

The PC Engineer's Reference Book

*Volume 3:
Hard Disk Tables
Expansion Cards
Printer Switches
Pinouts
FCC IDs*

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Hard Disk Tables

A hard disk has several platters on top of each other inside a hard case, each with its own read/write head, which are all used at the same time for speed. The platters were originally made of metal, but latterly of glass, which is why they are called hard disks (because they are not removeable, they are also called fixed disks). However, they were originally called *Winchester Drives*, after one that IBM made for mainframes, which had 30 Mb fixed and 30 removeable, after the Winchester 30-30 calibre rifle. In fact, their first one, in 1954, stored 5 Mb across fifty 24 inch platters – now, you re more likely to get 20 Mb across three 3.5 inch ones.

The first PC to support them properly was the PC/XT (eXtended Technology) in 1983. Previously, hard drives came as external devices with their own adapter card and power supply, as the BIOS and the power supply on the PC could not cope with them, and only then after DOS could handle subdirectories (in version 2). The hard disk controller in the XT was created by Xebec, which contained the extra code that wasn't already in the System BIOS, which is why you had to use a debug script at C800 to access it. The IBM AT (Advanced Technology) had hard disk support in the BIOS, together with more IRQs, etc to play with, and a CMOS chip backed up with a battery to remember it all. The "support", however was a few standard hard drive types, and you had to go back to a ROM on the controller if you wanted something else. The original types are still in there somewhere, although there are now well over 40 to choose from, plus those you can add yourself. Since a ROM cannot be changed, the additional types are kept in a small amount of memory set aside for the purpose.

DOS, meanwhile, was still unable to support partitions greater than 32 Mb, because of the way sectors were numbered; there could not be more than 65,536, as they were 16-bit values. Neither did it know anything about extended partitions before v3.3, so you couldn't even split a large drive up! As talking to the controller can be quite tedious, the BIOS contains a subroutine at INT 13 that can be accessed to do the job. DOS itself has routines for file management, as well (INT 25/26, etc), so applications call the DOS INTs, which in turn rope in the BIOS to help.

Inside a hard disk, each solid platter is mounted on a spindle and covered in a magnetic substance, with its own read/write head. All of them move at once when data is requested, giving the quickest possible response. The most common speed is 3600 RPM, but many high performance drives increase this up to 4500, 5400, 6300, 7200 or 10000. Speed is not the whole story, however – some 5400 RPM drives perform better than many at 7200. The surface of each platter is marked out in concentric *tracks*, which are split into *sectors* which hold 512 bytes of data each. Track 0 on the first platter, which holds the boot sector, is often referred to as Head 0, as each platter has its own heads. A collection of sectors is called a *cluster*, but

more of that later. All the tracks on all sides of the platters on top of each other are collectively known as a *cylinder*, which comes from the time when hard drives were round drums, like old phonograph records. Read/write heads are not in contact with the drive surface, as they are with floppy drives. On a hard disk, they actually float a couple of thousandths of an inch above it. As the gap between the recording head and the surface is so small, you can imagine the problems if dust or other contaminants were to get in. This is why hard disks are sealed – a good reason for not undoing them, although they still work with the top off (great for demos). When the power is off on older drives, the head will rest on the surface, with obvious dangers when the computer is moved. Unfortunately, similar dangers arise when the computer is switched on, since the flow of power moves the head slightly to the right, scraping the recording medium as it does so.

To protect your data, and prolong hard disk life, it's a good idea to *park* the heads in a neutral area whenever the computer is switched off, so the above problems are not so apparent. This won't stop the head from scraping the surface, but at least it will do so in a safe place! However, modern hard disk designs have the head mounted on a solenoid which is designed to spring upwards when power is turned off, so parking the heads is not so important, and may even confuse the issue. In fact, some manufacturers recommend that you *don't* park the heads on such drives, as the movement towards the safe area causes damage to the physical stops that prevent the head moving too far.

Size matters

The maximum capacity of your hard disk may be determined by your operating system; early versions of DOS (2.0-3.2) only supported up to 32 Mb in one volume on a physical drive. With v 3.3, you could have a 32 Mb *primary partition* and an *extended partition*, inside which you could put several volumes, up to 32 Mb in size (you can have a maximum of 23, because that's how many letters of the alphabet are left once A, B and C are used up). Although present versions are better, until recently, DOS and/or the BIOS and the IDE interface could still only cope with 1024 cylinders and 528 Mb, although you can have more than two drives (post DOS 5), but see *Enhanced IDE*, or *Logical Block Addressing*.

Many BIOSes had trouble handling drives over 2.1 Gb because not enough space was allocated in the CMOS to store a value for cylinders over a certain size (actually 4096), and some Phoenix BIOSes have a problem calculating over 32 Gb, but you can't access more than 2.1 Gb with FAT 16 anyway, unless you're using NT, which can format FAT 16 drives up to 4 Gb because it uses 64K clusters.

Back to operating systems, DOS (and hence Windows) cannot handle a translated drive geometry with 256 heads. DOS 6.22 is limited to 8.4 Gb, and although Windows can handle more than this, your BIOS may not, due to LBA translation methods - very few written before 1998 can do so. Drives over 8.4 Gb are supposed to report in with a geometry of 16282 x 16 x 63. There is a workaround for this that uses system memory to keep drive information as well as the normal registers, but this will still limit you to 137.4 Gb. The cylinder problem is catered for by clever programming, or translation of parameters, fooling the PC into thinking it has the right apparent size of drive, when it hasn't. A controller will have a *Translator ROM* on board to do this.

Common Interfaces

The interface is the connection between the hard disk and the expansion bus. Those relevant to PCs are:

ST-412

An early version of

ST-506

A standard established by Shugart Technologies in 1980, typically using MFM (see later) to transfer data serially at a rate of rather less than 1 Mb per second. An identical number of sectors is used per track, so they are shorter near the centre.

ESDI

The *Enhanced Small Device Interface*, developed by Maxtor, offers up to four times the throughput of ST-506, of which it is a direct descendant - it uses the same cabling, albeit with different signals. It still needs a separate controller, but the interpretation of various control bits is left to the drive, hence the transfer rate of up to 2.5 Mb per second (a higher density of sectors per track helps). Controller speed should match drive speed, meaning that a 10 MHz drive needs a 10 MHz controller.

Drives can be soft or hard sectored (switchable), but some controller cards can only cope with one or the other. The ESDI controller uses a data buffer to hold data during transfers, enabling data to be recovered that could be lost with an ST-506 controller. Many ESDI drives were quite well regarded.

ATA/IDE (embedded AT)

The term IDE, or *Integrated Drive Electronics* is popularly used to describe an intelligent drive that communicates directly with the AT expansion bus through an adapter on the motherboard. The interface name, by the way, is officially ATA, or *AT Attachment*, after the AT and was for ISA. Anything that's not a hard disk should not be referred to as IDE.

It was designed to use PIO (that is, *Programmed Input/Output*), where the CPU controls the transfer of every bit between the data bus and memory (although this sounds performance-draining, it was still faster than the original implementation of DMA). Because the controller is on the drive, the path between components is very short, as it is with ESDI, and therefore more reliable, so the track density can be increased. Having said that, with the former interfaces, verification was done by the controller, which would, after a write, read back the data and compare ECCs (not data). If the ECCs were OK, the transfer was presumed to be OK. In the ATA/IDE interface, the controller is on the same end of the cable as the hard drive, so the above system does not work.

The original ATA interface is based on TTL bus interface technology, which in turn uses the old asynchronous ISA bus protocol, where data and command signals are sent along a signal strobe, but are not interconnected, so that only one can be sent at a time, and a data request must be completed before a command or other signal can be sent along the same strobe.

ATA-2 was synchronous, giving faster PIO and DMA modes, where the drive controls the strobe and synchronizes the data and command signals with the rising edge of each pulse, which is regarded as a signal separator. Each pulse can carry a data or command signal, so they can be combined. Increasing the strobe rate increases performance, but also increases EMI, which can cause data corruption and transfer errors. ATA-2 also introduced ATAPI (*ATA Packet Interface*), for devices like CD-ROMs that use the ordinary ATA (IDE) port. EIDE (*Enhanced IDE*) is WD's version based on them both, and *Fast ATA* is Seagate and Quantum's answer, based on ATA-2 only. They both provide flow control through an unused pin (IORDY) on the IDE interface to control data transfer, which is much more efficient. Both systems can produce data transfer rates in excess of 10 Mbps, which is well over what the ISA bus can cope with, hence the need for flow control.

Originally, only two devices per interface were allowed, one being master and the other slave, and there is often considerable effort involved in getting drives from the same manufacturer working together, let alone with others. Four channels are allowed with EIDE, though, so you can have up to eight with two devices on each, but beware of mixing devices with different performance specifications on the same one. Not only will the slower one be taken as a yardstick, but data loss may also result (check out Western Digital's documentation).

ATA-4 includes *Ultra ATA* which, in trying to avoid EMI, uses both rising and falling edges of the strobe as signal separators, so twice as much data is transferred at the same strobe rate in the same period. It was designed by Quantum, in association with Intel, to better match the Pentium processor, and to take over from PIO Mode 5, which was abandoned because of electrical noise. While ATA-2 and -3 can burst up to 16.6 Mbytes/sec, Ultra ATA gives up to 33.3 Mbytes/sec. ATA-4 also adds Ultra DMA mode 2 (33.3 Mbytes/sec) to the previous PIO modes 0-4 and traditional DMA modes 0-2.

ATA-5 includes *Ultra ATA/66* which doubles the Ultra ATA burst transfer rate by reducing setup times and increasing the strobe rate, which again increases EMI to a point where a special cable is needed, adding 40 ground lines between each of the original 40 ground and signal lines, so the connector stays the same, except that pin 34 is knocked out to allow for cable section of Master and Slave (it's colour coded, too – the blue connector goes to the motherboard, the grey to the slave and the black to the master device on whichever channel it is used on). ATA-5 adds Ultra DMA modes 3 (44.4 Mbytes/sec) and 4 (66.6 Mbytes/sec) to the mix, but in a single-drive environment, there is a negligible performance increase over UDMA/33 – you're better off with two 10 Mb drives, for example, than one of 20 Mb, because of the better use of the bandwidth available, and you will actually find your machine better at multitasking than running faster. *UDMA/100* is the next one to come.

Having said all that, Bus Master DMA is available for IDE, which helps with multimedia under a multithreaded operating system. Traditional DMA still uses the CPU, even if only for setting up data transfers in the first place. A Bus Master DMA device can do its own setup and transfer, even between devices on the same bus, leaving the CPU (and the motherboard DMA controller) out of it (it doesn't improve IDE throughput, however).

In theory, IDE data transfer speeds can be three times higher than ESDI (IDE transmits in parallel), up to 5 Mb per second, in fact, but this depends on several factors, such as bus clock speeds and other hardware in the computer.

Capacity can be limited on a PC (around 528 Mb), due to the BIOS and IDE specifications. The BIOS Disk Interface (Int 13) is limited to 63 (512 byte) sectors per track and 1024 cylinders, while IDE drives themselves can only have 16 heads, together with up to 255 secs/track and 65536 cylinders. The BIOS only allows 255 heads and 128 bits for a CHS address. *Logical Block Addressing* converts CHS (*Cylinders, Heads, Sectors*) addresses to 28-bit Logical Blocks, numbered sequentially from 1-16, 450, 60, giving over 8 Gb capacity. The blocks may not necessarily be in the same place on different machines.

The maximum cable length is 18 inches, which depends on the machine, or its chipset. Some manufacturers use one buffer for two channels and the signals on the cable are therefore shared, which means your maximum cable length may be halved. Assuming your motherboard is like most others, and has already used up a couple of inches as a trace, something like 7' looks much safer, especially as the cable is not terminated or otherwise protected from noise. Many GPFs in Windows have been traced to IDE cables being too long.

Although 40-way cabling is standard, some proprietary interfaces (i.e. early Toshiba) use 72. ATA is a good cheap solution for desktop machines where multitasking is not required; that is, *serious* multitasking as opposed to just printing in the background. The average IDE drive in such a situation performs about 10-30% better than SCSI, but performance is not the whole story; SCSI handles more devices over longer cables with less interrupts.

SCSI

The *Small Computer Systems Interface*, originally designed by Shugart and NCR, has a high data transfer rate, up to 5 Mb/sec for **SCSI-1**, over an 8-bit bus (asynchronously, this was more like 3 Mb/sec). Asynchronous timing is faster on short cable runs, up to around 6 ft, but it needs an acknowledgement of every byte sent. Synchronous, on the other hand, can send multiple requests before receiving an acknowledgement, and is about 3 times faster.

As a SCSI hard drive is intelligent, its vital statistics can be hidden from applications – for example, the storage space provided will appear as sequentially numbered blocks rather than cylinders and heads. SCSI devices are daisy-chained along a parallel bus which, in theory, can cater for 8 or more, including the adapter, but many features are optional, so watch out for discrepancies. For example, there is no standard for how data is translated on to a hard drive, so be careful when moving drives between adapters. Although the adapter takes up an IRQ, the devices attached to it do not, which makes for easy expandability (EIDE requires an interrupt per channel).

SCSI-2 (Fast SCSI) is more standardised, offering more immunity to line noise, and longer cabling (Fast=10 MHz). It also paved the way for devices that weren't hard disks, and is the standard, whatever that means. It performs at rates up to 10 Mb/sec, for an 8-bit data path.

SCSI 3, known otherwise as *Ultra SCSI*, but really a subset of it (actually SCSI Fast 20), doubles the bus frequency with a 20 MHz bus clock, giving 20 Mb/sec on an 8-bit bus, and at less cost than Fast Wide SCSI. The bus is not the whole story, though; you can only get these speeds with multiple drives, as single drives tend to top out well below that, so you will only really notice the difference with multitasking or multiple users. Just to confuse matters, *Ultra 2 SCSI* can reach 40 Mb/sec over an 8-bit bus, the Wide version (i.e. 16-bit) getting 80 Mb/sec. This is commonly known as *U2W*. Ultra2 also uses LVD (*Low Voltage Differential*) and needs active (not passive) termination.

Wide SCSI is not really a standard, but a 16-bit variation to the normal Narrow (8-bit) standards mentioned above, having double the capacity (it uses two cables), and double the devices allowed (16). It can be combined with either of the above, so Fast Wide could give you 20 Mb/sec. Use Ultra Wide when you have more than one device simultaneously using the channel, to reduce bottlenecks.

| SCSI Type | Bus | Txfer Rate |
|---------------------|--------|------------|
| Standard | 8-bit | 4.5 Mb/sec |
| Fast | 8-bit | 10 Mb/sec |
| Fast Wide | 16-bit | 20 Mb/sec |
| Ultra SCSI | 8-bit | 20 Mb/sec |
| SCSI 3 (Ultra Wide) | 16-bit | 40 Mb/sec |
| Ultra 2 | 8-bit | 40 Mb/sec |
| Wide Ultra 2 (U2W) | 16-bit | 80 Mb/s |

SCSI devices rely less on the processor than IDE ones. The SCSI card and cable operate independently from the rest of the computer, so data exchange amongst the devices does not use CPU cycles or the system bus, allowing you to do a lot more in the background, like tape backups.

Each device needs a unique ID, including the adapter itself. The ID both identifies devices and allocates priorities between them, being from 0-7, with the card using ID 7 and the first boot device using 0 (usually). ID 7 has the highest priority, the remaining ones being 6 to 0 for 8-bit SCSI, 15 to 8, 23-16 and 31-24 otherwise. Gaps between numbers don't matter, that is, they don't need to be sequential along the cable or even used at all. The SCAM protocol (*SCSI Configured AutoMatically*) assigns IDs automatically if your devices support it, but it's always best to do it in hardware if you can.

The ID jumpers on each device are in binary, and run from right to left:

4 2 1

To allocate an ID of 5, therefore, place a jumper on 4 and 1. Removing all will give ID 0, and adding all gives ID 7 (1+2+4).

The ends of each SCSI channel, as with any bus, must be properly terminated. Usually, this means flicking a switch on the last device attached to it, but sometimes you have to use a terminating resistor (the adapter card looks after itself). Internal Ultra2 devices come with termination disabled and you must use a special cable with a terminator at the end of it. For those with relatively poor termination (such as external Zip drives) an Active Terminator can be installed at the end of the cable. These keep the bus voltage constant at 3.6 volts, whereas with Passive Terminators, it can vary between 1-2-3.5. Wide controllers have Low and High terminating wires. Low controls the 8-bit bus, and Low and High together control both. Desktop situations should have Terminator Power *from* the bus, whereas RAID, etc. should have it *to* the bus (that is from the device). *Set Start Unit* settings allow devices to start in sequence to avoid excessive power drain.

The command overhead for SCSI is high (10 times that of ESDI), which can detract from performance in a single drive system; EIDE will perform about 10-30% better here, but EIDE can also take up a significant

percentage of processor time. SCSI's strong point is connectivity over long distance (6m+), so is best for multi-user systems with heavy multitasking requirements, or when short of slots. You could also have external equipment, and there's nothing to stop you having one drive between two machines. Disadvantages include the fact that software drivers are required for *everything* and can be specific to the equipment, so you may need more than one card! This is reduced somewhat if all your equipment is compatible with ASPI or SCAM.

SCSI is not recognised by the BIOS (drives are set as *Not Installed*), so don't expect to have anything to boot from, which is why SCSI cards have an optional boot ROM. If you don't have one, you won't be able to boot from your SCSI drive. Most people in this situation boot from a small IDE and then hand over to the SCSI, which can confuse some software.

Ultra2 hard drives should be kept separate from other devices, that is, they should occupy their own channel. This is to avoid what is called *SCSI Drag*, where slower devices pull down the performance of faster ones. LVD (*Low Voltage Differential*) is the technology behind Ultra2 (SE, or *Single Ended* is for Fast and Ultra SCSI). Single-ended signalling uses two wires; one for the data and the other for reference ground. *Differential SCSI* still uses two, but the second carries the data signal in reverse, thus allowing less chance for noise, and is less error-prone. It is used for high performance equipment, and the two are *not* cross-compatible – don't use them on the same bus.

Each target device (that performs operations on behalf of an initiator) can accommodate up to 8 other devices, known as *Logical Units*, or LUNs. If a device (or an ID) is a single closed unit, like a hard disk or CD-ROM, its LUN would be 0, as it is the first and only logical address for that SCSI ID.

Low level formatting of SCSI drives is usually done through the BIOS on the adapter. Some Mylex cards have the software on separate floppies.

There are only four manufacturers in the SCSI field, Fujitsu, IBM, Quantum and Seagate, with the latter controlling over 50% of the market.

Maximum Cable Lengths

| Length | Txfer Rate | Devices |
|--------|------------|---------|
| 25m | U2 (80) | 1 |
| 12m | U2 (80) | 15 |
| 3m | Fast (10) | 7 |
| 3m | Wide (20) | 15 |
| 3m | Ultra (40) | 4 |
| 1.5m | Ultra (40) | 5-8 |

As devices have internal cabling and introduce impedance that interferes with the signal quality, reduce the cable length about 2 ft from the theoretical maximum for each device and cable converter.

SSA

Cables for parallel architectures, such as IDE, can become unwieldy, aside from being limited in length. *Serial Storage Architecture* is a full duplex system based on 4-wire differential pair serial cable, developed by IBM and regarded as somewhat proprietary. Data is transferred in frames 135 bytes long. Derived from mainframes, it uses bandwidth efficiently, typically 97% compared to 60-65% for SCSI (it also costs less). An 80 Mb/sec data transfer rate has been demonstrated, using *frame multiplexing*, which allows data to be transferred at any time, instead of having to wait for the bus to be free.

Data Encoding Methods

This is how data is actually recorded on the disk. Encoding is needed because you need to convert from digital bits to magnetic impulses, and back again.

MFM (Modified Frequency Modulation)

A fixed-length encoding method, using 17 sectors per track, typically found on ST-506 drives. All bits are evenly spaced with error-correction and clocking information stored with the data. Data is recorded as 1s and 0s; the current is not switched on and off, but kept running with the polarity reversed when you want either one; data is recorded as flux changes.

As a 1 results from a change in polarity, it's easily found again, but you get problems with several 0s in a row because no polarity reversals took place to record them, so a 0 was written as 10 (i.e. a pulse and a pause) and 1 was written as 11 (two pulses). The first pulse (or the *clock-bit*) was always present, and the second (the *data-bit*) was your data. As 1s had twice as many pulses, this was called *Frequency Modulation*, or *FM encoding*, but there were overheads like pulses that were only there to let you know where the 0s were, and which took up space. MFM, or *Modified* Frequency Modulation, on the other hand, has a different pulse pattern of 01, with the nature of the 0 changing according to whether the bit in front was a 0 or a 1.

RLL

Run Length Limited is a method which *limits* the amount, or (run) *length*, of data written. In RLL 2,7, for example, 2 is the minimum number (length) and 7 the maximum (limit) of bits between two fluxes, or consecutive zeros. As it makes more use of timing signals to pack more data in the space available, RLL requires fewer bits to be written; three can be packed in the space of two. It uses 26 sectors per track, but needs higher quality media. Although an RLL controller will format an MFM drive, it's not the case the other way round. Most modern drives use RLL, including IDE, ESDI and SCSI.

RLL has other advantages. A drive producing 20 Mb under MFM would give 30 Mb using RLL, with the original 20 Mb *squeezed down*, occupying only two thirds of the disk, so the heads don't have to move so far to reach the same data, effectively reducing the average seek time. RLL drives were actually from MFM production lines, but tested more rigorously. Those that failed were marked up as MFM and sold accordingly, which is why some drives in the tables below are marked up as both, i.e. M/R.

Performance

A slower machine with a fast hard disk will outperform a fast one with something less efficient, since even the slowest processors (and buses) spend around half their time waiting for disks to catch up. Differences between components can account for variations in performance as high as 20%.

A typical (MFM) hard disk transfers data at less than 1 Megabyte per second on a drive with 17 sectors of 512 bytes per sector, data passes under the read/write head at 522K per second (or 768K with 26 sectors), assuming a rotation speed of 3600 RPM. This is a lot less than even the ISA bus can handle, so *data throughput* is as important as the *access time* when comparing drives, although it really depends on what you're doing.

Databases use disks a lot, but for *searching*, not transferring data, so access time is important. On the other hand, graphic files are typically large (an A4 page takes up 1 Mb) so the data transfer rate will become more significant if you mainly copy these from place to place. Increasing the rotation speed reduces latency and thus performance (the Seagate Cheetah spins at 10,000 rpm). Hard disk performance is actually measured in many ways, including:

| | |
|----------------------------|--|
| Average access time | The time to find data in a specific place. Equals Average Seek and Average Latency. Some quote seek time instead! |
| Seek time | The time to locate a sector. Affected by the number of read/write heads and the data encoding method. |
| Average latency | The average time for the required sector to pass under the heads once the right track has been reached, improved by high RPM, equal to half the time taken for 1 rotation. The lower the better. |

| | |
|-----------------------------------|---|
| Command overhead | The time to process requests. The lower, the better. |
| Track to track access time | The time it takes to move from one track to the next. Affected quite markedly by the data encoding method, MFM or RLL. Mostly useless with LBA type systems. |
| Sector access time | Sectors retrieved in one second (affected by interleaving). |
| Data Transfer rate | The data moved on or off a hard disk in a particular time, but the effective rate can vary due to data compression, cacheing or the slowest component in your system—it works best when data is sequential. Maximum, or burst, rates give the capability of the interface, not the drive. Burst will only be used if the data is already in the buffer (reading) or can fit into it (writing). Expect between 850K-1.2Mbps on a 486/33 with a modern SCSI hard drive. |
| Head Switch Times | The time to switch heads—not instantaneous. |
| Buffer size | The bigger the better (usually 32-64K). Segmented and Adaptive versions are progressive improvements. |

Large partition sizes can slow the hard disk down once your files become fragmented, as they will. See *Partitioning with FDISK*.

AV drives do not need thermal recalibration, so the flow of data is not interrupted when they get hot and expand. They use embedded servos to keep the heads aligned, where positioning information is kept with the data. Also, they need to monitor bad sectors so that access times aren't increased unnecessarily. Normally, when a bad sector is marked, the new one is put at the end of the drive - AV drives just mark the bad sector (AV in Maxtor-speak is *ATA Value*).

The *areal density* is the amount of data per square inch, derived from the bits per inch on a track, multiplied by the number of tracks. Limited by head sensitivity, as data gets weaker the closer it is packed, and the amount of throughput the data channel can handle.

Measuring performance

Test software measures the transfer rate by reading from a complete cylinder, which is fine if you're using the physical parameters of the disk. Unfortunately, when using more cylinders than DOS can cope with (1024), and using sector translation, readings could take place over more than one cylinder, and the time taken to switch between them included in calculations. This will give you an *apparent* transfer speed lower than it should be. Under these circumstances, it's best to use such numbers for comparison purposes only, rather than absolute figures.

As the outer tracks on the drive surface are longer than the inner ones, they can hold more sectors. As the track length decreases towards the centre of the drive, the number of sectors also decreases, so with the drive spinning at a constant rate, a track with more sectors gives a proportionally higher transfer rate. The method used to cope with this is called *Zone Bit Recording* (ZBR).

The first cylinder of your drive is in the fastest zone, and it goes downhill from there, so if you benchmark and find it performing less than when you bought it, it's just because the test program is using sectors in a slower area than when you last did the test (the difference can be as much as a factor of 2).

Installation

First of all, you must tell the drive what its position is; for example, two hard drives will have to know which of them is 1 or 2, or Master and Slave in the case of IDE. You will have to set switches or jumpers on the drive itself, or use the alternative method, *Cable Select*, which both drives must support. ESDI, MFM and RLL drives use two flat data cables, one for control and one for data, whilst IDE and SCSI will combine everything in one (the max length for IDE is 18"). If the wide cable used with ESDI,

MFM or RLL drives has no twist at the last connector, set the first drive as no 1 and the next as no 2. If there is a twist between the 19th and 26th wires at the last connector, set *both* drives as no 2 (the twist will sort out who's who). To set the drive ID, look for jumpers or switches marked DS (Drive Select). Drive 0 can mean Drive 1!

With IDE, you will probably only have to set whichever one is going to be the slave (essentially disconnecting the logic board), but some, when Masters, need to be told there is another drive present. Multiple IDE drives are often fraught with difficulty, especially with drives from different manufacturers don't expect too much! The *Common Access Method* (CAM) is a way of ensuring that drives work together.

The configuration is usually done with jumpers or switches on the device but, increasingly, *Cable Selection* (CS) is used, where both are Masters, and the difference is resolved by way of the cable (it doesn't have pin 28 connected at one end, i.e. grounded). If you have a problem connecting 2 drives, try making each a master on its own channel. A CD-ROM should switched as a Master if by itself, but some don't work at all that way. A SCSI drive needs an ID of 0 if it's to be the boot drive (the card will be 7). If you have them, HSP grounds the HOST/SLAVE/ACTIVE signal, which indicates that a slave is present. C/D (or DS) is the Drive Select remove it on the slave. DSP tells the Master that a slave is present. ACT connects the ACTIVE signal to HSP, which drives an external LED.

The power lead will only go into its socket one way round, and the other cable(s) will have one edge in a different colour, usually red or blue. This indicates pin 1, and *must* be the right way round (usually, pin 1 goes towards the power connector). Just to make sure, look on the drive's circuit board and see whether one end of the connecting pins has actually been labelled as no 1 (or 34, in which 1 is at the opposite end). If you're using ESDI, MFM or RLL, there will be a slot cut into one side of the *edge connector*. The slot is nearest to pin 1.

CMOS

Now you must tell the computer what drive it will be talking to, through the CMOS Setup.

DO NOT USE THE HARD DISK UTILITY IN THE CMOS SETUP TO LOW LEVEL FORMAT AN IDE, ESDI or SCSI DRIVE!!!!

Several types of hard disk are catered for, from *Not Installed* upwards, and there's a user-defined type (47) for anything strange, so you need to specify the following for each drive. Use *Not Installed* for SCSI, translating controllers or 8-bit controllers in ATs. The head/cylinder count of the disk must always be equal to or larger than that of the BIOS selection. The sectors per track must equal both the parameters of the hard disk controller and the hard disk. The settings required are described in *The BIOS Companion*, under *Standard CMOS Setup*.

Preparing drives for use

Once the drive is in the machine, you have to make it ready for use by formatting it. There are two routines for this, low-level and high-level; the latter is sometimes called the DOS format (both processes are done at the same time with floppy drives). As with all formatting, note that *all data is destroyed*. After low-level formatting, use **fdisk** and **format** to make it useable.

Low Level Formatting

This establishes the relationship between the controller and the drive and creates sectors or blocks, according to whether you use SCSI/ATA or otherwise; the start of a sector is marked with an *Address Mark*, which is not normally generated by data, so it's easily identified. The information which immediately follows contains each sector's unique Cylinder, Head, and Sector number. These overheads mean you will lose a small amount of capacity.

Low level formatting programs allow you to enter the drive's *defect list*, which specifies flawed tracks (defective tracks receive a special code in their sector headers); the bad defect list is usually attached to the drive. Later, high level formatting moves this information into the system's File Allocation Table (FAT) so the operating system doesn't use them.

In theory, you can exchange AT MFM and RLL controllers between drives, but expect to low level format a drive to match them properly (you *must* do this with XT drives and controllers).

XTs

XT class (that is, 8-bit) PCs are usually low-level formatted with a program included in the BIOS ROM of the controller card. You use DEBUG to get to it, and the command is usually:

```
DEBUG G=C800:5
```

for Western Digital, Seagate and Ultrastor controllers, anyway. C800 means the address in memory where the routines can be found (in the ROM on the controller card), and :5 is the location within that area. They could fool you, however, and use a different memory address; try CA00, CC00, CE00 or :6 as alternatives (the ROM is always on a 2K boundary). The address can often be changed with jumpers on the controller card. For SMS-OMTI or Adaptec controllers use **C800:6**, or even **C800:ccc**. For the DMA test on Adaptechs, use **C800:9**.

ATs

With ATs, you generally use third party software; as it happens, this is often supplied with the computer's BIOS. ESDI drives use the same method as XTs (above) if you are using the Translator ROM on the controller card. Set the drive type as 1. SCSI drives will have software supplied with the controller; set as *Not Installed*.

**DO NOT LOW LEVEL FORMAT IDE DRIVES
UNLESS YOU HAVE SPECIAL SOFTWARE!**

You can, however, do it with a debug script; some are in the tables. The reason for having to do it properly is because the positioning information is either kept with the data it relates to, or on a separate platter. Either way, if it is destroyed, the drive becomes unuseable. Using a separate platter increases access times, but requires thermal recalibration every so often, and the resulting pauses aren't good for multimedia playback.

Interleaving

At some stage during the low-level format, you may be asked what interleave you want. Interleaving is a way of improving performance by judicious positioning of data on the surface, which actually depends on the capability of the whole drive chain (i.e. hard disk, controller, DMA channel and the rest of the PC) to absorb data from the hard disk and pass it on.

This will not apply to IDE, ESDI or SCSI drives, since the majority of the controllers associated with them are powerful enough to cope with a sector of data at a time, and will automatically give a 1:1 interleave (see below). Those with RLL or MFM drives, step forward . . .

After a sector has been read it must be moved from the controller's buffer into the computer. The time needed to transfer that sector's information determines how soon the controller will be ready to read the next one. If it isn't, the next sector containing the data you want will have passed by the read/write head and you will have to wait till it comes round again, wasting time waiting for data to be in the right position. A 1:1 interleave exists when sectors are filled one after the other in the proper sequence, i.e. 1 2 3 4, etc. If you position sequential sectors alternately, such as 1 3 2 4, you get a 1:2 interleave, where sector 3 is allowed to pass underneath so sector 2 can be taken up by the controller when it's ready. If you had a less capable controller, you might want to make this looser, such as 1:3, so you get something like 1 4 6 2 5 7 3. Try to imagine picking balls up from a roulette wheel, if it makes it any easier.

To sum up; an interleave of 1 reads each sector in succession. An interleave of 2 reads alternate sectors and requires two revolutions of the disk to read the full track, and an interleave of 3 reads every third block, requiring three revolutions of the disk, and so on. It's quite common to see an interleave of 4 or 5 in PC or XT type machines (older Amstrads needed 7). Selection of an interleave where the data rate is excessive for the disk, controller and computer combination will reduce performance, because more disk rotations are required to complete the track read.

If you can't change the PC's ability to transfer data internally (by increasing the DMA channel speed, for instance), you must increase the size of the controller's buffer, to at least 512 bytes, which is the size of a standard sector.

The trouble is that you rarely know before you start what is the best interleave, since the whole PC is involved, but there are several programs, notably *Spinrite* and even some BIOSes that both give you the opportunity to both test and change the interleave factor of your hard disk without affecting your data (although you would be well advised to take a backup!).

RLL controllers may need a looser interleave than MFM, because of the capacity of the ISA bus; and since there are 26 sectors per track, you need more revolutions of the disk to read or write 50% more data.

Partitioning with FDISK

Partitions were originally created to boot from different operating systems; a hard disk can have several, which are managed by the *Partition Table* at the beginning of it. The starting and ending locations for each partition are defined, together with which one controls the system during boot-up. Partitions don't know about the existence of each other, so your operating systems won't get mixed up (only one partition can be active at any time). The bigger your partitions are, the more you are likely to waste hard disk space, though this will depend on the size of file you regularly handle.

With FAT 16, disk space is allocated in *clusters*, the size of which depends on the size of your partition, which is limited in the first place because FAT entries are only 16 bits long and you can't have more than 65,536 clusters on any drive, so the bigger the drive is, the bigger the cluster has to be to compensate; 2K clusters mean a maximum drive size of 128 Mb. The maximum drive size you can have is 2 Gb, from the maximum cluster size of 32K, except with NT which can use 64K clusters.

The point is that if a file is smaller than the cluster it occupies, the rest of that cluster is unuseable. If the file spills over to a second, the remainder of the second is wasted, and so on. Although less FAT space is taken up with larger cluster sizes, to minimise wastage, choose smaller partitions, as far as convenience allows, e.g.:

| Partition Size (Mb) | Cluster Size (K) |
|---------------------|------------------|
| 16-127 | 2 |
| 128-255 | 4 |
| 256-511 | 8 |
| 512-1023 | 16 |
| 1024-2048 | 32 |

You can see that with 1 Gb partition and above, you would be wasting a high proportion of your hard disk space if your files are 20K or so! FAT 32, as used with Windows 9x, gets around this, but can make things slightly slower, as all the data is not kept in memory, and the management of all those smaller sectors slows the drive down by about 5%. Also, Windows talks directly to the drive with LBA, ignoring the BIOS, assuming it supports INT13 extensions. This is done automatically for drives over 8 Gb, where it is known as FAT32X (0x0C in the partition table). Ordinary FAT32 (0x0B) is used for smaller drives and uses Extended CHS.

You can have up to 24 logical drives on a physical disk, only because there are only that many letters in the alphabet (A and B are already used for floppies).

DOS Format

Lastly, format each partition for the operating system. Once the format has been done, you will end up with five special areas on your hard disk:

- ❑ The *partition record*, or *Master Boot Record (MBR)*, which indicates how the disk is divided. It is on cylinder 0, head 0, sector 1; the remaining 16 cylinders are not used.
- ❑ The *DOS Boot Record*, which contains a pointer to the File Allocation Table (FAT). This lives on cylinder 0, head 1, sector 1. It will contain information about the DOS version used for format, the number of bytes per sector, number of heads, etc.
- ❑ The *File Allocation Table*, which is a map of what clusters are associated with what file. DOS keeps a primary and secondary copy. The FAT can be either 12-bit (4096 12-bit entries), taking up 6K per copy, or 16-bit, with 64K 16-bit entries, taking up 128K for each entry. When a file is to be written to disk, DOS asks the FAT where to store it.

Bad areas are noted in the FAT and marked as unuseable; these will be either hard or soft errors. Hard errors are physical defects on the hard disk surface, and soft ones occur when data fades to the extent that it cannot be read.

- ❑ The *Root Directory*, which comes after the second copy of the FAT. It has 128 entries for a 12-bit FAT and 512 for a 16-bit.
- ❑ The *Data Area*, for user data, and if the disk is bootable with DOS, the first two entries, **io.sys** and **msdos.sys**.

The Tables

Figures given should be put into the CMOS. With MFM and RLL drives using ST-506, these will coincide with the physical characteristics, but larger ones using alternate systems (e.g. ESDI, IDE) will use sector translation to get round the normal maximum DOS/BIOS limits on a hard drive of 1023 cylinders, 16 heads and 63 sectors per track, so the figures won't correspond. Some drives, like the Miniscribe 3650, can format a higher number of cylinders than officially listed; this particular drive is written down as having 809 cylinders, but can safely be formatted to 842, as it actually has 852. If you use other figures, don't exceed the maximum sectors available (use the formula below to calculate this).

SCSI drives, of course, handle their own internal geometry, and the storage space is seen as a collection of LUNs, or *Logical UNits*, in which to store data, so the figures tend to be irrelevant anyway (with DOS, SCSI drives are set up as *Not Installed* in the CMOS). Capacities are formatted capacities, wherever possible, correct to the highest sectors per track specified (assuming each one is 512 bytes). However, the actual formatted capacity will depend on the controller used and the BIOS. SpT (*Sectors per Track*) settings may be switchable on the drive especially with ESDI.

Normally, the formatted capacity of a disk is derived from the form:

$$\frac{\text{Cyls} \times \text{Hds} \times \text{SPT} \times 512}{1048,756}$$

ESDI controllers offering alternate sectors per track will use:

$$\text{Cyls} \times \text{Hds} \times (\text{SPT}-1) \times 512$$

Some manufacturers divide by 1000 to give a better-looking formatted capacity. Modern drives do not require RWC, WPC or LZ, and may actually ignore your settings. For BIOS purposes, just add a 1 to the cylinder value, except where specified in these pages, which will effectively turn it off by using a non-existent cylinder.

Abbreviations

| | |
|-------------|---|
| M | MFPM, with ST506/ST412 usually 17 sectors per track. |
| R | RLL, with ST506/ST412 usually 26 sectors per track. |
| M/R | Either of the above, but may be unreliable with RLL |
| E | ESDI, with ST506/412 usually 34-36 sectors per track. |
| S | SCSI 1 Single-Ended (S-2=SCSI-2, F=Fast, W=Wide). |
| SASI | Shugart Associates System Interface precursor to SCSI. |
| A | ATA, commonly known as IDE |
| I | IPI; Intelligent Peripheral Interface. |
| SMD | Storage Module Drive |
| XSMD | Extended SMD |
| Z | ZBR, or <i>Zone Bit Recording</i> (variable secs/track). Actually used by Seagate, but others may call it MZR (<i>Multiple Zone Recording</i>), where more sectors per track are used towards the outside edge of the disk. |
| H | Hardcard |
| P | PCMCIA. |
| Par | Parallel Port |
| F | Fibre |
| O | Optical |

1776 Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------------|------|-------|------|-----|-----|---------------|
| Tom Paine | A | 400 | | | | Could be RLL |
| Patrick Henry I | S | 2700 | | | | Could be ESDI |
| Patrick Henry II | S | 62000 | | | | |

Adcomp

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------|------|------|------|-----|-----|-------|
| ZF1000 | S | 1000 | | | | Sun |
| ZF250T | S | 250 | | | | Sun |
| ZF500T | S | 500 | | | | Sun |
| ZF750 | S | 750 | | | | Sun |

ADIC

Advanced Digital Information Corp www.adic.com

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------|------|------|------|-----|-----|-------|
| 700-109 | S | 109 | | | | |
| 700-120 | S | 120 | | | | |
| APL 244D | S | 244 | | | | |
| APL 366D | S | 386 | | | | |
| APL 488D | S | 488 | | | | |
| N1000 | S | 1000 | | | | |
| N1000/2 | S | 2000 | | | | |
| N1000/2-DP | S | 2000 | | | | |
| N150 | S | 156 | | | | |
| N150/2 | S | 312 | | | | |
| N150/2-DP | S | 312 | | | | |
| N330 | S | 332 | | | | |
| N330/2 | S | 664 | | | | |
| N330/2-DP | S | 664 | | | | |
| N650 | S | 650 | | | | |
| N650/2 | S | 1326 | | | | |

Advantage Memory Corp

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------|------|-----|------|-----|-----|-------------|
| PCMCIA 170 | P3 | 170 | | | | Pocketdrive |
| PCMCIA 260 | P3 | 260 | | | | Pocketdrive |

ADS

American Digital Systems

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------|------|------|------|-----|-----|------------|
| Z 155 | S | 125 | | | | Masterdisk |
| Z 1600 | S | 1363 | | | | Masterdisk |
| Z 182 | S | 110 | | | | Masterdisk |
| Z 376 | S | 344 | | | | Masterdisk |
| Z 702 | S | 612 | | | | Masterdisk |
| Z 766 | S | 676 | | | | Portable |

Alps Electric

Rebadged Conners? *Alps America* before merger. www.alpsusa.com

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------|------|-----|------|-----|-----|---------------------------|
| DR 232N2 | A | 86 | 820 | 2 | 51 | |
| DR 232N8 | A | 135 | 1288 | 2 | 51 | |
| DR 311C901 | A | 100 | 732 | 8 | 35 | DC Pin Open 979 x 8 x 26? |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|------|-------|------|-----|-------|--|
| DR 311C901 | A | 101 | 527 | 8 | 49 | DC Pin Shorted |
| DR 311C911 | A | 117 | 545 | 8 | 55 | DC Pin Open |
| DR 311C911 | A | 100 | 732 | 8 | 55 | DC Pin Shorted |
| DR 312C901 | A | 202 | 527 | 16 | 49 | DC Pin Open |
| DR 312C901 | A | 202 | 2108 | 4 | 49 | DC Pin Shorted |
| DR 312C911 | A | 245 | 545 | 16 | 55 | DC Pin Open |
| DR 312C911 | A | 245 | 527 | 16 | 49 | DC Pin Shorted |
| DRR 040C(N) | A | 40 | 799 | 4 | 26 | |
| DRR 100C-50A | A | 105 | 979 | 8 | 26 | Also 732 x 8 x 35, DC=0 776 x 8 x 33 DC=1 911 x 9 x 25 DC=0,1 1465 x 4 x 35 |
| DRR 100C-91A | A | 100 | 732 | 8 | 35 | |
| DRA 010A | M | 10 | 306 | 4 | 17 | |
| DRA 020A | M | 20 | 615 | 4 | 17 | |
| DRB 040 | M | 51 | | | | Unformatted |
| DRL 010A | M | 10 | 306 | 4 | 17 | |
| DRM 010A | M | 10 | 615 | 2 | 17 | |
| DRM 020A | M | 20 | 615 | 4 | 17 | |
| DRND 10A | M | 10 | 615 | 2 | 17 | |
| DRND 20A | M/R | 20/32 | 615 | 4 | 17/26 | |
| DRP 020A | R | 20 | 615 | 2 | 26 | Weird interface! SCSI? |
| DRP 020D | R | 20 | 615 | 2 | 26 | |
| DRQ 040D | R | 40 | | | | ST 412 |
| DR 311D901 | S-2 | 106 | 2108 | 2 | 49 | |
| DR 311D911A | S-2 | 120 | 2108 | 2 | 49 | |
| DR 312D901 | S-2 | 211 | 2108 | 4 | 49 | |
| DR 312D911A | S-2 | 240 | 2108 | 4 | 49 | |
| DRR 050D | S | 49 | 979 | 4 | 26 | |
| DRR 100D | S | 99 | 979 | 8 | 26 | |
| DFL41311 | ? | | | | | |

DR 31 Series/DRR 100C-50A

| | |
|---------|-------------------------|
| Single: | C/D, Act closed |
| Master: | C/D, Dsp closed |
| Slave: | Hsp, Dsp, Act, C/D open |

31 Series SCSI

| ID | 0 | 1 | 2 |
|----|---|---|---|
| 0 | 0 | 0 | 0 |
| 1 | 1 | 0 | 0 |
| 2 | 0 | 1 | 0 |
| 3 | 1 | 1 | 0 |
| 4 | 0 | 0 | 1 |
| 5 | 1 | 0 | 1 |
| 6 | 0 | 1 | 1 |
| 7 | 1 | 1 | 1 |

Parity check enable: PAR=Shorted

Ampex

No longer producing hard drives

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|-----|------|-----|-----|-------|
| PYXIS 13 | M | 10 | 320 | 4 | 17 | |
| PYXIS 20 | M | 15 | 320 | 6 | 17 | |
| PYXIS 27 | M | 20 | 320 | 8 | 17 | |
| PYXIS 40 | M | 40 | 320 | 8 | 17 | |
| PYXIS 7 | M | 5 | 320 | 2 | 17 | |

Amstrad

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|------|-----|------|-----|-----|---------------|
| DRMD 20A12A | A | 21 | 615 | 4 | 17 | |
| SRD 3040C-50 | A | 42 | 822 | 2 | 51 | Rebadged Sony |
| SRD 3080C-50 | A | 80 | 964 | 10 | 17 | Rebadged Sony |

Andataco

www.andataco.com

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|------|------|-----|-----|-------|
| 10553 | S-2F | 1000 | | | | |
| 21553 | S-2F | 2100 | | | | |
| 43753 | S-2F | 4300 | | | | |
| 91753 | S-2F | 9100 | | | | |

Apple Computer Inc

www.apple.com

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------------|------|------|------|-----|-------|--------------------------------------|
| HD 20 | | 20 | | | | Non-SCSI 512K Mac floppy port |
| HD 160C | S | 160 | | | | |
| HD 20SC | S | 20 | 612 | 4 | 17 | Mac Plus/SE. Miniscribe 8425SA |
| HD 40SC | S | 40 | | 2 | | CP 3045—strange i/face. Mac Portable |
| HD 80SC | S | 80 | | 5 | | |
| HD 160SC | S | 160 | | 5 | 39 | 5.25" |
| HD 160SC | S | 160 | | 8 | 39 | 3.5" 3600 RPM not sold separately |
| Internal 40SC | S | 40 | | 2 | | Sony SRD 3040A |
| Internal 2 Gb | S | 2100 | 2756 | 19 | 62-97 | ST 12550N |

Applied Information Memories

Numbers (capacities) are suspicious!

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|-----|------|-----|-----|-------|
| Dart 130 | M | 125 | 519 | 7 | 17 | |
| Dart 170 | M | 160 | 519 | 9 | 17 | |
| Dart 250 | M | 245 | | | 17 | |

APS Technologies

Alliance Peripheral Systems www.apstech.com

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------|------|-------|------|-----|--------|-------------------------------|
| Q 1280 | A | 1282 | 2492 | 16 | 63 | EIDE Fireball |
| ST 2140A | A | 2140 | | | | EIDE Medalist |
| I 1080 | S-2F | 1080 | | | | |
| I 2160 | S-2F | 2000 | | | | |
| MS 1.0 | S-2 | 1001 | | | | MS 4210 7200 RPM |
| MS 2.0 | S | 1955 | 4150 | | | Micropolis 4221 7200 RPM |
| MS 4.0 | S-2F | 4095 | 3124 | 19 | Var | Micropolis 3243 7200 RPM |
| MS 9.0 | S | 8500 | | | | |
| Q 1.0 | S-2F | 1025 | 3832 | 5 | 79-138 | Atlas XP 31070 7200 RPM |
| Q 1080 | S-3 | 1042 | 2864 | 16 | 46 | Fireball 1080S 5400 RPM Sun |
| Q 18000(W) | S-3 | 18200 | | | | Quantum Atlas III |
| Q 2.0 | S-2F | 2050 | 3850 | 10 | 109 | Atlas XP 32150 7200 RPM Sun |
| Q 2000 | S | 2051 | | | | Fireball Stratus + |
| Q 2100 | S | 2010 | | | | |
| Q 2210 | S-2F | 2102 | 4172 | 8 | 129 | Capella VP 32210 5400 RPM Sun |
| Q 3000 | S | 3079 | | | | Fireball Stratus + |
| Q 4.0 | S-2F | 4101 | 3850 | 20 | 109 | Atlas XP 34300 7200 RPM Sun |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------|------|-------|------|-----|-----|------------------------------|
| Q 4000 | S | 4000 | | | | Fireball Stratus + |
| Q 4500W | S-3 | 4345 | | | | Quantum Viking |
| Q 514 | S-2 | 491 | | | | Daytona 514S 4500 RPM |
| Q 6400 | S-3 | 6149 | | | | Fireball Stratus + |
| Q 730 | S | 699 | | | | |
| Q 8000 | S-3 | 8063 | | | | Fireball Stratus + |
| Q 840 | S-2 | 810 | 2674 | 10 | 62 | Trailblazer 850 4500 RPM Sun |
| ST 1.0 | S-2F | 1010 | 3992 | 5 | 103 | ST 31230N 5400 RPM |
| ST 18000(W) | S-3 | 18200 | | | | |
| ST 2.0 | S-2F | 2047 | 3510 | 11 | 108 | ST 32550N 7200 RPM |
| ST 2000(W) | S-3 | 3250 | 6311 | 4 | 175 | ST 32272N(W) |
| ST 23000(W) | S-2F | 23400 | 6880 | 28 | 237 | ST 423451N(W) |
| ST 4.0 | S-2F | 4094 | 3711 | 21 | 107 | ST 15150N 7200 RPM |
| ST 4200 | S-2 | 4094 | 3992 | 19 | 110 | ST 15230N 5400 RPM |
| ST 4300(W) | S-3 | 4340 | 6311 | 8 | 176 | ST 34572N(W) |
| ST 4500(W) | S-3 | 4550 | 6526 | 8 | 170 | ST 34501N(W) |
| ST 9.0 | S-2F | 8669 | 4925 | 27 | 133 | ST 410800N 5400 RPM |
| ST 9000(W) | S-3 | 9100 | 5333 | 20 | 166 | ST 19171N(W) |
| ST 9100(W) | S-3 | 9100 | 6256 | 16 | 170 | ST 19101N(W) Cheetah |
| T 350 | S-2 | 335 | 2050 | 4 | | MK 1824 FBW 4200 RPM |
| T 800 | S-2 | 773 | 2360 | | | MK 2628FB 4200 RPM |
| WD 2000(W) | S-3 | 2170 | | | | WDE 2170 |
| WD 4300(W) | S-3 | 4360 | | | | WDE 4360 |
| WD 9000(W) | S-3 | 8900 | | | | |

Areal

Possible Disctec connection?

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|------|------|------|-----|-----|------------------------|
| A 1120 | A | 1290 | | | | EIDE |
| A 120 | A | 137 | 1024 | 4 | 60 | AT/XT |
| A 120AT (1992) | A | 136 | | | | |
| A 130 | A | 130 | 1438 | 2 | 89 | Physical AT/XT |
| A 131 | A | 130 | | | | |
| A 135 | A | 130 | 856 | 5 | 60 | |
| A 170 | A | 172 | 672 | 10 | 50 | AT/XT |
| A 175 | A | 175 | 950 | 6 | 60 | |
| A 180 | A | 180 | 715 | 10 | 50 | AT/XT 1488 x 4 x 60 |
| A 260 | A | 260 | 856 | 10 | 60 | AT/XT 1438 x 4 x 94 |
| A 265 | A | 265 | 856 | 10 | 60 | |
| A 340 | A | 340 | 1020 | 12 | 63 | AT/XT 2120 x 4 x 80 |
| A 345 | A | 350 | 2106 | 4 | 81 | Physical |
| A 520L | A | 526 | 1020 | 16 | 63 | EIDE |
| A 525 | A | 525 | 1020 | 16 | 63 | AT/XT 2108 x 6 x 81 |
| A 560 | A | 559 | | | | EIDE |
| A 60 | A | 60 | 1024 | 7 | 17 | |
| A 700L | A | 735 | 1424 | 16 | 63 | EIDE |
| A 80 | A | 80 | 665 | 14 | 17 | |
| A 840 | A | 839 | | | | EIDE |
| A 85 | A | 85 | 705 | 14 | 17 | AT/XT |
| A 90 | A | 91 | 715 | 10 | 25 | AT/XT 1430 x 2 x 63 |
| AD 2100 | A | 100 | | | | |
| BP 50 | A | 43 | 1720 | 1 | 60 | |
| BP 100 | A | 103 | 860 | 4 | 60 | 1720 x 4 x 60 |
| BP 200 | A | 204 | 3400 | 2 | 60 | |
| MD 2050 | A | 50 | 819 | 2 | 60 | |
| MD 2060 | A | 62 | 1024 | 2 | 17 | AT/XT Glass Technology |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|------|------|-----|-----|---------------------------|
| MD 2065 | A | 62 | 1024 | 2 | 60 | AT/XT |
| MD 2080 | A | 80 | 665 | 14 | 17 | AT/XT 1326 x 2 x 60 Glass |
| MD 2085 | A | 86 | 705 | 14 | 17 | AT/XT 1410 x 2 x 60 |
| MD 2100 | A | 98 | 819 | 4 | 60 | 1638 x 2 x 60 |
| RD 200 | A | 200 | | | | |
| AA 5180 | S-2 | 720 | | 20 | | |
| AA 9180 | S-2 | 1440 | | 36 | | |
| BP 100 | S | 106 | 1720 | 2 | 60 | |
| BP 200 | S | 199 | 3400 | 2 | 60 | |
| BP 50 | S | 53 | | | | |
| MD 2050S | S | 48 | 819 | 2 | 60 | |
| MD 2100S | S | 96 | 1638 | 2 | 60 | |
| RD 200 | S | 200 | | | | |

Artecon

www.artecon.com

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------|------|------|------|-----|-----|---------|
| Turbo 1044 | S | 1044 | | | | Mercury |
| Turbo 134 | S | 134 | | | | Mercury |
| Turbo 141 | S | 141 | | | | Mercury |
| Turbo 172 | S | 172 | | | | Mercury |
| Turbo 318 | S | 318 | | | | Mercury |
| Turbo 350 | S | 350 | | | | Mercury |
| Turbo 660 | S | 636 | | | | Mercury |

Atasi

HD division sold to Tandon and Western Digital. Possible connection with Vertex?

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|---------|------|-----|-------|------------------------|
| 617 | E | 149 | 1223 | 7 | 34 | |
| 628 | E | 234 | 1223 | 11 | 34 | |
| 638 | E | 319 | 1224 | 15 | 34 | |
| 6120 | E | 1051 | 1925 | 15 | 71 | 962 x 30 x 71 |
| 676 | E | 676 | 1632 | 15 | 54 | 816 x 30 x 54 |
| AT 3020 | M/R | 17/25 | 645 | 3 | 17/26 | 635 cyls? Not Xbc 1210 |
| AT 3030 | M | 28 | 645 | 5 | 17 | |
| AT 3033 | M/R | 28/42 | 645 | 5 | 17/26 | 635 cyls? Not Xbc 1210 |
| AT 3046 | M/R | 39/60 | 645 | 7 | 17/26 | 635 cyls? (Oli BIOS) |
| AT 3051 | M/R | 43/65 | 704 | 7 | 17/26 | 733 cylinders? |
| AT 3051+ | M | 45 | 733 | 7 | 17 | |
| AT 3053 | M/R | 44 | 733 | 7 | 17/26 | |
| AT 3058 | M | 70 | 1024 | 8 | 17 | |
| AT 3065 | M | 52 | 900 | 7 | 17 | 1024 cyls? |
| AT 3075 | M | 60 | 1024 | 8 | 17 | 900 cyls? (Oli BIOS) |
| AT 3085 | M/R | 68/109 | 1024 | 8 | 17/26 | |
| 502 | M | 46 | 755 | 7 | 17 | |
| 504 | M | 46 | 755 | 7 | 17 | |
| 519 | M/R | 160/244 | 1224 | 15 | 17/26 | |
| 514 | M | 117 | 1224 | 11 | 17 | |
| V 130 | M | 26 | 987 | 3 | 17 | Vertex? |
| V 150 | M | 43 | 987 | 5 | 17 | Vertex? |
| V 170 | M | 60 | 987 | 7 | 17 | Vertex? |
| V 185 | M | 71 | 1166 | 7 | 17 | Vertex? |
| AT 3128 | R | 104 | 1024 | 8 | 26 | ST 412 |
| 2053 | S | 43 | 1024 | 5 | 17 | MFM recording |
| 2085 | S | 68 | 1024 | 8 | 17 | MFM recording |
| 2128 | S | 104 | 1024 | 8 | 26 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------|------|------|------|-----|-----|-------|
| 2170 | S | 139 | 1366 | 8 | 26 | |
| 3128 | S | 104 | 1024 | 8 | 26 | |
| 519 | S | 160 | | | | |
| 7120 | S | 1055 | 1935 | 15 | 71 | |
| 738 | S | 329 | 1225 | 15 | 36 | |
| 776 | S | 668 | 1632 | 15 | 54 | |
| MacDisk II | S | 380 | | | | |

ATTO Technology

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------------|------|-----|------|-----|-----|--------------------------|
| SiliconDisk +/-Pro | S-2F | 129 | | | | Uses SIMMs (solid state) |

AT & T

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|-----|------|-----|-----|-----------------------|
| KS 23054 | M | 30 | 697 | 5 | 17# | Rebadged CDC 94155-36 |
| SXM 200 | S | 200 | | | | |

Aura Associates

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-----------|------|-----|------|-----|-----|---------------------------|
| AU 211 | A | 211 | | | | |
| AU 426 | A | 41 | 1104 | 2 | 38 | Not known by manufacturer |
| AU 43 | A | 43 | | 2 | | Discontinued |
| AU 85 | A | 85 | 977 | 8 | 17 | |
| AU 126 | A | 126 | 872 | 5 | 35 | Out in 1995 |
| AU 245A | A | 245 | | | | |
| AU 853 | A | 82 | 980 | 10 | 17 | Not known by manufacturer |
| AU 1085P | P3 | 85 | | | | |
| AU 1170P | P3 | 170 | | | | |
| AU 126 | P | 126 | 872 | 5 | 35 | |
| AU 170 | P | 170 | | 4 | | |
| AU 63-III | P | 63 | 2362 | 2 | 26 | Superseded by AU 170 |
| AU 85 | P | 85 | 977 | 8 | 17 | |
| AU 211S | S-2 | 211 | | | | |
| AU 245S | S | 245 | | | | |

Automated Systems Methodologies

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-----------------|------|------|------|-----|-----|-------|
| Gig-in-box 2.0 | Par | 2000 | | | | |
| Gig-in-box 1.08 | S-2F | 1080 | | | | |
| Gig-in-box 1.5 | S-2F | 1500 | | | | |
| Gig-in-box 3.5 | S-2F | 3500 | | | | |

Avastor

See *Digital*

BASF

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|-----|------|-----|-----|-------|
| 6182 | M | 6 | 180 | 4 | 17 | |
| 6183 | M | 10 | 220 | 6 | 17 | |
| 6184 | M | 14 | 306 | 6 | 17 | |
| 6185 | M | 23 | 440 | 6 | 17 | |
| 6186 | M | 15 | 440 | 4 | 17 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|-----|------|-----|-----|-----------|
| 6187 | M | 8 | 440 | 2 | 17 | |
| 6188 | M | 12 | 360 | 4 | 17 | |
| 6188-R1 | M | 10 | 612 | 2 | 17 | |
| 6188-R3 | M | 20 | 612 | 4 | 17 | 615 cyls? |
| 6188-R12 | M | 10 | 616 | 2 | 17 | |
| 6188-R25 | M | 21 | 616 | 4 | 17 | |
| 6192 | M | 41 | 1024 | 5 | 17 | |
| 6193 | M | 58 | 1024 | 7 | 17 | |
| 6194 | M | 75 | 1024 | 9 | 17 | |
| 6195 | M | 66 | 1024 | 8 | 17 | |
| 6196 | M | 90 | 1024 | 10 | 17 | |

Bay Microsystems Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|------|-----|------|-----|-----|-------|
| Bay 150 | E | 155 | | | | |
| Bay 320 | E | 320 | | | | |
| Bay 640 | E | 640 | | | | |
| Bay Micro 40 | S | 40 | | | | |

Belfort

Try the Quantum equivalent

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------|------|------|------|-----|-----|-----------------|
| B 5108A | A | 1080 | 2100 | 16 | 63 | Quantum Bigfoot |
| B 5128A | A | 1220 | 2492 | 16 | 63 | |
| B 5150A | A | 1430 | | | | |
| B 5256A | A | 2441 | 4994 | 16 | 63 | |
| B 5300A | A | 2861 | | | | |
| B 5450A | A | 4291 | | | | |

All drives

| | PS | DS | CS |
|---------|----|----|----|
| Single: | O | O | O |
| Master: | C | O | O |
| Slave: | O | C | O |
| Cable | O | O | C |

Bering Technology

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|------|------|------|-----|-----|---------------|
| EconoPac II/90 | S-2 | 1200 | | | | HP compatible |
| EconoPac II/90 | S-2 | 2100 | | | | HP compatible |

Blue Disk

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------|------|-----|------|-----|-----|-------|
| CD 1241-ISA | A | 124 | 976 | 8 | 31 | |
| CD 1501-ISA | A | 150 | 989 | 8 | 37 | |
| CD 2401-ISA | A | 240 | 977 | 8 | 59 | |
| CD 3251-ISA | A | 325 | 1024 | 12 | 51 | |
| CD 421-ISA | A | 42 | 976 | 4 | 21 | |
| CD 5101 | A | 510 | 977 | 14 | 72 | |

Borsu International

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------|------|------|------|-----|-----|-------|
| HD 1000 | S | 1000 | | | | |
| HD 1200 | S | 1240 | | | | |
| HD 2000 | S | 2000 | | | | |
| HD 500 | S | 546 | | | | |

Brand Tech

Makes drives for OEMs

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|-----|------|-----|-----|--------------------|
| BT 9121A | A | 107 | 1166 | 5 | 36 | |
| BT 9170A | A | 157 | 1072 | 7 | 41 | |
| BT 9220A | A | 200 | 1209 | 9 | 36 | |
| BT 9400A | A | 400 | 801 | 16 | 63 | Phys 1800 x 6 x 36 |
| BT 9650A | A | 650 | 1800 | 10 | 36 | Physical? |
| BT 8170E | E | 132 | 1024 | 8 | 34 | MFMRLL? |
| BT 9121E | E | 107 | 1166 | 5 | 36 | |
| BT 9124E | E | 105 | 1166 | 5 | 36 | |
| BT 9170E | E | 157 | 1072 | 7 | 41 | |
| BT 9220E | E | 200 | 1208 | 9 | 36 | |
| BT 8085 | M | 68 | 1024 | 8 | 17 | |
| BT 8120 | R | 104 | 1025 | 8 | 26 | |
| BT 8128 | R | 127 | 1024 | 8 | 31 | |
| BT 8170S | S | 150 | 1024 | 8 | 34 | |
| BT 220S | S | 200 | 1208 | 9 | 36 | |
| BT 9121S | S | 107 | 1166 | 5 | 36 | |
| BT 9170S | S | 157 | 1072 | 7 | 41 | |
| BT 9200S | S | 200 | | | | |

BT 9121A/9170A/9220A

Single: M closed
 Master: M, 8 closed
 Slave: S (or M2) closed

BSM Corp

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|------|-----|------|-----|-----|-------|
| KDK 20 | | 20 | | | | |
| KDK 30 | | 30 | | | | |
| KDS 49 | | 49 | | | | |
| MacCider 100 | S | 105 | | | | |
| MacCider 80 | S | 80 | | | | |

Bull Peripherals

Now owned by Honeywell—no longer producing hard drives.

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|--------|------|-----|-------|---------------|
| D 505 | M | 5 | 153 | 4 | 17 | |
| D 510 | M | 10 | 306 | 4 | 17 | |
| D 530 | M/R | 25/38 | 987 | 3 | 17/26 | |
| D 550 | M/R | 43/62 | 987 | 5 | 17/26 | |
| D 570 | M/R | 59/88 | 987 | 7 | 17/26 | |
| D 585 | M/R | 71/104 | 1166 | 7 | 17/26 | 583 x 14 x 17 |

C Itoh

CIE America—Hard drives sold to Y-E Data

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|-----|------|-----|-----|---------|
| YD 3161B | A | 46 | 1057 | 2 | | |
| YD 3162B | A | 91 | 1057 | 4 | | |
| YD 3042 | S | 41 | 788 | 4 | 26 | 31 SPT? |
| YD 3081B | S | 46 | 1057 | 2 | | |
| YD 3082B | S | 83 | 788 | 8 | 26 | |
| YD 3083B | S | 137 | 1057 | 6 | | |
| YD 3084B | S | 182 | 1057 | 8 | | |
| YD 3181B | S | 46 | 1057 | 2 | | |
| YD 3182B | S | 91 | 1057 | 4 | | |
| YD 3530 | M | 32 | 731 | 5 | 17 | |
| YD 3540 | M | 43 | 731 | 7 | 17 | |

Calluna Technology

www.callunacard.com

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-----------------|------|------|------|-----|-----|-------------------|
| Callunacard 130 | P | 130 | | | | |
| Callunacard 170 | P | 170 | | | | |
| Callunacard 260 | PII | 260 | | | | |
| Callunacard 340 | P | 340 | | | | |
| Callunacard 510 | PIII | 510 | | | | |
| Callunacard 1Gb | PIII | 1000 | | | | |
| CT 105MC | P3 | 105 | 832 | 8 | 36 | Try 828 x 8 x 31 |
| CT 128MC | P3 | 130 | 992 | 8 | 32 | Try 1009 x 4 x 63 |
| CT 170MC | P3 | 170 | | | | |
| CT 260MC | P3 | 260 | | | | |
| CT 340MC | P3 | 340 | | | | |
| CT 70MC | P3 | 170 | 932 | 8 | 45 | |
| CT 80MC | P3 | 85 | 923 | 4 | 45 | Try 923 x 5 x 36 |
| CT 1040RM | P | 1040 | | | | |
| CT 521RM | P | 520 | | | | |

Canyon Technology

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------|------|-----|------|-----|-----|-------|
| HD 20Z | S | 20 | | | | |
| HD 40Z | S | 40 | | | | |
| HD 80Z | S | 80 | | | | |
| HD 100Z | S | 100 | | | | |
| HD 200Z | S | 200 | | | | |

Cardiff

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|------|-----|------|-----|-----|-------|
| F 3053 | M | 44 | 1024 | 5 | 17 | |
| F 3080(E)(S) | E/S | 66 | 1024 | 5 | 26 | |
| F 3127(E)(S) | E/S | 109 | 1024 | 5 | 35 | |

CDC

Control Data Corp. All Imprimis; i.e. Seagate—original developers of the IDE interface. For jumper settings see Seagate equivalents. More info in deskref.exe from Seagate.

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|-----|------|-----|-----|-----------------|
| 94204-65 | A | 63 | 948 | 5 | 26 | Seagate ST 274A |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------|------|-----|------|-----|-----|----------------|
| 94204-71 | A | 71 | 516 | 10 | 27 | ST 280A |
| 94204-74 | A | 65 | 948 | 5 | 26 | ST 274A |
| 94204-81 | A | 71 | 516 | 10 | 27 | ST 280A |
| 94208-51 | A | 42 | 979 | 5 | 17 | Compaq type 17 |
| 94208-62 | A | 62 | 967 | 5 | 27 | |
| 94208-75 | A | 60 | 989 | 5 | 25 | Compaq type 47 |
| 92444-164 | A | 145 | 873 | 6 | 54 | |
| 94244-219 | A | 193 | 873 | 8 | 54 | |
| 94244-274 | A | 241 | 873 | 10 | 54 | ST 2274A |
| 94244-383 | A | 338 | 873 | 14 | 54 | ST 2383A |
| 94244-502 | A | 502 | | | | |
| 94314-136 | A | 120 | 1547 | 5 | 36 | |
| 94335-150 | A | 135 | 1072 | 9 | 28 | |
| 94354-90 | A | 79 | 536 | 10 | 29 | ST 1090A |
| 94354-111 | A | 98 | 536 | 10 | 36 | ST 1111A |
| 94354-126 | A | 109 | 536 | 14 | 29 | ST 1126A |
| 94354-133 | A | 117 | 636 | 10 | 29 | ST 1133A |
| 94354-155 | A | 139 | 536 | 14 | 36 | ST 1156A |
| 94354-156 | A | 138 | 1072 | 7 | 36 | |
| 94354-160 | A | 139 | 536 | 18 | 29 | ST 1162A |
| 94354-162 | A | 139 | 536 | 18 | 29 | |
| 94354-172 | A | 172 | 1072 | 12 | 26 | |
| 94354-186 | A | 164 | 636 | 14 | 36 | ST 1186A |
| 94354-200 | A | 174 | 536 | 18 | 36 | ST 1201A |
| 94354-201 | A | 174 | 536 | 18 | 36 | |
| 94354-230 | A | 211 | 954 | 12 | 36 | ST 1239A |
| 94354-239 | A | 211 | 954 | 12 | 36 | ST 1239A |
| 94604-767H | A | 665 | 1356 | 15 | 64 | |
| 94156-48 | E | 40 | 925 | 5 | 17 | MFM recording |
| 94156-57 | E | 57 | | | | |
| 94156-67 | E | 56 | 925 | 7 | 17 | MFM recording |
| 94156-72 | E | 72 | 925 | 9 | 17 | MFM recording |
| 94156-77 | E | 77 | | | | |
| 94156-86 | E | 72 | 925 | 9 | 17 | MFM recording |
| 94166-101 | E | 85 | 969 | 5 | 36 | |
| 94166-103 | E | 104 | 969 | 6 | 35 | |
| 94166-121 | E | 107 | 969 | 6 | 36 | |
| 94166-138 | E | 139 | 969 | 8 | 35 | |
| 94166-141 | E | 118 | 969 | 7 | 36 | |
| 94166-161 | E | 142 | 969 | 8 | 36 | |
| 94166-182 | E | 152 | 969 | 9 | 34 | ST 4182E |
| 94166-86 | E | 87 | 969 | 5 | 35 | |
| 94171-300 | E | 300 | 1412 | 9 | | |
| 94171-344 | E | | 1549 | 9 | | |
| 94181-574 | E | 330 | 1224 | 15 | 36 | |
| 94181-702 | E | 702 | 1549 | 15 | 50 | |
| 94186-265 | E | 234 | 1412 | 9 | 36 | 706 x 18 x 36 |
| 94186-324 | E | 286 | 1412 | 11 | 36 | 706 x 22 x 36 |
| 94186-383 | E | 319 | 1412 | 13 | 34 | ST 4383E |
| 94186-383H | E | 319 | 1224 | 15 | 34 | ST 4384E |
| 94186-442 | E | 368 | 1412 | 15 | 34 | ST 4442E |
| 94196-766 | E | 664 | 1632 | 15 | 53 | ST 4766E |
| 94216-106 | E | 94 | 1024 | 5 | 34 | ST 2106E |
| 94246-180 | E | 152 | 1453 | 4 | 52 | |
| 94246-182 | E | 160 | 1453 | 4 | 54 | ST 2182E |
| 94246-186 | E | 160 | 1453 | 4 | 54 | ST 2182E |
| 94246-383 | E | 338 | 1747 | 7 | 54 | ST 2383E |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|------|------|------|-----|-----|------------------------|
| 94316-111 | E | 96 | 1447 | 5 | 26 | |
| 94316-136 | E | 128 | 1072 | 5 | 48 | |
| 94316-155 | E | 36 | 1072 | 7 | 36 | |
| 94316-200 | E | 174 | 1072 | 9 | 36 | |
| 94356-111 | E | 92 | 1072 | 5 | 34 | ST 1111E |
| 94356-155 | E | 128 | 1072 | 7 | 34 | ST 1156E |
| 94356-200 | E | 194 | 1072 | 9 | 36 | ST 1201E |
| 97200-23G | I | | | | | ST 82272K |
| 97209-12G | I | 1056 | 1635 | 15 | Z | ST 81236K |
| 97209-25G | I | 2140 | 2611 | 19 | Z | ST 82500K |
| 97229-1050 | I | 1154 | 1635 | 14 | Z | ST 81154K |
| 97289-21G | I | 2105 | 2611 | 16 | Z | ST 82105K |
| 97299-23G | I | 2368 | 2611 | 18 | Z | ST 82368K |
| 97509-12G | I-2 | 1200 | 2101 | 17 | Z | ST 41201K |
| 77731608 | M | 29 | 670 | 5 | 17 | BJ7D5A |
| 77731612 | M | 27 | 797 | 4 | 17 | BJ7D5A |
| 77731613 | M | 31 | 733 | 5 | 17 | BJ7D5A |
| 77731614 | M | 23 | 670 | 4 | 17 | BJ7D5A |
| 94155-21 | M | 21 | 697 | 3 | 17 | |
| 94155-25 | M | 25 | 697 | 4 | 17 | |
| 94155-28 | M | 24 | 697 | 4 | 17 | |
| 94155-29 | M | 29 | 697 | 4 | 17 | |
| 94155-30 | M | 30 | 989 | 3 | 17 | |
| 94155-36 | M | 30 | 697 | 5 | 17 | |
| 94155-37 | M | 32 | 925 | 4 | 17 | |
| 94155-38 | M | 32 | 733 | 5 | 17 | |
| 94155-48 | M | 48 | 925 | 5 | 17 | |
| 94155-51 | M | 42 | 989 | 5 | 17 | |
| 94155-57 | M | 57 | 925 | 6 | 17 | |
| 94155-67 | M | 67 | 925 | 7 | 17 | |
| 94155-77 | M | 77 | 925 | 8 | 17 | |
| 94155-80 | M | 80 | 960 | 10 | 17 | |
| 94155-86 | M | 86 | 925 | 9 | 17 | |
| 94155-120(p) | M | 65 | 960 | 8 | 17 | |
| 94155-135P | M | 74 | 960 | 9 | 17 | |
| 94155-19 | M | 18 | 697 | 3 | 17 | BJ7D5- |
| 94155-21 | M | 21 | 697 | 3 | 17 | BJ7D5- |
| 94155-25 | M | 21 | 697 | 3 | 17 | 615x4x17 (Victor BIOS) |
| 94155-28 | M | 24 | 697 | 4 | 17 | BJ7D5- |
| 94155-29 | M | 24 | 697 | 4 | 17 | BJ7D5- |
| 94155-30 | M | 30 | 733 | 5 | 17 | |
| 94155-36 | M | 30 | 697 | 5 | 17 | aka AT&T KS 23054 |
| 94155-37 | M | 32 | 925 | 4 | 17 | |
| 94155-38 | M | 31 | 733 | 5 | 17 | BJ7D5- |
| 94155-48(p) | M | 40 | 925 | 5 | 17 | ATs—Disable J1/2 |
| 94155-51 | M | 43 | 989 | 5 | 17 | |
| 94155-56 | M | 72 | 925 | 9 | 17 | |
| 94155-57(p) | M | 48 | 925 | 6 | 17 | |
| 94155-67(p) | M | 55 | 925 | 7 | 17 | ATs—Disable J1/2 |
| 94155-77 | M | 64 | 925 | 8 | 17 | |
| 94155-85(p) | M | 70 | 1024 | 8 | 17 | ST 4085(p) |
| 94155-86(p) | M | 71 | 925 | 9 | 17 | ST 4086(p) |
| 94155-89 | M | 72 | 925 | 9 | 17 | |
| 94155-92(p) | M | 77 | 989 | 9 | 17 | |
| 94155-96(p) | M | 78 | 1024 | 9 | 17 | ST 4097(p) |
| 94156-48 | M | 40 | 925 | 5 | 17 | |
| 94156-67 | M | 55 | 925 | 7 | 17 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|------|------|------|-----|-----|------------------------|
| 94156-72 | M | 71 | 925 | 9 | 17 | |
| 94156-86 | M | 72 | 925 | 9 | 17 | |
| 9416-182 | M | 144 | 969 | 9 | 17 | |
| 94204-51 | M | 40 | 989 | 5 | 17 | |
| 94204-65 | M | 64 | 941 | 8 | 17 | |
| 94204-71 | M | 70 | 1024 | 8 | 17 | |
| 94205-30 | M | 25 | 989 | 3 | 17 | |
| 94205-41 | M | 34 | 989 | 4 | 17 | |
| 94205-51(7201) | M | 42 | 989 | 5 | 17 | ST 253 precomp 128 |
| 94205-51(7229) | M | 42 | 989 | 5 | 17 | Wyse (no precomp) |
| 94205-53 | M | 45 | 1024 | 5 | 17 | |
| 94205-55 | M | 44 | 1024 | 5 | 17 | |
| 94208-51 | M | 44 | 989 | 5 | 17 | |
| 94295-51 | M | 42 | 989 | 5 | 17 | |
| 94335-100 | M | 82 | 1072 | 9 | 17 | |
| 94335-150 | M | 80 | 1072 | 9 | 17 | |
| 94335-55 | M | 46 | 1072 | 5 | 17 | |
| 94351-172 | M | 172 | | 9 | 17 | |
| 94355-100 | M | 83 | 1072 | 9 | 17 | ST 1100 536 x 18 x 17 |
| 94355-150 | M | 128 | 1072 | 9 | 17 | |
| 94355-55 | M | 46 | 1072 | 5 | 17 | |
| 94356-200 | M | 172 | | 9 | 17 | |
| 94155-120 | R | 102 | 960 | 8 | 26 | |
| 94155-130 | R | 123 | 1024 | 9 | 36 | |
| 94155-135 | R | 115 | 960 | 9 | 26 | ST 4135R |
| 94205-77 | R | 65 | 989 | 5 | 26 | ST 279R |
| 94208-75 | R | 60 | 966 | 5 | 26 | Compaq type 47 |
| 94216-106 | R | 90 | 1024 | 5 | 17 | |
| 94314-136 | R | 120 | 1247 | 5 | 36 | |
| 94335-150 | R | 125 | 1072 | 9 | 26 | |
| 94354-111 | R | 71 | 1072 | 5 | 26 | |
| 94354-126 | R | 98 | 1072 | 7 | 26 | |
| 94354-133 | R | 83 | 1272 | 5 | 26 | |
| 94354-135 | R | 209 | 1072 | 9 | 42 | |
| 94354-155 | R | 98 | 1072 | 7 | 26 | |
| 94354-160 | R | 126 | 1072 | 9 | 26 | |
| 94354-172 | R | 172 | 1072 | 9 | 26 | |
| 94354-186 | R | 116 | 1272 | 7 | 26 | |
| 94354-200 | R | 126 | 1072 | 9 | 26 | |
| 94354-230 | R | 150 | 1272 | 9 | 26 | |
| 94355-150 | R | 125 | 1072 | 9 | 26 | ST 1150R 536 x 18 x 28 |
| 94355-156 | R | 138 | 1072 | 7 | 36 | ST 1156R |
| 94356-111 | R | 98 | 1072 | 5 | 26 | |
| 94356-155 | R | 138 | 1072 | 7 | 26 | |
| 94356-200 | R | 177 | 1072 | 9 | 26 | |
| 24221-125M | S | 111 | 1024 | 3 | | |
| 24221-209M | S | 183 | 1024 | 5 | | |
| 64161-155 | S | 140 | 969 | 9 | 34 | Seagate MN something |
| 9270-368 | S | 316 | 1217 | 10 | | |
| 9270-500 | S | 427 | 1217 | 10 | | |
| 9270-736 | S | 637 | 1635 | 15 | | |
| 9270-850 | S | 727 | 1381 | 15 | | |
| 9270-1230 | S | 1056 | 1635 | 15 | | |
| 94161-101 | S | 84 | 969 | 5 | 34 | |
| 94161-103 | S | 104 | 969 | 6 | 35 | |
| 94161-121 | S | 121 | 969 | 7 | 35 | |
| 94161-138 | S | 139 | 969 | 8 | 35 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|-------|------|------|-----|-----|---------------------------|
| 94161-141 | S | 121 | 969 | 7 | 35 | |
| 94161-155 | S | 152 | 969 | 9 | 34 | |
| 94161-182 | S | 155 | 969 | 9 | 34 | ST 4182N |
| 94161-86 | S | 86 | 969 | 5 | 35 | |
| 94171-300 | S | 300 | 1412 | 9 | 32 | 1365 x 9? 682 x 18 x ? |
| 94171-307 | S | 300 | 1412 | 9 | 32 | 706 x 18 x ? |
| 94171-327 | S | 300 | 1412 | 9 | 32 | 706 x 18 x ? |
| 94171-344 | S | 344 | 1549 | 9 | 32 | 774 x 18 x ? |
| 94171-350(M) | S | 307 | 1412 | 9 | 46 | ST 4350N 774 x 18 x ? |
| 94171-375 | S | 330 | 1549 | 9 | 45 | 774 x 18 x ? |
| 94171-376(M) | S | 315 | 1549 | 9 | 45 | ST 4376N 774 x 18 x ? |
| 94181-383H | S | 383 | 1224 | 15 | | |
| 94181-385H/M | S | 330 | 791 | 8 | 55 | ST 4385N |
| 94181-574 | S | 574 | 1549 | 15 | 32 | 774 x 30 x ? |
| 94181-702 | S | 613 | 1546 | 15 | 50 | ST 4702N 774 x 30 x ? |
| 94186-383S | S | 328 | 1412 | 13 | | 706 x 26 x ? |
| 94186-442S | S | 442 | 1412 | 15 | 26 | 706 x 30 x ? |
| 94191-766 | S | 676 | 1632 | 15 | 54 | ST 4766N 816 x 30 ? |
| 94196-766 | S | 676 | 1632 | 15 | 54 | ST 4766N |
| 94211-106 | S | 91 | 969 | 5 | 34 | ST 2106N/94211-091 |
| 94211-125 | S | 107 | 1544 | 3 | 45 | ST 2125N |
| 94211-209 | S | 209 | 1547 | 5 | 26 | |
| 94211-91 | S | 88 | 969 | 5 | 36 | aka 94211-106 992x5? |
| 94221-125 | S | 110 | 1544 | 3 | 45 | ST 2125N |
| 94221-169 | S | 159 | 1310 | 5 | Z | 655 x 10 x ? |
| 94221-184 | S | 184 | | | | |
| 94221-190 | S | 140 | 1547 | 5 | 36 | 773 x 10 x ? |
| 94221-209 | S | 183 | 1544 | 5 | 45 | ST 2209N 773 x 10 x ? |
| 94241-383 | S | 338 | 1261 | 7 | 74 | ST 2383N |
| 94241-502 | S | 435 | 1755 | 7 | 69 | ST 2502N |
| 94244-383 | S | 160 | 1747 | 7 | 26 | |
| 94311-136S | S-2 | 115 | 1247 | 5 | 36 | |
| 94316-136 | S | 120 | 1247 | 5 | 36 | |
| 94351-90 | S | 79 | 1068 | 5 | 29 | ST 1090N |
| 94351-230S | S | 204 | 1268 | 9 | 36 | |
| 94351-111 | S | 98 | 1068 | 5 | 36 | ST 1111N 534 x 10 x ? |
| 94351-126 | S | 110 | 1068 | 7 | 29 | ST 1126N 534 x 14 x 36 |
| 94351-128 | S | 110 | 1068 | 7 | 29 | 534 x 14 x 36 |
| 94351-133S | S-2 | 113 | 1268 | 5 | 36 | ST 1133NS 634 x 10 x ? |
| 94351-134 | S | 134 | 1068 | 7 | 36 | 534 x 14 x 36 |
| 94351-155(S) | S | 138 | 1068 | 7 | 36 | ST 1156N(S) 534 x 14 x ? |
| 94351-160 | S | 142 | 1068 | 9 | 29 | ST 1162N 534 x 18 x 36 |
| 94351-172 | S | 172 | 1068 | 9 | 36 | 534 x 18 x 36 |
| 94351-186(S) | S | 158 | 1268 | 7 | 36 | ST 1186N(S) 634 x 14 x ? |
| 94351-200(S) | S(-2) | 174 | 1068 | 9 | 36 | ST 1201N(S) 534 x 18 x 36 |
| 94351-230(S) | S-2 | 174 | 1268 | 9 | 36 | ST 1239N(S) 636 x 18 x 36 |
| 94351-90 | S | 79 | 1068 | 5 | 29 | ST 1090N |
| 94354-90 | S | 76 | 1072 | 5 | 29 | |
| 94354-126 | S | 106 | 1072 | 7 | 29 | |
| 94354-135 | S | 121 | 1072 | 8 | 29 | |
| 94354-160 | S | 136 | 1072 | 9 | 29 | |
| 94354-172 | S | 151 | 1072 | 8 | 36 | |
| 94354-200 | S | 170 | 1072 | 9 | 36 | |
| 94601-12G | S | 1037 | 1931 | 15 | 71 | ST 41200N |
| 94601-767H/M | S-2 | 665 | 1356 | 15 | 64 | ST 4767N |
| 97201-12G | S | 1049 | 1635 | 15 | Z | ST 81236N |
| 97201-25G | S | 2140 | 2611 | 19 | Z | ST 82500N |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|------|------|------|-----|-----|----------------------|
| 97201-368 | S | 316 | 1217 | 10 | 60 | ST 8368N |
| 97201-500 | S | 378 | 1217 | 10 | 82 | ST 8500N |
| 97201-736 | S | 637 | 1635 | 15 | Z | ST 8741N |
| 97201-850 | S | 727 | 1381 | 15 | Z | ST 8851N |
| 97501-12G | S | 1352 | 2101 | 17 | 74 | ST 41520N |
| 97501-15G | S-2 | 1500 | | 17 | 74 | |
| 97501-16G | S | 1370 | 2101 | 17 | 74 | ST 41600N |
| 97501-16G | S-2F | 1719 | 2129 | 19 | 83 | 2624 cyls? |
| Wren 3 | S | 106 | 969 | 5 | | |
| Wren 8 | S | 1415 | 2107 | 15 | 87 | |
| Wren 9 | S-2F | 1900 | 2573 | 15 | 96 | |
| 94151-xx SASI | SASI | 51 | 921 | 3 | 36 | 256 bytes per sector |
| 94151-25 | SASI | 25 | 921 | 3 | 36 | 256 bytes per sector |
| 94151-27 Wren2 | SASI | 27 | 921 | 3 | 19 | 512 bytes per sector |
| 94151-42 Wren2 | SASI | 85 | 921 | 5 | 36 | 256 bytes per sector |
| 94151-44 Wren2 | SASI | 45 | 921 | 5 | 19 | 512 bytes per sector |
| 94151-59 Wren2 | SASI | 119 | 921 | 7 | 36 | 256 bytes per sector |
| 94151-62 Wren2 | SASI | 63 | 921 | 7 | 19 | 512 bytes per sector |
| 94151-76 Wren2 | SASI | 153 | 921 | 9 | 36 | 256 bytes per sector |
| 94151-80 Wren2 | SASI | 81 | 921 | 9 | 19 | 512 bytes per sector |
| 97100-80 | SMD | 83 | 823 | 5 | Z | ST 683J |
| 97150-160 | SMD | 165 | 823 | 10 | Z | ST 6165J |
| 97150-300 | SMDE | 315 | 823 | 19 | Z | ST 6315J |
| 97150-340 | SMD | 344 | 711 | 24 | Z | ST 6344J |
| 97150-500 | SMD | 516 | 711 | 24 | Z | ST 6515J |
| 97200-368 | SMDE | 316 | 1217 | 10 | 60 | ST 8368J |
| 97200-500 | SMDE | 428 | 1217 | 10 | 82 | |
| 97200-736 | SMDE | 641 | 1635 | 15 | 60 | |
| 97200-850 | SMDE | 727 | 1381 | 15 | 82 | |
| 97200-1130 | SMD | | 1635 | 15 | Z | ST 81123J |
| 97200-12G | SMD | 1056 | 1635 | 15 | Z | ST 81236J |
| 97200-1230 | SMD | 1056 | 1635 | 15 | 100 | |
| 97200-23G | SMD | 2272 | 2611 | 19 | Z | ST 82272J |
| 97200-25G | SMD | 2140 | 2611 | 19 | Z | ST 82500J |
| 97200-500 | SMD | 378 | 1217 | 10 | 8 | ST 8500J |
| 97200-736 | SMD | 637 | 1635 | 15 | Z | ST 8741J |
| 97200-850 | SMD | 727 | 1381 | 15 | Z | ST 8851J |
| 97500-12G | SMD | 1200 | 2101 | 17 | | ST 41201J |

94244-164, 219, 502

Single: A, B, E in
Master: A, B in; E out
Slave: A in; no delay on startup
B in; delay startup for 20 secs

94166-xxx

| Bytes/sec | Secs/track | 1-2 | 1-3 | 1-4 |
|-----------|------------|-----|-----|-----|
| 512 | 34 | 1 | 1 | 0 |
| 512 | 35 | 1 | 0 | 0 |
| 512 | 36 | 0 | 1 | 0 |
| 256 | 64 | 0 | 0 | 0 |

94151-xx SASI

S=Sector block size; On=512, Off=256

Wren III

J4

| | |
|-----------|-------------------|
| 1-2 | Term Power Source |
| 3-4 | Term Power Source |
| 5-6 | Parity Check |
| 7-8-11-12 | ID select |
| 13-14 | Motor Start |

Centennial Technologies

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|------|-----|------|-----|-----|-------|
| MicroDrive 170 | P3 | 170 | | | | |
| MicroDrive 260 | P3 | 260 | | | | |
| MicroDrive 340 | P3 | 340 | | | | |

Century Data

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------|------|-----|------|-----|-----|---------------|
| CAST 10203 | E | 55 | 1050 | 3 | 35 | 525 x 6 x 35 |
| CAST 10204 | E | 73 | 1050 | 4 | 35 | |
| CAST 10304 | E | 75 | 1050 | 4 | 35 | 525 x 8 x 35 |
| CAST 10305 | E | 92 | 1050 | 5 | 35 | 525 x 10 x 35 |
| CAST 14404 | E | 112 | 1590 | 4 | 35 | 795 x 8 x 35 |
| CAST 14405 | E | 140 | 1590 | 5 | 35 | 795 x 10 x 35 |
| CAST 14406 | E | 168 | 1590 | 6 | 35 | 795 x 12 x 35 |
| CAST 24509 | E | 253 | 1599 | 9 | 35 | 799 x 18 x 35 |
| CAST 24611 | E | 310 | 1599 | 11 | 35 | 799 x 22 x 35 |
| CAST 24713 | E | 366 | 1599 | 13 | 35 | 799 x 26 x 35 |
| SS 170-2180 | E | 188 | | | | |
| CAST 10203S | S | 55 | 1050 | 3 | 35 | 525 x 6 x 35 |
| CAST 10304S | S | 74 | 1050 | 4 | 35 | 525 x 8 x 35 |
| CAST 10305S | S | 92 | 1050 | 5 | 35 | 525 x 10 x 35 |
| CAST 14404S | S | 112 | 1590 | 4 | 35 | 795 x 8 x 35 |
| CAST 14405S | S | 140 | 1590 | 5 | 35 | 795 x 10 x 35 |
| CAST 14406S | S | 168 | 1590 | 6 | 35 | 795 x 12 x 35 |
| CAST 24509S | S | 253 | 1599 | 9 | 35 | 799 x 18 x 35 |
| CAST 24611S | S | 310 | 1599 | 11 | 35 | 799 x 22 x 35 |
| CAST 24713S | S | 366 | 1599 | 13 | 35 | 799 x 26 x 35 |

Chinook Technology

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|-----|------|-----|-----|-------|
| CT-20 | S | 20 | | | | |
| CT-80 | S | 84 | | | | |

Ciprico

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|------|------|------|-----|-----|-------|
| Rimfire 6703 | S | 4200 | | | | |

CMI

Computer Memories Inc. Out of business. Original supplier for IBM AT. Tulin connection?

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------|------|-----|------|-----|-----|-------|
| CM 10E | M | 10 | 650 | 2 | 17 | |
| CM 15C | M | 15 | 305 | 6 | 17 | |
| CM 20E | M | 20 | 650 | 4 | 17 | |
| CM 30E | M | 30 | 650 | 6 | 17 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|--------|------|-----|-------|---------------------------|
| CM 3206 | M | 10 | 306 | 4 | 17 | |
| CM 3212 | M | 10 | 612 | 2 | 17 | |
| CM 3412 | M | 10 | 306 | 4 | 17 | |
| CM 3426 | M | 21 | 615 | 4 | 17 | Not XT's or Xebec 1210/20 |
| CM 4000 | M | 13 | | 2 | 17 | |
| CM 4426 | M | 21 | 615 | 4 | 17 | |
| CM 5018H | M | 15 | 845 | 2 | 17 | |
| CM 514 | M | 58 | 961 | 7 | 17 | |
| CM 5205 | M/R | 4/6 | 256 | 2 | 17/26 | Not XT's or Xebec 1210/20 |
| CM 5206 | M/R | 5/8 | 306 | 2 | 17/26 | |
| CM 5410 | M/R | 8/13 | 256 | 4 | 17/26 | |
| CM 5412 | M/R | 10/16 | 306 | 4 | 17/26 | |
| CM 5616 | M/R | 13/20 | 256 | 6 | 17/26 | |
| CM 5619 | M/R | 16/24 | 306 | 6 | 17/26 | |
| CM 5640 | M | 32 | 640 | 6 | 17 | |
| CM 5826 | M | 21 | 306 | 8 | 17 | |
| CM 6213 | M/R | 11/17 | 640 | 2 | 17/26 | |
| CM 6213S | M | 5 | 320 | 2 | 17 | |
| CM 6265 | M | 21 | 640 | 4 | 17 | |
| CM 6413 | M | 10 | 615 | 2 | 17 | |
| CM 6426 | M/R | 21/34 | 640 | 4 | 17/26 | 615 x 4? |
| CM 6426S | M | 22 | 615 | 4 | 17 | |
| CM 6626 | M | 21 | 640 | 4 | 17 | |
| CM 6640 | M/R | 33 | 640 | 6 | 17/26 | |
| CM 6853 | M | 42 | 640 | 8 | 17 | |
| CM 7000 | M | 43 | 733 | 7 | 17 | |
| CM 7030 | M | 24 | 733 | 4 | 17 | |
| CM 7038 | M | 30 | 733 | 5 | 17 | |
| CM 7053 | M | 43 | 733 | 7 | 17 | |
| CM 7085 | M | 68 | 1024 | 8 | 17 | |
| CM 7660 | M/R | 40/76 | 960 | 5 | 17/26 | 6 hds? |
| CM 7880 | M/R | 56/102 | 960 | 7 | 17/26 | 8 hds? |

CMS Enhancements

Found in PS/2s/ASTs/Compaqs/NECs/AT&Ts.

Often disguised Conners and others. Some problems with Epson BIOSes.

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------------|------|------|------|-----|-----|-------------------|
| ACC 20 | A | 21 | 615 | 4 | 17 | Commodore Colt XT |
| B 040A1-M3540 | A | 40 | 980 | 5 | 17 | Laptops |
| B 040A3-13 | A | 40 | 980 | 5 | 17 | Laptops |
| B 040A5 | A | 40 | 820 | 6 | 17 | |
| B 040A6 | A | 40 | 980 | 5 | 17 | |
| B 040M50-P | A | 40 | 820 | 6 | 17 | |
| B 060F2 | A | 64 | 823 | 4 | 17 | |
| B 080A3 | A | 85 | 526 | 8 | 39 | |
| B 080A3-N | A | 80 | 980 | 6 | 26 | |
| B 080A5 | A | 130 | 1001 | 15 | 17 | |
| B 1.0A1-U1 | A | 1281 | 2100 | 16 | 63 | |
| B 100A5/M50 | A | 106 | 1024 | 12 | 17 | |
| B 120 A2 | A | 125 | 872 | 8 | 35 | |
| B 120A3-13 | A | 120 | 762 | 8 | 39 | |
| B 120A5 | A | 130 | 1001 | 15 | 17 | |
| B 150A3 | A | 170 | 332 | 16 | 63 | |
| B 170A3 | A | 170 | 332 | 16 | 63 | |
| B 200A2 | A | 212 | 989 | 12 | 35 | |
| B 200A3 | A | 212 | 683 | 16 | 38 | |

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| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|------|------|------|-----|-----|---------------------|
| B 200 A5 | A | 213 | 1024 | 12 | 34 | |
| B 240A5 | A | 245 | 978 | 14 | 35 | |
| B 340A2-N/A4 | A | 341 | 1010 | 12 | 55 | Laptops |
| B 340A5 | A | 340 | 767 | 14 | 62 | |
| B 420A4-U1 | A | 425 | 1010 | 16 | 51 | |
| B 540A4-U1 | A | 541 | 1023 | 16 | 63 | |
| B 730A4-U1 | A | 730 | 1416 | 16 | 63 | |
| B 425A5 | A | 452 | 978 | 14 | 35 | Possibly! |
| B 500A5 | A | 528 | 1024 | 16 | 64 | |
| CQ Elite 520 | A | 514 | | | | Compaq |
| CQ LTE-120 | A | 127 | 980 | 15 | 17 | |
| CQ LTE-340 | A | 340 | 969 | 14 | 49 | |
| CQ LTE-386-200 | A | 209 | 985 | 13 | 32 | |
| D 040A3 | A | 40 | 980 | 5 | 17 | |
| D 40M30-SS | A | 42 | 805 | 4 | 26 | |
| F 70286D-WK | A | 68 | 1032 | 5 | 26 | |
| H 020A2 | A | 21 | 615 | 4 | 17 | |
| H 020A3 | A | 21 | 782 | 2 | 27 | |
| H 040A3 | A | 42 | 980 | 5 | 17 | |
| H 040A3-AF | A | 42 | 782 | 4 | 17 | |
| H 040A3/10 | A | 42 | 980 | 5 | 17 | |
| H 040CQ285D-P | A | 43 | 805 | 4 | 26 | Conner CP 344 |
| H 100286 | A | 104 | 776 | 8 | 33 | |
| H 100386 | A | 104 | 776 | 8 | 33 | |
| H 100A3 | A | 104 | 776 | 8 | 33 | |
| H 100CPQ3-P | A | 104 | 776 | 8 | 33 | |
| H 100CQ33-P | A | 104 | 776 | 8 | 33 | |
| H 140386-P/D | A | | | | | |
| H 20ASTB-P | A | 21 | 782 | 2 | 17 | |
| H 20286 | A | 21 | | | | |
| H 200386 | A | 212 | 1366 | 8 | 38 | |
| H 200CQ33 | A | 212 | 1366 | 8 | 36 | |
| H 300CQ33 | A | | | | | |
| H 40286 | A | 42 | 980 | 5 | 17 | |
| H 40386 | A | 42 | 980 | 5 | 17 | |
| H 40386S-S | A | 44 | 733 | 7 | 17 | |
| H 40ASTB-P | A | 42 | 782 | 4 | 27 | |
| H 40CQ286D | A | 42 | 980 | 5 | 17 | |
| H 40CQ286D-S | A | 44 | 733 | 7 | 17 | |
| H 40 CQP3-P | A | 42 | 980 | 5 | 17 | |
| H 60286 | A | 64 | 948 | 5 | 27 | |
| H 60CQ286D | A | 60 | 966 | 5 | 26 | |
| H 60CQ-P | A | 60 | 966 | 5 | 26 | |
| K 020A2-N | A | 21 | 615 | 4 | 17 | |
| K 020A3-AF(N) | A | 20 | 615 | 4 | 17 | Conner in disguise. |
| K 020A7 | A | 21 | 782 | 2 | 17 | |
| K 040A2-AF(N) | A | 40 | 667 | 4 | 33 | |
| K 040A3-N | A | 40 | 523 | 4 | 41 | CP 3044 in disguise |
| K 040A5 | A | 43 | 977 | 5 | 17 | Try 782 x 4 x 27 |
| K 040A6 | A | 42 | 980 | 5 | 17 | |
| K 040A7 | A | 42 | 782 | 4 | 27 | |
| K 045A3 | A | 44 | 733 | 7 | 17 | |
| K 080A1-AF(N) | A | 80 | 980 | 10 | 17 | Try 1024 x 4 x 39 |
| K 080A2-AF(N) | A | 80 | 667 | 8 | 33 | |
| K 080A3 | A | 84 | 832 | 6 | 33 | |
| K 085A4 | A | 89 | 1024 | 10 | 17 | |
| K 1.0A1 | A | 1020 | 887 | 30 | 77 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-----------------|------|-----|------|-----|-----|--------------------------|
| K 100A2 | A | 105 | 868 | 7 | 34 | |
| K 100A3 | A | 100 | 776 | 8 | 33 | Conner in disguise |
| K 120A2 | A | 120 | 667 | 12 | 33 | 1334 x 6 x 34 |
| K 120A3 | A | 120 | 762 | 8 | 39 | |
| K 120A4 | A | 130 | 1001 | 15 | 17 | |
| K 160A2 | A | 180 | 1334 | 8 | 17 | |
| K 160F2 | A | 160 | 1024 | 8 | 39 | |
| K 180A2 | A | 180 | 667 | 16 | 33 | 1334 x 6 x 34 |
| K 20AASTB-P | A | 21 | 782 | 2 | 27 | |
| K 20M25-ZS | A | 21 | 636 | 2 | 36 | |
| K 200A1-M2540 | A | 212 | 987 | 12 | 35 | Laptops |
| K 200A2 | A | 210 | 1216 | 10 | 33 | |
| K 200A3-I3 | A | 200 | 1024 | 8 | 48 | 1348 x 8 x 38 |
| K 200A4 | A | 211 | 954 | 12 | 36 | |
| K 340A5 | A | 426 | 895 | 15 | 62 | |
| K 40ASTB-P | A | 42 | 782 | 4 | 27 | |
| K 40M25 | A | 42 | 805 | 4 | 26 | |
| K 425A5-M3540 | A | 425 | 895 | 15 | 62 | Laptops |
| K 500A1 | A | 560 | 1020 | 16 | 67 | |
| K 500A3 | A | 544 | 1023 | 16 | 63 | |
| LD 1400J-40LT | A | 40 | | | | Litedrive |
| LD CQSLT-40 | A | 42 | 1047 | 2 | 40 | |
| LD CQSLT-80 | A | 85 | 980 | 10 | 17 | |
| LD EP286-R80 | A | 80 | 1024 | 9 | 17 | |
| LDS 3100-40 | A | 42 | 948 | 5 | 17 | |
| LDS NECHD-20 | A | 20 | 612 | 4 | 17 | |
| LDS NECMS-20 | A | 20 | 612 | 4 | 17 | |
| LDZE 386-100 | A | 100 | 776 | 8 | 34 | |
| NVersa 340 | A | 520 | | | | NEC |
| TP 750-520 | A | 524 | | | | Thinkpad |
| T4700-520 | A | 520 | | | | Toshiba |
| F 115ESDI-T | E | 114 | 914 | 7 | 35 | PS/2 models 60/80 |
| F 150AT-WCA | E | 150 | 969 | 9 | 34 | |
| F 150EQ-WCA | E | 150 | | | | |
| F 320AT-WCA | E | 320 | 1224 | 15 | 34 | |
| F 320ESDI-T | E | 320 | | | | PS/2 models 60/80 |
| F 650E1-(N)MV | E | 650 | 1632 | 15 | 54 | PS/2 |
| F 660E1-AFV | E | 660 | 1632 | 15 | 54 | |
| F 70ESDI-T | E | 70 | 582 | 7 | 35 | PS/2 models 60/80 |
| F 702086D | E | 73 | | | | |
| H 130E1-MV(N) | E | 130 | 1224 | 7 | 33 | PS/2 |
| H 140E1-AFV | E | 140 | 1224 | 7 | 33 | |
| H 330E1 Express | E | 329 | 1780 | 7 | 54 | 890 x 14 x 54 PS/2 |
| H 340E1 Express | E | 329 | 1780 | 7 | 54 | 890 x 14 x 54 |
| K 080F2-M5070 | EFB2 | 80 | | | | |
| K 095E1-AFV | E | 95 | 915 | 7 | 36 | |
| K 120M50Z70-P | EFB2 | 120 | 925 | 8 | 32 | PS/2 |
| K 160F2-M5070 | EFB2 | 160 | | | | |
| K 30M30E-P | EFB2 | 30 | 615 | 4 | 25 | PS/2 |
| K 60M50Z/70-P | EFB2 | 60 | | | | |
| PS Express 140 | E | 140 | | | | |
| PS Express 150 | E | 150 | 969 | 9 | 34 | PS/2 models 60/80 |
| PS Express 320 | E | 320 | 1224 | 15 | 34 | PS/2 60/80 aka K 020M3-N |
| PS Express 340 | E | 340 | | | | |
| PS Express 670 | E | 670 | | | | |
| PS Express 95 | E | 95 | | | | |
| D 020M30 | H | 20 | 615 | 4 | 17 | Not in AT&Ts |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------------|------|-----|------|-----|-----|-------------------------|
| D 020M6-X | H | 20 | 615 | 4 | 17 | XTs only |
| D 030R6-X | H | 30 | 615 | 4 | 26 | RLL XTs only. |
| D 030XT-OK | H | 32 | 615 | 4 | 26 | aka D 030R6-X RLL |
| D 20ATT-WS | H | 20 | 615 | 4 | 17 | AT&T 6300 aka K 030M3-N |
| D 30ATT-SS | H | 30 | 615 | 4 | 26 | RLL AT&T |
| D 30ATTW3 | H | 30 | 615 | 6 | 17 | MFM AT&T |
| D 40XT-WS | H | 40 | 977 | 5 | 17 | XTs |
| D 80XT | H | 80 | 1024 | 9 | 17 | aka K 080M2-N |
| K 020M3-N | H | 20 | 615 | 4 | 17 | aka D 20M30 |
| K 030M3-N | H | 30 | 615 | 6 | 17 | aka D 30ATTWS |
| K 080M2-N | H | 80 | 1024 | 9 | 17 | aka D 80XT-WC XTs |
| AH 20TAN-WS | M | 20 | 615 | 4 | 17 | Tandy 1000 |
| AH 40DS | M | 40 | 820 | 6 | 17 | XTs |
| D 20M30-OK | M | 20 | 615 | 4 | 17 | |
| D 20XT-OK | M | 21 | 615 | 4 | 17 | XTs only |
| D 40XT-WS | M | 42 | 977 | 5 | 17 | |
| D 80XT-WC | M | 80 | 1024 | 9 | 17 | aka K 080M2-N |
| F 070M3-A(N) | M | 70 | 1024 | 8 | 17 | |
| F 40-K | M | 42 | 1024 | 5 | 17 | |
| F 60-K | M | 61 | 1024 | 7 | 17 | |
| F 65M60K | M | 65 | 1024 | 8 | 17 | PS/2 models 60/80 |
| F 70-K | M | 70 | 1024 | 8 | 17 | |
| F 80-K | M | 80 | 1024 | 9 | 17 | |
| H 020M6-A(X) | M | 20 | 615 | 4 | 17 | aka H 20AT-S/AH20TAN |
| H 080M3-A | M | 80 | 1071 | 9 | 17 | aka K 080M2-A |
| H 080M4-A(N) | M | 80 | 1314 | 7 | 17 | |
| H 040M3-A,N,X | M | 40 | 820 | 6 | 17 | X=XT |
| H 40M50P | M | 42 | 977 | 5 | 17 | |
| H 65M50P | M | 65 | 1024 | 9 | 17 | |
| HD 20AT-S | M | 21 | 615 | 4 | 17 | |
| HD 30AT-S | M | 32 | 615 | 6 | 17 | |
| HD 40AT-S1 | M | 43 | 820 | 6 | 17 | |
| K 020M3-N | M | 20 | 615 | 4 | 17 | XTs AT&T 6300 |
| K 020M25-OK | M | 21 | 615 | 4 | 17 | |
| K 020M25-WS | M | 21 | 615 | 4 | 17 | |
| K 020M4-M2530 | M | 20 | 615 | 4 | 17 | PS/2 25/30 |
| K 020M4-N(X) | M | 20 | 615 | 4 | 17 | X=XT |
| K 030M25-OK | M | 32 | 615 | 6 | 17 | |
| K 030M25-WS | M | 32 | 615 | 6 | 17 | |
| K 040M25-WS | M | 42 | 820 | 6 | 17 | |
| K 040M3-N | M | 40 | 977 | 5 | 17 | |
| K 040M5-N | M | 40 | 820 | 6 | 17 | |
| K 080M2-A(N) | M | 80 | 1071 | 9 | 17 | aka H 080M3-A |
| K 080M25Z | M | 84 | 1072 | 9 | 17 | |
| K 20M25/30 | M | 20 | 615 | 4 | 17 | XTs OK/-WS |
| K 30M25/30-WS | M | 30 | 615 | 4 | 17 | |
| K 40 | M | 40 | 1024 | 5 | 17 | |
| K 60 | M | 60 | 1024 | 7 | 17 | |
| K 70 | M | 71 | 1024 | 8 | 17 | |
| K 80 | M | 82 | 1024 | 9 | 17 | |
| B 030F1-PS1 | PS/1 | 30 | 920 | 2 | 33 | Plug in and Play |
| H 40M50-P | PS/2 | 40 | 977 | 5 | 17 | Embedded MFM |
| H 65M52-P | PS/2 | 65 | 1071 | 9 | 17 | PS/2 model 50 |
| K 030F1-M2530 | PS/2 | 30 | 920 | 2 | 33 | Model 25/30 286 |
| K 040M3-M2530 | PS/2 | 40 | | | | Model 25/30 286 |
| K 120M50Z-70 | PS/2 | 120 | 925 | 8 | 32 | ESDI PS/2 50Z/70 |
| K 30M30E-P | PS/2 | 30 | 615 | 4 | 17 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------------|------|------|------|-----|-----|----------------------|
| K 50M50Z | PS/2 | 63 | 767 | 6 | 27 | |
| K 60M50Z/70-P | PS/2 | 60 | 767 | 6 | 26 | |
| D 30XT-OK | R | 32 | 615 | 4 | 26 | |
| H 040 R6-X | R | 40 | 667 | 4 | 31 | aka H 40RLL-SS X=XT |
| K 030M4-M2530 | R | 30 | 615 | 4 | 26 | PS/2 models 25/30 |
| K 030R4-X | R | 30 | 615 | 4 | 28 | XT |
| K 30M25/30-OK | R | 30 | 615 | 4 | 26 | |
| H 65M50-P | SMD | 65 | 1024 | 9 | 17 | |
| 1133OSI-NV | S | 330 | | | | |
| E 1.0S1-NV | S | 1000 | 831 | 15 | 28 | Lanstack 1000 |
| E 150S1-NV | S | 150 | 1780 | 7 | 54 | Lanstack 150 |
| E 200S2-N | S | 200 | | | | |
| E 325S0-NV | S | 325 | 1457 | 8 | 57 | External |
| E 330S1-NV | S | 330 | 1780 | 7 | 54 | Lanstack 330 |
| E 650S0-NV | S | 650 | 1457 | 16 | 57 | External |
| E 660S1-NV | S | 660 | 831 | 15 | 28 | Lanstack 660 |
| F 1.0S1-NV | S | 1000 | 831 | 15 | 28 | Sentry 1000 |
| F 325S0-NV | S | 325 | 1457 | 8 | 17 | |
| F 650S0-NV | S | 650 | 1457 | 16 | 57 | |
| F 660S1-NV | S | 660 | 831 | 15 | 28 | Sentry 660 |
| H 150S1-NV | S | 150 | 1780 | 7 | 54 | Sentry 150 |
| H 330S1-NV | S | 330 | 1780 | 7 | 54 | Sentry 330 |
| H 60SCSI-S | S | 65 | 628 | 6 | 34 | |
| H 80AT | S | 84 | 1072 | 9 | 17 | |
| H 80SCSI | S | 81 | 820 | 6 | 34 | |
| H C60SCSI-S | S | 60 | 628 | 6 | 34 | |
| K 080S1-M55N | S | 80 | 1021 | 4 | 39 | PS/2 55SX |
| K 080S1-M70N | S | 80 | 1021 | 4 | 39 | PS/2 50Z/70 |
| K 080S1-M80N | S | 80 | 1021 | 4 | 39 | PS/2 80 |
| K 160S1-M55N | S | 160 | 1021 | 8 | 39 | PS/2 55SX |
| K 160S1-M70N | S | 160 | 1021 | 8 | 39 | PS/2 50Z/70 |
| K 160S1-M80N | S | 160 | 1021 | 8 | 39 | PS/2 80 |
| K 200S2-N | S | 200 | | | | |
| K 320S1-M55N | S | 320 | 951 | 15 | 44 | PS/2 55SX |
| K 320S1-M70N | S | 320 | 951 | 15 | 44 | PS/2 50Z/70 |
| K 320S1-M80N | S | 320 | 951 | 15 | 44 | PS/2 80 |
| K 380S1-6000N | S | 380 | 1199 | 14 | 39 | IBM RISC System 6000 |
| K 400S1-M55N | S | 400 | 1199 | 4 | 48 | PS/2 55SX |
| K 400S1-M70N | S | 400 | 1199 | 4 | 48 | PS/2 70 |
| K 400S1-M80N | S | 400 | 1199 | 4 | 48 | PS/2 80 |
| K 45M30286 | S | 48 | 615 | 6 | 26 | |
| K 60M30286 | S | 60 | 921 | 5 | 26 | |
| K 80M30286 | S | 84 | 906 | 7 | 26 | |
| LDMAC20 | S | 20 | | | | MacLite |
| LDMAC40 | S | 40 | | | | MacLite |
| MacStack 40U | S | 40 | | | | |
| MacStack SD20 | S | 21 | | | | |
| MacStack SD30 | S | 31 | | | | |
| MacStack SD45 | S | 47 | | | | |
| MacStack SD60 | S | 62 | | | | |
| MacStack SD81 | S | 82 | | | | |
| MC 100 | S | 100 | | | | Mac (NEC) |
| MC 20 | S | 20 | | | | Mac (Seagate) |
| PB 340 | S-2 | 340 | | | | |
| PB 520 | S-2 | 520 | | | | |
| PC Stack 80 | S | 80 | | | | |
| PC Stack 45 | S | 45 | | | | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|------|------|------|-----|-------|---------------------|
| PI E660S1-II | S | 660 | 831 | 15 | 28 | |
| PI E1.0S5-II | S | 1000 | | | | |
| PI E1.0S1-II | S | 1000 | | | | |
| PI E1.3S1-II | S | 1300 | | | | |
| PI E1.4S1-II | S | 1400 | | | | |
| PI E1.75S1-II | S | 1800 | | | | |
| PI II Enh 1 | S | 1050 | 1747 | 15 | 58-94 | Micropolis 2112 |
| PI II Enh 2 | S | 2100 | 2280 | 21 | 71-94 | Micropolis 1924 |
| PI 80B | S | 81 | | | | PI=Platinum |
| PI 80C | S | 81 | | | | |
| PI 80R | S | 81 | | | | |
| PI PD 100 | S | 101 | | | | |
| PI PD 1000 | S | 1007 | | | | |
| PI PD 130 | S | 131 | | | | |
| PI PD 150 | S | 150 | | | | |
| PI PD 170 | S | 172 | | | | |
| PI PD 175 | S | 176 | | | | |
| PI PD 175B | S | 176 | | | | |
| PI PD 175C | S | 176 | | | | |
| PI PD 20 | S | 20 | | | | |
| PI PD 200 | S | 202 | | | | |
| PI PD 200 | S | 202 | | | | |
| PI PD 300 | S | 291 | | | | |
| PI PD 40 | S | 40 | | | | |
| PI PD 600 | S | 585 | | | | |
| PI PD 80 | S | 81 | | | | |
| PI PI 1000A | S | 1007 | | | | |
| PI PI 100B | S | 101 | | | | |
| PI PI 100C | S | 101 | | | | |
| PI PI 100R | S | 101 | | | | |
| PI PI 130B | S | 131 | | | | |
| PI PI 130C | S | 131 | | | | |
| PI PL 150A | S | 150 | | | | |
| PI PI 170A | S | 172 | | | | |
| PI PI 200B | S | 202 | | | | |
| PI PI 200C | S | 202 | | | | |
| PI PL 20R | S | 20 | | | | |
| PI PL 300A | S | 291 | | | | |
| PI PL 40B | S | 38 | | | | |
| PI PL 40C | S | 38 | | | | |
| PI PL 40R | S | 38 | | | | |
| PI PI 600A | S | 585 | | | | |
| Pres 160 | S | 160 | | | | Pres=Presidential |
| Pres 320 | S | 320 | | | | |
| Pres 80 | S | 80 | | | | |
| Prevail 325 | S | 325 | | | | |
| Prevail 660 | S | 650 | | | | |
| Sentry 180 | S | 180 | 1546 | 5 | | |
| Sentry 300 | S | 290 | 1546 | 9 | | |
| Sentry 600 | S | 600 | 1546 | 15 | | |
| Sentry 90 | S | 90 | 1024 | 5 | | |
| Sprinter 45E | S | 45 | | | | (SSTSETUP) External |
| Sprinter 45EMC | S | 44 | | | | MCA Run AutoConfig |
| Sprinter 45I | S | 44 | | | | Internal, Removable |
| SSE-155 | S | 155 | | | | |
| SSE-300 | S | 300 | | | | |
| SSE-702 | S | 702 | | | | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------|------|-----|------|-----|-----|-------|
| SSE-766 | S | 766 | | | | |
| Zeroslot 45 | S | 45 | | | | |
| Zeroslot 60 | S | 60 | | | | |
| Zeroslot 80 | S | 80 | | | | |

7 1,2,3

F 070M3-A

| | |
|-------|-------------|
| W2 On | Write fault |
| W8 | Drive Slct |

W1, W2 always jumped. Sw 8 should be closed on some Mac
SCSI drives - reset line on pin 40, handshaking.

K 080S1/K 160S1

| J3 | 1-2 | 3-4 | 5-6 |
|----|-----|-----|-----|
| 1 | 1 | 0 | 0 |
| 2 | 0 | 1 | 0 |
| 3 | 1 | 1 | 0 |
| 4 | 0 | 0 | 1 |
| 5 | 1 | 0 | 1 |
| 6 | 0 | 1 | 1 |
| 7 | 1 | 1 | 1 |

K 380S1-6000/K 320S1-M55N

| ID | 0 | 1 | 2 |
|----|---|---|---|
| 0 | 0 | 0 | 0 |
| 1 | 1 | 0 | 0 |
| 2 | 0 | 1 | 0 |
| 3 | 1 | 1 | 0 |
| 4 | 0 | 0 | 1 |
| 5 | 1 | 0 | 1 |
| 6 | 0 | 1 | 1 |
| 7 | 1 | 1 | 1 |

Do not use bit 3 (inside)

K 020A3-AF(N)/K 100A3

| | |
|---------|----------|
| Single: | ACT, C/D |
| Master: | C/D, DSP |
| Slave: | None |

K 200A3

| | |
|---------|--------|
| Single: | E2 |
| Master: | E1, E2 |
| Slave: | None |

Sprinter 45E

| ID | 1 | 2 | 3 |
|----|---|---|---|
| 0 | D | D | D |
| 1 | D | D | U |
| 2 | D | U | D |
| 3 | D | U | U |
| 4 | U | D | D |
| 5 | U | D | D |
| 6 | U | U | D |

Sprinter 45EMC/451

| | |
|---|-----|
| 0 | 0 |
| 1 | 1 |
| 2 | 2 |
| 3 | 1,3 |
| 4 | 4 |
| 5 | 1,3 |
| 6 | 2,3 |

Cogito

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------|------|-----|------|-----|-----|-------|
| CG 906 | M | 5 | 306 | 2 | 17 | |
| CG 912 | M | 11 | 306 | 4 | 17 | |
| CG 925 | M | 21 | 612 | 4 | 17 | |
| PT 912 | M | 11 | 612 | 2 | 17 | |
| PT 925 | M | 21 | 612 | 4 | 17 | |

Columbia

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------------|------|-----|------|-----|-----|-------|
| Columbia SCSI | S | 42 | 834 | 3 | | |

Commodore

Made by JCT

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|-----|------|-----|-----|-------|
| 1000 | M | 5 | 131 | 4 | 17 | |
| 1005 | M | 7 | | | 17 | |
| 1006 | M | 7 | 436 | 2 | 17 | |
| 1010 | M | 14 | 436 | 4 | 17 | |

Compaq

See also Conner Peripherals. Model nos = part nos

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------|------|-----|------|-----|-----|---------------------------|
| 107357 | A | 41 | 980 | 5 | 17 | |
| 107790 | A | 96 | 748 | 8 | 33 | |
| 108058 | A | 43 | 980 | 5 | 17 | |
| 108080 | A | 135 | 966 | 16 | 17 | |
| 110358 | A | 43 | 524 | 4 | 40 | |
| 1107790 | A | 101 | 748 | 8 | 33 | |
| 112438 | A | 80 | 832 | 6 | 33 | |
| 112525 | A | 112 | 832 | 8 | 33 | |
| 112526 | A | 43 | 805 | 4 | 26 | |
| 112527 | A | 21 | 615 | 4 | 17 | |
| 113016 | A | 20 | 615 | 4 | 17 | |
| 113030 | A | 43 | 980 | 5 | 17 | |
| 113217 | A | 62 | 966 | 5 | 25 | |
| 113219 | A | 300 | 611 | 16 | 52 | ESDI? |
| 114106 | A | 41 | 980 | 5 | 17 | |
| 114463 | A | 20 | 615 | 4 | 17 | |
| 114465 | A | 21 | 615 | 4 | 17 | |
| 115181 | A | 621 | 1631 | 15 | 52 | ESDI? |
| 115182 | A | 310 | 872 | 14 | 52 | |
| 115668 | A | 80 | 832 | 6 | 33 | |
| 116560 | A | 116 | 760 | 8 | 39 | |
| 116805 | A | 203 | 683 | 16 | 38 | |
| 116806 | A | 116 | 760 | 8 | 39 | |
| 117115 | A | 20 | 615 | 4 | 17 | |
| 117288 | A | 41 | 548 | 4 | 38 | |
| 123785 | A | 340 | 659 | 16 | 63 | Conner CP 3361 Type 63 |
| 123786 | A | 510 | 989 | 16 | 63 | Conner CP 3541 Type 61 |
| 131390 | A | 121 | 760 | 8 | 39 | Conner CP 30121E Type 50 |
| 137772 | A | 126 | 895 | 5 | 55 | Conner CFS 210A Type 65 |
| 137773 | A | 171 | 332 | 16 | 63 | Conner CFA 170A Type 65 |
| 137774 | A | 128 | 919 | 16 | 17 | Quantum LPS 120AT Type 50 |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------|------|------|------|-----|-----|-------------------------------------|
| 137790 | A | 244 | 720 | 13 | 51 | Quantum LPS 240 Type 1 |
| 137867 | A | 426 | 826 | 16 | 63 | Conner CFS 420A Type 65 |
| 139716 | A | 528 | 1023 | 16 | 63 | Conner CP 30541 Type 42 |
| 141086 | A | 244 | 720 | 13 | 51 | Quantum LPS 240AT Type 1 |
| 141647 | A | 121 | 760 | 8 | 39 | Quantum LPS 120AT Type 50 |
| 143343 | A | 121 | 760 | 8 | 50 | Quantum LPS 127AT Type 50 |
| 143344 | A | 42 | 966 | 5 | 17 | Quantum ELS 40AT Type 18 |
| 143345 | A | 84 | 832 | 6 | 33 | Quantum ELS 85AT Type 27 |
| 147203 | A | 121 | 760 | 8 | 39 | Conner CP 30121 Type 50 |
| 147204 | A | 244 | 720 | 13 | 51 | Conner CP 30251 Type 1 |
| 160162 | A | 270 | 997 | 10 | 53 | Conner CFA 270A Type 65 |
| 160163 | A | 252 | 895 | 10 | 55 | Conner CFA 240A Type 65 |
| 160686 | A | 104 | 905 | 9 | 25 | Seagate ST 3123A Type 32 |
| 160687 | A | 107 | 905 | 9 | 25 | Conner CFS 210A Type 65 |
| 160688 | A | 213 | 683 | 16 | 38 | Seagate ST 3243A Type 51 |
| 160689 | A | 213 | 685 | 16 | 38 | Conner CFS 210A Type 65 |
| 163668 | A | 211 | 723 | 15 | 38 | Quantum LPS 210A Type 65 |
| 164830 | A | 343 | 665 | 16 | 63 | Conner CFS 420A Type 65 |
| 177079 | A | 422 | 1010 | 16 | 51 | Quantum LPS 420AT Type 65 |
| 168727 | A | 171 | 1011 | 15 | 22 | Quantum LPS 170AT Type 65 |
| 184037 | A | 212 | 1024 | 12 | 34 | Seagate ST 3250A Type 50 |
| 184053 | A | 271 | 944 | 14 | 40 | Quantum Mav 270AT Type 65 |
| 184054 | A | 528 | 1024 | 16 | 63 | Quantum Mav 540AT Type 65 |
| 184055 | A | 730 | 1416 | 16 | 63 | Quantum Lng 730AT Type 65 |
| 184150 | A | 340 | 659 | 16 | 63 | Seagate ST 3391 Type 63 |
| 194328 | A | 171 | 332 | 16 | 63 | Conner CP 30171 Type 65 |
| 194346 | A | 270 | 942 | 14 | 40 | Quantum LPS 270 Type 65 |
| 194357 | A | 340 | 659 | 16 | 63 | Seagate ST 3390A Type 63 |
| 198347 | A | 528 | 1023 | 16 | 63 | Quantum LPS 540 Type 42 |
| 198375 | A | 342 | 1011 | 15 | 44 | Quantum LPS 340AT Type 65 |
| 100703 | M | 10 | 306 | 4 | 17 | |
| 102626 | M | 70 | 925 | 9 | 17 | |
| 104404 | M | 20 | 615 | 4 | 17 | |
| 106269 | M | 20 | 612 | 4 | 17 | |
| 107338 | M | 20 | 615 | 4 | 17 | |
| 107339 | M | 40 | 980 | 4 | 17 | |
| 108076 | M | 40 | 980 | 9 | 17 | |
| 142002 | S | 330 | 314 | 64 | 32 | Fujitsu M2622FA 1429 x 7 x 56-70 Ph |
| 142003 | S | 558 | 532 | 64 | 32 | HP C 2244 1981 x 8 x 58-96 Ph |
| 142004 | S | 1050 | 1001 | 64 | 32 | HP C 2247 1981 x 13 x 56-96 Ph |
| 142153 | S | 558 | 532 | 64 | 32 | Micropolis 2105 1744 x 8 58-94 Ph |
| 142154 | S | 1050 | 1001 | 64 | 32 | Micropolis 2112 1744 x 8 58-94 Ph |
| 148158 | S | 536 | 511 | 64 | 32 | CP 30540 2242x6x59-89 Ph |
| 142188 | S | 558 | 532 | 64 | 32 | Fujitsu M 2691ES 1819x8x58-96 Ph |
| 142189 | S | 1050 | 1001 | 64 | 32 | Fujitsu M2694ES 1819x15x58-96 P |
| 142215 | S | 2097 | 255 | 255 | 63 | HP C 2490 2582 x 18 x 68-108 Ph |
| 142292 | S | 1050 | 1001 | 64 | 32 | IBM 0662 4119 x 5 x 90-108 Ph |
| 142294 | S | 2104 | 255 | 255 | 63 | Seagate ST 12550 2707x19x58-97 |
| 199513 | S | 536 | 511 | 64 | 32 | DEC DSP 3053L 3117x 4 x 59-119 P |

Comport

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|-----|------|-----|-----|-------|
| 2040 | A | 44 | 820 | 4 | 26 | |
| 2041 | R | 44 | 820 | 4 | 26 | |
| 2082 | S | 86 | 820 | 6 | 34 | |

Computer Connection

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------------|------|------|------|-----|-----|-------|
| PL 540U | A | 540 | | | | |
| PL810U | A | 810 | | | | |
| PL 1200U | A | 1200 | | | | |
| Pluggger 540 | Par | 540 | | | | |
| Pluggger 810 | Par | 810 | | | | |
| Pluggger 1200 | Par | 1200 | | | | |

Computer Network

See Maxtor

Computer Product Center

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|------|-----|------|-----|-----|--------|
| HICN(M) 245I | A | 245 | | | | Hilite |
| HICM 340I | A | 345 | | | | Hilite |

Conner Peripherals

Originally partly owned by Compaq, now by Seagate. CFA spec is superior to CFS. Drives ending in: 1=Compaq 2=Conner 3=Zenith

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-----------|------|------|------|-----|-----|--------------------------------------|
| CFA 1080A | A | 1080 | 2100 | 16 | 63 | Filepro Advantage Tbl 8 Lg 524x64x63 |
| CFA 1275A | A | 1275 | 2479 | 16 | 63 | Filepro Advantage Tbl 8 Lg 619x64x63 |
| CFA 170A | A | 170 | 332 | 16 | 63 | As for CP 30174 Table 8 |
| CFA 210A | A | 210 | 685 | 16 | 38 | |
| CFA 2161A | A | 2147 | 1023 | 64 | 63 | ST 32161A |
| CFA 240A | A | 252 | 895 | 10 | 55 | |
| CFA 270A | A | 270 | 524 | 16 | 63 | 2805 x 2 x 72-114 |
| CFA 340A | A | 340 | 665 | 16 | 63 | As for CP 30344 Table 8 |
| CFA 420A | A | 420 | 826 | 16 | 63 | |
| CFA 425A | A | 426 | 839 | 16 | 63 | |
| CFA 540A | A | 540 | 1048 | 16 | 63 | 2805 x 4 x 72-114 Ph Table 8 |
| | | | 524 | 32 | 63 | Large |
| CFA 810A | A | 810 | 1572 | 16 | 63 | 2801 x 6 x 71-113 Ph Table 8 |
| | | | 786 | 32 | 63 | Large |
| CFA 850A | A | 850 | 1651 | 16 | 63 | Table 8 Large = 826 x 32 x 63 |
| CFL 350A | A | 350 | 905 | 12 | 63 | Filepro notebook Table 5 |
| CFL 420A | A | 422 | 818 | 16 | 63 | Kiwi Table 5 |
| CFN 170A | A | 170 | 326 | 16 | 63 | 1339 x 4 x 47-72 Table 5 |
| CFN 250A | A | 250 | 489 | 16 | 63 | 1339 x 6 x 47-72 Table 5 |
| CFN 340A | A | 340 | 667 | 16 | 63 | Filepro notebook Table 5 |
| CFN 422A | A | 422 | 826 | 16 | 63 | EIDE |
| CFP 1370 | A | 1400 | | | | |
| CFP 545 | A | 545 | | | | |
| CFS 1080A | A | 1080 | 2100 | 16 | 63 | Table 8 |
| CFS 1081A | A | 1080 | 2097 | 16 | 63 | ST 31081A |
| | | | 524 | 64 | 63 | Large |
| CFS 1275A | A | 1275 | 2479 | 16 | 63 | Table 8 2477 cyls Rev A |
| | | | 619 | 64 | 63 | Large |
| CFS 1276A | A | 1275 | 2479 | 16 | 63 | Large 524 x 64 x 63 |
| CFS 1621A | A | 1621 | 3146 | 16 | 63 | Large 786 x 64 x 63 |
| CFS 210A | A | 210 | 685 | 16 | 38 | 2395 x 2 x 63-100 Table 8 |
| CFS 270A | A | 270 | 600 | 14 | 63 | Cabo Table 5 |
| CFS 420A | A | 420 | 826 | 16 | 63 | 2395 x 4 x 63-100 Table 8 |
| CFS 425A | A | 425 | 839 | 16 | 63 | Cabo Table 5 |
| CFS 540A | A | 540 | 1048 | 16 | 63 | Cabo Table 8 Large 525x32x63 |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-----------------|------|-----|------|-----|-----|---------------------------------------|
| CFS 541A | A | 541 | 1048 | 16 | 63 | Large 599 x 28 x 63 |
| CFS 635A | A | 635 | 1238 | 16 | 63 | Large 619 x 32 x 63 |
| CFS 636A | A | 635 | 1238 | 16 | 53 | |
| CFS 850A | A | 850 | 1651 | 16 | 63 | EIDE Cabo Table 5 Large 826 x 32 x 63 |
| CP 1034 | A | 32 | 917 | 4 | 17 | |
| CP 1044 | A | 42 | | | | 1.8" |
| CP 2022 | A | 23 | 615 | 4 | 17 | Laptops Try 733 x 2 x 26 |
| CP 2024 Kato | A | 21 | 615 | 4 | 17 | Laptops Try 653 x 2 x 32 Table 3 |
| CP 2027 | A | 20 | 615 | 4 | 17 | |
| CP 2031 | A | 30 | 41 | 4 | 38 | Compaq Type 59 |
| CP 2034 Pancho | A | 32 | 823 | 2 | 38 | Laptops Try 411 x 4 x 38 Table 3 |
| CP 2041 Pancho | A | 42 | 548 | 4 | 38 | Compaq Type 53 Table 3 |
| CP 2044 Pancho | A | 42 | 980 | 5 | 17 | Laptops Try 548 x 4 x 38 Table 4 |
| CP 2048 Pancho | A | 42 | 548 | 4 | 38 | Compaq Type 53 Table 3 |
| CP 2061 Pancho | A | 60 | 823 | 4 | 38 | Compaq type 60 Table 3 |
| CP 2064 Pancho | A | 64 | 823 | 4 | 38 | Laptops Table 3 |
| CP 2064E | A | 64 | 823 | 4 | 38 | 1181 x 2 x 53 Sahara |
| CP 2067 | A | 64 | 823 | 4 | 38 | |
| CP 2081 | A | 80 | 665 | 14 | 17 | Compaq |
| CP 2084 Pancho | A | 85 | 548 | 8 | 38 | 1096 x 4 38 Table 4 |
| CP 2088 Honshu | A | 85 | 548 | 8 | 38 | 1096 x 4 x 38 Table 3 |
| CP 2104 | A | 121 | 762 | 8 | 39 | 1123 x 4 x 53 |
| CP 2124 Pancho | A | 120 | 762 | 8 | 39 | 1123 x 4 x 53 Table 4 |
| CP 2124HCD | A | 126 | 582 | 8 | 53 | 1164 x 4 x 53 Table 4 |
| CP 2174 | A | 168 | 326 | 16 | 63 | |
| CP 2254 Trigger | A | 253 | 489 | 16 | 63 | 1339 x 6 x 47-72 Table 5 |
| CP 2304 | A | 209 | 1348 | 8 | 39 | |
| CP 3000 | A | 42 | 980 | 5 | 17 | 1045 x 2 x 40 Table 1 |
| CP 30061 Hopi | A | 61 | 759 | 4 | 39 | Compaq 55 Table 6 |
| CP 30064(H) | A | 61 | 762 | 4 | 39 | 1524 x 2 x 39 Table 7 |
| CP 30081 | A | 84 | 526 | 8 | 39 | |
| CP 30084 Hopi | A | 84 | 526 | 8 | 39 | 1053 x 4 x 39 Table 6 |
| CP 30084E | A | 84 | 903 | 4 | 46 | 1806 x 2 x 46 Table 5 |
| CP 30100 | A | 121 | 761 | 8 | 39 | Compaq |
| CP 30101(G) | A | 121 | 762 | 8 | 39 | Compaq type 50 Table 6 |
| CP 30103 | A | 121 | 762 | 8 | 39 | |
| CP 30104(H) | A | 121 | 762 | 8 | 39 | Cpq 50/NEC 1504x4 x39 Table 6 |
| CP 30109 | A | 121 | 762 | 8 | 39 | Compaq type 50 |
| CP 30120 | A | 121 | 762 | 8 | 39 | Compaq |
| CP 30121 | A | 121 | 762 | 8 | 39 | Compaq type 50 |
| CP 30121E | A | 116 | 999 | 14 | 17 | Compaq type 50 |
| CP 30124 | A | 125 | 895 | 5 | 55 | 1985 x 2 x 62 Table 8 |
| CP 30160 | A | 160 | | | | |
| CP 3017 | A | 170 | 332 | 16 | 63 | Aka CFA 170A - as for CP 30174 |
| CP 30171 | A | 171 | 332 | 16 | 63 | |
| CP 30174 | A | 170 | 332 | 16 | 63 | 2111 x 2 x 67-91 Table 5 |
| CP 30174 (E,H) | A | 170 | 903 | 8 | 46 | As for CFA 170A Table 5 |
| CP 30201 | A | 210 | 671 | 12 | 51 | |
| CP 30204 | A | 212 | 683 | 16 | 38 | 2124 x 4 x 49 Cougar Table 5 |
| CP 3021(i) | A | 21 | 615 | 4 | 17 | Compaq Try 805 x 2 x 26 Table 7 |
| CP 3022 | A | 21 | 615 | 4 | 17 | 636 x 2 x 33 Table 7 |
| CP 3023 | A | 18 | 733 | 2 | 26 | |
| CP 3024 | A | 21 | 615 | 4 | 17 | 636 x 2 x 33 Table 1 |
| CP 30251 | A | 244 | 720 | 13 | 51 | |
| CP 30254 | A | 250 | 895 | 10 | 55 | 1985 x 4 x 62 (-1 Cpq) Table 8 |
| CP 30256 | A | 250 | 895 | 10 | 55 | |
| CP 3026 | A | 21 | 615 | 4 | 17 | CP 3024 remade for Olivetti |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-----------------|------|------|------|-----|-----|--------------------------------|
| CP 3034 | A | 340 | 665 | 16 | 63 | Aka CFA 340A – as for CP 30344 |
| CP 30344 | A | 343 | 667 | 16 | 63 | As for CFA 340A Table 8 |
| CP 3041 | A | 43 | 805 | 4 | 17 | Compaq 22 Try 980 x 5 x 17 |
| CP 30411 | A | 43 | 548 | 4 | 38 | Compaq |
| CP 3042 | A | 43 | 980 | 5 | 17 | Compaq |
| CP 3044 | A | 42 | 980 | 5 | 17 | Aka CMSK040A3-N Table 1 |
| CP 3046 | A | 43 | 980 | 5 | 17 | Table 1 |
| CP 30541A | A | 528 | 1023 | 16 | 63 | |
| CP 30544 Aegean | A | 545 | 1023 | 16 | 63 | 2249 x 6 x 59-89 Table 5 |
| CP 3084 | A | 84 | 832 | 6 | 33 | Compaq |
| CP 3101 | A | 101 | 748 | 8 | 33 | Compaq 45 Try 762 x 8 x 39 |
| CP 3102(A)(B) | A | 105 | 776 | 8 | 25 | |
| CP 3103 | A | 103 | 776 | 8 | 34 | 748 x 8 x 33? |
| CP 3104 | A | 104 | 776 | 8 | 33 | Try 925 x 13 x 17 Table 1 |
| CP 3106 | A | 106 | 776 | 8 | 33 | Found in Olivetti M290 |
| CP 3111 | A | 112 | 832 | 8 | 33 | Compaq 33 Try 805 x 2 x 26 |
| CP 3114 | A | 112 | 832 | 8 | 33 | Table 1 |
| CP 31374 | A | 371 | 2386 | 14 | | |
| CP 3181 | A | 84 | 832 | 6 | 33 | Compaq 27 Table 1 |
| CP 3184 | A | 84 | 832 | 6 | 33 | Table 1 |
| CP 3201F(G) | A | 212 | 683 | 16 | 38 | Compaq Type 51 CP 3204(F) |
| CP 3204(F) | A | 212 | 683 | 16 | 38 | 1366 x 8 x 38 Table 6 |
| CP 3209(F) | A | 212 | 683 | 16 | 38 | |
| CP 321 | A | 21 | 615 | 4 | 17 | Cpq 2 Try 805 x 2 x 26 Table 7 |
| CP 321i | A | 21 | 615 | 4 | 17 | Compaq |
| CP 323 | A | 18 | 733 | 2 | 26 | |
| CP 324 | A | 20 | 615 | 4 | 17 | |
| CP 3304 Summit | A | 304 | 659 | 16 | 63 | 1806 x 8 x 46 Table 5 |
| CP 3361 | A | 361 | 659 | 16 | 63 | Compaq Part no 123785 |
| CP 3364 Summit | A | 362 | 702 | 16 | 63 | 1808 x 8 x 49 Table 5 |
| CP 340 | A | 40 | 788 | 4 | 26 | |
| CP 341 | A | 42 | 980 | 5 | 17 | Cpq type 17 Try 805x4x26 3:1 |
| CP 341i | A | 42 | 788 | 4 | 26 | Cpq type 43 Try 805x4x26 1:1 |
| CP 342 | A | 40 | 980 | 5 | 17 | Try 805 x 4 x 26 |
| CP 343 | A | 42 | 980 | 5 | 17 | Zenith portables |
| CP 344 | A | 42 | 980 | 5 | 17 | Aka CMS H40CQ285D-P Table 1 |
| CP 346 | A | 42 | 980 | 5 | 17 | |
| CP 3501 | A | 510 | 989 | 16 | 63 | |
| CP 3504 Summit | A | 510 | 987 | 16 | 63 | 1806 x 12 x 46 Table 5 |
| CP 3505 | A | 510 | 987 | 16 | 63 | |
| CP 3541 | A | 510 | 989 | 16 | 63 | Compaq 61 |
| CP 3544 Summit | A | 540 | 1023 | 16 | 63 | 1808 x 12 x 49 Table 5 |
| CP 3554 | A | 554 | 1054 | 16 | 63 | |
| CP 4021 Stubby | A | 20 | 615 | 4 | 17 | Compaq 2 or 54 |
| CP 4024 Stubby | A | 21 | 627 | 2 | 34 | XT/AT |
| CP 4041 Stubby | A | 43 | 548 | 4 | 38 | Compaq 53 |
| CP 4044 Stubby | A | 42 | 1096 | 2 | 38 | XT/AT |
| CP 4084 | A | 85 | 832 | 6 | 33 | |
| CP 4094 Gator | A | 85 | | | | |
| CPS 1081A | A | 1080 | 2100 | 16 | 63 | |
| CPS 1621A | A | 1621 | | | | |
| DS 1275A | A | 1280 | 2479 | 16 | 63 | Repackaged CFA 1275 Table 5 |
| DS 270A | A | 270 | 525 | 16 | 63 | Table 5 |
| DS 30084E | A | 85 | 526 | 8 | 39 | |
| DS 30084EC | A | 85 | 903 | 4 | 46 | |
| DS 30104 | A | 120 | 762 | 8 | 39 | |
| DS 30174 | A | 170 | 903 | 8 | 46 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-----------------|------|------|------|-----|--------|--------------------------|
| DS 30204 | A | 216 | 683 | 16 | 38 | |
| DS 30254 | A | 251 | 895 | 10 | 55 | |
| DS 30344 | A | 343 | 665 | 16 | 63 | |
| DS 30424 | A | 420 | | | | |
| DS 30544 | A | 545 | 1024 | 12 | 86 | |
| DS 340A | A | 340 | | | | |
| DS 420A | A | 426 | 826 | 16 | 63 | EIDE DS=DiskStor Table 5 |
| DS 540A | A | 541 | 1048 | 16 | 63 | EIDE Table 5 |
| DS 850A | A | 850 | 1652 | 16 | 63 | EIDE Table 5 |
| CP 1034 | P | 32 | 826 | 2 | 38 | |
| CP 1044 | P | 42 | 1926 | 2 | | Derringer |
| DS 30344P | P | 340 | | | | |
| CP 30069 | PS/2 | 61 | 1524 | 2 | 39 | |
| CP 30089 Hopi | PS/2 | 84 | 1058 | 4 | 39 | |
| CP 30100 | PS/2 | 21 | 1524 | 4 | 39 | |
| CP 30109 | PS/2 | 121 | 1522 | 4 | 39 | |
| CP 3209F | PS/2 | 209 | 1366 | 8 | 38 | |
| CP 3209M | PS/2 | 209 | 1348 | 8 | 38 | |
| CFA 1080S | S-2F | 1080 | 2156 | 8 | 66-111 | Conner SCSI ID Jumpers |
| CFA 1275S | S-2F | 1200 | | 6 | 80-152 | |
| CFA 170S | S-2 | 170 | 2111 | 2 | 79 | |
| CFA 270S | S | 270 | 2805 | 2 | 72-114 | |
| CFA 340S | S-2 | 340 | 2111 | 4 | 67-91 | |
| CFA 425S | S-2 | 426 | | 2 | 79 | |
| CFA 540S | S | 540 | 2805 | 4 | 94 | |
| CFA 810S | S-2 | 810 | 2794 | 6 | 94 | |
| CFA 850S | S-2 | 852 | 3613 | 4 | 115 | |
| CFN 170S | S | 170 | 1339 | 4 | 61 | |
| CFN 250S | S | 250 | 1339 | 6 | 61 | |
| CFN 340S | S | 340 | 1598 | 6 | 53-89 | |
| CFP 1060D | S2FW | 1062 | 2757 | 8 | 94 | |
| CFP 1080S(E) | S2FW | 1080 | 3658 | 6 | 96 | ST 31080WC |
| CFP 1370 | S-2F | 1400 | | | | |
| CFP 2105E,S,W | S2FW | 2147 | 3948 | 10 | 106 | |
| CFP 2107E,S,W | S2FW | 2147 | 3999 | 10 | 104 | 7200 RPM |
| CFP 2117S,W | S-3 | 2147 | 6028 | 5 | | |
| CFP 2120D | S2FW | 2120 | 2756 | 16 | 63-111 | |
| CFP 4207E,S,W | S2FW | 4220 | 3999 | 20 | 104 | 7200 RPM |
| CFP 4217S | S-3 | 4294 | 6028 | 10 | | |
| CFP 545 | S-2F | 546 | | | | |
| CFP 9117S | S-3 | 9100 | 6028 | 20 | | |
| CFS 1060S | S-2 | 1062 | 2156 | 8 | 63-111 | Superseded by CFS 1080S |
| CFS 1080S | S-2 | 1080 | 2156 | 8 | 66-111 | Supersedes CFS 1060S |
| CFS 2105S | S-2F | 2147 | 3892 | 10 | 71-144 | |
| CFS 540S | S-2 | 541 | 2805 | 4 | 72-114 | |
| CP 2020 Kato | S | 21 | 642 | 2 | 32 | |
| CP 2040 Pancho | S | 42 | 548 | 4 | 38 | Mac/Sun |
| CP 2045 | S | 40 | | | | |
| CP 2060 Pancho | S | 64 | 823 | 4 | 38 | |
| CP 2105 | S2FW | 2100 | | | | |
| CP 2107 | S2FW | 2100 | | | | |
| CP 2120 | | | 762 | 8 | 39 | |
| CP 2250 Trigger | S | 253 | 1339 | 6 | 47-71 | |
| CP 3000 | S | 42 | 1045 | 2 | 40 | |
| CP 30010 Hopi | S | 121 | 1524 | 4 | 39 | |
| CP 30060 Hopi | S-2 | 60 | 1524 | 2 | 39 | |
| CP 30080 Hopi | S | 84 | 1053 | 4 | 39 | Compaq |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-----------------|------|------|------|-----|-------|------------------------------|
| CP 30080E | S | 85 | 1806 | 2 | 46 | |
| CP 30100 Hopi | S | 122 | 1522 | 4 | 39 | |
| CP 30120 | S | 120 | | | | |
| CP 30170 | S-2 | 170 | 2111 | 2 | 67-91 | Filepro |
| CP 30170E | S | 170 | 1806 | 4 | 46 | |
| CP 3020 | S | 21 | 636 | 2 | 33 | |
| CP 30200 | S-2 | 212 | 2124 | 4 | 49 | |
| CP 30340 | S-2 | 343 | 665 | 16 | 63 | |
| CP 30250 | S-2 | 251 | 1985 | 4 | 62 | |
| CP 3040 | S | 42 | 1026 | 2 | 40 | |
| CP 3045 | S | 40 | | | | Apple 40SC—strange interface |
| CP 30540 | S-2F | 545 | 2242 | 6 | 79 | Logical: 511 x 64 x 32 |
| CP 30548 | S-2F | 540 | | | | |
| CP 3040SC | S | 42 | 1026 | 2 | 40 | |
| CP 3100(D) | S | 105 | 776 | 8 | 33 | D Rebadged as DEC RZ23 |
| CP 3110 | S | 107 | 805 | 8 | 34 | |
| CP 31370 Baja | S-2F | 1370 | 2386 | 14 | 80 | |
| CP 3150 | S | 52 | 776 | 4 | 33 | |
| CP 3180 | S | 84 | 832 | 6 | 33 | |
| CP 320 | S | 20 | 1366 | 8 | 38 | |
| CP 3200(D)(F) | S | 212 | 1366 | 8 | 37 | D Rebadged as DEC RZ 24 |
| CP 3300 Summit | S | 340 | 1806 | 8 | 46 | |
| CP 3360 Summit | S-2 | 362 | 1807 | 8 | 49 | |
| CP 340 | S | 42 | 788 | 4 | 26 | |
| CP 3500 Summit | S | 510 | 1806 | 12 | 46 | 987x16x63 |
| CP 3540 Summit | S-2 | 543 | 1807 | 12 | 49 | |
| CP 4207 | S-2F | 4200 | | | | |
| CP 5500 Chinook | S-2 | 510 | 2034 | 10 | 49 | |
| DS 1060S(e) | S-2F | 1000 | | | | |
| DS 2105S(l) | S-2F | 2000 | | | | |
| DS 30340 | S | 343 | 2111 | 4 | 67-91 | |
| DS 30540 | S-2F | 545 | 2242 | 6 | 59-89 | |
| DS 31060 | S | 1000 | | | | |
| DS 540S | S | 540 | | | | |
| Macintosh 1060 | S-2F | 1020 | | | | DiskStor |
| Macintosh 2105 | S-2F | 2050 | | | | DiskStor |
| Macintosh 4207 | S-2F | 4100 | | | | DiskStor |

Debug script for IDE low level format

```

Debug
-A
MOV AX, 30A
MOV CX, 1
MOV DX, 80
MOV BX, 3800
INT 13
INT 3
<CR>
-G=100
-Q

```

Table 1

| | |
|---------|---------------|
| Single: | Act, C/D |
| Master: | Act, C/D, DSP |
| Slave: | None |

Table 2

| | |
|---------|---------|
| Single: | C/D |
| Master: | C/D, E1 |
| Slave: | None |

Table 3

| | |
|---------|-----------|
| Single: | E1 |
| Master: | E1 (+E2?) |
| Slave: | None |

Table 4

| | |
|---------|----------------|
| Single: | M/S (C/D open) |
| Master: | M/S (C/D open) |
| Slave: | None |

Table 5

| | |
|---------|------|
| Single: | C/D |
| Master: | C/D |
| Slave: | None |

Table 6

| | |
|---------|----------|
| Single: | C/D |
| Master: | C/D, Dsp |
| Slave: | None |

Table 7

| | |
|---------|---------|
| Single: | C/D,Dsp |
| Master: | C/D,Dsp |
| Slave: | None |

Table 8

| | |
|---------|--------------|
| Single: | C/D |
| Master: | C/D, ATA/ISA |
| Slave: | None |

CFN 170S/250S/1060S/1080S/2105S/2107S/4207S

| ID (J3) | E1 | E2 | E3 |
|---------|----|----|----|
| 0 | Hi | Hi | Hi |
| 1 | Lo | Hi | Hi |
| 2 | Hi | Lo | Hi |
| 3 | Lo | Lo | Hi |
| 4 | Hi | Hi | Lo |
| 5 | Lo | Hi | Lo |
| 6 | Hi | Lo | Lo |
| 7 | Lo | Lo | Lo |

E5 Disable spin on power up (E4 1080S)
 E6 Spin delay by ID
 E7 Disable Parity

Conner SCSI ID Jumpers

| ID | E1 | E2 | E3 | E4 |
|----|----|----|----|----|
| 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 0 | 0 | 0 |
| 2 | 0 | 1 | 0 | 0 |
| 3 | 1 | 1 | 0 | 0 |
| 4 | 0 | 0 | 1 | 0 |
| 5 | 1 | 0 | 1 | 0 |
| 6 | 0 | 1 | 1 | 0 |
| 7 | 1 | 1 | 1 | 0 |
| 8 | 0 | 0 | 0 | 1 |
| 9 | 1 | 0 | 0 | 1 |
| 10 | 0 | 1 | 0 | 1 |
| 11 | 1 | 1 | 0 | 1 |
| 12 | 0 | 0 | 1 | 1 |
| 13 | 1 | 0 | 1 | 1 |
| 14 | 0 | 1 | 1 | 1 |
| 15 | 1 | 1 | 1 | 1 |

Parity is always enabled except:

| | |
|---------|------------|
| CP 3180 | E4=disable |
| CP 3100 | E4=disable |
| CP 3200 | E4=disable |
| CP 1060 | E7=disable |

rzspinup (DEC) software for spin on power up.

CFA 170S/340S

| | |
|-------------------|--------------|
| TERM power enable | E1 In |
| DSPN | Disable Spin |

CFA 540S/CFP 1080S/ CFP 2105S

| | |
|-------------------|--------------------------|
| TERM power enable | E1 In |
| 0E4 | Disable Spin |
| E4 | Reserved |
| E5 | Disable spin on power up |
| E6 | Spin delay by ID |
| E7 | Disable Parity |
| E8 | Enable Term power |

CFS 31081A

| | |
|---------|------|
| Single: | 1-2 |
| Master: | 1-2 |
| Slave: | None |
| CS: | 5-6 |

CFP 1060W/2107S(W)/4207S(W)

| | |
|------|--------------------------|
| E1-4 | SCSI ID(see above) |
| E5 | Disable spin on power up |
| E6 | Spin delay by ID |
| E7 | Disable Parity |
| E8 | Enable Term power |

CP 30200

| | | |
|------|-----|--------------|
| E1-3 | | SCSI ID |
| E4 | On | Disable spin |
| E5 | Off | Enable term |

CP 30540/31370

| | | |
|------|-----|-------------------|
| E1-3 | | SCSI ID |
| E4 | On | Disable spin |
| E5 | Off | Enable term |
| E6 | Off | Enable term power |

Core International

OEMs from Seagate, HP, Fujitsu

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|------|--------|------|-----|-------|---------------|
| HC 200 | A | 200 | 986 | 12 | 33 | |
| AT 115 | E | 115 | 968 | 7 | 35 | |
| AT 150 | E | 151 | 1024 | 8 | 36 | 986 x 9 x 35? |
| AT 260 | E | 260 | 1212 | 12 | 35 | |
| HC 100F | E | 101 | | | | |
| HC 1000(-20) | E | 1056 | 1787 | 15 | 77 | |
| HC 1350 | E | 1341 | | | | |
| HC 150 | E | 152 | 1250 | 7 | 34 | |
| HC 175 | E | 176 | 1225 | 8 | 35 | |
| HC 25 | E | 250 | | | | |
| HC 260 | E | 256 | 1212 | 12 | 35 | 606 x 24 x 35 |
| HC 310 | E | 418 | 1582 | 15 | 35 | 791 x 24 x 35 |
| HC 315(-20) | E | 338 | 1447 | 8 | 57 | 723 x 16 x 57 |
| HC 380 | E | 382 | 1447 | 12 | 43 | |
| HC 40 | E | 40 | 564 | 4 | 35 | |
| HC 650 | E | 658 | 1661 | 15 | 53 | 830 x 30 x 53 |
| HC 655(-20) | E | 676 | 1447 | 16 | 57 | 723 x 32 x 57 |
| HC 90 | E | 85 | 969 | 5 | 35 | |
| AT 145 | M | 58 | 968 | 7 | 17 | |
| AT 20 | M | 20 | 615 | 4 | 17 | |
| AT 26 | M | 26 | 988 | 3 | 17 | |
| AT 30/R | M/R | 31/48 | 733 | 5 | 17/26 | |
| AT 30M | M | 31 | 733 | 5 | 17 | |
| AT 32/R | M/R | 31/48 | 733 | 5 | 17/26 | |
| AT 40/R | M/R | 40/61 | 924 | 5 | 17/26 | |
| AT 43 | M | 43 | 988 | 5 | 17 | |
| AT 63/R | M/R | 42/64 | 988 | 5 | 17/26 | |
| AT 72/R | M/R | 71/108 | 924 | 9 | 17/26 | |
| AT +43/R | M/R | 43/66 | 988 | 5 | 17/26 | |
| AT +44/R | M/R | 45/68 | 733 | 7 | 17/26 | |
| AT +56 | M | 56 | 924 | 7 | 17 | |
| AT +72/R | M/R | 72/111 | 924 | 9 | 17/26 | |
| AT +80/R | M/R | 80/127 | 1024 | 9 | 17/26 | |
| AT +82 | M | 82 | 968 | 5 | 35 | |
| ATDP 70 | M | 71 | 924 | 9 | 17 | |
| Optima 30/R | M/R | 31/48 | 733 | 5 | 17/26 | |
| Optima 40/R | M/R | 41/63 | 963 | 5 | 17/26 | |
| Optima 70/R | M/R | 71/108 | 918 | 9 | 17/26 | |
| Optima 80/R | M/R | 80/123 | 1024 | 9 | 17/26 | |
| MC 120 | PS/2 | 120.5 | 920 | 8 | 32 | |
| MC 80 | PS/2 | 60.8 | 928 | 4 | 32 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------------|------|------|------|-----|-----|--------------------|
| 3SHC230 | S | 230 | 1511 | 5 | | Var |
| 3SHC320 | S | 320 | | | | |
| 3SHC420 | S | 420 | | | | |
| 3SHC520 | S | 520 | | | | |
| AT 40F | S | 40 | 564 | 4 | 17 | MFM recording |
| CPR 100 | S | 1322 | | | | |
| CPR 200 | S | 2649 | | | | |
| CPR 400 | S | 4065 | | | | |
| CPR 500 | S | 5200 | | | | |
| HC 1000S | S | 1005 | 1918 | 16 | 64 | |
| HC 150S | S | 152 | 969 | 9 | 34 | |
| HC 200 | S | 202 | 1250 | 9 | 35 | |
| HC 230 | S | 230 | | 5 | | |
| HC 310S | S | 331 | 1447 | 8 | 56 | |
| HC 650 | S | 650 | 1661 | 15 | 51 | |
| HC 650S | S | 643 | 1661 | 14 | 54 | |
| HC 90S | S | 83 | 969 | 5 | 35 | |
| HC Fast 1GB | S-2F | 1000 | | | | DSS11007 |
| HC Fast 1.3GB | S | 1300 | | | | DSS12006 |
| HC Fast 2Gb | S | 2000 | | | | |
| HC Fast 3Gb | S | 3000 | | | | |
| HC Fast 420 | S | 420 | | | | |
| HC Fast 520 | S-2F | 520 | | | | DSS00520 |
| HCMAC 1000 | S | 1000 | | | | |
| HCMAC 1000/2 | S | 2000 | | | | |
| HCMAC 1300 | S | 1300 | | | | |
| HCMAC 330 | S | 330 | | | | |
| HCMAC 330/2 | S | 660 | | | | |
| HCMAC 650 | S | 650 | | | | |
| HCMAC 650/2 | S | 1300 | | | | |
| Optima 1000 | S | 1000 | | | | |
| Optima 120 | S | 120 | | | | |
| Optima 1300 | S | 1300 | | | | |
| Optima 200 | S | 213 | | | | |
| Optima 540 | S | 543 | | | | |
| Optima 80 | S | 80 | | | | |
| SLN09009 | S-2F | 520 | | | | SLAN Fast 520 |
| SLN 09010 | S-2F | 1000 | | | | SLAN Fast 520 |
| SLN12007 | S-2F | 1300 | | | | SLAN Fast 1.3GB |
| SLN O4001 | S-2F | 4000 | | | | |
| SLN 9001 | S-2F | 9000 | | | | |
| SSI 1000 | S | 1000 | | | | Also parallel port |

Corvus

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|-----|------|-----|-----|-------|
| H 11 | M | 14 | | 4 | 17 | |
| H 20 | M | 21 | | 6 | 17 | |
| H 6 | M | 7 | | 4 | 17 | |

COS

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------------|------|-----|------|-----|-----|----------|
| Filecard Q40 | H | 40 | | | | Quantum? |
| Filecard SO48 | H | 48 | | | | |
| Filecard SO80 | H | 80 | | | | |

Craft Data

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|-----|------|-----|-----|-----------|
| 3010 | S | 128 | | | | Removable |
| 5031 | S | 650 | | | | Removable |
| 5200 | S | 256 | | | | Removable |
| DMA 370 | S | 20 | | | | Removable |
| DMA 5500 | S | 50 | | | | Removable |

Crate Technology

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|------|-----|------|-----|-----|-------|
| InnerCrate 100 | S | 100 | | | | |
| InnerCrate 160 | S | 160 | | | | |
| InnerCrate 190 | S | 190 | | | | |
| InnerCrate 30 | S | 30 | | | | |
| InnerCrate 300 | S | 300 | | | | |
| InnerCrate 40 | S | 40 | | | | |
| InnerCrate 50 | S | 50 | | | | |
| InnerCrate 60 | S | 60 | | | | |
| InnerCrate 600 | S | 600 | | | | |
| InnerCrate 80 | S | 80 | | | | |
| MacCrate 100 | S | 100 | | | | |
| MacCrate 20 | S | 20 | | | | |
| MacCrate 300 | S | 338 | | | | |
| MacCrate 318 | S | 600 | | | | |
| MacCrate 40 | S | 40 | | | | |
| MacCrate 60 | S | 60 | | | | |
| MacCrate 80 | S | 80 | | | | |

Cristie

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------|------|-----|------|-----|-----|-------|
| Mach 40 | S | 43 | 1057 | 2 | 42 | |
| Swallow 110 | S | 98 | 1252 | 4 | 40 | |
| Swallow 40 | S | 42 | 1074 | 2 | 40 | |
| Swift 90 | S | 79 | 1552 | 2 | 52 | |

Cybernetics

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|------|------|-----|-----|-------|
| CY 2.1GB | S-2F | 2100 | | | | |
| CY 4.2GB | S-2F | 4200 | | | | |
| CY 8.7GB | S-2 | 8700 | | | | |
| CY 9GB | S-2 | 9000 | | | | |

Cybernex

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|-----|------|-----|-----|-------|
| 10203 | E | 54 | 1050 | 3 | 35 | |
| 10304 | E | 72 | 1050 | 4 | 35 | |
| 10305 | E | 90 | 1050 | 5 | 35 | |

Cynthia

Something to do with Disctron?

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|-------|------|-----|-------|-------|
| D520 | M/R | 21/34 | 640 | 4 | 17/26 | |
| 530 | M | 25 | 987 | 3 | 17 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|-----|------|-----|-----|-------|
| 550 | M | 40 | 987 | 5 | 17 | |
| 570 | M | 60 | 987 | 7 | 17 | |
| 585 | M | 71 | 1166 | 7 | 17 | |

Daeyoung Electronics

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|-----|------|-----|-----|-------|
| DX 3040A | A | 40 | | | | |
| DX 3060A | A | 60 | | | | |
| DX 3120A | A | 120 | 866 | 8 | 34 | |

Data General

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|------|------|-----|-----|-------|
| 6410 | A | 20 | | | | |
| 6556 | A | 42.8 | | | | |
| 6557 | A | 104 | | | | |
| 6664 | A | 202 | | | | |
| 6778B | A | 116 | | | | |
| 6301 | M | 37 | 640 | 7 | 17 | |
| 6338 | M | 68 | 1024 | 8 | 17 | |
| 6339 | M | 120 | 950? | 15 | 17 | |
| 6555B | E | 645 | | | | |
| 6597B | E | 156 | | | | |
| 660B | E | 330 | | | | |

Data Technology

Division of Qume

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------|------|-----|------|-----|-----|---------------|
| DTM 553 | M | 40 | 1024 | 5 | 17 | |
| DTM 853 | M | 40 | 640 | 8 | 17 | |
| DTM 885 | M | 70 | 1024 | 8 | 17 | |
| HF 12 | S | 10 | 301 | 2 | 17 | MFM recording |
| HF 24 | S | 21 | 506 | 2 | 17 | MFM recording |

Dauphin Technology

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------|------|-----|------|-----|-----|------------|
| Dynadriv 85 | | 85 | | | | Removeable |

DEC

Digital Equipment

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-----------|------|-----|------|-----|-----|-------|
| DSP 2022A | A | 220 | | 995 | 8 | 54 |
| PCXAR-CE | A | 85 | | | | |
| PCGXR-DA | A | 85 | | | | |
| PCGXR-DD | A | 120 | | | | |
| PCXAR-CA | A | 120 | | | | |
| PCXAR-CC | A | 120 | | | | |
| PCGXR-DE | A | 170 | | | | |
| PCGXR-EB | A | 210 | | | | |
| PCGXR-ED | A | 240 | | | | |
| PCXAR-CB | A | 240 | | | | |
| PCXAR-CD | A | 240 | | | | |
| PCGXR-ED | A | 340 | | | | |
| PCGXR-GD | A | 510 | | | | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|--------|---------|------|-----|--------|----------------------|
| PCXAR-CG | A | 525 | | | | |
| DSP 2022S | S-2F | 220 | 1484 | 5 | 58 | |
| DSP 3053L(W) | S2FW | 535 | 3100 | 4 | 59 | Avastor |
| DSP 3055 (R,W) | S-2F | 550 | 3115 | 4 | | Capella |
| DSP 3080 | S-2 | 852 | | | | |
| DSP 3085 | S-2F | 852 | 2086 | 14 | 57 | |
| DSP 3105 | S-2F | 1050 | 2570 | 14 | 57 | |
| DSP 3107L(W) | S2F(W) | 1070 | 3100 | 8 | 59 | Avastor |
| DSP 3110 (R,W) | S-2F | 1100 | 3115 | 8 | | Capella |
| DSP 3133L(W) | S2F(W) | 1337 | 3100 | 10 | 59 | Avastor |
| DSP 3160(W) | S2F(W) | 1600 | 2599 | 16 | 57 | Avastor; also OEM |
| DSP 3200 | S-2F | 2000 | | | | |
| DSP 3210(W) | S2F(W) | 2148 | 3042 | 16 | 59 | Avastor |
| DSP 3221 (R,W) | S-2F | 2200 | 4125 | 8 | | Capella |
| DSP 5200 | S-2F | 2000 | 2620 | 21 | 71 | |
| DSP 5300(W) | S2F(W) | 3000 | 3055 | 21 | 80 | Avastor |
| DSP 5350(W) | S-2F | 3500 | 3055 | 25 | 80 | Avastor |
| DSP 5400(W) | S2F(W) | 4000 | 3055 | 26 | 80 | Avastor |
| ESP 510 | S-2F | 107 | | | | Solid State |
| ESP 530 | S-2F | 267 | | | | Solid State |
| ESP 540 | S-2F | 428 | | | | |
| ESP 580 | S-2F | 856 | | | | |
| PCXAR-AB | S | 426 | | | | |
| PCXAR-AD | S | 1000 | | | | |
| PCXAR-AG | S | 245 | | | | |
| RZ 23L | S | 105 | 776 | 8 | 33 | CP 3100D in disguise |
| RZ 24 | S | 212 | 1366 | 8 | 38 | CP 3200D in disguise |
| RZ 24L-E | S | 240 | | | | Quantum 240S |
| RZ 25 | S | 426 | | | | |
| RZ 26L(W) | S(W) | 1050 | | 7 | | |
| RZ 28(W) | S(W) | 2100 | | 16 | | |
| RZ 29B | S | 4300 | | | | |
| RZ 73 | S | 2000 | | | | |
| RZ 74 | S | 3500 | | 25 | | |
| SP 3430(N) | S-2F | 4300 | 3832 | 20 | 71-138 | |
| SWXD3-S/WC | S-2 | 1050 | | | | |
| VP 3107(W) | S-2F | 1075 | 3832 | 5 | 71-138 | Quantum? |
| VP 3215 | S-2F | 2150 | 3832 | 10 | 71-138 | Quantum? |
| RA 71 | SDI | 700 | | | | |
| RA 72 | SDI | 1000 | | | | |
| RA 73 | SDI | 2000 | | | | |
| RF 31T | DSSI | 381 | | | | |
| RF 35 | DSSI | 852 | | | | |
| RF 36 | DSSI | 1600 | | | | |
| RF 72 | DSSI | 1000 | | | | |
| RF 73 | DSSI | 2000 | | | | |
| RF 74 | DSSI | 1357 Gb | | | | |

[DSP3133L/3160/3210/5300/5350/5400/5200/VP 3107/VP 3215](#)

| SCSI ID | 5-6 | 3-4 | 1-2 |
|---------|-----|-----|-----|
| 0 | 0 | 0 | 0 |
| 1 | 0 | 0 | 1 |
| 2 | 0 | 1 | 0 |
| 3 | 0 | 1 | 1 |
| 4 | 1 | 0 | 0 |
| 5 | 1 | 0 | 1 |

| SCSI ID | 5-6 | 3-4 | 1-2 |
|---------|-----|-----|-----|
| 6 | 1 | 1 | 0 |
| 7 | 1 | 1 | 1 |

DSP 3053L/3107L

| ID | 5-6 | 3-4 | 1-2 |
|----|-----|-----|-----|
| 0 | 0 | 0 | 0 |
| 1 | 0 | 0 | 1 |
| 2 | 0 | 1 | 0 |
| 3 | 0 | 1 | 1 |
| 4 | 1 | 0 | 0 |
| 5 | 1 | 0 | 1 |
| 6 | 1 | 1 | 0 |
| 7 | 1 | 1 | 1 |

| | | |
|-------|------|------------------|
| 7 | Open | Fault LED |
| 8 | | Key |
| 9 | Open | Busy LED |
| 10 | open | Spindle sync ref |
| 11 | open | +5v out |
| 12 | open | Reserved |
| 13-14 | | Delay Spin/WP |
| 15-16 | | LED |
| 17-18 | | Reserved |
| 19-20 | | Spindle Sync ref |

RZ Series

| ID | E1 | E2 | E3 |
|----|----|----|----|
| 0 | 0 | 0 | 0 |
| 1 | 1 | 0 | 0 |
| 2 | 0 | 1 | 0 |
| 3 | 1 | 1 | 0 |
| 4 | 0 | 0 | 1 |
| 5 | 1 | 0 | 1 |
| 6 | 0 | 1 | 1 |
| 7 | 1 | 1 | 1 |

Parity E4=disable.

Delta Microsystems Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------|------|------|------|-----|-----|-------|
| HPS 292D | S | 292 | | | | |
| HPS 320D | S | 320 | | | | |
| HPS 583D | S | 583 | | | | |
| SS 1002D | S | 1002 | | | | |
| SS 1003D | S | 1003 | | | | |
| SS 1291DUS | S | | | | | |
| SS 149D | S | 149 | | | | |
| SS 292D | S | 292 | | | | |
| SS 320D | S | 320 | | | | |
| SS 583D | S | 644 | | | | |
| SS 644D | S | 644 | | | | |

Deltiac Systems

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------|------|-----|------|-----|-----|-------|
| DS100Q | S | 105 | | | | |
| DS40Q | S | 40 | | | | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------|------|------|------|-----|-----|-------|
| Server 100H | S | 103 | | | | |
| Server 1200 | S | 1000 | | | | |
| Server 300Q | S | 320 | | | | |
| Server 320H | S | 320 | | | | |
| Server 420H | S | 420 | | | | |

Dickens Data Systems Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|------|------|-----|-----|-------|
| 1.2GB | S | 1000 | | | | |
| 396 | S | 331 | | | | |
| 793 | S | 663 | | | | |

Disctec

Made first removable 2.5" drive. See Areal for IDEs.

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------|------|------|------|-----|-----|----------------|
| RD 52 | A | 40 | 563 | 4 | 34 | |
| RD 53 | A | 67 | 977 | 4 | 33 | |
| RHD 120 | A | 120 | | | | |
| RHD 180 | A | 183 | | | | |
| RHD 210 | A | 210 | | | | |
| RHD 260 | A | 260 | | | | |
| RHD 340 | A | 340 | | | | |
| RHD 520 | A | 520 | | | | |
| RHD 20 | H | 20 | 733 | 2 | 26 | 615 x 2 x 34? |
| RHD 60 | H | 60 | 1024 | 7 | 17 | 1024 x 2 x 60? |
| RHD 80 | H | 80 | 980 | 10 | 17 | |
| CXD60 | Par | 120 | | | | Roadrunner |
| RXD20 | Par | 20 | | | | Roadrunner |
| RXD60 | Par | 60 | | | | Roadrunner |
| Trip XD120 | Par | 120 | | | | Roadrunner |
| Trip XD20 | Par | 20 | | | | Roadrunner |
| XD 540 | Par | 540 | | | | Roadrunner |
| XD 60 | Par | 60 | | | | Roadrunner |
| XD 730 | Par | 730 | | | | |
| XD 850 | Par | 850 | | | | |
| XD 1200 | Par | 1200 | | | | |

Disctron

Formed from merger of RMS and Data Peripherals. Later sold to Otari and Disk Tech One—Cynthia?

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|-------|------|-----|-------|-------|
| D 214 | M | 10 | 153 | 8 | 17 | |
| D 226 | M | 20 | 612 | 4 | 17 | |
| D 503 | M | 3 | 153 | 2 | 17 | |
| D 504 | M | 4 | 215 | 2 | 17 | |
| D 506 | M | 5 | 153 | 4 | 17 | |
| D 507 | M | 5 | 306 | 2 | 17 | |
| D 509 | M | 8 | 215 | 4 | 17 | |
| D 512 | M | 11 | 153 | 8 | 17 | |
| D 513 | M | 11 | 215 | 6 | 17 | |
| D 514 | M | 11 | 306 | 4 | 17 | |
| D 518 | M | 15 | 215 | 8 | 17 | |
| D 519 | M | 16 | 306 | 6 | 17 | |
| D 525 | M | 20 | | | 17 | |
| D 526 | M/R | 21/32 | 306 | 8 | 17/26 | |
| D 620 | M | 25 | | 4 | 17 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|-----|------|-----|-----|-------|
| D 640 | M | 42 | | 6 | 17 | |

Disk Technologies Corp

See *Disctec*

Disk Tech One

Bought Disctron. See *Disctec*

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|-----|------|-----|-----|-------|
| 5007 | M | 5 | 306 | 2 | 17 | |
| 5012 | M | 10 | 306 | 4 | 17 | |
| 5014 | M | 10 | 306 | 4 | 17 | |
| 5019 | M | 15 | 306 | 8 | 17 | |
| 5028 | M | 20 | 306 | 8 | 17 | |

DMA

(Ricoh) Out of business

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-----------|------|-------|------|-----|-------|---------------|
| 306 | M | 11 | 612 | 2 | 17 | Removeable |
| 360 | M/R | 11/26 | 612 | 2 | 17/26 | Removeable |
| 370 | M | 25 | 612 | 2 | 17 | |
| 371 | M | 25 | 1224 | 4 | 17 | |
| RH 5130 | M/R | 10/15 | 612 | 2 | 17/26 | |
| RH 5260 | M | 10 | 615 | 2 | 17 | |
| 380 | S | 39 | 1285 | 2 | 62 | |
| 381 | S | 39 | 1285 | 2 | 62 | |
| RH 5261 | S | 25 | 612 | 2 | 42 | MFM recording |
| RH 5500 | S | 50 | 1285 | 2 | 38 | Cartridge |
| RS 9250AR | S | 47 | 1285 | 2 | 36 | Cartridge |

DPI

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------|------|-----|------|-----|-----|-------|
| 144(II) | S | 138 | | | | |
| 160 | S | 160 | | | | |
| 20 | S | 21 | | | | |
| 30 | S | 32 | | | | |
| 300 | S | 300 | | | | |
| 600 | S | 582 | | | | |
| 70 | S | 68 | | | | |
| 90 | S | 91 | | | | |

DPL

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|------|-----|------|-----|-----|-------|
| Optistore 1000 | S | 644 | | | | |
| Optistore 128 | S | 128 | | | | |
| Optistore 650 | S | 650 | | | | |
| Optistore 650 | S | 650 | | | | |

DTM

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|-----|------|-----|-----|-------|
| 553 | M | 42 | 1024 | 5 | 17 | |
| 853 | M | 44 | 640 | 8 | 17 | |
| 885 | M | 70 | 1024 | 8 | 17 | |
| HF 12 | S | 23 | 301 | 2 | 78 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|-----|------|-----|-----|-------|
| HF 24 | S | 38 | 506 | 2 | 78 | |

Dynatech Systems

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------|------|------|------|-----|-----|----------|
| NDS 1.2 | S | 1000 | 1658 | 15 | 85 | External |
| NDS 180 | S | 173 | 1334 | 8 | 34 | External |
| NDS 2.0 | S | 1600 | 1893 | 20 | 103 | External |
| NDS 350 | S | 340 | 1658 | 8 | 34 | External |
| NDS 520 | S | 520 | 1435 | 11 | 60 | External |
| NDS 650 | S | 640 | 1658 | 9 | 53 | External |

Dynatek Automation Systems

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------------|------|------|------|-----|-----|------------------------------------|
| HDA 520FSI(D) | S-2 | 520 | | | | |
| HDA 540 | S-2 | 540 | | | | |
| HDA 1.0FSI(D) | S-2 | 1000 | | | | |
| HDA 1.1FSD | S-2 | 1080 | | | | |
| HDA 1.0 GB | S-2 | 1079 | 1658 | 15 | 85 | Fujitsu M 2266S-512. Sun 1648 cyls |
| HDA 2.0 GB | S-2 | 1662 | | | | Fujitsu M 2265S-512 |
| HDA 2.0ISD | S-3 | 2100 | | | | |
| HDA 2.2ISD | S-2 | 2160 | | | | |
| HDA 2.4FSI(D) | S-2 | 2000 | | | | |
| HDA 4.0MSD | S-3 | 4350 | | | | |
| HDA 9.0MSD | S-3 | 9100 | | | | |

ECOL 2

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------|------|-----|------|-----|-----|-------|
| EC 100 | A | 100 | 1005 | 2 | 17 | |
| EC 50 | A | 50 | 860 | 2 | 60 | |
| EC3-100 | A | 100 | 957 | 2 | 17 | |
| EC3-200 | A | 200 | 986 | 2 | 33 | |

ECCS Inc

www.eccs.com

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------------|------|------|------|-----|-----|-------|
| Space 300E | E | 300 | | | | |
| Space 1000S/D | S | 1000 | | | | |
| Space 1600S/D | S | 1600 | | | | |
| Space 2000S/D | S | 2000 | | | | |
| Space 3000S/D | S | 3000 | | | | |
| Space 300D | S | 300 | | | | |
| Space 300S | S | 300 | | | | |
| Space 3600S/D | S | 3600 | | | | |
| Space 4000S/D | S | 4000 | | | | |
| Space 600S/D | S | 600 | | | | |

E F Industries

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|-----|------|-----|-----|-------|
| 3046 | M | 39 | 645 | 7 | 17 | |
| 3051 | M | 43 | 704 | 7 | 17 | |

Ehman Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|-----|------|-----|-----|-------|
| E105Q | S | 105 | | | | |
| E135 | S | 130 | | | | |
| E165S | S | 165 | | | | |
| E180 | S | 170 | | | | |
| E20 | S | 21 | | | | |
| E30+ | S | 32 | | | | |
| E330 | S | 330 | | | | |
| E40Q | S | 42 | | | | |
| E45 | S | 47 | | | | |
| E60+ | S | 62 | | | | |
| E665 | S | 660 | | | | |
| E80+ | S | 82 | | | | |
| E80Q | S | 84 | | | | |

Eiger Labs

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------|------|-----|------|-----|-----|-------|
| EMS 170 | P3 | 170 | | | | |
| EMS 260 | P3 | 260 | | | | |

Elcoh

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------|------|-----|------|-----|-----|-------|
| Discache 10 | M | 11 | 320 | 4 | 17 | |
| Discache 20 | M | 22 | 320 | 8 | 17 | |

EMAC

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|------|-----|------|-----|-----|-------|
| 20SE | S | 20 | | | | |
| 40CX/ID | S | 40 | | | | |
| 40SE | S | 40 | | | | |
| 80CX/ID | S | 80 | | | | |
| 80SE | S | 80 | | | | |
| Impact 105 | S | 105 | | | | |
| Impact 170 | S | 168 | | | | |
| Impact 20 | S | 20 | | | | |
| Impact 40 | S | 40 | | | | |
| Impact 40 Plus | S | 40 | | | | |
| Impact 60 | S | 66 | | | | |
| Impact 80 | S | 80 | | | | |
| Metro 105 | S | 105 | | | | |
| Metro 105CX | S | 105 | | | | |
| Metro 170 | S | 168 | | | | |
| Metro 170CX | S | 168 | | | | |
| Metro 20 | S | 21 | | | | |
| Metro 40 | S | 42 | | | | |
| Metro 80 | S | 84 | | | | |

Emerald DOS

Used in PS/2s? In which case proprietary ESDI interface.

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|-----|------|-----|-----|-------|
| 150-3000 | E | 150 | | | | |

Emerald Systems

Used in PS/2s? In which case proprietary ESDI interface.

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------|------|-----|------|-----|-----|-------|
| PS 36 3002 | E | 36 | | 5 | | |
| PS 50 3002 | E | 50 | | 5 | | |
| PS 70 3002 | E | 70 | | 8 | | |
| PS 140 3002 | E | 140 | | 16 | | |
| PS 280 3002 | E | 280 | | 32 | | |

Emulex

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------|------|-----|------|-----|-----|-------|
| ATS 170 | E/S | 142 | 1022 | | | |
| ATS 380 | E/S | 310 | 1222 | | | |
| EMS 760 | E | 663 | | | | |
| ER2E/760 | E | 663 | | | | |
| ES36/760-1 | E | 663 | | | | |

Epson

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|-----|------|-----|-------|---------------|
| 94216 | E | 94 | 1024 | 5 | 36 | Seagate 2106E |
| HD 560 | M | 20 | 615 | 4 | 17 | |
| HD 720 | M | 20 | 615 | 4 | 17 | |
| HD 806 | M | 21 | 615 | 4 | 17 | |
| HD 830 | M/R | 10 | 612 | 2 | 17/26 | |
| HD 850 | M | 11 | 306 | 4 | 17 | |
| HD 860 | M/R | 21 | 612 | 4 | 17/26 | |
| HMD 710 | M | 10 | 615 | 2 | 17 | |
| HMD 720 | M | 20 | 615 | 4 | 17 | |
| SMD 710 | M | 10 | 615 | 2 | 17 | |
| SMD 720 | M | 21 | 615 | 4 | 17 | |
| SMD 830 | M | 10 | 612 | 4 | 17 | |
| SMD 850 | M | 10 | 306 | 4 | 17 | |
| SMD 860 | M | 20 | 612 | 4 | 17 | |
| EHDD 170 | P3 | 170 | | | | |
| EHDD 260 | P3 | 260 | | | | |
| EHDD 340 | P3 | 340 | | | | |
| HMD 755 | R | 21 | 615 | 2 | 34 | |
| HMD 765 | R | 42 | 615 | 4 | 34 | |
| HMD 726A | S | 21 | 615 | 4 | 32 | |
| HMD 976 | S | 69 | | | | |

Esperit

Purchased by Daeyoung Electronics.

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------|------|-----|------|-----|-----|-------|
| EP 340A | A | 43 | | 4 | | XT |
| PT 338 | | 32 | | | | |
| PT 351 | | 43 | | | | |
| EP 340S | S | 42 | | | | |

Everex Systems

Possible Microscience connection?

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------|------|-----|------|-----|-----|-------|
| HH 612 | M | 12 | 306 | 4 | 17 | |
| HH 725 | M | 26 | 500? | 6 | 17 | |

Evotek

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|-----|------|-----|-----|-------|
| 5820 | M | 26 | 375 | 8 | 17 | |

EZI

Somewhere in Germany.

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|-----|------|-----|-----|-------|
| 1200 | E | 171 | 1216 | 8 | 36 | |
| 1300 | E | 261 | 1216 | 12 | 35 | |
| 4410 | E | 334 | 1100 | 11 | 54 | |
| 2200 | S | 174 | 1216 | 8 | 35 | |
| 2300 | S | 261 | 1216 | 12 | 35 | |
| 4420 | S-2 | 334 | 1100 | 11 | 54 | |

Feith Systems Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------|------|-----|------|-----|-----|-------|
| Big Boy 636 | S | 636 | | | | |
| XM/SCSI | S | 147 | | | | |
| XM/SCSI | S | 312 | | | | |
| XM/SCSI | S | 80 | | | | |

First Class Peripherals

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|------|-----|------|-----|-----|-------|
| D7 Turbo | S | 70 | | | | |
| DF4 | S | 40 | | | | |
| DF7 | S | 70 | | | | |
| Sider C96 | S | 90 | | | | |
| Sider D2 | S | 20 | | | | |
| Sider D4T | S | 40 | | | | |
| Sider D9 Turbo | S | 87 | | | | |

Focus Enhancements

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------|------|------|------|-----|-------|-----------------|
| Focus 1.2GB | S | 1050 | 1747 | 15 | 58-94 | Micropolis 2112 |

Frame Electronics

Drives made by IBM

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------|------|------|------|-----|-----|-------|
| FAV 55F5974 | S | 1000 | | | | 0663 |
| FEV 93X2500 | S | ? | | | | 0661 |
| FH 155F9964 | S | ? | | | | 0663 |
| FHS 6475646 | S | ? | | | | 0663 |
| FMS 75G3577 | S | ? | | | | 0664 |
| FMS 73F9122 | S | 400 | | | | |

Fuji

No longer producing hard drives.

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|------|-----|------|-----|-----|-----------|
| FK 316A-105R | A | 105 | 804 | 15 | 17 | FK 307A?? |
| FK 316A-120R | A | 120 | 1310 | 4 | 46 | Physical |
| FK 316A-130R | A | 130 | 1331 | 4 | 46 | Physical |
| FK 317A-210R | A | 210 | 671 | 12 | 51 | |
| FK 317A-240R | A | 240 | 766 | 12 | 51 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------------|------|-----|------|-----|-----|------------------------|
| FK 301-13(-1) | M | 10 | 306 | 4 | 17 | |
| FK 302-13 | M | 10 | 612 | 2 | 17 | |
| FK 302-26 | M | 20 | 612 | 4 | 17 | 615 cyls (Victor BIOS) |
| FK 302-39 | M | 32 | 612 | 6 | 17 | |
| FK 303-52 | M | 42 | 615 | 8 | 17 | |
| FK 305-26 | M | 21 | 615 | 4 | 17 | |
| FK 305-39 | M | 32 | 615 | 6 | 17 | |
| FK 309-26 | M | 21 | 615 | 4 | 17 | |
| FK 309-39 | M | 32 | 615 | 6 | 17 | |
| FK 305-26R | R | 32 | 615 | 4 | 26 | |
| FK 305-39R | R | 32 | 615 | 4 | 26 | |
| FK 305-58R | R | 48 | 615 | 6 | 26 | |
| FK 308-39R | R | 30 | 615 | 4 | 26 | |
| FK 308-58R | R | 45 | 615 | 6 | 26 | |
| FK 309-39R | R | 32 | 615 | 4 | 26 | |
| FK 308S-39R | S | 32 | 615 | 4 | 32 | |
| FK 308S-58R | S | 45 | 615 | 6 | 32 | |
| FK 308S-59R | S | 45 | 615 | 6 | 32 | |
| FK 309S-50R | S | 40 | 615 | 4 | 32 | |

FK 316A

| | |
|---------|-------------|
| Single: | P1 P2 open |
| Master: | P1 close |
| Slave: | P1 P2 close |

FK 317A

| | |
|---------|----------|
| Single: | P2 open |
| Master: | P2 open |
| Slave: | P2 close |

Fujisawa

Made stuff for IBM

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------|------|-----|------|-----|-----|-------------|
| 90X8627 | E | 60 | | | | IBM Part No |
| 90X7392 | E | 120 | | | | IBM Part No |
| 90X9403 | M | 30 | | | | IBM Part No |

Fujitsu

Drives sold through OEM channels.
See also *Fujitsu Knowledge System*
www.fujitsu-computers.com

Drive Lettering

| | |
|----|-----------------------------------|
| 2 | Storage product |
| E | Enhanced |
| T | IDE |
| TA | IDE |
| S | Single-ended SCSI @ 256 bytes/blk |
| SA | Above, 512 bytes/blk |
| SB | Above, 1024 bytes/blk |
| H | Diff SCSI |
| F | Fast SCSI |
| Q | Fast Wide S-ended |
| R | Fast Wide Diff |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|------|------|-------|-----|-----|--------------------------------|
| M 1603TA | A2 | 544 | 1055 | 16 | 63 | Discontinued |
| M 1604 | A2 | 850 | 3456 | 5 | | |
| M 1606TA | A2 | 1089 | 2111 | 16 | 63 | Discontinued |
| M 1612 | A2 | 545 | 1057 | 16 | 63 | Discontinued |
| M 1614 TAU | A2F | 1091 | 2114 | 16 | 63 | Discontinued |
| M 1623 TAU | A2 | 1702 | 3298 | 16 | 63 | Discontinued |
| M 1624 TAU | A2 | 2100 | 4092 | 16 | 63 | Discontinued |
| M 1636 TAU | A2 | 1286 | 2490 | 16 | 63 | Discontinued |
| M 1638 TAU | A2 | 2571 | 4982 | 16 | 63 | Discontinued |
| M 2611T(#D) | A | 45 | 667 | 4 | 33 | 88,044 max secs Discontinued |
| M 2612 (E)T | A | 90 | 667 | 8 | 33 | 176,088 max secs Discontinued |
| M 2613 (E)T | A | 135 | 667 | 12 | 33 | 264,132 max secs Discontinued |
| M 2614 (E)T | A | 180 | 667 | 16 | 33 | 352,176 max secs Discontinued |
| M 2616 (E)T | A | 104 | 771 | 8 | 33 | 203,544 max secs Discontinued |
| M 2617T | A | 105 | 718 | 6 | 48 | 206,784 max secs Discontinued |
| M 2618T | A | 210 | 718 | 12 | 48 | 413,568 max secs Discontinued |
| M 2621T | A | 235 | 1435 | 5 | 63 | |
| M 2622T | A | 326 | 1013 | 10 | 63 | Try 1429 x 7 x 63 Discontinued |
| M 2623T | A | 420 | 1002 | 13 | 63 | Try 1429 x 9 x 63 Discontinued |
| M 2624T Eaglet | A | 513 | 995 | 16 | 63 | Try 1429x11x63 Discontinued |
| M 2631T | A | 45 | 916 | 2 | 48 | |
| M 2633T | A | 90 | 916 | 4 | 48 | Discontinued |
| M 2634T | A | 120 | 698 | 6 | 56 | Discontinued |
| M 2635T | A | 160 | 698 | 8 | 56 | Discontinued |
| M 2636T | A | 200 | 698 | 10 | 56 | Discontinued |
| M 2637T | A | 240 | 698 | 12 | 56 | Discontinued |
| M 2681TA | A | 252 | 977 | 11 | 48 | Discontinued |
| M 2682TA | A | 352 | 992 | 11 | 63 | Discontinued |
| M 2684TA | A2 | 528 | 1024 | 16 | 63 | Discontinued |
| M 2704T | A | 353 | 1991 | 4 | 86 | |
| M 2705T | A | 442 | 1991 | 5 | 86 | |
| M 2706T | A | 532 | 1991 | 6 | 86 | |
| M 2712T | A | 540 | 3916 | 2 | | |
| M 2713T | A | 816 | 1581 | 16 | 63 | Discontinued |
| M 2714T | A2 | 1087 | 2108 | 16 | 63 | 2.5" Discontinued |
| M 2723T | A3 | 1234 | 2371 | 16 | 63 | |
| M 2724 | A3 | 1632 | 3162 | 16 | 63 | |
| MHA 2021AT | A3 | 2170 | 4200 | 16 | 63 | |
| MHA 2032AT | A3 | 3250 | 6300 | 16 | 63 | |
| MHC2040AT | A | 4090 | 7944 | 16 | 63 | 12.5mm |
| MHD2021AT | A3 | 2170 | 4200 | 16 | 63 | 9.5mm |
| MHD2032AT | A3 | 3250 | 6304 | 16 | 63 | 9.5mm |
| MHE 2043AT | A3 | 4327 | 8944 | 15 | 63 | |
| MHE 2064AT | A3 | 6495 | 13424 | 15 | 63 | |
| MHF 2021AT | A3 | 2168 | 4200 | 16 | 63 | |
| MHF 2043AT | A3 | 4327 | 8944 | 15 | 63 | |
| MPA 3017AT | A3 | 1740 | 3390 | 16 | 63 | |
| MPA 3026AT | A3 | 2620 | 5086 | 16 | 63 | |
| MPA 3035AT | A3 | 3500 | 6780 | 16 | 63 | |
| MPA 3043AT | A3 | 4370 | 9042 | 15 | 63 | |
| MPA 3052AT | A3 | 5250 | 10850 | 15 | 63 | |
| MPB 3021AT | A3 | 2160 | 4470 | 15 | 63 | |
| MPB 3032AT | A3 | 3240 | 6704 | 15 | 63 | |
| MPB 3043AT | A3 | 4320 | 8940 | 15 | 63 | |
| MPB 3052AT | A3 | 5240 | 10850 | 15 | 63 | |
| MPB 3064AT | A3 | 6480 | 13410 | 15 | 63 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------------|-------|-------|-------|-----|-------|----------------------------|
| MPB 3065AH | A3 | 6510 | 13456 | 15 | 63 | |
| MPC 3032AT | A3 | 3240 | 6704 | 15 | 63 | |
| MPC 3043AT | A3 | 4320 | 8940 | 15 | 63 | |
| MPC 3045AH | A3 | 4550 | 9408 | 15 | 63 | |
| MPC 3064AT | A3 | 6480 | 13410 | 15 | 63 | |
| MPC 3065AH | A3 | 6480 | | | | |
| MPC 3084AT | A4 | 8450 | 16383 | 16 | 63 | UDMA 66 |
| MPC 3096AT | A3 | 8450 | 16383 | 16 | 63 | 9450 unformatted |
| MPC 3102AT | A4 | 8450 | 16383 | 16 | 63 | UDMA 66 |
| MPD 3108AT | A3 | 10800 | | | | |
| MPD 3137AH | A4 | 13700 | | | | 7200 RPM |
| MPD 3173AT | A4 | 17300 | | | | UDMA/66 5400 RPM |
| MPD 3182AH | A3 | 18200 | | | | 7200 RPM |
| MPE 3204AT | A4 | 27000 | | | | 5400 RPM |
| M 2227D | E | 111 | 615 | 8 | 45 | |
| M 2244E | E | 86 | 823 | 5 | 35 | |
| M 2245E | E | 120 | 823 | 7 | 35 | |
| M 2246E | E | 172 | 823 | 10 | 35 | |
| M 2247E | E | 181 | 1243 | 7 | 35 | 621 x 14 x ? |
| M 2248E | E | 240 | 1243 | 11 | 35 | |
| M 2249E | E | 389 | 1243 | 15 | 35 | 621 x 30 x ? |
| M 2261E | E | 321 | 1658 | 8 | 54 | 15 Mhz |
| M 2262E | E | 571 | 1658 | 11 | 54 | |
| M 2263E | E | 667 | 1658 | 15 | 54 | 15 Mhz |
| M 2266E | E | 674 | 1658 | 15 | 54 | |
| M 2331P | IPI-2 | 168 | 823 | 5 | | |
| M 2333P | IPI-2 | 337 | 823 | 10 | | |
| M 2381P | IPI-2 | 556 | 745 | 15 | | |
| M 2382P | IPI-2 | 844 | 745 | 27 | 82 | |
| M 2651P | IPI-2 | 1300 | 1893 | 16 | 84 | |
| M 2652P | IPI-2 | 1586 | 1893 | 20 | 84 | |
| M 2653P | IPI-2 | 1404 | 2078 | 15 | 88 | |
| M 2654P | IPI-2 | 2000 | 2179 | 21 | 88 | |
| M 2671P | IPI-2 | 2200 | 2671 | 15 | | |
| M 2691P | IPI-2 | 648 | 1819 | 9 | 58-96 | |
| M 220 | M | 10 | 306 | 4 | 17 | |
| M 2220A | M | 6 | 306 | 2 | 17 | |
| M 2223A | M | 13 | 306 | 4 | 17 | |
| M 2224A | M | 19 | 306 | 6 | 17 | |
| M 2225(A,D,2) | M | 25 | 615 | 4 | 17 | |
| M 2226(A,D,2) | M | 30 | 615 | 6 | 17 | Also SA 4000 |
| M 2227(D,2) | M | 40 | 615 | 8 | 17 | Also SA 4000 |
| M 2230AS | M | 5 | 320 | 2 | 17 | Also SA 4000 |
| M 2230AT | M | 5 | 306 | 2 | 17 | 320 cyls? |
| M 2231 | M | 5 | 306 | 2 | 17 | |
| M 2232 | M | 10 | 306 | 6 | 17 | |
| M 2233(A)(S) | M | 11 | 320 | 4 | 17 | Also SA 4000 |
| M 2233(A)(T) | M | 10 | 306 | 4 | 17 | 320 cyls? |
| M 2234(A)(S) | M | 16 | 320 | 6 | 17 | Also SA 4000 |
| M 2235(A)(S) | M | 21 | 320 | 8 | 17 | Also SA 4000 |
| M 2241(ABS2) | M | 26 | 754 | 4 | 17 | Also SA 4000 |
| M 2242(ABS2) | M | 46 | 754 | 7 | 17 | Also SA 4000 |
| M 2243(ABS2) | M | 68 | 754 | 11 | 17 | P/N B03B 4805 B003A |
| M 2243T | M | 68 | 1186 | 7 | 17 | 593 x 14 x 17 Also SA 4000 |
| M 2244 | M | 68 | 754 | 11 | 17 | |
| M 2311K | M | 84 | 589 | 4 | 17 | |
| M 2321K | M | 84 | 823 | 5 | 17 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|-------|------|-------|-----|-----|-------------------------------|
| M 3343AS | M | 72 | 754 | 11 | 17 | |
| M 2511A | O | 128 | 9952 | 1 | 25 | SCSI |
| M 2512A | O | 230 | 17840 | 1 | 25 | SCSI-2 |
| M 2225DR | R | 32 | 615 | 4 | 26 | |
| M 2226DR | R | 48 | 615 | 6 | 26 | |
| M 2227DR | R | 64 | 615 | 8 | 26 | |
| M 2243R | R | 130 | 1186 | 7 | 26 | 593 x 14 x 26 |
| M 1603SA | S2FS | 545 | 3547 | 3 | 94 | +15 cyls for SA Discontinued |
| | | | 3772 | 3 | 94 | Sun 5400 RPM |
| M 1604 | S-2F | 850 | | | | |
| M 1606SA | S-2F | 1092 | 3547 | 6 | 94 | +15 cyls for SA Discontinued |
| | | | 3778 | 6 | 94 | Sun 5400 RPM |
| M 1638S | S | 2200 | | | | |
| M 2226 SA | S | 32 | 615 | 6 | | Discontinued |
| M 2241B | S | 25 | 754 | 4 | 32 | |
| M 2242B | S | 43 | 754 | 7 | 32 | |
| M 2243B | S | 68 | 754 | 11 | 32 | |
| M 2244S(B) | S | 80 | 823 | 5 | 35 | |
| M 2245S(A,B) | S | 112 | 823 | 7 | 65 | |
| M 2246S(A,B) | SSync | 160 | 823 | 10 | 35 | |
| M 2247SA | S | 149 | 1243 | 7 | 35 | |
| M 2248SA | S | 234 | 1243 | 11 | 35 | |
| M 2249S(A) | S | 334 | 1243 | 15 | 35 | 621 x 30 x ? |
| M 2261S(AHB) | S-2 | 357 | 1658 | 8 | 54 | 829x16x53 Discontinued |
| M 2262S(AHB) | S | 492 | 1658 | 11 | 53 | Discontinued |
| M 2263S(AHB) | S-2 | 707 | 1658 | 15 | 53 | 829x30x53. Sun 1648 cyls Disc |
| M 2654S-512 | S | 1957 | | | | |
| M 2265S-512 | S | 1662 | | | | Dynatek 2.0 GB |
| M 2266S(AHB) | S-2 | 1079 | 1658 | 15 | 85 | Sun 1648 cyls Discontinued |
| M 2344KS | S | 675 | 624 | 27 | 82 | |
| M 2372KS | S | 700 | 745 | 27 | 68 | |
| M 2511A | S-2 | 128 | 9950 | 1 | 25 | Sun 3600 RPM |
| M 2512A | S | 17 | 850 | 1 | 25 | Sun 3600 RPM |
| M 254SA | S | 2000 | | | | |
| M 2611SA#D | S | 45 | 1334 | 2 | 34 | 667 x 4 x ? Discontinued |
| M 2612(E,S,A) | S | 91 | 1334 | 4 | 34 | 667 x 8 x ? Sun 1304 cyls |
| M 2613(E,S,A) | S | 137 | 1334 | 6 | 34 | MJ=Mac. Sun 1307 cyls |
| M 2614E(S,A,B) | SSync | 182 | 1334 | 8 | 34 | MJ=Mac. Sun 1307 cyls |
| M 2615ESA | S | 52 | 1542 | 2 | 33 | |
| M 2616SA | SSync | 105 | 1542 | 4 | 34 | MJ=Mac Discontinued |
| M 2621S(A) | S-2 | 234 | 1435 | 5 | 63 | |
| M 2622(FSHA) | S-2F | 330 | 1153 | 7 | 80 | Sun 1151 cyls Discontinued |
| M 26232(FSAB) | S-2F | 425 | 1153 | 9 | 80 | Sun 1151 cyls Discontinued |
| M 2624(F,S,A) | S-2F | 520 | 1465 | 11 | 63 | Sun 1463 cyls Discontinued |
| M 2631S | S-2 | 45 | 916 | 2 | 48 | |
| M 2633S | S-2 | 90 | 916 | 4 | 48 | |
| M 2635S(A) | S-2 | 160 | 1572 | 4 | 63 | Discontinued |
| M 2636S(A) | S-2 | 200 | 1572 | 5 | 63 | Discontinued |
| M 2637S(A) | S-2F | 240 | 1572 | 6 | 63 | Discontinued |
| M 2651(HDSA) | S-2 | 1396 | 1944 | 16 | 88 | Sun 1934 cyls Discontinued |
| M 2652(HDSA) | S-2F | 1746 | 1944 | 20 | 88 | Sun 1935/1942 cyls |
| M 2653(HDSA) | S-2 | 1404 | 2078 | 15 | 88 | Sun 2067 cyls |
| M 2654(HSA) | S-2F | 2055 | 2179 | 21 | 88 | Sun 2170 cyls |
| M 2681S | S | | | | | Discontinued |
| M 2682S | S | | | | | Discontinued |
| M 2684S | S | | | | | Discontinued |
| M 26818SA | S-2F | 264 | 2379 | 3 | 74 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|-------|-------|------|-----|---------|----------------------------|
| M 2682SA | S-2F | 353 | 2379 | 4 | 74 | |
| M 2684SA | S-2F | 532 | 2379 | 6 | 74 | |
| M 2691(ESHA) | S-2F | 649 | 1819 | 9 | 74 | Discontinued |
| M 2692(ESHA) | S-2F | 794 | 1819 | 11 | 74 | Discontinued |
| M 2693(ESHA) | S-2F | 939 | 1819 | 13 | 74 | Discontinued |
| M 2694(EHSA) | S2FW | 1083 | 1832 | 15 | 77 | Sun 1830 cyls Discontinued |
| M 2703 | S-2 | 264 | 2305 | 3 | | |
| M 2704SA | S-2 | 353 | 2305 | 4 | | Discontinued |
| M 2705SA | S-2 | 442 | 2305 | 5 | | Discontinued |
| M 2706SA | S2FS | 532 | 2305 | 6 | 74 | Discontinued |
| M 2903(HQRS) | S2FW | 2130 | 3150 | 13 | | Discontinued |
| M 2909(HQRS) | S2FW | 3066 | 3150 | 19 | | Discontinued |
| M 2914 | S2FW | 2100 | | | | |
| M 2915(HQRS) | S2FW | 2176 | 3182 | 15 | 89 | Sun 7200 RPM Discontinued |
| M 2927(H,S)A | S2FW | 1120 | 3150 | 7 | | Discontinued |
| M 2932S | S-2F | 2170 | 3551 | 18 | 133 | Sun 7200 RPM Discontinued |
| M 2934S(W) | S2FW | 4350 | 3429 | 18 | 113-147 | 7200 RPM Discontinued |
| M 2949/S/Q/R/E | S-2F | 9100 | 5770 | 18 | | 7200 RPM Discontinued |
| M 2952/S/Q/R/E | S-3 | 2200 | 5713 | 5 | | 7200 RPM Discontinued |
| M 2954/S/Q/R/E | S-3 | 4400 | 5713 | 9 | | 7200 RPM Discontinued |
| MAA 3045 | S-3 | 4550 | 8490 | 3 | | 7200 RPM |
| MAA 3091 | S-3 | 9100 | 8490 | 10 | | 7200 RPM |
| MAA 3182 | S-3 | 18200 | 9040 | 19 | | 7200 RPM |
| MAB 3045 | S-3 | 4550 | | | | |
| MAB 3091 | S-3 | 9100 | | | | |
| MAC 3045 | S-3 | 4550 | | | | |
| MAC 3091 | S-3 | 9100 | | | | |
| MAE 3091LC | S-U2 | 8500 | | | | LVD |
| MAE 3182 LP | S | 17400 | | | | 7200 RPM |
| MAF 3364LC | S | 34700 | | | | 10,000 RPM |
| MAG 3182L© | S | 17400 | | | | 10,000 RPM |
| M 2321K | SMD | 84 | 823 | 5 | | MFM recording |
| M 2322K | SMD | 168 | 823 | 10 | | |
| M 2331KS | SMD | | 823 | 5 | | |
| M 2333KS | SMD | | 823 | 10 | | |
| M 2343K | SMD | 383 | 624 | 15 | 81 | |
| M 2361A | SMD | 686 | 842 | 20 | 81 | |
| M 2380K | ESMD | 1000 | 745 | 27 | | |
| M 2382K | ESMD | 844 | 745 | 27 | 82 | |
| M 2391D,K | ESMD | 965 | 1916 | 11 | 83 | |
| M 2392D,K | ESMD | 1842 | 1916 | 21 | 83 | |
| M 2344K | HSMD | 586 | 624 | 27 | 69 | |
| M 2360A | HSMD | 585 | 841 | | 68 | |
| M 2372K | HSMD | 700 | 745 | 27 | 69 | |
| M 2331K,S | MSMD | 168 | 823 | 5 | | |
| M 2333K,S | M-SMD | 337 | 823 | 10 | | |
| M 2343KS | M-SMD | 383 | 624 | 15 | 69 | |
| M 2344KS | M-SMD | 690 | 624 | 27 | 69 | |
| M 2381K | M-SMD | 556 | 745 | 15 | | |
| M 2382K | M-SMD | 1000 | 745 | 27 | | Unformatted capacity |
| M 2230B(T) | S4000 | 5 | 320 | 2 | 17 | |
| M 2233B(T) | S4000 | 10 | 320 | 4 | 17 | |
| M 2234B | S4000 | 16 | 320 | 6 | 17 | |
| M 2235B | S4000 | 21 | 320 | 8 | 17 | |
| M 2241B | S4000 | 25 | 754 | 4 | 17 | |
| M 2242B | S4000 | 44 | 754 | 7 | 17 | |
| M 2243B | S4000 | 69 | 754 | 11 | 17 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------|-------|-----|------|-----|-----|-------|
| M 2301K | S1000 | 9 | 244 | 4 | 20 | |
| M 2302K | S1000 | 19 | 244 | 8 | 20 | |

1603/1606TA

| | | |
|---------|------|---------|
| Single: | CNH1 | 1-2 on |
| Master: | CNH1 | 1-2 on |
| Slave: | CNH1 | 1-2 off |

1612/1614

| | |
|---------|---------------|
| Single: | CNH1 MS (2-3) |
| Master: | CNH1 MS (2-3) |
| Slave: | None |

M 1623/1624/1636/1638

| | |
|---------|---------------|
| Single: | 1-2 (B01-B02) |
| Master: | 1-2 |
| Slave: | 3-4 |

Cable Select: 2-3

M 2681/2/4

| | |
|---------|---------|
| Single: | 1-2 On |
| Master: | 1-2 On |
| Slave: | 1-2 Off |

- 3-4 On IOCHRDY output enabled
- 5-6 On ACMODE connected. Allowssystem to tell drive whether own power save takes priority.
- 7-8 Off Auto Idle Control enabled
- 9-10 CSEL connected. Special cable.
- 11-12 Reserved
- 13-14 Reserved

MAA3182/MAB3045, 3091/MAC 3045, 3091

| ID | 1-2 | 3-4 | 5-6 | 7-8 |
|---------|------|-------|--------------------------------------|-----|
| 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 0 | 0 | 0 |
| 2 | 0 | 1 | 0 | 0 |
| 3 | 1 | 1 | 0 | 0 |
| 4 | 0 | 0 | 1 | 0 |
| 5 | 1 | 0 | 1 | 0 |
| 6 | 0 | 1 | 1 | 0 |
| 7 | 1 | 1 | 1 | 0 |
| 8 | 1 | 1 | 0 | 1 |
| 9 | 1 | 0 | 0 | 1 |
| 10 | 0 | 1 | 0 | 1 |
| 11 | 1 | 1 | 0 | 1 |
| 12 | 0 | 0 | 1 | 1 |
| 13 | 1 | 0 | 1 | 1 |
| 14 | 0 | 1 | 1 | 1 |
| 15 | 1 | 1 | 1 | 1 |
| CN6 1-2 | Open | Open | Term pwr from HD Off | |
| CN6 3-4 | Open | Short | Use Start/Stop Unit Spinup at pwr on | |
| CN6 5-6 | Open | Open | Term not connected | |
| 13-14 | Open | Short | Enable writes Disable | |

MPA 3017/3026/3035/3043/3052AT MPB 3021/3032/3043 3052/3064AT MPC 3032/3043/3064/3084/3096AT/3102AT

| | |
|---------|----------|
| Single: | 1-2, 3-5 |
| Master: | As above |
| Slave: | 3-5 |

CS 2-4, 3-5.
Legacy BIOS: 5-6 instead of 3-5

2611T#D/261xET

| | |
|---------|--------------------|
| Single: | SW2/1 on,2, 3 off |
| Master: | SW2/1, 3 on, 2 off |
| Slave: | SW2/1 off, 2,3 on |

SW2/4 on = write protect

2635/6/7/T

| | |
|---------|-----------|
| Single: | 2-4 open |
| Master: | 2-4 open |
| Slave: | 2-4 short |

M 2617/8

S/N 00001-30000

| | |
|---------|------------------------------|
| Master: | SW 2/1 Off, SW1/2 off, 3 on |
| Slave: | SW 2/1 On with remainder off |

S/N 30001 or larger

| | |
|---------|-----------------------------|
| Master: | SW 2/1 Off, SW1/4 off, 3 on |
| Slave: | SW 2/1 On. Remainder off |

M 261xT

| | | |
|---------|------|---------|
| Single: | CNH1 | 1-2 On |
| Master: | CNH1 | 1-2 On |
| Slave: | CNH1 | 1-2 Off |

2622/3/4T

SW1

- 1 Off Pin 27 = IOCHRDY
- On Reserved
- 2 Off SPSYNC disabled
- On Enabled
- 3 Off WP disabled
- On Enabled
- 4 Off 4-byte ECC
- On 7-byte ECC
- 5 Off Master
- On Slave
- 6 Off Reserved

CNH1

| | | |
|-----|-------|------------------------------|
| 1-2 | Open | Sp sync not active |
| | Short | Sp sync pulse to/from pin 28 |
| 3-4 | Short | Reserved |
| 5-6 | Short | Reserved |
| 7-8 | Short | Reserved |

CNH2 Factory Test

CNH3

| | | |
|-----|-------|-------------|
| 1-2 | Short | Pin 39 DASP |
| 3-4 | Open | reserved |

M 2611

CNH1

| | | |
|-----|-----|------------------|
| 1-2 | | ID 1 |
| 3-4 | | ID 2 |
| 5-6 | | ID 4 |
| 7-8 | Out | Spin up via comd |
| | In | Spin on power up |

CNH2

| | | |
|-----|-----|---------------------|
| 1-2 | In | Term power from IDD |
| 3-4 | In | Term power TERMPWR |
| 5-6 | out | Reserved |

Dip Switch

| | | |
|---|-----|---------------|
| 1 | On | Write Protect |
| 2 | On | Self starting |
| 3 | On | Normal |
| | Off | Test |

M 2615/2616

| CNH2 | 14-13 | 12-11 | 10-9 |
|------|-------|-------|------|
| 0 | 2-3 | 5-6 | 8-9 |
| 1 | 1-2 | 5-6 | 8-9 |
| 2 | 2-3 | 4-5 | 8-9 |
| 3 | 1-2 | 4-5 | 8-9 |
| 4 | 2-3 | 5-6 | 7-8 |
| 5 | 1-2 | 5-6 | 7-8 |
| 6 | 2-3 | 4-5 | 7-8 |
| 7 | 1-2 | 4-5 | 7-8 |

CNH1

| | | |
|-----|-------|------------------------|
| 7-8 | 10-11 | SCSI bus term power |
| | 9-10 | SCSI bus term power |
| 8-9 | 10-11 | IDD term power used |
| 4-5 | | Enable Synch Transfer |
| 6-7 | | Disable Synch Transfer |
| 1-2 | | Enable parity |
| 2-3 | | Disable parity |

Dip Switch

| | | |
|---|-----|---------------|
| 1 | On | Write Protect |
| 2 | On | Self starting |
| 3 | On | Normal |
| | Off | Test |

M 2261/2262/2263/2266H

| ID | 14-13 | 12-11 | 10-9 |
|----|-------|-------|------|
| 0 | 0 | 0 | 0 |
| 2 | 0 | 1 | 0 |
| 3 | 1 | 1 | 0 |
| 4 | 0 | 0 | 1 |
| 5 | 1 | 0 | 1 |
| 6 | 0 | 1 | 1 |
| 7 | 1 | 1 | 1 |

| | | |
|-----|-------|--------------------------|
| 7-8 | Short | Time monitoring disabled |
| 5-6 | Short | Read-ahead cahce enable |
| 3-4 | Short | Reserved |
| 1-2 | Short | Normal operation |
| | Open | Diagnostics |

2903/2909/2915

| ID | 0 | 1 | 2 |
|----|---|---|---|
| 0 | 0 | 0 | 0 |
| 1 | 1 | 0 | 0 |
| 2 | 0 | 1 | 0 |
| 3 | 1 | 1 | 0 |
| 4 | 0 | 0 | 1 |
| 5 | 1 | 0 | 1 |
| 6 | 0 | 1 | 1 |
| 7 | 1 | 1 | 1 |

1603/6

| | |
|-----|----------|
| 1-2 | ID bit 1 |
| 3-4 | ID bit 2 |
| 5-6 | ID bit 3 |
| 7-8 | Spin up |

CNH1

| ID | 1-2 | 3-4 | 5-6 |
|----|-----|-----|-----|
| 0 | 0 | 0 | 0 |
| 1 | 1 | 0 | 0 |
| 2 | 0 | 1 | 0 |
| 3 | 1 | 1 | 0 |
| 4 | 0 | 0 | 1 |
| 5 | 1 | 0 | 1 |
| 6 | 0 | 1 | 1 |
| 7 | 1 | 1 | 1 |

2704/5/6 2635/6/7

| ID | J5 | J6 | J7 |
|----|----|----|----|
| 0 | 0 | 0 | 0 |
| 1 | 1 | 0 | 0 |
| 2 | 0 | 1 | 0 |
| 3 | 1 | 1 | 0 |
| 4 | 0 | 0 | 1 |
| 5 | 1 | 0 | 1 |
| 6 | 0 | 1 | 1 |
| 7 | 1 | 1 | 1 |

| | | |
|------|-------|---------------------|
| JMP4 | Short | Spinup at pwr on |
| | Open | Use start/stop unit |
| JMP3 | Short | Parity enabled |

| | | |
|------|-------|-------------------|
| | Open | Disabled |
| JMP2 | Short | Unit ATTN enabled |
| | Open | Disabled |
| JMP1 | Short | Common Comd Set |
| | Open | SCSI-2 |

2681S/2682S/2684S/2622/3/4

| CNH 1 | 1-2 | 3-4 | 5-6 |
|-------|-----|-----|-----|
| 0 | 0 | 0 | 0 |
| 1 | 1 | 0 | 0 |
| 2 | 0 | 1 | 0 |
| 3 | 1 | 1 | 0 |
| 4 | 0 | 0 | 1 |
| 5 | 1 | 0 | 1 |
| 6 | 0 | 1 | 1 |
| 7 | 1 | 1 | 1 |

| | |
|----------|------------------------|
| 7-8 on | Unit attention enabled |
| 9-10 off | Parity enabled |
| 11-12 On | SCSI 2 |
| 13-14 On | Spindle motor auto |

CNH 2

| | | |
|-----|-------|------------------------------|
| 1-2 | Open | Tempwvr from IDD disable |
| | Short | Enable |
| 3-4 | Open | Tempwvr from TERMPWR disable |
| | Short | Enable |
| 5-6 | Open | Reserved |

2652/54

| CNH 1 | 1-2 | 3-4 | 5-6 |
|-------|-----|-----|-----|
| 0 | 0 | 0 | 0 |
| 1 | 1 | 0 | 0 |
| 2 | 0 | 1 | 0 |
| 3 | 1 | 1 | 0 |
| 4 | 0 | 0 | 1 |
| 5 | 1 | 0 | 1 |
| 6 | 0 | 1 | 1 |
| 7 | 1 | 1 | 1 |

| | |
|------------|--------------------|
| 7-8 on | SCSI port enabled |
| 9-10 off | Reserved |
| 11 | N/C |
| 13-14 | External LED |
| 15-16 On | W/P Disable |
| 17-18 On | Normal (Off=diags) |
| 19-20 Open | Drive reset |

CNH 1

| | | |
|-----|-------|-----------------------------|
| 1-2 | Short | LED active connected to bus |
| | Open | LED active when drive ready |
| 3-4 | Open | SCSI 1 |
| | Short | SCSI 2 |
| 5-6 | Open | Init from Host (INIT) |
| | Short | Init from Drive (TARG) |
| 7-8 | Short | Resel/Ack executed |
| | Open | Not executed |

2622/23/24SA(HA)(FA)

CNH1

| | | | |
|-------|-------|-------------------------|--------------------|
| 1-2 | On | PER default 0 | |
| | Off | PER default 1 | |
| 3-4 | On | SCSI-1/CCS mode | |
| | Off | SCSI-2 | |
| 5-6 | On | Self-diags executed | |
| | Off | Normal operation | |
| 7-8 | On | Report condition status | |
| | Off | No report | |
| 9-10 | On | Retry count unlimited | |
| | Off | 10 times | |
| 11-12 | | Reserved | |
| 13-14 | On | Enable Parity Checking | |
| | Off | Disable | |
| 15-16 | On | Enable SDTR fm RATG | |
| | Off | Disabled from TARG | |
| 17-18 | On | LED en during seeking | |
| | Off | During drive idle | |
| 19-20 | On | Spin Up on power up | |
| | Off | With Start Unit comd | |
| 21-22 | 3-4 | 5-6 | |
| | Short | Short | Tempwvr from IDD & |
| | Open | Short | TERMPWR |
| | Short | Open | Only from IDD |
| | | | Only from TERMPWR |

CNH2

| | |
|----------|----------|
| 1-2 open | Reserved |
| 3-4 open | Reserved |

CNH3

| | |
|----------|----------------|
| 1-2 open | Reserved |
| 3-4 open | No termination |

CNH7

| | |
|-----------|-----------|
| 7-8 open | Enable WP |
| 9-10 open | Reserved |

| CNH7 | 1-2 | 3-4 | 5-6 |
|------|-----|-----|-----|
| 0 | 0 | 0 | 0 |
| 1 | 1 | 0 | 0 |
| 2 | 0 | 1 | 0 |
| 3 | 1 | 1 | 0 |
| 4 | 0 | 0 | 1 |
| 5 | 1 | 0 | 1 |
| 6 | 0 | 1 | 1 |
| 7 | 1 | 1 | 1 |

2694ES

SW1

| | | |
|---|-----|--------------------------------|
| 1 | On | SCSI-1/CCS mode |
| | Off | SCSI-2 |
| 2 | On | Self-diags executed |
| | Off | Normal operation |
| 3 | On | Reports check condition status |
| | Off | No report check condition |
| 4 | On | Retry count unlimited |
| | Off | 10 times |

| | | |
|---|-----|----------------------------|
| 5 | On | Enable Parity Checking |
| | Off | Disable |
| 6 | On | Enable SDTR from RATG |
| | Off | Disabled from TARG |
| 7 | On | LED enabled during seeking |
| | Off | During drive idle |
| 8 | On | Spin Up on power up |
| | Off | With Start Unit cmd |

CNH10

| | | |
|------------|-------|---------------------------|
| 1-2 Short* | | Sp sync term resist pwr |
| 3-4 | 5-6 | |
| Short | Short | Tempwr from IDD & TERMPWR |
| Open | Short | Only from IDD |
| Short | Open | Only from TERMPWR |

CNH11

| | | |
|------------|--|------------|
| 7-8 open | | WP enabled |
| 9-10 open* | | Reserved |

| CNH11 | 1-2 | 3-4 | 5-6 | 7-8 |
|-------|-----|-----|-----|-----|
| 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 0 | 0 | 0 |
| 2 | 0 | 1 | 0 | 0 |
| 3 | 1 | 1 | 0 | 0 |
| 4 | 0 | 0 | 1 | 0 |
| 5 | 1 | 0 | 1 | 0 |
| 6 | 0 | 1 | 1 | 0 |
| 7 | 1 | 1 | 1 | 0 |
| 8 | 1 | 1 | 0 | 1 |
| 9 | 1 | 0 | 0 | 1 |
| 10 | 0 | 1 | 0 | 1 |
| 11 | 1 | 1 | 0 | 1 |
| 12 | 0 | 0 | 1 | 1 |
| 13 | 1 | 0 | 1 | 1 |
| 14 | 0 | 1 | 1 | 1 |
| 15 | 1 | 1 | 1 | 1 |

M 2949/2952/2954

CN4 (294x), CN7 (295x)

| ID | 1-2 | 3-4 | 5-6 | 7-8 |
|----|-----|-----|-----|-----|
| 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 0 | 0 | 0 |
| 2 | 0 | 1 | 0 | 0 |
| 3 | 1 | 1 | 0 | 0 |
| 4 | 0 | 0 | 1 | 0 |
| 5 | 1 | 0 | 1 | 0 |
| 6 | 0 | 1 | 1 | 0 |
| 7 | 1 | 1 | 1 | 0 |
| 8 | 1 | 1 | 0 | 1 |
| 9 | 1 | 0 | 0 | 1 |
| 10 | 0 | 1 | 0 | 1 |
| 11 | 1 | 1 | 0 | 1 |
| 12 | 0 | 0 | 1 | 1 |
| 13 | 1 | 0 | 1 | 1 |
| 14 | 0 | 1 | 1 | 1 |
| 15 | 1 | 1 | 1 | 1 |

| | | |
|-----------|-------|------------------------------|
| CN6 1-2 | Open | Use Start/Stop Unit |
| | Short | Spinup at pwr on |
| CN6 3-4 | Open | Parity check not done |
| | Short | Performed |
| CN6 3-4 | Open | Term resist DB08-DB15, n/c |
| (295xE) | Short | Connected |
| CN6 5-6 | Open | Self diags stopped |
| | Short | Executed |
| CN7 5-6 | Open | Enable write protect |
| (294x) | Short | Disable |
| CN7 11-12 | Open | Enable write protect |
| (295xS) | Short | Disable |
| CN7 13-14 | Open | Enable write protect |
| (295xQ) | Short | Disable |
| CN7 7-8 | Open | Term resistor not connected |
| (294x) | Short | Connected |
| CN7 13-14 | Open | Term resistor not connected |
| (295xS) | Short | Connected |
| CN10 | Open | Term resist n/c to bus lines |
| 1-2,3-4 | Short | Connected |

M 2932/2934

| ID | 1-2 | 3-4 | 5-6 | 7-8 |
|----|-----|-----|-----|-----|
| 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 0 | 0 | 0 |
| 2 | 0 | 1 | 0 | 0 |
| 3 | 1 | 1 | 0 | 0 |
| 4 | 0 | 0 | 1 | 0 |
| 5 | 1 | 0 | 1 | 0 |
| 6 | 0 | 1 | 1 | 0 |
| 7 | 1 | 1 | 1 | 0 |
| 8 | 1 | 1 | 0 | 1 |
| 9 | 1 | 0 | 0 | 1 |
| 10 | 0 | 1 | 0 | 1 |
| 11 | 1 | 1 | 0 | 1 |
| 12 | 0 | 0 | 1 | 1 |
| 13 | 1 | 0 | 1 | 1 |
| 14 | 0 | 1 | 1 | 1 |
| 15 | 1 | 1 | 1 | 1 |

| | | |
|---------|-------|------------------------------|
| CN6 1-2 | Open | Use Start/Stop Unit |
| | Short | Spinup at pwr on |
| CN6 3-4 | Open | Parity check not done |
| | Short | Performed |
| CN6 5-6 | Open | Self diags stopped |
| | Short | Executed |
| CN7 5-6 | Open | Enable write protect |
| | Short | Disable |
| CN7 7-8 | Open | Term resistor not connected |
| | Short | Connected |
| CN7 7-8 | Open | 8-bit SCSI mode |
| | Short | 16-bit SCSI mode |
| CN10 | Open | Term resist n/c to bus lines |
| 1-2,3-4 | Short | Connected |

M 2927

| ID | 1-2 | 3-4 | 5-6 |
|----|-----|-----|-----|
| 0 | 0 | 0 | 0 |
| 1 | 1 | 0 | 0 |
| 2 | 0 | 1 | 0 |
| 3 | 1 | 1 | 0 |
| 4 | 0 | 0 | 1 |
| 5 | 1 | 0 | 1 |
| 6 | 0 | 1 | 1 |
| 7 | 1 | 1 | 1 |

| | | |
|--------|-------|---------------------------|
| CN6 A | Open | Use Start/Stop Unit |
| | Short | Spinup at pwr on |
| CN6 P | Open | Parity check not done |
| | Short | Performed |
| CN6 D | Open | Self diags executed |
| | Short | Stopped |
| CN7 SY | Pin 1 | Ground |
| | Pin 2 | Execute Sp Sync I/O pulse |
| CN7 R | Open | No connection |
| | Short | Ext reset when to ground |
| CN7 WP | Open | Enable write protect |
| CN7 TM | Open | Term resistor disabled |
| | Short | Enabled |

FWB Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------------|------|------|------|-----|-----|---------------------------|
| Hammer 1000FMF | S-2F | 1050 | 2570 | 14 | 57 | DEC DSP 3105 |
| Hammer 1400 | S | 1400 | | | | |
| Hammer 600 | S | 600 | | | | |
| Hammer 100is | S | 100 | | | | |
| Hammer 155MFI | S | 155 | | | | |
| Hammer 300MF | S | 300 | | | | |
| Hammer 425i | S | 425 | | | | |
| Hammer 50is | S | 50 | | | | |
| Hammer 2000 | S | 2000 | | | | Sledgehammer |
| Hammer 87000 | S | 8700 | | | | |
| Hammer PB 340 | S | 340 | | | | |
| Hammer PB 500 | S | 500 | | | | |
| Hammer PE 270 | S | 270 | | | | |
| Hammer PE 350 | S | 350 | | | | |
| Hammer PE 700 | S | 698 | | | | |
| PH 1000FMF | S-2F | 1050 | 2570 | 14 | 57 | Pockethammer DEC DSP 3105 |
| PH 1760FMF-W | S | 1760 | | | | Pockethammer |
| PH 2000FMF | S-2F | 2129 | 2624 | 19 | 83 | Pockethammer ST 42400N |
| PH 2050FMF | S | 2050 | | | | Pockethammer |
| PH 4100FMF | S | 4100 | | | | Pockethammer |
| PH 530FMF | S | 500 | | | | Pockethammer |
| PH 975FMF | S | 975 | | | | Pockethammer |
| Sldgehmnr 2000FMF | S-2F | 2000 | | | | DEC DSP 3105(?) |

GCC Technologies Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------------|------|------|------|-----|-----|-----------------|
| MAX 105 | S | 105 | | | | Easydata |
| MAX 40 | S | 42 | | | | Easydata |
| MAX 80 | S | 80 | | | | Easydata |
| UltraDrive 100 | S | 100 | | | | Sun |
| UltraDrive 1000S | S-2F | 1054 | 1872 | 15 | 73 | ST 11200N |
| UltraDrive 175 | S | 175 | | | | |
| UltraDrive 20 | S | 20 | | | | |
| UltraDrive 200 | S | 200 | | | | |
| UltraDrive 2000X | S-2F | 2129 | 2624 | 19 | 83 | ST 42400N |
| UltraDrive 430 | S | 430 | | | | Sun |
| UltraDrive 45 | S | 45 | | | | |
| UltraDrive 45i | S | 45 | | | | |
| UltraDrive 40S | S | 40 | | | | |
| UltraDrive 50R | S | 50 | | | | Sun (removable) |
| UltraDrive 80 | S | 80 | | | | |

General Microsystems Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|------|------|-----|-----|-------|
| WN/D 220 | S | 1000 | | | | |

Gigastorage

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------|------|------|------|-----|-----|-------|
| B 5256A | A3 | 2500 | | | | |
| B 5300A | A3 | 3000 | | | | |

Glyph Technologies

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------|------|------|------|-----|-----|-------|
| GHD 600R | S-2 | 525 | | | | |
| GHD 1200R | S-2 | 1050 | | | | |
| GHD 2000RB | S-2 | 2100 | | | | |

GVP

Great Valley Products Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|------|-----|------|-----|-----|-------|
| HardCard 100 | H | 100 | | | | SCSI |
| HardCard 30 | H | 30 | | | | SCSI |
| HardCard 40Q | H | 40 | | | | SCSI |
| HardCard 45 | H | 45 | | | | SCSI |
| HardCard 80Q | H | 80 | | | | SCSI |

Grant

Made stuff for IBM

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------|------|-----|------|-----|-----|-------------|
| 72X8519 | E | 70 | | | | IBM Part No |
| 90X7392 | E | 115 | | | | IBM Part No |

Greenery Technology

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------|------|-----|------|-----|-----|-------|
| C 3100-12A | A | 120 | 100 | 16 | 63 | |

Hard Drives International

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|------|------|------|-----|-----|-------------|
| CardDrive 20 | | 20 | | | | |
| CardDrive 30 | | 30 | | | | |
| CardDrive 50 | | 49 | | | | |
| 105Q | S | 105 | | | | Powerdrives |
| 105Q | S | 105 | | | | |
| 105T | S | 105 | | | | |
| 105T | S | 105 | | | | |
| 200M | S | 200 | | | | |
| 200M | S | 200 | | | | |
| 20S | S | 20 | | | | |
| 20S | S | 20 | | | | |
| 210Q | S | 210 | | | | |
| 30S | S | 30 | | | | |
| 30S | S | 30 | | | | |
| 40Q | S | 40 | | | | |
| 40Q | S | 40 | | | | |
| 45S | S | 45 | | | | |
| 45S | S | 45 | | | | |
| 60S | S | 60 | | | | |
| 80Q | S | 80 | | | | |
| 80Q | S | 80 | | | | |
| 80S | S | 80 | | | | |
| 1050M | S | 1050 | | | | |
| 1050S | S | 1050 | | | | |
| 320M | S | 320 | | | | |
| 320S | S | 320 | | | | |
| 600S | S | 600 | | | | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|-----|------|-----|-----|-------|
| 630 | S | 630 | | | | |
| 660M | S | 660 | | | | |

Hewlett-Packard

Mostly for OEMs; e.g. Core Intl. Buys some IDE drives from Maxtor.

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------------|------|------|------|-----|--------|-----------------------------|
| C 2220A | A | 332 | | | | |
| C 2221A | A | 664 | | | | |
| C 222A | A | 1000 | | | | |
| C 2233A | A | 238 | 733 | 12 | 53 | Try 462 x 16 x 63 |
| C 2234A | A | 334 | 823 | 13 | 61 | Try 647 x 16 x 63 |
| C 2235A | A | 429 | 917 | 15 | 61 | Try 832 x 16 x 63 |
| C 3012 Kittyhawk | A | 14 | | 2 | | -001=ATA; -002=PCMCIA |
| C 3013 Kittyhawk | A | 21 | 615 | 4 | 17 | -001=ATA; -002=PCMCIA |
| C 3014A | A | 42 | 799 | 4 | 26 | |
| C 3015 Kittyhawk | A | 30 | | 4 | | -001=ATA; -002=PCMCIA |
| C 3016 Kittyhawk | A | 40 | | 4 | | -001=ATA; -002=PCMCIA |
| C 3031A | A | 21 | 400 | 4 | 26 | |
| C 3335 | A | 1000 | | | | |
| C 5270A | A | 1100 | 2105 | 16 | 63 | |
| C 5271A | A | 1100 | 2595 | 16 | 63 | |
| C 5272A | A | 1670 | 3244 | 16 | 63 | |
| C 5273A | A | 2004 | 3893 | 16 | 63 | |
| C 5435A | A | 1336 | 2595 | 16 | 63 | |
| C 5436A | A | 2004 | 3893 | 16 | 63 | |
| D 1445A | A | 100 | 624 | 10 | 34 | |
| D 1446A | A | 150 | 624 | 14 | 34 | |
| D 1660A | A | 330 | 646 | 16 | 63 | Try 728 x 16 x 57 |
| D 1661A | A | 667 | 728 | 32 | 57 | 294x16x63 in HP BIOS |
| D 1665A | A | 40 | 965 | 5 | 17 | |
| D 1666A | A | 80 | 965 | 10 | 17 | |
| D 1674A | A | 100 | 791 | 8 | 32 | |
| D 1675A | A | 150 | 791 | 12 | 32 | |
| D 1676A | A | 300 | 791 | 16 | 48 | |
| D 1679A | A | 120 | 814 | 9 | 32 | |
| D 1680A | A | 170 | 968 | 10 | 34 | |
| D 1694A | A | 52 | 751 | 8 | 17 | Quantum LPS 52 AT |
| D 1696A | A | 120 | | | | |
| D 1697A | A | 240 | | | | |
| D 2329A | A | 85 | 977 | 10 | 17 | Quantum ELS 85AT |
| D 2330 | A | 170 | 1011 | 15 | 22 | Quantum ELS 170AT |
| D 2387 | A | 210 | 723 | 15 | 38 | Quantum LPS 210AT |
| D 2389A | A | 540 | 1049 | 16 | 63 | Quantum Maverick (ProDrive) |
| Surestor 1.080A | A | 1080 | | | | |
| Surestor 1300A | A | 1300 | | | | EIDE |
| Surestor 1600A | A | 1620 | 3721 | 6 | 91-155 | Physical |
| Surestor 2000A | A | 2004 | 3893 | 16 | 63 | EIDE Maxtor 72004A |
| 7941A | HPIB | 30 | 968 | 3 | | |
| 7942A | HPIB | 30 | 968 | 3 | | |
| 7945A | HPIB | 72 | 968 | 7 | | |
| 79501A | HPIB | 14 | 698 | 2 | | |
| 97501A | HPIB | 14 | 698 | 2 | | Possibly misnumbered 79501A |
| 97501B | HPIB | | 1400 | 2 | | |
| 97530E | E | 136 | 1663 | 4 | 41 | |
| 97532E | E | 103 | 1663 | 4 | 64 | 831 x 8 x 64 |
| 97533E | E | 153 | 1663 | 8 | 64 | 831 x 16 x 64 |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|-------|------|------|-----|--------|------------------------|
| 97536E Coyote | E | 315 | 1583 | 12 | 64 | 831 x 24 x 64 |
| 97544E | E | 338 | 1457 | 8 | 57 | 728 x 16 x 57 |
| 97548E | E | 680 | 1457 | 16 | 56 | 728 x 32 x 57 |
| 97556E | E | 680 | 1680 | 11 | 72 | 840 x 22 x 72 |
| 97558E | E | 1084 | 1961 | 15 | 72 | 980 x 30 x 72 |
| 97560E | E | 1381 | 1961 | 19 | 72 | 980 x 38 x 72 |
| D 1296A | M | 21 | 615 | 4 | 17 | Seagate ST 225 |
| C 3012 Kittyhk | P3 | 14 | | 2 | | -001=ATA; -002=PCMCIA |
| C 3013 Kittyhk | P3 | 21 | 615 | 4 | 17 | -001=ATA; -002=PCMCIA |
| C 3014A | P3 | 42 | 799 | 4 | 26 | |
| C 3015 Kittyhk | P3 | 30 | | 4 | | -001=ATA; -002=PCMCIA |
| C 3016 Kittyhk | P3 | 40 | | 4 | | -001=ATA; -002=PCMCIA |
| C 3031A | P3 | 21 | 400 | 4 | 26 | |
| Kittyhk II PSM | P3 | 43 | | | | |
| 1000S+ | S-2F | 1050 | 3610 | 5 | 72-120 | SureStor |
| 2000LP | S-2F | 2170 | 3610 | 9 | 72-120 | |
| 9000S | S-2F | 2100 | | | | SureStor |
| 97500-85600 | S | 20 | | | | |
| 97500-85620 | S | 20 | | | | 9000 Series |
| 97530S | S | 204 | 1619 | 6 | 41 | |
| 97532D/S/T | S | 108 | 1663 | 4 | 64 | 831x8x64 OEM only |
| 97533D/S/T | S | 216 | 1663 | 8 | 64 | 831 x 16 x 64 |
| 97536D/S/T | S | 311 | 1663 | 12 | 64 | 831 x 24 x 64 |
| 97544D/S/T/P | S-2 | 311 | 1447 | 8 | 56 | 723 x 16 x 56 |
| 97548D/S/T/P | S | 660 | 1447 | 16 | 56 | 723 x 32 x 56 |
| 97549T/P | S-2 | 1000 | 1911 | 16 | 64 | 955 32 x 64 |
| 97554 | S | 340 | | | | |
| 97556-300T/P | S-2 | 673 | 1670 | 11 | 72 | 835 x 22 x 72 |
| 97558-300T/P | S-2 | 1069 | 1952 | 15 | 72 | 976 x 30 x 72 |
| 97560-300T/P | S-2 | 1357 | 1952 | 19 | 72 | 976 x 38 x 72 |
| C 2220B,M | S | 330 | | | | |
| C 2221B,M | S | 670 | | | | |
| C 2222B,M | S | 1070 | | | | |
| C 2223B,M | S | 1355 | | | | |
| C 2228B,M | S | 234 | | | | |
| C 2229B,M | S | 422 | | | | |
| C 2233S | S-2F | 234 | 1511 | 5 | 48-72 | 755 x 10 x ? |
| C 2234S | S-2F | 328 | 1511 | 7 | 48-72 | 755 x 14 x ? |
| C 2235S | S-2F | 422 | 1511 | 9 | 48-72 | 755 x 18 x ? |
| C 2244 | S2FW | 600 | 1974 | 7 | 56-96 | |
| C 2245 | S-2F | 750 | 1974 | 9 | 56-96 | |
| C 2246 | S-2F | 900 | 1974 | 11 | 56-96 | |
| C 2247-60062 | S | 1050 | 1974 | 13 | 56-96 | OEM |
| C 2249M | S | 422 | | | | |
| C 2270S | S | 320 | | | | |
| C 2271S | S | 663 | | | | |
| C 2451M | S | 677 | | | | |
| C 2452M | S | 1000 | | | | |
| C 2453M | S | 1300 | | | | |
| C 2490A | S | 2100 | 2582 | 18 | 68-108 | 255 x 255 x 63 Logical |
| C 3007 | S2(W) | 1370 | 2255 | 13 | 76-96 | |
| C 3009 | S-2 | 1792 | 2255 | 17 | 76-96 | |
| C 3010 | S | 2000 | 2255 | 19 | 76-96 | |
| C 3010-100 | S-2 | 1027 | 1099 | 19 | 96 | |
| C 3323SE(A) | S | 1050 | 2910 | 7 | 72-120 | |
| C 3325A | S-2 | 2170 | 3708 | 9 | 127 | 5400 RPM |
| C 3330A | S-2 | 2170 | | | | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-----------------|------|------|------|-----|-----|-------|
| C 3331A | S-2 | 4350 | | | | |
| C 3550 | S2FW | 2000 | | | | |
| C 3555 | S2FW | 1000 | | | | |
| C 3724 | S | 1200 | 3610 | 5 | | |
| C 3725 | S | 2140 | 3610 | 7 | | |
| D 1685A | S | 440 | | | | |
| D 1686A | S | 670 | | | | |
| D 1687A | S | 1000 | | | | |
| D 1699A | S | 430 | | | | |
| D 2077A | S-2F | 2100 | | | | |
| D 3340A | S-2 | 2100 | | | | |
| D 3341A | S-2 | 4200 | | | | |
| SureStor 2000LP | S-2F | 2140 | | | | |

C 2247

- 1 WP based on Mode Page
- 2 Unit Attention
- 3 Init SDTR msg at pwr on and reset
- 4 Parity Checking
- 5 Spin Up with Start Unit comd
- 6 Key
- 7-8 Sync spindle (unused)
- 9 Key
- 10 SCSI Address 1
- 11 SCSI Address 2
- 12 SCSI Address 3

- 12 Unit attention
- 13 WP
- 14-16 Reserved

97556/558/560

- 1 Reserved (open)
- 2-3 Sync Spindle Signal Routing
- 4-5 Term +5 source
- 6 Unit Attention
- 7 SDTR Init
- 8 Parity
- 9 Auto Spin Up

C 2490A Narrow S/E

- 1 SCSI Address 1
- 2 SCSI Address 2
- 3 SCSI Address 3
- 4 Reserved
- 5 Key
- 6 Synchronise spindle
- 7 SCSI pin 29
- 8 Key
- 9 Spin Up with Start Unit comd
- 10 Parity Checking
- 11 Init SDTR msg at pwr on and reset
- 12 Unit attention
- 13 WP based on mode page
- 14 Reserved
- 15 Term
- 16 Term pwr

C3010 12-pin (9-pin see 97556)

- 1 SCSI 1/SCSI 2
- 2 Fast seek enable
- 3 Reserved
- 4 Reserved (open)
- 5-6 Sync Spindle Signal Routing
- 7-8 Term +5 source
- 9 Unit Attention
- 10 SDTR Init
- 11 Parity
- 12 Auto Spin Up

9753xS/T/D

- 1 Reserved
- 2 0 - Inhibit init of SDTR message
1 - Enable init at power on and reset
- 3 0 - parity checking disabled
- 4 0 - Drive will not spin up till host sends start unit comd
1 - auto spin up with power on
- 5-7 SCSI Address

C 2490A Narrow Diff

- 1 SCSI Address 1
- 2 SCSI Address 2
- 3 SCSI Address 3
- 4 Reserved
- 5 Key
- 6 Synchronise spindle
- 7 N/C
- 8 Key
- 9 Auto Spin Up
- 10 Parity Checking
- 11 SDTR

9753xE ESDI

- 1 0 - Spin up at power on
1 - Spin up at command
- 2 0 - Addressive seeks option off
- 3-5 ESDI Address

C2244/45/46/47 Narrow Diff

- 1 Write Protect
- 2 Unit Attention

- 3 SDTR
- 4 Parity
- 5 Auto Spin Up
- 7 Sync Spindle
- 8 Reserved
- 10-12 SCSI Address

C2244/45/46/47 Narrow S/E

- 1 Write Protect
- 2 Unit Attention
- 3 SDTR
- 4 Parity
- 5 Auto Spin Up
- 7-8 Sync Spindle
- 10-12 SCSI Address

C2244/45/46/47 Wide Diff

- 1 Write Protect
- 2 Unit Attention
- 3 SDTR
- 4 Parity
- 5 Auto Spin Up
- 7 Sync Spindle
- 9-12 SCSI Address

Hitachi

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|------|-------|------|-----|-----|-------------|
| DK 211A-34 | A | 340 | 969 | 14 | 49 | |
| DK 211A-51 | A | 510 | 987 | 16 | 63 | |
| DK 211A-68 | A | 680 | 2094 | 8 | | |
| DK 212A-10A | A | 1000 | 2605 | 8 | | EIDE, ATA-2 |
| DK 212A-81 | A | 810 | 2602 | 6 | | EIDE, ATA-2 |
| DK 213A-11 | A | 1080 | | | | |
| DK 213A-13 | A | 1350 | 2605 | 10 | | EIDE |
| DK 213A-18 | A | 1800 | 3116 | 10 | | |
| DK 22AA-18 | A5 | 18100 | | | | |
| DK 221A (1993) | A | 340 | 692 | 16 | 60 | |
| DK 222A-54 | A2 | 540 | 1050 | 16 | 63 | 2.5" |
| DK 223A-81 | A | 810 | 2605 | 6 | | EIDE |
| DK 224A-14 | A | 1440 | 2792 | 16 | 63 | EIDE 2.5" |
| DK 225A-21 | A | 2100 | 4188 | 16 | 63 | EIDE 2.5" |
| DK 226A-21 | A3 | 2160 | 4188 | 16 | 63 | |
| DK 226A-32 | A3 | 3240 | 4283 | 16 | 63 | |
| DK 227A-41 | A3 | 4090 | 7944 | 16 | 63 | |
| DK227A-50 | A3 | 5000 | | | | |
| DK 228A-65 | A3 | 6400 | | | | |
| DK 229A-10 | A3 | 10000 | | | | |
| DK 237A-32 | A3 | 3200 | | | | |
| DK 239A-48 | A3 | 4871 | | | | |
| DK 239A-65 | A3 | 6490 | | | | |
| DK 23AA-12 | A5 | 12072 | | | | |
| DK 23AA-18 | A5 | 18000 | | | | |
| DK 23AA-60 | A5 | 6007 | | | | |
| DK 23AA-90 | A5 | 9042 | | | | |
| DK 512-8 | E | 67 | 823 | 5 | 64 | RLL? |
| DK 512-10 | E | 86 | 822 | 6 | 34 | |
| DK 512-12 | E | 94 | 823 | 7 | 64 | |
| DK 512-17 | E | 134 | 823 | 10 | 64 | |
| DK 514-38 | E | 330 | 903 | 14 | 51 | |
| DK 522-10 | E | 86 | 823 | 6 | 34 | |
| DK 515-78 | E | 673 | 680 | 28 | 69 | |
| DK 516-12 | E | 1056 | 1787 | 15 | 77 | |
| DK 516-15 | E | 1321 | 2235 | 15 | 77 | |
| DK 522-10 | E | 91 | 823 | 6 | 36 | |
| DK 5514-38 | E | 330 | 903 | 14 | | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|------|-------|------|-----|-----|------------------------|
| DK 319H-18FC | F | 18200 | | | | |
| DK 16-20M | I | 2000 | 1790 | 15 | | |
| DK 301-1 | M | 10 | 306 | 4 | 17 | |
| DK 301-2 | M | 16 | 306 | 6 | 17 | |
| DK 501-1 | M | 11 | 320 | 4 | 17 | |
| DK 502-1 | M | 10 | 320 | 4 | 17 | |
| DK 502-2 | M | 15 | 320 | 6 | 17 | 615 x 4 x 17? |
| DK 502-3 | M | 21 | 320 | 8 | 17 | 320 cyls? |
| DK 503-1 | M | 5 | 320 | 2 | 17 | |
| DK 503-2 | M | 10 | 306 | 4 | 17 | |
| DK 505-2 | M | 21 | 615 | 4 | 17 | |
| DK 511-3 | M | 31 | 699 | 5 | 17 | 714 hds on Victor BIOS |
| DK 511-5 | M | 43 | 699 | 7 | 17 | 714 hds on Victor BIOS |
| DK 511-8 | M | 70 | 823 | 10 | 17 | |
| DK 512-12 | M | 94 | 823 | 8 | 17 | |
| DK 512-17 | M | 134 | 823 | 11 | 17 | |
| DK 512-8 | M | 67 | 823 | 6 | 17 | |
| DK 521-5 | M | 40 | 823 | 6 | 17 | |
| WP-HD260 | P | 260 | | | | |
| DK 512-8 | R | 67 | 823 | 5 | 26 | |
| DK 215C-14 | S | | | | | |
| DK 312C-20 | S | 209 | 1076 | 10 | 38 | |
| DK 312C-25 | S | 251 | 1076 | 12 | 38 | |
| DK 314C-41 | S | 419 | 1169 | 14 | 50 | |
| DK 316C-10 | S-2F | 1000 | | | | |
| DK 315C-11 | S-2F | 1100 | | 15 | | |
| DK 315C-14 | S-2F | 1400 | | 15 | | |
| DK 318A-91 | S3 | 9100 | | | | |
| DK 319H-18WS | S-U | 17100 | | | | |
| DK 31AH-36LW | S | 35200 | | | | 7200 RPM |
| DK 32AH-18LW | S | 17600 | | | | 7200 RPM |
| DK 326C-10 | S-2F | 1050 | | 7 | | |
| DK 328C-10 | S-2F | 1050 | | 3 | | |
| DK 328C-21 | S-2F | 2100 | | 5 | | |
| DK 328C-43 | S-2F | 4300 | | 10 | | |
| DK 329H-91WS | S-U | 8600 | | | | |
| DK 512C-12 | S | 103 | 823 | 7 | 35 | |
| DK 512C-17 | S | 147 | 819 | 10 | 35 | |
| DK 512C-8 | S | 67 | 823 | 5 | 35 | |
| DK 514C-38 | S | 322 | 903 | 14 | 51 | |
| DK 515C-78 | S | 670 | 1361 | 14 | 69 | 680 x 28 x 69 |
| DK 516C-16 | S | 1342 | 2172 | 15 | 81 | |
| DK 517 | S-2 | 1900 | | | | |
| DK 517C-37 | S | 2900 | | 21 | | |
| DK 522C-10 | S | 88 | 819 | 6 | 35 | |
| DK 815-10 | | 1000 | 1737 | 16 | | |
| DK 815-5 | | 525 | 1241 | 15 | | |
| SVF 501-18 | S | 200 | | 10 | | Solid State |
| SVF 502-18 | S | 200 | | 10 | | Solid State |
| SV 502C-32D | S | 128 | | | | Solid State |
| SV 502C-32F | S | 160 | | | | Solid State |
| SV 502C-32H | S | 64 | | | | Solid State |
| SV 502C-64D | S | 256 | | | | Solid State |
| SV 502C-64F | S | 320 | | | | Solid State |
| SV 502C-64H | S | 128 | | | | Solid State |
| DK 512S-12 | SMD | 99 | 823 | 7 | 35 | |
| DK 512S-17 | SMD | 141 | 823 | 10 | 35 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------|------|------|------|-----|-----|--------------|
| DK 512S-8 | SMD | 70 | 823 | 5 | 35 | |
| DK 514S-38S | ESMD | 330 | 903 | 14 | 51 | Minicomputer |
| DK 515S-78 | ESMD | 673 | | 14 | | |
| DK 515-12 | HSMD | 1222 | 1989 | 15 | 80 | |
| DK 815-10A | SMD+ | 1067 | 1737 | 15 | | |

DK 215C-14

JP2

- 1-2 Spindle Sync (Def=On) (Master)
- 3-4 Spindle Sync (Def=On) (Slave)
- 5-6 Motor Auto Start (On=Start at power on)
- 7-8 SCSI Parity (On=Disable)
- 9-16 All on

JP3

- 1-2 INTMP (On=+5V for term from drive)
- 3-4 EXTMP (On=+5V for term from bus)
- 5-6 TMEN (On=Enable Terminator)
- 7-8 SPNTM (On=Master Clock Line terminated)

JP6

- 1-2 ID LSB (1) (none=ID 0)
- 3-4 ID (2)
- 5-6 ID MSB (4)
- 7-8 LED

JP7

All off

DK 515C

| JP 248 | 12-11 | 10-9 | 8-7 |
|--------|-------|------|-----|
| 0 | 1 | 1 | 1 |
| 2 | 1 | 0 | 1 |
| 3 | 0 | 0 | 1 |
| 4 | 1 | 1 | 0 |
| 5 | 0 | 1 | 0 |

Hi-Tech Marketing

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-----------|------|-----|------|-----|-----|-------|
| Giganstor | | 643 | | | | |

Honeywell

Seagates Use CDC numbers

Hyosung

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|-----|------|-----|-----|-------|
| HC 8085 | M | 71 | 1024 | 8 | | |
| HC 8128 | R | 109 | 1024 | 8 | | |
| HC 8170E | Auto | 151 | 1024 | 8 | 36 | |

IBM

Uses Xyratex and others as sub-contractors.

www.storage.ibm.com

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|------|------|-----|-----|------------------------|
| 30/2.5 | A? | 30 | | | | |
| 60/2.5 | A? | 60 | | | | |
| 00K0381 | A | 3200 | | | | |
| 00K0394 | A4 | 8400 | | | | UDMA 66 |
| 0AT1GBM | A | 1000 | | | | |
| 06G6421 | A | 40 | 977 | 5 | 17 | |
| 06H4152 | A | 270 | 944 | 14 | 40 | Quantum Maverick 270AT |
| 06H6111 | A | 1080 | 1049 | 16 | 63 | DALA 3540 |
| 06H7141 | A | 540 | | | | |
| 06H7142 | A | 540 | | | | |
| 06451047 | A | 40 | 977 | 5 | 17 | |
| 0662-A10 | A | 1052 | 2038 | 16 | 63 | Spitfire |
| 09J0308 | A4 | 6400 | | | | UDMA 66 |
| 17G3178 | A | 234 | 967 | 16 | 31 | Maxtor 7245AI |
| 2120 | A | 126 | 1248 | 4 | 50 | |
| 3120 | A | 120 | 820 | 6 | | |
| 32G3861 | A | 212 | | | | |
| 32G4194 | A | 245 | | | | |
| 32G4195 | A | 340 | | | | |
| 32G4196 | A | 527 | | | | |
| 32G4338 | A | 2880 | | | | |
| 364MBAT | A | 364 | | | | |
| 46H3426 | A | 3240 | | 16 | 63 | DeskStar 3 |
| 527MBAT | A | 527 | | | | |
| 53G 8704 | A | 340 | | | | |
| 64F4132 | A | 40 | 932 | 5 | | |
| 64F4133 | A | 80 | 932 | 10 | | |
| 70G7424 | A | 170 | | | | |
| 70G8486 | A | 527 | | | | |
| 70G8487 | A | 270 | | | | |
| 70G8488 | A | 364 | | | | |
| 70G8499 | A | 1440 | | | | |
| 70G8500 | A | 1440 | | | | |
| 70G8511 | A | 728 | | | | |
| 70G8512 | A | 1000 | | | | |
| 70G8847 | A | 270 | | | | |
| 70G8848 | A | 364 | | | | |
| 70G8849 | A | 527 | | | | |
| 70G8850 | A | 728 | | | | |
| 71G0666 | A | 1000 | | | | |
| 76H7236 | A | 2559 | 4960 | 16 | 63 | Caviar 22500 |
| 728MBAT | A | 728 | | | | |
| 79F1009 | A | 60 | 820 | 4 | | |
| 82G5926 | A | 270 | | | | |
| 82G5927 | A | 364 | | | | |
| 82G5928 | A | 540 | | | | |
| 82G5929 | A | 1000 | | | | |
| 82G6106 | A | 527 | | | | |
| 84G8998 | A | 1000 | | | | |
| 85G3596 | A | 810 | 1571 | 16 | 63 | |
| 93F0076 | A | 120 | 936 | 16 | 17 | |
| 93F0118 | A | 212 | 682 | 16 | | |
| 93F2360 | A | 163 | 984 | 10 | 34 | Maxtor 7170A |
| 94G3183 | A | 1080 | | | | |
| 94G3186 | A | 1080 | | | | |
| 94G4196 | A | 527 | | | | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|------|-------|-------|-----|-----|-----------------------------|
| 95F4721 | A | 80 | 984 | 10 | 17 | |
| 95F4728 | A | 170 | 984 | 10 | 34 | |
| 95F7204 | A | 85 | | | | |
| DALA 3540AT | A | 540 | 1049 | 16 | 63 | 06H7141 |
| DAQA 32160 | A | 2160 | 4200 | 16 | 63 | Deskstar 3. Sold to others. |
| DAQA 33240 | A | 3240 | 6296 | 16 | 63 | |
| DBOA 2360 | A | 361 | 700 | 16 | 63 | 12.5 mm |
| DBOA 2528 | A | 528 | 1024 | 16 | 63 | 12.5 mm |
| DBOA 2540 | A | 541 | 1050 | 16 | 63 | 12.5 mm |
| DBOA 2720 | A | 722 | 1400 | 16 | 63 | 12.5 mm |
| DCAA 33610 | A | 2160 | 4200 | 16 | 63 | 17 mm |
| DCAA 34330 | A | 4330 | 8400 | 16 | 63 | 17 mm |
| DCRA 22160 | A | 2160 | 4200 | 16 | 63 | 17 mm |
| DDLA 21215 | A | 1215 | 2384 | 16 | 63 | 9.5 mm |
| DDLA 21620 | A | 1620 | 3152 | 16 | 63 | 9.5 mm |
| Deskstar 16GP | A4 | 16800 | | | | |
| Deskstar 20GP | A4 | 20300 | | | | |
| Deskstar 22XGP | A4 | 22000 | | | | |
| Deskstar 25XGP | A4 | 25000 | | | | |
| Deskstar 34GXP | A4 | 34200 | | | | 7200 RPM |
| Deskstar 37GP | A4 | 37500 | | | | |
| DBCA 206480 | A | 6590 | 13424 | 15 | 63 | Travelstar 12.5 mm |
| DHAA 2270 | A | 270 | 524 | 16 | 63 | 17 mm |
| DHAA 2344 | A | 344 | 915 | 5 | 49 | |
| DHAA 2405 | A | 405 | 785 | 16 | 63 | 17 mm |
| DHAA 2528 | A | 528 | 1024 | 16 | 63 | |
| DHAA 2540 | A | 540 | 1047 | 16 | 63 | 17 mm |
| DHEA 34330 | A3 | 4300 | | | | |
| DHEA 36480 | A3 | 6400 | 1259 | 16 | 63 | |
| DHEA 38451 | A4 | 8024 | | | | |
| DJAA 31270 | A2 | 1270 | 2480 | 16 | 63 | |
| DJAA 31700 | A2 | 1705 | 3308 | 16 | 63 | DeskStar |
| DJNA 352030 | A4 | 20000 | | | | |
| DJNA 352500 | A4 | 23800 | | | | |
| DLGA 22690 | A | 2690 | 5216 | 16 | 63 | 17 mm |
| DLGA 23080 | A | 3080 | 5968 | 16 | 63 | 17 mm |
| DMCA 21080 | A | 1080 | 2100 | 16 | 63 | 12.5 mm |
| DMCA 21440 | A | 1440 | 2800 | 16 | 63 | 12.5 mm |
| DPEA 30540 | A | 541 | 1050 | 16 | 63 | |
| DPEA 30810 | A | 812 | 1574 | 16 | 63 | |
| DPEA 31080 | A | 1083 | 2100 | 16 | 63 | DeskStar XP EIDE |
| DPLA 25120 | A | 5120 | 10592 | 15 | 63 | |
| DPRA 20810 | A | 810 | 1572 | 16 | 63 | 17 mm |
| DPRA 21215 | A | 1215 | 2358 | 16 | 63 | 17 mm |
| DPTA 353750 | A4 | 37500 | | | | UDMA/66 2 Mb buffer |
| DPTA 373420 | A4 | 34200 | | | | Deskstar 34GXP |
| DSAA 31700 | A | 1700 | | | | |
| DSAA 3270 | A | 245 | 954 | 16 | 36 | |
| DSAA 3360 | A | 365 | 929 | 16 | 48 | |
| DSAA 3540 | A | 548 | 1062 | 16 | 63 | V2 1024x16x63 |
| DSAA 3720 | A | 730 | 1416 | 16 | 63 | |
| DSOA 20540 | A2 | 540 | 1050 | 16 | 63 | 12.5 mm |
| DSOA 20810 | A2 | 810 | 1575 | 16 | 63 | 12.5 mm |
| DSOA 21080 | A2 | 1080 | 2100 | 16 | 63 | 12.5 mm |
| DTLA 307060 | A4 | 6000 | | | | 7200 RPM |
| DTNA 21800 | A | 1800 | 3500 | 16 | 63 | 12.5 mm |
| DTNA 22160 | A | 2160 | 4200 | 16 | 63 | 12.5 mm |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|------|-------|------|-----|-----|-------------------------|
| DTTA 351680 | A4 | 16104 | | | | |
| DTTA 371010 | A4 | 9400 | | | | |
| DTTA 371440 | A4 | 13500 | | | | DeskStar 14GXP 7200 RPM |
| DVAA 2810 | A | 810 | 1571 | 16 | 63 | |
| H 2172-A2 | A | 172 | 989 | 10 | 34 | 17 mm |
| H 2258-A3 | A | 258 | 989 | 15 | 34 | 17 mm |
| H 2344-A4 | A | 344 | 915 | 15 | 49 | 17 mm |
| H 3133-A2 | A | 133 | 1023 | 15 | 17 | |
| H 3171-A2 | A | 171 | 984 | 10 | 34 | |
| H 3256-A3 | A | 250 | 872 | 16 | 36 | |
| H 3342-A4 | A | 342 | 872 | 16 | 48 | |
| Travelstar 4GN | A4 | 3200 | | | | |
| Travelstar 6GT | A4 | 5400 | | | | |
| Travelstar 8GS | A4 | 8100 | | | | |
| WD 2120D | A | 120 | 921 | 8 | 32 | |
| WD 240A | A | 41 | 615 | 4 | 33 | |
| WD 25A | A | 20 | 615 | 4 | 17 | |
| WD 260A | A | 60 | 1044 | 4 | 30 | |
| WD 3158A | A | 120 | 920 | 8 | 32 | |
| WD 3160A | A | 160 | 1024 | 8 | 39 | |
| WD 380A | A | 80 | 1024 | 4 | 39 | |
| WD 387A | A | 60 | 520 | 6 | 32 | |
| WDA 2080 | A | 86 | 980 | 10 | 17 | |
| WDA(S) 2120 | A | 126 | 969 | 15 | 17 | |
| WDA 2160 | A | 172 | 989 | 10 | 34 | |
| WDA 240 | A | 41 | 619 | 8 | 17 | |
| WDA(S) 260 | A | 63 | 969 | 8 | 17 | |
| WDA 280 | A | 86 | 989 | 10 | 17 | 2.5" |
| WDA 3158(G) | A | 120 | 920 | 8 | 32 | |
| WDA 3160 | A | 160 | 1021 | 8 | 39 | |
| WDA 380 | A | 81 | 1021 | 4 | 39 | |
| WDA 387(G) | A | 60 | 520 | 4 | 32 | |
| WDA L40(S) | A | 39 | 977 | 5 | 17 | 1067 x 2 x 39 Ph |
| WDA L42(S) | A | 40 | 977 | 5 | 17 | 1067 x 2 x 39 Ph |
| WDA L80 | A | 85 | 984 | 10 | 17 | 1923 x 2 x 44 |
| WDA L85 | A | 85 | 984 | 10 | 17 | |
| WDA L120 | A | 120 | 936 | 16 | 17 | |
| WDA L160 | A | 170 | 984 | 10 | 34 | 1923 x 4 x 44 |
| WDA S260 | A | 63 | 909 | 8 | 17 | |
| WDL 340 | A | 40 | 1038 | 2 | 39 | |
| 0645-0355 | E | 70 | 583 | 7 | 36 | 10 Mhz |
| 0645-0377 | E | 115 | 915 | 7 | 36 | 10 Mhz |
| 0645-0381 | E | 314 | 1225 | 15 | 34 | 10 Mhz |
| 0645-1073 | E | 40 | 1038 | 2 | 39 | 10 Mhz |
| 0645-1074 | E | 80 | 1027 | 4 | 39 | 10 Mhz |
| 0667-61 | E | 52 | 582 | 5 | 35 | |
| 0667-85 | E | 71 | 583 | 7 | 36 | 582 x 7 x 35? |
| 0669 | E | 115 | 915 | 7 | | |
| 0669-133 | E | 133 | | | | |
| 0671 | E | 314 | 1225 | 15 | | |
| 0671-315S | E | 315 | | | | |
| 72X8519 | E | 70 | 583 | 7 | 76 | Grant |
| 90X7392 | E | 115 | | | | Grant |
| 90X8627 | E | 60 | | | | Fujisawa |
| 90X8745 | E | 314 | 1225 | 15 | | 0671 |
| 90X9286 | E | 120 | | | | Fujisawa |
| 90X7392 | E | 115 | 915 | 7 | | Grant 0669 |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------|-------|------|------|-----|-----|------------------------------|
| 0664-P1S | IPI-2 | 1741 | 2304 | 15 | | |
| DCHS 38700 | IPI-2 | 8700 | | | | |
| 0665-30 | M | 21 | 615 | 4 | 17 | |
| 0665-38 | M | 31 | 733 | 5 | 17 | |
| 0665-53 | M | 44 | 733 | 7 | 17 | |
| 0667 | M | 20 | 615 | 4 | 17 | |
| 1430 | M | 13 | 306 | 5 | 17 | |
| 1431 | M | 30 | 733 | 5 | 17 | |
| 1470 | M | 30 | 733 | 5 | 17 | |
| 1471 | M | 43 | 733 | 7 | 17 | |
| 4956-G10 | M | 43 | 733 | 7 | 17 | |
| 5160-088 | M | 20 | 306 | 8 | 17 | |
| 5170-099 | M | 20 | 615 | 4 | 17 | |
| 5170-319 | M | 30 | 733 | 5 | 17 | Type 20 |
| 6150-473 | M | 43 | 733 | 7 | 17 | Type 31 |
| 6128287 | M | 30 | 615 | 4 | 17 | WD 336RT |
| 61X8929 | M | 20 | 612 | 4 | 17 | Type 26 Fujisawa |
| 62X1031 | M | 20 | | | | |
| 6278099 | M | 20 | 615 | 4 | 17 | Type 6 |
| 6489907 | M | 20 | 306 | 8 | 17 | Type 13 |
| 6489907-2 | M | 20 | 615 | 4 | 17 | Type 2 |
| 64F4146 | M | 30 | 615 | 4 | 17 | WD 336RT |
| 72X8522 | M | 20 | 612 | 4 | 17 | Type 30 Miniscribe/IBM Japan |
| 72X8541 | M | 44 | 733 | 7 | 17 | Type 31 Seagate |
| 8286216 | M | 30 | 733 | 5 | 17 | 0665 |
| 8529275 | M | 10 | 306 | 4 | 17 | WD12 Type 1 |
| 90X9403 | M | 30 | | | | Type 33 (?) Fujisawa |
| WD 12 | M | 10 | 306 | 4 | 17 | Type 10 |
| WD 25(A) | M | 21 | 306 | 8 | 17 | Type 13 |
| WD 30 | M | 30 | 733 | 5 | 17 | |
| WD 336RT | M | 30 | 615 | 4 | 17 | |
| 40G3166 | P1 | 5 | | | | SSD |
| 40G3167 | P1 | 10 | | | | SSD |
| 40G3168 | P1 | 20 | | | | SSD |
| 40G3169 | P2 | 30 | | | | SSD |
| 40G3170 | P2 | 40 | | | | SSD |
| 32G4199 | P3 | 105 | | | | |
| 3513364 | P3 | 364 | | | | |
| 3513527 | P3 | 527 | | | | |
| 70G8495 | P3 | 40 | | | | |
| 56F8892 | PS/2 | 80 | 1021 | 4 | | WD 380S |
| 56F8894 | PS/2 | 80 | 1021 | 4 | | WD 380S |
| 56F8895 | PS/2 | 160 | 1021 | 8 | | WD 3160S |
| 56F8896 | PS/2 | 40 | 1038 | 2 | | WD L40S |
| 61X8929 | PS/2 | 20 | 612 | 4 | | |
| 6128279 | PS/2 | 30 | 920 | 2 | | |
| 6128285 | PS/2 | 20 | 612 | 4 | | |
| 6128287 | PS/2 | 30 | 920 | 2 | | WD L330R |
| 6128291 | PS/2 | 120 | 920 | 8 | 32 | WD 3158 |
| 6128294 | PS/2 | 60 | 762 | 6 | | WD 387 |
| 85F0049 | PS/2 | 60 | 762 | 6 | | WD 387 |
| 92F0016 | PS/2 | 45 | 581 | 6 | | |
| WD 2120 | PS/2 | 126 | 1248 | 4 | 50 | |
| WD 240 | PS/2 | 43 | 1120 | 2 | 38 | |
| WD 280 | PS/2 | 86 | 1120 | 4 | 38 | 2.5" CL57SX Portable |
| WD 3158 | PS/2 | 120 | 920 | 8 | 32 | 6128291 |
| WD 3160S | PS/2 | 163 | 1021 | 8 | 39 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------|------|---------|------|-----|-----|----------------------|
| WD 3168 | PS/2 | 157 | | 8 | | |
| WD 325N | PS/2 | 20 | 615 | 4 | 17 | MFM PS/2 50 |
| WD 325Q | PS/2 | 20 | 612 | 4 | 17 | MFM PS/2 30 |
| WD 336P(R) | PS/2 | 31 | | | | PS/2 30E R=50Z |
| WD 380(S) | PS/2 | 81 | 1021 | 4 | 39 | S=PS/2 70 |
| WD 387,G,T | PS/2 | 60 | 520 | 6 | 32 | 928 x 4 x 32? |
| WDI 325N | PS/2 | 20 | 615 | 4 | 17 | MFM |
| WDI 325Q | PS/2 | 20 | 612 | 4 | 17 | MFM |
| WDL 320 | PS/2 | 30 | 612 | 4 | 17 | |
| WDL 330P/R | PS/2 | 30 | 920 | 2 | | P=PS/2 30E R=PS/2 70 |
| WDL 340 | PS/2 | 40 | 1038 | 2 | 39 | |
| WDL 352N | PS/2 | 30 | | | | Type 20 |
| WDL 40(S) | PS/2 | 41 | 1038 | 2 | 39 | S=PS/2 70 |
| WDM 240 | PS/2 | 41 | 1123 | 2 | 38 | |
| WDM 3158(G) | PS/2 | 120 | 920 | 8 | 32 | |
| WDM 3160 | PS/2 | 160 | 1021 | 8 | 39 | |
| WDM 380 | PS/2 | 80 | 1021 | 4 | 39 | |
| WDM 387 | PS/2 | 60 | 520 | 6 | 32 | |
| WDM 387G,T | PS/2 | 60 | 520 | 6 | 32 | |
| 27F4130 | R | 32 | 615 | 4 | 26 | Seagate ST 125R |
| | | 20 | 402 | 4 | | According to IBM |
| DCHC 38700 | SSA | 8700 | | 18 | | |
| DCHC C4X | SSA | 4510 | 1879 | 16 | | |
| DCHC 9X | SSA | 9000 | | | | |
| DFHC 31080 | SSA | 1099 | 4416 | 4 | | |
| DFHC 32160 | SSA | 2202 | 4416 | 8 | | |
| DFHC 34320 | SSA | 4406 | 4416 | 16 | | |
| DFHC C4X | SSA | 4510 | 1879 | 16 | | |
| 032 G4336 | S | 2000 | | | | |
| 03431 | S | 595-650 | | | | Removable Optical |
| 045G0001 | S | 1300 | | | | |
| 045G9466 | S | 1000 | | | | |
| 045G9467 | S | 1050 | 1001 | 64 | 32 | See 0662-S12 |
| 055F9824 | S | 1200 | | | | |
| 055F9825 | S | 1000 | | | | |
| 06H3370 | S-2F | 2250 | | | | |
| 06H3372 | S2FW | 2250 | | | | |
| 06H5338 | S-2 | 540 | 4892 | 2 | | DALS 3540 |
| 06H5709 | S2FW | 4510 | | | | |
| 06H5710 | S2FW | 5318 | | | | |
| 06H6740 | S-2D | 2255 | | | | |
| 06H6741 | S-2F | 4510 | | | | |
| 06H6742 | S-2D | | | | | |
| 06H6749 | S-2D | 5318 | | | | |
| 06H6750 | S-2D | 5318 | | | | |
| 06H8558 | S-2F | 540 | | | | |
| 06H8891 | S-2F | 1080 | | | | |
| 06H8892 | S-2F | 1080 | | | | |
| 061G9231 | S | 650 | | | | |
| 0645-0606 | S | 60 | 920 | 4 | 32 | |
| 0645-1045 | S | 80 | 1027 | 4 | 39 | |
| 0645-1046 | S | 160 | 1024 | 8 | 39 | |
| 0645-1050 | S | 120 | 920 | 8 | 32 | |
| 0645-1052 | S | 1000 | | | | |
| 0645-1081 | S-2 | 400 | 1201 | 14 | 48 | |
| 0645-1108 | S-2 | 320 | 949 | 14 | 48 | |
| 0645-1234 | S | 320 | 949 | 14 | 48 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|------|------|------|-----|-----|------------------------|
| 0645-1235 | S | 400 | 1199 | 14 | 48 | |
| 0645-1241 | S | 104 | | | | |
| 0645-1242 | S | 212 | | | | |
| 0661 | S-2 | 320 | 949 | 14 | | |
| 0661-1111 | S | 865 | 2051 | 13 | 66 | |
| 0661-1283 | S | 1004 | 2051 | 15 | 66 | |
| 0661-371 | S-2 | 320 | 949 | 14 | 48 | WD SC8320 Condor ucyls |
| 0661-437 | S-2 | 437 | | | | |
| 0661-467(R) | S-2 | 400 | 1149 | 14 | 48 | WD SC8400 Condor |
| 0662-S1D | S2FD | 1052 | | 5 | | |
| 0662-S12(D) | S2FW | 1050 | 1001 | 64 | 32 | Adstar FRU 45G9467 |
| 0662-SW1(D) | S2FW | 1062 | 1001 | 64 | 32 | |
| 0663-E12 | S-2F | 1044 | 2469 | 14 | 59 | |
| 0663-E15(R) | S-2F | 1206 | 2469 | 16 | 59 | |
| 0663-H11 | S-2 | 868 | 2051 | 13 | 66 | |
| 0663-H12 | S-2 | 1004 | 2051 | 15 | 66 | |
| 0663-L08 | S-2 | 600 | 2051 | 9 | 66 | |
| 0663-L11 | S-2 | 868 | 2051 | 13 | 66 | |
| 0663-L12(R) | S-2 | 1004 | 2051 | 15 | 66 | |
| 0663-W2H | S-2F | 2412 | | 30 | | |
| 0664-C(DE)SH | S-2F | 4027 | 2870 | 30 | 91 | Includes -DSH ESH FSH |
| 0664-M/N1H | S-2F | 2014 | 2870 | 15 | 91 | |
| 0671S | S | 387 | | 15 | | |
| 0671-S11 | S | 234 | 1224 | 11 | 34 | |
| 0671-S15 | S | 319 | 1224 | 15 | 34 | |
| 0681 | S-2 | 1050 | | 20 | | |
| 0681-1000 | S | 865 | 1458 | 20 | 58 | |
| 0681-500 | S | 476 | 1458 | 11 | 58 | |
| 06G8905 | S | 128 | | | | |
| 086F0102 | S | 2000 | | | | |
| 090F6677 | S | 4000 | | | | |
| 095F7193 | S | 85 | | | | |
| 155F9964 | S | ? | | | | 0663 |
| 32G3796 | S2FW | 2000 | | | | |
| 32G4198 | S-2F | 1000 | | | | |
| 32G4336 | S-2F | 2000 | | | | |
| 55F5974 | S | 1000 | | | | 0663 |
| 56F8851 | S | 160 | 1021 | 8 | 39 | WDS 3160 |
| 56F8854 | S | 81 | 1027 | 4 | 39 | WDS 380 |
| 56F8866 | S | 40 | 1120 | 2 | 38 | WDS 240 |
| 6128291 | S | 120 | 920 | 8 | 32 | WDS 3158 |
| 6128296 | S | 60 | 920 | 4 | 32 | |
| 6128298 | S | 120 | 920 | 8 | 32 | WDS 3158 |
| 6475646 | S | ? | | | | 0663 |
| 70G7164 | S-2F | 1000 | | | | |
| 70G8480 | S-2F | 170 | | | | |
| 70G8481 | S-2 | 340 | 2111 | 4 | | |
| 70G8491 | S-2F | 540 | | | | |
| 70G8492 | S-2F | 1052 | | | | |
| 70G8493 | S-2F | 2014 | | | | |
| 70G8494 | S2FW | 2014 | 2870 | 15 | | |
| 70G9743 | S2FW | 1000 | | | | |
| 71G6550 | S-2F | 170 | | | | |
| 73F9122 | S | 400 | | | | |
| 7204 | S | 80 | | | | |
| 74G7037 | S | 7000 | | | | |
| 74G7044 | S | 2000 | | | | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------|------|-------|------|-----|---------|-------------------|
| 74G7045 | S | 4000 | | | | |
| 75G3577 | S | ? | | | | 0664 |
| 82G5930 | S-2F | 270 | | | | |
| 82G5931 | S-2F | 364 | | | | |
| 82G5932 | S-2F | 540 | | | | |
| 82G5933 | S-2F | 728 | | | | |
| 85F0011 | S | 320 | 949 | 14 | 48 | |
| 85F0012 | S | 400 | 1199 | 14 | 48 | |
| 85G3623 | S | 1000 | | | | |
| 92F0089 | S | 1000 | 2057 | 15 | | L12 |
| 92F0428 | S-2F | 1052 | | | | |
| 92F0440 | S-2F | 2014 | | | | |
| 93X2500 | S | ? | | | | 0661 |
| 94G2413 | S-2F | 1052 | | | | |
| 94G2439 | S-2F | 270 | | | | |
| 94G2440 | S-2F | 364 | | | | |
| 94G2441 | S-2F | 540 | | | | |
| 94G2442 | S-2F | 728 | | | | |
| 94G2644 | S-2F | 270 | | | | |
| 94G2645 | S-2F | 364 | | | | |
| 94G2546 | S-2F | 540 | | | | |
| 94G2647 | S-2F | 728 | | | | |
| 94G2649 | S2FW | 1120 | | | | |
| 94G2650 | S2FW | 2250 | | | | |
| 94G2651 | S2FW | 4510 | | | | |
| 94G3052 | S2FW | 1120 | | | | |
| 94G3054 | S2FW | 2250 | | | | |
| 94G3055 | S2FW | 2250 | | | | |
| 94G3056 | S2FW | 2255 | | | | |
| 94G3057 | S2FW | 4510 | | | | |
| 94G3059 | S2FW | 5318 | | | | |
| 94G3184 | S2FW | 1080 | | | | |
| 94G3187 | S-2F | 1080 | | | | |
| 94G3192 | S-2F | 2250 | | | | |
| 94G3193 | S2FW | 2250 | | | | |
| 94G3195 | S2FW | 4510 | | | | |
| 94G3196 | S2FW | 4510 | | | | |
| 94G3197 | S2FW | 5318 | | | | |
| 94G3198 | S-2F | 4510 | | | | |
| 94G3199 | S-2D | 2255 | | | | |
| 94G3200 | S-2D | 4512 | | | | |
| 94G3201 | S-2D | 5318 | | | | |
| 94G3203 | S-2D | 2255 | | | | |
| 94G3204 | S-2D | 4512 | | | | |
| 94G3205 | S-2D | 5318 | | | | |
| 94G3787 | S-2F | 5318 | | | | |
| 94G3794 | S-2F | 5318 | | | | |
| 95F4748 | S | 104 | | | | |
| 95F4749 | S | 212 | | | | WDS 3200 |
| DALS 3540 | S-2F | 3540 | 4892 | 2 | | 06H5338 |
| DCAS 32160 | S-3 | 2160 | | 3 | | 5400 RPM |
| DCAS 34330 | S-3 | 4330 | | 6 | | 5400 RPM |
| DCHS 2XP | S-3W | 4550 | 6076 | 9 | 120-184 | See UltraStar 2XP |
| DCHS 34550 | S | 4560 | | 9 | | 7200 RPM |
| DCHS 38700 | S-2F | 8700 | | 18 | | |
| DCHS 39100 | S | 9111 | | 18 | | 7200 RPM |
| DCMS 310800 | S2FW | 10800 | | 20 | | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------------|--------|-------|------|-----|---------|---------------------------|
| DFHS S1x | S-2 | 1126 | 1872 | 4 | 100 | 1893 tcyls |
| DFHS S2x | S-2 | 2255 | 1877 | 8 | 100 | 1893 tcyls |
| DFHS S4x | S-2 | 4512 | 1879 | 16 | 100 | 1893 tcyls |
| DFHS 31080 | S-2F | 1120 | 4416 | 4 | 100 | |
| DFHS 32160 | S-2F | 2250 | 4416 | 8 | 100 | |
| DFHS 34320 | S-2F | 4510 | 4416 | 16 | 100 | |
| DFMS 31080 | S-2F | 1327 | 4416 | 4 | 105-180 | |
| DFMS 32160 | S-2F | 2324 | 4416 | 7 | 105-180 | |
| DFMS 32600 | S-2F | 2657 | 4416 | 8 | 105-180 | |
| DFMS 34320 | S-2F | 4320 | 4416 | 13 | 105-180 | |
| DFMS 351AV | S-2F | 5106 | | 16 | | |
| DFMS 35250 | S-2F | 5318 | 4416 | 16 | 105-180 | |
| DFHS-S1x | S-2 | 1120 | 4416 | 4 | 100 | |
| DFHS-S2x | S-2 | 2250 | 4416 | 8 | 100 | |
| DFHS-S4x | S-2 | 4510 | 4416 | 16 | 100 | |
| DFMS-S1x | S-2 | 1327 | 4416 | 4 | 105-180 | |
| DFMS-S2x | S-2 | 2324 | 4416 | 7 | 105-180 | |
| DFMS-S3x | S-2 | 2657 | 4416 | 8 | 105-180 | |
| DFMS-S4x | S-2 | 4320 | 4416 | 13 | 105-180 | |
| DFMS-S5x | S-2 | 5318 | 4416 | 16 | 105-180 | |
| DHAS 2270 | S-2F | 270 | 2788 | 2 | | |
| DHAS 2344 | S-2F | 344 | 2788 | 3 | | |
| DHAS 2405 | S-2F | 405 | 2788 | 3 | | |
| DHAS 2540 | S-2F | 540 | 2788 | 4 | | |
| DORS 31080 | S-3F | 2160 | | | | |
| DORS 32160 | S-3W | 2160 | 6717 | 5 | 99-148 | Physical: UltraStar |
| DPES 30540 | S-2 | 540 | 4896 | | | |
| DPES 30810 | S-2F | 810 | 4896 | | | |
| DPES 31080 | S-2F | 1080 | 4896 | 4 | Var | DeskStar XP/Apple |
| DPES 3540 | S-2F | 540 | | | | |
| DPES 3810 | S-2F | 810 | | | | |
| DPRS 20810 | S-2 | 810 | 3478 | 4 | | |
| DPRS 21215 | S-2 | 1215 | 3478 | 6 | | |
| DSAS 3270 | S-2F | 270 | | | | |
| DSAS 3360 | S-2F | 364 | | | | |
| DSAS 3540 | S-2F | 548 | 3875 | 4 | | |
| DSAS 3720 | S-2 | 730 | 3875 | 4 | | |
| DVAS 2810 | S-2F | 810 | 2788 | 6 | | |
| H 2172-S2 | S-2 | 172 | 2264 | 2 | | |
| H 2258-S3 | S-2 | 258 | 2264 | 3 | | |
| H 2344-S4 | S-2 | 344 | 2264 | 4 | | |
| H 3133 | S-2 | 133 | 2420 | 2 | | |
| H 3171 | S-2 | 171 | 2420 | 2 | | |
| H 3256-S3 | S-2 | 256 | 2420 | 3 | | |
| H 3342-S4 | S-2 | 342 | 2420 | 4 | | |
| Pegasus | S | 1000 | | | | |
| PN09L3903 | S (U2) | 36700 | | | | Ultrastar 36LZX |
| PN09L3905 | S (U2) | 18300 | | | | Ultrastar 18LZX |
| Ultrastar ES216 | S-2F | 2160 | | | | |
| Ultrastar 18LZX | S (U2) | 18300 | | | | 10000 RPM |
| Ultrastar 18XP/ZX | S(UW) | 18000 | | | | 7200 RPM 1 Mb 15.5W 42 mm |
| UltraStar 2XP | S-3W | 4550 | 6076 | 9 | 120-184 | See DCHS 2XP. |
| Ultrastar 36LZX | S (U2) | 36700 | | | | 10000 RPM |
| Ultrastar 9LP | S(UW) | 9100 | | | | 7200 RPM 1 Mb 25 mm |
| Ultrastar 9(L)ZX | S(UW) | 9100 | | | | 10,020 RPM 1 Mb 15.4 W |
| WD 160 | S-2 | 160 | | 8 | | |
| WD 40 | S | 41 | | 2 | | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------|------|------|------|-----|-----|-------------|
| WDL 100 | S | 100 | 1990 | 2 | 44 | |
| WDL 12 | S | 1000 | 2057 | 15 | | |
| WDL 200 | S | 200 | 1990 | 4 | 44 | |
| WDL 340 | S | 40 | 1038 | 2 | 39 | |
| WDS 240 | S | 41 | 1120 | 2 | 38 | |
| WDS 260 | S-2 | 63 | 1248 | 2 | 50 | |
| WDS 280 | S | 86 | 1120 | 4 | 38 | |
| WDS 3100 | S-2 | 105 | 1990 | 2 | 44 | |
| WDS 3158(G) | S | 120 | 920 | 8 | 32 | 6128291 |
| WDS 3160 | S-2 | 163 | 1021 | 8 | 39 | |
| WDS 3168 | S | 160 | | | | |
| WDS 3200 | S-2 | 210 | 1990 | 4 | 44 | |
| WDS 380 | S | 81 | 1027 | 4 | 39 | |
| WDS 387(G) | S | 60 | 520 | 6 | 32 | P/N 6128258 |
| WDS L160 | S-2 | 171 | 1923 | 4 | 44 | |
| WDS L40 | S-2 | 43 | 1038 | 2 | 39 | |
| WDS L42 | S-2 | 42 | 1066 | 2 | 39 | |
| WDS L80 | S-2 | 86 | 1923 | 2 | 44 | |
| 2311 | ? | 4 | | | | Mainframes |
| 2314 | ? | 30 | | | | Mainframes |
| 3030 | ? | 60 | | | | Mainframes |

662-A10

| | |
|---------|-------------------|
| Single | End jumper inside |
| Master: | As above |
| Slave: | Next to end. |

WDA L42(S)/L40(S)

| | |
|---------|-------|
| Single: | 2 on |
| Master: | 2 on |
| Slave: | 2 off |

WDA L80/L160

| | |
|---------|------------|
| Single: | 3/4 closed |
| Master: | 3/4 closed |
| Slave: | 3/4 open |

WDA L85, 120

| | |
|--------|--------------------|
| Single | JP1, 2 closed |
| Master | As above |
| Slave | JP1 closed, 2 open |

WDA 240/280, S260, 2120

| | |
|---------|------------|
| Single: | JP1 closed |
| Master: | JP1 closed |
| Slave: | JP1 open |

WDA 380/3160

| | |
|---------|----------|
| Single: | SW 2 on |
| Master: | As above |
| Slave: | SW 2 off |

H 3171-A2

| | |
|---------|------|
| Single: | JP1 |
| Master: | JP1 |
| Slave: | None |

H 3256-A3 DSAA 3540

| | |
|---------|------------|
| Single: | 1,2 closed |
| Master: | As above |
| Slave: | 3,4 closed |

H 3342

| | |
|---------|----------|
| Single: | 1 closed |
| Master: | 1 closed |
| Slave: | 2 closed |

DDLA 21215/21620, DLGA 22690/23080, DMCA 21080/21440, DCRA 22160, DTNA 21800/22160

| | |
|---------|--------------------|
| Single: | None |
| Master: | None |
| Slave: | 47-48 on (outside) |

CS = 48-50 (along bottom)

DHAA 2270/2405/2540, H 2172-A2/2258-A3/2344-A4, DBOA 2360/2528/2540/2720, DSOA 20540/20810/21080, DPRA 20810/21215

| | |
|---------|--------------------|
| Single: | 47-48 on (outside) |
| Master: | 47-48 on |
| Slave: | None |

CS = 48-50 (along bottom)

DSAA 3270/3360/3720/3540

| | |
|---------|------------------|
| Single: | JP1 closed (1-2) |
| Master: | JP1 closed (1-2) |
| Slave: | JP2 closed (3-4) |

DVAA 2810

| | |
|---------|-----------------|
| Single: | 45-46 (outside) |
| Master: | As above |
| Slave: | None |

CS = 48-46

DPEA 31080/30810/30540, DALA 3540, DJAA 31270/31700, DAQA 32160/33240, DCAA 33610/34330

| | |
|---------|-------------------|
| Single: | 1-2 (outside) |
| Master: | As above |
| Slave: | 3-4 (next one in) |

DPES 30540/31080

| | | |
|-------|-----|----------------------|
| 1-2 | Off | ID Bit 0 |
| 3-4 | Off | ID Bit 1 |
| 5-6 | Off | ID Bit 2 |
| 7-8 | On | Auto spin |
| 9-10 | Off | Unit Attn enabled |
| 11-12 | Off | Term on |
| 13-14 | Off | TI Synch Negotiation |

Many IBM SCSI Drives

| ID | 0 | 1 | 2 |
|----|---|---|---|
| 0 | 0 | 0 | 0 |
| 1 | 1 | 0 | 0 |
| 2 | 0 | 1 | 0 |
| 3 | 1 | 1 | 0 |
| 4 | 0 | 0 | 1 |
| 5 | 1 | 0 | 1 |
| 6 | 0 | 1 | 1 |
| 7 | 1 | 1 | 1 |

DSAS 3270/3360/3540/3720

| ID | JP1 | JP2 | JP 3 |
|----|-----|-----|------|
| 0 | 0 | 0 | 0 |
| 1 | 1 | 0 | 0 |
| 2 | 0 | 1 | 0 |
| 3 | 1 | 1 | 0 |
| 4 | 0 | 0 | 1 |
| 5 | 1 | 0 | 1 |
| 6 | 0 | 1 | 1 |
| 7 | 1 | 1 | 1 |

| | |
|------|----------------|
| JP4 | Auto Spin up |
| JP 5 | Unit Attn |
| JP 6 | Term Connect |
| JP 7 | TI Negotiation |

60/120 Mb/320/400Mb/1Gb*

On=switch down on connector side of switch. S is startup shunt (off in normal use). * D is unused

| ID | Switches |
|----|----------------|
| 6 | B, C On, A Off |
| 5 | A, C On, B Off |
| 4 | C On, A, B Off |
| 3 | A, B On, C Off |
| 2 | B On, A, C Off |
| 1 | A On, B, C Off |
| 0 | A, B, C Off |

80/160 Mb drives

| ID | Jumper |
|----|----------------|
| 6 | A, B On, C Off |
| 5 | A, C On B Off |
| 4 | A On, B, C Off |
| 3 | B, C On, A Off |
| 2 | B On, A, C Off |
| 1 | C On, A, B Off |
| 0 | A, B, C Off |

S is startup shunt (normally off)

Spitfire

| | | | |
|---|-------------|----|---------------|
| 1 | ID | 7 | Spindle Sync |
| 2 | ID (2) | 8 | LED |
| 3 | ID | 9 | Write Protect |
| 4 | Reserved | 10 | Reserved |
| 5 | Auto Start | 11 | Reserved |
| 6 | Enable term | 12 | Term Power |

ICL

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------|------|-----|------|-----|-----|----------------------|
| EDS 30 | ? | 30 | | | | Mainframes IBM 2314? |
| EDS4 | ? | 4 | | | | Mainframes IBM 2311? |

ICM

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------|------|-----|------|-----|-----|-------|
| SFX 12 | A | 42 | 615 | 4 | 34 | |
| SFX 12-54S | S | 42 | 615 | 4 | 34 | |

IDE Associates

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|-----|------|-----|-----|-------|
| DA 40 FI | M | 40? | | 8 | 17 | |

IEM

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|------|------|-----|-----|-------|
| 5010S | S | 1050 | | | | |
| 5023S | S | 2100 | | | | |

IMI

International Memories, Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|-------|------|-----|-------|-------|
| 2306H | M | 5 | 306 | 2 | 17 | |
| 2312H | M | 10 | 306 | 4 | 17 | |
| 5006H | M/R | 5/8 | 306 | 2 | 17/26 | |
| 5012H | M/R | 10/16 | 306 | 4 | 17/26 | |
| 5014H | M | 13 | | | | |
| 5018H | M/R | 16/24 | 306 | 6 | 17/26 | |
| 5021H | M | 20 | 306 | 8 | 17 | |
| 7710 | | 10 | | | | |
| 7720 | | 20 | | | | |
| 7740 | | 40 | | | | |

Imperial Technology

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|------|-----|------|-----|-----|-------------|
| Megaram 35S | S | 512 | | | | Solid State |
| Megaram-SCSI | S | 320 | | | | Solid State |

Imprimis

See CDC—previously Magnetic Peripherals (MPI), owned by CDC, which was sold to Seagate.

Infinity

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|------|------|------|-----|-----|-------|
| PAS-ATA02014 | A | 1440 | | | | 2.5" |
| PCQ-EL02014 | A | 1440 | 2800 | 16 | 63 | 2.5" |
| PCQ-EL01014 | A | 1440 | | | | 2.5" |
| PCQ-ATA02014 | A | 1440 | | | | 2.5" |
| PCQ-AR01014 | A | 1440 | | | | 2.5" |
| PDL-LA02014 | A | 1440 | | | | 2.5" |
| PIB-TP03014 | A | 1440 | | | | 2.5" |
| PIB-TP02014 | A | 1440 | | | | 2.5" |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|------|------|------|-----|-----|-------|
| PIB-TP01014 | A | 1440 | | | | 2.5" |
| PIB-ATA02014 | A | 1440 | | | | 2.5" |
| PNC-VS02014 | A | 1440 | | | | 2.5" |
| PNC-ATA02014 | A | 1440 | | | | 2.5" |
| PNC-VS01014 | A | 1440 | | | | 2.5" |
| PTS-TS02014 | A | 1440 | | | | 2.5" |
| PTS-TS01014 | A | 1440 | | | | 2.5" |
| PTS-ATA02014 | A | 1440 | | | | 2.5" |
| PAS-ATA02021 | A | 2160 | | | | 2.5" |
| PCQ-EL02021 | A | 2160 | | | | 2.5" |
| PCQ-EL01021 | A | 2160 | | | | 2.5" |
| PCQ-ATA02021 | A | 2160 | | | | 2.5" |
| PCQ-AR01021 | A | 2160 | | | | 2.5" |
| PDL-LA02021 | A | 2160 | | | | 2.5" |
| PIB-TP03021 | A | 2160 | | | | 2.5" |
| PIB-TP02021 | A | 2160 | | | | 2.5" |
| PIB-TP01021 | A | 2160 | | | | 2.5" |
| PIB-ATA02021 | A | 2160 | | | | 2.5" |
| PNC-VS02021 | A | 2160 | | | | 2.5" |
| PNC-ATA02021 | A | 2160 | | | | 2.5" |
| PNC-VS01021 | A | 2160 | | | | 2.5" |
| PTS-TS02021 | A | 2160 | | | | 2.5" |
| PTS-TS01021 | A | 2160 | | | | 2.5" |
| PTS-TS01021 | A | 2160 | | | | 2.5" |
| PTS-ATA02021 | A | 2160 | | | | 2.5" |
| PAS-ATA01030 | A | 3080 | | | | 2.5" |
| PCQ-EL02030 | A | 3080 | | | | 2.5" |
| PCQ-EL01030 | A | 3080 | | | | 2.5" |
| PCQ-ATA02030 | A | 3080 | | | | 2.5" |
| PCQ-AR01030 | A | 3080 | | | | 2.5" |
| PDL-LA01030 | A | 3080 | | | | 2.5" |
| PIB-TP03030 | A | 3080 | | | | 2.5" |
| PIB-TP02030 | A | 3080 | | | | 2.5" |
| PIB-TP01030 | A | 3080 | | | | 2.5" |
| PIB-ATA02030 | A | 3080 | | | | 2.5" |
| PNC-VS02030 | A | 3080 | | | | 2.5" |
| PNC-ATA02030 | A | 3080 | | | | 2.5" |
| PNC-VS01030 | A | 3080 | | | | 2.5" |
| PTS-TS02030 | A | 3080 | | | | 2.5" |
| PTS-TS01030 | A | 3080 | | | | 2.5" |
| PTS-ATA02030 | A | 3080 | | | | 2.5" |

Insight

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------------|------|------|------|-----|-----|---------------------|
| Talon TA3122A | A | 250 | | | | |
| Power Drive 1075 | S-2 | 1079 | 1658 | 15 | 85 | Fujitsu M 2266S-512 |
| Power Drive 1750 | S-2 | 1662 | | | | Fujitsu M 2265S-512 |

Integra Technologies Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------|------|------|------|-----|-----|-------|
| Integra 1 | A | 500 | | | | |
| Integra 1 | S | 500 | | | | |
| Integra III | S | 3000 | | | | |

Integral Peripherals

Vipers manufactured for DIP Systems Ltd.

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------------|------|------|------|-----|-----|------------|
| 2100 | A | 1000 | 1900 | 16 | 63 | |
| Platinum 1080 | A | 1080 | | | | 2.5" |
| Platinum 1200 | A | 1200 | | | | 2.5" |
| Silhouette 31650 | A | 1650 | | | | |
| Silhouette 32160 | A | 2160 | | | | |
| Silhouette 4090 | A | 4100 | | | | 3" 10.5 mm |
| 1820 Mustang | P | 21 | 608 | 2 | | XT/AT |
| 1841P(A) Ranger | P/A | 42 | | 2 | | |
| 1842 Stingray | P | 43 | | 4 | | XT/AT |
| 1862 Maverick | P | 64 | | 3 | | |
| 1862P Maverick | P | 64 | | 3 | | |
| 1882P(A) Cobra | P | 85 | | 3 | | |
| 1885 McKinley | P | 85 | | | | |
| 8105 PA | P | 105 | | | | |
| 8170 PA | P | 170 | | | | |
| Cobalt 420 | P | 170 | | | | |
| Pocketfile 105 | P | 105 | | | | |
| Pocketfile 170 | P | 170 | | | | |
| Pocketfile 260 | P | 260 | | | | |
| Pocketfile 42 | P | 42 | | | | |
| Pocketfile 85 | P | 85 | | | | |
| Viper 105 | P | 105 | | 4 | | |
| Viper 170 | P | 170 | | 4 | | |
| Viper 260 | P | 260 | | 4 | | |
| Viper 340 | P | 340 | | 4 | | |
| Viper 510 | P | 510 | | | | |

Integrated Data Storage Systems

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------|------|-----|------|-----|-----|-------|
| iDS100i | S | 102 | | | | |
| iDS130i | S | 132 | | | | |
| iDS180i | S | 182 | | | | |
| iDS200i | S | 204 | | | | |
| iDS20i | S | 22 | | | | |
| iDS20p | S | 22 | | | | |
| iDS40iC | S | 42 | | | | |
| iDS40iQ | S | 42 | | | | |
| iDS80i | S | 60 | | | | |

Introl Corp

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|------|------|-----|-----|-------|
| 1200D | S | 1000 | | | | |

lomega

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|------|-----|------|-----|-----|-----------|
| Insider 90 Pro | S-2 | 90 | | | | Bernoulli |
| Multidisk | S | 150 | | | | |

Irwin

aka Olivetti

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------|------|-----|------|-----|-----|---------|
| 416 | M | 13 | 819 | 2 | 17 | |
| 510 | M | 10 | 628 | 2 | 17 | HD/Tape |
| 516 | M | 13 | 819 | 2 | 17 | HD/Tape |
| HD 561 | M | 5 | 180 | 4 | 17 | |

Itochu

See C Itoh

Jasmine Technologies Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------|------|-----|------|-----|-----|------------|
| Backpac 40 | S | 42 | | | | |
| Backpac 80 | S | 80 | | | | |
| DD 40 | S | 40 | | | | Blueflower |
| DD 80 | S | 80 | | | | Blueflower |
| DD 180 | S | 174 | | | | |
| DD 130 | S | 130 | | | | |
| DD 80 | S | 90 | | | | Platinum |
| DD 40 | S | 40 | | | | Platinum |

JCT

Now Maxcard (e.g. Maxtor). No longer producing hard drives.

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|-----|------|-----|-----|-----------|
| 100 | M | 5 | 306 | 2 | 17 | |
| 1000 | M | 5 | 131 | 4 | 17 | Commodore |
| 1005 | M | 7 | | | 17 | Commodore |
| 1006 | M | 7 | 436 | 2 | 17 | Commodore |
| 1010 | M | 14 | 436 | 4 | 17 | Commodore |
| 105 | M | 7 | 436 | 2 | 17 | |
| 110 | M | 14 | 436 | 4 | 17 | |
| 120 | M | 20 | 615 | 4 | 17 | |

Jets Cybernetics Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------|------|------|------|-----|-----|-------|
| FileSurfer | S | 300 | | | | |
| FileSurfer | S | 1000 | | | | |

JTS

Formed by executives from Seagate and Tandon.

Makes 3" hard disks (Nordic) for OEMs.

www.jtscorp.com

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------|------|------|------|-----|-----|------------------|
| C 1700-2AF | A3 | 1700 | 3312 | 16 | 63 | 25.4 mm Champion |
| C 2000-2AF | A3 | 2000 | 3882 | 16 | 63 | 25.4 mm Champion |
| C 2500-3AF | A3 | 2500 | 4970 | 16 | 63 | 25.4 mm Champion |
| C 3000-3AF | A3 | 3000 | 5824 | 16 | 63 | 25.4 mm Champion |
| C 1000-2AF | A | 1000 | 1957 | 16 | 63 | 16.5 mm Champ |
| C 1300-2AF | A | 1300 | 1300 | 16 | 63 | 16.5 mm Champ |
| C 1700-3AF | A | 1700 | 3314 | 16 | 63 | 16.5 mm Champ |
| C 2000-3AF | A | 2000 | 3882 | 16 | 63 | 16.5 mm Champ |
| N 1080-2AR | A3 | 1080 | 4032 | 4 | | 10.5 mm Nordic |
| N 1440-3AR | A3 | 1440 | 4032 | 6 | | 12.5 mm Nordic |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------|------|------|------|-----|-----|----------------|
| N 1620-3AR | A3 | 1620 | 1620 | 6 | | 12.5 mm Nordic |
| N 2160-3AR | A3 | 2160 | 4435 | 6 | | 12.5 mm Nordic |
| P 1000-2AF | A | 1000 | 1942 | 16 | 63 | |
| P 1200-2AF | A | 1200 | 2332 | 11 | 63 | |
| P 1600-3AF | A2 | 1600 | 3108 | 16 | 63 | |
| P 3250A | A | 251 | 961 | 16 | 32 | P=Palladium |
| P 3360A | A | 362 | 791 | 16 | 56 | |
| P 3540A-2AF | A | 540 | 1049 | 16 | 63 | |
| P 3850-2AF | A | 816 | 1649 | 16 | 63 | |

P 1000-2AF/1200-2AF/3850AF

| | |
|---------|---------|
| Single: | JP2 3-4 |
| Master: | JP2 5-6 |
| Slave: | JP2 1-2 |

Cable Select: JP2 1-3

C 1000-2AF/1300-2AF/C1700-3AF/2000-3AF/P 1600-3AF

| | |
|---------|---------|
| Single: | JP1 3-4 |
| Master: | JP1 5-6 |
| Slave: | JP1 1-2 |

Cable Select: JP1 1-3

C 1700-2AF/2000-2AF/2500-3AF/3000-3AF

| | |
|---------|-----|
| Single: | 2-4 |
| Master: | 2-4 |
| Slave: | 1-2 |

Cable Select 3-4

JVC Information Products Inc

No longer producing hard drives

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|------|-----|------|-----|-----|---------------------------------|
| JD 3812M0Z0 | A | 21 | 436 | 2 | 48 | Zenith XT laptops JVC Interface |
| JD 3824R00-1 | A | 21 | 436 | 2 | 48 | Supersport XT laptop JVC I'face |
| JD E3824TA | A | 21 | 436 | 2 | 48 | Toshiba laptops |
| JD E3848HA | A | 43 | 436 | 4 | 48 | |
| JD E2042M | A | 42 | 973 | 2 | 43 | JVC Interface |
| JD E2064M | A | 64 | 532 | 4 | 59 | |
| JD E2085M | A | 85 | 973 | 4 | 43 | JVC Interface |
| JD E2130M | A | 130 | 538 | 8 | 59 | |
| JD E2825P(A,X) | A | 21 | 581 | 2 | 36 | |
| JD E2850P(A,X) | A | 42 | 793 | 3 | 36 | |
| JD E3848V10-2 | A | 42 | 862 | 2 | 48 | Toshiba Laptops |
| JD E3896V | A | 85 | 862 | 4 | 48 | |
| JD F2042M | A | 42 | 973 | 2 | 43 | JVC Interface |
| JD 3806M | M | 5 | 306 | 2 | 17 | |
| JD 3812M | M | 10 | 612 | 2 | 17 | |
| JD E2825P | S | 21 | 436 | 2 | 48 | |
| JD 2850P | S | 43 | | | | |
| JD E3848V(H) | S | 43 | | | | |
| JD E3896V | S | 85 | 862 | 4 | 48 | |

Kalok

Division of JTS Something to do with Xebec?

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------------|------|-----|------|-----|-----|-------------------------------|
| KE 3080 | A | 50 | 979 | 4 | 40 | |
| KL 1000 | A | 105 | 978 | 6 | 35 | |
| KL 3100 | A | 105 | 979 | 6 | 35 | |
| KL 3120 | A | 120 | 820 | 6 | 40 | |
| KL 343 Oct 40 | A | 42 | 676 | 4 | 31 | 644 x 4 x 30? |
| KL 383 Oct 2 | A | 64 | 815 | 6 | 26 | |
| KL 386 Oct 2 | A | 43 | | | | |
| P 3250AR/DS | A | 251 | 961 | 16 | 32 | K-Stor Removeable |
| P 3260/DS | A | 251 | | | | Removeable Flash BIOS |
| P 3360AR | A | 362 | 791 | 16 | 56 | |
| P 3540AR/DS | A | 540 | 1024 | 16 | 63 | Removeable Flash BIOS |
| P5 125A .5 | A | 126 | 2048 | 2 | 80 | Try 872 x 8 x 35 |
| P5 250A .5 | A | 252 | 2048 | 4 | 80 | Try 1010 x 9 x 55 |
| KL 320 Oct 20 | M | 21 | 615 | 4 | 17 | |
| KL 340 Oct 2 | M | 42 | 820 | 6 | 17 | |
| KL 360 | M | 42 | 820 | 6 | 17 | |
| KL 332 Oct 30 | PS/2 | 48 | 615 | 4 | 30 | |
| KL 342 | PS/2 | 35 | 676 | 4 | 26 | RLL |
| KL 330 Oct 30 | R | 33 | 615 | 4 | 26 | Also MFM; 17 sectors. WPC 300 |
| KL 341 Oct 40 | R | 40 | 644 | 4 | 26 | |
| KL 360 Oct 2 | R | 65 | 820 | 6 | 26 | |
| KL 341 Oct 40 | S | 43 | 644 | 4 | 31 | 676 cyls? |
| KL 381 | S | 84 | 815 | 6 | 34 | |
| P5 125S .5 | S-2 | 126 | 2048 | 2 | 80 | |
| P5 250S .5 | S-2 | 252 | 2048 | 2 | 80 | |

Kalok 343

| | |
|---------|--------|
| Master: | 5/6 on |
| Slave: | 7/8 on |

Kingston Technology Corp

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------------|------|-----|------|-----|-----|-----------|
| AT 260 | A | 260 | | | | Data Card |
| AT 340 | A | 340 | | | | Data Card |
| Data Traveler | Par | 127 | | | | |
| Data Traveler | Par | 209 | | | | |
| Data Pak 170 | P3 | 170 | | | | |
| Data Pak 260 | P3 | 260 | | | | |

KT Technology

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------|------|-----|------|-----|-----|----------|
| PHD 120 | A | 120 | | | | Hardcard |
| PHD 205 | A | 205 | | | | Hardcard |
| PHD 40 | A | 40 | | | | Hardcard |
| PHD 60 | A | 60 | | | | Hardcard |
| PHD 80 | A | 80 | | | | Hardcard |

Kyocera

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------|------|-----|------|-----|-----|------------------|
| KC 40GA | A | 42 | 977 | 5 | 26 | Try 537 x 4 x 17 |
| KC 80GA | A | 80 | 977 | 10 | 26 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------|------|-----|------|-----|-----|-------|
| KC 20A | M | 21 | 616 | 4 | 17 | |
| KC 20B | M | 20 | 615 | 4 | 17 | |
| KC 20C | M | 21 | 615 | 4 | 17 | |
| KC 30A | R | 32 | 616 | 4 | 26 | |
| KC 30B | R | 30 | 615 | 4 | 26 | |
| KC 80C | S | 87 | 787 | 8 | 26 | |
| KC 80GS | S | 83 | 787 | 8 | 26 | |

KC 40GA

| | |
|---------|---------------|
| Single: | ST3 shut |
| Master: | ST2 shut |
| Slave: | ST2, ST3 open |

LaCie Ltd

Makes external hard disks for Macs. Previously owned by Quantum, sold to Electronique d2 SA, France.

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------------|------|------|------|-----|-----|-----------------|
| Cirrus 650h | S | 664 | | | | |
| Cirrus 1000Q | S | 1050 | 2444 | 12 | 70 | Quantum PD 1050 |
| Cirrus 1200Q | S-2F | 1200 | 1834 | 5 | 87 | Quantum PD 1225 |
| Joule 540Mb | S-2 | 540 | | | | Portable/Base |
| Joule 730Mb | S-2 | 730 | | | | Portable/Base |
| Joule 1080Mb | S-3 | 1080 | | | | Portable/Base |
| Joule 1400Mb | S-3 | 1400 | | | | Portable/Base |
| Joule 2100Mb | S-3 | 2100 | | | | Portable/Base |
| ZFP 105 | S | 105 | | | | |
| ZFP 20 | S | 20 | | | | |
| ZFP 200 | S | 200 | | | | |
| ZFP 40 | S | 40 | | | | |
| ZFP 80 | S | 80 | | | | |
| ZFP Plus 1000 | S | 1000 | | | | |
| ZFP Plus 400 | S | 332 | | | | |
| ZFP Plus 400 | S | 400 | | | | |
| ZFP Plus 600 | S | 600 | | | | |
| ZFP Plus 650 | S | 650 | | | | |
| ZFP100 | S | 100 | | | | |

LANstor

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------|------|-----|------|-----|-----|-------|
| LAN 115 | | 115 | 918 | 15 | 17 | |
| LAN 140 | | 140 | 1024 | 8 | 34 | |
| LAN 180 | | 180 | 1024 | 8 | 26 | |
| LAN 64 | | 64 | 1024 | 8 | 17 | |

LaPine

Out of business

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------|------|-------|------|-----|-------|-------|
| 3062 | M | 10 | 306 | 4 | 17 | |
| 3065 | M | 10 | 306 | 4 | 17 | |
| 3512 | M | 10 | 306 | 4 | 17 | |
| 3522 Titan | M/R | 10/16 | 306 | 4 | 17/26 | |
| 3532 Titan | M/R | 21/32 | 615 | 4 | 17/26 | |
| 3533 | M | 20 | 615 | 4 | 17 | |
| LT 10 | M | 10 | 615 | 2 | 17 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|-------|------|-----|-------|-----------|
| LT 100 | M | 10 | 615 | 2 | 17 | |
| LT 20 | M | 21 | 615 | 4 | 17 | |
| LT 200 | M | 21 | 615 | 4 | 17 | 612 cyls? |
| LT 2000 | M | 20 | 614 | 4 | 17 | |
| LX 200 | M | 20 | 615 | 4 | 17 | |
| LX 2000 | M | 20 | 615 | 4 | 17 | |
| Titan 10 | M/R | 10/16 | 615 | 2 | 17/26 | |
| Titan 20 | M/R | 21/32 | 615 | 4 | 17/26 | |
| Titan 30 | M/R | 20/32 | 615 | 4 | 17/26 | |
| LT 30 | R | 33 | 615 | 4 | 26 | |
| LT 300 | R | 32 | 615 | 4 | 26 | 616 cyls? |
| LT 4000 | S | 40 | | | | |

Lexikon

see Olivetti

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-----------|------|-----|--------|-----|-----|--------------------|
| HD 352 | M | 20 | 612 | 4 | 17 | Set up by software |
| HD 674 | M | 35 | 820 | 5 | 17 | |
| HDC 372 | M | 21 | 611 | 4 | 17 | Hardcard |
| XM 5220/2 | M | 21 | 615(?) | 4 | 17 | Try 611 cyls |

Liberty Systems

C=Cartridge All Portable

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-----------|------|--------|------|-----|-----|------------------|
| 1080QAT | A | 80 | 1024 | 9 | 17 | Quantum? |
| 1080Q | S | 80 | 1024 | 9 | 17 | Quantum? |
| 11544S(P) | S | 44 | | | | |
| 11588S(P) | S | 88 | | | | |
| 1.2 GB-Q | S-2F | 1200 | 1834 | 5 | 87 | Quantum PD 1225 |
| 2040C | S | 40 | | | | |
| 22544SD | S | 44 x 2 | | | | |
| 22588SD | S | 88 x 2 | | | | |
| 3020C | S | 20 | | | | |
| 3020CT | S | 20 | | | | |
| 3040C(P) | S | 40 | | | | |
| 3040CT | S | 40 | | | | |
| 501080 | S | 1080 | 2866 | 8 | 92 | Parallel/P3 |
| 50105Q(P) | S | 105 | 1223 | 4 | 42 | |
| 50120C(P) | S | 120 | 1818 | 2 | 60 | |
| 501300 | S | 1300 | | | | Parallel/P3 |
| 502100 | S | 2100 | | | | Parallel/P3 |
| 5052Q(P) | S | 52 | 2438 | 2 | 70 | |
| 504200 | S | 4200 | | | | Parallel/P3 |
| 50730 | S | 730 | | | | Parallel/P3 |
| 70105Q | S | 105 | 1223 | 4 | 42 | |
| 70170Q | S | 170 | 2356 | 2 | 71 | |
| 70210Q | S | 210 | 3079 | 12 | 111 | |
| 702100 | S | 2100 | | | | Parallel/P3 |
| 70340M | S | 340 | 2356 | 4 | 71 | |
| 7040Q | S | 40 | | | | |
| 704200 | S | 4200 | | | | Parallel/P3 |
| 70425Q | S | 425 | | | | |
| 7052Q | S | 52 | 2438 | 2 | 70 | |
| 870 MB-T | S-2 | 862 | 1655 | 15 | 68 | Toshiba MK 438FB |

Longshine

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|-----|------|-----|-----|-------|
| | P | 124 | 979 | 6 | 41 | |

Loviell Computer Corp

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|------|------|-----|-----|-----------------|
| | S-2F | 1200 | 1834 | 5 | 87 | Quantum PD 1225 |

Mac/PC Data Enhancements Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|------|------|-----|-----|-------|
| PD 1040 | S | 42 | | | | |
| PD 1085 | S | 84 | | | | |
| PD 1105 | S | 105 | | | | |
| PD 1120 | S | 120 | | | | |
| PD 1170 | S | 168 | | | | |
| PD 1210 | S | 210 | | | | |
| PD 3350 | S | 325 | | | | |
| PD 3670 | S | 650 | | | | |
| PD 61000 | S | 1030 | | | | |

MacAvenue

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|------|-----|------|-----|-----|-------|
| Protege 100Q | S | 100 | | | | |
| Protege 20S | S | 20 | | | | |
| Protege 20S | S | 20 | | | | |
| Protege 40Q | S | 40 | | | | |
| Protege 40Q | S | 40 | | | | |
| Protege 40S | S | 40 | | | | |
| Protege 40S | S | 40 | | | | |
| Protege 80Q | S | 80 | | | | |
| Protege 80Q | S | 80 | | | | |
| Protege 80S | S | 80 | | | | |
| Protege 80S | S | 80 | | | | |

MacDirect

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|------|------|------|-----|-----|---------------------|
| MacDirect 2400 | S | 1957 | | | | Fujitsu M 2654S-512 |

MacProducts USA Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|------|------|------|-----|-----|---------------------|
| Magic 105Q | S | 101 | | | | |
| Magic 1.2 GB | S-2 | 1079 | 1658 | 15 | 85 | Fujitsu M 2266S-512 |
| Magic 150 | S | 152 | | | | |
| Magic 170Q | S | 169 | | | | |
| Magic 20 | S | 21 | | | | |
| Magic 2.1GB | S-2F | 1900 | 2573 | 15 | 96 | ST 42100N |
| Magic 30 | S | 31 | | | | |
| Magic 300 | S | 300 | | | | |
| Magic 40Q | S | 40 | | | | |
| Magic 46 | S | 65 | | | | |
| Magic 60 | S | 65 | | | | |
| Magic 600 | S | 584 | | | | |
| Magic 80Q | S | 81 | | | | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|-----|------|-----|-----|-------|
| Magic 91 | S | 92 | | | | |

Magnetic Peripherals Inc (MPI)

See CDC who marketed drives under this name before forming Imprimis

Magtron

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|------|------|-----|-----|-------|
| 3040A | A | 40 | 850 | 2 | 46 | |
| 3080A | A | 81 | 850 | 4 | 46 | |
| 3120A | A | 130 | | 4 | | |
| MT 4115E | E | 115 | 1600 | 4 | 35 | |
| MT 4140E | E | 140 | 1600 | 5 | 35 | |
| MT 4170E | E | 170 | 1600 | 6 | 35 | |
| MT 5400E | E | 361 | 1632 | 8 | 54 | |
| MT 5760E | E | 677 | 1632 | 15 | 54 | |
| MT 4115S | S | 115 | 1600 | 4 | 35 | |
| MT 4140S | S | 140 | 1600 | 5 | 35 | |
| MT 4170S | S | 170 | 1600 | 6 | 35 | |
| MT 5400S | S | 359 | 1623 | 8 | 54 | |
| MT 5760S | S | 673 | 1623 | 15 | 54 | |
| MT 6120S | S | 1200 | | | | |

Market West Computer Group

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|-----|------|-----|-----|-------|
| HC 8170E | E | 150 | | | | |

Mass Microsystems

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-----------------|-------|------|------|-----|-----|-------------------|
| Hard Drive 130 | P | 130 | | | | |
| Hard Drive 170 | P | 170 | | | | |
| Hard Drive 265 | P | 265 | | | | |
| 40 Hitchhiker | S | 40 | | | | External, Mac |
| 80 Hitchhiker | S | 82 | | | | External, Mac |
| 120P Diamond | S | 117 | | | | Portable, Mac |
| 210P Diamond | S | 200 | | | | Internal |
| 245i(V) Diamond | S-2 | 245 | | | | DD=Diamond |
| 320i(V) Diamond | S-2 | 320 | | | | |
| 510P Diamond | S | 508 | | | | Portable, Mac |
| 80P Diamond | S | 79 | | | | |
| MD 1005 | S-2F | 1000 | | | | MD=MASterDrive |
| MD 1600 | S-2F | 1600 | | | | Internal/External |
| MD 1630 | S-2F | 1630 | | | | Internal/External |
| MD 2010 | S-2F | 2010 | | | | Internal/External |
| MD 2100 | S-2F | 2100 | | | | Internal/External |
| MD 2780 | S-2F | 2800 | | | | Internal/External |
| MD 510 | S-2F | 510 | | | | |
| MASter 6 | S-2/P | 1000 | | | | Reader/Writer |
| MASter 7 | S-2/P | 2000 | | | | Reader/Writer |

Master Disk

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|-----|------|-----|-----|-------|
| DM 3142A | A | 42 | | | | IBM? |

Maximus

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|------|-----|------|-----|-----|----------------|
| El Dorado LX | M | 60 | 820 | 6 | 17 | |
| MaxiPro 20 | M | 20 | 782 | 2 | 17 | 3:1 interleave |
| MaxiPro 40 | M | 40 | 782 | 4 | 17 | |
| Premier 9000 | R | 71 | 1024 | 8 | 26 | |

Maxtor

Now owned by Hyundai; sells IDE drives to HP

For Maxtor (Colorado) see Miniscribe

For * or LXT/XT ESDI/SCSI models, ring Sequel 01734 509621; (408) 987 1000

For ** ring CNS on (303) 682 0090

For Hardcards ring Peripheral (408) 263 4043

For Passport XL ring Mountain Gate (702) 851 9393

For Optical Drives try Maxoptics, now owned by Kubota Corp

For Maxblast software (i.e. Disk Manager), set drive as Type 9, or 900 x 15 x 17

Model Numbering

87000A8 = 8000 series, 7000Mb, ATA with 8 data surfaces. **Suffixes** are: A=ATA, D=Ultra DMA or Diff SCSI, S=SCSI, E=ESDI, M=PCMCIA, P=128K cache, V=Value (*not* Visual, as in Audio-Visual), Q=64K cache (for European OEM), I=IBM, R=non-USA, L=Low Profile (1"), Y=nearly SCSI 2, H=High Perf. 7000 series discontinued 1996, SCSI & PCMCIA 1994 and ESDI 1991. LXTs replaced by MXTs 1993.

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------------|------|------|------|-----|-----|------------------------------|
| 250837 | A | 795 | 1621 | 16 | 63 | PIO 4 |
| 25084A | A | 80 | 569 | 16 | 18 | Discontinued |
| 251005 | A | 957 | 1945 | 16 | 63 | PIO 4 |
| 25128A Apache | A | 122 | 981 | 15 | 17 | 1092 x 4 x 30-60 |
| 251340A | A | 1276 | 2594 | 16 | 63 | PIO 4 |
| 25252A Apache | A | 240 | 569 | 16 | 54 | Try 1024 x 16 x 30 |
| 2585A Apache | A | 82 | 981 | 10 | 17 | 1092 x 4 x 24-48 |
| 7040A | A | 41 | 981 | 5 | 17 | 524x4x40 |
| 7060A | A | 60 | 467 | 16 | 17 | Try 1024 x 7 x 17 |
| 7080A | A | 81 | 981 | 10 | 17 | Try 832 x 6 x 33 |
| 71000A | A | 1080 | 1946 | 16 | 63 | |
| 71050A | A | 1006 | 2045 | 16 | 63 | EIDE PIO3 Replaced by 71080A |
| 71080A | A | 1006 | 2045 | 16 | 63 | Replaces 71050A |
| 71084A | A | 1036 | 2105 | 16 | 63 | PIO 4 |
| 7120A | A | 124 | 936 | 16 | 17 | Try 1024 x 14 x 17 |
| 71260AV | A | 1204 | 2448 | 16 | 63 | EIDE Excalibur PIO 3 |
| 713A | A | 113 | | | | Slimline |
| 7130A | A | 130 | 936 | 16 | 17 | 7120A in disguise |
| 7131A | A | 125 | 1002 | 8 | 32 | 2096 x 2 x 32 |
| 71336A(P) | A | 1277 | 2595 | 16 | 63 | EIDE PIO 4 |
| 7135AV | A | 129 | 966 | 12 | 21 | |
| 71350AP | A | 1292 | 2624 | 16 | 63 | |
| 71626AP | A | 1554 | 3158 | 16 | 63 | PIO 4 |
| 71670A(P) | A | 1586 | 3224 | 16 | 63 | EIDE |
| 71687AP | A | 1614 | 3280 | 16 | 63 | |
| 7170A/AT/AI | A | 163 | 984 | 10 | 34 | Made for IBM—p/n 93F2360 |
| 7171A | A | 165 | 866 | 15 | 26 | |
| 72004AP | A | 1916 | 3893 | 16 | 63 | PIO 4 |
| 72025AP | A | 1937 | 3936 | 16 | 63 | |
| 7213A | A | 203 | 683 | 16 | 38 | 1690 x 4 x 48-72 |
| 7245A | A | 234 | 967 | 16 | 31 | Try 944 x 14 x 40 |
| 72577AP | A | 2459 | 4996 | 16 | 63 | |
| 7270AV | A | 258 | 959 | 11 | 50 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------|------|------|-------|-----|-----|------------------------------|
| 72700AP | A | 2583 | 5248 | 16 | 63 | |
| 7273A | A | 261 | 1012 | 16 | 63 | Old version 967 x 16 x 31 |
| 7290A | A | 277 | 941 | 14 | 43 | |
| 7345A | A | 329 | 790 | 15 | 57 | 2219 x 4 |
| 7405A | A | 386 | 989 | 16 | 50 | |
| 7420AV | A | 401 | 986 | 16 | 52 | PIO 3 |
| 7425AV | A | 407 | 1000 | 16 | 52 | PIO 3 |
| 7540AV | A | 515 | 1046 | 16 | 63 | J22 for 1024x12x63 PIO 3 |
| 7541AV | A | 518 | 1052 | 16 | 63 | PIO 4 |
| 7546AV | A | 522 | 1060 | 16 | 63 | PIO 3 Old version 1024x16x63 |
| 7668A/AP | A | 638 | 1297 | 16 | 63 | PIO 4 |
| 7850AV | A | 814 | 1654 | 16 | 63 | |
| 8051AT | A | 41 | 982 | 5 | 17 | Also 745 x 4 x 28 |
| 80875A2 | A | 837 | 1700 | 16 | 63 | |
| 81080A3 | A | 1034 | 2100 | 16 | 63 | OEM |
| 81081A2 | A | 1034 | 2100 | 16 | 63 | |
| 81275A3 | A | 1221 | 2480 | 16 | 63 | OEM |
| 81280A2 | A | 1280 | 2481 | 16 | 63 | |
| 81312A3 | A | 1254 | 2548 | 16 | 63 | |
| 81620A3 | A | 1600 | 3250 | 16 | 63 | |
| 81630A4 | A | 1559 | 3168 | 16 | 63 | OEM |
| 81750A4 | A | 1781 | 3400 | 16 | 63 | |
| 82100A4 | A | 2014 | 4092 | 16 | 63 | |
| 82160A4 | A | 2060 | 4185 | 16 | 63 | |
| 82160D2 | A3 | 2160 | 4465 | 15 | 63 | DiamondMax 2160 |
| 82187A5 | A | 2091 | 4248 | 16 | 63 | |
| 8225A | A | 21 | 747 | 2 | 28 | |
| 82400A4 | A | 2317 | 4962 | 16 | 63 | OEM |
| 82559A4 | A | 2442 | 4962 | 16 | 63 | OEM |
| 82560A4 | A | 2442 | 4962 | 16 | 63 | |
| 82577A6 | A | 2560 | 4962 | 16 | 63 | OEM |
| 82580A5 | A | 2436 | 5004 | 16 | 63 | |
| 82625A6 | A | 2451 | 5100 | 16 | 63 | |
| 83062A7 | A | 2859 | 5948 | 16 | 63 | |
| 83200A5 | A | 2905 | 6296 | 15 | 63 | OEM |
| 83200A6 | A | 2905 | 6296 | 15 | 63 | OEM |
| 83200A8 | A | 3060 | 6218 | 16 | 63 | OEM |
| 83201A6 | A | 3060 | 6218 | 16 | 63 | |
| 83202A6 | A | 2905 | 6296 | 15 | 63 | OEM |
| 83209A5 | A | 3060 | 6218 | 16 | 63 | OEM |
| 83240D3 | A3 | 3240 | 6697 | 15 | 63 | DiamondMax 2160 |
| 83500A8 | A | 3347 | 6800 | 16 | 63 | |
| 83840A6 | A | 3840 | 7443 | 16 | 63 | |
| 84000A6 | A | 4000 | 7763 | 16 | 63 | OEM |
| 84004A8 | A | 3818 | 7758 | 16 | 63 | OEM |
| 84200A8 | A | 4028 | 8184 | 16 | 63 | OEM |
| 84320A8 | A | 4410 | 8960 | 16 | 63 | |
| 8450A | A | 43 | 745 | 4 | 28 | |
| 85120A8 | A | 4884 | 10585 | 15 | 63 | |
| | | 5120 | 9924 | 16 | 63 | |
| 85121A8 | A | 4884 | 10585 | 15 | 63 | OEM |
| 82560A3 | A3 | 2442 | 4962 | 16 | 63 | |
| 83240A(D)4 | A3 | 3089 | 6277 | 16 | 63 | |
| 83500A4 | A3 | 3339 | 7237 | 16 | 63 | |
| 84320A5 | A3 | 3862 | 8370 | 15 | 63 | |
| 84320D4 | A3 | 4320 | 8930 | 15 | 63 | |
| 85250A6 | A3 | 5009 | 10856 | 15 | 63 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------------|------|-------|-------|-----|-----|-----------------------------|
| 86480A8 | A3 | 6179 | 13392 | 15 | 63 | |
| 86480D6 | A3 | 6480 | 13395 | 15 | 63 | DiamondMax |
| 87000A8 | A3 | 6679 | 14475 | 15 | 63 | |
| 88400D8 | A | 8400 | 16278 | 16 | 63 | 5200 RPM 256K 5W Diamond |
| 90432D3 | A | 6400 | | | | |
| 9070D6 | A | 7500 | | | | |
| 90845D4 | A | 8400 | | | | |
| 91000D8 | A4 | 9529 | | | | Diamond Max + 2500 |
| 91024D4 | A | 10200 | | | | |
| 91080D5 | A | 10800 | | | | |
| 91303D6 | A | 13000 | | | | |
| 91360D8 | A4 | 12954 | | | | Diamond Max 3400 |
| 91536D6 | A | 15300 | | | | |
| 91728D8 | A | 17200 | | | | |
| 92048D8 | A | 20400 | | | | |
| Diamond Max 1750 | A | 1700 | | | | |
| Diamond Max 2880 | A4 | 11000 | | | | 2880 per platter |
| Diamond Max 3400 | A4 | 12954 | | | | 91360D8 |
| Diamond Max 4320 | A4 | 12100 | | | | 91303D6 5400 RPM, but fast |
| Diamond Max 4320 | A4 | 16100 | | | | 91728D6 |
| Diamond Max 6800 | A4 | 27200 | | | | 5400 RPM |
| Diamond Mx 84320D4 | A4 | 4300 | | | | UDMA 66 |
| Diamond Mx 88400D8 | A4 | 8400 | | | | UDMA 66 |
| Diamond Mx 90432D3 | A4 | 6400 | | | | UDMA 66 |
| Diamond Mx 90845D4 | A4 | 8400 | | | | UDMA 66 |
| Diamond Mx 91080D5 | A4 | 10800 | | | | UDMA 66 |
| Diamond Mx 91303D6 | A4 | 13000 | | | | UDMA 66 |
| Diamond Mx 91728D8 | A4 | 17200 | | | | UDMA 66 |
| Diamond Mx 92049Y4 | A4 | 20000 | | | | UDMA 66 2Mb buffer 5400 RPM |
| Diamond Max | A | 5100 | | | | |
| Diamond Max + 2500 | A4 | 9529 | | | | 91000D8 |
| Diamond Max + 5120 | A4 | 20400 | | | | UDMA 66 7200 RPM |
| Diamond Max + 6800 | A4 | 13000 | | | | |
| Dmnd Mx+ 54098U8 | A4 | 40980 | | | | UDMA 66 7200 RPM |
| Dmnd Mx+ 9070D6 | A | 7500 | | | | UDMA 66 7200 RPM |
| Dmnd Mx+ 91000D8 | A | 9000 | | | | UDMA 66 7200 RPM |
| Dmnd Mx+ 91024D4 | A | 10200 | | | | UDMA 66 7200 RPM |
| Dmnd Mx+ 91536D6 | A | 15300 | | | | UDMA 66 7200 RPM |
| Dmnd Mx+ 92041U4 | A4 | 20400 | | | | UDMA 66 5400 RPM |
| Dmnd Mx+ 92048D8 | A | 20400 | | | | UDMA 66 7200 RPM |
| Dmnd Mx+ 92732UB | A4 | 27300 | | | | UDMA 66 7200 RPM |
| LXT 100A | A | 96 | 733 | 8 | 32 | |
| LXT 200A | A | 191 | 816 | 15 | 32 | 1320 x 7 x 33-53 |
| LXT 213A | A | 213 | 683 | 16 | 38 | AKA 7213 from Arrow? |
| LXT 340A | A | 322 | 654 | 16 | 63 | 1560 x 7 x 47-72 |
| LXT 437A | A | 437 | 842 | 16 | 63 | |
| LXT 50A | A | 48 | 733 | 4 | 32 | |
| LXT 535A | A | 510 | 1036 | 16 | 63 | Actually 1560 x 11 x 47-72 |
| MXT 340A(L) | A | 340 | 654 | 16 | 63 | |
| MXT 540A(L) | A | 511 | 1050 | 16 | 63 | Try 780 x 22 x 63 |
| MXT 1240AL | A | 1240 | | 16 | 63 | 2512 x 15 x 44-85 |
| VL20 | A4 | 20000 | | | | |
| EXT 4125* | E | | | | | |
| EXT 4175* | E | 234 | 1224 | 11 | 34 | |
| EXT 4280E* | E | 157 | 1224 | 7 | 34 | |
| EXT 4380E* | E | 319 | 1224 | 15 | 34 | |
| XT 3130E** | E | 112 | 1224 | 5 | 36 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------------|------|----------|------|-----|-------|-------------------------------|
| XT 3170E | E | 172 | 1224 | 9 | 36 | |
| XT 3180E** | E | 150 | 1224 | 7 | 36 | |
| XT 3280E | E | 269 | 1224 | 15 | 36 | |
| XT 3380E | E | 338 | 1224 | 15 | 36 | 35 SpT on older drives;H/sect |
| XT 4000E | E | | | | | |
| XT 4170E* | E | 158 | 1224 | 7 | 36 | |
| XT 4175E | E | 150 | 1224 | 7 | 35 | |
| XT 4230E* | E | 203 | 1224 | 9 | 36 | |
| XT 4280E | E | 244 | 1224 | 11 | 36 | |
| XT 4380E* | E | 338 | 1224 | 15 | 36 | |
| XT 81000E | E | 890 | 1632 | 15 | 71 | |
| XT 8380E(H)* | E | 361 | 1632 | 8 | 52 | |
| XT 8610E | E | 541 | 1632 | 12 | 52 | |
| XT 8760E(H)* | E | 676 | 1632 | 15 | 54 | |
| XT 8800E | E | 695 | 1274 | 15 | 71 | |
| XT 9380E** | E | 322 | 1224 | 15 | 36 | 10 MHz |
| XT 9780E** | E | 676 | | | | |
| XT 1050* | M | 38 | 902 | 5 | 17 | |
| XT 1065* | M/R | 56/85 | 918 | 7 | 17/26 | ATs—disable J1/2 |
| XT 1085* | M/R | 72/109 | 1024 | 8 | 17/26 | |
| XT 1105* | M/R | 88/134 | 918 | 11 | 17/26 | 1024x11x17 Phoenix BIOS |
| XT 1140* | M/R | 120/204 | 918 | 15 | 17/26 | |
| XT 1140E | M | 131 | 1024 | 15 | 17 | |
| XT 1160M | M | 127 | 1024 | 15 | 17 | |
| XT 1170 | M | | 918 | 11 | 17 | |
| XT 1190 | M | 150 | 1224 | | 17 | |
| XT 1240 | M | 73 | 1224 | 7 | 17 | |
| XT 2085* | M | 70 | 1224 | 7 | 17 | ATs—disable J1/2 |
| XT 2140* | M | 117 | 1224 | 11 | 17 | |
| XT 2190* | M/R | 160/244 | 1224 | 15 | 17/26 | |
| XT 3053** | M | 44 | 1224 | 5 | 17 | |
| XT 3085** | M | 68 | 1224 | 7 | 17 | |
| XT 4380 | M | 156 | 1224 | 15 | 17 | |
| XT 8760 | M | 209 | 1632 | 15 | 17 | |
| RHT-800HS | O | 393/786 | | | | WORM |
| RXT-800HS | O | 393/786 | | | | Write Only |
| RXT-HD | O | 2500 | | | | Write Only |
| T3-1300 | O | 1300 | | | | |
| T4-1300 | O | 1300 | | | | |
| T4-2600 | O | 2600 | | | | |
| Tahiti II | O | 652/1024 | | | | |
| Tahiti SD | O | 652/1024 | | | | |
| Tahiti TMT-I | O | 652/1024 | | | | |
| Tahiti TMT-II | O | 652/1024 | | | | |
| MobileMAX Flash 1.0 | P | .9 | | | | Flash |
| MobileMAX Flash 10.2 | P | 10 | | | | Flash |
| MobileMAX Flash 12.5 | P | 11 | | | | Flash |
| MobileMAX Flash 16.7 | P | 15 | | | | Flash |
| MobileMAX Flash 2 | P | 2 | | | | Flash |
| MobileMAX Flash 20.9 | P | 20 | | | | Flash |
| MobileMAX Flash 4.1 | P | | | | | Flash |
| MXL 105 | P3 | 100 | 810 | 15 | 17 | Try 802 x 8 x 32 |
| MXL 131 | P3 | 125 | 1008 | 15 | 17 | 1534 x 4 x 28-50 |
| MXL 171 | P3 | 163 | 656 | 15 | 34 | |
| MXL 262 | P3 | 251 | 1008 | 15 | 34 | |
| XT 1120R* | R | 107 | 1024 | 8 | 26 | |
| XT 1140R | R | 183 | 918 | 15 | 26 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|-------|------|------|-----|--------|----------------------|
| XT 1240R* | R | 201 | 1024 | 15 | 26 | |
| 25128S Apache | S | 128 | 1092 | 4 | 30-60 | |
| 25252S | S | 252 | 1418 | 6 | 43-67 | |
| 2585S Apache | S | 83 | 1092 | 4 | 24-48 | |
| 4000S | S | | | | | |
| 7040S | S | 41 | 1155 | 2 | 36 | |
| 7060S | S | 65 | 1156 | 2 | 42 | |
| 7080S | S | 81 | 1155 | 4 | 36 | |
| 7120S | S | 130 | 1156 | 4 | 42 | |
| 7130S | S | 130 | 1516 | 4 | 42 | |
| 7170S | S | | | | | |
| 7213S(R) Chey | S | 213 | 1698 | 4 | 42 | |
| 7245S | S | 245 | 1944 | 4 | 48-72 | |
| 7290S | S | 290 | 1751 | 4 | 72-114 | |
| 7345S | S | 345 | 2219 | 4 | 57-96 | |
| 7546S | S | 546 | 2769 | 4 | 72-114 | |
| 8051S | S | 45 | 793 | 4 | 28 | Microcode 1222C+ |
| | | 42 | 739 | 4 | 28 | Microcode 1250C+ |
| 8425S | S | 21 | 612 | 4 | 17 | MFM |
| 9380S | S | 337 | 1218 | 15 | 36 | |
| 9780S | S | 676 | 1661 | 15 | 53 | |
| LXT 100S | S | 96 | 733 | 8 | 32 | |
| LXT 200S | S | 207 | 1314 | 7 | 45 | |
| LXT 213S | S | 213 | 1560 | 7 | 34-56 | AKA 7213 from Arrow? |
| LXT 213SY | S | 213 | 1320 | 7 | 34-56 | |
| LXT 340S(H)(Y) | S(-2) | 340 | 1560 | 7 | 47-72 | Discontinued |
| LXT 437S | S | 437 | 1560 | 9 | | |
| LXT 50S | S | 48 | 733 | 4 | 32 | |
| LXT 535SY | S | 535 | 1560 | 11 | 47-72 | Discontinued |
| MXT 1240S | S-2F | 1240 | 2512 | 15 | 44-85 | |
| MXT 340S(L) | S-2 | 340 | | | | |
| MXT 540S(L) | S-2 | 546 | 2616 | 7 | 46-78 | SL=slimline |
| MXT 4380S | S | 338 | 1224 | 15 | 36 | |
| MXT PQ-125 | S | 1000 | | | | |
| RXT 800S | S | 786 | | 2 | | WORM |
| XT 3130S** | S | 112 | 1255 | 5 | 36 | |
| XT 3170S | S | 266 | 1224 | 9 | 48 | |
| XT 3180S** | S | 153 | 1255 | 7 | 36 | |
| XT 3280S | S | 415 | 1224 | 15 | 45 | |
| XT 3380S | S | 380 | 1224 | 15 | 36 | |
| XT 4170S* | S | 157 | 1224 | 7 | 36 | |
| XT 4280S | S | 244 | 1224 | 11 | 36 | |
| XT 4380S* | S | 332 | 1224 | 15 | 36 | |
| XT 670S | S | 670 | | | | |
| XT 8360S | S | 360 | | | | |
| XT 8380S(H)* | S(-2) | 360 | 1632 | 8 | 54 | |
| XT 8702S | S | 617 | 1490 | 15 | 54 | |
| XT 8760S(H)* | S(-2) | 676 | 1632 | 15 | 54 | |

25084A/25252A

| | |
|---------|----------|
| Single: | J 301 |
| Master: | J 301 |
| Slave: | J301 out |

25128A/2585A

| | |
|---------|----------|
| Single: | J308 |
| Master: | J308 |
| Slave: | J308 out |

7040A/7060A/7080A/7120A/7130A

| | |
|---------|---------|
| Single: | J20/J19 |
| Master: | J20 |
| Slave: | J19 |

J17 sets model no: In=7080/7120
 J14/13 should be out.
 Try J20 other way round, as some drives were made for IBM that way.

7131A/7170A/7213A/7245A/7345A**/7546/7405**

| | |
|---------|-----------------|
| Single: | J20 |
| Master: | J20 |
| Slave: | J20 off (J19**) |

Try J20 other way round, as some drives were made for IBM that way.

7171A

| | |
|---------|---------|
| Single: | J20 |
| Master: | J20 |
| Slave: | J20 off |

J16=I/O CHRDY (on=enabled)
 J17=ECC (on=4 byte; off=11 byte)
 J18=Low power spin (on=enabled)
 J19=Reserved
 J22=Compatibility (on=enabled)
 J23=Write cache (on=enabled)
 J24=CS (on=enabled)

80875A, 81312A, 81750A, 82187A, 82625A, 83062A, 83500A

| | |
|---------|---------|
| Single: | J50 On |
| Master: | J50 On |
| Slave: | J50 Off |

CS enable J48 on
 Cache disable J46 on
 4092 cyls J42 on
 42 is next to pwr connector Set as type 9 in BIOS; should be 900/15/17.

85120A8/84000A6/83840A6/82560A4/81280A2

| | |
|---------|---------|
| Single: | J50 On |
| Master: | J50 On |
| Slave: | J50 Off |

CS=J48 (remove J50)

LXT200A/213A/340A/535A

| | |
|---------|-------------------------------|
| Single: | 1&2 out 5&6 out 7&8 out |
| Master: | 1&2 out 5&6 out 7&8 in |
| Slave: | 1&2 in 7&8 out |

7850/7546/71050A/71260AV/7270AV/7273A/7420AV/72004/71670/71626/71336/71084/7541/7540/7420/7135

| | |
|---------|---------|
| Single: | J20 |
| Master: | J20 |
| Slave: | J20 off |

J21/25=Reserved J22=1046 cyls (off) 1024 (on)
 J23=Write cache (en=on) J24=CS

DiamondMax

| | |
|-----|--------------------------|
| J50 | Master/Slave |
| J48 | Cable Select |
| J46 | 4092 cylinder limitation |
| J44 | Reserved |
| J42 | Reserved |

540AL

| | |
|----------------|---------|
| Single: | 1-2 out |
| Master: | 1-2 out |
| Slave: | 1-2 in |
| Write protect: | JP4 out |

1240S/540S/340S

| ID (J6) | 5-6 | 3-4 | 1-2 |
|---------|-----|-----|-----|
| 0 | O | O | O |
| 1 | O | O | J |
| 2 | O | J | O |
| 3 | O | J | J |
| 4 | J | O | O |
| 5 | J | O | J |
| 6 | J | J | O |
| 7 | J | J | J |

Pins 7-8 parity; in=enabled.
 Pins 9-10 motor start with pwr (0=wait)
 JP 4 0=Write protect
 JP 7 3-4 On=Single-ended.
 1-2, 5-6, 7-8, 9-10, 11-12 On=Diff
 JP 8 Leave jumped

7290S/7345S

| ID | J307 | 308 | 309 |
|----|------|-----|-----|
| 0 | 0 | 0 | 0 |
| 1 | 0 | 0 | 1 |
| 2 | 0 | 1 | 0 |
| 3 | 0 | 1 | 1 |
| 4 | 1 | 0 | 0 |
| 5 | 1 | 0 | 1 |
| 6 | 1 | 1 | 0 |

3130S/3180S

| ID (601) | 1-2 | 3-4 | 5-6 |
|----------|-----|-----|-----|
| 0 | 0 | 0 | 0 |
| 1 | 0 | 0 | 1 |
| 2 | 0 | 1 | 0 |

| ID (601) | 1-2 | 3-4 | 5-6 |
|----------|-----|-----|-----|
| 3 | 0 | 1 | 1 |
| 4 | 1 | 0 | 0 |
| 5 | 1 | 0 | 1 |
| 6 | 1 | 1 | 1 |

| Secs/track | J12 | J13 |
|------------|-----|-----|
| 34 | 1 | 0 |
| 35 | 0 | 0 |
| 36 | 0 | 1 |

J 510, 21, 20, 14, 27, 2, 13, 24, 30, 29 = defaults.

Maxtor 4000E

| | |
|------------|---|
| JP1 (IN) | Factory testing |
| JP6 (IN) | IN = Remote spinup disabled OUT = Remote spinup enabled |
| DS1-DS7 | Drive select (Default= 1) |
| JP14 (OUT) | IN= Write protected |
| JP16-JP29 | Programable sector size |
| JP30 (IN) | Enables hard sector mode |
| JP31 (OUT) | Enables soft sector mode |
| JP32-35,38 | Factory settings for head select |
| JP41 | Factory test (not configurable) |
| JP42 (IN) | Factory testing |
| JP45 | Conversion to short INDEX 1,2= Standard INDEX (70mS) 2,3= Short INDEX (3mS) |

| Jumper | Bytes/Sector |
|--------|--------------|
| JP 16 | 1 |
| JP 17 | 2 |
| JP 18 | 4 |
| JP 19 | 8 |
| JP 20 | 16 |
| JP 21 | 32 |
| JP 22 | 64 |
| JP 23 | 128 |
| JP 24 | 256 |
| JP 25 | 512 |
| JP 26 | 1024 |
| JP 27 | 2038 |
| JP 28 | 4096 |
| JP 29 | 8192 |

E.G. 20,940 bytes/track/36 sectors=581 b/sector
Install jumpers 25, 22, 18, 15

Maxtor 7245S/7213S

| Jumper | Function |
|--------|-------------------------|
| J301 | Terminator Power |
| J302 | Power Up Option |
| J303 | Disable Parity |
| J304 | Reserved |
| J305 | Reserved |
| J306 | Reserved |
| J307 | Target ID Address (MSB) |
| J308 | Target ID Address |
| J309 | Target ID Address (LSB) |

| ID | J307 | J308 | J309 |
|----|------|------|------|
| 0 | O | O | O |
| 1 | O | O | J |
| 2 | O | J | O |
| 3 | O | J | J |
| 4 | J | O | O |
| 5 | J | O | J |
| 6 | J | J | O |
| 7 | J | J | J |

XT 8800E

| Sec Size | Bytes/Sec | Jumpers |
|----------|-----------|----------------------|
| 69 | 606 | 17,18,19,20,22,25,30 |
| 70 | 598 | 17,18,20,22,25,30 |
| 71 | 590 | 17,18,19,22,25,30 |

Drive select jumpers are DS1-DS7, by data cables. Terminating resistors are next to the drive select jumpers. Jumpers 16-30 are near the center of the circuit board. They are not all labeled, only 24 may be listed. UltraStor 12F and DTC-6282-24 work fairly well with this drive.

4000S series (4170/4280/4380)

| ID | JP37 | JP-36 | JP35 |
|----|------|-------|------|
| 0 | O | O | O |
| 1 | O | O | 1 |
| 2 | O | 1 | O |
| 3 | O | 1 | 1 |
| 4 | 1 | O | O |
| 5 | 1 | O | 1 |
| 6 | 1 | 1 | O |
| 7 | 1 | 1 | 1 |

| Power Up | JP14 | JP38 | Mode |
|----------|------|--------|----------------|
| | O | O | ID sequence |
| | O | 1 | Wait for start |
| | 1 | 1 or O | When pwr on |

JP18 is write protect. JP 40 is parity

| Term Power | JP41 | JP34 | JP41/34 | From drive | From Bus | Both |
|------------|------|------|---------|------------|----------|------|
| | 1 | 1 | | | | |
| | | 1 | 1 | | | |
| | | | 1 | | | |

Maxtor 7000 series

| Jumper | Pins | Function |
|--------|------|-------------------------|
| J601 | | Terminator Power |
| J60 | | Diagnostic (factory) |
| J604 | | Reserved |
| J605 | | Disable Parity |
| J602 | 1-2 | Power-up Option |
| J602 | 3-4 | Not Used |
| J602 | 5-6 | Target ID Address (MSB) |
| J602 | 7-8 | Target ID Address |
| J602 | 9-10 | Target ID Address (LSB) |

| ID | J602 | J602 | J602 |
|----|------|------|------|
| | 5-6 | 7-8 | 9-10 |
| 0 | O | O | O |
| 1 | O | O | J |
| 2 | O | J | O |
| 3 | O | J | J |
| 4 | J | O | O |
| 5 | J | O | J |
| 6 | J | J | O |
| 7 | J | J | J |

LXT 200S/213SY/340/535

| ID (J6) | 5-6 | 3-4 | 1-2 |
|---------|-----|-----|-----|
| 0 | O | O | O |
| 1 | O | O | J |
| 2 | O | J | O |
| 3 | O | J | J |
| 4 | J | O | O |
| 5 | J | O | J |
| 6 | J | J | O |
| 7 | J | J | J |

Pins 7-8 are parity; in=enabled. 9-10 are motor start.

8760S(H)/8380SH

| J2 | 5 | 4 | 3 |
|----|---|---|---|
| 7 | 1 | 1 | 1 |
| 6* | 0 | 1 | 1 |
| 5 | 1 | 0 | 1 |
| 4 | 0 | 0 | 1 |
| 3 | 1 | 1 | 0 |
| 2 | 0 | 1 | 0 |
| 1 | 1 | 0 | 0 |
| 0 | 0 | 0 | 0 |

- 14 in Spin when power applied
- 18 out WP enabled
- 34 out Term power from bus
- 38 out Spin delay
- 40 in Parity
- 41 in Term power from drive

9380S

| ID (601) | 1 | 3 | 5 |
|----------|---|---|---|
| 0 | 0 | 0 | 0 |
| 1 | 0 | 0 | 1 |
| 2 | 0 | 1 | 0 |
| 3 | 0 | 1 | 1 |
| 4 | 1 | 0 | 0 |
| 5 | 0 | 1 | |
| 1 | | | |
| 6 | 1 | 1 | 0 |
| 7 | 1 | 1 | 1 |

- Parity 602-2 On
- Term (701) 1 2
- Local 1 0
- Remote 0 1

Maxtor Panther

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------|------|------|------|-----|-----|--------------|
| P1-08E | E | 696 | 1778 | 9 | 85 | |
| P1-12E | E | 1051 | 1216 | 15 | 85 | |
| P1-13E | E | 1160 | 1778 | 15 | 85 | |
| P1-16E | E | 1331 | 1778 | 19 | 85 | |
| P1-17E | E | 1470 | 1778 | 19 | 85 | |
| P0-12S | S-2 | 1029 | 1632 | 15 | 82 | Discontinued |
| P0 17S | S | 1503 | 1778 | 19 | 82 | Discontinued |
| P1-08S | S-2 | 664 | 1778 | 9 | 85 | |
| P1-12S | S-2 | 989 | 1254 | 19 | 85 | |
| P1-17S | S-2 | | 1778 | 19 | 82 | Discontinued |
| P2-08S | S-2 | 664 | 1778 | 7 | 85 | |
| P2-12S | S-2 | 1065 | 1254 | 15 | 102 | |
| P2-17S | S-2 | 1424 | 1778 | 15 | 85 | |
| P1-12 | SMDE | 1065 | 1778 | 15 | 78 | |
| P1-13 | SMDE | 1161 | 1776 | 15 | 85 | |

Maxtor Panther P0-12S

| Jumper | Description |
|----------|---|
| JP 2 | In=Write Protected Out=Read and Write* |
| JP 5 | In=Slave Sync. Termination* |
| JP 6 | In=Master Sync. Termination |
| JP10 | In=Term Power supplied by Host |
| JP11 | In=Term Power supplied by Drive |
| J2 Pins: | 1 & 2 Remote LED |
| | 3 & 4 Parity enable=Off |
| | 5 & 6 MSB Drive ID. Value =4 |
| | 7 & 8 Drive ID. Value =2 |
| | 9 & 10 LSB Drive ID. Value =1 |

For ID 6, Pins 5-6 and 7-8 should be jumpered.

For ID 0, 5-6, 7-8 and 9-10.

All others should be factory set and should not be changed.

Maxtor Panther P1-17S

| | |
|---------|---|
| JP 2 | In=Write Protected Out=Read and Write* |
| JP 5 | In=Slave Sync. Termination* |
| JP 6 | In=Master Sync. Termination |
| JP10 | In=Term Power supplied by Host |
| JP11 | In=Term Power supplied by Drive |
| JP 13 | In= Parity Disabled |
| J2 Pins | 1 & 2 MSB Drive ID. Value=4 |
| | 3 & 4 Drive ID. Value=2 |
| | 5 & 6 LSB Drive ID. Value=1 |
| | 7 & 8 Write Protect. In=Enabled |
| | 9 & 10 Remote LED |

| JP1 | JP12 | |
|-----|------|---------------------------------|
| O | O | Start by ID Sequence |
| O | J | Start Motor after 11-13 seconds |
| J | O | Wait for Motor Start Command |
| J | J | Start motor when power applied |

MDI

Micro Design International

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------|------|------|------|-----|-----|--------------|
| 1000HD | S-2 | 1000 | | | | SCSI Express |
| 2000HD | S-2 | 2000 | | | | SCSI Express |
| 4000HD | S-2 | 4000 | | | | SCSI Express |
| 5300HD | S-2 | 5300 | | | | |
| 1200F | S | 1200 | | | | Laserbank |

Megadrive

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------|------|------|------|-----|-----|-------|
| M1-120 | S | 105 | 1219 | 4 | | |
| M1-120 | S | 122 | 1818 | 2 | | |
| M1-240 | S | 245 | 1818 | 4 | | |
| M1-52 | S | 52 | 1219 | 2 | | |
| MH 1G | S | 1050 | 1974 | 13 | | |
| MH 340 | S | 338 | 1100 | 9 | | |
| MH 425 | S | 426 | 1520 | 9 | | |
| MH 535 | S | 525 | 1476 | 9 | | |
| P 105 | S | 105 | 1019 | 6 | 33 | |
| P 120 | S | 120 | 1123 | 5 | 33 | |
| P 170 | S | 170 | 1123 | 7 | 33 | |
| P 210 | S | 210 | 1156 | 7 | 33 | |
| P 320 | S | 320 | 886 | 15 | 33 | |
| P 42 | S | 42 | 834 | 3 | 33 | |
| P 425 | S | 425 | 1512 | 9 | 33 | |
| P 84 | S | 84 | 834 | 6 | 33 | |

Memorex

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|-------|------|-----|-------|-------|
| 306 | M | 6 | | 4 | 17 | |
| 310 | M | 10 | | 6 | 17 | |
| 313 | M | 13 | | 6 | 17 | |
| 321 | M/R | 5/8 | 320 | 2 | 17/26 | |
| 322 | M/R | 11/17 | 320 | 4 | 17/26 | |
| 323 | M/R | 15/25 | 320 | 6 | 17/26 | |
| 324 | M/R | 20/34 | 320 | 8 | 17/26 | |
| 450 | M/R | 10/16 | 612 | 2 | 17/26 | |
| 510 | M | 30 | | 4 | 17 | |
| 510 | M | 50 | | 6 | 17 | |
| 510 | M | 70 | | 8 | 17 | |
| 512 | M/R | 25/38 | 961 | 3 | 17/26 | |
| 513 | M/R | 41/67 | 961 | 5 | 17/26 | |
| 514 | M/R | 58/76 | 961 | 7 | 17/26 | |
| 70323 | M | 16 | 320 | 6 | 17 | |

Memory International

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------|------|-----|------|-----|-----|-------|
| Pocketdrive | P3 | 170 | | | | |
| Pocketdrive | P3 | 260 | | | | |

Memtech

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------|------|-----|------|-----|-----|-------------|
| I2596 | A | 96 | 614 | 10 | 32 | Solid State |
| PCB 902 | P | 2 | 32 | 4 | 32 | Solid State |
| PCE 910 | P | 8 | 256 | 4 | 16 | Solid State |
| PCF 912 | P | 4 | 128 | 4 | 16 | Solid State |
| PCF 914 | P | 4 | 128 | 4 | 16 | Solid State |
| PCF 932 | P | 32 | 2048 | 2 | 32 | Solid State |
| SC 3524 | S-2 | 432 | | | | Solid State |
| SC 3548 | S-2 | 432 | | | | Solid State |
| SSD 903 | S | 4 | 128 | 4 | 16 | Solid State |
| SSD 920 | S | 12 | | | | |
| SSD 924 | S-2 | 24 | | | | Solid State |

Micro Design International

See MDI

Microcomputer Memories

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|-----|------|-----|-----|-------|
| M 112 | M | 10 | 306 | 4 | 17 | |
| M 125 | M | 21 | 306 | 8 | 17 | |
| M 212 | M | 10 | 306 | 4 | 17 | |
| M 225 | M | 21 | 306 | 8 | 17 | |
| M 312 | M | 10 | 306 | 4 | 17 | |
| M 325 | M | 21 | 306 | 8 | 17 | |

Micronet Computer Systems Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------|------|-----|------|-----|-----|-------|
| EPS 100 | S | 100 | | | | |
| EPS 200 | S | 200 | | | | |
| EPS 40 | S | 40 | | | | |
| EPS 87 | S | 87 | | | | |

MicroNet Technology Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|------|------|------|-----|-----|-------|
| ADV 1000E(I) | S-2F | 1000 | | | | I=Mac |
| ADV 2000E(I) | S-2 | 2000 | | | | I=Mac |
| AT 1000 | S | 1035 | | | | |
| AT 1010/RA | S-2F | 1010 | | | | |
| AT 104/SP01 | S | 105 | | | | |
| AT 105 | S | 110 | | | | |
| AT 1300 | S | 1320 | | | | |
| AT 173 | S | 180 | | | | |
| AT 2060/RA | S-2F | 2060 | | | | |
| AT 2070/RA | S-2F | 2070 | | | | |
| AT 2120/W | S2FW | 2050 | | | | |
| AT 303 | S | 323 | | | | |
| AT 330 | S | 330 | | | | |
| AT 40/SP01 | S | 42 | | | | |
| AT 404 | S | 433 | | | | |
| AT 4050/RA | S-2F | 4050 | | | | |
| AT 4060/RA | S-2F | 4060 | | | | |
| AT 660 | S | 660 | | | | |
| AT 670 | S | 670 | | | | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------|------|------|------|-----|-----|--------------|
| AT 8640/RA | S-2F | 8640 | | | | |
| CPK 100 | S | 103 | | | | |
| CPK 200 | S | 200 | | | | |
| CPK 40p | S | 42 | | | | |
| DDM 1000 | S-2 | 1000 | | | | |
| DDM 2000 | S-2 | 2000 | | | | |
| DDM 2120W | S2FW | 2120 | | | | |
| DDM230M0 | S-2 | 230 | | | | |
| DDM 270R | S | 270 | | | | |
| DDM 4050 | S-2F | 4050 | | | | |
| DDM 4100W | S2FW | 4100 | | | | |
| MCI 40P | S | 40 | | | | Mac (Conner) |
| MCI 80P | S | 80 | | | | Mac (Maxtor) |
| MS 105 | S | 110 | | | | |
| MS 173 | S | 180 | | | | |
| PS 105 | S | 110 | | | | |
| PS 173 | S | 180 | | | | |
| PS 404 | S | 433 | | | | |
| PS 660 | S | 660 | | | | |
| PS 670 | S | 670 | | | | |
| Q8i 2070 | S-2F | 2070 | | | | Mac |
| Q9i 2070 | S-2F | 2070 | | | | Mac |
| Q9i 4050 | S-2F | 4050 | | | | |
| Q9i 8640 | S-2F | 8640 | | | | |
| SB 1000 | S | 1011 | | | | |
| SB 1000N | S | 1035 | | | | |
| SB 105 | S | 110 | | | | |
| SB 1300 | S | 1309 | | | | |
| SB 1300N | S | 1334 | | | | |
| SB 173 | S | 180 | | | | |
| SB 303 | S | 312 | | | | |
| SB 330 | S | 331 | | | | |
| SB 330n | S | 327 | 327 | | | |
| SB 404 | S | 423 | | | | |
| SB 404n | S | 433 | | | | |
| SB 644 | S | 644 | | | | |
| SB 644NPR | S | 606 | | | | |
| SB 660 | S | 660 | | | | |
| SB 663n | S | 663 | | | | |
| SB 669n | S | 669 | | | | |
| SB 670 | S | 670 | | | | |
| SB 808NPR | S | 808 | | | | |
| SB 8640 | S-2F | 8640 | | | | |
| SB 8670 | S-2F | 8670 | | | | |
| SBT 1288NP | S | 1288 | | | | |
| SBT 1350 | S | 1350 | | | | |
| SBT 2000 | S | 2000 | | | | |
| SBT 2002NP | S | 2022 | | | | |
| SBT 2600NP | S | 2613 | | | | |
| SS 1010/RA | S-2F | 1010 | | | | |
| SS 2060/RA | S-2F | 2060 | | | | |
| SS 2070 | S-2 | 2037 | | | | |
| SS 2120/W | S2FW | 2050 | | | | |
| SS 4050 | S-2 | 4050 | | | | |
| SS 4060/RA | S-2F | 4060 | | | | |
| SS 4070 | S-2F | 4070 | | | | |
| SSW 2120 | S2FW | 2050 | | | | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|------|------|-----|-----|-------|
| SSW 4100 | S2FW | 4100 | | | | |

Micropolis

Bought by Singapore Technologies in March 1995. Original company now trading as Stream Logic.

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------------|------|------|------|-----|-----|-------------------|
| 1743-5 | A | 138 | 1140 | 5 | 48 | |
| 1744-6 | A | 165 | 1140 | 6 | 48 | |
| 1744-7 | A | 193 | 1140 | 7 | 48 | |
| 1745-8 | A | 220 | 1140 | 8 | 48 | |
| 1745-9 | A | 248 | 1140 | 9 | 48 | |
| 2105A-5 | A | 557 | 1085 | 16 | 63 | 1747 x 8 x 58-94 |
| 2108A | A | 666 | 1745 | 10 | 63 | |
| 2112A-15 | A | 1050 | 2034 | 16 | 63 | Try 837x30x77 |
| 2205AT-5 | A | 584 | 1050 | 16 | 63 | |
| 2210AT-9 | A | 976 | 1891 | 16 | 63 | |
| 2217AT | A | 1626 | 3152 | 16 | 63 | |
| 4110A | A | 1052 | 2048 | 16 | 63 | Taurus |
| 4525A Mustang | A | 2500 | 4846 | 16 | 63 | |
| Mustang | A | 4000 | | | | |
| Mustang | A | 5000 | | | | |
| 1352 | E | 32 | 1024 | 2 | 36 | |
| 1352A | E | 41 | 1024 | 3 | 36 | |
| 1353 | E | 75 | 1024 | 4 | 36 | |
| 1353A | E | 94 | 1024 | 5 | 36 | PS/2 60-071 equiv |
| 1354 | E | 113 | 1024 | 6 | 36 | |
| 1354A | E | 132 | 1024 | 7 | 36 | PS/2 80-071 equiv |
| 1355 | E | 151 | 1024 | 8 | 36 | |
| 1516-10S | E | 666 | 1840 | 10 | 72 | |
| 1517-13 | E | 922 | 1925 | 13 | 72 | |
| 1517-14 | E | 981 | 1925 | 14 | 72 | |
| 1517-15 | E | 1051 | 1925 | 15 | 72 | |
| 1518-14 | E | 976 | 1925 | 14 | 72 | |
| 1518-15 | E | 1341 | 2104 | 15 | 83 | |
| 1538-15 | E | 910 | 1669 | 15 | 71 | |
| 1525-38 | E | 1000 | | | | |
| 1554-07 | E | 158 | 1224 | 7 | 36 | |
| 1555-08 | E | 180 | 1224 | 8 | 36 | |
| 1555-09 | E | 202 | 1224 | 9 | 36 | |
| 1556-10 | E | 225 | 1224 | 10 | 36 | |
| 1556-11 | E | 247 | 1224 | 11 | 36 | |
| 1556-13 | E | 271 | 1224 | 13 | 36 | |
| 1557-12 | E | 270 | 1224 | 12 | 36 | |
| 1557-13 | E | 293 | 1224 | 13 | 36 | |
| 1557-14 | E | 310 | 1224 | 14 | 36 | |
| 1557-15 | E | 338 | 1224 | 15 | 36 | |
| 1558-14 | E | 315 | 1224 | 14 | 36 | |
| 1558-15 | E | 338 | 1224 | 15 | 36 | |
| 1560-8S | E | 389 | 1632 | 8 | 54 | |
| 1564-07 | E | 315 | 1632 | 7 | 54 | |
| 1565-08 | E | 361 | 1632 | 8 | 54 | |
| 1565-09 | E | 406 | 1632 | 9 | 54 | |
| 1566-10 | E | 451 | 1632 | 10 | 54 | |
| 1566-11 | E | 496 | 1632 | 11 | 54 | |
| 1567-12 | E | 541 | 1632 | 12 | 54 | |
| 1567-13 | E | 586 | 1632 | 13 | 54 | |
| 1567-14 | E | 831 | 1632 | 14 | 54 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------|------|--------|------|-----|-------|-------------------|
| 1568-14 | E | 631 | 1632 | 14 | 54 | |
| 1568-15 | E | 676 | 1632 | 15 | 54 | |
| 1653-4 | E | 92 | 1249 | 4 | 36 | |
| 1653-5 | E | 115 | 1249 | 5 | 36 | |
| 1653-6 | E | 138 | 1249 | 6 | 36 | |
| 1653-7 | E | 161 | 1249 | 7 | 36 | |
| 1654-6 | E | 138 | 1249 | 6 | 36 | |
| 1654-7 | E | 161 | 1249 | 7 | 36 | |
| 1663-4 | E | 193 | 1780 | 4 | 54 | |
| 1663-5 | E | 242 | 1780 | 5 | 54 | |
| 1664-6 | E | 290 | 1780 | 6 | 54 | |
| 1664-7 | E | 344 | 1780 | 7 | 54 | |
| 1674-6 | E | 135 | 1249 | 6 | 36 | |
| 1674-7(HS) | E | 158 | 1249 | 7 | 36 | |
| 1743-5 | E | 111 | 1140 | 5 | 38 | |
| 1201 | M | 9 | | | | |
| 1202 | M | 26 | | | | |
| 1203 | M | 44 | | | | |
| 1221 | M | 8 | | | | |
| 1222 | M | 26 | | | | |
| 1223 | M | 44 | | | | |
| 1302 | M | 20 | 830 | 3 | 17 | |
| 1303 | M/R | 34/55 | 830 | 5 | 17/26 | RLL not certified |
| 1304 | M/R | 41/66 | 830 | 6 | 17/26 | RLL not certified |
| 1323 | M/R | 36/55 | 1024 | 4 | 17/26 | RLL not certified |
| 1323A | M/R | 45/66 | 1024 | 5 | 17/26 | RLL not certified |
| 1324 | M/R | 53/86 | 1024 | 6 | 17/26 | RLL not certified |
| 1324A | M/R | 62/96 | 1024 | 7 | 17/26 | RLL not certified |
| 1325BR | M/R | 71/109 | 1024 | 8 | 17/26 | RLL not certified |
| 1333 | M | 36 | 1024 | 4 | 17 | RLL not certified |
| 1333A | M/R | 44 | 1024 | 5 | 17/26 | PS/2 60-041 equiv |
| 1334 | M | 53 | 1024 | 6 | 17 | RLL not certified |
| 1334A | M/R | 62/91 | 1024 | 7 | 17/26 | PS/2 60-041 equiv |
| 1335 | M | 71 | 1024 | 8 | 17 | RLL not certified |
| 1353 | M/R | 34/65 | 1024 | 4 | 17/26 | |
| 1354 | M/R | 51/91 | 1024 | 6 | 17/26 | |
| 1355 | M | 68 | 1024 | 8 | 17 | |
| 1551 | M | 61 | 1024 | 7 | 17 | |
| 1554 | M | 115 | 1224 | 11 | 17 | |
| 1555 | M | 126 | 1224 | 12 | 17 | |
| 1556 | M | 136 | 1224 | 13 | 17 | |
| 1557 | M | 146 | 1224 | 14 | 17 | |
| 1558 | M | 157 | 1224 | 15 | 17 | |
| 1548 | M | 43 | 1024 | 5 | 17 | |
| 1372A | S | 52 | | | | |
| 1373 | S | 73 | 1024 | 4 | 36 | |
| 1373A | S | 91 | 1024 | 5 | 36 | |
| 1374 | S | 109 | 1024 | 6 | 36 | |
| 1374A | S | 128 | 1024 | 7 | 36 | |
| 1374-6 | S | 135 | 1245 | 6 | 36 | |
| 1375 | S | 146 | 1024 | 8 | 36 | |
| 1528(D)-15 | S-2 | 1342 | 2100 | 15 | 84 | |
| 1548(HS)-15 | S-2F | 1748 | 2099 | 15 | 84 | |
| 1571 | S | 160 | | | | |
| 1574-07 | S | 154 | 1224 | 7 | 36 | |
| 1575-08 | S | 177 | 1224 | 8 | 36 | |
| 1575-09 | S | 199 | 1224 | 9 | 36 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|------|------|------|-----|--------|-------------------------|
| 1576-10 | S | 221 | 1224 | 10 | 36 | |
| 1576-11 | S | 243 | 1224 | 11 | 36 | |
| 1577-12 | S | 265 | 1224 | 12 | 36 | |
| 1577-13 | S | 287 | 1224 | 13 | 36 | |
| 1578-14 | S | 310 | 1224 | 14 | 36 | |
| 1578-15 | S | 332 | 1224 | 15 | 36 | |
| 1579 | S | 677 | 1919 | 13 | 54 | |
| 1585-8S | S | 344 | 1628 | 8 | 54 | |
| 1586-11 | S | 486 | 1628 | 11 | 54 | |
| 1587-12 | S | 530 | 1628 | 12 | 54 | |
| 1587-13 | S | 575 | 1628 | 13 | 54 | |
| 1588-14 | S | 602 | 1632 | 14 | 54 | |
| 1588(D)(HS)15 | S | 668 | 1632 | 15 | 54 | |
| 1596-10S | S | 645 | 1834 | 10 | 72 | |
| 1597-10S | S | 498 | 1834 | 10 | 54 | |
| 1597-13 | S | 909 | 1919 | 13 | 72 | |
| 1598-14 | S | 936 | 1928 | 14 | 71 | |
| 1598(D)(HS)-15 | S-2 | 1035 | 1928 | 15 | 71 | |
| 1624-17 | S-2F | 668 | 2112 | 7 | 65-110 | |
| 1670-4 | S | 90 | 1245 | 4 | 36 | |
| 1670-5 | S | 90 | | | | |
| 1670-6 | S | 112 | | | | |
| 1670-7 | S | 135 | | | | |
| 1673-4 | S | 90 | 1249 | 4 | 36 | |
| 1673-5 | S | 112 | 1249 | 5 | 36 | |
| 1673-6 | S | 135 | 1249 | 6 | 36 | |
| 1673-7 | S | 156 | 1249 | 7 | 36 | |
| 1674-6 | S | 135 | 1249 | 6 | 36 | |
| 1674-7 | S | 157 | 1249 | 7 | 36 | |
| 1683-4 | S | 194 | 1777 | 4 | 54 | |
| 1683-5 | S | 242 | 1777 | 5 | 54 | |
| 1684-6 | S | 292 | 1777 | 6 | 54 | |
| 1684-7(HS) | S | 340 | 1777 | 7 | 54 | |
| 177-12 | S | 265 | 1220 | 12 | 36 | |
| 177-13 | S | 2387 | 1213 | 13 | 36 | |
| 1773-5 | S | 138 | 1140 | 5 | 48 | |
| 1774-6 | S | 160 | 1140 | 6 | 48 | |
| 1774-7 | S | 193 | 1140 | 7 | 48 | |
| 1775-8 | S | 220 | 1140 | 8 | 48 | |
| 1775-9 | S | 248 | 1140 | 9 | 48 | |
| 1908(D)(HS)-15 | S-2F | 1408 | 2089 | 15 | 71-94 | |
| 1924(D)(HS)-15 | S-2 | 2100 | 2280 | 21 | 71-94 | |
| 1926-15 | S-2 | 2158 | 2759 | 15 | | |
| 1936-15 | S-2F | 3022 | 2759 | 21 | 110 | |
| 1991AV(W) | S2FW | 9091 | 4461 | | Var | Scorpio 9 Audio Visual |
| 2100 | S-2F | 512 | 2759 | 15 | Var | |
| 2105-08 | S-2F | 560 | 1747 | 8 | 58-94 | |
| 2108-10 | S-2F | 698 | 1747 | 10 | 58-94 | |
| 2112-15 | S-2F | 1050 | 1747 | 15 | 58-94 | |
| 2116 | S-2F | 1400 | | | | |
| 2121 | S-2F | 1750 | | | | |
| 2205-5 | S-2F | 584 | 2360 | 5 | | |
| 2207-6 | S-2F | 700 | 2360 | 6 | | |
| 2210-9 | S-2F | 1050 | 2360 | 9 | | |
| 2217-15 | S-2F | 1750 | 2360 | 15 | | |
| 3020 | S-2F | 512 | 2759 | 21 | Var | |
| 3243AV/S(W) | S2FW | 4095 | 4124 | 19 | Var | Capricorn 4 AV 7200 RPM |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|-------|------|------|-----|--------|-------------------------|
| 3391 | S-2 | 4300 | 4811 | 11 | 76-125 | Same as 4345 |
| 4110 | S-2 | 1050 | | | | |
| 4210 | S-2 | 1001 | | | | 7200 RPM |
| 4221AV/S(W) | S2FW | 1955 | 4150 | | | Taurus 2 AV 7200 RPM |
| 4300 | | | | | | Stinger 5400 RPM |
| 4345NS | S-2 | 4300 | 4811 | 11 | 76-125 | Tomahawk – same as 3391 |
| 4421 | S-2 | 2150 | | | | Aries 2 |
| FH-3-777 | S | 688 | | | | GigaFile |
| FH-31200 | S | 1062 | | | | GigaFile |
| MIC 3391WS | S(UW) | 9100 | | | | 7200 RPM |
| Microdisk 1000 | S-2 | 1100 | | | | |
| Microdisk 1030 | S | 1036 | 1922 | 15 | 71 | |
| Microdisk 1050 | S-2 | 1100 | | | | |
| Microdisk 1340 | S | 1340 | 2094 | 15 | 84 | |
| Microdisk 1700 | S-2 | 1700 | | | | |
| Microdisk 1750 | S | 1748 | 2089 | 15 | 83-131 | |
| Microdisk 1760 | S-2 | 1700 | | | | |
| Microdisk 2100 | S-2 | 2100 | 2280 | 21 | 71-94 | Microplis 1924 |
| Microdisk 3020 | S-2 | 3000 | | | | |
| Microdisk 340 | S | 340 | 1774 | 7 | 54 | |
| Microdisk 4100 | S-2 | 1100 | | | | |
| Microdisk 670 | S | 667 | 1632 | 15 | 54 | |
| Raidion 2x340 | S | 340 | 1776 | 7 | 54 | |
| Raidion 2x670 | S-2F | 670 | 2099 | 7 | 65-110 | |
| Raidion 2x1030 | S | 1030 | 1922 | 15 | 71 | |
| Raidion 2x1340 | S | 1340 | 2094 | 15 | 84 | |
| Raidion 2x1750 | S-2F | 1750 | 2096 | 15 | 83-131 | |
| Raidion 2x2100 | S-2F | 2100 | 2280 | 21 | 71-94 | |
| Raidion 680 | S | 680 | 1776 | 7 | 54 | |
| Raidion 1340 | S-2F | 1300 | 2099 | 7 | 65-110 | |
| Raidion 2060 | S | 2100 | 1922 | 15 | 71 | |
| Raidion 2680 | S | 2600 | 2094 | 15 | 84 | |
| Raidion 3500 | S | 3500 | 2096 | 15 | 83-131 | |
| Raidion 4200 | S | 4200 | 2280 | 21 | 71-94 | |
| RM 340 | S | 340 | 1776 | 7 | 54 | Raidion Module |
| RM 670 | S-2F | 670 | 2099 | 7 | 65-110 | Raidion Module |
| RM 680 | S | 340 | | | | |
| RM 1030 | S-2 | 1030 | 1922 | 15 | 71 | Raidion Module |
| RM 1340 | S-2 | 1340 | 2094 | 15 | 84 | Raidion Module |
| RM 1750 | S-2F | 1750 | 2096 | 15 | 83-131 | Raidion Module |
| RM 2100 | S-2F | 2100 | 2280 | 21 | 71-94 | Raidion Module |

Micropolis 1300/1320/1330 (MFM)

| | |
|------------|----------------------------------|
| DS1, 2, 3 | Drive Select |
| W1 | Write fault latch—remove for ATs |
| W2, W7, W8 | Always installed |

| | | | | | | | |
|-----------|-----------------------------------|----|------|------|------|------|--|
| W5 | Spindle control (out for ATs) | | | | | | |
| W1 | Sectoring mode (out for ATs—hard) | | | | | | |
| Sect size | | | | | | | |
| W4 | W3 | W2 | 1650 | 1518 | 1538 | 1568 | |
| | | | | 1558 | | 1664 | |
| 0 | 0 | 0 | 35 | 82 | 68 | 53 | |
| 0 | 0 | 1* | 36 | 83 | 71 | 54 | |

1350/1518/1538/1558/1568/1650/1664 (ESDI)

| ID | DA3 | DA2 | DA1 |
|----|-----|-----|-----|
| 1 | 0 | 0 | 1 |
| 2 | 0 | 1 | 0 |
| 3 | 0 | 1 | 1 |
| 4 | 1 | 0 | 0 |
| 5 | 1 | 0 | 1 |
| 6 | 1 | 1 | 0 |
| 7 | 1 | 1 | 1 |

4525A Mustang

| | |
|--------|------|
| Single | D |
| Master | D, C |
| Slave | None |

1624

| ID | ID2 | ID1 | ID0 |
|----|-----|-----|-----|
| 0 | 0 | 0 | 0 |
| 1 | 0 | 0 | 1 |
| 2 | 0 | 1 | 0 |
| 3 | 0 | 1 | 1 |
| 4 | 1 | 0 | 0 |
| 5 | 1 | 0 | 1 |
| 6 | 1 | 1 | 0 |
| 7 | 1 | 1 | 1 |

- W1 Terminator power from drive
- W2 Term power from host via pin 26
- W31 With above, drive does itself/bus.
- J2 7,8 Spindle control; Out=auto start (*)
- J2 13,14 Bus Parity; Out=drive generated
- J2 11,12 WP; Out=not write protected

22xx

See 1624 for ID

1370

See 1624 for ID

| Terminator pwr | W1 | W2 |
|----------------|----|----|
| From drive | 1 | 0 |
| From host | 0 | 1 |

- W3 Spindle: Out for ATs (start at power on).
- W18 Parity check. Out=enabled (can be W9).

1528/1578/1588/1598

As for 1370, except:

- W11 Drive supplies terminator power to the bus. In for ATs.
- W5 Spindle control: Out for ATs (spindle starts at power on). In=wait for cmd.
- W4 Parity check. Out=enabled.
- W28 Ground -In for ATs.

1548/1908/1924

- W1 In=drive provides terminator power.
- W2 In=Term power from host (with W12 provides term power to bus as well).
- W11 Frame Ground (out for ATs).
- J2 7 & 8 out=drive starts spindle at pwr on.
11 & 12 out=drive not write protected.
13 & 14 out=parity check enabled.

2112-15

- ID1 Address 1
- ID2 Address 2
- ID3 Address 3
- PTY Parity Checking
- WP Write Protect
- SP0 Spin Up with Start Unit Command
- SP1 Spin Up delay disabled
Do not install SPIN0 and SPIN1.
- W4 LED enable

- W3 Drive provides bus term power
- W2 Off=Term power provided by host
- W1 Off=Drive provides local term power
- W10 Off=Slave Sync term enabled
- W11 Off=Master Sync term disabled

3391/4345

Front view, board down

- 1-2 Remote LED
- 3-4 ID0
- 5-6 ID1
- 7-8 ID2
- 9-10 ID3 (wide drives)
- 11-12 SP0
- 13-14 SP1
- 15-16 WP
- 17-18 Parity
- 19-20 No pins (key)
- 21-22 Reserved
- 23-24 Reserved
- 25-26 No pins (key)
- 27-28 Term enabled
- 29-30 W1 (Term power)
- 31-32 W2 (Term power)
- 33-34 W3 (Term power)
- 35-36 Reserved (fault LED in 4345)

Microscience

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------------|------|-------|------|-----|-------|--------------------------|
| HH 7040-00 | A | 46 | 855 | 3 | 36 | |
| HH 7070-00 | A | 76 | 855 | 5 | 40 | |
| HH 7070-20 | A | 86 | 960 | 5 | 35 | |
| HH 7100-00 | A | 107 | 855 | 7 | 35 | |
| HH 7100-20 | A | 120 | 960 | 7 | 35 | |
| HH 7200-00 | A | 201 | 992 | 9 | 44 | |
| HH 7400 | A | 304 | 1904 | 8 | ZBR | |
| HH 8040-00/20 | A | 42 | 977 | 5 | 17 | RLL? |
| HH 8040-50/58 | A | 52 | 855 | 7 | 17 | |
| HH 8040-60/62 | A | 62 | 1024 | 7 | 17 | |
| HH 8040-65/68 | A | 65 | 603 | 4 | 53 | |
| HH 8080-00 | A | 85 | 884 | 4 | 17 | |
| HH 8200 | A | 152 | 1904 | 4 | ZBR | |
| FH 21200 | E | 1062 | 1921 | 15 | 72 | |
| FH 21600 | E | 1350 | | | | |
| FH 2414 | E | 367 | 1658 | 8 | 54 | |
| FH 2777 | E | 688 | 1658 | 15 | 54 | |
| FH 3777E | E | 1200 | | | | |
| HH 2012 | E | 19 | 306 | 4 | 31 | |
| HH 2085 | E | 106 | 1024 | 5 | 31 | |
| HH 2120 | E | 119 | 1024 | 7 | 33 | 1022 x 7 x 34 in ALR 120 |
| HH 2160 | E | 161 | 1276 | 7 | 35 | |
| HH 5040-00 | E | 47 | 855 | 3 | 35 | |
| HH 5070-00 | E | 73 | 855 | 5 | 35 | |
| HH 5070-20 | E | 82 | 959 | 5 | 35 | |
| HH 5100-00 | E | 110 | 855 | 7 | 36 | |
| HH 5100-20 | E | 124 | 960 | 7 | 36 | |
| HH 5160-00 | E | 174 | 1270 | 7 | 40 | |
| HH 7100 | E | 105 | 855 | 7 | 36 | |
| Easy 20 | H | 25 | 612 | 4 | 17 | |
| Easy 30 | H | 38 | 612 | 4 | 26 | |
| HH 1040 | M | 40 | | | | |
| HH 1050 | M | 44 | 1024 | 5 | 17 | |
| HH 1075 | M | 61 | 1024 | 7 | 17 | |
| HH 1090 | M | 80 | 1314 | 7 | 17 | |
| HH 1314 | M | 76 | 1314 | 7 | 17 | |
| HH 2012 | M | 10 | 306 | 4 | 17 | |
| HH 312 | M/R | 10/16 | 306 | 4 | 17/26 | |
| HH 315 | M/R | 10/16 | 306 | 4 | 17/26 | |
| HH 325 | M/R | 21/32 | 612 | 4 | 17/26 | |
| HH 4050 | M | 44 | 1024 | 5 | 17 | |
| HH 4070 | M | 61 | 1024 | 7 | 17 | |
| HH 612 | M/R | 11/16 | 306 | 4 | 17/26 | |
| HH 612C | M | 10 | 612 | 4 | 17 | |
| HH 625 | M | 21 | 612 | 4 | 17 | |
| HH 712 | M/R | 10/16 | 612 | 2 | 17/26 | |
| HH 725 | M/R | 21/32 | 612 | 4 | 17/26 | |
| HH 825 | M | 21 | 612 | 4 | 17 | |
| MS 10E | M | 10 | 656 | 2 | 17 | |
| MS 15E | M | 15 | 522 | 4 | 17 | |
| MS 20E | M | 20 | 656 | 4 | 17 | |
| MS 30E | M | 30 | 656 | 6 | 17 | |
| MS 5B | M | 5 | 336 | 2 | 17 | |
| HH 1060 | R | 67 | 1024 | 5 | 26 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------|------|------|------|-----|-----|-------|
| HH 1080 | R | 68 | 1024 | 5 | 26 | SCSI? |
| HH 1095 | R | 94 | 1024 | 7 | 26 | |
| HH 1120 | R | 122 | 1314 | 7 | 26 | |
| HH 330 | R | 32 | 612 | 4 | 26 | |
| HH 338 | R | 32 | 612 | 4 | 26 | |
| HH 4060 | R | 67 | 1024 | 5 | 26 | |
| HH 4090 | R | 94 | 1024 | 7 | 26 | |
| HH 7100 | R | 110 | 855 | 7 | 26 | |
| HH 8040 | R? | 41 | 1024 | 2 | 40 | |
| HH 738 | R | 32 | 612 | 4 | 26 | |
| HH 830 | R | 32 | 615 | 4 | 26 | |
| FH 277S | S | 777 | | | | |
| FH 31200 | S | 1062 | 1921 | 15 | 72 | |
| FH 31600 | S | 1350 | | | | |
| FH 3414 | S | 367 | 1658 | 8 | 54 | |
| FH 3777 | S | 688 | 1658 | 15 | 54 | |
| FH 377S | S | 1200 | | | | |
| HH 1080 | S | | | | | |
| HH 3120 | S | 122 | 1314 | 7 | 26 | |
| HH 3160 | S | 171 | 1314 | 7 | 37 | |
| HH 6100 | S | 107 | 855 | 7 | 36 | |
| HH 6100-20 | S | 120 | 960 | 7 | 35 | |
| HH 7040 | S | 47 | 855 | 3 | | |
| HH 7100 | S | 110 | 855 | 7 | | |

Microscience 7100-20

| | J1 | J4 |
|---------|----|----|
| Single: | 0 | 0 |
| Master: | 1 | 0 |
| Slave: | 0 | 1 |

1xxx

1-4 Drive select
5-10 Terminations

2xxx

| | | |
|-----|-----|--------------------------------------|
| SW1 | 1 | On= 33 secs/track Off=35 |
| | 2 | On =Write Protect |
| SW2 | 1-7 | Drive select |
| | 8 | On=Soft sectorred Off=Hard sectorred |
| | 9/1 | Terminations |
| SW3 | All | Terminations |

4xxx

DS0-DS3 Drive select

5xxx

| Drive | 3-4 | 5-6 | 7-8 |
|-------|-----|-----|-----|
| 1 | on | off | off |
| 2 | off | on | off |
| 3 | on | on | off |
| 4 | off | off | on |
| 5 | on | off | on |
| 6 | off | on | on |

7 on on on

| Secs/Tk | 9-10 | 11-12 |
|---------|------|-------|
| 33 | on | on |
| 34 | off | on |
| 35 | on | off |
| 36 | off | off |

Jumper 13-14 On=Write protect

6xxx

| ID | 1 | 2 | 3 |
|----|-----|-----|-----|
| 0 | off | off | off |
| 1 | on | off | off |
| 2 | off | on | off |
| 3 | on | on | off |
| 4 | off | off | on |
| 5 | on | off | on |
| 6 | off | on | on |
| 7 | on | on | on |

7xxx

| | |
|---------|-------------|
| Single: | 1,2,7-8 off |
| Master: | 1-2 on |
| Slave: | 7-8 on |

Pins 3-6 are not used

8xxx

| | |
|---------|-----------|
| Single: | No jumper |
| Master: | No jumper |
| Slave: | 7-8 on |

Microse

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------|------|-----|------|-----|-----|-------|
| MM 1050 | M | 44 | 1024 | 5 | 17 | |

Micro Solutions

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------|------|------|------|-----|-----|----------|
| 152010 | Par | 1200 | | | | Backpack |
| 152020 | Par | 1600 | | | | |
| 152850 | Par | 850 | | | | Backpack |
| HD 100 | Par | 100 | | | | Backpack |
| HD 200 | Par | 200 | | | | Backpack |
| HD 300 | Par | 300 | | | | Backpack |
| HD 40 | Par | 40 | | | | Backpack |

Microstorage

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------|------|-------|------|-----|-------|-------|
| MS 212R | M/R | 10/15 | 306 | 4 | 17/26 | |

Microtech International Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|------|------|------|-----|-----|---------------|
| Polaris 1000 | A | 1000 | | | | |
| Polaris 500i | A | 500 | | | | |
| Polaris 700 | A | 700 | | | | |
| Eclipse 1000 | S | 1000 | | | | |
| Eclipse 200 | S | 200 | | | | |
| Eclipse 320 | S | 320 | | | | |
| Eclipse 400 | S | 400 | | | | |
| Eclipse 650 | S | 650 | | | | |
| Europa 100(ic) | S | 100 | | | | Mac (Quantum) |
| Europa 20(ic) | S | 21 | | | | Mac (Seagate) |
| Europa 40 | S | 40 | | | | |
| Europa 50(ic) | S | 50 | | | | Mac (Quantum) |
| Europa 80 | S | 80 | | | | |
| MicroLynx 1000 | S | 1030 | | | | |
| MicroLynx 2000 | S | 2010 | | | | |
| MicroLynx 4000 | S | 4000 | | | | |
| N 40(i) | S | 40 | | | | |
| N 650(i) | S | 650 | | | | |
| N 100(i) | S | 101 | | | | |
| N 120(i) | S | 120 | | | | |
| N 1200(i) | S | 1200 | | | | |
| N 150(i) | S | 152 | | | | |
| N 170(i) | S | 170 | | | | |
| N 200(i) | S | 200 | | | | |
| N 320(i) | S | 326 | | | | |
| N 400(i) | S | 400 | | | | |
| N 80(i) | S | 81 | | | | |
| PocketPac 320 | S | 323 | | | | |
| PocketPac 500 | S | 500 | | | | |
| Polaris 1000 | S | 1030 | | | | |
| Polaris 1400 | S | 1340 | | | | |
| Polaris 2000 | S | 2010 | | | | |
| Polaris 270 | S | 256 | | | | |
| Polaris 2700 | S | 2700 | | | | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|------|------|------|-----|-----|-------|
| Polaris 350 | S | 349 | | | | |
| Polaris 4000 | S | 4000 | | | | |
| Polaris 500 | S | 525 | | | | |
| Polaris 700 | S | 698 | | | | |
| Polaris 9000 | S | 9000 | | | | |
| RoadRunner 230 | S | 228 | | | | |
| RoadRunner 250 | S | 245 | | | | |
| RoadRunner 320 | S | 323 | | | | |
| RoadRunner 500 | S | 500 | | | | |

Microtek

Division of Tandon. Mindflight Technology

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------|------|------|------|-----|-----|-------|
| HP 1000 PIC | Par | 1000 | | | | |
| HP 1080 PIC | Par | 1080 | | | | |
| HP 1500 PIC | Par | 1500 | | | | |
| PL 500 PIC | Par | 1000 | | | | |

MiniMicro

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------|------|-----|------|-----|-----|---------------------------|
| MMHD 2040R | R | 42 | 820 | 4 | 26 | Rebadged Samsung SHD 2040 |

Miniscribe

Now Maxtor (Colorado) *CNS (Computer Network Services)

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|------|-----|------|-----|-----|------------------|
| 7040A | A | 43 | 981 | 5 | 17 | Try 585 x 4 x 36 |
| 7060A | A | 65 | 925 | 8 | 17 | |
| 7080A | A | 85 | 981 | 10 | 17 | Try 585 x 8 x 36 |
| 7120A | A | 130 | 936 | 16 | 17 | |
| 8051AT | A | 43 | 745 | 4 | 28 | Try 981 x 5 x 26 |
| 8057A | A | 50 | 750 | 5 | 26 | |
| 8225A(T)(1) | A | 21 | 805 | 2 | 28 | Try 615 x 4 x 17 |
| 8225XT | A | 21 | 805 | 2 | 26 | XT; AT=747 cyls |
| 8425XT | A | 21 | 615 | 4 | 17 | XT |
| 8438XT | A | 32 | 615 | 4 | 26 | XT |
| 8450AT | A | 43 | 745 | 4 | 28 | |
| 8450(E)(F)(XT) | A | 42 | 805 | 4 | 26 | XT |
| 3085E | E | 72 | 1270 | 3 | | |
| 3130E* | E | 112 | 1250 | 5 | 35 | 10 MHz |
| 3180E* | E | 157 | 1250 | 7 | 35 | |
| 6085E | E | 72 | 1024 | 4 | 36 | |
| 6128E | E | 104 | 1024 | 8 | 26 | |
| 6170E | E | 130 | 1024 | 8 | 34 | |
| 9000E | E | 329 | 1224 | 15 | 36 | |
| 9230E | E | 177 | 1224 | 9 | 32 | |
| 9380E* | E | 338 | 1224 | 15 | 35 | |
| 9424E | E | 360 | 1661 | 8 | 32 | |
| 9780E* | E | 676 | 1661 | 15 | 53 | 15 MHz |
| 1006 | M | 5 | 306 | 2 | 17 | |
| 1012 | M | 11 | 306 | 4 | 17 | OEM for IBM |
| 2006 | M | 5 | 306 | 2 | 17 | |
| 2012 | M | 11 | 306 | 4 | 17 | |
| 2425P | M | 20 | 615 | 4 | 17 | |
| 3006 | M | 5 | 306 | 2 | 17 | |
| 3012 | M | 11 | 612 | 2 | 17 | Very slow! |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------------|------|-------|------|-----|-------|---------------------------|
| 3051 | M | 42 | 306 | 5 | 17 | |
| 3052 | M | 45 | 1024 | 5 | 17 | |
| 3053* | M | 44 | 1024 | 5 | 17 | |
| 3085* | M | 71 | 1170 | 7 | 17 | |
| 3130 | M | 54 | 1250 | 5 | 17 | |
| 3180 | M | 75 | 1250 | 7 | 17 | |
| 3212(+) | M/R | 11/16 | 612 | 2 | 17/26 | + version MFM |
| 3412 | M | 11 | 306 | 4 | 17 | |
| 3425(+)(P) | M/R | 21/31 | 615 | 4 | 17/26 | + version MFM |
| 3650(F) | M | 42 | 809 | 6 | 17 | 852 cyls; formats 842 |
| 3838 | M | 20 | | | | |
| 4006 | M | 5 | 306 | 2 | 17 | |
| 4010 | M | 8 | 480 | 2 | 17 | |
| 4012 | M | 20 | 480 | 4 | 17 | |
| 4020 | M | 17 | 480 | 4 | 17 | |
| 5330 | M | 25 | 480 | 6 | 17 | |
| 5338 | M | 31 | 612 | 6 | 17 | |
| 5440 | M | 33 | 480 | 8 | 17 | |
| 5451 | M | 42 | 612 | 8 | 17 | |
| 6032 | M/R | 27/40 | 1024 | 3 | 17/26 | |
| 6053 | M/R | 45/68 | 1024 | 5 | 17/26 | |
| 6074 | M | 60 | 1024 | 7 | 17 | |
| 6079 | M/R | 44/68 | 1024 | 5 | 17/26 | |
| 6085 | M | 71 | 1024 | 8 | 17 | |
| 6212 | M/R | 10/16 | 615 | 2 | 17/26 | |
| 7426 | M/R | 21/32 | 612 | 4 | 17/26 | |
| 80SC-MFM | M | 21 | 615 | 4 | 17 | Poss SCSI + MFM recording |
| 8051A | M | 25 | 745 | 4 | 17 | |
| 8212 | M/R | 11/16 | 615 | 2 | 17/26 | |
| 8412 | M/R | 11/16 | 306 | 4 | 17/26 | |
| 8425(F)(XT) | M/R | 21/32 | 615 | 4 | 17/26 | |
| 3128 | R | 108.1 | 1170 | 7 | 26 | |
| 3438(F)(+)(P) | R | 32 | 615 | 4 | 26 | |
| 3450A | R | 39 | 745 | 4 | 26 | |
| 3650R | R | 64 | 809 | 6 | 26 | |
| 3675 | R | 65 | 809 | 6 | 26 | |
| 6079 | R | 68 | 1024 | 5 | 26 | |
| 6128 | R | 109 | 1024 | 8 | 26 | |
| 80SC-RLL | R | 32 | 615 | 4 | 26 | Poss SCSI + RLL recording |
| 8051 | R | 62 | 981 | 5 | 26 | |
| 8225 | R | 20 | 771 | 2 | 26 | |
| 8225XT | R | 20 | 805 | 2 | 26 | |
| 8432 | R | 32 | 615 | 4 | 26 | |
| 8434F | R | 32 | 615 | 4 | 26 | |
| 8438(F) | R | 32.7 | 615 | 4 | 26 | WPC 128 |
| 8450(C) | R | 40.6 | 771 | 4 | 26 | WPC 128 |
| 8450XT | R | 41 | 805 | 4 | 26 | |
| 3085S | S | 72 | 1256 | 3 | 35 | |
| 3130S* | S | 115 | 1255 | 5 | 35 | |
| 3180(S)(M)* | S | 154 | 1255 | 7 | 36 | M=Mac |
| 3425S | S | 21 | 612 | 4 | 17 | MFM recording |
| 7040S | S | 40 | 1155 | 2 | 36 | |
| 7060S | S | 65 | 1155 | 2 | 42 | 1516 cyls? |
| 7080S | S | 81 | 1155 | 4 | 36 | |
| 7120S | S | 131 | 1155 | 2 | 85 | 1516 cyls? |
| 8048S | S | 40 | | | | |
| 8051S | S | 43 | 739 | 4 | 28 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------|------|-----|------|-----|-----|------------------------|
| 8225S | S | 20 | 805 | 2 | 26 | |
| 8425S(A) | S | 21 | 612 | 4 | 17 | MFM recording. A=Apple |
| 8450S | S | 40 | 804 | 4 | 26 | |
| 9000S | S | 347 | 1220 | 15 | 32 | |
| 9230 | S | 203 | 1224 | 9 | 32 | |
| 9380(S)(M)* | S | 325 | 1218 | 15 | 36 | M=Mac |
| 9424S | S | 355 | 1661 | 8 | 32 | |
| 9780S* | S | 668 | 1661 | 15 | 53 | |

8051AT

Single: None
 Master: J4 5-6
 Slave: J4 1-2

J4 3-4 for BIOSes unable to support 1:1.

8438

| Drive No | J1 | J2 | J3 | J4 |
|----------|-------|-------|-------|-------|
| 1 | close | open | open | open |
| 2 | open | close | open | open |
| 3 | open | open | close | open |
| 4 | open | open | open | close |

Miniscribe model nos

1st digit

3: Half height
 6: Full height
 8: 3.5"

Miniscribe 3130E/3180E

| Terminators | Drive | Select | Jumpers |
|-------------|-------|--------|---------|
| RP-4, RP-17 | 1 | 2 | 3 |
| | 1 | O | J O |
| | 2 | O | J O |
| | 3 | J | J O |

J-14, J-20, J-21, J-24, J-27, J-29, J-30, J-510 must be installed. J-9, J-10, J-11, J-23 uninstalled.

Sector configuration

| J-19 | J-12 | J-13 | Bytes/sec | SpT |
|------|------|------|---------------|-----|
| J | J | J | Soft Sec Mode | |
| O | J | O | 512 | 34 |
| O | O | J | 512 | 36 |
| O | O | O | 512 | 35 |

Term Power. First pr controls power supplied by target. Second controls power from elsewhere.

Miniscribe 9380E

Sector Configuration

| J-19 | J-12 | J-13 | Bytes/sec | SpT |
|------|------|------|---------------|-----|
| J | J | J | Soft sec mode | |
| O | J | O | 530 | 34 |
| O | O | J | 512 | 36 |
| O | O | O | 512 | 35 |

ID

| J-16 | 1 | 2 | 3 |
|------|---|---|---|
| 1 | J | O | O |
| 2 | O | J | O |
| 3 | J | J | O |

Miniscribe 3130S/3180S/9380S*

| ID J601 | 1,2 | 3,4 | 5,6 |
|---------|-----|-----|-----|
| 0 | O | O | O |
| 1 | O | O | J |
| 2 | O | J | O |
| 3 | O | J | J |
| 4 | J | O | O |
| 5 | J | O | J |
| 6 | J | J | J |

| SpT | J-12 | J-13 |
|-----|------|------|
| 34 | J | O |
| 35 | O | O |
| 36 | O | J |

| | J701-1 | J701-2 |
|------------------|--------|--------|
| Local term power | J | O |
| Remote termpower | O | J |

*9380S Parity Enable (J-602). The first pair is undefined. The second defines parity (Off=Parity enabled).

Ministor Peripherals Corp

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------|------|------|------|-----|-----|-----------|
| MP 1080A-XL | A | 1080 | | | | EIDE, ATA |
| MP 1100A-XL | A | 1080 | | | | EIDE, ATA |
| MP 128A | A | 128 | 822 | 8 | 38 | |
| MP 130A | A | 130 | 846 | 8 | 38 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|------|-----|------|-----|-----|-----------|
| MP 170A | A | 85 | 1076 | 4 | | |
| MP 256A | A | 128 | 1280 | 2 | | |
| MP 32A | A | 32 | | | | |
| MP 42A | A | 42 | 547 | 4 | 38 | |
| MP 510A | A | 510 | | | | EIDE, ATA |
| MP 540A-SL | A | 540 | | | | EIDE, ATA |
| MP 550A-XL | A | 541 | | | | EIDE, ATA |
| MP 64A | A | 64 | 862 | 4 | 38 | |
| MP 680A | A | 680 | | | | EIDE, ATA |
| MP 810A-XL | A | 810 | | | | EIDE, ATA |
| MP 825A-XL | A | 812 | | | | EIDE, ATA |
| MP 85A | A | 85 | 547 | 4 | 38 | |
| MP 128P | P3 | 128 | 822 | 8 | 38 | |
| MP 130 | P3 | 130 | 846 | 8 | 38 | |
| MP 130/260P3 | P3 | 131 | 1325 | 4 | | |
| MP 170/340P3 | P3 | 179 | 1446 | 4 | | |
| MP 170P | P | 85 | 1076 | 4 | | |
| MP 263/526P3 | P3 | 261 | | | | |
| MP 42P | P3 | 42 | 547 | 4 | 38 | |
| MP 64P | P3 | 64 | 862 | 4 | 38 | |
| MP 85P | P3 | 85 | 547 | 4 | 38 | |
| MP 88P3 | P3 | 89 | | | | |

Mirror Technologies Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|-----|------|-----|-----|-------|
| M 595 | S | 595 | | | | |
| M 650 | S | 650 | | | | |
| M 100i | S | 96 | | | | |
| M 105i | S | 105 | | | | |
| M 130i | S | 130 | | | | |
| M 180i | S | 180 | | | | |
| M 20i | S | 21 | | | | |
| M 30i | S | 32 | | | | |
| M 325 | S | 325 | | | | |
| M 40i | S | 40 | | | | |
| M 45s/si | S | 45 | | | | |
| M 80i | S | 80 | | | | |
| M 90i | S | 90 | | | | |
| MP 105i | S | 105 | | | | |
| MP 200i | S | 194 | | | | |
| MP 290 | S | 290 | | | | |
| MP 40i | S | 42 | | | | |
| MP 80 | S | 84 | | | | |

Mitsubishi

No longer producing hard drives

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|-------|------|-----|-------|-----------|
| MR 5310E | E | 101 | 977 | 5 | 41 | |
| MR 321 | M | 10 | 615 | 2 | 17 | |
| MR 322 | M | 20 | 615 | 4 | 17 | |
| MR 335 | M | 54 | 743 | 8 | 17 | |
| MR 52 | M | 21 | 612 | 4 | 17 | |
| MR 521 | M | 10 | 612 | 2 | 17 | 615 cyls? |
| MR 522 | M/R | 21/31 | 612 | 4 | 17/26 | 615 cyls? |
| MR 533 | M/R | 24 | 971 | 3 | 17/26 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|-------|------|-----|-------|-------------------|
| MR 535 | M/R | 42/65 | 981 | 6 | 17/26 | Also 977 x 5 x 17 |
| MR 548 | M | 89 | 1225 | 8 | 17 | |
| MR 535R | R | 65 | 977 | 5 | 26 | |
| MR 5310S | S | 101 | 977 | 5 | 41 | |
| MR 535S | S | 65 | 977 | 5 | 26 | |
| MR 537S | S | 76 | 977 | 5 | 26 | |
| M 4870 | SMD | 247 | 1024 | 12 | 40 | |

Mitsumi

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-----------|------|-----|------|-----|-----|-------|
| HD 2509AA | A | 92 | 1024 | 4 | 44 | |
| HD 2513AA | A | 130 | 977 | 8 | 32 | |
| HD 309AA | A | 90 | 928 | 6 | 17 | |
| HD 313AA | A | 130 | 963 | 8 | 17 | |
| HD 354VA | A | 40 | 615 | 4 | 17 | |
| M 106 | M | 5 | 306 | 2 | 17 | |
| M 112 | M | 10 | 306 | 4 | 17 | |
| M 125 | M | 21 | 306 | 8 | 17 | |
| M 206 | M | 5 | 306 | 2 | 17 | |
| M 212 | M | 10 | 306 | 4 | 17 | |
| M 225 | M | 21 | 306 | 8 | 17 | |
| M 306 | M | 5 | 306 | 2 | 17 | |
| M 312 | M | 10 | 306 | 4 | 17 | |
| M 325 | M | 21 | 306 | 8 | 17 | |
| HD 309AC | S | 90 | 928 | 6 | 17 | |
| HD 313AC | S | 128 | 964 | 7 | 39 | |
| HD 354VC | S | 40 | 940 | 8 | 17 | |

MKE

Subcontractor for Quantum

MMI

Micro Memories Inc. Out of business.

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|-------|------|-----|-------|-------|
| M 106 | M/R | 5/8 | 306 | 2 | 17/26 | |
| M 112 | M/R | 10/16 | 306 | 4 | 17/26 | |
| M 125 | M/R | 21/32 | 306 | 8 | 17/26 | |
| M 206 | M/R | 5/8 | 306 | 2 | 17/26 | |
| M 212 | M/R | 10/16 | 306 | 4 | 17/26 | |
| M 225 | M/R | 21/32 | 306 | 8 | 17/26 | |
| M 306 | M/R | 5/8 | 306 | 2 | 17/26 | |
| M 312 | M/R | 10/16 | 306 | 4 | 17/26 | |
| M 325 | M/R | 21/32 | 306 | 8 | 17/26 | |

Morton Management Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-----------------|------|------|------|-----|-----|-------|
| GigaBox 1000 | E | 1000 | | | | |
| Gigabox 160 | E | 160 | | | | |
| GigaBox 330 | E | 330 | | | | |
| Gigabox 680 | E | 680 | | | | |
| GigaBox Jr 1000 | E | 1000 | | | | |
| Gigabox Jr 160 | E | 160 | | | | |
| Gigabox Jr 680 | E | 680 | | | | |
| GigaBox 1000 | S | 1000 | | | | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-----------------|------|------|------|-----|-----|-------|
| GigaBox 160 | S | 160 | | | | |
| GigaBox 330 | S | 330 | | | | |
| Gigabox 680 | S | 680 | | | | |
| GigaBox Jr 1000 | S | 1000 | | | | |
| GigaBox Jr 160 | S | 160 | | | | |
| GigaBox Jr 330 | S | 330 | | | | |

Mountain Gate

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------|------|------|------|-----|--------|-------|
| XL 1080 | S-2 | 1080 | 2874 | 8 | 64-107 | |
| XL 127 | S-2 | 127 | 1745 | 2 | 52-91 | |
| XL 170 | S-2 | 170 | 2337 | 2 | 52-91 | |
| XL 270 | S-2 | 270 | 2740 | 2 | 62-125 | |
| XL 340 | S-2 | 342 | 5493 | 4 | 52-91 | |
| XL 540 | S-2 | 541 | 2740 | 4 | 62-125 | |

MPI

See *Magnetic Peripherals (MPI)*

Myrica

Bought Rodime (Singapore)

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------|------|-----|------|-----|-----|--------------|
| RO3259A | A | 210 | 990 | 15 | 28 | Rodime 3259A |

NCL America

Brand Tech Connection?

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|-----|------|-----|-----|-------|
| 9170A | A | 150 | 582 | 14 | 36 | |
| 9121A | A | 107 | 1166 | 5 | 36 | |
| 9220A | A | 200 | 1209 | 9 | 36 | |
| 8170E | E | 136 | 1024 | 8 | 34 | |
| 9170E | E | 150 | 1072 | 7 | 41 | |
| 9121E | E | 107 | 1166 | 5 | 36 | |
| 9124E | E | 102 | 1166 | 5 | 36 | |
| 9220E | E | 200 | 1209 | 9 | 36 | |
| 8085 | M | 68 | 1024 | 8 | 17 | |
| 8170 | M | 136 | 1024 | 8 | 34 | |
| 8128 | R | 124 | 1024 | 8 | 31 | |
| 8170S | S | 136 | 1024 | 8 | 34 | |
| 9170S | S | 150 | 1072 | 7 | 41 | XT |
| 9121S | S | 107 | 1166 | 5 | 36 | |
| 9220S | S | 200 | 1209 | 9 | 36 | XT |

NCR

Now a division of AT&T.

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------------|------|-----|------|-----|-----|--------|
| 6801 STD10717 | A | 45 | 868 | 3 | 34 | |
| 6801 STD11017 | A | 104 | 776 | 8 | 33 | |
| 6801 STD11217 | A | 42 | 1047 | 2 | 40 | |
| 6801 STD14746 | E | 121 | 969 | 7 | 35 | 10 MHz |
| 6801 STD10317 | M | 53 | 872 | 7 | 17 | |
| 6801 STD14646 | M | 21 | 615 | 4 | 17 | |
| 6801 STD14746 | M | 71 | 1024 | 8 | 17 | |
| 6091-5101 | S | 332 | 1898 | 9 | 38 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-----------|------|-----|------|-----|-----|-------|
| 6091-5301 | S | 652 | 1244 | 16 | 64 | |
| 6928 | | | | | | |

NEC

081 993 8111 (508) 264 8000

Versas (800) 632 4525 Ready (800) 632 4054 Powermate (800) 632 4565 www.nec.com

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------------|-------|------|------|-----|-----|--------------------------------|
| AC 160 | A | 62 | 1024 | 7 | 17 | Rebadged WD Caviar |
| AB 01204 | A | 120 | 762 | 8 | 39 | 158-50395-304 CP 30104 |
| 158-050395-304 | A | 120 | 901 | 5 | 53 | Quantum LPS 120AT |
| D 1711 | A | 43 | 977 | 5 | 17 | |
| D 1731 | A | 85 | 977 | 10 | 17 | |
| D 1741 | A | 125 | 508 | 11 | 44 | |
| D 3556 | A | 100 | | | | |
| D 3711 | A | 173 | 335 | 16 | 63 | |
| D 3713 | A | 345 | 670 | 16 | 63 | |
| D 3715 | A | 270 | 524 | 16 | 63 | |
| D 3717 | A | 540 | 1048 | 16 | 63 | |
| D 3723 | A | 365 | 708 | 16 | 63 | |
| D 3724 | A | 427 | 827 | 16 | 63 | |
| D 3725-301/351/501 | A | 730 | 1416 | 16 | 63 | |
| D 3726 | A | 854 | 1654 | 16 | 63 | |
| D 3727 | A | 1083 | 2100 | 16 | 63 | |
| D 3735 | A | 44 | 733 | 7 | 17 | Try also 537 x 4 x 41 |
| D 3741 | A | 44 | 733 | 7 | 17 | Actually 423 x 8 x 26 |
| D 3743 | A | 540 | 1048 | 16 | 63 | |
| D 3745-301/351 | A | 1080 | 2096 | 16 | 63 | |
| D 3747 | A | 1620 | 3144 | 16 | 63 | |
| D 3755 | A | 105 | 625 | 8 | 41 | |
| D 3756 | A | 105 | 625 | 8 | 41 | |
| D 3761 | A | 114 | 915 | 7 | 36 | Conner Compaq type 45 |
| D 3765 | A | 176 | 1486 | 4 | 58 | Try 743 x 8 x 58 |
| D 3766 | A | 245 | 723 | 13 | 51 | |
| D 3771 | A | 220 | 1367 | 5 | 63 | |
| D 3772 | A | 331 | 1468 | 7 | 63 | |
| D 3781 | A | 426 | 1468 | 9 | 63 | Try 734 x 18 x 63 |
| D 3855 | A | 105 | 1251 | 4 | 41 | |
| D 4540 | A | 540 | 963 | 28 | 41 | Conner CFA 540A? |
| DSE 1340A | A | 1340 | 2600 | 16 | 63 | |
| DSE 1700A | A | 1700 | 3306 | 16 | 63 | |
| DSE 2010A | A | 2010 | 3900 | 16 | 63 | |
| DSE 2100A | A | 2100 | 4092 | 16 | 63 | |
| DSE 2550A | A | 2550 | 4960 | 16 | 63 | |
| OP 220 4002 | A | 127 | 980 | 15 | 17 | Seagate ST 9144A |
| D 3661 | E | 118 | 915 | 7 | 35 | 10Mhz-Try 913 cyls |
| D 5652 | E | 135 | 823 | 10 | 35 | 10 Mhz |
| D 5655 | E | 140 | 1224 | 7 | 64 | Powermate 256 bytes/sec |
| D 5662 | E | 300 | 1224 | 15 | 64 | 10 Mhz 256 bytes/sec |
| D 5665 | E | 153 | | | | |
| D 5682 | E | 665 | 1024 | 16 | 63 | Physical 1633 x 15 x 54 15 Mhz |
| D 2346 | IPI-2 | 400 | | | | |
| D 2366 | IPI-2 | 800 | 23 | | | |
| D 2367 | IPI-2 | | | | | |
| D 2377 | IPI-2 | 1400 | 27 | | | |
| D 2387 | IPI-2 | 2100 | 1371 | 30 | 98 | 514 b/sec |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|-------|-------|------|-----|-------|------------------------------|
| D 5392 | IPI-2 | 1300 | 615 | 16 | 17 | |
| D 5682/DA521 | IPI-2 | 665 | 1633 | 15 | 54 | |
| D 3122 | M | 21 | 642 | 4 | 32 | 256 bytes/sector |
| D 3126H | M/R | 21/32 | 615 | 4 | 17/26 | |
| D 3142 | M | 42 | 642 | 8 | 17 | |
| D 3146(H) | M | 40 | 615 | 8 | 17 | |
| D 5114 | M | 6 | 310 | 2 | 17 | |
| D 5120 | M | 20 | 612 | 4 | 17 | |
| D 5124 | M | 11 | 310 | 4 | 17 | ST 412 |
| D 5126(H) | M/R | 21/32 | 615 | 4 | 17/26 | ST 412 Not in XTs |
| D 5128 | M | 20 | 615 | 4 | 17 | |
| D 5142 | M | 10 | 310 | 4 | 17 | |
| D 5146(H) | M/R | 40/62 | 615 | 8 | 17/26 | Not in XTs/Xebec 1210 ST 412 |
| D 5224 | M | 20 | 309 | 8 | 17 | |
| D 5244 | M | 21 | 310 | 8 | 17 | |
| D 5452 | M | 67 | 823 | 10 | 32 | |
| D 1711 | P | 42 | 977 | 5 | 17 | |
| D 1731 | P | 85 | 977 | 10 | 17 | |
| EPP 340- | Par | 340 | | | | |
| EPP 540 | Par | 540 | | | | |
| D 3127 | R | 31 | 615 | 4 | 26 | |
| D 5127(H) | R | 32 | 615 | 4 | 26 | 5126 tested as RLL |
| D 5147(H) | R | 62 | 615 | 8 | 26 | Aka LR 56913 |
| D 2384S | S-2 | 384 | | | | Solid State |
| D 2462 | S | 800 | | 23 | | |
| D 2463 | S | 1100 | | 27 | | |
| D 2473 | S | 1400 | | 27 | | |
| D 3035 | S | 56 | | | | |
| D 3811 | S | 170 | 335 | 16 | 63 | |
| D 3813 | S | 340 | 670 | 16 | 63 | |
| D 3815 | S | 270 | 524 | 16 | 63 | |
| D 3817 | S | 540 | 1048 | 16 | 63 | |
| D 3823 | S | 365 | 708 | 16 | 63 | |
| D 3825 | S | 730 | 1416 | 16 | 63 | |
| D 3827 | S | 1083 | 2100 | 16 | 63 | |
| D 3835 | S | 45 | 1074 | 2 | 41 | |
| D 3841 | S | 45 | 400 | 8 | 25 | Mac compatible |
| D 3843 | S-2 | 540 | 1048 | 16 | 63 | |
| D 3845 | S-2 | 1080 | 2096 | 16 | 63 | |
| D 3847 | S-2F | 1620 | 3144 | 16 | 63 | |
| D 3855 | S | 105 | 1251 | 4 | 41 | |
| D 3856 | S | 105 | 1251 | 4 | 41 | |
| D 3861 | S | 115 | 915 | 7 | 35 | Mac compatible |
| D 3865 | S-2 | 176 | 1486 | 4 | 58 | |
| D 3871 | S | 220 | 1367 | 5 | 63 | |
| D 3872 | S | 331 | 1468 | 7 | 63 | |
| D 3881 | S-2 | 425 | 1464 | 9 | 63 | |
| D 3896 | S-2 | 2160 | 3928 | 9 | | |
| D 5852 | S | 147 | 823 | 10 | 35 | Mac compatible |
| D 5862 | S | 330 | 1224 | 15 | 35 | Mac compatible |
| D 5882 | S | 678 | 1630 | 15 | 54 | Mac compatible |
| D 5892 | SSync | 1400 | 1675 | 19 | 86 | |
| D 5894 | S | 1400 | 1680 | 19 | 86 | 5400 RPM |
| D 589X | S | 2180 | 2610 | 19 | 86 | |
| DSE 1340S | S | 1340 | 2600 | 16 | 63 | |
| DSE 1700S | S | 1700 | 3306 | 16 | 63 | |
| DSE 2010S | S | 2010 | 3900 | 16 | 63 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|------|------|------|-----|-----|-------------|
| DSE 2100S | S | 2100 | 4092 | 16 | 63 | |
| DSE 2550S | S | 2550 | 4960 | 16 | 63 | |
| SD 020S | S | 20 | | | | Solid State |
| SD 040S | S | 40 | | | | Solid State |
| SD 120S | S | 125 | | | | Solid State |
| D 2247 | SMD | 82 | | 10 | | |
| D 2257 | SMDE | 167 | | 10 | | MFM |
| D 2268H | SMDE | 337 | | | | MFM |
| D 2352 | SMD | 520 | | | | |
| D 2362 | SMD | 800 | 23 | | | |
| D 2363 | SMD | 1100 | 1024 | 27 | 71 | |
| D 2366 | SMD | 800 | | 23 | | RLL |
| D 2373 | SMDE | 1220 | 1024 | 27 | 86 | |
| D 2377 | SMD | 1415 | | 27 | | RLL |
| D 2462 | SMD | 800 | | 23 | | RLL |
| D 2463 | SMD | 1130 | | 27 | | RLL |
| D 2467 | SMD | 1130 | | 27 | | RLL |
| D 5682/DA501 | SMD | 665 | | 15 | | |
| D 5592 | SMD | 1300 | | | | 7200 RPM |

NEC Drive Numbering

2nd Digit

1=MFM 6=ESDI 7=IDE 8=SCSI

D 3735

| | |
|---------|--------------------|
| Single: | 11 closed, 12 open |
| Master: | 11,12 closed |

[D3723/3724/3725/3727/3713/3715/3717/3747/3743/3745/DSE 1340A/1700A/2010A/2100A/2550A](#)

| | |
|---------|------------|
| Single: | Sw 1-1 On |
| Master: | Sw 1-1 On |
| Slave: | Sw 1-1 Off |

CD=Sw 1-2 3-4 always off Don't use J4

D 3755/3756/3641

| | |
|---------|-----------|
| Single: | 12/13 Off |
| Master: | 12 On |
| Slave: | 12/13 On |

Pwr Save Off: 17 On ECC 11 bit: 15 off (on=4 bit)

D 3761

| | |
|---------|-----------------|
| Master: | MST, TRS closed |
| Slave: | SLV, TRS closed |

Compaq: FC closed, 776 x 8 x 33

D 3661

| | |
|--------|-----------------|
| DS | Drive Select |
| S on | Hard Sector |
| 36 s/t | SCNT S, 2, 0 on |
| 35 s/t | SCNT S, 2 on |
| 34 s/t | SCNT S, 1, 0 on |

Switches sometimes upside down!

[D3811/3813/3815/3817/3823/3825/3827/3843/3845/3827/DSE 40S/1700S/2010S/2100S/2550S](#)

| | |
|--------|------------------|
| Sw 1-1 | Always off |
| Sw 1-2 | Start cmd-on=use |
| Sw 1-3 | Parity-on=check |

| | |
|-------|--------------|
| J2-1 | ID 2 |
| J2-2 | ID 1 |
| J2-3 | ID 0 |
| J2-5 | Parity |
| J2-6 | Spindle sync |
| J9-14 | ground |

| | J2-3 | J2-2 | J2-1 |
|---|------|------|------|
| 0 | 0 | 0 | 0 |
| 1 | 0 | 0 | 1 |
| 2 | 0 | 1 | 0 |
| 3 | 0 | 1 | 1 |
| 4 | 1 | 0 | 0 |
| 5 | 1 | 0 | 1 |
| 6 | 1 | 1 | 0 |
| 7 | 1 | 1 | 1 |

If using pins, turn switches off. Don't use J4

D 3835/3855/3856

| | |
|-----|--------------|
| 1-1 | Off |
| 1-2 | Off Start dr |
| 1-3 | On Parity on |
| 1-4 | ID 2 |
| 1-5 | ID 1 |
| 1-6 | ID 0 |

D 5655

| | |
|--------|--------------|
| DS | Drive Select |
| S on | Hard Sector |
| 36 s/t | C, 5, 2 on |
| 34 s/t | C, 5, 1 on |

For PS/2, jmp D on Pwa G8ATA/G8ATE must be installed.
Switches sometimes upside down!

D 5662

| | |
|--------|--------------|
| DS | Drive Select |
| S on | Hard Sector |
| 36 s/t | C, 5, 2 on |
| 34 s/t | C, 5, 1 on |

Switches sometimes upside down!

D 5682

| | |
|--------|------------------|
| DS | Drive Select |
| S on | Hard Sector |
| 54 s/t | C, 5, 4, 2, 1 on |
| 53 s/t | C, 5, 4, 2 on |
| 34 s/t | SCNT S, 1, 0 on |

Switches sometimes upside down!

NEI

See NPL (Nippon)

Newbury Data

Maxtor under licence

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------------|------|------|------|-----|-----|----------------------|
| ND 100A | A | 96 | 733 | 8 | 32 | |
| ND 200A | A | 207 | 816 | 15 | 32 | |
| ND 213A | A | 213 | 683 | 16 | 63 | |
| ND 340AT | A | 340 | 654 | 16 | 63 | |
| ND 3490AT | A | 430 | 1585 | 9 | 43 | |
| ND 535AT | A | 535 | 1024 | 16 | 63 | |
| ND 540AT | A | 546 | | | | |
| ND 8380E | E | 361 | 1632 | 8 | 54 | |
| ND 8610E | E | 541 | 1632 | 12 | 54 | |
| ND 8760E | E | 677 | 1632 | 15 | 54 | |
| NDR 4170 | E | 194 | 1224 | 7 | 45 | |
| NDR 4175 | E | 150 | 1224 | 7 | 36 | |
| NDR 4230E | E | 203 | 1224 | 9 | 36 | |
| NDR 4380 | E | 323 | 1224 | 15 | 36 | |
| NDR 1065 | M | 55 | 918 | 7 | 17 | ATs—disable J1/2 |
| NDR 1085 | M | 71 | 1024 | 8 | 17 | |
| NDR 1105 | M | 87 | 918 | 11 | 17 | |
| NDR 1140 | M | 120 | 918 | 15 | 17 | |
| NDR 2085 | M | 75 | 1224 | 7 | 17 | ATs—disable J1/2 |
| NDR 2140 | M | 111 | 918 | 15 | 17 | 1224 x 11 x 17? |
| NDR 2190 | M | 160 | 1224 | 15 | 17 | Victor BIOS settings |
| NDR 320 | M | 21 | 615 | 4 | 17 | 612 cyls—Victor BIOS |
| NDR 340 Penny | M | 42 | 615 | 8 | 17 | Removeable |
| NDR 360 | M | 42 | 615 | 8 | 17 | |
| NDR 505 | M | 5 | 306 | 2 | 32 | |
| ND 1120R | R | 105 | 1024 | 8 | 25 | |
| ND 1240R | R | 97 | 1024 | 15 | 25 | |
| ND 100S | S | 96 | 733 | 8 | 32 | |
| ND 1240S(D) | S-2 | 1240 | 2389 | 15 | | |
| ND 200S | S | 201 | 1320 | 7 | | |
| ND 213S(D) | S | 213 | 1310 | 7 | | |
| ND 340S(D) | S | 340 | 1546 | 7 | | |
| ND 3490S(D) | S | 430 | 1585 | 9 | 43 | |
| ND 535S | S | 535 | 1546 | 11 | | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-----------|------|------|------|-----|-----|-------|
| ND 540S | S | 546 | | | | |
| ND 4170S | S | 158 | 1224 | 7 | 36 | |
| ND 437S | S | 437 | 1560 | 9 | | |
| ND 8380S | S | 360 | 1632 | 8 | 54 | |
| NDR 3170S | S | 140 | 1224 | 9 | 26 | |
| NDR 3280S | S | 233 | 1224 | 15 | 26 | |
| NDR 3380S | S | 320 | 1224 | 15 | 34 | |
| NDR 4380S | S | 314 | 1224 | 15 | 34 | |
| PI 17(D)S | S | 1503 | 1778 | 19 | 90 | |
| PO 12 | S | 1051 | 1795 | 15 | 17 | |

New Media Corp

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------------|------|-----|------|-----|-----|-------|
| Anycom 170 | P | 170 | | | | |
| Anycom 260 | P | 260 | | | | |
| NMC 00372 | P3 | 42 | | | | |
| NMC 00373 | P3 | 105 | | | | |
| NMC 00396 | P3 | 170 | | | | |
| Note Disk 105 | P3 | 105 | | | | |
| Note Disk 170 | P3 | 170 | | | | |
| Note Disk 260 | P3 | 260 | | | | |

N/Hance Systems

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|------|-----|------|-----|-----|-------|
| HCS-pcs150 | S | 150 | | | | |
| HCS-pcs150 | S | 150 | | | | |
| HCS-pcs2700e | S | 662 | | | | |
| HCS-pcs300 | S | 300 | | | | |
| HCS-pcs300 | S | 300 | | | | |
| HCS-pcs700 | S | 662 | | | | |
| HCS-ps2150E | S | 150 | | | | |
| HCS-PS2300e | S | 300 | | | | |
| Sun 70e | S | 71 | | | | Sun |
| Sun 50e | S | 150 | | | | Sun |

Northgate

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|-----|------|-----|-----|-------|
| Turbo | R | 42 | 809 | 6 | 26 | |

NPL

Nippon. Out of business?

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|------|-----|------|-----|-----|-----------|
| NP 02-13 | M | 10 | 306 | 4 | 17 | 320 cyls? |
| NP 02-26A(S) | M | 21 | 640 | 4 | 17 | |
| NP 02-52A | M | 43 | 640 | 8 | 17 | |
| NP 03-13 | M | 10 | 306 | 4 | 17 | |
| NP 03-20 | M | 15 | 306 | 6 | 17 | |
| NP 03-38 | M | 30 | 612 | 6 | 17 | |
| NP 03-6 | M | 5 | 306 | 2 | 17 | |
| NP 04-13T | M | 10 | 320 | 4 | 17 | |
| NP 04-14C | M | 23 | 650 | 4 | 17 | |
| NP 04-20T | M | 15 | 306 | 6 | 17 | |
| NP 04-26F | M | 21 | 320 | 8 | 17 | |
| NP 04-36 | M | 29 | 699 | 5 | 17 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-----------|------|-----|------|-----|-----|-------|
| NP 04-50 | M | 41 | 699 | 7 | 17 | |
| NP 04-55 | M | 44 | 754 | 7 | 17 | |
| NP 04-85 | M | 69 | 754 | 11 | 17 | |
| NP 05-105 | M | 10 | 320 | 4 | 17 | |
| RD 3127 | M | 10 | 612 | 2 | 17 | |
| RD 3255 | M | 20 | 612 | 4 | 17 | |
| RD 4064 | M | 5 | 306 | 2 | 17 | |
| RD 4127 | M | 10 | 306 | 4 | 17 | |
| RD 4191 | M | 15 | 306 | 6 | 17 | |
| RD 4255 | M | 20 | 306 | 8 | 17 | |
| RD 4362 | M | 30 | 612 | 6 | 17 | |
| NP 03-13 | R | 16 | 306 | 4 | 26 | |
| NP 02-26S | S | 54 | 640 | 4 | 42 | |

Okidata

Hard drive division bought by International Technologies.

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------|------|-------|------|-----|-------|-----------|
| OD 526 | M/R | 21/31 | 612 | 4 | 17/26 | 640 cyls? |
| OD 540 | M/R | 33/50 | 480 | 6 | 17/26 | 640 cyls? |

Olivetti

Olivetti—OPE See also Lexikon

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-----------|------|-----|------|-----|-----|---------------------|
| HD 352 | M | 20 | 612 | 4 | 17 | |
| HD 362 | M | 20 | 612 | 4 | 17 | |
| HD 416 | M | | 819 | 2 | 17 | |
| HD 512-1 | M | 5 | | 2 | 17 | |
| HD 512-2 | M | 13 | | 4 | 17 | |
| HD 512-3 | M | 21 | | 6 | 17 | |
| HD 561-1 | M | 3 | 180 | 2 | 17 | |
| HD 561-2 | M | 6 | 180 | 4 | 17 | |
| HD 561-3 | M | 9 | 180 | 6 | 17 | |
| HD 562-11 | M | 3 | 180 | 2 | 17 | |
| HD 562-12 | M | 6 | 180 | 4 | 17 | |
| HD 562-13 | M | 9 | 180 | 6 | 17 | |
| HD 563-1 | M | 6 | | 2 | 17 | |
| HD 563-2 | M | 12 | | 4 | 17 | |
| HD 563-3 | M | 20 | | 6 | 17 | |
| HD 661 | M | 20 | | | 17 | |
| HD 662/11 | M | 10 | 612 | 2 | 17 | |
| HD 662/12 | M | 21 | 612 | 4 | 17 | |
| HD 670-12 | M | 20 | 612 | 4 | 17 | |
| HD 674 | M | 41 | 820 | 6 | 17 | |
| SM 5220/2 | M | 20 | 612 | 4 | 17 | |
| XM 221 | M | 21 | 615 | 4 | 17 | |
| XM 3220 | M | 20 | 612 | 4 | 17 | |
| XM 5210/1 | M | 10 | 612 | 2 | 17 | 306 x 4 x 17? |
| XM 5210/2 | M | 10 | 612 | 2 | 17 | 615 cyls? 306x4x17? |
| XM 5220/2 | M | 20 | 612 | 4 | 17 | |
| XM 5221/2 | M | 20 | 615 | 4 | 17 | |
| XM 5540 | M | 42 | 825 | 6 | 17 | |
| XM 563-12 | M | 10 | 612 | 2 | 17 | |

Optima Technology

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|------|---------|------|-----|-----|-----------------------|
| A 1301 | A | 137 | 1024 | 8 | 32 | |
| A 1801 | A | 172 | 1024 | 8 | 41 | |
| A 401 | A | 43 | 981 | 4 | 21 | |
| A 901 | A | 86 | 981 | 8 | 21 | |
| Minipak A1801 | A | 172 | 1024 | 8 | 41 | |
| Minipak A2601 | A | 262 | 1012 | 12 | 42 | |
| Minipak A3601 | A | 344 | 1024 | 12 | 54 | |
| Minipak A801D | A | 80 | | | | |
| Minipak A8091 | A | 90 | 977 | 8 | 22 | |
| Concorde 1050 | S | 1050 | | 15 | | |
| Concorde 1350 | S | 1352 | | | | |
| Concorde 2100 | S-2F | 2129 | 2624 | 19 | 83 | ST 42400N |
| Concorde 600M | S | 600 | | | | |
| Concorde 635 | S | 640 | | 14 | | |
| Concorde 9000 | S-2 | 9000 | | | | |
| Diskovery 100 | S | 100 | | | | |
| Diskovery 1000 | S-2 | 1040 | | | | |
| Diskovery 130 | S | 137 | 1024 | 8 | 32 | IS = internal for Mac |
| Diskovery 1400 | S | 400 | | | | |
| Diskovery 1800 | S2FW | 1760 | | | | |
| Diskovery 200 | S | 200 | | | | IS = internal for Mac |
| Diskovery 2100 | S-2 | 2040 | | | | |
| Diskovery 260 | S | 2 x 130 | | | | Dual, Mac, Internal |
| Diskovery 310 | S | 310 | | | | |
| Diskovery 325 | S | 321 | | | | I version internal |
| Diskovery 40 | S | 45 | 998 | 4 | 22 | |
| Diskovery 400 | S | 2 x 200 | | | | Dual, Mac, Internal |
| Diskovery 4100 | S-2 | 4100 | | | | |
| Diskovery 420 | S | 416 | | 8 | | I version internal |
| Diskovery 45R | S | 45 | | | | Removeable |
| Diskovery 500 | S-2F | 520 | | | | |
| Disk'y IM260 | S | 260 | | | | |
| Disk'y IM400 | S | 440 | | | | |
| Disk'y IM620 | S | 2x310 | | | | Dual, Mac, Internal |
| Disk'y IS130 | S | 130 | | | | |
| Disk'y IS200 | S | 200 | | | | |
| Disk'y IS200 | S | 200 | | | | |
| Disk'y 80IM | S | 2 x 40 | | | | Dual, Mac, Internal |
| Minipak 100 | S | 104 | | 4 | | |
| Minipak 1000 | S-2F | 1050 | 2570 | 14 | 57 | DEC DSP 3105 |
| Minipak 130(I) | S | 130 | | | | I version internal |
| Minipak 1600 | S | 1600 | | | | |
| Minipak 200(I) | S | 209 | | 8 | | I version internal |
| Minipak 2100 | S-2F | 2040 | | | | |
| Minipak 240 | S | 248 | | | | |
| Minipak 300 | S | 320 | | | | |
| Minipak 310(I) | S | 306 | | | | I version internal |
| Minipak 40(I) | S | 40 | | | | I version internal |
| Minipak 4100 | S-2F | 4095 | | | | |
| Minipak 500 | S-2 | 511 | | | | |

Orca Technology

Out of business

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|------|------|-----|-----|---------------|
| OT 301-1 | A | 335 | | | | |
| OT 304-1 | A | 430 | | | | |
| OT 320A | A | 370 | | 9 | | |
| OT 400A | A | 470 | | 9 | | |
| OT 760E | E | 760 | 1564 | 15 | | Priam ID 700E |
| OT 320S | S | 370 | | 9 | | |
| OT 400S | S | 470 | | 9 | | |
| OT 507S | S | 676 | 1632 | 15 | 34 | |
| OT 510S | S | 1073 | 1928 | 15 | 73 | |
| OT 512S | S | 1063 | 1924 | 15 | 72 | |
| OT 513S | S | 1130 | 1911 | | | |
| OT 760S | S | 760 | 1564 | 15 | | Priam ID 700S |

Osicom Technologies Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|------|-----|------|-----|-----|-----------------|
| OsiCard 20 | H | 21 | | | | |
| OsiCard 30 | H | 33 | | | | |
| OsiCard 40 | H | 42 | | | | |
| OsiCard 8438 | H | 32 | 615 | 4 | 26 | Miniscribe 8438 |
| Macbest 100 | S | 91 | | | | |
| Macbest 150 | S | 150 | | | | |
| Macbest 30 ISE | S | 33 | | | | |
| Macbest 300 | S | 300 | | | | |
| Macbest 40I SE | S | 43 | | | | |
| Macbest 600 | S | 600 | | | | |
| Macbest 65 | S | 65 | | | | |
| Macbest 85 | S | 85 | | | | |
| Macbest-E 100 | S | 91 | | | | |
| Macbest-E 20 | S | 21 | | | | |
| Macbest-E 30 | S | 33 | | | | |
| Macbest-E 40 | S | 43 | | | | |
| Macbest-E 65 | S | 65 | | | | |
| Macbest-E 85 | S | 85 | | | | |

Otari

Bought Disctron. Sold to Rotating Memory Services

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|-----|------|-----|-----|-------|
| C 214 | M | 10 | 306 | 4 | 17 | |
| C 226 | M | 21 | 612 | 4 | 17 | |
| C 503 | M | 3 | 153 | 2 | 17 | |
| C 504 | M | 4 | 215 | 2 | 17 | |
| C 506 | M | 5 | 153 | 4 | 17 | |
| C 507 | M | 5 | 306 | 2 | 17 | |
| C 509 | M | 8 | 215 | 4 | 17 | |
| C 512 | M | 11 | 153 | 8 | 17 | |
| C 513 | M | 11 | 215 | 6 | 17 | |
| C 514 | M | 10 | 306 | 4 | 17 | |
| C 518 | M | 15 | 215 | 7 | 17 | |
| C 519 | M | 15 | 306 | 6 | 17 | |
| C 525 | M | 20 | 306 | 8 | 17 | |
| C 526 | M | 21 | 306 | 8 | 17 | |

Pacific Microelectronics Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------|------|------|------|-----|-----|-----------|
| PM HDE 1200 | S | 1200 | | | | NeXT, Sun |
| PM HDE 330 | S | 330 | | | | NeXT, Sun |
| PM HDE 660 | S | 660 | | | | NeXT, Sun |

Pacific/Magtron

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|------|------|-----|-----|-------|
| MT 3040 | A | 40 | | | | |
| MT 3050 | A | 50 | 1062 | 2 | 46 | |
| MT 3080A | A | 80 | | | | |
| MT 3100 | A | 100 | 1062 | 4 | 46 | |
| MT 3120A | A | 130 | | | | |
| MT 4115E | E | 115 | 1600 | 4 | 35 | |
| MT 4140E | E | 140 | 1600 | 5 | 35 | |
| MT 4170E | E | 170 | 1600 | 6 | 35 | |
| MT 5760E | E | 677 | 1632 | 15 | 54 | |
| MT 4115S | S | 115 | 1600 | 4 | 35 | |
| MT 4140S | S | 140 | 1600 | 5 | 35 | |
| MT 4170S | S | 170 | 1600 | 6 | 35 | |
| MT 5760S | S | 677 | 1632 | 15 | 54 | |
| MT 6120S | S | 1050 | | | | |

PACKinTELL Electronics USA

Out of business?

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|-----|------|-----|-----|-------|
| SX 47 | A | 47 | | | | |
| SX 43 | M | 43 | | | | |

Panasonic

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|-----|------|-----|-----|-------|
| RD 210AA | A | 210 | | | | |
| JU 116 | M | 21 | 615 | 4 | 17 | |
| JU 128 | M | 44 | 633 | 7 | 17 | |
| JU 1381 | S | 40 | | | | |
| JU 1391 | S | 80 | | | | |
| LF 3000E | S | 128 | | | | |
| LF 3002 | S | 128 | | | | |
| LF 5010E | S | 470 | | | | |
| LF 5012 | S | 470 | | | | |
| LF 7010E | S | 500 | | | | |
| LF 7012 | S | 500 | | | | |
| LF 9000E | S | 326 | | | | |
| LF 90002 | S | 326 | | | | |

Paragon

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|------|------|------|-----|-----|-------------|
| PCQ ELO 2013 | A | 1300 | 2633 | 16 | 63 | |
| PCQ ELO 2014 | A | 1400 | | | | MK 1401MAN? |
| PCQ ELO 2021 | A | 2160 | | | | ST 31621A? |
| PCQ ELO 2030 | A | 3080 | | | | MK 3003MAN? |

Peripheral Land Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-----------------|------|------|------|-----|-------|---------------------------|
| Infinity 88 Tbo | S | 88 | | | | |
| Infinity Opt | S | 118 | | | | |
| Infinity Opt | S | 650 | | | | |
| Mach One 100 | S | 96 | | | | Mac |
| Mach One 200 | S | 192 | | | | Mac |
| Mach One 30 | S | 32 | | | | Mac |
| Mach One 40 | S | 45 | | | | Mac |
| Mach One 400 | S | 400 | | | | Mac |
| Mach One 60 | S | 60 | | | | Mac |
| MiniArray 040 | S | 2000 | | | | DEC DSP 3105 |
| MiniArray 2 Gb | S | 1550 | 1747 | 15 | 58-94 | Micropolis 2112. External |
| PL 1.2 Turbo | S | 1200 | | | | |
| PL 1.35 Turbo | S | 1350 | | | | |
| PL 100 Turbo | S | 105 | | 4 | | |
| PL 20 Turbo | S | 22 | | | | |
| PL 200 Turbo | S | 210 | | 7 | | |
| PL 2.1GB Turbo | S-2F | 2129 | 2624 | 19 | 83 | ST 42400N |
| PL 250 Turbo | S | 251 | | | | Mac |
| PL 30 Turbo | S | 32 | | | | Mac |
| PL 300 Turbo | S | 300 | | | | Mac |
| PL 320 Turbo | S | 320 | | 14 | | |
| PL 383 Turbo | S | 383 | | | | Mac |
| PL 400 Turbo | S | 404 | | | | |
| PL 40 Turbo | S | 42 | | | | |
| PL 415 Turbo | S | 415 | | | | |
| PL 50 Turbo | S | 49 | | | | Mac |
| PL 600 Turbo | S | 613 | | | | Mac |
| PL 635 Turbo | S | 645 | | | | |
| PL 645 Turbo | S | 645 | | | | |
| PL 650 Turbo | S | 645 | | | | Mac |

Peripheral Systems Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------|------|-----|------|-----|-----|-------|
| PSI 380 | S | 361 | | | | |
| PSI 536 | S | 323 | | | | |
| PSI 760 | S | 677 | | | | |

Perstor Systems Inc

Out of business?

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------|------|-----|------|-----|-----|--------|
| StorMor 150 | | 150 | | | | ST 506 |
| StorMor 300 | | 300 | | | | ST 506 |
| StorMor 600 | | 600 | | | | ST 506 |
| StorMor 80 | | 80 | | | | ST 506 |

PLI

See *Peripheral Land Inc*

Plus 5

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------|------|-----|------|-----|-----|-------|
| HD 113 | S | 113 | | | | |
| HDC 105 | S | 105 | | | | |
| HDC 45 | S | 45 | | | | |
| HDE 113 | S | 113 | | | | |
| HDE 377 | S | 377 | | | | |
| HDP 211 | S | 211 | | | | |
| HDP 83 | S | 83 | | | | |
| RD 44E | S | 44 | | | | |
| RDP 44 | S | 44 | | | | |

Plus Development Corp

Makers of Plus Hardcards. Now owned by Quantum

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|------|-----|------|-----|-------|-------------------|
| Impulse 105AT | A | 105 | 755 | 16 | 17 | |
| Impulse 120AT | A | 120 | 814 | 9 | 32 | |
| Impulse 170AT | A | 168 | 968 | 10 | 34 | |
| Impulse 210AT | A | 209 | 873 | 13 | 36 | |
| Impulse 330AT | A | 331 | | 7 | 38 | |
| Impulse 40AT | A | 42 | 965 | 5 | 17 | Try 834 x 3 x ? |
| Impulse 425AT | A | 426 | 1021 | 16 | 51 | |
| Impulse 52AT | A | 52 | 751 | 8 | 17 | |
| Impulse 80AT | A | 84 | 965 | 10 | 17 | |
| Impulse 80ATLP | A | 86 | 616 | 16 | 17 | |
| Hardcard 20 | H(A) | 20 | 612 | 4 | 17 | 8-bit IDE MFM 3:1 |
| Hardcard 40 | H(A) | 40 | 612 | 8 | 17 | 8-bit IDE MFM 3:1 |
| Hardcard2 40 | H(A) | 40 | 925 | 5 | 17 | 16-bit RLL |
| Hardcard2 80 | H(A) | 80 | 925 | 10 | 17 | 16-bit RLL |
| Hardcard2 105 | H(A) | 105 | 806 | 15 | 17 | 16-bit S-2 XL |
| Hardcard2XL 50 | H(A) | 52 | 601 | 10 | 17 | 16-bit S-2 1:1 |
| Hardcard 80 | H | 81 | | | | 16-bit S-2 1:1 |
| Passport 20 | H | 21 | | | | 1:1 |
| Passport 40 | H | 43 | | | | 1:1 |
| Impulse 105S | S-2 | 105 | 1019 | 6 | | |
| Impulse 105SLP | S-2 | 105 | 609 | 8 | | |
| Impulse 120S | S-2 | 120 | 1123 | 5 | 42 | |
| Impulse 170S | S | 168 | 1123 | 7 | 48 | |
| Impulse 210S | S | 210 | 1156 | 7 | 39-59 | |
| Impulse 330S | S | 331 | | 7 | 78 | |
| Impulse 40S | S | 42 | 834 | 3 | 28 | |
| Impulse 425S | S | 426 | 1520 | 9 | 44-78 | |
| Impulse 52S/LP | S | 52 | 1219 | 2 | | |
| Impulse 80S | S | 84 | 834 | 6 | 35 | |
| Impulse 80S/LP | S-2 | 86 | | 4 | | |

Praitetek Corp

Out of business

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------|------|-----|------|-----|-----|--------------|
| PT 120 | A | 21 | 615 | 2 | 34 | XT/AT |
| PT 140 | A | 40 | 1024 | 2 | 38 | |
| PT 220A | A | 21 | 612 | 4 | 17 | |
| PT 240 | A | 42 | 615 | 4 | 34 | NEC Prospeed |
| PT 242A | A | 43 | 615 | 4 | 34 | XT/AT |
| PT 282A | A | 82 | 1024 | 4 | 39 | |
| PT 220S | S | 21 | 612 | 4 | 17 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------|------|-----|------|-----|-----|-------|
| PT 242S | S | 43 | 615 | 4 | 34 | |
| PT 282S | S | 82 | 1024 | 4 | 39 | |

Premier Computer Innovations Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------|------|-----|------|-----|-----|-------|
| PD 40281 | A | 40 | 977 | 5 | 17 | |
| P D2070R | R | 20 | | | | |
| P D4070R | R | 40 | | | | |
| P S30R | R | 33 | | 2 | | |
| P S50R | R | 49 | | 2 | | |
| P 103ES/IS | S | 103 | | | | Mac |
| P 20EM | S | 20 | | | | Mac |
| P 20IM | S | 20 | | | | Mac |
| P 20S | S | 22 | | 2 | | |
| P 30S | S | 32 | | 2 | | |
| P 401S | S | 40 | | | | Mac |
| P 50EM | S | 49 | | | | Mac |
| P 50IM | S | 49 | | | | Mac |
| P 601M | S | 60 | | | | Mac |
| P 60ES | S | 60 | | | | Mac |
| P 801S | S | 80 | | | | Mac |
| P 8028S | S | 80 | | | | |
| P 80ES | S | 80 | | | | Mac |
| PD 6028S | S | 60 | | | | |
| PS 5040S | S | 48 | | | | |
| PS 50S | S | 49 | | 2 | | |

Priam/Vertex

Division of Sequel. Partially purchased by Atasi in 1990.

ID=Internal Disk ED=External Disk

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|-------|-----|------|-----|-----|-----------------------|
| ID 200L-1(C,P) | A | 200 | 1316 | 9 | 33 | |
| 3708 | A | 49 | 745 | 4 | 28 | |
| 3804 | A | 65 | 981 | 5 | 26 | |
| 3804M | A | 40 | 745 | 4 | 26 | |
| ID 120-EX | E | 121 | 1024 | 7 | 33 | |
| ID 160H | E | 156 | 1225 | 7 | 36 | |
| ID 340H(-U) | E | 340 | 1218 | 7 | 36 | |
| ID 660H(-U) | E | 660 | 1632 | 15 | 54 | |
| ID 700E | E | 701 | 1564 | 15 | | Orca 760E |
| ID/ED 100 | E | | 1156 | 7 | | |
| ID/ED 120 | E | 121 | 1017 | 7 | 34 | |
| ID/ED 130 | E | | 1024 | 15 | 34 | |
| ID/ED 150 | E | 159 | 1268 | 7 | 34 | |
| ID/ED 160EC,E | E | 157 | 1218 | 7 | 36 | Logical 376 x 16 x 51 |
| ID/ED 160PS71 | E | 155 | 1195 | 7 | 36 | Logical 148 x 64 x 32 |
| ID/ED 230 | E | | 1218 | 15 | 36 | |
| ID/ED 250EC,E | E | 247 | 1218 | 11 | 36 | Logical 591 x 16 x 51 |
| ID/ED 250PS71 | E | 243 | 1195 | 11 | 36 | Logical 232 x 64 x 32 |
| ID/ED 330EC | E | 337 | 1218 | 15 | 36 | Logical 806 x 16 x 51 |
| ID/ED 330PS71 | E | 331 | 1195 | 15 | 36 | Logical 316 x 64 x 32 |
| ID/ED 75 | E | | 1156 | 5 | | |
| P 617 | E | 153 | 1225 | 7 | 36 | |
| P 628 | E | 241 | 1225 | 11 | 36 | |
| P 638 | E(S?) | 329 | 1225 | 15 | 36 | |
| P 676 | E | 677 | 1632 | 15 | 54 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|------|---------|------|-----|-------|-----------------------|
| ID 100AT | M | 103 | 1156 | 7 | 17 | |
| ID 160A | M | 62 | 1166 | 5 | 17 | |
| ID 185A | M | 73 | 1166 | 7 | 17 | |
| ID 20 | M | 20 | 987 | 3 | 17 | |
| ID 330 | M | 338 | | | | |
| ID/ED 40PC,W1 | M | 42 | 981 | 5 | 17 | X2 Interleave 6 V 150 |
| ID/ED 45 ATD2 | M | 45 | 1018 | 5 | 17 | Based on V160 |
| ID/ED 45PS002 | M | 45 | 1017 | 5 | 17 | 002 M30, 021 for M50 |
| ID/ED 60 PCX2 | M | 60 | 981 | 7 | 17 | X2 Interleave 6 V 170 |
| ID/ED 62 ATD2 | M | 62 | 1018 | 7 | 17 | |
| ID/ED 62 PS002 | M | 62 | 1017 | 7 | 17 | 02 M30, 021 M50 |
| ID/ED 120 | M | 26 | 987 | 3 | 17 | |
| ID/ED 130AT | M/R | 133/244 | 1018 | 15 | 17/25 | |
| ID/ED 130PS2 | M | 133 | 1218 | 15 | 17 | PS/2 Model 30 |
| ID/ED 130PS21 | M | 133 | 1017 | 15 | 17 | 021 M50, 041 others |
| P 1050 | M | 45 | 1024 | 5 | 17 | |
| P 502 | M | 45 | 755 | 7 | 17 | |
| P 503 | M | 71 | | 8 | 17 | |
| P 504 | M | 45 | 755 | 7 | 17 | |
| P 505 | M | 111 | | 12 | 17 | |
| P 514 | M/R | 117/180 | 1224 | 11 | 17/25 | |
| P 519 | M/R | 133/244 | 1224 | 15 | 17/25 | |
| P 623 | M | 70 | 752 | 11 | 17 | |
| P 630 | M | 156 | 1224 | 15 | 17 | |
| S 14 | M/R | 117/179 | 1224 | 11 | 17/25 | |
| S 15 | M/R | 160/244 | 1224 | 15 | 17/25 | |
| S 19 | M | 152 | 1224 | 15 | 17 | |
| V 130 | M/R | 25/39 | 987 | 3 | 17/25 | |
| V 150/ID 40 | M/R | 42/65 | 987 | 5 | 17/25 | |
| V 170/ID 60 | M/R | 60/91 | 987 | 7 | 17/25 | |
| V 185 | M/R | 71/108 | 1166 | 7 | 17/25 | |
| V 519 | M/R | 160 | 1224 | 15 | 17 | |
| 3504 | R | 44 | 820 | 4 | 25 | |
| 3504M | R | 57 | 771 | 4 | 25 | |
| 3704 | R | 58 | 793 | 4 | 35 | |
| ID/ED 75RC,RF | R | 74 | 1156 | 5 | 25 | Logical 578 x 10 x 25 |
| ID/ED 100RC | R | 103 | 1156 | 7 | 25 | Logical 578 x 14 x 25 |
| ID/ED 230RC | R | 233 | 1214 | 15 | 25 | Logical 612 x 30 x 25 |
| ID/ED 240R | R | 243 | 1220 | 15 | 26 | |
| V 130R | R | 39 | 987 | 3 | 25 | |
| V 150 | R | 151 | 987 | 5 | 25 | |
| V 160 | R | 74 | 1166 | 5 | 25 | |
| V 170R | R | 92 | 987 | 7 | 25 | |
| V 185 | R | 103 | 1166 | 7 | 25 | |
| ID/ED 160 | S | 158 | 1218 | 7 | 36 | |
| ID/ED 160PSSX | S | 158 | 1225 | 7 | 36 | |
| ID/ED 250 | S | 248 | 1218 | 11 | 36 | |
| ID/ED 250-PS | S | 244 | 1225 | 15 | 36 | |
| ID/ED 250-SX | S | 248 | 1225 | 11 | 36 | |
| ID/ED 330 | S | 338 | 1218 | 15 | 36 | |
| ID/ED 330PSSX | S | 339 | 1225 | 15 | 36 | |
| ID/ED 660 | S | 675 | 1628 | 15 | 54 | |
| ID 700S | S | 668 | 1564 | 15 | | Orca 760S |
| P 3708 | S | 86 | 838 | 6 | 35 | |
| P 717 | S | 164 | 1225 | 7 | 36 | |
| P 728 | S | 257 | 1225 | 11 | 36 | |
| P 738 | S | 352 | 1225 | 15 | 36 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------|------|-----|------|-----|-----|---------------|
| P 776 | S | 677 | 1632 | 15 | 54 | |
| P 806 | S | 192 | 1023 | 11 | 35 | |
| P 807 | S | 292 | 1552 | 11 | 35 | MFM recording |
| P 808 | S | 433 | 1422 | 12 | 52 | |
| P 3450 | SMD | 33 | 525 | 5 | 26 | |
| P 7050 | SMD | 67 | 1049 | 5 | 26 | |
| P 803 | SMD | 73 | 850 | 5 | 35 | MFM recording |

Procom Technology

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------------|------|------|------|-----|-----|-----------------|
| Atom AT 1300 | A | 1350 | | | | |
| Atom AT 340 | A | 340 | | | | |
| Atom AT 500 | A | 524 | | | | |
| Atom AT 700 | A | 700 | | | | |
| Atom AT 800 | A | 810 | | | | |
| Bravopaq 120 | A | 124 | 1024 | 14 | 17 | |
| Bravopaq 40 | A | 42 | 977 | 5 | 17 | |
| HIDE DRIVE AT 120 | A | 121 | 683 | 8 | 38 | |
| HIDE DRIVE 20 | A | 21 | 615 | 4 | 17 | Hardcard |
| HIDE DRIVE 30 | A | 33 | 615 | 4 | 26 | Hardcard |
| HIDE DRIVE 48 | A | 48 | 615 | 6 | 26 | Hardcard |
| HIDE DRIVE AT 80 | A | 84 | 526 | 8 | 39 | |
| PAT 100 | A | 100 | 535 | 14 | 29 | |
| PAT 40 | A | 42 | 805 | 4 | 26 | |
| PHD 20 | A | 20 | 615 | 4 | 17 | |
| PHD 30 | A | 33 | 615 | 4 | 26 | |
| PHD 45 | A | 48 | 608 | 6 | 26 | |
| PHD 48 | A | 49 | 615 | 6 | 26 | 773 x 7 x 17? |
| PHD 5045 | A | 45 | 773 | 7 | 17 | |
| PI 120 | A | 121 | 1524 | 4 | 39 | |
| PI 140 | A | 44 | 820 | 4 | 26 | |
| PI 80 | A | 84 | 1053 | 4 | 39 | |
| PIRA 100 | A | 110 | 531 | 14 | 29 | 776 x 8 x 33? |
| PIRA 120 | A | 124 | 1024 | 15 | 17 | |
| PIRA 200 | A | 210 | 951 | 12 | 36 | |
| PIRA 40 | A | 42 | 977 | 5 | 17 | |
| PIRA 50-120 | A | 120 | 1024 | 15 | 17 | |
| PIRA 50-200 | A | 212 | 683 | 16 | 38 | 954 x 12 x 36? |
| PIRA 50-270 | A | 270 | | | | |
| PIRA 50-340 | A | 340 | | | | |
| PIRA 50-420 | A | 420 | | | | |
| PIRA 50-80 | A | 87 | 1024 | 14 | 17 | |
| PIRA 55-120 | A | 120 | | | | |
| PIRA 55-200 | A | 212 | | | | |
| PIRA 55-270 | A | 270 | | | | |
| PIRA 55-340 | A | 340 | | | | |
| PIRA 55-420 | A | 420 | | | | |
| PIRA 55-500 | A | 500 | | | | |
| Propaq 100 | A | 105 | 776 | 8 | 33 | |
| Propaq 1201 | A | 121 | 1524 | 4 | 39 | |
| Propaq 120-19 | A | 124 | 1105 | 7 | 33 | 1024 x 14 x 17? |
| Propaq 185-15 | A | 189 | 977 | 9 | 42 | 1023 x 12 x 33? |
| Propaq 200 | A | 212 | 683 | 16 | 38 | |
| Propaq 40 | A | 42 | 523 | 4 | 40 | 805 x 4 x 26? |
| Propaq 80i | A | 80 | 1053 | 4 | 39 | |
| PR IDE 1200 | A | 1200 | | | | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|------|------|------|-----|-----|---------------|
| PR IDE 340i | A | 340 | | | | |
| PR IDE 500i | A | 510 | | | | |
| PR IDE 800 | A | 800 | | | | |
| Hiper 145 | E | 150 | 1024 | 8 | 36 | |
| Hiper 155 | E | 383 | 966 | 9 | 36 | |
| Hiper 330 | E | 337 | 1224 | 15 | 36 | |
| Hiper 380 | E | 383 | 755 | 16 | 63 | |
| Hiper II/65 | E | 65 | 925 | 9 | 17 | |
| Hiper II/155 | E | 157 | 150 | 64 | 32 | |
| Hiper II/380 | E | 383 | 365 | 64 | 32 | |
| PHD 20 | M | 20 | 615 | 4 | 17 | |
| PHD 2520 | M | 21 | 615 | 4 | 17 | |
| PHD 2545 | M | 45 | 733 | 7 | 17 | |
| PHD 3020 | M | 21 | 615 | 4 | 17 | |
| HideDrive 30 | M | 21 | 615 | 4 | 17 | |
| HideDrive 48 | M | 45 | 733 | 7 | 17 | |
| Hiper 20 | M | 21 | 615 | 4 | 17 | |
| HideDrive 30 | R | 33 | 615 | 4 | 26 | |
| Hiper 30 | R | 32 | 615 | 4 | 26 | |
| Hiper 48 | R | 48 | 615 | 6 | 26 | |
| Classic 100 | S | 100 | | | | Mac (Quantum) |
| Classic 20 | S | 20 | | | | Mac (Seagate) |
| Classic 30 | S | 30 | | | | Mac (Seagate) |
| Classic 45 | S | 45 | | | | Mac (Seagate) |
| Classic 50 | S | 50 | | | | Mac (Quantum) |
| HiPerf 100 | S | 102 | | | | |
| HiPerf 20 | S | 20 | | | | |
| HiPerf 200 | S | 200 | | | | |
| HiPerf 30 | S | 30 | | | | |
| HiPerf 320 | S | 320 | | | | |
| HiPerf 45 | S | 45 | | | | |
| HiPerf 650 | S | 650 | | | | |
| HiPerf 80 | S | 80 | | | | |
| LCsi 100 | S | 100 | | | | |
| LCsi 50 | S | 50 | | | | |
| MC 1003 | S | 1060 | | | | |
| MD 20 | S | 21 | 21 | 64 | 32 | |
| MD 200 | S | 208 | 200 | 32 | 32 | |
| MD 2003 | S-2F | 2030 | | | | |
| MD 2013 | S-2F | 2030 | | | | |
| MD 2103(W) | S2FW | 2100 | | | | |
| MD 30 | S | 30 | 30 | 64 | 32 | |
| MD 320 | S | 337 | 317 | 64 | 32 | |
| MD 420 | S | 433 | 415 | 64 | 32 | |
| MD 4303(W) | S2FW | 4300 | | | | |
| MD 45 | S | 46 | 45 | 64 | 32 | |
| MD 544 | S | 544 | | | | |
| MD 80 | S | 83 | 80 | 64 | 32 | |
| M Ilsi | S | 200 | | | | |
| MTD 1000 | S | 1000 | 989 | 64 | 32 | |
| MTD 1900 | S-2F | 1900 | | | | |
| MTD 2000 | S-2F | 2000 | | | | External Mac |
| MTD 320-10 | S | 337 | 317 | 64 | 32 | |
| MTD 585 | S | 601 | 573 | 64 | 32 | |
| MTD 650 | S | 676 | 650 | 64 | 32 | |
| MTD 9000 | S-2F | 9100 | | | | |
| QD 1900 | S-2F | 1900 | | | | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------|------|------|------|-----|-----|--------------|
| QD 2000 | S-2F | 2000 | | | | Internal Mac |
| Si 100 | S | 104 | 102 | 64 | 32 | |
| Si 1000/S5 | S | 1037 | | 64 | 32 | |
| Si 1003 | S | 1060 | | | | |
| Si 200/PS3 | S | 209 | 200 | 64 | 32 | |
| Si 2003 | S-2F | 2030 | | | | |
| Si 2103(W) | S2FW | 2100 | | | | |
| Si 320-10 | S | 320 | 317 | 64 | 32 | |
| Si 320H | S | 320 | 339 | 64 | 32 | |
| Si 420h | S | 435 | 415 | 64 | 32 | |
| Si 4303(W) | S2FW | 4300 | | | | |
| Si 45 | S | 48 | 45 | 64 | 32 | |
| Si 544 | S | 544 | | | | |
| Si 585/S5 | S | 601 | 415 | 64 | 32 | |
| Si 650 | S | 662 | 632 | 64 | 32 | |
| Si 80 | S | 83 | 80 | 64 | 32 | |
| Si 9000(W) | S2FW | 9100 | | | | |

PTI

Peripheral Technology

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|------|-------|------|-----|-------|-------|
| PT 238A | A | 32 | 615 | 4 | 26 | |
| PT 251A | A | 43 | 820 | 4 | 26 | |
| PT 357A | A | 48 | 615 | 6 | 26 | |
| PT 376A | A | 64 | 820 | 6 | 26 | |
| PT 4102A | A | 86 | 820 | 8 | 26 | |
| PT 225 | M/R | 21/32 | 615 | 4 | 17/26 | |
| PT 234 | M | 28 | 820 | 4 | 17 | |
| PT 325 | M | 20 | 615 | 4 | 17 | |
| PT 338 | M/R | 32/49 | 615 | 6 | 17/26 | |
| PT 351 | M | 42 | 820 | 6 | 17 | |
| PT 468 | M | 57 | 820 | 8 | 17 | |
| PT 238R | R | 32 | 615 | 4 | 26 | |
| PT 251R | R | 43 | 820 | 4 | 26 | |
| PT 257R | R | 30 | 615 | 6 | 26 | |
| PT 325R | R | 20 | 615 | 4 | 26 | |
| PT 338R | R | 30 | 615 | 6 | 26 | |
| PT 357R | R | 48 | 615 | 6 | 26 | |
| PT 376R | R | 64 | 820 | 6 | 26 | |
| PT 4102R | R | 86 | 820 | 8 | 26 | |
| PL 100 Turbo | S | 105 | | 4 | | |
| PL 200 Turbo | S | 210 | | 7 | | |
| PL 32 Turbo | S | 320 | | 14 | | |
| PT 238S | S | 52 | 615 | 4 | 42 | |
| PT 251S | S | 43 | 820 | 4 | 26 | |
| PT 357S | S | 48 | 615 | 6 | 26 | |
| PT 376S | S | 64 | 820 | 6 | 26 | |
| PT 4102S | S | 87 | 820 | 8 | 26 | |

Quadram

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|-----|------|-----|-----|-------|
| Q 520 | M | | 512 | 4 | 17 | |
| Q 530 | M | | 512 | 6 | 17 | |
| Q 540 | M | | 512 | 8 | 17 | |

Quantum

Drive manufacture subcontracted to MKE. DSP drives made by Digital.

Sun Parameters

CTRL may use the value SCSI; ACYL value is always 2; PCYL=NCYL+2 7200 RPM drives need v4.1.3 or higher. Solaris supports 7200.

Drive ID

First five characters of second group on bar code, such as CY12A. Numbers are capacity, last letter decode:

| | |
|----------|---------------------------------|
| A | IDE |
| S | SCSI, 50-pin, single-ended |
| W | SCSI Wide, 68 pin, single-ended |
| D | SCSI Wide, 68 pin, single-ended |
| J | SCSI SCA, 80 pin |

First letter decode:

| | | | | | | | |
|-----------|-------------|-----------|-------------|-----------|-------------|-----------|--------------|
| AT | Atlas | BF | Bigfoot | CP | Capella | CY | Bigfoot CY |
| DA | Daytona | EM | Empire | EN | Pro LPS | EP | Pro LPS 1800 |
| EU | Europa | FB | Fireball | GM | Pro LPS | GP | Grand Prix |
| HN | Atlas II | LT | Lightning | MU | Pro 425 | MV | Maverick |
| RR | LPS | SA | Saturn VP | SE | Fireball SE | SG | Pioneer SG |
| SR | Sirocco | ST | Fireball ST | TB | LPS | TM | Fireball TM |
| TR | Trailblazer | TX | Bigfoot TX | VK | Viking | | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------------|------|-------|-------|-----|-----|------------------------|
| Bigfoot 1.0AT | A | 1080 | 2100 | 16 | 63 | 5.25" |
| Bigfoot 1.2AT | A2F | 1286 | 2492 | 16 | 63 | 5.25" |
| Bigfoot 1.7AT | A2 | 1700 | 3744 | 16 | 63 | 5.25" |
| Bigfoot 2.1AT | A2F | 2110 | 4092 | 16 | 63 | 5.25" |
| Bigfoot 2.5AT | A2F | 2577 | 4994 | 16 | 63 | 5.25" |
| Bigfoot 3.5AT | A2F | 3500 | 6232 | 16 | 63 | 5.25" |
| Bigfoot CY 2.1AT | A2F | 2111 | 4092 | 16 | 63 | 5.25" |
| Bigfoot CY 4.3AT | A2F | 4320 | 8960 | 15 | 63 | 5.25" |
| Bigfoot CY 6.4AT | A2F | 6480 | 13346 | 15 | 63 | 5.25" |
| Bigfoot TS | A4 | 17900 | | | | |
| Bigfoot TX 4.0 | A2F | 4018 | 8306 | 15 | 63 | 5.25" |
| Bigfoot TX 6.0 | A2F | 6028 | 12459 | 15 | 63 | 5.25" |
| Bigfoot TX 8.0 | A2F | 8037 | 15574 | 16 | 63 | 5.25" |
| Bigfoot TX 12.0 | A4 | 11480 | 23361 | 16 | 63 | 5.25" |
| Daytona 127AT | A | 127 | 677 | 9 | 41 | |
| Daytona 170AT | A | 170 | 538 | 10 | 62 | |
| Daytona 256AT | A | 256 | 723 | 11 | 63 | |
| Daytona 341AT | A | 341 | 1011 | 15 | 44 | |
| Daytona 514AT | A | 514 | 997 | 16 | 63 | |
| ELS 127AT | A | 127 | 919 | 16 | 17 | 1536 x 3 x 42-67 |
| ELS 170AT | A | 170 | 1011 | 15 | 22 | |
| ELS 40AT | A | 42 | 966 | 5 | 17 | |
| ELS 42AT | A | 42 | 968 | 5 | 17 | 1536 x 1 x 42-67 |
| ELS 85AT | A | 85 | 977 | 10 | 17 | 832 x 6 x 33 HP D 2329 |
| Europa 1080AT | A2F | 1080 | 2362 | 15 | 60 | 2.5" |
| Europa 540AT | A2F | 540 | 1579 | 15 | 60 | 2.5" |
| Europa 810AT | A2F | 810 | 1771 | 15 | 60 | 2.5" |
| Fireball 2100AT | A2 | 2012 | 4092 | 16 | 63 | |
| Fireball II 1080AT | A2F | 1089 | 2112 | 16 | 63 | Normal |
| | | | 528 | 64 | 63 | LBA |
| | | | 1056 | 32 | 63 | Large |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------------|------|--------|--------|-----|-----|------------------------|
| Fireball II 1280AT | A2 | 1281 | 2484 | 16 | 63 | |
| Fireball II 540AT | A2 | 544 | 1056 | 16 | 63 | |
| Fireball II 640AT | A2 | 642 | 1244 | 16 | 63 | |
| Fireball CR 127 | A3 | 12700 | | | | |
| Fireball CR 13.0 | A3 | 12700 | | | | 5400 RPM |
| Fireball CR 84 | A3 | 8400 | | | | |
| Fireball CX 20A011 | A4 | 20400 | | | | 5400 RPM |
| Fireball EL 2.5 | A2 | 2500 | 5300 | 15 | 63 | |
| Fireball EL 5.1 | A2 | 5100 | 10602 | 15 | 63 | |
| Fireball EL 7.6 | A2 | 7600 | 15907 | 15 | 63 | |
| Fireball EL 10.2 | A4 | 9772 | 19885 | 16 | 63 | |
| Fireball EX 3.2 | A2 | 3200 | 6256 | 16 | 63 | |
| Fireball EX 5.1 | A2 | 5100 | 10602 | 16 | 63 | |
| Fireball EX 6.4 | A2 | 6400 | 133328 | 16 | 63 | |
| Fireball EX 10.2 | A2 | 10200 | 19885 | 16 | 63 | |
| Fireball EX 12700 | A2 | 12700 | 24704 | 16 | 63 | |
| Fireball KX Ultra | A4 | 27300 | | | | 7200 RPM |
| Fireball LCT 08 | A4 | 26000 | | 16 | | 5400 RPM U66 |
| Fireball LCT 10 | A4 | 30000 | | 16 | | 5400 RPM U66 |
| Fireball + KA | A3 | 18200 | | | | 7200 RPM Fast |
| Fireball + KX 10A00A | A4 | 10270 | | | | 7200 RPM |
| Fireball SE 2.1 | A(U) | 2151 | 4092 | 16 | 63 | |
| Fireball SE 3.2 | A(U) | 3228 | 6256 | 16 | 63 | |
| Fireball SE 4.3 | A(U) | 4310 | 14848 | 9 | 63 | |
| Fireball SE 6.4 | A(U) | 6448 | 13328 | 16 | 63 | |
| Fireball SE 8.4 | A(U) | 8455 | 16383 | 16 | 63 | |
| Fireball ST 1.6 | A | 1614 | 3128 | 16 | 63 | 5400 RPM |
| Fireball ST 2.1 | A | 2111 | 4092 | 16 | 63 | 5400 RPM |
| Fireball ST 3.2 | A | 3228 | 6256 | 16 | 63 | 5400 RPM |
| Fireball ST 4.3 | A | 4310 | 14848 | 9 | 63 | 5400 RPM |
| Fireball ST 6.4 | A | 6448 | 13328 | 15 | 63 | 5400 RPM |
| Fireball TM 1.0 | A | 1089.9 | 2112 | 16 | 63 | 4500 RPM |
| Fireball TM 1.2 | A | 1281 | 2484 | 16 | 63 | 4500 RPM |
| Fireball TM 1.7 | A | 1707 | 3309 | 16 | 63 | 4500 RPM |
| Fireball TM 2.1 | A2 | 2111 | 4092 | 16 | 63 | 4500 RPM |
| Fireball TM 2.5 | A | 2564 | 4969 | 16 | 63 | 4500 RPM |
| Fireball TM 3.2 | A2 | 3216 | 6232 | 16 | 63 | 5.25" Tempest 4500 RPM |
| Fireball TM 3.8 | A2 | 3860 | 7480 | 16 | 63 | 4500 RPM |
| GEM 160A | A | 168 | 968 | 10 | 34 | ProDrive |
| GEM 80A | A | 84 | 991 | 10 | 17 | ProDrive |
| GEM 24A012 | A | 240 | 723 | 13 | 51 | |
| GO 40AT | A | 43 | 821 | 6 | 17 | Laptops |
| GO 60AT | A | 65 | 526 | 9 | 26 | Laptops |
| GO 80AT | A | 86 | 991 | 10 | 17 | Also 1024 x 4 x 17 |
| GO 120AT | A | 127 | 731 | 13 | 26 | Laptops |
| GO 160AT | A | 169 | 968 | 10 | 34 | |
| GO GLS 127AT | A | 127 | 677 | 9 | 41 | |
| GO GLS 170AT | A | 170 | 538 | 10 | 62 | |
| GO GLS 256AT | A | 256 | 723 | 11 | 63 | |
| GO GLS 85AT | A | 85 | 722 | 10 | 23 | |
| GO GLS 341AT | A | 341 | 1011 | 15 | 44 | |
| GO GLS 541AT | A | 541 | 997 | 16 | 63 | |
| GO GRS 60AT | A | 60 | 526 | 9 | 26 | |
| GO GRS 80AT | A | 84 | 966 | 5 | 34 | Laptops |
| GO GRS 120AT | A | 127 | 1024 | 9 | 26 | |
| GO GRS 160AT | A | 169 | 966 | 10 | 34 | Laptops |
| GO QG80 | A | 84 | 991 | 10 | 17 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------------|------|------|------|-----|-----|----------------------------|
| IMP 52AT | A | 52 | 751 | 8 | 17 | |
| IMP 425AT | A | 425 | 1021 | 16 | 51 | |
| Lightning 270AT | A | 270 | 944 | 14 | 40 | |
| Lightning 365AT | A | 366 | 976 | 12 | 61 | |
| Lightning 540AT | A | 541 | 1120 | 16 | 59 | |
| Lightning 730AT | A | 731 | 1416 | 16 | 63 | |
| LPS 105AT | A | 105 | 755 | 16 | 17 | 1219 x 4 x 35-49 |
| LPS 120AT PD | A | 122 | 901 | 5 | 53 | 760 x 8 x 39—see 127AT |
| LPS 127AT | A | 128 | 919 | 16 | 17 | Try 760 x 8 x 39 |
| LPS 170AT | A | 170 | 1011 | 15 | 22 | |
| LPS 210AT | A | 210 | 723 | 15 | 38 | |
| LPS 240AT PD | A | 245 | 723 | 13 | 51 | |
| LPS 270AT | A | 270 | 944 | 14 | 40 | Maverick |
| LPS 330AT | A | 331 | 1011 | 15 | 44 | |
| LPS 340AT | A | 343 | 1011 | 15 | 44 | |
| LPS 420AT | A | 420 | 1010 | 16 | 51 | |
| LPS 450AT | A | 450 | 931 | 15 | 63 | 2096 x 6 x 44-96 |
| LPS 52AT | A | 52 | 751 | 8 | 17 | |
| LPS 525AT PD | A | 525 | 1017 | 16 | 63 | |
| LPS 540AT | A | 540 | 1120 | 16 | 59 | 1024 cyls for SCO Unix/AST |
| LPS 80AT | A | 85 | 616 | 16 | 17 | |
| LPS 85AT | A | 80 | 977 | 5 | 17 | |
| Maverick 270AT | A | 270 | 944 | 14 | 40 | IBM 06H4152 |
| Maverick 540AT | A | 541 | 1049 | 16 | 63 | |
| PD 120AT | A | 120 | 814 | 9 | 32 | |
| PD 170AT | A | 168 | 968 | 10 | 34 | |
| PD 210AT | A | 209 | 873 | 13 | 36 | |
| PD 425(i)AT | A | 426 | 1021 | 16 | 51 | |
| Pioneer SG 1.0 | A | 1082 | 2097 | 16 | 63 | |
| Pioneer SG 2.1 | A | 2111 | 4092 | 16 | 63 | |
| Pro 105AT | A | 105 | 755 | 16 | 17 | |
| Pro 120AT | A | 120 | 814 | 9 | 32 | 1123 x 5 x 48 |
| Pro 1225AT | A | 1225 | 2448 | 14 | 70 | |
| Pro 127AT | A | 127 | 814 | 9 | 32 | |
| Pro 170AT | A | 168 | 968 | 10 | 34 | 1123 x 7 x 48 |
| Pro 210AT | A | 210 | 873 | 13 | 36 | 1156 x 7 x 39-59 |
| Pro 240AT | A | 245 | 723 | 13 | 51 | |
| Pro 270AT | A | 270 | 944 | 14 | 40 | Mac LC630 |
| Pro 330AT | A | 336 | 1011 | 15 | 44 | |
| Pro 40AT | A | 42 | 965 | 5 | 17 | 834 x 3 x 28 |
| Pro 425(i)AT | A | 426 | 1021 | 16 | 51 | |
| Pro 52AT/S | A | 52 | 751 | 8 | 17 | |
| Pro 80AT | A | 84 | 965 | 10 | 17 | 834 x 6 x 28 |
| Pro 85AT | A | 85 | 611 | 16 | 17 | |
| QM 20256DYA | A | 256 | 723 | 11 | 63 | 2.5" |
| QM 20341DYA | A | 341 | 1011 | 15 | 44 | 2.5" |
| QM 20541DYA | A | 541 | 997 | 16 | 63 | 2.5" |
| QM 20540EUA | A | 540 | 1120 | 16 | 59 | 2.5" |
| QM 20810EUA | A | 810 | | | | 2.5" |
| QM 21080EUA | A | 1089 | 2112 | 16 | 63 | 2.5" |
| QM 30850TRA | A | 850 | 1647 | 16 | 63 | |
| QM 31080FBA | A | 1089 | 2112 | 16 | 63 | |
| Scirocco 1700 | A2 | 1713 | 3309 | 16 | 63 | |
| Scirocco 2550 | A2 | 2573 | 4969 | 16 | 63 | |
| Trailblazer 420AT | A | 421 | 1010 | 16 | 51 | |
| Trailblazer 635AT | A | 637 | 1234 | 16 | 63 | |
| Trailblazer 850AT | A | 850 | 1647 | 16 | 63 | Normal |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|----------------------------|-------|------|-----|--------|--------------------------|
| | | | 823 | 32 | 63 | LBA/Large |
| Pro 100E | E | 103 | | | | |
| Pro 145E | E | 145 | 1123 | 7 | 36 | |
| EZ 127 | H | 127 | 919 | 16 | 17 | 16-bit |
| EZ 240 | H | 245 | 723 | 13 | 51 | 16-bit |
| EZ 42 | H | 42 | 977 | 5 | 17 | 16-bit |
| EZ 85 | H | 85 | 977 | 10 | 17 | 16-bit |
| HCIIXL105 | H | 105 | 806 | 15 | 17 | 16-bit |
| HCIIXL50 | H | 52 | 601 | 10 | 17 | |
| Q 510 | M/R | 9/13 | 512 | 2 | 17/26 | |
| Q 520 | M/R | 15/27 | 512 | 4 | 17/26 | Not in XTs or Xebec 1210 |
| Q 530 | M/R | 25/41 | 512 | 6 | 17/26 | Not in XTs or Xebec 1210 |
| Q 540 | M/R | 36/54 | 512 | 8 | 17/26 | Not in XTs or Xebec 1210 |
| Q 2010 | R | 8 | 512 | 2 | 32 | |
| Q 2020 | R | 16 | 512 | 4 | 32 | |
| Q 2030 | R | 25 | 512 | 6 | 32 | |
| Q 2040 | R | 33 | 512 | 8 | 32 | |
| Q 2080 | R | 67 | 1172 | 7 | 32 | |
| Q 250 | R | 53 | 823 | 4 | 26 | |
| Q 280 | R | 80 | 823 | 6 | 26 | |
| Atlas | see XP series (down a bit) | | | | | |
| 240S | S | 240 | | | | Rebadged as DEC RZ 24L-E |
| 40S | S | 43 | 834 | 3 | 35 | |
| 80S | S | 71 | 834 | 5 | 35 | |
| 1050S | S | 1000 | | | | |
| 1080S | S | 1080 | | 8 | | |
| 1225S | S | 1200 | | | | |
| Capella | see VP series (down a bit) | | | | | |
| Daytona 127S | S-2 | 127 | 1704 | 2 | 54-92 | |
| Daytona 170S | S-2 | 170 | 1704 | 3 | 54-92 | |
| Daytona 256S | S-2 | 256 | 1704 | 4 | 54-92 | |
| Daytona 341S | S-2 | 341 | 1704 | 6 | 54-92 | |
| Daytona 514S | S-2 | 491 | | | | 4500 RPM |
| Daytona 541S | S-2 | 541 | 1704 | 8 | 54-92 | |
| DSP 3053L | S-2F | 535 | 8100 | 4 | 59-119 | |
| DSP 3107L | S2FW | 1070 | 3100 | 8 | 59-119 | |
| DSP 3133L | S2FW | 1340 | 3100 | 10 | 59-119 | |
| DSP 3210L | S2FW | 2150 | 3042 | 16 | 59-119 | |
| ELS 127S | S | 127 | 1541 | 3 | 54 | Sun 3600 RPM |
| | | | 1536 | 3 | 27 | HP |
| ELS 170S | S | 170 | 1544 | 4 | 54 | 3600 RPM |
| | | | 1542 | 4 | 54 | Sun |
| ELS 42S | S | 42 | 1528 | 1 | 17 | |
| ELS 455S | S | 455 | | | | |
| ELS 85S | S | 85 | 1537 | 2 | 54 | 3600 RPM |
| | | | 1535 | 2 | 54 | Sun |
| Empire 1080S | S-3F | 1080 | 2864 | 16 | 46 | Sun 5400 RPM |
| | | | 2866 | 8 | 46 | HP |
| Empire 1400S | S-2F | 1440 | 1988 | 24 | 86 | Sun 5400 RPM |
| | | | 1019 | 22 | 61 | HP |
| Empire 2100S | S-3F | 2100 | 1988 | 24 | 86 | Sun 5400 RPM |
| | | | 1990 | 24 | 43 | HP |
| Empire 540S | S-3F | 540 | 1431 | 16 | 46 | Sun 5400 RPM |
| | | | 1433 | 8 | 46 | HP |
| Empire II | see VP series (down a bit) | | | | | |
| ESP 3013 | S-2 | 134 | | | | Solid State |
| ESP 3026 | S-2 | 268 | | | | Solid State |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------------|-------|-------|------|-----|---------|----------------|
| ESP 5011 | S-2F | 118 | | | | Solid State |
| ESP 5047 | S-2F | 475 | | | | Solid State |
| ESP 5095 | S-2F | 950 | | | | Solid State |
| ESP 510 | S-2F | 107 | | | | Solid State |
| ESP 530 | S-2F | 267 | | | | Solid State |
| ESP 540 | S-2F | 428 | | | | Solid State |
| ESP 580 | S-2F | 856 | | | | Solid State |
| Fireball 1080S | S-3F | 1080 | 2864 | 16 | 46 | Sun 5400 RPM |
| Fireball 1280S | S-3F | 1282 | 4133 | 4 | 139 | Sun 5400 RPM |
| Fireball 2.1 | S-3F | 2100 | | | | |
| Fireball 540S | S-3F | 544 | 1431 | 16 | 46 | Sun 5400 RPM |
| Fireball 640S | S-3F | 640 | 4133 | 2 | 139 | Sun 5400 RPM |
| Fireball SE 2.1 | S-3 | 2151 | | | | |
| Fireball SE 3.2 | S-3 | 3228 | | | | |
| Fireball SE 4.3 | S-3 | 4310 | | | | |
| Fireball SE 6.4 | S-3 | 6448 | | | | |
| Fireball SE 8.4 | S-3 | 8455 | | | | |
| Fireball ST 2.1 | S-3 | 2111 | | | | 5400 RPM |
| Fireball ST 3.2 | S-3 | 3228 | | | | 5400 RPM |
| Fireball ST 4.3 | S-3 | 4310 | | | | 5400 RPM |
| Fireball ST 6.4 | S-3 | 6448 | | | | 5400 RPM |
| Fireball TM 1.2 | S-3 | 1281 | | | | 4500 RPM |
| Fireball TM 2.1 | S-3 | 2111 | | | | 4500 RPM |
| Fireball TM 3200S | S-3 | 3216 | 6810 | 6 | 104-232 | 4500 RPM |
| GEM 160S | S | 168 | | | | Prodrive |
| GEM 80S | S | 84 | 834 | 6 | 35 | Prodrive |
| GO 40S | S-2 | 43 | 870 | 2 | 39-58 | Laptops |
| GO 60S | S | 65 | 1097 | 2 | 44-68 | Laptops |
| GO 80S | S | 85 | 834 | 6 | 35 | Laptops |
| GO 120S | S | 130 | 1069 | 4 | 56 | Laptops 3600 |
| GO GLS 85S | S-2 | 85 | 1395 | 2 | 44-75 | |
| GO GLS 127S | S-2 | 127 | 1395 | 3 | 44-75 | |
| GO GLS 170S | S-2 | 170 | 1395 | 4 | 44-75 | |
| GO GLS 256S | S-2 | 256 | 1395 | 6 | 44-75 | |
| GO GRS 80S | S | 84 | 1376 | 2 | 45-73 | |
| GO GRS 160S | S | 169 | 1415 | 4 | 58 | 3600 RPM |
| Grand Prix | | | | | | See XP Series |
| Impulse 210 | S | 210 | | 7 | | |
| Impulse 425S | S | 455 | | 9 | | |
| Impulse 52S | S | 52 | | 2 | | |
| Impulse 525S | S | 525 | | | | |
| Impulse 80 | S | 80 | | 4 | | |
| KN 18L011 | SU160 | 18200 | | | | Atlas IV |
| Lightning 365S | S-2F | 365 | 3763 | 2 | 64-128 | |
| Lightning 540S | S-2F | 541 | 3763 | 3 | 64-128 | |
| Lightning 730S | S-2F | 732 | 3763 | 4 | 64-128 | |
| LPS 105S | SSync | 105 | 1221 | 4 | 42 | Sun 3600 RPM |
| LPS 105SMAC | SSync | 105 | 1219 | 4 | 41 | Mac compatible |
| LPS 105SPS2D | S | 105 | 1019 | 6 | 32 | PS/2 Upgrade |
| LPS 1050S | S-2 | 1050 | 2446 | 12 | 70 | |
| LPS 1080S | S3FW | 1080 | 2866 | 8 | 92 | Emp 2897x8x91 |
| LPS 120S(PS2) | SSync | 122 | 1987 | 2 | 60 | Sun 4300 RPM |
| | | | 829 | 6 | 24 | HP |
| LPS 1225S | S-2 | 1225 | 2448 | 14 | 69 | |
| LPS 127S | S | 128 | 1601 | 2 | 78 | Sun 3600 RPM |
| LPS 1400S | S3FW | 1400 | 2038 | 22 | 61 | Emp 3079x8x111 |
| LPS 1440S | S-3F | 1440 | 3100 | 8 | 74-135 | Empire |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|-------|------|------|-----|--------|--------------|
| LPS 170S | S | 171 | 871 | 8 | 48 | Sun 3600 RPM |
| LPS 2100S | S3FW | 2100 | 3079 | 12 | 111 | Empire |
| LPS 2160S | S-3F | 2160 | 3100 | 12 | 74-135 | Empire |
| LPS 240S(PS2) | SSync | 245 | 1995 | 4 | 60 | Sun 4300 RPM |
| | | | 901 | 7 | 38 | HP |
| LPS 270S | S | 271 | 1650 | 8 | 40 | Sun 4500 RPM |
| | | | 2740 | 2 | 48 | HP |
| LPS 330S | S | 331 | | 7 | | |
| LPS 340S | S | 343 | 871 | 16 | 48 | Sun 3600 RPM |
| LPS 425S | S | 426 | | 9 | | |
| LPS 450S | S-2F | 450 | 2096 | 6 | 44-96 | |
| LPS 52S(PS2D) | SSync | 52 | 2444 | 6 | 70 | Sun 4500 RPM |
| LPS 525S | S-2 | 525 | 2444 | 6 | 70 | Sun 4500 RPM |
| | | | 1895 | 9 | 30 | HP |
| LPS 540S | S | 541 | 1650 | 8 | 80 | Sun 4500 RPM |
| | | | 2740 | 4 | 48 | HP |
| LPS 540ES | S3FW | 541 | 2897 | 8 | 91 | Sun |
| | | | 1433 | 8 | 92 | HP |
| LPS 80(S)(T) | SSync | 85 | 834 | 4 | 34 | |
| Lightning 365S | S-2F | 365 | 1355 | 6 | 88 | Sun 4500 RPM |
| Lightning 540S | S-2F | 540 | 2296 | 6 | 48 | Sun 4500 RPM |
| Lightning 730S | S-2F | 730 | 2709 | 6 | 88 | Sun 4500 RPM |
| Maverick 270S | S | 271 | 1652 | 8 | 40 | |
| Maverick 540S | S | 540 | 2897 | 4 | 91 | Sun 5400 RPM |
| | | | 1433 | 8 | 92 | HP |
| Passport XL105 | S | 105 | 1219 | 4 | | XL Removable |
| Passport XL120 | S | 120 | 1800 | 2 | | Removable |
| Passport XL127 | S-2 | 127 | | | | Removable |
| Passport XL170 | S-2 | 170 | | | | Removable |
| Passport XL240 | S | 240 | 1800 | 4 | | Removable |
| Passport XL42 | S-2 | 42 | 1219 | | | Removable |
| Passport XL50 | S | 52 | 1219 | 2 | | Removable |
| Passport XL525 | S-2 | | | | | Removable |
| Passport XL85 | S-2 | 85 | | | | Removable |
| PD 1050S | S | 1050 | 2444 | 12 | 70 | Sun 4500 RPM |
| | | | 2075 | 13 | 38 | HP |
| PD 120S | SSync | 120 | 1114 | 5 | 42 | Sun 3600 RPM |
| PD 1225S(D) | S-2F | 1200 | 1834 | 5 | 87 | Sun 4500 RPM |
| | | | 2958 | 9 | 45 | HP |
| PD 170S | SSync | 168 | 1117 | 7 | 42 | Sun 3600 RPM |
| PD 1800S | S | 1800 | 2337 | 6 | 94 | Sun 4500 RPM |
| | | | 2339 | 16 | 47 | HP |
| PD 210S | SSync | 210 | 1189 | 7 | 49 | Sun 3600 RPM |
| | | | 1167 | 7 | 25 | HP |
| PD 2100S | S | | 1889 | 25 | 87 | Yukon |
| PD 40S | S | 42 | 834 | 3 | 28 | |
| PD 425S(i) | S | 426 | 1540 | 9 | 60 | Sun 3600 RPM |
| | | | 1527 | 9 | 30 | HP |
| PD 700S | S | 700 | 2441 | 8 | 70 | Sun 4500 RPM |
| | | | 1989 | 8 | 43 | |
| PD 80S | S | 84 | 834 | 6 | 35 | |
| Pro 105S | S | 105 | 1019 | 6 | 28-35 | |
| Pro 1050S(D) | S-2F | 1050 | 2448 | 12 | 70 | |
| Pro 120S | S | 120 | 1123 | 5 | 48 | |
| Pro 1225S | S-2 | 1225 | 2448 | 14 | 70 | |
| Pro 160S | S | 168 | | | | |
| Pro 170S | S | 168 | 1123 | 7 | 48 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------------|-----------------------------|-------|------|-----|---------|--------------------------|
| Pro 1800S | S-2 | 1800 | 2959 | 14 | 59-99 | |
| Pro 210S | S | 210 | 1156 | 7 | 39-59 | |
| Pro 240 | S-2F | 245 | | 6 | | |
| Pro 330S | S | 331 | | 7 | 78 | |
| Pro 40S | S | 42 | 834 | 3 | 28 | |
| Pro 425i,PS2D | S-2F | 426 | 1542 | 9 | 60 | 3600 RPM |
| Pro 450 | S-2 | 450 | | 6 | | |
| Pro 525S | S | 525 | 2448 | 6 | 44-92 | |
| Pro 700S(D) | S | 700 | 2441 | 8 | 42-92 | |
| Pro 80S | S | 84 | 834 | 6 | 35 | |
| Pro 85S | S | 85 | | | | |
| Q 160 | S | 160 | 823 | 12 | 31 | 815 cyls? 35 secs? |
| Q 250 | S | 53 | 823 | 4 | 31 | 815 cyls? 35 secs? |
| Q 280 | S | 77 | 823 | 6 | 31 | 815 cyls? 35 secs? |
| QM 20341DYS | S-2 | 341 | | | | |
| QM 20514DYS | S-2 | 514 | | | | |
| QM 30730LTS | S-2 | 730 | | | | |
| QM 30850TRS | S-2 | 850 | | | | |
| QM 31080FBS | S-2 | 1000 | | | | |
| QM 39100PX-LW | S-U2 | 8500 | | | | |
| Saturn | see VP3 series (down a bit) | | | | | |
| TN 36L011 | SU160 | 36400 | | | | Atlas 10K |
| Trailblazer 420S | S | 425 | 1334 | 10 | 62 | Sun 4500 RPM |
| Trailblazer 850S | S | 810 | 2674 | 10 | 62 | Sun 4500 RPM |
| VP 31080 | S-2F | 1085 | 3432 | 5 | | Saturn |
| VP 31110S | S2FW | 1110 | 4172 | 4 | 129 | Capella 1 Gb Sun |
| VP 32170S | S-2F | 2170 | 3432 | 10 | | Saturn |
| VP 32181S | S-3 | 2180 | | 5 | | Vik 2.1/Empire II |
| VP 32210S | S2FW | 2102 | 4172 | 8 | 129 | Capella 2 Gb Sun |
| VP 34360S | S-3 | 4360 | | 10 | | Vik 4.3/Empire II |
| VP 39100S | S-3 | 9100 | | 20 | | Empire II |
| XP 31070s | S2FW | 1080 | 3832 | 5 | 71-138 | Atlas |
| XP 3125S | S-2F | 2150 | | | | |
| XP 32140 | S3FW | 2140 | | 10 | <118 | Grand Prix 2140 |
| XP 32150S | S2FW | 2050 | 3850 | 10 | 109 | Atlas 2150 Sun |
| XP 32151S | S3FW | 2152 | 3561 | 10 | 118 | Grand Prix 2150 Sun 7200 |
| XP 32181 | S-3 | 2181 | | 5 | Var | Atlas |
| XP 34280 | S3FW | 4280 | | 20 | <118 | Grand Prix 4280 |
| XP 34300S | S2FW | 4101 | 3850 | 20 | 109 | Atlas 4300 Sun |
| XP 34301S | S3FW | 4306 | 3561 | 20 | 118 | Grand Prix 4300 Sun 7200 |
| XP 34361 | S-3 | 4360 | | 10 | Var | Atlas |
| XP 34550 | S-3 | 4550 | 5812 | 10 | 108-180 | Atlas II |
| XP 39100 | S-3 | 9100 | | 20 | Var | Atlas II 7200 RPM 17.6W |
| XP 4280S | S-2F | 4280 | | | | |
| 2010 | S1000 | 8 | 512 | 2 | 17 | MFM |
| 2020 | S1000 | 17 | 512 | 4 | 17 | MFM |
| 2030 | S1000 | 25 | 512 | 6 | 17 | MFM |
| 2040 | S1000 | 34 | 512 | 8 | 17 | MFM |

Most Quantum ATA Drives

| | |
|---------|-----------|
| Single: | DS |
| Master: | DS/SP/SS* |
| Slave: | None |

*Try without SP/SS with some Quantum drives.

with Quantum 50-210

| | |
|---------|------|
| Master: | DS |
| Slave: | None |

with Quantum 40-80

| | |
|---------|---------|
| Master: | DS/SS |
| Slave: | SS (TM) |

425iAT/540AT/525 PRO 120/170/210

with 3rd party drive

Master: DS SP
 Slave: SP

ELS 170AT

Restoring boot sector

```

DEBUG
A
MOV AX, 330
MOV CX, 1
MOV DX, 80
MOV BX, 3800
MOV ES, BX
MOV BX, 0
INT 13
INT 3
<Cge retn>
G=100
Q Reboot
    
```

Most Quantum SCSI drives

| ID | A2 | A1 | A0 |
|----|----|----|----|
| 1 | 0 | 0 | 0 |
| 2 | 0 | 0 | 1 |
| 3 | 0 | 1 | 0 |
| 4 | 0 | 1 | 1 |
| 5 | 1 | 0 | 1 |
| 6 | 1 | 1 | 0 |
| 7 | 1 | 1 | 1 |

Do not use if J5 is used for ID.

Maverick/Lightning/Empire

As above, but Empire:

TE Terminator Enable
 EP Enable Parity
 WS Wait/Spin
 J13 Terminator Power

Atlas XP series

| ID | 5-6 | 3-4 | 1-2 |
|----|-----|-----|-----|
| 1 | 0 | 0 | 0 |
| 2 | 0 | 0 | 1 |
| 3 | 0 | 1 | 0 |
| 4 | 0 | 1 | 1 |
| 5 | 1 | 0 | 1 |
| 6 | 1 | 1 | 0 |
| 7 | 1 | 1 | 1 |

7 FLT Out L LED
 8 Key (No pin)
 9 Out LED (BSY)
 10 Spindle Synch
 11 LED +5v Out
 12 N/A
 13 Spin delay
 14 Spin delay
 15 AC Low L

16 Logic Ground L
 17 WP
 18 WP
 19 Spin synch
 20 Logic Ground L

Grand Prix XP series

| ID | A2 | A1 | A0 |
|----|----|----|----|
| 1 | 0 | 0 | 0 |
| 2 | 0 | 0 | 1 |
| 3 | 0 | 1 | 0 |
| 4 | 0 | 1 | 1 |
| 5 | 1 | 0 | 1 |
| 6 | 1 | 1 | 0 |
| 7 | 1 | 1 | 1 |

A3 ID does not work on 50-pin SE/Diff
 TE on Terminator Enable
 EP on Enable Parity
 WS on Wait/Spin enable
 DS on Delay Spin enable
 J2 on Terminator Power from drive

DSP 3053L/3107L/3133L/XP 34300

| ID | 5-6 | 3-4 | 1-2 |
|----|-----|-----|-----|
| 1 | 0 | 0 | 0 |
| 2 | 0 | 0 | 1 |
| 3 | 0 | 1 | 0 |
| 4 | 0 | 1 | 1 |
| 5 | 1 | 0 | 1 |
| 6 | 1 | 1 | 0 |
| 7 | 1 | 1 | 1 |

GO drive SCSI ID

| J2 | 7 | 6 | 5 |
|----|---|---|---|
| 0 | 0 | 0 | 0 |
| 1 | 0 | 0 | 1 |
| 3 | 0 | 1 | 0 |
| 4 | 0 | 1 | 1 |
| 5 | 1 | 0 | 1 |
| 6 | 1 | 1 | 0 |
| 7 | 1 | 1 | 1 |

Pro 525S

1 0 0 0
 2 0 0 1
 3 0 1 0
 4 0 1 1
 5 1 0 1
 6* 1 1 0
 7 1 1 1
 TE on Terminator Enable
 EP on Enable Parity
 WS on Wait/Spin enable
 S4 on Spindle synch active (Rev 2)
 J13 on Terminator Power from host (Rev 2)

Qubie

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------|------|-----|------|-----|-----|-----------------|
| HH 612C | M | 21 | 615 | 4 | 17 | in Olivetti M24 |

Qume

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|-----|------|-----|-----|-------|
| R 200 | ? | | | | | |
| R 300 | ? | | | | | |

RACET Computers Ltd

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------|------|------|------|-----|-----|----------|
| Admin 350x1 | E | 650 | | | | External |
| Admin 350x2 | E | 1200 | | | | External |
| Admin 650x1 | E | 676 | | | | External |
| Admin 350x1 | S | 650 | | | | |
| Admin 350x1 | S | 676 | | | | |
| Admin 350x2 | S | 1200 | | | | |
| GigaSTOR | S | 5300 | | | | |
| PCMS SA185 | S | 185 | | | | |
| PCMS SA190 | S | 190 | | | | |
| PCMS SA338 | S | 338 | | | | |
| PCMS SA600 | S | 600 | | | | |
| SA 350 | S | 350 | | | | |
| SA 357 | S | 357 | | | | |
| SA 657 | S | 657 | | | | |
| SA 673 | S | 673 | | | | |

RARE Systems

DEC

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------|------|------|------|-----|--------|-------|
| RS 3105 | S-2F | 1050 | 2570 | 14 | 57 | |
| RS 3160 | S2FW | 1600 | 2599 | 16 | 53-107 | |
| RS 5200 | S-2F | 2100 | 2620 | 21 | 71 | |
| RS 5350 | S-2F | 3500 | 3035 | 25 | 80-120 | |

Relax Technology Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|------|------|------|-----|-----|---------------------|
| 960 MB | S-2 | 1079 | 1658 | 15 | 85 | Fujitsu M 2266S-512 |
| Hard Plus 100 | S | 102 | | | | |
| Hard Plus 1200 | S | 960 | | | | |
| Hard Plus 180 | S | 180 | | | | |
| Hard Plus 300 | S | 288 | | | | |
| Hard Plus 350 | S | 347 | | | | |
| Hard Plus 600 | S | 632 | | | | |
| Hard Plus 650 | S | 654 | | | | |
| Mac Int 100 | S | 102 | | | | |
| Mac Int 1200 | S | 960 | | | | |
| Mac Int 180 | S | 176 | | | | |
| Mac Int 30 | S | 32 | | | | |
| Mac Int 300 | S | 288 | | | | |
| Mac Int 350 | S | 347 | | | | |
| Mac Int 46 | S | 47 | | | | |
| Mac Int 600 | S | 632 | | | | |
| Mac Int 650 | S | 654 | | | | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------|------|-----|------|-----|-----|-------|
| Vista 100 | S | 102 | | | | |
| Vista 1200 | S | 960 | | | | |
| Vista 180 | S | 176 | | | | |
| Vista 30 | S | 32 | | | | |

Ricoh

DMA

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-----------|------|-------|------|-----|-------|---------------|
| RH 5130 | M/R | 10/15 | 612 | 2 | 17/26 | |
| RH 5260 | M | 10 | 615 | 2 | 17 | Removeable |
| RH 5261 | S | 25 | 612 | 2 | 17 | MFM recording |
| RH 5500 | S | 50 | 1285 | 2 | 76 | Cartridge |
| RS 9150AR | S | 47 | 1285 | 2 | 76 | Cartridge |

Rotating Memory Systems

Merged with Data Peripherals to form Disctron—later sold to Otari, sold to Rotating Memory Services

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|-----|------|-----|-----|-----------|
| SS 40AT | A | 42 | | | | Cartridge |
| SS 85AT | A | 83 | | | | |
| SS 180-E | E | 177 | | | | Cartridge |
| SS 20 | M | 21 | | | | Cartridge |
| SS 40 | M | 42 | | | | Cartridge |
| SS 85 | M | 83 | | | | Cartridge |
| SS 100-S | S | 100 | | | | Cartridge |
| SS 140-S | S | 142 | | | | Cartridge |
| SS 20-S | S | 21 | | | | Cartridge |
| SS 200-S | S | 207 | | | | Cartridge |
| SS 320S | S | 320 | | | | Cartridge |
| SS 400S | S | 42 | | | | Cartridge |
| SS 80S | S | 84 | | | | Cartridge |

Rotating Memory Services

Repair company which bought Otari, which was discontinued.

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------|------|-----|------|-----|-------|---------|
| RMS 214 | M | 10 | 306 | 4 | 17 | |
| RMS 503 | M/R | 3/4 | 153 | 2 | 17/26 | |
| RMS 504 | M | 4 | 215 | 2 | 17 | |
| RMS 506 | M | 5 | 153 | 4 | 17 | |
| RMS 507 | M | 5 | 306 | 2 | 17 | |
| RMS 509 | M | 8 | 216 | 4 | 17 | WPC 108 |
| RMS 512 | M | 11 | 153 | 8 | 17 | |
| RMS 513 | M | 11 | 215 | 6 | 17 | |
| RMS 514 | M | 10 | 306 | 4 | 17 | |
| RMS 518 | M | 15 | 215 | 8 | 17 | |
| RMS 519 | M | 15 | 306 | 6 | 17 | |
| RMS 525 | M | 20 | | 8 | 17 | |
| RMS 526 | M | 21 | 306 | 8 | 17 | |

Rodime Ltd

Out of business Aug 1991. Bought by Conner

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|-----|------|-----|-----|-------|
| RO 128A | A | 106 | 868 | 7 | 34 | |
| RO 3055A | A | 46 | 872 | 6 | 17 | |
| RO 3058A | A | 45 | 868 | 3 | 34 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|------|-------|------|-----|-------|------------------|
| RO 3059A | A | 42 | 217 | 15 | 28 | |
| RO 3071A | A | 61 | 1217 | 2 | 48 | |
| RO 3088A | A | 75 | 868 | 5 | 34 | |
| RO 3089A | A | 82 | 325 | 16 | 28 | |
| RO 3095A | A | 82 | 923 | 5 | 34 | |
| RO 3099A(P) | A | 80 | 373 | 15 | 28 | Try 515 x 8 x 17 |
| RO 3121A | A | 122 | | 4 | | |
| RO 3128A | A | 106 | 868 | 7 | 34 | |
| RO 3129A | A | 106 | 492 | 15 | 28 | |
| RO 3130T | A | 105 | 1053 | 7 | 28 | |
| RO 3135A | A | 112 | 923 | 7 | 34 | |
| RO 3139A(P) | A | 114 | 523 | 15 | 28 | |
| RO 3151A | A | 122 | 1217 | 4 | 39 | |
| RO 3199A | A | 163 | 1216 | 4 | 66 | |
| RO 3209A | A | 163 | 759 | 15 | 28 | |
| RO 3259A(P) | A | 210 | 990 | 15 | 28 | |
| RO 5075E | E | 65 | 1224 | 3 | 35 | |
| RO 5125E | E | 106 | 1224 | 5 | 34 | |
| RO 5180E | E | 150 | 1224 | 7 | 34 | |
| RO 100 | M | | | | | |
| RO 101 | M/R | 3/5 | 192 | 2 | 17/26 | |
| RO 102 | M/R | 7/11 | 192 | 4 | 17/26 | |
| RO 103 | M/R | 10/15 | 192 | 6 | 17/26 | |
| RO 104 | M/R | 14/21 | 192 | 8 | 17/26 | |
| RO 200 | M | 11 | 320 | 4 | 17 | |
| RO 201 | M/R | 5/8 | 320 | 2 | 17/26 | 321 cyls? |
| RO 201E | M/R | 11/16 | 640 | 2 | 17/26 | |
| RO 202 | M/R | 11/16 | 321 | 4 | 17/26 | |
| RO 202E | M/R | 22/31 | 640 | 4 | 17/26 | |
| RO 203 | M/R | 17/26 | 320 | 6 | 17/26 | |
| RO 203E | M/R | 33/47 | 640 | 6 | 17/26 | |
| RO 2031 | M | 16 | 320 | 6 | 17 | |
| RO 204 | M/R | 22/34 | 320 | 8 | 17/26 | 321 cyls? |
| RO 204E | M/R | 45/63 | 640 | 8 | 17/26 | |
| RO 206 | M | 40 | 320 | 8 | 17 | |
| RO 208 | M | 53 | 320 | 8 | 17 | |
| RO 2301 | M | 16 | 320 | 6 | 17 | |
| RO 251 | M | 5 | 306 | 2 | 17 | |
| RO 252(F) | M | 10 | 306 | 4 | 17 | |
| RO 3000A-XLA | M | 42 | 992 | 5 | 17 | |
| RO 3045 | M/R | 38/58 | 872 | 5 | 17/26 | |
| RO 3055 | M/R | 45/69 | 872 | 6 | 17/26 | 972 cyls? (Oli) |
| RO 3065 | M | 53 | 872 | 7 | 17 | |
| RO 350 | M | 10 | 306 | 4 | 17 | |
| RO 351 | M | 5 | 306 | 2 | 17 | |
| RO 352 | M/R | 11/16 | 306 | 4 | 17/26 | |
| RO 365 | M | 21 | 615 | 4 | 17 | |
| RO 412 | M | 34 | 1024 | 4 | 17 | |
| RO 413 | M | 51 | 1024 | 6 | 17 | |
| RO 414 | M | 68 | 1024 | 8 | 17 | |
| RO 5040 | M | 32 | 1224 | 3 | 17 | |
| RO 5065 | M | 63 | 1224 | 5 | 17 | |
| RO 5090 | M | 75 | 1224 | 7 | 17 | |
| RO 652 | M | 20 | 306 | 4 | 17 | |
| RO 200RX | R | 20 | | | | |
| RO 3000A-XL | R | 43 | 992 | 5 | 17 | |
| RO 3000A-NAT | R | 43 | 625 | 5 | 26 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------------|------|-----|------|-----|-----|---------------|
| RO 3060R | R | 50 | 750 | 5 | 26 | |
| RO 3075R | R | 60 | 750 | 6 | 26 | |
| RO 3085R | R | 67 | 750 | 7 | 26 | |
| RO 352 | R | 16 | 306 | 4 | 26 | |
| RO 5090R | R | 109 | 1224 | 7 | 26 | |
| RO 5095R | R | 81 | 1224 | 5 | 26 | |
| RO 5130R | R | 114 | 1224 | 7 | 26 | |
| RO 3040S | S | 32 | 872 | 3 | | |
| RO 3057S | S | 72 | 680 | 5 | 42 | |
| RO 3058T | S | 45 | 868 | 3 | 34 | |
| RO 3059T | S | 42 | 1216 | 2 | 34 | |
| RO 3070S | S | 70 | 756 | 4 | 45 | |
| RO 3080S | S | 38 | | | | |
| RO 3085S | S | 70 | 750 | 7 | 26 | |
| RO 3088T | S | 75 | 868 | 5 | 34 | |
| RO 3089T | S | 82 | 1216 | 3 | 44 | |
| RO 3090T | S | 75 | 1053 | 5 | 28 | |
| RO 3128T | S | 106 | 868 | 7 | 34 | |
| RO 3129T | S | 106 | 1090 | 5 | 38 | |
| RO 3130S | S | 106 | 1047 | 7 | 28 | |
| RO 3139S | S-2 | 113 | 1148 | 5 | 38 | |
| RO 3258T | S | 216 | 1235 | 9 | 38 | |
| RO 3259S | S-2 | 210 | 1189 | 9 | 38 | |
| RO 3259T | S | 210 | 1216 | 9 | 34 | |
| RO 3331S | S-2 | 331 | 1497 | 7 | 62 | |
| RO 3426S | S-2 | 426 | 1497 | 9 | 62 | |
| RO 3540S | S | 540 | 1568 | 11 | | |
| RO 5000S | S | 146 | 1233 | 7 | 33 | |
| RO 5040S | S | 38 | 1224 | 3 | 42 | |
| RO 5075S | S | 76 | 969 | 5 | 31 | |
| RO 5125S-102/1F2 | S | 106 | 1219 | 5 | 34 | |
| RO 5178S | S | 149 | 1219 | 7 | 34 | |
| RO 5180S-102/1F2 | S | 149 | 1219 | 7 | 34 | |
| RO 651 | S | 10 | 306 | 2 | 34 | |
| RO 652(A) | S | 21 | 306 | 4 | 33 | MFM recording |
| RO 652B | S | 26 | 306 | 4 | 42 | |
| RO 751 | S | 10 | 306 | 2 | 34 | |
| RO 752A | S | 25 | 306 | 4 | 42 | MFM recording |
| RO 8074 | SMDE | 667 | 1646 | 11 | | |

RO 3259A

Master: LK4 LK1

Rodime Systems

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------|------|-----|------|-----|-----|---------------|
| Cobra 110AT | A | 110 | | 4 | | Compaq |
| Cobra 210AT | A | 210 | 1216 | 9 | | Compaq |
| Cobra 40AT | A | 42 | 1170 | 2 | 36 | Compaq |
| Cobra 80AT | A | 84 | 1159 | 4 | 36 | Compaq |
| 20 Plus | S | 20 | | | 33 | Mac, External |
| 45 Plus | S | 40 | | | 34 | Mac, External |
| 100RX | S | 100 | | | | Mac |
| 450RX | S | 40 | | | | Mac |
| Classic 20 | S | 20 | | | | Mac |
| Classic 40 | S | 40 | | | | Mac |
| Classic 80 | S | 80 | | | | Mac |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------|------|------|------|-----|-----|---------------|
| Cobra 1000e | S | 1000 | | | | Mac, External |
| Cobra 100e | S | 100 | 868 | 7 | | Mac, External |
| Cobra 100i | S | 100 | 868 | 7 | | Mac, Internal |
| Cobra 110e | S | 105 | | 4 | | Mac, External |
| Cobra 210e | S | 210 | 1216 | 9 | | Mac, External |
| Cobra 210i | S | 210 | 1216 | 9 | | Mac, Internal |
| Cobra 330e | S | 330 | | | | Mac, External |
| Cobra 45e | S | 40 | 868 | 3 | | Mac, External |
| Cobra 45i | S | 40 | 868 | 3 | | Mac, Internal |
| Cobra 50il | S | 50 | | | | Mac |
| Cobra 650e | S | 650 | | | | Mac, External |
| Cobra 70e | S | 70 | 868 | 5 | | Mac, External |
| Cobra 70i | S | 70 | 868 | 5 | | Mac, Internal |

Ruby Systems Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|------|-----|------|-----|-----|-------|
| StarDrv 100 DN | S | 100 | | | | Mac |
| StarDrv 100 DX | S | 100 | | | | Mac |
| StarDrv 130 DN | S | 130 | | | | Mac |
| StarDrv 130 DX | S | 130 | | | | Mac |
| StarDrv 170 DN | S | 168 | | | | Mac |
| StarDrv 170 DX | S | 168 | | | | Mac |
| StarDrv 40D N | S | 40 | | | | Mac |
| StarDrv 40D X | S | 40 | | | | Mac |
| StarDrv 90D N | S | 88 | | | | Mac |
| StarDrv 90D X | S | 88 | | | | Mac |

Samsung

www.samsung.com

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------|------|-------|-------|-----|--------|------------------|
| PLS 30544A | A | 540 | 1047 | 16 | 63 | |
| PLS 30854A | A2 | 850 | 1647 | 16 | 63 | |
| PLS 31084A | A2 | 1080 | 2100 | 16 | 63 | |
| PLS 31264A | A | 1273 | 3844 | 6 | 72-132 | Physical |
| PLS 31274A | A2 | 1213 | 2478 | 16 | 63 | |
| SHB 30560 | A | 560 | | | | Apollo |
| SHB 3272A | A | 545 | | 4 | | Apollo |
| SHC 3061A | A | 60 | 966 | 5 | 26 | |
| SHC 3101A | A | 101 | 748 | 8 | 33 | |
| SHD 2041B | A | 41 | 820 | 4 | 28 | Try 900 x 6 x 17 |
| SHD 2081A | A | 80 | 1300 | 2 | 60 | |
| SHD 30280A | A | 280 | 869 | 10 | 63 | |
| SHD 30420A | A | 420 | 856 | 16 | 63 | |
| SHD 30560A | A | 561 | 1086 | 16 | 63 | |
| SHD 3061A | A | 61 | 993 | 7 | 17 | |
| SHD 3062A | A | 120 | 927 | 15 | 17 | |
| SHD 3101A | A | 105 | 754 | 16 | 17 | Try 776 x 8 x 33 |
| SHD 3121A | A | 125 | 615 | 16 | 25 | |
| SHD 3122A | A | 240 | 937 | 15 | 35 | |
| SHD 3171A | A | 170 | 968 | 8 | 45 | |
| SHD 3172A | A | 357 | 968 | 16 | 45 | |
| SHD 3211A | A | 213 | 1002 | 8 | 52 | |
| SHD 3212A | A | 426 | 1002 | 16 | 52 | |
| SP 0914D | A4 | 9108 | 17648 | 16 | 63 | |
| SP 1366D | A4 | 13658 | 26464 | 16 | 63 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------|------|-------|-------|-----|--------|----------------------|
| SP 1828D | A4 | 18216 | 35296 | 16 | 63 | |
| STG 31271A | A2 | 1280 | | | | |
| STG 31601A | A2 | 1600 | | | | |
| SV 0211A | A4 | 2112 | 4092 | 15 | 63 | |
| SV 0322A | A4 | 3200 | 11024 | 9 | 63 | |
| SV 0431D | A4 | 4311 | 8912 | 15 | 63 | |
| SV 0432A/D | A4 | 4311 | 8912 | 15 | 63 | |
| SV 0643A/D | A4 | 6448 | 13328 | 15 | 63 | |
| SV 0644A | A4 | 6402 | 13232 | 15 | 63 | |
| SV 0682D | A4 | 6851 | 14160 | 15 | 63 | |
| SV 0842D | A4 | 8455 | 16383 | 16 | 63 | |
| SV 0844A/D | A4 | 8455 | 16383 | 16 | 63 | |
| SV 1022D | A4 | 10204 | 19773 | 16 | 63 | |
| SV 1023D | A4 | 10276 | 19912 | 16 | 63 | |
| SV 1025A | A4 | 10200 | 19765 | 16 | 63 | |
| SV 1296A/D | A4 | 12922 | 25038 | 16 | 63 | |
| SV 1363D | A4 | 13672 | 26493 | 16 | 63 | |
| SV 1364D | A4 | 13702 | 26550 | 16 | 63 | |
| SV 1533D | A4 | 15307 | 29660 | 16 | 63 | |
| SV 1705D | A4 | 17127 | 33187 | 16 | 63 | |
| SV 1824D | A4 | 18230 | 35324 | 16 | 63 | |
| SV 2044D | A4 | 20409 | 39546 | 16 | 63 | 5400 RPM |
| SV 2046D | A4 | 20553 | 39824 | 16 | 63 | |
| TBR 31080A | A2 | 1080 | 2112 | 16 | 63 | Quantum Trailblazer? |
| VG 33402A | A | 3400 | 6591 | 16 | 63 | |
| VG 36483A | A4 | 6177 | | | | |
| WN 310820A | A | 1030 | 2093 | 16 | 63 | |
| WN 321620A | A | 2060 | 4186 | 16 | 63 | |
| WN 32163A | A | 2100 | 4136 | 16 | 63 | |
| WNH 31601A | A | 1600 | 3121 | 16 | 63 | |
| WU 32553A | A | 2540 | 4924 | 16 | 63 | |
| WU 33205A | A | 3240 | 6280 | 16 | 63 | |
| SHD 2030 | M | 27 | 820 | 4 | 17 | |
| SHD 2020 | R | 21 | 820 | 2 | 26 | |
| SHD 2021 | R | 23 | 820 | 2 | 28 | |
| SHD 2040 | R | 42 | 820 | 4 | 26 | |
| SHD 2041 | R | 47 | 820 | 4 | 28 | |
| SHD 3101A | R | 105 | 641 | 8 | 40 | |
| PLS 30854S | S | 850 | | | | |
| PLS 31084S | S | 1080 | 2093 | 16 | 63 | |
| PLS 31274S | S-2 | 1273 | 3844 | 5 | 72-132 | |
| SHD 3202 | S | 212 | 1376 | 7 | 43 | |
| SHD 3210S | S | 212 | 1376 | 7 | 43 | |
| SHD 3272S | S-2F | 545 | | 4 | | |

[SHD 30280A/30420A/30560A](#)

| | |
|---------|--------------|
| Single: | C/D In |
| Master: | C/D, DsP In |
| Slave: | C/D, DsP out |

[3101A/3061A/3062A](#)

| | |
|---------|-----------|
| Single: | CD,ACT On |
| Master: | CD,DSP On |
| Slave: | None |

[3121A/3122A](#)

| | |
|---------|--------|
| Single: | CD |
| Master: | CD,DSP |
| Slave: | None |

PLS 31274A/30854A, Wuxxxx3A

| | |
|---------|------|
| Single: | C/D |
| Master: | C/D |
| Slave: | None |

WA, VGxxxx2A

| | |
|---------|--------|
| Single: | Master |
| Master: | Master |
| Slave: | Slave |

VG, VA, SV, SW, Wuxxxx5A

| | |
|---------|----|
| Single: | MA |
| Master: | MA |
| Slave: | SL |

Saratoga

See *Areal* and *Disctec*

Saturae Corp

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|------|------|------|-----|-------|--------------|
| Edge 1000r | S-2F | 1050 | 2570 | 14 | 57 | DEC DSP 3105 |
| ProLine 1910hz | S | 2000 | 2255 | 19 | 76-96 | HP C 3010 |

Seagate

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|------|-----|------|-----|-----|---------------------|
| ST 1057A | A | 53 | 1024 | 6 | 17 | Try 940 x 3 x 34 |
| ST 1090A | A | 79 | 536 | 10 | 29 | CDC 94354-90 |
| ST 1102A | A | 85 | 1024 | 10 | 17 | ST 1144 Family |
| ST 1111A | A | 99 | 538 | 10 | 36 | CDC 94354-111 |
| ST 1126A | A | 111 | 536 | 14 | 29 | CDC 94354-126 |
| ST 1133A | A | 117 | 636 | 10 | 36 | CDC 94354-133 |
| ST 1144A | A | 131 | 1001 | 15 | 17 | Also 1024 x 14 x 17 |
| ST 1156A | A | 138 | 536 | 14 | 36 | CDC 94354-155 |
| ST 1162A | A | 143 | 804 | 12 | 29 | CDC 94354-160 |
| ST 1186A | A | 164 | 636 | 14 | 36 | CDC 94354-186 |
| ST 1201A | A | 177 | 804 | 12 | 36 | CDC 94354-200 |
| ST 1239A | A | 211 | 954 | 12 | 36 | CDC 94354-239 |
| ST 125A (-1) | A | 21 | 615 | 4 | 17 | 404 x 4 x 26 |
| ST 1274A | A | 23 | 407 | 4 | 26 | |
| ST 138A (-1) | A | 32 | 615 | 6 | 17 | 604 x 4 x 26 |
| ST 1400A | A | 332 | 1018 | 12 | 53 | ST 1480 Family |
| ST 1401A | A | 344 | 726 | 15 | 61 | ST 1480 Family |
| ST 1480A | A | 426 | 895 | 15 | 62 | 1475 x 9 x 54-85 |
| ST 157A (-1) | A | 43 | 733 | 7 | 17 | Try 1024 x 5 x 17 |
| ST 2140A | A | 140 | | | | |
| ST 2247A | A | 226 | 536 | 16 | 55 | |
| ST 2274A | A | 241 | 536 | 16 | 55 | CDC 94244-274 |
| ST 2383A | A | 338 | 737 | 16 | 56 | CDC 94244-383 |
| ST 2384A | A | 330 | | | | |
| ST 2660A | A | 540 | 1057 | 16 | 63R | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------|------|-------|-------|-----|-----|----------------------------------|
| ST 274A | A | 65 | 940 | 8 | 17 | CDC 94204-65/74 |
| ST 280A | A | 71 | 516 | 10 | 27 | CDC 94204-71/81 |
| ST 3025A | A | 21 | 808 | 2 | 26 | 1616 x 1 x 26 |
| ST 3051A | A | 43 | 820 | 6 | 17 | ST 3144 Family |
| ST 3057A | A | 40 | 1024 | 8 | 17 | 940 x 3 x 34 |
| ST 3096A | A | 89 | 1024 | 10 | 17 | Try 836 x 8 x 26 ST3144 Family |
| ST 31010A | A2 | 1082 | 524 | 64 | 63 | |
| ST 31012A | A | 1082 | 524 | 64 | 63 | |
| ST 310230A | A4 | 10200 | | | | UDMA 66 |
| ST 310240AG | A4 | 10200 | 16383 | 16 | 63 | Medalist |
| ST 31060A | A | 1065 | 516 | 64 | 63 | |
| ST 31081A | A2 | 1081 | 2097 | 16 | 63 | Cabo 1080 CFS 1081A 524x64x63 Lg |
| ST 31082A | A | 1082 | 524 | 64 | 63 | |
| ST 3120A | A | 106 | 1024 | 12 | 17 | ST 3144 Family |
| ST 31210A | A | 1080 | 611 | 64 | 63 | |
| ST 31220A | A | 1080 | 2099 | 16 | 63 | Medalist 1080 |
| | | | 524 | 64 | 63 | Large |
| ST 3123A | A | 106 | 1024 | 12 | 17 | Try 905 x 9 x 25 |
| ST 31270A | A | 1200 | 2485 | 16 | 63 | 621 x 64 x 63 Large |
| ST 31274A | A | 1279 | 619 | 64 | 63 | |
| ST 31275A | A | 1275 | 619 | 64 | 63 | |
| ST 31276A | A2 | 1276 | 2482 | 16 | 63 | Cabo 1276 |
| | | | 620 | 64 | 63 | Large |
| ST 31277A | A2 | 1281 | 620 | 64 | 63 | |
| ST 313021A | A4 | 13000 | | | | UDMA 66 |
| ST 313640A | A4 | 13600 | | | | UDMA 66 |
| ST 3144A | A | 130 | 1001 | 15 | 17 | ST 3144 Family |
| ST 3145A | A | 130 | 1001 | 15 | 17 | |
| ST 31621A | A2 | 1621 | 786 | 64 | 63 | Cabo 1621 |
| ST 31640A | A | 1640 | 3150 | 16 | 63 | 787 x 64 x 63 Large |
| ST 31720A | A | 1720 | 3305 | 16 | 63 | |
| | | | 826 | 64 | 63 | Large |
| ST 31721A | A2 | 1704 | 825 | 64 | 63 | |
| ST 31722A | A | 1704 | 825 | 64 | 63 | |
| ST 317221A | A4 | 17200 | | | | 5400 RPM U66 |
| ST 317242A | A4 | 17200 | | | | 5400 RPM UDMA 66 |
| ST 3195A | A | 170 | 981 | 10 | 34 | |
| ST 3211A | A | 213 | 685 | 16 | 38 | |
| ST 32110A | A | 2111 | 1023 | 64 | 63 | |
| ST 32120A | A2 | 2111 | 1023 | 64 | 63 | |
| ST 32122A | A | 2113 | 1023 | 64 | 63 | |
| ST 32132A | A3 | 2113 | 4096 | 16 | 63 | |
| | | | 1023 | 64 | 63 | Large |
| ST 32140A | A2 | 2140 | 4096 | 16 | 63 | Med 2140 |
| | | | 1024 | 64 | 63 | Large |
| ST 32161A | A | 2147 | 1023 | 64 | 63 | |
| ST 3240A | A | 210 | 1010 | 12 | 34 | |
| ST 3243A | A | 214 | 1024 | 12 | 34 | Try 683 x 16 x 38 |
| ST 325A (X) | A | 21 | 615 | 4 | 17 | 697 x 2 x 30 AT/XT |
| ST 3250A | A | 213 | 1024 | 12 | 34 | Medalist 210xe |
| ST 32520A | A | 2530 | 611 | 128 | 63 | |
| ST 32530A | A2 | 2530 | 611 | 128 | 63 | Medalist 2530 |
| ST 32531A | A2 | 2557 | 619 | 128 | 63 | |
| ST 32532A | A | 2557 | 619 | 128 | 63 | |
| ST 3270A | A | 271 | 600 | 14 | 63 | |
| ST 3271A | A | 265 | 977 | 10 | 53 | |
| ST 328040A | A4 | 28500 | | | | UDMA 66 |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------|------|------|-------|-----|-----|-------------------------------|
| ST 3283A | A | 245 | 978 | 14 | 35 | ST 3550 Family |
| ST 3290A | A | 260 | 1001 | 15 | 34 | |
| ST 3291A | A | 272 | 761 | 14 | 50 | |
| ST 3295A | A | 260 | 761 | 14 | 50 | Medalist 275xe |
| ST 33220A | A | 3227 | 781 | 128 | 63 | |
| ST 33221A | A | 3227 | 781 | 128 | 63 | |
| ST 33230A | A2 | 3227 | 781 | 128 | 63 | |
| ST 33232A | A | 3227 | 781 | 128 | 63 | |
| ST 33240A | A | 3200 | 781 | 128 | 63 | Large |
| ST 33440A | A | 3400 | | | | Medalist 3340 Fast ATA-2 |
| ST 3385A | A | 340 | 767 | 14 | 62 | |
| ST 3390A | A | 340 | 768 | 14 | 62 | Superseded by ST 3391A |
| ST 3391A | A | 341 | 768 | 14 | 62 | Supersedes ST 3390A |
| ST 3420A | A | 427 | 826 | 16 | 63 | |
| ST 3425A | A | 425 | 839 | 16 | 62 | |
| ST 34250A | A2F | 4250 | | | | Medalist 4250 |
| ST 34321A | A | 4303 | 555 | 240 | 63 | |
| ST 34340A | A2 | 4303 | 555 | 240 | 63 | |
| ST 34342A | A3 | 4300 | 555 | 240 | 63 | 4500 RPM Medalist |
| ST 34520A | A | 4500 | 588 | 240 | 63 | |
| ST 3491A | A | 428 | 899 | 15 | 62 | Medalist 420xe |
| ST 3500A | A | 426 | 895 | 15 | 62 | ST 3550 Family |
| ST 35040A | A2 | 5008 | 647 | 240 | 63 | |
| ST 351A (X) | A | 42 | 820 | 6 | 17 | AT/XT Also 980 x 5 x 17 |
| ST 35130A | A | | 661 | 240 | 63 | |
| ST 3541A | A | 540 | 524 | 32 | 63 | Cabo |
| ST 352A (X) | A | 43 | 980 | 5 | 17 | AT/XT Try 977 x 5 x 17 |
| ST 3543A | A | 542 | 525 | 32 | 63 | |
| ST 3544A | A | 541 | 524 | 32 | 63 | |
| ST 3550A | A | 452 | 1018 | 14 | 62 | Medalist 455 |
| ST 3600A | A | 528 | 1024 | 16 | 63 | 1872 x 7 x 53-88 |
| ST 3630A | A2F | 631 | 1223 | 16 | 63 | Medalist 630 |
| | | | 611 | 32 | 63 | Large |
| ST 3635A | A | 635 | 619 | 32 | 63 | |
| ST 3636A | A | 640 | 620 | 32 | 63 | |
| ST 36423A | A4 | 6448 | 13328 | 15 | 63 | Medalist 6423 |
| ST 36450A | A | 6400 | 833 | 240 | 63 | Large |
| ST 36451A | A | 6400 | 833 | 240 | 63 | Upgraded to ST 36530A |
| ST 36530A | A | 6400 | 841 | 240 | 63 | Upgraded ST 36451A 7200 RPM |
| ST 36531A | A | 6400 | 840 | 240 | 63 | Replaces ST 36451A 128K cache |
| ST 36540A | A | | 840 | 240 | 63 | |
| ST 3655A | A | 527 | 1024 | 16 | 63 | Medalist 350 |
| ST 3660A | A | 540 | 1057 | 16 | 63 | Medalist 545xe |
| | | | 699 | 32 | 63 | Large |
| ST 3780A | A | 722 | 1399 | 16 | 63 | Medalist 720 |
| | | | 699 | 32 | 63 | Large |
| ST 38420A | A4 | 8400 | | | | UDMA 66 |
| ST 3850A | A2F | 850 | 1648 | 16 | 63 | Medalist |
| | | | 824 | 32 | 63 | Large |
| ST 3851A | A | 851 | 825 | 32 | 63 | Cabo |
| ST 3852A | A | | 826 | 32 | 63 | |
| ST 3853A | A | | 826 | 32 | 63 | |
| ST 38641A | A4 | 8197 | 1023 | 256 | 63 | |
| ST 39140A | A4 | 8683 | 1023 | 256 | 63 | |
| ST 500A | A | 426 | 895 | 15 | 62 | |
| ST 51080A | A | 1034 | 2100 | 16 | 63 | Mode 4 Medalist SL |
| | | | 525 | 64 | 63 | Large |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------|------|------|------|-----|-----|--------------------------|
| ST 51270A | A2F | 1223 | 2485 | 16 | 63 | Medalist SL |
| | | | 621 | 64 | 63 | Large |
| ST 52160A | A | | 1023 | 64 | 63 | |
| ST 52520A | A | 2560 | 4978 | 16 | 63 | Medalist |
| | | | 621 | 128 | 63 | Large |
| ST 5540A | A | 517 | 1050 | 16 | 63 | |
| | | | 525 | 32 | 63 | Large |
| ST 5660A | A | 545 | 1057 | 16 | 63 | Decathlon 545 |
| | | | 528 | 32 | 63 | |
| ST 5850A | A | 854 | 1656 | 16 | 63 | Try 828 x 32 x 63 |
| | | | 828 | 32 | 63 | |
| ST 5851A | A | 1034 | 828 | 32 | 63 | |
| ST 7050A | A | 42 | 976 | 4 | 21 | |
| ST 9025A | A | 21 | 1024 | 4 | 17 | Try 654 x 2 x 32 |
| ST 9038A | A | 32 | | 2 | | |
| ST 9051A | A | 42 | 820 | 6 | 17 | Try 654 x 4 x 32 |
| ST 9052A | A | 42 | 980 | 5 | 17 | ST 9144 Family |
| ST 9077A | A | 64 | 669 | 11 | 17 | |
| ST 9080A | A | 64 | 823 | 4 | 38 | ST 9235 Family |
| ST 9096A | A | 85 | 980 | 10 | 17 | ST 9144 Family |
| ST 9100A(G) | A | 85 | 748 | 14 | 16 | ST 9295 Family |
| ST 91080A | A3 | 1083 | 525 | 64 | 63 | |
| ST 91350AG | A3 | 1350 | 654 | 64 | 63 | |
| ST 9140A(G) | A | 127 | 980 | 15 | 17 | |
| ST 91420A | A3 | 1441 | 694 | 64 | 63 | |
| ST 91430AG | A3 | 1449 | 702 | 64 | 63 | |
| ST 9144A(G) | A | 127 | 980 | 15 | 17 | Laptops |
| ST 9145A(G) | A | 127 | 980 | 15 | 17 | |
| ST 9150AG | A | 131 | 419 | 13 | 47 | Marathon 130sl |
| | | | 873 | 16 | 24 | Large |
| ST 91685AG | A | 1680 | 814 | 64 | 63 | |
| ST 9190A(G) | A | 171 | 873 | 16 | 24 | Marathon 170sl Compaq 65 |
| ST 9195A(G) | A | 170 | 800 | 13 | 32 | |
| ST 92080A | A | 64 | 823 | 4 | 38 | |
| ST 92120AG | A | | 1050 | 64 | 63 | |
| ST 92130AG | A3 | 2163 | 523 | 128 | 63 | |
| ST 92255AG | A | 2250 | 545 | 128 | 63 | |
| ST 9235A(G) | A | 209 | 985 | 13 | 32 | Laptops |
| ST 9240AG | A | 210 | 988 | 8 | 52 | Marathon 210sl |
| ST 9295AG | A | 261 | 569 | 15 | 60 | |
| ST 9300AG | A | 262 | 569 | 15 | 60 | Marathon 260sl |
| ST 93230AG | A | | 788 | 128 | 63 | |
| ST 9342A | A | 345 | 667 | 16 | 63 | |
| ST 9352A | A | 350 | 905 | 12 | 63 | |
| ST 9385AG | A | 340 | 934 | 14 | 51 | Marathon 340 |
| ST 94030AG | A | | 993 | 128 | 63 | |
| ST 9420AG | A | 421 | 988 | 16 | 52 | |
| ST 9422A | A | 421 | 818 | 16 | 63 | |
| ST 9546AG | A | 520 | 523 | 32 | 63 | |
| ST 9550AG | A | 455 | 942 | 16 | 59 | Marathon 455 |
| ST 9655AG | A | 524 | 1016 | 16 | 63 | Marathon 520 |
| ST 9810AG | A | 811 | 786 | 32 | 63 | |
| ST 9816AG | A2 | 810 | 1571 | 16 | 63 | 2.5" Marathon 810 |
| | | | 785 | 32 | 63 | Large |
| ST 9840AG | A3 | 840 | 814 | 32 | 63 | |
| ST 1111E | E | 99 | 1072 | 5 | 36 | CDC 94356-111 |
| ST 1156E | E | 138 | 1072 | 7 | 36 | CDC 94356-155 |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------|------|-------|-------|------|---------|-----------------------|
| ST 1182E | E | 161 | 972 | 9 | 36 | |
| ST 1201E | E | 178 | 1072 | 9 | 36 | CDC 94356-200 |
| ST 2106E | E | 89 | 1024 | 5 | 34 | 10 Mhz CDC 94216-106 |
| ST 2160E | E | 85 | 1024 | 5 | 34 | |
| ST 2182E | E | 160 | 1453 | 4 | 54 | 15 Mhz CDC 94246-182 |
| ST 2383E | E | 338 | 1747 | 7 | 54 | 15 Mhz CDC 94246-383 |
| ST 41650E | E | 1420 | 2107 | 15 | Z | |
| ST 4182E | E | 152 | 969 | 9 | 34 | 10 Mhz CDC 94166-182 |
| ST 4192E | E | 169 | 1147 | 8 | 36 | |
| ST 4383E | E | 319 | 1412 | 13 | 34 | 10 Mhz CDC 94186-383 |
| ST 4384E | E | 319 | 1224 | 15 | 34 | 10 Mhz CDC 94186-383H |
| ST 4442E | E | 368 | 1412 | 15 | 34 | 10 Mhz CDC 94186-442 |
| ST 4766E | E | 664 | 1632 | 15 | 53 | 15 Mhz CDC 94196-766 |
| ST 4767ES | E | 676 | 1399 | 15 | 63 | 24 Mhz |
| ST 4769ES | E | 631 | 1552 | 15 | 53 | 24 Mhz |
| ST 41201K | I | 1200 | 2101 | 17 | Z | CDC 97509-12G |
| ST 41800K | I | 1800 | 2627 | 26 | 138 | |
| ST 43200K | I2 | 3385 | 2627 | 20 | 161-240 | |
| ST 6515K | I | 576 | 711 | 24 | | |
| ST 6516K | I | 516 | 711 | 24 | | |
| ST 6545K | I | 516 | 711 | 24 | | |
| ST 8100K | I | 100 | 1-992 | 1-32 | 1-256 | Solid State |
| ST 81154K | I | 1154 | 1635 | 14 | 197 | CDC 97229-1150 |
| ST 81236K | I | 1056 | 1635 | 15 | 83 | CDC 97209-12G |
| ST 8134K | I | 134 | 1-992 | 1-32 | 1-256 | Solid State |
| ST 8135K | I | 134 | 1-992 | 1-32 | 1-256 | Solid State |
| ST 8167K | I | 167 | 1-992 | 1-32 | 1-256 | Solid State |
| ST 8201K | I | 201 | 1-992 | 1-32 | 1-256 | Solid State |
| ST 82030K | I | 2030 | 2120 | 19 | 83 | |
| ST 82105K | I | 2105 | 2611 | 16 | 78 | CDC 97289-21G |
| ST 82272K | I | | | | | CDC 97200-23G |
| ST 82368K | I | 2368 | 2611 | 18 | 86 | CDC 97299-23G |
| ST 82500K | I | 2140 | 2611 | 19 | 83 | CDC 97209-25G |
| ST 8268K | I | 288 | 1-992 | 1-32 | 1-256 | Solid State |
| ST 83050 | I | 3050 | 2655 | 18 | 212 | |
| ST 83220K | I | 3220 | 2655 | 19 | 106 | |
| ST 833K | I | 33 | 1-992 | 1-32 | 1-256 | Solid State |
| ST 8335K | I | 335 | 1-992 | 1-32 | 1-256 | Solid State |
| ST 8402K | I | 402 | 1-992 | 1-32 | 1-256 | Solid State |
| ST 867K | I | 67 | 1-992 | 1-32 | 1-256 | Solid State |
| ST 868K | I | 67 | 1-992 | 1-32 | 1-256 | Solid State |
| ST 8851K | I | 727 | 1381 | 15 | Z | CDC 97209-850 |
| SG 10B | M | 10 | 305 | 4 | 17 | |
| SG 15C | M | 15 | 305 | 6 | 17 | |
| SG 5A | M | 5 | 152 | 4 | 17 | |
| SG 5B | M | 5 | 305 | 2 | 17 | |
| ST 1100 | M | 83 | 1072 | 9 | 17 | CDC 94355-100 |
| ST 124 | M | 21 | 615 | 4 | 17 | |
| ST 125 (-1) | M/R | 21/32 | 615 | 4 | 17/26 | |
| ST 138 (-1) | M | 32 | 615 | 6 | 17 | |
| ST 151 | M/R | 42/65 | 977 | 5 | 17/26 | |
| ST 206 | M | 5 | 306 | 2 | 17 | |
| ST 212 | M/R | 10/16 | 306 | 4 | 17/26 | |
| ST 213 | M/R | 10/16 | 615 | 2 | 17/26 | |
| ST 225 | M | 21 | 615 | 4 | 17 | |
| ST 238 | M | 21 | 615 | 4 | 17 | |
| ST 251 (-1) | M | 42 | 820 | 6 | 17 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------------|------|--------|------|-----|-------|------------------------|
| ST 252 | M | 42 | 820 | 6 | 17 | |
| ST 253 | M | 43 | 989 | 5 | 17 | CDC 94205-51 |
| ST 3212 | M | 10 | 612 | 2 | 17 | |
| ST 4026 | M/R | 21/32 | 615 | 4 | 17/26 | High Performance |
| ST 4030 | M | 31 | 733 | 5 | 17 | |
| ST 4037 | M | 30 | 733 | 5 | 17 | |
| ST 4038 (M) | M/R | 31/48 | 733 | 5 | 17/26 | High Performance |
| ST 4051 | M/R | 42/65 | 977 | 5 | 17/26 | High Performance |
| ST 4053 | M | 44 | 1024 | 5 | 17 | IBM PS/280 |
| ST 406 | M/R | 5/8 | 306 | 2 | 17/26 | |
| ST 4068 | M | 72 | 925 | 9 | 17 | |
| ST 4085(p) | M | 71 | 1024 | 8 | 17 | CDC 94155-85 |
| ST 4086(p) | M | 72 | 925 | 9 | 17 | CDC 94155-86 |
| ST 4096 | M/R | 80/122 | 1024 | 9 | 17/26 | High Performance |
| ST 4097(p) | M | 80 | 1024 | 9 | 17 | CDC 94155-96(p) |
| ST 412 | M/R | 10/16 | 306 | 4 | 17/26 | Rebadged as IBM for XT |
| ST 419 | M/R | 15/24 | 306 | 6 | 17/26 | |
| ST 425 | M | 21 | 306 | 8 | 17 | |
| ST 506 | M/R | 5/8 | 153 | 4 | 17/26 | Unbuffered seek |
| ST 706 | M | 5 | 306 | 2 | 17 | |
| ST 7050P | P3 | 43 | 580 | 9 | 16 | ST 7000 family |
| ST 71P(5) | P2 | 1.8 | | | | Solid State Flashdrive |
| ST 710P(A)(5) | P2 | 10 | | | | Solid State Flashdrive |
| ST 720P(A)(5) | P2 | 21 | | | | Solid State Flashdrive |
| ST 72P(A)(5) | P2 | 3 | | | | Solid State Flashdrive |
| ST 740P(A)(5) | P2 | 42 | | | | Solid State Flashdrive |
| ST 75P(A)(5) | P2 | 5 | | | | Solid State Flashdrive |
| ST 910AC | P2 | 10 | | | | Solid State Flashdrive |
| ST 92AC | P2 | 3 | | | | Solid State Flashdrive |
| ST 920AC | P2 | 21 | | | | Solid State Flashdrive |
| ST 95AC | P2 | 5 | | | | Solid State Flashdrive |
| ST 1106R | R | 91 | 977 | 7 | 26 | |
| ST 1150R | R | 128 | 1072 | 9 | 26 | CDC 94355-150 |
| ST 1156R | R | 138 | 1072 | 7 | 36 | CDC 94355-156 |
| ST 137R | R | 33 | 615 | 4 | 26 | |
| ST 138R (-1) | R | 32 | 615 | 4 | 26 | |
| ST 157R (-1) | R | 49 | 615 | 6 | 26 | |
| ST 225R | R | 21 | 667 | 2 | 31 | |
| ST 238R | R | 32 | 615 | 4 | 26 | |
| ST 250R | R | 42 | 667 | 4 | 31 | |
| ST 251R | R | 43 | 820 | 4 | 26 | |
| ST 277R (-1) | R | 65 | 820 | 6 | 26 | ST 251 Family |
| ST 278R | R | 65 | 820 | 6 | 26 | |
| ST 279R | R | 65 | 989 | 5 | 26 | CDC 94205-77 |
| ST 4077R | R | 65 | 1024 | 5 | 26 | |
| ST 4135R | R | 115 | 960 | 9 | 26 | CDC 94155-135 |
| ST 4144R | R | 122 | 1024 | 9 | 26 | ST 4096 Family |
| ST 7075 | R | 65 | | | | |
| ST 7095 | R | 80 | | | | |
| ST 1057N | S-2 | 49 | 1021 | 3 | Z | |
| ST 1090N | S | 79 | 1068 | 5 | 29 | CDC 94351-90 |
| ST 1096N | S | 84 | 906 | 7 | 26 | ST 1144 Family |
| ST 1102N | S-2 | 84 | 965 | 5 | 34 | |
| ST 1111N | S | 99 | 1068 | 5 | 36 | CDC 94351-111 |
| ST 11200N(D) | S-2F | 1054 | 1872 | 15 | 73 | GCC UltraDrive 1000S |
| ST 11201N(D) | S-2F | 1054 | 1872 | 15 | 73 | ST 11200 Family |
| ST 1126N | S | 107 | 1068 | 7 | 29 | CDC 94351-126 |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|------|-------|------|-----|-------|--------------------------|
| ST 1133N | S | 113 | 1268 | 5 | 36 | CDC 94351-133S |
| ST 1133NS | S | 113 | 1068 | 5 | 36 | CDC 94351-133S |
| ST 1144N | S-2 | 126 | 2048 | 7 | Z | |
| ST 1156N(S) | S-2 | 138 | 1068 | 7 | 36 | CDC 94351-155 (S) |
| ST 1162N | S | 138 | 1068 | 9 | 29 | CDC 94351-160 |
| ST 11700N(D) | S-2F | 1430 | 2626 | 13 | 57-99 | ST 12400 Family |
| ST 11701N(D) | S2FW | 1430 | 2626 | 13 | 57-99 | ST 12400 Family |
| ST 11750N(D) | S-2F | 1437 | 2756 | 11 | 62-97 | Barracuda |
| ST 11751N(D) | S2FW | 1437 | 2756 | 11 | Z | |
| ST 118202LW | S-U | 18200 | 6962 | 24 | 213 | Cheetah |
| ST 118273(LNW) | S-U | 18200 | 7501 | 20 | 237 | Barracuda |
| ST 1186N(S) | S-2 | 160 | 1268 | 7 | 36 | CDC 94351-186(S) |
| ST 11900N(W) | S-2F | 1700 | 2621 | 15 | 83 | |
| ST 11901N | S | 1700 | 2621 | 15 | | |
| ST 11950N(W) | S-2F | 1689 | 2706 | 15 | 81 | Barracuda |
| ST 11951N | S-2F | 1689 | 2706 | 15 | | Barracuda |
| ST 1201N(S) | S-2 | 172 | 1068 | 9 | 35 | CDC 94351-200(S) |
| ST 1239N(S) | S-2 | 211 | 1268 | 9 | 36 | CDC 94351-230(S) |
| ST 12400N(DW) | S-2F | 2100 | 2621 | 19 | 83 | |
| ST 12401N | S-2F | 2100 | 2626 | 19 | 83 | ST 12400 Family |
| ST 12450N(DW) | S2FW | 1781 | 2710 | 9 | 149 | D model no termination |
| ST 125N(-1) | S | 21 | 407 | 4 | 26 | |
| ST 12550N(D) | S-2F | 2100 | 2707 | 19 | 81 | Barracuda; 7200 RPM |
| ST 12551N(D) | S2FW | 2100 | 2756 | 19 | 62-97 | Barracuda 2 |
| ST 138N(-1) | S | 32 | 615 | 4 | 26 | |
| ST 1400N | S-2 | 331 | 1476 | 7 | 62 | ST 1480 family |
| ST 1401N | S-2 | 338 | 1100 | 9 | 66 | ST 1480 Family |
| ST 14207(N)(W) | S-2F | 4295 | 3999 | 20 | 104 | |
| ST 14209(N)(W) | S-3 | 4295 | 3999 | 20 | 104 | |
| ST 1480N(D,V) | S-2 | 426 | 1476 | 9 | 62 | |
| ST 1481N(D) | S-2F | 426 | 1476 | 9 | 62 | ST 1480 Family |
| ST 150176LW | S-U2 | 50100 | | | | Barracuda 50 7200 RPM |
| ST 15150N(W) | S2FW | 4094 | 3711 | 21 | 107 | Barracuda 4 A/V 7200 RPM |
| ST 15230N | S-2F | 4094 | 3992 | 19 | 110 | A/V 5400 RPM |
| ST 157N(-1) | S | 49 | 615 | 6 | 26 | |
| ST 1581N(D) | S-2F | 525 | 1476 | 9 | 77 | ST 1480 Family |
| ST 177N | S | 60 | 921 | 5 | 26 | I version made for IBM |
| ST 1830N | S-2F | 702 | 1325 | 13 | 79 | |
| ST 19101N | S-3 | 9100 | 6256 | 16 | 170 | Cheetah 10,033 RPM 20 W |
| ST 19171N(W) | S2FW | 9100 | 5274 | 20 | 168 | Barracuda 9 7200 RPM |
| ST 1950N | S-2F | 803 | 1575 | 13 | 76 | |
| ST 1980N(D) | S-2F | 860 | 1730 | 13 | 74 | ST 11200 Family |
| ST 2106N(M) | S | 91 | 1022 | 5 | 36 | CDC 94211-106 M=Mac |
| ST 2125N(V,M) | S | 107 | 1544 | 3 | 45 | 94211-125 V=Novell |
| ST 2209N(V,M) | S | 179 | 1544 | 5 | 45 | CDC 94221-209 |
| ST 224N | S | 22 | 615 | 2 | 26 | |
| ST 225N | S | 21 | 615 | 4 | 17 | |
| ST 2383N(M) | S | 332 | 1261 | 7 | 74 | CDC 94241-383 M=Mac |
| ST 250N | S | 45 | 667 | 4 | 17 | |
| ST 2502N(V,M) | S | 435 | 1755 | 7 | 69 | CDC 94241-502 |
| ST 251N | S | 43 | 820 | 4 | 26 | 818 cyls? |
| ST 251N-1 | S | 43 | 630 | 4 | 34 | |
| ST 277N | S | 65 | 820 | 6 | 26 | ST 251 Family |
| ST 277N-1 | S | 65 | 628 | 6 | 34 | ST 251 Family |
| ST 296N | S | 84 | 820 | 6 | 34 | ST 251 Family |
| ST 3025N | S-2 | 21 | 1616 | 1 | 26 | |
| ST 3057N | S-2 | 49 | 940 | 3 | 34 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------------|------|-------|------|-----|-----|-------------------------------|
| ST 3096N | S-2 | 40 | 610 | 3 | 35 | |
| ST 31051N(W) | S2FW | 1060 | 4176 | 4 | 123 | Hawk |
| ST 31055N | S-3 | 1060 | 4176 | 4 | 123 | |
| ST 31060N | S-2F | 1062 | 2757 | 8 | 94 | |
| ST 31080N (WC) | S-2F | 1080 | 3658 | 6 | 96 | WC = CFP 1080E |
| ST 31200N(D,C) | S | 1063 | 2700 | 9 | 84 | |
| ST 31230N(W) | S-2F | 1010 | 3992 | 5 | 103 | Hawk 5400 RPM |
| ST 31231N | S-2F | 1060 | 3992 | 5 | 103 | |
| ST 31250N | S-2F | 1020 | 3711 | 5 | 107 | Barracuda 2LP |
| ST 3136403LWV | S-U2 | 36400 | | | | Cheetah 36 10000 RPM |
| ST 3144N | S-2 | 126 | 1652 | 3 | ZBR | |
| ST 318203LW | S-U2 | 18200 | | | | Cheetah 18LP 10,016 RPM |
| ST 318275SLW | S | 8600 | | | | 7200 RPM |
| ST 318451LC | S | 18000 | | | | Cheetah Ultra 160 15000 RPM |
| ST 31930N | S-2F | 1700 | 3898 | 7 | 121 | |
| ST 32105N | S-2F | 2148 | 3948 | 10 | 106 | |
| ST 32107N | S-2F | 2147 | 3999 | 10 | 104 | |
| ST 32109N | S-2F | 2148 | 3999 | 10 | 104 | |
| ST 32151N(W) | S2FW | 2145 | 4176 | 8 | 125 | Hawk |
| ST 32155N | S-3 | 2047 | 4176 | 8 | 125 | Hawk 2 XL |
| ST 32171N(W) | S-3 | 2150 | 5178 | 5 | 163 | Barracuda 4LP |
| ST 32271N | S-3 | 2260 | 5178 | 5 | 170 | |
| ST 32272N | S-3 | 3250 | 6311 | 4 | 175 | |
| ST 32430N(W) | S-2F | 2147 | 3992 | 9 | 116 | A/V |
| ST 325N | S | 21 | 654 | 2 | 32 | |
| ST 32550N(W) | S2FW | 2041 | 3510 | 11 | 108 | Barracuda 4LP A/V 68 pin 7200 |
| ST 3283N | S-2F | 248 | 1689 | 5 | 57 | ST 3550 Family |
| ST 3285N | S | 249 | 1689 | 3 | 57 | |
| ST 3390N | S | 344 | 2676 | 3 | 83 | |
| ST 34217 | S-3 | | | | | Cozume 1 |
| ST 34371N(W) | S-3 | 4320 | 5178 | 10 | 164 | Barracuda 4LP |
| ST 34501N | S-3 | 4550 | 6526 | 8 | 170 | Also 9100 Mb Cheetah |
| ST 34502LW | S | | 6962 | 6 | 212 | |
| ST 34520(N)(W) | S | | 9006 | 4 | 246 | |
| ST 34555(N)(W) | S | | 6311 | 8 | 176 | |
| ST 34571N | S-3 | 4550 | 5178 | 10 | 171 | |
| ST 34572N | S-3 | 6500 | 6311 | 8 | 176 | |
| ST 34573(N)(W) | S | | 7501 | 5 | 237 | |
| ST 3500N(D) | S-2F | 426 | 1547 | 7 | 76 | |
| ST 3550N | S-2F | 456 | 2126 | 5 | 83 | |
| ST 3600N | S-2F | 525 | 1872 | 7 | 76 | Try 1872 x 7 x 79 |
| ST 3610N(D) | S-2F | 535 | 1872 | 7 | 79 | ST 3600 Family |
| ST 3620N(N,C) | S-2F | 551 | 2700 | 5 | 78 | |
| ST 36530(L)(N)(W) | S | | 9006 | 6 | 234 | |
| ST 3655N | S | 545 | 2393 | 5 | 89 | |
| ST 39102LW | S-U2 | 9100 | 6962 | 12 | 212 | Cheetah |
| ST 319103LW | S | 8600 | | | | Cheetah 10025 RPM |
| ST 39140(N)(W) | S | | 9006 | 8 | 246 | |
| ST 39173LW | S-U2 | 9100 | 7520 | 5 | 236 | Barracuda |
| ST 39173(N)(W) | S | | 7501 | 10 | 237 | |
| ST 39175LW | S | 8600 | | | | Barracuda 7200 RPM |
| ST 4051N | S | 103 | 977 | 5 | 42 | |
| ST 4077N | S | 87 | 1024 | 5 | 26 | |
| ST 4096N | S | 84 | 1147 | 4 | 42 | |
| ST 410800N(W) | S-2F | 8669 | 4925 | 14 | 133 | A/V Elite 9 5400 RPM |
| ST 41200NDVM | S-2 | 1035 | 1931 | 15 | 71 | 94601-12G/Tricord SD 1200 |
| ST 41250N | S | 1550 | 2098 | 17 | 74 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------------|------|-------|------|-----|-----|---------------------------|
| ST 4144N | S | 122 | 1024 | 9 | 26 | |
| ST 41520N(D) | S-2 | 1352 | 2098 | 17 | 74 | CDC 97501-12G |
| ST 41600N | S | 1370 | 2098 | 17 | 74 | CDC 97501-16G |
| ST 41601N(D) | S-2F | 1370 | 2098 | 17 | 74 | CDC 97501-16G |
| ST 41650N(D) | S-2 | 1415 | 2107 | 15 | 87 | |
| ST 41651N(D) | S-2F | 1415 | 2107 | 15 | 87 | |
| ST 4182N(M) | S | 155 | 969 | 9 | 35 | CDC 94161-182 M=Mac |
| ST 4192N | S | 168 | 1147 | 8 | 36 | |
| ST 42000N(D) | S | 1792 | 2624 | 16 | 83 | |
| ST 42100N(D) | S-2F | 1900 | 2573 | 15 | 96 | |
| ST 42101N | S2FW | 1900 | 2573 | 15 | 96 | |
| ST 423451N | S-2F | 23400 | 6876 | 28 | 237 | Elite 23 |
| ST 42400N(D) | S-2F | 2129 | 2624 | 19 | 83 | FWB Hammer 2000FMF |
| ST 43400N(D) | S-2F | 2916 | 2735 | 21 | 99 | |
| ST 43401N(D) | S2FW | 2916 | 2735 | 21 | 99 | |
| ST 43402N(D) | S2FW | 2916 | 2735 | 21 | 99 | |
| ST 4350N(M) | S | 307 | 1412 | 9 | 46 | 94171-350/M M=Mac |
| ST 4356N | S | 311 | 1430 | 9 | Z | |
| ST 4376NDMV | S | 330 | 1549 | 9 | 45 | 94171-376/M M=Mac |
| ST 4385N(DM) | S | 330 | 791 | 15 | 55 | 94181-385H/Tricord SD 385 |
| ST 446452 | S | | 9996 | 28 | 328 | |
| ST 4702N(DM) | S | 601 | 1546 | 15 | 50 | 94181-702/Tricord SD 702 |
| ST 4766N(DM) | S | 676 | 1632 | 15 | 54 | CDC 94191-766 M=Mac |
| ST 4767N(DM) | S-2 | 665 | 1356 | 15 | 63 | 94601-767H/M M=Mac |
| ST 51080N | S-2F | 1080 | 4826 | 4 | 109 | Physical A/V Med 1080 |
| ST 52160WC(N) | S-3 | 2170 | 6536 | 4 | 161 | |
| ST 5660N | S-2F | 545 | 3002 | 4 | 88 | |
| ST 5767ND | S | 676 | 1356 | 15 | | |
| ST 81236N | S | 1049 | 1635 | 15 | 83 | CDC 97201-12G |
| ST 82500N | S | 2140 | 2611 | 19 | Z | CDC 97201-25G |
| ST 8368N | S | 316 | 1217 | 10 | 60 | CDC 97201-368 |
| ST 8500N | S | 378 | 1217 | 10 | 82 | CDC 97201-500 |
| ST 8741N | S | 637 | 1635 | 15 | Z | CDC 97201-736 |
| ST 8851N | S | 851 | 1381 | 15 | Z | CDC 97201-850 |
| ST 9096N | S-2 | 85 | | 4 | | |
| ST 9144N | S-2 | 128 | 1024 | 16 | 63 | |
| ST 9235N | S | 209 | 985 | 13 | 32 | |
| ST 9252N | S | 252 | 1339 | 6 | 61 | |
| ST 9259N | S | 251 | | | | Never produced |
| ST 41097J | SMD | 1097 | 2101 | 17 | Z | |
| ST 41201J | SMD | 1200 | 2101 | 17 | Z | CDC 97500-12G |
| ST 6165J | SMD | 165 | 823 | 10 | Z | CDC 97150-160 |
| ST 6315J | SMDE | 315 | 823 | 19 | Z | CDC 97150-300 |
| ST 6344J | SMDE | 344 | 711 | 24 | Z | CDC 97150-340 |
| ST 6515J | SMDE | 344 | 711 | 24 | Z | CDC 97150-500 |
| ST 6516J | SMD | 344 | 711 | 24 | Z | CDC 97150-500 |
| ST 683J | SMD | 83 | 823 | 5 | Z | CDC 97100-80 |
| ST 81123J | SMDE | 1123 | 1635 | 15 | 76 | CDC 97200-1123 |
| ST 81236J | SMDE | 1056 | 1635 | 15 | 83 | CDC 97200-12G |
| ST 82030J | SMD | 2030 | 2120 | 19 | 83 | |
| ST 82038J | SMD | 2038 | 2611 | 19 | 68 | |
| ST 82272J | SMDE | 2272 | 2611 | 19 | 86 | CDC 97200-270 |
| ST 82500J | SMDE | 2140 | 2611 | 19 | 83 | CDC 97200-25G |
| ST 83073J | SMD | 3073 | 2655 | 19 | | |
| ST 8368J | SMDE | 316 | 1217 | 10 | 60 | CDC 97200-368 |
| ST 8500J | SMDE | 378 | 1217 | 10 | 82 | CDC 97200-500 |
| ST 8741J | SMDE | 736 | 1635 | 15 | 60 | CDC 97200-736 |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|-----|------|-----|-----|---------------|
| ST 8851J | SMDE | 851 | 1381 | 15 | 82 | CDC 97200-850 |

Seagate Drive Nos

1st Form factor

- 1 3.5" HH
- 2 5" HH
- 3 3.5" 1"
- 4 5" FH
- 6 9"
- 7 1.8"
- 8 8"
- 9 2.5"

2nd/3rd Unformatted Capacity

| Letter | Interface |
|--------|-------------------|
| A | ATA |
| AG | ATA +Shock |
| C | SCSI Wide |
| D | Differential SCSI |
| E | ESDI |
| J | SMD/SME-E |
| K | IPI-2 |
| N | Narrow SCSI |
| NM | SCSI Mac |
| NV | SCSI NetWare |
| P | PCMCIA |
| R | RLL |
| S | Synchronous SCSI |
| W | Wide SCSI |
| X | XT IDE |
| 0 | Standard Access |
| 1 | Faster Access |

Power requirements

On early Elite drives, +5 should not fall below +4.85.

ST 3600A, 3500A

| | |
|---------|-----------|
| Single: | J5-A in |
| Master: | J5-B in |
| Slave: | J5-AB out |

With 2x3 style J6 on right side near rear

- A=vertical (pins 9&10).
- B=horizontal (8&10)

With 2x2 style J6 on right side near rear

A=1-2 (1-2 are at rear of drive). B=3-4

ST 1090A, 1111A, 1126A, 133A, 1156A, 1162A, 1186A, 1201A, 1239A

| | |
|---------|------------------|
| Single: | 1 open |
| Master: | 1 open, 3 closed |
| Slave: | 1 closed |

ST125A, 138A, 157A

0=open, 1=closed. Read from left, look at back with board down.

6-pin jumpers 10-pin

| | | |
|---------|----------|----------|
| Single: | 1-2 | 3-4 |
| Master: | 1-2, 3-4 | 3-4, 5-6 |
| Slave: | 3-4 | None |

ST 274A/280A

Jumper nearest AT cable on for Master, off for slave. For 280A, leave other jumper alone if non-C model*. For C model*, other jumper on indicates No Slave, off means Slave present. *There are two models. If you do not have a C after the model no, you can only connect two similar 94204-xx drives. Otherwise you can mix.

ST 3295A, 3660A, 3250A, 3291A, 3391A, 3491A, 3240A

| | |
|---------|--|
| Single: | None (5-6, 7-8 off) |
| Master: | As above if slave is ATA compatible 1-2 on if slave without -DASP signal 5-6 on if slave non-ATA |
| Slave: | 7-8 on (to ATA compatible master) |

Cable select is 3-4 (default)

ST 3123A, 3145A, 3195A, 3243A, 3290A

| | |
|---------|------------------------|
| Single: | 1-2, 3-4 open |
| Master: | 1-2 open 3-4 closed |
| Slave: | 1-2 closed |

1-2 are at the back

ST 31081A

| | |
|---------|------|
| Single: | 1-2 |
| Master: | 1-2 |
| Slave: | None |
| CS | 5-6 |

ST 31276A/32132A

| | |
|---------|------|
| Single: | 5-6 |
| Master: | 5-6* |
| Slave: | None |

CS: 3-4 32132A - 3-4, 5-6

ST 1057A, 1102A, 1144A

| | |
|---------|--------------------------|
| Single: | 3-4 closed |
| Master: | 3-4 closed 5-6 closed |
| Slave: | 3-4 open |

1-2 nearest data cable

ST 3051A, 3096A, 3120A, 3144A

| | |
|---------|----------|
| Single: | 3-4 |
| Master: | 3-4, 5-6 |
| Slave: | 3-4 open |

1-2 are at the back

ST 325A/X, ST 351A/X, ST 352A/X

Pins on side, 1-2 towards front

12-pin version

| | |
|---------|-----------------|
| Single: | 1-2, 11-12 |
| Master: | 1-2, 3-4, 11-12 |
| Slave: | 5-7, 11-12 |

XT Mode: 7-8

| | |
|--------|----------|
| 40 Mb: | 1-2 |
| 30 Mb: | 3-4 |
| 20 Mb: | 1-2, 3-4 |

18-pin version

| | |
|---------|------------------------|
| Single: | 3-4, 11-12, 17-18 |
| Master: | 3-4, 5-6, 11-12, 17-18 |
| Slave: | 7-8, 11-12, 17-18 |

| | |
|----------|----------|
| XT Mode: | 9-10 |
| 40 Mb: | 3-4 |
| 30 Mb: | 5-6 |
| 20 Mb: | 3-4, 5-6 |

ST 2274A, 2383A

| | |
|---------|---|
| Single: | A, B, E |
| Master: | A, B |
| Slave: | A (B start delay 20 sec from mstr start). |

A is nearest power connector

ST1400A, 1480A

With 2x2 style J6 on right side near rear

| | |
|---------|------------|
| Single: | J5 Cin |
| Master: | J5 C, D in |
| Slave: | J5 C open |

With 2x3 style J6 on right side near rear

A=vertical (pins 9&10).
B=horizontal (8&10)

| | |
|---------|-----------|
| Single: | J5-A in |
| Master: | J5-B in |
| Slave: | J5-AB out |

ST 3283A, 3385A, 3390A, 3550A, 3655A

| | |
|---------|--------------------------------|
| Single: | None |
| Master: | Pin next to mini pwr closed. |
| Slave: | Pin away from mini pwr closed. |

ST 9051A, 9052A, 9080A, 9077A, 9096A
9100AG, 9140AG, 9144A, 9145A, 9150AG
9190AG, 9235AG, 9240AG, 9300AG 9385AG,
9550AG, 9655AG

| | |
|---------|-----------------------------|
| Single: | None |
| Master: | Pin next AT cable On |
| Slave: | Pins away from AT cable on. |

ST 3780A/31220A

Type A

14 pins outside of drive. 1-2 at rear

| | |
|---------|----------|
| Single: | None |
| Master: | 3-4 (J5) |
| Slave: | 1-2 (J5) |

Type B

4 pins at rear on left

| | |
|---------|-------------------------------|
| Single: | None |
| Master: | Pin nearest AT connector on |
| Slave: | Pin away from AT connector on |

ST 31720A

| | |
|---------|----------|
| Single: | 5-6 |
| Master: | 3-4, 5-6 |
| Slave: | None |

ST 5540A/5851A/51080A/51270A

| | |
|---------|------|
| Single: | None |
| Master: | 3-4 |
| Slave: | 1-2 |

CS=9-10

If mstr wants 30 secs for slave, 3-4/5-6

ST 5660A/5850A

| | |
|---------|------------------|
| Single: | J8 1-2, 3-4 open |
| Master: | J8 3-4 On |
| Slave: | J8 1-2 On |

34-33 closed for 1024 cyls.

J8 is at front of drive.

ST 9420A

| | |
|---------|-------------------------------|
| Single: | None |
| Master: | Pin nearest AT connector on |
| Slave: | Pin away from AT connector on |

ST 41200N/4385N/4702N

| ID | 3 | 4 | 5 |
|----|---|---|---|
| 1 | 0 | 0 | 1 |
| 2 | 0 | 1 | 0 |
| 3 | 0 | 1 | 1 |
| 4 | 1 | 0 | 0 |
| 5 | 1 | 0 | 1 |
| 6 | 1 | 1 | 0 |
| 7 | 1 | 1 | 1 |

ST 12550N

J01

| | | |
|-----|-----|------------------|
| 1-2 | On | Term pwr Address |
| 3-4 | Off | |

J04

| | |
|-------|-------------------------------------|
| 1-2 | Spindle sync connector |
| 3-4 | Init SDTR msg at power on and reset |
| 5-6 | Remote LED |
| 7-8 | Write Protect |
| 9-10 | Delayed Motor Start Disabled |
| 11-12 | Spin Up with Start Unit Comd |
| 13-14 | Parity Checking |
| 15-16 | Reserved |
| 17-18 | Address 1 |
| 19-20 | Address 2 |
| 21-22 | Address 3 |

ST 19101W (Cheetah)

J5 (Rear)

| | |
|-----|---------|
| 1-2 | SCSI ID |
| 3-4 | SCSI ID |
| 5-6 | SCSI ID |
| 7-8 | SCSI ID |
| 10 | GND |
| 11 | +5v |

J2 (Side)

| | |
|---------|-----------------------------|
| 1 (RHS) | Term Power from A drive* |
| 2 | Term Power from B drive* |
| 3 | Reserved |
| 4 | Parity disable |
| 5 | Write protect |
| 6 | Motor Start |
| 7 | Start delay |
| 8 | Enable T-Res (W model only) |

* Use bottom pins of 1&2 for supply from Bus. ½not used on WC model. Use external active termination for WD drives.

J6 (Front)

| | |
|-------|------------|
| 1-2 | ID1 |
| 3-4 | ID2 |
| 5-6 | ID4 |
| 7-8 | ID8 |
| 9-10 | Reserved |
| 11 | +5v |
| 13-14 | Remote LED |
| 15-16 | Always Off |
| 17-18 | Always Off |
| 19-20 | Always Off |
| 21-22 | Always On |

Sequel

See also Maxtor, possibly Quantum. Bought Maxtor's LXT/XT drives.

See DEC for jumper settings

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|-------|------|------|-----|-----|---------|
| SEQ 4125EXT | E | 113 | 1224 | 7 | 54 | |
| SEQ 4170E | E | 158 | 1224 | 7 | 36 | |
| SEQ 4175EXT | E | 149 | 1224 | 7 | 34 | |
| SEQ 4230E | E | 203 | 1224 | 9 | 36 | |
| SEQ 4280EXT | E | 230 | 1224 | 11 | 34 | |
| SEQ 4380E | E | 338 | 1224 | 15 | 36 | |
| SEQ 4380EXT | E | 319 | 1224 | 15 | 36 | |
| SEQ 1050 | M | 38 | 902 | 5 | 17 | |
| SEQ 1065 | M | 54 | 918 | 7 | 33 | |
| SEQ 1085 | M | 71 | 1024 | 8 | 17 | |
| SEQ 1105 | M | 85 | 918 | 11 | 33 | |
| SEQ 1140 | M | 120 | 918 | 15 | 17 | |
| SEQ 2085 | M | 72 | 1224 | 7 | 33 | |
| SEQ 2140 | M | 113 | 1224 | 11 | 33 | |
| SEQ 2190 | M | 155 | 1224 | 15 | 33 | |
| SEQ 1120R | R | 105 | 1024 | 8 | 25 | |
| SEQ 1240R | R | 197 | 1024 | 15 | 25 | |
| SEQ 4170S | S | 158 | 1224 | 7 | 36 | |
| SEQ 4380S | S | 338 | 1224 | 15 | 36 | |
| SEQ 5300S | S-2F | 3000 | 3055 | 21 | 80 | DEC DSP |
| SEQ 5350S | S-2F | 3572 | 3055 | 25 | 80 | DEC DSP |
| SEQ 5400S(W) | S-2FW | 4000 | 3055 | 26 | 80 | DEC DSP |

Shinwa

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|-----|------|-----|-----|-------|
| D 220 | M | 20 | 614 | 4 | 17 | |

Shugart

No longer making hard drives.

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------|-------|-------|------|-----|-------|-----------|
| 1002 | S1000 | 4 | 256 | 2 | 17 | MFM |
| 1004 | S1000 | 8 | 256 | 4 | 17 | MFM |
| 1006 | S1000 | 30 | | | 17 | MFM |
| 4004 | S1000 | 14 | | | 17 | MFM |
| 4008 | S1000 | 29 | | | 17 | MFM |
| 4100 | S1000 | 56 | | | 17 | MFM |
| SA 1002 | SA | 5 | 256 | 2 | 20 | MFM |
| SA 1004 | SA | 1 | 256 | 4 | 2 | MFM |
| SA 602 | M | 2 | 160 | 2 | 17 | |
| SA 604 | M/R | 5/8 | 160 | 4 | 17/26 | 159 cyls? |
| SA 605 | M | 5 | 160 | 4 | 17 | |
| SA 606 | M/R | 8/12 | 160 | 6 | 17/26 | 159 cyls? |
| SA 607 | M | 5 | 311 | 2 | 17 | 306 cyls? |
| SA 612 | M/R | 11/16 | 311 | 4 | 17/26 | |
| SA 706 | M | 5 | 306 | 2 | 17 | 320 cyls? |
| SA 712 | M | 11 | 306 | 4 | 17 | 320 cyls? |
| SA 724 | M | 20 | 640 | 4 | 17 | |
| SA 725 | M | 20 | 615 | 4 | 17 | |

Siemens

Microscience connection?

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|------|------|-----|-----|----------|
| 1100 | E | 83 | 1216 | 4 | 32 | |
| 1200i | E | 156 | 1216 | 8 | 32 | Megafile |
| 1300 | E | 234 | 1216 | 12 | 32 | Megafile |
| 2200 | E | 74 | 1216 | 8 | 32 | |
| 2300 | E | 61 | 1216 | 2 | 32 | |
| 4410 | E | 334 | 1100 | 11 | 54 | Megafile |
| 5710 | E | 655 | 1478 | 15 | 54 | |
| 5720 | E | 655 | 1478 | 15 | 54 | SCSI? |
| 5810 | E | 777 | 1658 | 15 | 54 | |
| 2200i | S | 156 | 1216 | 8 | 32 | ESDI? |
| 2300 | S | 234 | 1216 | 12 | 32 | ESDI? |
| 4420 | S | 334 | 1100 | 11 | 54 | |
| 5720 | S | 55 | | 15 | | |
| 5820 | S | 777 | 1658 | 15 | 54 | |
| 6200 | S | 1200 | 1658 | 16 | 54 | |
| 7520 | S | 655 | | 15 | 54 | |

Simple Technology

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-----------|------|------|------|-----|-----|-------|
| 1.08 Gb | A | 1080 | | | | 2.5" |
| 1.3 Gb | A | 1300 | | | | 2.5" |
| 2.1 Gb | A | 2100 | | | | 2.5" |
| STI 260HD | P3 | 260 | | | | |
| STI 340HD | P3 | 340 | | | | |

Singapore

Bought Micropolis

Sony

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|------|-----|------|-----|-----|----------|
| SRD 3040C-50 | A | 42 | 822 | 2 | 51 | Amstrad* |
| SRD 3080C-50 | A | 80 | 964 | 10 | 17 | Amstrad* |
| SRD 4080A | A | 85 | | | | |
| RMO 5550 | S | 650 | | | | |
| RMO 5350 | S | 128 | | | | |
| SRD 2020A | S | 20 | | | | A=Apple |
| SRD 2040A-01 | S | 42 | 624 | 4 | 33 | Mac |
| SRD 3040(A)S | S | 42 | | 2 | | A=Apple |
| SRD 3080L | S | 80 | | | | |
| SRD 4080S | S | 85 | | 4 | | |

* Found in Amstrad ALT 386SX portable

SRD 2040

- 1 5-6 2 3-4
- 3 3-4/5-6 4 1-2
- 5 1-2/5-6 6 1-2/3-4
- 7 1-2/3-4/5-6

Southern Data

Southern Data Systems Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------|------|-----|------|-----|-----|-------|
| 2290S-40T | E | 40 | | | | |
| 2290S-80R | E | 80 | | | | |
| 2290S-130R | E | 130 | | | | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------|------|-----|------|-----|-----|-------|
| 2290S-150T | E | 150 | | | | |
| 2290S-190R | E | 190 | | | | |
| 2290S-300T | E | 300 | | | | |
| 2290S-34R | E | 34 | | | | |
| 2290S-90T | E | 90 | | | | |

SPC

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|------|-----|------|-----|-----|-------|
| Scorecard 44 | H | 44 | 753 | 7 | 17 | MFM |

Specialised Systems Technology Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|------|-----|------|-----|-----|-------|
| Stor Stak 780 | E | 80 | | | | |
| Stor Stak 1650 | S | 342 | | | | |
| Stor Stak 170 | S | 70 | | | | |
| Stor Stak 380 | S | 80 | | | | |

Sperry

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------------|------|-----|------|-----|-----|------------------------|
| 20 Fixed Card | H | | | | | Tandon 362 in disguise |

Spin Peripherals Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------|------|------|------|-----|-----|------------------|
| 1.2 GB | S-2 | 1230 | 1979 | 15 | | Toshiba MK 538FB |
| Spin 1021 | S | 1000 | | | | |
| Spin 32151 | S | 2000 | | | | |
| Spin 4221AV | S | 2000 | | | | |
| Spin 34300 | S | 4000 | | | | |
| Spin 3423AV | S | 4000 | | | | |

Storage Devices

See Storage Dimensions, and Samsung

Storage Dimensions

Maxtor aka Speedstor

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|-----|------|-----|-----|----------------------|
| AT 155E | E | 156 | 1224 | 9 | 36 | Maxtor XT 4170E |
| AT 335E | E | 338 | 1224 | 15 | 36 | Maxtor XT 4380E |
| AT 650E | E | 651 | 1632 | 15 | 54 | Maxtor XT 8760E |
| PS 155E | E | 156 | 1224 | 9 | 36 | Maxtor XT 4170E PS/2 |
| PS 335E | E | 338 | 1224 | 15 | 36 | Maxtor XT 4380E PS/2 |
| AT 120 | M | 120 | 918 | 15 | 17 | Maxtor XT 1140 |
| AT 133 | M | 133 | 1024 | 15 | 17 | |
| AT 160 | M | 160 | 1224 | 15 | 17 | Maxtor XT 2190 |
| AT 40 | M | 44 | 1025 | 5 | 17 | |
| AT 70 | M | 71 | | | | |
| LAN 160 | M | 159 | | | | Lanstor |
| LAN 320D | M | 52 | | | | Lanstor |
| LAN 650D | M | 651 | | | | Lanstor |
| AT 100 | R | 109 | 1024 | 8 | 26 | |
| AT 140 | R | 142 | 1024 | 8 | 34 | |
| AT 200 | R | 204 | 1024 | 15 | 26 | |
| AT 100S | S | 105 | | 3 | | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------------|------|------|------|-----|-----|----------------------|
| AT 105S | S | 105 | | | | Speedstor |
| AT 200S | S | 204 | | 7 | | |
| AT 1000S | S | 1000 | | 15 | | |
| AT 155S | S | 156 | 1224 | 9 | 36 | Maxtor XT 4170S |
| AT 2640S2 | S | 651 | | | | |
| AT 320S | S | 320 | 1224 | 15 | 36 | Maxtor XT 4380S |
| AT 4320S1 | S | 320 | | | | |
| AT 4640 | S | 651 | | | | |
| AT 650S | S | 651 | 1632 | 15 | 54 | Maxtor XT 8760S |
| CDASM 1051F | S-2F | 1000 | | | | |
| CDASM 2105F | S-2F | 2100 | | | | |
| CDASM 400SF | S-2F | 4300 | | | | |
| DMH A02W | S2FW | 2100 | | | | |
| DMH A04W | S2FW | 4300 | | | | |
| DMH B02W | S2FW | 2100 | | | | |
| DMH B04W | S2FW | 4300 | | | | |
| LAN 1050F | S-2F | 1050 | | | | |
| LAN 150S | S | 155 | | | | |
| LAN 2101F | S-2F | 2101 | | | | |
| LAN 2105F | S-2F | 2105 | | | | |
| LAN 21300S2 | S | 1300 | | | | |
| LAN 2320S | S | 326 | | | | |
| LAN 2320S1 | S | 326 | | | | |
| LAN 2320S1 | S | 326 | | | | |
| LAN 2640S2 | S | 653 | | | | |
| LAN 4005 | S-2F | 4300 | | | | |
| LAN 650S(1) | S | 651 | | | | |
| LAN 9000F | S-2F | 9000 | | | | |
| MAC B-1000F | S-2F | 1050 | 2570 | 14 | 57 | DEC DSP 3105 |
| MAC 1-2030F-1 | S-2F | 2129 | 2624 | 19 | 83 | ST 42400N |
| Macinstor 100 | S | 101 | | | | |
| Macinstor 1020 | S | 1020 | | | | |
| Macinstor 195 | S | 195 | | 7 | | |
| Macinstor 195i | S | 194 | | | | |
| Macinstor 2040 HC2 | S | 2040 | | | | |
| Macinstor 325 II/i | S | 325 | | | | |
| Macinstor 40 | S | 40 | | | | Mac (Maxtor) |
| Macinstor 595 II/i | S | 594 | | | | |
| Macinstor 650 II/i | S | 650 | | | | |
| Macinstor 80 | S | 80 | | | | Mac (Maxtor) |
| PS 155S | S | 156 | 1224 | 9 | 36 | Maxtor XT 4170S PS/2 |
| PS 320S | S | 320 | 1224 | 15 | 36 | Maxtor XT 4380S PS/2 |
| PS 650S | S | 651 | 1632 | 15 | 54 | Maxtor XT 8760S PS/2 |
| PS 21300S2 | S | 1303 | | | | PS/2 |
| PS 2640S2 | S | 640 | | | | PS/2 |
| PS 41280S4 | S | 1280 | | | | PS/2 |
| PS 41300S2 | S | 1303 | | | | PS/2 |
| PS 41950S4 | S | 1954 | | | | PS/2 |
| PS 42600S4 | S | 2606 | | | | PS/2 |
| PS 4320S1 | S | 320 | | | | PS/2 |
| PS 4640S2 | S | 640 | | | | PS/2 |
| PS 4650S1 | S | 650 | | | | PS/2 |
| PS 4960S3 | S | 960 | | | | PS/2 |
| OS 1000S | S | 1000 | | | | |
| OS 200S | S | 200 | | | | |
| OS 330S | S | 330 | | | | |
| OS 650S | S | 650 | | | | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------|------|------|------|-----|-----|-----------|
| SAZ-2610F2 | S-2F | 1370 | 2098 | 17 | 74 | ST 41601N |
| XS 100S | S | 104 | | | | Xstor |
| XS 200S | S | 200 | | | | |
| XS 330S | S | 330 | | | | |
| XS 1100S1 | S | 104 | | | | |
| XS 1200SI/2 | S | 200 | | | | |
| XS 1330S1 | S | 330 | | | | |
| XS 1400S2 | S | 400 | | | | |
| XS 1665S1 | S | 667 | | | | |
| XS 21320S4 | S | 1320 | | | | |
| XS 21330S2 | S | 1330 | | | | |
| XS 2200SI | S | 200 | | | | |
| XS 2330S1 | S | 330 | | | | |
| XS 2400S2 | S | 400 | | | | |
| XS 2660S2 | S | 660 | | | | |
| XS 2665S | S | 667 | | | | |
| XS 2800S4 | S | 800 | | | | |
| XS 2990S3 | S | 990 | | | | |
| XS 2600S3 | S | 600 | | | | |

Storage Solutions

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------------|------|------|------|-----|-----|-------|
| SSI 1000(EXT) | S-2F | 1000 | | | | |
| SSI 2000M | S2FW | 2100 | | | | |
| SSI 4400 | S2FW | 4300 | | | | |
| SSI 5200 | S2FW | 5200 | | | | |

Streamlogic Corp

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------|------|------|------|-----|-----|-------|
| AV 9100 | S-2F | 9100 | | | | |
| LT/AV 2100 | S2FW | 2100 | | | | |
| LT/AV 4300 | S2FW | 4300 | | | | |

Sumitronics

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------|------|-----|------|-----|-----|-------|
| NP 04 | M | 55 | | 10 | 17 | |
| RD 3000 | M | 10 | 306 | 4 | 17 | |
| RD 4000 | M | 20 | 306 | 8 | 17 | |

Sumo Systems

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|------|-----|------|-----|-----|-------|
| Subsystem 20 | S | 20 | | | | |
| Subsystem 50 | S | 50 | | | | |

Summus Corp

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-----------|------|-----|------|-----|-----|-------|
| SUM 44100 | E | 65 | | | | |
| SUM 44600 | E | 82 | | | | |
| SUM 44600 | E | 82 | | | | |
| SUM 43000 | S | 70 | | | | |
| SUM 44100 | S | 65 | | | | |
| SUM 44600 | S | 82 | | | | |
| SUM 44900 | S | 38 | | | | |

Sun Microsystems Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------------|------|------|------|-----|-----|-------|
| 104 Mb System | S | 104 | | | | Sun |
| 327 Mb System | S | 327 | | | | Sun |
| 654 Mb System | S | 654 | | | | Sun |
| 669 Mb System | S | 669 | | | | Sun |
| 71 Mb System | S | 71 | | | | Sun |
| 911 Mb System | S | 911 | | | | Sun |
| 1 Gb System | S | 1000 | | | | Sun |

SuperMac Technology Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|-----|------|-----|-----|-------|
| XP200 | S | 200 | | | | Mac |
| XP330 | S | 330 | | | | Mac |
| XP600 | S | 600 | | | | Mac |

SyDOS

Division of Syquest

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|-----|------|-----|-------|--------------------|
| 44/2 | S | 88 | | | | |
| 44e | S | 44 | 1275 | 2 | 34 | External Cartridge |
| 44i | S | 44 | 1275 | 2 | 34 | Internal Cartridge |
| 88/2 | S | 176 | | | | |
| 88e | S | 88 | 1774 | 2 | 36-52 | External Cartridge |
| 88i | S | 88 | 1774 | 2 | 49ish | Internal Cartridge |

Syquest

support@syquest.com

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------------|------|-------|------|-----|-------|----------------------|
| SQ 105 | A | 105 | | | | |
| SQ 200 | A | 200 | | | | |
| SQ 2542A | A | 42 | 985 | 5 | 17 | |
| SQ 2543A | A | 42 | | | | Cartridge |
| SQ 270 | A | 270 | | | | |
| SQ 3105A | A | 105 | 841 | 16 | 16 | Cartridge |
| SQ 3270A | A | 256 | 1024 | 16 | 32 | |
| SQ 225F | M | 20 | 612 | 4 | 17 | |
| SQ 306R | M | 5 | 306 | 2 | 17 | 4 hds? |
| SQ 306RD | M/R | 11/16 | 306 | 4 | 17/26 | Removeable |
| SQ 312(RD) | M/R | 11/16 | 615 | 2 | 17/26 | Remove jumper W3 |
| SQ 315F | M | 21 | 612 | 4 | 17 | |
| SQ 319 | M/R | 11/15 | 612 | 2 | 17/26 | |
| SQ 325(A,F) | M | 21 | 612 | 4 | 17 | 615 cyls Victor BIOS |
| SQ 330F | M | 11 | 612 | 2 | 17 | |
| SQ 338(F) | M | 31 | 615 | 6 | 17 | 612 cyls? |
| SQ 340AF | M | 38 | 640 | 6 | 17 | |
| EZ 135 | S-2 | 135 | | | | Removeable |
| SQ 01 | S | | | | | ISA 8-Bit Interface |
| SQ 2543A | S | 42 | | | | Cartridge |
| SQ 3105 | S | 105 | | | | Cartridge |
| SQ 555 | S | 44 | 1275 | 2 | 34 | Cartridge |
| SQ 5110 | S | 88 | 1774 | 2 | 48ish | Cartridge |
| SQ 5200C | S-2 | 200 | | | | |
| SQ 400 | S | 44 | | | | Cartridge |
| SQ 800 | S | 88 | | | | Cartridge |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|-----|------|-----|-----|-------|
| SQ 88 | S | 80 | | | | |

Sysgen Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-----------|------|-----|------|-----|-----|-----------|
| Maxi RD45 | C | 45 | | 2 | | Cartridge |
| HD 40e | S | 40 | | | | |
| HD 80e | S | 80 | | | | |

System Industries Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|------|-----|------|-----|-----|-------|
| S 1350 | S | 320 | | | | Sun |
| S 1350 Model 1 | S | 320 | | | | Sun |
| S 1350 Model 2 | S | 640 | | | | Sun |
| S 156QR | S | 319 | | | | Sun |
| S 156QR | S | 319 | | | | Sun |
| S 157QR | S | 639 | | | | Sun |
| S 157QR | S | 639 | | | | Sun |

Systems Peripheral Consultants

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------|------|-----|------|-----|-----|-------|
| LHD 80H | M | 119 | | | | |
| LHD 20H | M | 22 | | | | |
| LHD 30H | M | 33 | | | | |
| LHD 40H | M | 44 | | | | |

Talon

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|-----|------|-----|-----|-------|
| TA 3020A | A | 121 | 739 | 8 | 40 | |
| TA 3101A | A | 105 | 641 | 8 | 40 | |

Tandon

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|-------|------|-----|-------|----------|
| TV 2009 | A | 110 | 1001 | 15 | 17 | ST 1144A |
| MK 134F | M | | 733 | 7 | 17 | |
| MKM 3114 | M | 40 | 733 | 7 | 17 | |
| TM 251 | M | 5 | 306 | 2 | 17 | |
| TM 252 | M/R | 11/16 | 306 | 4 | 17/26 | |
| TM 253 | M | 30 | 695 | 5 | 17 | |
| TM 261 | M | 10 | 615 | 2 | 17 | |
| TM 262 | M/R | 21/32 | 615 | 4 | 17/26 | |
| TM 270 | M | 71 | 1024 | 8 | 17 | |
| TM 3085 | M | 71 | 1024 | 8 | 17 | |
| TM 344 | M | 27 | 780 | 4 | 17 | |
| TM 346 | M | 41 | 780 | 6 | 17 | |
| TM 352 | M | 20 | 612 | 4 | 17 | |
| TM 353 | M | 10 | 306 | 4 | 17 | |
| TM 361 | M | 10 | 615 | 2 | 17 | |
| TM 362 | M/R | 21/32 | 615 | 4 | 17/26 | |
| TM 364 | M | 27 | 780 | 4 | 17 | |
| TM 383 | M | 38 | | | 17 | |
| TM 501 | M/R | 5/8 | 306 | 2 | 17/26 | |
| TM 502 | M/R | 11/16 | 306 | 4 | 17/26 | |
| TM 503 | M/R | 11/16 | 306 | 6 | 17/26 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------|------|-------|------|-----|-------|-----------|
| TM 6015 | M | 6 | 153 | 2 | 17 | |
| TM 6025 | M/R | 5/8 | 153 | 4 | 17/26 | |
| TM 6025E | M | 7 | 230 | 4 | 17 | |
| TM 6035 | M/R | 8/12 | 153 | 6 | 17/26 | |
| TM 6035E | M/R | 12/18 | 230 | 6 | 17/26 | |
| TM 702(AT) | M/R | 21/32 | 615 | 4 | 17/26 | |
| TM 703(AT) | M/R | 32/48 | 733 | 5 | 17/26 | |
| TM 705 | M | 41 | 962 | 5 | 17 | 981 cyls? |
| TM 755 | M/R | 43/62 | 981 | 5 | 17/26 | |
| TM 775 | M | 40 | | | | |
| TM 244 | R | 41 | 782 | 4 | 26 | |
| TM 246 | R | 62 | 782 | 6 | 26 | |
| TM 262R | R | 20 | 782 | 2 | 26 | WD 382R |
| TM 264 | R | 41 | 782 | 4 | 26 | |
| TM 3085R | R | 104 | 1024 | 8 | 26 | |
| TM 344 | R | 41 | 782 | 4 | 26 | |
| TM 346 | R | 62 | 782 | 6 | 26 | |
| TM 362R | R | 20 | 782 | 2 | 26 | |
| TM 364 | R | 41 | 782 | 4 | 26 | WD 384R |
| TM 3641 | R | 41 | 782 | 4 | 26 | |
| TM 702 | R | 32 | 615 | 4 | 26 | |
| TM 755R | R | 65 | 981 | 5 | 26 | |
| TM 2085 | S | 74 | 1004 | 9 | 26 | |
| TM 2128 | S | 115 | 1004 | 9 | 26 | |
| TM 2170 | S | 154 | 1344 | 9 | 36 | |
| TM 270 | S | 161 | 1024 | 8 | 39 | |
| TM 3085 | S | 10 | 1024 | 8 | 26 | |

Tandy

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------|------|-----|------|-----|-----|----------------|
| 25-1045 | A | 28 | | | | |
| 25-1046 | A | 43 | 782 | 4 | 27 | WD 93044-X 3:1 |
| 25-1048 | A | 40 | | 2 | | |
| 25-4124 | A | 52 | | 2 | | |
| 25-4130 | A | 105 | 780 | 8 | 32 | |
| ? | S | 80 | 823 | 6 | | |

Tatung

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|-----|------|-----|-----|-------|
| 4000 | | 10 | | | | |

TCP

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------|------|-----|------|-----|-----|----------|
| 105 AT | A | 105 | | | | Quantum? |
| 210AT | A | 210 | | | | |
| 52AT | A | 52 | | | | |
| 105S | S | 105 | | | | |
| 210S | S | 210 | | | | |
| 52S | S | 52 | | | | |

Teac

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------|------|-----|------|-----|-----|-------|
| SD 240 | A | 43 | 1000 | 2 | 42 | |
| SD 260 | A | 63 | 1226 | 2 | 50 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------------|------|-------|------|-----|-------|---------------------------------|
| SD 3040EA | A | | | | | |
| SD 3105(A)(H) | A | 105 | 641 | 8 | 40 | Also 1024 x 5 x 40 |
| SD 3210A | A | 215 | 847 | 8 | 62 | 1024 x 10 x 40 |
| SD 3240 | A | 245 | 965 | 8 | 62 | |
| SD 3250N-30 | A | 251 | 961 | 16 | 32 | |
| SD 3360N-30 | A | 362 | 791 | 16 | 56 | |
| SD 340A-27 | A | 43 | 525 | 4 | 40 | Also 1024 x 2 x 40/977 x 5 x 17 |
| SD 3540N | A | 540 | 1059 | 16 | 63 | |
| SD 380H(A) | A | 86 | 525 | 8 | 40 | Also 1024 x 4 x 40 |
| SD 3240-30 | A | 240 | 1930 | 4 | 62 | |
| SD 150 | M | 10 | 306 | 4 | 17 | |
| SD 510-01 | M/R | 10/16 | 306 | 4 | 17/26 | |
| SD 520(-U) | M/R | 21/32 | 615 | 4 | 17/26 | |
| SD 521 | M | 20 | 615 | 4 | 17 | |
| SD 540 | M | 40 | 615 | 8 | 17 | |
| OD 3000 | O | 27 | | | | S-2 |
| SD 3105S | S | 105 | 1282 | 4 | 40 | |
| SD 3210S | S | 215 | 1695 | 4 | 62 | |
| SD 3240-00 | S | 240 | | | | |
| SD 340S | S | 43 | 1050 | 2 | 40 | |
| SD 380(S)(H) | S | 41 | 1050 | 4 | 40 | |

SD 3105/340H/380

| | |
|---------|-------------------|
| Single: | S0, S2, S3 On |
| Master: | S0, S1, S2, S3 On |
| Slave: | S0, S1, S3 On |

SD 340A-27/3210

| | |
|---------|------------|
| Single: | S1, S2, S3 |
| Master: | S1, S2, S3 |
| Slave: | S1, S3 |

Tecmar

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|-----|------|-----|-----|-------|
| ATHD | M | 21 | 612 | 4 | 17 | |
| XTHD | M | 10 | 306 | 4 | 17 | |
| 60W20 | M | 21 | 612 | 4 | 17 | |

Texas Instruments

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------|------|-----|------|-----|-----|-------|
| TI-5 | M | 5 | 153 | 4 | 17 | |
| 525-122 | M | 10 | 306 | 4 | 17 | |

Texas ISA

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|------|------|-----|-----|-------|
| ISA 9101 | S-2 | 1300 | | | | |
| ISA 9102 | S-2 | 2100 | | | | |

Third Wave Computing

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|------|------|-----|-----|----------------------|
| 1.2GB | S-2 | 1079 | 1658 | 15 | 85 | Fujitsu MK 2266S-512 |
| 2.0GB | S | 1662 | | | | Fujitsu MK 2265S-512 |

Time

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|------|-----|------|-----|-----|-------|
| Smartcrd 100XL | S | 100 | | | | |
| Smartcrd 200XL | S | 200 | | | | |
| Smartcrd 340XL | S | 340 | | | | |
| Smartcard 40XL | S | 40 | | | | |

Tokico

Possible Hitachi connection? Out of business?

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|-----|------|-----|-----|-------|
| DK 503-1 | M | 5 | 306 | 2 | 17 | |
| DK 503-2 | M | 10 | 306 | 4 | 17 | |

Toshiba

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-----------------|------|------|------|-----|-----|---------------------------|
| DNB 540 | A | 540 | | | | 2.5" EIDE |
| DNB 810 | A | 814 | | | | 2.5" EIDE |
| DNB 135 | A | 1350 | | | | 2.5" EIDE |
| MK 0200MAT | A | 270 | | | | 2.5" EIDE Libretto 20 |
| MK 0803MAT | A | 815 | 1580 | 16 | 63 | 2.5" EIDE Libretto 50/60 |
| MK 1002MAV | A | 1060 | 2100 | 16 | 63 | 12.7mm |
| MK 1003MAV | A | | | | | |
| MK 1022FC | A | 22 | | | | Laptops |
| MK 1034FC | A | 107 | 664 | 8 | 39 | 1339 x 4 x 39 (Unix) 25mm |
| MK 1122FC | A | 43 | 988 | 5 | 17 | 977 x 2 x 43 17mm |
| MK 11422 FCV | A | 86 | 988 | 10 | 17 | |
| MK 1301MAV | A | 1300 | 2633 | 16 | 63 | 12.7mm |
| MK 1302MAN | A | 1300 | 2633 | 16 | 63 | 19mm |
| MK 1401MAN | A | 1400 | 3720 | 16 | 63 | |
| MK 1422FCV | A | 86 | 988 | 10 | 43 | |
| MK 1522FCV | A | 126 | 812 | 8 | 38 | 12.7mm |
| MK 1624FCV | A | 213 | 684 | 16 | 38 | |
| MK 1701MAN | A | 1700 | 3294 | 16 | 63 | |
| MK 1702MAV | A | 1700 | | | | |
| MK 1722FCV | A | 131 | 842 | 8 | 38 | |
| MK 1724FCV | A | 249 | 842 | 16 | 38 | 63 Sectors? |
| MK 1824FCV | A2 | 352 | 682 | 16 | 63 | 12.7mm |
| MK 1924FCV | A2 | 540 | 1053 | 16 | 63 | 12.7mm |
| MK 1926FCV | A2 | 815 | 1579 | 16 | 63 | 12.7mm |
| MK 2024FC | A | 86 | 988 | 10 | 17 | 977 x 4 x 43 19mm |
| MK 2101MAN | A | 2100 | 4200 | 16 | 63 | 19mm |
| MK 2103MAV | A | 2100 | 4200 | 16 | 63 | 2.5" 12.7mm |
| MK 2104 MAV | A | 2167 | 4200 | 16 | 63 | 2.5" |
| MK 2124FC | A | 130 | 934 | 16 | 17 | 1155 x 4 x 55 19mm |
| MK 2224FC | A | 213 | 684 | 16 | 38 | Try 995 x 8 x 52 19mm |
| MK 2326FC(V)(H) | A | 340 | 969 | 14 | 49 | 19mm |
| MK 234FC(H) | A | 101 | 845 | 7 | 35 | |
| MK 2428FC | A | 520 | 1016 | 16 | 63 | 19mm |
| MK 2526FC | A | 528 | 1023 | 16 | 63 | |
| MK 2528FC | A | 704 | 1365 | 16 | 63 | |
| MK 2628FC | A | 810 | 1571 | 16 | 63 | 19mm |
| MK 2720FC | A | 1250 | 2358 | 16 | 63 | 19mm |
| MK 2728FC | A | 1080 | 1579 | 8 | 63 | 19mm |
| MK 3003MAN | A | 3080 | 5968 | 16 | 63 | 19mm |
| MK 3303MAN | A | 3300 | | | | 19mm |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------------|--------|--------|------|-----|-------|------------------|
| MK 4310 | A | 4300 | | | | UDMA 66 |
| MK 6409 | A | 6400 | | | | UDMA 66 |
| MK 153FA | E | 74 | 830 | 5 | 35 | |
| MK 154FA | E | 104 | 830 | 7 | 35 | |
| MK 156FA | E | 145 | 830 | 10 | 35 | |
| MK 250F | E | 382 | 1224 | 10 | 35 | |
| MK 350FA | E | 765 | | | | |
| MK 353A | E | 72 | | | | |
| MK 355FA | E | 398 | 1661 | 9 | 53 | |
| MK 358FA | E | 676 | 1661 | 15 | 53 | 15 Mhz |
| MK 535FA | E | 251 | 1632 | 9 | 35 | |
| MKM 0363A/J | E | 74 | 830 | 5 | 35 | |
| MKM 0364A/J | E | 104 | 830 | 7 | 35 | |
| MK 130 | M | 50 | 733 | 7 | 17 | |
| MK 132FA | M | 18 | | | | |
| MK 133FA | M | 30 | | | | |
| MK 134FA(M,R) | M/R | 44/65 | 733 | 7 | 17/26 | |
| MK 53F(ABMR) | M/R | 36/55 | 830 | 5 | 17/26 | ATs—disable J1/2 |
| MK 54F(ABMR) | M/R | 50/77 | 830 | 7 | 17/26 | ATs—disable J1/2 |
| MK 56F(ABMR) | M/R | 72/105 | 830 | 10 | 17/26 | |
| MK 72PC(R) | M/R | 72/105 | 830 | 10 | 17/26 | |
| MKM 0351E/J | M | 36 | 830 | 5 | 17 | |
| MKM 0352E/J | M | 50 | 830 | 7 | 17 | |
| MKM 0353E/J | M | 72 | 830 | 10 | 17 | |
| MKM 0381E/J | M | 36 | 830 | 5 | 17 | |
| MKM 0382E/J | M | 50 | 830 | 7 | 17 | |
| MKM 0383E/J | M | 72 | 830 | 10 | 17 | |
| MK 1301MAV | S2FW | 1350 | 2633 | 16 | 63 | Notebooks |
| MK 153FB | S | 74 | 830 | 5 | 35 | |
| MK 154FB | S | 104 | 830 | 7 | 35 | |
| MK 156FB | S | 148 | 830 | 10 | 35 | |
| MK 1824FBV | S-2 | 335 | 2050 | 4 | | 12.7mm 4200 RPM |
| MK 1924FBV | S-2 | 540 | 2920 | 4 | | 12.7mm |
| MK 1926FBV | S2FW | 815 | 2920 | 6 | | 12.7mm |
| MK 2101 | S2FW | 2160 | | | | |
| MK 2224FB | S | 213 | 1560 | 4 | 66 | 19mm |
| MK 232FB | S | 46 | 845 | 3 | 36 | |
| MK 2326FB | S | 340 | 1830 | 14 | 49 | 19mm |
| MK 233FB | S | 75 | 845 | 5 | 36 | |
| MK 234FB | S | 106 | 845 | 7 | 36 | |
| MK 234FBS | SAsync | 106 | 845 | 7 | | |
| MK 2428FB | S-2 | 520 | 1920 | 8 | 49-83 | 19mm |
| MK 250FB | S | 215 | 1224 | 10 | 35 | |
| MK 2526FB | S-2F | 528 | 2050 | | | |
| MK 2528FB | S-2F | 704 | | | | |
| MK 2628FB | S-2F | 773 | 2360 | | | 19mm |
| MK 2720FB | S-2FW | 1350 | 2633 | 26 | | 19mm |
| MK 2728 | S-2F | 1080 | | | | |
| MK 350FB | S | 675 | | | | |
| MK 355FB | S | 398 | 1632 | 9 | 53 | |
| MK 358FB | S | 664 | 1661 | 15 | 53 | |
| MK 438FB | S-2 | 867 | 1655 | 15 | 68 | Discontinued |
| MK 535FB | S | 251 | 1632 | 9 | 35 | |
| MK 537FB | S | 1060 | 1979 | 13 | | |
| MK 538FB | S-2 | 1230 | 1979 | 15 | | |
| MK 182FB | SMD | 83 | 823 | 5 | | |
| MK 184FB | SMD | 116 | 823 | 7 | | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|-----|------|-----|-----|------------|
| MK 186FB | SMD | 166 | 823 | 10 | | |
| MK 286FC | HSMD | 374 | 823 | 11 | | 8" |
| MK 288FC | HSMD | 510 | 823 | 15 | | 8" 10 Hds? |
| MK 388FA | HSMD | 720 | 1162 | 15 | | 8" 10 Hds? |

MK 234FC

Single: 5-6
 Master: 5-6, 7-8
 Slave: 3-4

1-2 (=LED) are furthest from IDE connector.

MK1724FCV, 1824FCV, 1122FC, 2024FC, 2124FC, 2224FC, 2326FC, 2428FC, 2628FC, 1422FCV, 1522FCV, 1722FCV, 2526FC, 2528FC

Single: J2 open
 Master: J2 open
 Slave: J2 closed

T1200, 3100, 3200, 5100 Debug low level format

```

Debug
A
MOV AX,0703
MOV CX,0001
MOV DX,0080
INT 13
INT 3
<CR>
G=100
    
```

Tradewinds

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------|------|-----|------|-----|-----|------------|
| PD20-1 | | 20 | | | | Removeable |
| PDH20-1 | | 20 | | | | Removeable |

Tricord Systems Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------|------|------|------|-----|-----|-----------|
| SD 1200 | S-2 | 1035 | 1931 | 15 | 71 | ST 41200N |
| SD 385 | S | 330 | 791 | 15 | 55 | ST 4385N |
| SD 702 | S | 601 | 1546 | 15 | 50 | ST 4702 |

Trimarchi Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------|------|-----|------|-----|-----|--------------|
| Twin Sixes | S | 600 | | | | Datakeg; Sun |

TTP Enterprises Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-------|------|-----|------|-----|-----|-------|
| MC 80 | M | 80 | | | | |

Tulin

No longer making hard drives. CMI connection? (640)

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-----------|------|-----|------|-----|-----|-------|
| HCPS 120B | A | 121 | 1522 | 4 | 39 | |
| HCPS 40B | A | 40 | 1024 | 2 | 40 | |
| HJ 510CB | A | 509 | 987 | 16 | 63 | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|------|-------|------|-----|-------|---------------|
| HJ 85B | A | 85 | 526 | 8 | 39 | |
| HJPS 1000MBH | A | 975 | 1891 | 16 | 63 | |
| HJPS 120CB | A | 120 | 1522 | 4 | 39 | |
| HJPS 40B | A | 40 | 1024 | 2 | 30 | |
| HJPS 85CB | A | 85 | 526 | 8 | 39 | |
| HS 85B/M | A | 85 | 526 | 8 | 39 | |
| HSPS 85CB | A | 85 | 526 | 8 | 39 | |
| TL 213 | M | 10 | 640 | 2 | 17 | |
| TL 226 | M/R | 22/34 | 640 | 4 | 17/26 | Not on XTs |
| TL 238 | M/R | 32/48 | 640 | 4 | 17/26 | |
| TL 240 | M/R | 33/51 | 640 | 6 | 17/26 | |
| TL 258 | M/R | 48/72 | 640 | 6 | 17/26 | |
| TL 326 | M/R | 22/34 | 640 | 4 | 17/26 | |
| TL 338 | M/R | 32/48 | 640 | 4 | 17/26 | |
| TL 340 | M/R | 33/51 | 640 | 6 | 17/26 | |
| TL 358 | M/R | 48/72 | 640 | 6 | 17/26 | |
| TL 640 | M | 48 | 640 | 6 | 17 | |
| Hermit Crab | S | | | | | Mac, External |
| HJ 1000H | S-2F | 1000 | | | | |
| HJ 2000 | S | 2000 | | | | |
| HJ 2100Q | S-2F | 2100 | | | | |
| HJ 520 | S | 520 | | | | |
| HJ 540Q | S-3F | 540 | | | | |
| HJ 730Q | S-3F | 730 | | | | |
| HS 240 | S | 240 | | | | |
| TL 32 | S | 32 | | | | XT, Mac |
| TL 40 | S | 40 | | | | XT, Mac |
| TL 48 | S | 48 | | | | XT, Mac |
| TL 60 | S | 60 | | | | XT, Mac |
| TL 65 | S | 65 | | | | XT, Mac |
| TL 105 | S | 105 | | | | |
| TL 1050 | S | 1050 | | | | |
| TL 105NQ | S | 105 | | | | |
| TL 154 | S | 154 | | | | |
| TL 200 | S | 200 | | | | |
| TL 2100 | S | 2100 | | | | |
| TL 3100 | S | 3100 | | | | |
| TL 320 | S | 330 | | | | |
| TL 330 | S | 330 | | | | |
| TL 340 | S | 340 | | | | |
| TL 612 | S | 612 | | | | |
| TL 675 | S | 675 | | | | |
| TL 84NQ | S | 84 | | | | XT, Mac |
| TL 85 | S | 85 | | | | |

Unbound Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|------|------|------|-----|-----|-------|
| SunStor 1.2G | S | 1200 | | | | Sun |
| SunStor 100 | S | 100 | | | | Sun |
| SunStor 200 | S | 200 | | | | Sun |
| SunStor 250 | S | 250 | | | | Sun |
| SunStor 380 | S | 380 | | | | Sun |
| SunStor 500 | S | 500 | | | | Sun |
| SunStor 760 | S | 760 | | | | Sun |

United Peripherals

Rebadged Newbury Data drives, which came from Maxtor.

Unitek Systems Corp

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------|------|-----|------|-----|-----|-------|
| Unicard 20 | H | 21 | | | | MFM |

US Design Corporation Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------------|------|------|------|-----|-----|-------|
| VIP/F EM1200 | E | 1200 | | | | Sun |
| VIP/F EM8760 | E | 760 | | | | Sun |
| VIP/F EMA4380 | E | 380 | | | | Sun |
| Q STOR 1200X | S | 1000 | | | | Sun |
| Q STOR 2000X | S | 2000 | | | | Sun |
| Q STOR 380X | S | 380 | | | | Sun |
| Q STOR 760X | S | 650 | | | | Sun |
| Q K380R | S | 380 | | | | Sun |
| Q K760R | S | 760 | | | | Sun |

ValueStor

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------------|------|------|------|-----|-----|-------|
| Mobile SX 1000 | S-2 | 1020 | | | | |
| Mobile SX 540 | S-2 | 540 | | | | |
| Mobile SX 700 | S-2 | 730 | | | | |
| 10363-01 | Par | 1000 | | | | |
| 10369-01 | Par | 850 | | | | |
| 10409-01 | Par | 1600 | | | | |
| Mobile EP 1000 | Par | 1020 | | | | |
| Mobile EP 540 | Par | 540 | | | | |
| Mobile EP 700 | Par | 730 | | | | |

Vertex

See *Priam/Vertex*

Wang Laboratories Inc

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------------|------|-----|------|-----|-----|-------|
| HDD 1001-AT | A | 100 | | | | |
| HDD 2001-AT | A | 20 | | | | |
| HDD 2002-AT | A | 200 | | | | |
| HDD 4001-AT | A | 40 | | | | |
| HDD 3211-PC2 | E | 321 | | | | |
| HDD 4001MC | PS/2 | 40 | | | | |
| HDD 7601MC | PS/2 | 70 | | | | |

Western Digital

1st numeral in model numbers indicates number of platters.

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------|------|------|------|-----|-----|---------|
| SP 105A | A | | | 14 | | Piranha |
| SP 210A | A | 210 | | 8 | | Piranha |
| SP 2100 | A | | | | | Piranha |
| SP 4200 | A | | | | | Piranha |
| WD 1410354 | A | 8400 | | | | |
| WD 1410355 | A | 6400 | | | | |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|-----------------|------|-------|------|-----|-----|-----------------------|
| WD 141035B | A | 10100 | | | | |
| WD 280A | A | 85 | | | | |
| WD 2120A | A | 125 | | | | |
| WD 2170A | A | 170 | | | | |
| WD 2200A | A | 210 | | | | |
| WD 2250A | A | 250 | | | | |
| WD 2340A | A | 340 | | | | |
| WD 2540 | A | 540 | | | | |
| WD 273BA | A4 | 27300 | | | | UDMA 66 7200 RPM |
| WD 307AA-00ANA0 | A4 | 30700 | | | | UDMA 66 5400 RPM |
| WD 36400AB | A | 6449 | | | | |
| WD 380A | A | 78 | 1021 | 4 | 39 | |
| WD 4250A | A | 425 | | | | |
| WD 93020A | A | 10 | 615 | 2 | 17 | |
| WD 93024A | A | 21 | 615 | 4 | 17 | 782 x 2 x 27 |
| WD 93028A(D) | A | 21 | 615 | 4 | 17 | 782 x 2 x 27 |
| WD 93042A(D) | A | 21 | 615 | 4 | 17 | 782 x 2 x 27 Centaur |
| WD 93044A(D) | A | 43 | 977 | 5 | 17 | 782 x 4 x 27 |
| WD 93048A(D) | A | 40 | 977 | 5 | 17 | 782 x 4 x 27 |
| WD 95024A | A | 21 | 615 | 4 | 17 | 782 x 2 x 27 |
| WD 95028A | A | 21 | 782 | 4 | 27 | |
| WD 95042A | A | 21 | 615 | 4 | 17 | 782 x 2 x 27 Centaur |
| WD 95044A | A | 42 | 977 | 5 | 17 | 782 x 4 x 27 Centaur |
| WD 95048A(D) | A | 42 | 782 | 4 | 27 | |
| WD 95049A | A | 43 | 782 | 4 | 27 | |
| WD 95038X | A | 32 | 615 | 6 | 17 | XT In Amstrad 1640 |
| WD 93020X | A | 21 | 612 | 4 | 17 | |
| WD 93024X | A | 21 | 782 | 2 | 26 | XT -X range hardcards |
| WD 93028X | A | 21 | 782 | 2 | 27 | XT |
| WD 93034X | A | 32 | 782 | 3 | 27 | XT |
| WD 93038X | A | 32 | 782 | 3 | 27 | XT |
| WD 93042X | A | 21 | 615 | 4 | 17 | XT 782x2x27 Centaur |
| WD 93044X | A | 43 | 782 | 4 | 27 | XT Tandy 25-1046 |
| WD 93048X | A | 42 | 977 | 5 | 17 | XT 782 x 4 x 27 |
| WD 93084X | A | 43 | 782 | 4 | 27 | XT |
| WD 95024X | A | 21 | 615 | 4 | 17 | XT 3:1 |
| WD 95028X | A | 20 | 782 | 2 | 27 | XT |
| WD 95034X | A | 32 | 615 | 6 | 17 | XT |
| WD 95038X | A | 30 | 782 | 3 | 27 | XT |
| WD 95044X | A | 42 | 977 | 5 | 17 | XT |
| WD 95048X | A | 42 | 977 | 5 | 17 | XT |
| WDAB 130 | A | 32 | 512 | 7 | 17 | Tidbit XT/AT |
| WDAB 140 | A | 43 | 980 | 5 | 17 | |
| WDAB 260 | A | 63 | 1024 | 7 | 17 | Tidbit XT/AT |
| WDAC 11000 | A | 1056 | 2046 | 16 | 63 | |
| WDAC 11200 | A | 1281 | 2484 | 16 | 63 | |
| WDAC 11600 | A | 1624 | 3148 | 16 | 63 | |
| WDAC 1170 | A | 171 | 1010 | 6 | 55 | Caviar |
| WDAC 1200 | A | 212 | 989 | 12 | 35 | |
| WDAC 1210 | A | 212 | 989 | 12 | 35 | Caviar |
| WDAC 12100 | A | 2111 | 4092 | 16 | 63 | |
| WDAC 1270 | A | 270 | 917 | 12 | 48 | Caviar |
| WDAC 1365 | A | 365 | 708 | 16 | 63 | |
| WDAC 140 | A | 43 | 980 | 5 | 17 | Caviar |
| WDAC 1425 | A | 426 | 827 | 16 | 63 | |
| WDAC 160 | A | 62 | 1024 | 7 | 17 | Caviar |
| WDAC 18000D | A3 | 18000 | | | | Expert 7200 RPM |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|---------------|------|-------|-------|-----|-----|-----------------------|
| WDAC 21000 | A | 1033 | 2100 | 16 | 63 | |
| WDAC 2120 | A | 120 | 872 | 8 | 35 | Caviar |
| WDAC 21200A | A | 1282 | 2484 | 16 | 63 | CMOS Normal mode |
| | | | 1242 | 32 | 63 | CMOS Large mode |
| | | | 621 | 64 | 63 | CMOS LBA mode |
| WDAC 21600 | A | 1600 | 3148 | 16 | 63 | EIDE |
| WDAC 2170 | A | 170 | 1010 | 6 | 55 | Caviar |
| WDAC 21700 | A | 1707 | 3308 | 16 | 63 | |
| WDAC 2200 | A | 213 | 989 | 12 | 35 | Caviar |
| WDAC 22000 | A | 2000 | 3876 | 16 | 63 | |
| WDAC 22100 | A | 2112 | 4092 | 16 | 63 | |
| WDAC 2250 | A | 256 | 1010 | 9 | 55 | Caviar |
| WDAC 22500 | A | 2560 | 4960 | 16 | 63 | Caviar IBM 76H7236 |
| WDAC 23200 | A | 3249 | 6296 | 16 | 63 | |
| WDAC 2340 | A | 341 | 1010 | 12 | 55 | Caviar |
| WDAC 240 | A | 42 | 820 | 4 | 26 | Caviar |
| WDAC 2420 | A | 425 | 989 | 15 | 56 | Caviar |
| WDAC 24300 | A | 4311 | 8912 | 15 | 63 | |
| WDAC 2540 | A | 516 | 1048 | 16 | 63 | Caviar |
| WDAC 2635 | A | 610 | 1240 | 16 | 63 | Caviar |
| WDAC 2700 | A | 697 | 1416 | 16 | 63 | Caviar |
| WDAC 280 | A | 85 | 980 | 10 | 17 | Caviar |
| WDAC 2850 | A | 814 | 1654 | 16 | 63 | Caviar |
| WDAC 29100 | A4 | 9100 | | | | UDMA 66 |
| WDAC 31000 | A | 1033 | 2100 | 16 | 63 | Rebadged as IBM |
| WDAC 310100 | A | 10141 | 16383 | 16 | 63 | UDMA 66 |
| WDAC 31200 | A | 1223 | 2484 | 16 | 63 | For CMOS Normal mode |
| | | | 1242 | 32 | 63 | For CMOS Large mode |
| | | | 621 | 64 | 63 | For CMOS LBA mode |
| WDAC 313000 | A | 13000 | | | | UDMA 66 |
| WDAC 31600 | A | 1594 | 3148 | 16 | 63 | Normal Compaq type 65 |
| | | | 785 | 64 | 63 | LBA |
| WDAC 3210 | A | 1250 | | | | |
| WDAC 32100A | A | 2100 | 4092 | 16 | 63 | ATA 3 |
| WDAC 32500A | A | 2560 | 4960 | 16 | 63 | ATA 3 |
| WDAC 33100 | A | 3166 | 6136 | 16 | 63 | |
| WDAC 33200 | A | 3249 | 6296 | 16 | 63 | |
| WDAC 34000 | A | 4001 | 7752 | 16 | 63 | |
| WDAC 34200 | A | 4223 | 8184 | 16 | 63 | |
| WDAC 34300 | A | 4304 | 8896 | 15 | 63 | |
| WDAC 35100 | A | 5163 | 10672 | 15 | 63 | 5400 RPM UDMA |
| WDAC 36400-UD | A | 6138 | 13328 | 15 | 63 | 5400 RPM UDMA |
| WDAC 38400 | A | 8455 | 16383 | 16 | 63 | |
| WDAC 418000 | A4 | 17200 | | | | UDMA/66 |
| WDAC 420400 | A4 | 20400 | | | | UDMA/66 |
| WDAH 2160 | A | 159 | | | | |
| WDAH 240 | A | 42 | | 2 | | Tidbit 2 |
| WDAH 260 | A | 62 | 1024 | 14 | 17 | Tidbit |
| WDAH 280 | A | 85 | 980 | 10 | 17 | Tidbit 2 |
| WDAL 1100 | A | 100 | 958 | 6 | 34 | |
| WDAL 185 | A | 85 | 980 | 10 | 17 | |
| WDAL 2120 | A | 130 | 1001 | 15 | 17 | |
| WDAL 2170 | A | 170 | 980 | 10 | 34 | Caviar Lite (2.5") |
| WDAL 2200 | A | 200 | 989 | 12 | 35 | |
| WDAL 2540 | A | 540 | 1048 | 16 | 63 | |
| WDAP 2100 | A | 100 | 987 | 6 | 35 | Piranha |
| WDAP 2120 | A | 125 | 872 | 8 | 35 | Piranha |

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|------------------|------|-------|------|-----|---------|----------------------|
| WDAP 4105 | A | 105 | | 4 | | Piranha |
| WDAP 4200 | A | 212 | 987 | 12 | 35 | Piranha |
| WD CU 140 | A | 42 | 980 | 5 | 17 | |
| Filecard 20 | H | 20 | 612 | 4 | 17 | |
| Filecard 30 | H | 30 | 612 | 4 | 26 | |
| TM 262 | M | 20 | 615 | 4 | 17 | |
| TM 362 | M | 20 | 615 | 4 | 17 | |
| WD 10XSAS | M | 10 | 612 | 2 | 17 | |
| WD 20XSAS | M | 20 | 612 | 4 | 17 | |
| WD 505 | M | 10 | 310 | 2 | 17 | |
| WD 562-5 | M | 20 | 615 | 4 | 17 | |
| PhD 1000 | PIDE | 1083 | 2100 | 16 | 63 | |
| PhD 1400 | PIDE | 1440 | 2792 | 16 | 63 | |
| PhD 2100 | PIDE | 2167 | 4200 | 16 | 63 | |
| WD CU 140 | P | 42 | 980 | 5 | 17 | Caviar Ultralite |
| WD M1130-44 | PS/2 | 31 | 920 | 2 | 33 | 44 pin |
| WD M1130-72 | PS/2 | 30 | 928 | 2 | 32 | 72 pin |
| WD M14120-72 | PS/2 | 125 | 925 | 8 | 33 | 72 pin |
| TM 262R | R | 20 | 782 | 4 | 26 | |
| TM 362R | R | 20 | 782 | 4 | 26 | |
| TM 264R | R | 40 | 782 | 4 | 26 | |
| TM 364R | R | 40 | 782 | 4 | 26 | |
| WD 344R | R | 40 | 782 | 4 | 26 | |
| WD 382R | R | 20 | 782 | 2 | 26 | Tandon TM 262R |
| WD 383R | R | 30 | 615 | 4 | 26 | |
| WD 384R | R | 40 | 782 | 4 | 26 | Tandon TM 364 |
| WD 544R | R | 40 | 782 | 4 | 26 | |
| WD 582R | R | 20 | 782 | 2 | 26 | |
| WD 583R | R | 30 | 615 | 4 | 26 | |
| WD 584R | R | 40 | 782 | 4 | 26 | |
| 20 AP | S | 20 | | | | Mac, Preference |
| 40 AP | S | 40 | | | | Mac, Preference |
| Enterprise 2170 | S-3 | 2170 | 5956 | 4 | 133-225 | |
| Enterprise 4630 | S | 4300 | | | | |
| HD 910-WA | S | 9100 | | | | |
| Piranha 105S | S | 105 | | 14 | | |
| Piranha 210S | S | 210 | | 8 | | |
| WD 380SC | S | 320 | | | | Mac |
| WD SC8320 | S-2 | 320 | 949 | 14 | 48 | Condor; IBM 0661-371 |
| WD SC8400 | S-2 | 400 | 1199 | 14 | 48 | Condor; IBM 0661 467 |
| WD SP2100 | S-2 | 106 | 1265 | 4 | 41 | |
| WD SP2400 | S | 209 | | | | |
| WD SP4105 | S | 105 | | | 4 | Piranha |
| WD SP4200 | S-2 | 209 | 1280 | 8 | 40 | |
| WDE 18300 | S-U2 | 18300 | | | | |
| WDE 18310-005042 | U160 | 18300 | | | | Enterprise 10000 RPM |
| WDE 2170 | S-3 | 2170 | | | | 7200 RPM |
| WDE 4360 | S-3 | 4360 | | | | 7200 RPM |
| WDE 4550 | S-3 | 4550 | | 6 | | |
| WDE 9100 | S-3 | 9100 | | 12 | | |

WDAC 2200

| | |
|---------|----|
| Single: | CP |
| Master: | MA |
| Slave: | SL |

2540, 2700, 31000

| | |
|---------|------|
| Single: | None |
| Master: | 5-6 |
| Slave: | 3-4 |

Cable select is 1-2 Default is across 3-5 (neutral).

WDAL 2200

| | |
|---------|------------|
| Single: | None |
| Master: | Inside pr |
| Slave: | Outside pr |

| | |
|---------|---------|
| Single: | J8 3-5 |
| Master: | J8 5-6* |
| Slave: | J8 3-4 |
| CS | J8 1-2 |

22500-23LA (IBM) J8 3-5
 Slave to original Conner CP 342/3022: J8 1-2

Centaur/Caviar/Piranha

6-pin connector

| | |
|---------|-------------|
| Single: | J8 nil |
| Master: | J8 5-6 (MA) |
| Slave: | J8 3-4 (SL) |

10-pin connector:

WDAC 2120

| | |
|---------|-----|
| Single: | Nil |
| Master: | MA |
| Slave: | SL |

Western Dynex

Possible Western Digital connection?

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|--------|------|-----|------|-----|-------|-------|
| WD 505 | M/R | 5/8 | 310 | 2 | 17/26 | |

Workstation Technologies

See *Adcomp*

Xebec

Out of business

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|-----|------|-----|-----|-----------------|
| XE 3040 | A | 40 | 814 | 2 | 48 | |
| XE 3080 | A | 80 | 979 | 4 | 40 | |
| XE 3100 | A | 105 | 979 | 6 | 35 | |
| XE 3120 | A | 120 | 981 | 6 | 40 | |
| XE 4000 | M | 10 | 306 | 4 | 17 | In Amstrad 1512 |
| XE 4020 | M | 20 | 615 | 4 | 17 | |
| XE 4040X | M | 40 | | | 17 | In Amstrad 1512 |
| OWL I | S | 25 | 733 | 4 | 17 | MFM recording |
| OWL II | S | 39 | 1124 | 4 | 17 | MFM recording |
| OWL III | S | 52 | 1512 | 4 | 17 | MFM recording |

Y-E Data

Bought C Itoh hard drive division.

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|-----|------|-----|-----|-------|
| YD 3161B | A | 45 | 1057 | 2 | 42 | |
| YD 3162B | A | 90 | 1057 | 4 | 42 | |
| YD 3530 | M | 32 | 731 | 5 | 17 | |
| YD 3540 | R | 42 | 731 | 7 | 17 | |
| YD 3042 | R | 42 | 788 | 4 | 26 | |
| YD 3081B | S | 45 | 1057 | 2 | 42 | |
| YD 3082 | S | 87 | 788 | 8 | 26 | |
| YD 3082B | S | 90 | 1057 | 4 | 42 | |
| YD 3083B | S | 136 | 1057 | 6 | 42 | |
| YD 3084B | S | 182 | 1057 | 8 | 42 | |
| YD 308XB | S | 45 | 1057 | 2 | 42 | |
| YD 3181B | S | 45 | 1057 | 2 | 42 | |
| YD 3182B | S | 90 | 1057 | 4 | 42 | |
| YD 3541 | S | 45 | 731 | 8 | 15 | |

Zentec

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|-----|------|-----|-----|------------------|
| ZH 3100A | A | 86 | 924 | 6 | 31 | |
| ZH 3140A | A | 121 | 993 | 7 | 35 | Try 970 x 8 x 31 |
| ZH 3270A | A | 239 | 1124 | 10 | 41 | |
| ZH 3380A | A | 334 | 1020 | 16 | 40 | |
| ZH 3490A | A | 430 | 1115 | 16 | 47 | |
| ZM 3140A | A | 124 | 979 | 6 | 41 | |
| ZM 3180 | A | 170 | | | | |
| ZM 3272 | A | 252 | 1994 | 4 | | |
| ZM 3360 | A | 340 | | | | |
| ZM 3370 | A | 340 | 2149 | 4 | | |
| ZM 3480 | A | 440 | 2149 | 6 | | |
| ZM 3540 | A | 518 | | | | |
| ZM 3560 | A | 510 | 2149 | 6 | | |
| ZM 3880 | A | 810 | | | | |
| ZQ 2048 | A | 42 | 525 | 6 | 26 | |
| ZQ 2096 | A | 84 | 880 | 6 | 31 | |
| ZQ 2140 | A | 126 | 1410 | 4 | 52 | |
| ZR 2000A | A | 42 | 525 | 6 | 26 | |
| ZR 2040 | A | 42 | 976 | 2 | 42 | |
| DRACO | S-2F | 518 | 2142 | 6 | Var | |
| ZH 3100S | S | 86 | | | | |
| ZH 3140S | S | 121 | | | | |

ZSI

| Model | Type | Cap | Cyls | Hds | SpT | Notes |
|----------|------|-----|------|-----|-----|-------|
| ZM 3140A | A | 126 | 1540 | 4 | 40 | |
| ZQ 2090 | A | 80 | | | | |

Notes

Notes

Hard Disk Controllers

Standard Addresses

| | |
|---------------|-----|
| AHA 152x | 340 |
| AHA 154x | 330 |
| AHA 174x | CC0 |
| Buslogic | 330 |
| EATA/DPT | 1F0 |
| IN 2000 | 220 |
| PAS 16 | 388 |
| QLogic | 230 |
| Ultrastor | 330 |
| WD 7000 FASST | 350 |
| FD TMC 16x0 | 140 |
| FD TMC 8x0 | 1C0 |

Adaptec

ACB 1540B/42B

SCSI-2 Bus mastering. The 42 supports 2 floppies.

| | | | | | | | | | | |
|-------|-----------|--------|--------------------------------------|-----|-----|----|----|----|---|---|
| J 5 | 1 | Out | Synchronous Negotiation disabled* | | | | | | | |
| | 2 | Out | Diagnostics (factory only) disabled* | | | | | | | |
| | 3 | Out | Parity Bit enabled* | | | | | | | |
| | 4,5,6 | ID | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | | 4* | x | - | x | - | x | - | x | - |
| | | 5 | x | x | - | - | x | x | - | - |
| | | 6 | x | x | x | x | - | - | - | - |
| | 7,8 | DMA Ch | 0 | 5* | 6 | 7 | | | | |
| | | 7 | x | - | x | - | | | | |
| | | 8 | x | x | - | - | | | | |
| | 9,10,11 | IRQ | 9 | 10 | 11* | 12 | 14 | 15 | | |
| | | 9 | - | x | - | x | - | x | | |
| | | 10 | | | x | x | | | | |
| | 11 | | | | | x | x | | | |
| 12,13 | DMA Txfer | 5.0 | 5.7* | 6.7 | 8.0 | | | | | |
| | 12 | | x | | x | | | | | |
| | 13 | | | x | x | | | | | |

| | | | | | | | | |
|---------|-------|-----------------------------|--|------------------------|--------------|--------------|------------|---|
| J 6 | 1 | In | BIOS Enable | | | | | |
| | 2,3,4 | | Not used | | | | | |
| | 5 | | Auto Sense disable | | | | | |
| J 7 | 1 | Out* | Floppy Secondary Address | | | | | |
| | 2,3,4 | AT I/O Port Address | 334 | 330* | 230 | 134 | 130 | |
| | | | 2 | - | x | - | x | - |
| | | | 3 | - | - | x | x | - |
| | | | 4 | - | - | - | x | x |
| | 5,6 | BIOS Wait State (ns) | 0 | 100 | 200 | 300 | | |
| | | | 5 | - | x | - | x | |
| | | | 6 | - | - | x | x | |
| | 7,8 | BIOS Address | DC000* | CC000 | D8000 | C8000 | | |
| | | | 7 | - | x | - | x | |
| | | 8 | | | x | x | | |
| J 8 | 1 | In | Floppy Enable (1542B only). If removed, remove jumpers J8. | | | | | |
| | 2,3 | | DMA REQ (2/3)2=2 | | | | | |
| | 4,5 | | DMA ACK (2/3)4=2 | | | | | |
| | 6,7 | | IRQ (6/10)6=6 | | | | | |
| | 8 | In | Dual Speed Enable | | | | | |
| | J 9 | 1,2,3,4 | | DMA REQ. (0,5,6,7) 2=5 | | | | |
| 5,6,7,8 | | | DMA ACK (0,5,6,7)6=5 | | | | | |
| 9,10 | | | IRQ (9,10,11, 12,14,15) 11=11 | | | | | |
| 11,12 | | | | | | | | |
| 13,14 | | | | | | | | |

ACB 2070

RLL. 16-bit full size. Built around ST 238. M-N/O-P and Q-R/S-T (below) are ignored with your settings.

| | | |
|-----|-----|------------------------------------|
| A-B | All | Factory use only |
| C-D | All | Factory use only |
| E-F | In | Drive 0 is removable cartridge |
| | Out | Drive 0 is soft-sectored, ST 506 |
| G-H | In | Drive 1 is removable cartridge |
| | Out | Drive 1 is soft-sectored, ST 506 |
| I-J | In | Connections J0 and J1 are reserved |
| | Out | Connections J0 and J1 are normal |
| K-L | In | Self diagnostics on |

Parameter Tables and Jumper Selection

| Table | Cap | Step Rate | Hds | Cyls | Drive 0 In | Drive 1 In |
|-------|-----|-----------|-----|------|------------|------------|
| 0 | 30 | 3 | 4 | 612 | MN+OP | Q-R+S-T |
| 1 | 15 | 3 | 2 | 612 | M-N | Q-R |
| 2 | 60 | 3 | 5 | 981 | O-P | S-T |
| 3 | 30 | 3 | 4 | 615 | | |

ACB 2072

RLL. 8-bit half size; 2:1 interleave. See 2070A for Parameter Tables and Selection for Jumpers M-T.

| | | |
|-----|----|--------------------------|
| A-B | In | Drive 0 is a Syquest |
| C-D | In | Drive 1 is a Syquest |
| E-F | | Reserved |
| G-H | | Reserved |
| I-J | | Reserved |
| K-L | In | Self diagnostics enabled |
| BD | In | BIOS Disabled |
| 324 | In | Alternate I/O Address |

| | | |
|---------|-----|-------------------|
| U-V+W-X | Out | BIOS Address C800 |
| U-V | In | BIOS Address CA00 |
| W-X | In | BIOS Address F400 |
| U-V+W-X | In | BIOS Address CC00 |

ACB 2310/12

MFM. 16-bit Full Size; 1:1 interleave (with low level format). Default is no jumpers installed. No BIOS, so no DEBUG option. 2312 controls floppy.

| | | | |
|-----|-------|-----|--------------------------------------|
| J10 | E4-E5 | Out | Primary Hard disk address 1F0-1F7h |
| | E4-E5 | In | Secondary Hard Disk address 170-177h |
| | E1-E2 | Out | Primary Floppy Address 3F0-3F7h |
| | E1-E2 | In | Secondary Floppy Address 370-377h |
| J9 | 1 | In | Disable I/O Wait State |
| | 2 | In | TRK-1 Recal, Step=35uSec |
| | 3 | | Not used |
| | 4 | In | Serial Monitor Mode. |
| | 5 | In | Diagnostics Enable |
| | 6 | | Reserved |

ACB 2320

ESDI. 1:1 interleave. 10 MHz.

| | | | |
|-----|------|------------------------------------|--------------------------------------|
| J5 | 1 | Out | Primary Hard disk address 1F0-1F7h |
| | | In | Secondary Hard Disk address 170-177h |
| | 2 | | Not used |
| | | | |
| | 3 | Out | Bus wait state enabled |
| | | In | Bus wait state disabled |
| | 4 | | Not used |
| 5 | | Not used | |
| 6 | Out | Serial Monitor disabled | |
| | In | Serial Monitor enabled (2400 baud) | |
| 7 | | Test point | |
| J6 | | | Test point |
| J7 | | | Serial Monitor output |
| J8 | | | Test point |
| J10 | | | Not used |
| J11 | | | Not used |
| J12 | 1-2 | | IRQ 14 |
| | | | IRQ 15 |
| | 3-4 | | Do not use |
| J13 | 1-2 | | BIOS Address C8000-CBFFF |
| | 2-3 | | BIOS Address CC000-CFFFF |
| | None | | BIOS disabled |

ACB 2322

ESDI

| | | | |
|-----|-----|----------|--------------------------------------|
| J2 | 1 | Out | Primary Hard disk address 1F0-1F7h |
| | | In | Secondary Hard Disk address 170-177h |
| | 2 | Out | Primary Floppy Address 3F0-3F7h |
| | | In | Secondary Floppy Address 370-377h |
| | 3 | In | Bus Wait State disabled |
| | 4 | | Not used |
| | 5 | In | Read ahead cache disabled |
| 6 | | Not used | |
| 7 | | Not used | |
| J 7 | All | Out | BIOS Disabled |
| | 1-2 | In | C800-CBFF |

| | | | |
|------|-----|----|-------------------|
| | 2-3 | In | CC00-CFFF |
| J 13 | 1-2 | | IRQ 14 |
| | 2-3 | | IRQ 15 |
| J20 | 1-2 | In | Floppy DMA DREQ 3 |
| | 2-3 | In | Floppy DMA DREQ 2 |
| J21 | 1-2 | In | Floppy DACK 2 |
| | 2-3 | In | Floppy DACK 3 |
| J22 | 1-2 | In | Floppy IRQ 6 |
| | 2-3 | In | Floppy IRQ 10 |

ACB 2322A

ESDI. Supports 2 floppies. –8 is 15 MHz.

| | | | |
|---------|-----|------------------------------------|-----------------------------------|
| J 6 | | | Test Point |
| J 7 | | | Test Point |
| J 8 | | | Test Point |
| J 9 | | | Test Point |
| J 10 | | | Test Point |
| J 11 | All | Out | BIOS Disabled |
| | 1-2 | In | C800-CBFF |
| | 2-3 | In | CC00-CFFF |
| J 12 | 1 | Out | Primary HD Address 1F0-1F7h |
| | | In | Secondary HD Address 170-177h |
| | 2 | Out | Primary Floppy Address 3F0-3F7h |
| | | In | Secondary Floppy Address 370-377h |
| | 3 | In | Bus wait state disabled |
| | 4 | | Not used |
| | 5 | | Not used |
| 6 | In | Serial Monitor enabled (2400 baud) | |
| 7 | | Test Point | |
| J 13 | | | Serial Monitor output |
| J 14-15 | | | Test Point |
| J 16-17 | | | Not used |
| J 18 | 1-2 | In | IRQ 14 |
| | 2-3 | In | IRQ 15 |
| | 3-4 | | Reserved |
| J 19 | 1-2 | In | Floppy DACK 2 |
| | 2-3 | In | Floppy DACK 3 |
| J 20 | 1-2 | In | Floppy IRQ 6 |
| | 2-3 | In | Floppy IRQ 10 |
| J 21 | 1-2 | In | Floppy DMA DREQ 3 |
| | 2-3 | In | Floppy DMA DREQ 2 |

ACB 2322B

ESDI. 64K cache; 1:1 interleave.

| | | | |
|------|-----|----------|-----------------------------------|
| J 2 | 1 | Out | Primary HD Address 1F0-1F7h |
| | | In | Secondary HD Address 170-177h |
| | 2 | Out | Primary Floppy Address 3F0-3F7h |
| | | In | Secondary Floppy Address 370-377h |
| | 3 | In | Wait state enabled |
| | 4 | | Not used |
| | 5 | Out | Read ahead cache enabled |
| 6 | | Not used | |
| 7 | | Not used | |
| JP 7 | All | Out | BIOS Disabled |
| | 1-2 | In | C800-CBFF |
| | 2-3 | In | CC00-CFFF |

| | | | |
|--------|-----|----|-------------------|
| J P 13 | 1-2 | In | HD IRQ 14 |
| | 2-3 | In | HD IRQ 15 |
| JP 20 | 1-2 | In | Floppy DMA DREQ 2 |
| | 2-3 | In | Floppy DMA DREQ 3 |
| J P 21 | 1-2 | In | Floppy DMA DACK 2 |
| | 2-3 | In | Floppy DMA DACK 3 |
| J P 22 | 1-2 | In | Floppy IRQ 6 |
| | 2-3 | In | Floppy IRQ 10 |

ACB 2370

RLL

| | | | |
|------|-----------------------|---------------|---|
| J 6 | 1 | Out | Primary Hard disk address 1F0-1F7h |
| | | In | Secondary Hard Disk address 170-177h |
| | 2 | Not used | |
| | | 3 | |
| | 4 | Out | Drive recal to Trck 0 -1 enabled (ST 238) |
| | | In | Disabled (ST 4144R) |
| 5 | Not used | | |
| | 6 | In | Serial Monitor Mode enabled (2400 bd) |
| J 7 | Test Point | | |
| J 8 | Test Point | | |
| J 9 | Test Point | | |
| J 10 | Serial Monitor Output | | |
| J 13 | 1-2 | In | IRQ 14 |
| | 2-3 | In | IRQ 15 |
| | 3-4 | Not used | |
| J 14 | 1-2 | In | C8000-CBFFF |
| | 2-3 | In | CC000-CFFFF |
| | None | BIOS Disabled | |
| J 15 | 6 | Test Points | |

ACB 2372A

| | | | |
|------|-----------------------|---------------------------------------|---|
| J 6 | Test Point | | |
| J 7 | Test Point | | |
| J 8 | Test Point | | |
| J 9 | Test Point | | |
| J 10 | Test Point | | |
| J 11 | Test Points | | |
| J 12 | 1-2 | In | C8000-CBFFF |
| | 2-3 | In | CC000-CFFFF |
| | None | BIOS Disabled | |
| J 13 | Test Point | | |
| J 14 | 1 | Out | Primary Hard disk address 1F0-1F7h |
| | | In | Secondary Hard Disk address 170-177h |
| | 2 | Out | Primary Floppy address 3F0-3F7h |
| | | In | Secondary Floppy address 370-377h |
| | 3 | Out | Wait State enabled |
| | 4 | Out | Drive recal to Trck 0 -1 enabled (ST 238) |
| | | In | Disabled (ST 4144R) |
| 5 | Not used | | |
| 6 | In | Serial Monitor Mode enabled (2400 bd) | |
| 7 | Test Point | | |
| J 15 | Serial Monitor output | | |
| J 16 | Test Points | | |
| J 17 | Not used | | |
| J 18 | Not used | | |

| | | | |
|--------|-----|----|--------------------|
| J 19 | 1-2 | In | IRQ 14 |
| | 2-3 | In | IRQ 15 |
| | 3-4 | | Not used |
| J P 20 | 1-2 | In | FloppyDMA DACK 2* |
| | 2-3 | In | Floppy DMA DACK 3 |
| J P 21 | 1-2 | In | Floppy IRQ 10 |
| | 2-3 | In | Floppy IRQ 6* |
| JP 22 | 1-2 | In | Floppy DMA DREQ 3 |
| | 2-3 | In | Floppy DMA DREQ 3* |

ACB 2372D

RLL. 1:1 interleave

| | | | | | |
|------|----|-----------------------------------|--------------------------------------|----------|---------------------|
| J4 | | | Manufacturing test points | | |
| J 7 | 1 | | Not used | | |
| | 2 | Out | Drive uses physical parameters | | |
| | | In | Drive split if > 1024 cyls. | | |
| | 3 | | Reserved | | |
| | 4 | | Not used | | |
| | 5 | In | Read ahead cache disabled | | |
| | 6 | | Reserved | | |
| J 10 | 1 | Out | Primary Hard disk address 1F0-1F7h | | |
| | | In | Secondary Hard Disk address 170-177h | | |
| | 2 | Out | Primary Floppy Address 3F0-3F7h | | |
| | In | Secondary Floppy Address 370-377h | | | |
| | 3 | In | Floppy Disabled | | |
| J 11 | | Out | Single speed floppy | | |
| | | In | Dual speed floppy | | |
| J 12 | | 1 | 2 | 3 | BIOS Address |
| | | Out | Out | Out | C8000 |
| | | In | Out | Out | CC000 |
| | | Out | In | Out | D0000 |
| | | In | In | Out | D4000 |
| | | Out | Out | In | Disable |
| | | In | Out | In | D8000 |

ACB 4000(A)/4070

SCSI

| | |
|--------------|---------------|
| Controller 1 | None |
| Controller 2 | A-B |
| Controller 3 | C-D |
| Controller 4 | A-B, C-D |
| Controller 5 | E-F |
| Controller 6 | A-B, E-F |
| Controller 7 | A-B, C-D, E-F |

AHA 1510

| | | |
|----|----|---|
| J9 | 2 | IRQ 12 |
| | 11 | IRQ 11 (Default) |
| | 10 | IRQ 10 |
| | 19 | IRQ 9 |
| | AL | Primary/Secondary Address; def 340H (no jumper); otherwise it's 140H. |

AHA 1520/22

16-bit SCSI-2, 1522 supports 2 floppies.

| | | | | | | | |
|-----|------------|-------------------------------------|---|-------------------|------------------|----------|--|
| J 5 | 1 | Out | Enables data txfer on host bus with second party DMA. | | | | |
| | 2 | In | Boot enable (BIOS intercepts INT 19) | | | | |
| | 3, 4 | Out | Display Adaptec header and Error messages (default). | | | | |
| | | In | Display Error messages only | | | | |
| | | 4 In | Display Adaptec header, Boot progress report, Error msgs. | | | | |
| | | 3 In | Display above plus jumper and SCSI device info. | | | | |
| | 5 | In | Synchronous negotiation enable (initiated by board). | | | | |
| | 6 | In | Disconnect/Reconnect enable for target. | | | | |
| | 7,8 | Out | Reserved | | | | |
| J 6 | 1, 2, 3 | SCSI ID | | 1 | 2 | 3 | |
| | | | 0 | 00 | 00 | 00 | |
| | | | 1 | 11 | 00 | 00 | |
| | | | 2 | 00 | 11 | 00 | |
| | | | 3 | 11 | 11 | 00 | |
| | | | 4 | 00 | 00 | 11 | |
| | | | 5 | 11 | 00 | 11 | |
| | | | 6 | 00 | 11 | 11 | |
| | | 7* | 11 | 11 | 11 | | |
| | 4,5 | IRQ select | | 4 | 5 | | |
| | | | 9 | 00 | 00 | | |
| | | | 10 | 11 | 00 | | |
| | | | 11 | 00 | 11 | | |
| | | 12 | 11 | 11 | | | |
| | 6,7 | DMA Channel Select 0 (8-bit) | | 6 | 7 | | |
| | | | 0* | 00 | 00 | | |
| | | | 5 | 11 | 00 | | |
| | | | 6 | 00 | 11 | | |
| | | 7 | 11 | 11 | | | |
| | 8 | Out | SCSI Parity Disable | | | | |
| | J 7 (1522) | 1 | In | Floppy enable | | | |
| | | 2 | In | Floppy DMA DREQ 2 | | | |
| | | 3 | Out | Floppy DMA DREQ 3 | | | |
| | | 4 | In | Floppy DMA DACK 2 | | | |
| 5 | | Out | Floppy DMA DACK 3 | | | | |
| 6 | | In | Floppy IRQ 6 | | | | |
| 7 | | Out | Floppy IRQ 10 | | | | |
| 8 | | Out | Dual Speed Enable | | | | |
| J 8 | 1 | Out | DMA DREQ 7 | | | | |
| | 2 | Out | DMA DREQ 6 | | | | |
| | 3 | Out | DMA DREQ 5 | | | | |
| | 4 | In | DMA DREQ 4 (Default) | | | | |
| | 5 | Out | DMA DACK 7 | | | | |
| | 6 | Out | DMA DACK 6 | | | | |
| | 7 | Out | DMA DACK 5 | | | | |
| | 8 | In | DMA DACK 4 (Default) | | | | |
| J 9 | 1234 | Out | IRQ 12 | | | | |
| | | In | IRQ 11 | | | | |
| | | Out | IRQ 10 | | | | |
| | | Out | IRQ 9 | | | | |
| | 5 | In | Primary address (140h) | | | | |
| | | Out | Secondary Address (340h) | | | | |
| | 6, 7 | | 00 | 00 | C8000 BIOS Addr. | | |
| | | | 00 | 11 | CC000 | | |
| | | | 11 | 00 | D8000 | | |
| | | | 11 | 11 | DC000 | | |
| 8 | In | BIOS active | | | | | |

AHA 1540CF/42CF

SCSI-2 Bus mastering.

| | | | | |
|-------|------------|------------|------------|-------------------------------|
| SW1 | On | | | Enable Termination |
| | Off | | | Disable (software controlled) |
| SW2-4 | SW2 | SW3 | SW4 | I/O Port |
| | Off | Off | Off | 330-333h |
| | On | Off | Off | 334-337h |
| | Off | On | Off | 230-233h |
| | On | On | Off | 234-237h |
| | Of | Off | On | 130-133h |
| | On | Off | On | 134-137h |
| | Off | On | On | Reserved |
| | On | On | On | Reserved |
| SW5 | On | | | Disable Floppy |
| | Off | | | Enable |
| SW6-8 | SW2 | SW3 | SW4 | BIOS Address |
| | Off | Off | Off | DC000h |
| | On | Off | Off | D8000h |
| | Off | On | Off | D4000h |
| | On | On | Off | D0000h |
| | Of | Off | On | CC000h |
| | On | Off | On | C8000h |
| | Off | On | On | Reserved |
| | On | On | On | Disable |

ALR

Dart

RLL

| | | |
|------|-----|--------------------------------|
| W 1 | Out | Reserved |
| W 2 | Out | Pri Addresses 1F0-1F7, 3F2-3F7 |
| W 3 | Out | Sec Addresses 170-177, 372-377 |
| W 4 | Out | Init Data Rate Control 500-KHz |
| W 5 | In | Hardware Select Mode Installed |
| W 6 | In | 2-3 and 5-6 Installed |
| W 7 | Out | Floppy Precompensation Control |
| W 8 | In | 16K PROM Installed |
| W 9 | Out | PROM Address C800:0000 |
| W 10 | In | PROM Enabled |

CMS

F 150AT-WCA

MFM

| BIOS Address | W1 | W2 | W3 |
|--------------|-----|-----|--------------|
| C8000-C9FFF | 2-3 | 2-3 | Jumpered* |
| CA000-CBFFF | 2-3 | 1-2 | Jumpered |
| CC000-CDFFF | 1-2 | 2-3 | Jumpered |
| CE000-CFFFF | 1-2 | 1-2 | Jumpered |
| Disabled | | | Not Jumpered |

| | | |
|-----|-----|---------------------------|
| W 4 | Out | Floppy Controller Enabled |
| W 6 | 1-2 | Floppy Address 37x |
| | 2-3 | Floppy Address 3Fx* |
| W 7 | 1-2 | 5.25" 1.2 Mb* |

| | | |
|-----------|-----|-----------------------------|
| | 2-3 | 3.25" 1.44 Mb |
| W 8 | Out | WD 1007 Mode |
| | In | WD 1005 Mode |
| W 11 | Out | Without FDC Option |
| W 12 | In | HD Address 17x |
| | Out | HD Address 1Fx* |
| W 13 Etch | Cut | Floppy Disabled |
| W 14 | In* | Sector Translation Disabled |
| W 15 | Out | ECC Enabled |
| W 10 | In | PROM Enabled |

Compaq

957 IDE

| | | |
|------|-----|---|
| Sw 1 | Off | Primary Diskette Addresses |
| | On | Secondary Diskette Addresses |
| Sw 2 | Off | Disable high speed transfer rates from systems w/out 1.2 Mb drive/40 Mb tape. |
| | On | Enable high speed transfer rates for systems with 1.2 Mb drive or 40 Mb tape. |
| Sw 3 | Off | Enable HD |
| | On | Disable HD |
| Sw 4 | Off | Serial interface as Com1, IRQ4 |
| | On | Serial interface as Com2, IRQ3 |
| Sw 5 | Off | Enable Serial Interface |
| | On | Disable Serial Interface |
| Sw 6 | Off | Enable Parallel Interface |
| | On | Disable Parallel Interface |

996—ESDI

| | | |
|------|-----|------------------------------|
| Sw 1 | Off | Primary Diskette Addresses |
| | On | Secondary Diskette Addresses |
| Sw 2 | Off | ESDI enabled |

CSC (Corporate System Center)

AK-47 VESA SCSI-II

16-bit high speed SCSI-II. 7 devices and 4 floppies.

| SW7,8 | SW7 | SW8 | Memory Base Address |
|-------|-----|-----|---------------------|
| | Off | On | D000-D7FF |
| | On | Off | D800-DFFF |
| | On | On | C800-CFFF |
| | Off | Off | E000-E7FF |
| SW6 | On | | 180-19Fh (IRQ 14) |
| | Off | | 320-33Fh (IRQ 15) |
| SW1 | On | | Disable Floppy |
| | Off | | Enable |

Cacheing ESDI card

16-bit - 7 devices and 4 floppies. 32 Mb memory.

| | | |
|----|-----|--------------------------|
| W1 | On | BIOS Address |
| W2 | On | BIOS Address |
| W3 | On | Enable HD - SW 1 all off |
| W4 | Off | Fixed disk address |
| W5 | On | Enable Floppy - also W7 |
| W6 | On | Enable cache (algorithm) |

| | | |
|----|-----|--------------------|
| W7 | On | DACK2 Enable |
| W9 | 1/2 | Floppy address 3FX |

| SW1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | IRQ |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | On | On | Off | Off | Off | Off | Off | Off | 11 |
| | Off | Off | On | On | Off | Off | Off | Off | 12 |
| | Off | Off | Off | Off | On | On | Off | Off | 13 |
| | Off | Off | Off | Off | Off | Off | On | On | 14 |

Fastcache 32

7 SCSI devices and 4 floppies. 32 Mb memory.

| | | | |
|-------|------------|------------|-----------------------|
| SW0,1 | SW0 | SW1 | Base Address |
| | On | On | D000 |
| | On | Off | C800 |
| | Off | On | E000 |
| SW2,3 | SW2 | SW3 | Module type |
| | On | On | 256K |
| | On | Off | 1 Mb |
| | Off | On | 4 Mb |
| SW4 | On | | Fast bus speed |
| | Off | | Faster |
| SW5 | On | | Enable floppy |
| | Off | | Disable |
| SW6,7 | On | | Normal floppy density |
| SW8 | | | Not used |

Fastcache 64

7 SCSI devices and 4 floppies. 64 Mb memory.

| | | | |
|-------|------------|------------|---------------------|
| SW1,2 | SW1 | SW2 | IRQ |
| | Off | Off | None |
| | On | Off | 14 |
| SW3 | Off | On | 15 |
| | On | | Enable Floppy |
| SW4 | On | | Non std bus speed |
| | Off | | Standard |
| SW5,6 | SW5 | SW6 | Module Type |
| | On | On | 256K |
| | Off | On | 1 Mb |
| | On | Off | 4 Mb |
| SW7,8 | Off | Off | 16 Mb |
| | SW7 | SW8 | Base Address |
| | Off | On | C800 |
| | On | On | D000 |
| SW9 | Off | Off | D800 |
| | On | Off | E000 |

IDE Fastcache 64

2 devices and 4 floppies. 64 Mb memory.

| | | | |
|-------|------------|------------|---------------------|
| SW1,2 | SW1 | SW2 | Base Address |
| | Off | On | C800 |
| | On | On | D000 |
| | Off | Off | D800 |
| SW3 | On | Off | E000 |
| | SW3 | SW4 | Module Type |
| On | On | 256K | |

| | | | |
|-----|-----|-----|-------------------|
| | Off | On | 1 Mb |
| | On | Off | 4 Mb |
| | Off | Off | 16 Mb |
| SW5 | On | | Non std bus speed |
| | Off | | Standard |
| SW6 | On | | Enable floppy |
| SW7 | On | | Primary IDE |
| | Off | | Secondary |
| SW8 | On | | Buffered |
| | Off | | Unbuffered |

Datacare

DC-1234

SCSI

| | | |
|-----|-----|--|
| JP2 | Out | 2 drives connected |
| | In | 1 drive connected |
| JP3 | Out | Primary I/O address 3F0-3F7, 1F0-1F7 |
| | In | Secondary I/O address 370-377, 170-177 |

DPT

PM 2001/9x

SCSI

| Y8,Y9 | HD IRQ | Y8 | Y9 | Y10 | Y22 |
|----------|-------------|---------------------|----|-----|-----|
| Y10,Y22 | | 14* | 1 | 0 | 0 |
| | | 7 | 0 | 1 | 0 |
| | | 15 | 0 | 0 | 1 |
| | | 12 | 0 | 0 | 0 |
| Y1,Y2,Y4 | SCSI ID | Y1 | Y2 | Y4 | |
| | | 0 | 0 | 0 | 0 |
| | | 1 | 1 | 0 | 0 |
| | | 2 | 0 | 1 | 0 |
| | | 3 | 1 | 1 | 0 |
| | | 4 | 0 | 0 | 1 |
| | | 5 | 1 | 0 | 1 |
| | | 6 | 0 | 1 | 1 |
| | | 7* | 1 | 1 | 1 |
| Y5 | I/O Address | | | | |
| Y17 | In | 170-177h | | | |
| | Out | 1F0-1F7h | | | |
| Y7 | Out | ROM disabled | | | |
| Y18 | In | ROM Address D8000 | | | |
| | Out | ROM Address C8000* | | | |
| Y20 | Out | Floppy enabled | | | |
| Y21 | Out | Head load disabled* | | | |

PM 2012A/B

SCSI; EISA

| | | |
|-----|-----|--------------------|
| Y7 | Out | ROM disabled |
| Y19 | In | ROM Address D8000 |
| | Out | ROM Address C8000* |
| Y20 | Out | Floppy enabled |

PM 301A/60

SCSI

| | | | | | | |
|---------|-----------------|----------------------------|------------|------------|------------|------------|
| Y1-Y3 | | DPT use only | | | | |
| Y4 | Out | SCSI I/O address disabled | | | | |
| Y5,Y6 | 8K ROM | | Y5 | Y6 | | |
| | | Disabled | 0 | 0 | | |
| | | Enabled | | 1 | 1 | |
| Y7,8,16 | HD IRQ | | Y7 | Y8 | Y16 | |
| | | 14* | 1 | 0 | 0 | |
| | | 5 | 0 | 0 | 1 | |
| | | 7 | 0 | 1 | 0 | |
| Y9,10 | SCSI IRQ | | Y9 | Y10 | | |
| | | None* | 0 | 0 | | |
| | | 5 | 1 | 0 | | |
| | | 7 | 0 | 1 | | |
| Y11 | In | HD I/O Address 170-177 | | | | |
| | Out | HD I/O Address 1F0-1F7* | | | | |
| Y12,13 | DMA | | Y12 | Y13 | Y14 | Y15 |
| 14,15 | | None* | 0 | 0 | 0 | 0 |
| | | 1 | 1 | 0 | 1 | 0 |
| | | 3 | 0 | 1 | 0 | 1 |
| Y17 | In | Floppy I/O Address 370-377 | | | | |
| | Out | HD I/O Address 3F0-3F7* | | | | |

PM 3011A/50/60

SCSI

| | | | | | | |
|----------|-----------------|---------------------------|------------|------------|------------|------------|
| Y1-Y4 | | DPT use only | | | | |
| Y5 | In | Floppy address 370-377h | | | | |
| | Out | Floppy address 3F0-3F7h | | | | |
| Y6 | Out | SCSI I/O address disabled | | | | |
| Y7 | Out | 8K ROM disabled | | | | |
| Y8 | | DPT use only | | | | |
| Y9,10,11 | HD IRQ | | Y9 | Y10 | Y11 | |
| | | 14* | 1 | 0 | 0 | |
| | | 5 | 0 | 0 | 1 | |
| | | 7 | 0 | 1 | 0 | |
| Y12,13 | SCSI IRQ | | Y12 | Y13 | | |
| | | None* | 0 | 0 | | |
| | | 5 | 1 | 0 | | |
| | | 7 | 0 | 1 | | |
| Y14,15 | DMA | | Y14 | Y15 | Y16 | Y17 |
| 16,17 | | None* | 0 | 0 | 0 | 0 |
| | | 1 | 1 | 0 | 1 | 0 |
| | | 3 | 0 | 1 | 0 | 1 |
| Y18 | In | HD I/O Address 170-177 | | | | |
| | Out | HD I/O Address 1F0-1F7* | | | | |
| Y19,20 | SCSI I/O | | Y19 | Y20 | | |
| | | C8000* | 0 | 0 | | |
| | | D8000 | 1 | 0 | | |
| | | E8000 | 0 | 1 | | |
| | | F1000 | 1 | 1 | | |
| Y21 | Out | Floppy enabled | | | | |
| Y22 | Out | Head load disabled* | | | | |

PM 3011A/70

SCSI

| | | | | | | |
|-----------------|----------|---------------------------|------------|------------|------------|------------|
| Y1-Y4 | | DPT use only | | | | |
| Y5 | In | Floppy address 370-377h | | | | |
| | Out | Floppy address 3F0-3F7h | | | | |
| Y6 | Out | SCSI I/O address disabled | | | | |
| Y7 | Out | 8K ROM disabled | | | | |
| Y8,9,10 | HD IRQ | | Y8 | Y9 | Y10 | |
| | | 14* | 1 | 0 | 0 | |
| | | 5 | 0 | 0 | 1 | |
| | | 7 | 0 | 1 | 0 | |
| Y11,12 | SCSI IRQ | | Y11 | Y12 | | |
| | | None* | 0 | 0 | | |
| | | 5 | 1 | 0 | | |
| | | 7 | 0 | 1 | | |
| Y13,14 15,16 | DMA | | Y13 | Y14 | Y15 | Y16 |
| | | None* | 0 | 0 | 0 | 0 |
| | | 1 | 1 | 0 | 1 | 0 |
| | | 3 | 0 | 1 | 0 | 1 |
| Y17 | In | HD I/O Address 170-177 | | | | |
| | Out | HD I/O Address 1F0-1F7* | | | | |
| Y18,19 | SCSI I/O | | Y18 | Y19 | | |
| | | C8000* | 0 | 0 | | |
| | | D8000 | 1 | 0 | | |

PM3011E/55/65

SCSI

| | | | | | | |
|-----------------|----------|---------------------------|------------|------------|------------|------------|
| Y1-Y4 | | DPT use only | | | | |
| Y5 | In | Floppy address 370-377h | | | | |
| | Out | Floppy address 3F0-3F7h | | | | |
| Y6 | Out | SCSI I/O address disabled | | | | |
| Y7 | Out | 8K ROM disabled | | | | |
| Y8 | | DPT use only | | | | |
| Y9,10,11 | HD IRQ | | Y9 | Y10 | Y11 | |
| | | 14* | 1 | 0 | 0 | |
| | | 12 | 0 | 0 | 1 | |
| | | 7 | 0 | 1 | 0 | |
| Y12,13 | SCSI IRQ | | Y12 | Y13 | | |
| | | None* | 0 | 0 | | |
| | | 12 | 1 | 0 | | |
| | | 7 | 0 | 1 | | |
| Y14,15 16,17 | DMA | | Y14 | Y15 | Y16 | Y17 |
| | | None* | 0 | 0 | 0 | 0 |
| | | 1 | 1 | 0 | 1 | 0 |
| | | 3 | 0 | 1 | 0 | 1 |
| Y18 | In | HD I/O Address 170-177 | | | | |
| | Out | HD I/O Address 1F0-1F7* | | | | |
| Y19 | In | Boot PROM address D8000 | | | | |
| | Out | Boot PROM address C8000 | | | | |
| Y20 | In | SCSI I/O address D8000 | | | | |
| | Out | SCSI I/O address C8000 | | | | |
| Y21 | Out | Floppy enabled | | | | |
| Y22 | Out | Head load disabled* | | | | |

PM 3011E/75

SCSI

| | | | | | | |
|-----------------|----------|---------------------------|-----|-----|-----|-----|
| Y1-Y4 | | DPT use only | | | | |
| Y5 | In | Floppy address 370-377h | | | | |
| | Out | Floppy address 3F0-3F7h | | | | |
| Y6 | Out | SCSI I/O address disabled | | | | |
| Y7 | Out | 8K ROM disabled | | | | |
| Y8,9,10 | HD IRQ | | Y9 | Y10 | Y11 | |
| | | 14* | 1 | 0 | 0 | |
| | | 12 | 0 | 0 | 1 | |
| Y11,12 | SCSI IRQ | | Y12 | Y13 | | |
| | | 7 | 0 | 1 | | |
| | | None* | 0 | 0 | | |
| Y13,14 15,16 | DMA | | Y14 | Y15 | Y16 | Y17 |
| | | 1 | 1 | 0 | 1 | 0 |
| | | 3 | 0 | 1 | 0 | 1 |
| Y17 | In | HD I/O Address 170-177 | | | | |
| | Out | HD I/O Address 1F0-1F7* | | | | |
| Y18 | In | Boot PROM address D8000 | | | | |
| | Out | Boot PROM address C8000 | | | | |
| Y19 | In | SCSI I/O address D8000 | | | | |
| | Out | SCSI I/O address C8000 | | | | |
| Y20 | Out | Floppy enabled | | | | |
| Y21 | Out | Head load disabled* | | | | |

Data Technology (DTC)

31/3280A

SCSI

| | | | | | | | | | |
|---------|-----|-------------------------------------|--------|--------|---|---|---|---|---|
| W1 | 1-2 | 8K SRAM | | | | | | | |
| | 2-3 | 2K SRAM | | | | | | | |
| Sw 1 | 1-4 | B IRQ | 1 | 2 | 3 | 4 | | | |
| | | Disabled | 0 | 0 | 0 | 0 | | | |
| | | 15 | 1 | 0 | 0 | 0 | | | |
| | | 12 | 0 | 1 | 0 | 0 | | | |
| | | 11* | 0 | 0 | 1 | 0 | | | |
| Sw 1/7 | Out | Dual speed floppies not supported | | | | | | | |
| | In | Dual speed floppies supported | | | | | | | |
| Sw 1/8 | Out | PS/2 drive as #2 | | | | | | | |
| | In | AT drive as #2 | | | | | | | |
| Sw 1/9 | Out | Precomp depends on floppy data rate | | | | | | | |
| | | 500KHz | 125 ns | | | | | | |
| Sw 1/10 | Out | 300KHz 208 ns | | | | | | | |
| | | 250KHz | 250 ns | | | | | | |
| Sw 2 | 1-2 | A Interrupt | Sw 2/1 | Sw 2/2 | | | | | |
| | | 15 | 0 | 0 | | | | | |
| Sw 2/5 | Out | Disable floppy interface | | | | | | | |
| | | Enable floppy interface | | | | | | | |
| Sw 2 | 6-8 | ID0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | | Enable parity on SCSI bus | | | | | | | |

| | | | | | | | | | |
|----|-----|------------------------------------|---|---|---|---|---|---|---|
| | | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 |
| | | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| W2 | 1-2 | Primary Floppy Address (3F2-3F7) | | | | | | | |
| | 2-3 | Secondary Floppy Address (372-377) | | | | | | | |

5150 BX

MFM. With BXD-6 ROM, IBM 0,1,2 become:

| | |
|-------|-------------|
| IBM 0 | 35 Mb 512x8 |
| IBM 1 | 10Mb 612x2 |
| IBM 2 | 20Mb 612x4 |

| Drive | No | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|--------------------|----|---|---|---|---|---|---|---|---|
| IBM 05 Mb306 x 2 | 1 | | | 1 | 1 | | | 1 | 1 |
| | 2 | 1 | 1 | | | 1 | 1 | | |
| IBM 126 Mb 375x8 | 1 | | | 0 | 1 | | | 1 | 1 |
| | 2 | 0 | 1 | | | 1 | 1 | | |
| IBM 215 Mb306x6 | 1 | | | 1 | 0 | | | 1 | 1 |
| | 2 | 1 | 0 | | | 1 | 1 | | |
| IBM 310 Mb306x4 | 1 | | | 0 | 0 | | | 1 | 1 |
| | 2 | 0 | 0 | | | 1 | 1 | | |
| DTC 45 Mb306x2 | 1 | | | 1 | 1 | | | 0 | 1 |
| | 2 | 1 | 1 | | | 0 | 1 | | |
| DTC 528 Mb640x5 | 1 | | | 0 | 1 | | | 0 | 1 |
| | 2 | 0 | 1 | | | 0 | 1 | | |
| DTC 620 Mb306x8 | 1 | | | 1 | 0 | | | 0 | 1 |
| | 2 | 1 | 0 | | | 0 | 1 | | |
| DTC 7Non-StdDrives | 1 | | | 0 | 0 | | | 0 | 1 |
| | 2 | 0 | 0 | | | 0 | 1 | | |
| DTC 818 Mb512x4 | 1 | | | 1 | 1 | | | 1 | 0 |
| | 2 | 1 | 1 | | | 1 | 0 | | |
| DTC 927 Mb512x6 | 1 | | | 0 | 1 | | | 1 | 0 |
| | 2 | 0 | 1 | | | 1 | 0 | | |
| DTC A10 Mb612x2 | 1 | | | 1 | 0 | | | 1 | 0 |
| | 2 | 1 | 0 | | | 1 | 0 | | |
| DTC B22 Mb640x4 | 1 | | | 0 | 0 | | | 1 | 0 |
| | 2 | 0 | 0 | | | 1 | 0 | | |
| DTC C18 Mb697x3 | 1 | | | 1 | 1 | | | 0 | 0 |
| | 2 | 1 | 1 | | | 0 | 0 | | |
| DTC D30 Mb697x5 | 1 | | | 0 | 1 | | | 0 | 0 |
| | 2 | 0 | 1 | | | 0 | 0 | | |
| DTC E33 Mb640x6 | 1 | | | 1 | 0 | | | 0 | 0 |
| | 2 | 1 | 0 | | | 0 | 0 | | |
| DTC FSpecial | 1 | | | | | | | | |
| | 2 | 0 | 0 | | | 0 | 0 | | |

5150/60 CR(H)

RLL

| | | | | | |
|----|-------------|----------|------------|------------|------------|
| W1 | 1-2 | 8K ROM | | | |
| | 2-3 | 16K ROM | | | |
| W2 | PROM | | 3-4 | 2-5 | 1-6 |
| | | Disabled | 0 | | |
| | | C800 | 1 | 0 | 0 |
| | | CA00 | 1 | 0 | 1 |
| | | D800 | 1 | 1 | 0 |
| | | F400 | 1 | 1 | 1 |
| W3 | 1-2 | DACK 1 | | | |

| | | |
|----|--|------------------------------------|
| | 2-3 | DACK 3* |
| W4 | 1-2 | DREQ 3* |
| | 2-3 | DREQ 1 |
| W5 | 1-2 | IRQ 2 |
| | 2-3 | IRQ 5 |
| W6 | An 8-position jumper readable from hard disk port 2, used for drive type. Its meaning is defined by the BIOS in use (the standard one doesn't use this). | |
| W7 | In | Primary Floppy Address (320-323) |
| | Out | Secondary Floppy Address (324-327) |

5150 X

MFM

5160 X

RLL

| | | | | | |
|-----|------------------|----------------------------|------------|------------|------------|
| W2 | PROM | | 3-4 | 2-5 | 1-6 |
| | | Disabled | 0 | | |
| | | C800 | 1 | 0 | 0 |
| | | CA00 | 1 | 0 | 1 |
| | | D800 | 1 | 1 | 0 |
| | | F400 | 1 | 1 | 1 |
| 7-8 | Factory use only | | | | |
| W3 | In | ST 225 or equivalent | | | |
| | Out | Drive type defined by menu | | | |

5180I

MFM - See 5187I

5187I

RLL

| | | |
|--------|-----|--|
| W2, W3 | Out | Primary Addresses 1F0-1F7, 3F0-3F7* |
| | In | Secondary Addresses 170-177, 370-377 |
| W 4 | Out | Floppy Drive Transfer Rate 500 KHz* |
| | In | Floppy Drive Transfer Rate 250 KHz |
| W 5 | In | Hardware Select Mode* |
| | Out | Firmware Select Mode |
| W 6 | In | Auto-Deselect Mode Enabled* |
| W 7 | In | Floppy Precompensation at 125nSec |
| | Out | Prec Scaled/Freq (125nS@500KHz, 208nS@300KHz, 250nS@250KHz)* |

5187-1

RLL

| | | | | | | |
|---------|------------|--|------------|------------|------------|------------|
| W1 | In | Floppy disk changed signal low when accessed | | | | |
| | Out | Floppy disk changed signal not driven | | | | |
| W2 | In | BIOS enabled | | | | |
| W3 | In | BIOS address D800 Out = C800 | | | | |
| W4 | In | BIOS is 27128 Out = 2746 | | | | |
| W5 & W6 | In | Secondary port address (170-177, 376-377) | | | | |
| | Out | Primary port address (1F0-1F7, 3F6-3F7) | | | | |
| W7 | IRQ | | 1-2 | 3-4 | 5-6 | 7-8 |
| | | 14 | 0 | 0 | 0 | 1 |
| | | 13 | 0 | 0 | 1 | 0 |
| | | 12 | 0 | 1 | 0 | 0 |
| | | 11 | 1 | 0 | 0 | 0 |

5287CR

RLL

| | | |
|---------|-----|--|
| W1 | In | Floppy disk changed signal low when accessed |
| | Out | Floppy disk changed signal not driven |
| W2 & W3 | In | Secondary port address (170-177, 376-377) |
| | Out | Primary port address (1F0-1F7, 3F6-3F7) |
| W4 | 1-2 | Initial Interrupt disabled after reset |
| | 2-3 | Initial Interrupt enabled after reset |
| W5 | In | Drive select controlled by system reset |
| | Out | Drive select controlled by firmware |
| W6 & W7 | | Factory use only—must be installed |
| W8 | In | Enable PROM |
| | Out | Disable PROM |
| W9 | In | PROM address D800 |
| | Out | PROM address C800 |
| W11 | | Factory use only—must not be installed |

5280CZ

MFM

| | | |
|---------|-----|---|
| W2 & W3 | In | Secondary port address |
| | Out | Primary port address |
| W5 | | Factory use only; must be installed |
| W6 | | Factory use only; 2-3/5-6 must be installed—all others must be off. |

5280i

RLL; OS/2 compatible with 1:1 interleave at zero wait states up to 16MHz. No embedded Low Level Format routine, so third party software required.

| | | |
|-------|-----|---|
| W2 W3 | Out | Primary Addresses 1F0-1F7; 3F0-3F7* |
| | In | Secondary Addresses 170-177; 370-377 |
| W4 | Out | Floppy Drive Transfer Rate 500 KHz* |
| | In | Floppy Drive Transfer Rate 250 KHz |
| W5 | In | Hardware Select Mode* |
| | Out | Firmware Select Mode |
| W6 | In | Auto-Deselect Mode Enabled* |
| W7 | In | Floppy Precompensation at 125nSec |
| | Out | Prec Scaled by floppy data rate: 125nS@500KHz 208nS@300KHz 250nS@250KHz* |

5287

RLL; OS/2 compatible with 1:1 interleave, at zero wait states up to 16MHz. No embedded Low Level Format routine, so third party software required.

| | | |
|--------|-----|--|
| W2, W3 | Out | Primary Addresses 1F0-1F7, 3F0-3F7* |
| | In | Secondary Addresses 170-177, 370-377 |
| W4 | Out | Floppy Drive Transfer Rate 500 KHz* |
| | In | Floppy Drive Transfer Rate 250 KHz |
| W5 | In | Hardware Select Mode* |
| | Out | Firmware Select Mode |
| W6 | In | Auto-Deselect Mode Enabled* |
| W7 | In | Floppy Precompensation at 125nSec |
| | Out | Precompensation Scaled by floppy data rate: 125nS@500KHz 208nS@300KHz 250nS@250KHz* |
| W8 | | Reserved - must be installed for correct operation |
| W9 | In | BIOS Address (16KB) D800-DC00 |
| | Out | BIOS Address C800-CC00* |
| W10 | In | BIOS enabled |

6280

| | | |
|---------|---------|--|
| W1 | In | Auto-Deselect Mode Enabled* |
| W2, W3 | In, Out | Floppy enabled |
| | Out, In | Floppy disabled |
| SW1,SW3 | Out | Primary I/O port Address 1F0-1F7, 3F0-3F7* |
| | In | Secondary Address |
| SW3 | In | BIOS Address D800-DC00 |
| | Out | BIOS Address C800-CC00* |
| SW4 | In | BIOS enabled |

7180

MFM

| | | |
|---------|-----|--|
| W1 | In | Floppy disk changed signal low when accessed |
| | Out | Floppy disk changed signal not driven |
| W2 & W3 | In | Secondary port address (170-177, 376-377) |
| | Out | Primary port address (1F0-1F7, 3F6-3F7) |
| W4 | 1-2 | Interrupt disabled after reset |
| | 2-3 | Interrupt enabled after reset |
| W6 | In | Auto-deselect enabled |
| | Out | Auto-deselect disabled |

7187

RLL

| | | |
|---------|-----|--|
| W1 | In | Floppy disk changed signal low when accessed |
| | Out | Floppy disk changed signal not driven |
| W2 & W3 | In | Secondary port address |
| | Out | Primary port address |
| W4 | 1-2 | Interrupt disabled after reset |
| | 2-3 | Interrupt enabled after reset |
| W6 | In | LED auto-deselect on |
| | Out | LED auto-deselect off |
| W7 | | Factory use only |
| W8 | In | Enable PROM |
| W9 | In | PROM address D800 |
| | Out | PROM address C800 |

7280

MFM. See 5280i.

7287

See 5287.

Everex**EV-346**

MFM

| | | | |
|-----|-----|-----|----------------------------------|
| W5 | 1-2 | Out | Disable floppy DACK2 |
| | | In | Enable floppy DACK2 |
| W6 | | Out | HD primary address 1F0-1F7 |
| | | In | HD secondary address 170-177 |
| W9 | | Out | Floppy primary address 3F4-3F7 |
| | | In | Floppy secondary address 375-377 |
| W10 | 1-2 | In | Floppy disable (also W5 out) |
| W11 | 1-2 | Out | Disable HD |

Konan

TenTime

| | | | | | |
|----------|-----------------------|----------------------------------|------------------------------|-----------|-----------|
| S1,S2,S3 | Memory address | | S1 | S2 | S3 |
| | | C000 | On | On | On |
| | | C800 | Off | On | Off |
| | | CC00 | Off | Off | Off |
| | | D000* | On | On | Off |
| | | D400 | On | Off | Off |
| | | D800 | Off | On | On |
| | | DC00 | Off | Off | On |
| | | Disable | On | Off | On |
| S4 | In | Disable floppy | | | |
| S5,S6,S7 | IRQ | | S5 | S6 | S7 |
| | | 14* | On | Off | Off |
| | | 15 | Off | On | Off |
| | | 5 | Off | Off | On |
| | | In | HD secondary address 170-177 | | |
| W9 | Out | Floppy primary address 3F4-3F7 | | | |
| | In | Floppy secondary address 375-377 | | | |
| W10 | 1-2 | In | Floppy disable (also W5 out) | | |
| W11 | 1-2 | Out | Disable HD | | |

Longshine

LCS 6210D

MFM

| | | | |
|-----|-----|-----|-------------------------------|
| JP1 | 1-2 | Out | Drives with 9-16 heads |
| | | In | Drives with less than 8 heads |
| JP2 | | Out | BIOS address C8000 |
| | | In | BIOS address E8000 |

6610HX

MFM

| | | | |
|-----|-----|-----|-------------------------------|
| JP2 | | Out | DTK BIOS in system |
| | | In | Other BIOS than DTK in system |
| JP3 | 1-2 | In | HD primary address 1F0-1F7 |
| | 2-3 | In | HD secondary address 170-177 |
| JP4 | 1-2 | In | C & T chipset |
| | | In | Other chipset |

OMTI

5520

| 1 | 2 | 3 | 4 | Cyls | Hds | WP |
|---|---|---|---|------|-----|-----|
| 0 | 0 | 0 | 0 | 306 | 4 | 128 |
| 0 | 0 | 0 | 1 | 640 | 6 | 256 |
| 0 | 0 | 1 | 0 | 612 | 6 | 128 |
| 0 | 1 | 0 | 0 | 697 | 5 | 256 |
| 0 | 1 | 0 | 0 | 612 | 4 | 256 |
| 0 | 1 | 0 | 1 | 977 | 5 | 300 |
| 0 | 1 | 1 | 0 | 512 | 8 | 256 |
| 0 | 1 | 1 | 1 | 612 | 4 | 128 |
| 1 | 0 | 0 | 0 | 612 | 2 | 256 |

| | | | | | | |
|---|---|---|---|-----|----|-----|
| 1 | 0 | 0 | 1 | 733 | 5 | 300 |
| 1 | 0 | 1 | 0 | 612 | 2 | 400 |
| 1 | 0 | 1 | 1 | 987 | 7 | |
| 1 | 1 | 0 | 0 | 615 | 4 | 300 |
| 1 | 1 | 0 | 1 | 306 | 4 | |
| 1 | 1 | 1 | 0 | 640 | 4 | 256 |
| 1 | 1 | 1 | 1 | 918 | 15 | |

5527

| 1 | 2 | 3 | 4 | Cyls | Hds | WP |
|---|---|---|---|------|-----|-----|
| 0 | 0 | 0 | 0 | 615 | 4 | |
| 0 | 0 | 0 | 1 | 987 | 5 | |
| 0 | 0 | 1 | 0 | 612 | 4 | |
| 0 | 1 | 0 | 0 | 640 | 8 | |
| 0 | 1 | 0 | 0 | 306 | 4 | 128 |
| 0 | 1 | 0 | 1 | 612 | 8 | |
| 0 | 1 | 1 | 0 | 830 | 10 | |
| 0 | 1 | 1 | 1 | 640 | 6 | |
| 1 | 0 | 0 | 0 | 306 | 4 | |
| 1 | 0 | 0 | 1 | 830 | 7 | |
| 1 | 0 | 1 | 0 | 612 | 4 | 128 |
| 1 | 0 | 1 | 1 | 918 | 15 | |
| 1 | 1 | 0 | 0 | 615 | 2 | |
| 1 | 1 | 0 | 1 | 980 | 5 | 700 |
| 1 | 1 | 1 | 0 | 1024 | 8 | |
| 1 | 1 | 1 | 1 | 640 | 4 | |

8150

MFM. See 8157.

8157

RLL

| | | |
|-----|-----|----------------------------------|
| W7 | 1-2 | Selects SYSCLK to 5098C* |
| W8 | | Not used |
| W9 | | Not used |
| W10 | | Reserved—do not use |
| W11 | Out | Primary HD address 1F0-1F7 |
| | In | Secondary HD address 170-177 |
| W12 | | Not used |
| W13 | In | Connects bracket to board ground |
| | Out | Bracket ground option not used |
| J6 | | HD LED |

8240

MFM

| | | |
|----|-----|----------------------------------|
| W1 | Out | Primary HD address 1F0-1F7 |
| | In | Secondary HD address 170-177 |
| W2 | Out | Primary floppy address 3F0-3F7 |
| | In | Secondary floppy address 370-377 |
| J6 | | HD LED |

8250

MFM. See 8257.

8257

RLL**

| | | | |
|-------|-----|-----|----------------------------------|
| W7 | 1-2 | In | Selects SYSCLK to 5098C* |
| W8 | 1-2 | In | Single speed floppies |
| | 2-3 | In | Dual speed floppies |
| W9 | 2-3 | In | Floppy precompensation |
| W10 | | | Reserved. Do not use |
| W11 | | Out | HD primary address 1F0-1F7 |
| | | In | HD secondary address 170-177 |
| W12 | 2-3 | In | Floppy primary address 3F0-3F7 |
| | | Out | Floppy secondary address 370-377 |
| W12** | 2-3 | In | Floppy primary address 3F0-3F7 |
| | 1-2 | In | Floppy secondary address 370-377 |
| W13 | | Out | Bracket ground option not used |
| | | In | Connects bracket to board ground |

Perstor

PS 180-16FN

RLL. Does not work with WD 1002-FOX floppy controller (16 bit version controls its own floppies).

Promise

DC 100/100M

IDE. Add minimum .5Mb to DC-100; the 100M has .5Mb on board. Will not co-exist.

| | | |
|-----|------------------------------------|---|
| JP2 | Parallel Port (CN2) Output Options | Output Only: Jumped* Bi-Directional;(no jumper; OS/2) |
| JP3 | Port Configurations | Serial Port 1 (CN1) COM1 (3F8, IRQ4): 1-2, 5-6* COM3 (3E8, IRQ4): 2-3, 4-5 Disabled:2-3, 5-6 Serial Port 2 (JP1) COM2 (2F8, IRQ3): 7-8, 11-12* COM4 (2E8, IRQ3): 8-9, 10-11 Disabled:8-9, 11-12 Parallel Port (CN2) (3BC, IRQ7): 13-14, 16-17, 20-21 (378, IRQ7): 13-14, 17-18, 20-21* (278, IRQ5): 14-15, 16-17, 19-20 Disabled:14-15, 17-18 Enable:22-23* Disable: 23-24 |
| | Floppy Disk (J1) | |

DC 2030

| | | | | | |
|----------|--|------------|------------|------------|------------|
| J 1, J 2 | DC-2010 Expansion Memory Board | | | | |
| J 4 | IDE "Pass Through" connector. For motherboard controller w/2030 IDE disabled (W2 off). | | | | |
| W 2 | In - IDE enabled | | | | |
| W 3,4,5 | Reserved | | | | |
| W 6 | In - Floppy enabled | | | | |
| W7 | BIOS address | 1-2 | 3-4 | 5-6 | 7-8 |
| | C000 | 1 | 1 | 1 | 1 |
| | C200 | 1 | 1 | 1 | 0 |
| | C400 | 1 | 1 | 0 | 1 |
| | C600 | 1 | 1 | 0 | 0 |
| | C800 | 1 | 0 | 1 | 1 |
| | CA00 | 1 | 0 | 1 | 0 |
| | CC00 | 1 | 0 | 0 | 1 |

| | | | | |
|-------|---|---|---|---|
| CE00 | 1 | 0 | 0 | 0 |
| D000 | 0 | 1 | 1 | 1 |
| D200 | 0 | 1 | 1 | 0 |
| D400 | 0 | 1 | 0 | 1 |
| D600 | 0 | 1 | 0 | 0 |
| D800* | 0 | 0 | 1 | 1 |
| DA00 | 0 | 0 | 1 | 0 |
| DC00 | 0 | 0 | 0 | 1 |
| DE00 | 0 | 0 | 0 | 0 |

Rancho Technology Inc

RT 1000A

SCSI

| | | |
|----------|--------------------|--|
| X1 | In | Floppy Disk Write Precomp 125 ns |
| | Out | Floppy Disk Write Precomp 187 ns |
| X2 | In | Single speed floppies |
| | Out | Dual speed floppies |
| X3 | In | Alternate Floppy Address 3F7 |
| | Out | Standard XT/AT Floppy Address 377H |
| X4,X5,X6 | HD Mem Addr | |
| | | D4000 On On On |
| | | CC000 Off On On |
| | | D0000 On Off On |
| | | C8000 Off Off On |
| | | E4000 On On Off |
| | | DC000* Off On Off |
| | | E0000 On Off Off |
| | | D8000 Off Off Off |
| X7 | In | Remote terminator power |
| X8 | In | IRQ 7 |
| X9 | In | IRQ 5 |
| X10 | In | IRQ 4 |
| X11 | In | IRQ 3 |
| X12 | In | Enable zero wait state logic |
| X13 | Out | Disable Floppy |
| X14 | Out* | PS/2 MicroChannel only |
| X15 | Out* | Add for Syquest and some removeable drives |
| X16 | Out* | SCSI passthrough only |
| X17 | Out* | Factory use only |
| X18 | Out | No additional delay (e.g. 5 sec) after BUS RESET during initialisation |
| JMP 4 | 1-2 In* | Floppy Primary/Enable (3F0-3F7) |
| | 2-3 In | Floppy Secondary/Disable (370-377) |
| JMP 13 | 1-2 In* | Floppy Enable |
| | 2-3 In | Floppy Disable (and JMP 4 2-3 In) |
| JMP 8 | 1-2 In | HD Primary Address (1F0-1F7)* |
| | 2-3 In | HD Secondary Address (170-177) |

Seagate

ST 01(-A)(-B)(-E50)

SCSI. Early versions have 8K ROM and no aux drive power connector; recognized by absence of notch in upper left corner. The16K version has an aux drive power connector and ROM Version 2.0 or higher.

| | | | |
|----|-----|-----|------------------------|
| W1 | All | Out | 8K BIOS Address CA000* |
| | A-B | In | 8K BIOS Address C8000 |

| | | | |
|----|-----|-----|---|
| | C-D | In | 8K BIOS Address CE000 |
| | All | In | 8K BIOS Address DE000 |
| | All | Out | 16K BIOS Address C800* |
| | A-B | In | 16K BIOS Address Invalid |
| | C-D | In | 16K BIOS Address CC00 |
| | All | In | 16K BIOS Address DC00 |
| W2 | H-I | Out | Zero wait state disabled |
| | | In | Zero wait state enabled (for optimum performance if PC can cope). |
| W3 | All | Out | Disable interrupts* |
| | E-F | In | IRQ 3 |
| | F-G | In | IRQ 5 |

ST 02(-E50)

SCSI

| | | | |
|-----|-----|-----|--|
| W1 | All | Out | 8K BIOS Address CA000* |
| | A-B | In | 8K BIOS Address C8000 |
| | C-D | In | 8K BIOS Address CE000 |
| | All | In | 8K BIOS Address DE000 |
| | All | Out | 16K BIOS Address C800* |
| | A-B | In | 16K BIOS Address Invalid |
| | C-D | In | 16K BIOS Address CC00 |
| | All | In | 16K BIOS Address DC00 |
| W2 | H-I | Out | Zero wait state disabled |
| | | In | Zero wait state enabled (for best performance if PC can cope). |
| W3 | All | Out | Disable interrupts* |
| | E-F | In | IRQ 3 |
| | F-G | In | IRQ 5 |
| IP5 | M-N | In | 360/720K floppies only |
| | N-O | In | 360/720K & 1.2/1.4Mb floppies supported* |
| JP6 | Q-R | In | Register 01F4 emulation enabled for XT |
| | P-Q | In | Register 01F4 emulation disabled for XT |

ST 05X (XT) ST 02(-E50)

SCSI

| JP1 | A-B | C-D | BIOS ROM | BIOS RAM |
|-----|-----|-----|-------------|-------------|
| | Out | Out | C8000-CBF7F | CBF80-CBFFF |
| | Out | In | D8000-DBF7F | DBF80-DBFFF |
| | In | Out | D0000-D3F7F | D3F80-D3FFF |
| | Out | Out | E0000-E3F7F | E3F80-E3FFF |

ST 07A/08A

IDE. Half-slot.

| | | | |
|--------------|-----|------|--|
| JP2 | 1-2 | Out* | HD Primary Address 1F0-1F7, 3F6-3F7 |
| | | In | HD Secondary Address 170-177, 376-377 |
| JP2 (ST 08A) | 1-2 | Out* | Floppy Primary Address 3F0-3F5, 3F7 |
| | | In | Floppy Secondary Address 370-375, 377 |
| JP4 | 1-2 | Out | Floppy Disabled |
| | | In* | Floppy Enabled |
| JP5 | 1-2 | | IRQ 14 status to host is cleared when hard drive is busy; for systems which do not read status following an interrupt. |
| | 2-3 | | Hard drive interrupt connected directly to IRQ 14 line of the AT bus*. |
| JP6 | 1-2 | Out* | I/O channel READY from hard drive is not connected to the host. |
| | | In | I/O channel READY from the hard drive is connected to the host. |

ST 10

MFM

| | | | |
|----|---------|-----|--------------------|
| W2 | 3-4 | In | BIOS address C8000 |
| | 3-4 | Out | BIOS disabled |
| | 3-4/1-6 | In | BIOS address D0000 |
| | 3-4/2-5 | In | BIOS address D8000 |
| | All | In | BIOS address F4000 |

ST 11M/R

MFM/RL. 8-bit. Unique recording format; can recognize Paired Program software.

| | | | |
|----|--------|-----|----------------------------------|
| W1 | All | Out | BIOS address C8000 (I/O 320-323) |
| | A-B | In | BIOS address D0000 (I/O 324-327) |
| | C-D | In | BIOS address D8000 (I/O 328-32B) |
| | A-BC-D | In | BIOS address E0000 (I/O 32C-32F) |

ST 21/22/M/R

MFM/RL. Apparently has unique recording format. When installing in a system already containing a hard disk controller, the ST 21M/R must be jumpered at a higher BIOS address.

| | | |
|------|------|--|
| JP1 | Out* | HD I/O Address 1F0-1F7, 3F6-3F7 |
| JP2 | Out | Floppy I/O Address 3F0-3F5, 3F7 BIOS Address C8000-CBFFF |
| | Out | HD I/O Address 1F0-1F7, 3F6-3F7 |
| | In | Floppy I/O Address 3F0-3F5, 3F7 BIOS Address CC000-CFFFF |
| | In | HD I/O Address 170-177, 376-377 |
| | Out | Floppy I/O Address 370-375, 377 BIOS Address D8000-DBFFF |
| | In | HD I/O Address 170-177, 376-377 |
| JP3 | Out | BIOS Disabled |
| | In* | BIOS Enabled |
| JP4* | Out | Floppy Disabled (ST 22) |
| | In | Floppy Enabled (ST 22) |

ST 21M/R Error Codes (LED flashes)

- 1 Normal completion of controller diagnostics.
- 2 Failure of HD interface.
- 3 Sector Buffer error.
- 4 Controller task file interface failure.
- 5 Microcode ROM checksum error.
- 6 ECC circuits failure.

Silicon Valley Computers

ADP 20

IDE

| | | |
|--------|-----|---|
| E1, E4 | In | Floppy Drive Enable (cut traces on the back). |
| E2 | Out | Floppy Precomp 105 ns* |
| | In | Floppy Precomp 125 ns |
| E3 | In | Dual Speed Floppy |
| E5 | In | Hard drive support (cut traces on the back). |

ADP 60LF/L

IDE

| | | |
|--------|------|------------------------------------|
| E1 | In | Floppy Drive Disable |
| E2, E3 | Out* | Reserved |
| E4 | Out | Primary Floppy Address (1F0-AF7)* |
| | In | Secondary Floppy Address (170-177) |

| | | |
|----|---------|---|
| E5 | Out | ROM BIOS Address (small) C800* |
| | In | CA00 |
| E6 | Out | ROM BIOS Address (large) C8000* |
| | In | CA000 |
| E7 | In | BIOS Enable (cut trace on the back) |
| E8 | 1-2 In* | Reserved |

Storage Plus

Sumo

SCSI

| | | | | | | |
|---------|---------|-----------------------------------|----------|----------|----------|----------|
| OPT | In | Zero Wait State | | | | |
| CODE | In* | | | | | |
| FLPY | In | FloppyEnable* | | | | |
| A,B,R | | BIOS Address | B | A | R | |
| | | C800:0000-1FFF | 1 | 1 | 1 | |
| | | CC00:0000-1FFF | 0 | 1 | 1 | |
| | | D800:0000-1FFF | 1 | 0 | 1 | |
| | | DC00:0000-1FFF* | 0 | 0 | 1 | |
| | Disable | 0 | 0 | 0 | | |
| C,D,E,I | | I/O Address | E | D | C | I |
| | | 300H | 1 | 1 | 1 | 1 |
| | | 310H* | 0 | 1 | 1 | 1 |
| | | 320H | 1 | 0 | 1 | 1 |
| | | 330H | 0 | 0 | 1 | 1 |
| | | 340H | 1 | 1 | 0 | 1 |
| | | 350H | 0 | 1 | 0 | 1 |
| | | 360H | 0 | 1 | 1 | 1 |
| | | 370H | 0 | 0 | 0 | 0 |
| | | Disable | 0 | 0 | 0 | 0 |
| IRQ | | Default is 14; numbered in order. | | | | |

UltraStor

12C

ESDI

| | | | | | | | | | | |
|------|------|------|--|------------|--------------|-------------|-------------|-------------|-------------|-------------|
| JP2 | | Out | Factory use only | | | | | | | |
| JP3 | | In | Factory use only | | | | | | | |
| JP4 | 1-2 | Out | Reserved | | | | | | | |
| | 3-4 | In | Reserved | | | | | | | |
| JP10 | | | BIOS | Dis | *C800 | CC00 | D000 | D400 | D800 | DC00 |
| | | | 1-2 | 0 | 0 | 0 | 0 | 1 | 1 | 1 |
| | | | 3-4 | 0 | 0 | 1 | 1 | 0 | 0 | 1 |
| | | | 5-6 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| JP11 | 1-2 | Out* | 3rd floppy; Double-twist cable, set as drive 2 | | | | | | | |
| | | In | 3rd floppy; Single-twist cable, set as drive 4 | | | | | | | |
| | 3-4 | In | 2nd floppy; PS/2 type (3.5" only) | | | | | | | |
| | | Out* | 2nd floppy; AT type (3.5" or 5.25") | | | | | | | |
| | 5-6 | In | 1st floppy; PS/2 type (3.5" only) | | | | | | | |
| | | Out* | 1st floppy; AT type (3.5" or 5.25") | | | | | | | |
| | 7-8 | In | Secondary floppy address (370-377) | | | | | | | |
| | | Out* | Primary floppy address (3F0-3F7) | | | | | | | |
| | 9-10 | In | Dual speeds (300, 360 RPM) | | | | | | | |
| | | Out* | Single speed (300 RPM) | | | | | | | |

| | | | |
|------|-------|------|--|
| | 11-12 | In | Precomp fixed at 125ns |
| | | Out* | Precomp varies with data rate 250khz:250ns 300khz:208ns 500KHz:125ns |
| JP12 | | In | HD Secondary address (170-177). |
| | | Out* | HD Primary address (1F0-1F7). |
| JP16 | | In | Chassis ground connected to logic ground. |
| JP17 | | In | Floppy Enabled* |
| JP20 | | | Factory use only. |
| JP21 | 1-2 | In | HD IRQ 15 |
| | 2-3 | In | HD IRQ 14 |

12F

| ESDI | | | | | | | | | |
|--|-------|-------------|---|--------------|-------------|-------------|-------------|-------------|-------------|
| JP1 | | In | Enable to co-reside with another controller | | | | | | |
| | | Out | Primary controller | | | | | | |
| JP2 | | Out | Factory use only | | | | | | |
| JP3 | | In | Factory use only* | | | | | | |
| JP4 | 1-2 | Out | Reserved* | | | | | | |
| | 3-4 | In | Cache Control disable | | | | | | |
| JP5 | 1-2 | | 32K data buffer* | | | | | | |
| | 2-3 | | 8K data buffer | | | | | | |
| JP6 | 1-2 | | Factory configured: 8/32K data buffer | | | | | | |
| | 2-3 | | Reserved | | | | | | |
| JP7 | 1-2 | | Factory use only | | | | | | |
| JP9 | | Out | Factory use only | | | | | | |
| JP10 | | BIOS | Dis | *C800 | CC00 | D000 | D400 | D800 | DC00 |
| | 1-2 | | 0 | 0 | 0 | 1 | 1 | 1 | 1 |
| | 3-4 | | 0 | 0 | 1 | 1 | 0 | 0 | 1 |
| | 5-6 | | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| Pri addresses must use C800, D000 or D800; sec CC00, D400 or DC00. JP12. | | | | | | | | | |
| JP11 | 1-2 | Out* | 3rd floppy; Double-twist cable, set as drive 2 | | | | | | |
| | | In | 3rd floppy; Single-twist cable, set as drive 4 | | | | | | |
| | 3-4 | In | 2nd floppy; PS/2 type (3.5" only) | | | | | | |
| | | Out* | 2nd floppy; AT type (3.5" or 5.25") | | | | | | |
| | 5-6 | In | 1st floppy; PS/2 type (3.5" only) | | | | | | |
| | | Out* | 1st floppy; AT type (3.5" or 5.25") | | | | | | |
| | 7-8 | In | Secondary floppy address (370-377) | | | | | | |
| | | Out* | Primary floppy address (3F0-3F7) | | | | | | |
| | 9-10 | In | Dual speeds (300, 360 RPM) | | | | | | |
| | | Out* | Single speed (300 RPM) | | | | | | |
| | 11-12 | In | Precomp fixed at 125ns | | | | | | |
| | | Out* | Precomp Varies with data rate: 250khz:250ns 300khz:208ns 500KHz:125ns | | | | | | |
| JP12 | | In | HD Secondary address (170-177) | | | | | | |
| | | Out* | HD Primary address (1F0-1F7) | | | | | | |
| JP17 | | In | Floppy Enabled* | | | | | | |
| JP20 | 1-2 | In | HD IRQ 15 | | | | | | |
| | 2-3 | In | HD IRQ 14 | | | | | | |

22F

| ESDI | | | |
|------|-----|-----|-----------------------|
| JP1 | | | Reserved |
| JP2 | | Out | Factory use only* |
| JP3 | | In | Factory use only* |
| JP4 | 1-2 | | Reserved* |
| | 3-4 | In | Cache Control disable |
| JP5 | 1-2 | | 32K data buffer |

| | | | | | | | | |
|--|------|--|--|---|---|---|---|---|
| | 2-3 | | 8K data buffer | | | | | |
| JP6 | 1-2 | | 8/32K data buffer | | | | | |
| | 2-3 | | Reserved | | | | | |
| JP7 | | | Factory use only | | | | | |
| JP9 | | Out | Factory use only | | | | | |
| JP10 | | BIOS | Dis | | | | | |
| | | | *C800 | | | | | |
| | | | CC00 | | | | | |
| | | | D000 | | | | | |
| | 1-2 | 0 | 0 | 0 | 0 | 1 | 1 | 1 |
| | 3-4 | 0 | 0 | 1 | 1 | 0 | 0 | 1 |
| | 5-6 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| Primary addresses must use C800, D000 or D800; secondary CC00, D400 or DC00. See JP12. | | | | | | | | |
| JP11 | 1-2 | Out* | 3rd floppy; Double-twist cable, set as drive 2 | | | | | |
| | | In | 3rd floppy; Single-twist cable, set as drive 4 | | | | | |
| | 3-4 | In | 2nd floppy; PS/2 type (3.5" only) | | | | | |
| | | Out* | 2nd floppy; AT type (3.5" or 5.25") | | | | | |
| | 5-6 | In | 1st floppy; PS/2 type (3.5" only) | | | | | |
| | | Out* | 1st floppy; AT type (3.5" or 5.25") | | | | | |
| | 7-8 | In | Secondary floppy address (370-377) | | | | | |
| | | Out* | Primary floppy address (3F0-3F7) | | | | | |
| | 9-10 | In | Dual speeds (300, 360 RPM) | | | | | |
| | | Out* | Single speed (300 RPM) | | | | | |
| 11-12 | In | Precomp fixed at 125nsPrecomp | | | | | | |
| | Out* | Varies with data rate: 250khz:250ns 300khz:208ns 500KHz:125ns | | | | | | |
| JP12 | | In | HD Secondary address (170-177) | | | | | |
| | | Out* | HD Primary address (1F0-1F7) | | | | | |
| JP16 | | In | Chassis ground connected to logic ground. | | | | | |
| JP17 | | In | Floppy Enabled* | | | | | |
| JP20 | 1-2 | In | HD IRQ 15 | | | | | |
| | 2-3 | In | HD IRQ 14 | | | | | |

Western Digital

Speedkit

See WD 1006V-MM1/MM2.

WD 1002-27X

RLL. Half size, 8-bit. Has a power connector for filecards. Discontinued March 1989.

| | | | |
|--------|-----|-----|---|
| W3 | | In | BIOS Enable. |
| W4 | 1-2 | In | Secondary Address 324-327 |
| | 2-3 | In | Primary Address 320-323* |
| W6 | 1-2 | In* | 16 head disk drive. |
| | 2-3 | In | 8 head disk drive w/RWC* |
| W7 | 1-2 | In | IRQ 5 |
| | 2-3 | In | IRQ 2 (needs custom BIOS, close S1-7). |
| W8 | 1-2 | In | Secondary controller (CA00)Primary Controller (C800*) |
| | 2-3 | In | |
| Sw 1-7 | | Out | IRQ 5 |
| | | In | IRQ 2; also modify W7; must have custom BIOS. |
| Sw 1-8 | | Out | XT Mode. |
| | | In | AT Mode |

| BIOS Table | Cap | Cyls | Hds | SpT | 1-1* | 1-2* | 1-3* | 1-4* | 1-5 | 1-6 | W9 |
|------------|-----|------|-----|-----|------|------|------|------|-----|-----|----|
| 0 | 65 | 981 | 5 | | In | In | In | In | Out | Out | |

| | | | | | | | | | | | |
|---|----|-----|---|----|-----|-----|-----|-----|-----|-----|-----|
| 1 | 92 | 987 | 7 | 17 | Out | In | Out | In | In | Out | Out |
| 2 | 33 | 612 | 4 | 26 | In | Out | In | Out | Out | In | Out |
| 3 | 33 | 612 | 4 | 17 | Out | Out | Out | Out | In | In | In |

*Standard settings are Sw 1-1/1-2=Drive 1 and Sw 1-3/1-4=Drive 0. Swap for Super BIOS. Sw 5-8 should be out for BIOS tables 0, 1 & 2; valid for Super BIOS only.

WD 1002A-27X

RLL; half-size. Unavailable from March, 1989.

| | |
|---|------------|
| Translation Mode for 17 secs/track—30 Mb/< 663 Cyls, 4 Hds: | W1, W2 On |
| > 663 Cyls, with Dynamic Formatting (e.g physical CHS): | W1, W2 Off |

WD 1002A-FOX

Supports up to 4 drives; 360 and/or 720K should be external. Not with Perstor 180. There are four versions:

- F 001 supports two drives internally with no BIOS.
- F 002 supports four drives (two internal/two external) with no BIOS.
- F 003 supports two drives internally with the BIOS.
- F 004 supports four drives (two internal/two external) with BIOS.

| | | |
|--------|------------------|---|
| W1 | 1-2 | High density to J2 pins 2 and 3 |
| | 2-3 | Ground return J2 pins 2 and 3 |
| W2, W3 | ROM BIOS Address | W2 2-3 EE000-EFFFF |
| | | W3 2-3 |
| | | W2 2-3 CE000-CFFFF |
| | | W3 1-2 |
| | | W2 1-2 EC000-EDFFF |
| | | W3 2-3 |
| | | W2 1-2 CC000-CDFFF |
| | | W3 1-2 |
| W4 | 1-2 | Secondary addresses 3F0-377 |
| | 2-3 | Primary addresses 3F0-3F7 |
| W5 | 1-2 | Optional +5V to external drive; +5V to J2 pin 4 |
| | 2-3 | No connection. Storage position only |
| W6 | 1-2 | Optional +12V to external drive |
| | 2-3 | No connection. Storage position only |
| W7 | 1-2 | Dual speed spindle support |
| W8 | 1-2 | Connects logic ground to chassis ground |
| SW1 | | 1,3,5,7 2,4,6,8 Drive Type |
| | | OFF OFF 360K |
| | | OFF ON 1.2 Mb |
| | | ON OFF 720K |
| | | ON ON 1.44 Mb |
| | | 1-1 and 1-2 indicates first drive |
| | | 1-2 and 1-4 indicates second drive |
| | | 1-5 and 1-6 indicates third drive |
| | | 1-7 and 1-8 indicates fourth drive. |

WD 1002-HX4

Used in Compaq Deskpro.

| Drive Type | SW1/1 | SW1/2 | SW1/3 | SW1/4 |
|------------|-------|-------|-------|-------|
| 10 Mb | On | On | On | On |
| 20 Mb | On | Off | On | On |
| 30 Mb | On | On | Off | Off |

WD 1002-WAH

MFM

| | | |
|----|-----|---|
| W1 | 1-2 | Primary address* |
| | 2-3 | Secondary address, 170-177 and 376-377 |
| W2 | L | Latched mode—LED constantly on* |
| | NL | Non-Latched Mode—current drive is selected only when controller is communicating with it, and LED only lights when drive is accessed. Used for Compaqs. |

WD 1002A-WA2

| | |
|-------|---|
| E1-E2 | Floppy secondary addresses, 372 and 374-377 |
| E2-E3 | Floppy primary addresses* |
| E4-E5 | HD secondary addresses, 170-177 and 376-377 |
| E5-E6 | HD primary addresses* |
| E7-E8 | Must be installed. |

WD 1002A-WX1

MF. If U12, the BIOS ROM, is part number 62-000094 followed by any three numbers, you have the SUPERBIOS, so the WD1002A-WX1 works in ATs.

| | | |
|----|----------|--|
| W1 | Not used | |
| W2 | Not used | |
| W3 | In | BIOS Enabled |
| W4 | 1-2 | Device Address 324H |
| | 2-3 | Device Address 320H |
| W5 | 1-2 | 32 or 64K BIOS ROM (solder connection) |
| | 2-3 | 16K BIOS ROM (solder connection) |
| W6 | 1-2 | Head Sel 3 (16 heads) |
| | 2-3 | RWC (8 Heads) |
| W7 | 1-2 | IRQ 5 |
| | 2-3 | IRQ 2 |
| W8 | 1-2 | Second disk controller—modify W4 |
| | 2-3 | First controller* |

S1 Jumper Settings

| | 10 Mb/306 x 4 | 10 Mb/615 x 2 | 20 Mb/615 x 4 |
|---------------|---------------|---------------|---------------|
| 1-1 | Open | Closed | Open |
| 1-2 | Closed | Open | Open |
| 1-3 | Open | Closed | Open |
| 1-4 | Closed | Open | Open |
| 1-5 | Open | Open | Open |
| 1-6 | Open | Open | Open |
| 1-7 | Open | Open | Open |
| 1-8 (XT Mode) | Open | Open | Open |
| 1-8 (AT Mode) | Open | Open | Open |

WD 1002(A)-WX2

Drive Tables

Full size, and the WD1002-WX2 a half-card; otherwise, they're both the same. *Drive 1 **Drive 2

| BIOS Table | Cap | Cyls | Hds | E5-6* | E7-8* | E9-10** | E11-12** |
|------------|-----|------|-----|-------|-------|---------|----------|
| 0 | 10 | 306 | 4 | In | In | In | In |
| 1 | 10 | 612 | 2 | In | Out | In | Out |
| 2 | 20 | 612 | 4 | Out | In | Out | In |
| 3 | 31 | 640 | 6 | Out | Out | Out | Out |

Switch Settings

| | | | |
|-----|---|----------|--------|
| SW1 | 5 | In | IRQ 2* |
| | | Out | IRQ 5 |
| | 6 | Reserved | |

| | |
|---|----------|
| 7 | Reserved |
| 8 | Reserved |

WD 1002S-WX2A

MFM

| | | |
|--------|-----|---|
| W1 | | Not used |
| W2 | | Not used |
| W3 | In | BIOS Enabled |
| W4 | 1-2 | Device Address 324H |
| | 2-3 | Device Address 320H |
| W5 | 1-2 | 32 or 64K BIOS ROM |
| | 2-3 | 16K BIOS ROM |
| W6 | 1-2 | Head Select 3 (16 heads) |
| | 2-3 | RWC (8 Heads) |
| W7 | 1-2 | IRQ 5 |
| | 2-3 | IRQ 2 |
| W8 | 2-3 | Standard setting |
| W9 | 1-2 | CO23 setting |
| W10 | 2-3 | Standard configuration |
| | 1-2 | Special feature |
| Sw 1-5 | Out | No translation |
| | In | Not allowed |
| Sw 1-6 | Out | 17 sectors per track |
| | In | Not allowed |
| Sw 1-7 | Out | IRQ 5 |
| | In | IRQ 2; requires modification of W7 and custom BIOS. |
| Sw 1-8 | Out | XT Mode |
| | In | AT Mode |

SW1 settings for Rev G/H

| BIOS Table | Cap | Cyls | Hds | WPC | 1-1 | 1-2 | 1-3 | 1-4 |
|------------|-----|------|-----|------|-----|-----|-----|-----|
| 0 | 20 | 612 | 4 | 0 | In | In | In | In |
| 1 | 10 | 612 | 2 | 128 | Out | In | Out | In |
| 2 | 20 | 612 | 4 | 128 | In | Out | In | Out |
| 3 | 10 | 612 | 4 | None | Out | Out | Out | Out |

SW1 settings for Super BIOS

| BIOS Table | Cap | Cyls | Hds | WPC | 1-1 | 1-2 | 1-3 | 1-4 |
|------------|-----|------|-----|-----|-----|-----|-----|-----|
| 0 | 20 | 612 | 4 | 450 | In | In | In | In |
| 1 | 10 | 306 | 4 | 0 | Out | In | Out | In |
| 2 | 10 | 615 | 2 | 450 | In | Out | In | Out |
| 3 | 10 | 615 | 4 | 450 | Out | Out | Out | Out |

WD BIOS 62000042-15 (Rev H)

| BIOS Table | Drive 1 | | | | | | | Cap | Cyls | Hds | WPC |
|------------|---------|-----|-----|-----|-----|-----|----|------|------|------|-----|
| | 1 | 2 | 7 | 3 | 4 | 8 | | | | | |
| 0 | In | In | In | In | In | In | 43 | 977 | 5 | None | |
| 1 | Out | In | In | Out | In | In | 32 | 733 | 5 | 300 | |
| 2 | In | Out | In | In | Out | In | 33 | 640 | 6 | None | |
| 3 | Out | Out | In | Out | Out | In | 62 | 1024 | 8 | 1024 | |
| 4 | In | In | Out | In | In | Out | 43 | 820 | 6 | None | |
| 5 | Out | In | Out | Out | In | Out | 10 | 612 | 2 | 128 | |
| 6 | In | Out | Out | In | Out | Out | 20 | 612 | 4 | 128 | |
| 7 | Out | Out | Out | Out | Out | Out | 10 | 306 | 4 | 0 | |

WD 1003-GRY

Used in IBM XT286; no jumpers.

WD 1003-WA2

MFM. Revision E044 can operate with bus speeds up to 12MHz.

| | |
|-------|----------------------------|
| E1-E2 | Secondary floppy addresses |
| E2-E3 | Primary floppy addresses, |
| E4-E5 | Secondary HD addresses |
| E5-E6 | Primary HD addresses |
| E7-E8 | 360 RPM floppies |
| E8-E9 | 300 RPM floppies |

WD 1003-WAH

MFM

| | | |
|----|------|---|
| W1 | Out | Status Read is non-latched. Dynamic drive select; i.e. SELECT = DRIVE BUSY. Used for Compaq hosts. |
| | In* | Status Read is latched. Static drive select (SELECT asserted except during RESET). |
| W2 | Out* | Primary address |
| | In | Secondary address |
| W3 | Out | Used with WD11C00C-22, or if W5 1-2 is jumpered. |
| | In | Required only on early units with WD11C00-22 and W5 1-2 jumpered. Do not jumper with the WD11C00C-22 installed. |
| W4 | 1-2 | Supports 615 x 2 second drive with system set for 4 head, 306 cylinder drive |
| | 2-3 | Ties firmware sense bit input high* |
| W5 | 1-2 | Internal signal Power-up circuit controls WG enable |
| | 2-3 | Standard factory setting |
| W6 | 1-2 | Ties input low; 16 msec step rate; not 35 msec. |
| | 2-3 | Ties input high* |

WD 1003-RA2

RLL

| | | |
|----|------|---|
| W1 | 1-2 | Used with a WD11C00C-22 at U16 |
| | 2-3 | Required only on early units with WD11C00-22 and W5 1-2 jumpered. Do not jumper with the WD11C00C-22 installed. |
| W2 | 1-2 | Out No translation for drive 0. |
| | | In Translation enabled. Select a 615 cylinder and six head drive type through Setup. |
| | 3-3 | Out No translation for drive 1. |
| | | In Translation enabled. Select a 615 cylinder and six head drive type through Setup. |
| W3 | 1-2 | In Standard setting; do not use. |
| | 3-4 | In Standard setting; do not use. |
| W4 | 3-5 | HD primary address, 1F0-1F7 |
| | 1-3 | HD secondary address, 170-177 |
| | 4-6 | Floppy primary address, 3F0-3F7 |
| | 2-4 | Floppy secondary address, 370-377 |
| W5 | 1-2* | Closed by etch on solder side. Controls drives with a maximum of eight heads or RWC. |
| | 2-3 | Closed by etch on solder side. Controls drives with a maximum of 16 heads. |
| W6 | | Removed from final release |
| W7 | 1-2 | Dual speed floppies |
| | 2-3 | 300/360 RPM floppies (single speed) |

| | |
|-------|-------------------------------------|
| E1-E2 | Secondary HD address; 170-177 |
| E2-E3 | Primary HD address; 1F0-1F7 |
| E4-E5 | Secondary floppy address, 370-377 |
| E5-E6 | Primary floppy address, 3F0-3F7 |
| E7-E8 | 300/360 RPM floppies (single speed) |
| E8-E9 | Dual speed floppies |

WD 1003A-WA2

MFM. See WD 1003A-RA2.

WD 1003-RAH

RLL

| | | | |
|----|-------------|-----|--|
| W1 | 1-2 | Out | Non-latched Mode; HD LED only on during drive access; used for Compaqs. |
| | | In | Latched mode; HD LED permanently on; used for ATs |
| W2 | 3-4 | Out | Primary Addresses*, 1F0-1F7, 3F0-3F7 |
| | | In | Secondary Addresses, 170-177, 370-377 |
| W4 | 1-2 2-3 | In | No translation for drive 0* |
| | | In | Enables drive 0 translation to 17 s/track; only available for drives with 615 cyls/4 hds. Select a drive with 6 heads in CMOS setup. |
| W5 | 1-2 2-3 | In | WG and drive select lines are disabled during power up reset and when +5v power supply drops below approx +4.15v. |
| | | In* | WG and drive select lines only enabled when drive. |
| W6 | 1-2 2-3 | In | No translation for drive 1*. |
| | | In | Enables drive 1 translation to 17 secs per track; only available for drives with 615 cyls/4 hds. Select a drive with 6 heads in CMOS setup. |
| W7 | 1-2 3-4* | | Operates with daisy-chained drive(s) Both can be daisy-chained from J1, or drive 0 can be connected to J1 and drive 1 to J5. Set first drive as 0 and second as 1. |
| | | | Operates with parallel connected drives. Attach drive 1 to J1, drive 0 to J5. Set both drives as 0. |
| | 1-3 2-4 | | |
| W8 | 1-2 1 | | Ties input high* |
| | | 2-3 | Enables seek to landing zone (cylinder663) on any seek to cylinder drives. Also changes step rate 0 (24msec) to step rate 15 (11 msec). |

WD 1003(V)-MM1/2

MFM

| | | | |
|-----|-----|-------------------|--|
| W1 | 1-2 | Out | Latched mode*; HD LED permanently on; used for ATs |
| | | In | Non-latched mode; HD LED only on during drive access; used for Compaqs. |
| | 3-4 | Out | ECC 4-byte Enabled* |
| | | In | Reserved |
| 5-6 | Out | Cacheing enabled* | |
| | 7-8 | Out | Incompatible with WD 1003-WA2/H |
| | | In | Compatible with WD 1003-WA2/H (> 8 Hds). The WD1003-WAH numbers heads 8-15 as 0-7. |
| W3 | | In | HD Secondary Address |
| | | Out | HD Primary Address* |
| W4 | | In | Floppy Secondary Address |
| | | Out | Floppy Primary Address* |
| W5 | | In | Dual Speed Floppies |
| | | Out | Single Speed Floppies |
| W6 | | In | Bracket grounded |

WD 1003V-SR1/2—RLL

| | | | |
|-----|-----|-------------------|---|
| W1 | 1-2 | Out | Latched mode*; HD LED permanently on; used for ATs |
| | | In | Non-latched mode; HD LED only on during drive access; used for Compaqs. |
| | 3-4 | Out | ECC 4-byte* |
| | | In | ECC 7-byte |
| 5-6 | Out | Cacheing enabled* | |
| W2 | 1-2 | In | BIOS disabled |
| W3 | | In | HD Secondary Address |
| | | Out | HD Primary Address* |
| W4 | | In | Floppy Secondary Address |
| | | Out | Floppy Primary Address* |
| W5 | | In | Dual Speed Floppies |
| | | Out | Single Speed Floppies |
| W6 | | In | Bracket grounded |

WD 1004A-27X

RLL. Half size. The A version cannot be used as a secondary controller.

| | | |
|-----|------|---------------|
| R23 | Out* | Internal BIOS |
| | In | External BIOS |
| W27 | Out | IRQ5* |
| | In | IRQ2 |
| W28 | Out | XT Mode |
| | In | AT Mode |

Drive Tables

*1st drive **Second drive

| BIOS Table | Cap | Cyls | Hds | W17* | W18* | W19** | W20** |
|------------|-----|------|-----|------|------|-------|-------|
| 0 | 65 | 820 | 6 | In | In | In | In |
| 1 | 42 | 782 | 4 | Out | In | Out | In |
| 2 | 21 | 782 | 2 | In | Out | In | Out |
| 3 | 32 | 615 | 4 | Out | Out | Out | Out |

Address and BIOS ranges

| BIOS Address | I/O Address | W21 | W22 |
|--------------|-------------|------|------|
| C8000-C9FFF | 320-323 | Out* | Out* |
| CA000-CBFFF | 324-327 | In | Out |
| CC000-CDFFF | 328-32B | Out | In |
| CE000-CFFFF | 32C-32F | In | In |

Sector Settings/Translation

| Table | Cap | Sectors | Translate | Dynamic | W25 | W26 |
|-------|-----|---------|-----------|---------|-----|------|
| RLL | 65 | 17 | Yes | No | In* | Out* |
| RLL | 42 | 26 | No | Yes | Out | In |

WD 1004A-WX1

MFM

Drive Tables

| BIOS Table | Cap | Cyls | Hds | W17* | W18* | W19** | W20** |
|------------|-----|------|-----|------|------|-------|-------|
| 0 | 21 | 612 | 4 | In | In | In | In |
| 1 | 10 | 306 | 4 | Out | In | Out | In |
| 2 | 10 | 615 | 2 | In | Out | In | Out |
| 3 | 21 | 615 | 4 | Out | Out | Out | Out |

Address and BIOS ranges

| BIOS Address | I/O Address | W21 | W22 |
|--------------|-------------|------|------|
| C8000-C9FFF | 320-323 | Out* | Out* |
| CA000-CBFFF | 324-327 | In | Out |
| CC000-CDFFF | 328-32B | Out | In |
| CE000-CFFFF | 32C-32F | In | In |

Sector Settings/Translation

| Table | Cap | Sectors | Translate | Dynamic | R25 | R26 |
|-------|-----|---------|-----------|---------|-----|------|
| RLL | 65 | 17 | Yes | No | In* | Out* |
| RLL | 42 | 26 | No | Yes | Out | In |

WD 1005-WAH

ESDI

| | | |
|----|------|---|
| W1 | Out* | Not used |
| | In | Test setting for OEM |
| W2 | Out | Translation mode enabled (MS-DOS compatible). |

| | | | |
|----|------|----------------------------|--|
| | In | Translation mode disabled. | |
| W3 | 2-3* | Primary address | |
| | 1-2 | Secondary address | |

WD 1006-RAH

RLL

| | | | |
|-------|---------------------|------|---|
| W1 | 1-2 | In | Supports 16 heads. No RWC |
| | 2-3 | In | Supports 8 heads and RWC |
| W2 | | Out | No wait states requested |
| W3 | 1-2 | In | Primary Ports* |
| | 2-3 | In | Secondary ports |
| W4 | 1-2 | In | LED not latched; LED lights for drive select. Remove W10 if this installed. |
| W5,W6 | BIOS Address | | W5 |
| | | | W6 |
| | | | In |
| | | | In |
| | | | Out |
| | | | In |
| | | Out | Out |
| | | Out | In |
| | | Out | Out |
| W7 | 1-2 | In* | Enables BIOS |
| W8 | 1-2 | Out* | 4-byte ECC |
| | | In | 7-byte ECC |
| W9 | | Out* | Enables cacheing |
| W10 | 1-2 | Out* | Non-latched mode |
| | | In | Latched mode |

WD 1006-WAH

| | | | |
|-------|-----|-----|--|
| W1 | 1-2 | In* | Supports 16 heads. No RWC |
| | 2-3 | In | Supports 8 heads and RWC |
| W2 | 1-2 | | Not used with F001 (no wait state hardware) |
| W3 | 1-2 | In | Primary Ports* |
| | 2-3 | In | Secondary ports |
| W4 | 1-2 | In | Drive LED is not latched. Remove W10 if this is installed. |
| W5-W8 | | Out | Reserved for WD 1006-RAH |
| W9 | 1-2 | In | On F001 disables cacheing |
| W10 | | Out | Non-latched mode (factory setting). |
| W11 | | Out | Isolates mounting bracket from board logic ground |

WD 1006(S)-WAH

| | | | |
|----|-----|-----|--|
| W1 | 1-2 | In | Drive LED is non-latched*. Remove W6 if this is installed. |
| | | Out | Drive LED is latched. |
| W2 | 1-2 | | Supports 16 heads. No RWC* |
| | 2-3 | | Supports 8 heads and RWC |
| W3 | 1-2 | Out | Cacheing enabled* |
| W4 | 1-2 | In | Connects mounting bracket to board logic ground |
| W5 | 1-2 | In | Selects primary ports. Etch connects pins 1 and 2.* |
| | 2-3 | In | Selects secondary ports. Requires cutting etch between pins 1 and 2 and installing a jumper. |
| W6 | 1-2 | Out | Non-Latched mode* |

WD 1006V-MC1

MFM. For PS/2 Model 50, 60, 80 systems. V boards can run in high speed AT systems (10-16 Mhz). With one ESDI and one ST506 drive, the Micro Channel architecture always selects ESDI as C.

WD 1006V-MCR

RLL. See WD 1006C-MC1.

WD 1006V-MM1/2

MFM. You can't disable the floppy controller. Supplied with Speedkit.

| | | | |
|-----|-----|--|---|
| W1 | 1-2 | In | Non-latched Mode (LED on when drive accessed) |
| | | Out | Latched mode* (LED always on) |
| | 3-4 | Out | ECC 4-byte Enabled* |
| | | In | Reserved |
| 5-6 | Out | Cacheing enabled* | |
| 7-8 | Out | Incompatible with WD 1003-WA2/H | |
| | In | Compatible with WD 1003-WA2/H (> 8 Hds). The WD1003-WAH numbers heads 8-15 as 0-7. | |
| W3 | 1-2 | In | HD Secondary Address |
| | | Out | HD Primary Address* |
| W4 | 1-2 | In | Floppy Secondary Address |
| | | Out | Floppy Primary Address* |
| W5 | 1-2 | In | Dual Speed Floppies |
| | | Out | Single Speed Floppies |
| W6 | 1-2 | In | Bracket grounded |

WD 1006V-SM1/SM2

See WD 1006V-MM1/MM2.

WD 1006V-SR1/2

RLL

| | | | |
|-----|-----|-------------------|-----------------------------------|
| W1 | 1-2 | In | Non-latched Mode |
| | | Out | Latched mode* |
| | 3-4 | Out | ECC 4-byte* |
| In | | ECC 7-byte | |
| 5-6 | Out | Cacheing enabled* | |
| W2 | 1-2 | In | BIOS Disabled |
| W3 | 1-2 | In | HD Secondary Address |
| | | Out | HD Primary Address* |
| W4 | 1-2 | In | Floppy Secondary Address |
| | | Out | Floppy Primary Address* |
| W5 | 1-2 | In | Dual Speed Floppies |
| | | Out | Single Speed Floppies |
| W6 | 1-2 | In | Bracket connected to board ground |

WD 1007-WA2

ESDI

| W1, W2 | In | BIOS Address | W1 | W2 |
|--------|------|---|-----|-----|
| | | C8000-C9FFF | 2-3 | 2-3 |
| | | CA000-CBFFF | 2-3 | 1-2 |
| | | CC000-CDFFF | 1-2 | 2-3 |
| | | CE000-CFFFF | 1-2 | 1-2 |
| W3 | Out | BIOS disabled | | |
| W4 | Out | Floppy disabled | | |
| W5 | Out | Single speed floppy | | |
| W6 | 2-3 | Floppy address select (3FX) | | |
| W7 | 1-2 | Floppy drive type | | |
| W8 | Out* | WD1007 Mode. Firmware forces a 10 MHz drive to 35 secs/track when using the Set Unformatted Bytes per Sector command. This mode supports a 1:1 interleave. | | |
| | In | Allows the WD1007A-WA2 to be used as a replacement board for the WD1005-WAH without reformatting the drive. The controller reads the Unformatted Bytes Per Sector from the drive. | | |
| W9 | Out | Chassis ground disconnected | | |
| W10 | Out* | Digital Input Register unlatched | | |
| W11 | Out | Diskette change enable (with FDC Option) | | |
| W12 | Out | Secondary address select (1FX) | | |

| | | |
|-----|------|----------------------------|
| W14 | Out | Sector Translation Enabled |
| W15 | Out* | 7-byte ECC |
| | In | 4-byte ECC |

WD 1007A-WA2

ESDI. Feature 0 (F000) does not have the BIOS.

| | | | | |
|-------|-----|---------------------|--|-----------|
| W1,W2 | In | BIOS Address | W1 | W2 |
| | | C8000-C9FFF | 2-3 | 2-3 |
| | | CA000-CBFFF | 2-3 | 1-2 |
| | | CC000-CDFFF | 1-2 | 2-3 |
| | | CE000-CFFFF | 1-2 | 1-2 |
| | 3-4 | Out | ECC 4-byte* | |
| | | In | ECC 7-byte | |
| | 5-6 | Out | Cacheing enabled* | |
| W3 | 1-2 | In | BIOS Disabled | |
| | | Out | BIOS Enabled | |
| W4 | 1-2 | Out | Floppy enabled | |
| W5 | | Out | Single Speed Floppy (125 ns precomp)* | |
| | | In | Dual Spindle Speed Floppy | |
| W6 | 1-2 | | Floppy Address Select (37X) | |
| | 2-3 | | Floppy Address Select (3FX)* | |
| W7 | 1-2 | | Floppy Drive Select | |
| W8 | | Out* | WD1007 Mode. Forces 10 MHz ESDI drive to 35 secs per track when using the Set Unformatted Bytes Per Sector command. Supports 1:1 interleave. | |
| | | In | Can be used as replacement board for the WD1005-WAH without reformatting drive. Controller reads Unformatted Bytes/Sector from drive. | |
| W9 | 1-2 | Out | Chassis ground disconnected | |
| W10 | | Out* | Digital Input Register Unlatched | |
| W11 | | In* | Diskette Change Enable (with FDC Option) | |
| W12 | | Out* | Secondary Address Select (1FX) | |
| W13 | | In | Floppy Controller Enabled (Etch) | |
| W14 | | Out* | Sector Translation Enabled | |
| W15 | | Out* | 4 bytes ECC | |
| | | In | 7 bytes ECC | |

WD 1007A-WA4

ESDI. Supports only hard sectored drives.

| | | | | | |
|-----|-----|------|---|------------|-------------|
| W1 | 1-2 | | Primary floppy address (3FX)* | | |
| | 2-3 | | Disable Floppy controller | | |
| | 3-4 | | Secondary floppy address (37X) | | |
| W2 | 1-2 | | Primary hard disk address (1FX)* | | |
| | 2-3 | | Secondary hard disk address (17X) | | |
| W3 | 1-2 | | Primary parallel port address (37X) | | |
| | 2-3 | | Disable parallel port | | |
| | 3-4 | | Secondary parallel port address (27X) | | |
| W4 | 1-2 | | Primary serial port address (3FX)* | | |
| | 2-3 | | Disable serial port | | |
| | 3-4 | | Secondary serial port address (2FX) | | |
| W9 | | Out* | Digital input register, non-latched | | |
| | | In | Digital input register, latched | | |
| W13 | | | W13 | W14 | W15 |
| W14 | | | off | xx | Function |
| W15 | | | on | 1-2 | 1-2 |
| | | | 1-2 | 2-3 | CE00-CFFF |
| | | | 2-3 | 1-2 | CC000-CDFFF |
| | | | 2-3* | 2-3 | CA000-CBFFF |
| | | | | | C8000-C9FFF |
| W16 | 1-2 | Out* | WD 1007 mode (always 35 sectors per track)/WD 1005 mode | | |

| | | | |
|-----|------|----|-------------------------|
| | | In | |
| 3-4 | Out* | | Translation enabled |
| | | In | |
| 5-6 | Out* | | 4 bytes ECC 7 bytes ECC |
| | | In | |

WD 1007A-WAH

ESDI. Hard sector mode only. Feature 0 (F000) does not have the BIOS.

| | | | | | |
|-------|-----|--------|---|-----------|-----------|
| W1,W2 | | In | BIOS Address | W1 | W2 |
| | | | C8000-C9FFF | 2-3 | 2-3 |
| | | | CA000-CBFFF | 2-3 | 1-2 |
| | | | CC000-CDFFF | 1-2 | 2-3 |
| | | | CE000-CFFFF | 1-2 | 1-2 |
| W3 | 1-2 | In | BIOS Disabled | | |
| | | Out | BIOS Enabled | | |
| W8 | 1-2 | Out*In | WD 1007 mode (always 35 sectors per track)WD 1005 mode. | | |
| W9 | | Out* | Chassis Ground Disconnected | | |
| W10 | 5-6 | Out* | Digital input register, non-latched | | |
| W11 | | Out | Diskette Change Enable w/FDC Option | | |
| W12 | | Out | Secondary hard disk address (1FX) | | |
| W14 | | Out | Sector Translation Enabled | | |
| W15 | | Out* | 4 Bytes ECC* | | |
| | | In | 7 Bytes ECC | | |

WD 1007V-SE1/SE2

ESDI. If replacing a WD1007A with a WD1007V, install jumpers on W1 9-10/11-12 to save reformatting.

| | | | |
|-----|-------|------|--|
| W1 | 1-2 | In | Look ahead cacheing disabled. |
| | 3-4 | In | 7-byte ECC |
| | | Out | 4-byte ECC (most common) |
| | 5-6 | In | Controller uses true physical values of the drive. |
| | | Out* | Translation enabled |
| | 7-8 | Out* | Reserved |
| | 9-10 | In | Forces drive to 35 SpT, but not on drives with transfer rates of 15 Mbits/sec. |
| | | Out | Controller uses physical SpT as determined by the drive's jumper settings. |
| | 11-12 | In | Alternate sectors per track are provided, for operating systems which can accommodate only a certain number of errors. You will lose drive capacity. |
| W3 | 1-2 | In | Disable BIOS |
| W5 | 1-2 | In | Dual speed floppies |
| | | Out | Single speed floppies |
| W6 | 1-2 | Out* | Primary floppy address, 3F2-3F7 |
| | | In | Secondary floppy address, 372-377 |
| W7 | 1-2 | In | IRQ 14 |
| | 2-3 | In | IRQ 15 |
| W8 | 1-2 | In | BIOS address C8000-CFFFF |
| | 2-3 | In | BIOS address CC000-CFFFF |
| W12 | 1-2 | In | Primary HD address, 1F0-1F7 |
| | | Out | Secondary HD address, 170-177 |

WD 1009V-SE1/SE2

ESDI (EISA). There are two models; The -SE2 controls floppies as well. The enhanced EISA version has a chip at U51 capable of EISA Auto configuration.

| | | | |
|----|-----|-----|-----------------------------|
| W2 | 1-2 | | Centre twisted floppy cable |
| | 2-3 | | End twisted floppy cable |
| W3 | 1-2 | | AT type 1.4 Mb |
| | 2-3 | | PS/2 type 1.4 Mb |
| W4 | | Out | Card always enabled |

| | | | | | | | |
|-------|-------|----------------------------------|---|-----------|-----------|-----------|-----------|
| | | In | Card enabled by EISA host | | | | |
| W5 | 1-2 | In | Alternate sectors enabled; reserves 1 sect/track for bad sector swapping. | | | | |
| | 3-4 | In | Translation disabled. | | | | |
| | 5-6 | In | Physical sectors per track | | | | |
| | | Out* | Force 35/53 sectors per track on 10/15 Mb/s drives. | | | | |
| | 7-8 | Out* | 4-byte ECC | | | | |
| | | In | 7-byte ECC; only used for certain diagnostics. | | | | |
| | 9-10 | In | Look ahead cacheing disabled. | | | | |
| | | Out* | Look ahead cacheing enabled. | | | | |
| | 11-12 | In | Secondary BIOS address CC00 | | | | |
| | | Out* | Primary BIOS address C600 | | | | |
| | 13-14 | In | Disable BIOS | | | | |
| | 15-18 | In | IRQ | 15 | 16 | 17 | 18 |
| | | | 14 | 0 | 0 | 0 | 0 |
| | | | 11 | 1 | 1 | 1 | 1 |
| 12 | | | 1 | 1 | 0 | 0 | |
| 15 | | | 0 | 0 | 1 | 1 | |
| 19-20 | Out* | DMA channel 6 | | | | | |
| | In | DMA channel 7 | | | | | |
| 21-22 | Out* | Primary HD address, 1F0-1F7 | | | | | |
| | In | Secondary HD address, 170-177 | | | | | |
| 23-24 | Out* | HD controller enabled | | | | | |
| W6 | 1-2 | Out* | Floppy enabled | | | | |
| | 3-4 | Out* | Floppy DMA channel 2 | | | | |
| | | In | Floppy DMA channel 3 | | | | |
| | 5-6 | Out* | Primary floppy address, 3F0-3F7 | | | | |
| | | In | Secondary floppy address, 370-377 | | | | |
| | 7-8 | Out* | Single speed floppy | | | | |
| In | | Dual speed floppy | | | | | |
| W7 | Out* | EISA auto-configuration disabled | | | | | |

WDAT-140

| | | | |
|----|------|-----|--|
| W1 | 1-2 | 3-4 | |
| | Out* | In* | DIRQ 14 passed directly to host |
| | In | Out | For CP 342 or 3022 in IBM AT; DIRQ 14 gated to host. |

WDAT-240

| | | | |
|----|-----|------|-------------------------------------|
| W1 | 1-2 | Out | DIRQ 14 passed directly to host |
| | 3-4 | In | |
| W2 | 1-2 | In | Floppy primary address 3F0-3F7 |
| | 3-4 | Out | |
| | 1-2 | In | Floppy secondary address 370-377 |
| | 3-4 | In | |
| | 1-2 | Out | Floppy address 370-377 |
| | | 3-4 | |
| W3 | 1-2 | In | Dual speed floppy |
| | | Out* | Single speed floppy |
| W4 | 1-2 | In | Logic ground connected to chassis |
| | | Out | Logic ground independent of chassis |

WD 7000-FASST2

SCSI. Sold to Future Domain in 1991. Software from Columbia Data Products, called SST. The OEM version is the 7000-ASC; the consumer version, with software, is called 7000-FASST, or 7000-FASST2.

| | | |
|----|-----|-------|
| W1 | 1-2 | IRQ 3 |
| | 3-4 | IRQ 4 |
| | 5-6 | IRQ 5 |

| | | | | | | | |
|----|---------------------|------------|------------|------------|------------|-------------|---|
| | 7-8 | IRQ 7 | | | | | |
| | 9-10 | IRQ 9 | | | | | |
| W2 | 1-2 | DRQ 7 | | | | | |
| | 3-4 | DRQ 6* | | | | | |
| | 5-6 | DRQ 5 | | | | | |
| | 7-8 | DACK 7 | | | | | |
| | 9-10 | DACK 6* | | | | | |
| | 11-12 | DACK 5 | | | | | |
| | 13-14 | IRQ 15* | | | | | |
| | 15-16 | IRQ 14 | | | | | |
| | 17-18 | IRQ 12 | | | | | |
| | 19-20 | IRQ 11 | | | | | |
| | 21-22 | IRQ 10 | | | | | |
| W3 | I/O address | 1-2 | 3-4 | 5-6 | 7-8 | 9-10 | |
| | 300 | | 1 | 1 | 1 | 1 | 1 |
| | 308 | | 0 | 1 | 1 | 1 | 1 |
| | 310 | | 1 | 0 | 1 | 1 | 1 |
| | 318 | | 0 | 0 | 1 | 1 | 1 |
| | 320* | | 1 | 1 | 0 | 1 | 1 |
| | 328 | | 0 | 1 | 0 | 1 | 1 |
| | 330 | | 1 | 0 | 0 | 1 | 1 |
| | 338 | | 0 | 0 | 0 | 1 | 1 |
| | 340 | | 1 | 1 | 1 | 0 | 1 |
| | 348 | | 0 | 1 | 1 | 0 | 1 |
| | 350 | | 1 | 0 | 1 | 0 | 1 |
| | 358 | | 0 | 0 | 1 | 0 | 1 |
| | 360 | | 1 | 1 | 0 | 0 | 1 |
| | 368 | | 0 | 1 | 0 | 0 | 1 |
| | 370 | | 1 | 0 | 0 | 0 | 1 |
| | 378 | | 0 | 0 | 0 | 0 | 1 |
| | 380 | | 1 | 1 | 1 | 1 | 0 |
| | 388 | | 0 | 1 | 1 | 1 | 0 |
| | 390 | | 1 | 0 | 1 | 1 | 0 |
| | 398 | | 0 | 0 | 1 | 1 | 0 |
| | 3A0 | | 1 | 1 | 0 | 1 | 0 |
| | 3A8 | | 0 | 1 | 0 | 1 | 0 |
| | 3B0 | | 1 | 0 | 0 | 1 | 0 |
| | 3BH | | 0 | 0 | 0 | 1 | 0 |
| | 3C0 | | 1 | 1 | 1 | 0 | 0 |
| | 3C8 | | 0 | 1 | 1 | 0 | 0 |
| | 3D0 | | 1 | 0 | 1 | 0 | 0 |
| | 3D8 | | 0 | 0 | 1 | 0 | 0 |
| | 3E0 | | 1 | 1 | 0 | 0 | 0 |
| | 3E8 | | 0 | 1 | 0 | 0 | 0 |
| | 3F0 | | 1 | 0 | 0 | 0 | 0 |
| | 3F8 | | 0 | 0 | 0 | 0 | 0 |
| W4 | BIOS address | 1-2 | 3-4 | 5-6 | 7-8 | | |
| | C000 | | 1 | 1 | 1 | 1 | |
| | C200 | | 0 | 1 | 1 | 1 | |
| | C400 | | 1 | 0 | 1 | 1 | |
| | C600 | | 0 | 0 | 1 | 1 | |
| | C800 | | 1 | 1 | 0 | 1 | |
| | CA00 | | 0 | 1 | 0 | 1 | |
| | CC00 | | 1 | 0 | 0 | 1 | |
| | CE00 | | 0 | 0 | 0 | 1 | |
| | D000 | | 1 | 1 | 1 | 0 | |
| | D200 | | 0 | 1 | 1 | 0 | |
| | D400 | | 1 | 0 | 1 | 0 | |
| | D600 | | 0 | 0 | 1 | 0 | |

| | | | | | | | |
|-------|------|------|--------------------------------------|-----------|-----------|---|---|
| | | | D800* | 1 | 1 | 0 | 0 |
| | | | DA00 | 0 | 1 | 0 | 0 |
| | | | DC00 | 1 | 0 | 0 | 0 |
| | | | DE00 | 0 | 0 | 0 | 0 |
| W5 | 1-2 | In | Terminator power | | | | |
| W7 | 1-2 | In | Dual Speed (300/360) floppy support | | | | |
| | | Out* | Single Speed floppies only (300 rpm) | | | | |
| W8 | 1-2 | In | Floppy write precomp 187 ns | | | | |
| | | Out* | Floppy write precomp 125 ns | | | | |
| W6,W9 | | | Floppy support | W6 | W9 | | |
| | | | Disabled | 1 | 1 | | |
| | | | w/hard card 0 | 1 | | | |
| +W98 | | In* | BIOS enabled | | | | |
| +W99 | 1-2 | | Reserved | | | | |
| | 2-3 | | 8Kx8 ROMs | | | | |
| +W100 | | | Reserved—must be jumpered | | | | |
| +W200 | 1-2 | | 1st floppy PS/2 type | | | | |
| | 2-3* | | 1st floppy AT/ANSI type | | | | |
| +W201 | 1-2 | | 2nd floppy PS/2 type | | | | |
| | 2-3* | | 2nd floppy AT/ANSI type | | | | |

WDXT-GEN

No jumpers to select. Discontinued March 1989.

WDXT-GEN2

Disable BIOS in AT&T 6300(T).

WDXT-GEN2

MFM

| | | |
|-----|------|---------------|
| R23 | In | External BIOS |
| | Out* | Internal BIOS |
| R27 | Out* | IRQ5* |
| | In | IRQ2 |

Drive Tables

*First hard disk **2nd hard disk

| BIOS Table | Cap | Cyls | Hds | W17* | W18* | W19** | W20** |
|------------|-----|------|-----|------|------|-------|-------|
| 0 | 21 | 612 | 4 | In | In | In | In |
| 1 | 10 | 306 | 4 | Out | In | Out | In |
| 2 | 10 | 615 | 2 | In | Out | In | Out |
| 3 | 21 | 615 | 4 | Out | Out | Out | Out |

Address and BIOS ranges

| BIOS Address | I/O Address | R21 | R22 |
|--------------|-------------|------|------|
| C8000-C9FFF | 320-323 | Out* | Out* |
| CA000-CBFFF | 324-327 | In | Out |
| CC000-CDFFF | 328-32B | Out | In |
| CE000-CFFFF | 32C-32F | In | In |

WD XT-GEN2 Plus

MFM

| | | |
|---------|------|---------|
| W25,W26 | Out* | |
| W27 | Out | IRQ5* |
| | In | IRQ2 |
| W28 | Out | XT Mode |
| | In | AT Mode |

Drive Tables

*First hard disk **2nd hard disk

| BIOS Table | Cap | Cyls | Hds | W17* | W18* | W19** | W20** |
|------------|-----|------|-----|------|------|-------|-------|
| 0 | 21 | 612 | 4 | In | In | In | In |
| 1 | 10 | 306 | 4 | Out | In | Out | In |
| 2 | 10 | 615 | 2 | In | Out | In | Out |
| 3 | 21 | 615 | 4 | Out | Out | Out | Out |

Address and BIOS ranges

| BIOS Address | I/O Address | W21 | W22 |
|--------------|-------------|------|------|
| C8000-C9FFF | 320-323 | Out* | Out* |
| CA000-CBFFF | 324-327 | In | Out |
| CC000-CDFFF | 328-32B | Out | In |
| CE000-CFFFF | 32C-32F | In | In |

WD XT-GEN2R

RLL

| | | |
|-----|-----|---------------|
| R23 | In | External BIOS |
| | Out | Internal BIOS |
| R27 | Out | IRQ5* |
| | In | IRQ2 |
| R28 | Out | XT Mode |
| | In | AT Mode |

Drive Tables

*First hard disk **2nd hard disk

| BIOS Table | Cap | Cyls | Hds | R17* | R18* | R19** | R20** |
|------------|-----|------|-----|------|------|-------|-------|
| 0 | 65 | 820 | 6 | In | In | In | In |
| 1 | 42 | 782 | 4 | Out | In | Out | In |
| 2 | 21 | 782 | 2 | In | Out | In | Out |
| 3 | 32 | 615 | 6 | Out | Out | Out | Out |

Address and BIOS ranges

| BIOS Address | I/O Address | R21 | R22 |
|--------------|-------------|------|------|
| C8000-C9FFF | 320-323 | Out* | Out* |
| CA000-CBFFF | 324-327 | In | Out |
| CC000-CDFFF | 328-32B | Out | In |
| CE000-CFFFF | 32C-32F | In | In |

Sector Settings/Translation

| Table | Sectors | Translate | Dynamic | R25 | R26 |
|-------|---------|-----------|---------|-----|------|
| RLL | 17 | Yes | No | In* | Out* |
| RLL | 26 | No | Yes | Out | In |

WD XT 150

IDE

| | | |
|----|-----|-----------------------------|
| W1 | 2-3 | Primary BIOS address C800 |
| | 1-2 | Secondary BIOS address C800 |
| W2 | 1-2 | Primary port address 320 |
| | 2-3 | Secondary port address 324 |
| W3 | 1-2 | IRQ 5* |
| | 2-3 | IRQ 2 |

WDATXT-FASST

| | | | | | | | |
|----|-------|-----|---|--------------------------|------------|------------|------------|
| W1 | All | Out | Single byte programmed I/O; slow but most reliable. | | | | |
| | 1-2 | In | DMA 1 | | | | |
| | 3-4 | In | Demand driven I/O (aka Blind I/O). Fastest. | | | | |
| | 1-2 | In | DMA 3 | | | | |
| | 5-6 | In | | | | | |
| W2 | | | I/O address | 1-2 | 3-4 | 5-6 | 7-8 |
| | | | 200 | 1 | 1 | 1 | 1 |
| | | | 220 | 0 | 1 | 1 | 1 |
| | | | 240 | 1 | 0 | 1 | 1 |
| | | | 250 | 0 | 0 | 1 | 1 |
| | | | 280 | 1 | 1 | 0 | 1 |
| | | | 200 | 0 | 1 | 0 | 1 |
| | | | 2C0 | 1 | 0 | 0 | 1 |
| | | | 2E0 | 0 | 0 | 0 | 1 |
| | | | 300 | 1 | 1 | 1 | 0 |
| | | | 320 | 0 | 1 | 1 | 0 |
| | | | 340 | 1 | 0 | 1 | 0 |
| | | | 360 | 0 | 0 | 1 | 0 |
| | | | 380 | 1 | 1 | 0 | 0 |
| | | | 3A0 | 0 | 1 | 0 | 0 |
| | | | 3C0 | 1 | 0 | 0 | 0 |
| | | | 3E0 | 0 | 0 | 0 | 0 |
| | | | Try reversing the above! | | | | |
| W3 | | | BIOS address | 1-2 | 3-4 | 5-6 | 7-8 |
| | | | C800* | 1 | 0 | 1 | 1 |
| | | | CC00 | 0 | 0 | 1 | 1 |
| | | | D000 | 1 | 1 | 0 | 1 |
| | | | D400 | 0 | 1 | 0 | 1 |
| | | | D800* | 1 | 0 | 0 | 1 |
| | | | DC00 | 0 | 0 | 0 | 1 |
| W4 | 1-2 | | IRQ 2 | Also W1 9-10 | | | |
| | 3-4 | | IRQ 3 | Also W1 7-8, 9-10 | | | |
| | 5-6 | | IRQ 4 | Also W1 11-12 | | | |
| | 7-8 | | IRQ 5 | Also W1 7-8, 11-12 | | | |
| | 9-10 | | IRQ 6 | Also W1 9-10, 11-12 | | | |
| | 11-12 | | IRQ 7 | Also W1 7-8, 9-10, 11-12 | | | |
| W5 | 1-2 | Out | No signal lines tied between W1 and W2. | | | | |
| | 3-4 | Out | | | | | |
| | 1-2 | In | W1/9-10 tied to W2/3-4 | | | | |
| | 3-4 | Out | | | | | |
| | 1-2 | Out | W1/11-12 tied to W2/3-4 | | | | |
| | 3-4 | In | | | | | |

Xebec

Xebec 1210/1220

ROM #106020

*First hard disk **2nd hard disk

| BIOS Table | Cyls | Hds | 1 | 2 | 3 | 4 |
|------------|------|-----|-----|-----|-----|-----|
| 0 | 306 | 2 | In | In | In | In |
| 1 | 375 | 8 | In | Out | In | Out |
| 2 | 375 | 6 | Out | In | Out | In |
| 3 | 306 | 4 | Out | Out | Out | Out |

ROM106022 #

*First hard disk **2nd hard disk

| BIOS Table | Cyls | Hds | 1 | 2 | 3 | 4 |
|------------|------|-----|-----|-----|-----|-----|
| 0 | 306 | 4 | In | In | In | In |
| 1 | 375 | 8 | In | Out | In | Out |
| 2 | 375 | 4 | Out | In | Out | In |
| 3 | 306 | 2 | Out | Out | Out | Out |

Tape Streamers

Wangtek

PC-02

Note: IRQ/DRQ/DACK as labelled on board.

| I/O Address | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|-------------|---|---|---|---|---|---|---|---|---|-----|
| 200 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | N/A |
| 238 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | N/A |
| 280 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | N/A |
| 288 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | N/A |
| 2AC | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | N/A |
| 300* | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | N/A |
| 338 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | N/A |
| 360 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | N/A |
| 368 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | N/A |

Notes

Memory/Multi I/O Cards

AST

Rampage! Mk 1

| | | | | | |
|------------|---|----------|-------------------------------|----------|-------------------|
| 1-1 to 1-4 | 1 | 2 | 3 | 4 | IO Address |
| | On | On | On | On | 208 |
| | On | On | On | Off | 218* |
| | On | Off | On | Off | 258 |
| | On | Off | Off | On | 268 |
| | Off | On | Off | On | 2AB |
| | Off | On | Off | Off | 2B8 |
| | Off | Off | Off | On | 2E8 |
| | Off | Off | Off | Off | Disabled |
| 1-5 to 1-6 | 5 | 6 | Backfill Start Address | | |
| | Off | Off | 0K | | |
| | On | Off | 64K | | |
| | Off | On | 256K | | |
| 1-7 to 1-8 | 7 | 8 | Banks used as Backfill | | |
| | On | On | 0 | | |
| | Off | On | 1* | | |
| | On | Off | 2 | | |
| | Off | Off | All | | |
| E1-E2 | Dual Page Mode disabled (E2-E3 enabled) | | | | |
| E8-E9 | Parity Check enabled | | | | |

Rampage XT

| | | | | | | |
|----------|--------------------|----------|----------|----------|----------|----------|
| Switch 1 | I/O Address | 1 | 2 | 3 | 4 | |
| 1 to 4 | | On | On | On | On | 208 |
| | | On | On | On | Off | 218* |
| | | On | Off | On | Off | 258 |
| | | On | Off | Off | On | 268 |
| | | Off | On | Off | On | 2AB |
| | | Off | On | Off | Off | 2B8 |
| | | Off | Off | Off | On | 2E8 |
| | | Off | Off | Off | Off | Disabled |

| | | | | | | | |
|--------------------|-------------------------|-----------------------------|----------|----------|------------|------------|------------|
| 5 to 6 | Banks Installed | 5 | 6 | | | | |
| | | On | On | 0K | | | |
| | | Off | On | 1 (256K) | | | |
| | | On | Off | 2 (512K) | | | |
| | | Off | Off | 3 (768K) | | | |
| | 7 | On = Dual Page Mode enabled | | | | | |
| | 8 | On = Parity Check enabled | | | | | |
| Switch 2 1 to 4 | Start Address | 1 | 2 | 3 | 4 | | |
| | | Off | Off | Off | Off | 0 | |
| | | On | Off | Off | Off | 64K | |
| | | Off | On | Off | Off | 128K | |
| | | On | On | Off | Off | 192K | |
| | | Off | Off | On | Off | 256K | |
| | | On | Off | On | Off | 320K | |
| | | Off | On | On | Off | 384K | |
| | | On | On | On | Off | 448K | |
| | | Off | Off | Off | On | 512K | |
| | | On | Off | Off | On | 576K | |
| | | Off | On | Off | On | 640K | |
| Switch 1 | 1 to 4 | 1 | 2 | 3 | 4 | | |
| | Start Address | Off | Off | Off | Off | 0 | |
| | | On | Off | Off | Off | 64K | |
| | | Off | On | Off | Off | 128K | |
| | | On | On | Off | Off | 192K | |
| | | Off | Off | On | Off | 256K | |
| | | On | Off | On | Off | 320K | |
| | | Off | On | On | Off | 384K | |
| | | On | On | On | Off | 448K | |
| | | Off | Off | Off | On | 512K | |
| | | On | Off | Off | On | 576K | |
| | | Off | On | Off | On | 640K* | |
| | 5 to 7 | 5 | 6 | 7 | Bk1 | Bk2 | Bk3 |
| | Banks Installed | Off | Off | Off | 256K | 256K | 256K |
| | | On | Off | Off | 64K | 256K | 256K |
| | | On | On | Off | 64K | 64K | 256K |
| | 8 | On=parity check enable | | | | | |
| Switch 2 | 1 to 4 | 1 | 2 | 3 | 4 | | |
| | I/O Address | On | On | On | On | 208 | |
| | | Off | On | On | Off | 218* | |
| | | Off | On | Off | On | 258 | |
| | | On | Off | Off | On | 268 | |
| | | On | Off | On | Off | 2AB | |
| | | Off | Off | On | Off | 2B8 | |
| | | Off | Off | On | Off | 2E8 | |
| | | Off | Off | Off | Off | Disabled | |
| | 5-8 | 5 | 6 | 7 | 8 | | |
| | Memory Installed | On | On | On | Off | 576K | |
| | | Off | Off | Off | On | 512K | |
| | | On | Off | Off | On | 448K | |
| | | Off | On | Off | On | 384K | |
| | | On | On | Off | On | 320K | |
| | | Off | Off | On | On | 256K | |
| | | On | Off | On | On | 192K | |
| | | Off | On | On | On | 128K | |
| | | On | On | On | On | 64K | |
| | | Off | Off | Off | Off | 0K | |
| | 7 | On = Dual Page Mode enabled | | | | | |

Rampage/EGA AT

| Switch 1 | 1 to 4 | 1 | 2 | 3 | 4 | |
|----------|------------------|---------------------------|----------|----------|----------|---------------|
| | Back fill | On | On | On | On | 128K* |
| | | On | On | On | Off | 256K |
| | | On | On | Off | On | 384K |
| | | On | On | Off | Off | 512K |
| | | On | Off | On | On | 640K |
| | | On | Off | On | Off | 768K |
| | | On | Off | Off | On | 896K |
| | | On | Off | Off | Off | 1024K |
| | | Off | On | On | On | 1152K |
| | | Off | On | On | Off | 1280K |
| | | Off | On | Off | On | 1408K |
| | | Off | On | Off | Off | 1536K |
| | | Off | Off | On | On | 1664K |
| | | Off | Off | On | Off | 1792K |
| | | Off | Off | Off | On | 1920K |
| | | Off | Off | Off | Off | 2048K |
| | 5 to 8 | 5 | 6 | 7 | 8 | IO Add |
| | I/O address | On | On | On | On | 208 |
| | | On | On | On | Off | 218* |
| | | On | Off | On | Off | 258 |
| | | On | Off | Off | On | 268 |
| | | Off | On | Off | On | 2AB |
| | | Off | On | Off | Off | 2B8 |
| | | Off | Off | Off | On | 2E8 |
| | | Off | Off | Off | Off | Disabled |
| Switch 2 | 8 | On=parity enabled | | | | |
| | 9 | On=Dual Page Mode enabled | | | | |

Monographplus Graphics Board

| | |
|---|--------------|
| 1 | Clock enable |
| 2 | COM 2 IRQ 3 |
| 3 | COM 1 IRQ4 |

Rampage AT

Note: Each bank has two rows of chips. 2 Meg max.

| Switch 1 | 1 to 4 | 1 | 2 | 3 | 4 | |
|----------|------------------|----------|----------|----------|----------|---------------|
| | Back fill | On | On | On | On | 128K* |
| | | On | On | On | Off | 256K |
| | | On | On | Off | On | 384K |
| | | On | On | Off | Off | 512K |
| | | On | Off | On | On | 640K |
| | | On | Off | On | Off | 768K |
| | | On | Off | Off | On | 896K |
| | | On | Off | Off | Off | 1024K |
| | | Off | On | On | On | 1152K |
| | | Off | On | On | Off | 1280K |
| | | Off | On | Off | On | 1408K |
| | | Off | On | Off | Off | 1536K |
| | | Off | Off | On | On | 1664K |
| | | Off | Off | On | Off | 1792K |
| | | Off | Off | Off | On | 1920K |
| | | Off | Off | Off | Off | 2048K |
| | 5 to 8 | 5 | 6 | 7 | 8 | IO Add |
| | I/O address | On | On | On | On | 208 |
| | | On | On | On | Off | 218* |

| | | | | | | |
|----------|-----|---------------------------|-----|-----|-----|----------|
| | | On | Off | On | Off | 258 |
| | | On | Off | Off | On | 268 |
| | | Off | On | Off | On | 2AB |
| | | Off | On | Off | Off | 2B8 |
| | | Off | Off | Off | On | 2E8 |
| | | Off | Off | Off | Off | Disabled |
| Switch 2 | 1-7 | Non-page memory | | | | |
| | 8 | On=parity enabled | | | | |
| | 9 | On=Dual Page Mode enabled | | | | |

I/O Plus II

Port Enable

| | |
|----|---------------------------|
| C1 | 1st serial as COM 1 |
| C2 | 1st serial as COM 2 |
| S2 | 2nd serial as COM2 |
| P2 | LPT1 (LPT2 with IBM mono) |
| P1 | LPT2 (LPT3 with IBM mono) |
| G | Game port enable |

IRQ Block

| | |
|----|------------------------------|
| 7 | Parallel (later boards only) |
| 5C | Clock to IRQ 5 |
| 5S | 2nd serial to IRQ 5 |
| 4 | 1st serial to IRQ 4 (COM 1) |
| 3 | 1st serial to IRQ 3 (COM 2) |
| 3S | 2nd serial to IRQ 3 (COM 2) |
| 2C | Clock to IRQ 2 |
| 2S | 2nd serial to IRQ 2 |

I/O Mini

| | |
|-----|---------------------------------|
| E1 | Clock enable |
| E2 | Parallel is LPT 1/2 |
| E3 | Parallel is LPT 2/3 |
| E4 | 1st serial to IRQ 3 (COM 2) |
| E5 | 1st serial to IRQ 4 (COM 1) |
| E6 | 1st serial is COM 1 |
| E7 | 1st serial is COM 2 |
| E8 | 2nd serial port enabled (COM 2) |
| E9 | 2nd serial to IRQ 3 (COM 2) |
| E10 | Parallel port IRQ 7 enable |

I/O Mini II

| | |
|-----|---------------------------------|
| E1 | 1-2 CTS |
| E2 | 1-2 DSR |
| E3 | 1-2 DCD |
| E4 | 1-2 CTS |
| E5 | 1-2 DCD |
| E6 | 1-2 DSR |
| E7 | 1-2 PCAT; 2-1 PCXT |
| E8 | 1st serial port enabled (COM 1) |
| E9 | 2nd serial (COM 2) disabled |
| E10 | LPT 1 enabled |
| E11 | LPT 2 disabled |
| E12 | Game port enabled |

| | |
|-----|---|
| E13 | Clock/calendar enabled |
| E14 | IRQ 3 for COM 2 (2nd serial port) disabled |
| E15 | IRQ 3 for COM 2 (1st serial port) disabled |
| E16 | IRQ 4 for COM 1 enabled |
| E17 | IRQ 7 for parallel port (LPT 1) enabled |
| E18 | Reserved, but in an AT, move E17 here to configure parallel for IRQ 5 |

MP Mini

DL1 On=Parity Enable

Shortpak

| 1 to 3 | 1 | 2 | 3 | | |
|----------------------|------------------|-----|-----|------|----------------------|
| Start Address | Off | Off | Off | 64K | |
| | Off | Off | On | 128K | |
| | Off | On | Off | 192K | |
| | Off | On | On | 256K | |
| | On | Off | Off | 320K | |
| | On | Off | On | 384K | |
| | On | On | Off | 448K | |
| | On | On | On | 512K | |
| 4 to 6 | 4 | 5 | 6 | | |
| Memory size | On | On | On | 576K | Bank 0 64K, 1,2 256K |
| | On | On | Off | 512K | Bank 0,1 256K |
| | On | Off | On | 384K | Bank 0,1 64K, 2 256K |
| | On | Off | Off | 320K | Bank 0 64K, 1 256K |
| | Off | On | On | 256K | Bank 0 256K |
| | Off | On | Off | 128K | Bank 0, 1 64K |
| | Off | Off | On | 64K | Bank 0 64K |
| | Off | Off | Off | 0K | |
| 8 | On=Enable Parity | | | | |

FastrAM

| 1 to 5 | 1 | 2 | 3 | 4 | 5 | |
|--------------------|-------|-----|-----|-----|--------|-------|
| Memory size | On | On | On | On | On | 128K* |
| | Off | On | On | On | On | 256K |
| | On | Off | On | On | On | 384K |
| | Off | Off | On | On | On | 512K |
| | On | On | Off | On | On | 640K |
| | Off | On | Off | On | On | 768K |
| | On | Off | Off | On | On | 896K |
| | Off | Off | Off | On | On | 1024K |
| | On | On | On | Off | On | 1152K |
| | Off | On | On | Off | On | 1280K |
| | On | Off | On | Off | On | 1408K |
| | Off | Off | On | Off | On | 1536K |
| | On | On | Off | Off | On | 1664K |
| | Off | On | Off | Off | On | 1792K |
| | On | Off | Off | Off | On | 1920K |
| Off | Off | Off | Off | On | 2048K | |
| 6 | On=1 | | | | | |
| Board No | Off=2 | | | | | |
| 7 to 10 | 7 | 8 | 9 | 10 | IO Add | |
| I/O address | On | On | On | On | 208 | |
| | Off | On | On | On | 218* | |
| | Off | On | Off | On | 258 | |
| | On | Off | Off | On | 268 | |
| On | Off | On | Off | 2AB | | |

| | | | | |
|-----|-----|-----|-----|-----|
| Off | Off | On | Off | 2B8 |
| On | Off | Off | Off | 2E8 |

SixPakPlus (Original)

| 1 to 3 | 1 | 2 | 3 | | |
|---------------|-----|-----|-----|------|--|
| Start Address | Off | Off | Off | 64K | |
| | Off | Off | On | 128K | |
| | Off | On | Off | 192K | |
| | Off | On | On | 256K | |
| | On | Off | Off | 320K | |
| | On | Off | On | 384K | |
| | On | On | Off | 448K | |
| | On | On | On | 512K | |

| 4 to 6 | Bks Installed | 4 | 5 | 6 | | |
|-------------|---------------|----|-----|-----|------|------|
| Memory size | 6 | On | Off | On | 384K | |
| | 5 | | On | Off | Off | 320K |
| | 4 | | Off | On | On | 256K |
| | 3 | | Off | On | Off | 128K |
| | 2 | | Off | Off | On | 64K |
| | 1 | | Off | Off | Off | 0K |

| | |
|---|------------------|
| 7 | Not used |
| 8 | On=Enable Parity |

Port Enable Jumpers

| | |
|---|-----------|
| 1 | COM 1 |
| 2 | COM 2 |
| 3 | LPT 1 |
| 4 | LPT 2 |
| 5 | Game Port |
| 6 | Clock |

Interrupts (earlier boards)

| | |
|------------|-----------------|
| 3S | COM 2 interrupt |
| 4S | COM 1 interrupt |
| 4, 5, 7, 2 | CLK interrupt |

Interrupts (later boards)

| | |
|---|-------------------|
| 3 | COM 2 interrupt |
| 4 | COM 1 interrupt |
| 7 | Printer interrupt |

RS232 block (earlier boards)

| | |
|---|-----|
| 1 | CTS |
| 2 | DSR |
| 3 | DCD |

RS232 block (later boards)

| | |
|---|------------|
| 1 | CTS True |
| 2 | CTS Normal |
| 3 | DSR True |
| 4 | DSR Normal |
| 5 | DCD True |
| 6 | DCD Normal |

SixPakPlus (Mica)

| 1 to 3 | 1 | 2 | 3 | | |
|---------------|------------------|-----|-----|------|----------------------|
| Start Address | Off | Off | Off | 64K | |
| | Off | Off | On | 128K | |
| | Off | On | Off | 192K | |
| | Off | On | On | 256K | |
| | On | Off | Off | 320K | |
| | On | Off | On | 384K | |
| | On | On | Off | 448K | |
| | On | On | On | 512K | |
| 4 to 6 | 4 | 5 | 6 | | |
| Memory size | On | On | On | 576K | Bank 0 64K, 1,2 256K |
| | On | On | Off | 512K | Bank 0,1 256K |
| | On | Off | On | 384K | Bank 0,1 64K, 2 256K |
| | On | Off | Off | 320K | Bank 0 64K, 1 256K |
| | Off | On | On | 256K | Bank 0 256K |
| | Off | On | Off | 128K | Bank 0, 1 64K |
| | Off | Off | On | 64K | Bank 0 64K |
| | Off | Off | Off | 0K | |
| 8 | On=Enable Parity | | | | |

IRQ block

| | |
|---|---------------|
| 3 | IRQ 3 – COM 2 |
| 4 | IRQ 4 – COM 1 |
| 7 | IRQ 7 – LPT 1 |

Port enable block

| | |
|------|----------------|
| CM1 | COM 1 |
| CM2 | COM 2 |
| LP 1 | LPT 1 |
| LP 2 | LPT 2 |
| GME | Game Port |
| CLK | Clock/Calendar |

RS 232C block

| | |
|---|------------|
| 1 | DSR True |
| 2 | DSR Normal |
| 3 | DCD True |
| 4 | DCD Normal |
| 5 | CTS True |
| 6 | CTS Normal |

Megaplus II

| S1 to S4 | 1 | 2 | 3 | 4 | |
|---------------|--------------------------------------|-----|-----|-----|------|
| Start Address | On | On | On | Off | 64K |
| | On | On | Off | On | 128K |
| | On | On | Off | Off | 192K |
| | On | Off | On | On | 256K |
| | On | Off | On | Off | 320K |
| | On | Off | Off | On | 384K |
| | On | Off | Off | Off | 448K |
| | Off | On | On | On | 512K |
| | Off | On | On | Off | 576K |
| S5/S6 | Used for split memory - normally off | | | | |
| S7 | On=parity enabled | | | | |
| S8 | Game port enable - not used | | | | |

Interrupts (Ancient)

| | |
|--------|---------------------------|
| 2S | Serial 2 to IRQ 2 |
| 2C | Clock to IRQ 2 |
| 3S (3) | Serial 2 to IRQ 3 (COM 2) |
| 3 (3S) | Serial 1 to IRQ 3 (COM 2) |
| 4 (4S) | Serial 1 to IRQ 4 (COM 1) |
| 4C | Clock to IRQ 4 |
| 5C | Clock to IRQ 5 |
| 5S | Serial 2 to IRQ 5 |
| 7C | Clock to IRQ 7 |

Serial/Clock

| | |
|----|---------------------|
| CS | Clock enable |
| C2 | 1st serial as COM 2 |
| C1 | 1st serial as COM 1 |
| S2 | 2nd serial as COM 2 |

Parallel

| | |
|----|---------------------------------------|
| P1 | Printer=LPT1 (or LPT 2 with IBM mono) |
| P2 | Printer=LPT2 (or LPT 3 with IBM mono) |

CC-432

| 1 to 2 | 1 | 2 | IO Add |
|--------|-------|-----|---------|
| | On | On | 300-30F |
| | Off | On | 320-32F |
| | On | Off | 340-34F |
| | Off | Off | 360-36F |
| 3 | IRQ 7 | | |
| 4 | IRQ 8 | | |
| 5 | IRQ 5 | | |
| 6 | IRQ 4 | | |
| 7 | IRQ 3 | | |
| 8 | IRQ 2 | | |

HotShot/286

| 1 to 3 | 1 | 2 | 3 | | |
|------------------------|-----|-----|-----|----------|-------------|
| Cached area (base) | Off | Off | Off | disabled | |
| | On | Off | Off | 0-256K | |
| | Off | On | Off | disabled | |
| | On | On | Off | disabled | |
| | Off | Off | On | disabled | |
| | On | Off | On | 0-512K | |
| | Off | On | On | 0-576K | |
| | On | On | On | 0-640K | |
| 4 to 7 | 4 | 5 | 6 | 7 | |
| Cached area (extended) | Off | Off | Off | Off | disabled |
| | On | Off | Off | Off | C0000-CFFFF |
| | On | On | Off | Off | C4000-D3FFF |
| | Off | On | On | Off | CC000-DBFFF |
| | Off | Off | On | Off | D0000-DFFFF |
| | On | Off | On | Off | D4000-E3FFF |
| | On | On | On | Off | D8000-E7FFF |
| | On | On | On | On | DC000-EBFFF |
| | Off | On | On | On | E0000-EFFFF |
| | Off | Off | On | On | CC000-EFFFF |

| | | | | |
|-----|-----|-----|----|-----------------------------|
| On | Off | On | On | CC000-EFFFF A0000-AFFFF |
| On | Off | Off | On | CC000-EFFFF A0000-B7FFFF |
| On | On | Off | On | CC000-DBFFFF A0000-AFFFF |
| Off | On | Off | On | CC000-DBFFF A0000-B7FFF |
| Off | Off | Off | On | D0000-DFFFF A0000-B7FFF |

220

| | |
|-----|--------|
| E5 | IRQ 3* |
| E6 | IRQ 4 |
| E7 | IRQ 5 |
| E8 | IRQ 6 |
| E9 | IRQ 7 |
| E10 | DRQ 1 |
| E11 | DACK 1 |
| E12 | DRQ 3 |
| E13 | DACK 3 |

Notes

Scanner Cards

Canon

IX31F

For IX-12 scanner; half-size. The Mk I is full-size, with only two jumpers. Switches are On when down. Software is ixhnd2.com, from Canon, plus a device driver from scanner software.

| SW5,SW6 | I/O address | SW5 | SW6 | | | | |
|---|----------------|-----|-----|-----|-------------------|---|-------|
| | 308-30F* | 0 | 0 | | | | |
| | 318-31F | 0 | 1 | | | | |
| | 1A8-1AF | 1 | 0 | | | | |
| | Not selectable | | 1 | 1 | | | |
| 1A8-1AF cannot be used on IBMs and compatibles. | | | | | | | |
| SW1,SW2 SW3,SW3 | Mem addr | SW1 | SW2 | SW3 | SW4 (:0000-:0FFF) | | |
| | C000 | | 1 | 1 | 1 | 1 | |
| | C400 | | 0 | 1 | 1 | 1 | |
| | C800* | | 1 | 0 | 1 | 1 | |
| | CC00 | | 0 | 0 | 1 | 1 | |
| | D000 | | 1 | 1 | 0 | 1 | (VGA) |
| | D400 | | 0 | 1 | 0 | 1 | (EGA) |
| | D800* | | 1 | 0 | 0 | 1 | |
| | DC00 | | 0 | 0 | 0 | 1 | |
| | E000 | | 1 | 1 | 1 | 0 | |
| | E400 | | 0 | 1 | 1 | 0 | |
| | E800 | | 1 | 0 | 1 | 0 | |
| | EC00 | | 0 | 0 | 1 | 0 | |
| | F000 | | 1 | 1 | 0 | 0 | |
| | F400 | | 0 | 1 | 0 | 0 | |
| | F800 | | 1 | 0 | 0 | 0 | |
| | FC00 | | 0 | 0 | 0 | 0 | |

Notes

Video Cards

Many VGA cards have a jumper setting to give 0 or 1 wait states for the memory on board; worth trying to get better performance, but not if your bus is running too fast. There may also be a jumper (particularly on Tridents J7) that will run monitors at higher speeds, and one for switching between 8/16 bit. The BIOS in early IBM PCs (1981-82) cannot recognise advanced graphics adapters; as a rule of thumb, if there is more than 64K of memory on the board, you may have a problem.

Tandon/Taxan (plus others)

EGA

Switch 5 is for Int mode. Jumper is always 1-2.

| | 1 | 2 | 3 | 4 |
|------|-----|-----|-----|-----|
| Mono | Off | Off | On | Off |
| CGA | Off | Off | Off | On |
| EGA | Off | On | On | Off |

EGA Supreme

5, 6 and 7 must be set for the monitor type.

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|------|-----|----|----|-----|-----|-----|-----|----|
| Mono | Off | On | On | Off | Off | On | Off | On |
| CGA | On | On | On | Off | On | On | Off | On |
| EGA | Off | On | On | Off | On | Off | Off | On |
| Comp | On | On | On | Off | On | On | Off | On |

Trident

TVGA 9000

| | | |
|----|--------|---------------------------------|
| J7 | On | Interlaced (default) |
| J8 | Off | Autodetect 8/16 bit |
| | On | Disable |
| J9 | Open | 16 bit – must be open for 9000B |
| | Closed | 8 bit |

Unknown

ET 4000/W32P

| | | |
|-----|-----|------------------------|
| JP1 | 1-2 | IRQ2 enabled |
| | 2-3 | Disabled |
| JP2 | 1-2 | DAC Snoop disabled |
| | 2-3 | Enabled |
| JP3 | 1-2 | Delay command disabled |
| | 2-3 | Enabled |

CD-ROM Cards

Hitachi

CD-IF14/18/35

IP:address (as specified above) required for device driver.

| | |
|---------|-----|
| S7, 360 | 36F |
| S6, 340 | 34F |
| S5, 320 | 32F |
| S4, 300 | 30F |
| S3, 260 | 26F |
| S2, 240 | 24F |
| S1, 220 | 22F |
| S0, 200 | 20F |

Notes

Sound Cards

Gravis

UltraSound Classic rev 2.1 - 3.74

Rev 2.1-2.4 has a joystick enable/disable jumper at JP 2.

Rev 3.4 - 3.74 uses software:

ultrinit -ej to enable and **ultrinit -dj** to disable.

Base I/O address:

| <i>Address</i> | 4 | 5 | 6 | 7 |
|----------------|-----|-----|-----|-----|
| 210 | OFF | ON | ON | ON |
| 220 | ON | OFF | ON | ON |
| 230 | OFF | OFF | ON | ON |
| 240 | ON | ON | OFF | ON |
| 250 | OFF | ON | OFF | ON |
| 260 | OFF | ON | ON | OFF |

The four other banks of jumpers were removed when a 16-bit recording daughterboard was added, and should all be set to **On Off On Off** if the daughterboard is not used.

Notes

Network Cards

AST

8-bit long card

| IRQ | SW | 1-1 | 1-2 | | |
|-----|--------|-----|-----|--|--|
| | IRQ 2* | On | On | | |
| | IRQ 3 | Off | On | | |
| | IRQ 4 | On | Off | | |
| | IRQ 5 | Off | Off | | |

| Memory-Mapped Address Space | SW | 1-5 | 1-6 | 1-7 | 1-8 |
|--------------------------------|--------------|-----|-----|-----|-----|
| | C0000-C3FFF | On | On | On | On |
| | C4000-C7FFF | Off | On | On | On |
| | C8000-CBFFF | On | Off | On | Off |
| | CC000-CFFFF* | Off | Off | On | On |
| | D0000-D3FFF | On | On | Off | On |
| | D4000-D7FFF | Off | On | Off | On |
| | D8000-DBFFF | On | Off | Off | On |
| | DC000-DFFFF | Off | Off | Off | On |
| | E0000-E3FFF | On | On | On | Off |
| | E4000-E7FFF | Off | On | On | Off |
| | E8000-EBFFF | Off | Off | On | Off |

Coax II

Beta version has jumpers for IRQ.

| Base I/O Address | SW | 1 | 2 |
|------------------|------|-----|-----|
| | 02Dx | Off | Off |
| | 06Dx | Off | On |
| | 0ADx | On | Off |
| | 0EDx | On | On |

| Segment & Control I/O Address | SW | 3 | 4 |
|----------------------------------|-----------|-----|-----|
| | 0250/0251 | Off | Off |
| | 0350/0351 | Off | On |
| | 0450/0451 | On | Off |
| | 0550/0551 | On | On |

| | | |
|-----|--------|---|
| IRQ | IRQ 2* | 5 |
|-----|--------|---|

| | |
|-------|---|
| IRQ 3 | 6 |
| IRQ 4 | 7 |
| IRQ 5 | 8 |

Star Port

E1 should always be installed

| I/O Address | 0380-038F | E2 Installed | | |
|-------------|-----------|--------------|------------|------------|
| | 0390-039F | E2 removed | | |
| IRQ | SW | | 1-1 | 1-2 |
| | IRQ 2* | | On | On |
| | IRQ 3 | | On | Off |
| | IRQ 4 | | Off | On |
| | IRQ 5 | | Off | Off |
| DMA | SW | | 1-3 | 1-4 |
| | 1 | | On | On |
| | 2 | | On | Off |
| | 3 | | Off | On |
| | Not used | Off | Off | |

Novell/Eagle

NE 1000/NE2000

| I/O | I/O | W9 | W10 | W11 | | |
|-----|------------|------------|------------|------------|------------|--|
| | 300 | On | On | Off | | |
| | 320 | Off | On | Off | | |
| | 340 | On | Off | Off | | |
| | 360 | Off | Off | Off | | |
| IRQ | IRQ | W12 | W13 | W14 | W15 | |
| | 2 | On | Off | Off | Off | |
| | 3 | Off | On | Off | Off | |
| | 4 | Off | Off | On | Off | |
| | 5 | Off | Off | Off | On | |

Western Digital

Each board has RAM buffer of 8, 16, or 32 K that occupies memory space. Base address set by software.

EtherCard PLUS (WD8003E) with Boot ROM Socket (WD8003EBT)

| Jumper | Pins | Name | Function when selected |
|--------|--------------|----------|--|
| W1 | 1-2 | Zero | Select 0 wait states for optimized Wait operation in a 6MHz AT (default is jumper removed, which ensures correct operation in faster AT bus systems). Ignored in XT bus systems. |
| | 3-4 | I/O Base | 3-4*5-6*9-10* 280 |
| | 5-6 | | 5-6, 9-10 2A0 |
| | 7-8 | | 3-4, 9-10 2C0 |
| | 9-10 | | 9-10 2E0 |
| | | | 3-4, 5-6, 7-8 300 |
| | 5-6, 7-8 320 | | |
| | 3-4, 7-8 340 | | |
| W2 | 1-2 | | IRQ 7 |
| | 3-4 | | IRQ 6 |
| | 5-6 | | IRQ 5 |
| | 7-8 | | IRQ 4 |
| | 9-10 | | IRQ 3 |
| | 11-12 | | IRQ 2 |
| W3 | 1-2 | AUI/BNC | All jumpered for BNC (Thin Ethernet) |
| | 3-4 | | All off for AUI (Thick Ethernet) |

| | | | |
|-----|-----------|----------------|--|
| | 5-6 | | W4 1-2 Ethernet Version |
| | 7-8 | | Out for Thin Ethernet and 802.3/V 2 Thick Ethernet*. In for Thick Ethernet v1. |
| | 9-10 | | |
| | 11-12 | | |
| W5 | 1-2 | Segment Length | In for 802.3 standard (185m) Out for 300m extended |
| W6 | 1-2 | ROM | Open |
| | 3-4 | Address | C0000 (16K, 32K, 64K ROMs) C4000 (16K ROMs) C8000 (16K, 32K ROMs) CC000 (16K ROMs) D0000 (16K, 32K, 64K ROMs) D4000 (16K ROMs) |
| | 5-6 | | |
| | 7-8 | | |
| | 9-10 | | |
| | | | 1-2, 5-6 3-4*, 5-6* D8000 (16K, 32K ROMs) 1-2, 3-4, 5-6 DC000 (16K ROMs) 7-8*, 9-10* Disabled (disabled) Do not use C0000 or C4000 for Boot ROMs |
| W6 | 7-8, 9-10 | ROM | Disabled |
| W9 | 2-3 | Size | |
| W10 | 2-3 | | |
| W6 | Open | ROM | 16K |
| W9 | 2-3 | Size | |
| W10 | 2-3 | | |
| W6 | 7-8 | ROM | 32K |
| W9 | 2-3 | Size | |
| W10 | 1-2 | | |
| W6 | 9-10 | ROM | 64K |
| W9 | 1-2 | Size | |
| W10 | 1-2 | | |
| W7 | 2-3* | RAM | 8K RAM. Valid 8 K RAM base addresses are C0000, C2000, C8000, CA000, D0000, D2000, D8000, and DA000 |
| W8 | 2-3* | Buffer | |
| W11 | 2-3* | Size | |
| W7 | 1-2 | RAM | 32K RAM. Valid 32 K RAM base addresses are C0000, C8000, D0000 and D8000 |
| W8 | 1-2 | Buffer | |
| W11 | 1-2 | Size | |

EtherCard PLUS with Boot ROM Socket (WD8003EB)

| Jumper | Name | Function when selected | | | | | | | | | | | | |
|---------|----------|---|--|------|-------|---------|-----|-----|------|--------|-----|------|--------|--------|
| W1 | Init 280 | If jumper is installed when power is turned on, I/O Base Address is temporarily set to 280. Setup Program must then be run to store new I/O Base Address, and jumper must be removed (*). | | | | | | | | | | | | |
| W3 | AUI/BNC | All jumpered for BNC (Thin Ethernet) All off for AUI (Thick Ethernet) | | | | | | | | | | | | |
| W9 | ROM Size | <table border="1"> <thead> <tr> <th></th> <th>Left</th> <th>Right</th> </tr> </thead> <tbody> <tr> <td>16 K(*)</td> <td>Top</td> <td>Top</td> </tr> <tr> <td>32 K</td> <td>Bottom</td> <td>Top</td> </tr> <tr> <td>64 K</td> <td>Bottom</td> <td>Bottom</td> </tr> </tbody> </table> Jumpers are ignored if no ROM is installed | | Left | Right | 16 K(*) | Top | Top | 32 K | Bottom | Top | 64 K | Bottom | Bottom |
| | Left | Right | | | | | | | | | | | | |
| 16 K(*) | Top | Top | | | | | | | | | | | | |
| 32 K | Bottom | Top | | | | | | | | | | | | |
| 64 K | Bottom | Bottom | | | | | | | | | | | | |

EtherCard PLUS16 (WD8013EBT)

| Jumper | Name | Function when selected |
|--------|--------------------------|---|
| W0 | Wait State 8-bit Access | Reduces wait states for 8-bit memory access from four to two. |
| | Wait State 16-bit Access | Reduces wait states for 16-bit memory access from 1 to 0. Both jumpers for bus speeds <8MHz. Default is both off. Ignored in XTs. |
| W1 | I/O Add | 200, 220, 240, 260, 280(*), 2A0 |
| W2 | IRQ | 10, 11 and 15 are not available in 8-bit bus systems. IRQ2/9 selects IRQ2 for 8-bit systems and IRQ9 for 16-bit. |
| W3 | AUI/BNC | All jumpered for BNC (Thin Ethernet). Off for AUI (Thick Ethernet) |

| | | | | | |
|---|------------------|----------------------------------|-------|-------|-------|
| W6 | ROM Memory Space | NONE(*), 16K, 32K, Space and 64K | | | |
| W9 | ROM Size | 16 K(*) | Left | Left | |
| | | 32 K | Left | Right | |
| | | 64 K | Right | Right | |
| Jumpers are ignored if no ROM is installed. | | | | | |
| W15 | ROM Base Address | Ignored when W6 is set to NONE. | | | |
| | | Address | C4000 | C8000 | D0000 |
| | | C0000 | | | |
| | | C4000 | | X | |
| | | C8000 | | | X |
| | | D0000 | | | |
| | | CC000 | X | X | X |
| | | D4000 | | X | X |
| | | D8000(*) | X | | X |
| | | DC000 | | X | X |

EtherCard PLUS TP, LattisNet Compatible (WD8003WT)

| Jumper | Pins | Name | Function when selected |
|--------|-----------|------------------|---|
| W1 | 1-2 | Zero | Select zero wait states for optimized Wait operation in a 6MHz AT (default is jumper removed, which ensures correct operation in faster AT bus systems). Ignored in XT bus systems. |
| | 3-4 | I/O Base | 3-4*,5-6*,9-10* 280 |
| | 5-6 | | 5-6, 9-10 2A0 |
| | 7-8 | | 3-4, 9-10 2C0 |
| | 9-10 | | 9-10 2E0 |
| | | | 3-4, 5-6, 7-8 300 |
| | | | 5-6, 7-8 320 |
| | | | 3-4, 7-8 340 |
| W2 | 1-2 | | IRQ 7 |
| | 3-4 | | IRQ 6 |
| | 5-6 | | IRQ 5 |
| | 7-8 | | IRQ 4 |
| | 9-10 | | IRQ 3 |
| | 11-12 | | IRQ 2 |
| W3 | 1-2 | AUI/RJ45 | All jumpered for RJ 45 (UTP)All off for AUI (Thick Ethernet) |
| | 3-4 | | |
| | 5-6 | | |
| | 7-8 | | |
| | 9-10 | | |
| | 11-12 | | |
| W4 | 1-2 | Ethernet Version | Out for Thin Ethernet and 802.3/V 2 Thick Ethernet*.In for Thick Ethernet v1. |
| W5 | 1-2 | Segment Length | In for 802.3 standard (185m)Out for 300m extended |
| W6 | 1-2 | ROM Address | Open C0000 (16K, 32K, 64K ROMs) |
| | 3-4 | | 1-2 C4000 (16K ROMs) |
| | 5-6 | | 3-4 C8000 (16K, 32K ROMs) |
| | 7-8 | | 1-2, 3-4 CC000 (16K ROMs) |
| | 9-10 | | 5-6 D0000 (16K, 32K, 64K ROMs) |
| | | | 1-2, 5-6 D4000 (16K ROMs) |
| | | | 3-4*, 5-6* D8000 (16K, 32K ROMs) |
| | | | 1-2, 3-4, 5-6 DC000 (16K ROMs) |
| | | | 7-8*,9-10* Disabled Do not useC0000 or C4000 for Boot ROMs |
| W6 | 7-8, 9-10 | ROM Size | Disabled |
| W9 | 2-3 | | |
| W10 | 2-3 | | |
| W6 | Open | ROM Size | 16K |
| W9 | 2-3 | | |
| W10 | 2-3 | | |
| W6 | 7-8 | ROM Size | 32K |
| W9 | 2-3 | | |

| | | | |
|-----|------|-------------|--|
| W10 | 1-2 | | |
| W6 | 9-10 | ROM Size | 64K |
| W9 | 1-2 | | |
| W10 | 1-2 | | |
| W7 | 2-3* | RAM | 8K RAM: C0000, C2000, C8000, CA000, D0000, D2000, D8000, and DA000 |
| W8 | 2-3* | Buffer Size | |
| W11 | 2-3* | | |
| W7 | 1-2 | RAM | 32K RAM: C0000, C8000, D0000 and D8000 |
| W8 | 1-2 | Buffer Size | |
| W11 | 1-2 | | |

EtherCard PLUS10T for UTP - 10BaseT (WD8003W)

| Jumper | Name | Function when selected | | |
|---------------------------------|--------------------------|---|--------------|--------|
| W1 | Init 280 | If jumper is installed when power is turned on, I/O Base Address is temporarily set to 280. Setup Program must then be run to store new I/O Base Address, and jumper must be removed (*). | | |
| W9 | ROM Size | Left | Right | |
| | | 16 K(*) | Top | Top |
| | | 32 K | Bottom | Top |
| | | 64 K | Bottom | Bottom |
| Ignored if no ROM is installed. | | | | |
| W20 | Auto Polarity Correction | On(*), adapter automatically corrects for incorrect polarity on receive twisted pair. Off, receive twisted pair polarity must be correct to 10BaseT standard. | | |
| W21 | Link Integrity | Link integrity test between adapter and concentrator performed with jumper removed (*). Not if jumper installed. | | |

EtherCard PLUS/A For Micro Channel (WD8003ET/A)

| Jumper | Pins | Name | Function when selected | |
|--------|-------|-----------------|--|--|
| W3 | 1-2 | AUI/BNC | All jumpered for BNC. | |
| | 3-4 | | All off for AUI | |
| | 5-6 | | | |
| | 7-8 | | | |
| | 9-10 | | | |
| | 11-12 | | | |
| W9 | 2-3 | ROM Size | 16K | |
| W10 | Open | | | |
| W9 | 2-3 | ROM Size | 32K | |
| W10 | 1-2 | | | |
| W9 | 1-2 | ROM Size | 64K | |
| W10 | 1-2 | | | |
| W7 | 2-3* | RAM Buffer Size | 8K RAM: C0000, C2000, C8000, CA000, D0000, D2000, D8000, and DA000 | |
| W8 | 2-3* | | | |
| W11 | 2-3* | | | |
| W7 | 1-2 | RAM Buffer Size | 32K RAM:C0000, C8000, D0000 and D8000 | |
| W8 | 1-2 | | | |
| W11 | 1-2 | | | |

EtherCard PLUS/A for Micro Channel (WD8003E/A)

| Jumper | Name | Function when selected | | |
|--------|----------|---------------------------------|-----------|--------|
| W9 | ROM Size | W10 | W9 | |
| W10 | | 16 K(*) | Top | Top |
| | | 32 K | Bottom | Top |
| | | 64 K | Bottom | Bottom |
| | | Ignored if no ROM is installed. | | |

EtherCard PLUS10T/A for Micro Channel (WD8003W/A)

| Jumper | Name | Function when selected |
|--------|--------------------------|---|
| W9 | ROM | W10 W9 Ignored if no ROM is installed |
| W10 | Size | 16 K(*) Top 32 K Bottom 64 K Bottom |
| W20 | Auto Polarity Correction | When ON(*), the adapter automatically corrects for incorrect polarity on the receive twisted pair. When Off, the receive twisted pair polarity must be correct on the RJ-45 port according to the 10BaseT standard. |
| W21 | Link Integrity | The 10BaseT link integrity test between the adapter and a 10BaseT concentrator is performed with the jumper removed (*). Not if the jumper is installed. |

StarCard PLUS/A For Micro Channel (WD8003ST/A)

| Jumper | Pins | Name | Function when selected |
|--------|------|------|------------------------|
| W9 | 2-3 | ROM | 16K |
| W10 | Open | Size | |
| W9 | 2-3 | ROM | 32K |
| W10 | 1-2 | Size | |
| W9 | 1-2 | ROM | 64K |
| W10 | 1-2 | Size | |

StarCard PLUS (WD8003S) and StarLink PLUS (WD8003SH)

| Jumper | Pins | Name | Function when selected |
|--------|-------|----------|---|
| W1 | 1-2 | Zero | Select zero wait states for optimized Wait ops in a 6MHz AT (default is jumper removed, which ensures correct operation in faster AT bus systems). Ignored in XT bus systems. |
| | 3-4 | I/O Base | 3-4*, 5-6*, 9-10* 280 |
| | 5-6 | | 5-6, 9-10 2A0 |
| | 7-8 | | 3-4, 9-10 2C0 |
| | 9-10 | | 9-10 2E0 |
| | | | 3-4, 5-6, 7-8 300 |
| | | | 5-6, 7-8 320 |
| | | | 3-4, 7-8 340 |
| W2 | 1-2 | | IRQ 7 |
| | 3-4 | | IRQ 6 |
| | 5-6 | | IRQ 5 |
| | 7-8 | | IRQ 4 |
| | 9-10 | | IRQ 3 |
| | 11-12 | | IRQ 2 |
| W3 | 1-2 | In | WD 8003S |
| | | Out | WD 8003SH (for compatibility with 802.3 1BASE5 StarLAN standard). |

Additional Jumpers On

StarLink PLUS Only (WD8003SH)

| Jumper | Pins | Name | Function when selected |
|--------|-----------|------------------|--|
| W4 | 11-12 | ROM Enable | On=enable |
| W4 | | ROM Base Address | 3-4*, 7-8*, 9-10* C8000 (16K, 32K ROMs)-default 7-8, 9-10 CC000 (16K ROMs) 3-4, 5-6, 9-10 D0000 (16K, 32K, 64K ROMs) 5-6, 9-10 D4000 (16K ROMs) 3-4, 9-10 D8000 (16K, 32K ROMs) |
| W5 | 1-3, 2-4 | ROM Size | 16 K |
| W6 | 1-3, 2-4* | | |
| W5 | 1-3, 4-6 | ROM Size | 32 K |
| W6 | 1-3, 4-6 | | |
| W5 | 3-5, 4-6 | ROM Size | 64K |
| W6 | 3-5, 4-6 | | |

Printer Switches

Canon

BJ 10 SX

BJ 10 Mode

| Switch | Function | Off | On |
|--------|-------------------------|-----------------------|------------------------|
| 1 | Auto sheet feeder | Disable | Enable |
| 2 | Text Scale Mode | Disable | Enable |
| 3 | Automatic Line Feed | Normal | CR + LF |
| 4 | Page length | 11 inches | 12 inches |
| 5 | Character Set | 1 | 2 |
| 6 | Auto Carriage Return | Normal LF | LF + CR |
| 7 | Alternate Graphics Mode | Disable | Enable |
| 8 | Buffer Size | Input 37K. Download 0 | Input 3K. Download 34K |
| 9 | Code Page | USA 437 | Multilingual 850 |
| 10 | Emulation | Proprinter X24E | BJ 130e |
| 11 | Control Mode | BJ 10e | Epson LQ |

Epson LQ Mode

| Switch | Function | Off | | | On |
|--------|---------------------|-----------|----------|----------|-----------|
| 1 | Auto sheet feeder | Disable | | | Enable |
| 2 | Text Scale Mode | Disable | | | Enable |
| 3 | Automatic Line Feed | Normal | | | CR + LF |
| 4 | Page length | 11 inches | | | 12 inches |
| 5 | Character Set | Italics | | | Graphics |
| 6,7,8 | Intl Character Set | 6 | 7 | 8 | Set |
| | | Off | Off | Off | USA |
| | | Off | Off | On | UK |
| | | Off | On | Off | Germany |
| | | Off | On | On | France |
| | | On | Off | Off | Denmark |
| | | On | Off | On | Sweden |
| | | On | On | Off | Italy |
| | | On | On | On | Spain |

| Switch | Function | Off | | On |
|--------|--------------|----------|-----------|------------|
| 9,10 | Typeface | 9 | 10 | Typeface |
| | | Off | Off | Roman |
| | | Off | On | Sans Serif |
| | | On | - | Draft |
| 11 | Control Mode | BJ 10e | | Epson LQ |

Epson

EPL 6000

*If on, pin 25 will be set to +5. Otherwise it is not used.

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---------|-----|-----|-----|-----|-----|-----|-----|-----|
| RS 232C | Off | Off | Off | Off | * | Off | Off | On |
| RS 423A | Off | Off | Off | Off | Off | On | On | Off |

LQ 2550

Has none.

LQ 800/1000

| Switch | Function | Setting |
|--------|----------------------------------|--|
| 2-1 | Paper length | On=12"Off=11" |
| 2-2 | Not used | |
| 2-3 | Serial interface/parity settings | See table below |
| 2-4 | | |
| 2-5 | Baud rate | See table below |
| 2-6 | | |
| 2-7 | Printer select | On=printer cannot be deactivated by software |
| 2-8 | Automatic Line Feed | On=Line Feed added to each Carriage Return |
| 1-1 | International Character Set | See table below |
| 1-2 | | |
| 1-3 | | |
| 1-4 | Large or small buffer | On=7K Off=1K |
| 1-5 | Letter Quality/Draft print | On=draft Off=LQ |
| 1-6 | Condensed characters | On=condensed |
| 1-7 | One-inch skipover | On=LQ leaves to and bottom margin of .5" and skips over perforations on each page. |
| 1-8 | Cut sheet feeder | On=feeder fitted |

Country

| | 1-1 | 1-2 | 1-3 |
|---------|-----|-----|-----|
| USA | On | On | On |
| France | On | On | Off |
| Germany | On | Off | On |
| UK | On | Off | Off |
| Denmark | Off | On | On |
| Sweden | Off | On | Off |
| Italy | Off | Off | On |
| Spain | Off | Off | Off |

Interface Selection

| | 2-3 | 2-4 |
|---------------------|-----|-----|
| 8-bit parallel | Off | Off |
| Serial, even parity | On | Off |
| Serial, odd parity | Off | On |
| Serial, non-parity | On | On |

Baud rate

| | 2-5 | 2-6 |
|------|-----|-----|
| 300 | Off | Off |
| 1200 | On | Off |
| 4800 | Off | On |
| 9600 | On | On |

Panasonic

| Switch | Function | Setting |
|------------|-----------------------------|--|
| SW 2 | Printer Mode | See table below |
| SW3 | Autofeed | On=LF added to each CR Off=It isn't |
| SW4 | Skip perforation | On=3 line margin is skipped before and after perforations. |
| SW 5, 6, 7 | International Character Set | See table below |
| SW 8 | 7/8 bit code selection | On=7 bit Off=8 bit |

| SW 1 | SW 2 | Printer Mode |
|------|------|---------------------|
| On | On | Standard |
| Off | On | IBM Matrix |
| On | Off | IBM Graphics set G1 |
| Off | Off | IBM Graphics set G2 |

| SW 5 | SW 6 | SW 7 | Intl Character Set | Form length |
|------|------|------|--------------------|-------------|
| On | On | On | USA | 11" |
| Off | On | On | France | 12" |
| On | Off | On | Germany | 11" |
| Off | Off | On | England | 11" |
| On | On | Off | Denmark I | 12" |
| Off | On | Off | Sweden | 12" |
| On | Off | Off | Italy | 12" |
| Off | Off | Off | Spain | 12" |

Samsung

SP 2412

Has none.

Notes

Printer Codes

Epson FX

Printer Operation

| Decimal | ASCII | Description |
|-----------|----------|---|
| 7 | BEL | Beeper |
| 17 | DC1 | Select printer |
| 19 | DC3 | Deselect printer |
| 27 25 48 | ESC EM 0 | Turn cut sheet feeder control off |
| 27 25 52 | ESC EM 4 | Turn cut sheet feeder control on |
| 27 56 | ESC 8 | Disable paper out sensor |
| 27 57 | ESC 9 | Enable paper out sensor |
| 27 60 | ESC < | Select unidirectional mode for one line |
| 27 64 | ESC @ | Initialize printer |
| 27 85 48 | ESC U 0 | Cancel unidirectional mode |
| 27 85 49 | ESC U 1 | Select unidirectional mode |
| 27 115 48 | ESC s 0 | Turn half speed mode off |
| 27 115 49 | ESC s 1 | Turn half speed mode on |

Vertical/Horizontal Motion:

| Decimal | ASCII | Description |
|------------|------------|---|
| 8 | BS | Backspace |
| 9 | HT | Horizontal tab |
| 10 | LF | Line Feed |
| 11 | VT | Vertical Tab |
| 12 | FF | Form Feed |
| 27 47 c | ESC / c | Select vertical tab channel (c=0..7) |
| 27 48 | ESC 0 | Select 8 lines per inch |
| 27 49 | ESC 1 | Select 7/72 inch line spacing |
| 27 50 | ESC 2 | Select 6 lines per inch |
| 27 51 n | ESC 3 n | Select n/216 inch line spacing (n=0..255) |
| 27 65 n | ESC A n | Select n/72 inch line spacing (n=0..85) |
| 27 66 0 | ESC B NUL | Clear Vertical tabs |
| 27 66 tabs | ESC B tabs | Select up to 16 vertical tabs where tabs are ascending values from 1..255 ending with NUL |
| 27 67 n | ESC C n | Select page length in lines (n=1..127) |
| 27 67 48 n | ESC C 0 n | Select page length in inches (n=1..22) |

| Decimal | ASCII | Description |
|--------------|----------------|--|
| 27 68 0 | ESC D NUL | Clears all horizontal tables |
| 27 68 tabs 0 | ESC D tabs NUL | Sets up to 32 horizontal tabs with ascending values 1-137. NUL or a value less than previous tab ends command. |
| 27 74 n | ESC J n | Immediate n/216 inch line feed (n=0..255) |
| 27 78 n | ESC N n | Select skip over perforation (n=1..127) |
| 27 79 | ESC O | Cancel skip over perforation |
| 27 81 n | ESC Q n | Set right margin (n=column) |
| 27 98 b c 0 | ESC b c NUL | Clear vertical tabs in channel (c=0..7) |
| 27 98 c tabs | ESC b c tabs | Select up to 16 vertical tabs in channels (c=0..7) where tabs are ascending values from 1..255 ending with NUL |
| 27 101 48 s | ESC e 0 s | Set horizontal tab to increments of 's' |
| 27 101 49 s | ESC e 1 s | Set vertical tab to increments of 's' |
| 27 102 48 s | ESC f 0 s | Set horizontal skip to increments of 's' |
| 27 102 49 s | ESC f 1 s | Set vertical skip to increments of 's' |
| 27 106 n | ESC j n | Reverse linefeed (n/216 inch after buffer) |
| 27 108 n | ESC l n | Set left margin (n=column) |

Printing Style

| Decimal | ASCII | Description |
|-----------|---------|--|
| 27 33 n | ESC ! n | Master select where n is a combination of: 0 Pica 16 Double Strike 1 Elite 32 Double Wide 4 Condensed 64 Italic 8 Emphasized 128 Underline Pica & Elite and Condensed/Emphasized are mutually exclusive |
| 27 107 48 | ESC k 0 | Select NLQ Roman font |
| 27 107 49 | ESC k 1 | Select NLQ Sans Serif font |
| 27 120 48 | ESC x 0 | Select draft mode |
| 27 120 49 | ESC x 1 | Select NLQ mode |

Print Size and Character Width

| Decimal | ASCII | Description |
|----------|---------|---------------------------------------|
| 14 | SO | Select double width for one line |
| 15 | SI | Select condensed mode |
| 18 | DC2 | Cancel condensed mode |
| 20 | DC4 | Cancel one line double width mode |
| 27 14 | ESC SO | Double width for one line (duplicate) |
| 27 15 | ESC SI | Select condensed mode (duplicate) |
| 27 77 | ESC M | Select elite width (12 cpi) |
| 27 80 | ESC P | Select pica width (10 cpi) |
| 27 87 48 | ESC W 0 | Cancel double width mode |
| 27 87 49 | ESC W 1 | Select double width mode |

Print Enhancement

| Decimal | ASCII | Description |
|----------|---------|------------------------------|
| 27 45 48 | ESC - 0 | Cancel underlining |
| 27 45 49 | ESC - 1 | Select underlining |
| 27 69 | ESC E | Select emphasized mode |
| 27 70 | ESC F | Cancel emphasized mode |
| 27 71 | ESC G | Select double strike mode |
| 27 72 | ESC H | Cancel double strike mode |
| 27 83 48 | ESC S 0 | Select superscript |
| 27 83 49 | ESC S 1 | Select subscript |
| 27 84 | ESC T | Cancel superscript/subscript |

Character Sets

| Decimal | ASCII | Description |
|---------|-------|--------------------|
| 27 52 | ESC 4 | Select italic mode |
| 27 53 | ESC 5 | Cancel italic mode |

| Decimal | ASCII | Description |
|----------|-----------|--|
| 27 54 | ESC 6 | Enable printing of characters (128-159,255) |
| 27 55 | ESC 7 | Cancel [ESC 6] command |
| 27 82 n | ESC R n | Select International character set where numeric 'n' is: 0 USA 7 Spain I 1 France 8 Japan 2 Germany 9 Norway 3 United Kingdom 10 Denmark II 4 Denmark I 11 Spain II 5 Sweden 12 Latin America 6 Italy |
| 27 116 0 | ESC t NUL | Select italic character set |
| 27 116 1 | ESC t SOH | Select Epson character set |

User Defined Characters:

| Decimal | ASCII | Description |
|-------------|-------------------|--|
| 27 37 0 | ESC % NUL | Selects normal character set |
| 27 37 1 | ESC % SOH | Selects user defined set |
| 27 38 0 | ESC & NUL ? | Select user defined chars (see manual) |
| 27 58 0 0 0 | ESC : NUL NUL NUL | Copy ROM into RAM |

Graphics Character Sets

| Decimal | ASCII | Description |
|---------------|-----------------|--|
| 27 42 0 n1 n2 | ESC * NUL n1 n2 | Select single density graphics |
| 27 42 1 n1 n2 | ESC * SOH n1 n2 | Select double density graphics |
| 27 63 s n | ESC ? s n | Reassign graphics mode 's'=(K,L,Y or Z) to mode 'n'=(0..6) |
| 27 75 n1 n2 | ESC K n1 n2 | Single density graphics (60 dpi) |
| 27 76 n1 n2 | ESC L n1 n2 | Double density graphics (120 dpi) |
| 27 89 n1 n2 | ESC Y n1 n2 | Hi-speed double den graphics (120 dpi) |
| 27 90 n1 n2 | ESC Z n1 n2 | Quad density graphics (240 dpi) |
| 27 94 m n1 n2 | ESC ^ m n1 n2 | Select 9 pin graphics mode number of columns = n1 + (n2 * 256) |

Other

| Decimal | ASCII | Description |
|----------|----------|--|
| 13 | CR | Carriage Return |
| 24 | CAN | Cancel text in line (but not control codes) |
| 127 | DEL | Delete character (but not control codes) |
| 27 32 n | ESC SP n | Space in n/72 inch following each NLQ char |
| 27 35 | ESC # | MSB control sequence cancel |
| 27 36 | ESC \$ | Select absolute dot position |
| 27 61 | ESC = | MSB = 0 |
| 27 62 | ESC > | MSB = 1 |
| 27 73 48 | ESC 0 | Cancel above [ESC 1] |
| 27 73 49 | ESC 1 | Printable codes expansion (0-31,128-159) |
| 27 92 | ESC \ | Select relative dot position |
| 27 97 n | ESC a n | NLQ justification where numeric 'n' is: 0 left justification (default) 1 center 2 right justification 3 full justification |
| 27 112 | ESC p | Select/cancel proportional mode |

Codes listed relate to the LX 800 - where a numeric value of zero or one is required, the ASCII value of the number can be substituted.

HP LaserJet II

Printer Control and Orientation

| | |
|---------|----------------------|
| ESC E | Reset printer |
| ESC z | Self Test |
| ESC &I0 | Portrait orientation |

| | |
|----------|-----------------------------------|
| ESC &I0 | Landscape orientation |
| ESC (s0P | Select fixed space font |
| ESC (s1P | Select proportional font |
| ESC (s0S | Set upright character orientation |
| ESC (s1S | Set Italic character orientation |
| ESC &#X | Select '#' number of copies |
| ESC &I0H | Eject page |
| ESC &I1H | Feed paper from tray |
| ESC &I2H | Feed paper manually |
| ESC &I3H | Feed envelope |
| ESC &I0T | Default stacking position |
| ESC &I1T | Togglestacking position |

8 Bit Symbol Set

| | |
|---------|--------------------|
| ESC (8U | Roman 8 symbol set |
| ESC (8K | Kana 8 symbol set |
| ESC (8M | Math 8 symbol set |

7 Bit Symbol Set

| | |
|----------|-------------------------------|
| ESC (0U | USASCII symbol set |
| ESC (0B | Line Draw symbol set |
| ESC (0A | Math symbol set |
| ESC (0M | Math 7 symbol set |
| ESC (0Q | Math 8a symbol set |
| ESC (1Q | Math 8b symbol set |
| ESC (1U | US Legal symbol set |
| ESC (0E | Roman Extension symbol set |
| ESC (0D | ISO Denmark/Norway symbol set |
| ESC (1E | ISO United Kingdom symbol set |
| ESC (0F | ISO France symbol set |
| ESC (0G | ISO German symbol set |
| ESC (0I | ISO Italy symbol set |
| ESC (0S | ISO Sweden/Finland symbol set |
| ESC (1S | ISO Spain symbol set |
| ESC (15U | PiFont symbol set |
| ESC (2Q | PiFonta symbol set |

Font Management

| | |
|-----------------|--|
| ESC (s3T | Courier font |
| ESC (s0T | Line Printer font |
| ESC (s1T | Pica font |
| ESC (s2T | Elite font |
| ESC (s4T | Helvetica font |
| ESC (s5T | Times Roman (TMS RMN) font |
| ESC (s6T | Gothic font |
| ESC (s7T | Script font |
| ESC (s8T | Prestige font |
| ESC *c#D | font ID '#' |
| ESC *c#E | character code '#' |
| ESC *c0F | Delete all fonts, including permanent |
| ESC *c1F | Delete all temporary fonts |
| ESC *c2F | Delete last font ID specified |
| ESC *c3F | Delete last character code and font ID specified |
| ESC *c4F | Make last font ID temporary |
| ESC *c5F | Make last font ID permanent |
| ESC *c6F | Copy or assign last font ID specified |
| ESC *c7F | Reestablish ROM |
| ESC *c8F | Set primary font |
| ESC *c9F | Set secondary font |
| ESC *c10F | Set primary and secondary font default |
| ESC)s#W <data> | Create font header |

| | |
|-----------------|--|
| ESC (s#W <data> | Download character |
| ESC (#X <data> | Designate downloaded font as primary |
| ESC)#X <data> | Designate downloaded font as secondary |
| ESC (#@ | Primary font default (see printer manual) |
| ESC)#@ | Secondary font default(see printer manual) |

Pitch and Point Selection

| | |
|-------------|--------------------|
| ESC (s10H | 10 pitch |
| ESC (s12H | 12 pitch |
| ESC (s16.6H | 16.66 pitch |
| ESC (s7V | point size to 7 |
| ESC (s8V | point size to 8 |
| ESC (s8.5V | point size to 8.5 |
| ESC (s10V | point size to 10 |
| ESC (s12V | point size to 12 |
| ESC (s14.4V | point size to 14.4 |

Page Dimensions

| | |
|----------|---|
| ESC &##P | Set page length to '# lines |
| ESC &##E | Set top margin to '# lines |
| ESC &##F | Set text length to '# lines |
| ESC 9 | Clear margins |
| ESC &a#L | Set left margin to column '# |
| ESC &a#M | Set right margin to column '# |
| ESC &#C | Set vertical motion index to '# 1/48" increments |
| ESC &#D | Set lines per inch to '#, valid values are: 1, 2, 3, 4, 6, 8, 12, 16 or 24 |
| ESC &k#H | Set horizontal motion index where # is derived using # = (120.0/cpi) (1/10 precision) |

Cursor Positioning

| | |
|----------|--|
| ESC &a#R | Move to row '# |
| ESC &a#C | Move to col '# |
| ESC &a#H | Move to horizontal position '# in decipoints |
| ESC &a#V | Move to vertical position '# in decipoints |
| ESC *p#X | Move to horizontal position '# in dots |
| ESC *p#Y | Move to vertical position '# in dots |
| ESC &f0S | Push cursor position |
| ESC &f1 | Pop cursor position |

Raster Graphics

| | |
|-----------------|--|
| ESC *t75R | Select 75 dots per inch graphics mode |
| ESC *t100R | Select 100 dots per inch graphics mode |
| ESC *t150R | Select 150 dots per inch graphics mode |
| ESC *t300R | Select 300 dots per inch graphics mode |
| ESC *r0A | Start graphics at left most position |
| ESC *r1A | Start graphics at current cursor |
| ESC *b#W <data> | Transfer '# byte raster image as stream "<data>" |
| ESC *rB | End graphics |

Advanced Graphics

| | |
|----------|---|
| ESC *c#A | Set horizontal rule/pattern size in dots |
| ESC *c#H | Set horizontal rule/pattern size in decipoints |
| ESC *c#B | Set vertical rule/pattern size in dots |
| ESC *c#V | Set vertical rule/pattern size in decipoints |
| ESC *c0P | Select black rule |
| ESC *c2P | Select gray scale pattern |
| ESC *c3P | Select HP-Defined pattern |
| ESC *c#G | Set grey scale pattern, where # is a value between [0..6] for HP defined patterns and [0..100] to specify percentage gray scaling. The mode depends on the rule/pattern selected using ESC *c?P |
| ESC *c1G | Vertical lines pattern |
| ESC *c2G | Horizontal lines pattern |
| ESC *c3G | Diagonal lines pattern (upward left to right) |
| ESC *c4G | Diagonal lines pattern (downward left to right) |

| | |
|----------|--|
| ESC *c5G | Horizontal/vertical grid lines pattern |
| ESC *c6G | Diagonal grid pattern |
| ESC *c#G | Set gray scaling to '# percent |

Macro commands

| | |
|-----------|-----------------------------|
| ESC &#Y | Identify macro as ID '#' |
| ESC &f0X | Start macro definition |
| ESC &f1X | Stop macro definition |
| ESC &f2X | Execute macro |
| ESC &f3X | Call macro |
| ESC &f4X | Enable auto macro overlay |
| ESC &f5X | Disable auto macro overlay |
| ESC &f6X | Delete all macros |
| ESC &f7X | Delete all temporary macros |
| ESC &f8X | Delete macro ID |
| ESC &f9X | Make macro temporary |
| ESC &f10X | Make macro permanent |

Miscellaneous

| | |
|-----------------|--|
| ESC (s#B | Set stroke weight '#=(7..-7), 7=bold, -7=light |
| ESC &dD | Set underline on |
| ESC &d@ | Set underline off |
| ESC = | Half line feed |
| ESC Y | Turn display functions mode on |
| ESC Z | Turn display functions mode off (default) |
| ESC &p#X <data> | Disable command interpretation for the '# bytes following this command |
| ESC &i0L | Disable perforation skip |
| ESC &i1L | Enable perforation skip |
| ESC &k0G | Set line terminators to CR=CR, LF=LF, FF=FF |
| ESC &k1G | Set line terminators to CR=CR+LF, LF=LF, FF=FF |
| ESC &k2G | Set line terminators to CR=CR, LF=CR+LF, FF=CR+FF |
| ESC &k3G | Set line terminators to CR=CR+LF, LF=CR+LF, FF=CR+FF |
| ESC &s0C | Enable end of line wrap |
| ESC &s1C | Disable end of line wrap |

Escape sequence combination rules:

- The first 2 characters following the ESC must be the same
- The final character in a sequence other than the last must be changed to lower case
- The last character in the complete sequence must be changed to upper case
- Escape sequences must be specified in the order in which they should be performed
- The space following ESC is not included in the string.

Pinouts

25-pin Parallel Port

| <i>Pin</i> | <i>Description</i> | <i>Pin</i> | <i>Description</i> |
|------------|--------------------|------------|--------------------|
| 1 | -Strobe | 10 | -Acknowledge |
| 2 | Data Bit 0 | 11 | Busy |
| 3 | Data Bit 1 | 12 | Paper End |
| 4 | Data Bit 2 | 13 | Select |
| 5 | Data Bit 3 | 14 | -Auto Feed |
| 6 | Data Bit 4 | 15 | -Error |
| 7 | Data Bit 5 | 16 | -Init Printer |
| 8 | Data Bit 6 | 17 | -Select Input |
| 9 | Data Bit 7 | 18-25 | Signal Ground |

Parallel PC-PC connections

| | | |
|---------|-----------|--------|
| Strobe | 1 --- 1 | Strobe |
| Data 0 | 2 --- 15 | Error |
| Data 1 | 3 --- 13 | Slct |
| Data 2 | 4 --- 12 | PaperE |
| Data 3 | 5 --- 10 | Ack |
| Data 4 | 6 --- 11 | Busy |
| Ack | 10 --- 5 | Data3 |
| Busy | 11 --- 6 | Data4 |
| PaperE | 12 --- 4 | Data2 |
| Slct | 13 --- 3 | Data1 |
| AutoFd | 14 --- 14 | AutoFd |
| Error | 15 --- 2 | Data0 |
| Init | 16 --- 16 | Init |
| Slct In | 17 --- 17 | SlctIn |
| Ground | 25 --- 25 | Ground |

Keyboard

| <i>DIN</i> | | <i>Mini-DIN</i> | |
|------------|-------------|-----------------|-------------|
| Pin | Description | Colour (maybe!) | Description |
| 1 | Clock | Orange | Data |
| 2 | Ground | Clear | Reset (n/c) |

| <i>DIN</i> | | <i>Mini-DIN</i> | |
|------------|----------|-----------------|--------|
| 3 | Data | Red | Ground |
| 4 | 5v | Yellow | 5v |
| 5 | Reserved | | Clock |

Game Port

| <i>Pin</i> | <i>Description</i> |
|------------|--------------------|
| 1 | +5v C |
| 2 | Button 0 |
| 3 | Timer 0 |
| 4 | Ground |
| 5 | Ground |
| 6 | Timer 1 |
| 7 | Button 1 |
| 8 | +5v DC |
| 9 | +5v DC |
| 10 | Button 2 |
| 11 | Timer 2 |
| 12 | Ground |
| 13 | Timer 3 |
| 14 | Button 3 |
| 14 | +5v DC |

Power

Chips can accept 5% variations, but output from cheaper power supplies may be 10%.

| <i>Conn</i> | <i>Pin</i> | <i>Colour</i> | <i>Description</i> |
|-------------|------------|---------------|--------------------|
| PS 8 | 1 | White | Pwr Good |
| | 2 | Red | 5v (AT) Key (XT) |
| | 3 | Yellow | 12v |
| | 4 | Blue | -12v |
| | 5 | Black | GND |
| | 6 | Black | GND |
| PS 9 | 7 | Black | GND |
| | 8 | Black | GND |
| | 9 | Green | -5v |
| | 10 | Red | 5v |
| | 11 | Red | 5v |
| Towers | 12 | Red | 5v |
| | 1 | Red | 5v |
| | 2 | Red | 5v (Key) |
| | 3 | Red | 5v |
| | 4 | Black | GND |
| | 5 | Black | GND |

Battery

| <i>Pin</i> | <i>Description</i> |
|------------|--------------------|
| 1 | Ground |
| 2 | Not used |
| 3 | Key |
| 4 | 6v DC |

Video

EGA

| <i>Pin</i> | <i>Description</i> |
|------------|---------------------------|
| 1 | GND |
| 2 | Sec Red/Gnd |
| 3 | Primary Red |
| 4 | Primary Green |
| 5 | Primary Blue |
| 6 | Sec Green/Intensity |
| 7 | Secondary Blue/Mono video |
| 8 | Horizontal Sync |
| 9 | Vertical Sync |

VGA

| <i>Pin</i> | <i>Mono</i> | <i>Colour</i> | <i>SVGA</i> |
|------------|-------------|---------------|-------------|
| 1 | None | Red | Red |
| 2 | Video | Green | Green |
| 3 | None | Blue | Blue |
| 4 | None | None | ID Bit 2 Gd |
| 5 | Self Test | Self Test | Self Test |
| 6 | None | Red rtn | Red rtn |
| 7 | Video grd | Green rtn | Green rtn |
| 8 | None | Blue rtn | Blue rtn |
| 9 | None | None | None |
| 10 | Digital grd | Digital grd | Digital grd |
| 11 | None | Digital grd | Digital grd |
| 12 | Connect 10 | None | None |
| 13 | Hsync | Hsync | Hsync |
| 14 | Vsync | Vsync | Vsync |
| 15 | None | None | None |

Mono

| <i>Pin</i> | <i>Description</i> |
|------------|-----------------------|
| 1 | GND |
| 2 | GND |
| 3 | Not used |
| 4 | Not used |
| 5 | Not used |
| 6 | Intensity (out) |
| 7 | Video (out) |
| 8 | Horizontal Sync (out) |
| 9 | - Vertical Sync (out) |

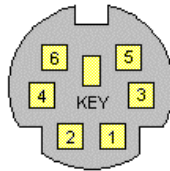
CGA

| <i>Pin</i> | <i>Description</i> |
|------------|------------------------|
| 1 | GND |
| 2 | GND |
| 3 | Red (out) |
| 4 | Green (out) |
| 5 | Blue (out) |
| 6 | Intensity (out) |
| 7 | Reserved (out) |
| 8 | Horizontal Drive (out) |
| 9 | - Vertical Drive (out) |

Mouse

6-pin connector (PS/2)

| Pin | Description |
|-----|---------------|
| 1 | Data |
| 2 | Reserved |
| 3 | Signal Ground |
| 4 | Power (+5v) |
| 5 | Clock |
| 6 | Reserved |



9-pin connector

| | | |
|---|--------|---------------|
| 1 | CD | Clocking |
| 5 | Ground | Signal Ground |
| 3 | CTS | Power (+5v) |
| 4 | RI | Data |

Newton-PC

| Newton | | PC |
|-------------------|--------|----------------------|
| 4 (black/orange) | GROUND | 1 |
| 8 (violet/violet) | GROUND | 7 |
| 3 (orange/red) | data | 2 |
| 5 (blue/yellow) | data | 3 |
| 1 (yellow/black) | flow | 4 (and 20) 20 (to 4) |
| (green/brown) | | 5 (6, 8) |

AUI (Dix)

| Pin | Description |
|-----|----------------------|
| 1 | Ground |
| 2 | Collision Detect (+) |
| 3 | Transmit (+) |
| 4 | Ground |
| 5 | Receive Data (+) |
| 6 | Ground |
| 7 | Unused |
| 8 | Ground |
| 9 | Collision Detect (-) |
| 10 | Transmit (-) |
| 11 | Ground |
| 12 | Receive Data (-) |
| 13 | +12v DC |
| 14 | Ground |
| 15 | Unused |

UTP (RJ 45)

| Pin | Description |
|-----|-------------------|
| 1 | Transmit Data (+) |
| 2 | Transmit Data (-) |
| 3 | Receive Data (+) |
| 4 | Unused |
| 5 | Unused |
| 6 | Receive Data (-) |
| 7 | Unused |
| 8 | Unused |

Modem (RJ 11)

| Pin | Description |
|-----|-------------|
| 1 | Not used |
| 2 | Not used |
| 3 | Input 1 |
| 4 | Input 2 |
| 5 | Not used |
| 6 | Not used |

RS232

RS232 signals are numbered and named with three standard systems, plus another that isn't standard but in common use. One is by pin number (used by most people) and another is by abbreviations of the signal description (that's the non-standard one, which we saw when looking at the modem lights). In describing the activities of the serial port, we will use both of these. The other two are boring, using technical definitions in the standards themselves, so we won't bother with them. Here's a list of what's on the larger 25-pin connector:

| Pin No | Symbol | Purpose |
|--------|--------|--|
| 1 | PG | Protective Ground. If used, for connecting the cable shielding to, but only at one end, to prevent spurious voltages between pin 7 and this one. If the two terminals are at different ground potentials, the resistance to current flow along wire 7 (a ground return path) could cause a potential difference between pins 1 and 7 at both ends. As Potential Difference is another name for Voltage, it could be mistaken for a real signal. This is particularly important for terminals—it could stop them working at all. |
| 2 | TD | Transmit Data. Data is transmitted from this pin to the DCE (modem). |
| 3 | RD | Receive Data. As above, but in reverse, i.e. to the DTE. |
| 4 | RTS | Request To Send. Used to initialise the modem and goes from the DTE. With half-duplex, also used to turn the direction of transmission around. |
| 5 | CTS | Clear To Send. The modem's reply to the above. |
| 6 | DSR | Data Set Ready. Indicates the modem's readiness for action (Data Set, meaning the modem, is a term used in the same way as Radio Set). |
| 7 | SG | Signal Ground. The reference ground for all other signals, so it must be connected at both ends of the cable (but see also Pin 1). |
| 8 | DCD | Data Carrier Detect. The modem activates this when it's happy with the quality of the line. |
| 9 | | Data Set Test. |
| 10 | | Data Set Test. |
| 11 | | Unassigned |
| 12 | SCDC | Secondary DCD (Pin 8). Sometimes used as a speed indicator where a modem senses it automatically. It goes to the DTE. |
| 13 | SCTS | Secondary CTS (Pin 5). |
| 14 | STD | Secondary TD (Pin 2). |
| 15 | | Transmit Clock (for synchronous DCE operations). |
| 16 | SRD | Secondary RD (pin 3). |
| 17 | | Receive Clock (synchronous DCE, but known to be used on some laptops for asynchronous chat with IBM PCs. It depends on the software). |
| 18 | | Unassigned. |
| 19 | SRTS | Secondary RTS (Pin 4.) |
| 20 | DTR | Data Terminal Ready —to the modem. |
| 21 | | Signal Quality Detect (synchronous operations). |
| 22 | RI | Ring Indicator. Current flows in sympathy with the ringing tone on the line. |
| 23 | | Data Signal Rate Select. Used when a modem is able to switch speeds. |
| 24 | | Transmit Clock (for synchronous DTE operations, the same as pin 17). |
| 25 | | Unassigned. |

25-pin Serial Port

| <i>Pin</i> | <i>Description</i> | <i>Pin</i> | <i>Description</i> |
|------------|---------------------|------------|-------------------------|
| 1 | Frame Ground | 14 | Secondary TD |
| 2 | Transmit Data | 15 | Transmit Clock |
| 3 | Receive Data | 16 | Secondary RD |
| 4 | Request To Send | 17 | Receive Clock |
| 5 | Clear To Send | 18 | Unassigned |
| 6 | Data Set Ready | 19 | Secondary RTS |
| 7 | Signal Ground | 20 | Data Terminal Ready |
| 8 | Data Carrier Detect | 21 | Signal Quality Detect |
| 9 | Data Set Test | 22 | Ring Indicator |
| 10 | Data Set Test | 23 | Data Signal Rate Select |
| 11 | Unassigned | 24 | Transmit Clock |
| 12 | Sec DCD | 25 | Unassigned |
| 13 | Sec CTS | | |

9-pin Serial Port

| <i>Pin</i> | <i>Description</i> |
|------------|--------------------------|
| 1 | DCD; Data Carrier Detect |
| 2 | RX; Receive Data |
| 3 | TX; Transmit Data |
| 4 | DTR; Data Terminal Ready |
| 5 | Signal Ground |
| 6 | DSR; Data Set Ready |
| 7 | RTS; Request To Send |
| 8 | CTS; Clear To Send |
| 9 | RI; Ring Indicator |

FCC ID

Manufacturer names only. Full decode at www.fcc.gov/oet/fccid.

| Code | Company |
|------|---|
| A26 | Alpine Electronics Inc |
| A2H | Alco Electronics Ltd |
| A3D | NEC Technologies Inc |
| A3D | NEC Technologies Inc |
| A3K | Philips Electronics Industries (Taiwan) |
| A3L | Samsung Electronics Co Ltd |
| A3W | Transaction Technology Inc |
| A5A | Hiraoka New York Inc |
| A6R | Yamaha Corporation |
| A79 | Sentrol Inc |
| A7P | Great Electronics Corporation |
| A7R | Orion Electric Co Ltd |
| A89 | Beautiful Enterprise Co Ltd |
| A8D | Clarion Corporation Of America |
| A92 | Texas Instruments Inc |
| A95 | Dukane Corporation |
| A98 | NEC America Inc |
| A9K | Stanley Home Automation Inc |
| A9S | Narco Avionics Inc |
| AAA | Code A Phone Corporation |
| AAD | T T Systems Corporation |
| AAL | Casio PhoneMate Inc |
| AAL | Phone Mate Inc |
| AAO | Radio Shack |
| AAW | San Bar Corporation |
| AB6 | Northern Telecom Inc |
| AB6 | Northern Telecom Inc |
| AB7 | Scantronic (USA) Inc |
| ABB | Ericsson GE Mobile Communications Inc |
| ABL | Hitachi Ltd |
| ABM | White Consolidated Industries Inc |
| ABO | General Motors Corporation-Corporate Af |

| Code | Company |
|------|---|
| ABO | General Motors Corporation-Environmenta |
| ABP | Repco Incorporated |
| ABS | Prentke Romich Co |
| ABY | Motorola Inc |
| ABZ | Motorola Inc |
| AC6 | Silent Knight Security Systems Inc |
| ACD | Pamco Electronics Inc |
| ACJ | Matsushita Electric Industrial Co Ltd |
| ACK | Matsushita Communication Industrial Co |
| ACL | Matsushita Microwave Oven Corporation o |
| ACM | General Electric Company |
| ACO | Butler National Corporation |
| ACQ | General Instrument Corporation |
| ACV | Magic Chef Inc |
| AD8 | Napco Security Systems Inc |
| ADB | Furuno USA Inc |
| ADC | Data General Corporation |
| ADG | Gai Tronics Corporation |
| ADH | Anderson Jacobson Inc |
| ADP | Azrak Hamway International Inc |
| ADT | Funai Electric Co Ltd |
| ADV | General Research of Electronics Inc |
| AE7 | Cray Communications Inc |
| AEB | Insung Industrial Co Ltd |
| AEG | MRC Taiwan Ltd |
| AEK | Taiyo Kogyo Co Ltd |
| AEQ | T C Electronics (Korea) Corporation |
| AER | MSI Data Corporation |
| AES | Uniden Corporation |
| AEZ | Sanyo Electric Co Ltd |
| AFA | Sanyo Sales & Supply (USA) Corporation |
| AFI | Darome Inc |

| Code | Company |
|------|---|
| AFJ | ICOM Incorporated |
| AFL | Sharp Electronics Corporation |
| AG6 | General DataComm Inc |
| AG6 | General DataComm Inc |
| AGC | Tandy Electronics Japan Ltd |
| AGF | Tamagawa Electric Co Ltd |
| AGI | Toshiba Corporation |
| AGJ | King Fisher Company |
| AHA | RCA Corporation |
| AHG | RCA Corporation |
| AIE | Ritron Inc |
| AIH | Litton Microwave Cooking Products |
| AIN | Sanyo Manufacturing Corporation |
| AIU | LPB Inc |
| AJ4 | Racal Data Communications Inc |
| AJ9 | Radionics Inc |
| AJD | Pioneer Electronic Corporation |
| AJH | Rockwell International Corporation |
| AJK | Rockwell International Corporation |
| AJL | Rockwell International Corporation |
| AJN | Rockwell International Corporation |
| AJT | Harmon Industries Inc |
| AJU | General Electric Company |
| AJX | Toshiba America Consumer Products Inc |
| AJX | Toshiba America Consumer Products Inc |
| AK3 | Motorola Inc |
| AK5 | Midland International Corporation |
| AK8 | Sony Corporation |
| AKB | Sperry Marine Inc |
| AKH | Yaesu Musen USA Inc |
| AKJ | General Electric Company |
| AKX | Shinwa of America Inc |
| AL8 | Plantronics Inc |
| ALH | Kenwood Communications Corporation |
| ALI | Kenwood USA Corporation |
| ALO | QEI Corporation |
| ALQ | Reach Electronics Inc |
| ALS | Scientific Radio Systems Inc |
| AM9 | Marquette Electronics Inc |
| AML | Asahi Corporation |
| AMP | Jean Co Ltd Kaohsiung Branch Office |
| AMP | Jean Co Ltd |
| AMQ | Rockwell International Corporation |
| AMW | Uniden America Corporation |
| AMW | Uniden America Corporation |
| ANO | International Business Machines Corpora |
| AO9 | Digital Equipment Corporation |
| AOI | AlliedSignal Commercial Avionics System |
| AOM | Sinoca Enterprises Co Ltd |
| AP3 | Racal Datacom Inc |
| APB | Mattel Toys A Division of Mattel Inc |
| APC | AER-Aerotron Inc |
| APH | Roper Corporation |
| API | Harman Kardon Inc |
| APJ | Amana Refrigeration Inc |
| APV | Standard Communications Corporation |
| APY | Sharp Corporation |

| Code | Company |
|------|---|
| AQ6 | NMB Technologies Inc |
| AQC | Asahi Corporation |
| AQX | Xerox Corporation |
| AQZ | Harris Corporation RF Systems Division |
| ARF | Sampo Technology Corporation |
| ARS | AOC International |
| ARU | RELM Communications Inc |
| ARV | Solar Electronics Corporation Ltd |
| AS5 | AT&T Corp |
| AS5 | Lucent Technologies Inc. |
| ASH | Akai Electric Co Ltd |
| ASI | Victor Company of Japan Ltd |
| ASJ | Fujitsu General Limited |
| ASK | Liberty Electronics Co Ltd |
| ASL | Raytheon Marine Co |
| ASM | Apelco Marine Electronics |
| ASY | AlliedSignal Avionics Inc |
| AT9 | Motorola Inc |
| ATA | Sharp Corporation |
| ATE | Regency Land Mobile Inc |
| ATF | Sharp Corporation |
| ATH | E F Johnson Company |
| ATI | Action Electronics Co Ltd |
| ATM | Technol Ace Corporation |
| ATN | Sun Chung Precision Metal Industry Ltd |
| ATO | Zenith Electronics Corporation |
| AU4 | Novation Inc |
| AU6 | Ven Tel Inc |
| AU7 | Multi Tech Systems Inc |
| AW2 | AT&T Paradyne Corporation |
| AWH | Bandai America Inc |
| AWL | Oak Communications Company |
| AWQ | Kyocera Electronics Inc |
| AWQ | Kyocera Electronics Inc |
| AWW | Maxon Electronics Co Ltd |
| AX2 | Clarion Co Ltd |
| AX3 | Alaron Inc |
| AXA | Ericsson Inc |
| AXL | Sansui USA Inc |
| AXN | Universal Security Instruments Inc |
| AXW | Tatung Co of America Inc |
| AXY | Airtronics Inc |
| AXZ | Cox Hobbies Inc |
| AY5 | NEC America Inc |
| AZ4 | Motorola Inc |
| AZD | Canon Inc |
| AZP | Futaba Corporation of America |
| AZP | Futaba Corporation of America |
| B23 | Auto Page Inc |
| B25 | Fujitsu Ltd |
| B2A | SCM Corporation |
| B2F | Kantronics Inc |
| B2J | OKI Telecom Division of OKI America Inc |
| B2K | Oki Data Corporation |
| B2M | Encomm Inc |
| B2N | Racon Inc |
| B2Y | Spectrum Communications Corporation |

| Code | Company |
|------|---|
| B32 | VeriFone Inc |
| B34 | Audio Intelligence Devices Inc |
| B37 | Superior Engineering Corporation |
| B3A | Sercel Inc |
| B3Q | Brother Industries Ltd |
| B3T | Trans World Communications Inc |
| B3W | Nautel Maine Inc |
| B3Z | Ricoh Corp |
| B46 | Cemetek Microelectronics Inc |
| B47 | International Quartz Ltd |
| B4G | East Asia Radio Factory Ltd |
| B4K | Hi Tec Co Ltd |
| B4S | X 10 (USA) Inc |
| B4V | Anchor Automation Inc |
| B4Y | Wang Laboratories Inc |
| B4Z | Interactive Technologies Inc |
| B54 | Becker Flugfunkwerk GmbH |
| B5B | Silware Corporation |
| B5D | Telex Communications Inc |
| B5F | Fanon Courier Corporation |
| B5K | Ericsson Radio Systems AB |
| B5P | Laboratoire General Des Telecommunicati |
| B66 | ACR Electronics Inc |
| B67 | Standard Elektrik Lorenz AG |
| B69 | Southern Avionics Company |
| B6B | Nihon Kohden Corporation |
| B6C | Now Precision Co Ltd |
| B6D | Star Micronics Co Ltd |
| B6J | Dayton Granger Inc |
| B6M | Sammo Corporation |
| B6Y | Acorn Computers Limited |
| B6Z | Hitachi Denshi America Ltd |
| B7F | Honeywell Inc |
| B7L | Yick's Electronic Co Ltd |
| B7M | Radio Systems Inc |
| B7Y | Mobile Marine Radio Inc |
| B7Z | NEC Technologies Inc |
| B83 | Loral TerraCom |
| B8A | NEC Corporation |
| B8B | Unisonic Products Corporation |
| B8C | Scientific Atlanta Inc |
| B8G | Hing Yip Electronic Co Ltd |
| B8H | RF Technology Inc |
| B8J | Symbios Logic Incorporated |
| B8J | Symbios Logic Incorporated |
| B8K | HDS Inc |
| B8Q | Genie Company |
| The | |
| B8Q | The Genie Company |
| B8V | Casat Technology Inc |
| B8X | California Microwave Inc |
| B8X | California Microwave Inc |
| B8Z | Micropolis Corporation |
| B93 | Chapman Industries Corp |
| B94 | Hewlett Packard Company |
| B95 | Celltronics Inc |
| B95 | RF Neulink |

| Code | Company |
|------|---|
| B99 | Aire Sciences Inc |
| B9X | Mennen Medical Inc |
| BA2 | Rice International Sales Inc |
| BA9 | A C Nielsen Company |
| BAA | Taiyo Musen Co Ltd |
| BAB | Fujitsu Ten Limited |
| BAI | Henry Radio Inc |
| BAK | Racal Survey USA |
| BAS | TRUCO The Hallicrafters Co |
| BAU | Oriental Precision Co Ltd |
| BBB | Iwata Electric Co Ltd |
| BBC | Kokusai Electric Co Ltd America |
| BBD | TPL Communications Inc |
| BBE | Ocean Applied Research Corporation |
| BBG | Aristo Craft |
| BBO | Cobra Electronics Corporation |
| BBP | Ricoh Company Ltd |
| BBQ | Casio Computer Co Ltd |
| BBS | Dataproducts Corporation |
| BC5 | Telxon Corporation |
| BCA | Intech Inc |
| BCC | Houston Instrument |
| BCE | GN Netcom Inc |
| BCG | Apple Computer Inc |
| BCK | Harris Corporation Farinon Division |
| BCK | Harris Corporation Farinon Division |
| BCP | Radionics Inc |
| BCR | Allen Telecom Systems |
| BCT | Multitone Electronics Inc |
| BD5 | Otron Corporation |
| BD7 | Hung Nien Electronics Ltd |
| BDB | Okidata Div of Oki America Inc |
| BDJ | Nokia Data Communications Corporation |
| BDN | Zoom Telephonics Inc |
| BDT | Ploy Scientific Litton Systems Inc |
| BDZ | Lifeline Systems Inc |
| BEA | Hewlett Packard Co |
| BEB | Micom Systems Inc |
| BEJ | LG Electronics Inc |
| BEK | Nady Systems Inc |
| BEN | Marti Electronics Inc |
| BET | Xerox Corporation |
| BF2 | Toshiba America Information Systems Inc |
| BF7 | Elec & Eltek Co Ltd |
| BFC | Novatel Communications Ltd |
| BFD | Vega A Mark IV Company |
| BFJ | Hayes Microcomputer Products Inc |
| BFL | Glenayre Electronics Inc |
| BFL | Glenayre Electronics Inc |
| BFV | Golden Eagle Electronics Manufactory Lt |
| BFY | Shintom Co Ltd |
| BGA | Audiovox Corporation |
| BGB | Mitsubishi Electric Corporation |
| BGC | Tobishi Electronic Co Ltd |
| BGK | New Products Electronic Co Ltd |
| BGQ | Lasonic Electronics Corporation |
| BGR | Star Light Electronics Co Ltd |

| Code | Company |
|------|--------------------------------------|
| BGR | Star Light Electronics Co Ltd |
| BGT | Arts Electronics Co Ltd |
| BHG | Vita Electronics Corporation Ltd |
| BHJ | American Research & Engineering |
| BHK | Astec International Ltd |
| BHT | Gakken Corporation |
| BI8 | Webcor Electronics Inc |
| BIF | NJR Corporation |
| BIH | Protection Technologies Inc |
| BIL | Stellar Systems Inc |
| BIO | TFT Inc |
| BJ4 | Heath Company |
| BJD | Microwave Sensors Inc |
| BJI | TEC Corporation |
| BJJ | Aiwa Co Ltd |
| BJK | Western Marine Electronics Company |
| BJM | Tatung Company |
| BJN | Proton Electronic Industrial Co Ltd |
| BKL | Kraft Systems Inc |
| BKM | Seiko Epson Corporation |
| BKQ | Crown Radio Corporation |
| BKS | Larcan TTC Inc |
| BKT | Yung Tai Electronics Ind Co Ltd |
| BKW | Win Technic Electronics Factory Ltd |
| BKZ | Kraco Enterprises Inc |
| BLA | Marathon Technology Corporation |
| BLD | General Electric Co |
| BLH | Universal Appliances Ltd |
| BLS | Electro Brand Inc |
| BLU | S R Mickelberg Co Inc |
| BMC | Nintendo of America Inc |
| BMH | Mayming Electronics (HK) Co Ltd |
| BMT | EMCEE Broadcast Products |
| BMW | The Ertl Company |
| BNB | Avantek Inc |
| BNI | Nasta Industries Inc |
| BNM | SBE Inc |
| BNV | Coleco Industries Inc |
| BNW | Qualimax Electronics Ltd |
| BNX | Video Technology Computers Ltd |
| BO7 | Sanyo Fisher (USA) Corporation |
| BOA | Offshore Navigation Inc |
| BOE | Sanda & Company |
| BOI | Harris Corporation |
| BOJ | Wilcox Electric Inc |
| BOK | Fox Marketing Inc |
| BOQ | AA Electronics (International) Ltd |
| BOU | Philips Consumer Electronics Company |
| BOU | Philips Consumer Electronics Company |
| BPB | Pulsar Control Corporation |
| BPG | Fyrnetics Inc |
| BPN | Hobby Shack |
| BPV | LJN Toys (HK) Ltd |
| BQA | Allister Mfg Co |
| BQE | Goldstar Telecommunication Co Ltd |
| BQF | Chinon Industries Inc |
| BQI | Pacific Communications Inc |

| Code | Company |
|------|---|
| BQI | Pacific Communications Inc |
| BQI | VitalCom Inc |
| BQJ | Guardall Limited |
| BQM | Acrodyne Industries |
| BQP | Southern Marine Research Inc |
| BQQ | Continental Electronics Corporation |
| BQR | S P Radio A/S |
| BQS | Townsend Broadcast Systems Inc |
| BR5 | Thunderware Inc |
| BR6 | AEG Bayley Inc |
| BR8 | ADI Corporation |
| BR9 | Commodore Business Machines Inc |
| BRF | Korea Electronics Co Ltd |
| BRF | Korea Electronics Co Ltd |
| BRG | Phonic Ear Inc |
| BRW | Horizon Hobby Distributors Inc |
| BS2 | QUME Corporation |
| BS4 | Hewlett Packard Company |
| BS8 | Controlonics Corporation |
| BSB | Thermador A Masco Company |
| BSD | Hewlett Packard Company |
| BSF | NEC Corporation |
| BSH | Advance Operator Div of Overhead Door C |
| BSY | GMT Industrial Ltd |
| BT9 | Racal Decca Marine Ltd |
| BTG | Schell Electronics Inc |
| BTQ | Model Rectifier Corporation |
| BU8 | Hopes Electronics Co Ltd |
| BUA | Yon Lux Limited |
| BUE | Allied Signal Incorporated |
| BUF | Channel Master Division of Avnet Inc |
| BUL | Mentor Radio Co |
| BUS | Zeny Corporation |
| BUV | Enterprise Electronics Corporation |
| BUW | Ramco Electronics Inc |
| BUY | Canadian Marconi Company |
| BV2 | Nippon Columbia Co Ltd |
| BV6 | Facit Inc |
| BV8 | M/A Com Mac Inc |
| BVC | Sensormatic Electronics Corporation |
| BVC | Sensormatic Electronics Corporation |
| BVI | Ess Cee Inc |
| BVJ | Telephonics Corporation |
| BVM | Ess Cee Ltd |
| BVY | Walter Dittel GmbH |
| BW3 | Dialer & Business Electronics Co Ltd |
| BWN | Fisher Pierce |
| BWX | Seaboard Electronics |
| BX7 | Stanley Electronics |
| BXG | ISC Cardion Electronics Inc Sub of ISC |
| BXH | Termbay Electronics Co Ltd |
| BXJ | Yonezawa Corporation |
| BXQ | Ray Jefferson Division Jetronic Industr |
| BXS | Charming Electronics Co |
| BXT | Kaga Electronics Co Ltd |
| BXU | Elcom Specialty Products Inc |
| BXZ | Telecourier Inc |

| Code | Company |
|------|---|
| BY3 | Scientific Toys Ltd |
| BY3 | Scientific Toys Ltd |
| BY4 | Trans Electric Co Ltd |
| BY6 | Harris Corporation |
| BY7 | Summagraphics Corporation |
| BY9 | Tel Instrument Electronics Corporation |
| BYD | Micron Electronics Inc |
| BYD | Zeos International Ltd |
| BYF | Chamberlain Mfg Corporation |
| BYG | Sangean Electronics Inc |
| BYH | Metz Consumer Electronics Inc dba MCE |
| BYM | HM Electronics Inc |
| BYT | InterDigital Communications Corporation |
| BYT | International Mobile Machines Corporati |
| BZ5 | Larcan Inc |
| BZ6 | SEA Inc of Delaware |
| BZ7 | Eitel Electronics |
| BZB | Azden Corporation |
| BZD | Salco Industries Inc |
| BZG | Kyosho Corporation |
| BZQ | Command Communications Inc |
| C2A | Skandinavisk Teleindustri Skanti A/S |
| C2D | C & K Systems Inc |
| C2G | Polaroid Corporation |
| C2H | Intra Electronics Co Ltd |
| C2P | Granger Associates Inc |
| C2R | Ranger Electronic Communications Inc |
| C2S | Good Mind Industries Co Ltd |
| C35 | Shinwa Tsushinki Co Ltd |
| C36 | Lanson Electronics Inc |
| C38 | Sun Chung Fabrica de Brinquedos (Macau) |
| C39 | Spectradyne Inc |
| C3D | Winegard Company |
| C3E | Loma Scientific Inc |
| C3F | Micron Audio Products Ltd |
| C3K | Microsoft Corporation |
| C44 | Team Concepts Electronics Ltd |
| C4G | Endress + Hauser Inc |
| C4P | Westinghouse Security Electronics Inc |
| C4Z | Seiko Instruments Inc |
| C5A | Wiso Electronics Co Ltd |
| C5B | Nanao Corporation |
| C5C | Phonic Corporation |
| C5F | Daewoo Electronics Co Ltd |
| C5Q | Smoothline Ltd |
| C5S | Destron Fearing Corporation |
| C5V | Polytechnic Electronics PLC |
| C5X | AEG Olympia Office GmbH |
| C6D | Nikko Electronics Toy Pte Ltd |
| C6E | Graphtec Corporation |
| C6F | Mitsubishi International Corporation |
| C6N | DEI |
| C6P | AT&T Global Information Solution Compan |
| C6T | AWA Communications Division of AWA New |
| C6U | Hewlett Packard Company |
| C6Z | Comtek Communications Technology Inc |
| C7E | Diode Inc |

| Code | Company |
|------|---|
| C7O | Selesmar SpA |
| C7V | ALM Corporation |
| C8C | Samsung Semiconductor & Telecommunicati |
| C8J | Scion Corporation |
| C8L | Park Air Electronics Limited |
| C8S | Copal Co Ltd |
| C8U | HOFCO Inc |
| C8V | TriGem Computer Inc |
| C8W | Mirage Communication Equipment Inc |
| C94 | Maggiore Electronic Laboratory Inc |
| C95 | Commodore Electronics Limited |
| C9H | BDT Buro und Datentechnik GMBH |
| C9I | BDT Products Inc |
| C9L | Arizona Avionics |
| C9M | Mitsuba Corporation |
| C9N | Seung Yong Electronics Co Ltd |
| C9S | Fujitsu Limited |
| CA6 | Southwest Microwave Inc |
| CA9 | Dorne & Margolin Inc |
| CAC | Cybiotronics Limited |
| CAP | DX Antenna Co Ltd |
| CAR | R L Drake Company |
| CAS | Tait Electronics Ltd |
| CAZ | Cosmo Time Corporation |
| CB2 | Prince Corporation |
| CBD | DNS Industries Ltd |
| CBF | Control Chief Corporation |
| CBP | Si Tex Marine Electronics Inc |
| CBR | Seikosha Co Ltd |
| CBY | Data South Computer Corporation |
| CCC | Emergency Beacon Corporation |
| CCN | The Bendix Corporation |
| CCR | Sam Ash Music Corporation |
| CCT | Fisher Price Inc |
| CCW | Atlantic Guest Inc |
| CCX | Terra Corporation |
| CCX | Trimble Navigation Limited |
| CCY | ARF Products Inc |
| CD2 | Bogen Communications Inc |
| CDG | Magnavox Electronic Systems Company |
| CDH | Eastern Co Ltd |
| CDJ | Olympus Optical Co Ltd |
| CDL | Murry Rosenblum Sound Associates Inc |
| CDS | Nurad Inc |
| CE2 | Samkeun Co Ltd |
| CE3 | Aeronautical Communications Equipment I |
| CEF | CTS Corporation |
| CEG | City Electronics Ltd |
| CEK | Daifuku Co Ltd |
| CER | Concord Data Systems Inc |
| CEX | Quantum Instruments Inc |
| CEY | Telex Communications Inc |
| CF7 | Xebec Corporation |
| CFC | Mannesmann Tally Corporation |
| CFD | Fujitsu America Inc |
| CFR | Ericsson Radar Electronics AB |
| CFS | Alarm Device Manufacturing Company |

| Code | Company |
|------|---|
| CFT | SGC Inc |
| CFW | Enterprex International Corporation |
| CFX | Communications Specialists Inc |
| CFY | Tad USA Corporation |
| CG7 | ACE Communications Inc |
| CGC | Tecmar Inc |
| CGD | N V Nederlandsche Apparatenfabriek NEDA |
| CGG | Sentrol Incorporated |
| CGJ | Nikon Corporation |
| CGK | Ericsson Radio Systems BV |
| CGR | Taiwan Telecommunication Industry Co Lt |
| CGU | Anam Electric Industrial Co Ltd |
| CHP | Communication Microwave Corp |
| CHQ | Rhine Electronics Co Ltd |
| CHX | Crimestopper Security Products Inc |
| CHY | Kustom Electronics Inc |
| CI5 | Tepco Corporation |
| CIB | Falco Data Products Inc |
| CIC | Kelvin Hughes Limited |
| CID | TA AG |
| CIG | Key Tronic Corporation |
| CIN | Chiayo Electronics Co Ltd |
| CIP | IFR Systems Inc |
| CIW | Philips Lighting Company |
| CIX | Artlight Electrical Manufacturing Co Lt |
| CJ6 | Toshiba Corporation |
| CJ7 | Sanko International Corporation |
| CJA | Philips Automotive Electronics |
| CJE | U S Robotics Inc |
| CJE | US Robotics Access Corp |
| CJE | US Robotics Access Corp |
| CJJ | ITS Corporation |
| CJR | M P H Industries Inc |
| CK2 | Franklin Electronic Publishers Inc |
| CK2 | Franklin Electronic Publishers |
| CK4 | Bonneville International Corporation |
| CKE | Japan Radio Co Ltd |
| CKL | Hyundai Electronics Industries Co Ltd |
| CKL | Hyundai Electronics Industries Co Ltd |
| CKL | Hyundai Electronics Industries Co Ltd |
| CKN | MFJ Enterprises Inc |
| CKP | Silver Seiko Ltd |
| CKT | Yams Electronics Factory Ltd |
| CKW | Hitachi Ltd |
| CLB | Microcom Inc |
| CLH | S Megga Telecommunications Ltd |
| CLJ | Delos Electronics Corp |
| CLP | Mountain Network Solutions Inc |
| CLS | Semo Co Ltd |
| CLV | Recoton Corporation |
| CM6 | SpaceLabs Incorporated |
| CMC | Hewlett Packard |
| CMY | Mitsumi Electric Co Ltd |
| CN2 | Cattron Incorporated |
| CN4 | Koala Acquisitions Inc |
| CNA | Capricorn Electronics Inc |
| CNI | Signal Communications Corporation |

| Code | Company |
|------|---|
| CNM | Williams Sound Corporation |
| CNT | Compaq Computer Corporation |
| CNT | Compaq Computer Corporation |
| CNV | Broadcast Microwave Services Inc |
| CP5 | Taiyo Toy(s) PTE LTD |
| CP9 | Interac Corporation |
| CPD | Kingtel Telecommunications Corp |
| CQ3 | Shinlee Corporation |
| CQQ | Coherent Communications Systems Corpora |
| CQU | ESL/Sentrol Inc |
| CR8 | Sunriver Data Systems |
| CS3 | Aydin Corporation (West) |
| CSD | CMI Inc |
| CSK | Raymond Industrial Ltd |
| CSL | Bio Com Inc |
| CSQ | BI Incorporated |
| CSU | Moseley Associates Inc |
| CSW | Startech Innovations Inc |
| CSY | Samsung Display Devices Co Ltd |
| CSY | Samsung Electron Devices Co Ltd |
| CTD | AT&T Global Information Solution (GIS) |
| CTM | Del Norte Technology Inc |
| CTN | Traco Limited |
| CTR | Fisherman's Paradise Inc |
| CTS | Godfrey Engineering Inc |
| CTT | Stanley Access Technologies |
| CTW | GTCO Corporation |
| CTX | Bondwell Industrial Ltd |
| CTZ | Bull HN Information Systems Italia SpA |
| CTZ | Compuprint SpA |
| CU8 | Fairfield Industries Inc |
| CUC | Tomy Company Ltd |
| CUF | Rodime PLC |
| CUL | Kaypro Corporation |
| CUM | Dor O Matic Division of Republic Indust |
| CUP | Hewlett Packard Optoelectronic Division |
| CVN | Hull Electronics Company |
| CVQ | Enter Computer Inc |
| CVT | Nikko Co Ltd |
| CWW | Comdial Corporation |
| CW2 | Rothenbuhler Engineering Company Inc |
| CWD | Cordata Technologies Inc |
| CWE | Mouse Systems Corporation |
| CWH | LICC Manufacturing Co (Far East) Limite |
| CWR | Mun Ah Plastic Electronic Toys Co Ltd |
| CWS | Heung Yang Inc |
| CWT | Alps Electric Co Ltd |
| CWU | AMX Corporation |
| CWW | VoCom Products Corporation |
| CX4 | Unichem Enterprises Co Ltd |
| CX9 | Jungpoong Products Co Ltd |
| CXJ | Juki Corporation |
| CXP | Northern Telecom Inc |
| CXV | Random Corporation |
| CXY | Pulse Electronics Inc |
| CYJ | 3M |
| CZ5 | Clifford Electronics Inc |

| Code | Company |
|------|---|
| CZA | Hitachi Ltd |
| CZV | Vehicle Security Electronics Inc |
| D2A | Headland Technology Inc |
| D2B | QUME Corporation |
| D2C | AED Satellite Systems Ltd |
| D2H | Ankook Company Ltd |
| D2I | Cortex Electronics Inc |
| D2Q | Seagate Technology |
| D3B | Hewlett Packard Co |
| D3E | Imarflex Mfg Co Ltd |
| D3F | Seiko Epson Corporation |
| D3Z | R Columbia Products Co Inc |
| D43 | WICO Corporation |
| D4B | Robocom Co Inc |
| D4D | Kendecom Inc |
| D4H | GLB Electronics Inc |
| D4N | Electro Voice Inc |
| D4P | Glenayre Electronics Ltd |
| D4T | Telemobile Inc |
| D54 | Hewlett Packard France SA |
| D5D | Northwestern Bell Information Technolog |
| D5I | Dae Ryung Industries Inc |
| D5K | Fontex Technology Corporation |
| D5M | Vectran Corporation |
| D5N | Mylex Corporation |
| D65 | Pulnix America Inc |
| D6M | Aviation Systems Inc |
| D6W | Philips Electronics Ltd Product Centre |
| D6X | Tecom Co Ltd |
| D78 | OmniTel Inc |
| D7H | Cipher Data Products Inc |
| D7J | Maxi Switch Inc |
| D7K | Nippon Kentek Kaisha Ltd |
| D7R | Jofforts Computer Industrial Co Ltd |
| D83 | Mitac Incorporated |
| D87 | Sigma Designs Inc |
| D88 | Ioline Corporation |
| D8I | Maynard Electronics Inc |
| D8K | Ultratec Inc |
| D8T | Astronet Corporation |
| D8Z | Taiwan Hwan Hong Enterprise Co |
| D94 | Develcon Electronics Ltd |
| D9H | Hanzon Data Inc |
| D9V | Asher Technologies Inc |
| DA3 | Samil Enterprise Co Ltd |
| DA8 | Schwing America Inc |
| DAR | Shinko Seisakusho Co Ltd |
| DAX | Olivetti USA |
| DB8 | Visionary Electronics |
| DBC | KTK Engineering Co Inc |
| DBH | Telesensory Systems Inc |
| DBJ | Labelle Industries |
| DBL | Chuntex Electronic Co Ltd |
| DBM | Philips Multimedia Production Group |
| DBM | Western Digital Imaging |
| DBS | DSC Communications Corporation |
| DBZ | Lectrosonics Inc |

| Code | Company |
|------|---|
| DC3 | MARS Electronics |
| DC4 | Exabyte Corporation |
| DCJ | ASTI PACIFIC CORPORATION |
| DCL | Blackbox Automation Inc |
| DCP | Alarm Electronics Manufacturing Co Inc |
| DCS | Nakajima All Co Ltd |
| DCU | Neutec Communications |
| DD4 | Shure Brothers Inc |
| DD9 | Phonetime Industries Limited |
| DDE | Broadcast Electronics Inc |
| DDI | Dai Yoon Electronics Co Ltd |
| DDS | Orchid Technology Inc |
| DDT | Multitech Industrial Corporation |
| DDX | Iomega Corporation |
| DE4 | Dimango Products Corporation |
| DE6 | Cherry Electrical Products |
| DE8 | GRE America Inc |
| DE9 | INMAC |
| DEE | Teletex (Hong Kong) Limited |
| DF6 | 3Com Corporation |
| DF8 | ELTS Unlimited Inc |
| DFC | Televideo Inc |
| DFC | Televideo Systems Inc |
| DFD | Siemens Information Systems Inc |
| DFI | International Microwave Corporation |
| DFI | International Microwave Corporation |
| DFK | Tandon Corporation |
| DFM | RMS Industrial Controls Inc |
| DG7 | D G Electronic Developments Co Inc |
| DGF | 3M Safety & Security Systems Division |
| DGI | Inventec Corporation |
| DGV | Ehrhorn Technological Operations Inc |
| DGZ | Intermatic Inc |
| DH5 | Prima International |
| DH6 | Hua Chang Electronics Co Ltd |
| DHP | Jerrold Division General Instrument Cor |
| DHT | Telegest Inc |
| DHW | Herald Metal & Plastic Works Ltd |
| DHX | Leading Edge Products Inc |
| DI2 | Computime Limited |
| DI5 | Alloy Computer Products Inc |
| DI8 | Sakata Inx USA Corporation |
| DIG | Krupp Atlas Elektronik |
| DIJ | Galaxy Far East Corp |
| DJ3 | OCLC Online Computer Library Center Inc |
| DJ6 | BFGoodrich FlightSystems Incorporated |
| DJ7 | Ten Tec Inc |
| DJ9 | Quadram Corporation |
| DJK | AST Research Inc |
| DJL | Japan Radio Company Ltd |
| DJM | Voyetra Technologies |
| DJT | Conair Corporation |
| DK4 | GVC Corporation |
| DK7 | Delta Electronics Inc |
| DKB | Digitize Inc |
| DKD | Roland Corp US |
| DKM | Comark Communications Inc |

| Code | Company |
|------|---------------------------------------|
| DKM | Comark Communications Inc |
| DKN | Houston Tracker Systems Inc |
| DKU | Murata Machinery Ltd |
| DKW | Dah Yang Industry Co Ltd |
| DKX | Tranbon Electronic Industrial Co Ltd |
| DL5 | Tribar Industries |
| DL7 | Genicom Corporation |
| DLA | TOA Corporation |
| DLB | Realty Electronics |
| DLD | Canon Electronics Inc |
| DLF | Prometheus Products Inc |
| DLF | Prometheus Products Inc |
| DLK | Citizen Watch Co Ltd |
| DLQ | Gandalf Canada Limited |
| DLR | Logitech Inc |
| DLX | Advanced Electronic Applications Inc |
| DM9 | Hitachi Denshi Ltd |
| DMA | Kurta Corporation |
| DMO | Sennheiser Electronic Corp (NY) |
| DMP | Radio Systems Inc |
| DN4 | Giltronix |
| DND | Software Support Inc |
| DNY | Electromagnetic Sciences Inc |
| DO2 | Mobile Data International |
| DO4 | Checkpoint Systems Inc |
| DO5 | Xerox Corporation |
| DOI | Mitsumi Electric Co Ltd |
| DON | Spilsbury Communications Limited |
| DOO | Hughes Aircraft Company |
| DOS | Digital Communications Associates Inc |
| DOY | Browning Communications Inc |
| DP6 | Dan Mar Company Inc |
| DPB | Whetron Industrial Co Ltd |
| DPD | Ultra Sensors Inc |
| DPE | British Jeffrey Diamond |
| DPT | Luxor AB |
| DQE | Kuang Yuan Company Ltd |
| DQG | Yanjen Electronic Co Ltd |
| DQU | M M O S Inc |
| DRK | Knight Protective Industries Inc |
| DRO | Handar Inc |
| DRW | Eagletron Telecommunications Ltd |
| DRW | Eagletron Telecommunications Ltd |
| DRX | Micron Electronics Co Ltd |
| DS7 | Alcatel Information Systems Inc |
| DS8 | Sentex Systems Inc |
| DSI | Hewlett Packard Singapore Pte Ltd |
| DSN | Daeyoung Electronics Ind Co Ltd |
| DT6 | Multiplex Technology Inc |
| DT6 | Multiplex Technology Inc |
| DT7 | Vehicle Radar Safety Systems Inc |
| DT9 | Jebsee Electronics Company Ltd |
| DTB | Hong Years Telephone Co Ltd |
| DTS | Daewoo Telecom Ltd |
| DU2 | Asahi Optical Company Ltd |
| DUM | Microwave Sources Corporation |
| DUO | Emulex Corporation |

| Code | Company |
|------|---|
| DUO | Emulex Corporation |
| DUP | Practical Peripherals Inc |
| DV2 | Holmes Products Corporation |
| DV7 | Wong's Electronics Co Ltd |
| DV8 | Fukuda Denshi Co Ltd |
| DVB | Toyo Communication Equipment Co Ltd |
| DVP | Xtron Computer Equipment Corporation |
| DVQ | Advanced Videotech Corporation |
| DWW | Disc Instruments |
| DVX | Siltronics Ltd |
| DWB | Pace Electronics Group Co Ltd |
| DWE | Xecom Inc |
| DWH | CAF Computer Corporation |
| DWN | Somfy Systems |
| DWQ | PC Technologies Inc |
| DWV | American Phone Products Inc |
| DX9 | TEAC Corporation |
| DXL | Lung Hwa Electronics Co Ltd |
| DXO | Copam Electronics Corporation |
| DY4 | Japan Marina Co Ltd |
| DY7 | Sportsman's Market Inc |
| DY9 | Touchstone Technology Inc |
| DYD | Wyse Technology |
| DYH | Digital Microwave Corporation |
| DYK | Ing C Olivetti & Co SpA |
| DYZ | AGC Electronics Corp |
| DZ2 | Northern Information Technology Inc |
| DZE | ERI Exceptional Realty |
| DZF | Lucky Goldstar International Corp |
| DZK | Unisys Corporation |
| DZL | Logitech Inc |
| DZQ | Harris Corporation Long Range Division |
| E23 | Computing Devices Company |
| E25 | Manhattan Electronics Ltd |
| E28 | Amstrad International (Hong Kong) Ltd |
| E2F | Metscan Inc |
| E2H | MUX Lab Inc |
| E2J | Octocom Systems Inc |
| E2K | Dell Computer Corporation |
| E2O | Datatronics Technology Inc |
| E2Q | King Marine Electronics Inc |
| E2R | Chung Hsin Electric & Machinery Manufac |
| E2X | Samsung Electro Mechanics |
| E2Z | Telemax Inc |
| E34 | Mastervoice Ltd |
| E36 | Escort Memory Systems Inc |
| E38 | Dynamark Security Centers Inc |
| E39 | Ambico Inc |
| E3B | Symphony Systems Inc |
| E3E | Everex Systems Inc |
| E3J | Anixter Bros Inc |
| E3S | Eicon Technology Corporation |
| E3S | Eicon Technology Corporation |
| E3T | Firmware Specialists Inc |
| E3U | Computer Logics Limited |
| E3V | Mealtronic Manufactory Ltd |
| E3W | Ideassociates Inc |

| Code | Company |
|------|---|
| E3Z | Baker CAC Inc |
| E4A | Irwin Magnetic Systems Inc |
| E4B | Eastman Kodak Company |
| E4E | Omron Corporation |
| E4W | Schlage Lock Company |
| E52 | Mita Industrial Co Ltd |
| E5B | Philips Electronics Ltd |
| E5I | Tack Cheung Plastic Manufactory Ltd |
| E5M | Microwave Data Systems |
| E5N | Toyhouse Manufacturing Corp |
| E5Q | Fountain Technologies Inc |
| E5U | Advanced Transducer Devices Inc |
| E5V | Datatech Enterprises Co Ltd |
| E5X | Behavior Tech Computer Corporation |
| E5Y | Diamond Flower Electric Instrument Co L |
| E5Z | Alpha Microsystems |
| E64 | Kiel Corporation Inc |
| E66 | Associated Mills Inc |
| E67 | Milcom International Inc |
| E67 | Powerwave Technologies Inc |
| E6L | Arnet Corporation |
| E6O | Indesys Inc |
| E6P | R P T Intergroups International Ltd |
| E6Q | Jow Dian Enterprise Co Ltd |
| E6Q | The Jow Dian Enterprise Co Ltd |
| E6R | Mintek Computer International Corp |
| E6T | BEXT Inc |
| E75 | Eastman Kodak Company |
| E7A | Unitron Inc |
| E7D | Checkmate Technology Inc |
| E7J | Johnathon Freeman Designs Inc |
| E7S | QMS Inc |
| E7T | Profit Systems Inc |
| E7U | Fox Security Services |
| E7Y | Advanced Logic Research Inc |
| E86 | Multitone Electronics PLC |
| E8C | Comtec Systems Co Ltd |
| E8H | Chicony Electronics Co Ltd |
| E8M | Atronics International Inc |
| E8M | Atronics International Inc |
| E8O | TECO Information Systems Co Ltd |
| E8T | Affinitec Corporation |
| E96 | Motorola Inc |
| E98 | Datadesk International Inc |
| E9L | Philips Data Systems |
| E9M | AKG Acoustics Incorporated |
| E9N | PC Craft Inc |
| E9P | CSS Laboratories Inc |
| E9U | Indala Corporation |
| E9V | Ergo Electronics Company Limited |
| EA3 | European Standard Electronics PTE Ltd |
| EA4 | Security Tag Systems Inc |
| EA5 | Minolta Co Ltd |
| EA9 | Digital Pathways Inc |
| EAE | Western Dynex Corp |
| EAG | Brooktrout Technology Inc |
| EAK | Personal Computer Products Inc |

| Code | Company |
|------|---|
| EAQ | Ultrason International Inc |
| EAX | Conner Peripherals Tape Drive Division |
| EAY | Care Systems Inc |
| EAZ | Xetec Inc |
| EB3 | Osram Sylvania Inc |
| EB3 | Osram Sylvania Inc |
| EB9 | F & M Global Communications Inc |
| EBA | Atari Corporation |
| EBB | Passport Designs Inc |
| EBD | Gulton Industries Inc |
| EBY | Keystone Electronics Co Ltd |
| EBZ | Dialogic Corporation |
| EC2 | Ryokuseisha Corporation |
| EC4 | Rabbit Software Corporation |
| EC9 | King Electronic Co Ltd |
| ECF | Microwave Networks Incorporated |
| ECP | CalComp Digitizer Products Group |
| ED9 | National Semiconductor Corporation |
| EDB | Telebyte Technology Inc |
| EDG | Anritsu Corporation |
| EDI | Heath Company |
| EDR | Whirlpool SMC Microwave Products Develo |
| EDR | Whirlpool SMC Microwave Products Develo |
| EDU | Konica Corporation |
| EE6 | Marconi Electronic Devices Ltd |
| EEB | Digital Products Corporation |
| EEK | Ampex Corporation |
| EEM | GCC Technologies Inc |
| EEN | Philips Consumer Electronics BV |
| EEN | Philips Consumer Electronics BV |
| EER | NCR Corporation |
| EET | CCA Electronics Inc |
| EF4 | Linear Corporation |
| EF5 | Team Technology Inc |
| EF7 | Sotec Co Ltd |
| EF8 | Kong Wah Electronic Enterprises Ltd |
| EF9 | Microtek International Inc |
| EFA | Computer Language Research Inc |
| EFC | Orion Electronics Limited |
| EFO | Tactical Electronics Corporation |
| EFX | Genovation Inc |
| EFY | Olympic Co Ltd |
| EFZ | Colorado Memory Systems Inc |
| EG3 | Lear Operations Research & Development |
| EGB | Realwave Corporation |
| EGC | Sweet Electronics Corporation |
| EGO | Output Technology Corporation |
| EGS | Manzana Microsystems Inc |
| EGT | Remtron Inc |
| EGT | Remtron Inc |
| EGU | Advanced Medical Systems Inc |
| EGZ | Epson America Inc |
| EH4 | Ortech Industries Inc |
| EHA | Norand Corporation |
| EHC | Medical Data Electronics |
| EHD | Yuan Long Machinery Co Ltd |
| EHI | Princeton Graphic Systems |

| Code | Company |
|------|---|
| EHK | Gerry Baby Products Company |
| EHT | Mitel Corporation |
| EHX | Black Box Corporation |
| EI2 | Ark Electronic Products Inc |
| EI4 | Solidyne Corporation |
| EI9 | Lee Data Corporation |
| EIF | Welch Allyn Inc |
| EIH | Research Electronics Inc |
| EIS | Personal Computer Peripherals Corp |
| EIU | Personal Touch Corporation |
| EIY | GCH Systems Inc |
| EJ3 | Calpak Corporation |
| EJ4 | Eureka Systems |
| EJ5 | Compower Technology Corporation |
| EJ8 | Proxima Corporation |
| EJ9 | King Products Electronic |
| EJH | Mitac International Corporation |
| EJK | International Crystal Manufacturing Co |
| EJM | Intel Corporation |
| EJN | Southwestern Bell Telecommunications In |
| EJV | Mountain Medical Corporation |
| EK2 | Peninsula Wireless Communications |
| EKL | Happy World Inc |
| EKO | JDL Inc |
| EKS | STB Systems Incorporated |
| EKY | Chien Hou Electronics Co Ltd |
| ELG | DesignTech International Inc |
| ELH | Trans Com Inc |
| ELJ | Proscise Corporation |
| ELL | Tseng Labs Inc |
| ELR | Data Share Inc |
| ELT | Tactical RF Incorporated |
| ELV | Nutek Corporation |
| ELY | Jeckson Electric Company Ltd |
| EMA | Hewlett Packard de Mexico SA de CV |
| EMC | Natural MicroSystems Corp |
| EMF | Electrofix |
| EMJ | Primax Electronics Ltd |
| EMO | SDI Technologies Inc |
| EMS | Fastcomm Communications Corporation |
| EN5 | Rabbit Systems Inc |
| EN7 | General Railway Signal Company |
| ENP | Electronic Systems Technology |
| ENR | Plectron Corporation |
| ENZ | Casio Electronics Manufacturing Co Ltd |
| EO2 | Nokia Mobile Phones (UK) Ltd |
| EO9 | Itron Inc |
| EOE | Compaq Telecommunications Corp |
| EOG | General Electronics Mfg Co Ltd |
| EOI | Hitachi America Ltd |
| EOJ | Il Morrow Inc |
| EOK | Computer Logics Limited |
| EOO | Newko Toy Co Ltd |
| EOT | Dataradio Incorporated |
| EOZ | Shintom West Corporation of America |
| EP2 | Bell & Howell Quintar Company |
| EP7 | Pony Electric Corporation |

| Code | Company |
|------|---------------------------------------|
| EP8 | Olivetti Office Srl |
| EPF | Sunkyoung Limited |
| EPK | South East Asia Resources Ltd |
| EPK | South East Asia Resources Ltd |
| EPN | Beemer RC West Distributors Inc |
| EPS | Image Data Corporation |
| EPV | New Image Technology Inc |
| EPW | Hozn Auto & Soft Co Ltd |
| EQI | Motorola Inc |
| EQN | Shinano Kenshi Co Ltd |
| ER2 | Basic Time Incorporated |
| ER5 | Geminis Industrial and Technical Corp |
| ER9 | Telebit Corporation |
| ERJ | Imagen Corporation |
| ERO | Crestron Electronics Inc |
| ERY | Seco Larm USA Inc |
| ES2 | Sea Ranger Marine Inc |
| ES7 | PEAC Media Research Inc |
| ESE | Micro Controls Inc |
| ESG | Cable Electric Products Inc |
| ESN | Kinpo Electronics Inc |
| ESQ | Star Gate Technologies Inc |
| ESV | Detection Systems Inc |
| ESY | KSP America Corporation |
| ET5 | Catcom Systems Corp |
| ETI | Touchbase Systems Inc |
| ETO | Memorex Telex Corporation |
| ETS | Verticom |
| ETU | Dayna Communications Inc |
| ETX | Brains Master Corporation |
| EU4 | Western Digital Corporation |
| EU6 | Pentel Co Ltd |
| EU8 | Gigamation Inc |
| EU9 | Plus Development Corporation |
| EUC | Instalart |
| EUD | Boca Research Inc |
| EUD | Boca Research Inc |
| EUF | Information Storage Inc |
| EUG | Alinco Electronics Inc |
| EUI | Mannesmann Tally GmbH |
| EUI | Mannesmann Tally GmbH |
| EUK | Ju Feng Electric Manufacturing Co Ltd |
| EUN | First International Computer Inc |
| EUQ | SelecTronics Inc |
| EUY | Gemini Industries Inc |
| EV3 | Nihon Electronics Company Limited |
| EV5 | Gamma Technology Inc |
| EV9 | Multipoint Networks |
| EVC | Telsor Corporation |
| EVF | Tigertronics Incorporated |
| EVJ | Measurement Devices Limited |
| EVL | Lotus Information Network Corporation |
| EVO | Korea Data Systems Co Ltd |
| EVO | Korea Data Systems Co Ltd |
| EVO | Korea Data Systems Co Ltd |
| EVZ | Data Race Inc |
| EW3 | INTV Corporation |

| Code | Company |
|------|---|
| EW4 | Mitsumi Electric Co Ltd |
| EW5 | Outlook Haewa Industrial Corp |
| EW6 | Hercules Computer Technology Inc |
| EW7 | VTech Communications Ltd |
| EWB | Orion Electric Co Ltd |
| EWG | Gulfstream Micro Systems |
| EWI | ABB Metrawatt Inc |
| EWO | Electronic Ballast Technology Inc |
| EWQ | Itron Inc |
| EWB | American Computer & Peripheral Inc |
| EX2 | ITT Corporation |
| EXC | Blaupunkt Werke GmbH |
| EXD | Wicom Weiser Industries |
| EXG | Electronic Security Products of Califor |
| EXH | Soricon Corporation |
| EXK | Intelligent Data System Inc |
| EXM | ATI Technologies Inc |
| EXN | National Instruments Corporation |
| EXR | Page Com Inc |
| EXW | Vermont Microsystems Inc |
| EXX | Tysam Inc |
| EXY | Northwestern Bell Phones |
| EY4 | Westinghouse Electric Corporation |
| EY5 | International Computers Limited |
| EYI | In Situ Inc |
| EYM | Tai Shan Sheng Yeh Industrial Co Ltd |
| EYW | Applied Engineering |
| EZE | Laser Digital Inc |
| EZH | Data Doc Electronics Inc |
| EZI | California Computer & Component Inc |
| EZL | Cheetah International Inc |
| EZN | Val Avionics Limited |
| EZO | Cotag International Incorporated |
| EZO | Cotag International Incorporated |
| EZP | Kombix Co Ltd |
| EZQ | Conographic Corporation |
| EZS | Directed Electronics Inc |
| EZU | Clone Computers |
| EZW | Tektronix Incorporated |
| EZZ | TX RX Systems Inc |
| F29 | Royal Information Electronics Corp |
| F2H | Commercial Power Co |
| F2J | GRiD Systems Corporation |
| F2L | Protel Inc |
| F2M | Megahertz Corporation |
| F2M | U S Robotics Mobile Communications Corp |
| F2N | Cable Home Communication Corporation |
| F2P | CompuAdd Computer Corporation |
| F2Q | Qtronix Corporation |
| F33 | Traffic Monitoring Technologies Partner |
| F34 | SR Telecom Inc |
| F35 | Cannon Electronics Inc |
| F36 | Jasmine Computer Systems |
| F38 | Jee Won Industrial Co Ltd |
| F3C | Kin Star Technology Corp |
| F3E | TERMA Elektronik AS |
| F3F | Anko Electronic Co Ltd |

| Code | Company |
|------|---|
| F3J | Maxon America Inc |
| F3K | Maxon Systems Incorporated |
| F3K | Maxon Systems Incorporated |
| F3M | Teletec Corporation |
| F3S | Trantec Systems |
| F3T | Lemarquis Audio International Inc |
| F3U | CLEO Software |
| F3V | Message Technology Ltd |
| F3Z | Security Sentry A Division of Supradur |
| F42 | Foalert Inc |
| F44 | Hummingbird Communications Limited |
| F46 | Tae Yon Products Ltd |
| F48 | CannonBear Inc |
| F49 | CD & F Electronics Corporation |
| F4A | Quatech Inc |
| F4G | WELTEC digital inc |
| F4J | Senoc Corporation |
| F4M | International Datacasting Company |
| F4S | Winkelmann Security Systems Limited |
| F4T | Cabletron A Division of the Collingswor |
| F4U | Thunderbolt Electronics Co Inc |
| F4W | Spainhour Flying Service Inc |
| F4X | HomeSafe Corporation |
| F4Z | Forward Electronics Co Ltd |
| F52 | International Keytech Corp |
| F53 | Digital Security Controls Limited |
| F54 | Standard Computer Corporation |
| F55 | The Complete PC Inc |
| F56 | PBH Computer Products Inc |
| F59 | Mantec Technology Limited |
| F5A | Promiga |
| F5C | Apparat Inc |
| F5G | Fuji Photo Film Co Ltd |
| F5H | Infomtech Industrial Limited |
| F5J | Ka Wah Manufactory Limited |
| F5K | Harmony Electric Co Ltd |
| F5P | Laptop Enhancement Systems Inc |
| F5R | Micron Technology Inc |
| F5T | Datamedia Corporation |
| F5Y | Computer Products United |
| F64 | E Machines Inc |
| F65 | Nikkyo Seisakusho Co Ltd |
| F66 | Tri Cor Industries Inc |
| F67 | Ampex Corporation |
| F6B | Century Data Systems Inc |
| F6E | Golden West Communications Inc |
| F6G | Earmark Inc |
| F6H | King Phoenix Company Limited |
| F6P | Siemens Transmission Systems Inc |
| F6Q | Gemel s r l |
| F6T | Transtech International Corporation |
| F6Z | Phonodaptor Products Co |
| F73 | LC Technologies |
| F77 | Coastal Electronics WA |
| F78 | Electronic Industries Inc |
| F7A | BTS Broadcast Television Systems Inc |
| F7C | Intecolor Corporation |

| Code | Company |
|------|--------------------------------------|
| F7D | Solidex Inc |
| F7P | ICOT Corp |
| F7T | Aquabug International Inc |
| F7U | Varda Company |
| F7V | Mackay Communications Inc |
| F7X | Telepanel Inc |
| F7Y | Western Starrise Inc |
| F82 | DTK Computer Inc |
| F83 | Banksia Information Technology Ltd |
| F84 | AMSKAN Ltd |
| F87 | Eastern Microsystems Corporation |
| F88 | Union Electric Corporation |
| F8B | Telemetry Technologies Inc |
| F8F | Prodem Technology Inc |
| F8G | Newex Inc |
| F8I | ADC Kentrox Industries |
| F8I | ADC Kentrox |
| F8I | ADC Wireless Systems |
| F8T | Best Communication Inc |
| F8Z | Techguard Industries Ltd |
| F92 | Emerson Electric Co |
| F95 | JDR Microdevices Inc |
| F97 | Iiyama Electric Co Ltd |
| F98 | Spring Circle Computer Inc |
| F99 | Touch Sound Electronics Corp |
| F9A | Hoptron Electronics Inc |
| F9C | Schlumberger Industries Inc |
| F9C | Schlumberger Industries Inc |
| F9F | Tech Electronics Company |
| F9G | Wernex Electronics Limited |
| F9H | International Geosystems Corporation |
| F9L | Elec & Eltek (USA) Corp |
| F9P | Spring Circle Technology Inc |
| F9R | Newbridge Networks Corporation |
| F9S | JRL Toys |
| F9X | Cubic Precision Incorporated |
| FA7 | Optex (USA) Incorporated |
| FAE | Anyang Electronics Inc |
| FAF | The Eska Company |
| FAH | Longshine Electronic Co |
| FAM | US Computer Systems Inc |
| FAZ | Tideland Signal Corporation |
| FB3 | Novitas Inc |
| FB8 | Genoa Systems Corporation |
| FB9 | Unison Electric Co Ltd |
| FBB | Cheer Electronics Corp |
| FBC | Incomm Data Systems Inc |
| FBG | Superwave Electronic Co Ltd |
| FBI | Gentner Communications Corporation |
| FBJ | Kash N Gold Limited |
| FBR | Fleetwood Furniture Company |
| FBT | Henson Scientific Inc |
| FBX | Datacomp Electronics Co Ltd |
| FBZ | GTECH Corporation |
| FC2 | Wells American |
| FC3 | Microwave Radio Corporation |
| FC6 | Anes Electronics Inc |

| Code | Company |
|------|---|
| FC7 | Remcor Technical Industries Inc |
| FC8 | Cascade Electronics Inc |
| FC9 | Maple Technology Corporation |
| FCC | Grantee |
| FCC | Norsat International Inc |
| FCI | Vital Communications Pty Ltd |
| FCL | Goldstar Precision Co Ltd |
| FCY | Data Blocks Inc |
| FCZ | Diamond Multimedia Systems Inc |
| FCZ | Supra Corporation |
| FD3 | Star Industries Inc |
| FD4 | American Research Corporation |
| FD5 | Golden Time Corporation |
| FD7 | Tulin Corporation |
| FD9 | Identitech Corporation |
| FDA | ACS International Inc |
| FDJ | Octus Inc |
| FDN | Epson Portland Inc |
| FDP | CASIO Inc |
| FDQ | Uni Met Electronics Inc |
| FDU | PC Designs Inc |
| FE3 | Sudbury Systems Inc |
| FEA | Com Ser Laboratories Inc |
| FEB | Indtech Inc |
| FED | Core International |
| FEF | Arnav Systems Inc |
| FEG | Fanking Products Inc |
| FEH | Microtek Inc |
| FEL | Taicom Data Systems Co Ltd |
| FEM | PC & C Research Corp |
| FEN | TW Casper Corporation |
| FES | Digital Transmission Systems Inc |
| FF6 | Relax Technology Inc |
| FF8 | Sirex USA Inc |
| FFC | Peripheral Land |
| FFE | Luma Telecom Inc |
| FFG | Advanced Matrix Technology Inc |
| FFG | Advanced Matrix Technology Inc |
| FFH | Kuan Yue Electric Co Ltd |
| FFJ | Datex International Ltd |
| FFM | Goldstar Information & Communications L |
| FFO | Headstart Technologies Co |
| FFS | Kenetic Electronics Ltd |
| FFX | K S Brotherbox Co Ltd |
| FFZ | CAL ABCO |
| INC. | |
| FG9 | Nitech Inc |
| FGF | Telko Incorporated |
| FGT | Adaptec Inc |
| FH5 | Comtex Micro Systems Inc |
| FHA | Applied Micro Technology Inc |
| FHD | Metrocast |
| FHH | TMC Research Corporation |
| FHH | Tiva Microcomputer Corporation (TMC) |
| FHM | Granger Telettra |
| FHN | Fifth Generation Systems Inc |
| FHP | Tecom Co Ltd |

| Code | Company |
|------|---|
| FHQ | Yangtech Electric Co Ltd |
| FHS | May Computers Corporation |
| FI2 | Taiwan Liton Electronic Co Ltd |
| FI3 | Biostar Systems Co Ltd |
| FI7 | Archtek Telecom Corporation |
| FI8 | Benjamin International Inc |
| FIA | Wasae Corporation |
| FIB | JC Information Systems Inc |
| FIF | Personal Computer & Communication Inc |
| FIG | Abaton Technology Corporation |
| FIH | Amtech Systems Corporation |
| FIS | Telcor Systems Corp |
| FJ5 | Vutek Systems Inc |
| FJ6 | Modular Mining Systems Inc |
| FJ8 | Sega Enterprises Ltd |
| FJ9 | Corrections Services Inc |
| FJA | Barr Systems Inc |
| FJB | Penguin Products Inc |
| FJG | Measurement Systems International Inc |
| FJH | Priam Corporation |
| FJI | Dyna Micro Incorporated |
| FJJ | Ten X Technology Inc |
| FJJ | Ten X Technology Inc |
| FJP | DEE VAN Enterprise Co Ltd |
| FJS | DigiBoard Incorporated |
| FK3 | SIIG Inc |
| FK8 | Pei Chow Industry Co Ltd |
| FKB | Duda |
| John | |
| J | |
| FKC | Amax Engineering Corporation |
| FKD | Monterey International Corporation |
| FKF | Keytech Incorporation |
| FKG | Twinhead International Corporation |
| FKI | Digital Office Systems International |
| FKL | Dynamic Decisions Inc |
| FKR | Pan Asia Electronics Co Ltd |
| FKS | Advanced Digital Information Corporatio |
| FKS | Advanced Digital Information Corporatio |
| FKX | Flytech Technology Co Ltd |
| FKY | DTI Security |
| FL8 | Bestek International Inc |
| FLA | Soyo Technology Co Ltd |
| FLC | Swintek Enterprises Inc |
| FLH | Atlantic Computer Products Inc |
| FM2 | Personal Computer Associates Inc |
| FM3 | Ilon USA Inc |
| FMA | Nan Tan Computer Co |
| FMF | Rodime Systems Inc |
| FMG | Data Bank Computer |
| FMJ | Nighthawk Electronics Limited |
| FMO | Genesis Technology Inc |
| FMO | Genesis Technology Inc |
| FMU | US Micro |
| FMZ | Yih Lung Enterprises Co Ltd |
| FN4 | Innovative Controls Inc |
| FN5 | NEC America Inc |

| Code | Company |
|------|---|
| FN6 | Best Data Products Inc |
| FNC | Cort Musical Instruments Co Ltd |
| FNE | Japan CBM Corporation |
| FNF | UFO Systems Inc |
| FNK | HYMCO Technologies Inc |
| FNL | Dynatron Associates Inc |
| FNM | Jet Comp Enterprises |
| FNP | X Cyte Inc |
| FNR | S T Institute |
| FNS | Peer Inc |
| FNU | Scientific Micro Systems Inc |
| FNZ | Empac International Corp |
| FNZ | Empac International Corp |
| FO5 | Cadam Inc |
| FO6 | Han Seung Enterprise Co Ltd |
| FO7 | Microtech International Inc |
| FO8 | Halsey Enterprise Co Ltd |
| FOD | Packard Bell Electronics Inc |
| FOJ | Hwa Hsin Electronic Co Ltd |
| FOL | Bowen Security Equipments Ltd |
| FON | Challenger Division of Wayne Dalton Cor |
| FOQ | Earl Ruble and Associates Inc |
| FOR | Datavue Technical Systems |
| FOS | Innovative Industries Incorporated |
| FOT | Multivision Products Inc |
| FOU | R D Percy & Company |
| FOX | Novatech Designs Ltd |
| FP5 | Babson Bros Co |
| FPA | Sowa Corporation |
| FPF | Well Join Ind Co Inc |
| FPJ | PFU Limited |
| FPL | Pantex Computer Incorporated |
| FPS | Business Integration Group Inc |
| FPV | Reliable Communications Inc |
| FPW | Jing Mold Enterprise Co Ltd |
| FPX | Computer Elektronik Infosys of America |
| FQI | Joytech Computer Co Ltd |
| FQJ | Anakin Research Inc |
| FQM | Alps Electric (USA) Inc |
| FQT | Tailyn Communication Co Ltd |
| FQU | Computer Peripherals Inc |
| FQW | Wholepota Company Limited |
| FRD | Dalme Inc |
| FRW | AlliedSignal Avionics Inc |
| FS2 | Security Organization Supreme Inc |
| FS6 | Aicom Corporation |
| FSD | SieloxCheckpoint Systems Inc |
| FSE | Kwik Find Inc |
| FSL | Artisoft Inc |
| FSM | Hyo Sung Computer |
| FSQ | Focus Electronic Co Ltd |
| FSS | Kouwei Electronic Corp |
| FSU | KYE Systems Corp |
| FT9 | Flying Triumph Co Ltd |
| FTE | Opus Systems |
| FTF | Antex Data Systems |
| FTJ | CableSoft Inc |

| Code | Company |
|------|---|
| FTR | Parex Electronics & Computer Co Ltd |
| FTS | Commercial Data System Taiwan Corp |
| FTU | Diamond Multimedia Systems Inc |
| FTV | Gan's International Inc |
| FTZ | Premier Telecom Products Inc |
| FU4 | Standard Equipment & Funding Corporatio |
| FU5 | Everspring Industry Co Ltd |
| FU7 | Teleken Electronics Co Ltd |
| FUC | Conner Peripherals Inc |
| FUD | Micro Distribution Center Inc |
| FUI | CEC Electronics Co |
| FUL | CMS Enhancements Inc |
| FUM | SuperMac Technology |
| FUN | Allen Bradley Company |
| FUS | Opcode Systems Inc |
| FUU | Microspeed Incorporated |
| FUV | AMP Incorporated |
| FUY | Lightspeed Inc |
| FV6 | Commercial and Industrial Design Co Inc |
| FVI | Continental Systems Inc |
| FVJ | Digital Solutions Incorporated |
| FVK | Innovation Computer Corporation |
| FVL | SABA Technologies Inc |
| FVQ | Herko Electronics Inc |
| FVR | Philips LMS |
| FVV | SunRize Industries |
| FVZ | Current Logic Systems Inc |
| FVZ | Macronix Inc |
| FW2 | Hewlett Packard Company |
| FW7 | Ehman Engineering Inc |
| FW8 | United Innovations |
| FW9 | Lotek Engineering Inc |
| FWI | Bravo Communications Inc |
| FWJ | Ahead Systems Inc |
| FWN | Cypher Technology Corporation |
| FWQ | Ambrosia Microcomputer Products Inc |
| FWT | Ricoh Systems Inc |
| FWY | Micromet Corporation |
| FX3 | Radio TV Engineering Co |
| FX5 | Digitech Computer Co Ltd |
| FX6 | Target Electronics Co |
| FXA | American Communications & Electronics |
| FXE | Great Software Ideas Inc |
| FXG | Up To Date Technology Inc |
| FY4 | Deyi Technology Co Ltd |
| FY5 | China Keyboard Co Ltd |
| FY7 | Advance Transformer Company |
| FYA | Contriver Technology Inc |
| FYC | Adaptive Computer Technologies |
| FYG | Tait Electronics USA Inc |
| FYL | Sampo Corporation |
| FYN | Mechatronic Technologies Inc |
| FYP | Costa Electronics Inc USA |
| FYU | American Television and Communications |
| FYV | Adak Communications Corporation |
| FYX | Unitron Computer USA Inc |
| FYZ | Proapp Inc |

| Code | Company |
|------|--|
| FZ3 | CSC Computer System Corporation |
| FZ4 | Suncor Communications Inc |
| FZ5 | Tangent Technologies Ltd |
| FZ6 | SMK Electronics Corporation USA |
| FZ9 | E & M Development Inc |
| FZM | Crystal Data Systems Inc |
| FZN | Datacopy Corporation |
| FZP | Control Systems |
| FZQ | Fischer America Inc |
| FZS | Lifecal Systems Inc |
| FZT | Vindicator Inc |
| FZV | Fisons Corporation |
| FZW | Jadine Research Inc |
| FZY | Fair Electronics Co Ltd |
| G2D | Wearnes Technology Corporation Limited |
| G2E | Umax Data Systems Inc |
| G2F | Extensive Enterprise Co Ltd |
| G2H | Shi Chen Electric Mfg Works Co Ltd |
| G2J | CSI Manufacturing and Distribution Inc |
| G2J | CSI Manufacturing and Distribution Inc |
| G2K | Wordtech Systems Inc |
| G2L | Software Security Inc |
| G2M | Digitan Systems Inc |
| G2R | Video Technology Electronics Ltd |
| G2S | Restorr Technology |
| G2T | Protec Microsystems Inc |
| G2U | Heroform Industries Ltd |
| G2X | Tunstall Telecom Limited |
| G33 | AW Data |
| G34 | Sonodyne America Limited |
| G36 | Korea DaeJin Co Ltd |
| G3A | Vista Labs |
| G3E | Nexus Engineering Corp |
| G3F | Namera Group Incorporated |
| G3G | T Berry Electronics Corporation |
| G3K | U Link Enterprise Co Ltd |
| G3L | Dual Enterprises Corporation |
| G3L | Dual Technology Corporation |
| G3M | Cryptall LP |
| G3S | American Health Products Inc |
| G3V | DSL Dynamic Sciences Limited |
| G3W | Chinook Technology |
| G3X | Creative Technology Pte Ltd |
| G3Z | Citizen America Corporation |
| G42 | Universal Associated Co Ltd |
| G44 | Intelligence Devices Corporation |
| G45 | Telemidas |
| G46 | Regent Corporation |
| G47 | Telesystems SLW Inc |
| G49 | Mai Ko Electrics Industrial Co Ltd |
| G4A | Lite Check Inc |
| G4B | Star Beam Inc |
| G4F | Nichimen America Inc |
| G4J | Kyushu Matsushita Electric (UK) Ltd |
| G4L | Aprotek |
| G4N | Bargate Limited |
| G4R | Taiwan Carol Electronics Co Ltd |

| Code | Company |
|------|---|
| G4S | Everest Computer Corporation |
| G4U | Tully Lake Systems Inc |
| G4V | Motain Enterprise Co Ltd |
| G53 | Utron Technologies Inc |
| G54 | Wintime Technology Inc |
| G57 | SCS Frigette Inc |
| G59 | Compu Com Corporation |
| G5A | Bydatel Corporation |
| G5B | Tokyo Sound Co Ltd |
| G5E | Vintech International Co Ltd |
| G5F | Transcon Industrial Corporation |
| G5J | Hwa Yung Industrial Co Ltd |
| G5J | R C America Inc |
| G5L | Procom Technology Inc |
| G5M | Sonar Electronics Co Ltd |
| G5R | Unicott Technology Corp |
| G5S | Mirus Industries Corporation |
| G5U | Digitext Inc |
| G5V | MSI Data Communications Inc |
| G5W | Radar Control Systems Corporation |
| G5X | GEM Elettronica SRL |
| G5Z | Philips Communication & Security System |
| G68 | OAK MicroSystems Ltd |
| G6A | ET Escort Corporation |
| G6C | Guardian Technologies Inc |
| G6D | New Bright Industrial Co Ltd |
| G6M | Remanco Systems Inc |
| G6S | Poly Graphic Systems B V |
| G6U | G A International Electronics Corporati |
| G6Z | Consumer Products Inc |
| G72 | Electrolab of America Inc |
| G77 | Yamaha Corporation of America |
| G79 | Clover Toys Inc |
| G7A | Midasonic Industrial Co Ltd |
| G7C | Honda Electronics Co Ltd |
| G7E | Dak Industries Inc |
| G7G | Ogivar Technologies 92 Inc |
| G7J | AEG Bayly Inc |
| G7K | QEI Inc |
| G7L | Cypress Research Corporation |
| G7O | ACE Communications |
| G7U | Smallwood Technologies Inc |
| G7V | Magni Systems Inc |
| G7W | Tandy Electronics A Division of Tandy C |
| G7Y | Son Por Enterprise Co Ltd |
| G7Z | Toy Park (International) Ltd |
| G83 | Cylink Corporation |
| G84 | Glimpse Waters Applications Company |
| G86 | Balogh T A G Inc |
| G89 | Spectra Physics |
| G8C | Jovian Logic Corp |
| G8E | NEC Corporation |
| G8G | Gradco Systems Inc |
| G8I | Monolithic Systems Corporation |
| G8J | American Meter Company |
| G8K | Truevision Inc |
| G8L | The Vanguard Enterprises Co Ltd |

| Code | Company |
|------|---|
| G8M | Turnkey Computer Systems |
| G8N | Pacific Advanced Engineering Inc |
| G8U | Seiko Systems Inc |
| G8V | Darnam Corporation |
| G8Y | Area Electronics Systems Inc |
| G8Y | Area Electronics Systems Inc |
| G8Z | Emerald Technology Inc |
| G92 | PacComm Packet Radio Systems Inc |
| G93 | Comar Systek Inc |
| G95 | Thomson Consumer Electronics Inc |
| G96 | Multi Industry Technology |
| G98 | DAL American Inc |
| G99 | Seiwa Corporation |
| G9B | BEA Inc |
| G9C | Circuit Research Corporation |
| G9D | Aristotle Industries Inc |
| G9E | Bristol Research Corporation |
| G9F | Taxan USA Corporation |
| G9H | Thomson Consumer Electronics Inc |
| G9I | Karkar Electronics (A Division of Gener |
| G9L | Precision Systems Group Inc |
| G9N | Black Bird Engineering Inc |
| G9P | Air Cool Industrial Co Ltd |
| G9R | Entertainment Marketing Inc |
| G9T | E Tech Inc |
| G9T | E Tech Inc |
| G9W | Action Technology Ltd |
| G9Y | RasterOps Corporation |
| GAB | Lithonia Control Systems |
| GAC | JT Communications |
| GAD | Raven Radio Manufacturing Inc |
| GAF | Columbia Telecommunications Group Inc |
| GAG | Marconi Electronics Inc |
| GAL | Talbot Corporation |
| GAP | NSI Logic Inc |
| GAQ | Boram Development Co Ltd |
| GAS | Zap Computer Supplies |
| GAU | North American Philips Corp |
| GB2 | Talking Technology Inc |
| GB7 | Windmaster Manufacturing |
| GB8 | Honeywell Inc Commercial Flight System |
| GB9 | NEL International Ltd |
| GBB | Fung Seng Industrial Co Ltd |
| GBC | Renaissance Grx Inc |
| GBE | American Computer & Communication Inc |
| GBF | Huffman Communications & Engineering |
| GBG | Inmar Inc |
| GBJ | Datacom Northwest Inc |
| GBK | Advanced Storage Concepts Inc |
| GBL | Berkeley Varitronics Systems Inc |
| GBM | The Com U Tec Group Incorporated |
| GBN | Energy Onix Broadcast Equipment Co Inc |
| GBP | Electro Sciences Corporation |
| GBQ | Top Harvest Int'l Corporation |
| GBU | 3M Company |
| GBV | Kuo Feng Corporation |
| GBW | Syntrex Inc |

| Code | Company |
|------|---|
| GBX | GTE Consumer Communications Products Co |
| GBY | Manke Instruments |
| GC3 | Franklin Telecom |
| GC5 | Gama Computers Inc |
| GC8 | Rimco Resources Inc |
| GCA | Sota Technology Inc |
| GCE | Gateway Communications Inc |
| GCF | Blue Chip Electronics |
| GCG | Link Computer Inc |
| GCH | United Security Products Inc |
| GCI | Future Care Systems Inc |
| GCJ | Nanao Corporation Matto Factory |
| GCK | Astre Systems Incorporated |
| GCM | Eltech Research Inc |
| GCN | ASTRO Systems Inc |
| GCP | Arctic Technologies International Inc |
| GCT | Forefront International Ltd |
| GCW | Echosphere Corporation |
| GCX | Kansai Electric Co Ltd |
| GCY | Advanced Input Devices Inc |
| GCZ | PC House |
| GD2 | Qualtron Inc |
| GD4 | Mirror Technologies Inc |
| GD8 | Shiva Corporation |
| GD9 | Makcoson Industrial Company Limited |
| GDC | SHARP Digital Information Products Inc |
| GDD | Cherry Mikroschalter GmbH |
| GDD | Cherry Mikroschalter GmbH |
| GDE | Cardinal Technologies Inc |
| GDG | Spica Electronic Corp |
| GDH | Prescription Learning Corp |
| GDI | DataCard Corporation |
| GDQ | Hsiang Hwa Industrial Co Ltd |
| GE6 | RPC |
| GE7 | Microset Corp |
| GEA | Roctec Electronics Ltd |
| GEC | Tall Tree Systems |
| GED | Holco Enterprise Co Ltd |
| GEG | Great Power Electronic Products Co |
| GEH | PC Com |
| GEI | Furuno Electric Co Ltd |
| GEK | Datawave Inc |
| GEM | Columbia Data Systems Inc |
| GEP | Taichi Computer Industry Co Ltd |
| GEQ | PTI (Hong Kong) Limited |
| GES | Monitor Electronic Corporation |
| GEV | Unilarm Industrial Co Ltd |
| GF3 | Datacomm Co Ltd |
| GF5 | ARCTCO Inc |
| GF6 | Plexsys Corp |
| GF7 | Matchbox Trading Ltd |
| GF8 | Digital Services Corporation |
| GFA | Maximum Storage Inc |
| GFF | Blue Sky Importing Inc |
| GF1 | PC Calc Ltd (USA) |
| GFQ | Air Chek Manufacturing Co Inc |
| GFX | Infinity Technology Inc |

| Code | Company |
|------|----------------------------------|
| GFY | Kuo Horng Electric Ind Co Ltd |
| GFZ | Newtronics Co Ltd |
| GG9 | View Master Ideal Group Inc |
| GGA | C F Watts Jr Company |
| GGC | Bando Sports Ltd |
| GGF | Maxon America Inc |
| GGG | Telcom Japan Co Ltd |
| GGN | Hentak (USA) |
| GGR | Uniq Technology Inc |
| GGU | JSM Communications Inc. |
| GGX | Micro Design International Inc |
| GH3 | Hanchang Corporation |
| GH5 | RACET Computes Ltd |
| GH6 | CEMTYS S A |
| GHA | A Plus Technologies |
| GHB | Stentofon Communications Inc |
| GHC | Digital Products Inc |
| GHE | O Yang Co Ltd |
| GHF | Dynamac Computer Products Inc |
| GHG | Altec Technology Corporation |
| GHL | Tamiya Plastic Model Co |
| GHR | Han Mi Co Ltd |
| GI3 | Shaffstall Corporation |
| GI4 | Safety First Systems Ltd |
| GI7 | 3Lynx Technologies Corporation |
| GIB | PacTel Products Co |
| GID | Dallas Semiconductor Corporation |
| GIF | Badger Meter Inc |
| GIL | Chaparral Communications Inc |
| GIP | Acrosound Inc |
| GIQ | Datavue Corporation |
| GIR | Nippon Conlux Co Ltd |
| GIS | Circuit Cellar Inc |
| GIW | BiTech Enterprises Inc |
| GIX | Truedox Corporation |
| GIY | Centram Inc |
| GJ2 | Wugo International Corp |
| GJ3 | Worlds of Wonder Inc |
| GJ4 | Elser Antifurti SPA |
| GJ5 | Storage System Inc |
| GJ8 | American Honda Motor Co Inc |
| GJ9 | Elbiru Private Limited |
| GJC | Vidar-SMS Co Ltd |
| GJD | Hottek Corporation |
| GJE | Innovative Security Systems |
| GJF | GAW Systems |
| GJH | Austek Microsystems Limited |
| GJJ | Se Jin Electron Inc |
| GJJ | Se Jin Electron Inc |
| GJK | Honeywell Keyboard Division |
| GJL | Covert Industries Inc |
| GJM | John Manufacturing Ltd |
| GJN | Prosat of America Inc |
| GJP | Nth Group |
| GJS | Precision Standard Time Inc |
| GJW | Nam Sung Electronics Corp |
| GJX | Foster Technology |

| Code | Company |
|------|---|
| GJY | Daeil Industrial Co Ltd |
| GJZ | Emergency Locator Products Corp |
| GK2 | Venture Research |
| GK3 | Meng Chieng Trading Co Ltd |
| GK4 | Bi Link Computer Inc |
| GK6 | Future Systems Inc |
| GKC | Complus Inc |
| GKD | Forum Systems Inc |
| GKG | Kerbertronics |
| GKK | Ad Lib Inc |
| GKL | One Touch America Inc |
| GKR | Compal Electronics Inc |
| GKS | Four Star International Trading Company |
| GKX | JcAIR Incorporated |
| GL2 | Micronorth Co Ltd |
| GL4 | Diversified Technology Inc |
| GL5 | Takahashi Kogyo Co Ltd |
| GL6 | Rex Corporation |
| GL7 | Navico Ltd |
| GL9 | Micro Power Systems Inc |
| GLB | Oceanic Electronics Corp |
| GLE | Suncon Toys Industry Ltd |
| GLF | Protech Systems Co Ltd |
| GLQ | Delco Chassis Division GMC |
| GLW | Lear Siegler Inc |
| GM3 | Teklogix Inc |
| GM3 | Teklogix Inc |
| GM4 | Pico Macom Inc |
| GM5 | Nissei Opto Co Ltd |
| GM8 | Ortek Technology Inc |
| GM9 | Communication Intelligence Corporation |
| GMB | Commtron Corporation |
| GMD | Emptel Electronics Co Ltd |
| GMG | Samtech Corporation |
| GMH | Scully Signal Company |
| GML | Nokia Mobile Phones Inc |
| GMM | Kader Industrial Company Limited |
| GMP | NT Systems Inc |
| GMQ | Moog Inc |
| GMS | Maryland Precision Products Inc |
| GMW | The Janzer Corporation |
| GMY | MicroGate Corporation |
| GN2 | Maxan Industrial Inc |
| GN4 | Clear Com Intercom Systems |
| GN8 | Mini Micro Supply Co Inc |
| GN9 | Universal Vectors Corporation |
| GNA | NSC Electronics Inc |
| GNE | Abest International Inc |
| GNF | Rancho Technology Inc |
| GNJ | ILM Industries Inc |
| GNK | Mitsubishi International Corp |
| GNL | Controlled Activities Corporation |
| GNN | Givens Ocean Survival Systems Co Inc |
| GNP | Databyte Technology Inc |
| GNQ | J M System Inc |
| GNR | Tiara Computer Systems Inc |
| GNS | Ikegami Electronics (USA) Inc |

| Code | Company |
|------|---------------------------------------|
| GNT | Automatic Power Inc |
| GNW | Metricom Incorporated |
| GNZ | Advance Micro Research Inc |
| GO2 | Caching Technology Corporation |
| GO3 | Handok Information Systems Corp |
| GO8 | Computer Communications Specialists |
| GOA | Scantronic Radio Systems Limited |
| GOG | Taiwan Tai Hao Enterprise Co Ltd |
| GOH | Code Alarm Inc |
| GOK | Quadrant Components Inc |
| GOL | Northern Airborne Technology Ltd |
| GOR | Management Investment & Technology Co |
| GOT | Koryo Systems Inc |
| GOV | Han Chi Hang Co Ltd |
| GOX | Tekk Incorporated |
| GOY | Radar Based Technology Inc |
| GP6 | Teleos Communications Inc |
| GP9 | Arche Technology Inc |
| GPF | CXR Telcom Corp |
| GPL | Aquarius Systems Inc |
| GPM | Mitek Systems Inc |
| GPN | Itac Systems Incorporated |
| GPP | Osicom Technologies Inc |
| GPR | Antifurto Sirio 777 srl |
| GPT | Mustek Corporation |
| GPY | Kunnan Enterprise Ltd |
| GQ4 | TRW Inc |
| GQ7 | Quasar Electronics Corporation |
| GQ8 | Acer America Corporation |
| GQ9 | Micro Smart Inc |
| GQB | Capetronic USA (HK) Inc |
| GQC | Telefood Inc |
| GQE | Garnet Business Machines Inc |
| GQL | Espion Inc |
| GQL | Espion Inc |
| GQU | Viewstar Canada Inc |
| GQW | Total Alert Corporation |
| GQX | Vista Peripherals Inc |
| GR5 | Wireless Technology Inc |
| GR7 | EEG Enterprises Inc |
| GR8 | Southern Information Systems Inc |
| GRA | Micronics Computers Inc |
| GRA | Micronics Computers Inc |
| GRF | Dicon Systems Inc |
| GRH | Gold Star Alps Electronics Co Ltd |
| GRK | Sun's Electronics Co Ltd |
| GRT | AML Specialties Inc |
| GRV | KPG Incorporated |
| GRW | Lothar Sanford Corporation |
| GRX | Keithco Inc |
| GS2 | Costar Electronics Inc |
| GS6 | Modern Computer Corp |
| GS8 | Dataworld Inc |
| GSA | Visonic Ltd |
| GSE | American Microland Inc |
| GSG | Engineering Department Inc |
| The | |

| Code | Company |
|------|---|
| GSI | Oi Electric Co Ltd |
| GSJ | Continental Microwave Ltd |
| GSM | A-Squared Distributions Inc |
| GSP | Yonwoo Trading Inc |
| GSR | Buffalo Village Products |
| GSS | ViewSonic Corporation |
| GSU | Pacific Rim Systems Incorporated |
| G SX | Ally Communication Co Ltd |
| GT3 | SMK Corporation |
| GT4 | Magnaphase Industries Inc |
| GT5 | CALCOMP A Lockheed Company |
| GT6 | Northgate Computer Systems Inc |
| GT7 | American Leading Systems Inc |
| GT8 | Advanced Microcomputer Systems Inc |
| GT9 | Cumulus Corporation |
| GTA | Wangtek Inc |
| GTB | Win Laboratories Ltd |
| GTD | Wandel and Goltermann Limited |
| GTE | Renex Corporation |
| GTF | Top-A Industrial Co |
| GTG | Lightgate |
| GTH | M B I Inc |
| GTI | Supercom Industries Inc |
| GTJ | Taiwan Glorious Union Information Syste |
| GTK | Invictus Corporation |
| GTN | Holmes Microsystems Inc |
| GTS | RainWise Inc |
| GTV | Scantech Computer Systems Inc |
| GTW | Cherokee Data Systems |
| GTY | Voice Control Systems |
| GU2 | Fisher Research Laboratory |
| GU3 | U S Keyboards |
| GU4 | Martec Systems Inc |
| GU6 | Monarch Marking Systems Inc |
| GU7 | Vindicator Corporation |
| GU9 | Clay Equipment Corporation |
| GUA | Cambridge Computer Ltd |
| GUC | Philips Telecom Equipment Company |
| GUM | Microbilt Corporation |
| GUP | J N L Products Inc |
| GUQ | Wearnes Technology (Private) Limited |
| GUS | Interphase Technologies |
| GUT | Tae Yeun Electronics Co Ltd |
| GUU | MicroWay Inc |
| GUV | Robert A Freedman |
| GUX | American Nucleonics Corporation |
| GV3 | Kensington Microwave Ltd |
| GV5 | BMW of North America Inc |
| GV8 | Radiodetection Corporation |
| GV9 | Insight Incorporated |
| GVC | Gemini Technology Inc |
| GVF | QuesTech |
| GVI | Corinth Telecommunications Corp |
| GVK | Savin Corporation |
| GVN | Major Electronics Corp |
| GVP | New Idea Electronic Co Ltd |
| GVR | FIPSCO Inc |

| Code | Company |
|------|--|
| GVS | GIT Co Ltd |
| GVV | NeXT Computer Incorporated |
| GVW | Arche Technologies Inc |
| GVZ | Cross International Technologies Inc |
| GW2 | Delcom Radio Ltd |
| GW3 | Animated Systems |
| GW6 | Metrotech Inc |
| GW8 | Jerr Dan Corporation |
| GWD | Taiwan Sanko Electronics Co Ltd |
| GWF | Telefind Corporation |
| GWG | Capetronic (Kaohsiung) Corporation |
| GWK | Alert Systems Inc |
| GWL | Sunshine Technologies Inc |
| GWM | Laser Master Corporation |
| GWQ | PerfectTEK Corporation |
| GWR | Crownbridge Industries Inc |
| GWT | Lin Ming Industrial Co Ltd |
| GWU | Bruce Computer Co Ltd |
| GWV | Sun Microsystems Inc |
| GWW | Varian TVT |
| GWX | Cellular Control Systems Corporation |
| GWY | Chips and Technologies Inc |
| GX2 | Worldwide Technologies Inc |
| GX5 | Digicom Systems Inc |
| GX6 | American Printing House for the Blind |
| GX8 | Zama Industry Co Ltd |
| GX9 | Climax Technology Co Ltd |
| GXD | Libra Electronics Inc |
| GXE | Toot Hardware & Software Design Co Ltd |
| GXH | Computer Support Corporation |
| GXK | Besco Electronic Manufacturing Co Ltd |
| GXL | Chaplet Systems USA Inc |
| GXN | Sigma Tek Inc |
| GXQ | Bioma Research Inc |
| G XU | Micro Express |
| GXV | Bonneville Telecommunications |
| GXW | Grand Valley Manufacturing Ltd |
| GXY | West Marine Products |
| GXZ | Maxtec International Corporation |
| GY7 | Hai Sing Corporation |
| GYB | Sertek International Inc |
| GYE | Wah Shing Electronics Co Ltd |
| GYF | Amstrad Inc |
| GYG | Jay Electronic |
| GYI | Alps Electric (USA) Inc |
| GYJ | Linus Technologies Inc |
| GYK | Electrotechnics Corporation |
| GYN | Sensory Electronics Inc |
| GYQ | California Peripherals Corporation |
| GY S | Simrad Inc |
| GYT | Pulse Data Systems Inc |
| GYU | Silitek Corporation |
| GYW | STS Systems Ltd |
| GZ3 | Wildlife Materials Inc |
| GZ4 | Aquatech Controls Co |
| GZ5 | Farallon Computing Inc |
| GZ5 | Farallon Computing Inc |

| Code | Company |
|------|---|
| GZA | Product R&D Corporation |
| GZD | WorldCom Incorporated |
| GZE | Force System Inc |
| GZI | Cosmo Development Co Ltd |
| GZJ | LaCie Ltd |
| GZK | CEIEC (HK) Limited |
| GZM | Fimi Srl |
| GZN | Aox Incorporated |
| GZR | Emtrad Limited |
| GZT | Doshin Industrial Co Ltd |
| GZY | Skyworld Technology Ltd |
| GZZ | Precision Electronic Engineering |
| H22 | ABC Computer (USA) Corp |
| H25 | Dynatech Tactical Communications |
| H25 | Dynatech Tactical Communications |
| H26 | Vision Logic |
| H29 | Mitsubishi Electronics America Inc |
| H2B | Spectragraphics Corporation |
| H2G | Wavetek RF Products |
| H2H | Personal Computer Associates of Califor |
| H2L | N Marshall and Associates Inc |
| H2M | StereoGraphics Corporation |
| H2N | Suntech Electronics Corporation |
| H2O | Data Solution Computer Co Ltd |
| H2Q | Tama Denki Co Ltd |
| H2R | Liberty Systems Inc |
| H2T | Comerstone Imaging Inc |
| H2U | ACE CAD Enterprise Co Ltd |
| H2V | Lifewise Industrial Co Limited |
| H2W | Casablanca Fan Company Inc |
| H2Y | Autoroofs Limited |
| H2Z | ICCM Electronics Taiwan Corp |
| H36 | Ray Yoe Industrial Co Ltd |
| H38 | Sekaku Electron Industry Co Ltd |
| H39 | Creative Solutions Inc |
| H39 | Creative Solutions Inc |
| H3C | Mega Electronics Co Ltd |
| H3D | Legacy Storage Systems Inc |
| H3G | Memorex Telex |
| H3I | PSB Imports Inc |
| H3L | Exima Computer Products Co Ltd |
| H3M | Yupiteru Industries Co Ltd |
| H3R | TLV Co Ltd |
| H3S | Seiko Instruments USA Inc |
| H3T | Bandy Inc |
| H3U | Sonica Industries Limited |
| H3V | HMC Technology Ltd |
| H3W | Pace Mark Technologies Inc |
| H3X | Emerson Technologies |
| H3Y | ADY Enterprises |
| H3Z | Ara International Co Ltd |
| H44 | Visiplex Communications Ltd |
| H45 | Radio Control Development Inc |
| H46 | Geotronics AB |
| H47 | Ketec Inc |
| H48 | Barringer Telecom Inc |
| H49 | Clercom Inc |

| Code | Company |
|------|---|
| H4A | Topgay Industries Ltd |
| H4B | AITech International Corporation |
| H4E | ANT Nachrichtentechnik GmbH |
| H4F | SanBar Technologies Inc |
| H4G | SI Electronics Ltd |
| H4H | Oce Graphics USA Inc |
| H4I | LITE ON Technology Corporation |
| H4I | LITE ON Technology Corporation |
| H4J | Daniels Electronics Limited |
| H4K | Artex Aircraft Supplies Inc |
| H4L | Total Peripherals Inc |
| H4M | Putzmeister Inc |
| H4O | Shinsung Electronics Co |
| H4Q | Scantron Corporation |
| H4T | Zoltrix Inc |
| H4U | Exicom New Zealand Limited |
| H4V | Microindustrie Inc |
| H4W | Philips Circuit Assemblies |
| H4Y | Pioneer Computer Inc |
| H4Z | Data Soft International Co Ltd |
| H52 | Puretek Industrial Co Ltd |
| H55 | FORTE of Monroe County Inc |
| H55 | Forte Technologies Inc |
| H57 | Trio Engineering Co Ltd |
| H58 | Tsenglabs International Co Ltd |
| H5A | Trycomm LP |
| H5B | Universal Data Incorporated |
| H5E | CONTEX A/S |
| H5F | Justin Products Ltd |
| H5H | Handok Company |
| H5K | Scenario Inc |
| H5L | Tekstar Corporation |
| H5N | Wave Mate Inc |
| H5O | Advance Security Inc |
| H5P | Topcon Corporation |
| H5V | CM Communications Incorporated |
| H5W | Nolan Computer Systems |
| H5Y | Logicode Technology Inc |
| H5Z | IC Computer Inc |
| H62 | Computer Peripherals Inc |
| H64 | Anigma Incorporated |
| H65 | Megawise Investment Limited |
| H66 | Taiwan Megawise Co Ltd |
| H67 | C&B Technology Co Ltd |
| H6B | Flying Dragon Electronic Co |
| H6C | Wavecon Electronics Ltd |
| H6D | World Electronics Inc |
| H6G | Intercomputer Communications Corporatio |
| H6M | Kaval Electronics Inc |
| H6N | CellNet Data Systems |
| H6O | EXAR Corporation |
| H6P | Suntek Information Systems Co Ltd |
| H6Q | Kabil Electronics Co Ltd |
| H6Q | Kabil Electronics Co Ltd |
| H6V | Advanced Products & Technologies Inc |
| H6Z | Allegro Computer Corporation |
| H72 | Vocal Technologies Ltd |

| Code | Company |
|------|---|
| H75 | ICA Technology Inc |
| H77 | Dih Shin Industries Co Ltd |
| H78 | KP Electronic Systems Ltd |
| H79 | Delta Electronics Incorporated |
| H7B | Amigo Business Computers |
| H7C | Tad Radio of Canada Inc |
| H7D | Microwriter Systems plc |
| H7F | Premier Innovations Inc |
| H7G | Valitek |
| H7H | Amsonic Limited |
| H7I | DataMemory Corporation |
| H7J | OSRAM Corporation |
| H7Q | DATACOMP Corporation |
| H7R | AWA Defense Industries Inc |
| H7U | GEC Plessey Telecommunications (Canada) |
| H7Z | Ventek Corporation |
| H82 | Elex Telecommunications Inc |
| H83 | Lee's Electronics Corp |
| H85 | DD & TT Enterprise Inc |
| H86 | TCL Incorporated |
| H87 | Cheerful International Corporation |
| H89 | USVIDEO |
| H8A | Trine Products Corp |
| H8B | Frecom International Inc |
| H8C | Harrison Precision Industrial Co Ltd |
| H8E | Litton Industrial Automation Inc |
| H8F | Aurora Technology Corp |
| H8G | A Four Tech Co Ltd |
| H8H | Microfield Graphics Inc |
| H8I | Tystar Electronics Co Ltd |
| H8K | PowerDrive Inc |
| H8M | Intelligent Modem Corporation |
| H8N | Askey Computer Corp |
| H8P | Kollay Erwin |
| H8Q | Rectron Ltd |
| H8R | Da Vinci Graphics Inc |
| H8S | Hingda Electronics Ltd |
| H8T | Pora Corporation |
| H8X | Pacific Data Products Inc |
| H8Y | Storage Plus Inc |
| H8Z | ATR Systems Inc |
| H92 | Advanced Integration Research Inc |
| H93 | Wangdat Inc |
| H95 | Win Computer Technologies Inc |
| H96 | Tidalwave Microtech Inc |
| H98 | Advanced Communications Engineering Inc |
| H99 | Questel Inc |
| H9A | Radar Sports Timing |
| H9B | DiTron Systems |
| H9D | Questronex |
| Inc | |
| H9E | PNB L'Avance Modem |
| H9F | BiPro Computers |
| H9H | Westec Communications Inc |
| H9H | Westec Communications Inc |
| H9I | Maxcess Inc |
| H9J | Advanced Graphic Applications Inc |

| Code | Company |
|------|---|
| H9M | Sunix Co Ltd |
| H9N | Elitegroup Computer Systems Inc |
| H9O | Hauppauge Computer Works Inc |
| H9P | Symbol Technologies Inc |
| H9P | Symbol Technologies Inc |
| H9Q | CLEO Communications |
| H9R | Automation Concepts Inc |
| H9U | Caliber Computer Corporation |
| H9V | Computer Integrated Management |
| H9W | First Class Peripherals |
| H9X | Signwaves Inc |
| H9Z | Trigem Corporation |
| HA3 | Deico Electronics Corporation Inc |
| HA7 | IPC Technologies Inc |
| HAA | Graphic Notes |
| HAK | Alcatel TITN Inc |
| HAN | Zymacom Inc |
| HAP | Echo Toys Ltd |
| HAP | Echo Toys Ltd |
| HAV | American Telemetry Equipment Co |
| HAX | Advanced Radio Devices Inc |
| HAZ | Allan Toys Manufacturing Limited |
| HB2 | Club American Technologies Inc |
| HB8 | With Design In Mind |
| HBA | Win Industries Ltd |
| HBB | Appelrate |
| HBG | Princeton Publishing Labs Inc |
| HBI | Advanced Medical Technologies Inc |
| HBP | Automated Security (Holdings) PLC |
| HBQ | United Microelectronics Corporation |
| HBR | Double Kingdom Ltd |
| HBS | Toy State Industrial Ltd |
| HBU | ABC Data Kap Computer Inc |
| HBV | Blaser Industries Inc |
| HBW | Chamberlain Group Inc |
| The | |
| HBV | Chartered Electronics Industries Pte Lt |
| HBZ | Joystick Technologies Inc |
| HC2 | Korea Vehicle Security Company |
| HC3 | Defa Group A. S. |
| HC6 | Pacific Image Communications |
| HC8 | Digital Recorders Inc |
| HC9 | Nitto Kohki USA Inc |
| HCA | Rossin Corporation |
| HCA | Rossin Corporation |
| HCB | Expert Multimedia Systems S A |
| HCF | Carrady Electronics Limited |
| HCJ | SCI Systems Inc |
| HCN | Cetec Inc |
| HCQ | Inovonics Corporation |
| HCT | Kroy Inc |
| HCY | CT Continental Inc |
| HCZ | Visual Database Systems |
| HD5 | Hand Held Products Inc |
| HD5 | Hand Held Products Inc |
| HD6 | Ruby Systems Incorporated |
| HD7 | Sonetics Corporation |

| Code | Company |
|------|---|
| HD8 | Solidway Incorporated |
| HD9 | Wing Lee Cheung Electronic Co Ltd |
| HDC | Adtran |
| HDK | Xenon International Products Ltd |
| HDP | Control Systems Laboratories |
| HDS | Control Concepts Inc |
| HDT | Kin Yat Electronics Industrial Co Ltd |
| HDT | Kin Yat Industrial Co Ltd |
| HDY | Corometrics Medical Systems Inc |
| HDZ | The Toro Company Home Improvement Divis |
| HE2 | Universal Wireless Data Corporation |
| HE7 | EXI Electronic Systems |
| HE8 | Mechanical Enterprises Inc |
| HE9 | Bondwell Industrial Co Inc |
| HED | Accton Technology Corp |
| HEE | Dae Hwa Electronics Co Ltd |
| HEF | Hanstar Industries Inc |
| HEG | Crosfield Hastech Inc |
| HEI | Honotron Corporation |
| HEJ | Tera Electronic Co Ltd |
| HEL | C O Systems Inc |
| HEN | Haedong System Corp |
| HEP | Keta Electronics Co Ltd |
| HEQ | MicroNet Technology Inc |
| HES | Three Chestnuts Technology |
| HET | Epic Data Inc |
| HEU | Podworld Co Ltd |
| HF2 | Traxxas Corporation |
| HF3 | ACI Architectural Communications Inc |
| HF4 | Micronyx Inc |
| HF5 | Our Business Machines Inc |
| HF7 | Memory and Storage Technology Inc |
| HFA | International Data Communications Inc |
| HFF | Jonas Inc |
| HFG | Second Source Systems Inc |
| HFH | Pointer Systems Inc |
| HFJ | Epic Technology Inc |
| HFK | Oceanic America |
| HFL | Rohde & Schwarz Inc |
| HFN | Arachnid Inc |
| HFO | RTI Communications |
| HFQ | Bay Technical Associates |
| HFR | Chronar Corporation |
| HFS | Quanta Computer Inc |
| HFU | Konica Technology Inc |
| HFV | Nelcor Incorporated |
| HFX | EPIC Technologies Incorporated |
| HFY | Cheng Ching Toys Co Ltd |
| HG4 | Aritronix Ltd |
| HG7 | Lonton Corporation |
| HG7 | Lonton Corporation |
| HG8 | Taiwan Boom Enterprise Corp |
| HG9 | Sun PC Inc |
| HGA | Catec Industrial (Toys) Ltd |
| HGB | Aquatronics |
| HGD | AccuTel Inc |
| HGE | Plus & Plus Co Ltd |

| Code | Company |
|------|---|
| HGF | President Micro Systems |
| HGG | BASS Inc |
| HGI | Gakken Co Ltd |
| HGJ | M P Computer Solutions Inc |
| HGN | C L I C |
| HGP | Cadco Technologies Inc |
| HGQ | Destiny Technology Corp |
| HGS | AMT International Industries Inc |
| HH3 | V&V Systems Taiwan Co Ltd |
| HH4 | MIE Medical Research Ltd |
| HH7 | IDA Company |
| HH8 | Dong Yang Security Electronics Co |
| HHA | American Liquid Light Inc |
| HHB | Agape Computer |
| HHI | Metropolitan Life Insurance Company |
| HHM | Braemar Corporation |
| HHN | Comtrol Corporation |
| HHS | Goldstar Co Ltd |
| HHV | Matsushita Electric Works Ltd |
| HHW | Peripheral Technology Inc |
| HHZ | American Microsystems |
| HI2 | QUEST International Computers Pty Ltd |
| HI3 | Dynabook Technologies Corporation |
| HIA | Sun Team Electronic Co Ltd |
| HIB | Onhope Industrial Co Ltd |
| HID | Lucky Star International Inc |
| HIF | International Traffic Systems Inc |
| HIR | Rich Tech Computer (USA) Corp |
| HIS | Pure Data Limited |
| HIS | Pure Data Limited |
| HIU | XES Inc |
| HJ2 | Greenwich Instruments Ltd |
| HJ3 | Decibel Products Inc |
| HJ4 | Sysgen Inc |
| HJ5 | Laserdrive Limited |
| HJ9 | REEF Thirdware divisions of Precision S |
| HJB | Gerber Garment Technology Inc |
| HJD | ICD Inc |
| HJE | Award Software Incorporated |
| HJH | Far Mountain Corporation |
| HJI | My Alarm Inc |
| HJJ | Computer Music Supply Inc |
| HJK | Edsun Laboratories Inc |
| HJM | Bohsei International Co Ltd |
| HJR | Mortara Instrument Inc |
| HJV | SilCom Communications Inc |
| HJW | Computer Products Center Inc |
| HJX | Koden International Incorporated |
| HJY | Murata Manufacturing Company Limited |
| HJZ | Progressive Image Technology |
| HJZ | Progressive Image Technology |
| HK2 | KMI Kraft Midwest Inc |
| HK3 | Wescom Inc |
| HK4 | Megadata Corporation |
| HK9 | Future Domain Corporation |
| HKA | NDC Automation Inc |
| HKC | Spectravideo International Ltd |

| Code | Company |
|------|---|
| HKH | Logicraft Products Mfg Pte Ltd |
| HKO | A B V Electronics Ltd |
| HKQ | Elec & Eltek Research Ltd |
| HKR | PC Link Corp |
| HKX | Intel Corporation |
| HKZ | Berkeley Softworks Inc |
| HL2 | Kennametal Inc |
| HL3 | Dauphin Technology Inc |
| HL4 | Gem Main Industries Limited |
| HLC | Calera Recognition Systems |
| HLE | Unitech Computer Co Ltd |
| HLG | JTech Inc |
| HLG | Jeron Technologies |
| HLH | Balluff Inc |
| HLL | Perfax Systems International Corp |
| HLO | Veridata Electronics Inc |
| HLO | Veridata Electronics Inc |
| HLP | Practical Solutions Inc |
| HLQ | Integrated Touch Arrays Inc |
| HLR | Mees Enterprises Inc |
| HLU | Comp u Cycle Inc |
| HLV | Coyote Manufacturing Inc |
| HLW | ITM Enterprises Inc |
| HLX | Saelio Inc |
| HLY | Penny & Giles Potentiometers Ltd |
| HLZ | Acer Incorporated |
| HM2 | Arrowhead Technologies |
| HM3 | PAC International Ltd |
| HM5 | Mitsubishi Plastics Industries Limited |
| HM6 | CliniCom Incorporated |
| HM8 | 3 Com PDD Division |
| HM9 | Pan Overseas International Corp |
| HMA | BMC Micro Industries Pte Ltd |
| HMB | Pentax Technologies Corporation |
| HMD | Fixor Electronic Industry Co Ltd |
| HMH | Progressive Peripherals and Software In |
| HML | PC Star |
| HMN | Powersource Computer Systems Inc |
| HMU | Mimetics Corporation |
| HMV | Sales Activation Inc |
| HMY | Excell Computer Systems |
| HN2 | Intermec Corporation |
| HN6 | Nanlien International Corporation |
| HNA | Electronics Line USA Inc |
| HNB | American Medical Alert Corp |
| HND | JPS Microsystems Inc |
| HNE | International Marine Industries Inc |
| HNG | Trident Microsystems Inc |
| HNH | Micro Solutions Inc |
| HNL | Robotron Pty Ltd |
| HNL | Robotron Pty Ltd |
| HNP | Joincom Electronic Corp |
| HNR | Moore O Matic Inc |
| HNV | Jin Rong Electronic Corp |
| HNX | Communication Factors |
| HO2 | AlliedSignal Canada Inc |
| HO3 | Mileage Validator Inc |

| Code | Company |
|------|--|
| HO5 | Micro Labs Inc |
| HO8 | Ameritron |
| HOA | Alert Concepts Inc |
| HOB | Widex Hearing Aid Co Inc |
| HOF | Excelogic Inc |
| HOI | Supertron Electric Co Ltd |
| HOJ | Teletrix Corporation |
| HOM | Quantum Corporation |
| HON | Rainier Enterprise Co Ltd |
| HOQ | Hondex Marine Electronics |
| HOS | Parallax Inc |
| HOT | Trans 2000 Inc |
| HOT | Trans 2000 Inc |
| HOW | Focus Enhancements Inc R&D |
| HOX | JRI |
| HOY | Swan Technologies Corporation |
| HP2 | Digidesign Inc |
| HP3 | SMT GOUPIL |
| HP4 | P J Mc Nerney & Associates Inc |
| HP6 | Pegasus Inc |
| HP7 | Microlink Inc |
| HP8 | Exabyte Corporation |
| HP9 | Techne Electronics Limited |
| HPD | Otec Technologies Inc |
| HPF | Goldstar Products Co Ltd |
| HPG | Taian Electric Co Ltd |
| HPH | The Mother Board Factory |
| HPI | Brown Broadcasting Service Inc |
| HPJ | Delta Computer Corporation |
| HPK | ST Systems Corporation (STX) |
| HPL | Agfa Gevaert N V |
| HPN | Kimpson Corporation |
| HPP | Million Step Limited |
| HPR | US Computer |
| HPU | Korea Marvel Co Ltd |
| HPX | World Enterprises (HK) Co |
| HPY | OA Data Co Ltd |
| HPZ | Dunson Electronics Ltd |
| HQ4 | Rastek Corporation |
| HQ6 | Carspec Electronic Co Ltd |
| HQ8 | Citizen Watch Co Ltd |
| HQA | Truedox Technology Corporation |
| HQB | Dotronix Inc |
| HQK | Key Mouse Electronic Enterprise Co Ltd |
| HQN | Star Paging (Holding) Ltd |
| HQP | QSP Inc |
| HQQ | SCSI Technologies Inc |
| HQR | CTI Electronics Corporation |
| HQS | A & D Company Limited |
| HQT | ECE Research & Development Corp |
| HQV | Hama Electronics Limited |
| HQX | Sysgration Ltd |
| HQZ | Goldmen Electronic Co Ltd |
| HR2 | Primages Inc ROC |
| HR3 | CCOM International |
| HR8 | Evertex Company |
| HR9 | Connector Resources Unlimited Inc |

| Code | Company |
|------|---|
| HRE | Unisys Corporation |
| HRF | Analog Devices Incorporated |
| HRG | Great Tek Inc |
| HRL | Versa Link Inc |
| HRM | HIMS Inc |
| HRN | Northern Electric Company |
| HRO | Armstrong Transmitter Corporation |
| HRP | Dongyang Jonghap Corporation |
| HRR | US Integrated Technologies |
| HRU | Elba Industries Inc. |
| HRV | Comer Communications Inc |
| HRZ | EMX Incorporated |
| HS2 | Multanova RPJ Inc |
| HS3 | Safety Electronics Inc |
| HS4 | Nikko Electronics SDN BHD |
| HS6 | BSM Computers Inc |
| HS7 | Sprite Inc |
| HS8 | Kangaroo Technologies Corp |
| HSB | Austin Development |
| HSC | Top Link Computer Co Ltd |
| HSD | DataTrek Corporation |
| HSE | Twinhead Corporation |
| HSF | Digital Data Systems |
| HSG | Hawk Computers |
| HSH | Inteletron Products |
| HSI | Magic Mansions |
| HSK | Jan Electronics Inc |
| HSL | Precision Electronic Products Inc |
| HSN | Pelorus Navigation Systems Inc |
| HSO | Nichetek Computer Co Ltd |
| HSP | Solar States Ltd |
| HSQ | Creative Radio Services Ltd |
| HSS | Siemens Nixdorf Informationssysteme AG |
| HST | Olicom AS |
| HSU | Royal Information Electronics Co Ltd |
| HSV | Group Three Technologies Inc |
| HSW | Digital Wireless Corporation |
| HSX | Whistler Corporation |
| HT5 | Gestetner Australia Pty Limited |
| HT7 | MicroSlate Inc |
| HT9 | Omnitronix Inc |
| HT9 | Omnitronix |
| HTG | Multi Technical Services |
| HTH | Dr T's Music Software Inc |
| HTI | NYNEX Corporation |
| HTL | Ranger Communications Inc |
| HTM | ORVEL SpA |
| HTO | Universal Microelectronics Co Ltd |
| HTR | Decatur Electronics Inc |
| HTS | Flagship Marine Security |
| HTT | Talent Technology Co Ltd |
| HTV | Litton Systems Inc |
| HTW | Same Time Electronics Ltd |
| HTX | Office Computing Equipment and Networks |
| HTZ | Data Communicating Devices Inc |
| HU8 | Electronic Laboratories Inc |

| Code | Company |
|------|-----------------------------------|
| HUA | Chicago Model International Inc |
| HUB | ESS Technology Inc |
| HUD | Urim Corporation |
| HUD | Urim Corporation |
| HUE | Green Corporation |
| HUH | Datamini Products (HK) Ltd |
| HUI | O'Neill Communications Inc |
| HUJ | Advanced Vision Research Inc |
| HUL | Magnum Distribution Inc |
| HUM | Numonics Corporation |
| HUN | GigaTrend Incorporated |
| HUS | GST Inc |
| HUT | Articulate Systems Inc |
| HUX | Radius Inc |
| HV4 | Wacom Co Ltd |
| HV6 | Fujitsu Personal Systems Inc |
| HV8 | Advanced Information Concepts |
| HV9 | ViewNet Inc |
| HVA | Shepherd Intelligence Systems Inc |
| HVD | S R M Toys Ltd |
| HVF | Suite 12 Group |
| HVJ | Hokkings Systemation Inc |
| HVM | Sanyo Fisher (USA) Corporation |
| HVN | The Peerless Group |
| HVQ | Capri Micro Systems Inc |
| HVV | Federal Signal Corporation |
| HW4 | Heart Data Corporation |
| HW5 | Life Point System Inc |
| HWA | Netronix Inc |
| HWB | Agilis Corporation |
| HWC | VideoLogic Limited |
| HWE | Micro Byte Research Inc |
| HWF | Must Systems Inc |
| HWF | Must Systems Inc |
| HWG | Sparton Technology Inc |
| HWI | A-2 Technology Co Ltd |
| HWJ | Alco Communications Inc |
| HWN | Binsfeld Engineering Inc |
| HWO | Micro Electronic Technologies Inc |
| HWS | NEC America Inc |
| HWX | Yeebo Electronic Limited |
| HWY | Gateway 2000 Inc |
| HX2 | Apollo Corporation |
| HX5 | Julian Systems Inc |
| HX8 | Jinpa Co Ltd |
| HX9 | Cord Mate Inc |
| HXA | Ericsson Paging Systems BV |
| HXC | ProHance Technologies Inc |
| HXG | CTC Systems Inc |
| HXH | Comtech Micro Systems Inc |
| HXI | Compro Technology Inc |
| HXJ | Asta Electronic Systems Corp |
| HXR | Digitech Inc |
| HXS | KAPAK Design |
| HXU | Uniq Technology Inc |
| HXY | ED Engineering Co Ltd |
| HXZ | UNISYS Corporation |

| Code | Company |
|------|---|
| HY2 | NTN Systems Inc |
| HY4 | XXERA Technologies Inc |
| HY5 | Maxiguard of America |
| HY7 | Dove Computer Corporation |
| HY8 | Tech Genius Electronic Corp |
| HY9 | NIC WARE Corp |
| HYA | Rayton Communication (USA) Inc |
| HYB | Hisland US Corporation |
| HYC | International Commerce Corp |
| HYD | Talkie Tooter Inc |
| HYF | Computer Systems Research Inc |
| HYG | Focus Information Systems Inc |
| HYJ | Reor Electronics Co Ltd |
| HYK | Asia Source Incorporated |
| HYN | Advanced Gravis Computer Technology Ltd |
| HYO | Roger Wagner Publishing Inc |
| HYQ | Nippondenso Co Ltd |
| HYU | Dash System Inc |
| HYV | GardenAmerica Corp |
| HYW | Penquin Technologies Inc |
| HYY | Midwest Communications Corporation |
| HZ3 | Chinon America Inc |
| HZ4 | President Technology Inc |
| HZ6 | Comark Incorporated |
| HZ8 | CCS Custom Computer Systems Inc |
| HZA | Systender International Corporation |
| HZB | Western Multiplex Corporation |
| HZD | Chapman Products Inc |
| HZE | Data Storage Marketing Inc |
| HZF | Appian Graphics |
| HZF | Appian Technology Inc |
| HZG | Supertek Co |
| HZH | Best Electronics |
| HZK | Command Technologies Inc |
| HZK | Command Technologies Inc |
| HZL | Standard Radio and Telefon AB |
| HZP | Hankwang Watch Co Ltd |
| HZQ | S Management |
| HZS | NCL America Computer Products Inc |
| HZT | Dolphin Systems Technology |
| HZX | Mimic Inc |
| I22 | High Definition Systems Inc |
| I24 | Gemini Elettronica Srl |
| I25 | Digital Processing Systems Inc |
| I27 | Biostar Microtech Int'l Corp |
| I28 | Comtec Information Systems Inc |
| I2A | IOCOM Corporation |
| I2B | Chia Shin Technology Corp |
| I2C | Long Well Electronics Corp |
| I2E | Integrated LCD Technology Corporation |
| I2F | Vexcel Corporation |
| I2H | Hornet Technology USA Corp |
| I2I | Leadtek Research Inc |
| I2J | Lescal Inc |
| I2L | C3 Inc |
| I2N | Rever Computer Inc |
| I2O | Spectrian |

| Code | Company |
|------|---------------------------------------|
| I2O | Spectrian |
| I2Q | Aquila Systems Inc |
| I2T | Information Access Company |
| I2V | PC Connection Inc |
| I2X | Integrated Technologies Co Ltd |
| I2Y | BEEM Company |
| I2Z | Fan Shaing Electronics Co Ltd |
| I32 | TAC Systems Inc |
| I34 | Inwin Toy Limited |
| I35 | B&B Electronics Manufacturing Company |
| I36 | Ellington Elsasser Company |
| I37 | ProSys |
| I38 | Aztech Systems Ltd |
| I38 | Aztech Systems Ltd |
| I39 | Fortress Systems International |
| I3A | Pacific Coast Network Inc |
| I3B | The Brinkmann Corporation |
| I3C | Pixel Engineering Inc |
| I3D | CalComp |
| I3E | Vistron Inc |
| I3H | GTS Inc |
| I3I | BRYDIS Data Incorporation |
| I3K | Tronic Computer Systems Ltd |
| I3L | Vorad Safety Systems Inc |
| I3M | Digital Data Systems Inc |
| I3N | US Personal Computer Distributors Inc |
| I3O | Sunbeam Northern Company |
| I3P | Disk Technologies Corporation |
| I3Q | Biomark Inc |
| I3Q | Biomark Inc |
| I3R | King of Fans Inc |
| I3S | Anchor Enterprise Co Ltd |
| I3T | Hertz Computer Corporation |
| I3X | Ocean Office Automation Inc |
| I3Y | Avodah Inc dba CUI |
| I3Z | Milwaukee PC |
| I42 | Vital Information Co Ltd |
| I43 | EverGuard Security Systems Ltd |
| I44 | Corporate Triangle Inc |
| I45 | TREQ Systems |
| I46 | In Focus Systems Inc |
| I46 | In Focus Systems Inc |
| I49 | Blackship Computer Systems Inc |
| I4A | EZ Bird Dog Training Equipment |
| I4B | ABIT Computer Corporation |
| I4C | Ocean Microsystems Inc |
| I4D | Touch Panel Industries Co Ltd |
| I4E | Prosper Computer Industries Co Ltd |
| I4F | HiTron Electronics Inc |
| I4G | Applied Computer Technology |
| I4I | Arpach Corporation |
| I4J | Fred Gretsch Enterprises Ltd |
| I4K | VCS Technologies Inc |
| I4L | Micro Star International Co Ltd |
| I4M | Dimension Computer Inc |
| I4O | Shakespeare Company |
| I4P | Alicia Industrial Co Ltd |

| Code | Company |
|------|---|
| I4Q | Relational Systems Corporation |
| I4S | Peavey Electronics Corporation |
| I4T | Zofcom Incorporated |
| I4U | Nucomm Incorporated |
| I4W | Winders & Geist |
| I4X | AddTech Research Inc |
| I4Y | American Automotive Security Products I |
| I4Z | BMG Computers Inc |
| I54 | Tiger Electronics Inc |
| I55 | Merry Electronics Co Ltd |
| I57 | DataJets International Inc |
| I58 | Axik Computer Inc |
| I5B | Ballard Synergy Corporation |
| I5C | CNF Inc |
| I5C | CNF |
| I5D | Tamarack Microelectronics Inc |
| I5E | Star Paging (Communications Equipment) |
| I5F | DynaLab Inc |
| I5I | Chuanlu Company Ltd |
| I5K | Richtech Development Limited |
| I5L | Pai Jung Electronic Industrial Co Ltd |
| I5M | Avital Technologies Inc |
| I5N | International Teletext Communications I |
| I5O | Tandberg Data SA |
| I5Q | LifeScan Inc |
| I5R | Future Echo |
| I5S | Spire Technologies Inc |
| I5T | Senstar Corporation |
| I5U | Summit Micro Design Inc |
| I5W | Square D Company |
| I5X | CoPilot Electronic Products Inc |
| I5Z | Tidemark Corporation |
| I62 | Handykey Corporation |
| I63 | Hughes Network Systems |
| I64 | Vital Link Incorporated |
| I65 | Top Thunder Technology Co Ltd |
| I66 | Lasung Electronics Co Ltd |
| I68 | Ventor Electronics Corporation |
| I69 | Oki Electric Industry Co Ltd |
| I6B | Bausch & Lomb |
| I6E | Gracilis Inc |
| I6F | Advanced R & D Systems Inc |
| I6G | Compression Labs Incorporated |
| I6H | GTO Inc |
| I6I | Nautilus International Control & Engine |
| I6K | Bell Computer Inc |
| I6L | Telephoto Communications Inc |
| I6M | Kwanglim Electronic Industry Co Ltd |
| I6N | Vestax Corporation |
| I6O | Capital Safety Systems Inc |
| I6P | Lanwise Computer Inc |
| I6Q | Topfly Corporation |
| I6R | Advanced Macrocosm Technology Inc |
| I6T | Ronix Technology Inc |
| I6U | Bull SA |
| I6V | Kepro International Inc |
| I6X | Novak Electronics Inc |

| Code | Company |
|------|---|
| I6Y | Apex Security Alarm Products |
| I6Z | Secofoto Corporation |
| I73 | CoStar Corporation |
| I74 | Shindo Electronics Co Ltd |
| I76 | Amphenol Interconnect Products Corporat |
| I79 | Jenco Computer Systems Inc |
| I7A | Northman Technologies Co Ltd |
| I7C | Microtronics Inc |
| I7C | Microtronics Inc |
| I7D | WellCom Corporation |
| I7E | Ambition Technology Co Ltd |
| I7G | Artdex Computer Corp |
| I7G | Spica Computer Corporation |
| I7I | Sleuth Security Systems Ltd |
| I7J | ABB Power T&D Company Inc |
| I7K | Realtek Microelectronics Corp |
| I7M | Iwatsu Electric Corp |
| I7N | Beaver Computer Corporation |
| I7P | Cary Peripherals Inc |
| I7R | Tele Larm AB |
| I7S | Microcomp Inc |
| I7T | MicroMax International Corporation |
| I7U | Hualon Microelectronics Corp |
| I7V | Electronic Universal Distribution Inc |
| I7X | Pan & Lees' Industrial Co Ltd |
| I7Y | Porten Enterprise Co Ltd |
| I7Z | MGV Manufacturing Inc |
| I83 | Transource Services Corp |
| I84 | A Plus Info Corp |
| I85 | Computer Warehouse of Central Florida I |
| I86 | Ko Sheng Enterprises Co Ltd |
| I87 | Liu's Enterprise Co Ltd |
| I88 | ZyXEL Communications Corporation |
| I88 | ZyXEL Communications Corporation |
| I89 | DH Print |
| I8A | Bitwise Designs Inc |
| I8B | Laser Vision Inc |
| I8C | The Software Toolworks Inc |
| I8D | Hwa Lin Electronic Co Ltd |
| I8E | Ho Tai Shin Automatic Co Ltd |
| I8F | Service Electronics Supply Co Inc |
| I8G | Elite Office Automation Inc |
| I8H | CompUSA |
| I8I | Ares Microdevelopment Inc |
| I8J | Associates Mega Sub System Inc |
| I8K | Vidicode US Inc |
| I8M | Continental Associates |
| I8N | Technology Advancement Group |
| Inc | |
| I8O | Hi Tek (HK) Enterprises Co |
| I8P | Hsin Lin Computer Co Ltd |
| I8Q | Service Alert Inc |
| I8S | Midas Computers & Supplies |
| I8T | Crony Electronics Corp |
| I8U | SuperGuide Corporation |
| I8V | Progen Technology Inc |
| I8V | Progen Technology Inc |

| Code | Company |
|------|--------------------------------------|
| I8W | Merlin Gerin Inc |
| I8Y | Western Computer and Office Products |
| I94 | Boswell Industries Inc |
| I96 | VideOcart Inc |
| I97 | Logidata Technology Inc |
| I9A | Silicon Valley Computer |
| I9B | Micro Supply Inc |
| I9C | American Digital Data Associates |
| I9D | Unitoys Company Limited |
| I9E | Spaceball Technologies Incorporated |
| I9E | Spacetec IMC Corporation |
| I9F | Rydex Ltd |
| I9H | Everware Technology Co |
| I9I | Advanced Micro Systems Inc |
| I9K | Getek International Ltd |
| I9L | Cimetrics Technology |
| I9M | Babtech Enterprise Co Inc |
| I9O | Ace RC Inc |
| I9P | NewGen Systems Corporation |
| I9Q | Advanced TechCom Inc |
| I9Q | Advanced TechCom Inc |
| I9R | Comwave Inc |
| I9T | Optical Access International Inc |
| I9V | Kola Industrial Co Ltd |
| I9X | DuraComm Corporation |
| IA3 | Reply Corporation |
| IA4 | STA Computer Corporation |
| IA6 | Chaintech Computer US Inc |
| IA7 | Sirius Industries Incorporated |
| IA8 | UniStor Corporation |
| IA9 | OMNEX Engineering Ltd |
| IA9 | OMNEX Engineering Ltd |
| IAA | Provato Technologies Inc |
| IAE | The Computer Learning Works Inc |
| IAJ | Kiddesigns Inc |
| IAK | NBCC Corporation |
| IAM | Citex International Corp |
| IAN | ProXellent International Inc |
| IAO | Sigma Information Systems |
| IAP | A Dan Enterprise Company Ltd |
| IAP | A Dan Enterprise Company Ltd |
| IAQ | Woods Wire Products Inc |
| IAR | Teletimer International Inc |
| IAT | Co Time Computer Ltd |
| IAW | MAG Technology Co Ltd |
| IAX | Advanced Graphics Technology Inc |
| IAX | Synergy Advanced Technology Inc |
| IAZ | Electronics Safety Device Inc |
| IB2 | Ross Engineering Company |
| IB4 | Quay Communications Inc |
| IB7 | NewTek Inc |
| IB9 | Prolink Microsystems Corporation |
| IB9 | Prolink Microsystems Corporation |
| IBA | Creative Labs Inc |
| IBC | Sierra Micro Systems |
| IBD | Spears Technology Holding Co Inc |
| IBG | E S Trading Co Ltd |

| Code | Company |
|------|---|
| IBH | Union Concept Co Ltd |
| IBI | Geotel Development Company |
| IBJ | Talkie Tooter (Canada) Limited |
| IBK | Bit Bucket |
| IBL | PC Outlet Inc |
| IBP | MicroTouch Systems Inc |
| IBQ | Applied Concepts Inc |
| IBR | ACK Technologies Inc |
| IBT | Moniterm Corporation |
| IBU | Extended Systems Inc |
| IBV | Wang International Trade Inc |
| IBW | Rightpoint Electronics Inc |
| IBY | Orcim Inc |
| IBZ | Walt Disney Computer Software Inc |
| IC2 | Suretrak |
| IC4 | Wintech Technology Co Ltd |
| IC5 | Com Power Corporation |
| IC8 | Laser Computer Ltd |
| IC9 | SMC Technology Ltd |
| ICA | Taiwan X'tal Corporation |
| ICB | International TIC Sales Corporation |
| ICD | Nova Marine Systems Limited |
| ICE | Suwa Electronics Inc |
| ICG | Outbound Systems Inc |
| ICI | Galaxy Networks Inc |
| ICJ | TRW Information Networks Division |
| ICK | Loyal Technology Co Ltd |
| ICL | Techsonic Industries Inc |
| ICM | Automated Computer Technology Corporati |
| ICO | Tetravalence Electronics Manufacturing |
| ICS | PriceLink Inc |
| ICU | Gainward Co Ltd |
| ICU | Gainward Co Ltd |
| ICV | VNS America Corporation |
| ICW | Altra |
| ICX | Interactive Network Inc |
| ICZ | Mitac Industrial Corporation |
| ID2 | Winbond Electronics Corp |
| ID3 | Vantak Inc |
| ID4 | Arima Computer Corp |
| ID5 | Data One Inc |
| ID7 | Matrox Electronics Systems Ltd |
| ID8 | Dae Sung Electronic Co Ltd |
| ID9 | Young Micro Systems Corp |
| IDA | Metheus Corporation |
| IDB | Storage Dimensions |
| IDC | Orion Technologies Corp dba Inventure |
| IDE | BTG Inc |
| IDF | Computer Extension Systems Inc |
| IDH | APT Inc |
| IDH | Fellowes Manufacturing Co. |
| IDI | Lo Jack Corporation |
| IDK | Alliance Peripheral Systems Inc |
| IDL | Technobox Inc |
| IDN | Shin Yang Electronics Industries Co Ltd |
| IDO | Touch Computer |
| IDQ | International Electronic Technology Inc |

| Code | Company |
|------|--------------------------------------|
| IDT | Sys Technology Inc |
| IDT | Sys Technology Inc |
| IDW | Oak Technology Inc |
| IDW | Oak Technology Inc |
| IDX | Pao Ku International Co Ltd |
| IE2 | Reflection Technology |
| IE3 | Interlink Electronics |
| IE4 | Atrie Technology Inc |
| IE4 | Atrie Technology Inc |
| IE5 | Hand Held Communications Inc |
| IE6 | J Squared Technical Service |
| IE7 | Asure Corporation |
| IE8 | Trantor Systems Inc |
| IEB | Wolf Auto Accessories Ltd |
| IEC | Vis a Vis Communications Inc |
| IEC | Workstation Technologies Inc |
| IED | Georgetown Electric Limited |
| IEE | Universal Cellular Inc |
| IEF | NPC Computer Corporation |
| IEG | Sino Technic (Pte) Ltd |
| IEH | Monitor Innovation Technology Co Ltd |
| IEI | Automan |
| IEJ | Global Village Communication Inc |
| IEK | Corel Systems Corporation |
| IEL | Opus Technology USA Ltd |
| IEM | Prism Imaging Systems |
| IEP | Motorola Microwave |
| IEQ | Accel Computer Corporation |
| IER | Bright Headphone Electronics Co |
| IER | Bright Headphone Electronics Co |
| IES | Nippon Avionics Co Ltd |
| IET | Yick Che Toys |
| IEU | Protec Co Ltd |
| IEV | Communication Systems Incorporated |
| IEW | Oak Technology Inc |
| IEX | Siemens Medical Systems |
| IEY | Nokia Display Products Oy |
| IEY | Salcomp Oy |
| IEZ | Gateway Telephone Inc |
| IF2 | Midori Electronics Co Ltd |
| IF4 | Parkway Communications Inc |
| IF5 | MER Communications Systems Inc |
| IF6 | Dorian Industries Pty Ltd |
| IF8 | Prince Information Systems Co Ltd |
| IF9 | Sycon Corporation |
| IFA | Aceex Corporation |
| IFB | OnSpec Electronic Inc |
| IFF | Maxum Systems Inc |
| IFG | PC Genius |
| IFH | Hitec RCD Inc. |
| IFI | Lapro Corporation |
| IFM | Karrie Industrial Co Ltd |
| IFO | Zenith Data Systems Corporation |
| IFO | Zenith Data Systems |
| IFO | Zenith Data Systems |
| IFP | Distributed Processing Technology |
| IFR | Ocean Satellite Systems |

| Code | Company |
|------|---|
| IFS | Laser Computer Inc |
| IFT | American DataCom Inc |
| IFV | Wing Wo Plastic Factory |
| IFW | AMKLY Systems Inc |
| IFX | Roland DGA Corporation |
| IFY | Colby Systems Corporation |
| IFZ | NEC Technologies Inc |
| IG2 | GreatWest Technology Limited |
| IG7 | Star Tech Company |
| IG8 | MVP Canada Industries Inc |
| IGA | Duracraft Corporation |
| IGB | Creative Controllers Inc |
| IGD | Ripe Hitek Corporation |
| IGE | Eastern Electronic Co Ltd |
| IGF | Spectra Merchandising International Inc |
| IGG | Iverson Computer Corporation |
| IGJ | Sophisticated Circuits Inc |
| IGK | The Arbitron Company |
| IGL | The Disc Company |
| IGO | Fujikama OA Distribution |
| IGP | VenKoren Inc |
| IGQ | S Tec Corporation |
| IGT | Digigram |
| IGU | Ban Young Electronics Co Ltd |
| IGV | Daewoo Electronic Components Company Li |
| IGW | Tamron Co Ltd |
| IGY | J Bond Computer Systems Corporation |
| IGZ | Vitesse Inc |
| IH3 | Creative Micro Designs Inc |
| IH4 | Microflip Inc |
| IH5 | Acrian Inc |
| IH8 | PC Brand Inc |
| IH9 | Music Quest Inc |
| IHA | NYMA Inc |
| IHC | Digital Vision Incorporated |
| IHD | Motorola Inc |
| IHE | Motorola Inc |
| IHG | Synergistic Board Products Inc |
| IHH | Heddolf Industrial Company Limited |
| IHI | Midisoft Corporation |
| IHJ | Rodtronics Corporation |
| IHK | Bexar Micro-Systems |
| IHM | Qualimetrics Inc |
| IHN | Singapore Technologies International In |
| IHP | Brilliant Technology Co Ltd |
| IHT | Weldun International Inc |
| IHU | TG3 Electronics Inc |
| IHW | Concept Keyboard Co Inc |
| IHZ | Garrison Industries Co Ltd |
| IJ3 | Vectronics Corporation Inc |
| IJ4 | Tricord Systems Inc |
| IJ6 | Supersonics Electric Co |
| IJ7 | Tangent Computer Incorporated |
| IJ9 | YES Systems Corporation |
| IJA | ACS Innovations International PTE Ltd |
| IJB | Taiwan Video & Monitor Corp |
| IIC | Flytech Technology (USA) Inc |

| Code | Company |
|------|---|
| IID | Hallt Security Systems Inc |
| IIF | Iterated Systems Inc |
| IIH | Aten Research Inc |
| III | New Paradise Enterprise Co Ltd |
| IJJ | Relisys |
| IIK | Maxima Gopro Technologies Ltd |
| IIO | CNet Technology Inc |
| IIP | Paxim Co Ltd |
| IIR | Full Power Investment Co Ltd |
| IIS | Core Pacific Electronics Co Ltd |
| IIT | Interonics Corporation |
| IIU | Applied Inventions Management Corporati |
| IIV | Acculogic Inc |
| IIW | MacGregor Navire (FIN) Oy |
| IYY | TCI Partners Inc |
| IJ2 | PC Products Corporation |
| IJ3 | POTOMAC INSTRUMENTS inc |
| IJ4 | Aapps Corporation |
| IJ5 | Kraus Industries Limited |
| IJ6 | Royal Telecom Incorporated |
| IJ7 | J C Computer Warehouse |
| IJ9 | Timberland Equipment Limited |
| IJA | Danitas Radio AS Ltd |
| IJB | National Microcomputer Research Institu |
| IJC | Martin L Kaiser Inc |
| IJE | Essex Monitor Co Ltd |
| IJF | Great Chieftrain Enterprise Co Ltd |
| IJG | Hwachang Electronics Co Ltd |
| IJM | Miele Appliances Inc |
| IJN | Bow Electronics Co Ltd |
| IJP | Kegan Co Ltd |
| IJQ | Sentech Electronics |
| IJQ | Sentech Electronics |
| IJS | Ocean Interface Company Incorporated |
| IJU | Melawares International Corporation of |
| IJV | Link Technologies |
| IJW | Koutech Systems Inc |
| IJX | Sicommerce AG Remex |
| IJY | Computer Place Incorporated |
| The | |
| IJY | The Computer Place Incorporated |
| IJZ | Ericsson Mobile Data Incorporated |
| IK6 | Cableshare Inc |
| IK6 | Cableshare Inc |
| IK7 | Northman Technologies Co Ltd |
| IK9 | Optima Technology Corporation |
| IKA | E Systems Inc |
| IKD | Digital Distributing Inc |
| IKG | TechWare Electronics Corporation |
| IKH | Rapid Data Inc |
| IKI | Lokata Limited |
| IKJ | Tech Services International |
| IKL | Santa Barbara Instrument Group |
| IKN | Mospen Products Company |
| IKO | Management Advisory Software Inc |
| IKS | Data Broadcasting Technologies Inc |
| IKT | Ericsson Mobile Communications AB |

| Code | Company |
|------|--|
| IKV | PerCom Technology Inc |
| IKW | China Terminals & Electric Co Ltd |
| IL2 | Dana Corporation |
| IL3 | WestData Computer Inc |
| IL6 | Collett Electronics USA Inc |
| ILA | Exide Electronics Corporation |
| ILC | Caere Corporation |
| ILD | Hewitt Rand Corporation |
| ILE | NISCA Incorporated |
| ILJ | GTE Spacenet Corporation |
| ILK | Acro Electronics Corporation |
| ILL | Britek Electronics Co Ltd |
| ILN | Young Star Electric Co Ltd |
| ILO | Great Valley Products Inc |
| ILP | Psion Incorporated |
| ILR | Electo Galil Electronic Co Ltd |
| ILS | SEED Tech Corporation |
| ILT | EDISSI Systems Technology Inc |
| ILU | Formosa Microsystems Inc |
| ILV | Unibel Developments Inc |
| ILX | Model American Computer Corporation |
| ILZ | High Ability Computer Co Ltd |
| IM3 | Paradigm Systems |
| IM4 | MHE Systems Corporation |
| IM5 | Eclipse Technologies |
| IM6 | Intelligence Technology Corporation |
| IM9 | MountainGate Data Systems Inc |
| IMA | Technisonic Industries Limited |
| IMC | Positive Corporation |
| IMD | Identification Business Inc |
| IME | Lynch Resources Limited |
| IMF | Metromedia Paging Services |
| IMG | Chaining Computer & Communication Corp |
| IMI | Leeds & Northrup |
| IMJ | Midiman |
| IMJ | Midiman |
| IMK | Proxim Inc |
| IML | FutureVideo Products Inc |
| IMN | Oregon Scientific Inc |
| IMO | STS Enterprises Inc |
| IMP | TK IDM Distribution Inc |
| IMQ | InCom Technology Inc |
| IMR | AT&T Global Information Solutions WCND |
| IMT | Midern Computer Inc |
| IMU | AutoWrap Inc |
| IMW | Tee Comm Electronics Inc |
| IMX | Synergistic Computers Inc |
| IMY | Verran Electronics Limited |
| IN2 | Hunter Fan Company |
| IN5 | Interstate Engineering Company |
| IN9 | Sealed Air Corporation |
| INA | De Longhi SpA |
| IND | System Ave Inc |
| INE | Bravo Micro Systems Inc |
| INF | PSI Integration Inc |
| ING | Taky Electronics Co Ltd |
| INH | X Ray Scanner Corporation |

| Code | Company |
|------|-----------------------------------|
| INI | LARMCO Security Inc |
| INJ | Sanki Industrial Co Ltd |
| INM | DayStar Digital Inc |
| INN | The Cloud Inc |
| INO | Audiotel International Limited |
| INQ | Infiniti MFG Inc |
| INR | Ampron International Inc |
| INS | Technology Applications |
| INT | BusLogic Inc |
| INU | Griffin Products Ltd |
| INV | AzureSoft |
| INW | Polar Electro Inc |
| INZ | Silicon Graphics Inc |
| IO2 | Dolch Computer Systems |
| IO3 | SKV International Inc |
| IO4 | LES Systems Inc |
| IO5 | Proficiency |
| IO6 | EISA Tech Corp |
| IO8 | Sierra Digital Communications Inc |
| IOB | DSP Solutions Inc |
| IOC | International Computers |
| IOH | Cosa Liebermann Trading Ltd |
| IOI | Dynamic Security Systems Inc |
| IOJ | Kyodo West Inc |
| IOL | AVID Marketing Inc |
| IOI | AVID Marketing Inc |
| IOM | KENWOOD Corporation |
| IOP | Computer 2000 Inc |
| IOQ | Ositech Communications Inc |
| IOR | Hyundai Electronics America |
| IOS | Dell Star Technologies Inc |
| IOT | Batron Inc |
| IOU | National Datacomm Corporation |
| IOV | WesTest Engineering Corporation |
| IOW | Chic Technology Corporation |
| IOX | AVR Communications Ltd |
| IOY | Keen Systems (China) Ltd |
| IOZ | Ceda America |
| IP2 | Toshiba of Canada Limited |
| IP3 | Tour Mate Systems Limited |
| IP4 | Datacare International Corp |
| IP5 | Technology Power Enterprises Inc |
| IP6 | Visitect Incorporated |
| IP9 | Tactical Technologies Inc |
| IPC | Micro Q Computer Products |
| IPD | Jiangmen Electronic Ltd |
| IPF | EECO Limited |
| IPG | Texas Weather Instruments Inc |
| IPH | Garmin International Inc |
| IPH | Garmin International Inc |
| IPK | Yunhan Corporation |
| IPL | AESL Technology Inc |
| IPN | Toven Technologies Inc |
| IPP | Wanon Industries Ltd |
| IPS | Radi Adds |
| IPT | Powerhouse Computer Sales Ltd |
| IPV | Ergo Computing Inc |

| Code | Company |
|------|---------------------------------------|
| IPW | Shin Wha Computer Co Ltd |
| IPX | AudioScience Inc |
| IPZ | Hewlett Packard GmbH |
| IQ2 | Fortune News Industrial Limited |
| IQ5 | Data Flow Systems Inc |
| IQ6 | Expert Electronic Company Ltd |
| IQ7 | Jetta Computers Co Ltd |
| IQ8 | Big Egg Electronics Industrial Co Ltd |
| IQ9 | Enhanced Telephone Services Inc |
| IQB | CC & Associates Inc. |
| IQC | Librex Computer Systems Inc |
| IQD | Ericsson Paging Systems Inc |
| IQF | Micro Pro Systems Corporation |
| IQG | Msound International Incorporated |
| IQH | Selvac Corporation |
| IQI | Marcraft International Corporation |
| IQJ | Chief Electronic Co Ltd |
| IQJ | Chief Tek Electronics Co Ltd |
| IQK | Wai Ko Electronics Ltd |
| IQL | EPD Electronics Inc |
| IQM | Fair Friend Enterprise Co Ltd |
| IQO | Sang Corporation |
| IQP | Keithley MetraByte Corporation |
| IQU | Cumulus Manufacturing Corporation |
| IQV | World-Tech Corporation |
| IQW | Momenta Corporation |
| IQX | Shamrock Technology Co Ltd |
| IQY | Prolab Technology Co Ltd |
| IQZ | CQG Incorporated |
| IR2 | Davis Instruments |
| IR4 | Global Micro Systems Inc |
| IR5 | CReTE SYSTEMS INC |
| IR7 | Acma Computers Inc |
| IR9 | CUBE Computer Corporation |
| IRA | Syncomp International Corp |
| IRB | Comfort Key Corporation |
| IRC | Reason Technology |
| IRD | Potex Electronics Co Ltd |
| IRE | Pepperl + Fuchs Inc |
| IRH | Kennex International Corp |
| IRI | DATALUX Corporation |
| IRJ | Marson Technology Co Ltd |
| IRN | Gakken (HK) Trading Company Limited |
| IRO | Altatron Inc |
| IRP | BroadBand Technologies Inc |
| IRR | Information Systems Inc |
| IRS | Creative Electronics Company |
| IRT | Sassy Inc |
| IRU | Kingtec Corporation |
| IRV | Sworn Enterprises Company Inc |
| IRY | Besam |
| IRZ | FMR Devices Inc |
| IS2 | Trovan Limited |
| IS3 | Bridge Information Co Ltd |
| IS4 | Systems Overseas Inc |
| IS5 | Radio Control Systems Inc |

| Code | Company |
|------|---|
| IS6 | Linear Systems Ltd |
| IS8 | Siecor Corporation |
| IS9 | Artran Inc |
| ISA | DURANGO auto tech Produktionsgesellscha |
| ISB | Comtech Micro Systems Inc (MD) |
| ISC | Inter Link Communications Inc |
| ISD | Avatar Mfg Co Limited |
| ISE | Instantel Inc |
| ISG | Match Technologies Inc |
| ISJ | Chaney Systems Inc |
| ISK | AOI Kane Seiko (USA) Inc |
| ISL | IMAGENATION Corporation |
| ISM | Continental Technology Inc |
| ISN | Limtech Industrial Co Ltd |
| ISO | MEGA PC Technology Inc |
| ISP | Magitronic Technology Inc |
| ISP | Magitronic Technology Inc |
| ISQ | Allied Electronic & Semiconductor Techn |
| ISR | DP Tek Inc |
| ISS | Totoku Electric Co Ltd |
| IST | Elite High Technology Inc |
| ISV | Sankyo Seiki (America) Inc |
| ISW | Asuka Technologies Inc |
| ISX | NISCA Corporation |
| ISY | Jin Tech Electronics Corp |
| IT2 | Sun Flower Instruments Inc |
| IT4 | Monterey Electronics Inc |
| IT5 | Prolink Computer Inc |
| IT6 | Computer Logics Limited |
| IT7 | Daewoo Precision Industries Ltd |
| IT8 | Audio Design Associates |
| IT9 | Remote Automation & Control Electronics |
| ITB | Gain Technology Co Ltd |
| ITC | CRN Telemetry Devices |
| ITC | Crylam Inc |
| ITE | Ultima Electronics Corp |
| ITG | SunRace Technology Corporation |
| ITH | Microland Electronics Corp |
| ITI | Integrated Information Technology Inc |
| ITJ | Novacor Inc |
| ITK | Actron AG |
| ITO | Digitech Research Inc |
| ITP | Progressive Security Systems Inc |
| ITQ | Charles Machine Works Inc |
| ITQ | The Charles Machine Works Inc |
| ITR | International Data Products Corporation |
| ITS | Gaggenau Werke Haus-Und Lufttechnik Gmb |
| ITT | Outline Electronics Ltd |
| ITU | Shuttle Computer International Inc |
| ITV | Compulink Systems Inc |
| ITY | Amstrad PLC |
| ITZ | Dalton Instrument Corporation |
| IU2 | Datametrics Inc |
| IU3 | Sampson Electronics Inc |
| IU5 | Eteknik Corporation |
| IU7 | Mitac USA Inc |
| IU7 | Mitac USA Inc |

| Code | Company |
|------|---|
| IU8 | Shanpu Co Ltd |
| IU9 | FlashTalk Corporation |
| IUA | Scantronic (USA) Inc |
| IUB | Marantz Japan Inc |
| IUC | Kobell USA Trading Co |
| IUD | Tru Test Inc |
| IUE | American Megatrends Inc |
| IUF | Mosaic Development |
| IUG | DPI Labs Inc |
| IUH | Cogent Data Technologies Inc |
| IUH | Cogent Data Technologies Inc |
| IUJ | Traffic Control Systems Specialists Inc |
| IUM | Flytek Corporation |
| IUO | Matsushita Kotobuki Electronics Industr |
| IUP | Chun Yun Electronics Co Ltd |
| IUQ | Twincom |
| IUR | Lead Tech International Corp |
| IUT | Fastmicro Inc |
| IUW | Progress Instrument Inc |
| IUX | Tripole Electronic Industries Co Ltd |
| IUY | Applied Power Incorporated |
| IUZ | Aviev Technology Inc |
| IV2 | Axonix Corporation |
| IV3 | Mutoh Industries Ltd |
| IV4 | CPU Research Inc |
| IV5 | Jenn Huey Enterprise Co Ltd |
| IV6 | National Drive Buy Broadcasting Inc |
| IV9 | Kanematsu USA Inc |
| IVA | Everquest Inc |
| IVB | Soletek Computer Supply Inc |
| IVC | Pulse Metric Inc |
| IVE | Suntron Electronics Co Ltd |
| IVI | Alpha Digital Systems Inc |
| IVK | Flashcom Corp |
| IVL | Techno American National Group Inc |
| IVN | Senses International |
| IVO | TeleSciences Transmission Systems Inc |
| IVQ | Kustom Signals Inc |
| IVR | MPR Teltech Ltd |
| IVU | SOYO USA Inc |
| IVV | Tokimec Inc |
| IVW | New Media Graphics Corporation |
| IVX | Tyco Playtime |
| IVZ | Rainbow Technologies Inc |
| IW2 | CompuTrend Systems Inc |
| IW3 | Olympic Computer Technology Inc |
| IW4 | Dassault Electronique |
| IW6 | Bicom Technology Inc |
| IW9 | Datamatic System Co Ltd |
| IWA | Alps Elec Co Ltd Comp & Comm Bus Unit |
| IWB | PC Pros |
| IWC | Noraxon USA Inc |
| IWD | Celwave RF |
| IWE | Grey Matter Response |
| IWG | Fimbel Door Corporation |
| IWH | Mandax Computer |

| Code | Company |
|------|--|
| IWI | Chung Lam Electronics |
| IWK | Extech Instruments Corporation |
| IWL | Acumos Inc |
| IWM | Hasselblad Electronic Imaging AB |
| IWN | Volvo Cars of North America |
| IWO | Hanzawa (HK) Ltd |
| IWP | Total System Integration |
| IWR | Logical Design Works Inc |
| IWS | Ariel Design Inc |
| IWU | Scientific Atlanta Canada Inc |
| IWV | Cirplus Corporation |
| The | |
| IWW | Databook Inc |
| IWX | Midier's Land |
| IWZ | MerchanTec International |
| IX2 | Smith Corona Acer |
| IX3 | MicroNet |
| IX4 | TSI Security Acquisition Corp |
| IX5 | Polin Corporation |
| IX7 | Vosca Corporation |
| IX8 | Aviation and Marine Technology Inc |
| IX9 | Micro Card Technologies Inc |
| IXB | Actix Systems Inc |
| IXC | Electronic Distributors Corp |
| IXD | American Digicom Corp |
| IXF | Polywell Computers Inc |
| IXH | Electronic Modules Inc |
| IXJ | Protronix Inc |
| IXL | Deister Electronic GmbH |
| IXM | Universal Scientific Industrial Co Ltd |
| IXO | Dragon Systems Inc |
| IXP | Bona Computech Co Ltd |
| IXQ | Regtech Information Corp |
| IXR | Tech R&D of Taiwan Co Ltd |
| IXS | Network Peripherals Inc |
| IXT | Precise Logix Computer Inc |
| IXU | Rextechnik International Corp |
| IXV | Automicro Technology Inc |
| IXW | Media Vision Inc |
| IXX | Tungtai Co Ltd |
| IXY | Airis Computer Corporation |
| IXZ | Destron IDI Inc |
| IY2 | Mass World International Co Ltd |
| IY3 | Bona Technologies Corp |
| IY5 | L&L Technology Co Ltd |
| IY7 | Apropo Technologies (1989) Ltd |
| IY8 | HiQuality Systems Inc |
| IY9 | AJR Technology |
| IYA | Pioneer Electronics (USA) Inc |
| IYC | Lodestar Technology Inc |
| IYD | Seritech Enterprise Co Ltd |
| IYE | Spea Inc |
| IYG | Spectralink Corporation |
| IYH | Hana Engineering Inc |
| IYI | Sunwave Electronic Ltd |
| IYJ | Avery Datendrucksysteme GmbH |
| IYL | Lexmark International Inc |

| Code | Company |
|------|--|
| IYN | Keypot Technology Co Ltd |
| IYO | The Computer Store |
| IYP | Tianess Enterprise Co Ltd |
| IYQ | Adobe Systems Incorporated |
| IYR | Antec Incorporated |
| IYS | Ramar Incorporated |
| IYT | Elite Micro Technology Inc |
| IYU | Silver Dollars International Inc |
| IYV | K M Corporation |
| IYX | Lxycon Technologies |
| IYZ | Marquardt GmbH |
| IZ2 | Panda Electronics Corp |
| IZ3 | TRON Tek Inc |
| IZ4 | Ronics Technology Co |
| IZ5 | Ultra Comp |
| IZ6 | MOST Inc |
| IZ8 | Jung Di Hsing Industry Company Limited |
| IZB | Snider Communications Corporation |
| IZC | Lightwave Technologies Inc |
| IZD | Ling Yih Co Ltd |
| IZE | Oriental Tech Co Ltd |
| IZF | Broadcast Technology Company |
| IZI | Syncan Corporation |
| IZJ | Centrix Computer Inc |
| IZK | Migraph Inc |
| IZL | Hanics Co Ltd |
| IZM | Lights of America |
| IZN | Sureman Computer Corp |
| IZO | Ubitech Systems Inc |
| IZP | Echelon |
| IZQ | Caradon Friedland Limited |
| IZS | BBC Computers Inc |
| IZT | Madenta Communications Inc |
| IZV | Best Com Technology Co Ltd |
| IZX | Microlane Computers Incorporated |
| J23 | Compatible Personal Computers Inc |
| J24 | Interface Controls (1991) Inc |
| J25 | Medical Surgical Specialties Ltd |
| J26 | California Amplifier Inc |
| J29 | Doradus Corporation |
| J2A | PC Wisconsin |
| J2B | Focus Computer & Electronics Inc |
| J2C | Dash Computer Inc |
| J2D | Beyond Technology Inc |
| J2E | Linnex Computers Inc |
| J2F | Technitrol |
| J2H | Angia Communications Inc |
| J2K | Bodyguard Technologies Inc |
| J2L | Fuji Xerox Corporation Limited |
| J2M | Concept II Inc |
| J2P | Snow Development Inc |
| J2Q | Samkyung Mechatronics Co Ltd |
| J2R | Buddy L (Hong Kong) Ltd |
| J2S | Siam United Hi Tech Ltd |
| J2U | Quad Micro Systems Inc |
| J2V | Monark International Corp |
| J2Y | K & R International Inc |

| Code | Company |
|------|--|
| J2Z | Vantron Technologies Incorporated |
| J32 | Key Power Inc |
| J36 | Armatek Incorporated |
| J37 | Alden Electronics Inc |
| J39 | Centaur Development |
| J3C | Brentwood Research & Development Inc |
| J3D | The Future Now |
| J3E | MTI Corporation |
| J3F | Hyquest Technology Inc |
| J3G | Jeangirl Technology Co Ltd |
| J3I | Redford Company Inc |
| J3J | Datex Systems Inc |
| J3K | Census Computers Inc |
| J3L | MSEOI Ltd |
| J3N | Century Ballast Electronic Corporation |
| J3O | Xircom |
| J3O | Xircom |
| J3Q | Knogo North America Inc |
| J3S | Bulldog Security |
| J3U | Plusware Inc |
| J3V | IOtech Inc |
| J3X | Open Corporation |
| J3Z | Silicon Star International Inc |
| J42 | SFE Research Inc |
| J43 | Dynasys Technologies Inc |
| J44 | Neotech Ltd |
| J45 | Datel Corporation |
| J46 | Wireless Security Systems Ltd |
| J47 | General Devices |
| J48 | ETA SA Fabriques d'Ebauches |
| J49 | Sanlendi Inc |
| J4A | Carlson Communications Inc |
| J4B | Orthomatic Adjustable Beds |
| J4C | S&A Systems Inc |
| J4D | B&F Consultants Inc |
| J4E | AverMedia Technologies Inc |
| J4G | Locatakid Inc |
| J4H | FWB Incorporated |
| J4H | StreamLogic Corporation |
| J4I | Sierra Semiconductor |
| J4J | CommCenter Corp |
| J4K | Planar Systems Inc |
| J4M | Chester Inc |
| J4N | Extension Technology Corporation |
| J4P | Acer Laboratories Inc |
| J4R | Dong Ho Electric Co Ltd |
| J4R | Dong Ho Electric Co Ltd |
| J4S | TTC Computer Products |
| J4U | Protac International Corp |
| J4W | Auto Guardian Electronics Inc |
| J4X | InterActive Inc |
| J4Z | American Artificial Larynx Co LP |
| J52 | Kwok Kin Enterprises Ltd |
| J54 | Cincinnati Microwave Inc |
| J55 | Naldjian Bros Inc |
| J56 | Holly Electronic Corporation |
| J58 | Health Care Keyboard Company Inc |

| Code | Company |
|------|---|
| J59 | Kingroyal Co Ltd |
| J5B | Adams Fravel Inc |
| J5F | Astroflex Inc |
| J5G | CellularVision Inc |
| J5H | Sampey Scientific Ltd |
| J5I | Xinetron Inc |
| J5J | Plexsys International Corp |
| J5K | Atlas Elektronik of America |
| J5M | Group Technologies Corporation |
| J5O | Micro Equipment Corporation |
| J5P | Toptek Micro Computer Inc |
| J5Q | Princeton Technology Corp |
| J5R | Auro Tech & System Inc |
| J5S | Marchon Inc |
| J5T | Inno Pro Inc |
| J5U | EQUIS Computer Corporation |
| J5X | Grace Industries Inc |
| J5Y | Wination Industrial Ltd |
| J5Z | Tradac Corporation |
| J62 | Focus |
| J63 | Texas Microsystems Inc |
| J64 | Integrated Systems & Information Inc |
| J66 | Elekon Industries USA Inc |
| J67 | Fast Electronic US Inc |
| J68 | Northwest Micro Inc |
| J69 | Indyme Electronics Inc |
| J6A | Enviro Light Inc |
| J6C | Pinnacle Micro Inc |
| J6D | Advanced Data Systems |
| J6E | Santos Technology |
| J6G | Kanrich Tech Int'l Corp |
| J6I | Galaxy Commutech Limited |
| J6J | Pennsylvania Computers Connections Inc |
| J6K | Guardian Security Products Inc |
| J6N | Cirrus Logic Inc |
| J6P | Analog and Digital Systems Inc |
| J6Q | Lestina International Ltd |
| J6R | Multipoint Technology Corporation |
| J6S | Sports Sciences Inc |
| J6U | Teleconferencing Systems International |
| J6W | Occidental Systems |
| J6X | DTI Inc |
| J6Y | Tadiran Ltd Communication Group |
| J6Z | Philips Telecom - Private Mobile Radio |
| J74 | The Library Corporation |
| J75 | Sunrex Technology Corp |
| J77 | Wu Yu Corporation |
| J78 | Crest Computers & Supplies |
| J7A | Advanced Remote Technologies Incorporat |
| J7C | Transportation and Recording Systems |
| J7D | The Generic Software Place |
| J7E | Performance Computer Systems |
| J7F | Etoile Enterprise Co Ltd |
| J7G | Way To Go Corporation |
| J7I | Yick Shun Electronic Toys Manufactory L |
| J7I | Yick Shun Electronic Toys Manufactory L |
| J7J | ClubMac |

| Code | Company |
|------|---|
| J7K | Windata Inc |
| J7M | Supercommand Company Inc |
| J7N | Ocean State Computers Ltd |
| J7P | Concord Office Automation Industrial (H |
| J7Q | SANYO Electric Co Ltd |
| J7R | Autec Power Systems Inc |
| J7S | Piiceon Inc |
| J7T | EIS Electronic Integrated Systems Inc |
| J7U | Audiological Engineering Corporation |
| J7V | Sunlan Technology (USA) Inc |
| J7W | Winner International |
| J7X | Microstar Computers Inc |
| J82 | PG Design Electronics Inc |
| J83 | Innovation Computer Inc |
| J84 | American AML Inc |
| J85 | Target Micro Inc |
| J86 | USFO Technology Corp |
| J87 | Micro Marketing Group Inc |
| J88 | Bang Chen Computer Enterprise Co Ltd |
| J89 | TSR Technologies Inc |
| J8A | Siltron Electronics Inc |
| J8C | Union Switch & Signal Inc |
| J8D | A Top Research Inc |
| J8E | Data IO Corporation |
| J8F | ANTEC Manufacturing |
| J8H | Amta Computer of New York Inc |
| J8K | Amita Corporation |
| J8L | NCR Corporation |
| J8M | Eden Group Limited |
| J8N | Gold Disk Inc |
| J8O | Information Unlimited |
| J8P | Key Innovations Corporation |
| J8Q | Wing Lee Technology Co Ltd |
| J8R | Audio Technica US Inc |
| J8S | Mercury Technologies |
| J8T | Trojan Systems America |
| J8U | Coded Communications Corporation |
| J8W | Jabert & lig Enterprise Co Ltd |
| J8X | H B Electronics Ltd |
| J8Y | Data Technology Corporation |
| J8Z | Anchor Audio Inc |
| J94 | Steele Creek Technologies Inc |
| J95 | Shelcore Hong Kong Ltd |
| J98 | Anchor Electronics Company |
| J99 | Inventec Electronics (Malaysia) Sdn Bhd |
| J9A | Wonder Systems |
| J9B | Korea Security System Co Ltd |
| J9C | Qualcomm Incorporated |
| J9C | Qualcomm Incorporated |
| J9D | Insight Information Systems Inc |
| J9E | Computer Source |
| J9G | Shaoxing Communication Broadcast TV App |
| J9H | Moked Enosh International (1992) Ltd |
| J9I | ShareVision Technology Inc |
| J9J | RACC Industries Inc |
| J9K | NTK Computer Inc |
| J9L | Scottcare Division of Scott Fetzer Co |

| Code | Company |
|------|--|
| J9M | New Media Corporation |
| J9N | Micro Conversions Inc |
| J9O | Taiwan Video System Co Ltd |
| J9P | Ta Ta Industrial Co Ltd |
| J9Q | Taipei Multipower Electronics Co Ltd |
| J9R | Cari Computer Corporation |
| J9V | Lion Computers Corp |
| J9X | Visage Inc |
| J9Y | Dynatech Spectrum Inc |
| J9Z | Gemini Sound Products Corporation |
| JA2 | Howtek Inc |
| JA3 | Sun Mountain Sports |
| JA5 | Sinfa |
| JA6 | Electronics Express |
| JA7 | Super Star Technology Co Ltd |
| JAA | Motorola Canada Limited |
| JAB | Dr Neuhaus Mikroelektronik GmbH |
| JAC | Personal Communication Systems Inc |
| JAF | ComStream Corporation |
| JAG | Desktop Electronics Inc |
| JAH | Display Product Factory Tianjin China |
| JAJ | Horward Broth Corporation |
| JAK | Roseman Engineering Ltd |
| JAL | Interface Electronics Inc |
| JAM | Trak System International |
| JAN | Heung Jin Electronics Co Ltd |
| JAQ | Infogrip Inc |
| JAS | Tri-Star Computer Corporation |
| JAU | Seoul Electronics Co Ltd |
| JAX | Light Source Computer Images Inc |
| JAY | Advanced Communications & Services Inc |
| JAZ | Bezier Systems Inc |
| JB3 | Abol Electronic Products Ltd |
| JB5 | Data Broadcasting Corporation |
| JB6 | Datavan Enterprises Co Ltd |
| JB7 | Wiseware Computer Inc |
| JB8 | Kinesis Corporation |
| JB9 | Speaking Devices Corporation |
| JBA | Macronix International Co Ltd |
| JBB | Smartech Technology Inc |
| JBE | BOU MATIC |
| JBH | Municipal Electronics |
| JBJ | SherTek Incorporated |
| JBK | Kintron Microtek Inc |
| JBL | National Design Inc |
| JBN | International Data Systems Inc |
| JBO | Emergency Signal Systems Inc |
| JBP | AmPro International Inc |
| JBQ | Sanyo Electric Co Ltd |
| JBR | Millidyne Inc |
| JBS | Unifx Communications Corporation |
| JBT | Covox Inc |
| JBU | Jae II Engineering Co Ltd |
| JBV | Chloride El Paso Inc |
| JBW | David Levy Co Inc |
| JBX | Lightning Communications Inc |
| JBY | Amkotron Inc |

| Code | Company |
|------|---|
| JBZ | Apex Technology Group Inc |
| JC2 | Pony Computer Inc |
| JC3 | Bion Technologies Corporation |
| JC6 | Don Johnston Developmental Equipment In |
| JC7 | Greenetree Engineering Inc |
| JC8 | Arcon Technology Corp |
| JC9 | Information Integration Inc |
| JCA | Shinwa Communications of America Inc |
| JCC | AGATech Corporation |
| JCE | Pam Pacific Associates Inc |
| JCH | Well Communication Corporation |
| JCJ | Shinetek Technology Inc |
| JCK | Giga Byte Technology Co Ltd |
| JCM | USA 2 Way Inc |
| JCN | E J Ward Inc |
| JCO | Jin You Industrial Co Ltd |
| JCQ | Martec Access Products Inc |
| JCR | SYX Systems |
| JCU | Multi Micro Systems |
| JCW | NCR Corporation |
| JCX | Data MicroSystems International Inc |
| JCY | Ginjet Technology Corp |
| JD2 | ADplus Technology Inc |
| JD3 | Media Technology |
| JD4 | Kaime Electronics Corp |
| JD7 | QDI Computer Inc |
| JD8 | FaxCom Solutions |
| JD9 | Applied Concepts Incorporated |
| JDA | Taiwan Kingye Industry Co Ltd |
| JDB | Speed Direction & Sound Inc |
| JDC | Triton Technology Laboratory |
| JDD | Nordic Computers |
| JDE | Lien Engineering Inc |
| JDF | TNC Chemical Co Ltd |
| JDG | Air Jack Wireless Systems Inc |
| JDH | Logic Computer |
| JDI | Letex Inc |
| JDJ | Nuvo Corporation of America |
| JDL | Leadman Electronics Inc USA |
| JDM | Tamarack Technologies Inc |
| JDM | Tamarack Telecom Inc |
| JDN | EMPaC Research Inc |
| JDO | Garry L Mott |
| JDP | Furukawa Co Ltd |
| JDQ | National MicroSystems Inc |
| JDR | Rostra Precision Controls Inc |
| JDT | Spectrum Electronic Products |
| JDZ | ETC Peripherals Inc |
| JE2 | Mass Memory Systems Inc |
| JE3 | Mobius Encryption Technologies |
| JE4 | Rokonet Electronics Ltd |
| JE5 | CompuAdd Express Corporation |
| JE6 | Fairmart Inc |
| JE7 | California Allied Technologies |
| JEA | Begonia Univac Corp |
| JEB | Wa Gol Industrial Co Ltd |
| JEE | Shin Kwang Enterprise Co Ltd |

| Code | Company |
|------|---|
| JEF | Prestige Electronics Corporation |
| JEG | TXC Corporation |
| JEH | AT&T Global Information Solutions Compa |
| JEH | NCR Corporation |
| JEI | Autotalk Inc |
| JEJ | Alston Research Inc |
| JEL | Ether Co Ltd |
| JEM | Ericsson Radio Messaging AB |
| JEN | Ansel Communications |
| JEO | INTELEC Corporation |
| JER | SAE Afikim |
| JES | Professional Computer Systems |
| JET | Ample Technology Incorporated |
| JEV | GS Industries Inc |
| JEX | Max Group Corp |
| JEY | Euro Tech Inc |
| JF5 | ChangJiang Computer Union Corporation (|
| JF6 | Alcatel Network Systems Inc |
| JF7 | Preh Electronic Industries Inc |
| JF9 | Number Nine Computer Corporation |
| JFB | Diamond Flower (Northeast) Inc |
| JFC | P C Ware International Inc |
| JFD | ReadySoft Inc |
| JFE | Parker/Vision Inc |
| JFG | Fluoroware Incorporated |
| JFJ | J & M |
| JFL | Voyager Technologies Inc |
| JFN | Phoenician Faire |
| JFO | Etech Micro Supply Inc |
| JFP | Micro Innovation Inc |
| JFQ | NatSteel Electronics Pte Ltd |
| JFR | Teg System Ltd |
| JFS | SL CONNEXION Europe |
| JFT | Lamp Power Supply Technology Co Ltd |
| JFU | GRANDTEC Electronic Corp |
| JFU | GRANDTEC Electronic Corp |
| JFV | InnoSys Incorporated |
| JFW | Midi Land Inc |
| JFX | Takashima & Co Ltd |
| JFY | Alacrity Systems Incorporated |
| JFZ | Audio Technica Corp |
| JG4 | CDS Systems Inc. |
| JG5 | Thought Technology Ltd |
| JG6 | Trident Autotech Corp |
| JG7 | Cotronix Incorporated |
| JG9 | UltraStor Corporation |
| JGA | Research and Development Solutions Inc |
| JGB | Gold Star Electron Co Ltd |
| JGC | Comband Technologies Inc |
| JGD | Random Technology Inc |
| JGF | Invent-Tech Enterprise Limited |
| JGH | Woobang Corp |
| JGL | Dolby Laboratories Inc |
| JGM | Argent Technologies Inc |
| JGN | Rainy City Computer Products |
| JGO | International Security Systems Group In |
| JGQ | Intec Corporation |

| Code | Company |
|------|---|
| JGR | Moisture Intrusion Detection Systems In |
| JGS | Mega Drive Systems Inc |
| JGT | Continental Resources Inc |
| JGV | United Solutions Inc |
| JGW | BleuMont Inc |
| JGY | Infotel Inc |
| JGZ | Edmark Corporation |
| JH2 | Altech Systems |
| JH3 | Waterway Communications System Inc |
| JH5 | Krohne America Inc |
| JH6 | AG Communication Systems Corporation |
| JH7 | Infotech Computer Co Ltd |
| JH8 | Careo Technology Co Ltd |
| JH9 | Interphase Corporation |
| JHA | Protech Co Ltd |
| JHB | Cellular Data Incorporated |
| JHC | Eagle Communications Inc |
| JHD | Identec Limited |
| JHF | Noise Com |
| Inc | |
| JHG | Dolphin Microsystems |
| JHH | Detection Dynamics Texas Inc |
| JHI | Graco Inc |
| JHL | United Dynasty Corporation |
| JHM | Infralink of America Inc |
| JHO | Billion Sound Ltd |
| JHP | Perfect Toys International Co Ltd |
| JHQ | American Power Conversion Corporation |
| JHR | MicroCenter Computer Inc |
| JHS | BCM Advanced Research Inc |
| JHT | Diamond Technologies |
| JHU | Nisshin Industry Co Ltd |
| JHW | Quantum Data Systems Ltd |
| JHY | United Circle Associated Inc |
| JHZ | Techco Research (Canada) Inc |
| JJ2 | New World Sound Enterprise Co Ltd |
| JJ5 | Standard Microsystems Corporation |
| JJ6 | LS Miller Inc |
| JJ7 | Marconi Circuit Technology Corporation |
| JJ8 | Tadpole Technology Inc |
| JJ9 | Intercontinental Technologies Ltd |
| JJB | AcuPrint Inc |
| JJC | Kingston Technology Corporation |
| JJD | Sidus Systems Inc |
| JJE | AM Sensors Inc |
| JJF | Superpower Supply Inc |
| JJG | American Prolmage Inc |
| JJH | American Prolmage Inc |
| JJI | Total Peripherals (Taiwan) Inc |
| JJL | SonicPRO International Inc |
| JJM | PCUSA |
| JJN | Advanced Scientific Corp |
| JJO | Alligator Communications Inc |
| JJP | Rin Teck Corporation |
| JJQ | Vertos Technologies Incorporated |
| JJR | Phihong Enterprise Co Ltd |
| JJS | Go Video Inc |

| Code | Company |
|------|---|
| JIT | Multi Connection Technology |
| JIU | EZ Sales and Manufacturing Inc |
| JIV | Rose Communications Inc |
| JIW | Microdyne Corporation |
| JJW | Microdyne Corporation |
| JJY | Edison Technologies |
| JJZ | Scientific and Commercial Systems Corpo |
| JJ2 | Networkland |
| JJ4 | Gyraton Inc |
| JJ5 | ACR Computer & Technology Corporation |
| JJ6 | EFA Corporation |
| JJ7 | CUE Network Corporation |
| JJA | 3 DBM Inc |
| JJB | Lighthorse Technologies |
| JJC | Smart House LP |
| JJD | Advanced Digital Systems Inc |
| JJE | Amico Corporation |
| JJF | SportSense Inc |
| JJG | Opta |
| JJI | Doctor PC Inc |
| JJK | Dataexpert Corporation |
| JJL | Promise Technology Inc |
| JJN | Evershine Technologies International Co |
| JJP | Royal Bright International Corp |
| JJR | Intelligent Security Systems Inc |
| JJS | Weitek |
| JJT | Korea Industrial Co Ltd |
| JJU | Welltronix Co Ltd |
| JJV | Race Computer Information Corp |
| JJW | Ably Tech Corporation |
| JJX | Uniplex Corporation |
| JJY | ComputerMart of New Hampshire Inc |
| JK2 | Comptek Research Inc |
| JK3 | Digital Technology Exchange |
| JK5 | Tecnasa Electronica Professional SA |
| JK6 | Sound Entertainment Inc |
| JK7 | Kontron Elektronik GmbH |
| JK9 | Hornet Technology Corporation |
| JKA | APC Computers |
| JKD | Huge Technology Co Ltd |
| JKE | Motorola Inc |
| JKF | King Star Computer Inc |
| JKG | Tremon Enterprises Co Ltd |
| JKI | Multi Pal International Taiwan Corp |
| JKJ | System Integrators Inc |
| JKM | NCR Corporation |
| JKO | Hantarex S P A |
| JKP | Syntax Computer Inc |
| JKQ | Design Computer Systems Inc |
| JKR | Notebook Computer Company |
| JKS | Vidtronics Inc |
| JKU | Northwest Technology Inc |
| JKV | Polywell RST |
| JKW | Dart Technology Company Limited |
| JKY | C Cube Microsystems |
| JL2 | Technology Works Inc |
| JL3 | Maxoptix Corporation |

| Code | Company |
|------|--|
| JL3 | Maxoptix Corporation |
| JL4 | Sun Star Electronics Co Ltd |
| JL5 | Cardiac Telecom Corporation |
| JL7 | Aorta Systems Corporation |
| JL8 | Unifax Communications Ltd |
| JLB | Deemax Technology Inc |
| JLC | Independent Design |
| JLD | Radio Property Ventures |
| JLF | Impact Technologies Inc |
| JLG | Addtron Technology Co Ltd |
| JLI | VinSotec Inc |
| JLJ | Allentown Precision Drafting Inc |
| JLK | Triple Crown Electronics Inc |
| JLM | EON Corporation |
| JLN | Supercom Industries Inc |
| JLO | Techron |
| JLR | Accutron Innovated Electronics |
| JLT | XLI Corporation |
| JLV | ETS Corp of Illinois |
| JLW | Litronic Industries |
| JLZ | Xante Corporation |
| JM2 | Animation-Technologies Inc |
| JM3 | Newton Net Technology Co Ltd |
| JM4 | Joindata Systems Inc |
| JM5 | Discount Computer Paradise |
| JM7 | Innovative Control Systems Inc |
| JMA | Cast Technology Inc |
| JMB | Advanced Telemetrics Inc |
| JMC | TOMCOR |
| JME | Mercantile Communication Network (USA) |
| JMF | Information Systems Corporation |
| JMG | Jays Products |
| JMH | BSE Company |
| JMI | Synerco Inc |
| JML | Mobile Telecommunication Technologies |
| JMM | Fantas Technology Co Ltd |
| JMN | Turtle Beach Systems Inc |
| JMO | Arkenstone Inc |
| JMP | Signalmatic International Inc |
| JMQ | Edge Technology Inc |
| JMR | Dallas Fax Inc |
| JMS | I Cheng Electronics Co Ltd |
| JMT | Blue Dolphin Computers Inc |
| JMU | USPC System |
| JMX | AlphaNet Telecom Inc |
| JN3 | Maxwell Products Inc |
| JN5 | Leadertech Systems Inc |
| JN6 | Logical Connection Inc |
| JN8 | Samlex USA Inc |
| JN9 | Helionetics Inc |
| JNA | Destiny Computer |
| JNB | Telenexus |
| JNC | Optimax Computer |
| JND | Acbel Technologies Inc |
| JNE | Goodwell Industries Limited |
| JNG | Empert Co Ltd |
| JNH | Matra Enterprise Co Ltd |

| Code | Company |
|------|---|
| JNI | CES Corporation |
| JNJ | Eversource International Corporation |
| JNL | East Gate Micro Inc |
| JNM | Forcom Corporation |
| JNN | Direction Technology Inc |
| JNO | DTRONIX |
| JNP | Lion Tech Co Ltd |
| JNQ | Age Technology Co Ltd |
| JNS | Raytech International Inc |
| JNT | Cemtech Ltd |
| JNU | Jacobs Electronics Inc |
| JNV | Matsushita Communication Industrial Cor |
| JNW | Arco Toys Ltd |
| JNX | On Track Innovations Ltd |
| JNZ | Logitech Far East Ltd |
| JO2 | PI Systems Corporation |
| JO3 | D Gordon International Inc |
| JO5 | SCANTEK Incorporated |
| JO6 | Yantai Computer Corporation |
| JOA | Omni Telecommunications Inc |
| JOA | Valor Electronics Inc |
| JOB | Elesys Inc |
| JOC | NextWave Communication Corporation |
| JOC | NextWave Communications Corporation |
| JOE | Lifetime Memory Products Inc |
| JOF | Radio Sound Inc |
| JOG | Simplicity Computing Inc |
| JOI | Sun-Korea Electronic Co Ltd |
| JOJ | Chem Corporation |
| JOK | Elcombe Systems Ltd |
| JOL | Trubend Systems Inc |
| JOM | P Q Controls Inc |
| JON | Spirit Technologies Inc |
| JOO | MagnaTron Corporation |
| JOP | Muscular Movement Information Inc |
| JOS | Magicseries International Corp |
| JOU | Alphacom International |
| JOV | CTI Inc |
| JOW | US Monitors Ltd |
| JOY | Kyocera Corporation |
| JOZ | Automatic Manufacturing Ltd |
| JP2 | Matrix Digital Products Inc |
| JP3 | Storage System Engineering Service |
| JP4 | Treasure Chest Computer Systems |
| JP5 | Elonex plc |
| JP6 | Siemens Nixdorf Information Systems Inc |
| JP7 | Tans Co Ltd |
| JP8 | Skydata Inc |
| JP9 | Intek |
| JPA | Airport Systems International Inc |
| JPB | Relialogic Corporation |
| JPC | Future Sonics Inc |
| JPD | Viva Computer Company |
| JPE | Henry D Park |
| JPF | Sports Radar Ltd |
| JPG | TFE Industries Inc |
| JPJ | Eastcom |

| Code | Company |
|------|---|
| JPK | Artbo Electronics Ltd |
| JPL | Greenleaf International Inc |
| JPM | Optima Computers |
| JPO | Micro Channel Distributors Inc |
| JPQ | Accel Inc |
| JPS | Verma Laboratories Inc |
| JPT | Dubri Electronics Co |
| JPV | Pacal Integrated Corporation |
| JPW | XI Computer Corporation |
| JPX | Tradpost Hong Kong Limited |
| JPY | Quansan Computer Inc |
| JPZ | Lutron Electronics Company Inc |
| JQ2 | Northern Electronic Technologies Inc |
| JQ5 | Intelisys Inc |
| JQ6 | Hughes Identification Devices Inc |
| JQ7 | CMOS Technologies Inc |
| JQ8 | Western Microtechnology Inc |
| JQA | Sait Electronic Systems |
| JQA | Sait Electronic Systems |
| JQD | Avance Logic Inc |
| JQD | Avance Logic Inc |
| JQE | Unicorn Engineering Inc |
| JQF | New Korea Enterprise System Co Ltd |
| JQH | Equus Inc |
| JQI | Win All Electronics Co Ltd |
| JQJ | Ascentex Industry Corporation |
| JQJ | Ascentex Industry Corporation |
| JQK | Eplus Corporation Ltd |
| JQL | Taiwan Herz Technology Corporation |
| JQM | Win Win Electronic Co Ltd |
| JQN | Digital Communications Inc |
| JQQ | Control O Fax Corporation |
| JQR | Colorado Time Systems Inc |
| JQS | Kearnesty Enterprises Corp |
| JQT | CGS International Inc |
| JQU | Mark IV Industries Ltd |
| JQV | Management Systems Applications |
| JQW | Xenotech |
| JR3 | BTM Computers Inc |
| JR4 | Tatung (UK) Ltd |
| JR5 | Steinbrecher Corporation |
| JR6 | Autocomputer Co Ltd |
| JR7 | SyQuest Technology Inc |
| JR8 | Sensys Traffic UK Limited |
| JR9 | Southern California Microwave Inc |
| JRB | American Origon International Inc |
| JRC | Micros to Mainframes |
| JRE | Inline Connection Corporation |
| JRF | Engineered Systems Inc |
| JRG | Heart Computer Inc |
| JRL | Econolite Control Products Inc |
| JRM | Micro Alarm Systems Inc |
| JRN | Scope Marketing (Communications UK) Ltd |
| JRO | Work Link Innovations |
| JRP | Laurite Corporation |
| JRQ | Radiant Computer Technology Corporation |
| JRR | Microtek Electronics Inc |

| Code | Company |
|------|---|
| JRS | Yuan Yuan Enterprise Co Ltd |
| JRS | Yuan Yuan Enterprise Co Ltd |
| JRU | ASE Technologies Inc |
| JRV | Sam Jung Electronics Co Ltd |
| JRY | AZ Com |
| JRZ | NIC Technology Inc |
| JS2 | Icon CS Canada Inc |
| JS5 | Comguard Corporation |
| JS6 | Hong Kong Toy Centre Ltd |
| JS9 | How Rise Ltd |
| JSC | TNG Enterprises |
| JSD | Bel Tronics Limited |
| JSE | Wing Lynch Inc |
| JSF | Avison Inc |
| JSF | Avison Inc |
| JSJ | Quorum Communications Inc |
| JSL | Pacific Rim Data Sciences |
| JSN | Siemens Industrial Automation Inc |
| JSP | Guri USA Inc |
| JSQ | Alpha Systems Lab Inc |
| JSR | Lite On Inc |
| JSS | V Com Enterprises Inc |
| JSX | Deltaic Systems Incorporated |
| JSY | Tech Cast Mfg Corp |
| JSZ | Tatung Company of America Inc |
| JT3 | Karnig Devices Inc |
| JT5 | Eastertech Corporation |
| JT6 | MX COM Inc |
| JT7 | Modern Talking Picture Service Inc |
| JT8 | Peacock Electronic Corporation |
| JT9 | Tianjin Display Equipment Co Ltd |
| JTA | Videomail Inc |
| JTE | Grayson Electronics Company |
| JTF | Datapro International Inc |
| JTG | Spectrum Engineering Inc dba Newer Tech |
| JTH | Quick Technology Corp |
| JTI | OFS WeatherFax |
| JTJ | Control Module Inc |
| JTK | Taps Continental Inc |
| JTN | Somat Corporation |
| JTP | Dunamis Inc |
| JTQ | Casi Rusco |
| JTR | Econsoft Limited |
| JTS | Cortan Information Co Ltd |
| JTT | I Bus PC Technologies |
| JTU | Essence Group Inc |
| JTV | IQV Corporation |
| JTW | Parity Systems Inc |
| JTX | Sanve (HK) Company |
| JU2 | Kent Modular Electronics Ltd |
| JU3 | Magitron USA Inc |
| JU4 | Biomedical Monitoring Systems Inc |
| JU5 | Lead Computech Co Ltd |
| JU6 | Cosmos Technology Sdn Bhd |
| JU8 | Specom Technologies Corp |
| JU8 | Specom Technologies Corp |
| JU9 | Data Net |

| Code | Company |
|------|---|
| JUA | New Bedford Panoramex Corporation |
| JUB | Scientech Electronics Co Ltd |
| JUF | Ejim Company Inc |
| JUG | Wearnes Peripherals Intl (PTE) Ltd |
| JUG | Wearnes Technology Corporation |
| JUI | Forever Grand International Co Ltd |
| JUK | GES Singapore Pte Ltd |
| JUO | Argyle Computer Services Inc |
| JUP | Trimble Navigation Ltd |
| JUP | Trimble Navigation Ltd |
| JUR | Ricoh Company Ltd |
| JUS | Taicom Systems Limited |
| JUT | Quickpath Systems Incorporated |
| JUU | VidTech Microsystems Inc |
| JUV | Promax System Co Ltd |
| JUW | Pointer Inc |
| JUY | Sunwell International Corporation |
| JV3 | Prima Computer Inc |
| JV5 | Primus Technology Co Ltd |
| JV6 | Sunyama Technology Co Ltd |
| JV7 | Labway Computer Co Ltd |
| JV8 | UP Technology Inc |
| JV9 | Austec Electronic Systems Ltd |
| JVB | LKA Computer Consultants Inc |
| JVC | SSI Business Centers |
| JVD | Aspect Computer |
| JVF | First International Computer of America |
| JVG | APAQ Technology Inc. |
| JVG | APAQ Technology Inc. |
| JVK | Paoku P&C Co Ltd |
| JVL | PC Club Inc |
| JVM | ASP Computer Products Inc |
| JVM | ASP Computer Products Inc |
| JVN | CompuSpeak Laboratories Inc |
| JVP | Acer Peripherals Inc |
| JVP | Acer Peripherals Inc |
| JVR | Kondo & Co Ltd |
| JVS | Netis Technology Inc |
| JVY | Protech Marketing Inc |
| JW2 | Metex Corporation |
| JW3 | Aims Information Systems |
| JW4 | Market West Computer Group |
| JW5 | Aquarius USA Inc |
| JWC | Granite Communications Inc |
| JWD | Wongs International USA Corporation |
| JWF | Teledesign Systems Inc |
| JWH | Bulbtronics Inc |
| JWI | Arthur Dent Associates Inc |
| JWJ | MDM Systems Inc |
| JWJ | MDM Systems Inc |
| JWK | Harvard Radio |
| JWM | Kodak AG |
| JWN | Paradigm Software |
| JWO | US Research and Development |
| JWP | National Advantages Inc |
| JWR | Inwood Industries Co Ltd |
| JWS | Worthington Data Solutions |

| Code | Company |
|------|---|
| JWU | Japan Worksystems Co Ltd |
| JWW | Microdex Computers Corp |
| JWY | Vextrec Technology Inc |
| JWZ | Storage Devices Inc |
| JX3 | Asia Island Enterprises Co Ltd |
| JX4 | Xylon Research Inc |
| JX5 | GainTEC Ltd |
| JX6 | Kao Hui Electronic Technology Co Ltd |
| JX8 | Datacom Technology Co Ltd |
| JX9 | Distec Data Systems Inc |
| JXA | Hai Yang Corporation |
| JXB | Innova Corporation |
| JXC | Softstar Information Co Ltd |
| JXH | Compex Technology Inc |
| JXI | Applied Programming Technologies Inc |
| JXJ | Jotron Electronics A/S |
| JXK | EVAS |
| JXL | Subsino Co Ltd |
| JXN | TVS Electronics Limited |
| JXO | Di Rothhammer/Commlink Inc |
| JXP | Binary Group Inc |
| JXQ | Yeong Ton Industrial Co Ltd |
| JXR | Display Research Laboratory |
| JXR | Display Research Laboratory |
| JXS | Vista Vision Inc |
| JXT | Desktop Products Inc |
| JXU | Amrel Technology Inc |
| JXV | Ness Security Products |
| JXV | Ness Security Products |
| JXW | Jetyo Electronics Corp |
| JXY | Columbus Micro Systems Inc |
| JXZ | Cable AML Inc |
| JY2 | USM Distributors Inc |
| JY3 | JKP Micro Supply Inc |
| JY5 | Industry Standard Architecture Computer |
| JY6 | Apex Technology Co Ltd |
| JYA | M Squared Technology Ltd |
| JYB | Alaris Inc |
| JYC | Pantech Co Ltd |
| JYD | Abacus Image Technology Ltd |
| JYE | Impro Technologies (Pty) Ltd |
| JYF | Futech Products Limited |
| JYG | The Castle Group Limited |
| JYH | Fisk Communications Inc |
| JYI | Enabling Technologies Company |
| JYJ | CDS Taiwan Corp |
| JYK | Ciprico Inc |
| JYL | Telonics Inc |
| JYO | Sixgraph Computing Ltd |
| JYP | INT Research & Education Inc |
| JYQ | Handyer Technology Inc |
| JYR | Lien Shang International & Technology C |
| JYS | S&S Research |
| JYT | Sun Fu Cheong Electronics Co Ltd |
| JYU | Dotop Company Limited |
| JYV | Dialogue Technology Corporation |
| JYW | A+H International Products Inc |

| Code | Company |
|------|---------------------------------------|
| JYX | Aten International Co Ltd |
| JZ2 | Fargo Electronics Inc |
| JZ3 | SuperComputers Inc |
| JZ5 | Voicon System Inc |
| JZ6 | Atlas Industries Inc |
| JZ7 | 3-6 Computers |
| JZ8 | Comda Enterprises Corporation |
| JZ9 | Bestek Computer Co Ltd |
| JZC | Multimax Inc |
| JZD | Corpex International Ltd |
| JZE | Pathways International Ltd |
| JZF | Factory Direct Sales |
| JZH | Summit Memory Systems Inc |
| JZI | Teledisk Systems Inc |
| JZJ | Optonet Communication Inc |
| JZK | Mutoh Industries Ltd |
| JZL | Styling City Limited |
| JZM | E Chain Technic International Co Ltd |
| JZN | CFC Inc |
| JZO | Perfectdata Corporation |
| JZQ | Mobius Computer Corporation |
| JZY | Grantek Industrial Co Ltd |
| JZZ | Adtech Micro Systems Inc |
| K24 | PA Decoder Soundssysteme |
| K25 | JM Computers Inc |
| K26 | Cedi Systems Inc |
| K28 | Itochu Technology Inc |
| K29 | YS Ventures |
| K2A | Combinet Inc |
| K2B | Quality High Tech Systems |
| K2C | Firenze Research Lab |
| K2C | Firenze Research Lab |
| K2D | Cleardata Corporation |
| K2E | Blonder Tongue Laboratories Inc |
| K2H | Southern Minnesota Office Machines |
| K2I | Microniche Information Systems |
| K2J | Goldstar Instrument & Electric Co Ltd |
| K2K | Ara Tech Co Ltd |
| K2L | Secure System Inc |
| K2N | Ascnet Inc |
| K2N | SOS Wireless Communications Inc |
| K2O | Precor Incorporated |
| K2P | Cybernetic Power Systems Inc |
| K2Q | Multi Computer Products |
| K2S | Vision Computer Technologies Inc |
| K2S | Vision Computer Technologies Inc |
| K2T | Ait Inc |
| K2U | Pacific Communication Sciences Inc |
| K2U | Pacific Communication Sciences Inc |
| K2V | Intelligent Peripheral Devices Inc |
| K2W | Group Sense Ltd |
| K2Y | Media Chips Inc |
| K2Z | Computer Technology Link Corporation |
| K2Z | Computer Technology Link Corporation |
| K32 | All Ship Enterprises Co Ltd |
| K33 | IPC Corporation Ltd |
| K34 | PC Channel Inc |

| Code | Company |
|------|---------------------------------------|
| K35 | ViewSonic Corporation |
| K36 | Fujiitsu Microelectronics Inc |
| K37 | Jace Tech Inc |
| K3C | Megatek Corporation |
| K3D | APF |
| K3F | Sound Craft Systems Inc |
| K3G | L&J Engineering Inc |
| K3H | Kodiak Technology |
| K3I | Safety Technology Inc |
| K3J | PT Central Rama Informatik |
| K3L | Toshiba (Australia) Pty Limited |
| K3M | Sam Joo Electronic Co |
| K3N | Wireless Access Inc |
| K3N | Wireless Access Inc |
| K3R | Channel Link Incorporation |
| K3U | Lafitte Garner Limited |
| K3V | Custom Micro |
| K3X | Warn Industries Inc |
| K3Y | Hughes Network Systems |
| K3Z | Ming Kuangs Electronic Mfg Corp |
| K42 | Sunskill Industries Limited |
| K43 | Radio Computer & Telephone Corp |
| K44 | Kenwood Corporation |
| K45 | SMS Data Products Group Inc |
| K47 | Newtech Korea Co Ltd |
| K49 | Market Strategies Inc |
| K4B | Wi Lan Inc |
| K4C | Pan International Industrial Corp |
| K4D | System PowerHouse Inc |
| K4E | Superior Electronics Corporation |
| K4G | TransTech Coast Inc |
| K4H | Talking Homes of America |
| K4I | Leadertech Systems of Chicago Inc |
| K4J | Technology Applications Singapore Pte |
| K4K | Contact Network |
| K4L | Titan Electronics Inc |
| K4L | Titan Electronics Inc |
| K4N | Silicon Integrated Systems Corp |
| K4O | Sherwood Inkel (USA) Corporation |
| K4P | USA Teknik Inc |
| K4Q | Itelco USA Inc |
| K4Q | Itelco USA Inc |
| K4T | Sandvik Automation GmbH |
| K4U | Jabil Circuit Inc |
| K4V | Light Full Industries Ltd |
| K4W | NK EXA Corporation |
| K4X | American Microsystems II Inc |
| K4Y | Cherry Computers Inc |
| K53 | EI Line Service Co |
| K54 | Golden Tech Inc |
| K55 | Techlink Communication Inc |
| K57 | Manucy Enterprises Inc |
| K58 | Coherent Technology Pte Ltd |
| K59 | UltraTek |
| K5A | Seanix Technology Inc |
| K5A | Seanix Technology Inc |
| K5B | Matric Limited |

| Code | Company |
|------|---------------------------------------|
| K5B | Matric Limited |
| K5C | Everon Mobilcom Ltd |
| K5C | Samson Co Ltd |
| K5D | Quality Electronics Inc |
| K5E | Raritan Computer Taiwan Inc |
| K5G | Hitachi Digital Graphics (USA) Inc |
| K5I | Huge Automations Co Ltd |
| K5J | Arche Computer & Technologies Inc |
| K5K | Alpha Computer Concepts Inc |
| K5M | Charm Winner Co Ltd |
| K5M | Charm Winner Co Ltd |
| K5N | Goldbeam Electronics Inc |
| K5N | Goldbeam Electronics Inc |
| K5P | Yao Sheng Electronic Co Ltd |
| K5R | Kool Computer Inc |
| K5S | Shuttle Technology Limited |
| K5U | Stun Tech Inc |
| K5X | Health Watch Inc |
| K5Y | Spacecom Systems Inc |
| K5Z | Goldfame Computer Ltd |
| K62 | Auction Page Incorporated |
| K63 | Hang Zhou Zhi Jiang Electrical Co Ltd |
| K64 | Omni Tech Corporation |
| K65 | Maxon Systems Inc (London) Ltd |
| K66 | Yaesu Musem Co Ltd |
| K67 | Comtrak |
| K68 | Radiodetection Ltd |
| K69 | Bai Chz Industrial Co Ltd |
| K6B | Philips Taiwan Ltd |
| K6C | NEC Corporation |
| K6F | Corporate Systems Engineering |
| K6G | Metropolitan Stevedore Company |
| K6H | StarTech Systems Inc |
| K6I | Georgens Industries Incorporated |
| K6K | Cal Corporation |
| K6L | Greatway Hong Kong Limited |
| K6M | CTE International srl |
| K6N | Scitor Corporation |
| K6O | Op Tech Inc |
| K6P | Pacific Crest Technologies Inc |
| K6R | Ocean Information Systems Inc |
| K6S | Uraco Research Corporation PTE Ltd |
| K6T | Gee Vi Enterprises Co Ltd |
| K6U | Optics Storage Pte Ltd |
| K6V | Silicon Valley Power Amplifiers |
| K6X | Integrix Inc |
| K72 | Allitex Electronics Ltd |
| K73 | Evtex Corporation |
| K75 | On Command Video Corporation |
| K76 | Mac Plastics Inc |
| K78 | XBit Inc |
| K7A | Digitex Computer Products |
| K7B | Phylon Communication Inc |
| K7C | Superluck Electrics Corporation |
| K7D | Securicor PMR Systems Ltd |
| K7D | Securicor Radiocomms Ltd |
| K7G | Giant Electronics Ltd |

| Code | Company |
|------|---|
| K7H | Printer Systems International GmbH |
| K7I | Kadence Systems Co |
| K7J | Byte Gallery |
| K7L | SPC Manufacturing (S) Pte Ltd |
| K7M | Actionvoice! |
| K7P | Dynatech Wireless Technologies |
| K7S | Belkin Components |
| K7T | Radicom Research Inc |
| K7V | Macase Industrial Group/GA Inc |
| K7Z | TS Microtech Inc |
| K82 | Zytek Inc |
| K83 | Matrix Systems Inc |
| K84 | Que Synergy International |
| K85 | Jaguar Cars Limited |
| K86 | Graphics Technology Company |
| | The |
| K87 | Grandtime Technology Limited |
| K88 | Lectronic Kaddy Corporation |
| K89 | Novalink Technologies Inc |
| K8A | Syscorp Inc |
| K8B | Glyph Technologies |
| K8C | Saab Tank Control |
| K8D | Asia Source Dallas |
| K8E | Marine Technology International Ltd |
| K8F | Digital Ocean Inc |
| K8H | MSI International Corp |
| K8J | Taiwan Laser Precision Industrial Co Lt |
| K8L | AC Data Systems |
| K8N | New World Technologies Inc |
| K8Q | Wus Printed Circuit Co Ltd |
| K8R | Sokkia Technology Inc |
| K8U | King Zeal Enterprise Co Ltd |
| K8W | Hanwah Electronics Ltd |
| K8Z | Southern Automation Sales and Services |
| K92 | Hi Go Public Alert Inc |
| K94 | Mediasonic Inc |
| K95 | BK Radio Inc |
| K96 | Prime Protection Inc |
| K97 | Voice Craft Electronics Co Ltd |
| K98 | Alpha Enterprises Inc |
| K99 | Eurosats USA Limited |
| K9A | Medinet Inc |
| K9C | PE Logic Corporation |
| K9D | Probofi Co Ltd |
| K9E | Intelligent Computers and Technologies |
| K9F | DAS Distribution Inc |
| K9G | Great Lakes Electronics Dist Inc |
| K9H | Dae Ho Engineering Co |
| K9J | Aspar Technology Co Ltd |
| K9K | Shenzhen Dali Energy - Saving Electroni |
| K9L | Skyline Associates International Inc |
| K9M | Systems Engineering & Management Compan |
| K9N | Texas Instruments France |
| K9P | Shenzhen Aero Computer Equipment Compan |
| K9Q | Promedia Technology Corporation |
| K9R | Chori America Inc |
| K9T | Infomatic Power Systems Corp |

| Code | Company |
|------|---------------------------------------|
| K9U | Samar Enterprises Co Ltd |
| K9V | NBB Controls Inc |
| K9V | NBB Controls Inc |
| K9X | Electric Life Incorporated |
| K9Y | American Wireless Systems Inc |
| KA2 | D Link Corporation |
| KA3 | Solectek Corporation |
| KA4 | Tusk Incorporated |
| KA5 | General Sales Equipment |
| KA6 | Altec |
| KA7 | Harman Video |
| KA9 | Hong Jin Crown America Inc |
| KAC | Peripheral Integration Technologies |
| KAG | MDEX Inc |
| KAJ | Software Architects Inc |
| KAK | MW Computer Corp |
| KAL | BlackCurrant Technology |
| KAM | Roslin Computers |
| KAN | Ant Technologies Inc |
| KAO | Tyan Computer Corporation |
| KAO | Tyan Computer Corporation |
| KAP | Telepad Corporation |
| KAR | Super Science Northwest Inc |
| KAS | Triangle Digicom Corp |
| KAT | Fong Pei Enterprise Co Ltd |
| KAU | Mindflight Technology Inc |
| KAV | Law Enforcement Associates Inc |
| KAW | Whirlpool Sweden AB |
| KAY | RMS Communications Group Inc |
| KAZ | Trident Computer Inc |
| KB2 | Team Aten Inc |
| KB7 | Lanex Corporation |
| KB8 | Chang Kung Enterprise Inc |
| KB9 | Playtech Ltd |
| KBB | Visualization Technology Inc |
| KBD | Hypertec Pty Limited |
| KBE | Tekin Electronics |
| KBG | Apercom Corporation |
| KBI | Hightech Information System Ltd |
| KBJ | CD Technology Inc |
| KBK | California Komputer Test Inc |
| KBM | Presentation Electronics Incorporated |
| KBN | Ssangbangwool Electronics Ltd |
| KBP | Desktop Displays |
| KBR | Kansei Corporation |
| KBS | Innotek Inc |
| KBT | Apex Data Inc |
| KBU | C Media Electronics Inc |
| KBV | Advanced Components & Peripherals P/L |
| KBW | Ad Lib MultiMedia Inc |
| KBX | CenTech Computer Products Inc |
| KBZ | Sensor Technos Co Ltd |
| KC2 | Dah Jiing Enterprise Co Ltd |
| KC3 | Vocaltec Inc |
| KC5 | Lightwave Communications Inc |
| KC6 | Transpolar Industrial Co Ltd |
| KC7 | Full Yes Industrial Corp |

| Code | Company |
|------|--|
| KC8 | Palit Microsystems Inc |
| KC9 | EO Inc |
| KCA | Norm Pacific Automation Corp |
| KCC | Terminator Systems USA Inc |
| KCD | Fujitsu Networks Industry Inc |
| KCE | Inforite Corporation |
| KCF | I&G Technologies Pte Ltd |
| KCG | Racal InterLan Inc |
| KCH | Sensus Technologies Inc |
| KCM | Genesys Advanced Technology Enterprise |
| KCQ | Telesynergy Research Inc |
| KCR | MCD Inc |
| KCT | Morton Management Inc |
| KCV | PC Round Korea Data System |
| KCX | Advanced Lighting Industries |
| KCY | Timestep Electronics Ltd |
| KCZ | Chyi An Enterprise Co Ltd |
| KD2 | Saratoga Radio Corporation |
| KD3 | Adson Enterprises Inc |
| KD4 | Da Pun Electronic Co Ltd |
| KD6 | Northwest Starscan Limited Partnership |
| KD7 | Ergomedics Inc |
| KD8 | Trakker Inc |
| KD9 | Pycon Inc |
| KDA | Schlaforst Inc |
| KDB | Ubitrex Corporation |
| KDC | Extreme Systems |
| KDD | Gemlight Computer Ltd |
| KDE | Quantum Designs (HK) Ltd |
| KDF | Psychic Lab Inc |
| KDH | Thomas Conrad Corporation |
| KDH | Thomas Conrad Corporation |
| KDI | Comtrade Electronic USA Corp |
| KDJ | Stonyun Enterprise Corporation |
| KDK | Advance Storage Device Corporation |
| KDO | Combitech Traffic Systems AB |
| KDP | Omron Office Automation Products Inc |
| KDQ | Hitec Computers |
| KDS | Lab Partners Associates Inc |
| KDT | Science Instrument Factory Shanghai |
| KDU | Coactive Computing Corporation |
| KDV | CTC Corporation |
| KDW | Gebbs Data Products Pvt Ltd |
| KDY | Pirotec Technologies Inc |
| KDZ | LXE Inc |
| KE2 | Crescent Computers Inc |
| KE3 | Radio Systems Corp |
| KE4 | Update Technology Incorporated |
| KE5 | Axil Computers Inc |
| KE6 | Kingsfield Technology Limited |
| KE7 | Link USA International Inc |
| KE8 | Part II Research Ltd |
| KE9 | CBM Incorporated |
| KEA | Pacific Crest Corporation |
| KEC | EXP Computer Inc |
| KEC | EXP Computer Inc |
| KED | Waseca Technology Inc |

| Code | Company |
|------|---|
| KEE | HAL Communications Corp |
| KEF | Digital Peripherals Corporation |
| KEG | Powertech Electronic Co Ltd |
| KEI | Compunic Electronics Co Ltd |
| KEJ | Telemetrics Inc |
| KEK | Virtual Vision Inc |
| KEO | Sublime Luz Enterprise Co Ltd |
| KEQ | Lope Computer Co Ltd |
| KER | Access USA Corp |
| KET | Motorola Inc |
| KEW | Microstar Computer Corp |
| KEY | Computer Expo Inc |
| KEZ | Eletech Enterprise Co Ltd |
| KF5 | Ortovox Sportartikel GmbH |
| KF6 | Cosmotech Computer Corp |
| KF7 | Central Business Systems Inc |
| KFA | Homeguard Incorporated |
| KFB | Chern Yin International Corp |
| KFD | Fidelity International Technologies |
| KFE | Lin Chi Electronic Co Ltd |
| KFF | Metaresearch Incorporated |
| KFG | Inex Technologies Inc |
| KFJ | PC Expert Tech Co Ltd |
| KFK | Phoenix Design |
| KFM | Altima Systems Inc |
| KFN | Shining Technology Inc |
| KFN | Shining Technology Inc |
| KFO | E&J Technology Inc |
| KFP | Micromice Industrial Corp |
| KFQ | Isis Multimedia Co Ltd |
| KFR | Vision Automobile Electronics Industria |
| KFS | R Scott Associates Inc |
| KFU | Xerox Imaging Systems Inc |
| KFV | Tanita Corporation of America Inc |
| KFW | Ruby Tech Corporation |
| KFX | Solomon Technology (USA) Corporation |
| KFY | Runtop Inc |
| KFZ | Protect & Defend Inc |
| KG2 | ATS Computers Inc |
| KG3 | ICL Personal Computers AB |
| KG4 | Kingkong Technology Development Ltd |
| KG5 | Remostar Technology Corp |
| KG6 | Shenzhen Traso Electronic Corp |
| KG7 | Peet Bros Company Inc |
| KG8 | Pacific Technology Co Ltd |
| KG9 | Aresys Inc |
| KGA | Corion Industrial Corp |
| KGB | Niche Tech Inc |
| KGC | Winfox Electric Wire & Cable Co Ltd |
| KGD | MicroSource Technologies Inc |
| KGE | Zypcom Inc |
| KGF | Chia Loang Electronic Co Ltd |
| KGG | Shinagawa International Limited |
| KGI | Tour Information Systems |
| KGJ | Sinmatai Enterprise Co Ltd |
| KGK | Xiamen Taiji Display Equipment Co Ltd |
| KGL | Channel Electronics Corporation |

| Code | Company |
|------|---|
| KGN | Display Technologies Inc |
| KGO | WJ Culver Consulting Inc |
| KGP | Custom Computer Wholesale |
| KGR | Sound Minds Technology Inc |
| KGT | Sanyo Electric (Taiwan) Co Ltd |
| KGU | Keytec Industria de Produtos Eletronico |
| KGV | Display Tech |
| KGW | Youmax Enterprises Co Ltd |
| KGX | Shenzhen Tellus Electronics Co Ltd |
| KH2 | Primax Manufacturing Limited |
| KH3 | Tepass Special Security Equipment Co Lt |
| KH4 | Criterion Computer Corp |
| KH6 | Dinkum Computer Co Ltd |
| KH7 | Computer Access Technology Corporation |
| KH8 | FMA Inc |
| KH9 | Applied Laser Systems |
| KHA | Tekram Technology Co Ltd |
| KHA | Tekram Technology Co Ltd |
| KHB | Quorum International Ltd |
| KHC | Microstep Inc |
| KHH | Lucas Body Electronics |
| KHI | Myday Technology Ltd |
| KHJ | Kris Technologies Inc |
| KHK | Wai Hang Electronic Co Ltd |
| KHM | Personal Instruments Inc |
| KHN | Pewee Valley Innovations Inc |
| KHP | Neotech Inc |
| KHR | Asian Micro Sources Inc |
| KHS | White's Electronics Inc |
| KHT | Derek International Inc |
| KHX | Lyrrus Inc |
| KHZ | Fujitsu Isotec Limited |
| KI3 | Chijea Electronics Co Ltd |
| KI7 | Tai Wah Television Industries Ltd |
| KI8 | Image Stream International Inc |
| KI9 | Castalia Software |
| KIA | RT&C Systems |
| KIC | TBC Technology Corp |
| KID | Quanta Corporation |
| KIF | PKT Electronics Inc |
| KIG | Racer Electronic Corporation |
| KIH | Sava Research Corporation |
| KII | DKB Software |
| KIK | Tech 101 Office Automation Inc |
| KIN | P Com Inc |
| KIN | P Com Inc |
| KIO | Computer Science China Corp |
| KIP | Gallant Technology Inc |
| KIQ | HJS&E Engineering |
| KIR | Pudder Emery B |
| KIS | Satec Technology Co Ltd |
| KIT | Hi Link Computers Corp |
| KIU | Langner John W |
| KIV | Pertain Enterprise Corp |
| KIW | TDK Corporation |
| KIW | TDK Corporation |
| KIX | Advanced Medical Instruments Inc |

| Code | Company |
|------|--|
| KIY | Orbis Industries Inc |
| KIZ | Mitsui Petrochemical Industries Ltd |
| KJ2 | Jinan Huafu Video Terminal Co Ltd |
| KJ3 | Young Wisdom International Co |
| KJ4 | Wireless Freedom Corporation |
| KJ5 | Ergonomics Inc |
| KJ6 | Computer Dealers Source Inc |
| KJ7 | Olympia USA Inc |
| KJ9 | Eagle Mountain Systems |
| KJA | Aerocon Inc |
| KJB | Dycam Inc |
| KJD | Kentech Computer (HK) Ltd |
| KJE | EKM Computer Inc |
| KJF | Micro Pro Technology Ltd |
| KJG | Elsa GmbH |
| KJI | M Technology Inc |
| KJJ | Chih Yin Electronic Co Ltd |
| KJK | Tainet Communication System Corp |
| KJM | Systech Corporation |
| KJP | Best Electronics |
| KJR | Great Tek Corp |
| KJT | Vita Electronics Co Ltd |
| KJU | KT Automation (M) Sdn Bhd |
| KJU | KT Technology (S) Pte Ltd |
| KJV | Cunningham James R |
| KJX | Wentek Technology Inc |
| KK2 | Cateza Operativo SA de CV |
| KK4 | Peer Data Systems Inc |
| KK4 | Peer Data Systems Inc |
| KK5 | Pyronix Ltd |
| KK6 | Husky Computers Ltd |
| KK7 | Poptron Corporation |
| KK9 | Maximum Company |
| KKA | Orion Business International Inc |
| KKB | Integrated Home Solutions |
| KKC | DX Radio Systems |
| KKD | Leunig GmbH |
| KKE | I Yeon Electronics Co Ltd |
| KKG | Digital Control Inc |
| KKH | Oksori Co Ltd |
| KKJ | Xcellant Technology Corporation |
| KKK | Unisoft Inc |
| KKL | Encad Incorporated |
| KKM | Unified Microsystems |
| KKO | Actech Inc |
| KKP | Hydra Systems Inc |
| KKQ | Shenzhen Jiuling Electronics Co Ltd |
| KKR | Traffic Management Systems Corporation |
| KKS | ITI Technologies Inc |
| KKT | Perceptive Solutions Inc |
| KKU | TVCOM International |
| KKV | Deutsche Aerospace AG |
| KKV | Paul Vahle GmbH & Co KG |
| KKW | Victson Electronic Limited |
| KKX | Ultra Mates Co Ltd |
| KKY | Microtek International (P) Ltd |
| KKZ | Tacit Inc |

| Code | Company |
|------|--|
| KL2 | Daly Computers Inc |
| KL3 | Smartz Computer Source |
| KL6 | Intellon Corporation |
| KL7 | Savi Technology Inc |
| KL8 | Dubner International Inc |
| KLA | Mitor Industries Inc |
| KLB | Click Technologies Inc |
| KLC | Circuit Specialists Inc |
| KLD | Qualstar Corporation |
| KLG | Telebell Ltd |
| KLH | National Auto Center Incorporated |
| KLI | Tokyo Denshi Sekei KK |
| KLJ | Unlimited Systems Corporation Inc |
| KLJ | Unlimited Systems Corporation Inc |
| KLK | Newton Net Technology Inc |
| KLL | Tekom Industries Limited |
| KLM | Mian Data Systems Inc |
| KLN | Maximum Incorporated |
| KLP | Identity Systems Technology Inc |
| KLQ | Parallel Storage Solutions |
| KLS | McMurdo Ltd |
| KLU | Mobiltex Data Ltd |
| KLW | Unipac Computers |
| KLX | Onsite Instruments Incorporated |
| KLZ | Audiowave Technologies Pte Ltd |
| KM3 | Theta Systems Inc |
| KM4 | Daou Tech Inc |
| KM5 | Forex Computer Corp |
| KM6 | Aspen Peripherals |
| KM8 | Femco - A Div of Gai-Tronics Corporation |
| KM9 | Strong Man Enterprises Co Ltd |
| KMA | Hanmaeum Electronic Co Ltd |
| KMA | Hanmaeum Ltd |
| KMC | Acubit Technology Inc |
| KMD | Option Select Inc |
| KMF | H45 Technology |
| KMG | Hitachi Ltd Omika Works |
| KMH | Ford Motor Company |
| KMI | Advanced Modular Solutions Inc |
| KMJ | Argotronic Industrial Ltd |
| KMK | Hunter Marketing |
| KML | Fujitsu Computer Products of America Inc |
| KMM | Poong Jeong Ind Co Ltd |
| KMN | Procomp USA Inc |
| KMO | Calsonic Corp |
| KMP | PN Electronics Limited |
| KMQ | Otter Computer Inc |
| KMR | Ter Yang Systems Co Ltd |
| KMS | Tonic International (BVI) Limited |
| KMT | VIP Computer Inc |
| KMV | Computer Services & Products Inc |
| KMY | Avitech Inc |
| KN2 | Dragon Scale Industrial Co Limited |
| KN4 | Dura Micro Inc |
| KN7 | GraphOn Corporation |
| KN8 | Ya Hsin Industrial Co Ltd |
| KN9 | Corvus America Inc |

| Code | Company |
|------|---|
| KNA | Echo Speech Corporation |
| KNB | Imagimedia Corporation |
| KND | PostBox Technology Inc |
| KNE | Infotech Systems |
| KNF | Iowa Export Import Trading Company |
| KNI | Bunswell Corporation |
| KNJ | Lockheed Information Management Service |
| KNM | Intermark Corporation |
| KNN | Myriad Enterprises Inc |
| KNQ | Robertson Transformer Company |
| KNT | Olympus Image Systems Inc |
| KNT | Olympus Image Systems Inc |
| KNU | Menage Automation Inc |
| KNV | Multifax |
| KNX | Zanto Corporation |
| KNY | FreeWave Technologies Inc. |
| KNY | FreeWave Technologies Inc. |
| KNZ | DSI (HK) Ltd |
| KO2 | Go Technology Corporation |
| KO3 | Dooin Electronics |
| KO4 | Guardian Angel Pool Alarms Pty Ltd |
| KO5 | Taiwan & Hong Kong Monitor Corporation |
| KO6 | Zin Zan Enterprise Co Ltd |
| KO8 | Champ A Dan America Inc |
| KOA | Galaxy Computers Inc |
| KOB | United Technologies Automotive |
| KOC | Smart Modular Technologies |
| KOC | Smart Modular Technologies |
| KOD | DTS Technology Co Ltd |
| KOE | Xyst Infotek Incorporation |
| KOF | Synchronistic Business Solutions Inc |
| KOG | Hi Tech USA |
| KOH | Featron Technologies Corporation |
| KOI | GEC Marconi Ltd |
| KOJ | DW Thomas Companies Inc |
| KOK | KIS Business Computer Center Inc |
| KOL | Touchpls Technology Co Ltd |
| KOO | Microcomputer Research Inc |
| KOP | Logic Micro Systems Inc |
| KOQ | Informtech International Inc |
| KOR | Northern Computing Consultants |
| KOS | CMD Technology Inc |
| KOV | Woodward McCoach Inc |
| KOX | ICI Security Systems |
| KOY | WC Electronics Inc |
| KOZ | Dextra Technology Corporation |
| KP3 | ThrustMaster Inc |
| KP3 | ThrustMaster Inc |
| KP4 | Trimm Industries |
| KP5 | US Logic |
| KP6 | Cyberstar Computer Systems Inc |
| KP8 | Data Stream Corporation(s) Pte Ltd |
| KPA | YKE International Inc |
| KPB | General Microwave Services Inc |
| KPE | ILC Data Device Corporation |
| KPF | Jaui Ping Computer Information Co Ltd |
| KPG | Shan Yeun Co Ltd |

| Code | Company |
|------|---|
| KPH | ComPH |
| KPI | Ritika Electronics Pvt Ltd |
| KPJ | Compu Data |
| KPK | GTE Airfone Incorporated |
| KPL | Sound Data Micro Technology Inc |
| KPM | Axis Micro Device Corp |
| KPN | System Dynamic Group Inc |
| KPO | Set Inc |
| KPP | AT/Comm Inc |
| KPR | Actisys Corporation |
| KPS | WinLogic Inc |
| KPU | Naldec Corporation |
| KPV | Micron Computer Inc |
| KPV | Micron Electronics |
| KPZ | Duncan Group |
| KQ2 | Alphacom Enterprise Co Ltd |
| KQ3 | Mani Industries Ltd |
| KQ4 | China Guangzhou Radio Factory |
| KQ5 | DTC Technology Corporation |
| KQ6 | Adaptive Vehicle Systems Inc |
| KQ7 | Racom Systems Inc |
| KQ8 | Progressive Technology in Lighting/Pro |
| KQ9 | Opseis Inc |
| KQA | Sundex Electronics Ltd |
| KQC | Solar Wide Industrial Ltd |
| KQD | Far East Consultants |
| KQE | Dynatek Automation Systems Inc |
| KQG | Renishaw Metrology Ltd |
| KQI | Karrie Industrial (USA) Corporation |
| KQJ | Level Electronics Co Ltd dba Level Comp |
| KQK | Precision America Inc |
| KQL | AeroComm Corporation |
| KQM | Tech Advanced Inc |
| KQN | Murandi Communications Ltd |
| KQP | Chuan Shih Industrial Co Ltd |
| KQQ | Leopard Technology International |
| KQR | MicroMed Systems Inc |
| KQS | REIS Inc |
| KQT | Axel |
| KQU | Dai Hwa Electronics (Malaysia) Sdn Bhd |
| KQV | VideoLinx Inc |
| KQW | Wedge Technology Inc |
| KQY | StarSight Telecast Inc |
| KQZ | Maser Technology Corp |
| KR2 | PSQ Scientific Inc |
| KR3 | Oakwell Technology Corp |
| KR4 | Webest Technology International Inc |
| KR5 | Siemens AG Automotive Systems Group |
| KR5 | Siemens AG |
| KR6 | Motron Electronics |
| KR7 | Wallace Associates Of Kansas Inc |
| KRA | M&A Technology Inc |
| KRB | Futek Electronics Co Ltd |
| KRD | Elly Electronics Co Ltd |
| KRE | RF Technology Pty Ltd |
| KRF | Magitech Corporation |
| KRH | Automation & Electronics Inc |

| Code | Company |
|------|--|
| KRJ | Yes Entertainment Corporation |
| KRL | Integrated Computers Electronics Inc |
| KRM | Microcomputer Systems(M) SDN BHD |
| KRN | KTL Research Limited |
| KRS | Computer Word Processing Systems Inc |
| KRV | Bluestar I S Corp |
| KRW | Pellucid Inc |
| KRX | Innovent Inc |
| KRY | Hitachi Television (Taiwan) Ltd |
| KRZ | Whalinger Enterprise Co Ltd |
| KS2 | Unimax Toys Limited |
| KS4 | Taimax Taiwan Computer Co Ltd |
| KS5 | Zebex Computers Inc |
| KS6 | KUSU-FM Utah State University |
| KS7 | Advanced PC Products Inc |
| KS8 | Optelecom Inc |
| KS9 | VTECH Computers Inc |
| KSA | Genesis Technologies International (S) |
| KSB | Digital Expressions Inc |
| KSC | Lectron Co Ltd |
| KSD | Boam R&D Co Ltd |
| KSE | Troll Technology Corporation |
| KSG | C Centennial Inc |
| KSL | Dongyang Tech Electronics |
| KSM | Beta Raven Inc |
| KSN | A&D Co Ltd |
| KSP | KNX Limited |
| KSP | KNX Limited |
| KSQ | Yu Phone Co Ltd |
| KSR | Dunn Computer Corporation |
| KSU | QDI Computer (USA) Inc |
| KSV | HS Electronics Corp |
| KSX | Xirlink Inc |
| KSX | Xirlink Inc |
| KSY | Varad Corporation |
| KSZ | Watkins Johnson Company |
| KT3 | American Microparts Inc |
| KT4 | CTcell Limited |
| KT5 | Integrated Display Technology Ltd |
| KT6 | Boxer Toys Company Limited |
| KT9 | Techpower Co Ltd |
| KTA | Shin Ho Tech Co Ltd |
| KTB | Broadcast Sports Technology |
| KTC | Riviera Technologies Inc |
| KTD | Kasan Electronics Co Ltd |
| KTE | KAO Industries Inc |
| KTF | DME Corporation |
| KTG | SVEC Computer Corp |
| KTH | Okaya Electric America Inc |
| KTI | Bonwin Industries Ltd |
| KTJ | Metagen International Inc |
| KTK | CIM Engineering (USA) Inc |
| KTL | Westronic Industries Inc |
| KTM | Design Assistant Inc |
| KTO | Argus Security Corporation |
| KTO | Argus Security Corporation |
| KTQ | High Performance Appliances Inc |

| Code | Company |
|------|--|
| KTT | Tadiran Ltd |
| KTU | Supertoys Industrial Co Ltd |
| KTV | Mopa Inc |
| KTX | EPS Technologies Inc |
| KTY | Charles Wain Industrial Co Ltd |
| KU4 | In Motion Technologies Inc |
| KU6 | Super Gate Technology Co Ltd |
| KU8 | Shin Sung Communications Inc |
| KU9 | B&W Nuclear Technologies |
| KUA | Mydas Manufacturing Pty Ltd |
| KUF | Cache Computers |
| KUH | Intelligent Decisions Incorporated |
| KUI | X Technology Co Ltd |
| KUJ | Chungear Industrial Co Ltd |
| KUK | Brown Hadley Jr |
| KUL | Anthem Electronics Inc |
| KUN | Spider Graphics Inc |
| KUO | Consumer Technology Northwest Inc |
| KUP | Seaboard Systems Inc |
| KUT | Capital Prospect Ltd |
| KUW | Andrew Corporation |
| KUW | Andrew Corporation |
| KUX | Trontech Inc |
| KUY | Admore Technology Inc |
| KV3 | Italiana Ponti Radio |
| KV4 | GLC Systems Inc |
| KV6 | Racal Avionics Limited |
| KV7 | Telebrands Advertising Corporation |
| KV8 | Real Electronics Industries Singapor |
| KV9 | Unipower Corporation |
| KVA | Minta Technologies |
| KVB | J Square Systec Incorporation |
| KVC | Ksai Electronics Co Ltd |
| KVC | Ksai Electronics Co Ltd |
| KVE | ABB Nera AS Satcom Marine |
| KVF | Advanced Video & Audio Technology Co Ltd |
| KVI | Joy Life Electronic Co Ltd |
| KVJ | Thomson-CSF Branche Communication et Co |
| KVK | Vision |
| KVL | Triax Technologies |
| KVM | Jinhui Electronic Co Ltd |
| KVN | Winner Products (USA) Inc |
| KVP | Micro Intelligent Systems Inc |
| KVQ | Waters Research Company |
| KVR | Meritus Industries Ltd |
| KVT | Hanwha Communication Co Ltd |
| KVU | Twin T Distribution |
| KVV | Ahopeway International Co Ltd |
| KWW | Rohde & Schwarz GmbH & Co KG |
| KVX | International Development Corporation |
| KVY | MicroDimensions Inc |
| KVZ | Chipment Computer Co Ltd |
| KW3 | Radio Metrix Inc |
| KW5 | GoldView Corporation Ltd |
| KW7 | Bold Data Technology Inc |
| KWA | Sanye Computers & Components Canada Ltd |
| KWB | Axelen Industrial Inc |

| Code | Company |
|------|--|
| KWC | Phonak Inc |
| KWD | Win Way Co Ltd |
| KWE | Detec Security Systems Inc |
| KWG | Car Ram Electronics Co Ltd |
| KWH | Communicate Ltd |
| KWI | Alka's Industrial Co Ltd |
| KWK | Compmate Industrial Co Ltd |
| KWL | Calypso Micro Products Inc |
| KWN | American Microwave Link Inc |
| KWP | Chapman Studio Equipment Inc |
| KWQ | Relia Technologies |
| KWR | Wise Connection Corp |
| KWT | HumanWare Inc |
| KWX | Formosa Industrial Computing Inc |
| KWY | E Systems Inc |
| KX2 | Dialoc ID Technology |
| KX2 | Dialoc |
| KX3 | Joong Woo Electronics |
| KX4 | MicroQue Inc |
| KX5 | VictorMaxx Technologies Inc |
| KX7 | Three Soma Technology Co Ltd |
| KX7 | Three Soma Technology Co Ltd |
| KXB | Whole Color Inc |
| KXC | AT&T Global Information Solutions |
| KXF | Interactive Computing Devices Inc |
| KXG | Air Communications |
| KXH | NSA Nissei Sangyo America Ltd |
| KXI | Teledyne Brown Engineering |
| KXK | Der Song Electronics Co Ltd |
| KXL | Micro Access |
| KXN | Easeup Industries Ltd |
| KXP | Nantong Yu Tai Electronic Co Ltd |
| KXQ | Logisys Computer Co Ltd |
| KXR | American Traffic Systems Inc |
| KXS | Beauty Sound Ltd |
| KXT | Dong Yang Transformer Ind Co Ltd |
| KXU | R F Technologies Inc |
| KXX | Miracle Computers Inc |
| KXZ | Ambra Computer Corporation |
| KY2 | Jaton Corporation |
| KY3 | AddressEase Inc |
| KY4 | Deltec Electronics Corp |
| KY5 | Manufacturing Technology Resources Inc |
| KY6 | Gerber Scientific Products |
| KY7 | Macusa Inc |
| KY7 | Tech Squared Inc |
| KY8 | Hetronic Steuersysteme GmbH |
| KY9 | AC Marketing |
| KY9 | AC Marketing |
| KYC | Tai Hing Chun Po Factory Limited |
| KYD | Enlison Industries Co Ltd |
| KYF | Spectrum Signal Processing Inc |
| KYG | Voice Plus Inc |
| KYI | Std Manufacturing Limited |
| KYJ | Creative Critters |
| KYK | Continental Technology Inc |
| KYM | MTB International Ltd |

| Code | Company |
|------|---|
| KYN | Standard Radio Marine AB |
| KYP | Yazaki EDS Engineering Inc |
| KYQ | Lu's World Co Ltd |
| KYR | Toucan Security Systems Inc |
| KYS | Resource Finance Group Ltd |
| KYT | Xing Technology Corporation |
| KYU | VDO Yazaki Corporation |
| KYV | Axcis Pocket Information Network Inc |
| KYW | Ogden Corporation |
| KYY | Kalman Technologies Inc |
| KZ2 | JBL Incorporated |
| KZ3 | Invisible Fence Company Inc |
| KZ5 | Rhetorex Incorporated |
| KZ7 | Ultrazone Franchising Inc |
| KZ8 | Transvideo Systems Inc |
| KZ9 | Playmates Toys (Hong Kong) Limited |
| KZB | Hammond and Hammond Inc |
| KZC | FTG Data Systems |
| KZD | Explorer Communications Corp |
| KZE | CyberMax Inc |
| KZH | Metacomp Inc |
| KZI | Pinnacle Technologies |
| KZJ | Barnett Electronics Inc |
| KZK | Nutek USA Corp |
| KZL | Intersection Development Corporation |
| KZM | QLogic Corporation |
| KZN | DC International Inc |
| KZO | Microwave Bypass Systems Inc |
| KZP | Sunnytech Inc |
| KZQ | Optiquest Inc |
| KZR | Plustek Inc |
| KZR | Plustek Inc |
| KZS | Pleiades Research Corporation |
| KZT | Roselius Computer Corporation |
| KZU | Advanced Training Systems Inc |
| KZV | Tagram System Corporation |
| KZY | CK International Corp |
| L22 | SemiSystems Inc |
| L23 | Initio Corporation |
| L24 | Samwoo System |
| L25 | Supreme Toys (Hong Kong) Ltd. |
| L26 | Research and Development Enterprises In |
| L29 | Omnivision Telecommunications Inc. |
| L2A | Neonlite Electronic & Lighting (H.K.) L |
| L2B | Solid Year Co Ltd |
| L2E | R and L Research |
| L2F | Information Resource Engineering Inc |
| L2H | Longyunn Technology Co Ltd |
| L2J | Maruda Techvision Ltd |
| L2L | BinTec Computersysteme GmbH |
| L2M | Omega Research and Development Inc |
| L2N | Manaras Door and Gate Operator Co |
| L2P | Workplace Designs Inc |
| L2U | Sprint Products Group |
| L2V | Axon Corporation |
| L2W | Telesound Systems (1994) Ltd |
| L2X | Tulip Computer International B. V. |

| Code | Company |
|------|-------------------------------------|
| L2Y | Team Concepts North America Ltd |
| L2Z | Advanced Protocol Systems |
| L32 | Solimar Systems Inc |
| L37 | Signal Science Incorporated |
| L38 | Micromachines |
| L3B | Patriot Computers Corp |
| L3C | KPM Technology Inc |
| L3D | Cellgood Technology Co Ltd |
| L3H | Chia Wei Electric Co Ltd |
| L3K | China Products Inc |
| L3L | Debco Electronics Inc |
| L3M | Swissphone Telecommunications |
| L3O | K and M Electronics Inc |
| L3Q | AVM GmbH |
| L3R | ABC Computers Inc |
| L3S | Evans & Sutherland Computer Corp. |
| L3V | Comstor |
| L3W | Dr G S C Wang |
| L3X | Yoga Electronics Co Ltd |
| L3Y | Smart Company Pty Ltd |
| The | |
| L3Z | Gateway Security AB |
| L42 | Guardian Electronics Inc |
| L44 | Keystar Industrial Ltd |
| L45 | Nexus Telecommunication Systems Ltd |
| L4A | Antenna Company |
| L4B | Asus Computer International |
| L4C | Axonic Electronic Inc |
| L4D | Xionics |
| L4F | Computer Resources Corporation |
| L4F | Computer Resources Corporation |
| L4H | Stallion Technologies |
| L4H | Stallion Technologies |
| L4I | Provideo Multimedia Co Ltd |
| L4K | STD Computer Inc |
| L4M | Leading Edge Technologies Inc |
| L4N | Janko Enterprises Limited |
| L4O | CIS Technology Inc |
| L4P | Kapok Computer Co |
| L4Q | Teles AG |
| L4Q | Teles Group |
| L4R | Neung Han Industry Co Ltd |
| L4S | Automated Systems Methodologies Inc |
| L4T | Maxtone Electronics Ltd |
| L4U | Intellicard Systems Pte Ltd |
| L4W | Commspectrum Inc |
| L4X | SsangBangWool Int'l Inc |
| L4Y | Novacomm Inc |
| L4Z | Clinton Electronics Corporation |
| L52 | CeoTronics GmbH |
| L53 | High Technology Distributing |
| L54 | Virtual iO Inc |
| L55 | La Com Inc |
| L56 | Khyber Technologies Corporation |
| L57 | Nassgil Financial |
| L58 | Marshall Industries |
| L59 | Cheyenne Technology Inc |

| Code | Company |
|------|---|
| L5A | Sony Electronics Inc |
| L5C | Ansen Electronics Co |
| L5G | British Telecommunications PLC |
| L5H | Lockheed Sanders Inc |
| L5H | Sanders - A Lockheed Martin Company |
| L5J | Anstar International Limited |
| L5L | Elcom Technologies Corporation |
| L5N | Intermart Systems Inc |
| L5P | Methode Electronics Inc |
| L5S | MJS Designs |
| L5T | Taiwan Shin-G Tech International Co Ltd |
| L5U | HAL Computer Systems |
| L5X | Atlantic Communication Sciences Inc |
| L5X | P Com Inc |
| L5Y | Actown Corporation |
| L5Z | Eidetex Technology |
| L62 | Sefco Peripherals |
| L65 | Utics Corporation |
| L66 | Dogwatch Inc |
| L67 | Sharp Brave Company Ltd |
| L68 | Imes Company Ltd |
| L6A | Research In Motion Limited |
| L6G | Allgon System |
| L6I | Instantaneous Reactive Interactive Syst |
| L6J | Power Computing Corporation |
| L6K | 3D TV Corporation |
| L6L | David Hanour Inc |
| L6N | Acer Sertek Inc |
| L6O | Unique Hardware Co Ltd |
| L6Q | World Peace Industrial Co Ltd |
| L6S | Ant System Corp |
| L6T | Delta Information Systems Inc |
| L6U | Cybermaster Computers Inc |
| L6V | Quantum World Corporation |
| L6W | Wintel Co Ltd |
| L6X | Jocatek Inc |
| L6Y | PM Design Labs |
| L6Z | ICTV Inc |
| L72 | Beond Technology Corporation |
| L73 | Sanwa Electronic Instrument Co Ltd |
| L75 | Atto Technology Inc |
| L76 | Koss Corporation |
| L77 | Intelix Electronics Co Ltd |
| L79 | Ameri King Corporation |
| L7A | Further Tech Co Ltd |
| L7B | Granite Communications Inc |
| L7C | Traditional Technology Group Inc |
| L7E | Gainbery Computer Products Inc |
| L7H | Creative Sales |
| L7J | AccelGraphics Inc |
| L7K | Nokia Telecommunications Inc |
| L7M | Wireless Computing Inc |
| L7N | Vision Technology Inc |
| L7O | Stribel GmbH |
| L7P | FutureTel |
| L7Q | Toys For Special Children |
| L7R | Kay Computers |

| Code | Company |
|------|---|
| L7S | Futuretouch Corporation |
| L7T | Videonics Inc |
| L7W | SDM Corp |
| L7X | Intergraph Computer Systems |
| L82 | Siemens Rolm Communications Inc |
| L83 | GEC Plessey Semiconductors Inc |
| L86 | Larsen Electronics Inc |
| L87 | Ashtech Inc |
| L89 | Infopet Identification Systems Inc |
| L8A | Computers Plus Inc |
| L8B | Jaco Electronics |
| L8C | LS Chan's USA Co Ltd |
| L8F | Silicom Electronics Inc |
| L8G | Lantech Computer Company |
| L8H | Foshan Jetvon Machinery & Electronic Co |
| L8I | Datron Messtechnik GmbH |
| L8J | Famo Inc |
| L8K | American Crytronics Inc |
| L8L | Argyll Technical Services Inc |
| L8M | Quickshot Technology Inc |
| L8N | Sequel Imaging Inc |
| L8O | Honey Bee Industrial (HK) Co |
| L8P | Valor Enterprises Inc |
| L8Q | Corsair Communications |
| L8S | Bruel & Kjaer |
| L8T | Gigawave |
| L8U | Connectware Inc |
| L8Y | Perex Ltd |
| L8Z | Deuretzbacher GmbH & Co Engineering KG |
| L8Z | ESD Electronic Systems Design GmbH |
| L92 | Suncheer International Inc |
| L93 | Value Stor Inc |
| L96 | Dais Electric Co Ltd |
| L97 | Craig Associates International |
| L98 | AER Energy Resources Inc |
| L99 | Tek Tron Enterprises Inc |
| L9B | China Changzhou Novel Electronic Applia |
| L9D | Sam Woo Electronics Co Ltd |
| L9E | C Point Corporation |
| L9F | Ronics Technology Co Ltd |
| L9G | Artin Industrial Co Ltd |
| L9H | Versatile Control Systems Inc |
| L9L | American Laser Games |
| L9M | E Squared Incorporated |
| L9N | AES Corporation |
| L9O | Lucky Goldstar International Inc |
| L9P | Gator Technologies Inc |
| L9Q | Beond Communications Incorporated |
| L9R | General Ballasts Inc |
| L9T | Macaw Electronics Inc |
| L9W | Thunder Eagle Inc |
| L9X | Macrovision Corporation |
| L9Y | Pulse Data International Ltd |
| L9Z | Robotech Inc |
| LA2 | Hankuk Communication Co Inc |
| LA3 | Advanced Engineering Concepts Inc |
| LA4 | LandSea Systems Inc |

| Code | Company |
|------|---|
| LA5 | Senior Technologies Inc |
| LA6 | Ardor Technology Co Ltd |
| LA7 | PowerTek Industries Inc |
| LA9 | Joint Ventures Ada Electronics Co Ltd |
| LAC | Integrated Fleet Technology |
| LAD | Shenzhen Keyue Electronics Company |
| LAE | China National Electronics Import and E |
| LAG | Seodu Media Inc |
| LAH | Miro Computer Products AG |
| LAI | Three J Tech Co Ltd |
| LAK | BTC Korea Co Ltd |
| LAN | Scala Inc |
| LAP | Electrofab (St Kitts) Limited |
| LAQ | Foshan Wingbao Information Enterprise L |
| LAS | Okada International Limited |
| LAU | Orca Technology Inc |
| LAW | HT Research Inc |
| LAX | Stop Anti Theft Systems Inc |
| LAY | Advanced Broadcast Systems Inc |
| LB2 | Ana Electronics Co Ltd |
| LB3 | Veccom Co Ltd |
| LB4 | Ortel Corporation |
| LB5 | Mediashare Corporation |
| LB6 | Disys Corporation |
| LB7 | Armaan Electric Limited |
| LB8 | Continental Conair Limited |
| LBC | Compu Time Technology Incorporated |
| LBE | U.S. Public Technologies Inc |
| LBG | Ark Logic Inc |
| LBG | Ark Logic Inc |
| LBH | Hip Chong Toys (HK) Ltd |
| LBI | Manufacture Technology Resource Corpora |
| LBJ | Tut Systems Inc |
| LBK | Solatrol Inc |
| LBL | Mediatrrix Peripherals Inc |
| LBN | Doc Tech International |
| LBO | Mobile Telesystems Inc |
| LBP | Firehouse Productions |
| LBQ | Ilju System Co Ltd |
| LBT | GreenTronix Inc |
| LBV | Silent Sentry Inc |
| LBW | California Microwave - Microwave Networ |
| LBW | California Microwave-TeleCon Transmissi |
| LBX | Raytech Electronic Corp |
| LBY | Apache Micro Peripherals Inc |
| LC2 | Crescendo Systems Corporation |
| LC3 | Westinghouse Electric Corporation |
| Elec | |
| LC4 | Proteon Inc |
| LC5 | Computer Mechanix Inc |
| LC8 | Infortrend Technology Inc |
| LC9 | Comfocus Corporation |
| LCA | Syschamp (S) Pte Ltd |
| LCB | Topcon America Corporation |
| LCC | Visioneer Communications Inc |
| LCD | Korea Computer Incorporated |
| LCE | Reveal Computer Products Inc |

| Code | Company |
|------|---|
| LCF | EZI America Corp |
| LCG | Endress and Hauser GmbH and Co |
| LCH | AIMS Lab Pte Ltd |
| LCH | AIMS Lab Pte Ltd |
| LCI | Vision Electronics Co |
| LCK | OPTi Inc |
| LCK | OPTi Inc |
| LCL | Autotime Corporation |
| LCM | Holtek Microelectronics Inc |
| LCN | Foshan Wing Feng Computer Peripherals M |
| LCO | Tripole Data Inc |
| LCQ | Sapura Holdings Sdn Bhd |
| LCR | Galanti Organ Builders Inc |
| LCS | Southwestern Bell Freedom Phone |
| LCT | Open Telephonics Inc |
| LCU | ErgonomiXX Inc |
| LCV | Cathay Chemical Works Inc |
| LCW | VIDA Design Ltd. |
| LCX | Security Devices Manufacturing Ltd |
| LCY | PC Importers Inc |
| LCZ | Tritek Lighting Inc |
| LCZ | Tritek Lighting Inc |
| LD3 | Mapower Electronics Co Ltd |
| LD4 | Bayview Technology Group Inc |
| LD5 | BYK Gardner Inc |
| LD6 | Shenzhen Hailong Photoelectric Science |
| LD7 | Xerox Corporation |
| LD8 | Remanco International Inc |
| LDB | Runco International |
| LDD | Ta Tung Information Enterprises Inc. |
| LDE | MTC maintronic |
| LDI | Vive Synergies Inc |
| LDI | Communication Systems Technology Inc |
| LDJ | Goldtron RF Pte Ltd. |
| LDK | Cisco Systems Inc |
| LDN | Guardian International |
| LDO | MPL AG Elektronik Unternehmen |
| LDQ | Abstract R&D Inc |
| LDR | Samsung Corporation |
| LDU | Digital Power Inc |
| LDY | Acula Technology Corp. |
| LDZ | International Computers Limited |
| LE2 | JSW Pacific Corp |
| LE3 | Astral Corporation |
| LE7 | Control Electronics Corporation |
| LE8 | ComSystem A/S Ltd |
| LE9 | Farpoint Communications |
| LEB | Hsu Shines International Corp |
| LEE | Easy Micro Computers Inc |
| LEH | Highland Microcomputer |
| LEI | Novaplex Inc |
| LEK | ASECO American Autosecurity Equipmen |
| LEM | Gamet Systems Co Ltd |
| LEN | Command Corporation |
| LEO | ID Technologies Inc. |
| LEP | Dakota Digital Inc |
| LER | Smith and Nephew Rolyan Inc |

| Code | Company |
|------|---|
| LES | Silsonic Electronics (HK) Co Ltd |
| LET | Security Dynamics |
| LEU | Creata Corporation |
| LEW | Greystone Digital |
| LEX | Nova Net Communications Inc |
| LEY | Soo Goo Electric Co Ltd |
| LEZ | Multistar Industries Co Ltd |
| LF3 | Tonghua Electronics Industry Co Ltd |
| LF4 | Quantum Composers |
| LF5 | Medtronic Inc |
| LF7 | Ensoniq Corporation |
| LF8 | General Scanning Inc |
| LF9 | Kong Wah Communications Ltd |
| LFB | Susteen Inc |
| LFC | Acekey Technology Co Ltd |
| LFD | Adapteck Mfg (s) Pte Ltd |
| LFE | Progressive Electronics |
| LFG | LJ Raymart Inc |
| LFH | Peripheral Venture Inc |
| LFK | Ant Computer Inc |
| LFM | Top Henry Co Ltd |
| LFN | Mizushi Corp |
| LFO | Utilicom Inc |
| LFP | TAI Computer Corporation |
| LFQ | Interactive Media Corporation |
| LFR | Tele Digital Development Inc |
| LFS | China Tianjin Northern Electronic Co Lt |
| LFT | Wu Jing Huaguang Energy Svg Electric Ap |
| LFU | Sunpentown Electric Co Ltd |
| LFU | Sunpentown Electric Co Ltd |
| LFV | Dae Sun Industrial Co Ltd |
| LFW | Sung Jin Industrial Co Ltd |
| LFW | Sung Jin Industrial Co Ltd |
| LFY | Communication Lab International Inc |
| LFZ | Kintek Electronics Co Ltd |
| LG2 | Axon Networks |
| LG3 | Kokusai Electric Co Ltd |
| LG4 | Smart Systems International |
| LG5 | Micro Electronics Inc |
| LG6 | Productivity Enhancement Products Inc |
| LG8 | Cirque Corporation |
| LG9 | Powerble Limited |
| LGA | CVDS Inc |
| LGB | Objix Multimedia Corporation |
| LGD | Leader Precision Industrial Co Ltd |
| LGE | Clover Trading Co Ltd |
| LGG | Linkwell Development Limited |
| LGH | Adaptive Micro Ware Inc |
| LGI | Canon Information Systems |
| LGI | Sinetec Technology Co Ltd |
| LJK | Hanbit Technology Inc |
| LGP | Mirage Electronics Corp |
| LGR | RDI Computer Corp |
| LGS | Neway Electronics Inc |
| LGU | ARM Systems |
| LGV | County Line Limited |
| LGW | Astarek Electronic Inc |

| Code | Company |
|------|-------------------------------------|
| LGX | NCR MPD |
| LGY | O'Neil Product Development Inc |
| LGZ | Cardwell International Corporation |
| LH2 | KC Hiites Inc |
| LH3 | Tel Alarm Systems Inc |
| LH6 | Unisys Taiwan Ltd |
| LH7 | Acronics Systems Inc |
| LH8 | Cardin Elettronica spa |
| LH9 | Aristo Graphic Systeme GmbH & Co KG |
| LHA | Super Micro Computer Inc |
| LHB | Harley Street Software Ltd |
| LHC | Paralon Technologies Incorporated |
| LHD | Tasco Electronics Inc |
| LHF | Weir Jones Automotive Inc |
| LHH | Boser Technology Co Ltd |
| LHI | Meade Instruments Corporation |
| LHJ | Motorola Inc |
| LHK | Crystal Computer Corporation |
| LHL | MaxVision Corporation |
| LHM | Cascade Medical Inc |
| LHO | Artex International Corporation |
| LHP | Fortron International Corporation |
| LHR | Klava eltromed GmbH & Co KG |
| LHT | Arista Technologies Inc |
| LHU | Cactus Logic |
| LHV | Inner Ear Communications Inc |
| LHW | Trimerica Systems Inc |
| LHX | Regent Technologies Corp |
| LI3 | Se Young Electronics Co |
| LI4 | Jacobs Chuck Bilz Company |
| LI5 | Government Micro Resources Inc |
| LI7 | Potrans International Inc |
| LI9 | Kimpex Inc |
| LIA | Unikey Electronics Co Ltd |
| LIB | White Horse Industrial Co Ltd |
| LID | Holly Electronic Co Ltd |
| LIE | Well Tech Toys Company Ltd |
| LIG | Wan Li Electronic Co Ltd |
| LII | Chain Plus Information Inc |
| LIJ | International Marketing Concepts |
| LIK | GTL Technology Corporation |
| LIL | Curtis Inc |
| LIM | Dataradio Corporation |
| LIO | Multi System Technology Inc |
| LIP | Tron Link Enterprises Co Ltd |
| LIQ | Winic Corporation |
| LIR | API Outdoors Inc |
| LIS | Danbury Marketing Corporation |
| LIT | Copycomm Inc |
| LIV | Lionel Trains Inc |
| LIX | Poli Auto Inc |
| LIY | Computer Net Inc |
| LIZ | Tae IL Media Co Ltd |
| LIZ | Tae II Media Co Ltd |
| LJ2 | Telos Corporation |
| LJ2 | Telos Corporation |
| LJ6 | Bilbo Innovations Inc |

| Code | Company |
|------|------------------------------------|
| LJ7 | Countrywood Management Inc |
| LJ9 | SCII Telecom |
| LJ9 | SCII Telecom |
| LJA | Amigo Toys Ltd |
| LJC | Paragon Concepts Inc |
| LJD | WPI Termiflex Inc |
| LJE | Thermo Instrument Controls Inc |
| LJF | Fast Electronic GmbH |
| LJG | 10X Corporation |
| LJH | CAF Technology Inc |
| LJJ | M3i Technologies Inc |
| LJJ | XL Computing (Canada) Inc |
| LJK | Megapower International Corp |
| LJL | Lite On Automotive Corporation |
| LJO | Nokia Mobile Phones Ltd |
| LJP | Nokia Mobile Phones |
| LJQ | Calcom Products Inc |
| LJR | China Shenzhen Yuan Wang City |
| LJS | Secure Communication Systems Inc |
| LJU | Fascinating Electronics Inc |
| LJV | Advanced System Products Inc |
| LJW | Jazz Multimedia |
| LJX | Datalogic Corporation |
| LJY | Ventritex |
| LJZ | Phone Jing Industrial Co Ltd |
| LK2 | Kwan Chiu Radio Mfg Co Ltd |
| LK3 | Laserex Technologies Pty Ltd |
| LK4 | Iwill Corporation |
| LK5 | Ace Electronics Co Ltd |
| LK6 | Znyx Corporation |
| LK7 | Miyuki Electronic Design Co Ltd |
| LK8 | Comtronic Computer Inc |
| LK9 | Kiwi Computer Inc |
| LKA | Lion Optics Corporation |
| LKC | 21st Century Innovations Inc |
| LKD | Connectix |
| LKD | Connectix |
| LKF | Power Pixel Technologies Inc |
| LKG | Cornell Computer Systems |
| LKH | Expert Computer Group Inc |
| LKK | Hello Direct Inc |
| LKL | Networking Company Pte Ltd |
| | The |
| LKM | Oneac Corporation |
| LKN | XELTEK |
| LKO | Artist Graphics |
| LKP | SoftMagic Corp |
| LKR | Gencron Engineering Inc |
| LKS | FirePower Systems Incorporated |
| LKT | Breeze Wireless Communications |
| LKT | Lannair Ltd |
| LKU | Rockwell International Corporation |
| LKX | Aura Microsystems Inc |
| LL2 | Universal Protection Inc |
| LL3 | SC&T2 International Inc |
| LL4 | Ecen Electronics Co Ltd |
| LL5 | Advanced Digital Systems |

| Code | Company |
|------|---|
| LL6 | Pixel Magic Inc |
| LL7 | Studio Magic Corp. |
| LL8 | TFL Lan Inc |
| LL9 | Sierra Wireless Inc |
| LLA | VXL Instruments Limited |
| LLB | Hexagram Inc |
| LLE | Prochassis International Corp |
| LLF | Hua Feng Keyboard Industrial Co |
| LLI | Hi Tron Systems Inc |
| LLJ | Silent Systems Inc |
| LLK | Altus Systems Inc |
| LLL | Kerber Applied Research |
| LLM | Alpha Telecom Inc |
| LLN | Colortran Inc |
| LLO | Intellipoint Corporation |
| LLP | National Electronics Company |
| LLQ | Yangzi Information International |
| LLS | Eagle Solutions International Inc |
| LLT | Bryce Office Systems LLC |
| LLU | Ross Computer and Appliance Warehouse |
| LLV | Visionetics International |
| LLW | Funai Electric Company of Taiwan |
| LLY | Well Join Industry Co Ltd |
| LLZ | Nogatech Inc |
| LM2 | HLA Systems & Solutions Inc |
| LM3 | Paula Lee Systems |
| LM4 | Vintron Industries Ltd |
| LM5 | Continental Healthcare Systems Canada I |
| LM6 | Life Fitness |
| LM9 | One Source Micro Products |
| LMA | Gentec Inc |
| LMB | Parsons Technology |
| LMD | Smart D & M Technology Co Ltd |
| LMF | Alarm Control Product Inc |
| LMI | Sierra Logicom |
| LMJ | Grant Lloyd Industries Ltd. |
| LMK | Haitai Electronics Company Ltd |
| LMM | Sicon International Inc |
| LMO | PCS Wireless Inc |
| LMP | Datafab Systems Inc |
| LMQ | VideoGuide Inc |
| LMR | Syslink Computer Corp |
| LMS | Kubota Graphics Corporation |
| LMT | Changzhou Huahui Electronic Equipment C |
| LMU | Magnasonic Canada Corp |
| LMV | Adaptive Solutions Inc |
| LMY | Mantech Solutions Corp |
| LN3 | Pegasus Technologies Ltd |
| LN5 | Advanced Mos Technology Inc |
| LN6 | E Systems Inc ECI Division |
| LN7 | Amtek |
| LN8 | NTR Technologies Inc |
| LN9 | Atima Technology Inc |
| LN9 | Atima Technology Inc |
| LNA | Microtech Computers Inc |
| LNB | Teletron Music LLC |
| LNC | Creatix Polymedia L.P. |

| Code | Company |
|------|--|
| LND | Optima Computer Systems Inc |
| LNE | Upright Technology Inc |
| LNF | Responz P.D.Q. |
| LNH | Trinity Corporation |
| LNK | TRW Wireless Communications |
| LNM | Smartoy Manufacturing Co Ltd |
| LNN | Zekom International Corp |
| LNO | Automated Engineering Co |
| LNP | Atec Inc |
| LNQ | Actiontec Electronics Inc |
| LNQ | PreMax Electronics Inc |
| LNT | Motorola Inc Computer Group |
| LNU | JRC Canada Inc |
| LNU | JRC International Inc |
| LNV | Allflex USA Inc |
| LNW | Sicon Peripheral Co Ltd |
| LNX | Circuits Maximus Company Inc |
| LNY | Promptus Communications Inc |
| LNZ | Miclor Inc |
| LO3 | Claircom Communications Group L P |
| LO4 | Great Computer Corp |
| LO5 | G D Systems America Inc |
| LO6 | Futurecom Systems Group Inc |
| LOC | AlfaData US |
| LOD | Engle Broadcasting |
| LOF | Comfy Interactive Movies Ltd |
| LOF | Comfy Interactive Movies |
| LOG | Awesome Technology Co Ltd |
| LOJ | Hyung Kwang Ind Co Ltd |
| LOK | Eagle Telecom International Inc |
| LOK | Eagle Telecom International |
| LOM | Enraf BV |
| LON | Networks Northwest Inc |
| LOO | Sensor Engineering Company |
| LOP | Hilevel Technology Inc |
| LOQ | KC Electrics Corporation |
| LOR | Powtel Monitoring Systems Inc |
| LOS | Dae Ho Co Inc |
| LOU | National Advantages Computer Inc |
| LOV | Digicom International Inc |
| LOY | Mediaforte Products Private Limited |
| LOZ | Airnet Wireless Communications Inc |
| LP2 | 3Com Corporation |
| LP7 | Sycom Technologies Inc |
| LP8 | Automated Functions Inc |
| LP9 | Canon Computer Systems Inc |
| LPA | International Electronic Technology of |
| LPB | International Electronic Technology of |
| LPC | Raytheon Service Company |
| LPD | Hughes Missile Systems Company |
| LPF | Innovations International Limited |
| LPG | Stylus Assets Ltd |
| LPH | SpreadNet Inc |
| LPI | Creative Insights Incorporated |
| LPJ | MJ Systems Inc |
| LPL | Brantingham & Associates Co Ltd |
| LPM | Select Comfort Corp |

| Code | Company |
|------|--|
| LPN | Magnetrol |
| LPO | Marisafe Inc |
| LPP | Gerald L. Greer Company Inc |
| LPP | Gerald L. Greer Company Inc |
| LPR | Science Application International Corpo |
| LPT | Tektron Micro Electronics Inc |
| LPU | Eastman Kodak (Japan) Ltd. |
| LPV | Alford Industries Ltd |
| LPW | Necode Electronics Inc |
| LPX | Simple Technology Incorporated |
| LPZ | Alps Electric (Ireland) Ltd |
| LQ2 | RJP Electronics Inc |
| LQ5 | Wanstrow Limited |
| LQ7 | TWT Industries Limited |
| LQ8 | Mind Path Technologies |
| LQA | PictureTel Corporation |
| LQB | Castner Design Inc. |
| LQC | Q-Tron Ltd. |
| LQD | Piper Research Incorporated |
| LQE | David Sarnoff Research Center Inc |
| LQF | Innovonics Inc |
| LQG | Datasonix Corporation |
| LQH | PT Pembina Galindra Electric Co |
| LQI | Waffer Industrial Corp |
| LQJ | Computer Tec Inc |
| LQK | Geotek Communications Inc |
| LQL | K & J Trading Inc |
| LQM | Data Systems Depot Inc |
| LQN | Connaught Electronics Ltd |
| LQO | EDEK Technologies Inc |
| LQP | Smarthome Products Ltd |
| LQQ | VideoLabs Inc |
| LQR | Seth C. Enterprise Co Ltd |
| LQS | Cayuga Radio Partners Ltd Partnership |
| LQT | Hopax Industries Co Ltd |
| LQU | Adtech Advanced Technologoy Distributors |
| LQV | D&B Electronics Inc |
| LQW | Nakamichi Corporation |
| LQX | Iran Info-Tech Development |
| LQY | Penn State Industries |
| LQZ | Time Frame International Ltd |
| LR2 | Plasmon Data Systems Ltd |
| LR5 | Aster Technologies Inc |
| LR6 | Oki America Inc |
| LR7 | Sprint Manufacturing Corporation |
| LR8 | Chase Technologies Inc |
| LR9 | Bitfield Oy |
| LRB | DOVatron de Mexico S.A. de C.V. |
| LRD | Datatrans Electronics Corp |
| LRE | Summit Telecommunications Inc |
| LRH | Ascend Communications |
| LRI | Accelerated Christian Education Inc |
| LRJ | Super Elite Technology Co Ltd |
| LRK | Allodyne Inc |
| LRL | Hubbell Industrial Controls Inc |
| LRM | Zenith/Inteq Inc. |
| LRN | Marantec Antriebs-und Steuerungstechnik |

| Code | Company |
|------|---|
| LRO | Teldata Communications Corp |
| LRP | Martignoni Electronics AG |
| LRQ | I-O Data Device Inc. |
| LRS | Premier Wireless Inc |
| LRS | Sigcom |
| LRU | Pyramid Communications |
| LRV | Data Ray Corporation |
| LRW | Megatech (Wong's) Research & Developmen |
| LRY | Hybrid Networks Inc |
| LRZ | EDEE Inc |
| LS2 | Sequel Security Systems Inc |
| LS4 | Veltek Industries Inc |
| LS6 | Lys Electronic Ltda |
| LS7 | Kaydon Electro Tec Corporation |
| LSA | Wen Ding Technology Ltd |
| LSC | TrueTime Inc |
| LSD | DoorKing Inc |
| LSE | Alco Communications Limited |
| LSE | Alco Communications Limited |
| LSJ | Intech Direct Company |
| LSK | Zuson Electronic Co Ltd |
| LSL | Tae Il Media Co Ltd/Ballast Divison |
| LSM | Hong Jin Cycle Corporation |
| LSN | Carillon Corporation |
| LSO | ISDN*tek |
| LSP | Dae Yoo Telecom Ltd |
| LSQ | Elmo Tech Ltd |
| LSR | Up Lighting Co Ltd |
| LSS | Los Lais Enterprise Co Ltd |
| LST | Uraco Lighting International Pte Ltd |
| LSU | Turnkey Television and Radio/ABE |
| LSV | X-Rite Incorporated |
| LSW | Wise Medical Systems Inc |
| LSX | Formosa Superb Enterprises Co Ltd |
| LSY | Quantum Technologies Inc |
| LSZ | Shanghai Pujia Electronic Equipment Fac |
| LT2 | US Safety Sensors Inc |
| LT4 | O'Neill Connectivities Inc |
| LT5 | OST Inc |
| LT6 | PC Chip Computer Manufacturer(S) PTE Lt |
| LT7 | Dynamic Supply International Ltd. |
| LT8 | Easy Computer Solutions Inc |
| LTB | Guangzhou Guangli Computer Device Co Lt |
| LTC | Unidata |
| LTD | Simplex Time Recorder Co |
| LTE | Luoyang Electrical Energy Saving Applia |
| LTF | Ora Electronics |
| LTG | Mega World International Ltd |
| LTH | Solomon Technology Corp |
| LTI | Horstmann Kearney |
| LTJ | Speech System Inc |
| LTL | Ye Data Inc |
| LTN | Atlantic Components Ltd |
| LTO | Computer Connections America Inc |
| LTP | Kidtech Inc |
| LTQ | F+G Megamos Mikroelektronik |
| LTR | American Crane & Service Inc |

| Code | Company |
|------|---|
| LTS | KidBoard Inc |
| LTT | Samsung DSR Inc |
| LTV | Memory and More Ltd PDS |
| LTW | AT&T Global Information Solutions Compa |
| LTX | NexTrend Technology Inc |
| LTY | Safetran Systems Corporation |
| LU2 | Mandi Corporation |
| LU3 | Ultra Sport Corp Inc |
| LU4 | SMTEK Inc |
| LU8 | Hagiyara Sys-Com Co Ltd |
| LU9 | Micro Games of America (HK) Ltd |
| LU9 | Micro Games of America (HK) Ltd |
| LUA | LANcity Corporation |
| LUB | Socket Communications Inc. |
| LUC | Hong Sheng Electronics Co Ltd |
| LUD | Mediacom Technologies Pte Ltd |
| LUE | Integrated Systems Group Inc |
| LUF | Vision Enhancements |
| LUG | Lucid Technologies Inc |
| LUH | R & L Media Systems Inc |
| LUI | Antennas America Inc |
| LUJ | Brainworks Inc |
| LUK | Micro Concepts Inc |
| LUL | Obelisk Systems |
| LUM | Quadrant International Inc |
| LUM | Quadrant International Inc |
| LUP | Powell Computer Co Ltd |
| LUP | Powell Computer Co Ltd |
| LUQ | D & D Office Automation |
| LUS | Magictek Computer Inc |
| LUT | Dataexpert Corp |
| LUT | Dataexpert Corp |
| LUX | Patapsco Designs |
| LUZ | Leo Systems |
| LUZ | Leo Systems |
| LUZ | Leo Systems |
| LV2 | PeRisCope Engineering GmbH |
| LV3 | Digitrax Inc |
| LV6 | Alta Research Corporation |
| LV8 | EZShow Systems Inc |
| LVA | WattSmart |
| LVB | Interchip Electronics |
| LVD | Foster Electronic & Electrical Mfg Co |
| LVF | Chem Maw Electronic Co Ltd |
| LVH | Diablo Research Corporation |
| LVI | RDC Communications Ltd |
| LVK | Neotech Company Inc |
| LVM | Enbloc Inc |
| LVN | Integrated Technology USA Inc |
| LVO | Ingenius |
| LVQ | TGA Systems Inc |
| LVR | Proteq Technologies Pte Ltd |
| LVS | Beijing Comsun Electronbiology Technolo |
| LVT | Micro Distribution Center |
| LVU | Mega-Tech Assembly Inc |
| LVV | Erol's |
| LVV | Addtech Computer Inc |

| Code | Company |
|------|---|
| LVY | O'Conner Engineering Inc |
| LW3 | Active Control Technology Inc |
| LW4 | Marantz America Inc |
| LW5 | Metrologic Instruments Incorporated |
| LW7 | HiTech Technologies Inc |
| LW9 | Hetronic USA Inc |
| LWA | Regal Enterprises Ltd |
| LWB | Philips Semiconductors |
| LWC | Mediatek Corp |
| LWD | Knight Light Corp |
| LWE | Cheng Fong Technology Corp |
| LWG | International Computer Monitor Limited |
| LWH | Labway Corporation |
| LWI | Hi-Vi Electronics Co Ltd |
| LWJ | Vierci Corporation |
| LWK | Shanghai Vaccum Electron Devices Co Ltd |
| LWM | AVision Technology Inc |
| LWN | Lee's High-Tech Ent Co Ltd |
| LWO | Sanyo Information Systems |
| LWQ | Advanced Computer Concepts |
| LWS | MicroGreen Products Inc |
| LWV | Stanilite Electronics Ltd |
| LWW | Sunus Suntek International Corp |
| LWX | American Business Service & Computer Te |
| LWY | Apex Corporation |
| LX2 | Emotion Inc |
| LX3 | Advanced Technology Consultants |
| LX4 | Revenue Markets Inc |
| | The |
| LX5 | Copper Leaf Technology Inc |
| LX6 | Motorola Inc. |
| LX7 | AML Communications |
| LX8 | BMW AG |
| LX9 | Great Concept Development Limited |
| LXB | Darim System Co Ltd |
| LXB | Darim System Co Ltd |
| LXC | Nippondenso America Inc |
| LXD | Capital Automation Co Ltd |
| LXE | Winfat Industrial Company |
| LXF | Radio Telecom & Technology Inc |
| LXH | Pacific Image Electronics Co |
| LXJ | A P Acoustics Inc |
| LXL | C-One Technology Corp |
| LXM | Wyse Technology Taiwan Ltd |
| LXP | Robert Bosch (Australia) Pty Ltd |
| LXR | Dae Ryung Industries Inc |
| LXS | Motorola Wireless Data Group |
| LXT | Zynk Industrial Corporation |
| LXU | PT Infotech Prima Industry |
| LXV | Toy Biz Inc |
| LXY | Arco Computer Products Inc |
| LXZ | Micro Express Computers Inc |
| LY2 | Sungsan Products Co Ltd |
| LY3 | Yuil Industrial Co Ltd |
| LY4 | KEPS Technologies Inc |
| LY6 | Sonic Systems Inc |
| LY7 | General Magic Inc |

| Code | Company |
|------|---------------------------------------|
| LYA | Larus Corporation |
| LYB | Elbert Instruments Corp |
| LYC | Morning Star Solutions Inc |
| LYF | Emerald Medical Products Corporation |
| LYH | Siemens AG |
| LYI | Linear Equipamentos Eletronicos S. A. |
| LYJ | CEIS TM |
| LYL | Saturn Electronics & Engineering Inc. |
| LYM | Kernel Productions |
| LYN | Current Works Inc |
| LYO | Sparton Electronics Florida Inc |
| LYP | Cochran Consulting Inc |
| LZR | Micro Products Center Inc |
| LYU | Astrotek Limited |
| LYW | Luckywin Industrial Limited |
| LYX | TriGem America Corporation |
| LYZ | Wireless Transactions Corporation |
| LZ3 | Ohio Art Co |
| The | |
| LZ4 | Universal Research Laboratory |
| LZ5 | SmartWorks Corporation |
| LZ6 | Fomotech International Corp |
| LZ7 | Maryland Radio Center Inc. |
| LZ9 | RCR Electronics Mfg Ltd |
| LZC | Glentel Inc. |
| LZD | Advanced Systems Consultants Inc |
| LZE | HORIBA Ltd. |
| LZF | Parallel Communications Inc. |
| LZK | Wireless Integrated Systems Inc |
| LZL | Pacific Electric Wire & Cable Co Ltd |
| LZM | Fuji Software Inc |
| LZN | Argosy Research Inc |
| LZO | Robert J. Punko Marketing Inc |
| LZR | Alliance Semiconductor |
| LZS | Bits Technical Corporation |
| LZT | Kuo Jan Electronic Ent Co Ltd |
| LZU | Macromate Corp |
| LZV | P. I. Engineering Inc. |
| LZW | S3 Incorporated |
| LZX | Unical Enterprises Inc |
| LZY | Alfa Systems Limited |
| LZZ | Acrontech International Inc |
| M26 | Elmic Systems Inc |
| M2B | Winnov L P |
| M2I | TD Ltd |
| M2N | American Inventory Resources |
| M2X | Hansung Electronics Co Ltd |
| M3B | GS Xerox Electronics Inc |
| M3D | KPN Industry Co Ltd |
| M3F | Design and Development Inc |
| M3S | Xitel Pty Limited |
| MA3 | Fingers Krossed Inc |
| MA4 | Dayton Industrial Corporation |
| MA5 | D&B International Computer Inc |
| MA6 | ComEdge Marketing Pte Ltd |
| MA7 | Allspirit Co Ltd |
| MA8 | ISDN Systems Corporation |

| Code | Company |
|------|---|
| MA9 | Source Innovations Inc |
| MAA | Procomp Informatics Ltd |
| MAD | Microelectronics Technology Inc |
| MAE | Zeitnet Incorporated |
| MAF | Mycap USA |
| MAG | MRK Group Ltd |
| MAH | Reality Simulation Systems Inc |
| MAI | U Tronics America Inc |
| MAJ | Integrated Micro Solutions Inc |
| MAL | Silcom Ltd |
| MAU | Getac Corporation |
| MAW | Fastcom Ltd |
| MAX | Sage Alerting Systems Inc |
| MAY | GEC Plessey Semiconductors |
| MAZ | Claymate Inc |
| MB3 | Fulton Electronics Inc |
| MB5 | Panda Electronic Group Co |
| MB6 | Yangtze Non Ferrous Metals United Co (G |
| MB7 | Asolid Computer Supply Inc |
| MB9 | Wangrow Electronics Inc |
| MBB | Anam Electronics Co Ltd |
| MBC | Comlink Equipment International Inc |
| MBD | Added Value Electronics Distribution In |
| MBH | Sanyo Canada Inc |
| MBI | Universal Products Corporation |
| MBJ | Secured Data Inc |
| MBK | Acumer Micro Computer |
| MBL | Hobbes & Co Ltd |
| MBO | Airwave Technology Inc |
| MBP | SCM Microsystems |
| MBQ | DirectWave Inc |
| MBR | Esselte Dymo N V |
| MBU | Standard Telecom Co Ltd |
| MBX | C Spec Corporation |
| MBY | Castelle |
| MBZ | Remote Systems Application Inc |
| MC3 | David L Julian |
| MC4 | Teleprocessing Products |
| MC5 | Rochelle Communications Inc |
| MC7 | Wireless Scientific Inc |
| MC8 | AetherWorks Corporation |
| MC9 | Majorette Toys (US) Inc |
| MCB | QRO Technologies Inc |
| MCC | Flowpoint Corporation |
| MCC | Flowpoint Corporation |
| MCE | Car Mate Mfg Co Ltd |
| MCF | Integraphics Systems Inc |
| MCF | Integraphics Systems Inc |
| MCG | Benevision Pte Ltd |
| MCH | Decade Transmitters Inc |
| MCI | Radio Local Area Networks Inc (Radiolan |
| MCJ | American Engineering & Manufacturing In |
| MCK | Lun Cheung Enterprises Ltd |
| MCL | Ambit Microsystems Corporation |
| MCM | Sports Fantasy Trivia Inc |
| MCN | Networth |
| MCO | TN Technologies |

| Code | Company |
|------|---------------------------------------|
| MCP | Technology Distribution Network Inc |
| MCQ | Digi International Inc |
| MCQ | Digi International Inc |
| MCR | Aeonstar Technology Corp |
| MCS | Emperor Corporation |
| MCV | Input/Output Inc |
| MCZ | Maxam Technology Corp |
| MD3 | Pantel |
| MD4 | LASAT Communications A/S |
| MD4 | LASAT Communications A/S |
| MD5 | Naztec Inc |
| MD6 | Tomar Systems Inc |
| MD7 | Fore Systems Inc |
| MD8 | Elitegroup Computer Systems Co Ltd |
| MDB | Initiative Computing USA Inc |
| MDC | Teledapter Systems Inc |
| MDF | Likom Innovation Sdn Bhd |
| MDG | Tridium Research Inc |
| MDH | Aitec Lansing Technologies Inc |
| MDI | Sun Crown Enterprises Ltd |
| MDJ | Po Shun Corporation |
| MDK | Mitsubishi Chemical America Inc |
| MDK | Mitsubishi Chemical America Inc |
| MDL | Aspen Technologies Inc |
| MDN | Future Endeavors |
| MDO | Synnex Technology International Corp |
| MDP | Funtech Entertainment Corp |
| MDQ | Livingston Enterprises Inc |
| MDU | Citadel Computer Corporation |
| MDV | Blue Box International Ltd |
| MDW | Vision Aid Systems Inc |
| MDX | Win Far Technology Co Ltd |
| MDY | Axxon Computer Corporation |
| MDZ | Amtran Technology Co Ltd |
| ME2 | Arkon Resources Inc |
| ME3 | Kalidor |
| ME7 | NuCom Systems Inc |
| ME8 | Active Computer Services Inc |
| MEA | Immersion Human Interface Corporation |
| MEB | SAT |
| MED | Yunglin Technology Corp |
| MEE | Ranger Electronic (Shanghai) Inc |
| MEH | Mega Computer Corporation |
| MEI | PC & Networks Warehouse Inc |
| MEJ | Microtree |
| MEL | SunTechnologies Inc |
| MEN | ABS |
| MEO | Sprintel Communications (UK) Ltd |
| MEP | Excel Sciencetech Co Ltd |
| MEQ | Fushing Brothers & Co |
| MES | Gemplus |
| MET | ECI Telesystems |
| MEW | Superior Broadcast Products |
| MEW | Superior Broadcast Products |
| MEY | Tck'O Enterprises Co Ltd |
| MEZ | Shark Multimedia Inc |
| MF3 | Chas A Blatchford & Sons Ltd |

| Code | Company |
|------|---|
| MF4 | Esselte Meto International GmbH |
| MF5 | Kunst Computer LLC |
| MF6 | Motorola Inc |
| MF7 | Two J's Computers Inc |
| MFA | NSM Jukebox |
| MFC | Wething Digit (Tianjin) Co Ltd |
| MFE | RF Link Technology Inc |
| MFF | m&h Inprocess messtechnik GmbH |
| MFG | Clearvox Communications Inc |
| MFI | Skyline Technology Inc |
| MFJ | Eaton Corporation |
| MFK | Eilon Engineering |
| MFM | Teletronics International Inc |
| MFN | PinOak Digital Corporation |
| MFR | Anbonn Inc |
| MFR | Anbonn Inc |
| MFS | Vogel International Inc |
| MFT | Datek Industrietechnik AB |
| MFV | Alfadata Computer Technic Corp. |
| MFW | Multivideo Labs Inc |
| MFY | Taylor Bros (Oldham) Ltd |
| MG3 | Universal Electronics Inc |
| MG4 | Gemini Computers and Supplies |
| MGA | Kingmax Technology Inc |
| MGF | MediSense Inc |
| MGI | Xerox Corporation |
| MGJ | Apex Systems Inc |
| MGK | Apex Dynamics Inc |
| MGL | E Lead Electronic Co Ltd |
| MGM | En Technology Corporation |
| MGP | Wireless Marketing Corporation |
| MGQ | Megacomm (Phils) Inc |
| MGR | Vansco Electronics Ltd |
| MGS | Rockwell International Corporation |
| MGV | Adcon Corporation |
| MGX | Key Source International |
| MGY | Freetek Technology Corporation |
| MGZ | Chase Advanced Technologies Ltd. |
| MH4 | Centralforce Limited |
| MH6 | Langchao Electronic Information Industr |
| MH8 | Pelagic Pressure Systems |
| MH9 | Xetron Corp |
| MHD | Viking Components Inc |
| MHE | New Century Empire Corporation |
| MHI | Card Access |
| MHK | Racore Computer Products Inc |
| MHL | Wagner Electronic Products Inc |
| MHM | NewCom Inc |
| MHP | Compumedia Ltd |
| MHQ | Motto Technologies Sdn Bhd |
| MHR | Security Design Group |
| MHT | Parallel Technology Sales LP |
| MHW | Ascension Technology Corporation |
| MHX | Shanghai Hailong Photoelectric S&T Co L |
| MHZ | Momentum Microsystems Inc |
| MI2 | Data 2000 Inc |
| MI3 | Apexx Technology Inc |

| Code | Company |
|------|---------------------------------------|
| M4 | Software Group Limited |
| The | |
| M5 | Stinson and Associates Inc |
| M6 | LTEL Corporation |
| M7 | Electrocom Communication Systems |
| LP | |
| M8 | Olsbergs Hydraulic AB |
| MIC | Techmedia Computer Systems Corp |
| MIF | Goldtron Multimedia Limited |
| MIK | Nu Metrics |
| MIL | Pensar Corporation |
| MIN | Toray Marketing & Sales (America) Inc |
| MIQ | Nam Wah Holdings (H.K.) Co Ltd |
| MIS | Vas Das Inc |
| MIU | Pearce Educational Technology Inc |
| MIV | Inet Inc |
| MIX | CLH International Inc |
| MIZ | Intellect Australia Pty Ltd |
| MJ4 | Promark Technologies |
| MJ5 | Crystal Semiconductor Corporation |
| MJ6 | Jem Electronics |
| MJ7 | Great Science & Technology Co Ltd |
| MJ8 | Combyte Inc |
| MJ9 | Lan Plus |
| MJA | Nulan Technologies Ltd |
| MJB | Allied Telesyn International Corp |
| MJC | Palmer Environmental Ltd |
| MJD | Virtual Power Devices Inc |
| MJE | Compulink Research Inc |
| MJF | Datapath Ltd |
| MJG | Micro control as |
| MJK | MVP Computers Inc |
| MJL | Vortex Computersysteme GmbH |
| MJN | Strategic Advisory Services |
| MJO | Educational Insights |
| MJP | Pohan Engineering Ltd |
| MJR | Positive Self Talk TV Inc |
| MJT | MBA Systems Automation Inc |
| MJU | Magic Technology Corporation Limited |
| MJV | Meyer Systems |
| MJX | Most Manufacturing Inc |
| MJY | Applied Electronics Company |
| MJZ | Inphone Electronics Enterprise Co Ltd |
| MK2 | North American Computer |
| MK3 | Carroll Touch Inc |
| MK6 | Sailing Strong International Co Ltd |
| MK7 | Kelmax Limited |
| MK8 | Compex Inc |
| MK9 | Amiga Technologies GmbH |
| MKB | Zeta (Asia) Corporation |
| MKC | Wheelpower International Ltd |
| MKD | ADI Communications Corporation |
| MKF | Kenwo Industries Limited |
| MKG | Solium Incorporated |
| MKJ | Kennerley Spratling Inc |
| MKL | Rainbow Business Machines |
| MKM | Motorola Wireless Data Group |

| Code | Company |
|------|---------------------------------------|
| MKN | Communistarr Inc |
| MKO | Thai Computer Mfg Co Ltd |
| MKP | USAR Systems |
| MKR | Single Chip Systems Corporation |
| MKU | SyntheComm Inc |
| MKW | Diehl Ident GmbH |
| MKY | Mytek Korea Co |
| MKZ | OTC Telecom Inc |
| ML2 | Macrotron Systems Inc |
| ML3 | ACCS Wireless Inc |
| ML5 | Arsys Innotech Corporation |
| ML6 | Orbit Underground Sprinklers |
| ML8 | CyberMark |
| ML9 | Ptek |
| MLA | Diva Laboratories Ltd |
| MLB | Honda Lock Mfg Co Ltd |
| MLC | Performance Technologies Incorporated |
| MLD | Spot Technology Inc |
| MLE | Nomai S A |
| MLF | All Phase Computer Systems |
| MLG | Access Technology Inc |
| MLI | Adtron Corporation |
| MLJ | SoloPoint Inc |
| MLN | Synaptel |
| MLP | Vision Technologies |
| MLR | Astral Microelectronic Corp |
| MLS | Promax Technology |
| MLT | Telital Srl |
| MLV | Sungrow Learning Systems Ltd |
| MLW | Fasco Consumer Products Inc |
| MLX | Netmedia Inc |
| MLZ | Nicetel Electronic Co Ltd |
| MM2 | Zhejiang Sunlight Group Corporation |
| MM3 | Chang Jun Technology Co Ltd |
| MM4 | Power Up Products |
| MM5 | Seohan Electronics Inc |
| MM8 | HT Communications Inc |
| MM9 | Yi Ray Electronic Industrial Co Ltd |
| MMA | Midland Consumer Radio |
| MMB | Color Dreams Inc |
| MMD | Hitachi Ltd |
| MME | Pragmatic Communications Systems Inc |
| MMH | DiviCom Inc |
| MMI | Go Gro Industries Ltd |
| MMK | Golight Inc |
| MMP | Kwo Light Co Ltd |
| MMT | Motorola Lighting Inc |
| MMV | Hizon International Enterprise Ltd |
| MMW | Linkworld Electronic Co Ltd |
| MMX | Dex Computer Center |
| MMY | Omega Digital Data Inc |
| MN3 | AbleNet Inc |
| MN4 | Electronic Design Associates |
| MN8 | Jenor Industries Co Ltd |
| MN9 | Topaz Systems Inc |
| MNA | Pathlight Technology Inc |
| MNB | Zydacron Inc |

| Code | Company |
|------|---|
| MNF | East Coast Electronics |
| MNG | Laser Alignment Inc |
| MNH | AT&T Taiwan Telecommunications Co Ltd |
| MNI | Sharper Image |
| The | |
| MNJ | Safety 1st Inc |
| MNK | Clark Research and Development Inc |
| MNL | Adomax Technology Co Ltd |
| MNM | RM Shifler Equipment Corporation |
| MNO | Colorgraphic Communications Corporation |
| MNR | Megabyte International Inc |
| MNT | Sonik Technologies Corporation |
| MNV | BKI Inc |
| MNW | Welcome To The Future Inc |
| MNY | Microstar Computer Inc |
| MNZ | Contour Design Inc |
| MO5 | Johnson Worldwide Associates |
| MO7 | Bering Technology Inc |
| MOA | Ikon Technologies Corporation |
| MOB | Ecca Corporation |
| MOC | Nae Wae Semiconductor Co Ltd |
| MOD | Sindo Ricoh Co Ltd |
| MOF | Teammax Corporation |
| MOG | Toshiba Mechatronics Co Ltd |
| MOI | Ohmart/Vega |
| MOK | Databyte International |
| MOL | Tac Systems Incorporated |
| MOM | WavePhore Canada Inc |
| MOQ | Kelly Brothers Games Pty Ltd |
| MOT | Knobnics Co Ltd |
| MOU | Philips Caribbean Panama Inc |
| MOZ | Tokai Rika Co Ltd |
| MP2 | PC Video Conversion |
| MP5 | Harris Canada Inc |
| MP6 | Ungo Security Corporation |
| MP7 | Cable Healthcare Corporation |
| MP8 | Top Cyber Co Ltd |
| MPA | SVI Systems Inc |
| MPB | Hung World Enterprise Co Ltd |
| MPC | Innovative Trek Technology Pte Ltd |
| MPD | Kavouras Inc |
| MPE | All American |
| MPF | Astech GmbH |
| MPG | Compevo AB |
| MPK | SFA Datacomm Inc |
| MPL | VLSI Technology Inc |
| MPO | Advanced Navigation & Positioning Inc |
| MPS | Control Industries Inc |
| MPT | Fairform Mfg Co Ltd |
| MPU | WonYoung Corporation |
| MPV | Likom Technology Sdn Bhd |
| MPW | Robbe Modellsport |
| MPY | Software Surgery Inc |
| MQ2 | CYF Technology Co Ltd |
| MQ3 | Needhams Electronics Inc |
| MQ4 | AboCom Labs Inc |
| MQ5 | Telean Technology Ltd |

| Code | Company |
|------|---|
| MQ6 | Silent Paw Productions Inc |
| MQ8 | Ultrasys Technology Co Ltd |
| MQ9 | Palm Computing Inc. |
| MQA | Compix Media Inc |
| MQB | Kleer Industries Inc |
| MQC | Cyrix Corporation |
| MQD | Million Industrial Ltd |
| MQF | Glowmaster Corporation |
| MQK | Shaoguang Dongli Electronic & Electrica |
| ML | NEC Corporation |
| MQM | Acme Portable Machines Inc |
| MQO | Vocollect Inc |
| MQU | Shinwoo Telecom Co Ltd |
| MR3 | Corelogic |
| MR5 | American Magnetics Corporation |
| MR9 | Ennyah International Trading Co. Ltd. |
| MRA | Zymed Medical Instrumentation |
| MRB | Satel Oy |
| MRD | Randtoy (Hong Kong) Limited |
| MRI | STL Electronics Limited |
| MRN | Curry Controls Company |
| MRR | Cardware Lab Inc |
| MRS | Mold Tech Plastics Inc |
| MRU | Leventhal Limited |
| MRX | Schrader Automotive Inc |
| MRY | Bakson Corporation |
| MRZ | Epix Imaging Systems Inc |
| MS2 | Silicon Vision Inc |
| MS5 | May International Limited |
| MS6 | DataStor Technology |
| MS7 | Motorola Multimedia Group |
| MS9 | Dillon |
| MSA | Hansol Electronics Inc |
| MSB | Astra Taipei Ltd |
| MSC | CP8 Transac |
| MSE | Samwon Electronics Inc |
| MSG | Demo SRL |
| MSH | Cosys Corporation |
| MSI | Efficient Networks Inc |
| MSJ | Kin Sun Electronics Ltd |
| MSL | Beehive Technologies Inc |
| MSM | Addonics |
| MSP | WTT Testelektronik |
| MSQ | ASUSTeK Computer Inc |
| MSR | Country Good Industrial Ltd |
| MSS | Transcrypt International Ltd |
| MST | Nexar Technologies Inc |
| MSU | Astralic Technology |
| MSY | Digital Engineering Ltd |
| MSZ | PC Tel Inc |
| MT2 | VLSI Vision Limited |
| MT3 | Interactive Innovations Inc |
| MT4 | NuVision Technologies Inc |
| MT7 | Forthright Systems and Consulting Inc |
| MT9 | Atherton Technology Co Ltd |
| MTB | Hunter Digital Ltd |
| MTC | Ju Young Electronic Co. |

| Code | Company |
|------|---------------------------------------|
| MTD | TimeKeeping Systems Inc |
| MTH | Wavelink Technologies Inc |
| MTK | Sourcecom Corporation |
| MTL | Vista 2000 Inc |
| MTO | Radtec Engineering Inc |
| MTQ | Golden Way Electronic Corp |
| MTR | Pro Nets Technology Corporation |
| MTT | BJMT Technology Corporation |
| MTW | Color Savvy Systems Incorporated |
| MTX | Dynamic Alarms Inc |
| MTZ | Alarminator Inc |
| MU4 | Lasco Industries Limited |
| MU7 | Fujitsu PC Corporation |
| MU8 | Mikom GmbH |
| MU9 | Edom International Corporation |
| MUA | ActivCard |
| MUB | Core Dynamics Corporation |
| MUD | KACE Electronics Asia Inc |
| MUE | ETrunk Systems Inc |
| MUG | Virtual Media International Inc |
| MUH | Venstar Inc |
| MUJ | Achme Computer Inc |
| MUK | Net TV |
| MUN | Pacific CommWare |
| MUO | Dynasty Computer Inc |
| MUP | Icon Inc |
| MV5 | Cirel Systemes |
| MV6 | TSI Prime |
| MV8 | Netpower Inc |
| MV9 | MRT Micro AS |
| MVA | Uni Art Precise Products Ltd |
| MVB | PB Electronics Ltd |
| MVC | Taiwan Multimedia Inc |
| MVD | Sunstar Technology International |
| MVG | Pixera Corporation |
| MVH | Caben Ltd |
| MVI | Hughes Data Systems |
| MVJ | On Off Distribution Electronique Inc |
| MVK | Calian Communications Systems Ltd |
| MVM | Protectronics Inc |
| MVS | Info Radio |
| MVT | VIR Systems Pty Ltd |
| MVU | Zebco Corporation A Brunswick Company |
| MVY | TSG Technology LLC |
| MW2 | EDI Technologies Inc |
| MW3 | Accurite Technologies Inc |
| MW4 | Motobell USA Inc |
| MW5 | Ex Machina Inc |

| Code | Company |
|------|---|
| MW6 | Umax Computer Corporation |
| MW7 | Ahmed Corporation |
| MW8 | NTT Intelligent Technology Co Ltd |
| MW9 | Car Tell Limited |
| MWA | Subspace Communications |
| MWC | Sealevel Systems Incorporated |
| MWE | Big Island Communications Inc |
| MWG | Avid Technology Inc |
| MWI | EzKEY Corp |
| MWJ | Comp & Soft Experts |
| MWK | Macrotek International Corp |
| MWN | KIC Thermal Profiling |
| MWO | California Digital Computers |
| MWP | EPoX International Inc |
| MWU | Clinical Innovations |
| MWV | ITK Telekommunikation AG |
| MWW | Pinpoint Communications Inc |
| MWY | XL Computing Corporation |
| MX5 | Eltron International Inc |
| MX6 | Archos S. A. |
| MX7 | Orbitech Advanced Systems Ltd |
| MXD | HRH Vertriebs GmbH |
| MXE | OnDemand Imaging Corporation |
| MXG | Funrise Toy Corporation |
| MXI | Added Value Enterprises (Asia) Pte Ltd |
| MXN | Master Meter Inc |
| MXO | CDT Canada Corp |
| MXP | Bird Products Corporation |
| MXS | Access Micro Products |
| MXU | Mark's Micro Shop Inc |
| MXX | Lyncorn Industries Inc |
| MY7 | TSC International Asia Ltd |
| MY8 | Prochips Inc |
| MYC | Microcell Systems Pty Ltd |
| MYH | Fontech Ltd |
| MYI | The Other 90% Technologies Inc |
| MYK | Jinsung Industries Co Ltd |
| MYL | Excel Computer Ltd |
| MYS | Mask Systems Inc |
| MYY | Pyramid Technology |
| MZ7 | Patel Inc |
| MZB | Omnifashion Corporation |
| MZD | Maxiland Enterprise Inc |
| MZE | Siemens Nixdorf Advanced Technologies G |
| MZF | Jfton America Inc |
| MZI | VisuAide Inc |
| MZM | Voice Powered Technology Inc |