
ADDS Mentor 6000: Product Profile



System Overview

The Mentor 6000 32-bit supermicro-computer is based on the Pick operating system and comes bundled with office automation and database management software. It is oriented toward a range of office functions including office automation, wholesale distribution, and direct mail processing.

The Mentor 6000 comprises Models 2, 4, and 8.

Vendor

Applied Digital Data Systems
(ADDS)
100 Marcus Boulevard
Hauppauge, NY 11788
(516) 231-5400

Price

Basic configuration prices range from \$26,210 to \$146,360.

GSA Schedule

No.

Competition

The Mentor 6000 competes with a variety of supermicrocomputer systems, including products from Prime, McDonnell Douglas, IBM, Altos, and Alpha Micro.

Characteristics

See Table 1 for a comparison of system characteristics.

Specifications

Main Memory

The Mentor 6000 supermicrocomputers provide main storage up to 16M bytes in 2M-byte increments.

Processing Components

The 32-bit CPU is based on either a 16.7MHz MC68020 chip and 8K bytes of cache memory or a 25MHz chip and 32K bytes of cache.

Peripherals

See Table 2 for the specifications of mass storage devices.

Tape Drives

All tape drives communicate with the Mentor 6000 system via a Small Computer System Interface (SCSI).

The M6-TPS reel-to-reel tape drive uses 1/2-inch media and writes in 1600 bit-per-inch (bpi) mode at 25 or 100 inches per second (ips) or in 3200 bpi mode at 50 ips. This drive has a maximum storage capacity of 92M bytes and a peak data transfer rate of 160K bytes per second.

The M6-TP8MM helical scan digital tape subsystem uses a 5 1/4-inch form factor and features a streaming speed of 150 ips and linear density of 43,000 bpi. Compact in size (4 1/2 inches high, 6 1/2 inches wide, and 14 1/2 inches deep), this drive is ideally suited for backup and archival storage of data. The maximum storage capacity is 2G bytes, and the peak data transfer rate is 246K bytes per second.

The TP6250CD integrated a reel-to-reel tape subsystem with a disk subsystem. The tape drive uses 1/2-inch media and writes in 6250 bpi mode. An adaptive velocity control feature allows the drive to automatically switch speeds depending on the data transfer rate from the host. The maximum storage capacity is 180M bytes, and the peak data transfer rate is 469K bytes per second. Up to four 850M-byte disks can be installed in the disk subsystem, for a total storage capacity of 3.4G bytes.

Terminals/Workstations

Several video display terminals are available for the Mentor 6000.

Model M1010 offers a 14-inch flat display screen etched for reduced glare. The screen format

Table 1. System Comparison

Model	M6/2	M6/4	M6/8
System Characteristics			
Min./Max. Memory (bytes)	2-8M	2-16M	2-16M
Min./Max. Storage (bytes)	380M max.	760M max.	14G max.
Number of Processors	1	1	1
Number of Terminals	—	—	—
Direct Connect/Shared Access	—	—	—
Max./Recommended No. of Users	128	254	254
Date First Installed	3/87	9/86	9/86
Central Processing Unit & Memory			
Computer Type	32-bit	32-bit	32-bit
Processor Model	Motorola 68020	Motorola 68020	Motorola 68020
Memory Type	ECC	ECC	ECC
Floating-Point Co-Processor	NA	NA	NA
Cache Memory (bytes)	8K	32K	32K
Performance Characteristics			
Multiprocessing Capability (Y/N)	N	N	N
MIPS	—	—	—
Proc. Clock Speed (MHz)	16-25	16-25	16-25
I/O Transfer Rate	—	—	—

Note: A dash (—) in a column indicates that the information is unavailable from the vendor.

Table 2. Mass Storage Devices

Model	M6-DSS2	M6-DSS4	TP6250CD
Size	5¼	5¼	5¼
Formatted Capacity (bytes)	660M	2.6G	695M
Interface/Controller	—	—	—
Average Access Time (ms.)	25	16	16
Data Transfer Rate (bytes/second)	1.2M	1.5M	2.46M

Note: A dash (—) in a column indicates that the information is unavailable from the vendor.

is 80 characters per line, and the keyboard features 27 programmable key modes. The terminal includes an RS-232-C serial interface and a parallel printer port.

Model M2020 also features a 14-inch flat, reduced-glare screen. The display format is 80 or 132 characters per line, by 26 lines. The keyboard offers 44 programmable keys with 88 modes. The terminal includes an RS-232-C serial interface and a printer port which can be used for either a parallel or serial printer. Windowed desk accessories are available and include a clock, calculator, and calendar.

Model 2025 is a dual-host 14-inch terminal which allows a user to access two hosts simultaneously by dividing the screen into two windows. The terminal also features one serial port, which can be used for a second host and/or printer, and one parallel printer port.

Communications

Protocols Supported: TTY, BSC, SDLC.

Network Applications Supported: BSC 2780/3780.

LANs Supported: None.

Operating Environment

All Mentor 6000 systems can operate between 50 and 104 degrees Fahrenheit and within a humidity range of 20 to 80 percent (noncondensing). The Mentor 6000 requires standard power of 100/127 V AC or 220/240 V AC, at 50 to 60 Hz. The physical specifications of the Mentor 6000 are highlighted in the following table.

Physical Specifications				
Model	Height (in.)	Width (in.)	Depth (in.)	Weight (lb.)
M6/2	29	5	25.5	84
M6/4	29	7	27	123
M6/8	29	7	27	123

Sample Configuration Pricing

Sample Mentor 6000 configurations, including prices, are outlined below.

Entry-Level System: Model 2		
Description	Product ID	Price (\$)
CPU	25MHz CPU	—
Main Memory	2M-byte RAM	—
Console	2020 System Console	—
I/O Ports	8 Ports	—
Disk Controller	MSC	—
Disk Drive	140M-byte drive	—
Tape Controller	MSC	—
Tape Drive	60M-byte ¼-inch	—
Workstation Controller	—	—
Printer	—	—
Workstation Display	—	—
Total Hardware	—	26,210
Monthly Maintenance	—	255
Operating System	Mentor O/S	Included
Languages	Databasic	Included
DBMS	Included in O/S	Included
Total	—	26,210

Intermediate-Level System: Model 4		
Description	Product ID	Price (\$)
CPU	25MHz CPU	—
Main Memory	2M-byte RAM	—

Intermediate-Level System: Model 4		
Description	Product ID	Price (\$)
CPU	25MHz CPU	—
Console	2020 System Console	—
I/O Ports	16 Ports	—
Disk Controller	SMSC	—
Disk Drive	380M-byte drive	—
Tape Controller	SMSC	—
Tape Drive	150M-byte ¼-inch	—
Workstation Controller	—	—
Printer	—	—
Workstation Display	—	—
Total Hardware	—	47,310
Monthly Maintenance	—	330
Operating System	Mentor O/S	Included
Languages	Databasic	Included
DBMS	Included in O/S	Included
Total	—	47,310

Large System: Model 8		
Description	Product ID	Price (\$)
CPU	25MHz CPU	—
Main Memory	4M-byte RAM	—
Console	2020 System Console	—
I/O Ports	16 Ports	—
Disk Controller	SMSC	—
Disk Drive	380M-byte drive	—
Tape Controller	SMSC	—
Tape Drive	150M-byte ¼-inch	—
Workstation Controller	—	—
Printer	—	—
Workstation Display	—	—
Total Hardware	—	146,360
Monthly Maintenance	—	845
Operating System	Mentor O/S	Included
Languages	Databasic	Included
DBMS	Included in O/S	Included
Total	—	146,360

Software

The Mentor 6000 operating system is based on the generic Pick operating system. Pick is designed around a relational database and incorporates virtual memory and addressing capabilities.

All Mentor systems are bundled with the Mentor Pick operating system, including a relational database, inquiry language (Info Access), Basic compiler, editor, and JCL processor (PROC). Also included in the bundled software package are an application builder (Implementor) and an office automation package consisting of word processing, a multiuser spreadsheet, and other office automation tools.

Communications

ADDS offers three communications packages for the Mentor 6000.

- *Protege II*—a PC-to-Mentor communications system which includes file transfer, Viewpoint terminal emulation, and print and file server capabilities.
- *Mentor Link*—a Mentor-to-Mentor data transfer utility which allows multiple systems to co-exist in a Mentor network.
- *Mentor/Bisync*—a Mentor-to-mainframe communications system using IBM protocols.

Other Software

There are over 3,000 Pick proprietary and third-party applications that will run on the Mentor 6000. These include a variety of office automation packages such as spreadsheets, word processing, and business graphics. ■