Data General Corp. Eclipse MV/Family: Product Profile

In this report:

Characteristics..... -202

Sample Configuration
Pricing.....-204

System Overview

Data General (DG) Corp.'s flagship product is its Eclipse MV/Family of 32-bit superminicomputers. Introduced in 1983, the product line continues to evolve to compete in today's high-performance, nonproprietary environment. Over the last year, DG has restructured the Eclipse MV/Family and introduced its fifth generation. New systems include the MV/30000 series of midrange systems, and the MV/3500 DC desktop system. These models join the two existing desktop systems at the low end, the MV/1000 DC and the MV/5500 DC, the MV/9500 midrange system, and the MV/40000 and four MV/40000 HA models at the high end.

The Eclipse MV/Family targets a broad range of vertical markets with industry-specific software solutions. Adhering to industry networking standards, the series communicates with other vendors' systems and allows users to access applications running under both UNIX and AOS/VS, DG's proprietary operating system. Positioned as a family of strategic, on-line information management

systems, DG's Eclipse MV/Family offers a wide choice of hardware with high system availability and reliability and scalable growth paths for the future.

Vendor

Data General Corp. 4400 Computer Drive Westboro, MA 01580 (508) 366-8911

Price

\$8,150 to \$53,100 (low-end) to \$464,900 to \$1,585,000 (high-end).

GSA Schedule

Yes.

Competition

DG competes with IBM, Digital Equipment, Hewlett-Packard, Wang, Prime, Bull, NCR, and Unisys in the superminicomputer environment.

—By Marlene H. Schulke Associate Editor/Analyst

Characteristics

See Table 1 for a comparison of system characteristics.

Peripherals

Peripherals communicate with the Eclipse MV/ Family through Small Computer Systems Interface (SCSI), RS-232, or Ethernet controllers and interfaces.

Mass Storage

See Table 2 for specifications on available mass storage devices.

Tape Drives

Various tape drives are supported by the Eclipse MV/Family including QIC cartridge tape drives and streaming, reel-to-reel tape drives. See Table 2 for further details.

Terminals/Workstations

DG's Eclipse MV/Family supports 12-inch and 14-inch monochrome and color terminals. Portable personal computers and personal computer workstations can also be connected to MV systems.

Communications

Protocols Supported: Async, X.25, TCP/IP, XNS, HASP II, SDLC.

Network Applications Supported: X.400, OSI, NFS, SNA 3270/3770, BSC 2780/3780, SNA/LU6.2.

LANS Supported: 802.3 Ethernet, 802.3 STAR-LAN.

Operating Environment

Low-end Eclipse MV models operate between a temperature of 50 and 100 degrees Fahrenheit and a humidity range of 10 and 90 percent noncondensing. Midrange systems require a temperature range between 32 and 131 degrees Fahrenheit and humidity between 10 and 90 percent. The high-end models operate between 50 and 100 degrees Fahrenheit and 20 and 80 percent humidity. Physical specifications for the Eclipse MV/Family follow.

Model	Height (in.)	Width (in.)	Depth (in.)	Weight (lb.)
MV/3500 DC	6.25	19.25	16.25	45
MV/5500	62.9	29.8	57.2	_
MV/9500	10.5	19	27.5	67.5
MV/30000	15.75	17.5	27	74
MV/40000 or MV/ 40000 HA	53	46	28.3	952

Table 1. System Comparison

Model	MV/1000 DC	MV/3500 DC	MV/5500 DC	MV/9500	MV/30000 Model 1
System Characteristics					
Min/Max Memory (bytes)	4M/12M	4M/16M	16M/32M	8M/128M	16M/256M
Expansion Increments (bytes)	2M, 4M, 8M	4M, 8M	8M, 16M	8M, 32M	16M, 32M, 64M
Min/Max Storage (bytes)	40M/3.3G	179M/4G	179M/4G	179M/77G	332M/230G
Number of Processors	1	1	1	1	1
Number of Terminals					
Direct Connect	32	40	144	624	2,472
Max/Recommended # of Users	32/24	40/36	144/100	624/123	2,472/123
Date First Installed	5/89	9/90	4/9Ó	4/90	11/90
Central Processing Unit & Memor	y [′]	•	•	•	•
Processor Model	Proprietary	Proprietary	Proprietary	Proprietary	Proprietary
Memory Type	MOS	MOS	MOS	MOS	MOS
Performance Characteristics					
MIPS	1	3	5	5	5
Purchase Price					
Basic Configuration (\$)	8,150	25,500	53,100	62,000	120,000
Memory/Storage Included (bytes)	4M/40M	4M/179M	16M/320M	8M/320M	16M/332M

Table 1. System Comparison (Continued)

Model	MV/40000	MV/40000 HA Model 1	MV/40000 HA Model 2	MV/40000 HA Model 3	MV/40000 HA Model 4
System Characteristics					
Min/Max Memory (bytes)	32M/128M	64M/256M	64M/256M	96M/256M	128M/256M
Expansion Increments (bytes)	16M, 32M	16M, 32M	16M, 32M	16M, 32M	16M, 32M
Min/Max Storage (bytes)	Not speci- fied/544G	Not speci- fied/1,152G	Not speci- fied/1,152G	Not speci- fied/1,152G	Not speci- fied/1,152G
Number of Processors	1	1	2	3	4
Number of Terminals					
Direct Connect	2,928	4,224	4,224	4,224	4,224
Max/Recommended # of Users	1,024/232	3,456/232	3,456/418	3,456/580	3,456/742
Date First Installed	12/88	1/89	10/88	10/88	10/88
Central Processing Unit & Memor	y [']	•	·	•	•
Processor Model	Proprietary	Proprietary	Proprietary	Proprietary	Proprietary
Memory Type	MOS	MOS	MOS	MOS	MOS
Cache Memory (bytes)	68K	68K	136K	204K	272K
Performance Characteristics					
Multiprocessing Capability (Y/N)	N	N	Υ	Υ	Υ
MIPS	14	14	28	42	50
Proc. Clock Speed (ns)	50	50	50	50	50
Purchase Price					
Basic Configuration (\$)	464,900	629,000	905,000	1,265,000	1,585,000
Memory/Storage Included (bytes)	32M/0	64M/0	64M/0	96M/0	128M/0

Table 2. Mass Storage Devices

Model	6491	6237	6240	6426	4307-TL
Туре	Winchester	Winchester	Fixed Disk	Cartridge	Reel-to-Reel
••				Tape	Tape
Formatted Capacity (bytes)	332M	1.062G	1.7G	6250 bpi	130M
Interface/Controller	SCSI	SCSI	SCSI	SCSI	SCSI
Data Transfer Rate (bytes/sec)-	1.5M	1.6M	2.2M	125 ips	Not specified
Purchase Price (\$)	6,500	56,500	70,000	9,800	55,000

Software

Operating System

In the Eclipse MV/Family, software is classified by CPU model including the operating system software. Usually bundled with each CPU, AOS/VS II is DG's strategic operating system for the next generation of Eclipse MV/Family systems. It supports the full range of Eclipse MV/Family systems including the high-end MV/40000 and MV/40000 HA systems. DG places specific emphasis on AOS/VS II for high availability, reliability, and UNIX interoperability. Since AOS/VS II was built on DG's proprietary AOS/VS, it offers the same commercial features and is 100 percent system call-compatible from AOS/VS. AOS/VS will continue to be offered and maintained by DG for customers who have no plans to migrate to AOS/VS II.

Certain low-end models run the integrated Real-Time Disk Operating System (DG/RDOS), an operating system for timesharing and realtime processing, concurrently with AOS/VS. This operating system allows users to implement languages, CEO office automation software, and other software running under AOS/VS. Besides proprietary operating systems, an advanced implementation of the UNIX operating system, DG/UX, is available for many MV systems. DG/UX is a compatible memory-resident subset of AOS/VS and is a dedicated realtime operating system. The operating system software and license, RTU (right-to-use), is bundled with the packaged system on all models up to the midrange MV/30000 models. It must be purchased separately for the high-end MV/40000 and MV/40000 HA systems.

Communications

A large communications software library is optionally available for the Eclipse MV/Family. For DG environments, Xodiac software and XTS products manage intercomputer communications access to both local area networks using IEEE 802.3 Ethernet protocols and wide-area networks with

industry-standard X.25 protocols. Communications packages available include Xodiac, XTS/SNA Backbone, DG/SNA, AOS/HASP II, TCP/IP, XTS/Std. X.25, and DG/SDLC.

Other Software

In addition to communication packages, program products available for the Eclipse MV/Family include language, utility, database management, engineering/scientific, and office automation software.

Languages include Fortran-77, Basic, PL/1, Cobol, APL, Common Lisp, RPG II, Pascal, C, DG/UX Pascal, and DG/UX Fortran-77. Sort/ Merge, EMACS, Trendview, and ADE Extension utilities; DG/SQL, Present u/DBMS, DG DBMS, INFOS II, and DG/Data Dictionary database management systems; TEO/3D engineering/scientific software; and CEO and CEO Document Exchange II office automation software are optionally available for each CPU class within the family.

Sample Configuration Pricing

Enter Lave		845	/4000	D0
Entry-Leve	ı əvstem:	MU	/ 1000	DC

Entry-Level System. MD/ 1000 DC				
Description	Product ID	Price (\$)		
CPU	Proprietary	8,150		
Main Memory	4M bytes	Included		
I/O Ports	RS-232	Included		
Disk Controller	SCSI	Included		
Disk Drive	40M bytes	Included		
Tape Controller	SCSI	Included		
Tape Drive	24M bytes	1,500		
Workstation Controller	12-port Async Controllers	2,250		
Printer	300 lpm Matrix	7,790		
Workstation Display	11 14-inch Monochrome	5,610		
Total Hardware		25,300		
Monthly Maintenance	Base Configuration	79		
Operating System	AOS/VS II RTU	Included		
Languages	Various	Optional		
DBMS	Various	Optional		
Total		Dependent on Software		

Intermediate-Level System: MV/30000 Model 1

Description	Product ID	Price (\$)
CPU	Proprietary	120,000
Main Memory	16M bytes	Included
I/O Ports	RS-232	Included
Disk Controller	SCSI	Included
Disk Drive	332M bytes	6,500
Tape Controller	SCSI	Included
Tape Drive	130M bytes	9,800
Workstation Controller	3 IAC/16 Channels	14,325
Printer	10 300 lpm Matrix	77,900
Workstation Display	40 14-inch Monochrome	20,400
Total Hardware		248,925
Monthly Maintenance	Base Configuration	465
Operating System	AOS/VS II RTU	Included
Languages	Various	Optional
DBMS	Various	Optional
Total		Dependent on Software

Large System: MV/40000

Description	Product ID	Price (\$)
CPU	Proprietary	464,900
Main Memory	32M bytes	Included
I/O Ports	RS-232	Included
Disk Controller	SCSI	Included
Disk Drive	5 1.062G bytes	282,500
Tape Controller	SCSI	Included
Tape Drive	Reel to Reel	55,000
Workstation Controller	11 IAC/16 Channels	52,525
Printer	12 300 lpm Matrix	93,480
Workstation Display	145 14-inch Monochrome	73,950
Total Hardware		1,022,355
Monthly Maintenance	Base Configuration	1,275
Operating System	AOS/VS II RTU	17,250
Languages	Various	Optional
DBMS	Various	Optional
Total		Dependent on Software