Digital Equipment Corp. VAX 4000

Product Enhancement

Digital Equipment Corp. has enhanced its low-end VAX 4000 Series with the addition of a new entry-level model.

The new model is the VAX 4000 Model 200, which is based on Digital's proprietary RISC (reduced instruction set computing) I/O technology and CMOS CPU. The system runs Digital's VMS operating system and VAXeln development tool/specialized runtime environment.

The current VAX 4000 product line now includes the Model 200 and Model 300.

Product Definition

The Model 200, the new entry point in the VAX 4000 line, is intended to be used as a server or a timesharing system for distributed transaction processing. The target customer base includes departments and small work groups that need a system that will complement higher level VAX models. The Model 200 supports up to 64M bytes of main memory and 21G bytes of storage.

—By Margaret M. Jacobs
Assistant Editor

Analysis

Within its own family, the VAX 4000 Model 200 provided a new entry-point for the Series. While the Model 300 represents the future growth platform of the VAX 4000 Series, the Model 200 protects the Qbus memory and peripherals investment of MicroVAX 3000 users. The MicroVAX 3000 machines can be upgraded to the VAX 4000 Model 200 via a CPU swap. The Model 200 replaces the MicroVAX 3400.

The Model 200 uses a slightly different CMOS processor, different memory, and different CPU interconnect architecture than the Model 300, making upgrades from the 200 to the 300 impossible. Users hoping to expand beyond the 200 must use a dual host DSSI configuration to link the Model 200 to the 300.

Looking at the larger VAX family on a continuum, the 4000 line fits above the MicroVAX 3000 line and just below the VAX 6000. The VAX 4000 Model 200, offering a 100 percent price/performance increase over its MicroVAX 3000 predecessors, provides 5 MIPS rather than MicroVAX 3000's 4 MIPS for the same price. The Model 200's memory architecture with a 40M-byte/second

Table 1. System Comparison

Model	VAX 4000/200	VAX 4000/300
System Characteristics		
Date of Introduction	January 1991	July 1990
Date of First Delivery	January 1991	July 1990
Operating System	VMS, VAXELN	VMS, VAXELN
Upgradable from	Not applicable	Not applicable
Upgradable to	MicroVAX 3000	MicroVAX II, 3500/3600, and VAX11/750/780/785
MIPS	5	8
CPU cycle time (ns.)	35	28
Memory		
Minimum Capacity (bytes)	8M	32M
Maximum Capacity (bytes)	64M	128M
Cache memory (bytes)	—	128K on the board, 56 ns.
Disk Storage		
Minimum capacity (bytes)	381M	381M
Maximum capacity (bytes)	21G	28G
Communications Protocols	Ethernet	Ethernet
Purchase Price (basic) ($)	25,000	106,850

bandwidth is almost twice that of the MicroVAX 3800/3900.

Compared to the Model 300, the Model 200 offers 5 MIPS at $25,000 for the multiuser timesharing configuration, whereas the Model 300 offers 8 MIPS at $106,850 for a base configuration.

In contrast, the VAX 6000, meant for use in the corporate data center, starts at $66,000 for the Model 310.

Competition

In terms of power and performance in the distributed transaction processing arena, the VAX 4000 Model 200 is positioned with Hewlett-Packard HP 3000 Model 932 and the IBM AS/400 Model B50. The Model 200 also competes with the Compaq Systempro 486 and Sun SPARCserver in the server market.

System Features

See Table 1 for system specifications.

System Configurations

The Model 200 is available in five configurations; three are available in both large and small pedestal arrangements. The small pedestal includes six total (four available) Qbus slots in a BA215 enclosure. The large pedestal includes 12 total (10 available) Qbus slots in a BA430 enclosure.

Configurations are:

- VAX 4000 Model 200, Timesharing: small pedestal—8M bytes of memory, 110-user VMS license; large pedestal—16M bytes of memory, 120-user VMS license.
- VAX 4000 Model 200, Timesharing Dual Host: large pedestal only—two 16M-byte memory modules, two unlimited-user VMS licenses.
- VAXserver 4000 Model 200: small pedestal—8M bytes of memory, VMS file and application server license, DECnet VAX full function license, VAXcluster license, and VMS/ULTRIX Connection license; large pedestal—same as above with 16M bytes of memory and no VAXcluster license.
- VAXserver 4000 Model 200, Dual Host: large pedestal only—two 16M-byte memory modules, VMS file and application server license, DECnet VAX full function license, VAXcluster license, and VMS/ULTRIX Connection license.

- rtVAX 4000 Model 200, Realtime: small pedestal—8M bytes of memory, VAXELN license; large pedestal—16M bytes of memory, VAXeln license.

Availability

The VAX 4000 Model 200 is available immediately.

Base Configuration Pricing

VAX 4000 Model 200, Timesharing, small pedestal: $25,000.
VAX 4000 Model 200, Timesharing, large pedestal: $46,000.
VAX 4000 Model 200, Timesharing, Dual Host, large pedestal: $136,930.
VAXserver 4000 Model 200, small pedestal: $20,000.
VAXserver 4000 Model 200, large pedestal: $32,000.
VAXserver 4000 Model 200, Dual Host, large pedestal: $60,740.
rtVAX 4000 Model 200, Realtime, small pedestal: $16,420.
rtVAX 4000 Model 200, Realtime, large pedestal: $28,180. ■