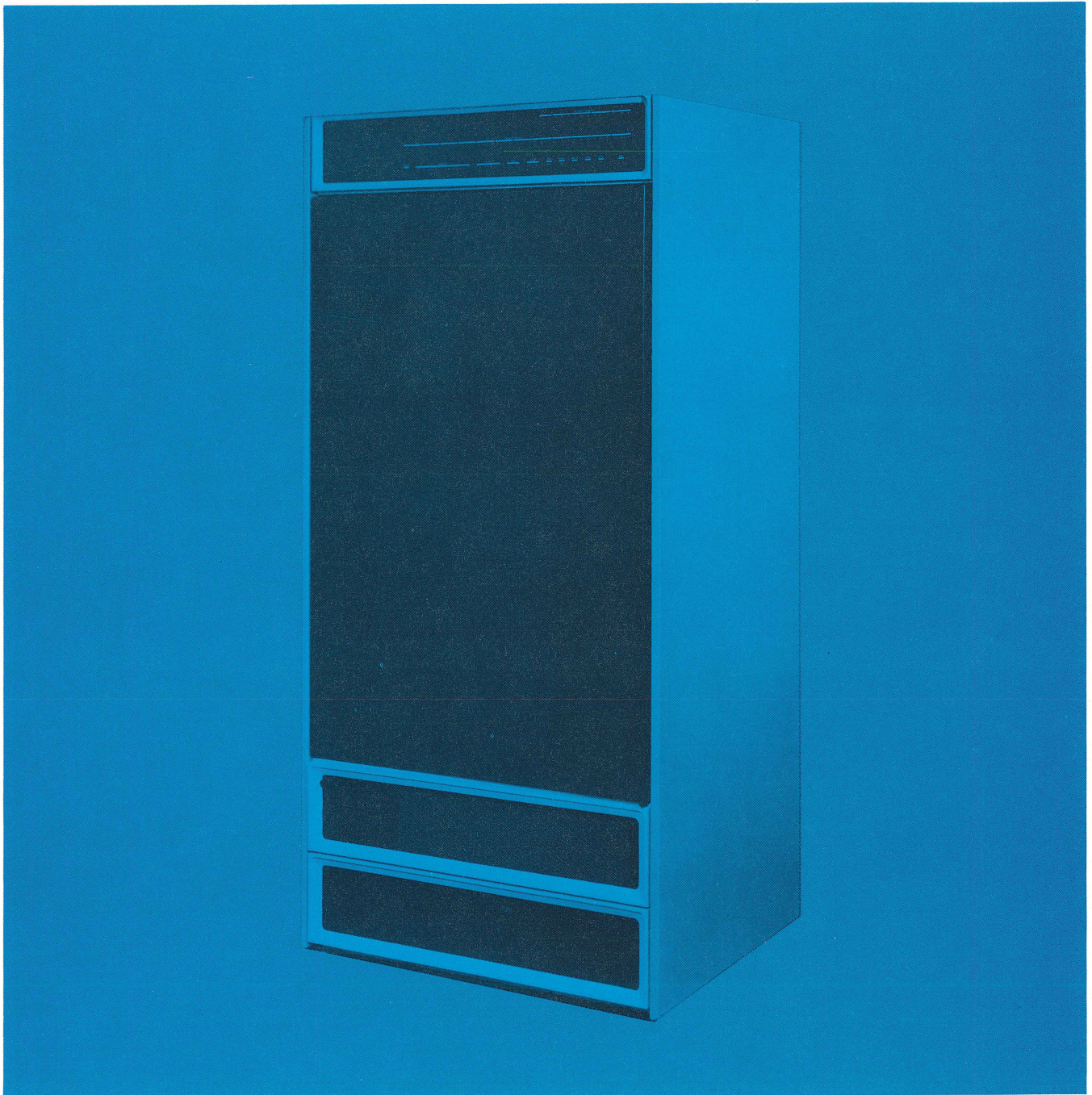


DIGITAL EQUIPMENT CORPORATION

dec system 10

OPTION BULLETIN

ME10 MEMORY SYSTEM



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FEATURES

- 550 nanosecond access time
- Overlapped memory operation
- Two- or four-way interleaving
- 22-bit address logic
- 256K words (36 bits plus parity per word) directly addressable memory (maximum)
- Compatible with both KA10 and KI10 processors

The ME10 Memory System permits DECsystem-10 users to expand the KA10 and KI10 system memories for maximum performance. The KI10 in particular benefits from the advanced control logic features of the ME10 Memory System. Included is an overlapped memory control logic which permits the KI10 to transmit an address to a second ME10 memory bank for the next data fetch while waiting for the preceding data request to be satisfied by another memory bank. This feature gives KI10/ME10 configurations a high throughput rate under heavy processing loads.

The ME10 Memory System is a ferrite-core memory having a nominal read access time of 550 nanoseconds, a maximum read access time of 610 nanoseconds, and a cycle time of one microsecond. The stack arrangement is a 3-wire, 3D type with 16K words per module (a word is 36 bits plus parity and K is a factor of 1024). Up to 16 ME10 modules may be combined to provide 256K words of high speed memory. Each module may contain one to four memory ports for connection to processors, data channels, and the data channel multiplexer. Two- or four-way interleaving is provided by switches on each memory module. Address logic decodes a 22-bit address, providing 4096K words of addressing capability.

Because of the asynchronous operation of the DECsystem-10 processor, the ME10 memory can be intermixed with DECsystem-10 memory systems of various speeds to provide the exact performance required.

SPECIFICATIONS

Word Size	36 bits plus parity
Minimum Memory Size	16K words (K = 1024)
Expansion Module Size	16K words
Maximum Memory Size	256K words
Read Access Time	
Typical	550 Nanoseconds
Maximum	610 Nanoseconds
Memory Cycle Time	1.0 microsecond
Voltage	115 or 230 VAC
Current	
Operating	15.2A @ 115V or 7.6A @ 230V
Surge	28A @ 115V or 14A @ 230V
Power	1600 Watts
Heat	5400 BTU's/hr.
Dimensions	
Height	69.0 in, 1.75m
Width	32.5 in, 0.84m
Depth	28.0 in, 0.71m
Weight	740 lb, 336 kg
Operating Temperature	60° to 95° F 15° to 35° C
Storage Temperature	40° to 110° F 5° to 45° C
Relative Humidity	20° to 80%

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