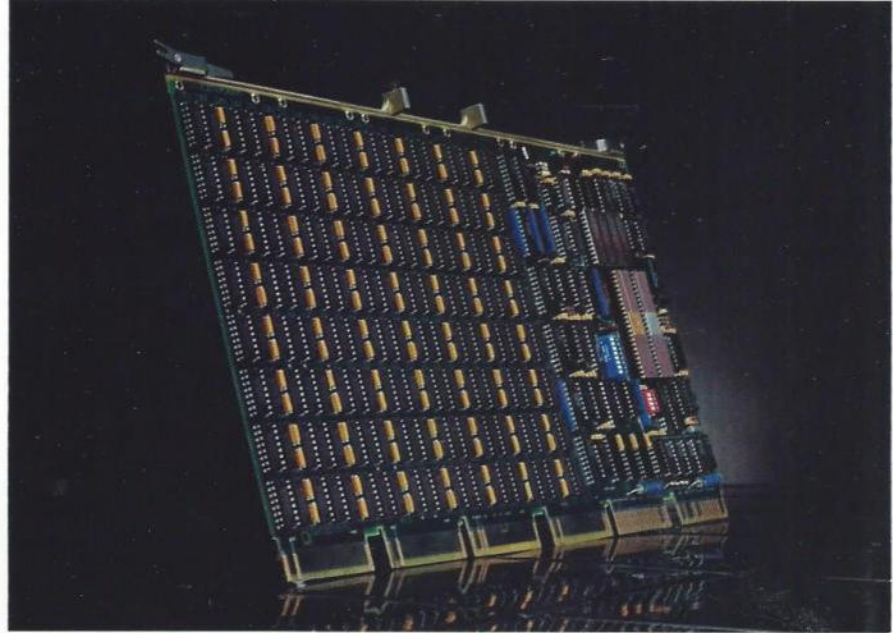


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Now One Module Does the Work of Four...and Costs Much Less.

The MS11-PB, the first UNIBUS memory to be introduced with 64-Kbit RAMS, brings a tremendous cost savings to users. In the past it took four 256-Kbyte modules to supply 1 Mbyte of capacity. With MS11-PB, only one memory module and one set of control logic are needed. When used with the PDP-11/44 and PDP-11/24 processors, the MS11-PB allows for system configurations of up to 4 Mbytes of memory. And the memory starting address can be set at any 16-Kbyte boundary within the 4,096-Kbyte extended UNIBUS address space.

Highlights

- MS11-PB memory offers much greater reliability and lower service costs than current 16K RAM memories.
 - Increased density enables MS11-PB memory to provide one Mbyte of MOS memory on a single hex-height module, for exceptional compactness.
 - The 22-bit addressing capability permits the configuration of PDP-11/44 and -11/24 systems of up to four Mbytes of memory on the extended UNIBUS, giving your system the greatly increased capacity.
 - Error Correction Control corrects single-bit errors transparently and detects double-bit errors, ensuring data integrity.
 - An Error Trap enables the CPU to trap double-bit errors before the erroneous word is used by the system, providing high reliability.
 - Error information is easy to access because it is stored visually in LEDs.
 - MS11-PB memory can be intermixed with any existing PDP-11/44 or -11/24 memory and uses PDP-11 operating systems, for complete PDP-11 compatibility.
 - Performance has been improved at the PDP-11/44 system level during write cycles, saving you time.
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MS11-PB Offers Tremendous Savings in a Trim Package.

The MS11-PB memory offers an inexpensive way to enhance the performance of your processor. Increased memory allows you to implement a broader range of applications and give more users access to the system. You get a lot more processor for a little more money.

Digital's MS11-PB memory packs into a single hex-height module an extended UNIBUS interface, timing and control logic, error-correction-code (ECC) logic, and a one-Mbyte MOS storage array. This module also contains circuitry for ECC initialization and memory refresh and a control and status register (CSR) for diagnostics.

MS11-PB Lets You Add Memory and Leaves You Room for Options.

Your minicomputer should be an investment in future expansion as well as in present functionality. Digital's MS11-PB memory provides this expansion at little additional cost. In one MS11-PB memory module come the memory and functionality previously available only by adding four times as many modules. That leaves three open slots in your processor's backplane for whatever options you wish to incorporate in the future. With MS11-PB, the memory for your applications can grow now, and your system's options can grow in the future.

Battery Backup Keeps Your System's Memory Secure.

With MS11-PB, power failures don't need to be memory failures. An optional battery backup unit supports the memory power supply regulator(s) for up to 20 minutes during temporary power failures.

MS11-PB Is Manufactured to Digital's High Quality Standards.

MS11-PB is like every other product from Digital Equipment Corporation. Quality comes first. We monitor our products for quality throughout the production process. Digital uses only premium dynamic MOS RAM in its MOS memories. Each RAM supplier undergoes a stringent qualification process that includes extensive life-test and characterization-test processes. At the memory-module level, thermocycle and voltage/timing margin testing are done. An ongoing reliability testing system ensures that we produce the highest quality product.

Specifications

Physical

Height: 21.6 cm (8.5 in.)

Length: 38.1 cm (15 in.)

Width: 1.27 cm (.5 in.)

Environmental

Storage Temp. Range
-40°C-66°C (-40°F-140°F)

Operating Temp. Range
5°C-60°C (41°F-140°F)

Relative Humidity
10%-90% noncondensing

Electrical

Requires no special power, only normal +5 V present on PDP-11/44-24.
Maximum operating power 38 watts.

Performance

Read Cycle	(DATF) 750 ns
Write Cycle	(DATO) 620 ns
Read Access	(DATI) 535 ns
Write Access	(DATO) 125 ns

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