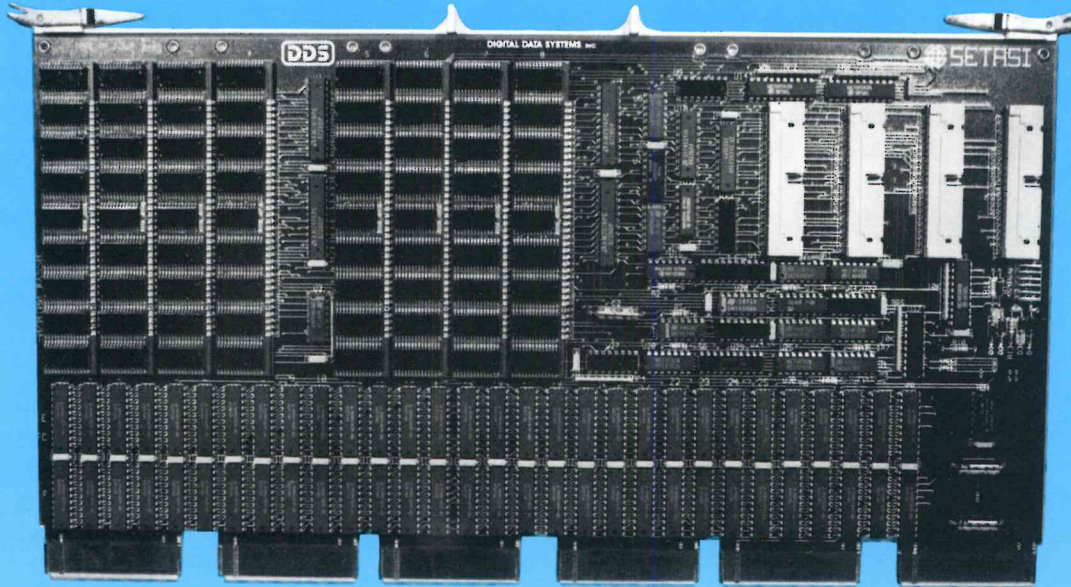


M O D E L

PEP-70

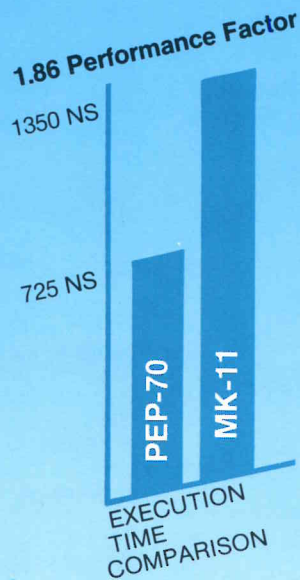
PDP-11/70

PERFORMANCE ENHANCEMENT PRODUCT



FEATURES

- Memory Access Time, 15ns
- Full 4MB Capacity on one HEX board
- Battery Back-Up
- Plug and Play, plugs into CPU back plane
- Replaces all present memory including cabinets and associated hardware
- Reduces system floor space
- Increases system data rate capability



- Improves User Response Time under heavy CPU and/or UNIBUS DMA activity
- Allows Upgrade to Faster Disk Technology
- Totally system transparent except for performance increase
- One year pay back by eliminating maintenance cost
- Lifetime Warranty with 24 Hour Replacement

WORLD'S FASTEST PDP-11/70 MEMORY



DIGITAL DATA SYSTEMS INC.
 1551 N.W. 65TH AVENUE • FORT LAUDERDALE, FL 33313
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(305) 792-3290
 TWX: 910-997-4751 (DIGITAL)
 FAX: 305-581-1325



DESCRIPTION

MODEL PEP-70

Digital Data Systems, Inc. and SETASI Research and Development, the companies that brought you the World's Fastest UNIBUS Memory, now brings you the World's Fastest PDP 11/70 Memory, the PEP-70.

The PEP-70 is a Fast 4MB Memory all on one plug-and-play module that resides in the CPU backplane. The PEP-70 eliminates all existing memory including cabinets and associated hardware.

The PEP-70 increases CPU and Bus throughput, thus allowing a previously CPU bound system to have the same user response as a lightly loaded system. The additional UNIBUS bandwidth allows you to increase I/O capacity, I/O transfer rates, and user loads.

The PEP-70, when installed, is **fully compatible** with present hardware and operating system software. Installation is a simple process with minimum system down time.

Over two decades of design experience enables us to offer performance products of unfailing reliability at the lowest possible cost. How do you know?? Because we have a lifetime warranty and a 24-hour replacement guarantee.

PERFORMANCE DATA

The performance of a computer is measured by how fast it can EXECUTE an instruction. Therefore anything that can be done to reduce this time will increase computer performance.

| DESCRIPTION | PEP-70 INSTALLED | MK-11 MEMORY INSTALLED |
|----------------------|------------------|------------------------|
| CPU | 120ns | 120ns |
| CACHE | 180ns | 180ns |
| MEM. OVERHEAD | 410ns | 410ns |
| MEM. ACCESS | 15ns | 640ns |
| TOTAL EXECUTION TIME | 725ns | 1350ns |

The following illustrates the effects that the PEP-70 has, versus MK-11 memory, on reducing execution time of a MOVE instruction (MOV RO R1).

725 vs 1350 equals a 1.86 Performance Factor

| ACTUAL BENCH MARK RUN TIMES | PEP-70 Time | MK-11 Time |
|---|-------------|-------------|
| Running DEC diagnostic "EMJA" ½ MB, 1 PASS | 555 seconds | 994 seconds |
| Running Speed Test "Cache on" 28K MOVs (above) 10,000/8 Passes 230,686,720 Instructions Executed | 59 seconds | 99 seconds |

555 vs 994 equals a 1.79 Performance Factor

59 vs 99 equals a 1.68 Performance Factor

BOTTOM LINE, IF YOU'RE CPU BOUND, THE PEP-70 WILL HELP!!

SPECIFICATIONS

| | | |
|--|---|-------------------------------|
| MEMORY CAPACITY: | 2 MB or 4 MB | |
| OPERATING SPEEDS: | Read access time 15nsec.* | Memory cycle time 100nsec. |
| *Time measured at memory interface from logic signals MSTARTL to DRDYL | | |
| POWER REQUIREMENTS: | | |
| Voltage | +5VDC | |
| Operating | 1.3A (6.5W) | |
| Battery power | 1.2W | |
| Battery Back-up | 2.5 Ahr (8hrs) | |
| MECHANICAL: | | |
| Dimensions | 8.075in x 15.68 in (Standard HEX PC board) | |
| Weight | 2.0 lbs. | |
| ENVIRONMENTAL: | Meets all requirements specified for applicable system type by manufacturer, including class C. | |

NOTES: DEC, PDP-11 and UNIBUS are registered trademarks of Digital Equipment Corporation. PEP-70 is a trademark of DDS and SETASI.

THE INTELLIGENT SOLUTION



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