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## CPU 486(MCM-DX) CARD

### Features

- Processor Rates of 25 to 50Mhz and up to 100Mhz using clock doubled CPU's
- Full PC/AT Hardware/Software Compatibility
- 16-Bit PC/104 Expansion Bus
- Up to 32 Mb of ruggedized onboard DRAM
- Two Serial Ports with RS-232/RS-422/RS-485 capability
- Standard Centronics Parallel Printer Port
- Watchdog Timer with Power Fail Reset
- 16-Bit Dual IDE Disk Interface
- +5 Volt only operation

### General Description

The MCM-DX is a small, high-performance embeddable computer system on a single STD-BUS board. It can be populated with any of the popular '486 Family of chips. It's full PC/AT hardware complement and industry standard AWARD BIOS assures full hardware and software compatibility with PC software and operation systems. The MCM-DX includes onboard interfaces for floppy disks, IDE fixed disks, parallel printer, and two serial channels with RS-232, RS-422, or RS-485 capability on either or both channels. A full 16-Bit PC/104 expansion BUS is provided in addition to the STD-Bus interface for further expansion to an entire industry of add on peripherals including high speed

VGA controllers, sound and speech modules, SCSI controllers, and literally hundreds of other options available from WinSystems and variety of vendors supporting the PC/104 standard. Up to 32-megabytes of factory installed DRAM is supported on board. An onboard Silicon Disk socket supports a solid-state disk of up to 1 Megabyte in size and can utilize SRAM, PEROM (Flash), EPROM or the M-Systems Disk-On-Chip as the disk media. Boot capability is provided onboard and a setoff utilities and drivers are provided to make silicon disk based system very user friendly.

### Specifications

#### Electrical

Bus Interface:	STD-8088/188 Compatible PC/104 8-bit/16-bit expansion bus
System Clock:	Jumper Programmable from 2Mhz to 100Mhz
Interrupts:	100Mhz level input
VCC:	+5V +/-5% at 930 mA typical at 40Mhz X 2 on a T1 486DX2 with 32 Mb DRAM
VCC1:	+12V +/-5% (Not required. PC/104 or Cooling Fan Use Only)
VCC2:	-12 +/-5% (Not required. PC/104 Use only)

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## Memory

Addressing: 64 Mb addressing (32Meg max onboard)

BIOS ROM Socket: 128Kb EPROM

DRAM Memory: 16 SMT J-lead locations on both sides of the board supporting factory configurations from 1M to 32 Meg.

SSD Memory: One 32-pin JEDEC Standard socket supporting 4-Mb SRAM, 4-Mb PEROM, 4-Mb EPROM, 16-Mb EPROM or the M-Systems DOC Module.

## Environmental

Operating Temperature: -40° to +70°C.

Non-Condensing Humidity: 5 to 95%

## Configuration

- Jumpers as shown in diagram
- J1 to touch screen
- J1 to RS232 connector on cabinet bulkhead
- J16 to floppy drive

