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# MSC-259

[\(Picture\)](#)

## *Pentium Half-Size PCI-Bus All-in-One CPU Card*

### **Introduction**

The MSC-259 is an advanced high performance single board computer based on 32-bit PCI Bus architecture. It is half-size CPU board supporting Intel P54C/P55C, Cyrix M1, and AMD K5 CPU series. The PCI Bus slot with PC/104 Bus interface makes this card the most ideal in high speed application.

It provides with two 72-pin SIMM sockets for installing up to 128MB DRAM choosing from FPM, EDO, BEDO RAM and comes with 256KB high performance Pipelined Burst SRAM or 512KB upgradable. On board features include two serial ports RS-232 and optional RS-422/485, bi-directional parallel port with ECP/EPP function. In addition, an enhanced IDE controller and keyboard, PS/2 mouse interface, as well as three stages Watch-dog timer function on board to compose as a full function SBC.

In addition, on board optional Disk-On-Chip SSD from M-System with capacity of 1MB to 2MB (4MB, 6MB, 12MB will be available in the 2<sup>nd</sup> quarter of 1997) provides excellent storage for vital data.

### **Features**

- Intel P54C/P55C, Cyrix M1 and AMD K5
- AMI Flash BIOS, Plug & Play function
- PC-104 Bus interface
- PCI Bus slot interface
- 256KB to 512KB Pipelined Burst SRAM
- Up to 2MB M-System Disk-On-Chip SSD (Option)
- Two 72-pin SIMM sockets for up to 128MB
- 16-bit I/O decoding feature
- External RTC BQ3287A for 10-years data retention
- Non-loss CMOS setup
- Up to 4 IDE HDD with PIO mode 5
- PnP 2S/1P/PS2 Keyboard and Mouse port
- Optional RS-422/485 serial interface
- 3-stage of Watch-dog Timer

### **Specifications**

<b>Main Processor</b>	Intel P54C/P55C, Cyrix M1, AMD K5
<b>Main Memory</b>	Up to 128MB on board two 72pin SIMM Socket
<b>Cache Memory</b>	256KB up to 512KB Pipeline Burst SRAM
<b>BUS Interface</b>	PC/104 and PCI bus
<b>System BIOS</b>	AMI Flash BIOS
<b>AT Compatible Controllers</b>	* 16-level interrupts * 7 DMA channels

	* 3 Programmable counter-timers
<b>Watch-dog Timer</b>	3 stage of watchdog timer port 1s/10s/30s
<b>DS12887A</b>	* 10-year data retention * 128 byte RAM locations * CMOS RAM memory can be cleared
<b>Built-in Connectors</b>	* Reset switch and key-lock switch * Hard disk LED * External speaker
<b>All-in-one Features</b>	* Two EIDE interface ports. * Two RS-232/422/285 serial ports * One parallel port (EPP/ECP) * One FDC * PS/2 mouse connector
<b>Special on-board Connectors</b>	* PC/104 expansion bus * 1 or 2MB M-System flash disk * CPU Clock throttle control
<b>Keyboard Connectors</b>	PS/2 connector and 5-pin shrouded external keyboard connector
<b>Power Requirements</b>	+5V @3.0A typ. (2pcs of SIMMs) +12V @15mA typ
<b>PCB</b>	6-layer PCB design
<b>Dimensions (L x H)</b>	7.283" x 4.783"
<b>Operating Temperature</b>	0 to 60°CJ (32 to 140°CK)
<b>Storage Temperature</b>	-20 to +85°CJ(-4 to 185°CK)
<b>Humidity</b>	5% to 95%, Non-condensing
<b>MTBF</b>	50,000 hours