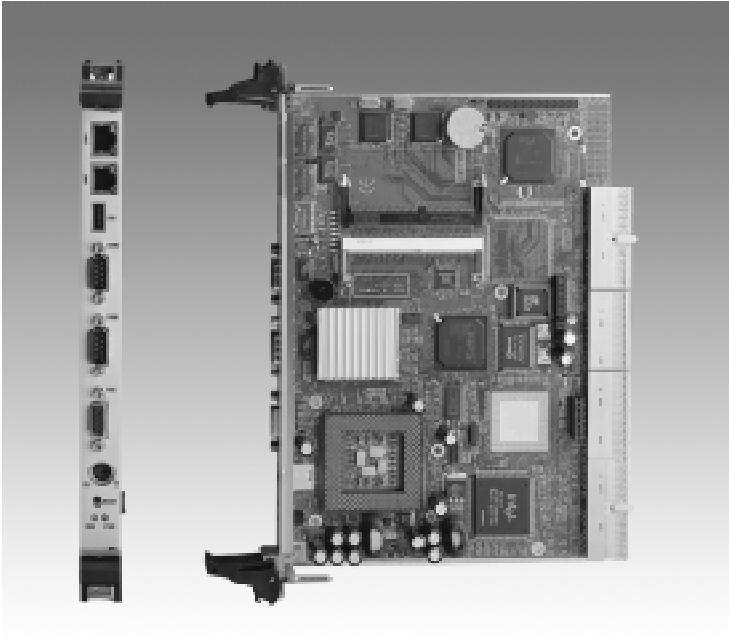


MIC-3377/M 6U CompactPCI™ Pentium® III/ Celeron™ SBC with VGA/Dual LAN



Features

- Socket 370 for Intel® Pentium® III and Celeron™ processors
- Intel® 440BX chipset
- Two SO-DIMM sockets support up to 512 MB SDRAM. Supports ECC
- One/Two PCI-to-PCI bridges drives up to 7/14 CompactPCI™ slots
- Dual on-board 10/100Base-TX fast Ethernet with RJ-45 connectors
- On-board high-performance AGP VGA display
- Connection to four Ultra DMA/33 high speed IDE devices through J3 connector
- Accepts CompactFlash™ memory card on the rear I/O transition board
- Compact single slot wide

Introduction

The MIC-3377/M is a 6U CompactPCI™ single board computer. Designed for the socket 370 Pentium® III and Celeron™ processors, the MIC-3377/M is a cost-effective solution for performance-demanding applications. The MIC-3377/M has many functions on a single board within a single-slot width, saving valuable CompactPCI™ slots for peripheral boards.

High Performance Yet Compact Celeron™ Processor

The MIC-3377/M accepts an Intel® Pentium® III or Celeron™ processor with the PGA370 package. The Pentium® III processor has on-chip 256 KB and the Celeron™ processor has on-chip 128 KB L2 cache memory providing high performance with low cost. The MIC-3377/M supports a 66/100 MHz CPU bus clock, allowing upgrade to future higher speed CPUs.

Single and Dual PCI-to-PCI options

The MIC-3377/M is available in two versions - MIC-3377/M and MIC-3377D/M. The MIC-3377/M with single PCI-to-PCI bridge is applicable up to 8-slot enclosure (MIC-3032/MIC-3021/MIC-3033) and drive up to seven compactPCI™ slots, while the MIC-3377D/M with optional dual PCI-to-PCI bridges is applicable up to 14-slot enclosure (MIC-3031) and drives up to 14 compactPCI™ slots.

Complete I/O Functions

The MIC-3377/M offers all the functions of an industrial computer with the rugged Eurocard form factor. It offers an AGP VGA display, two serial ports, one USB port, two auto-switchable fast Ethernet interfaces, and one PS/2 keyboard/mouse connector. Standard connectors for all the functions are available on the front and rear panel. The front panel also has LEDs for power status, HDD operation and Ethernet communication, as well as a reset button.

The built-in high speed PCI IDE controller provides two separate IDE channels with Ultra DMA/66 mode. The User-defined J3 connector is designed to support up to four IDE devices and two FDDs. These drives

can simply be connected to the backplane or to the rear transition board for easy service and maintenance. The MIC-3377/M also accepts a CompactFlash™ memory card on the rear transition board. To protect the system, a watchdog timer can automatically reset the system if the system stops due to a program bug or EMI.

Optional rear transition boards (MIC-3301 and MIC-3302) can be used to connect all the inputs and outputs on the rear panel. It is recommended to select the MIC-3302 or MIC-3302F for the MIC-3377/M's rear connection, and the MIC-3301 for the MIC-3377D/M's.

Fanless Heat Sink with Space-saving Design

A special fanless heat sink is designed for MIC-3377/M. For ventilation, it only requires external cooling air from the chassis fans. This enables the MIC-3377/M to use an Intel® Pentium® III or Celeron™ processor within a merely single-slot wide space.



The MIC-3377/M with CPU heat sink

Specifications

Standard SBC Functions

- **CPU:** Socket 370 Pentium® III CPU up to 850 MHz or Celeron™ CPU up to 566 MHz
- **BIOS:** Award 2 Mb flash memory
- **Chipset:** Intel® 440BX chipset
- **Front Side Bus Clock:** 100 MHz for Pentium® III CPU and 66 MHz for Celeron™ CPU
- **Bus Interface:** 32-bit/33 MHz, PICMG 2.0 compliant
- **2nd level cache:** CPU built-in 256 KB (Pentium® III) or 128 KB (Celeron™) on die
- **RAM:** Two 144-pin SO-DIMM sockets. Support PC-100 SDRAMs with memory capacity up to 512 MB. Support ECC.
- **Enhanced IDE interface:** Handles up to 4 IDE devices. Supports PIO mode 4, DMA/33, and DMA/66 mode.
- **Floppy disk drive interface:** Supports up to two floppy disk drives
- **Series ports:** Two RS-232 ports with 16C550 compatible UARTs
- **USB interface:** One USB connector with fuse protection. Complies with USB specification 1.0
- **Keyboard/Mouse connector:** One 6-pin mini-DIN connector on the front panel.
- **Watchdog timer:** Can generate a system reset. Software enabled/disabled. Time interval is from 1 to 63 seconds, jumperless with run-time setup.
- **PCI-to-PCI bridge:** One (for MIC-3377/M) or two (for MIC-3377D/M) Intel® DEC 21150 controller chips, drives up to 7/14 PCI master peripherals

10/100Base-TX Ethernet Interface

- **Controller chips:** Two Intel® 82559 Fast Ethernet controller chips
- 10 Mbps or 100 Mbps auto-switchable
- Dual LAN ports on the front panel

AGP VGA Interface

- **Controller:** Intel® C&T 69000
- AGP 1.0 compliant, 66 MHz
- **Display memory:** On-chip 2 MB SDRAM
- **Display resolution:**

Resolution	Number of Colors
640 x 480, 800 x 600, 1024 x 768, 1280 x 1024	256 (8 bits)
640 x 480, 800 x 600, 1024 x 768	65,536 (16 bits)
640 x 480, 800 x 600	16.8 million (24 bits)
640 x 480	4.3 billion (32 bits)

Optional Rear I/O Boards

Models name	MIC-3301	MIC-3302	MIC-3302F
PS/2 keyboard & mouse	V	V	V
COM ports	1	1	2
USB ports	-	1	2
LAN ports	-	2	2
VGA connectors	-	V	V
SCSI connectors	-	V	V
IDE connectors	2	2	2
FDD connectors	V	V	V
CompactFlash™ socket	V	V	V
Slot Width	2	1	2

Mechanical and Environmental Specifications

- **Operating temperature:** 0 ~ 55° C (32 ~ 131° F), depending on CPU installed
- **Storage Temperature:** -20 ~ 80° C (-4 ~ 176° F)
- **Humidity (Operating and storage):** 5 ~ 95% (non-condensing)
- **Power Consumption:** +5 V @ 2.1 A; +3.3 V @ 2.5 A; +12 V @ 640 mA
- **Board size:** 233.35 x 160 mm (6U size), 1-slot (4 TE) wide
- **Weight:** 0.8 Kg (1.8 lb)
- **Shock:** 20 G (operating); 50 G (storage/transit)
- **Random vibration:** 1.5 Grms

Ordering Information

- **MIC-3377/M:** Single-slot 6U CompactPCI™ Pentium® III/Celeron™ processor board with single PCI-to-PCI bridge, VGA/dual LAN, utility CD-ROM disc, manual, and heat sink
- **MIC-3377D/M:** Single-slot 6U CompactPCI™ Pentium® III/Celeron™ processor board with dual PCI-to-PCI bridge, VGA/dual LAN, utility CD-ROM disc, manual, and heat sink
- **MIC-3301:** Two-slot 6U rear transition board. Provides connection to COM 1, keyboard and mouse on rear panel. On-board connectors for 2 x IDE, floppy, and CompactFlash™ memory card. On-board HDD mounting bracket
- **MIC-3302:** Single-slot 6U rear transition board. Provides connection to KB/MS, 1 x COM, 1 X USB, 2 x LAN and VGA port on rear panel. On-board connectors for SCSI, 2 x IDE, floppy, and CompactFlash™ memory card.
- **MIC-3302F:** Two-slot 6U rear transition board. Provides connection to KB/MS, 2 x COM, 2 X USB, 2 x LAN and VGA port on rear panel. On-board connectors for SCSI, 2 x IDE, floppy, and CompactFlash™ memory card. One-slot wide 2.5" HDD mounting bracket