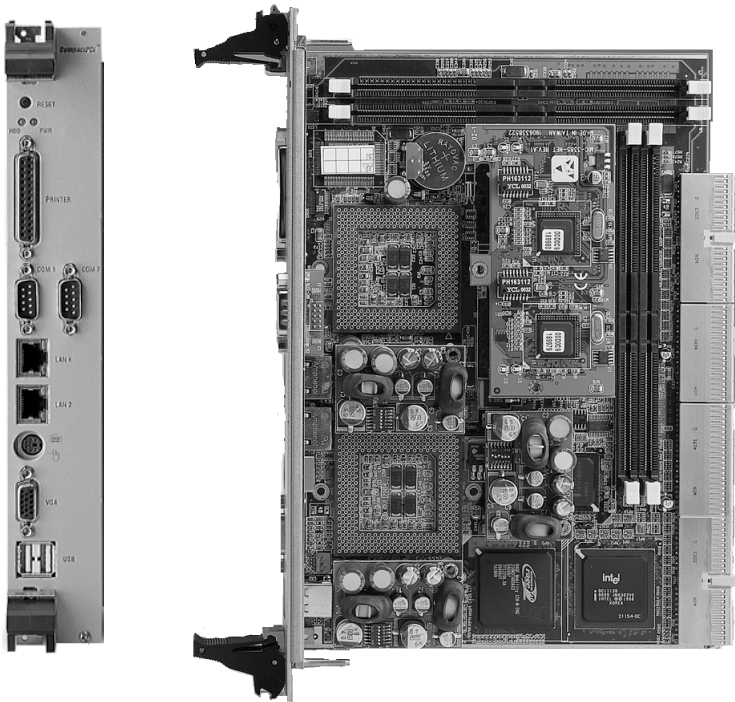


MIC-3385 6U CompactPCI™ Dual Pentium® III SBC with VGA/Dual LAN



Features

- Dual/Single socket 370 Pentium® III processor
- Intel® 840 chipset
- 100/133 MHz front side bus
- 64-bit / 66 MHz PCI bus interface
- Dual on-board 10/100Base-TX Fast Ethernet with RJ-45 connectors
- Dual RAMbus memory channels support up to 2 GB RDRAM
- Connection to four Ultra DMA/66 high speed IDE devices via J3 connector
- Accepts CompactFlash™ memory card on the rear I/O transition board
- One PCI-to-PCI bridge drives up to 7 CompactPCI™ slots
- On-board high-performance AGP VGA display

Introduction

The MIC-3385 is a 6U CompactPCI™ single board computer. Targeting performance-demanding applications such as telecom, Internet and industrial control, the MIC-3385 accepts dual Intel® Pentium® III processors, up to 866 MHz, the Intel® 840 chipset, the exceptional 64-bit CompactPCI™ bus, as well as the high-speed RAMbus memory channels.

Dual High Performance Pentium® III Processors

The MIC-3385 accepts dual or a single Intel® Pentium® III processor with 370-pin PGA package. Dual processor configurations can support symmetrical multiprocessing (SMP) operations under supporting operating system software. With the support of a 133 MHz front side bus (FSB) and CPU on-chip 256 KB L2 cache memory, the MIC-3385 can fulfill customer's expectations of high-performance computing capability.

Dual High-Speed Rambus Channels

The MIC-3385 memory system supports the latest RAMbus Dynamic Random Access Memory (RDRAM) technology. Dual RAMbus channels connecting the RAM controller to four RIMMs support up to 2 GB RDRAM (1 GB per channel). RAMbus (RDRAM) provides a two-byte (16-bit) bus. At a RAM speed of 800 MHz, the peak data transfer rate is 1.6 GB per second.

64-bit CompactPCI Interface

Different from other Advantech CompactPCI™ CPU boards, the MIC-3385 supports a 64-bit PCI interface on the physical CompactPCI connectors J1 and J2. Through the Intel® 21154 PCI-to-PCI bridge, the MIC-3385 is applicable up to 8-slot enclosure (MIC-3021/MIC-3032/MIC-3033) and drives up to seven PCI bus master slots.

Complete I/O Functions

The MIC-3385 offers all the functions of an industrial computer with the rugged Eurocard form factor. It offers an AGP VGA display, two serial ports, two USB ports, two Ethernet interfaces, one parallel port, and one PS/2 keyboard/mouse connector. Standard connectors for all the functions are available on both the front panel and rear panel. The front panel also has LEDs for power status, HDD operation, 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 modes.

An optional rear transition board (MIC-3302) can be used to connect all the inputs and outputs on the rear panel. It also supports one CompactFlash™ memory card.

Meets Industrial Applications Requirements

The MIC-3385 is designed for use in mission critical applications. It accepts a CompactFlash™ memory card on the rear transition board, thus eliminating the need to use a fragile rotating hard drive. A watchdog timer can automatically reset the system if the system stops due to a program bug or EMI. The two-layer front panel design complies with IEEE 1101.10. Connectors are firmly screwed to the front panel, and the replaceable shielding gasket is attached to the panel edge. This reduces emissions and gives better protection against external interference.



Specifications

Standard SBC Functions

- **CPU:** Socket 370 single/dual Intel® Pentium® III processors, up to 866MHz
- **BIOS:** Award 4 Mb flash memory
- **Chipset:** Intel® 840
- **Front side bus clock:** 100/133 MHz
- **Bus interface:** 64-bit/66 MHz and 32-bit/33 Hz
- **2nd level cache:** CPU built-in 256 KB
- **RAM:** 2x2 184-pin RIMM sockets support up to 2 GB RDRAM (1 GB per channel at 300/400 MHz)
- **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
- **Parallel port:** Supports multimode parallel (SPP/EPP/ECP) port
- **Ethernet:** Two Intel® 82559 Fast Ethernet controller chips, 10/100Base-TX with RJ-45 connectors
- **Serial ports:** Two RS-232 ports with 16C550 UARTs.
- **USB interface:** Two USB ports 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
- **Keyboard/mouse connectors:** One 6-pin mini-DIN connector on the front panel
- **PCI-to-PCI bridge:** One Intel® DEC 21154 controller chip, drives up to 7 bus master peripherals

AGP VGA Interface

- **Controller:** ATI RAGE Mobility® M3
- **Display resolution:** Supports non-interlaced CRT monitor resolutions up to 1024 x 768 x 16-bit color for 3D graphics, and 1600 x 1200 x 8-bit color for 2D graphics. 24-bit color up to 1280 x 1024



The MIC-3385 dual processor SBC

Rear Transition Board

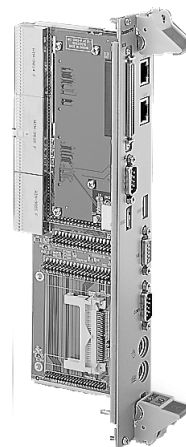
- **MIC-3302:** Single slot rear transition board
 - Rear panel I/O connectors: PS/2 keyboard and mouse, COM1, VGA, dual Ethernet ports, 1 x USB
 - On-board connectors: 2 x IDE connectors, floppy disk connector, CompactFlash™ socket, SCSI interface
- **MIC-3302F:** 2-slot rear transition board
 - Rear panel I/O connectors: PS/2 keyboard and mouse, 2 x serial ports, VGA, dual Ethernet ports, 2 x USB, SCSI interface
 - On-board connectors: 2 x IDE connectors, floppy disk connector, CompactFlash™ socket, SCSI interface
 - On-board 2.5" HDD mounting bracket

Mechanical and Environmental Specifications

- **Operating temperature:** 0° ~ 55° C (32° C ~ 131° F)
- **Storage temperature:** -20° ~ 70° (-4° ~ 158° F)
- **Humidity (operating and storage):** 5 ~ 95% (non-condensing)
- **Size:** 233.35 x 160 mm (6U), 1-slot (4 TE) or 2-slot (8 TE) width
- **Weight:** 0.8 kg (1.8 lb)
- **Shock:** 20 G (operating); 50 G (storage/transit)
- **Random vibration:** 1.5 Grms

Ordering Information

- ❑ **MIC-3385:** 6U CompactPCI™ dual Pentium® III processors board with single PCI-to-PCI bridge, VGA/dual LAN, utility CD-ROM disc, manual
- ❑ **MIC-3302:** Single-slot 6U rear transition board. Provides connection to KB/MS, 1 x RS-232, 1 x USB, VGA, and 2 x LAN ports on rear panel. On-board connectors for 2 x IDE, floppy, SCSI, and CompactFlash™ card
- ❑ **MIC-3302F:** 2-slot 6U rear transition board. Provides connection to KB/MS, 2 x RS-232, 2 x USB, SCSI, VGA, and 2 x LAN ports on rear panel. On-board connectors for 2 x IDE, floppy, SCSI, and CompactFlash™ card. 1-slot wide 2.5" HDD mounting bracket



The MIC-3302F 6U transition board