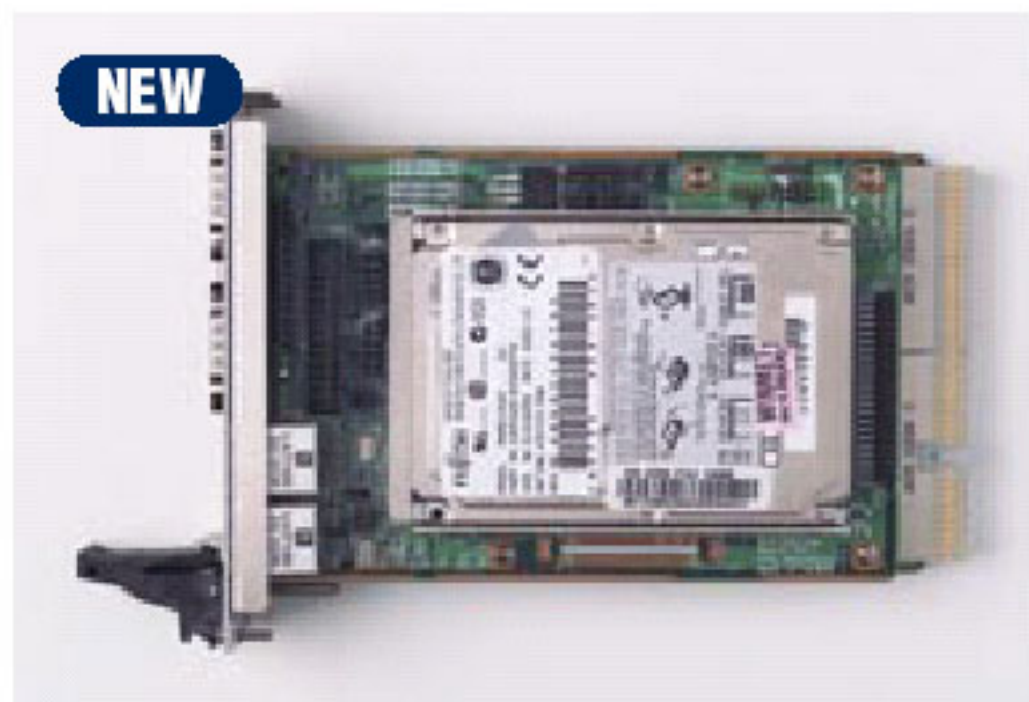


MIC-3318

3U CompactPCI® Pentium® 4-M Controller



Features

- Built-in Intel® Pentium® 4-M CPU processor up to 1.7 GHz
- Supports up to 512MB DDR-266 memory on board
- Onboard high-performance VGA display
- Dual Gigabit Ethernet with RJ-45 connector on board
- Supports 2 Ultra ATA 33/66/100 high-speed IDE devices
- Onboard CompactFlash disk socket
- One PCI-to-PCI bridge drives up to 7 bus master peripherals
- Advantech Hot-swap Manager to support Advantech I/O and Communication Hot-swap function
- Rear I/O signal support for easy wiring
- Supports onboard 2.5" HDD

Introduction

The MIC-3318 is a 3U CompactPCI® controller that has been optimized for its onboard Intel® Pentium® 4 Processor-M, and Intel 845GV Chipset. Designed to be a high performance CompactPCI platform, MIC-3318 delivers compelling system bus speed performance at 400 MHz with its Intel NetBurst™ microarchitecture. Innovative wide data paths and flexible memory refresh technology optimize the DDR SDRAM's performance in the MIC-3318. 512 KB of On-die L2 Cache, and dual Gigabit Ethernet are also provided.

MIC-3318 is a powerful 3U CompactPCI Controller that fulfills your requirements in mission-critical applications, such as military defense, transportation, traffic control, test and measurement (T&M) as well as critical data acquisition & control applications.

Specifications

Processor System

- CPU Intel Pentium 4 Processor-M (fanless)
- Speed 1.2 or 1.7 GHz (400MHz FSB), BIOS selection
- L2 Cache 512 KB on die
- Chipset Intel 845GV
- BIOS Award 4 Mb Flash

Bus

- Front Side Bus 400 MHz
- PCI-to-PCI Bridge PI7C8150
- Controller Pericom
- PCI 32-bit/33 MHz

Memory

- Technology PC-2100 DDR266 SO-DIMM, 200-pin socket x 1
- Max. Capability 512 MB

Graphics

- Controller Integrated in Intel 845GV chipset
- VRAM DVMT 64 MB
- Resolution 2048 x 1536 High Color @ 75 Hz for Flat panel
1920 x 1080 True Color @ 85 Hz for CRT

Ethernet

- Interface 10/100/1000Base-TX Gigabit Ethernet
- Controller Intel 82540 x 2
- Connector RJ-45 x 2
- LAN1 supports both front and rear I/O access on MIC-3318R (jumper selectable)

Serial

- Interface RS-232/422/485, jumper selectable
- Controller Winbond™ 83627HF Super IO chip
- Data bits 5, 6, 7, 8
- Stop bits 1, 1.5, 2
- Parity None, even, odd
- Speed (bps) 50 ~ 115.2 K
- Data signals RS-232: TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND, RI
- RS-422/485 TxD, RxD, RTS, CTS
- Connectors DB-9 x 2
- COM1 supports both front and rear I/O access on MIC-3318R

EIDE

- Mode ATA 33/66/100 mode
- Channels 2
- Storage Site One IDE connector and space reserved for embedded 2.5" HDD

Front I/O Interface

- LAN 2 x Gigabit Ethernet, RJ-45 connector
- Serial 2 x RS-232/422/485, DB-9 connector

Ordering Information

- MIC-3318-AC00 MIC-3318 w/ on-board P4-M 1.7GHz CPU, 256MB RAM without Rear I/O support
- MIC-3318-AD00 MIC-3318 w/ on-board P4-M 1.7GHz CPU, 512MB RAM without Rear I/O support
- MIC-3318R-AC00 MIC-3318 w/ on-board P4-M 1.7GHz CPU, 256MB RAM and Rear I/O support
- MIC-3318R-AD00 MIC-3318 w/ on-board P4-M 1.7GHz CPU, 512MB RAM and Rear I/O support
- MIC-3518 Rear I/O module for MIC-3318R

3U CompactPCI® Pentium® 4-M Controller

Rear I/O Signal Interface (MIC-3318R series)

- VGA, KB/MS, USB3, USB4, LAN1, COM1

Operating Systems

- **Compatibility** Windows 2000/XP, Kernel Linux v2.4

Hardware Monitor

- **Controller** Winbond 83627HF Super IO chip
- **Monitor** CPU temperature, 3.3 V/5 V/12 V

Watchdog Timer

- **Output** System reset
- **Interval** Programmable, 0 ~ 255 sec.

Miscellaneous

- **Solid State Disk** One onboard CompactFlash socket
- **2.5" HDD** One 2.5" HDD bay for easy installation
- **LEDs** Power, IDE
- **USB (v2.0)** 2 channels
- **Real Time Clock** Built into the South Bridge

Power Requirements

With P4-M 1.2 GHz				
	+3.3 V	+5 V	+12 V	-12 V
Typical	1.7 A	3.4 A	16 mA	16 mA
Max	1.7A	4.7A	16 mA	16 mA

With P4-M 1.7 GHz				
	+3.3 V	+5 V	+12 V	-12 V
Typical	1.7 A	4.1 A	16 mA	16 mA
Max	1.7A	5.7 A	16 mA	16 mA

Environment

- **Operating Temperature** -10 ~ 60° C @1.2 GHz CPU
-10 ~ 50° C @1.7 GHz CPU
- **Storage Temperature** -40 ~ 80° C (-40~140° F)
- **Humidity** 95% @ 60° C, non-condensing

Physical

- **Dimensions** 100 x 160 mm (3U), 2-slot (8 TE) width
- **Weight** 0.6 kg

Compliance

- **Standard** PICMG 2.0, R3.0 CompactPCI Specification
PICMG 2.1, R2.0 Hot-Swap Specification

Rear Transition Board for MIC-3318R series

- **P/N** MIC-3518
- **KB/MS** Yes
- **COM** COM1
- **LAN** LAN1
- **VGA** Yes
- **USB** USB3, USB4

1
Applied Panel Computing

2
Industrial Computing Platform

3
Compact PCI

4
Industrial Workstation & Computing

5
Industrial I/O

6
Industrial Communication

7
Embedded Computing

8
ARM/PPC Embedded Computing

9
Automation

10
Automation I/O (AO/AI)