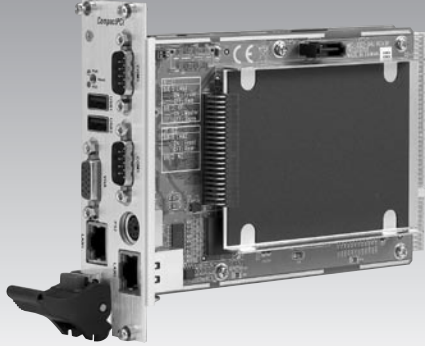# MIC-3321

3U CompactPCI Pentium M 2.0G High-performance Controller

NEW

Features

- Built-in Intel® Pentium® M 760 2.0G processor with 2 MB L2 Cache
- Mobile Intel 915GM express chipset
- Supports up to 1GB DDR2 533/400 SDRAM soldered on board
- Extended operating temp: -25 ~ 70° C (Optional: MIC-3321C only)
- Dual Giga LAN on PCI-Express
- High-performance Intel Graphics Media Accelerator 900 VGA display
- Onboard CompactFlash® disk socket
- Onboard 2.5" HDD support
- Rear I/O signal support for easy wiring

Introduction

The MIC-3321 3U is a CompactPCI system controller board that combines the performance of Intel's Mobile Pentium M 760 2.0GHz processor with the high integration of the 915GM chipset and the I/O Controller Hub ICH6. The low power of the Intel Mobile Celeron® M makes it possible to work with high extended temperature ranges. The directed soldered CPU and memory provide less weight and a higher shock/vibration resistance than socket devices.

MIC-3321 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

CPU		MIC-3321: Intel Pentium M 760 2.0 GHz with 2 MB L2 cache
		MIC-3321C: Intel Celeron M Ultra Low Voltage 373 1.0 GHz with 512 KB L2 cache
Chipset		Intel 915 GM (GMCH) + Intel 82801FBM (ICH6-M)
BIOS		Award 4 MB Flash
Bus	Front Side Bus	533 MHz (Intel Pentium M 760 2.0 GHz CPU)
		400 MHz (Intel Celeron M Ultra Low Voltage 373 1.0 GHz CPU)
	PCI Bus	PCI-to-PCI Bridge: PERICOM PI7C8150
		7 x 32bit/33MHz CompactPCI bus Master interface
		3.3 V/5 V VIO adjustable
Memory		Directed Soldered 512 MB DDR2 SDRAM
Graphics		Controller: Intel Graphics Media Accelerator 900
		VRAM: DVMT3.0 128MB
		Resolution: Up to 2048 x 1536 with 32-bit color at 75 Hz
Ethernet		Interface: 10/100/1000Base-TX Gigabit Ethernet
		Controller: 2 x Intel 82573E/L PCI Express Gigabit Ethernet Controller
		Connector: 2 x RJ-45
		Supports Pre-boot Execution Environment (PXE)

Serial	Interface: RS-232
	Controller: 2 x 16C550 Compatible
	Data Bits: 5, 6, 7, 8
	Stop Bits: 1, 1.5, 2
	Parity: None, Even, Odd
	Speed (bps): 50 ~ 115.2K
	Data Signal: TxD, RxD, RTS, CTS, DTR, DSR, DCD, RI, GND
	Connector: 2 x DB9 male
	Two as front I/O, one as rear I/O
P-IDE	One channel P-IDE Supports PIO mode 4 (16.67MB/s data transfer rate) and ATA 33/66/100 (33/66/100MB/s data transfer rate)
	1 x CompactFlash Socket Type II
	1 x 44-pin 2.5" HDD connector
SATA	SATA interface with data transfer rate up to 150MB/s
	1 x External SATA connector
USB	4 x USB 2.0 channels up to 480Mbps, 2 as front I/O, 2 as rear I/O
PS/2	PS/2 for keyboard and mouse legacy support
Watchdog Timer	0 ~ 64s, 0.25s step, generate reset signal
Hot Swap	Support for all signals to allow peripheral boards to be hot swapped. The individual clocks for each slot and access to the backplane ENUM# signal comply with the PICMG 2.1 Hot Swap specification. (PCI to PCI bridge GPIO3)
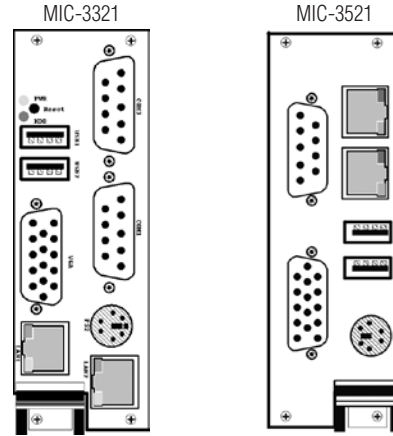
Front Panel Functions	4HP Board	1 x VGA-CRT 15-pin D-SUB connector
		Ethernet: 1 x RJ-45 connector with integrated LEDs
		USB: 2 x 4-pin connectors
		Reset: Reset button, guarded
		LED: Power, HDD
	8HP Board (Additional to 4HP)	COM1: 1 x DB9 RS-232 connector COM3: 1 x DB9 RS-232 connector
		PS/2: 1 x PS/2 connector for keyboard and mouse
		Ethernet: 1 x RJ-45 connector with integrated LEDs
Rear I/O via J2		2 x USB 2.0 channels
		2 x Gigabit Ethernet channels with LED (shared with front I/O)
		1 x COM port
		1 x VGA-CRT channel (shared with front I/O)
		1 x PS/2 keyboard/mouse channel (shared with front I/O)
Compliancy		PICMG 2.0 Rev. 3.0 compatible
		CompactPCI Hot Swap Specification PICMG 2.1 R2.0
Environment	Operating Temperature	0 ~ 50° C (Pentium M 2.0G CPU)
		0 ~ 50° C (Celeron M 1.0G CPU)
		-25 ~ 70° C (Optional: Celeron M 1.0G CPU only)
	Storage Temperature	-40 ~ 80° C
Physical	Dimensions (W x H)	160 x 100 mm (3U)
	Weight	0.6 Kg
Rear Transition Board	P/N	MIC-3521
	Width	8HP

Front View of MIC-3321

MIC-3321   MIC-3521

Ordering Information

- **MIC-3321**   Pentium M 2.0 GHz, 2MByte L2 cache, 512 MByte soldered DDR2 SDRAM, 8 HP width
- **MIC-3321C**   Celeron M 1.0 GHz, 512KByte L2 cache, 512 MByte soldered DDR2 SDRAM, 8 HP width
- **MIC-3521**   Rear I/O Transition Board for MIC-3321 series