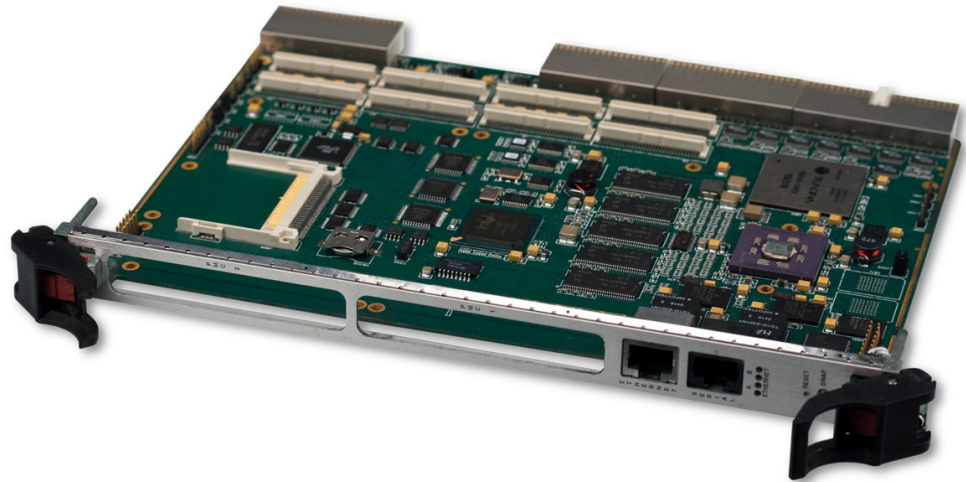


XChange1102

End of Life

Dual PrPMC Ruggedized Conduction- or Air-Cooled 6U cPCI with AMCC 440GX and PICMG 2.16 Carrier Card in Extended Temperatures

- ▶ AMCC PowerPC 440GX
533-800 MHz processor
- ▶ 133 MHz PCI-X cPCI and
local bus interfaces
- ▶ Autosense
system/peripheral slot
- ▶ Hot Swap support
- ▶ Up to 512 MB, 266 MHz
DDR SDRAM
- ▶ Up to 1 GB CompactFlash
- ▶ Front panel Gigabit
Ethernet port
- ▶ Front panel serial port
- ▶ Two PICMG 2.16
backplane Ethernet ports
- ▶ Complies with PICMG 2.0,
2.1, 2.3, 2.9 and 2.16
- ▶ Wind River VxWorks BSP
- ▶ Linux BSP



XChange1102

The XChange1102 is a 6U CompactPCI dual PrPMC carrier card with a PICMG 2.16 Gigabit Ethernet interface. With PCI-X support on both CompactPCI and local bus interfaces, the XChange1102 is ideal for applications requiring high bandwidth and the flexibility that PMC modules offer in ruggedized systems.

Based on the AMCC PowerPC 440GX processor, the XChange1102 is armed with the processing power needed for demanding applications. With integrated PCI-X, DDR SDRAM, and Ethernet interfaces, the 440GX offers a highly-optimized, yet cost-effective solution for packet processing and general computing.

Hot Swap support allows the XChange1102 to be installed into a live system without disrupting cPCI bus activity. In addition, system management bus support allows the card to be powered down and reset remotely through the IPMI interface.

X-ES

Extreme Engineering Solutions

...Always Fast

Extreme Engineering Solutions

3225 Deming Way, Suite 120 • Middleton, WI 53562

Phone: 608.833.1155 • Fax: 608.827.6171

sales@xes-inc.com • <http://www.xes-inc.com>

Processor

- AMCC PowerPC 440GX processor
- 800 MHz max processor speed
- 133 MHz PCI-X Interface
- 32 kB L1 instruction/data caches
- 256 kB L2 cache/SRAM
- 266 MHz DDR SDRAM interface
- Two 10/100/1000 Mbps Ethernet controllers
- Two 10/100 Ethernet controllers

Memory

- Up to 512 MB DDR SDRAM
- Up to 144 MB surface mount flash
- 512 kB socketed flash
- Up to 1 GB CompactFlash
- 512 byte EEPROM

cPCI

- PICMG 2.1 (Hot Swap support)
- PICMG 2.3 (PMC I/O to J3 and J5)
- PICMG 2.9 (dedicated IPMI controller)
- PICMG 2.16 (two 10/100/1000BASE-T Ethernet ports)

PCI-X PMC Slots

- Maximum aggregate bandwidth of 1 Gbps
- Processor PMC (PrPMC) support
- 10 mm stacking height

Software Support

- Linux BSP
- Wind River VxWorks BSP
- Ethernet and IPMI drivers

Front Panel

- Serial interface
- 10/100 Ethernet

Physical

- 6U cPCI form factor
- 233.35 mm x 160 mm

Environmental Requirements

Contact factory for appropriate board configuration based on environmental requirements.

- Supported ruggedization levels (see chart below): 1
- Conformal coating available as an ordering option

Power Requirements

- 3.3 V, 2.94 A, 9.72 W
- 5 V, 0.1 A, 0.5 W

Ruggedization Level	Level 1	Level 3	Level 5
Cooling Method	Standard Air-Cooled	Rugged Air-Cooled	Conduction-Cooled
Operating Temperature	0 to +55°C ambient (300 LFM)	-40 to +70°C (600 LFM)	-40 to +85°C (board rail surface)
Storage Temperature	-40 to +85°C ambient	-55 to +105°C ambient	-55 to +105°C ambient
Vibration	0.002 g ² /Hz, 5 to 2000 Hz	0.04 g ² /Hz (maximum), 5 to 2000 Hz	0.1 g ² /Hz (maximum), 5 to 2000 Hz
Shock	20 g, 11 ms sawtooth	30 g, 11 ms sawtooth	40 g, 11 ms sawtooth
Humidity	0% to 95% non-condensing	0% to 95% non-condensing	0% to 95% non-condensing

