

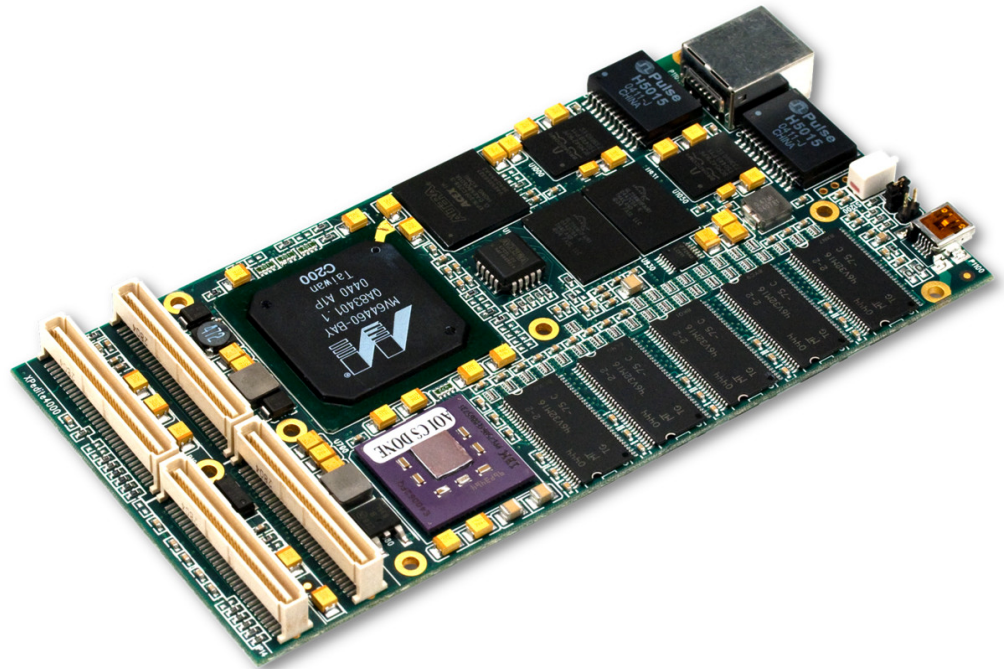
XPedite4000

End Of Life

IBM 750GX PowerPC Processor-Based PMC Module with Two Gigabit Ethernet Ports

Please see XPedite5400

- ▶ IBM 750GX PowerPC 750GX 500-1000 MHz processor
- ▶ 133 MHz PCI-X PrPMC and local bus interfaces
- ▶ Up to 1 GB DDR SDRAM
- ▶ Up to 128 MB soldered flash
- ▶ Two Gigabit Ethernet ports
- ▶ Two RS-232 serial ports
- ▶ Front or rear I/O
- ▶ Integrated 1 MB L2 cache
- ▶ Linux BSP
- ▶ Wind River VxWorks BSP



XPedite4000

The XPedite4000 is a high-performance Processor PMC (PrPMC) module. A PCI-X PMC interface provides the system designer with ample bandwidth for I/O intensive applications. Two front panel Ethernet ports provide a flexible I/O interface by auto-negotiating between 10, 100, and 1000 Mbps operation.

The XPedite4000 utilizes the IBM PowerPC 750GX embedded processor. With integrated PCI-X, DDR SDRAM, and Ethernet interfaces, the XPedite4000 offers a highly-optimized solution for packet processing and general computing applications. The serial and Gigabit Ethernet interfaces are accessible through the front panel, and a Gigabit Ethernet interface, an I²C interface, and four GPIO pins are accessible through P14 I/O. A second serial port is accessible through an onboard header.

The XPedite4000 is ideal for PrPMC applications requiring low cost and power yet high bandwidth and processing performance. The 750GX processor, while operating at 1 GHz, provides 2320 DMIPs of processing power.

X-ES

Extreme Engineering Solutions

...Always Fast

Extreme Engineering Solutions

9901 Silicon Prairie Parkway • Verona, WI 53593
 Phone: 608.833.1155 • Fax: 608.827.6171
 sales@xes-inc.com • <https://www.xes-inc.com>

Processor

- IBM PowerPC 750GX
- 1000 MHz max processor speed
- 133 MHz PCI-X interface
- 32 kB L1 instruction/data caches
- 1 MB L2 cache

Non-Volatile Storage

- Up to 128 MB surface mount flash
- 512-bytes SEEPROM

Ethernet

- Two Ethernet controllers
- Auto-negotiates between 10/100/1000 Mbps
- Front panel/rear I/O

DDR SDRAM

- Up to 1 GB
- 3.2 Gb/s peak bandwidth

Front Panel I/O

- One Gigabit Ethernet port
- One RS-232 serial port
- Link and activity LEDs

Rear I/O

- One Gigabit Ethernet port
- Four GPIO pins
- Two RS-232 serial ports

RTC

- M41T00 I²C timekeeper
- 60 hour clock retention

Software

- Linux BSP
- Wind River VxWorks BSP
- Ethernet, I²C, and RTC drivers

Physical Characteristics

- PMC form factor
- Dimensions: 149 mm x 74 mm, 10 mm stacking height

Environmental Requirements

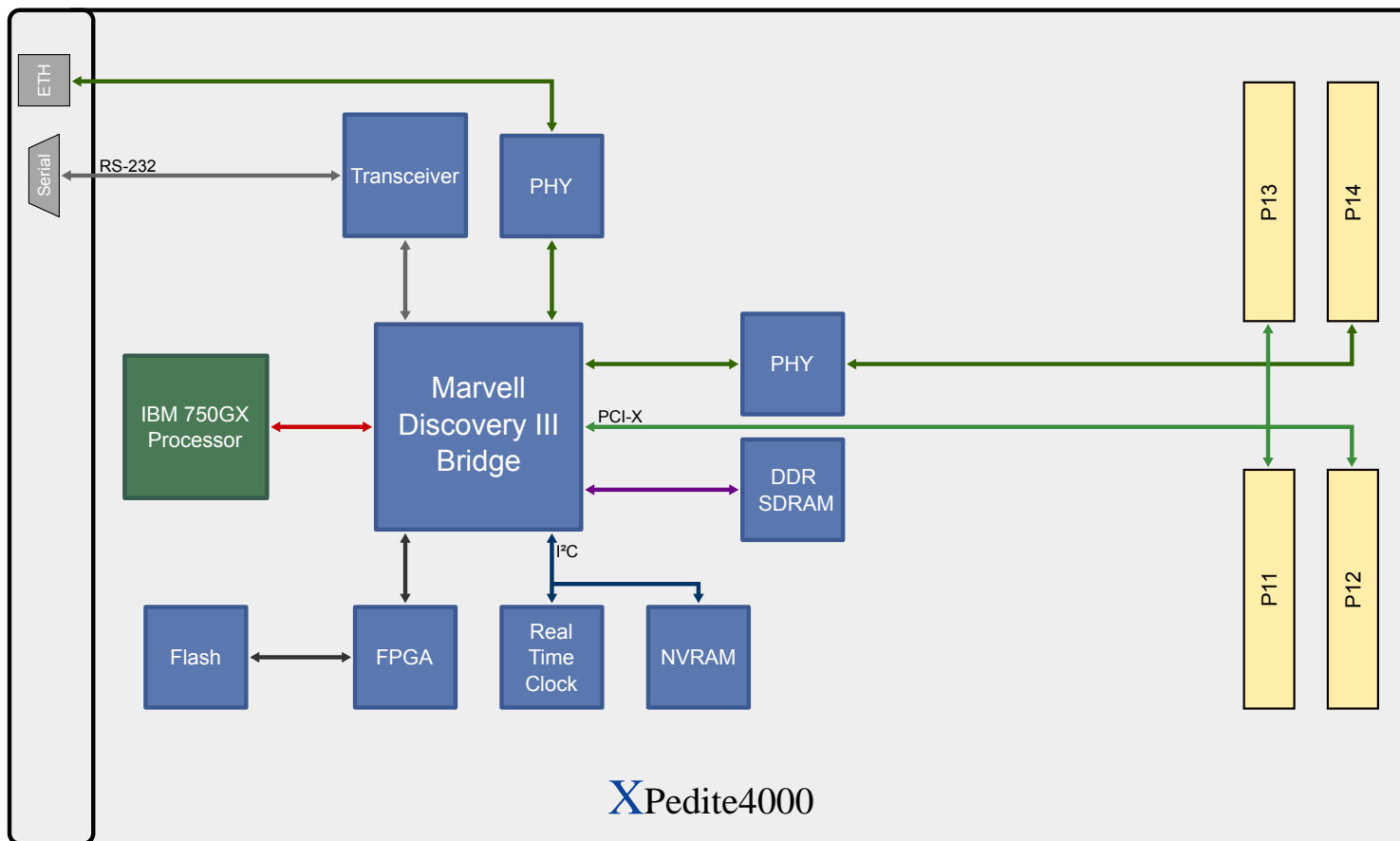
Contact factory for appropriate board configuration based on environmental requirements.

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

Power Requirements (Estimate)

- 3.3 V, 4.3 A, 14.2 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 (maximum)
Vibration	0.002 g ² /Hz (maximum), 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



XPedite4000