

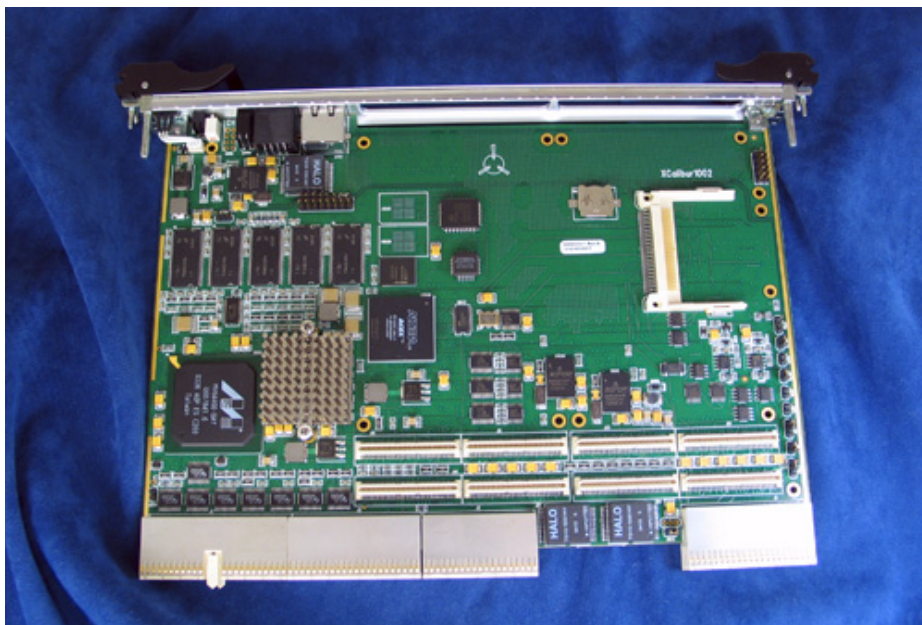
# XCalibur1002

750GX Ruggedized, Extended Temperature CompactPCI Computer With PICMG 2.16 Switched Ethernet

XCalibur1002

## Features

- IBM 750GX PowerPC 1GHz Processor
- Ruggedized and Operational from -40C to +85C
- Dual PCI-X PrPMC Slots
- Autosense System / Peripheral Slot
- Hot Swap Support
- Up to 1GB 266MHz DDR SDRAM
- 4 - 80MB Soldered Flash
- Compact Flash Socket
- Front Panel Serial and 10/100/1000Mbs Ethernet Ports
- Two 10/100/1000Mbs PICMG 2.16 Backplane Ethernet ports
- Complies to PICMG 2.0, 2.1, 2.3, 2.9, 2.16
- VxWorks BSP
- Linux LSP



XCalibur1002 is a 6U ruggedized CompactPCI single board computer with a PICMG 2.16 Gigabit Ethernet backplane interface. An extended operating temperature range of -40C to +85C makes XCalibur well suited for industrial and military applications. With a 1GHz IBM PowerPC Processor, XCalibur is ideal for the high bandwidth processing requirements of today's blade and general computing applications.

XCalibur1002 provides a highly configurable processing platform. 266Mhz DDR DRAM provides up to 1GB of local memory. An optional CompactFlash interface accepts up to 1GB of non-volatile memory. Two PCI-X PPMC slots are available for high bandwidth IO.

Hot Swap support allows XCalibur1002 to be installed into a live system without disrupting CompactPCI bus activity. In addition, system management bus support allows the card to be powered down and reset remotely through the IPMI interface.

To the system designer, XCalibur1002 provides a feature rich solution to support the next generation of embedded applications.

## Typical Applications

- Processing Node
- Routing Blade
- System Controller

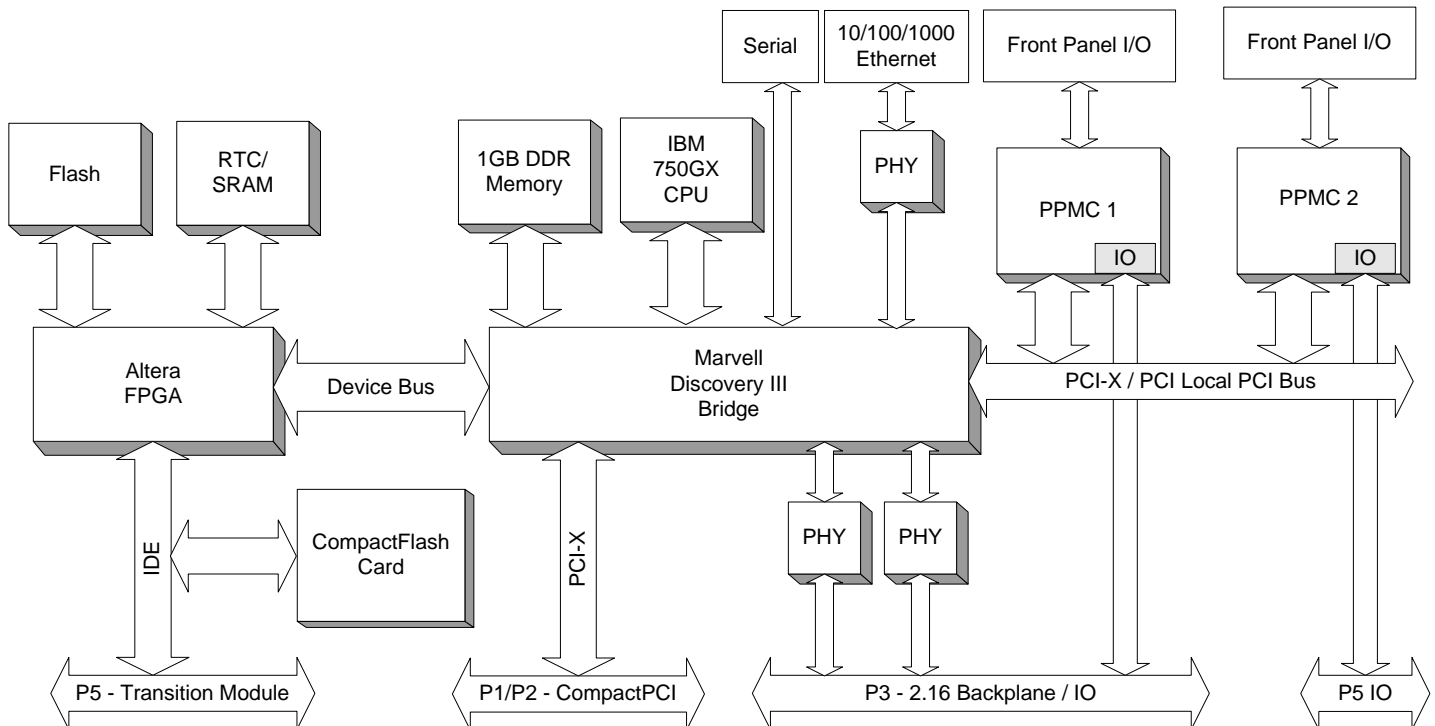
# X-ES

Extreme Engineering Solutions...  
...Always Fast

For more information on XCalibur1002:  
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E-mail: [sales@xes-inc.com](mailto:sales@xes-inc.com)

# Block Diagram

# XCalibur1002



## Processor

- IBM PowerPC 750GX Processor
- 1GHz Max Processor Speed
- 133MHz Bus Speed
- 32KB L1 Instruction/Data Caches
- 1MB L2 Cache

## Memory

- 256MB - 1GB DDR SDRAM
- 4 - 80MB Surface Mount Flash
- 512KB Socketed Flash
- 512 Byte Serial EEPROM

## PICMG 2.1

- Hot Swap Support Allows Insertion and Removal From an Active CompactPCI Bus

## PICMG 2.3

- Routes PMC I/O to P3 and P5

## PICMG 2.9

- Dedicated IPMI Microcontroller
- Ability to Control Power and Reset to the PMC slots
- Monitors 1.5V, 1.8V, 2.5V, 3.3V, 5V, +12V, -12V
- Monitors Board Temperature

## PICMG 2.16

- Auto Negotiates Between 10/100/1000Mbps
- High Bandwidth PCI-X Controller

## PCI-X PMC Slots

- Maximum Aggregate Bandwidth of 1GBs
- Processor PMC (PrPMC) Support

## Software

- VxWorks BSP
- Linux LSP
- Ethernet and IPMI Drivers

## Physical

- 6U CompactPCI Form Factor
- 233.35mm x 160mm

## Power Requirements (Single CPU)

+3.3V	3.10A	10.2W
+5.0V	0.08A	0.40W
+12.0V	0.00A	0.00W
-12.0V	0.00A	0.00W

## Operating Temperature:

-40 to +85C ambient, at board

## Humidity

0% to 85%

## Storage Temperature

-40 to +85C



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