

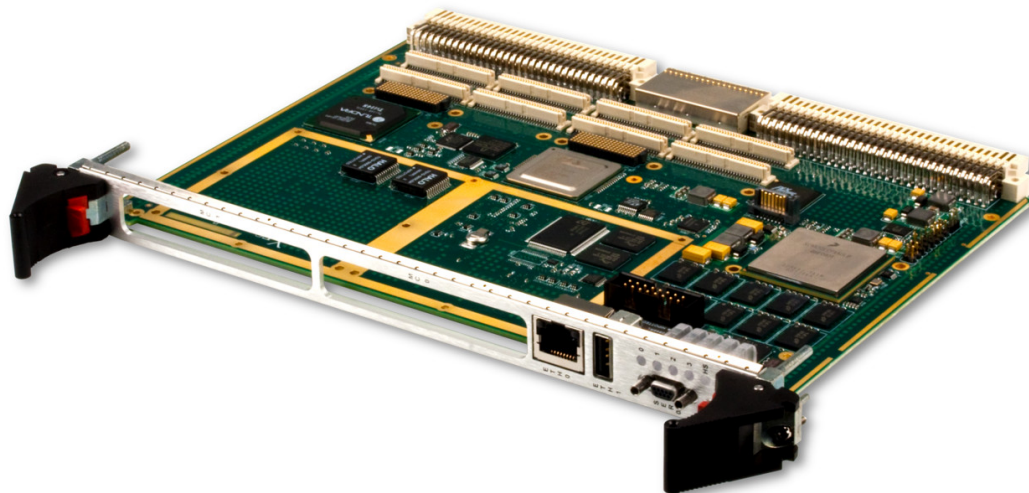
# XCalibur1531

**End of Life**

NXP MPC8572E Processor-Based Conduction- or Air-Cooled 6U VME Module

Please contact X-ES Sales

- ▶ NXP PowerQUICC™ III MPC8572E processor with dual Power Architecture® e500 cores at up to 1.5 GHz
- ▶ 6U VME module
- ▶ Conduction or air cooling
- ▶ Up to 4 GB DDR2-800 ECC SDRAM in two channels
- ▶ Up to 256 MB of NOR flash (with redundancy)
- ▶ Up to 16 GB of NAND flash
- ▶ Four Gigabit Ethernet ports
- ▶ x8 PCI Express to XMC sites
- ▶ Three USB 2.0 ports
- ▶ Two RS-232/422/485 serial ports
- ▶ Two PrXMC/PrPMC interfaces
- ▶ Linux BSP
- ▶ Wind River VxWorks BSP
- ▶ QNX Neutrino BSP
- ▶ Green Hills INTEGRITY BSP



## XCalibur1531

The XCalibur1531 is a high-performance, multiprocessing, 6U VME, single board computer that is ideal for ruggedized systems requiring high bandwidth processing and low power consumption. With dual Power Architecture® e500 cores running at up to 1.5 GHz, the NXP (formerly Freescale) MPC8572E delivers enhanced performance and efficiency for today's embedded computing applications.

The XCalibur1531 provides two separate channels of up to 4 GB (2 GB each) DDR2-800 ECC SDRAM, two PrXMC/PrPMC slots, as well as 256 MB of NOR flash (with redundancy). The XCalibur1531 also supports four Gigabit Ethernet ports, XMC I/O, PMC I/O, and RS-232/422/485 serial ports out the front panel and/or P2/P0 backplane connectors.

The XCalibur1531 is a powerful, feature-rich solution for the next generation of compute-intensive embedded applications. Operating system support for Wind River VxWorks, Microsoft Windows, QNX Neutrino, and Linux is available.

# X-ES

Extreme Engineering Solutions

*...Always Fast*

### Extreme Engineering Solutions

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**Processor**

- NXP (formerly Freescale) PowerQUICC™ III MPC8572E processor
- Dual Power Architecture® e500 cores at up to 1.5 GHz
- 1 MB of shared L2 cache

**Memory**

- Up to 4 GB of DDR2 ECC SDRAM in two channels
- Up to 16 GB of NAND flash
- Up to 256 MB of NOR flash (with redundancy)
- 16 kB I<sup>2</sup>C EEPROM

**VME**

- VME64 (VITA 1-1994 R2002)
- VME64x (VITA 1.1-1997 R2003)
- 2eSST (VITA 1.5-2003)
- Ethernet on VME64x (VITA 31.1-2003)
- PMC I/O on VME (VITA 35-2000)

**XMC/PrPMC**

- PCI-X (64/32-bit, 100/66 MHz)
- PCI (64/32-bit, 66/33 MHz)
- x8 PCIe port to P15 and P25 (XMC)

**Front Panel**

- Two RS-232 serial ports
- One Gigabit Ethernet port
- One USB 2.0 port
- General-purpose LEDs

**Back Panel**

- Two RS-232/422/485 serial ports
- Three Gigabit Ethernet ports
- PMC I/O
- Two USB 2.0 ports

**Software**

- Linux BSP
- Wind River VxWorks BSP
- QNX Neutrino BSP
- Greens Hills INTEGRITY BSP

**Environmental Requirements**

Contact factory for appropriate board configuration based on environmental requirements.

- Supported ruggedization levels (see chart below): 1, 3, 5
- Conformal coating available as an ordering option

**Power Requirements**

- Power will vary based on configuration and usage. Please consult factory.

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 <sup>2</sup> /Hz (maximum), 5 to 2000 Hz	0.04 g <sup>2</sup> /Hz (maximum), 5 to 2000 Hz	0.1 g <sup>2</sup> /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

