

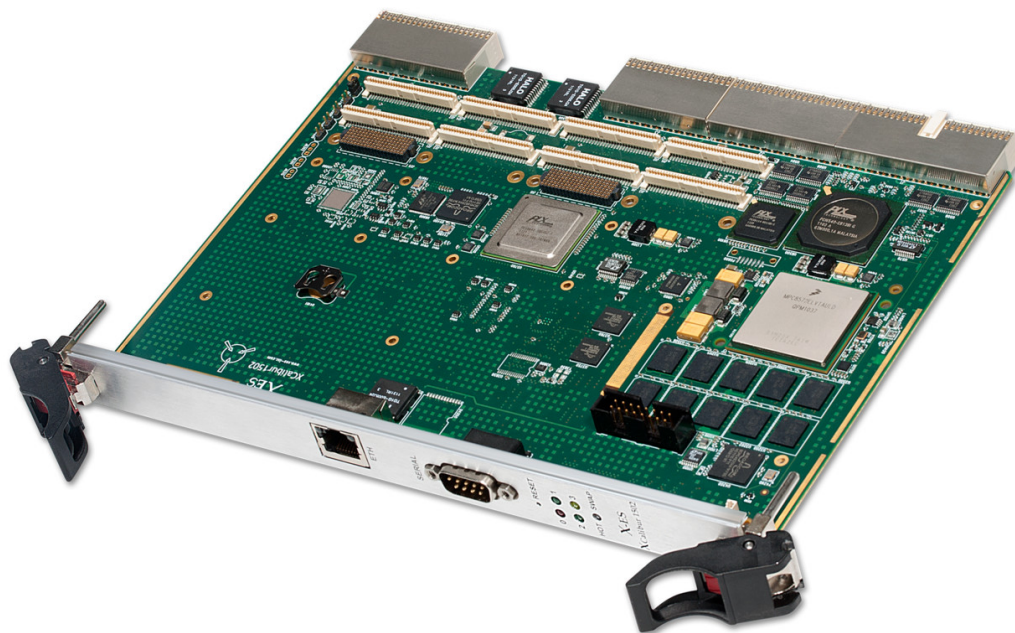
XCalibur1502

End of Life

NXP MPC8572E Processor-Based Air-Cooled 6U cPCI Module

Please contact X-ES Sales

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



XCalibur1502

The XCalibur1502 is a high-performance, multiprocessing, 6U CompactPCI, 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 XCalibur1502 provides two separate channels of up to 4 GB (2 GB each) DDR2-800 ECC SDRAM, two XMC/PrPMC slots, as well as 256 MB of NOR flash (with redundancy). The XCalibur1502 also supports four Gigabit Ethernet ports, I²C, XMC I/O, PMC I/O, and RS-232/422/485 serial ports out the front panel or J5 connector.

The XCalibur1502 is a powerful, feature-rich solution for the next generation of compute-intensive embedded applications. Operating system support for Wind River VxWorks, Green Hills INTEGRITY, QNX Neutrino, and Linux is available.

X-ES

Extreme Engineering Solutions

...Always Fast

Extreme Engineering Solutions

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Processing Nodes

- 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 (2 GB each) of DDR2 ECC SDRAM in two channels
- Up to 4 GB of NAND flash
- Up to 256 MB of NOR flash (with redundancy)
- 16 kB I²C EEPROM
- Optional Trusted Platform Module (TPM)

cPCI

- 66 MHz 64-bit PCI interface to J1 and J2
- 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)

Front Panel

- Two RS-232/422/485 serial ports
- One or two Gigabit Ethernet ports
- General purpose LEDs

Back Panel

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

Software Support

- Linux BSP
- Wind River VxWorks BSP
- Greens Hills INTEGRITY BSP
- QNX Neutrino BSP (contact factory)

Environmental Requirements

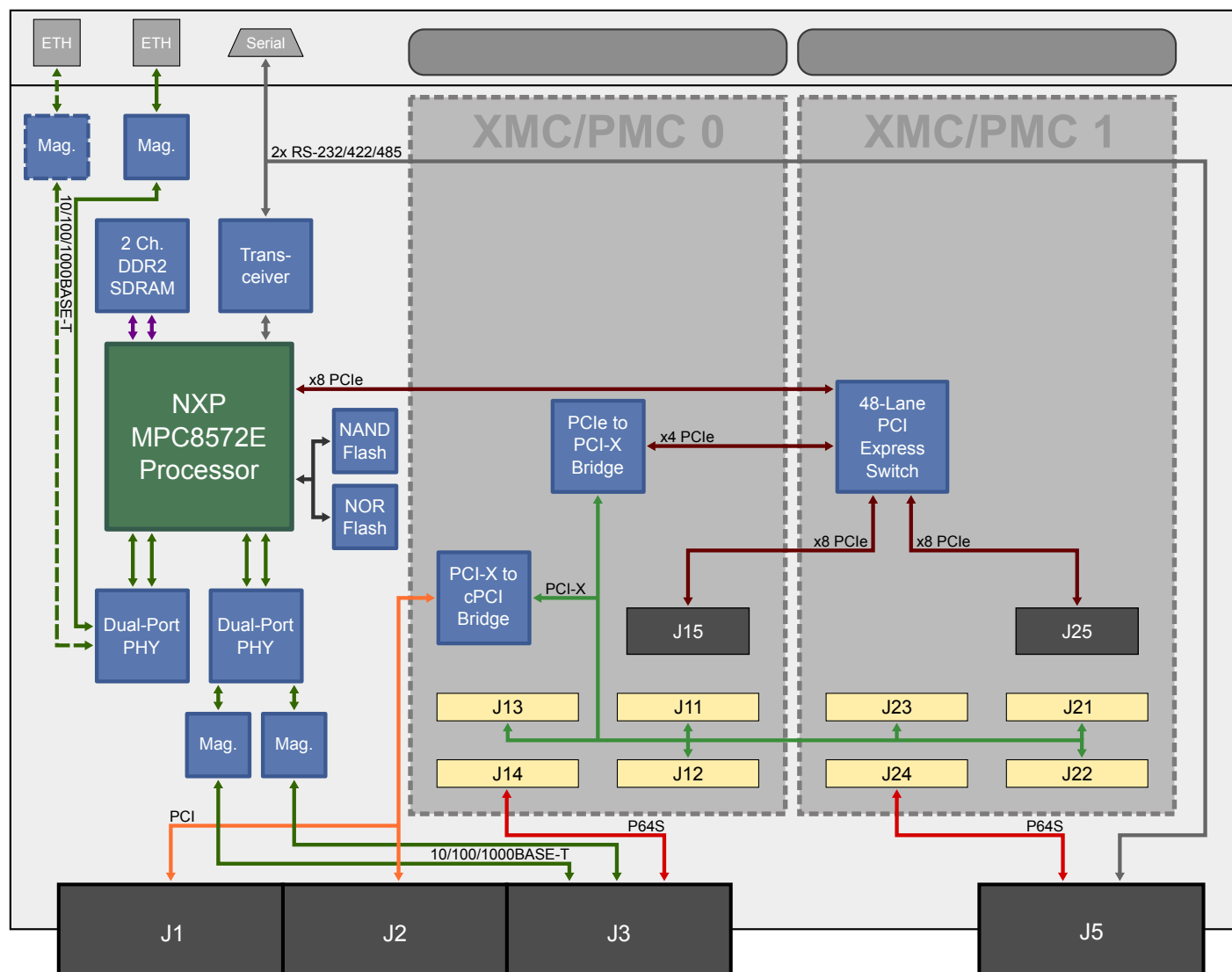
Contact factory for appropriate board configuration based on environmental requirements.

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

Power Requirements

- 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 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 |



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