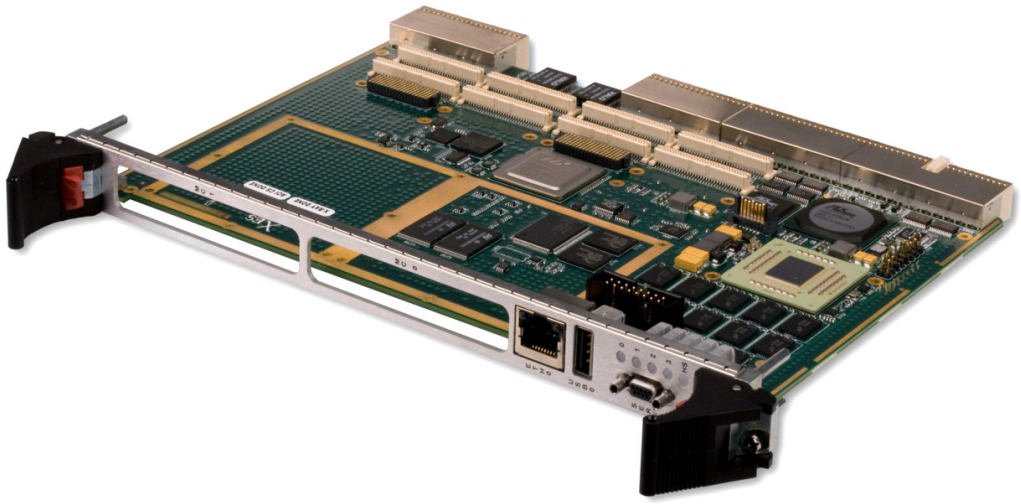
XCalibur1301

End of Life

NXP MPC8640D Processor-Based Conduction- or Air-Cooled 6U cPCI Module

Please see XCalibur1900

- NXP MPC8640D processor with dual Power Architecture® e600 cores at up to 1.25 GHz
- 6U cPCI module
- Conduction or air cooling
- Up to 4 GB DDR2-533 ECC SDRAM per processor in two channels
- Double-precision Floating-Point Unit (FPU)
- Integrated AltiVec unit
- Up to 256 MB of NOR flash (with redundancy)
- Up to 8 GB of NAND flash
- 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
- QNX Neutrino BSP
- Green Hills INTEGRITY BSP



XCalibur1301

The XCalibur1301 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® e600 cores running at up to 1.25 GHz, the NXP (formerly Freescale) MPC8640D delivers enhanced performance with AltiVec technology and IEEE 754 double-precision Floating-Point Unit, and it offers efficiency for today's network information processing and other embedded computing applications.

The XCalibur1301 provides up to 4 GB of DDR2-533 ECC SDRAM in two separate channels, two XMC/PrPMC slots, as well as 256 MB of NOR flash (with redundancy). The XCalibur1301 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 XCalibur1301 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
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...Always Fast

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Processor

- NXP MPC8640D processor
- Two Power Architecture® e600 cores at up to 1.25 GHz
- 1 MB of L2 cache per core
- Integrated AltiVec unit
- IEEE 754 Floating-Point Unit

Memory

- Up to 4 GB DDR2-533 ECC SDRAM in two channels
- Up to 8 GB of NAND flash
- Up to 256 MB of NOR flash (with redundancy)
- 16 kB I²C SEEPROM

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 serial ports
- One or two Gigabit Ethernet ports
- General-purpose LEDs

Back Panel

- Two RS-232/422/485 serial ports
- Two PICMG 2.16 Gigabit Ethernet ports
- PMC I/O

Software Support

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

Environmental Requirements

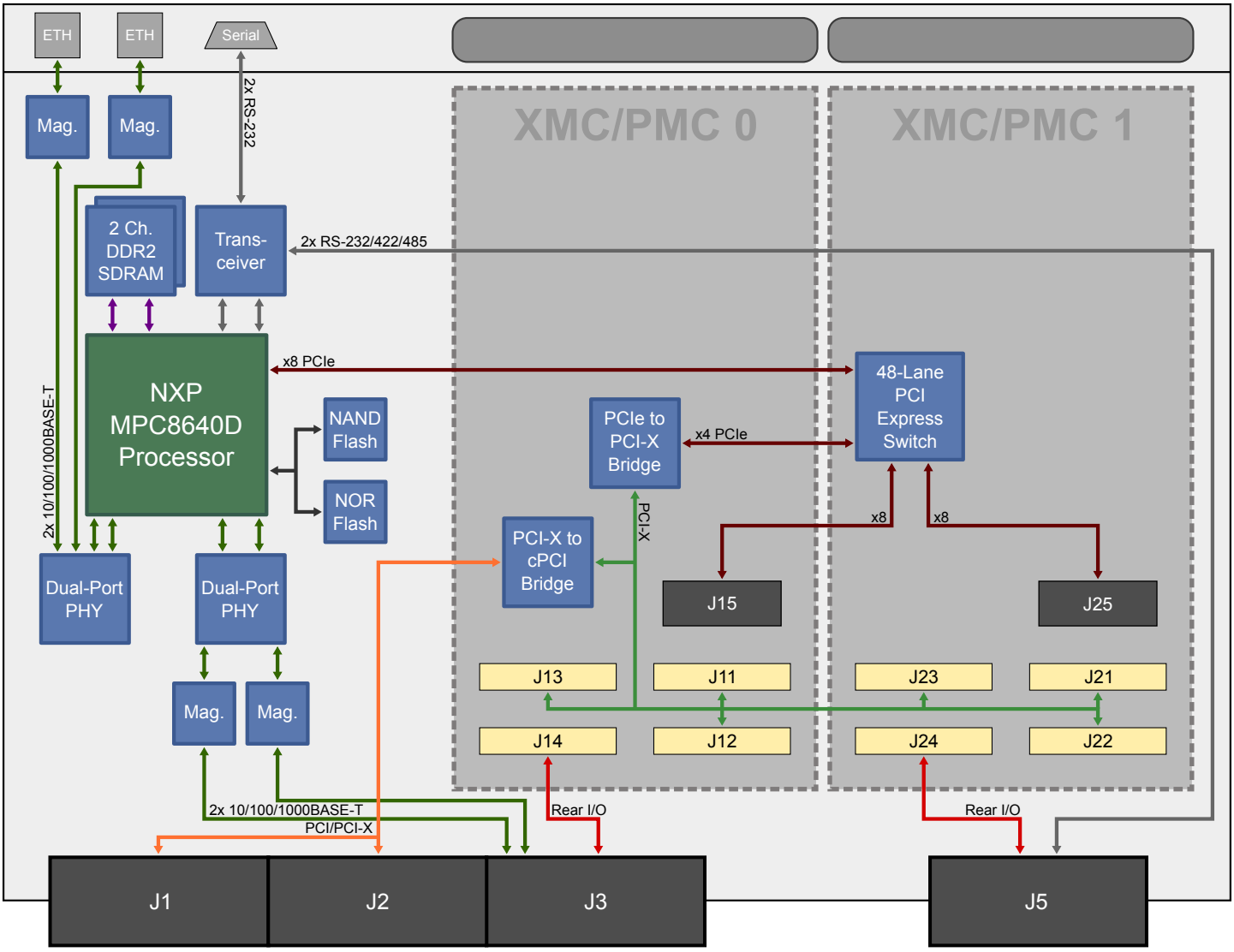
Contact factory for appropriate board configuration based on environmental requirements.

- 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 g²/Hz (maximum), 5 to 2000 Hz	0.04 g²/Hz (maximum), 5 to 2000 Hz	0.1 g²/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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