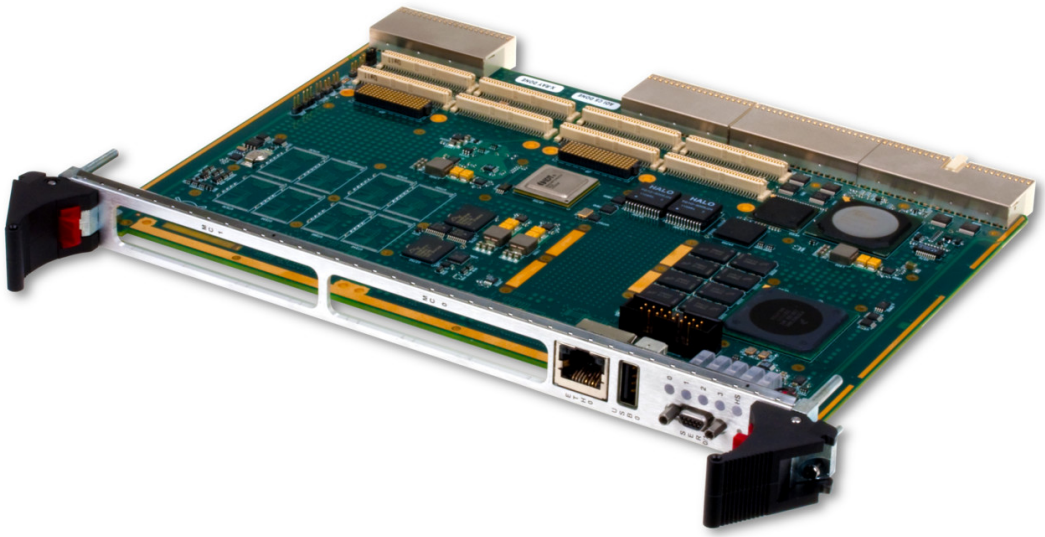
XCalibur1700

End of Life

NXP QorIQ P2020 Processor-Based Conduction- or Air-Cooled 6U cPCI Module

Please contact X-ES Sales

- NXP QorIQ P2020 processor with dual Power Architecture® e500 cores at up to 1.2 GHz
- Conduction or air cooling
- Up to 8 GB DDR3-800 ECC SDRAM
- Up to 512 MB of NOR flash (with redundancy)
- Up to 32 GB of CPU NAND flash
- Three Gigabit Ethernet ports
- x4 PCI Express to XMC sites
- One USB 2.0 port
- Two RS-232/422/485 serial ports
- Two XMC/PrPMC interfaces
- Linux BSP
- Wind River VxWorks BSP
- QNX Neutrino BSP
- Green Hills INTEGRITY-178 BSP



XCalibur1700

The XCalibur1700 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 1.2 GHz, the NXP (formerly Freescale) QorIQ P2020 delivers enhanced performance and efficiency for today's embedded computing applications.

The XCalibur1700 provides up to 8 GB DDR3-800 ECC SDRAM, two XMC/PrPMC slots, as well as 512 MB of NOR flash (with redundancy). The XCalibur1700 also supports three 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 XCalibur1700 is a powerful, feature-rich solution for the next generation of compute-intensive embedded applications. For customers seeking a lower power option, the XCalibur1700 can be designed with the NXP QorIQ P1020 processor offering a reduction of approximately 7 W. Operating system support for Wind River VxWorks, Green Hills INTEGRITY-178, QNX Neutrino, and Linux is available.

X-ES
Extreme Engineering Solutions

...Always Fast

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Processor

- NXP (formerly Freescale) QorIQ P2020 processor
- Dual Power Architecture® e500 cores at up to 1.2 GHz
- 512 kB of shared L2 cache

Memory

- Up to 8 GB DDR3-800 ECC SDRAM
- Up to 512 MB of NOR flash (with redundancy)
- Up to 32 GB of NAND flash

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)

XMC/PrPMC

- PCI-X (64/32-bit, 100/66 MHz)
- PCI (64/32-bit, 66/33 MHz)
- x4 PCI Express to J15 and J25 (XMC)

Front Panel

- Two RS-232/422/485 serial ports
- One Gigabit Ethernet port
- One USB 2.0 port
- General purpose LEDs

Back Panel

- Two RS-232/422/485 serial ports
- Two Gigabit Ethernet ports
- PMC I/O
- One USB 2.0 port (optional)

Software Support

- Linux BSP
- Wind River VxWorks BSP
- QNX Neutrino BSP
- Greens Hills INTEGRITY-178 BSP

Environmental Requirements

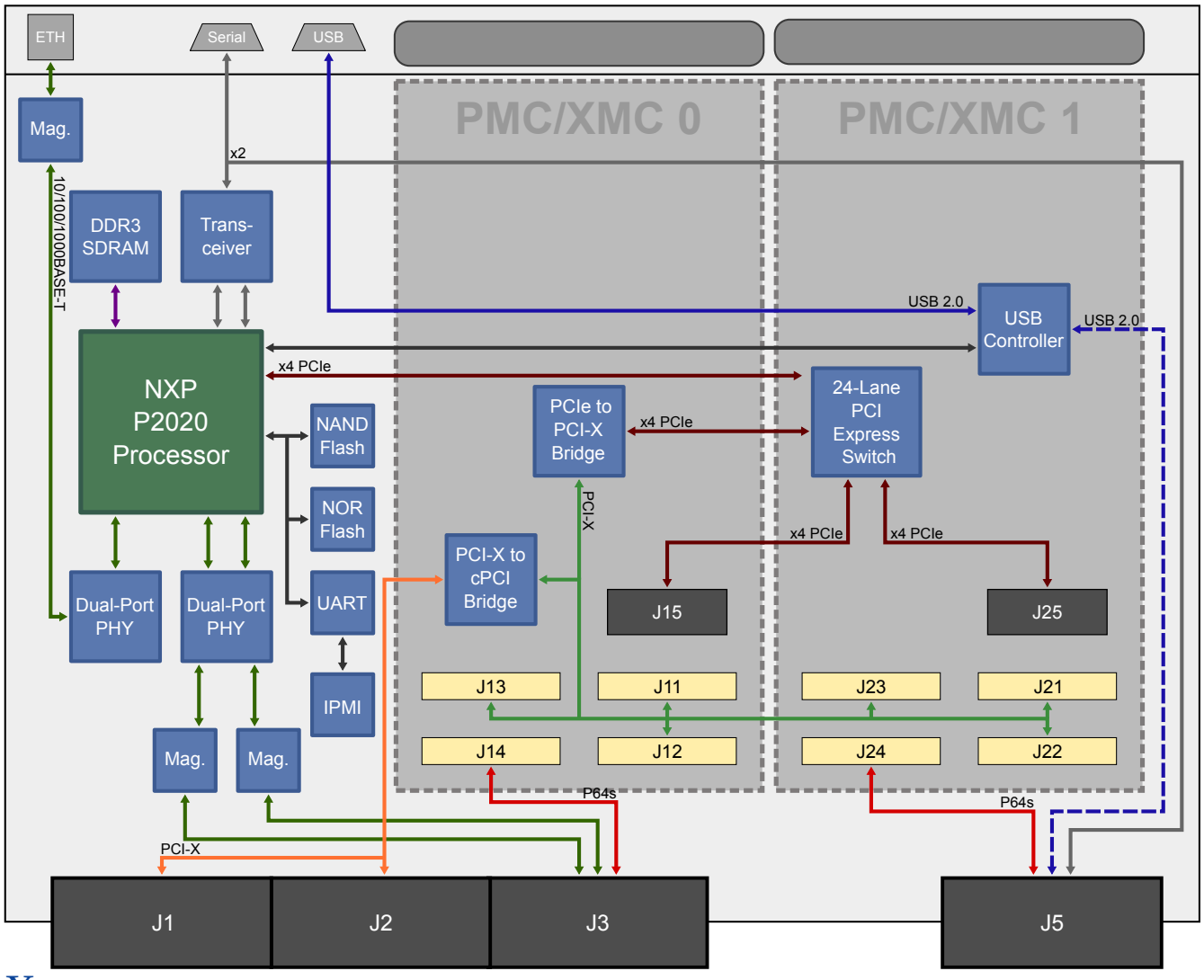
Contact factory for appropriate board configuration based on environmental requirements.

- 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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