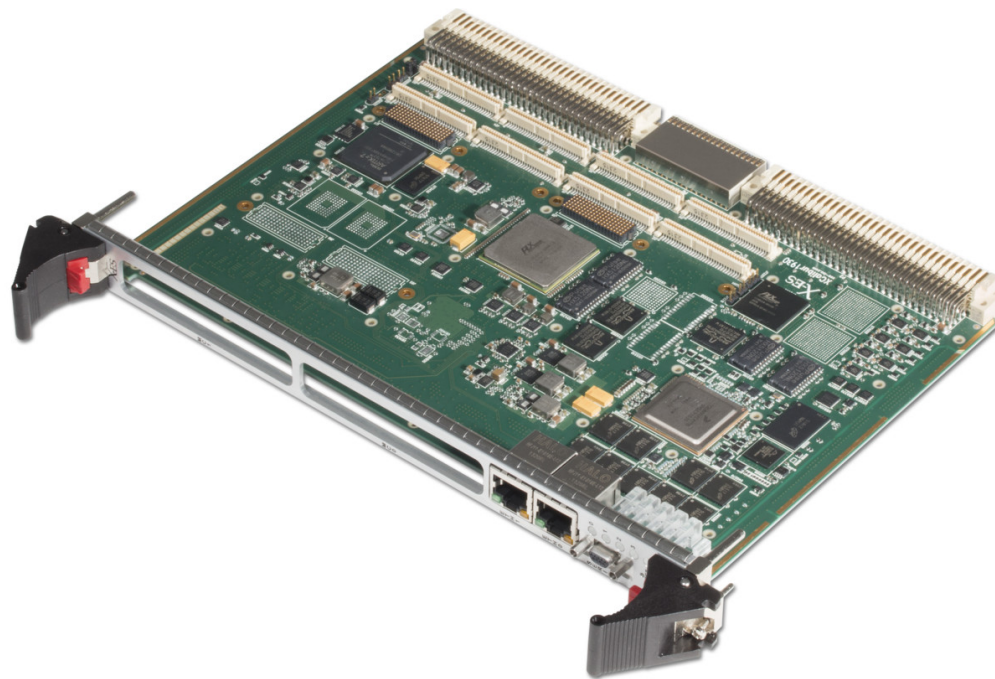


XCalibur1930

End of Life

NXP QorIQ T2080 Processor-Based Conduction or Air-Cooled 6U VME Single Board Computer **Please contact X-ES Sales**

- ▶ NXP QorIQ T2080 processor with four dual-threaded e6500 cores at up to 1.8 GHz
- ▶ 6U VME module
- ▶ Conduction or air cooling
- ▶ Up to 8 GB DDR3 ECC SDRAM
- ▶ Up to 512 MB of NOR flash (with redundancy)
- ▶ Up to 64 GB of CPU NAND flash
- ▶ Up to 64 GB of SATA NAND flash (optional)
- ▶ Up to five Gigabit Ethernet ports
- ▶ One 10GBASE-T to front panel using I/O mezzanine card (optional)
- ▶ x8 PCI Express to XMC sites
- ▶ Two SATA ports
- ▶ Two USB 2.0 ports
- ▶ Up to four RS-232/422/485 serial ports
- ▶ Two XMC/PrPMC interfaces
- ▶ NXP hypervisor support for secure partitioning
- ▶ Wind River VxWorks BSP
- ▶ Linux BSP
- ▶ Green Hills INTEGRITY BSP
- ▶ Contact factory for availability of QNX Neutrino and LynxWorks LynxOS



XCalibur1930

The XCalibur1930 is a high-performance, 6U VME, multiprocessing, single board computer that is ideal for ruggedized systems requiring high bandwidth processing and low power consumption. With four dual-threaded e6500 cores running at up to 1.8 GHz, each with a 128-bit AltiVec SIMD unit, the NXP (formerly Freescale) QorIQ T2080 delivers enhanced performance and efficiency for today's embedded computing applications.

The XCalibur1930 provides up to 8 GB of DDR3 ECC SDRAM, two XMC/PrPMC slots, and 512 MB of NOR flash (with redundancy). The XCalibur1930 also supports Gigabit Ethernet, PMC I/O, USB, SATA, and RS-232/422/485 serial ports out the P2 backplane connectors. The front panel supports 10 Gigabit Ethernet, Gigabit Ethernet, USB 2.0, and RS-232 serial ports.

The XCalibur1930 is a powerful, feature-rich solution for the next generation of compute-intensive embedded applications. Wind River VxWorks, Linux, and Green Hills INTEGRITY Board Support Packages (BSPs) are available. Wind River VxWorks and Linux BSPs may optionally be paired with the NXP hypervisor software to facilitate secure partitioning.

X-ES

Extreme Engineering Solutions

...Always Fast

Extreme Engineering Solutions

9901 Silicon Prairie Parkway • Verona, WI 53593
 Phone: 608.833.1155 • Fax: 608.827.6171
 sales@xes-inc.com • <https://www.xes-inc.com>

Processor

- NXP (formerly Freescale) QorIQ T2080 processor
- Four dual-threaded e6500 cores at up to 1.8 GHz
- 2 MB of shared L2 cache

Memory

- Up to 8 GB of DDR3 ECC SDRAM
- Up to 512 MB of NOR flash (with redundancy)
- Up to 32 GB of NAND flash
- Up to 64 GB of SATA NAND flash (optional)

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

Front Panel (Optional)

- Two RS-232 serial ports
- Two Gigabit Ethernet ports
- One USB 2.0 port
- One 10GBASE-T port to front panel using I/O mezzanine card
- General-purpose LEDs

Back Panel

- Up to four RS-232/422/485 serial ports
- Three Gigabit Ethernet ports
- Two SATA ports capable of 3 Gb/s
- PMC I/O
- One or two USB 2.0 ports

Software Support

- Wind River VxWorks BSP with optional NXP hypervisor support for secure partitioning
- Linux BSP with optional NXP hypervisor support for secure partitioning
- Green Hills INTEGRITY-178 BSP
- Contact factory for availability of QNX Neutrino and LynuxWorks LynxOS BSPs

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 †	-40 to +70°C ambient †	-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	Up to 95% non-condensing	Up to 95% non-condensing	Up to 95% non-condensing

† Contact factory for airflow rate details.

