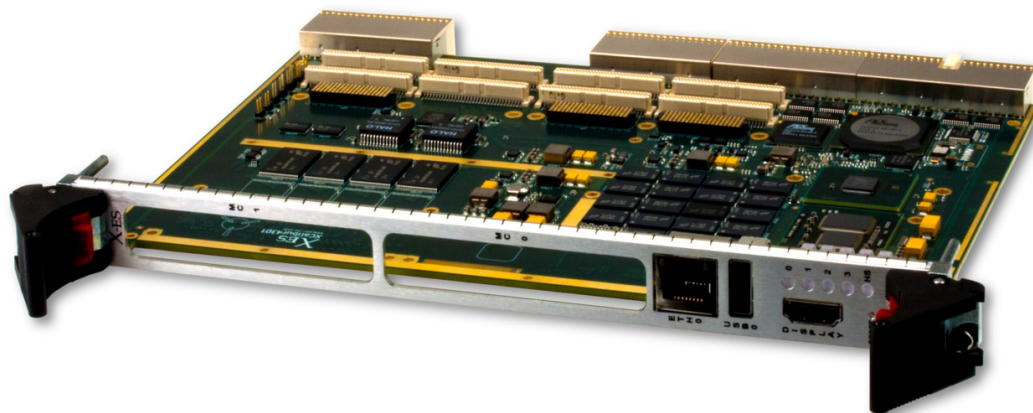


# XCalibur4301

**End of Life**

Intel® Core™ i7 Processor-Based Conduction- or Air-Cooled 6U CompactPCI Single Board Computer **Please contact X-ES Sales**

- › Intel® Core™ i7-610E, -620LE, -620UE, and -660UE processors
- › Dual-core with Hyper-Threading Technology
- › 6U CompactPCI module
- › Conduction or air cooling
- › Up to 8 GB of DDR3-1066 ECC SDRAM in two channels
- › 32 MB NOR boot flash
- › Up to 128 GB of NAND flash
- › Front panel Gigabit Ethernet port
- › Dual rear panel Gigabit Ethernet ports
- › Two XMC/PMC interfaces
- › Front and rear graphics ports
- › Complies with PICMG 2.0, 2.1, 2.3, 2.9, 2.16
- › Linux BSP
- › Wind River VxWorks BSP
- › QNX Neutrino BSP
- › Green Hills INTEGRITY BSP
- › Microsoft Windows drivers



## XCalibur4301

The XCalibur4301 is a high-performance, 6U CompactPCI, multiprocessing, single board computer that is ideal for ruggedized systems requiring high-bandwidth processing and low power consumption. With the Intel® Core™ i7 processor, the XCalibur4301 delivers enhanced performance and efficiency for today's network information processing and embedded computing applications.

The XCalibur4301 provides two separate channels of up to 8 GB of DDR3-1066 ECC SDRAM, two PrXMC/PrPMC slots, 32 MB of NOR flash, and up to 128 GB of NAND flash. The XCalibur4301 also supports Gigabit Ethernet, I<sup>2</sup>C, USB, XMC I/O, PMC I/O, and DVI dual-head graphics out the connectors.

The XCalibur4301 is a powerful, feature-rich solution for the next generation of compute-intensive embedded applications. Operating system support for Wind River VxWorks, QNX Neutrino, Linux, and Microsoft Windows drivers is available.

# X-ES

Extreme Engineering Solutions

*...Always Fast*

### Extreme Engineering Solutions

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 sales@xes-inc.com • <https://www.xes-inc.com>

**Processor**

- Intel® Core™ i7 processor operating at 2.53, 2.0, 1.06, or 1.33 GHz
- Dual-core with Hyper-Threading Technology
- Intel® QM57 chipset
- Dual-channel integrated memory controller
- Integrated graphics controller
- 4 MB of shared cache

**Memory**

- Up to 8 GB of DDR3-1066 ECC SDRAM in two channels
- 32 MB NOR flash
- Up to 128 GB of NAND flash
- 16 kB I<sup>2</sup>C EEPROM

**cPCI**

- 66 MHz 64-bit PCI interface to J1 and J2
- PICMG 2.1 (Hot Swap support)
- PICMG 2.3 (PMC I/O to P3 and P5)
- PICMG 2.9 (dedicated IPMI controller)
- PICMG 2.16 (two 10/100/1000BASE-T Ethernet ports)

**PMC**

- PCI-X (32/64-bit, 66/100 MHz)
- PCI (32/64-bit, 33/66 MHz)

**XMC**

- x8 Gen2 at 2.5 GT/s PCI Express port to J15 and J25

**Graphics**

- Front and rear panel DVI

**Front Panel I/O (Optional)**

- One HDMI video interface
- One 10/100/1000BASE-T Ethernet port
- One USB 2.0 port

**Back Panel**

- Two RS-232/422/485 serial ports
- Two 10/100/1000BASE-T Ethernet ports
- PMC I/O
- DVI video
- Four SATA ports capable of 3 Gb/s
- Two USB 2.0 ports

**Software Support**

- Linux BSP
- Wind River VxWorks BSP
- QNX Neutrino BSP
- Green Hills INTEGRITY
- Microsoft Windows drivers

**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

