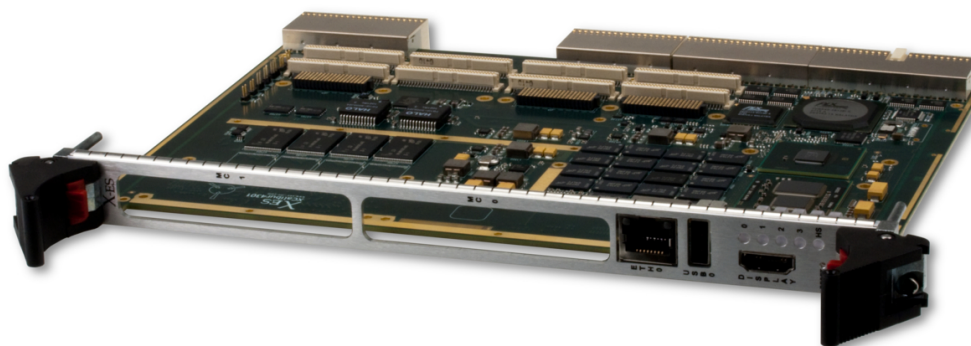


XCalibur4301

Intel® Core™ i7 Processor-Based Conduction- or Air-Cooled 6U CompactPCI Single Board Computer

- ▶ 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 PMC/XMC 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 PrPMC/PrXMC slots, 32 MB of NOR flash, and up to 128 GB of NAND flash. The XCalibur4301 also supports Gigabit Ethernet, I²C, USB, PMC I/O, XMC 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

3225 Deming Way, Suite 120 • Middleton, WI 53562
 Phone: 608.833.1155 • Fax: 608.827.6171
 sales@xes-inc.com • <http://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 I²C 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 port)

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 3.0 Gb/s ports
- Two USB 2.0 ports

Software Support

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

Environmental Requirements

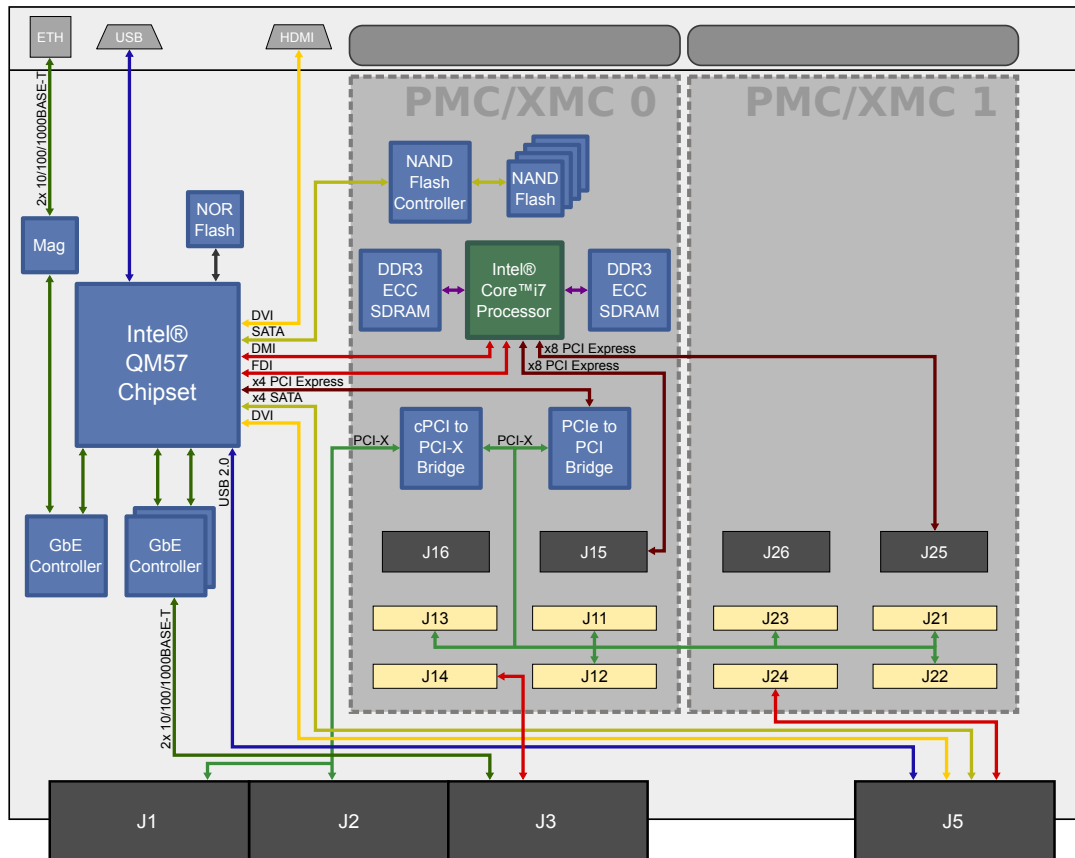
Contact factory for appropriate board configuration based on environmental requirements.

- 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 ambient
Vibration	0.002 g ² /Hz, 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



XCalibur4301

