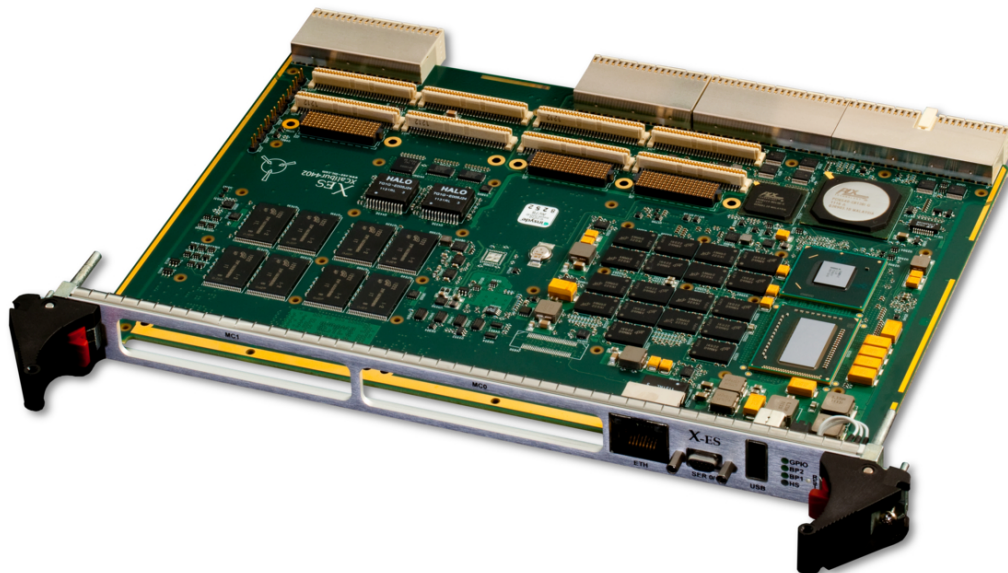


XCalibur4402

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

- ▶ Supports 2nd generation Intel® Core™ i7 processors and 3rd generation Intel® Core™ i7 processors
- ▶ Dual- or quad-core processor with Intel® Hyper-Threading Technology
- ▶ CompactPCI 6U module
- ▶ Conduction or air cooling
- ▶ Up to 16 GB of DDR3-1600 ECC SDRAM in two channels
- ▶ Up to 128 GB of NAND flash
- ▶ One front panel serial port
- ▶ Dual rear panel Gigabit Ethernet ports
- ▶ Four rear panel SATA 3.0 Gb/s ports
- ▶ Two PMC/XMC interfaces
- ▶ Rear graphics ports
- ▶ Complies with PICMG 2.0, 2.1, 2.3, 2.9, 2.16
- ▶ Wind River VxWorks BSP
- ▶ Linux BSP
- ▶ Microsoft Windows drivers
- ▶ Contact factory for availability of Green Hills INTEGRITY, QNX Neutrino, and LynuxWorks LynxOS BSPs



XCalibur4402

The XCalibur4402 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 2nd generation Intel® Core™ i7 processor or 3rd generation Intel® Core™ i7 processor, the XCalibur4402 delivers enhanced performance and efficiency for today's network information processing and embedded computing applications.

The XCalibur4402 provides up to 16 GB of DDR3-1600 ECC SDRAM in two channels, two PrPMC/PrXMC slots, and up to 128 GB of NAND flash. The XCalibur4402 also supports Gigabit Ethernet, SATA, I²C, USB, PMC I/O, XMC I/O, and DisplayPort graphics out the connectors.

The XCalibur4402 is a powerful, feature-rich solution for the next generation of compute-intensive embedded applications. Wind River VxWorks and Linux Board Support Packages (BSPs) are available, as well as Microsoft Windows drivers.

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

- Quad- or Dual-core Intel® Core™ i7
- Intel® Turbo Boost Technology
- Intel® Hyper-Threading Technology
- AVX instruction set extensions
- Integrated with Intel® QM67 chipset
- Dual-channel integrated memory controller

Dual-Core Processor Configurations

- Core™ i7-2655LE: 2.2 GHz, 4 MB cache
- Core™ i7-2610UE: 1.5 GHz, 4 MB cache
- Core™ i7-3555LE: 2.5 GHz, 4 MB cache
- Core™ i7-3517UE: 1.7 GHz, 4 MB cache

Quad-Core Processor Configurations

- Core™ i7-3612QE: 2.1 GHz, 6 MB cache

Memory

- Up to 16 GB of DDR3-1600 ECC SDRAM in two channels
- Up to 128 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 P3 and P5)
- PICMG 2.9 (dedicated IPMI controller)
- PICMG 2.16 (two 10/100/1000Base-T Ethernet ports)

PrPMC

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

XMC (VITA 42.3)

- One SATA 6.0 Gb/s port
- x8 Gen2 (5 GT/s) PCI Express
- Intel® High Definition Audio port
- Two USB 2.0 ports

Front Panel I/O (Optional)

- One RS-232/485 serial port
- One 10/100/1000BASE-T Ethernet port
- One USB 2.0 port
- General-purpose LEDs

Security and Management

- Baseboard Management Controller (IPMI)
- Optional Trusted Platform Module (TPM)
- Non-volatile memory write protection

Back Panel

- Dual RS-232/485 serial ports
- Two 10/100/1000BASE-T Ethernet ports
- Four SATA 3.0 Gb/s ports
- PMC I/O
- Two USB 2.0 ports
- DisplayPort

Software Support

- Wind River VxWorks BSP
- Linux BSP
- Microsoft Windows drivers
- Contact factory for availability of Green Hills INTEGRITY, QNX Neutrino, and LynuxWorks LynxOS BSPs

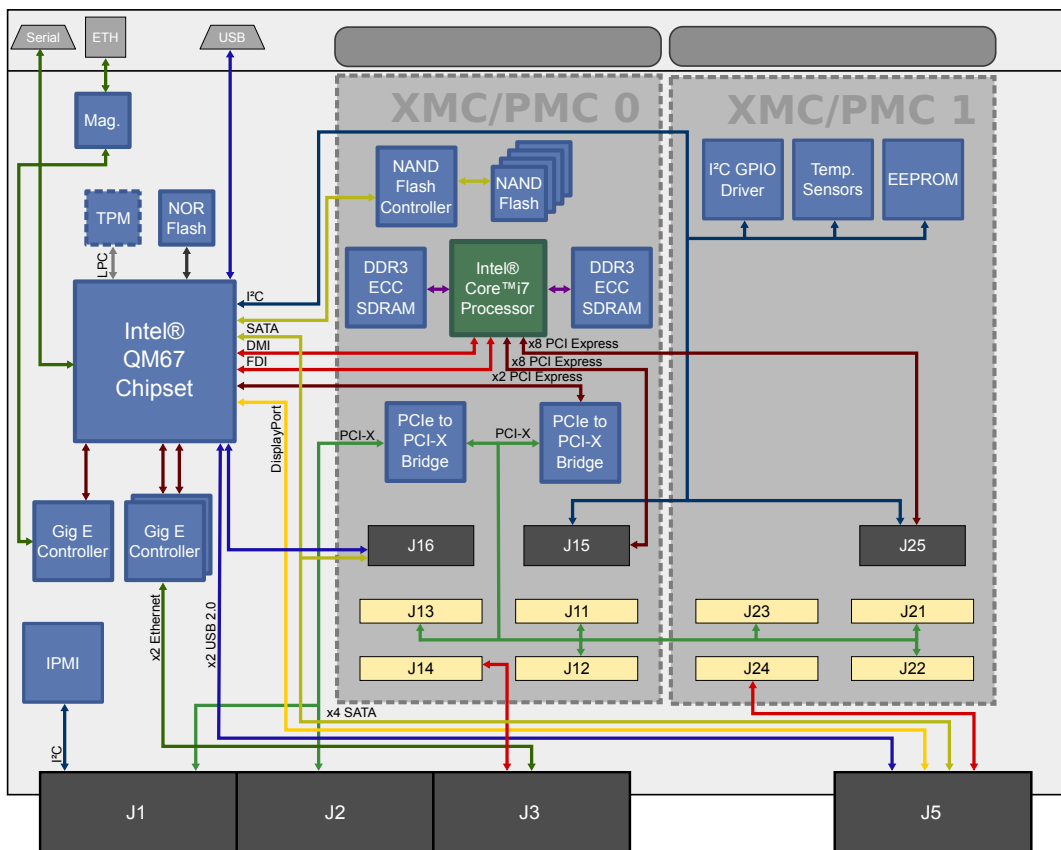
Environmental Requirements

- 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 CPU frequency and application. Please consult factory.

Supported 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



XCalibur4402

