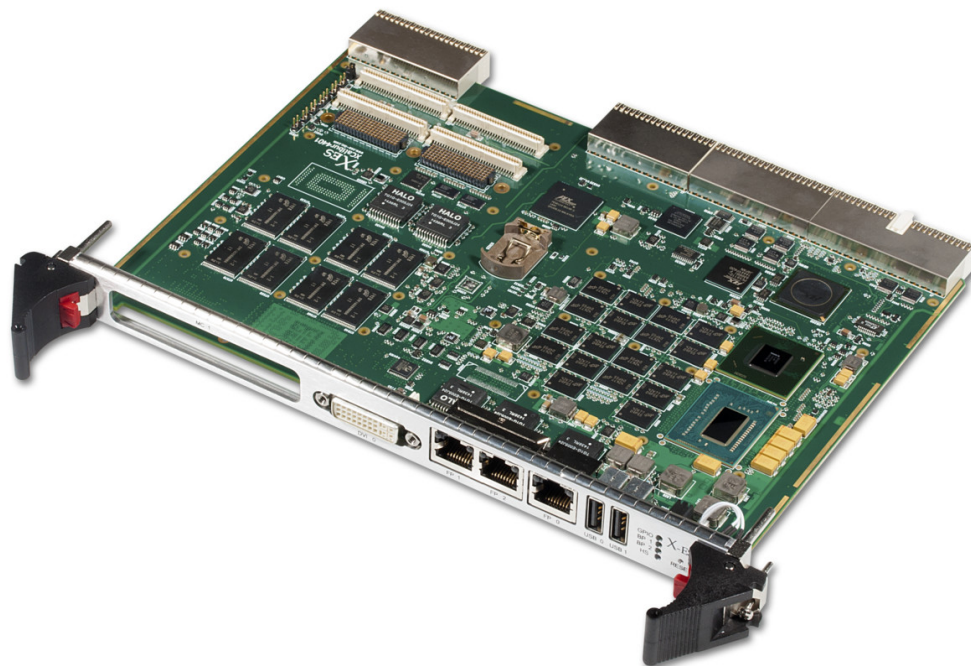


# XCalibur4401

**End of Life**

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

- ▶ Supports 2nd and 3rd generation Intel® Core™ i7 processors
- ▶ Quad- or dual-core processor with Intel® Hyper-Threading Technology
- ▶ 6U CompactPCI module
- ▶ Conduction or air cooling
- ▶ Up to 16 GB of DDR3 ECC SDRAM in two channels
- ▶ Up to 128 GB of NAND flash
- ▶ Three front panel Gigabit Ethernet ports
- ▶ Dual rear panel Gigabit Ethernet ports
- ▶ Two rear panel USB 2.0 high-speed ports
- ▶ Four rear panel SATA ports
- ▶ One XMC/PMC interface
- ▶ Front and 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



## XCalibur4401

The XCalibur4401 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 or 3rd generation Intel® Core™ i7 processor, the XCalibur4401 delivers enhanced performance and efficiency for today's network information processing and embedded computing applications.

The XCalibur4401 provides up to 16 GB of DDR3 ECC SDRAM in two channels, one PrXMC/PrPMC slot, and up to 128 GB of NAND flash. The XCalibur4401 also supports Gigabit Ethernet, SATA, I<sup>2</sup>C, USB, PMC I/O, XMC I/O, and DVI graphics out the connectors.

The XCalibur4401 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

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**

- 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

**Quad-Core Processor Configurations**

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

**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

**Memory**

- Up to 16 GB of DDR3 ECC SDRAM in two channels
- Up to 128 GB of NAND flash

**Security and Management**

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

**cPCI**

- 66 MHz 32-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 port capable of 6 Gb/s
- x8 PCI Express Gen2 (5 GT/s)
- Intel® High Definition Audio port
- Two USB 2.0 ports

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

- DVI-D interface
- Three 10/100/1000BASE-T Ethernet ports
- Two USB 2.0 ports
- General-purpose LEDs

**Back Panel**

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

**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.

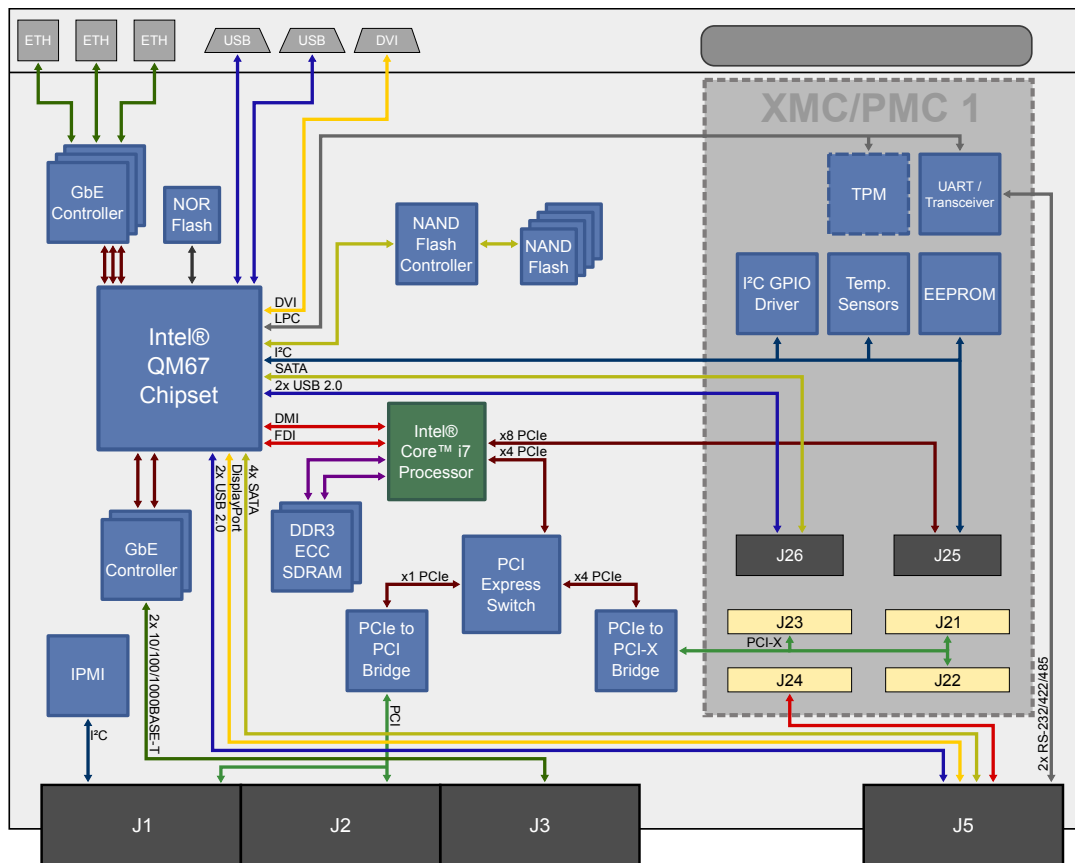
- Supported ruggedization levels (see chart below): 1, 3, 5
- Conformal coating available as an ordering option

**Power Requirements**

- Power will vary based on 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 <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

† Contact factory for airflow rate details.



XCalibur4401

