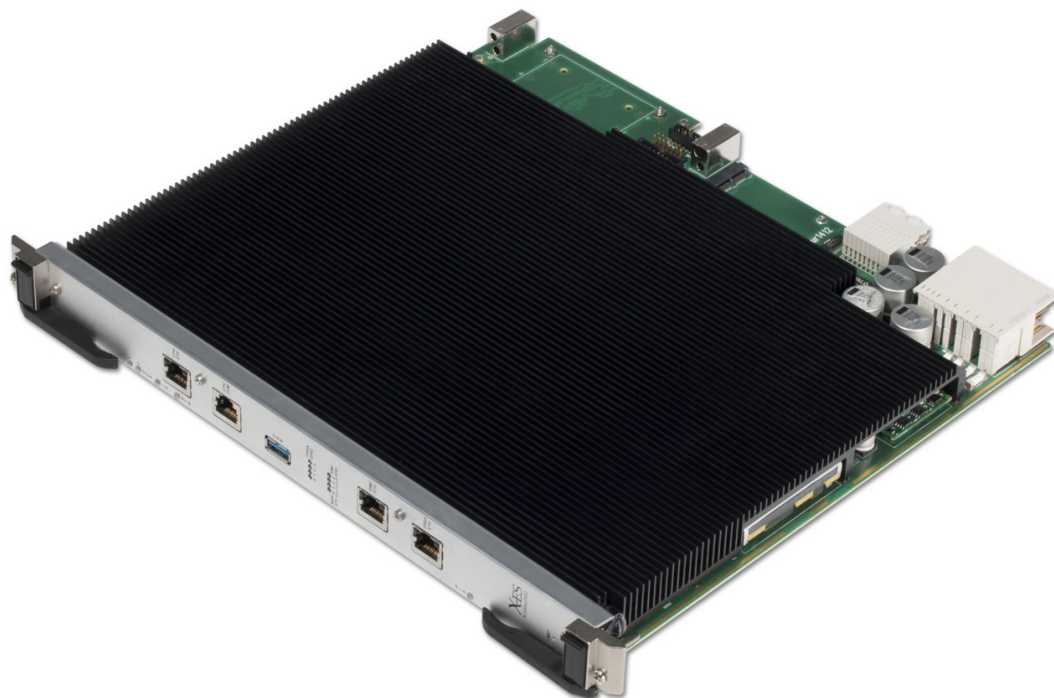


XCalibur1412

Intel® Xeon® E5-2600 v4 Family Processor-Based AdvancedTCA (ATCA) Blade with Security FPGA & Dual 40/56GbE/InfiniBand

- ▶ Supports dual Intel® Xeon® E5-2600 v4 family of processors (formerly Broadwell-EP)
- ▶ PICMG 3.0 AdvancedTCA (ATCA) processing blade
- ▶ Integrated Xilinx Kintex® UltraScale™ security FPGA (XCKU060 or XCKU095)
- ▶ Ruggedized design
- ▶ Up to 128 GB of DDR4-2400 ECC SDRAM across eight channels
- ▶ Up to 56 Gb/s InfiniBand or 40/56 Gigabit Ethernet ports
- ▶ Four Gigabit Ethernet ports
- ▶ One USB 3.0 port
- ▶ One RS-232 serial port (CPU or IPMC console)
- ▶ IPMI support
- ▶ X-ES Enterprise Linux (XEL) BSP



XCalibur1412

The XCalibur1412 with SecureCOTS™ technology provides an industry-leading combination of security and performance for an AdvancedTCA (ATCA) processing blade. It features dual Intel® Xeon® E5-2600 v4 family processors (formerly Broadwell-EP) with a tightly coupled Xilinx Kintex® UltraScale™ security FPGA and two up to 56 Gb/s InfiniBand or 40/56 Gigabit Ethernet ports.

The XCalibur1412 is designed and manufactured in the USA, using COTS components from trusted domestic supply chains. With full support for the PICMG 3.0 AdvancedTCA (ATCA) standard, it is a true Open Systems Architecture (OSA) design that can be installed within COTS ATCA chassis. The XCalibur1412 also integrates ruggedization features that enable it to perform in environmentally challenging applications without modifications or enhancements.

An X-ES Enterprise Linux (XEL) Board Support Package (BSP) is available for the XCalibur1412.

X-ES

Extreme Engineering Solutions

...Always Fast

Extreme Engineering Solutions

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 Phone: 608.833.1155 • Fax: 608.827.6171
 sales@xes-inc.com • <https://www.xes-inc.com>

Processor

- Dual Intel® Xeon® E5-2600 v4 family processors (formerly Broadwell-EP)
- Default configuration utilizes E5-2648L v4 processors
- Up to 128 GB of DDR4-2400 ECC SDRAM across eight channels

FPGA

- Xilinx Kintex® UltraScale™ security FPGA (XCKU060 or XCKU095)
- 8 GB DDR4 ECC SDRAM
- External Gigabit Ethernet interface
- SATA interface (optional)
- Two x8 and one x4 PCI Express Gen3-capable interfaces to processor subsystem

IPMI

- PICMG 3.0 R3.0-based IPMI support

Backplane I/O

- Two up to 56 Gb/s InfiniBand or 40/56 Gigabit Ethernet ports (fabric interface)
- Two 10/100/1000BASE-T Ethernet ports (base interface)

Front Panel I/O

- One processor 10/100/1000BASE-T Ethernet port
- One FPGA 10/100/1000BASE-T Ethernet port
- One IPMC 10/100BASE-TX Ethernet port
- One USB 3.0 port
- One RS-232 serial port (CPU or IPMC console)

Physical Characteristics

- PICMG 3.0 AdvancedATCA (ATCA)
- Dimensions: 280 mm x 322.5 mm, single slot

Environmental Requirements

Contact factory if your requirements are outside of our advertised levels.

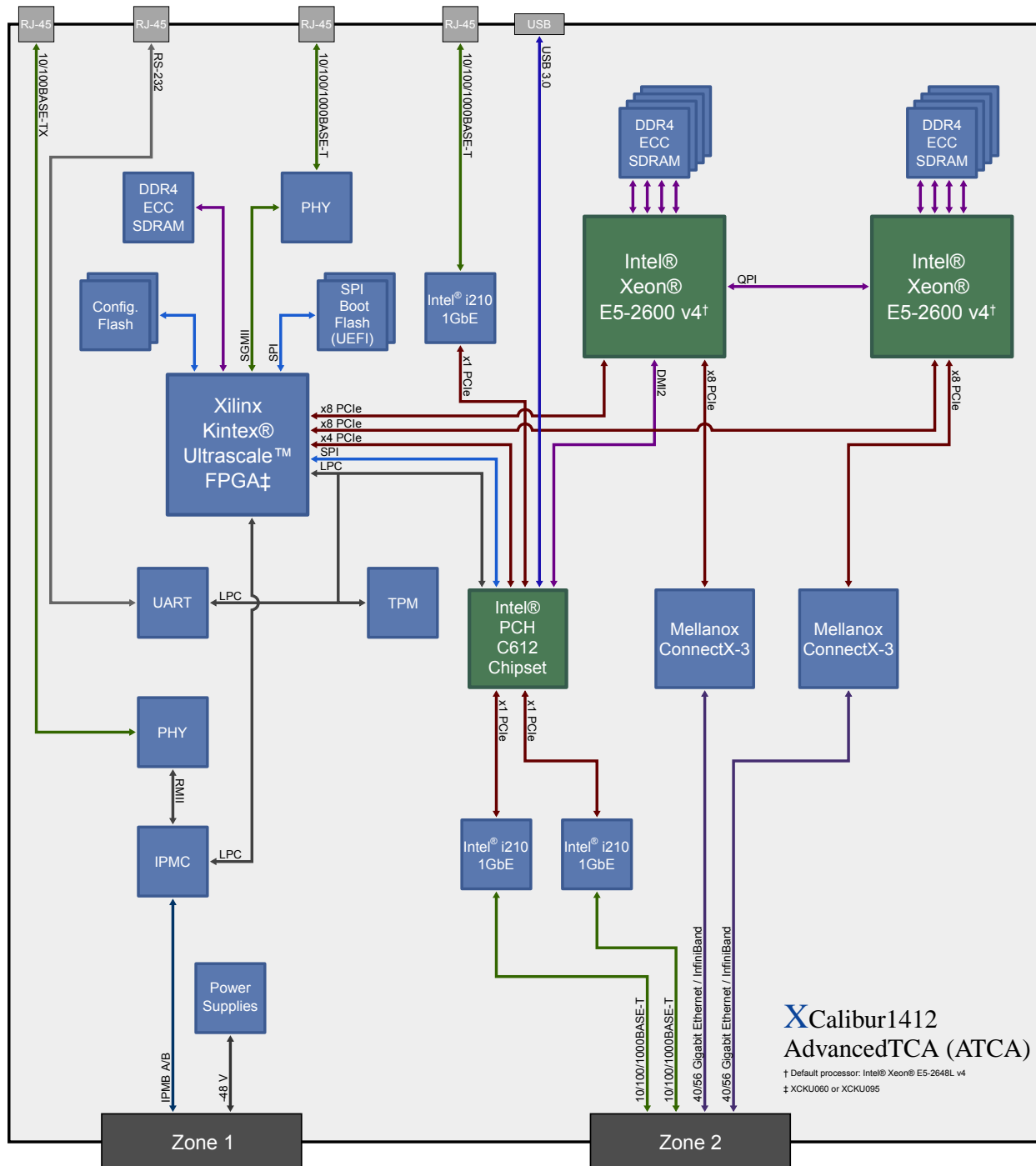
- Low temperature operation to 0°C
- High temperature operation to +55°C ambient at 300 LFM
- Storage temperature of -40°C to +85°C ambient
- Operation within 5 Hz to 2,000 Hz (0.002g²/Hz maximum) vibration, 20 g (11 ms sawtooth) shock, and 0% to 95% non-condensing humidity
- Conformal coating available as an ordering option

Software Support

- X-ES Enterprise Linux (XEL) BSP

Power Requirements

- Power will vary based on configuration and usage. Please consult factory



XCalibur1412
AdvancedTCA (ATCA)

† Default processor: Intel® Xeon® E5-2648L v4
‡ XCKU060 or XCKU095