

# XPand6000 Series

Rugged Small Form Factor Intel® Core™ i7 or Freescale QorIQ™-Based System with XMC or PMC Support

- ▶ Convection-cooled or conduction-cooled Small Form Factor (SFF) ATR chassis
- ▶ Physical dimensions of 2.36 in. (W), 4.88 in. (H), 7.10 in. (L) for vertical orientation, convection-cooled version
- ▶ Physical dimensions of 4.88 in. (W), 2.10 in. (H), 7.70 in. (L) for horizontal orientation, convection-cooled version
- ▶ Physical dimensions of 4.88 in. (W), 1.90 in. (H), 7.10 in. (L) for horizontal orientation, conduction-cooled version
- ▶ Supports single ruggedized Freescale QorIQ™ or Intel® Core™ i7 processor-based COM Express module
- ▶ Supports single conduction-cooled PMC or XMC module
- ▶ Integration services with third-party modules available
- ▶ Optional Slim SATA SSD memory module
- ▶ Integrated MIL-STD-704 28 VDC power supply
- ▶ MIL-STD-461 E/F EMI filtering
- ▶ Optional internal holdup
- ▶ Environmentally sealed
- ▶ D38999 connector support
- ▶ Configurable front panel I/O connectors
- ▶ Customizable internal carrier card for application-specific circuitry
- ▶ Back panel power connector



## XPand6000 Series

XPand6000 Series systems are based on convection-cooled and conduction-cooled, fully-ruggedized Small Form Factor (SFF) chassis designed and tested to meet the rigorous standards of MIL-STD-810 while integrating the latest power-saving, performance-enhancing, and space-efficient COTS technology. Its small size, availability in horizontal and vertical orientations, and use of COTS components enables the XPand6000 Series to be deployed quickly into a wide variety of airborne and ground vehicle applications.

XPand6000 Series systems support an internal carrier card that can be populated with a high-performance ruggedized Freescale QorIQ™ or Intel® Core™ i7 processor-based COM Express module, a PMC or XMC module, an SSD, and it can be customized to support application-specific circuitry such as additional I/O or an FPGA. X-ES has an extensive lineup of PMC and XMC solutions to fulfill your data-processing and I/O requirements. Additionally, X-ES provides integration services for third-party ruggedized COM Express or PMC/XMC modules.

An optional Slim SATA SSD memory module (with optional integrated encryption) provides the convenience of high-capacity off-the-shelf storage, the ruggedness of solid-state non-volatile memory, and the security of 256-bit AES encryption. X-ES maximizes power supply performance per cubic inch, supporting an integrated MIL-STD-704 28 VDC power supply and MIL-STD-461 EMI filtering. Internal holdup can be provided, as well.

# X-ES

Extreme Engineering Solutions

...Always Fast

### Extreme Engineering Solutions

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**Physical Characteristics – vertical orientation, convection cooling**

- 2.36 in. (W), 4.88 in. (H), 7.10 in. (L)
- Weighs less than 4 pounds (fully populated)

**Physical Characteristics – horizontal orientation, convection cooling**

- 4.88 in. (W), 2.10 in. (H), 7.70 in. (L)
- Weighs less than 3.75 pounds (fully populated)

**Physical Characteristics – horizontal orientation, conduction cooling**

- 4.88 in. (W), 1.90 in. (H), 7.70 in. (L)
- Weighs less than 3.5 pounds (fully populated)

**Configuration Options**

- Supports a single ruggedized Freescale QorIQ or Intel® Core™ i7 processor-based COM Express module
- Supports a single conduction-cooled PMC or XMC module
- Customized carrier card solutions available for application-specific circuitry
- Optional Slim SATA SSD module with optional integrated encryption

**Front Panel I/O Options**

- Up to two D38999 circular connectors for I/O
- Customizable connector options
- DVI graphics interfaces
- USB 2.0- and 1.0-compliant interfaces
- 10/100/1000BASE-T Gigabit Ethernet interfaces
- RS-232/422 serial links
- MIL-STD-1553
- ARINC 429
- Custom I/O via XMC or PMC modules
- Custom I/O via carrier card

**Power Supply Options**

- Integrated power supply
- MIL-STD-704 28 VDC input voltage support (default)
- MIL-STD-461 EMI filtering
- Integrated internal holdup (optional)
- Additional power supply options available

**Thermal**

- The chassis, power supply, and internal components are designed and tested to handle ambient temperatures down to -40°C and extreme high temperatures. However, high and low temperature performance is dependent on the capabilities of the installed COTS modules.

