XPand6000 Series

Rugged Intel® Core™ i7, Intel® Atom™, or Freescale QorIQ-Based Small Form Factor (SFF) System with XMC/PMC Support

- Convection-cooled or conduction-cooled Small Form Factor (SFF) ATR chassis
- Physical dimensions of 7.1 in. (L) x 2.36 in. (W) x 4.88 in. (H) for vertical orientation, convection-cooled version
- Physical dimensions of 7.7 in. (L) x 4.88 in. (W) x 2.1 in. (H) for horizontal orientation, convection-cooled version
- Physical dimensions of 7.1 in. (l) x 4.88 in. (W) x 1.9 in. (H) for horizontal orientation, conduction-cooled version
- Supports single Intel® Core™ i7, Intel® Atom™, or Freescale QorIQ processor-based Rugged COM Express® module
- Supports single conduction-cooled PMC or XMC module
- Integration services with third-party modules available
- Slim SATA SSD memory module (optional)
- Integrated MIL-STD-704 28 VDC power supply
- MIL-STD-461 E/F EMI filtering
- Internal holdup (optional)
- 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 can be populated with a high-performance ruggedized Intel® Core™ i7, Intel® Atom™, or Freescale QorIQ processor-based COM Express® module. The XPand6000 Series supports an XMC or PMC site for expansion. The system's carrier card can also 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

- Dimensions: 7.10 in. (L) x 2.36 in. (W) x 4.88 in. (H)
- Weighs less than 4 lbs. (fully populated)

Physical Characteristics – Horizontal Orientation, Convection Cooling

- Dimensions: 7.70 in. (L) x 4.88 in. (W) x 2.10 in. (H)
- Weighs less than 3.75 lbs. (fully populated)

Physical Characteristics – Horizontal Orientation, Conduction Cooling

- Dimensions: 7.70 in. (L) x 4.88 in. (W) x 1.90 in. (H)
- Weighs less than 3.5 lbs. (fully populated)

Configuration Options

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

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.