

# XPand6103

**End of Life**

Rugged and Compact Intel® Core™ i7-Based Fanless Embedded Box PC

Please contact X-ES Sales

- › 3rd generation Intel® Core™ i7 processor
- › Fanless embedded box PC
- › Extremely rugged and reliable design
- › Compact and maintenance-free
- › Supports a wide voltage range for input power
- › Rugged M12 I/O connectors
- › Gigabit Ethernet
- › CAN bus
- › Dual-Mode DisplayPort video interface
- › One USB 2.0 port
- › Up to two RS-232/422/485 serial ports
- › PCI Express Mini Card expansion slots
- › 10GBASE-T 10 Gigabit Ethernet (optional)
- › -40°C to +70°C operating temperature
- › Designed for rugged high performance Industrial PC (IPC) and transportation applications
- › Ideal computing platform for autonomous vehicles



## XPand6103

The XPand6103 is a rugged and compact fanless embedded box PC utilizing the Intel® Core™ i7 processor. The XPand6103 provides a reliable and maintenance-free, high-performance, computing platform ideally suited for environmentally challenging and space-constrained situations. It was specifically designed for rugged, yet processing-intensive, Industrial PC (IPC), vehicle, and rail transportation applications, and it provides an optimal solution for demanding autonomous vehicle computing requirements.

The XPand6103 supports the 3rd generation Intel® Core™ i7 processor by integrating the XPedite7450 rugged COM Express module. The internal 64 GB Slim SATA SSD memory module combines the convenience of high-capacity off-the-shelf storage with the reliability of solid-state non-volatile memory. The standard configuration includes Dual-Mode DisplayPort video, two Gigabit Ethernet, USB 2.0, four CAN bus, and RS-232/422/485 ports. The system can also be configured to provide up to two 10 Gigabit Ethernet 10GBASE-T interfaces. With three internal PCI Express Mini Card slots and support for two external antennae, the XPand6103 can offer a flexible array of additional I/O options, including WLAN, cellular, and GPS.

The XPand6103 supports a wide input voltage range and complies with the power specifications of SAE J1455, EN50155, ISO-7637-2, MIL-STD-1275, and MIL-STD-704.

Through the implementation of an environmentally sealed and completely rugged design, the XPand6103 can operate under the most demanding IEC61373, EN50155, and MIL-STD-810 shock and vibration requirements. The XPand6103 also supports operating temperatures from -40°C to +70°C ambient.

# X-ES

Extreme Engineering Solutions

*...Always Fast*

### Extreme Engineering Solutions

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**Physical Characteristics**

- Dimensions do not include connectors
- 7.70 in. (L) x 4.88 in. (W) x 2.10 in. (H)
- Weighs less than 4 lbs.

**Processor**

- Includes XPedite7450 Intel® Core™ i7 ruggedized COM Express® module

**Non-Volatile Memory**

- 64 GB SLC NAND Slim SATA module
- mSATA configurations for additional storage (optional)

**Front Panel I/O**

- Two Gigabit Ethernet interfaces
- Four CAN bus 2.0A- and 2.0B-compliant interfaces
- Dual-Mode DisplayPort video interface
- Up to two RS-232/422/485 serial ports
- One USB 2.0 port
- Additional I/O configurations available with up to three PCI Express Mini cards
- Optional WLAN, cellular, GPS, and dual 10GBASE-T 10 Gigabit Ethernet configurations

**Power Supply Options**

- Supports a wide voltage range for input power
- Meets SAE J1455, EN50155, ISO-7637-2, MIL-STD-1275, and MIL-STD-704

**Environmental**

- -40°C to +70°C operating temperature
- -55°C to +105°C storage temperature
- 0.1 g<sup>2</sup>/Hz (maximum), 1 hour per axis from 5 Hz to 2000 Hz vibration
- 40 g, 11 ms sawtooth shock
- Up to 95% humidity

