

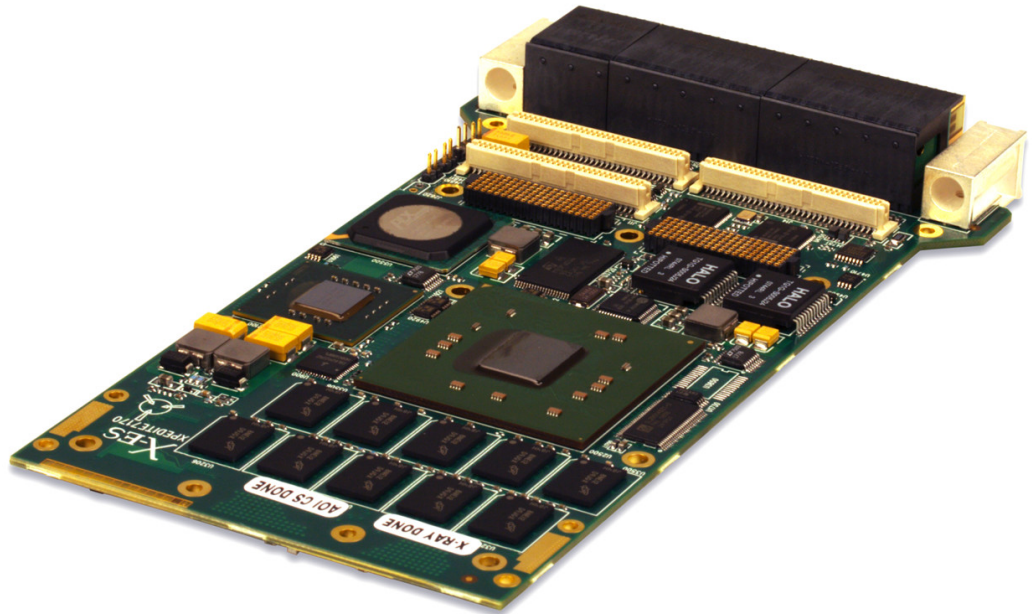
# XPedite7170

**End Of Life**

Intel® Core™2 Duo Processor-Based Conduction- or Air-Cooled 3U VPX-REDI Module

Please see [XPedite7470](#)

- ▶ Intel® Core™2 Duo processor at up to 1.8 GHz
- ▶ 3U VPX (VITA 46) module
- ▶ Ruggedized Enhanced Design Implementation (REDI)
- ▶ Conduction or air cooling
- ▶ Up to 4 GB of DDR2-400 ECC SDRAM
- ▶ Up to 2 MB firmware hub flash (or 1 MB with redundancy)
- ▶ 4 GB of NAND flash
- ▶ XMC/PrPMC interface with rear and front panel I/O support
- ▶ Two x4 PCI Express P1 fabric interconnects
- ▶ Two rear panel Gigabit Ethernet ports with integrated magnetics (optional)
- ▶ Two rear panel USB 2.0 high-speed ports (optional)
- ▶ Two rear panel SATA ports (optional)
- ▶ Up to two rear panel RS-232/422/485 serial ports
- ▶ Front I/O available via plugover module
- ▶ Linux BSP
- ▶ Wind River VxWorks BSP
- ▶ QNX Neutrino BSP
- ▶ Green Hills INTEGRITY BSP
- ▶ Microsoft Windows drivers



## XPedite7170

The XPedite7170 is a high-performance, low-power 3U VPX-REDI single board computer based on the Intel® Core™2 Duo processor. With two x4 PCI Express P1 interconnects and up to two Gigabit Ethernet ports, the XPedite7170 is ideal for high-bandwidth data-processing applications.

The XPedite7170 accommodates up to 4 GB of DDR2-400 ECC SDRAM to support memory-intensive applications, and hosts numerous I/O ports including Gigabit Ethernet, USB 2.0, SATA, and RS-232/422/485 through the P2 backplane connector.

The XPedite7170 can be used in either the system slot or peripheral slot of a VPX backplane. Linux 2.6, Wind River VxWorks, QNX Neutrino, and Green Hills INTEGRITY Board Support Packages (BSPs), as well as Microsoft Windows drivers, are available for the XPedite7170.

# X-ES

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*...Always Fast*

### Extreme Engineering Solutions

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**Processor**

- Intel® Core™2 Duo at up to 1.8 GHz
- Up to 200 MHz (800 MT/s) FSB
- Up to 6 MB of L2 cache

**Memory**

- Up to 4 GB of DDR2-400 ECC SDRAM
- Up to 2 MB firmware hub flash (or 1 MB with redundancy)
- 4 GB of NAND flash

**Front Panel I/O**

- Front panel RJ-45 Ethernet, USB, and micro-DB-9 RS-232 serial ports available via optional plugover module

**VPX (VITA 46) P1 I/O**

- x4 PCI Express interface to P1.A
- x4 PCI Express interface to P1.B
- One Gigabit Ethernet port
- X12d XMC P16 I/O

**VPX (VITA 46) P2 I/O**

- One Gigabit Ethernet port
- Two SATA ports (optional)
- Two USB 2.0 ports (optional)
- Up to two RS-232/422/485 serial ports
- I<sup>2</sup>C port
- 3.3 V GPIO signals
- P64s PMC P14 I/O

**XMC/PrPMC Site**

- 32-bit, 33 MHz PCI bus (PMC interface)
- x4 PCIe port (XMC interface)
- P64s P14 I/O support
- X12d P16 I/O support

**Software**

- Linux BSP
- Wind River VxWorks BSP
- QNX Neutrino BSP
- Green Hills INTEGRITY BSP
- Microsoft Windows drivers

**Physical Characteristics**

- 3U VPX-REDI conduction- or air-cooled form factor
- Dimensions: 100 mm x 160 mm
- 0.8 in. pitch without solder-side cover
- 0.85 and 1.0 in. pitch with solder-side cover

**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**

- Maximum power consumption: 37 W (with 1.8 GHz processor), 28 W (with 1.2 GHz processor)

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 (300 LFM)	-40 to +70°C (600 LFM)	-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

