XPedite7172

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 module
- OpenVPX™ standards based
- 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 interface with rear and front panel I/O support
- Two x4 PCI Express P1 fabric interconnects
- Two SerDes Gigabit Ethernet or 10/100/1000BASE-T Ethernet ports
- Two rear panel USB 2.0 high-speed ports (optional)
- Six rear panel SATA 1.5 Gb/s ports (optional)
- 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

XPedite7172

The XPedite7172 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 two Gigabit Ethernet ports, the XPedite7172 is ideal for high-bandwidth data-processing applications.

The XPedite7172 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 XPedite7172 can be used in either the system slot or peripheral slot of a VPX backplane. Linux, Wind River VxWorks, QNX Neutrino, and Green Hills INTEGRITY Board Support Packages (BSPs), as well as Microsoft Windows drivers, are available.

X-ES Extreme Engineering Solutions

...Always Fast

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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

VPX (VITA 46) P1 I/O

- x4 PCI Express interface to P1.A
- x4 PCI Express interface to P1.B
- Two SerDes Gigabit Ethernet ports (or one 10/100/1000BASE-T port out P1 and one out P2)
- X12d XMC P16 I/O

VPX (VITA 46) P2 I/O

- One 10/100/1000 Mbps Gigabit Ethernet port (optional)
- Six SATA 1.5 Gb/s ports (optional)
- Two USB 2.0 ports (optional)
- Two RS-232/422/485 serial ports
- I²C port
- 3.3 V GPIO signals
- P64s P14 I/O

XMC Site

- x4 PCIe port
- P64s P14 I/O support
- X12d P16 I/O support

Front Panel I/O

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

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 g²/Hz (maximum), 5 to 2000 Hz	0.04 g²/Hz (maximum), 5 to 2000 Hz	0.1 g²/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