

XPedite7301

End of Life

Intel® Core™ i7 Processor-Based Conduction- or Air-Cooled XMC Module

Please contact X-ES Sales

- ▶ Intel® Core™ i7-610E, -620LE, -620UE, and -660UE processors
- ▶ Dual-core processor with Hyper-Threading Technology
- ▶ XMC module
- ▶ Conduction or air cooling
- ▶ Up to 4 GB of DDR3-1066 ECC SDRAM in two channels
- ▶ 32 MB NOR boot flash
- ▶ Up to 16 GB of NAND flash
- ▶ Two x4 or one x8 PCI Express P15 XMC interface
- ▶ One x4 PCI Express P16 XMC interface
- ▶ Gigabit Ethernet port with integrated magnetics
- ▶ Four USB 2.0 ports
- ▶ Two SATA ports
- ▶ Two RS-232/422/485 serial ports
- ▶ DVI video
- ▶ Audio line I/O port
- ▶ Linux BSP
- ▶ Wind River VxWorks BSP
- ▶ QNX Neutrino BSP
- ▶ Green Hills INTEGRITY BSP
- ▶ Microsoft Windows drivers



XPedite7301

The XPedite7301 is a high-performance, low-power, XMC module based on the Intel® Core™ i7 processor and Intel® QM57 chipset. With up to three PCI Express ports and a Gigabit Ethernet port, the XPedite7301 is ideal for high-bandwidth data-processing applications.

The XPedite7301 accommodates up to 4 GB of DDR3 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.

Wind River VxWorks, QNX Neutrino, Linux, and Green Hills INTEGRITY Board Support Packages (BSPs), as well as Microsoft Windows drivers, are available for the XPedite7301.

X-ES

Extreme Engineering Solutions

...Always Fast

Extreme Engineering Solutions

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Processor

- Intel® Core™ i7 processor operating at 2.53, 2.0, 1.06, or 1.33 GHz
- Dual-core processor with Hyper-Threading Technology
- Intel® QM57 chipset
- Dual-channel integrated memory controller
- Integrated graphics controller
- 4 MB of shared cache

Memory

- Up to 4 GB of DDR3-1066 ECC SDRAM in two channels
- 32 MB NOR boot flash
- Up to 16 GB of NAND flash

P14 PMC Interface

- Two USB 2.0 ports
- Two RS-232/422/485 serial ports
- One 10/100/1000BASE-T Ethernet port
- Four GPIO signals
- One audio I/O port

P15 XMC Interface

- One x8 or two x4 PCI Express interfaces

P16 XMC Interface

- One DVI display
- Two USB 2.0 ports
- Two SATA ports capable of 3 Gb/s
- One x4 PCI Express interface

Software

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

Physical Characteristics

- XMC form factor
- Dimensions: 149 mm x 74 mm, 10 mm stacking height

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

- Power will vary based on configuration and usage. Please consult factory.

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 ² /Hz (maximum), 5 to 2000 Hz	0.04 g ² /Hz (maximum), 5 to 2000 Hz	0.1 g ² /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

