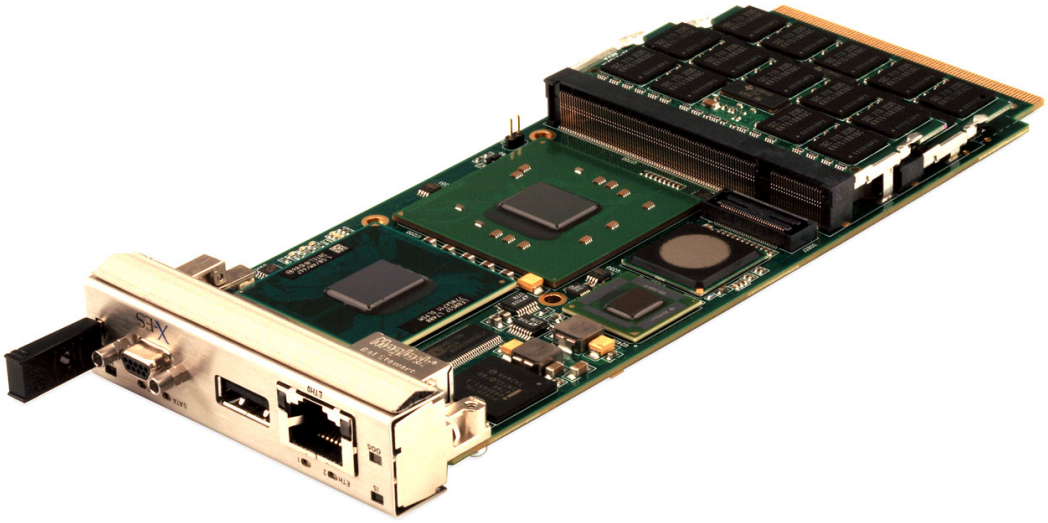
XPedite7040

End Of Life

Intel® Core™ Duo or Intel® Core™2 Duo Processor-Based AMC Module

Please see XPedite7501

- Intel® Core™ Duo or Intel® Core™2 Duo processor at up to 1.5 GHz
- Intel® 3100 chipset
- Front panel Gigabit Ethernet port
- Front panel RS-232 serial port
- Front panel USB 2.0 port
- Complies with AMC.0 and MicroTCA.0 (µTCA)
- AMC.1 x4 PCI Express interface
- AMC.2 dual Gigabit Ethernet 1000BASE-BX interfaces
- AMC.3 dual SATA interfaces
- Two PC3200 SO-RDIMMs, up to 8 GB
- 4 GB of NAND flash
- Up to 4 MB of Firmware Hub (FWH) storage
- AMI BIOS
- Linux BSP
- Wind River VxWorks BSP
- QNX Neutrino BSP
- Green Hills INTEGRITY BSP
- Microsoft Windows drivers



XPedite7040

The XPedite7040 is a single-width, mid-size or full-size Advanced Mezzanine Card (AMC) single board computer designed to provide maximum performance and I/O options while minimizing power consumption. The Ultra Low Voltage (ULV) Intel® Core™ Duo processor or Low Voltage (LV) Intel® Core™2 Duo processor provides the XPedite7040 with a significant performance-per-watt processing advantage. Additionally, the Intel® 3100 chipset combines the functionality of an integrated server-class memory controller (Northbridge) and an I/O controller (Southbridge) into a single device that is specifically intended for power- and board-space-sensitive embedded applications.

The XPedite7040 can be installed in an AdvancedTCA (ATCA) AMC.0-compliant carrier or a MicroTCA.0 (µTCA)-compliant backplane. The XPedite7040 supports an AMC.1 x4 PCI Express interface, dual AMC.2 Gigabit Ethernet 1000BASE-BX interfaces, and dual AMC.3 SATA interfaces. Additional serial and GPIO is provided through the backplane connector.

The XPedite7040 supports two PC3200 SO-RDIMM modules and 4 GB of NAND flash for ample on-card memory capacity. Up to 4 MB of Firmware Hub (FWH) flash is also supported for redundant BIOS or OS kernel storage.

X-ES
Extreme Engineering Solutions

...Always Fast

Extreme Engineering Solutions
3225 Deming Way, Suite 120 • Middleton, WI 53562
Phone: 608.833.1155 • Fax: 608.827.6171
sales@xes-inc.com • http://www.xes-inc.com

Processor

- Intel® Core™ Duo or Intel® Core™2 Duo processor
- Up to 1.5 GHz
- Up to 4 MB L2 cache
- Up to 166 MHz (667 MT/s) FSB

Memory and I/O Controller Hub

- Intel® 3100
- DDR2-400 ECC SDRAM
- 4 GB of NAND flash
- Up to 4 MB of Firmware Hub (FWH) storage

AMC Backplane Interconnect

- Complies with AMC.0 and MicroTCA.0 (µTCA)
- AMC.1 x4 PCI Express interface
- AMC.2 dual Gigabit Ethernet 1000BASE-BX interfaces
- AMC.3 dual SATA interfaces
- Dual USB 2.0 interfaces
- RS-232/422 serial interface

Front Panel I/O

- Micro-DB-9, RS-232 serial port
- USB 2.0 port
- Gigabit Ethernet port

Software

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

Physical Characteristics

- Single-width, mid-size, or full-size AMC
- Dimensions: 180.6 mm x 73.5 mm

Environmental Requirements

Contact factory for appropriate board configuration based on environmental requirements.

- Supported ruggedization levels (see chart below): 1
- Conformal coating available as an ordering option

Power Requirements

Tested at 25°C ambient with 2 GB DDR2 and 1.2 GHz CPU

- Less than 30 Watts

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 ambient
Vibration	0.002 g²/Hz, 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