

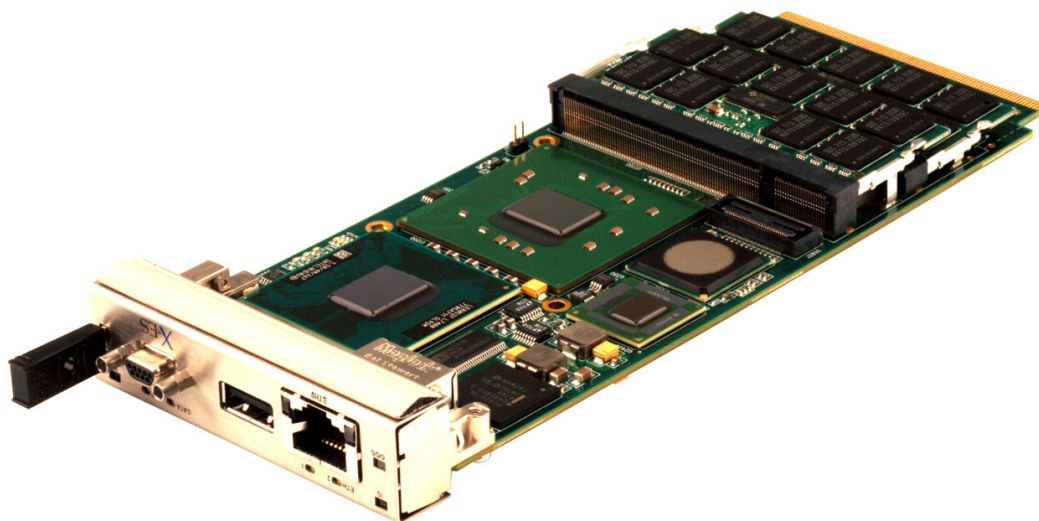
# XPedite7040

**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

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### Extreme Engineering Solutions

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### 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 (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                       |

