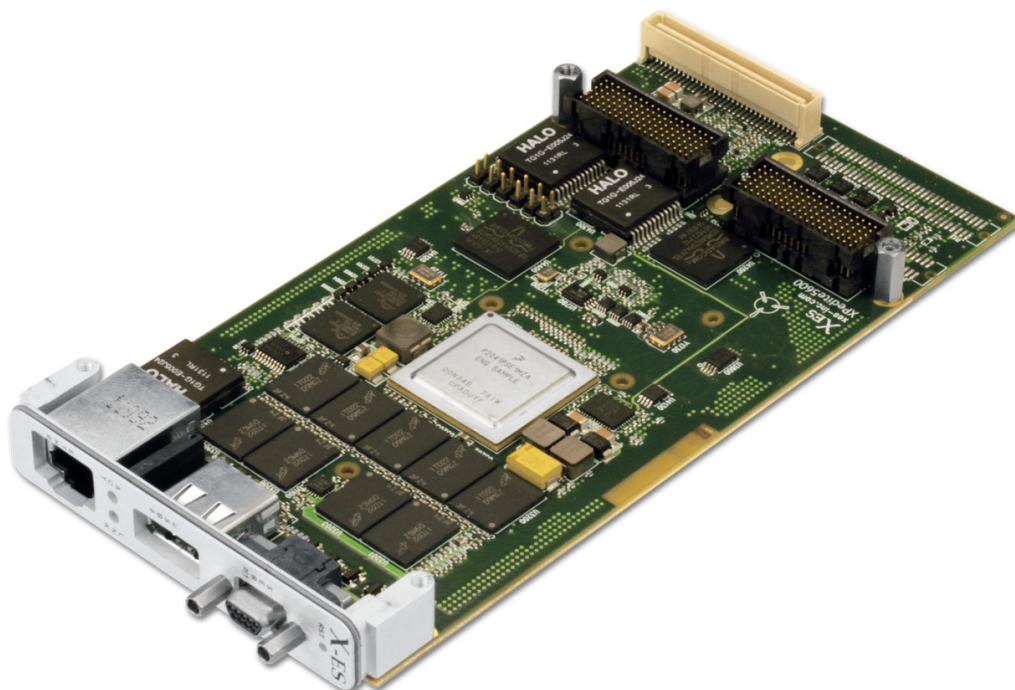


XPedite5600

Freescale Quad-Core, P2041 Processor-Based, Air-Cooled, XMC/PrPMC with Four Gigabit Ethernet Ports

- Freescale P2041 processor with four Power Architecture® e500mc cores at up to 1.5 GHz (alternate processor P2040)
- Air-cooled
- Up to 8 GB of up to DDR3-1333 ECC SDRAM
- Up to 256 MB of NOR flash (with redundancy)
- Up to 16 GB of NAND flash
- x4 PCI Express interface to P15
- XAUI to P16
- PCI PrPMC interface
- Four Gigabit Ethernet ports
- Two RS-232/422/485 serial ports
- Two USB 2.0 ports (one to P14 and one to the front panel or P14)
- Two SATA ports to P16
- Linux BSP
- Wind River VxWorks BSP
- Green Hills INTEGRITY-178 tuMP BSP



XPedite5600

The XPedite5600 is a high-performance, XMC/PrPMC, single board computer supporting a Freescale QorIQ P2041 processor.

For applications that are power conscious, the P2041 processor offers four e500mc cores running at up to 1.5 GHz with a single channel of DDR3 memory, all within a modest power envelope. An additional, reduced-function processor is available for further flexibility in meeting power and performance budgets.

The XPedite5600 provides a high-performance, feature-rich solution for current and future generations of embedded applications. Wind River VxWorks, Linux, and Green Hills INTEGRITY-178 tuMP Board Support Packages (BSPs) are available.



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Processor

- Freescale P2041 processor
- Four Power Architecture® e500mc cores at up to 1.5 GHz
- 128 kB L2 cache per core
- 1 MB L3 cache per channel
- IEEE 754 Floating-Point Unit support

Alternate Processor Configurations

- P2040 processor with four Power Architecture® e500mc cores at up to 1.5 GHz (no XAUI, no L2 cache)

Memory

- Up to 8 GB of up to DDR3-1333 ECC SDRAM
- Up to 256 MB of NOR flash (with redundancy)
- Up to 16 GB of NAND flash

PrPMC Interface

- 66/33 MHz PCI
- 32-bit bus interface

P15 XMC Interface

- x4 configurable PCI Express

P14/P16 XMC/PMC Interface

- Two 10/100/1000BASE-T Ethernet ports
- One 1000BASE-X Ethernet port to P16
- Two RS-232/422/485 ports
- 3.3 V GPIO
- Up to two USB 2.0 ports
- Two SATA ports capable of 3 Gb/s
- One XAUI port to P16 (optional)

Front Panel I/O

- One Gigabit Ethernet port
- Two RS-232 serial ports
- One USB 2.0 port

Software Support

- Linux BSP
- Wind River VxWorks BSP
- Green Hills INTEGRITY-178 tuMP BSP

Physical Characteristics

- Air-cooled XMC/PMC 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 ambient
Vibration	0.002 g ² /Hz, 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

