

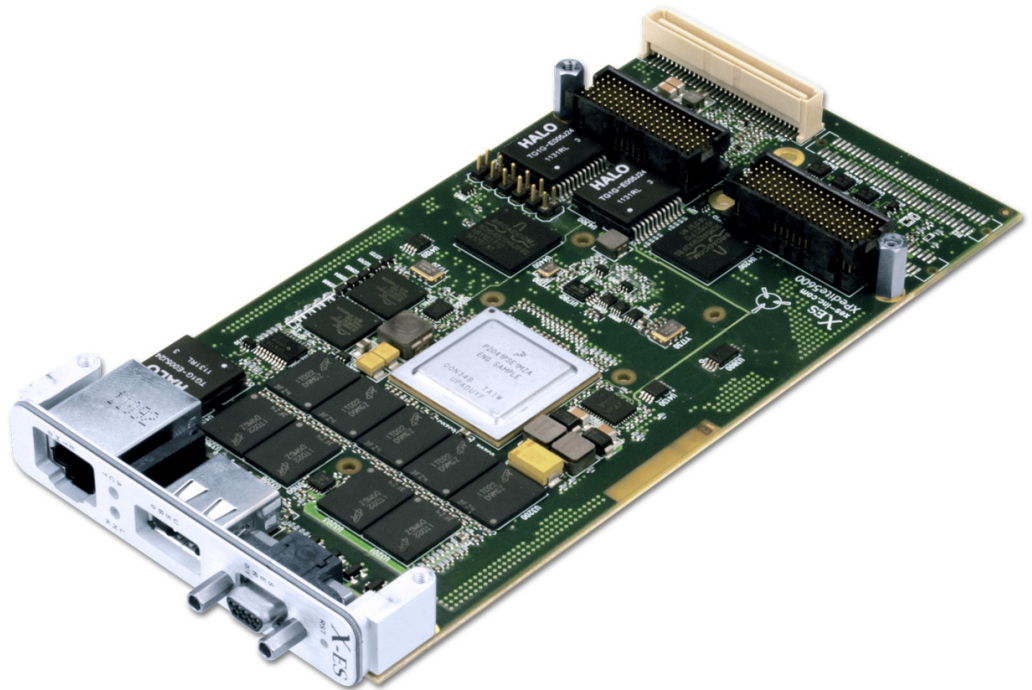
# XPedite5600

**End of Life**

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

Please contact X-ES Sales

- ▶ NXP QorIQ P2041 processor with four Power Architecture® e500mc cores at up to 1.5 GHz
- ▶ Alternate NXP QorIQ processor: P2040
- ▶ Air-cooled
- ▶ Up to 8 GB of DDR3 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 an NXP (formerly 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

- NXP (formerly Freescale) QorIQ 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 Configuration

- 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 DDR3 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 serial 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 †	-40 to +70°C ambient †	-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	Up to 95% non-condensing	Up to 95% non-condensing	Up to 95% non-condensing

† Contact factory for airflow rate details.

