

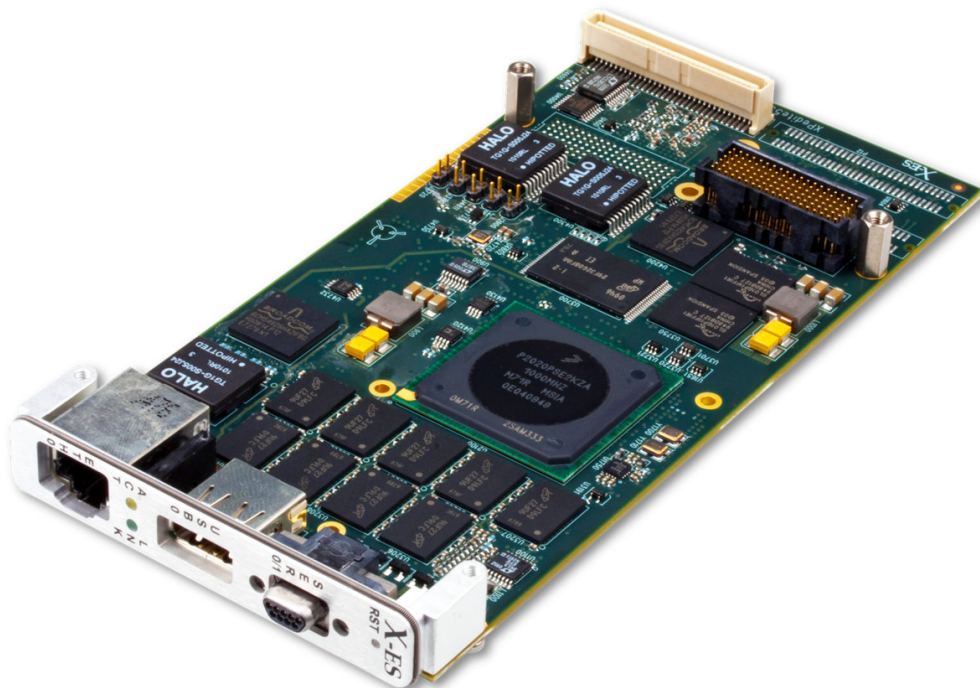
XPedite5500

**Not Recommended
for New Designs**

NXP QorIQ P2020 Processor-Based Air-Cooled XMC/PrPMC Module

Please contact X-ES Sales

- ▶ NXP QorIQ P2020 processor with dual Power Architecture® e500v2 cores at up to 1.2 GHz
- ▶ Alternate NXP QorIQ processors: P1011, P1020, and P2010
- ▶ Air-cooled
- ▶ Extended shock and vibration tolerance
- ▶ Up to 8 GB of DDR3 ECC SDRAM
- ▶ PCI PrPMC interface
- ▶ Two Gigabit Ethernet ports to P14
- ▶ Two RS-232/422/485 serial ports to P14
- ▶ One USB 2.0 port
- ▶ Up to 512 MB of NOR flash (with redundancy)
- ▶ Up to 16 GB of NAND flash
- ▶ Detachable front panel for development
- ▶ Linux BSP
- ▶ Wind River VxWorks BSP
- ▶ QNX Neutrino BSP
- ▶ Green Hills INTEGRITY-178 BSP



XPedite5500

The XPedite5500 is an XMC/PrPMC mezzanine module targeting the NXP (formerly Freescale) QorIQ P2020 processor. With dual Power Architecture® e500 cores running at up to 1.2 GHz, the P2020 delivers enhanced performance and efficiency for today's network information processing and other embedded computing applications.

Complementing processor performance, the XPedite5500 features up to 8 GB of DDR3 ECC SDRAM. A conventional PCI interface to the PMC connectors provides ample bandwidth to the P2020. Two Gigabit Ethernet ports, a USB 2.0 port, and two RS-232/422/485 ports are routed to P14 for additional system flexibility. A detachable front panel provides one Gigabit Ethernet port and two RS-232 serial ports for development.

The XPedite5500 provides a high-performance, feature-rich solution for current and future generations of embedded applications. Additionally, for customers seeking a maximum power of just 8 W, the XPedite5500 can be designed with the NXP QorIQ P1020 processor. Operating system support packages for the XPedite5500 include Wind River VxWorks, QNX Neutrino, Green Hills INTEGRITY-178, and Linux 2.6.

X-ES

Extreme Engineering Solutions

*“Fast, Flexible, Customer-Focused
Embedded Solutions”*

Extreme Engineering Solutions

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Processor

- NXP (formerly Freescale) QorIQ P2020 processor
- Dual/single Power Architecture® e500 cores at up to 1.2 GHz
- 512 kB of shared L2 cache

Alternate Processor Configurations

- P1011 processor with one Power Architecture® e500v2 core at up to 800 MHz
- P1020 processor with two Power Architecture® e500v2 cores at up to 800 MHz
- P2010 processor with one Power Architecture® e500v2 core at up to 1.2 GHz

Memory

- Up to 8 GB of DDR3 SDRAM
- Up to 512 MB of NOR flash (with redundancy)
- Up to 16 GB of NAND flash

PrPMC Interface

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

P14/P16 XMC/PrPMC Interface

- Two RS-232/422/485 serial ports
- 3.3 V GPIO
- Two Gigabit Ethernet ports

Front Panel I/O

- One Gigabit Ethernet port to P14
- Two RS-232 serial ports to P14
- One USB 2.0 port

Software Support

- Linux BSP
- Wind River VxWorks BSP
- QNX Neutrino BSP
- Green Hills INTEGRITY-178 BSP

Physical Characteristics

- Air-cooled XMC/PMC form factor
- Dimensions: 149 mm x 74 mm

Environmental Requirements

Contact factory for appropriate board configuration based on environmental requirements.

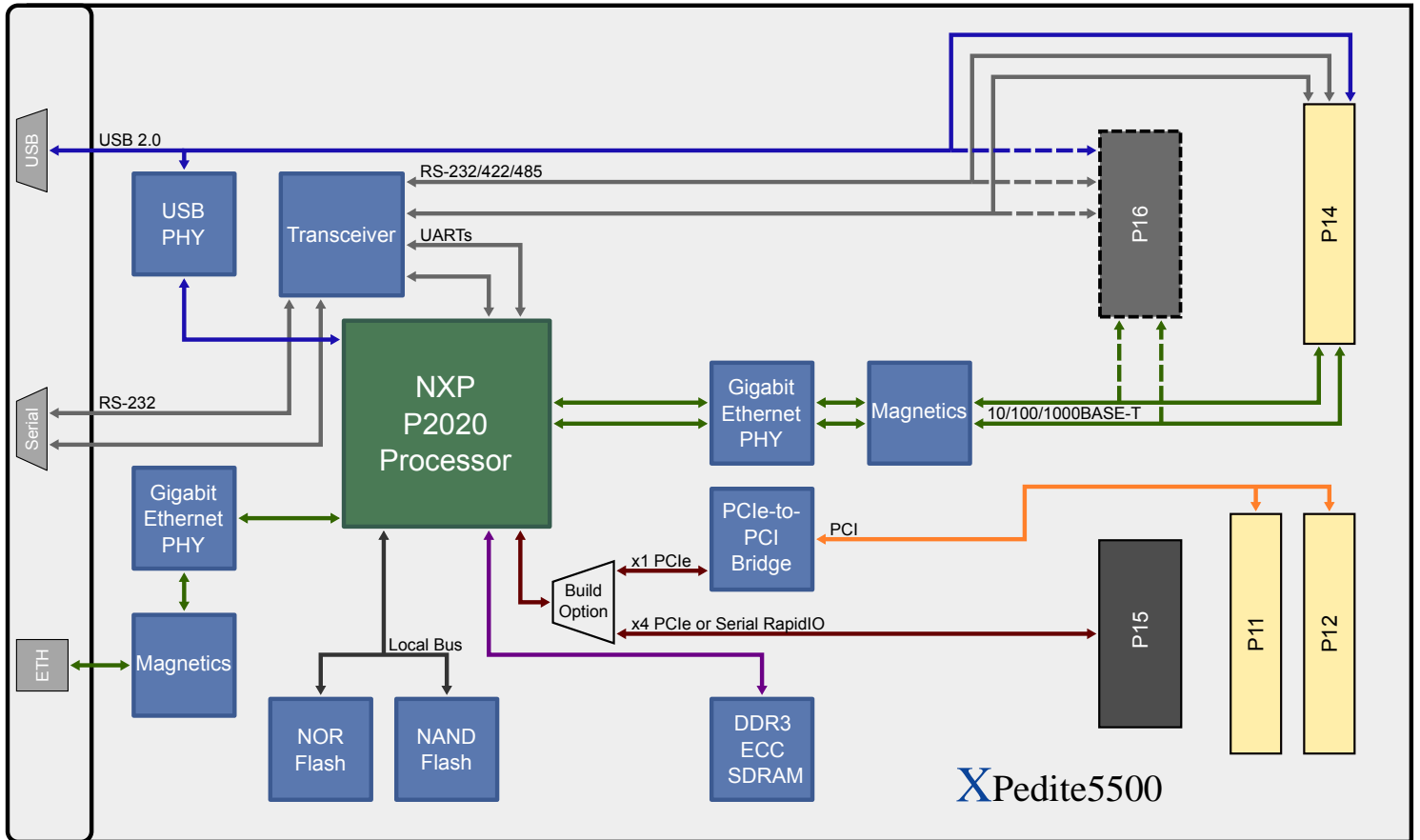
- Supported ruggedization levels (see chart below): 1
- Conformal coating available as an ordering option

Power Requirements

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

Ruggedization Level	Level 1
Cooling Method	Standard Air-Cooled
Operating Temperature	0 to +55°C ambient †
Storage Temperature	-40 to +85°C ambient
Vibration	0.002 g ² /Hz (maximum), 5 to 2000 Hz
Shock	20 g, 11 ms sawtooth
Humidity	Up to 95% non-condensing

† Contact factory for airflow rate details.



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