# XPedite2600

**End of Life**

AMD (formerly Xilinx) Zynq® UltraScale+™ MPSoC-Based Conduction- or Air-Cooled XMC Module

Please contact X-ES Sales

- AMD (formerly Xilinx) Zynq® UltraScale+™ XCZU11EG MPSoC
- Conduction- or air-cooled XMC module
- Up to 16 GB of DDR4 ECC SDRAM in two 64-bit channels
- 64 GB of EMMC flash
- x8 PCI Express Gen3 interface to P15
- Four High-Speed Serial ports from FPGA to P16
- Four High-Speed Serial ports from Zynq® processor subsystem to P16
- Two 1000BASE-X Ethernet ports or one 10/100/1000BASE-T Ethernet port to P16
- Two USB 2.0 interfaces to P16
- Two RS-232/422/485 serial interfaces to P16
- One I²C interface to P16
- 9 LVDS to P16
- 32 LVDS to P14 (optional)
- Dual-QSPI FPGA configuration flash
- FPGA Development Kit (FDK)
- Linux drivers

## XPedite2600

The XPedite2600 is a configurable, high-performance, conduction- or air-cooled XMC module based on the AMD (formerly Xilinx) Zynq® UltraScale+™ family of MPSoC devices. These devices provide specialized processing elements ideal for next-generation wired and 5G wireless infrastructure, cloud computing, and aerospace and defense applications. The Zynq® UltraScale+™ XCZU11EG MPSoC combines a quad-core ARM® Cortex™-A53 platform with dual-core Cortex™-R5 real-time processors, a Mali™-400 MP2 graphics processing unit, and 16 nm FinFET+ programmable logic.

The XPedite2600 is capable of interfacing to and processing streaming data from a wide variety of inputs. It provides four High-Speed Serial interfaces from the FPGA and four High-Speed Serial interfaces from the Zynq® processor subsystem, the latter featuring integrated support for multiple protocols such as SATA, Gigabit Ethernet, USB 3.0, and DisplayPort. Other interfaces on the P16 connector include Gigabit Ethernet, USB 2.0, serial, and LVDS I/O. Additional LVDS I/O is available via an optional P14 connector.

The X-ES FPGA Development Kit (FDK) is provided to jump-start application development with a full suite of IP blocks, HDL, test benches, Linux drivers, and complete example designs for the XPedite2600.

X-ES
Extreme Engineering Solutions

*"Fast, Flexible, Customer-Focused Embedded Solutions"*

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## MPSoC

- AMD (formerly Xilinx) Zynq® UltraScale+™ MPSoC XCZU11EG
- Quad-core ARM® Cortex™-A53 platform running at up to 1.5 GHz
- Dual-core ARM® Cortex™-R5 real-time processors
- ARM® Mali™-400 MP2 graphics processing unit
- 16 nm FinFET+ programmable logic

## Memory

- Up to 16 GB of DDR4 ECC SDRAM in two 64-bit channels
- 64 GB of Micron EMMC flash
- Dual-QSPI FPGA configuration flash

## XMC Site

- x8 PCI Express Gen3 interface

## P14 User I/O (Optional)

- 32 LVDS user I/O to FPGA

## P15 I/O

- x8 PCI Express Gen3 interface compliant with VITA 42.3

## P16 I/O

- Four PL MGT High-Speed Serial ports from FPGA
- Four PS GTR High-Speed Serial ports from Zynq® processor subsystem with integrated support for multiple protocols
- Two 1000BASE-X Ethernet ports or one 10/100/1000BASE-T Ethernet port
- One I²C port
- Two RS-232/422/485 serial ports
- Two USB 2.0 interfaces
- Nine LVDS user I/O to FPGA

## Development Support

- X-ES FPGA Development Kit (FDK)
- Linux drivers

## Physical Characteristics

- Conduction- or air-cooled XMC form factor
- Dimensions: 149 mm x 74 mm

## Environmental Requirements

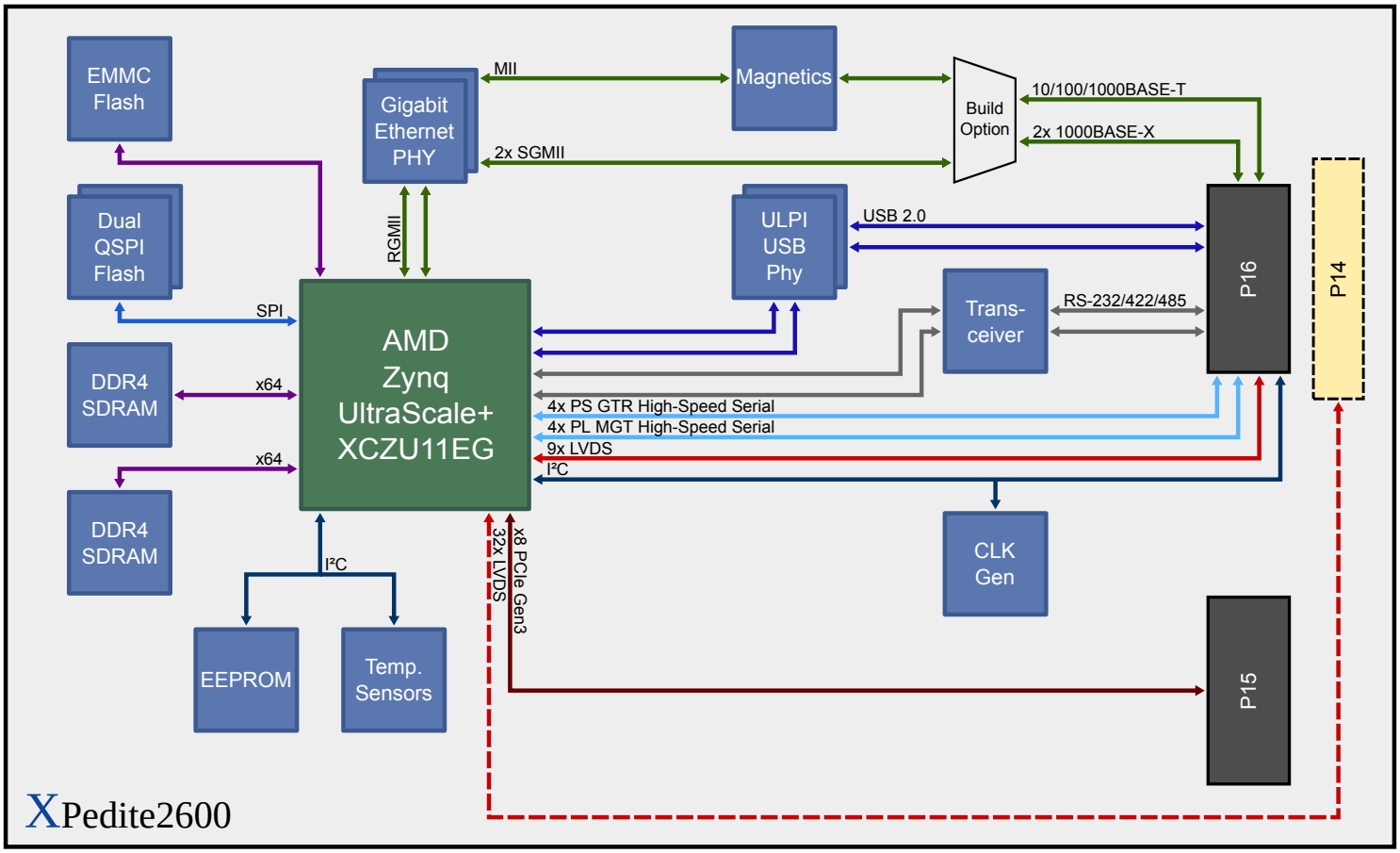
Contact factory for appropriate board configuration based on environmental requirements.

- Supported ruggedization levels (see chart below): 5
- Conformal coating available as an ordering option
- Contact X-ES for air-cooled development options

## Power Requirements

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

| Ruggedization Level | Level 5 |
|---|---|
| **Cooling Method** | Conduction-Cooled |
| **Operating Temperature** | -40 to +85°C (board rail surface) |
| **Storage Temperature** | -55 to +105°C (maximum) |
| **Vibration** | 0.1 g²/Hz (maximum), 5 to 2000 Hz |
| **Shock** | 40 g, 11 ms sawtooth |
| **Humidity** | Up to 95% non-condensing |




* Dashed lines indicate configuration-specific functionality. Please contact X-ES Sales to determine the appropriate configuration to support desired functionality.