

# XPort2100

Four Port T1/E1/J1 PMC (PrPMC) XMC Module Based on the MPC8560 PowerQUICC III™ Series

XPort2100

## Features

- MPC8560 Up To 1GHz with Integrated PCI-X and RapidIO
- Four RJ45 T1/E1/J1 Software Configured Interfaces
- CSU/DSU Support
- Front Or Rear I/O
- 133MHz / 64-bit PCI-X
- 500MHz 8-bit RapidIO
- 128-512MB 333MHz DDR SDRAM
- 256KB L2 Cache
- Integrated Floating Point
- 16-128MB Soldered Flash
- ATM over T1/E1 and IMA support
- Optional RS-232 SMC Port
- Optional Back Panel 10/100/1000Mbps Ethernet
- VxWorks Driver and BSP
- Linux LSP

Preliminary

XPort2100 is an intelligent communications controller targeting high performance yet low cost communications applications. XPort2100 supports fully channelized HDLC and transparent protocols over four software configured T1/E1/J1 interfaces, with CSU/DSU support and optionally Signaling System 7 (SS7). Also, all of the T1/E1/J1 interfaces can be brought through the backplane I/O adding to the flexible I/O routing structure. XPort2100 packs maximum performance and flexibility into an industry standard PMC module form factor. Coupled with X-ES supplied software, customers can install XPort2100 on standard VME and cPCI platforms, or, custom motherboards that support PMC sites.

## Typical Applications

- Frame Relay
- ISDN D-channel Signalling
- LAN/WAN Data Transport
- Wireless Basestations
- Signaling System 7 (SS7)

With the PowerQUICC III's integrated PCI-X, DDR SDRAM, and Ethernet interfaces, the PowerQUICC III offers a highly optimized solution for packet processing and general computing applications.

For performance systems, XPort2100 can be used as an XMC in which the 500MHz 8-bit RapidIO interface can be used in accordance to VITA 42 in parallel or in substitution of the 133MHz, 64 bit PCI-X 1.0a, PCI 2.2 compliant interface.

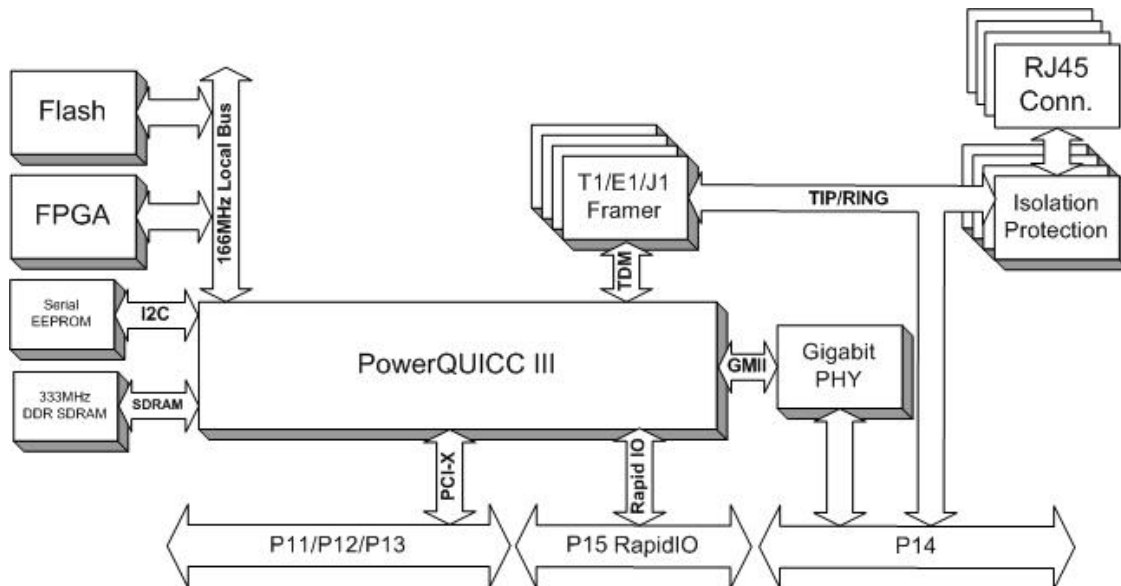
X-ES

Extreme Engineering Solutions...  
...Always Fast

For more information on XPort2100:  
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# Block Diagram

# XPort2100



## Processor

- MPC8560 PowerQUICC III
- Embedded PowerPC e500 Core
- 600-1000MHz
- 1850 Dhrystones at 800MHz
- 32KB L1 Instruction and Data Caches
- 256KB L2 Cache/SRAM
- Integrated Floating Point Unit
- Integrated MMU
- 333MHz DDR SDRAM Interface
- 500MHz 8-bit RapidIO
- 133MHz PCI-X interface
- 2 Gigabit Ethernet Controllers
- 2 Serial Controllers
- 2 I2C Controllers

## Memory

- 128-512MB 333MHz DDR SDRAM
- 16-128MB Surface Mount Flash
- 512KB of Socketed Flash
- 2 KB Serial EEPROM

## Multi Communication Controller

- HDLC and Transparent modes
- 128 total channels

## Multi Communication Controller (cont.)

- Independent Tx/Rx clocking per TDM

## PM4351 Comet Framer

- T1/E1/J1 Interface Standards
- Long and Short Haul LBO's
- 1.544MHz and 2.048MHz rates
- Software configured interface modes
- CSU/DSU

## Backplane Connections

- Up to Four T1/E1/J1 line interfaces
- One 1000Mbps Ethernet port
- RS-232 Serial Debug port

## Software

- MCC, CSU, SMC, ATM, IMA, SS7 and Ethernet Drivers
- VxWorks BSP
- Linux LSP

## Physical

- PMC Form Factor
- 149mm x 74mm

## Physical (cont.)

- 10mm Stacking Height

## Power Requirements

- +3.3V TBD TBD
- +5.0V 0.00A 0.0W
- +12.0V 0.00A 0.0W
- -12.0V 0.00A 0.0W

## Operating Temperature

- 0 to +55C ambient, at board

## Humidity

- 0% to 85%

## Storage Temperature

- -40 to +70C

