miriac® MPX2020 (EOL)

System on Module based on NXP® QorIQ® P2020 CPU

- up to 2 GB DDR2 memory, soldered, optional: with EEC
- up to four SerDes up to 3.125 GHz multiplexed across controllers
- two 208 Pin Zero Force Connectors, that make all I/O and bus signals available to the carrier board
- High precision RTC
- Scaling from a single core at 533 MHz (P1011) to a dual core at 1.2 GHz (P2020)
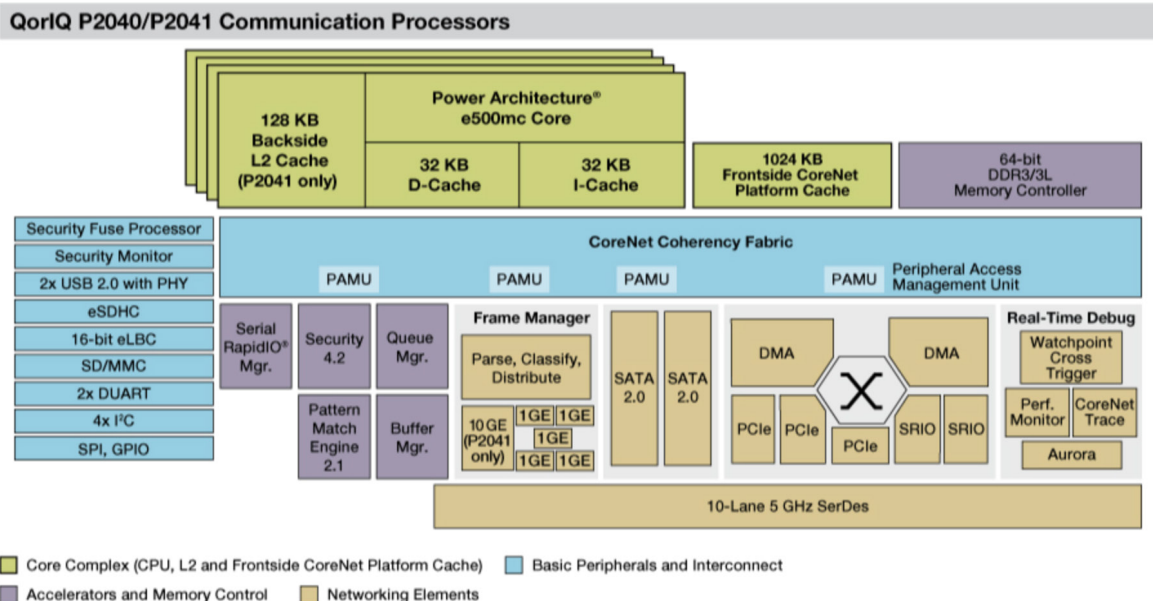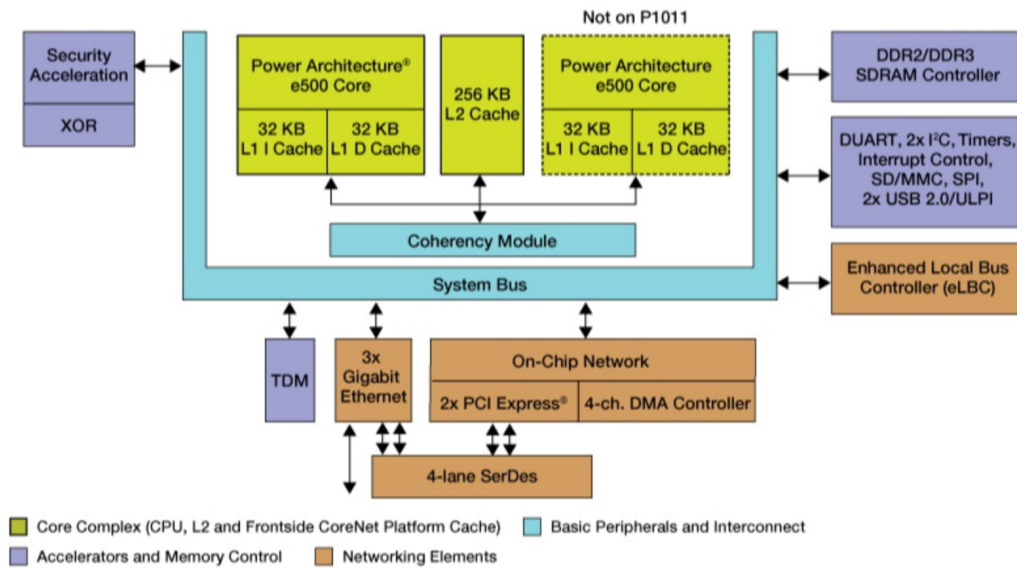
The miriac® MPX2020 CPU Module is the first of a series of QorIQ® based products. The P2020 combines dual Power Architecture® e500v2 processor cores with system logic required for networking, wireless infrastructure and telecommunications applications.

Block Diagrams

QorIQ P2040/P2041 Communication Processors block diagram:
Core Complex (CPU, L2 and Frontside CoreNet Platform Cache); Basic Peripherals and Interconnect; Accelerators and Memory Control; Networking Elements

QorIQ P1020 and P1011 Block Diagram

Features

CPU

Architecture	PowerPC

Memory

Flash	up to 512 MB NAND Flash
Flash Card	1x SD

High Speed IO

SerDes lanes	up to four SerDes up to 3.125 GHz multiplexed across controllers, e.g. • 3x PCI Express® • 2x SRIO or • 2x SGMII
USB 2.0	1x USB 2.0

Operating Condition

Temperature	optional: ext. temp.

Mechanical

Formfactor	MPX-1, 77 mm x 66 mm

Software / Additional

Software Support	• Linux • Microware OS-9 • VxWorks • MicroC/OS-II • QNX • others are avialable on request

Our standard product versions offer what we consider to be the optimum configuration in terms of performance, price, usage and TDP. The product features lists specify the maximum range of functions per interface. However, not all interfaces or functions are always available in parallel. Flexible SERDES multiplexing is one of the reasons for this. In addition, we provide multiple memory expansion options and are also happy to accommodate specific customer wishes. So do not hesitate to contact us directly to discuss your desired configuration.

Take a look at related products

miriac® SBC2020 (EOL)