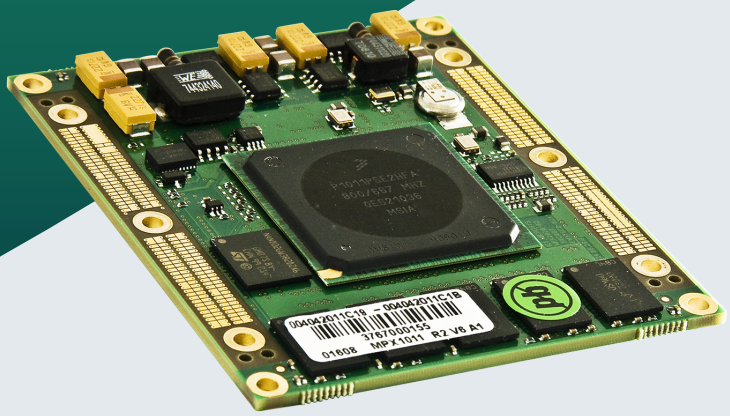
MicroSys
Creating Embedded Systems

SoMs Power Architecture

miriac® MPX1022 (EOL)

System on Module based on NXP® QorIQ® P1022 CPU



Highlights

- up to 2 GB soldered DDR2 memory
- up to five 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
- I²S interface with maximum sampling frequency of 192 kHz
- LCD interface supporting a display of 1280 x 1024P @ 60 MHz, 24 bits per pixel

NXP Gold Partner

Product Description

The miriac® MPX1022 CPU Module is another member of a series of QorIQ® based SoMs by MicroSys. It is functional compatible to the MPX2020 products. The devices in these two platforms are software compatible, sharing the e500 Power Architecture core and peripherals, as well as being fully software compatible with the existing PowerQUICC processors. This enables you to create a product with multiple performance points from a single board design. The MPX1022 SoM supports the CPUs audio visual and two SATA interfaces and offers two processor cores as main benefit over the QorIQ® P1011 family, P1022.

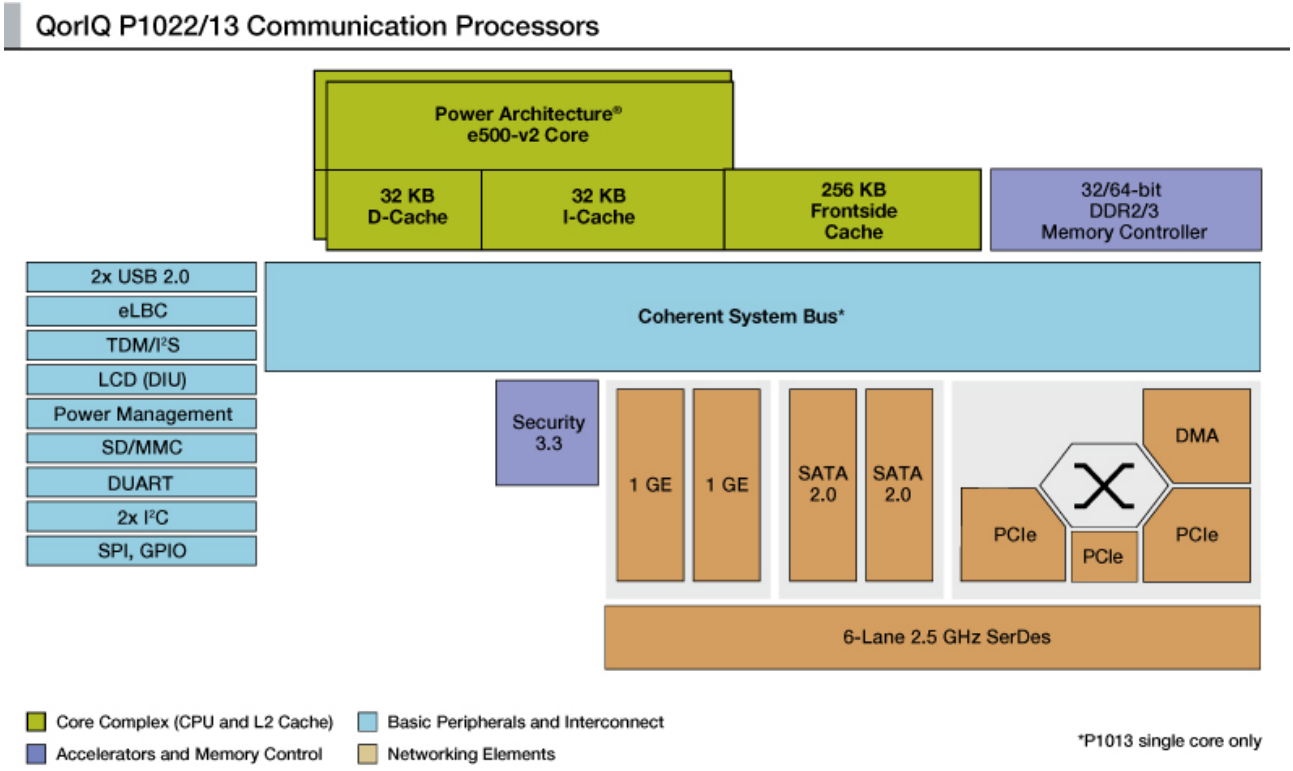
Features

CPU	
Architecture:	PowerPC
Processor:	NXP® QorIQ® P1022 CPU, dual 500v2 core @ 600 - 1055 MHz, 256 kB L2 Cache with ECC, also configurable as SRAM and stashing memory
Memory	
Flash:	up to 512 MB NAND Flash
Flash Card:	1x SD/MMC
Graphic	
Graphics Controller:	LCD interface supporting a display of 1280 x 1024P @ 60 MHz, 24 bits per pixel
High Speed IO	
SerDes lanes:	up to five SerDes to 3.125 GHz multiplexed across controllers, e.g. - 3x PCI Express® interfaces - 2x SATA interfaces
USB 2.0:	2x 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 QNX others are avialable on request

General Note:

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.

Block Diagrams



QorIQ®, NPX®, P1013, P1022, block diagram

Related Products

Name	Description	Image
miriac® SBC1022 (EOL)		

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