

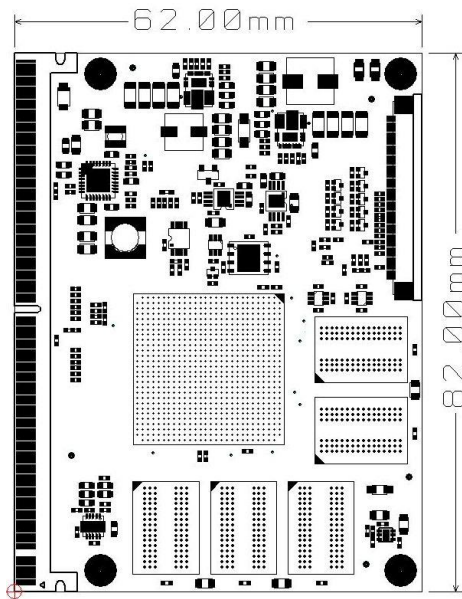
**miriac<sup>®</sup> MPX-T1042 SoM**  
based on NXP QorIQ T1042 CPU  
Product Description



### miriac<sup>®</sup> MPX-T1042 System on Module

#### Feature Overview

- NXP QorIQ T1042 CPU: 4x e5500 64-bit cores at up to 1.4 GHz core frequency
- new cost effective MPX-2 System on Module form factor, connecting to a standard edge connector (MXM3.0 socket)
- variants available with QorIQ T1014/1024, T1020 and T1040
- hybrid 32-bit mode to support legacy software
- up to 8GB 64 Bit DDR4 ECC RAM at 1600 MT/s
- up to 2GB SLC NAND Flash & up to 16MB SPI Flash
- parallel Ethernet interface: configurable as 2x RGMII max, or 1x MII
- IEEE Std. 1588 support
- max. 8x SerDes lanes at 5 Gb/s, configurable in different options:
  - max 4x PCIe 2.0
  - max 2x SATA 2.0 (3GB/s)
  - max 2x QSGMII at 1000Mbps
- 2x USB 2.0 Host /Client /OTG support
- 12 Bit Display Interface
- 1x SDHC
- other interfaces: 2x I<sup>2</sup>C, 2x DUART, 1x SPI, 1x TDM, 1x JTAG (with COP support)
- temperature sensor
- All on board supply voltages are monitored by a separate  $\mu$ -controller. Control of on board voltages and the reset logic offer a wide spectrum of custom functionality, even low level safety functions.

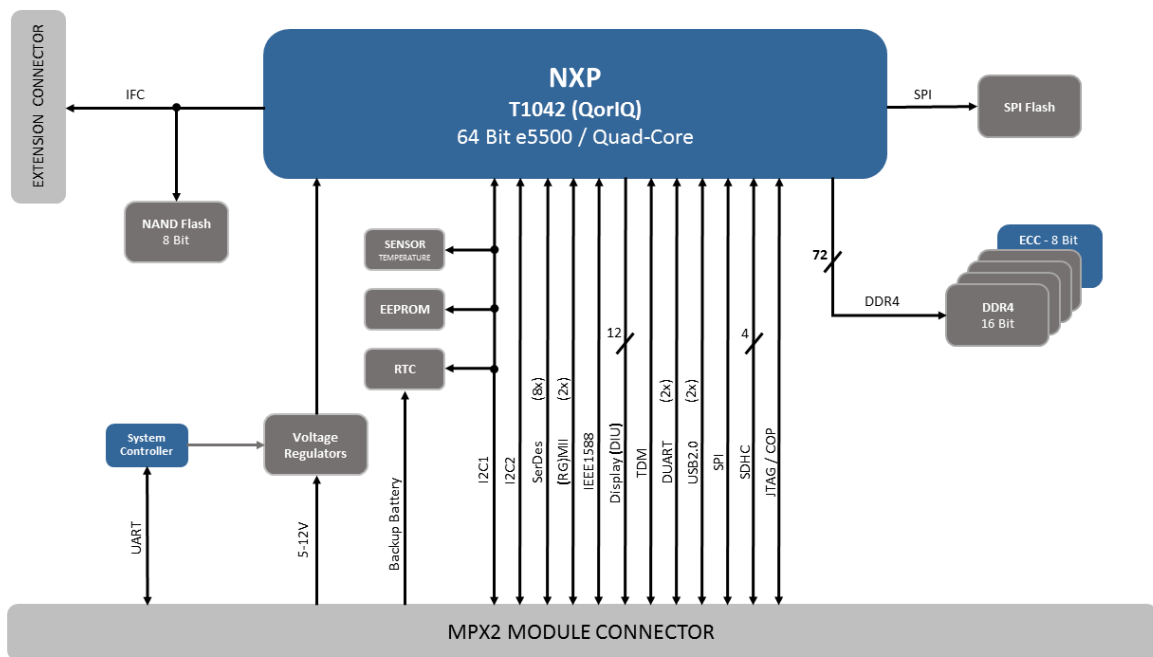


### Software Support

- Linux,
- VxWorks,
- Microware OS-9,
- others on request

Order Number	Description	Status
853902	miriac MPX-T1042 SoM, T1042@1.2GHz, 2GB DDR ECC RAM, 512MB Flash memory	available
534310	miriac SBC-T1042 Development Kit, SoM (order# 853902), Carrier, Linux BSP, accessories	available

**Fig. 1** miriac MPX-T1042 SoM Layout



**Fig. 2** miriac MPX-T1042 Block Diagram

You are interested in more information? You are very welcome to contact us.

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