

# miriac™ MPX-T1042 SoM

## based on Freescale QorIQ T1042 CPU

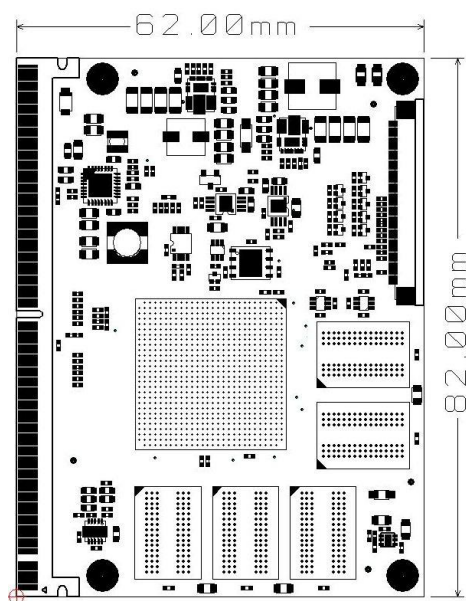
### Product Description



#### miriac MPX-T1042 System on Module

##### Feature Overview

- Freescale 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.

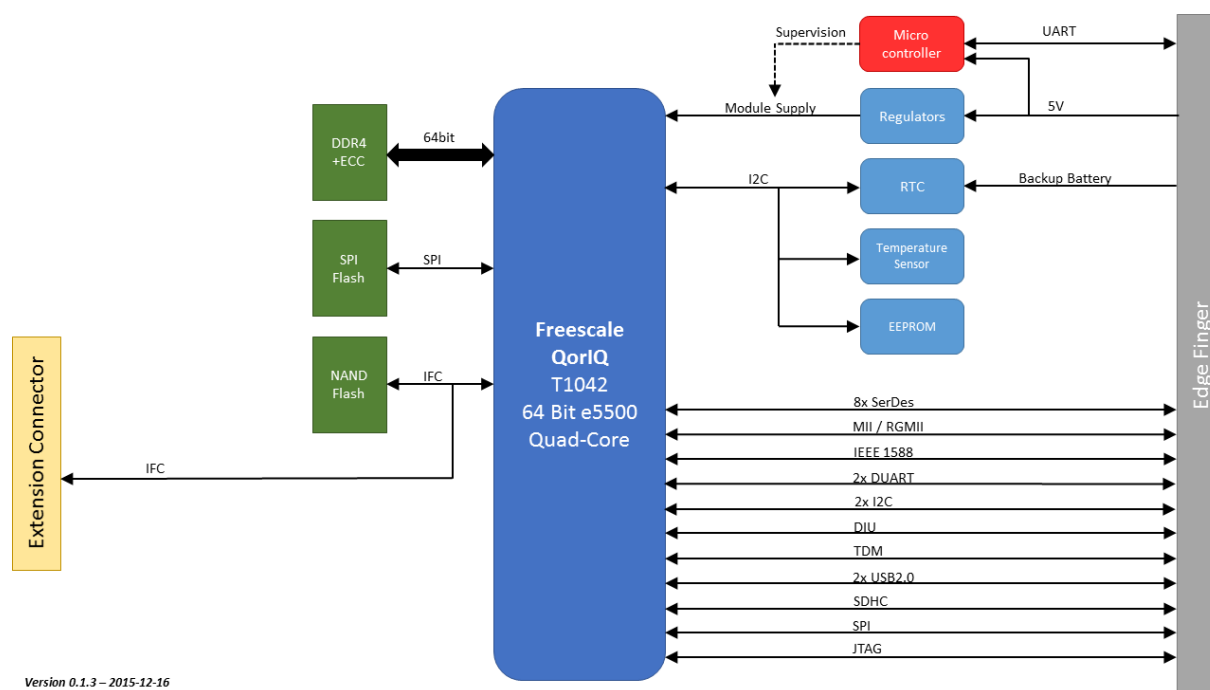


**Software Support**

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

Order Number	Description	Status
853901	miriac MPX-T1042 SoM, T1042@1.2GHz, 2GB DDR ECC RAM, 512MB Flash memory	available in Q4 2015
534310	miriac SBC-T1042 Development Kit, SoM, Carrier, Linux BSP, accessories	in work

**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.

**MicroSys** Electronics GmbH  
 Muehlweg 1  
 82054 Sauerlach  
 Germany [www.microsys.de](http://www.microsys.de)

Phone +49 (0)8104 801-0  
 Hotline +49 (0)8104 801-130  
 Fax +49 (0)8104 801-110  
 Email [info@microsys.de](mailto:info@microsys.de)