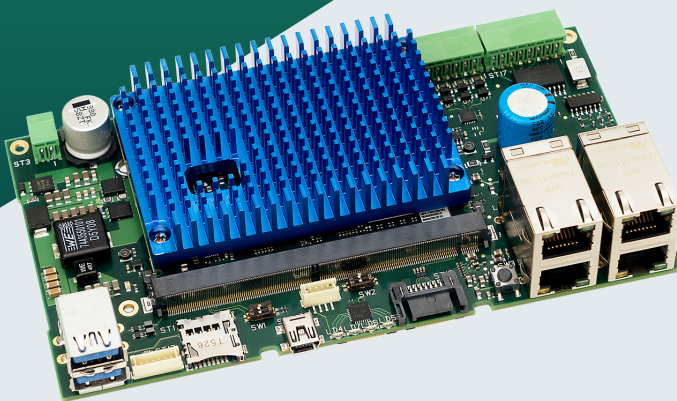![MicroSys - Creating Embedded Systems]

SBC Power Architecture

# miriac® SBC-T1042

Single Board Computer based on NXP® QorIQ®
T1042

## Highlights

- up to 8GB 64-bit DDR4 RAM at 1600MTps, soldered, ECC optional

- hybrid 32-bit mode to support legacy software

- temperature sensor

- All on board supply voltages are monitored by a separate µ-controller.

# Product Description

The miriac® SBC-T1042 Single Board Computer is a member of a family of NXP® QorIQ® T104x series based complete system solutions by MicroSys. NXP's T1040/20 and T1042/22 CPUs are the midrange class of the more powerful T2081 pin compatible CPU device.

# Features

| CPU | |
|---|---|
| Architecture: | PowerPC |
| Processor: | NXP® QorIQ®T1042 |
| **Memory** | |
| Flash: | up to 4GB SLC NAND Flash (soldered) |
| Flash Card: | 1x microSD Card slot |
| EEPROM: | 16kB |
| **Graphic** | |
| Graphics Controller: | 12 Bit Display Interface |
| LCD Interface: | 1x DVI-I |
| **High Speed IO** | |
| USB 2.0: | 2x USB2.0 Host/Client OTG support, 1x USB to UART (debugging) |
| SATA: | 1x SATA |
| **Operating Condition** | |
| Power Supply Voltage: | Single +7 - +24 V power input |
| Temperature: | 0 °C to 70 °C |
| Optional Extended Temperature: | -40 °C to 85 °C |
| **Mechanical** | |
| Dimensions: | b:86mm, l:156mm, h:30mm |
| **Software / Additional** | |
| Software Support: | Linux |
| | Microware OS-9 |
| | others 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
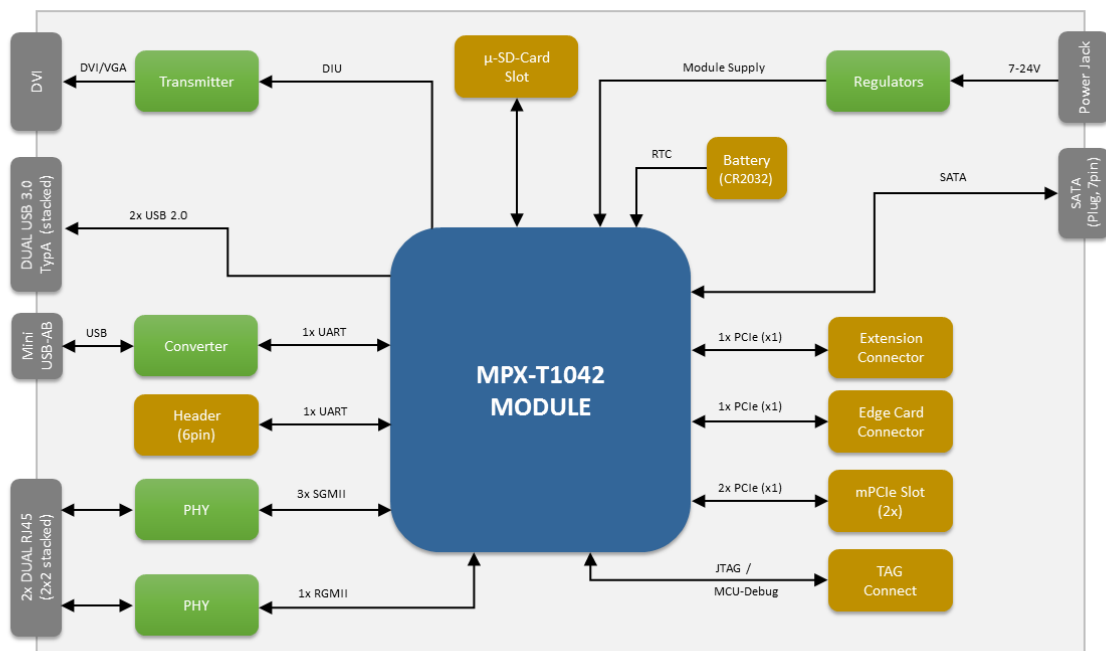


*SBC-T1042: Version 1.1.0 – 2016-04-25*

miriac® SBC-T1042

# Order Info

| Name | Code | Description | Status |
|------|------|-------------|--------|
| miriac® SBC-T1042 | 854301 | miriac® SBC-T1042 Single Board Computer, T1042@1.2GHz SoM, 2GB DDR4 RAM, 512 MB Flash Speicher | active |
| miriac® SBC-T1042 Starter Kit | 854310 | miriac® SBC-T1042 Development Kit, includes order #854301, Linux BSP, accessories | active |

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