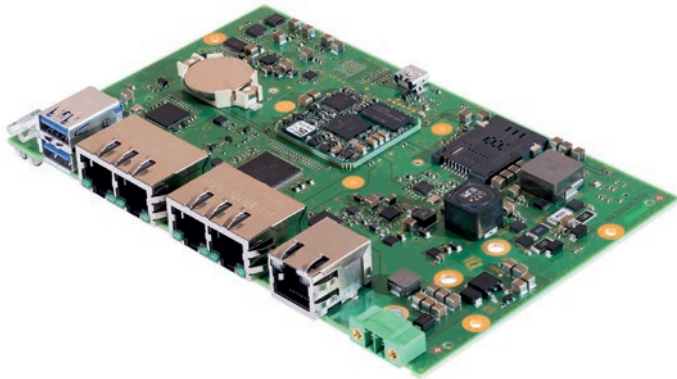


MBLS1012AL

Arm® Family



HIGHLIGHTS

- ▶ Extended temperature range
- ▶ High-speed communication via 5x Gbit
- ▶ Ethernet, 2x Mini PCIe and 2x USB 3.0 interface
- ▶ Low power consumption (typ. 2-3 W)
- ▶ QorIQ Trust Architecture and Arm® TrustZone®
- ▶ Packet Acceleration Engine
- ▶ Modularly expandable

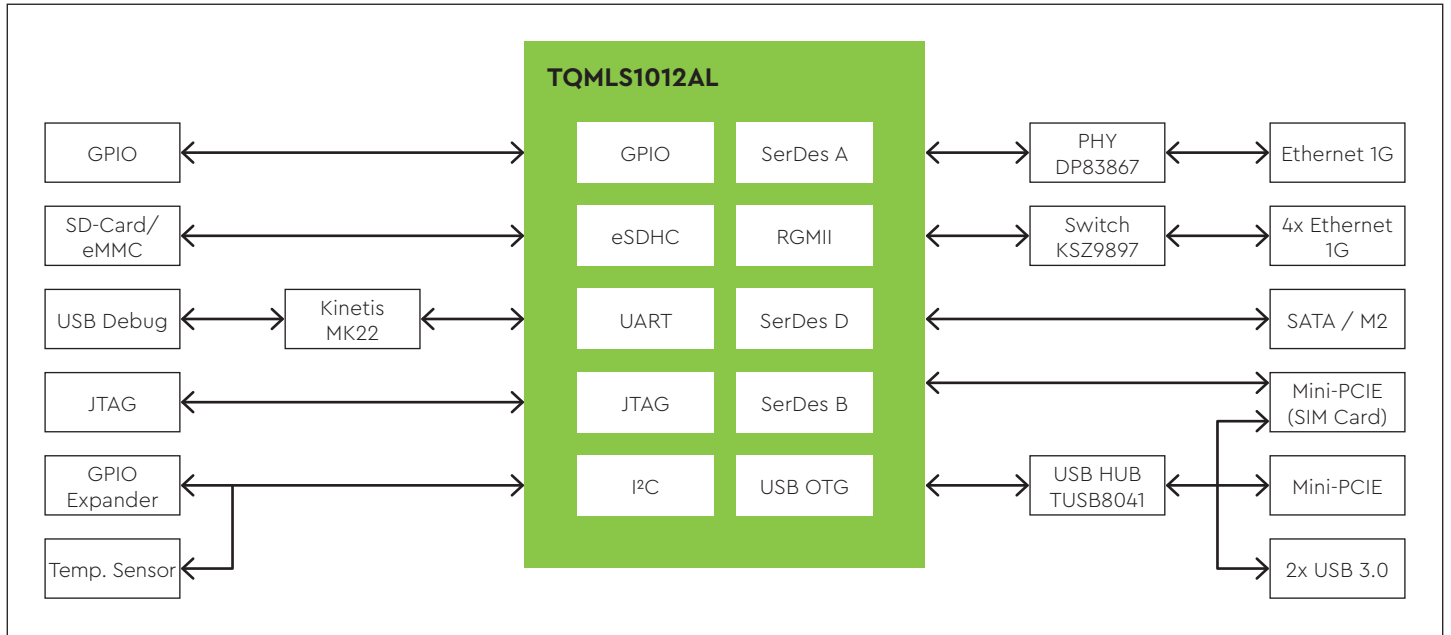
Single Board Computer (SBC) based on TQML1012AL as a high speed platform for smart IIOT solutions.

TECHNICAL SPECIFICATION

CPU	QorIQ LS1012A
Memory	DDR3L-SDRAM: Up to 1 GB Quad SPI NOR: Up to 256 MB EEPROM: 0/64-kbit
Interfaces	1x Ethernet 10/100/1000 Mbit 4x Ethernet 10/100/1000Mbit (Ethernet Switch) 2x USB 3.0 1x SATA 3.0 (M.2) 2x Mini PCIe (1x only USB, SIM-Card) 1x SD-Card
Periphery interfaces (Pin Header 2,54 mm)	Up to 1x I ² C Up to 1x UART Up to 5x GPIO
Other	Real Time Clock (RTC) Temperature sensor CPU JTAG Interface USB-Debug (RS232)
Power supply	16 -28 V DC

Ambient conditions	Standard temperature range: -25°C...+70°C Extended temperature range: -40°C...+70°C
Dimensions	160 mm x 100 mm
Operating systems	Linux

BLOCK DIAGRAM MBL1012AL



ORDERING INFORMATION

MBLS1012AL-AA (Prototypes Q1/19)

MBLS1012AL-AA ,TQMLS1012A, Cortex®-A53/800 MHz, 64 MB Q-SPI NOR Flash, 512 MB DDR3L, 64-kB EEPROM, -25°C...+70°C, 2x USB 3.0, 5x ETH 10/100/1000, 2x Mini PCIe (1x only USB, SIM-Card), 1x SATA M.2, USB - Debug Interface, JTAG RTC, Temperature sensor, Reset-Button, SD-Card interface

Other configurations on request

Starterkit STKLS102x set

The MBL1012AL set is delivered with the TQMLS1012AL module with a Cortex®-A53 CPU from NXP. The components contained in the single board computer constitute a modular system enabling you to develop your own product ideas. To develop your own hardware you can use the certified and qualified circuit components of this platform in your own designs. For this platform, there is also a housing solution available to enable use as a complete system.

TQ-Systems GmbH

Mühlstraße 2 | Gut Delling | 82229 Seefeld | Germany
Tel.: +49 8153 9308-0 | info@tq-group.com | tq-group.com

tq-embedded.com