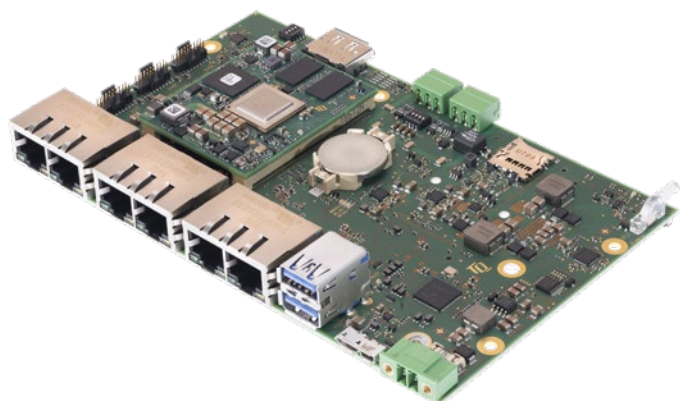


MBLS1028A-IND

Arm® Family



HIGHLIGHTS

- ▶ 1x TSN Ethernet 1 Gbit
- ▶ 1x 4 Port TSN Gbit Ethernet Switch
- ▶ Graphics with 3D GPU and 4K support
- ▶ Extended temperature range
- ▶ Low power consumption
- ▶ Security functions

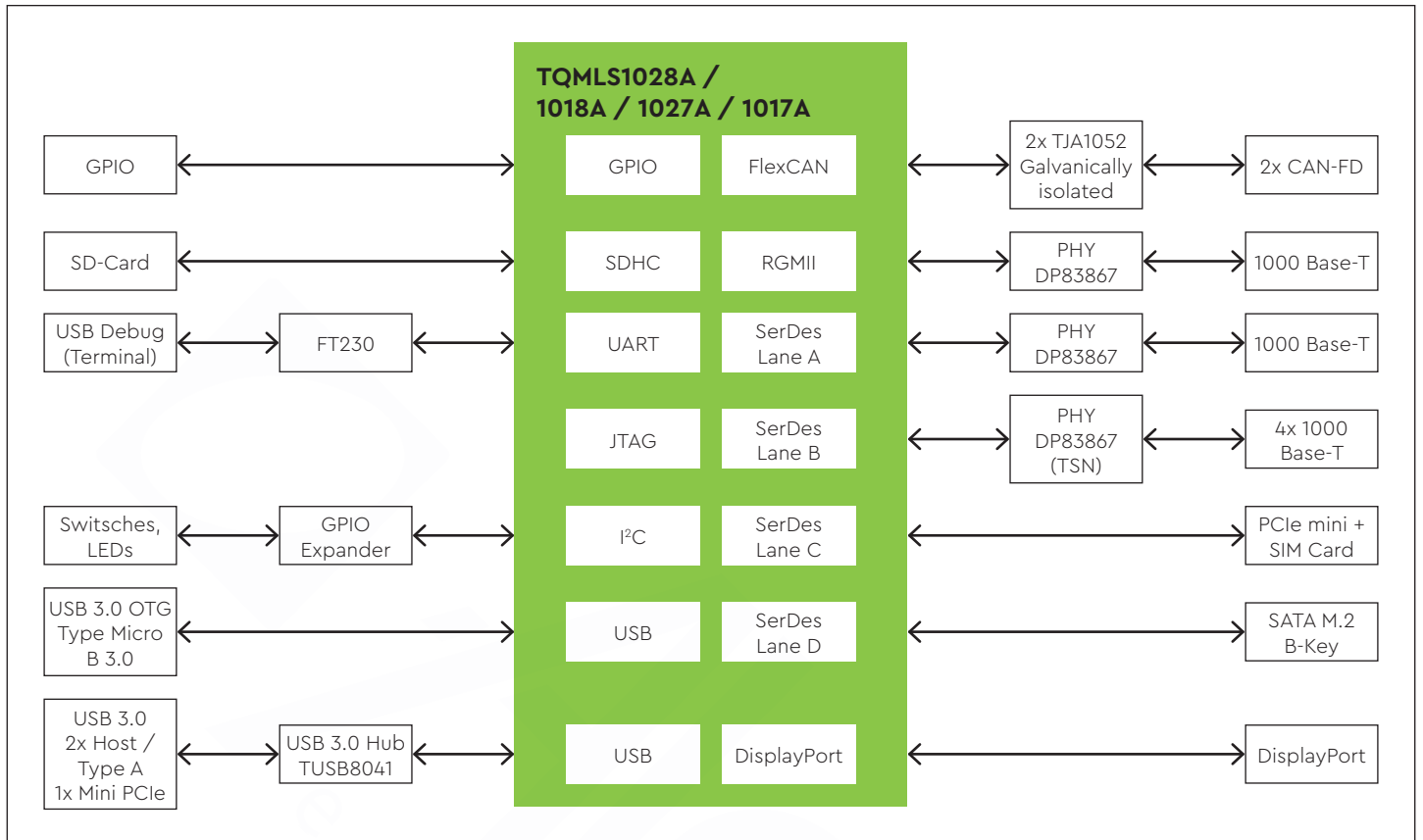
Single Board Computer (SBC) based on TQMLS10128A as a high speed platform with 4 Port TSN Gigabit Ethernet Switch for Real time demands.

TECHNICAL SPECIFICATION

CPU	QorIQ Layerscape LS1028A, LS1018A, LS1027A, LS1017A,
Interfaces	1x 4 Port TSN Ethernet Switch up to 1 Gbit 1x TSN Ethernet 1 Gbit 1x Ethernet 1 Gbit 2x USB 3.0 2x CAN 1x USB 3.0 OTG 1x SATA 3.0 (M.2) 1x Mini PCIe (SIM-Card support) 1x Miro SD.Card
Periphery interfaces	1x SDIO
Pin Header 1,27 mm	1x I ² C 2x SPI
Graphic	eDP/DP Phy
Memory	DDR4-SDRAM: Up to 8 GB ECC Protection Quad SPI NOR: Up to 512 MB EEPROM: 0/256 kbit

Other	Real Time Clock (RTC) Temperature sensor CPU JTAG Interface USB-Debug (RS232)
Power supply	16 – 28V
Ambient conditions	Extended temperature range: -40°C...+70°C
Dimensions	160 mm x 100 mm
Operating systems	Linux
Operating systems on request	other TBD

BLOCK DIAGRAM MBL1028A-IND



ORDERING INFORMATION

MBLS1028A-IND-AA

MBLS1028A-IND-AA, TQMLS1028A, Dual Cortex®-A72/1.3 GHz, 64 MB Q-SPI NOR Flash, 1 GB DDR4, 64-kB EEPROM, -40°C...+70°C, 2x USB 3.0, 1x USB 3.0 OTG, 2x ETH 10/100/1000, 1x 4 Port TSN Switch, 1x eDP, 2x CAN, 1x Mini PCIe (SIM-Card), 1x SATA M.2, USB-Debug Interface, JTAG RTC, Temperature sensor, Reset-Button, SD-Card interface

Other variants on request

STKLS1028A-IND-set

The MBL1028A-IND set is delivered with the TQMLS1028A module with a Cortex®-A72 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

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