

LBox-LS1028A

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

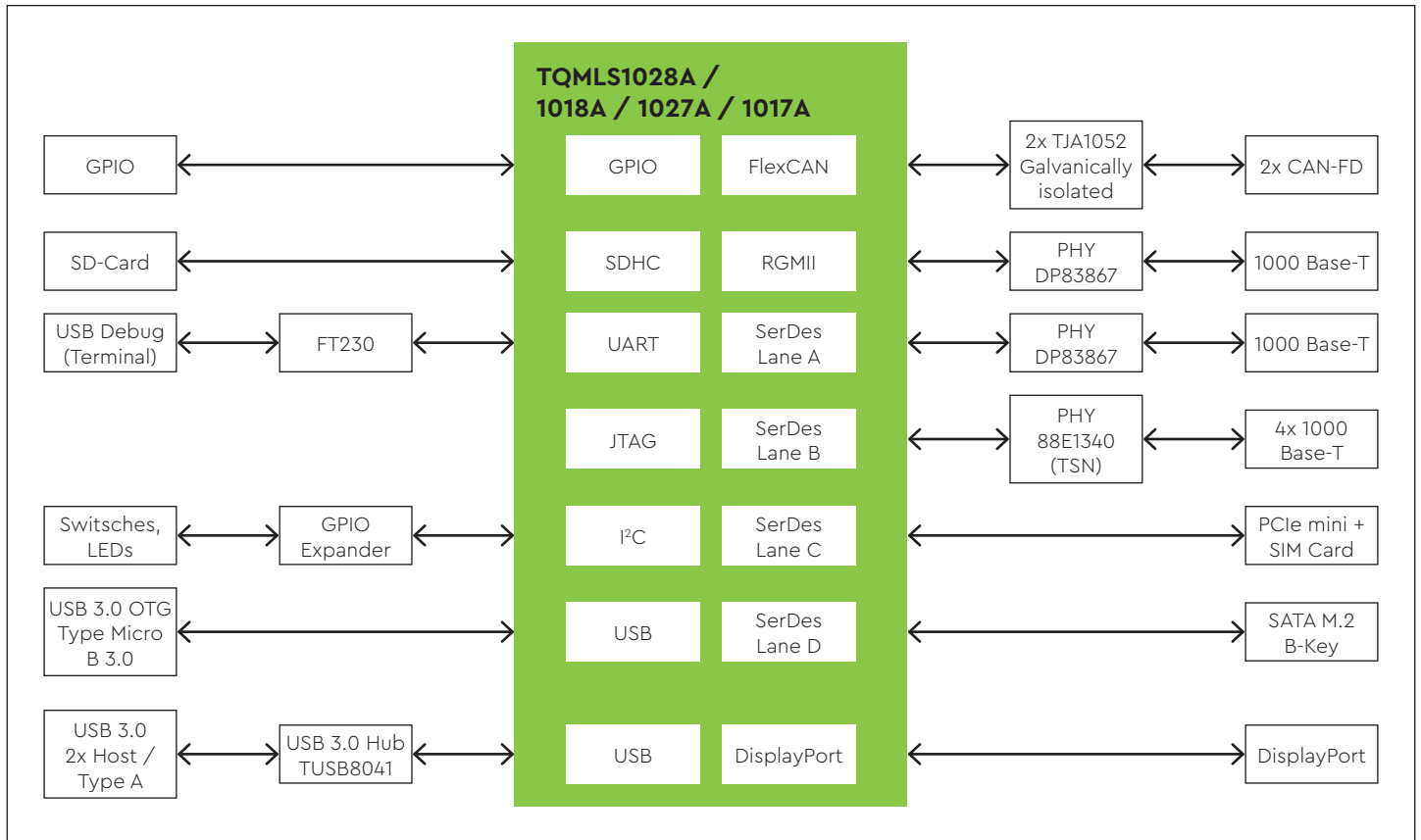
BoxPC based on TQMLS10128A as a high speed platform with 4 Port TSN Gbit Ethernet Switch for Real time demands.

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 Micro SD.Card
Periphery interfaces	1x SDIO
Pin Header	2x I ² C
1.27 mm	2x SPI
Graphic	eDP/DP Phy
Memory	DDR4-SDRAM: Up to 8 GB ECC Protection eMMC: Up to 64 GB Quad SPI NOR: Up to 512 MB EEPROM: 0/256 kbit

Other	Real Time Clock (RTC) Temperature sensor CPU JTAG Interface USB-Debug UART
Power supply	18 – 28V
Ambient conditions	Extended temperature range: -40°C...+70°C
Dimensions	170 mm x 103 mm x 43 mm
Operating systems	Linux
Operating systems on request	other TBD

BLOCK DIAGRAM LBOX-LS1028A



ORDERING INFORMATION

**LBox-LS1028A-AA
(Prototype available)**

LBox-LS1028A with MBL1028A-IND-AA, TQMLS1028A, Dual Cortex®-A72/1.3 GHz, 64 MB Q-SPI NOR Flash, 1 GB DDR4, 32-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

LBox-LS1028A-set

The LBox-LS1028A set is delivered with the MBL1028-IND and TQMLS1028A module based on 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.

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