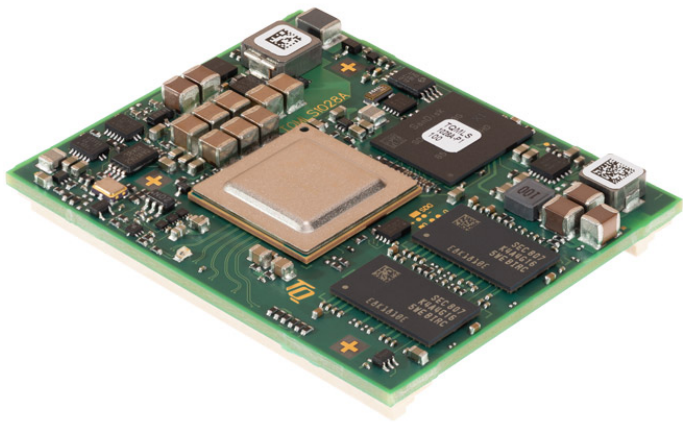


TQMLS1028A

Arm® Family



HIGHLIGHTS

- ▶ 1x 2,5 Gbit Ethernet
- ▶ 1x 4 Port TSN Ethernet Switch
- ▶ Graphics with 3D GPU and 4K support
- ▶ Extended temperature range
- ▶ Low power consumption
- ▶ Security functions

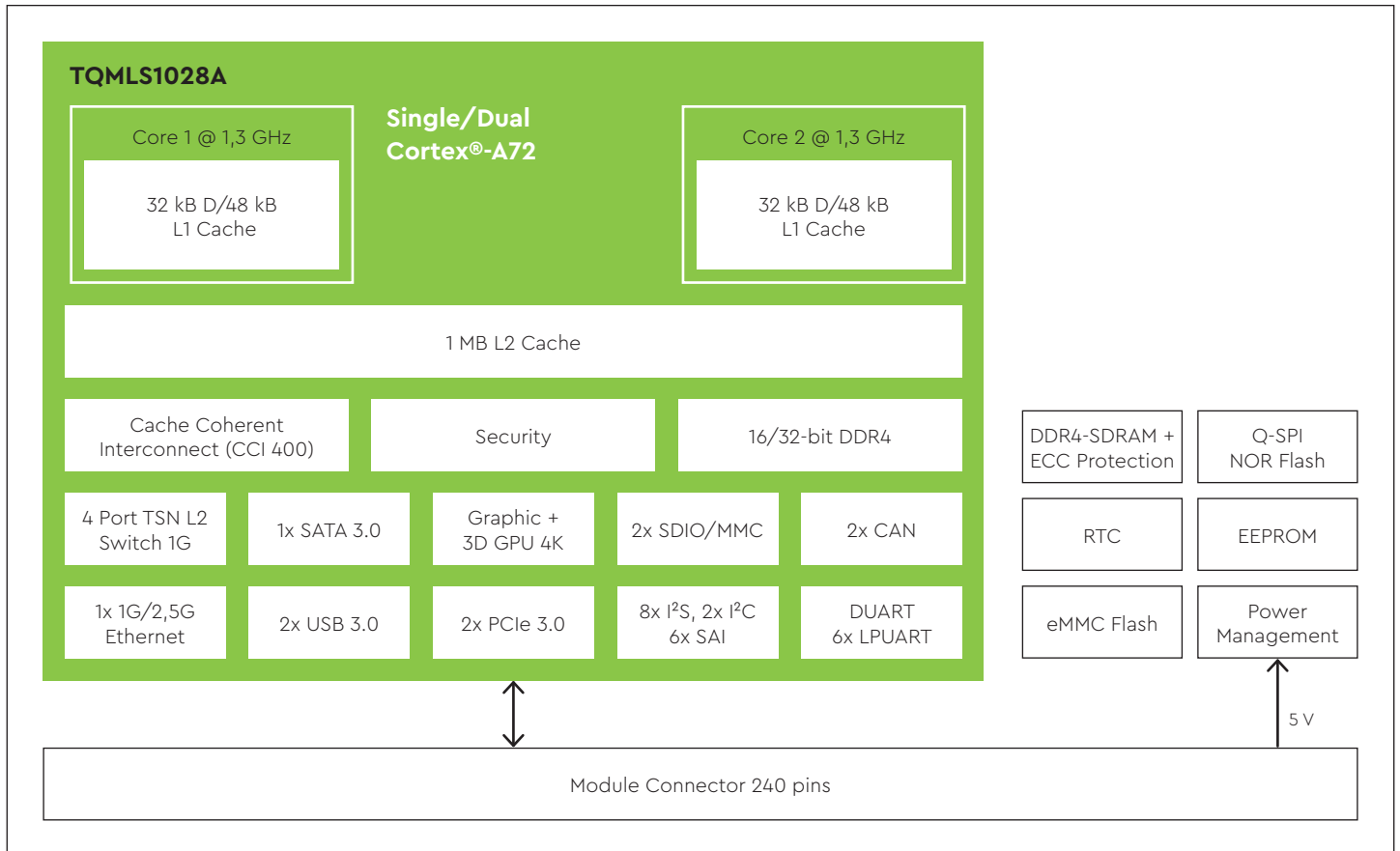
Embedded Cortex®-A72 module based on LS1028A with 4 Port TSN Gigabit Ethernet Switch for Real time demands.

TECHNICAL SPECIFICATION

CPU	Layerscape LS1028A, LS1018A, LS1027A, LS1017A,
Interfaces	1x 4Port TSN Gbit Ethernet Switch Up to 1x Ethernet 2,5 Gbit Up to 1x Ethernet 1 Gbit Up to 2x USB 3.0 Up to 6x UART Up to 2x CAN
Periphery interfaces	Up to 2x SDIO/MMC Up to 8x I ² C Up to 2x SPI Up to 6x SAI Up to 1x SATA 3.0 Up to 2x PCIe 3.0
Graphic	4K LCD Controller with eDP/DP Phy 3D GPU
Memory	DDR4-SDRAM: Up to 2 GB (TBD) ECC Protection Quad SPI NOR: Up to 512MB (TBD) EEPROM: 0/64 kbit

Other	Real Time Clock (RTC) Temperature sensor CPU JTAG Interface
Power supply	5 V (TBD)
Ambient conditions	Extended temperature range: -40°C...+85°C
Dimensions	55 mm x 44 mm
Plug-in system	Board-to-board plug-in system 240 pins
Operating systems	Linux
Operating systems on request	other TBD

BLOCK DIAGRAM TQMLS1028A



ORDERING INFORMATION

TQMLS1028A-AA (Prototypes Q1/19 TBD) TQMLS1028A, Dual Cortex®-A72/1,3 GHz, 64 MB NOR Flash, 8GB eMMC Flash, 1GB DDR4, 64kB EEPROM, -40°C...+85°C

TQMLS1018A-AA (Prototypes Q1/19 TBD) TQMLS1018A, Single Cortex®-A72/1,3 GHz, 64 MB NOR Flash, 8GB eMMC Flash, 1 GB DDR4, 64kB EEPROM, -40°C ...+85°C

TQMLS1027A-AA (Prototypes Q1/19 TBD) TQMLS1027A, Dual Cortex®-A72/1,3 GHz, 64 MB NOR Flash, 8GB eMMC Flash, 1GB DDR4, 64kB EEPROM, -40°C ...+85°C

TQMLS1017A-AA (Prototypes Q1/19 TBD) TQMLS1017A, Single Cortex®-A72/1,3 GHz, 64 MB NOR Flash, 8GB eMMC Flash, 1 GB DDR4, 64kB EEPROM, -40°C ...+85°C

Other variants on request

STKLS1028A-AA (Prototypes Q1/19 TBD) STKLS1028A (Eval Kit) with TQMLS1028AA or TQMLS101027A/Dual Cortex A72/1,3 GHz, 1GB DDR4, 64MB QSPI NOR Flash, 8GB eMMC, 64kB EEPROM, RTC, 2x CAN 2.0B gtr., 2x USB 3.0 HOST, 1 x USB 3.0 OTG , 2x ETH 10/100/1000, 4x Gigabit Ethernet TSN Switch, 1x M.2 SATA, 1x Display Port, 1x Mini PCIe + SIM, Reset-Button, Micro SD-Interface, 1x USB Debug, Power Supply, SD-Card, Accessoires, Cable

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