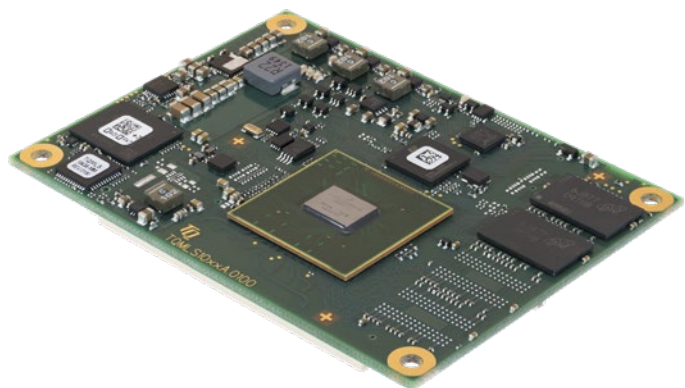


TQMLS10xxA

ARM® Family



HIGHLIGHTS

- ▶ 2x 10 Gbit Ethernet
- ▶ DDR4 + ECC protection
- ▶ High speed communication via 8x Gbit Ethernet, 3x PCIe and 3x USB 3.0 interface
- ▶ Extended temperature range
- ▶ Up to 8 ARM® Cortex® A53 Cores
- ▶ QorIQ® Trust Architecture and ARM® TrustZone®
- ▶ Security functions

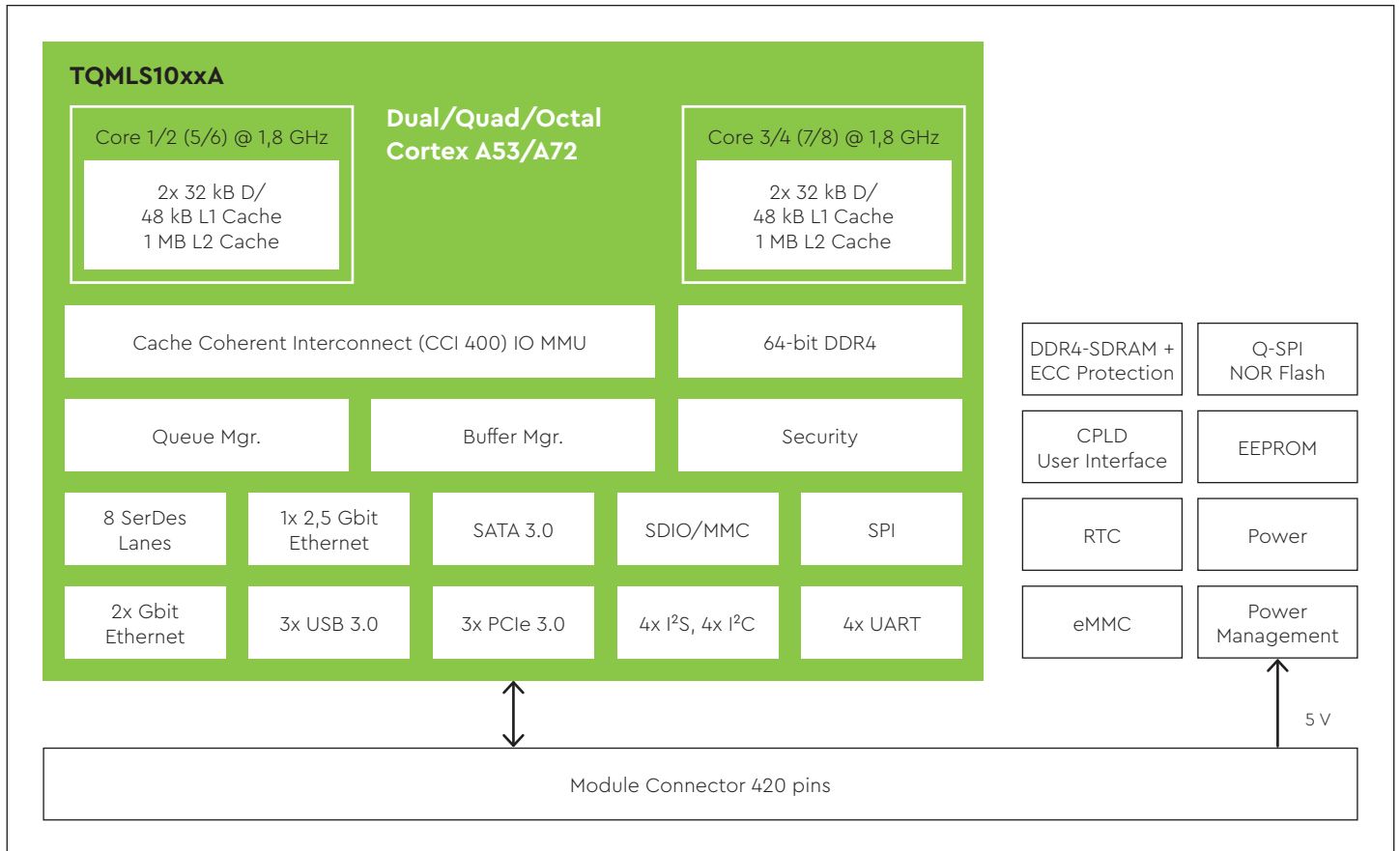
Embedded Cortex A53/A72 module based on LS102xA with 10 Gbit Ethernet interfaces for many network applications.

TECHNICAL SPECIFICATION

CPU	Layerscape LS1046A, LS1026A, LS1043A, LS1023A, LS1088A
System interfaces	Up to 2x Ethernet 10 Gbit Up to 10x Ethernet 10/100/1000 Mbit Up to 3x USB 3.0 high speed HOST interface Up to 4x UART
Periphery interfaces	Up to 1x SDIO/MMC Up to 2x I ² C Up to 1x SPI Up to 1x SATA 3.0 Up to 3x PCIe 3.0
Memory	DDR4-SDRAM: Up to 8 GB Up to 64 GB eMMC Quad SPI NOR: Up to 512 MB EEPROM: 0/64-kbit ECC protection
Other	Real Time Clock (RTC) Temperature sensor CPU JTAG interface

Power supply	5 V
Ambient conditions	Extended temperature range: -40°C...+85°C
Dimensions	80 mm x 60 mm
Plug-in system	Board-to-board plug-in system 420 pins
Operating systems	Linux
Operating systems on request	VxWorks, other TBD

BLOCK DIAGRAM TQMLS10XXA



ORDERING INFORMATION

TQMLS1043A-AA (Prototypes Q3/18) LS1043/1,0 GHz, 64MB QSPI NOR Flash, 8GB eMMC, 1GB DDR4+ ECC, 64kB EEPROM, RTC, -40°C- +85°C

TQMLS1046A-AA (Prototypes Q3/18) LS1046/1,8 GHz, 128MB QSPI NOR Flash, 8GB eMMC, 2GB DDR4+ ECC, 64kB EEPROM, RTC, -40°C- +85°C

TQMLS1088A-AA (Prototypes Q3/18) LS1088 / 1,4 GHz, 128MB QSPI NOR Flash, 8GB eMMC, 2GB DDR4+ ECC, 64kB EEPROM, RTC, -40°C- +85°C

Other configurations on request

STKLS10xxA-AA (Prototypes Q3/18) STKLS10xxA (Eval Kit) mit TQMLS10xx-AA, LS10xxA/ 1,6 GHz, 2GB DDR4, 128MB QSPI NOR Flash, 8GB eMMC, RTC, 64kB EEPROM, 1x RS232, 1x RS485, 1x SATA M.2, 1x CAN 2.0B gtr., 3x USB 2.0 HOST, 1x USB 3.0 OTG, 10x ETH 10/100/1000, 2x ETH 10 Gigabit, Temperatursensor, 1x PCIe, 2x Mini PCIe (1x SIM Card), Reset-Button, SD-Interface, Power Supply, SD-Card, Accessoires, Cable

Starterkit STKLS10xxA set The core of the STKLS10xxA set is the TQMLS10xxA module with a Dual/Quad Cortex A72 and A53 CPU from NXP. The components contained in the starter kit 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 the starter kit in your own designs.

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