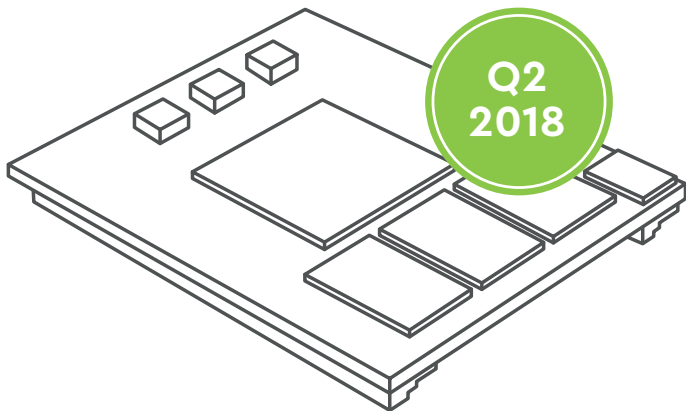


# TQMLS10xxA

ARM® Family



## HIGHLIGHTS

- ▶ 2x 10 Gigabit Ethernet
- ▶ DDR4 + ECC protection
- ▶ High speed communication via 8x Gigabit 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

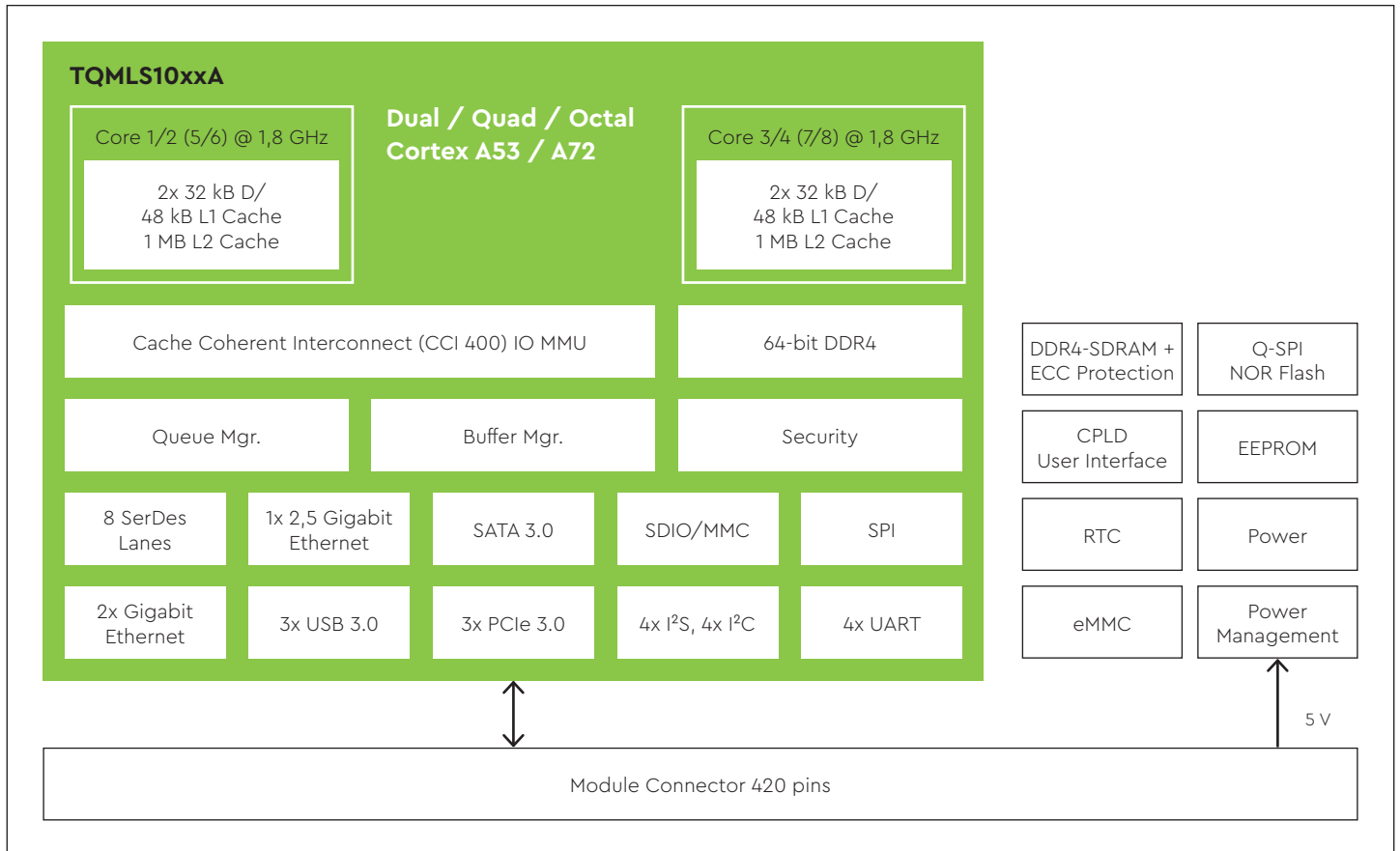
**Embedded Cortex A53 / A72 module based on LS102xA with 10 Gigabit Ethernet interfaces for many network applications.**

## TECHNICAL SPECIFICATION

<b>CPU</b>	Layerscape LS1046A, LS1026A, LS1043A, LS1023A, LS1088A
<b>System interfaces</b>	Up to 2x Ethernet 10 Gigabit Up to 10x Ethernet 10/100/1000 Mbit Up to 3x USB 3.0 high speed HOST interface Up to 4x UART
<b>Periphery interfaces</b>	Up to 1x SDIO/MMC Up to 2x I <sup>2</sup> C Up to 1x SPI Up to 1x SATA 3.0 Up to 3x PCIe 3.0
<b>Memory</b>	DDR4-SDRAM: Up to 2 GB Up to 32 GB eMMC Quad SPI NOR: Up to 512 MB EEPROM: 0 / 64-kbit ECC protection
<b>Other</b>	Real Time Clock (RTC) Temperature sensor CPU JTAG interface CPLD "User Configurable Interface" (CAN/CAN FD, SPI, UART,..)

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

## BLOCK DIAGRAM TQMLS10XXA



## ORDERING INFORMATION

<b>TQMLS104xA-AA (Prototypes Q2/18)</b>	TQMLS1046A, Quad Cortex A72 / 1,6 GHz, 128 MB NOR Flash, 8 GB eMMC Flash, 1 GB DDR4 + ECC, 64 kB EEPROM, -40°C...+85°C
<b>TQMLS102xA-AA (Prototypes Q2/18)</b>	TQMLS1043A, Dual Cortex A53/1,6 GHz, 128 MB NOR Flash, 8 GB eMMC Flash, 1 GB DDR4 + ECC, 64 kB EEPROM, -40°C...+85°C
<b>TQMLS108xA-AA (Prototypes Q2/18)</b>	TQMLS10288A, Octal Cortex A53/1,6 GHz, 128 MB NOR Flash, 8 GB eMMC Flash, 1 GB DDR4 + ECC, 64 kB EEPROM, -40°C...+85°C
<b>STKLS10xxA-AA (Prototypes Q2/18)</b>	STKLS10xxA (Eval Kit) with TQMLS10xxA-AA, Dual/Quad Cortex A72/A53 or Octal Cortex A53 1,6 GHz, 1 GB DDR4, 128 MB NOR Flash, 8 GB eMMC Flash 64 kB EEPROM, 1x RS232, 1x RS485, 1x CAN FD, 3x USB 3.0 HOST, 1x USB 2.0 OTG, 3x ETH 10/100/1000, 2x 10 Gigabit Ethernet 2x PCIe, RTC, Temperature sensor, Reset-Button, SD interface, Power Supply, 4GB SD card, Cables
<b>Starterkit STKLS10xxA set</b>	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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