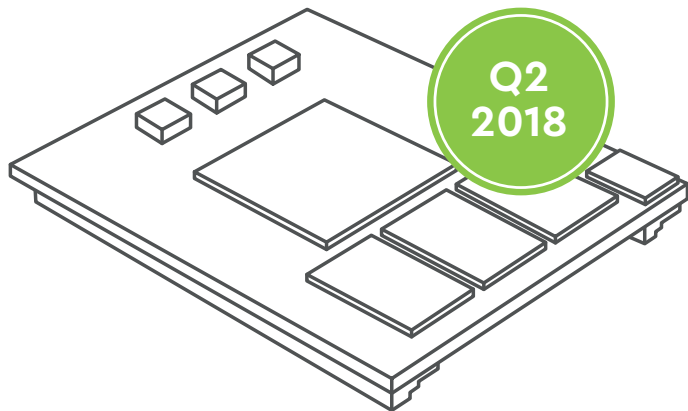


TQMa8Xx

ARM® Family



HIGHLIGHTS

- ▶ Graphic with 4 K Support
- ▶ DSP for audio processing
- ▶ High-speed communication via 2x Gbit Ethernet, 1x PCIe and 1x USB 3.0
- ▶ Low power consumption (typ. 4 W)
- ▶ Integrated 1x Cortex M4 CPU (Real Time/ Security)
- ▶ 3x CAN FD
- ▶ Integrated security functions

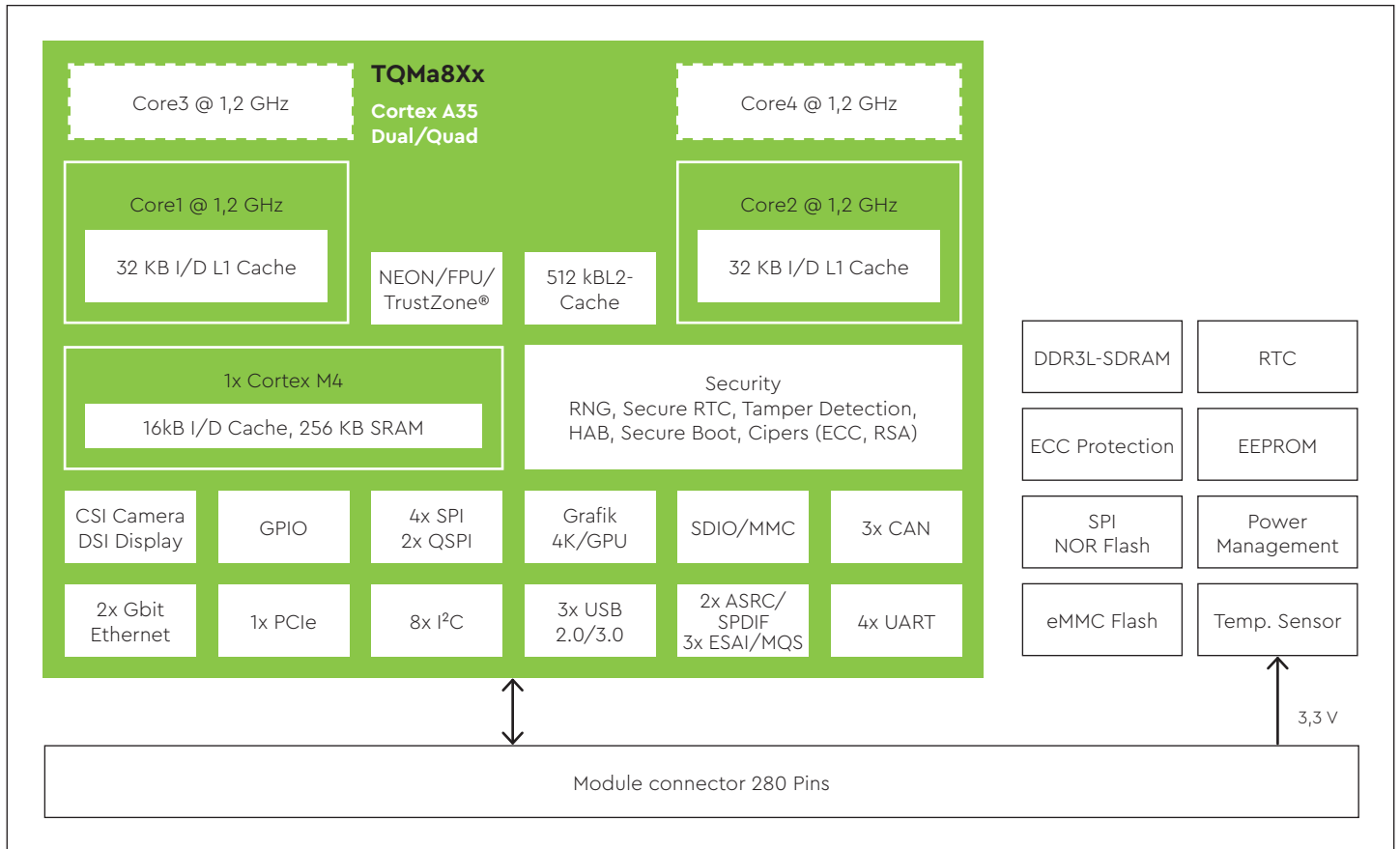
Embedded Cortex A35 module based on i.MX8X with high computing power combined with high-speed interfaces.

TECHNICAL SPECIFICATION

CPU	Cortex A35 Technology i.MX8 DualX, i.MX8 DualX Plus i.MX8 QuadX Plus
Interfaces	Up to 2x Ethernet 10/100/1000 Mbit (IEEE 1588) Up to 1x USB 3.0 OTG interface Up to 2x USB 2.0 OTG interface Up to 4x UART Up to 3x CAN FD
Periphery interfaces	1x SDIO/MMC 1x PCIe Up to 8x I ² C Up to 4x SPI Up to 2 Q-SPI Up to 2x SPDIF Up to 4x ESAI Up to 32 GPIO
Graphic	LCD Interface (LVDS)
Memory	DDR3L-SDRAM: Up to 2 GB Quad SPI NOR: Up to 256 MB Up to 64 MB eMMC Flash EEPROM: 0/64-kbit
Other	Real Time Clock (RTC) Temperature sensor CPU JTAG interface
Power supply	3,3 V (TBD)

Ambient conditions	Standard temperature range: -25°C...+85°C Extended temperature range: -40°C...+85°C
Dimensions	55 mm x 44 mm
Plug-in system	Board-to-board plug-in system 280 pins (TBD)
Operating systems	Linux
Operating systems on request	QNX, Android

BLOCK DIAGRAM TQMa8XX



ORDERING INFORMATION

TQMa8XD-AA (Prototypes Q2/18)	TQMa8XD-AA, i.MX8 DualX/1,2 GHz, 8 GB eMMC Flash, 1 GB DDR3L, 64 kB EEPROM, -25°C...+85°C
TQMa8XDP-AA (Prototypes Q2/18)	TQMa8XDP-AA, i.MX8 DualX Plus/1,2 GHz, 8 GB eMMC Flash, 1 GB DDR3L, 64 kB EEPROM, -25°C...+85°C
TQMa8XQP-AA (Prototypes Q2/18)	TQMa8XQP-AA, i.MX8 QuadX Plus/1,2 GHz, 8 GB eMMC Flash, 1 GB DDR3L, 64 kB EEPROM, -25°C...+85°C
STKa8Xx-AA (Prototypes Q2/18)	STKa8Xx (Eval Kit) with TQMa8Xx-AA, i.MX8Xx/1,2 GHz, 1 GB DDR3L, 8 GB eMMC Flash, 64 kB EEPROM, 1x RS232, 2x CAN FD separated, 1x USB 3.0 OTG, 4x USB 2.0 HOST, 2x ETH 10/100/1000, 1x HDMI/DP, 2x LVDS/DSI, 1x PCIe, RTC, Temperature sensor, Reset-Button, SD interface, Power Supply, 4 GB SD card, Cables
Starterkit STK8Xx set	The core of the STKa8Xx set is the TQMa8Xx module with a i.MX8Xx Cortex A35 CPU. The components contained in the starter kit constitute a modular system enabling you to develop your own product ideas. Development of graphic interfaces can be started immediately using a TQ display kit which is adjusted for a starter kit. To develop your own hardware you can use the certified and qualified circuit components of the starter kit in your own designs.

TQ-Systems GmbH

Mühlstraße 2 | Gut Delling | 82229 Seefeld | Germany
Tel.: +49 8153 9308-0 | info@tq-group.com | tq-group.com

Quicklink: tq-group.com/TQMa8Xx