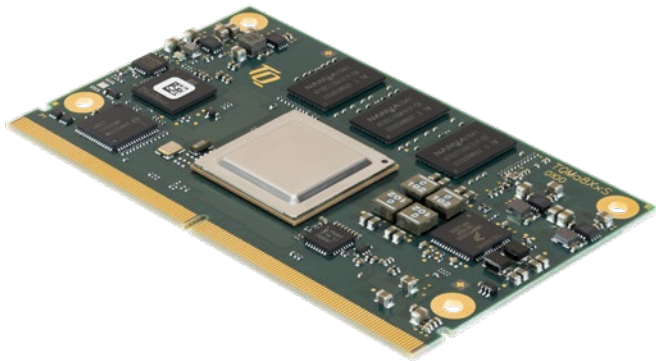


TQMa8XxS

ARM® Family



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

HIGHLIGHTS

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

Based on

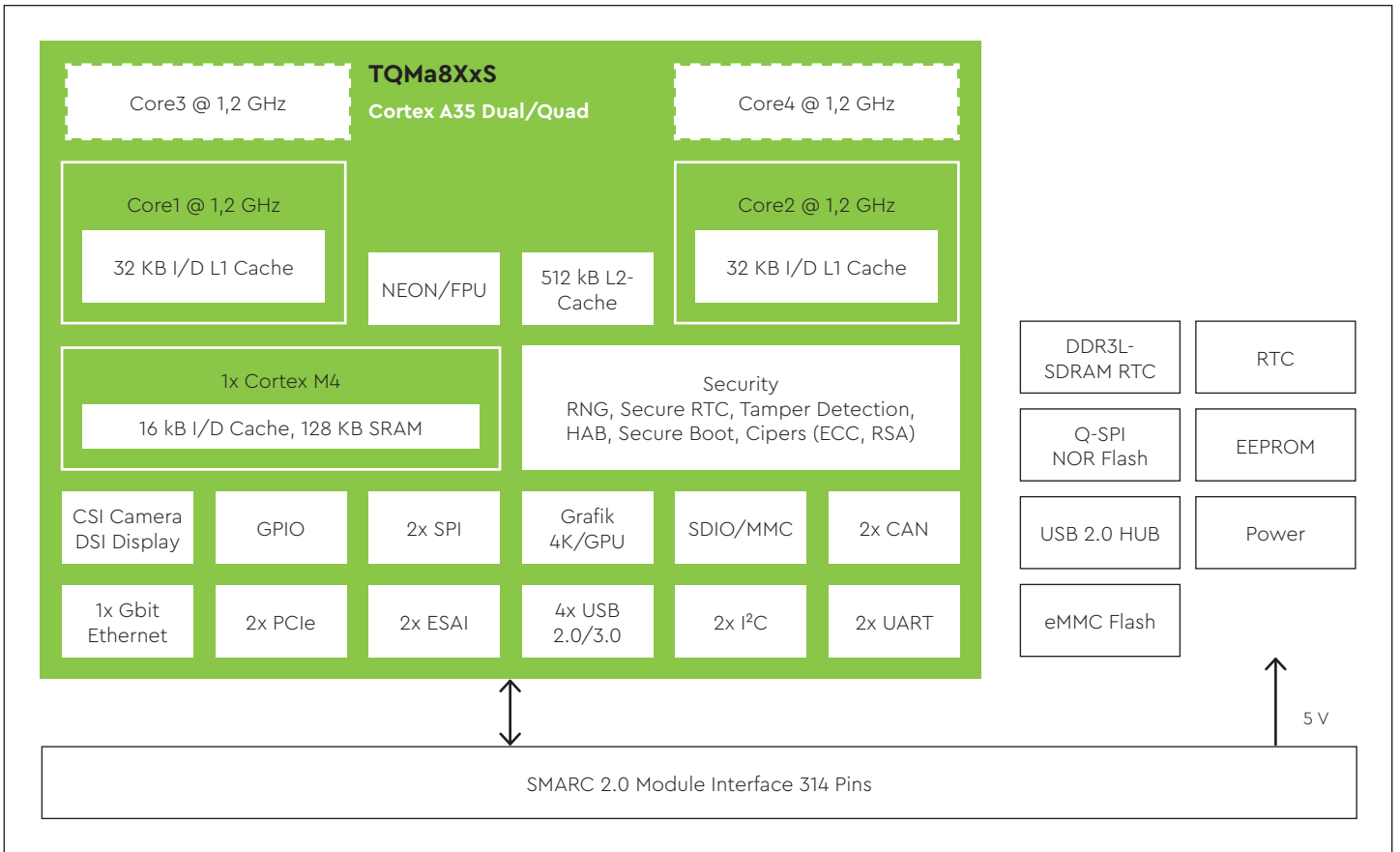


TECHNICAL SPECIFICATION

CPU	Cortex A35 Technology i.MX8X Dual, i.MX8X Dual Plus i.MX8X Quad Plus
Interfaces	Up to 2x Ethernet 10/100/1000 Mbit (IEEE 1588) Up to 1x USB 3.0/2.0 OTG interface Up to 4x USB 2.0 (USB Hub) Up to 2x UART Up to 2x CAN FD
Periphery interfaces	Periphery interfaces 1x SDIO/MMC 2x I ² C 2x SPI 1x I ² S 1x PCIe SPDIF/ESAI GPIO
Graphic	LCD Interface (HDMI, LVDS)
Memory	DDR3L-SDRAM: Up to 2 GB Quad SPI NOR: Up to 256 MB Up to 64 GB eMMC Flash EEPROM: 0/64 kbit
Other	Real Time Clock (RTC) Temperature sensor CPU JTAG interface

Power supply	5 V
Ambient conditions	Standard temperature range: -25°C...+85°C Extended temperature range: -40°C...+85°C
Dimensions	82 mm x 50 mm
Plug-in system	SMARC 2.0 Board-to-board plug-in system 314 pins
Operating systems	Linux
Operating systems on request	QNX, Android

BLOCK DIAGRAM TQMA8XxS



ORDERING INFORMATION

TQMa8XDS-AA
(Prototypes Q3/18)

i.MX8X Dual/1,2 GHz, 8 GB eMMC Flash, 1 GB DDR3L, 64 kB EEPROM, -25°C...+85°C

TQMa8XDPS-AA
(Prototypes Q3/18)

i.MX8X Dual Plus/1,2 GHz, 8 GB eMMC Flash, 1 GB DDR3L, 64 kB EEPROM, -25°C...+85°

TQMa8XQPS-AA
(Prototypes Q3/18)

i.MX8X Quad Plus/1,2 GHz, 8 GB eMMC Flash, 1 GB DDR3L, 64 kB EEPROM, -25°C...+85°

Other configurations on request

STKa8XxS-AA
(Prototypes Q3/18)

STKa8XxS (Eval Kit) with TQMa8XxS-AA, i.MX8Xx / 1,2 GHz, 1 GB DDR3L, 8GB eMMC Flash, 64kB EEPROM, 3x RS232, 2 x CAN FD separated, 1x USB 3.0 OTG, 1x USB 3.0 HOST, 1x USB 2.0 HOST, 2x ETH 10/100/1000, 1x Display Port, 2x LVDS/DSI, 1x PCIe, Audio, RTC, Temperature sensor, Reset-Button, SD interface, Power Supply, 4GB SD card, Cables

Starterkit
STK8XxS set

The core of the STKa8XxS set is the TQMa8XxS module with a i.MX8X 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 the prepared combination of closed display unit and starter kit that are matched to each other. 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

tq-embedded.com