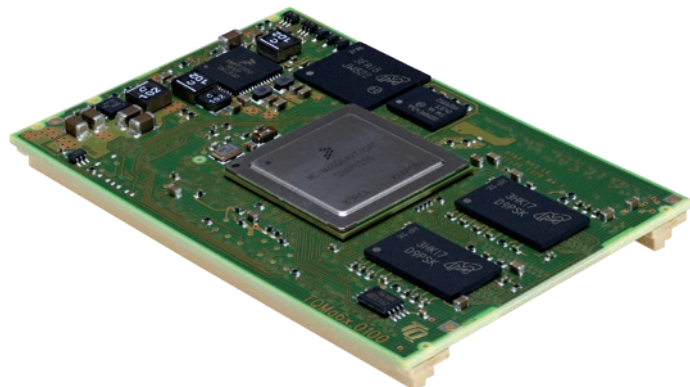


TQMa6x

Arm® Family



Embedded Cortex®-A9 module based on i.MX6 with scalable computing and graphics performance.

HIGHLIGHTS

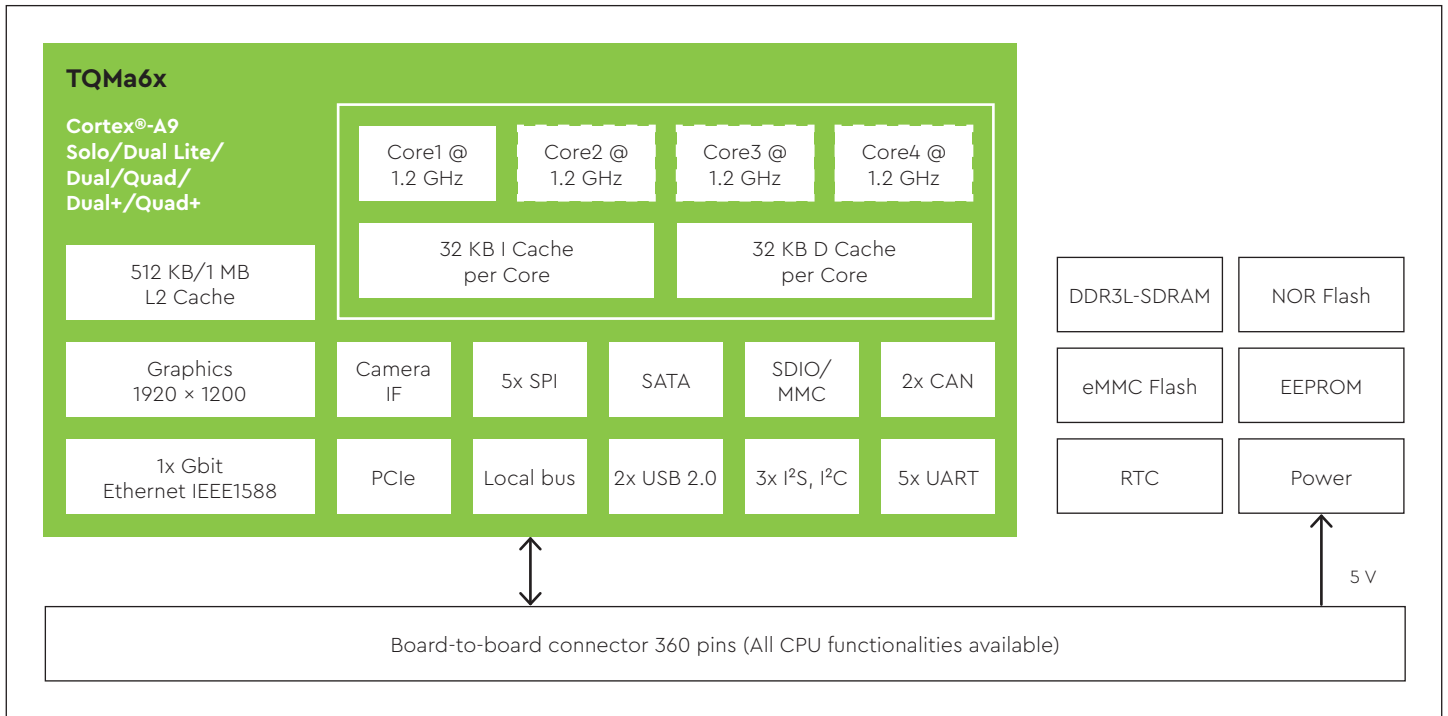
- ▶ Graphic
- ▶ Extended temperature range
- ▶ eMMC Flash
- ▶ NOR Flash
- ▶ Low power consumption (typ. 4 W)
- ▶ Long-term availability
- ▶ IEEE 1588 support
- ▶ Security functions

TECHNICAL SPECIFICATION

CPU	i.MX6 Solo/Dual Lite/Dual/Quad/ Dual+/Quad+
Interfaces	1x Ethernet 10/100/1000 Mbit (IEEE 1588) 2x FlexCAN 1x USB 2.0 high speed OTG interface 1x USB 2.0 high speed HOST interface Up to 5x UART
Periphery interfaces	WEIM Bus Up to 3x SDIO/MMC Up to 2x I ² C Up to 5x SPI Up to 3x SSI/I ² S ESAI 2x 16-bit Camera I/F SATA PCIe SPDIF

Graphic	DVI (HDMI) Parallel 2x 24-bit (RGB) Dual LVDS
Memory	DDR3L-SDRAM: Up to 2 GB (MCIMX6 Solo with 1 GB) eMMC: Up to 16 GB NOR: Up to 128 MB 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	70 mm x 46 mm
Plug-in system	Board-to-board plug-in system 360 pins
Operating systems	Linux, VxWorks, QNX

BLOCK DIAGRAM TQMa6X



ORDERING INFORMATION

TQMa6S-AA	i.MX6S, Solo Cortex®-A9/800 MHz, 8 GB eMMC flash, 512 MB DDRL3, 64-kbit EEPROM, -25°C...+85°C
TQMa6U-AA	i.MX6U, Dual Lite Arm® Cortex®-A9/800 MHz, 8 GB eMMC Flash, 1 GB DDR3L, 64 kB EEPROM, -25°C...+85°C
TQMa6D-AA	i.MX6D, Dual Cortex®-A9/800 MHz, 8 GB eMMC flash, 1 GB DDRL3, 64-kbit EEPROM, -25°C...+85°C
TQMa6DP-AA	i.MX6DP, Dual Plus Cortex®-A9/800 MHz, 8GB eMMC Flash, 1GB DDR3L, 64kB EEPROM, -25°C...+85°C
TQMa6QP-AA	i.MX6QP, Quad Plus Cortex®-A9/800 MHz, 8GB eMMC Flash, 1GB DDR3L, 64kB EEPROM, -25°C...+85°C
TQMa6Q-AA	i.MX6Q, Quad Cortex®-A9/800 MHz, 8 GB eMMC flash, 1 GB DDRL3, 64-kbit EEPROM, -25°C...+85°C

Further variants with SPI NOR and extended temperature range (-40°C...+85°C) are available as a standard. Other configurations on request

STKa6D-AA	STKa6x (Eval Kit) with TQMa6D-AA, Dual Cortex®-A9/800 MHz, 1 GB DDR3, 8 GB eMMC Flash, 64-kbit EEPROM, 1x RS232, 1x RS485, 2x CAN 2.0 B separated, 3x USB 2.0 HOST, 1x USB 2.0 OTG, 1x ETH 10/100/1000, 1x ETH 10/100, 1x Mini PCIe, DVI (HDMI), 1x PCIe, 2x LVDS, Sound, RTC, Temperature sensor, Reset button, SD interface, Power Supply, 4 GB SD card, Cables
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Starterkit STKa6D set	The core of the STKa6D Set is the TQMa6D module with a Dual Cortex®-A9 CPU from Freescale. 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.
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