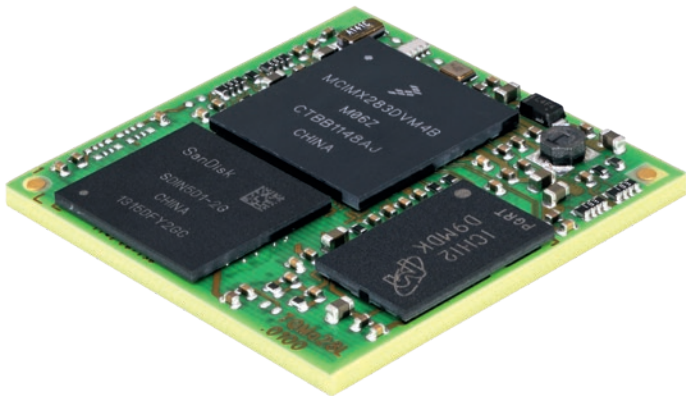


TQMa28L

Arm® Family



HIGHLIGHTS

- ▶ Smallest Arm9™ module
- ▶ High quantity use
- ▶ Extended temperature range
- ▶ 2x IEEE1588 Ethernet (L2 Switch)
- ▶ Low power consumption (typ. 1 W)
- ▶ Long-term availability
- ▶ IEC 61850 stack

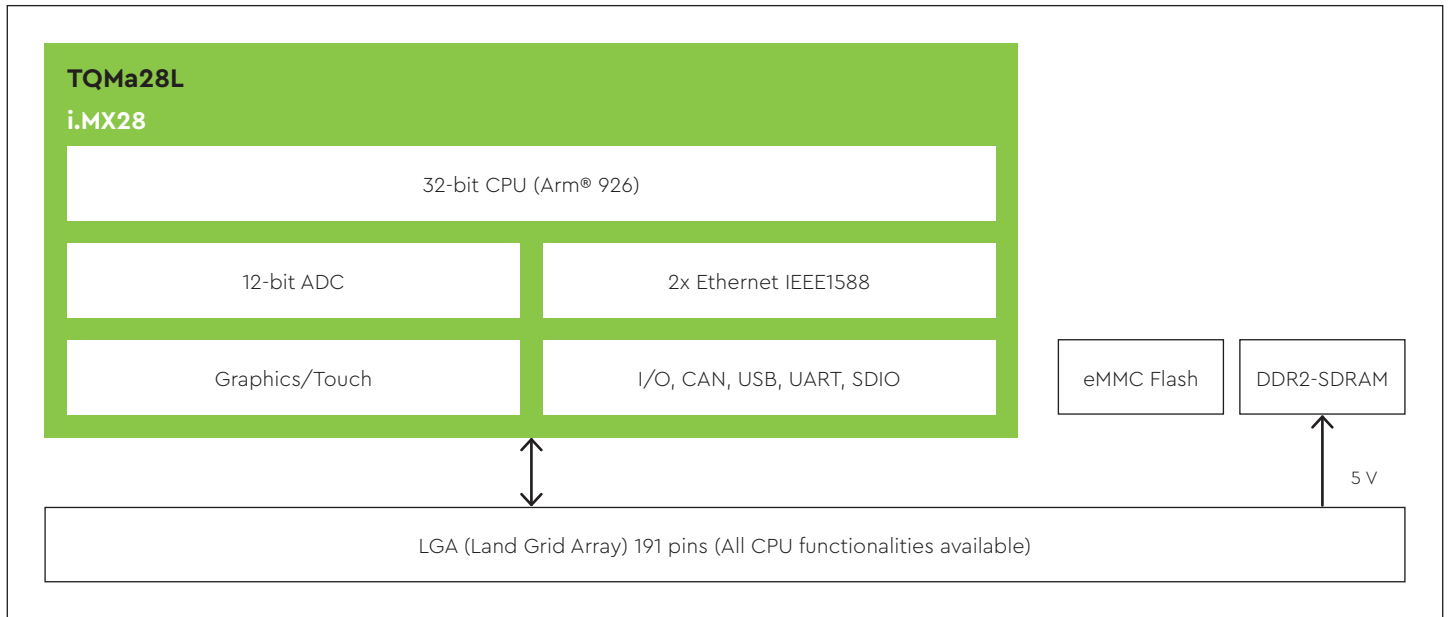
Smallest Arm9™ LGA module based on i.MX28 with good graphics and computing power.

TECHNICAL SPECIFICATION

CPU	i.MX283, i.MX287 (450 MHz)
Interfaces	Up to 2x Ethernet 10/100 Mbit (L2 Switch) Up to 2x CAN 2.0 B Up to 5x UART 1x USB 2.0 high-speed HOST interface 1x USB 2.0 high-speed OTG interface 1x SDIO/MMC Up to 2x I2C Up to 2x I2S Up to 2x SPI GPIO Up to 8x 12-bit ADC channels Up to 8x PWM
Graphic	24-bit TFT Interface
Memory	DDR2-SDRAM: up to 256 MB eMMC flash: up to 16 GB
Other	Real Time Clock (RTC) CPU JTAG Interface
Power supply	5 V

Ambient conditions	Standard temperature range: -25°C...+85°C Extended temperature range: -40°C...+85°C
Plug-in system	LGA (Land Grid Array) 191 pins
Operating systems	Linux, Win CE 6.0, QNX
Operating systems on request	VxWorks
Dimensions	31 mm x 31 mm

BLOCK DIAGRAM TQMA28L



ORDERING INFORMATION

TQMa28L-AB i.MX283@ 450 MHz, 128 MB DDR2, 8 GB eMMC flash, -25°C...+85°C

TQMa28L-AA i.MX287@ 450 MHz, 128 MB DDR2, 8 GB eMMC flash, -25°C...+85°C

Other configurations on request

STKa28-AA* STKa28 (Eval Kit) with TQMa28-AA, i.MX287/450 MHz, 128 MB DDR2, 8 GB eMMC flash, 1x RS232, 1x RS485, GPIO, 4x IN/ 8x OUT, 2x USB 2.0 HOST, 1x ETH 10/100, Stereo Out, Mono Mic In, RTC, Reset button, SD interface, Power Supply, 2 GB SD card, Z-Modem Cable

STKDT070-AA 7" Touch-Display, WVGA 800 × 480, 300 cd, Touchpen, Cable set

Starterkit STKa28 *Please note, that for evaluation purposes we provide you with the starter kit STKa28 with the module TQMa28 (not TQMa28L!). The module mainly differs in the plug system.

The core of the STKa28 is the TQMa28 with an Arm9™ 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