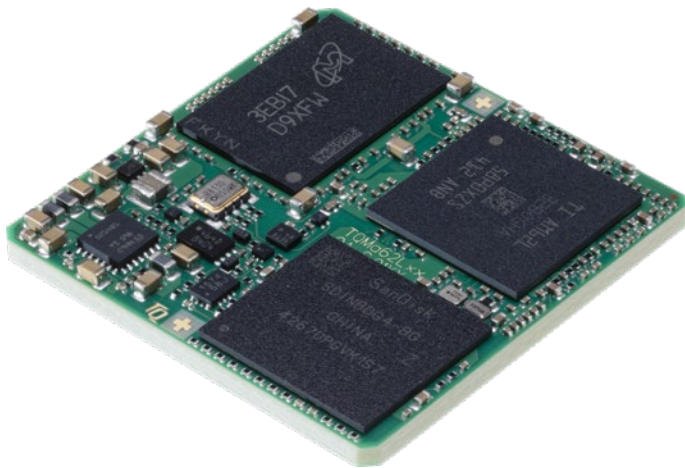


TQMa62LxxOA-S

Arm® Family



HIGHLIGHTS

- ▶ Featuring new OSM –S Standard with 30×30mm
- ▶ Single / Dual Cortex A53 up to 1,25GHz
- ▶ 1x Display DSI / RGB
- ▶ High-speed communication via 2x Gbit Ethernet switch, 3 x CAN FD, 2x USB 2.0
- ▶ Integrated security functions
- ▶ Low power consumption (1–2 W)

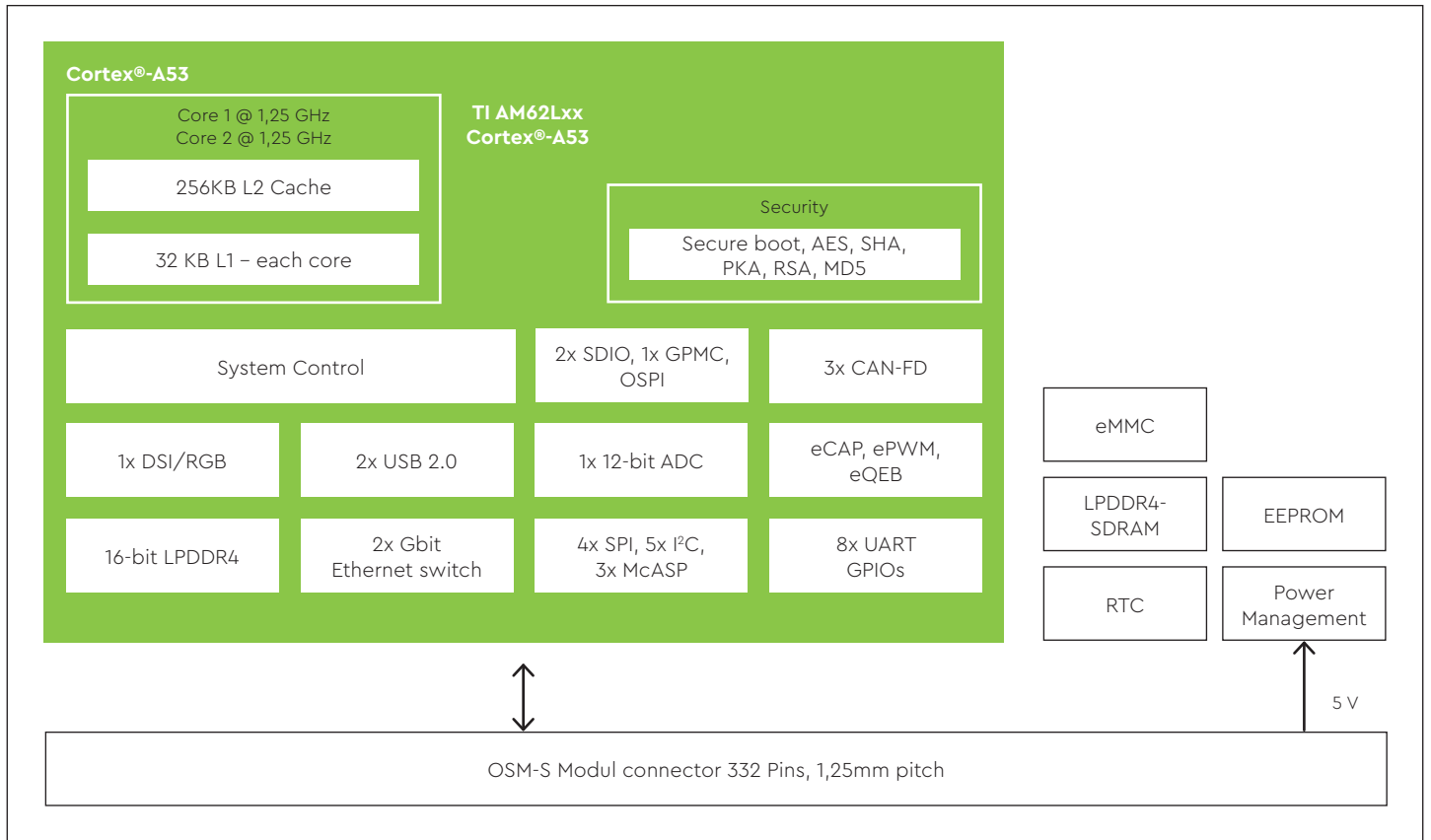
Embedded Cortex®-A53 module based on TI AM62Lxx with well equipped interface for applications like HMI, Control unit and home automation.

TECHNICAL SPECIFICATION

CPU	AM62L32, AM62L31
Interfaces	Up to 2x Gbit-Ethernet switch (TSN) Up to 2x USB 2.0 interface Up to 3x CAN FD Up to 8x UART Up to 2x SDIO Up to 5x I2C Up to 4x SPI Up to 1x GPMC Up to 1x OSPI Up to 3x PWM 3x McASP (Audio)
Graphic	1x DSI / RGB (24bit)
Memory	LPDDR4: Up to 2 GB eMMC: Up to 256 GB

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	30 mm x 30 mm
Plug-in system	Board to board plug in system 332 pins 1,25 mm pitch, OSM–S-Standard
Operating systems	Linux
Operating systems on request	Armbian

BLOCK DIAGRAM TQMa62LxxOA-S



ORDERING INFORMATION

TQMa62L320A-S-AA TQMa62L320A-S-AA, Dual Cortex®- A53 / 1,25GHz, 1GB LPDDR4, 8GB eMMC, RTC, -25°C...+85°C

TQMa62L310A-S-AA TQMa62L310A-S-AA, Single Cortex®- A53 / 1,25GHz, 256MB LPDDR4, 8GB eMMC, -25°C...+85°C

Other configurations on request

STKa62LxxOSM-S (Prototypes Q2/2026) STKa62LxxOSM-S (Eval Kit) with TQMa62LxxOA-PROTO+Adapter, Dual Cortex®- A53 / 1,25GHz, 64 MB NOR Flash, 1GB SDRAM, RTC, 2x ETH 10/100/1000 (TSN/ POE capable), 2x CAN FD, 1x RS485, 1x USB 2.0 OTG, 2x USB 2.0, 1x USB debug, Audio, 1x Temperature sensor, GPIOs (4x 24V_IN, 4x 24V_OUT, 8x AI_IN), WIFI/ BT, Mobile Network, Reset-Button, SD Card interface, Power Supply, 4 GB SD card, Cables

Starterkit STKa62LxxOSM-S set The core of the STKa62LxxOSM-S set is the TQMa62LxxOA-S module with a Dual Cortex®-A53 CPU. 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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