

MBa62xx(L)

Arm® Family



HIGHLIGHTS

- ▶ 2x GBit Ethernet TSN capable (1x PoE)
- ▶ 1x LVDS, 1x CSI camera, 1x USB OTG, 2x USB2.0, 1x USB debug, 1x SD-card, 1x SIM card, 1x RS485
- ▶ 2x CAN – FD, Analog Frontend, Digital IN/OUT, WIFI+BT, Mobile Network and much more
- ▶ low power dissipation (typ. 1–2W)

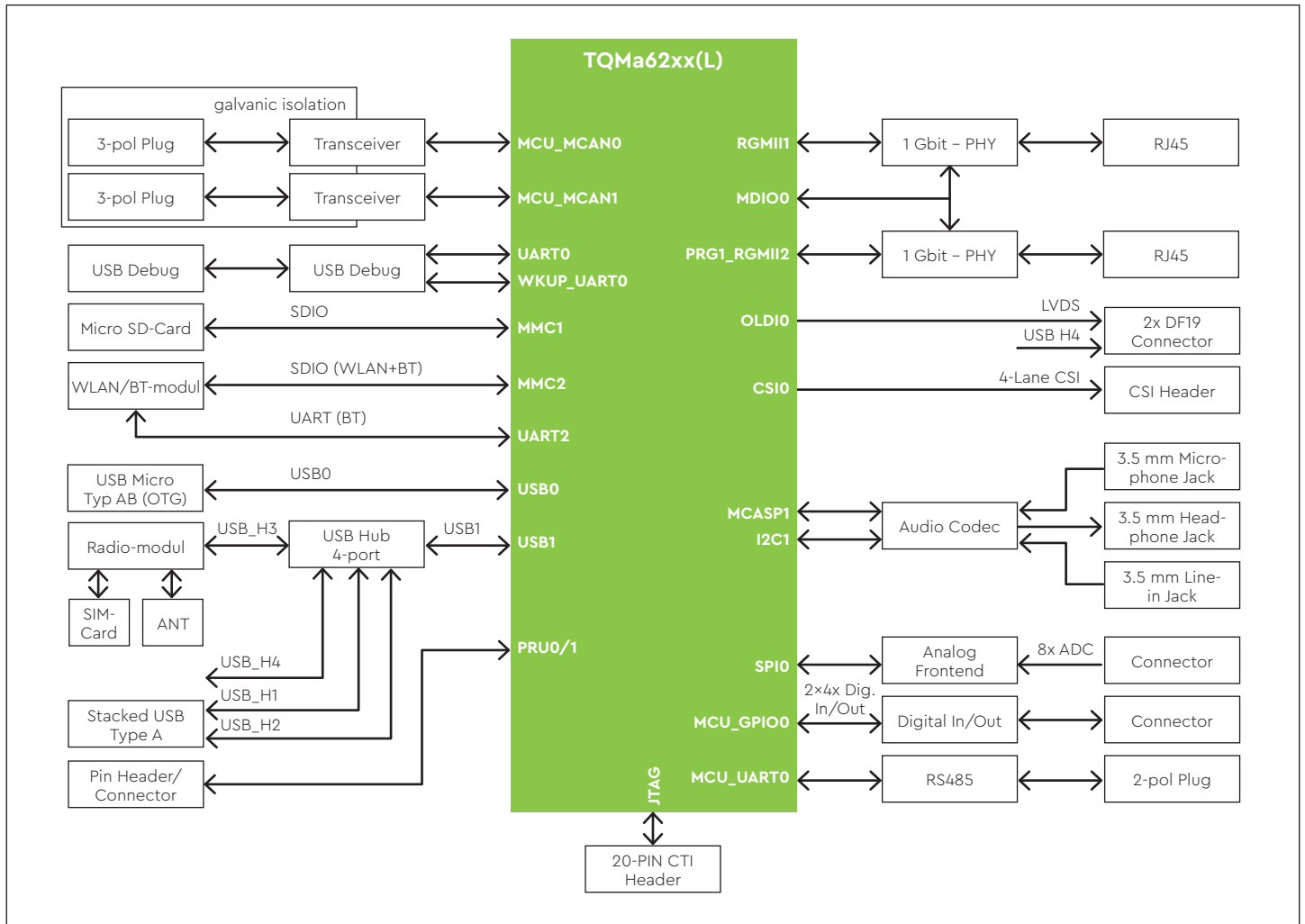
**Evaluationkit based on TQMa62xx(L)
Embedded Cortex®-A53/M4F module based
on TI AM62xx for applications with enhanced
computing & scalable graphics performance**

TECHNICAL SPECIFICATION

CPU	AM6254, AM6252, AM6251, AM6234, AM6232, AM6231
Interfaces	Up to 2 Gbit-Ethernet (TSN/PoE capable) 1x USB 2.0 OTG 1x USB debug 2x USB 2.0 2x CAN FD 1x RS485 4x Digital 24 V Input 4x Digital 24 V output Up to 8x programmable Analog input 1x Micro SD – card 1x SIM card
Periphery interfaces Pin Header	On/Off button/Reset Up to 6x I ² C Up to 5x MCSPi Up to 3x PWM Up to 1x SAI
Graphics	1x LVDS 1x CSI kamera sensor
Memory	SDRAM: Up to 2 GB NOR: Up to 256 MB eMMC: Up to 64 GB EEPROM: 0/64-kbit

Other	Real Time Clock (RTC) Secure Element SE050 Temperature sensor CPU JTAG interface WIFI/Mobile Network
Power supply	16 – 28 V
Ambient conditions	Standard temperature range: -25°C...+85°C Extended temperature range: -40°C...+85°C
Dimensions	170 mm x 170 mm
Operating systems	Linux
Operating systems on request	Other TBD

BLOCK DIAGRAM MBA62XX(L)



ORDERING INFORMATION

**STKa62xx(L)-AA
Prototypes Q3/2023**

STKa62xx(L) (Eval Kit) with TQMa62xx / TQMa62xxL + Adapter, Dual Cortex®- A53 / 1GHz, 2x Dual Cortex®-R5F/800 MHz, Cortex®- M4 / 400MHz, 8GB eMMC, 1GB SDRAM, 64 kB EEPROM, RTC, 1x LVDS, 1x CSI, Audio, 1x USB 2.0 OTG, 2x USB 2.0, 1x USB debug, 2x ETH 10/100/1000 (TSN/ POE capable), 2x CAN FD, 1x RS485, 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
STKa62xx(L) set**

The core of the STKa62xx(L) set is the TQMa62xx and TQMa62xxL module with a Dual Cortex®-A53 / R5F 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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