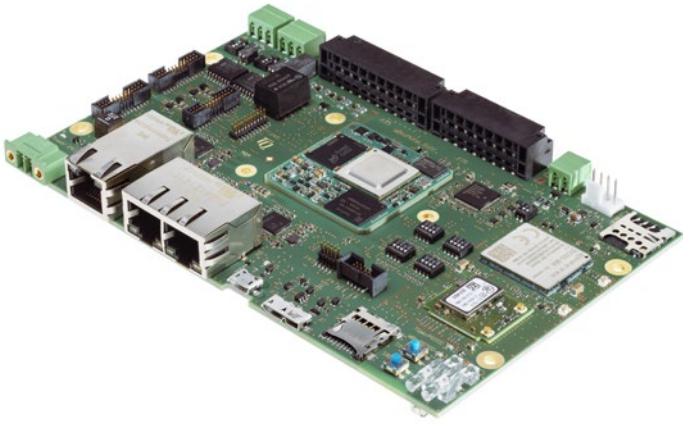


MBa64xxL

Arm® Family



HIGHLIGHTS

- ▶ 2x real time GBit Ethernet for fieldbus
- ▶ Highspeed communication via 1x Gbit Ethernet, 1x USB 2.0 Host, 1x USB 3.1, 1x SD-card, 1x SIM card, etc.
- ▶ 2x CAN – FD, Analog Frontend, Digital IN/OUT, WIFI, Mobile Network
- ▶ Integrated security features
- ▶ Low power consumption (typ. 1–2 W)

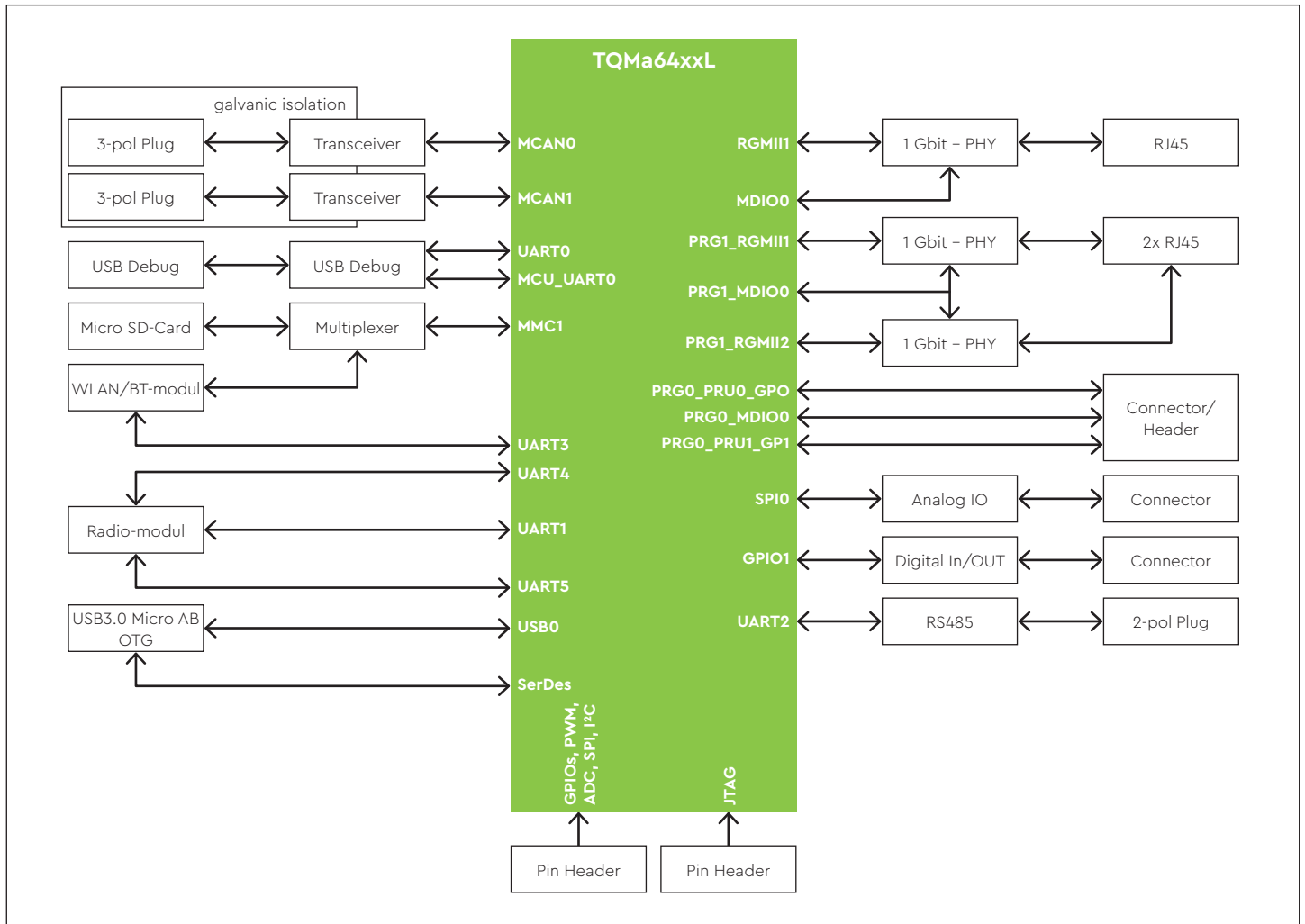
Embedded Cortex®-A53 / R5F module based on TI AM64xx for headless Applications with Real – time demand.

TECHNICAL SPECIFICATION

CPU	AM6442, AM6441, AM6422, AM6421, AM6412, AM6411
Interfaces	1x Gbit-Ethernet 2x Real-time Gbit Ethernet (PRU) 1x USB 2.0 host 1x USB 3.1 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
Periphery interfaces Pin Header	On/Off button/Reset Up to 2x I ² C Up to 2x MCSPi Up to 1x PWM
Memory	LPDDR4: 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 – 26 V
Ambient conditions	Standard temperature range: -25°C...+85°C Extended temperature range: -40°C...+85°C
Dimensions	160 mm x 100 mm
Operating systems	Linux
Operating systems on request	Other TBD

BLOCK DIAGRAM MBA64XXL



ORDERING INFORMATION

STKa64xxL-AA

STKa64xxL (Eval Kit) with TQMa64xxL-AA, Dual Cortex®-A53/1 GHz, 2x Dual Cortex®-R5F/800 MHz, Cortex®-M4/400 MHz, 8 GB eMMC, 1 GB LPDDR4, 64 kB EEPROM, RTC, 1x USB 2.0 OTG, 2x ETH 10/100/1000 (PRU), 1x ETH 10/100/1000, 2x CAN FD, 1x Temperature sensor, GPIOs (4x 24V_IN, 4x 24V_OUT, 8x AI_IN), Reset-Button, SD-Card interface, Power Supply, 4 GB SD card, Cables

**Starterkit
STKa64xxL set**

The core of the STKa64xxL set is the TQMa64xxL 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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