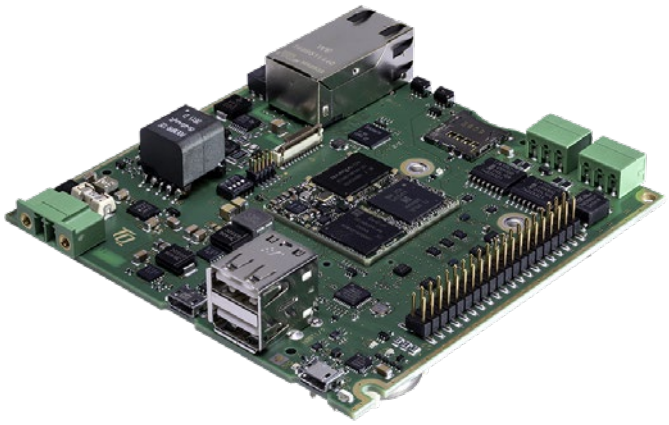
MBa62LxxO-S

Arm® Family



HIGHLIGHTS

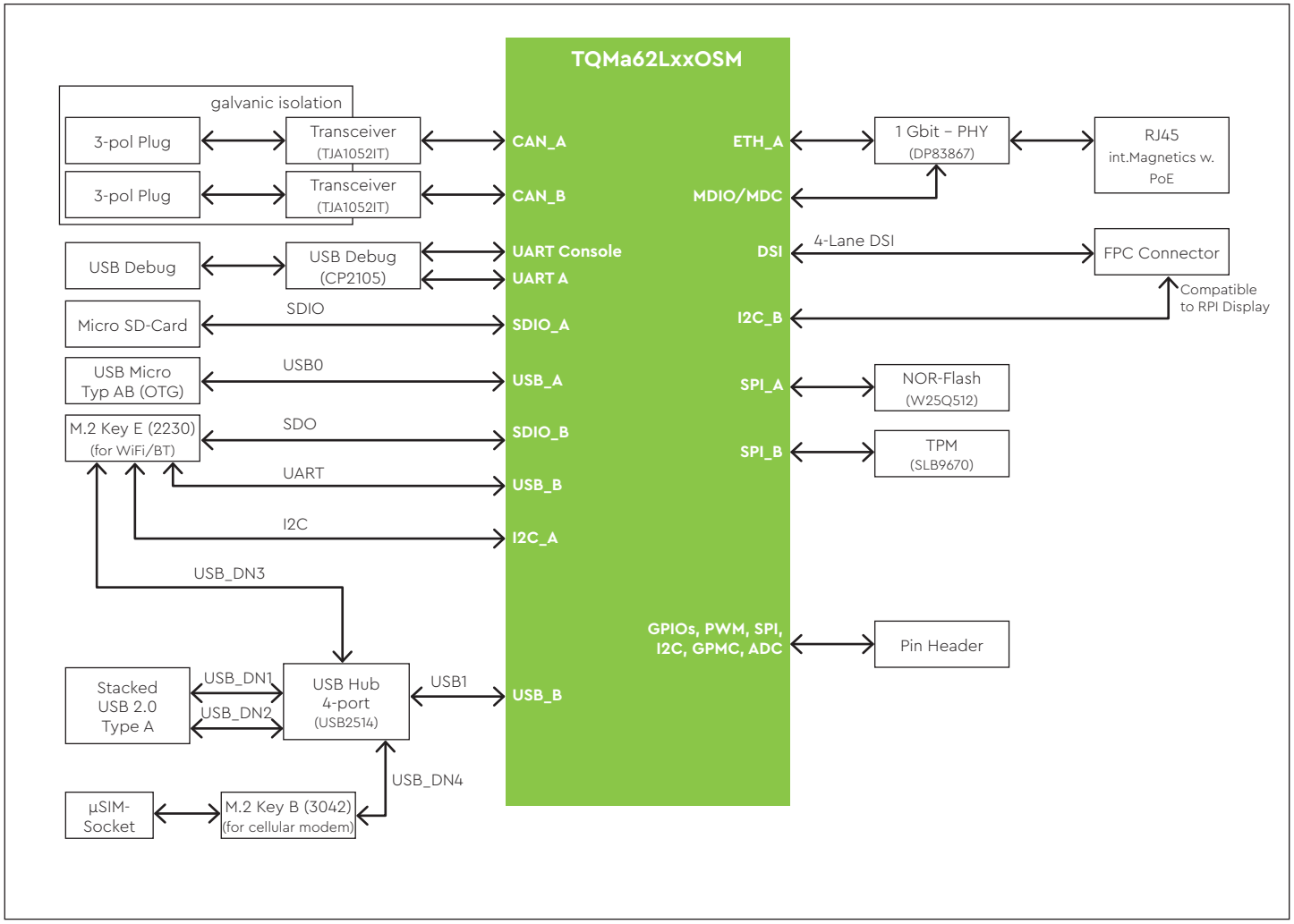
- Single Board Computer based on TQMa62LxxOA-S
- 1x Power of Ethernet (PoE)
- 1x Display DSI via FPC connector
- 2x USB 2.0, 1x micro USB OTG, 1x USB debug
- 2x CAN-FD galvanic isolated
- 2x M.2 (Key B, Key E)
- Low power consumption (typ. 2–3 Watt)

Single Board Computer (SBC) based on TQMa62LxxOA-S as platform for applications like simple HMI with 5 -7" displays, Control unit and home automation.

TECHNICAL SPECIFICATION

CPU	AM62L32, AM62L31
Interfaces	1x Gbit-Ethernet for PoE 2x CAN FD 1x micro SD card 2x USB 2.0 1x USB OTG 1x USB debug 2x M.2 (Key E & Key B)
Periphery Interfacse (pinheader 2,54 mm)	Up to 1x UART Up to 1x I2C Up to 1x SPI Up to 1x GPMC Up to 2x PWM Up to 1x McASP (Audio) Up to 28x GPIOs
Graphics	1x DSI via FPC connector
Memory	LPDDR4: Up to 2 GB eMMC: up to 256 GB NOR: up to 256 MB (optional) EEPROM: 0/64 kbit
Other	Real Time Clock (RTC) Temperature sensor CPU JTAG interface
Power supply	12 V Input
Ambient conditions	Standard temperature range: -25°C...+85°C Extended temperature range: -40 °C...+85 °C
Dimensions	100 mm x 100 mm
Operating systems	Linux Armbian on request

BLOCK DIAGRAM MBA62LXXO-S



ORDERING INFORMATION

MBa62LxxO-S (Prototypes Q3/26)	MBa62LxxO-S with TQMa62L32LOA-S, Dual Cortex®- A53 / 1,25 GHz, 1 GB SDRAM, 8 GB eMMC, 64k Bit EEPROM, RTC, 1x ETH 10/100/1000 for PoE, 2x CAN FD, 1x USB 2.0 OTG, 1x USB Debug, 2x USB 2.0., 1x DSI via FPC, 1xM.2 Key E für WiFi/ BT, 1xM.2 Key B für Cellular Modem, Pinheader (JTAG,GPIOs, SPI, I2C, PWM), Reset-Button, 1x micro SD Card, 1x micro SIM card, On/Off-Button.
	Other configurations on request
Starterkit MBa62LxxO-S set	The Single Board Computer (SBC) is based on the embedded module TQMa62LxxOA-S, with a Dual Cortex®-A53 CPU AM62L from Texas Instruments. All relevant interfaces integrated in the CPU have been implemented on the MBa62LxxO-S as interfaces suitable for industrial use. Due to the numerous interfaces and the small size, the use in various applications is possible without the need to produce a special design.

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