

# ABox-8MPxL

Arm® Family



**BoxPC based on MBa8MPxL and TQMa8MPxL as a high-end platform with TSN Gigabit Ethernet, ML-Accelerator and Multidisplay Graphics support.**

## TECHNICAL SPECIFICATION

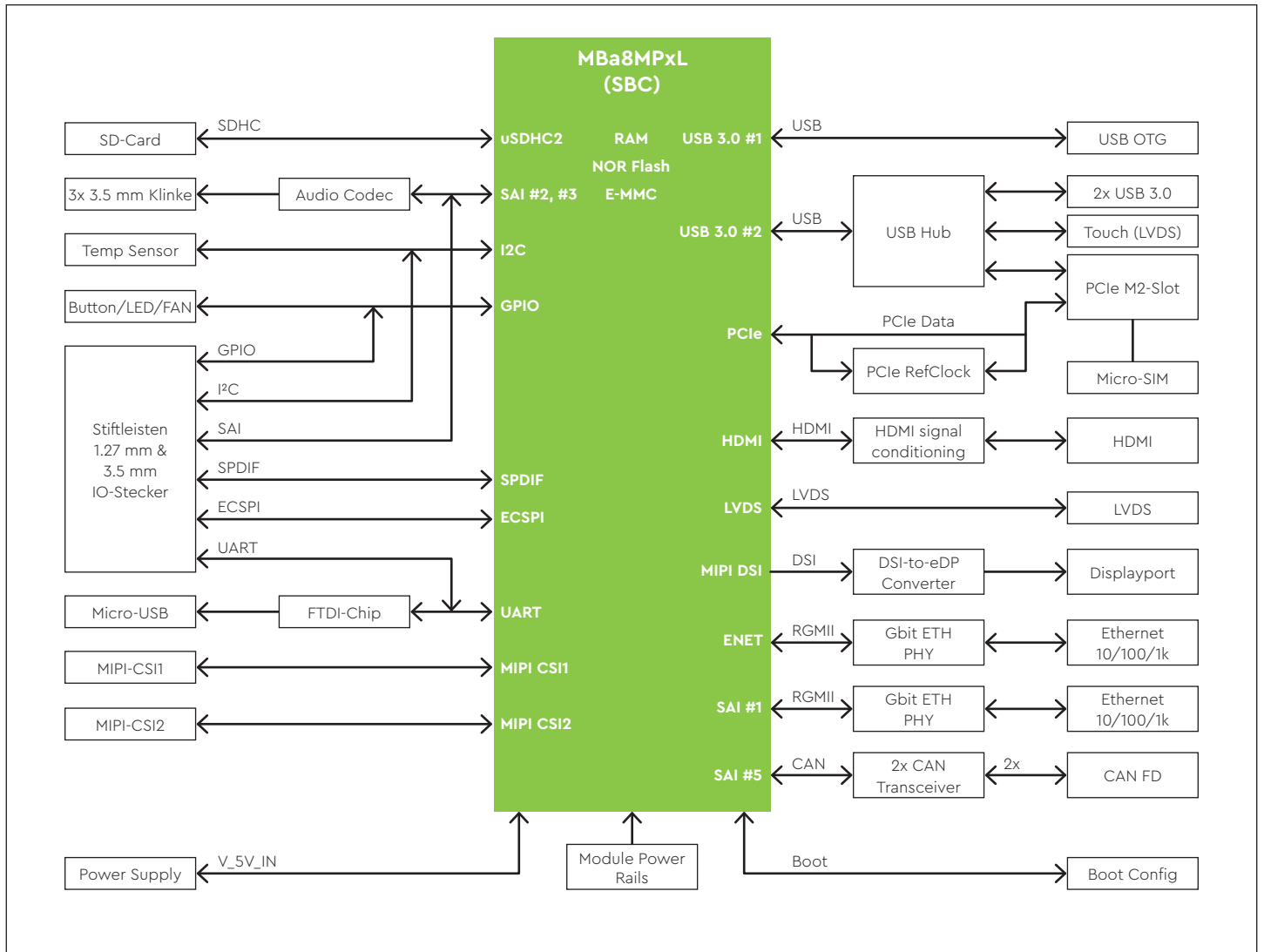
<b>CPU</b>	i.MX 8M Plus Quad 8 ML/AI i.MX 8M Plus Quad 6 Video i.MX 8M Plus Quad 4 Lite
<b>Interfaces</b>	2x Gbit-Ethernet (1x TSN) 2x USB 3.0 interface 2x CAN FD 4x Digital 24 Input 4x Digital 24 Output 2x Analog Input 1x Micro SD Card 1x M.2 PCIe (B-Key) 1x Audio (Line In, Line Out, MIC)
<b>Periphery interfaces</b>	Up to 4x I2C
<b>Pin Header</b>	Up to 4x UART Reset, Soft Reset On/Off Button ISO7816/ISO14443 Up to 2x SPI SAI/SPDIF
<b>Graphic</b>	1x HDMI 1x Display Port 1x LVDS Interface (4/8 Lanes) LCD Interface: 1x MIPI DSI; (4 Lanes) 2x MIPI-CSI (4 Lanes)

## HIGHLIGHTS

- ▶ Advanced Audio properties with HiFi4 DSP
- ▶ Machine Learning Accelerator 2.3 TOPS
- ▶ 2x CAN FD, Digital IN/OUT
- ▶ High-speed communication via 2x Gbit Ethernet (1x TSN) and 2x USB 3.0 interface
- ▶ Low power consumption (typ. 4W)
- ▶ Integrated security functions

<b>Memory</b>	LPDDR4: Up to 8 GB NOR: Up to 256 MB eMMC: Up to 256 GB EEPROM: 0/64-kbit
<b>Other</b>	Real Time Clock (RTC) Secure Element SE050 Temperature sensor CPU JTAG interface
<b>Power supply</b>	18-28 V
<b>Ambient conditions</b>	Standard temperature range: -25°C...+70°C Extended temperature range: -40°C...+70°C
<b>Dimensions</b>	170 mm x 103 mm x 35 mm
<b>Operating systems</b>	Linux
<b>Operating systems on request</b>	Android

## BLOCK DIAGRAM ABOX-8MPXL



## ORDERING INFORMATION

### ABox-8MPQL-AB

ABox-8MPxL with MBa8MPxL-AB based on TQMa8MPQL-AB, Quad Cortex®-A53/1.6 GHz, 2 GB LPDDR4, 16 GB eMMC Flash, 64 kB EEPROM, RTC, 2x USB 3.0 HOST, 1x USB 3.0 OTG, 2x ETH 10/100/1000, 2x CAN FD, 1x HDMI, 1x DP, 1x Dual LVDS, 2x MIPI CSI, 1x PCIe M.2 + SIM Card, Audio, GPIOs (4x 24V\_IN, 4x 24V\_OUT, 2x AI\_IN), Temperature sensor, Reset-Button, Micro SD

Other configurations on request

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