



Features

- Robust M12 & FAKRA connectors with rich I/O interface
- Dual SIM sockets support WWAN redundancy
- Onboard isolated CAN 2.0A / 2.0B / CAN-FD
- Removable 2.5" device bay for SSD storage
- Rich I/O interfaces for wireless, SSD, GPS, WWAN and add-on card expansion
- Ignition power control
- Wide-range voltage GPIO interface
- 1x USB Type-C with graphics output for quick setting and diagnostics
- Fanless and ruggedized design

Specifications

System Mainboard	MBT-3101V
CPU Type	Intel® Atom® x7433RE Processor
Processor Speed	Up to 2.7GHz
Memory	1x DDR5-4800 SO-DIMM socket Up to 16GB
Front Panel External I/O	1x USB3.2 Gen2 stack Type-A connector 2x external accessible SIM socket 1x USB TYPE-C connector with screw-lock 1x Removable 2.5" SSD device bay 1x DB9 female connector for Line-out & MIC-in 1x reset button 1x 14-pin terminal block 6-in & 6-out digital I/O with 24V input and output 2x FAKRA I-code plug Beige color connector for wifi / Bluetooth 1x FAKRA C-code plug Blue color connector for GPS 2x FAKRA D-code plug Violet color connector for 4G/5G 4x light-pipe for status LED Indicators
Rear Panel External I/O	2x M12 X-code 8P female for GbE LAN1/LAN2 1x terminal block 3 pins for DC-input 1x VGA connector for graphic output (optional) 1x DisplayPort output 1x DB9F connector for 2 x Can FD bus connection (works with extra CAN module) 2x DB9M for COM#1 / COM#2 2x USB 2.0 Type-A connector 2x light-pipe for LAN status LED Indicators
Storage	1x M.2 2280 M-Key socket for SSD (SATA III signal) 1x 2.5" removable device bay for SSD
Expansion slots	1x M.2 2230 E-Key socket for WLAN & BT connection (PCI-E + USB2.0 + SMBus) 1x M.2 3042/52 B-Key socket for WWAN (4G/5G) connection (USB3.2 Gen.1 + SMBus) 1x M.2 2280 M-Key socket for SSD device (SATA III) 1x Mini PCI-E full-sized socket for MVB/CAN FD module (PCI-E + USB2.0 + SMBus) 1x Mini PCIe half-sized socket for GPS module (USB2.0 only)
Power Supply	DC-input 9V ~ 36V
Construction	Aluminum
Chassis Color	Black
Mounting	wall mount
Dimensions	250 (W) x 150 (D) x 55 (H) mm 9.84" (W) x 5.9" (D) x 2.16" (H)
Operating Temperature	-40°C ~ 70°C (-40°F ~ 158°F) (w/o FAN & SSD) -20°C ~ 55°C (-4°F ~ 131°F) (w/ PCI-E card)
Storage Temperature	-40°C ~ 85°C (-40°F ~ 185°F)
Relative Humidity	10 ~ 95% RH @45°C (non-condensing)

Vibration	Operating/Non-operating (SSD): 2,26 Grms (5~500 Hz) / MIL-STD-810G composite wheeled condition (Z-axis only)
Shock	Operating: Sawtooth: 20G, 11msec (Z-axis) /MIL-STD-810G Non-operating: Sawtooth: 40G, 11 msec (Z-axis) /MIL-STD-810G
Certified	E-Mark-24 CE (EN 62368-1 / EN55032 / EN55035), FCC Class-B

Ordering Information

MPT-3100V	MPT-3100V with MBT-3101, Intel® Atom® x7433RE Processor w/ 1x 8GB DDR5-4800, 1x SSD bay, No PSU, No storage (RoHS)
MPT-3100V-AI	MPT-3100V with MBT-3101, Intel® Atom® x7433RE Processor w/ 1x 8GB DDR5-4800, w/ Hailo AI accelerator, 1x SSD bay, No PSU, No storage (RoHS)

Dimensions

