

PV100A

NXP® i.MX 8M Arm Cortex-A53 Quad Core In-vehicle Fanless Embedded Computer



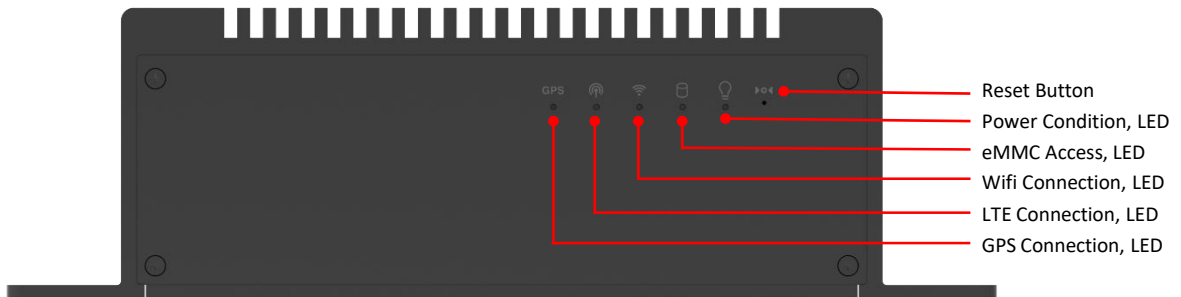
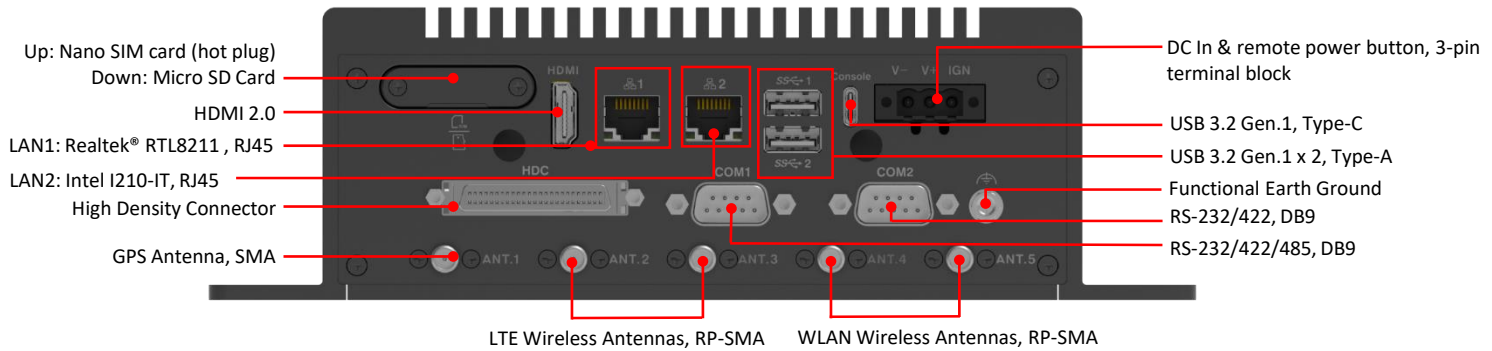
Features

- Integrated 4G LTE, Wi-Fi and GPS solution
- Intelligent vehicle power management: ignition on/off delay
- Vehicle diagnostic interface support: dual CAN (2.0 A/B, CANOpen, J1939, OBD-II)
- Wide-operating temperature with integrated 4G LTE + Wi-Fi + GPS solution: -25~70°C

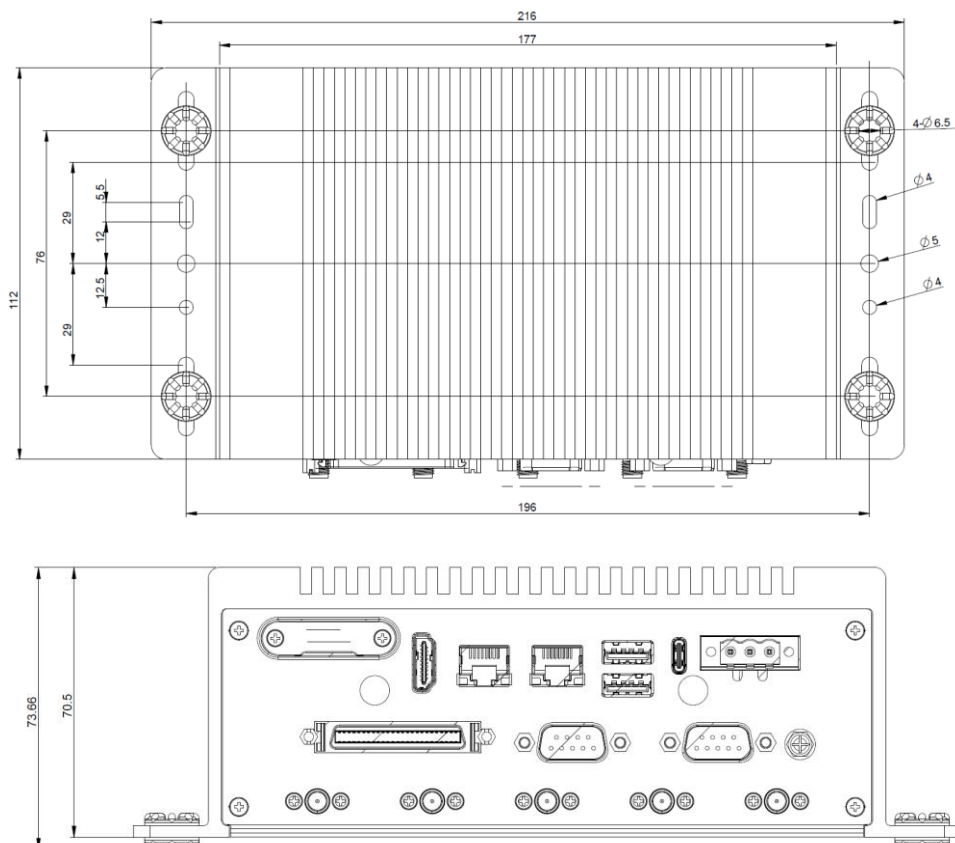
Specifications

System	CPU	i.MX8M, 4 x Cortex-A53 Quad Core, 1.3 GHz
	Memory	2 GB DDR4 onboard
	OS Storage	16 GB eMMC onboard
External Interfaces	Video	1 x HDMI 2.0, supports up to 3840 x 2160 @60Hz
	Ethernet	2 x 10/100/1000 Mbps Ethernet ports, RJ45
	USB	2 x USB 3.2 Gen.1, Type-A 1 x USB 3.2 Gen.1, supports OTG, Type-C
	COM	1 x RS-232/422/485, DB9 1 x RS-232/422, DB9
	SIM	2 X Nano-SIM slot
	High Density Connector	4 x isolated DI, 4 x isolated DO 2 x RS-232/422/485 1 x Mic-in, 1 x Line-out 2 x CANbus (CAN2.0 A/B, CANOpen, J1939, OBDII) *all interfaces are integrated in one high density connector, please purchase high density cable from optional accessory list
Storage	Micro SD	1 x Micro SD Card slot (on-board)
	M.2 E Key	1 x mSATA slot (shared with Mini PCIe socket)
Expansion Slot	Mini PCIe	1 x Mini PCIe socket (supports SATA & PCIe & USB signal, supports mSATA up to 512 GB) * 2 signal configurations can be selected via SW: (1) PCIe & USB (2) SATA & USB
	M.2 B Key	1 x M.2 2242 B-key socket (supports UDR GPS module)
	M.2 E Key	1 x M.2 2230 E-key socket (supports BT/Wi-Fi module)
Power	Power	9 to 36 VDC, 3-pin terminal block *supports ignition ON/OFF control and remote power button
Mechanical	Mounting	Wallmount with 4 shock absorb rubber
	Dimensions	216(L) x 112(W) x 70.5(H) mm
	Weight	1.62 kg
Environment	Operating Temp.	-25~70°C w/ all module operating (industrial parts) 0~40°C w/ all module operating (commercial module)
	Storage Temp.	-40~85°C
	Relative Humidity	5 to 95% (non-condensing)
	EMC	CE (ITE), FCC, VCCI, RCM, CCC
	Vehicle Regulation	E-Mark (12/24V), ISO-7637-2, SAE J1455, EN50155
	Military Standard	MIL-STD-810H
	Safety	UL, CE-LVD, CB, CCC, BSMI
	Shock	Operating: IEC 60068-2-27 (w/ SD card), MIL-STD-810H
	Vibration	Operating: IEC 60068-2-64 (w/ SD card), MIL-STD-810H
Green	GA (RoHS)	
Others	Watch dog timer	Yes. HW WDT Enable (WDT_EN)
	G-sensor	Triple-axis accelerometer (±2g/4g/8g)
	Operating System	Linux Yocto

Appearance:



Dimension (mm):



Ordering Information:

CPU	DRAM	eMMC	M.2 B-key	mPCIe	M.2 E-key	Operating temperature
NXP® i.MX 8M	2 GB	16 GB	GPS (optional)	TPU/ LTE (EG25-G)/ mSATA SSD (optional)	TPU/ Wi-Fi (optional)	-25~70/ 0~40° (depends on selected key part)

* Please check with your importer or integrator for system level certification.

Packing List:

Description	Quantity
Adapter cable terminal block 3 pin to DC, 10cm (with switch)	1
Damper	4

Optional Accessories:

Part Number	Description
ADAPTER	Power adapter, input voltage 100 to 240VAC, output voltage 19VDC, 0 to 35°C operating temperature
POWER CORD	Power cord with United States (US) plug Power cord with Europe (EU) plug Power cord with China (CN) plug Power cord with Japan (JP) plug Power cord with Australia (AU) plug Power cord with United Kingdom (UK) plug Power cord with Korea (KR) plug Power cord with Swiss (CH) plug Power cord with Taiwan (TW) plug Power cord with Thailand (TH) plug
ADAPTOR CABLE WITH SWITCH	Power jack to 3-pin terminal block adaptor with switch, 10cm
HIGH DENSITY CABLE	High density cable with 4*isolated DI/DO, 2*RS-232/422/485, 1*Mic-in, 1*Line-out, 2*CANbus High density cable with 1*Mic-in, 1*Line-out, 1*CANbus
WIRELESS EXTENSION CABLE	External wireless extension cable, RP-SMA to RP-SMA, 60cm
4G LTE ANTENNA	Omni-directional rubber duck GPRS/EDGE/UMTS/HSPA/LTE antenna, 704 to 960MHz & 1710 to 2690MHz, 3.5 dBi, RP-SMA, antenna length 10cm
WI-FI ANTENNA	Omni-directional rubber duck Wi-Fi antenna, 2.4/5GHz, 2dBi, RP-SMA, antenna length 8.6cm
EXTERNAL ANTENNA FOR GPS	Active type adhesive GPS antenna with extension cable, 1582MHz, 26dBi, SMA, antenna length 10cm, extension cable length 3m
CABLE TIE KIT	Cable tie & mounting *2 set