

SIG-M101

Industrial IoT Edge Gateway with NXP i.MX 8M Plus Quad Cortex-A53/M7



Features

- Powered by NXP i.MX 8M Plus Quad Cortex-A53/M7 Processor
- Onboard DDR4L 2/4/8GB/ eMMC 16/32GB
- 2 x Serial port (RS-232/485/422)
- CAN-FD x 2CH
- 2 x mPCIe connector for RF Module
- Support RTC, TPM 2.0
- 9 ~ 36 VDC, wide-range power input
- Pre-Install Linux Debian 12, Yocto kirkstone 5.15, Ubuntu 22.04
- Wide temperature -20 ~ 70 °C

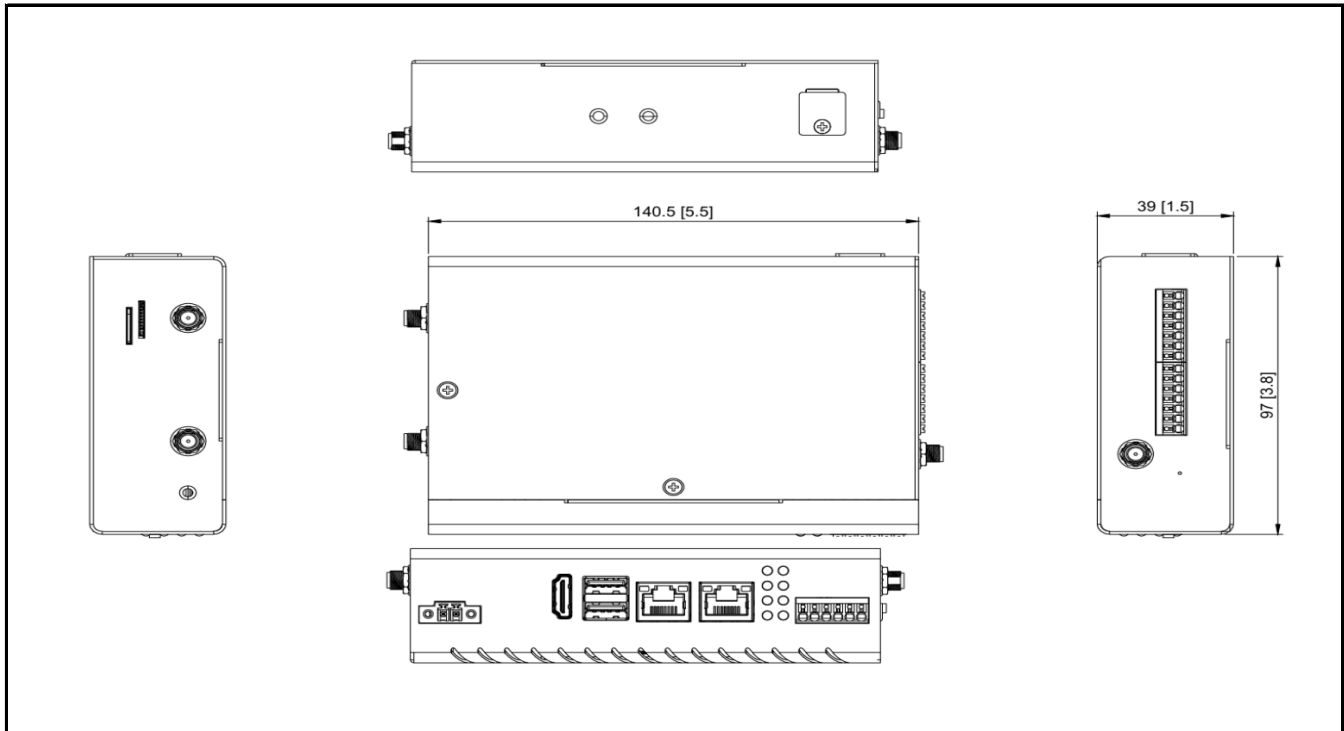
Specifications

System	
CPU/MCU	NXP i.MX 8M Plus, Quad-Core ARM Cortex-A53/M7 Processor
Memory	DDR4L 2/4/8 GB (Optional)
Storage	eMMC 16/32 GB (Optional)
Real time clock	1 x RTC
Indicators	7 x LED indicators
Security	1 x TPM 2.0
Cellular	1 x mPCIe connector 3052
Wireless LAN	1 x mPCIe connector 3052
Operating System	Linux Debian 12, Yocto kirkstone 5.15, Ubuntu 22.04 (Optional)
Support Protocol	--
Power Supply	
Power Requirement	9 ~ 36 VDC
Power Consumption	9.36 W (Full Loading)
MTBF (Hours)	479,374
Environmental and Mechanical	
Dimension	140.5 x 98 x 39 mm (5.5" x 3.9" x 1.5")
Weight	0.5 kg
Mouting/Installation	Din Rail
Operating Temperature	-20 ~ 70 °C (-4 ~ 158 °F)
Storage Temperature	-40 ~ 80 °C (-40 ~ 176 °F)
Operating Humidity	10% ~ 95% relative humidity, non-condensing
Certification	
Regulations	CE, FCC
Carrier	Planning

Interface	
Serial Port	2 x RS232/RS485, Phoenix Connector
CAN Bus	2CH x CAN-FD, Phoenix Connector
Ethernet	2 x GbE LAN, RJ45
USB	2 x USB 3.0 type A
ADC	--
DI/DO	--
AI/AO	--
Display	1 x HDMI (Output)
Power Connector	1 x Terminal Block 2pin
Debug Port	1 x Micro USB
Expansion Slot	1 x SIM card slot 1 x microSD slot
Other Interface	3 x SMA for RF Module

Dimension

Unit: mm / inch



Ordering Information

Packing List

- 1 x DIN Mounting Kits
- 1 x Terminal Block

Part Number

2SIG-M101-01-01	Protocol Gateway ARM Cortex A53/M7 DDR4L 2 GB eMMC 16 GB 9 ~ 36 VDC
2SIG-M101-12-01	Protocol Gateway ARM Cortex A53/M7 DDR4L 4 GB eMMC 32 GB 9 ~ 36 VDC
2SIG-M101-22-01	Protocol Gateway ARM Cortex A53/M7 DDR4L 8 GB eMMC 32 GB 9 ~ 36 VDC

Optional Accessories

Part Number / Item

4G LTE	mPCIe card, 4G LTE Module
Antenna	Antenna GPS
Wi-Fi	mPCIe card, Wi-Fi Module
Adapter	Adapter AC/DC 100 ~ 240 VAC 12 VDC
Power Cord	Power Cord