

AES-IMX8L

NXP i.MX 8M Plus Quad-core Cortex-A53 IoT Gateway Controller

COMING SOON

Features

- Powered by NXP i.MX8M Plus Quad Cortex-A53 1.6 GHz Processor
- Onboard Max. DDR4L 4GB / eMMC 32GB
(Optional 2GB RAM/ eMMC 16GB)
- Multiple interface connections
- Wide Temperature -20 °C ~ 70 °C
- Support RTC, TPM 2.0
- Pre-Install Linux Debian 11, Yocto kirkstone 5.15 (Optional)
- CE, FCC Certification



Specification

System

| | |
|------------------|--|
| CPU/MCU | NXP i.MX8M Plus, Quad-Core ARM Cortex-A53, 1.6GHz Processor |
| Memory | On Board LPDDR4, 2GB/4GB (model variant) |
| Storage | On Board eMMC 16GB/32GB (model variant) External Micro SD slot, Max. 32GB |
| Real time clock | 1 x RTC, with 3V CR2032 lithium battery |
| Security | 1 x TPM 2.0 |
| Indicators | LED indicator x 8 |
| Cellular | 1x Mini card slot, USB2 signal |
| Wireless LAN | 1x Mini card slot, PCIe and USB2 signal 1x M.2 B key, USB3 signal |
| Operating System | Linux Debian 11, Yocto kirkstone 5.15 |

Interface

| | |
|-----------------|--|
| Serial Port | 2 x RS-232/422/485, Terminal Block |
| Ethernet | 5 x GbE LAN, RJ45 1 x 1000BASE-SX (IEEE 802.3z) |
| USB | 2 x USB 3.0, Type-A |
| DI/DO | 4 x Digital Input, Wet contact, Terminal Block 4 x Digital Output, Isolation open collector, Terminal Block |
| Power Connector | 1 x HDMI 2.0 (Output) |
| Debug Port | 1 x micro USB for console |
| Expansion Slot | 1 x SIM card slot 1 x Micro SD slot |

Power Supply

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|-------------------|----------------------|
| Power Requirement | 12/24 VDC |
| Power Consumption | 9.36W (Full Loading) |

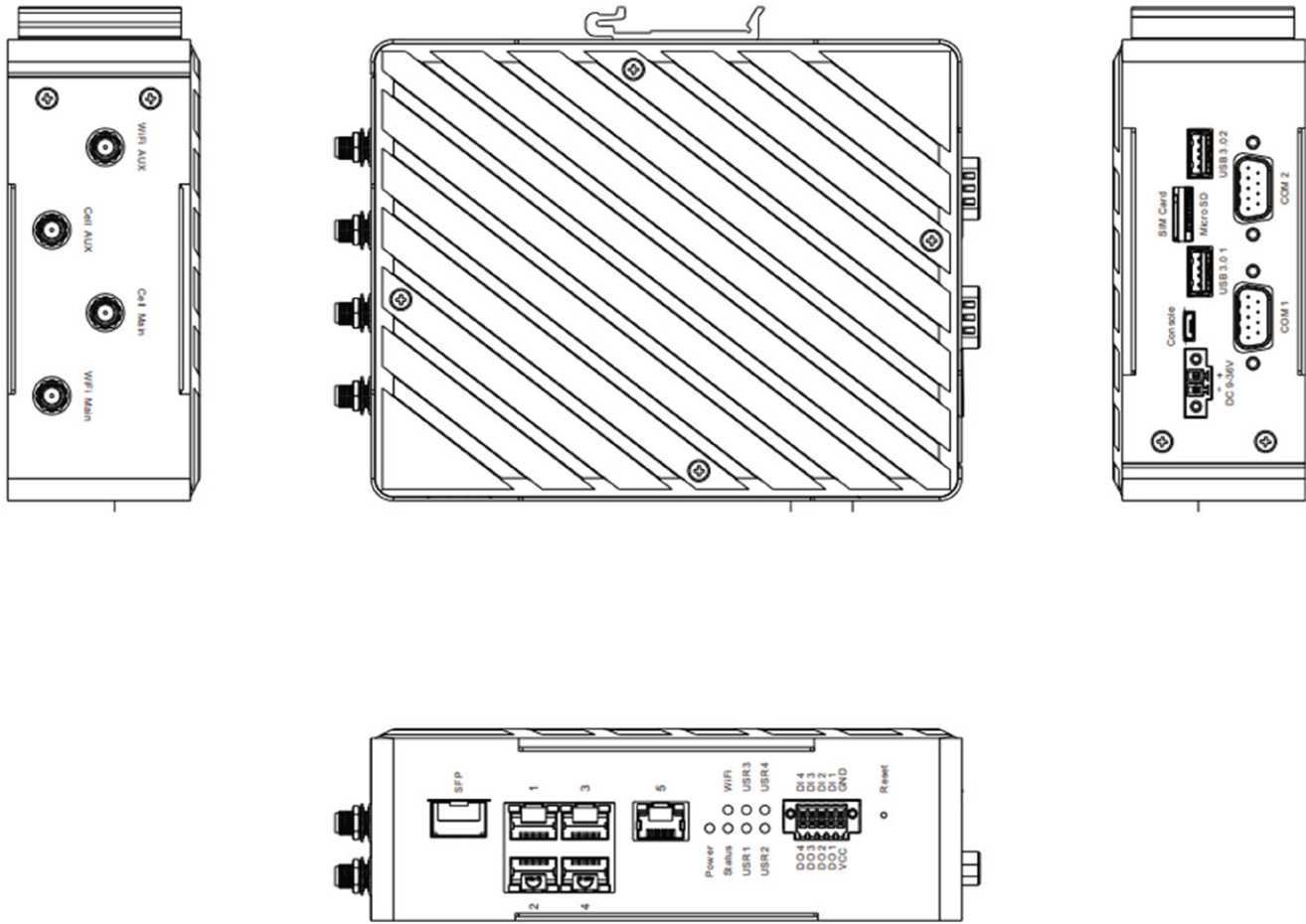
Environmental and Mechanical

| | |
|----------------------|---|
| Dimension | 5.54" x 3.86" x 1.89" (140.76 x 98.2 x 48 mm) |
| Weight | 1.08 Kg |
| Mouting/Installation | Din Rail, Wall Mount |
| Operating Temp. | -4 °F ~ 158 °F (-20 °C ~ 70 °C) |
| Storage Temp. | -40 °F ~ 176 °F (-40 °C ~ 80 °C) |
| Operating Humidity | 10% ~ 95% relative humidity, non-condensing |

Certification

| | |
|----------------------------|--|
| Regulations | CE, FCC |
| Carrier | Planning |
| Radio Frequency (Optional) | 3GPP Rel.9 compliant protocol Frequency bands: FDD LTE: B1 /B2 /B3 /B4 /B5 /B7 /B8 /B12 /B13 /B18 /B19 /B20 /B25 /B26 /B28 TDD LTE: B38/B39/B40/B41 WCDMA: B1/B2/B4/B5/B6/B8/B19 GSM: B2/B3/B5/B8 |
| LTE 4G (CAT 1) (by model) | SIM card size: Micro-SIM slot Antenna type: External type Antenna connector: SMA-Male |
| GPS (by model) | GPS/GLONASS/BeiDou (Compass)/Galileo |

Dimensions



Ordering Information

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|------------|---|
| AES-IMX8L1 | IOT Gateway, Quad-core Cortex-A53, 1.6GHz, 4GB RAM, 32GB eMMC, 12/24VDC |
| AES-IMX8L2 | IOT Gateway, Quad-core Cortex-A53, 1.6GHz, 2GB RAM, 16GB eMMC, 12/24VDC |

Optional

| | |
|------------|---|
| 9741EG25G1 | LTE 4G Mini-PCIe module, with cable and antenna |
| 9686261AC0 | WiFi Mini-PCIe module, IEEE 802. 11ac/a/b/g/n Industrial-Grade. 2T2R W/BT5. 0 |