

AES-IMX8E

NXP i.MX 8M Plus Quad-core Cortex-A53/M7 IoT Gateway Controller



Features

- Powered by NXP i.MX 8M Plus Quad Cortex-A53/M7 Processor
- Onboard DDR4L 4GB / eMMC 32G
- 2 x serial port(RS232/485/422)
- CAN-FD x 2CH
- Mini PCIe connector (For RF Module) x 2
- Support RTC, TPM 2.0
- Wide Voltage DC 9V-36V
- Wide Temperature -20 °C ~ 70 °C
- Pre-Install Linux Debian 11, Yocto kirkstone 5.15, Ubuntu 22.04



Specification

System

Processor	NXP i.MX 8M Plus Quad-core Cortex-A53/M7 Processor
Memory	Onboard DDR4L 2GB (Optional 4GB)
Storage	eMMC 16GB (Optional 32GB)
Real time clock	RTC x 1, with 3V CR2032 Lithium battery
Cellular	Mini PCIe Connector x 1 (USB signal)
Security	TPM 2.0
Wireless LAN	Mini PCIe Connector x 1 (PCIe, USB signal)
Operating System	Debian 11, Yocto kirkstone 5.15, Ubuntu 22.04
LED indicators	Programmable LED control x 7

Power Supply

Power Requirement	9-36 VDC
Power Consumption	9.36W (Full Loading)
MTBF (Hours)	479,374

Environmental and Mechanical

Dimension	TBD
Weight	TBD
Mouting/Installation	-
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

Interface

Serial Port	2 x RS-232/422/485, Terminal Block
CAN bus	2 x CAN-FD, Terminal Block
Ethernet	2 x GbE LAN, RJ-45
USB	2 x USB 3.0, Type A 1 X Micro USB (Debug)
Display	1 x HDMI 2.0 (Output)
Power Connector	2 Pin 3.81mm Pitch Phoenix Connector
Debug Port	Micro USB x 1
Expansion Slot	SIM card slot x 1 Micro SD slot x 1

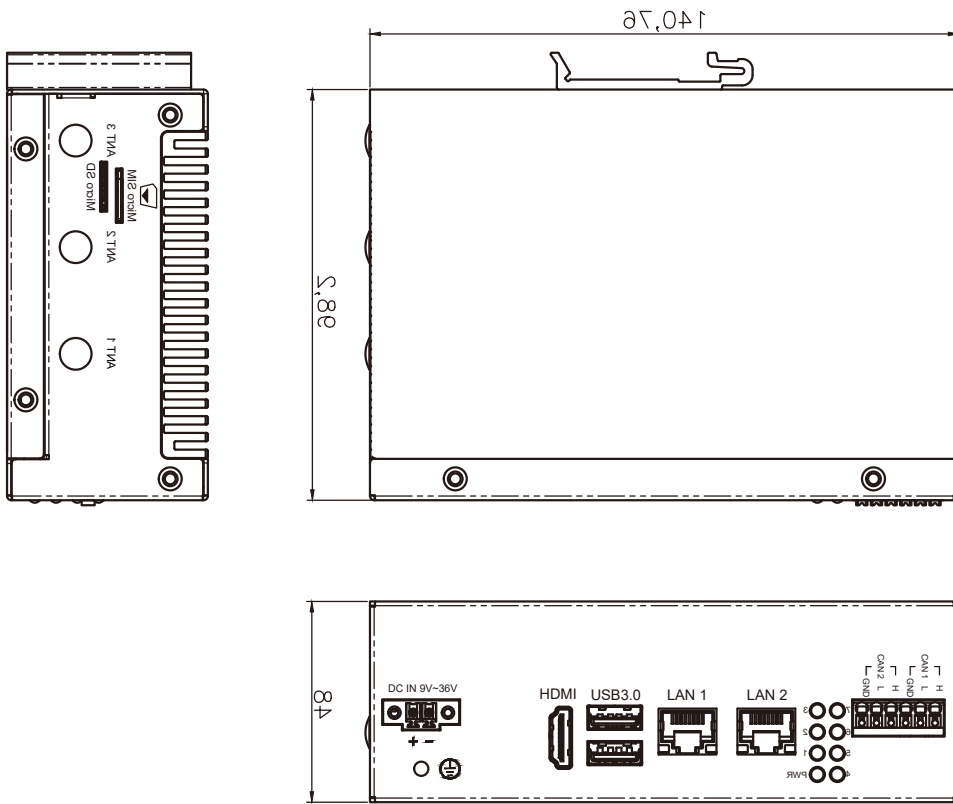
Certification

Regulations	CE, FCC
Carrier	Planning

Ordering Information

AES-IMX8E1	Quad-Core Cortex-A53 1.6GHz, 2GB RAM, 16GB eMMC, DC 9-36V
AES-IMX8E2	Quad-core Cortex-A53, 1.6GHz, 4GB RAM, 32GB eMMC, DC 9-36V
AES-IMX8E3	Quad-core Cortex-A53, 1.6GHz, 8GB RAM, 32GB eMMC, DC 9-36V

Dimensions



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