

WMK-IMX9PL

Standard RISC Gateway with ARM i.MX8M Plus Quad-Core Cortex-A53 1.6GHz Processor



Front view



Rear view

Features

- ARM NXP i.MX8M Plus Quad-Core, Cortex-A53 1.6GHz
- GbE x 2
- LPDDR4, up to 4 GB, eMMC 5.1 x 1
- HDMI 2.0 x 1
- USB 3.0 Gen 1 x 2
- M.2 2230 E Key x 1, Full-sized minicard x 1
- COM x 2, CAN x 2, TPM 2.0



Specifications

System

Form Factor	Desktop Network Appliance
Processor	ARM NXP i.MX8M Plus Quad-Core Cortex-A53 1.6GHz Processor (Default w/NPU, optional w/o NPU)
Memory	Onboard LPDDR4 up to 4GB (8GB by request)
BIOS	AMI SPI Flash BIOS
Storage	eMMC 5.1 16/32GB (Optional 64/128 GB), Micro SD Card slot x 1
Real Time Clock	RTC x 1, with 3V CR2032H Lithium battery
Security	TPM 2.0 (optional)
Indicator	Programmable LED control x 3
Cellular	Full Size Mini Card x 1 (USB signal)
Wireless Lan	M.2 2230 E-key x 1 (USB, PCIe)
Operating System	Debian 11 (Default, GUI is optional) Debian 12 (By request) Android 13 Yocto 4.0
Support Protocol	Modbus, MQTT, OPCUA

Network Interface	6 x GbE RJ-45 (Intel® i210) (C3338) 6 x GbE RJ-45 (Intel® i210) and 2 x SFP+ (C3558) 6 x GbE RJ-45 (Intel® i210) and 4 x SFP+ (C3758)
I/O Interface	
Serial Port	RS-232/422/485 switchable x 2, Phoenix Connector
Ethernet	Gigabit Ethernet x 2, RJ-45 support IEEE 1588, TSN, integrated RGMII
Audio	Line Out x 1 (optional)
USB	USB 3.0 Type-A x 2
Can Bus	CAN-FD x 2 CH, Phoenix Connector
Display	HDMI 2.0 x 1
Power Connector	2 Pin 3.81mm Pitch Phoenix Connector
Debug Port	Micro USB x 1
Expansion Slot	M.2 2230 E-key x 1, support Wifi/BT module Full Size Mini Card x 1, support 4G module, etc) Power control available by software Nano SIM card slot x 1 (for SRG-IMX8PL-A12 only)
Expansion Interface	1 x Full-size PCIe Mini Card slot (PCIe+USB) 1 x Full-size PCIe Mini Card slot (SATA+USB)
MTBF (hours)	1,699,754 Hours
Power Requirement	DC 9-36V (Optional: 12V)
Power Consumption	14.8W (Full Loading)

Mechanical/ Environmental

Form Factor	1U desktop
Storage Temperature	-40 °F ~ 176 °F (-40 °C ~ 80 °C)
Operating Temperature	-40 °F ~ 176 °F (-40 °C ~ 80 °C)
Humidity	0% ~ 90% relative humidity, non-condensing
Mounting	Wall Mount, Din Rail (Optional)
Dimensions	4.25" x 3.12" x 1.69" (108mm x 79.5mm x 43mm)

Weight (net/gross)	1.01 lbs (0.46kg)
Certifications	CE/FCC Class B

Ordering Information

Standard

PART NUMBER	SRG-IMX8PL-A10-0001
CPU	ARM NXP i.MX8M Plus Quad-Core Cortex-A53 1.6GHz Processor
NPU	2.3 TOPs
MEMORY	Onboard LPDDR4 2GB
DISPLAY	HDMI x 1
STORAGE	eMMC 16GB MicroSD x1
LAN	GbE x 2
USB	USB 3.0 Gen1 x 2
COM	RS232(4-wire)/422/485 x 2
EXPANSION SLOT	M.2 2230 E-key x 1, miniCard (Full) x 1
POWER	+12V lockable Terminal Block
OPERATING TEMP	-40°C ~ 80°C
OS	Debian 11

Optional

9651IMX804	Wall mount kit. 75x27mm
9651IMX803	DIN rail kit.25mm

* Specifications and certifications may vary based on different requirements.

Packing List

1 x DC power adapter 12V/5A or
12V/7A 1 x Power cord- US

1 x SATA cable

Optional Accessories

Part Number	Description
9741EG25G0	4G Module & Antenna (for global)
9651882200	M.2 2230 E key Wireless Kit.802.11 ac/a/b/g/n + BT 5.0.2T2R,Enli RTL-8822CE.w/2 sets of cable and antenna
9651276000	M.2 2230 E Key Wireless Kit.802.11a/b/g/n/ac.W/2 sets of antenna and cable.Chipset:NXP 88W8997.Azurewave.CM-276MA-PUR for Android
9651PX8L00	AC/DC Adapter.100V-240V.12VDC.40W.3.34A (for sample order), w/packaging box
1255300611	Power Adapter
170203180J	Power Cord for UK
170X000799	Power Cord (US type)
170X000800	Power Cord (European Type)
170X000806	POWER CORD.3P-125V 7A.1.8M.TWN
170X000803	Power Cord (Japanese Type)
9651IMX804	Wall mount kit. 75x27mm

