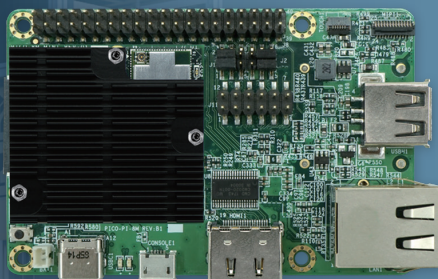


PICO-PI-IMX8M

- NXP i.MX 8M Quad applications processor
- Up to 4 Cortex-A53 1.5 GHz processors
- Armv8 64-Bit CPU cores
- Certified Wi-Fi 5 and Bluetooth LE



Specifications

Core System

Processor	NXP i.MX8M Quad
Processor Speed	1.3GHz
Architecture	ARM Cortex-A53 + M4
PMIC	ROHM BD71847
Memory	Up to 4GB LPDDR4
Storage	16GB eMMC (default)
Board-to-Board Connector	PICO 70-pin Hirose connectors
System on Module	PICO SOM
Debug Interface	Micro USB debug

Connectivity

Network LAN	1x Realtek RTL8211
Wi-Fi	Qualcomm Atheros QCA9377 Wi-Fi 5 – 802.11 a/b/g/n/ac
Bluetooth	Qualcomm Atheros QCA9377 Bluetooth
Antenna	MHF4 connector

Signaling

I/O	HDMI	I ² S
	LAN	UART
	MIPI CSI	SPI
	MIPI DSI	I ² C
	PCIe	PWM
	USB	GPIO
	USB OTG	

Video

GPU Engine	Vivante GC7000Lite
Video Decode	4K UltraHD HDR 4Kp60, H.265 VP9
Camera	MIPI CSI (4 lanes)

Audio

Audio Interface	I ² S (2 channel)
-----------------	------------------------------

Power Specifications

Power Consumption	Depending on Configuration
-------------------	----------------------------

Operation Systems

Standard Support	Linux Yocto Android Ubuntu
Extended Support	Boot2Qt Commercial Linux

Environmental and Mechanical

Dimensions	85 (W) x 56 (H) x 25.2 (D) mm
Relative Humidity	10 to 90 %
MTBF	50,000 Hours
Shock	15G half-sine 11 ms duration
Operation Temperature	Commercial: 0° to +60° C
Vibration	1 Grms random 5-500Hz hr/axis
Weight	70 grams

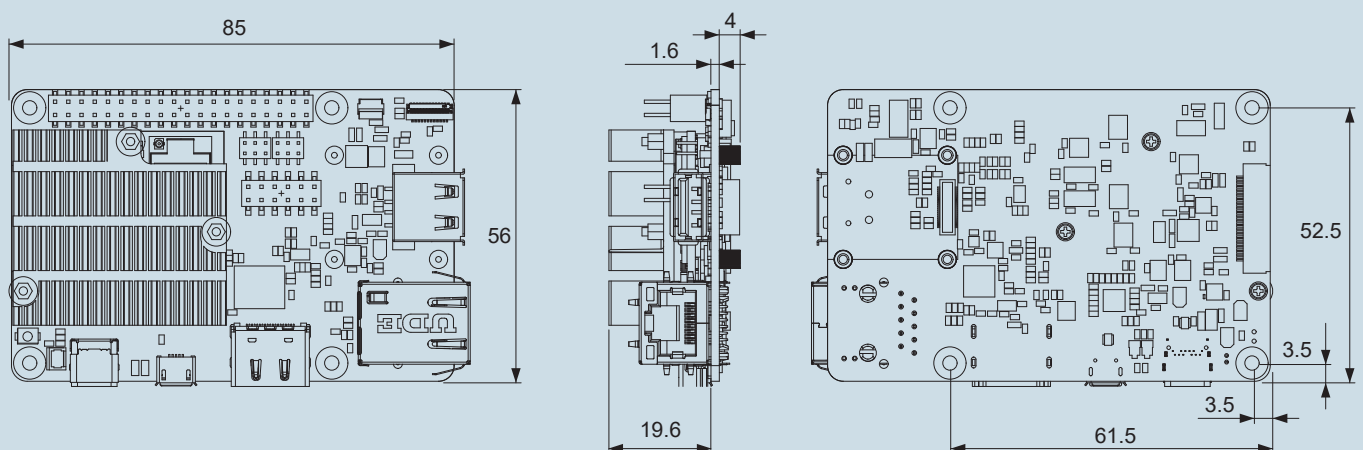
External Connectors

External Connectors	1x HDMI
Network	1x RJ45
USB	1x USB 2.0 Host 1x USB 2.0 OTG (Type-C)
Buttons	1x Reset

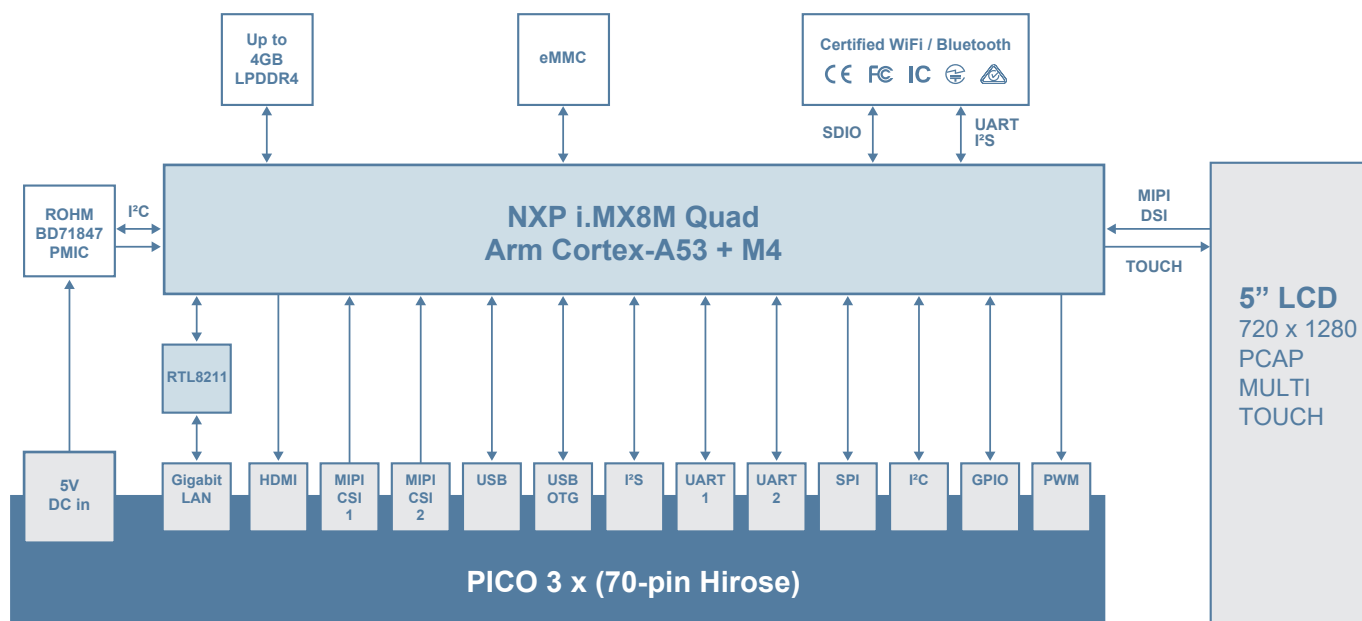
Certification and Compliance

USA	FCC ID: 2AKZA-QCA9377
Canada	IC: 22364-QCA9377
European Union	EN 300 328 v2.2.2 EN 301 893 v2.1.1 EN 55032 / EN 55024
Japan	TELEC: 201-180629
Australia/New Zealand	RCM Compliant
Bluetooth Logo	QDID 150839 (Bluetooth 4.2) QDID 193238 (Bluetooth 5)
Certification	Compliant with RoHS / REACH directives

Dimensions (units in mm)



Block Diagram



Ordering Information

PICO-PI-IMX8M-1G

NXP i.MX8M Quad Development Board with 1GB LPDDR4, 16GB eMMC and Wi-Fi + BT wireless connectivity including antenna and cable set.



PICO-PI-IMX8M-2G

NXP i.MX8M Quad Development Board with 2GB LPDDR4, 16GB eMMC and Wi-Fi + BT wireless connectivity including antenna and cable set.



PICO-PI-IMX8M-4G-DEV

NXP i.MX8M Quad Development Board with 4GB LPDDR4, 16GB eMMC and Wi-Fi + BT wireless connectivity including antenna, camera module, 5 inch PCAP display, cable set and cardboard stand.

