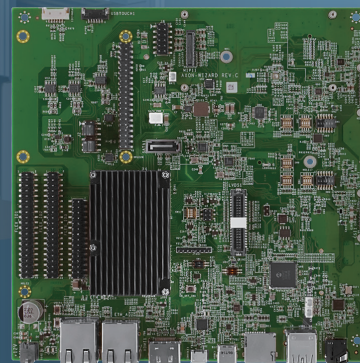


AXON-WIZARD-IMX8M-PLUS

- NXP i.MX 8M Plus applications processor
- Up to 4 Cortex-A53 1.8 GHz processors
- Cortex-M7 processor with speeds up to 800 MHz
- Neural Processing Unit (NPU)
- Image Signal Processor (ISP)
- Armv8 64-Bit CPU cores



Specifications

Core System

Processor	NXP i.MX8M Plus
Processor Speed	1.8 GHz
Architecture	ARM Cortex-A53 + M7
PMIC	NXP PCA9450
Memory	Upto 8GB LPDDR4
Storage	32GB eMMC (default)
Board-to-Board Connector	80-pin Hirose connectors
System on Module	AXON SOM
Debug Interface	JTAG/UART

Signaling

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

Video

GPU Engine	GC520L (2D) Vivante GC7000UL
Video decode	1080p60 (h.265, h.264, VP9, VP8)
Video encode	1080p60 (h.265, h.264)
Camera	2 x ISP up to 12 MP resolution Dual MIPI CSI (4 lanes)

Audio

Audio Codec	Texas Instruments TLV320AIC3100
Audio Connectors	CTIA compliant 3.5mm audio jack

Power Specifications

Power Consumption	Depending on Configuration
Power Connector	2-pin Micro - Fit 3.0

Operation Systems

Standard Support	Yocto Linux
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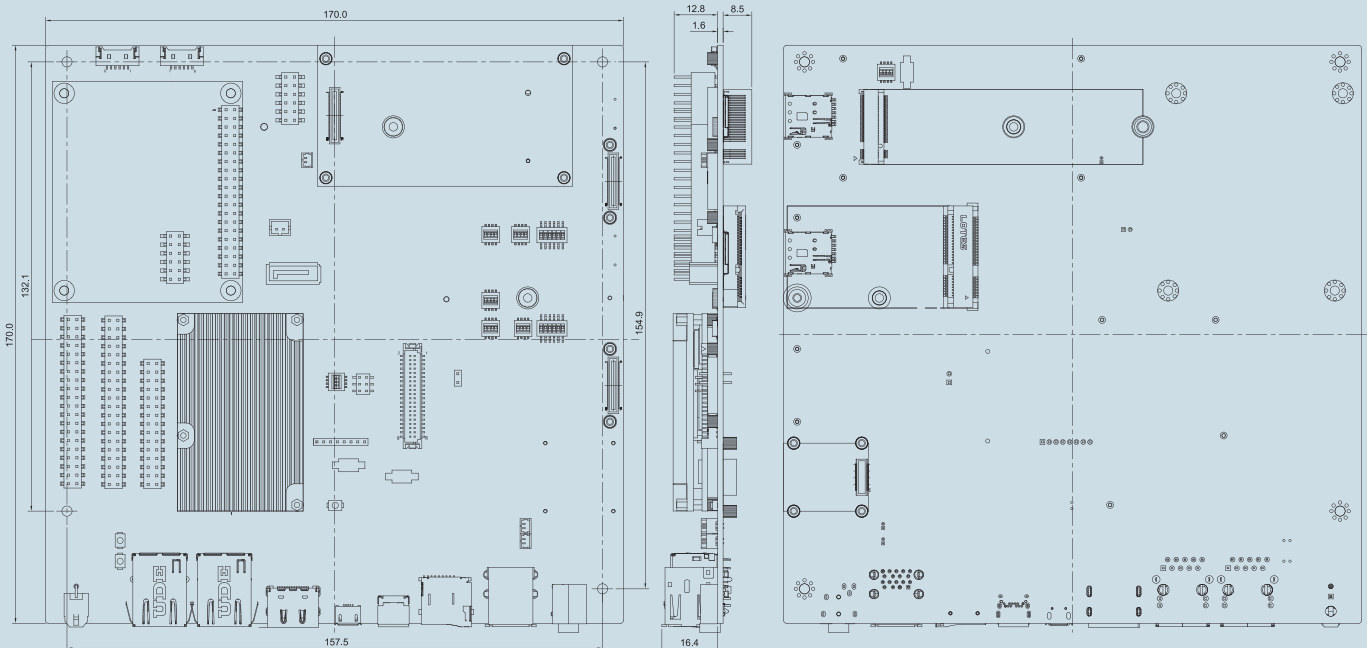
Environmental and Mechanical

Dimensions	170 (W) x 170 (H) x 26.5 (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	204 grams

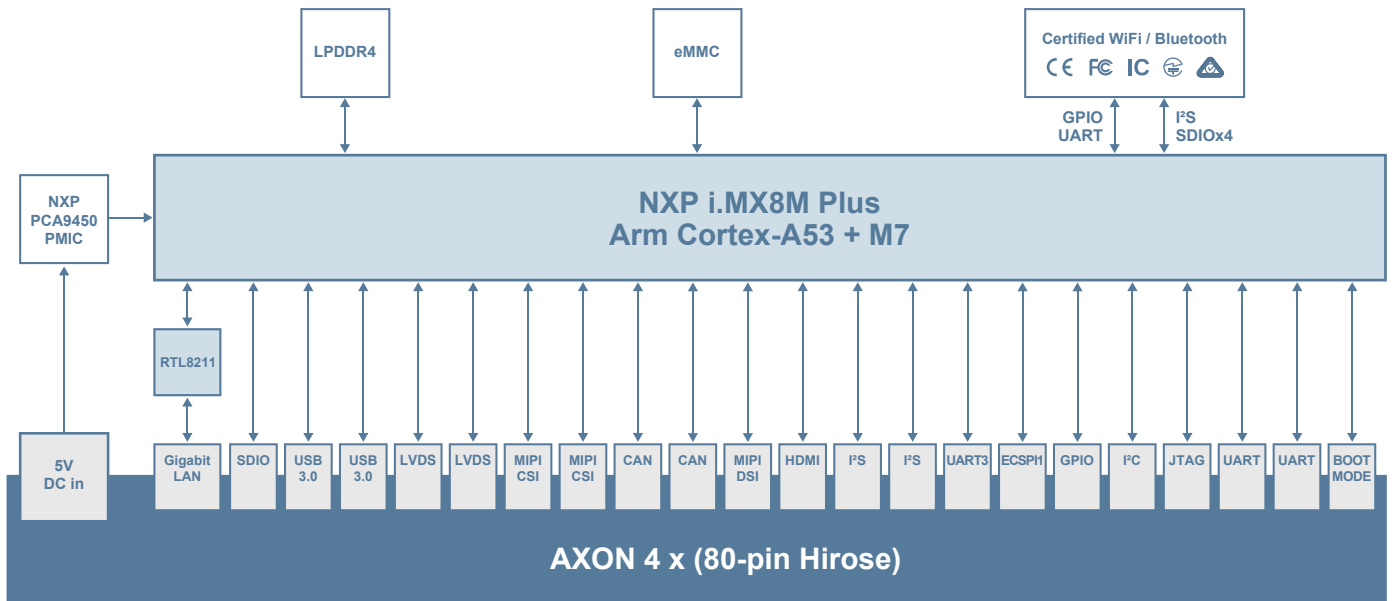
Certification and Compliance

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 CE / FCC / RoHS / REACH directives

Dimensions (units in mm)



Block Diagram



Ordering Information

AXON-WIZARD-IMX8M-PLUS

Development Kit based around NXP i.MX8M Plus applications processor including camera module, capture card, 10.1 inch display and cable set.

