

[Specification](#)[Blockdiagram](#)[Dimensions](#)[Part Numbers](#)

Core System

Processor	NXP i.MX8M Plus
Architecture	ARM Cortex-A53 + M7
AI / ML	NN Accel 2.3 TOPS
PMIC	NXP PCA9450
Memory	Upto 8GB LPDDR4
Storage	32GB eMMC (default)
Board-to-Board Connector	AXON 80-pin Hirose connectors
System on Module	AXON SOM
Debug Interface	JTAG / UART

Connectivity

Network LAN	1x Atheros AR8035 Gigabit LAN
Wi-Fi	Qualcomm Atheros QCA9377 Wi-Fi 5 – 802.11 a/b/g/n/ac (optional)
Bluetooth	Qualcomm Atheros QCA9377 Bluetooth (optional)
Antenna	MHF4 connector (optional)

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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Video

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

**TechNexion**

Audio Codec

On carrier board

Audio Interface

I²S (2 channel)

Power Specifications

Power Input	5V DC +/-5%
Power Consumption	Depending on Configuration

Operating Systems

Standard Support	Linux Yocto Android Ubuntu
Extended Support	Boot2Qt Commercial Linux

Certification and Compliance

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

Environmental and Mechanical

Dimensions	58 x 37 mm
Form Factor	AXON
Relative Humidity	10 to 90 %
MTBF	100,000+ Hours
Shock	15G half-sine 11 ms duration
Operation Temperature	Commercial: 0° to +60° C Industrial: -40° to +85° C
Vibration	1 Grms random 5-500Hz hr/axis
Weight	8 grams

Shop Data

Brand	TechNexion
Country of Origin	Taiwan
HTSN	8473.30.1180
ECCN	5A992.c Mass Market
CCATS	Mass Market (No License Required)
REACH / RoHS	YES