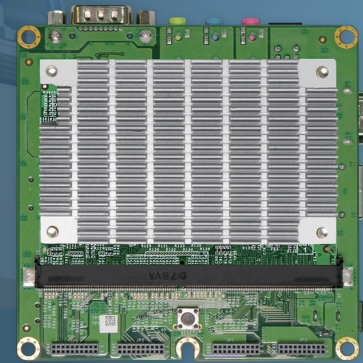


## Wandboard-IMX6

- low cost open source community development board



## Specifications

### Core System

Processor	NXP i.MX6 Solo NXP i.MX6 Duallite NXP i.MX6 Quad
Architecture	ARM Cortex-A9
PMIC	NXP MMPF0100
Memory	Up to 2GB DDR3
Storage	MicroSD
Board-to-Board Connector	EDM connector (314-pin MXM3)
System on Module	EDM SOM
Debug Interface	JTAG Interface by Through-hole

### Connectivity

Network LAN	1x Realtek RTL8211
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	HDMI	I <sup>2</sup> S
	LVDS	SPDIF
	RGB TTL	SDIO
	LAN	CAN
	MIPI CSI	UART
	MIPI DSI	SPI
	PCIe	I <sup>2</sup> C
	SATA	PWM
	USB	GPIO
	USB OTG	

### Video

GPU Engine	Vivante GC2000 (Quad) Vivante GC320 (2D Composition) Vivante GC520L (2D) Vivante GC880 (Solo/DualLite)
Video decode	1080p30 + D1 (Solo/DualLite) 1080p60 H.264 (Quad)
Video encode	1080p30 H.264
Camera	MIPI CSI (4 lanes)

### Audio

Audio Codec	On carrier board
Audio Interface	I <sup>2</sup> S (2 channel) S/PDIF
Audio Connectors	1x 3.5mm jack Microphone 1x 3.5mm jack Stereo Audio in 1x 3.5mm jack Stereo Audio out S/PDIF (optical)

### Power Specifications

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

## Operation Systems

Standard Support	Linux Yocto Android Ubuntu
Extended Support	Commercial Linux

## External Connectors

External Display	1x HDMI
Network	1x RJ45
USB	1x USB 2.0 Host 1x USB 2.0 OTG
Serial Port	1x RS-232
Buttons	1x Reset
SD Cardslot	1x MicroSD Card Slot

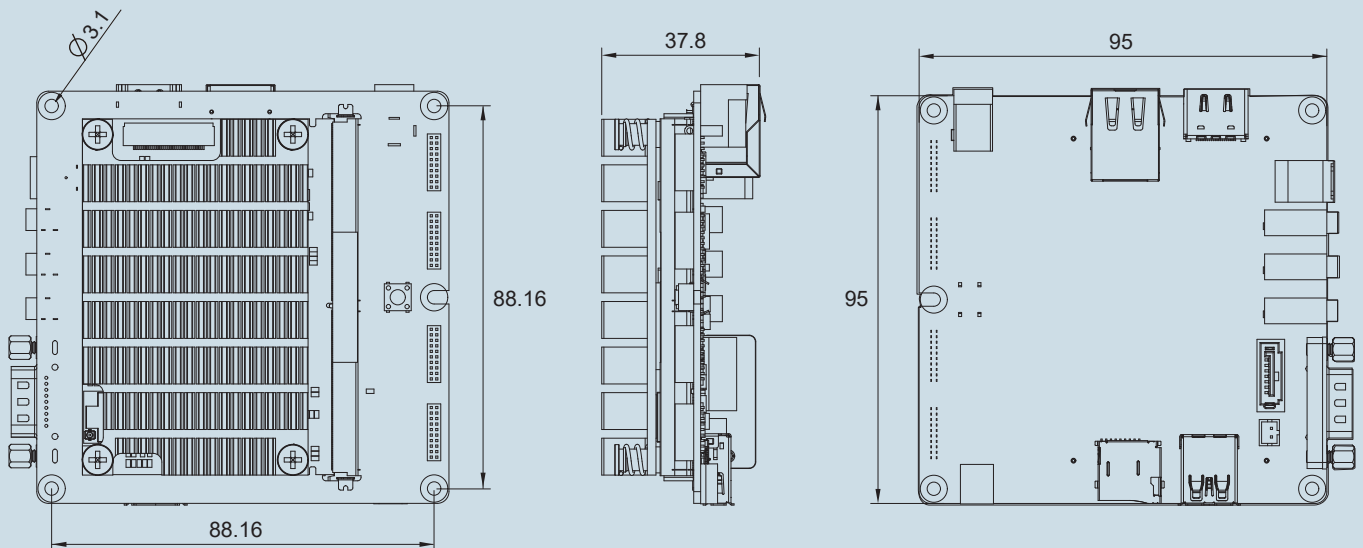
## Environmental and Mechanical

Form Factor	EDM Type 1
Dimensions	95 (W) x 95 (H) x 37.8 (D) mm
Relative Humidity	10 to 90 %
MTBF	100,000+ Hours
Shock	15G half-sine 11 ms duration
Operation Temperature	Commercial: 0° to +60° C
Vibration	1 Grms random 5-500Hz hr/axis
Weight	75 grams

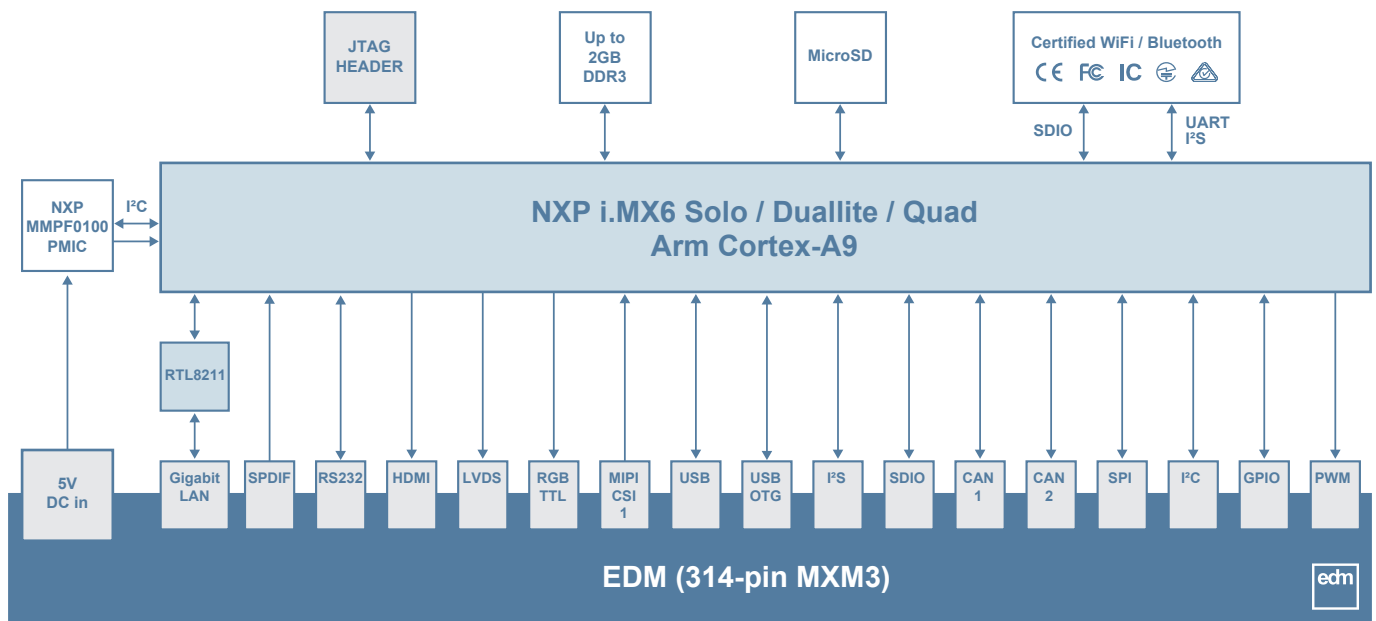
## Certification and Compliance

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 RoHS / REACH directives

## Dimensions (units in mm)



## Block Diagram



## Ordering Information

Model Name	Description
WB-IMX6S-9377	Wandboard i.MX6 Solo
WB-IMX6U-9377	Wandboard i.MX6 DualLite
WB-IMX6Q-9377	Wandboard i.MX6 Quad
WBENCLOSURE	Wandboard enclosure
WBANTENNAKIT	Wandboard antenna kit
CAM-OV5645	Camera module