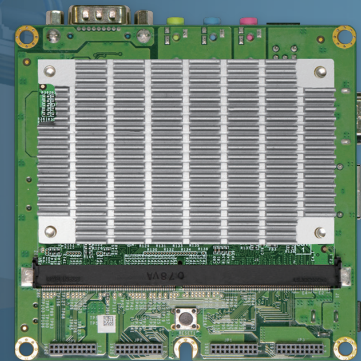


Wandboard-IMX6

- 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 ² S
	LVDS	SPDIF
	RGB TTL	SDIO
	LAN	CAN
	MIPI CSI	UART
	MIPI DSI	SPI
	PCIe	I ² 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 ² 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

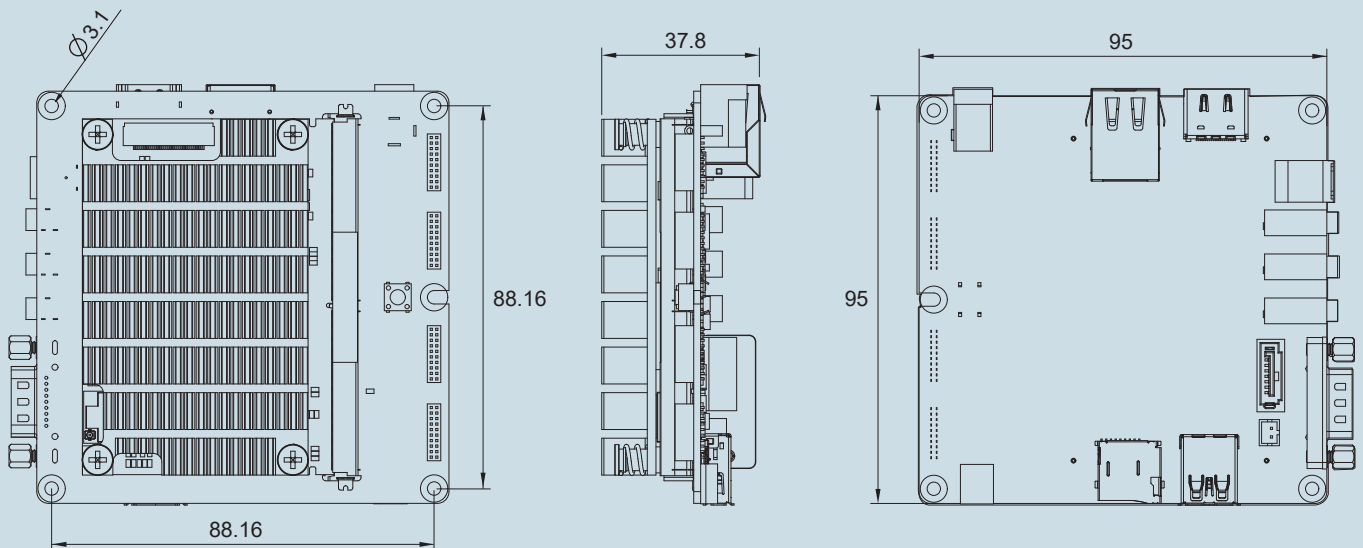
Environmental and Mechanical

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

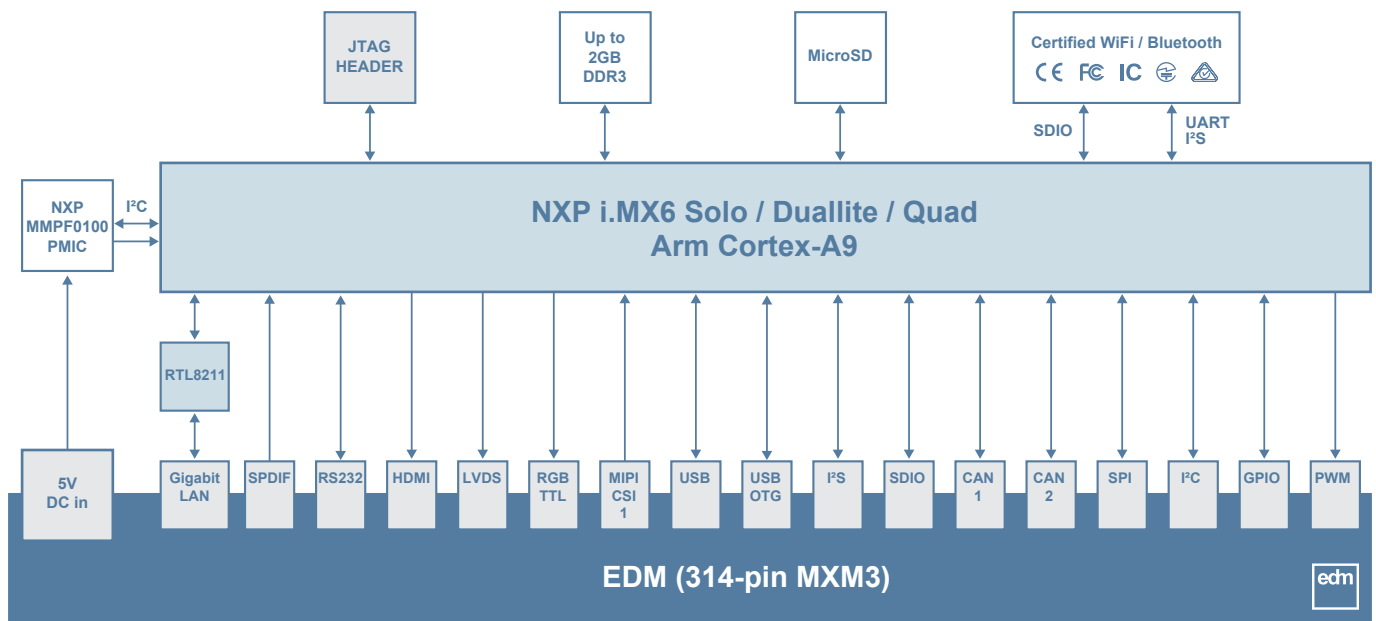
Certification and Compliance

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