



miliwave MWC-708 11AX MU-MIMO OFDMA Dual Band Embedded Board Instruction Manual

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Features

- Quad-core ARM 64bit A53@1.8GHz Processor
- 1GB DDRL3L System Memory
- 8MB NOR Flash, 256MB NAND Flash
- Supports Dynamic Frequency Selection (DFS)
- 2×2 On-board 2.4GHz radio, up to 573Mbps physical Data Rate
- 2×2 On-board 5GHz radio, up to 1201Mbps physical Data Rat

Applications

- 802.11ax MU-MIMO OFDMA Access Point
- Smart AP TWT
- Industrial environment data transmission

Product Description

MWC-708 based on Quad-core ARM 64bit A53@1.8GHz chipset is an enterprise wireless module integrated with 2×2 5G high power Radio module and 2×2 2.4G high power Radio module designed specifically to provide users with mobile access to high-bandwidth video streaming, voice, and data transmission for office and challenging RF environment in factories, warehouses establishment.

Absolute Maximum Rating

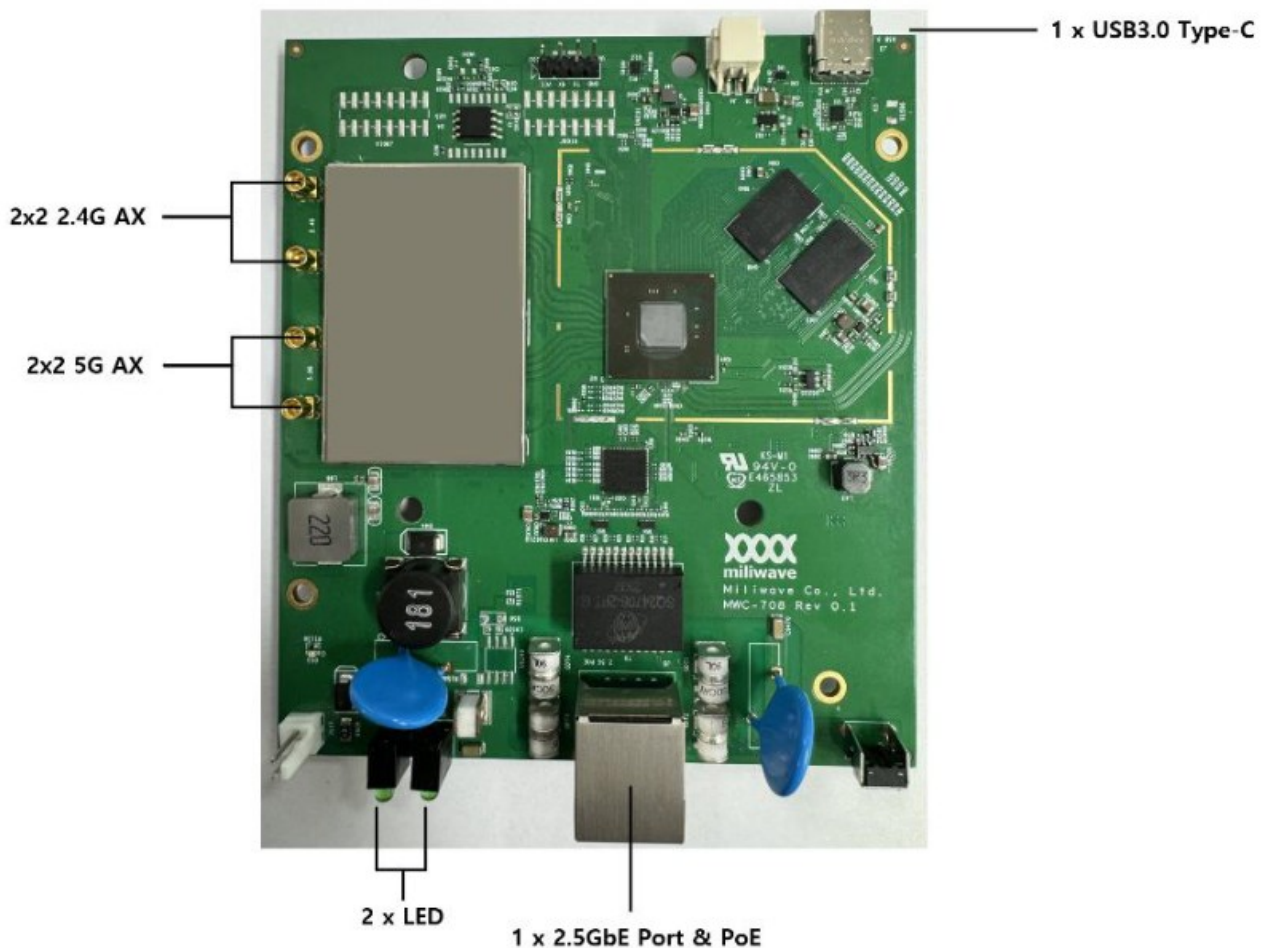
Parameter	Rating	Unit
Supply Voltage	24V~48V(DC Jack)	V
Operating Temperature Range	-40 to +70	°C
Storage Temperature Range	-45 to +105	°C
Operating Humidity Range	5 to +95 (non-condensing)	%
Storage Humidity Range	0 to +90 (non-condensing)	%

Hardware Specifications

Symbol	Parameter
CPU	Qualcomm-Atheros IPQ6010
CPU Frequency	Quad-core ARM 64 bit A53 @1.8 GHz processor
System Memory	1GB (2x 512MB) DDR3L 16-bit interface with 32-bit memory bus design
Ethernet Port	1 x 2.5Gbps Ethernet Ports & POE
USB	1x USB 3.0 Type-C Port
PoE	24V~56V passive PoE 48V~56V passive/Active PoE(Suport 802.3bt)
DC Jack	24V~48V power supply
LED	2 x LEDs
Serial Port	1x Serial Port 4 Pin Connector
Wireless	On-board 2x2, 2.4GHz MU-MIMO OFDMA 802.11b/g/n/ax,support DSSS, OFDM, OFDMA On-board 2x2 , 5GHz MU-MIMO OFDMA 802.11a/n/ac/ax,max 20dBm per cha in,support OFDM, OFDMA 4x MMCX Connectors
Antenna	2.4G, 5G Wi-Fi rod antenna-1: ALX19X-221050-00 2.4G, 5G Wi-Fi rod antenna-2: DRA2G5GD002 5G Wi-Fi patch antenna-1: OLX23P-097100-A 5G Wi-Fi patch antenna-2: OLX23P-097100-B 2.4G Wi-Fi PCB antenna: ALX19P-051AA2-02
Nor Flash	8MB
Nand Flash	256MB
DDR	2 x 512MB
Dimension	120mm x 105mm x 20mm

2.4G WIFI		
Maximum Output Power:	802.11b: 22.92 dBm 802.11g: 21.42 dBm 802.11n20: 22.34 dBm 802.11n40: 18.72 dBm 802.11ax20: 22.65 dBm 802.11ax40: 18.35 dBm	
Operating Band/Frequency:	2412~2462 MHz(802.11b/g/n20/ax20), 2422~2452 MHz(802.11n40/ax40)	
Channel Number:	11(802.11b/g/n20/ax20), 7(802.11n40/ax40)	
5G WIFI		
Maximum Output Power:	5G Wi-Fi B1:	5G Wi-Fi B4:
	802.11a:16.82 dBm	21.39 dBm
	802.11ac20:18.39 dBm	23.84 dBm
	802.11n-HT20:18.39 dBm	23.85 dBm
	802.11ac40:20.33 dBm	24.80 dBm
	802.11n-HT40:20.33 dBm	24.81 dBm
	802.11ac80:10.06 dBm	22.10 dBm
	802.11ax20:18.08 dBm	23.59 dBm
	802.11ax40:19.80 dBm	24.24 dBm
	802.11ax80:9.52 dBm	22.10 dBm
Operating Frequency	5G Wi-Fi B1: 5180-5240 MHz, B4: 5745-5825 MHz	
Channel Number	5G Wi-Fi B1: 7, B4: 8	
Channel Separation	5G Wi-Fi: a/ac20/n20/ax20: 20 MHz, ac40/n40/ax40: 40 MHz, ac80/ax80: 80 MHz	

Interface MAP



Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:


- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Radiation Exposure Statement:


This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body. For 5150-5250MHz used indoor only

<http://www.miliwave.net/>

Documents / Resources

	<p>miliwave MWC-708 11AX MU-MIMO OFDMA Dual Band Embedded Board [pdf] Instruction Manual</p> <p>MWC-708 11AX MU-MIMO OFDMA Dual Band Embedded Board, MWC-708, 11AX MU-MIMO OFDMA Dual Band Embedded Board, OFDMA Dual Band Embedded Board, Dual Band Embedded Board, Band Embedded Board, Embedded Board, Board</p>
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References

-  [miliwave](#)
-  [Wallys 802.11ax, wifi 6, IPQ4029,IPQ4019,IPQ6018,IPQ6000.Router board, wireless card.Access Point-Wallys Communications \(Suzhou \) Co., LTD](#)
- [User Manual](#)

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