

Operational Description

FCC ID: 2AQAA-EZBOOKS7MEGA

The product is a Laptop with Bluetooth, WLAN function.

The EUT ratings: DC 7.6V by battery

Recharged by DC 12.0V

The EUT is working base on the **INS23035320 (CRYSTAL 1:19.2MHz, CRYSTAL 2:32.768KHz)**

The EUT support Bluetooth, WLAN function based on **RF Chip CM251 (CRYSTAL 1:40MHz)**

The G-sensor is only gravity sensing without power reduction.

Bluetooth

Works in the 2.4GHz (2402MHz~2480MHz) ISM band

79 channels for Bluetooth (BDR/EDR)

40 channels for Bluetooth (BT LE)

1MHz for Bluetooth (BDR/EDR)

2MHz for Bluetooth (BT LE)

Modulation type: GFSK, $\pi/4$ -DQPSK, 8-DPSK for Bluetooth (BDR/EDR)

GFSK for Bluetooth (BT LE)

2.4G WIFI:

Works in the 2.4GHz ISM Band (2412MHz~2462MHz)

Modulation: DSSS and OFDM on IEEE 802.11 protocols and support IEEE 802.11b/g/n.

Channel spacing: 5MHz.

11 channels for 20MHz bandwidth (2412-2462MHz)

7 channels for 40MHz bandwidth (2422-2452MHz)

5G WIFI:

Works in the 5GHz ISM Band (5180-5240MHz/5745-5825MHz)

Modulation: OFDM on IEEE 802.11 protocols and support IEEE 802.11a/n/ac.

4 Channels for 5180.00-5240.00MHz(802.11a/ac/n -HT20)

2 Channels for 5190.00-5230.00MHz(802.11ac/n -HT40)

1 Channels for 5210.00MHz(802.11ac -HT80)

5 channels for 20MHz bandwidth(5745-5825MHz) (802.11a/ac/n -HT20)

2 channels for 40MHz bandwidth(5755~5795MHz) (802.11ac/n -HT40)

1 channels for 80MHz bandwidth(5775MHz) (802.11ac -HT80)

Antenna Description:

The EUT use Internal antenna and maximum antenna gain is 2.00dBi(Max.) for 2.4G Band and 2.00dBi(Max.) for 5G Band, meet FCC part §15.203 , RSS-Gen and MIC antenna requirement.

This device has two antennas, The other WLAN antenna is prohibited

The device support 2 antenna while customer will disable Aux antenna by software and end-user can only use main antenna for WLAN/BT.

The device support one WLAN/BT modular and antenna, cannot support WLAN and BT simultaneously transmission.

Manufacturing Tolerance:**Bluetooth**

GFSK(Average)			
Channel	Channel 0	Channel 39	Channel 78
Target (dBm)	1.0	1.0	1.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
π /4DQPSK(Average)			
Channel	Channel 0	Channel 39	Channel 78
Target (dBm)	2.0	2.0	2.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
8-DPSK(Average)			
Channel	Channel 0	Channel 39	Channel 78
Target (dBm)	2.0	2.0	2.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
GFSK BT LE (Average)			
Channel	Channel 0	Channel 19	Channel 39
Target (dBm)	-5.5	-5.5	-5.5
Tolerance $\pm$ (dB)	1.0	1.0	1.0

2.4GWLAN

IEEE 802.11b(Average)			
Channel	Channel 01	Channel 06	Channel 11
Target (dBm)	16.0	17.0	17.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
IEEE 802.11g(Average)			
Channel	Channel 01	Channel 06	Channel 11
Target (dBm)	18.0	19.0	19.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
IEEE 802.11n HT20 (Average)			
Channel	Channel 01	Channel 06	Channel 11
Target (dBm)	17.0	18.0	17.5
Tolerance $\pm$ (dB)	1.0	1.0	1.0
IEEE 802.11n HT40(Average)			
Channel	Channel 03	Channel 06	Channel 09
Target (dBm)	15.0	16.0	16.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0

5.2GWLAN

IEEE 802.11a (Average)			
Channel	Channel 36	Channel 40	Channel 48
Target (dBm)	9.0	9.5	9.5
Tolerance $\pm$ (dB)	1.0	1.0	1.0
IEEE 802.11n HT20 (Average)			
Channel	Channel 36	Channel 40	Channel 48
Target (dBm)	9.0	9.0	9.5
Tolerance $\pm$ (dB)	1.0	1.0	1.0
IEEE 802.11n VHT40 (Average)			
Channel	Channel 38	Channel 46	/
Target (dBm)	8.0	9.0	/
Tolerance $\pm$ (dB)	1.0	1.0	/
IEEE 802.11ac VHT20 (Average)			
Channel	Channel 36	Channel 40	Channel 48
Target (dBm)	9.0	9.0	9.5
Tolerance $\pm$ (dB)	1.0	1.0	1.0
IEEE 802.11ac VHT40 (Average)			
Channel	Channel 38	Channel 46	/
Target (dBm)	8.0	9.0	/
Tolerance $\pm$ (dB)	1.0	1.0	/
IEEE 802.11ac VHT80 (Average)			
Channel	Channel 42	/	/
Target (dBm)	8.0	/	/
Tolerance $\pm$ (dB)	1.0	/	/

5.8GWLAN

IEEE 802.11a (Average)			
Channel	Channel 149	Channel 157	Channel 165
Target (dBm)	7.0	7.5	7.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
IEEE 802.11n HT20 (Average)			
Channel	Channel 149	Channel 157	Channel 165
Target (dBm)	7.0	7.5	6.5
Tolerance $\pm$ (dB)	1.0	1.0	1.0
IEEE 802.11n VHT40 (Average)			
Channel	Channel 151	Channel 159	/
Target (dBm)	6.0	6.0	/
Tolerance $\pm$ (dB)	1.0	1.0	/
IEEE 802.11ac VHT20 (Average)			
Channel	Channel 149	Channel 157	Channel 165
Target (dBm)	7.0	7.0	6.5
Tolerance $\pm$ (dB)	1.0	1.0	1.0
IEEE 802.11ac VHT40 (Average)			
Channel	Channel 151	Channel 159	/
Target (dBm)	6.0	6.0	/
Tolerance $\pm$ (dB)	1.0	1.0	/
IEEE 802.11ac VHT80 (Average)			
Channel	Channel 155	/	/
Target (dBm)	5.0	/	/
Tolerance $\pm$ (dB)	1.0	/	/