

2AQPLLBE5HY1MW Installation Manual

FCC ID of this product is as follows.

FCC ID: 2AQPLLBE5HY1MW

IC No. of this product is as follows.

IC: 24569-LBEE5HY1MW

Contents

1. Supply Voltage
2. Theory of Operation & Channel List
3. Antenna

1. Supply Voltage

Parameter		Min.	Typ.	Max.	Unit
Operating Temperature		-30	25	+85	°C
Supply Voltage	VBAT	3.2	3.3	4.8	V
	VIO ¹ 1.8V/3.3V	1.62	-	3.63	V

1: VIO does not influence the RF characteristics.

2. Theory of Operation & Channel List

The following table lists the supported channels and operating modes. If the module is installed in hardware that supports an external dipole antenna, the italicized modes of operation must be disabled in firmware or software.

Frequency of Operation			Scan	Antenna	
				Trace	Dipole
2.4 GHz	11b/g/n - HT20	2412-2462MHz	Active	✓	✓
	<i>BT</i>	<i>2402-2480MHz</i>	<i>N/A</i>	✓	

	<i>BLE</i>	<i>2402-2480MHz</i>	<i>N/A</i>	✓	
W52	<i>11a/n/ac - (V)HT20</i>	<i>5180-5240MHz</i>	<i>Active</i>	✓	✓
	<i>11n/ac - (V)HT40</i>	<i>5190-5230MHz</i>	<i>Active</i>	✓	✓
	<i>11ac - VHT80</i>	<i>5210MHz</i>	<i>Active</i>	✓	
W53	<i>11a/n/ac - (V)HT20</i>	<i>5260-5320MHz</i>	<i>Passive</i>	✓	
	<i>11n/ac - (V)HT40</i>	<i>5270-5310MHz</i>	<i>Passive</i>	✓	
	<i>11ac - VHT80</i>	<i>5290MHz</i>	<i>Passive</i>	✓	
W56	<i>11a/n/ac - (V)HT20</i>	<i>5500-5720MHz</i>	<i>Passive</i>	✓	
	<i>11n/ac - (V)HT40</i>	<i>5510-5710MHz</i>	<i>Passive</i>	✓	
	<i>11ac - VHT80</i>	<i>5530-5690MHz</i>	<i>Passive</i>	✓	
W58	<i>11a/n/ac - (V)HT20</i>	<i>5745-5825MHz</i>	<i>Active</i>	✓	✓
	<i>11n/ac - (V)HT40</i>	<i>5755-5795MHz</i>	<i>Active</i>	✓	✓
	<i>11ac - VHT80</i>	<i>5775MHz</i>	<i>Active</i>	✓	

3. Antenna

Two types of antennas are support by this module:

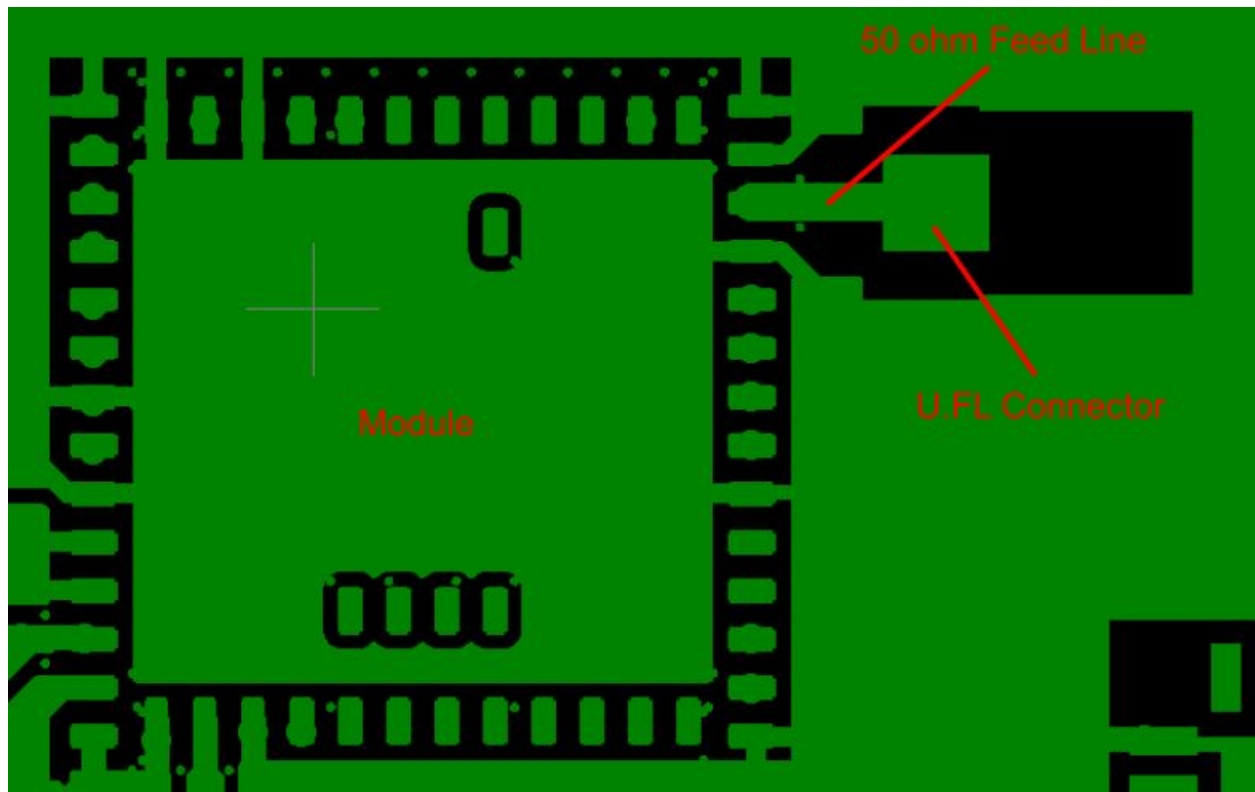
1. The PCB trace antenna defined in the original Murata LBEE5HY1MW documentation
2. An external dipole antenna as described in this section.

3.1 Antenna Characteristics

		Antenna
Antenna Type		External dipole
Max Gain	2.4 GHz 5 GHz	3.0 dBi 5.0 dBi

Antenna Connector	50 ohm U.FL
50 ohm feed line length	We test it at 1mm as representative

3.3 Antenna Trace Layout Guide



4. Regulatory Requirements

4.1 Labeling Guidelines

The following information must be indicated on the host device of this module or, if it cannot be described on the host device, must be listed in the host product manual.

Contains FCC ID: 2AQPLLBEE5HY1MW

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.*

Contains IC 24659-LBEE5HY1MW

This device complies with ISED Canada licence-exempt RSS standard(s). 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. that may cause undesired operation of the device.*

The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be located or operating in conjunction with any other antenna or transmitter.