

LBEE6ZZ1DM Installation Manual

“FCC ID and IC Number” of these products are followings.

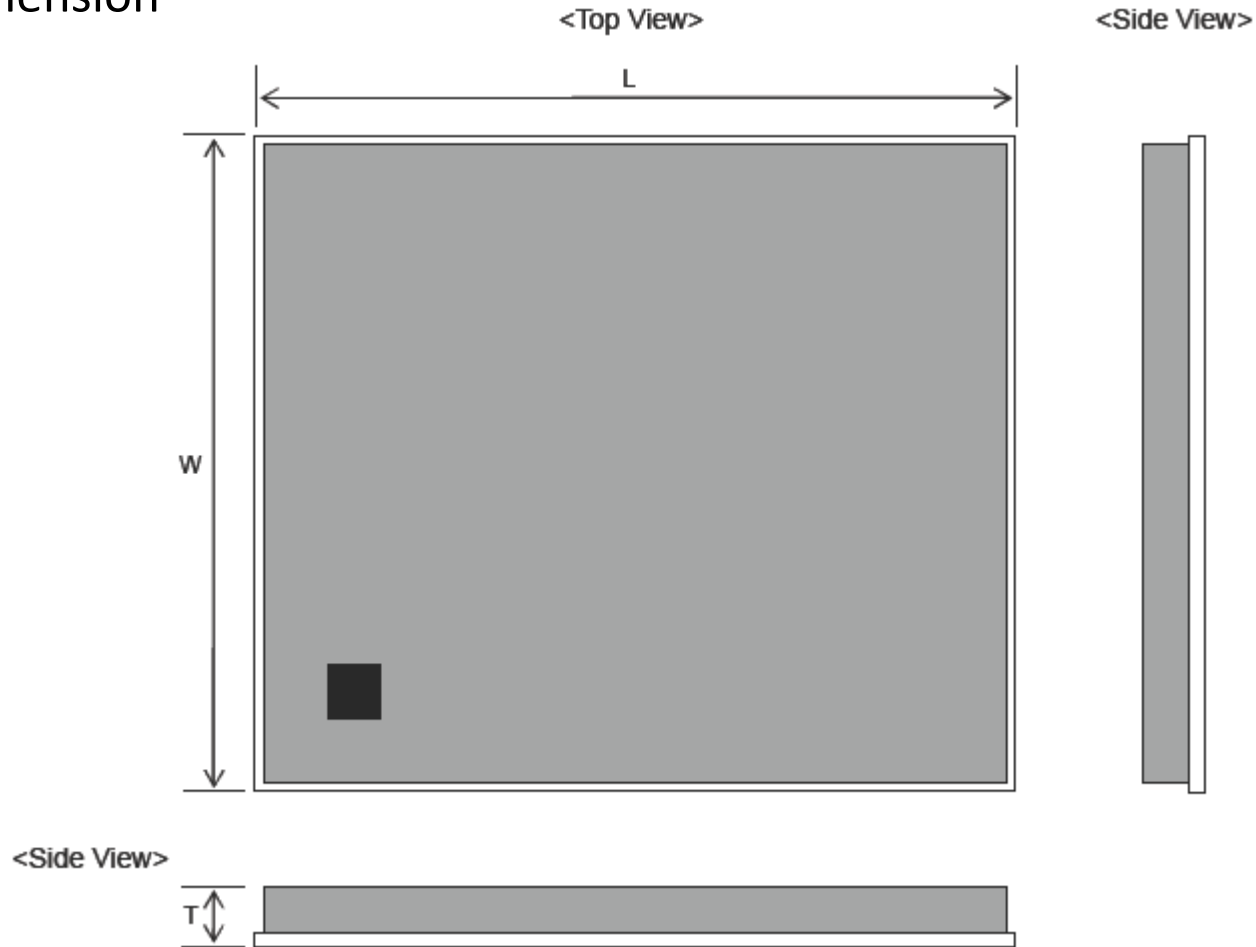
FCC ID	: VPYLB1DM
IC Number	: 772C-LB1DM
Model	: LBEE6ZZ1DM

For OEM integration only – device cannot be sold to general public.
Therefore we will ask OEM to include the following statements required by FCC on the product and in the Installation manual Notice.

Contents

- 1.Dimension
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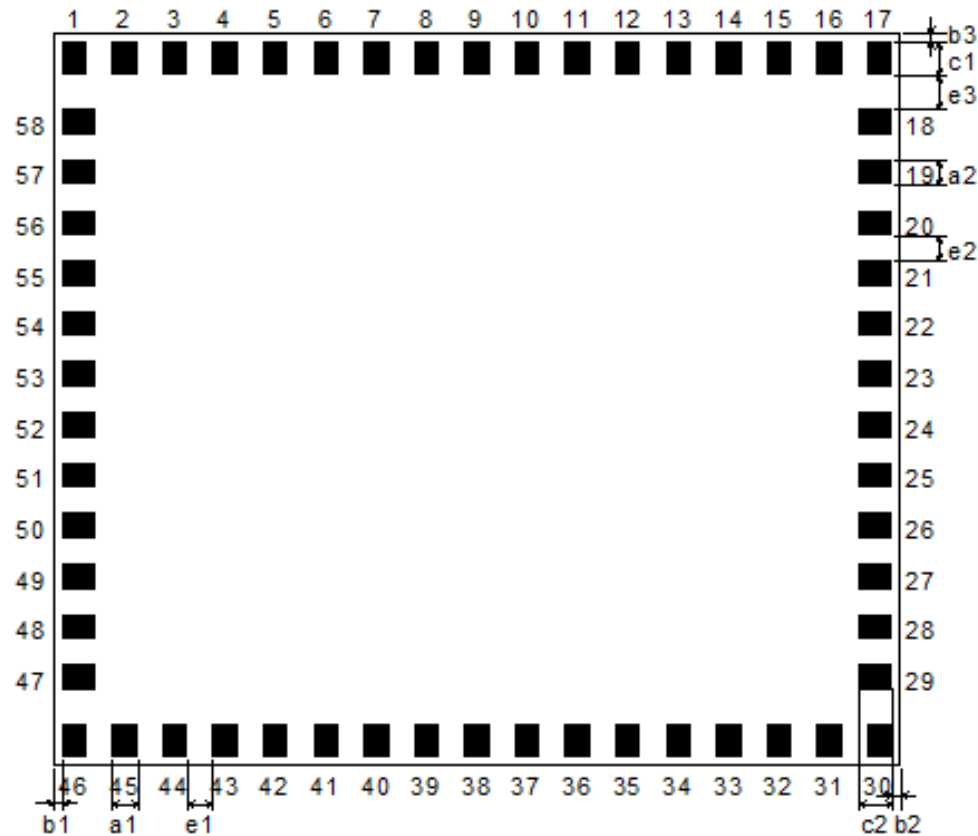
1. Dimension

**Dimensions**

Mark	Dimensions	Mark	Dimensions	Mark	Dimensions
L	20.2	W	17.4	T	2.6 max.

2. Land Pattern(Recommended)

<Bottom View>



Dimensions

Mark	Dimensions	Mark	Dimensions	Mark	Dimensions
a1	0.6	a2	0.6	b1	0.2
b2	0.2	b3	0.2	c1	0.8
c2	0.8	e1	0.6	e2	0.6
e3	0.8	-	-	-	-

Unit : mm

3. Operating Voltage

Parameter	Min.	Typ.	Max.	Units	
Operating Temperature	-40	+25	+85	deg.C	
Supply Voltage	VDD33	3.0	3.3	3.6	V
	VDD18	1.71	1.8	1.89	V
	VIO	1.71 3.0	1.8 3.3	1.89 3.6	V V

4. Terminal Configuration

Terminal Configurations

No.	Terminal Name	Type	Supply	System	Connection to IC Terminal	Description
1	GND	-	-	-	-	Ground
2	GND	-	-	-	-	Ground
3	GND	-	-	-	-	Ground
4	BT_LEDn	O	VIO	BT	GPIO[17]	LED_OUT 1
5	GND	-	-	-	-	Ground
6	VDD33	P	-	WLAN/BT	VBLDO3V_VIN	3.3V Voltage Input
7	GND	-	-	-	-	Ground
8	PCM_CLK	I/O	VIO	BT	GPIO[13]	PCM Clock
9	PCM_DOUT	O	VIO	BT	GPIO[12]	PCM Data Out
10	PCM_DIN	I	VIO	BT	GPIO[11]	PCM Data In
11	NC	-	-	-	GPIO[15]	GPIO
12	PCM_SYNC	I/O	VIO	BT	GPIO[14]	PCM Sync
13	NC	-	-	-	GPIO[4]	GPIO
14	WLAN_LEDn	O	VIO	WLAN	GPIO[1]	LED_OUT 0
15	NC	-	-	-	GPIO[16]	GPIO
16	SLEEPn	O	VIO	WLAN/BT	GPIO[0]	SLEEPn (active low)
17	GND	-	-	-	-	Ground
18	NC	-	-	-	GPIO[6]	GPIO
19	NC	-	-	-	GPIO[8]	GPIO
20	NC	-	-	-	GPIO[2]	GPIO
21	NC	-	-	-	GPIO[7]	GPIO
22	GND	-	-	-	-	Ground
23	SD_CLK	I	VIO	WLAN/BT	SD_CLK	SDIO 4-bit Mode: Clock input
24	GND	-	-	-	-	Ground

4. Terminal Configuration

Terminal Configurations

No.	Terminal Name	Type	Supply	System	Connection to IC Terminal	Description
25	SD_D3	I/O	VIO	WLAN/BT	SD_DAT[3]	SDIO 4-bit Mode: Data line bit 3
26	SD_D2	I/O	VIO	WLAN/BT	SD_DAT[2]	SDIO 4-bit Mode: Data line bit 2
27	SD_D0	I/O	VIO	WLAN/BT	SD_DAT[0]	SDIO 4-bit Mode: Data line bit 0
28	SD_D1	I/O	VIO	WLAN/BT	SD_DAT[1]	SDIO 4-bit Mode: Data line bit 1
29	SD_CMD	I/O	VIO	WLAN/BT	SD_CMD	SDIO 4-bit Mode: Command/response
30	GND	-	-	-	-	Ground
31	NC	-	--	-	GPIO[18]	GPIO
32	RESETn	I	VIO	WLAN/BT	RESETn	Reset (active low)
33	NC	-	-	-	GPIO[10]	GPIO
34	NC	-	-	-	GPIO[9]	GPIO
35	TCK	I	VIO	-	TCK	JTAG Test Mode: JTAG test clock (input)
36	TDO	O	VIO	-	TDO	JTAG Test Mode: JTAG test data (output)
37	TMS	I	VIO	-	TMS	JTAG Test Mode: JTAG controller select (input)
38	TDI	I	VIO	-	TDI	JTAG Test Mode: JTAG test data (input)

4. Terminal Configuration

Terminal Configurations

No.	Terminal Name	Type	Supply	System	Connection to IC Terminal	Description
39	PDn	I	VIO	WLAN/BT	PDn	Full Power Down (active low) 0 = full power down mode 1 = normal mode <ul style="list-style-type: none"> ● Connect to power down pin of host or VIO ● External host required to drive this pin high for normal operation ● No internal pull-up on this pin
40	GND	-	-	-	-	Ground
41	VDD18	P	-	WLAN/BT	LVLDO_VIN AVDD18	1.8V Voltage Input
42	VIO	P	-	WLAN/BT	VIO	1.8/3.3 Digital I/O Power Supply VIO pin should be connected to the same supply which drives the SDIO interface of the host processor.
43	GND	-	-	-	-	Ground
44	NC	-	-	-	WP	Not connected Don't connect to Ground EEPROM write protect
45	GND	-	-	-	-	Ground
46	GND	-	-	-	-	Ground
47	GND	-	-	-	-	Ground
48	GND	-	-	-	-	Ground
49	NC	-	-	-	-	Not connected
50	GND	-	-	-	-	Ground
51	GND	-	-	-	-	Ground
52	GND	-	-	-	-	Ground
53	NC	-	-	-	-	Not connected
54	GND	-	-	-	-	Ground
55	GND	-	-	-	-	Ground
56	ANT	RF	-	WLAN/BT	-	BT and WLAN RF Antenna
57	GND	-	-	-	-	Ground
58	GND	-	-	-	-	Ground

Please describe the following warning on the final product which contains this module.

Contains Transmitter Module FCC ID: VPYLB1DM

or

Contains FCC ID: VPYLB1DM

This device complies with Part 15 of FCC Rules and Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of this device.

Le présent appareil est conforme aux la partie 15 des règles de la FCC et CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

※When the product is small, as for these words mentioned above, the posting to a manual is possible.

● Please describe the following warning to the manual.

FCC CAUTION

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

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

● When installing it in a mobile equipment. Please describe the following warning to the manual.

This equipment complies with FCC/IC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines and RSS-102 of the IC radio frequency (RF) Exposure rules. This equipment should be installed and operated keeping the radiator at least 20cm or more away from person's body.

Cet équipement est conforme aux limites d'exposition aux rayonnements énoncées pour un environnement non contrôlé et respecte les règles les radioélectriques (RF) de la FCC lignes directrices d'exposition et d'exposition aux fréquences radioélectriques (RF) CNR-102 de l'IC. Cet équipement doit être installé et utilisé en gardant une distance de 20 cm ou plus entre le radiateur et le corps humain.

● When installing it in a portable equipment.

It is necessary to take a SAR test with your set mounting this module.
Class II permissive change application is necessary using the SAR report.

Note)

Portable equipment : Equipment for which the spaces between human body and antenna are used within 20cm.

Mobile equipment : Equipment used at position in which the spaces between human body and antenna exceeded 20cm.