

➤ **ITM-G3**

OEM/Integrators Installation Manual

➤ Confidential Information

➤ Samsung Electronics Co., Ltd.

**SAMSUNG**

## IoT Modul

### IoT Module ITM-G3

SLP-I211BZXXWW



#### Key Features

- ZigBee 3.0 and BLE 5.0
- 4-GPIO channel outputs for Switch control

#### Basic Features

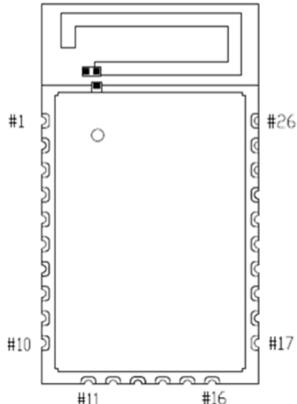
Series.	Part Number	Input	Output	Connectivity	Frequency	TX Power
ITM-Gen3	SLP-I211BZXXWW	3.3Vdc	GPIO	ZigBee, BLE	2.4GHz	8dBm

- Firmware Version : TBD

## 1. Specification

Article	Symbol	Specification			Unit	Note
		Min.	Typ.	Max.		
<b>Electrical SPECIFICATIONS</b>						
Input Voltage	Vin	3.0	3.3	3.8	V	
Input Current	mA			100	mA	
<b>ENVIRONMENTAL SPECIFICATIONS</b>						
Operation Temperature		-40		85	°C	
Storage Temperature		-50		150		
<b>MECHANICAL SPECIFICATION</b>						
Dimensions		18.5 x 10.5 x 2.2		mm	L x W x H	

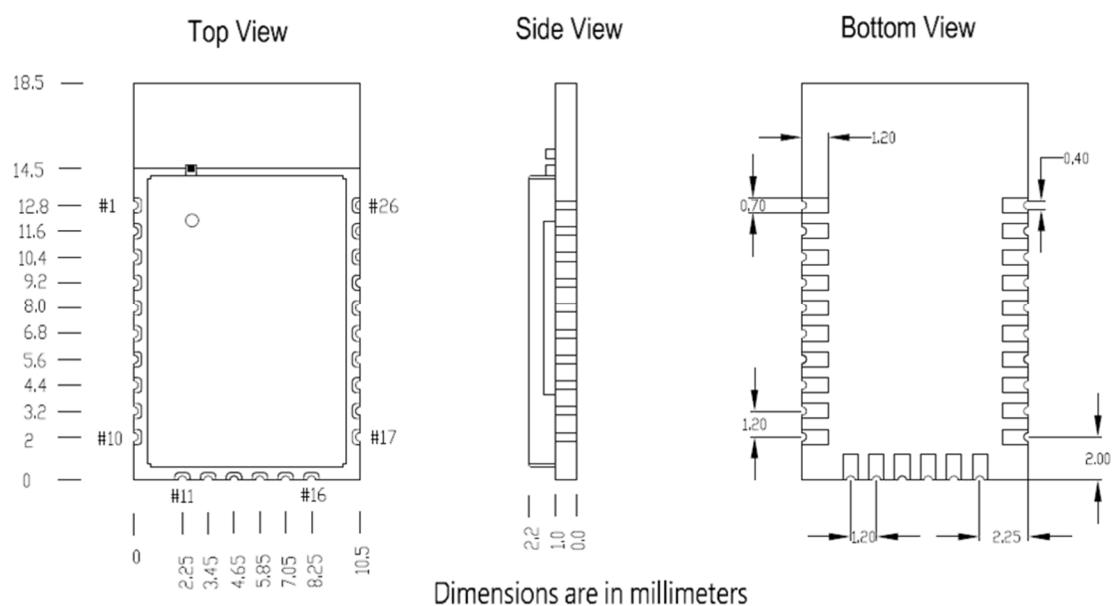
## 2. Pin Assignment



Pin No.	Name	Function
1 / 2 / 10 / 14 / 15 / 17 / 18 / 26	GND	Ground
3	GPIO1	Light on/Dim up
4	-	-
5	GPIO2	Light off/Dim down
6	GPIO3	Status LED
7	GPIO4	LED toggle
8		
9		

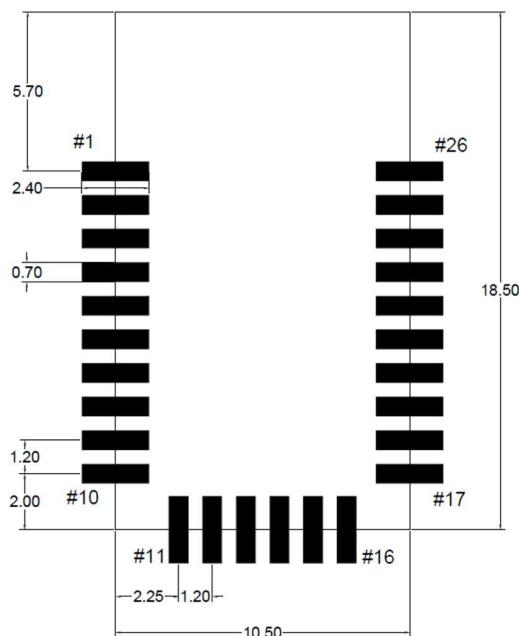
11	Reset	Software Reset
12	-	-
13	-	-
16	Vin	Input Voltage
19	-	-
20	-	-
21	-	-
22	-	-
23	-	-
24	-	-
25	-	-

### 3. Dimension



## 4. Application Guide

- Solder PAD



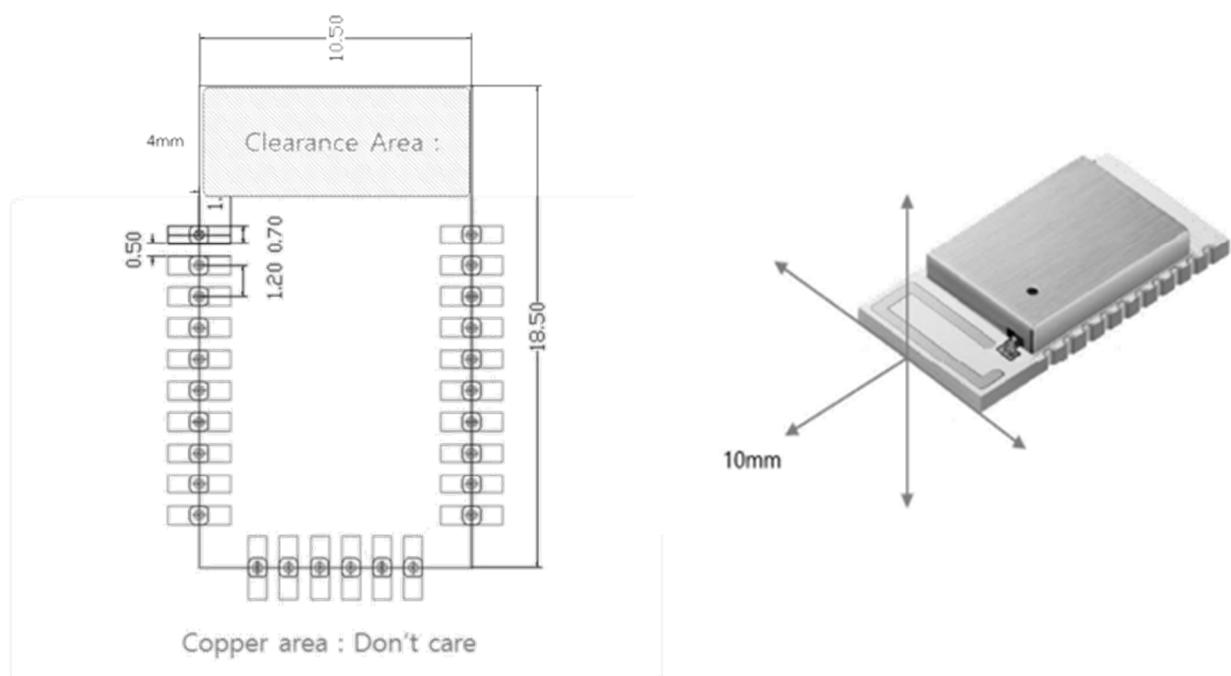
- Solder spread area

Solder pad shoud be soldered over 60% of full area.

- Clearance Area

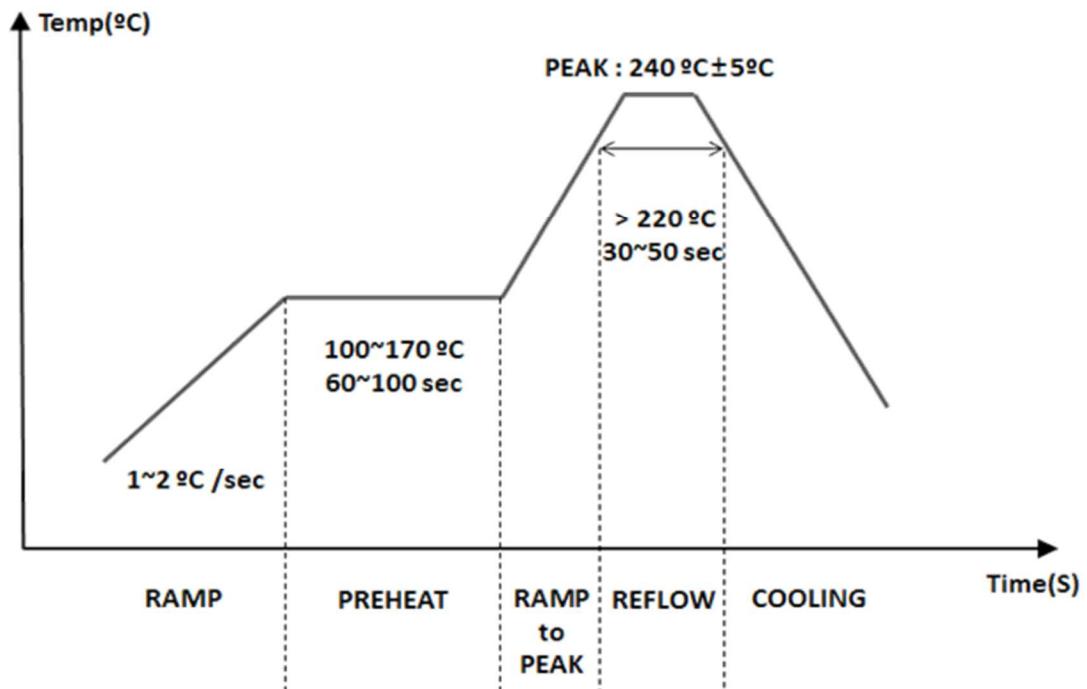
① Recommend to design a clearance area in the main board for the better performance of antenna radiation. It should be applied to all layers of the board. There shall not be any components, traces, pads or copper areas in any layer within the clearance area.

→ Minimum clearance area size (non-copper) = 10.5mm x 4.0mm



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- Reflow Profile



- Max. Temperature: 245°C
- Max. number of reflow cycles: 2
- Hand soldering: follow IPC recommendation

## 5. Label

- QR Code



QR Code Information:

SLP-I211BZXXWW\_210928\_AAAA...AAAA\_BBBB...BBBB\_CCCC...CCCC

Index	Contents	Digit
Product Code	SLP-I211BZXXUS	14
Date	YYMMDD	6
BT MAC Address	AAAA...AAAA <sup>1)</sup>	12
ZigBee EUI	BBBB...BBBB <sup>2)</sup>	16
Install Code	CCCC...CCCC <sup>3)</sup>	36
Under-Bar	—	4
Total Digit		88

## 6. FCC Information

This device complies with part 15 of the FCC Results. Operation is subject to the following two conditions:

- (1) This Device may not cause harmful interface, 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 CLASS B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. 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 correct the interference by one or more of the following measures:

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

### FCC RF Radiation Exposure Statement

- (1) This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
- (2) This equipment complies with RF radiation exposure of 20cm between the radiator and your body.

### **WARNING**

1. Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.
2. It is necessary to check whether the product using the module meets the certification.
3. Exposure in the finished product should be re-evaluated.

CAUTION: Exposure to Radio Frequency Radiation. Antenna shall be mounted in such a manner to minimize the potential for human contact during normal operation. The antenna should not be contacted during operation to avoid the possibility of exceeding the FCC radio frequency exposure limit.

## 7. Precaution

To prevent the module from any defect, please handle and store it with care

- Do not drop or give shock
- Do not store in very humid location or at extreme temperature
- Do not open or disassemble the product

Static electricity or surge voltage may damage the components inside the module, as such please observe proper anti-electrostatic working process

- People handing the module should be well grounded (e.g. using ESD wrist band) and wear anti-static working clothes and gloves
- All related devices and instruments in the production line should be well grounded (e.g. working table, measuring equipment, assembly jigs)

Avoid input voltage exceeds the maximum rating, which will cause damage to the circuit and result in malfunction.

Specifications are subject to change without notice.

### **RF exposure considerations**

This modular complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. RF Exposure - This device is only authorized for use in a mobile application. At least 20 cm of separation distance between the module and the user's body must be maintained at all times.

### **Instruction to Integrator**

#### **Labelling**

A label must be affixed to the outside of final commercial product with the following statements:

This device contains FCC ID: 2AR3A-ITM-G3

### **RF exposure considerations**

Consistent with §2.909(a), the following text must be included within the user's manual or operator instruction guide for the final commercial product

This modular complies with FCC RF radiation exposure limits set forth for an uncontrolled environment.

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

This device is only authorized for use in a mobile application. At least 20 cm of separation distance between the module and the user's body must be maintained at all times.

### **Additional testing, Part 15 Subpart B disclaimer**

The final host / module combination may also need to be evaluated against the FCC Part 15B criteria for unintentional radiators in order to be properly authorized for operation as a Part 15 digital device.

The FCC Part 15 Statement shall be included in the user manual of final commercial product if applicable.

Caution Statement for Modifications:

**CAUTION: Any changes or modifications not expressly approved could void the user's authority to operate the equipment.**

# Legal and additional information.

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