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A-2. Jumper setting

Section B: Adapter Board user guide

B-1. Function description of all key components

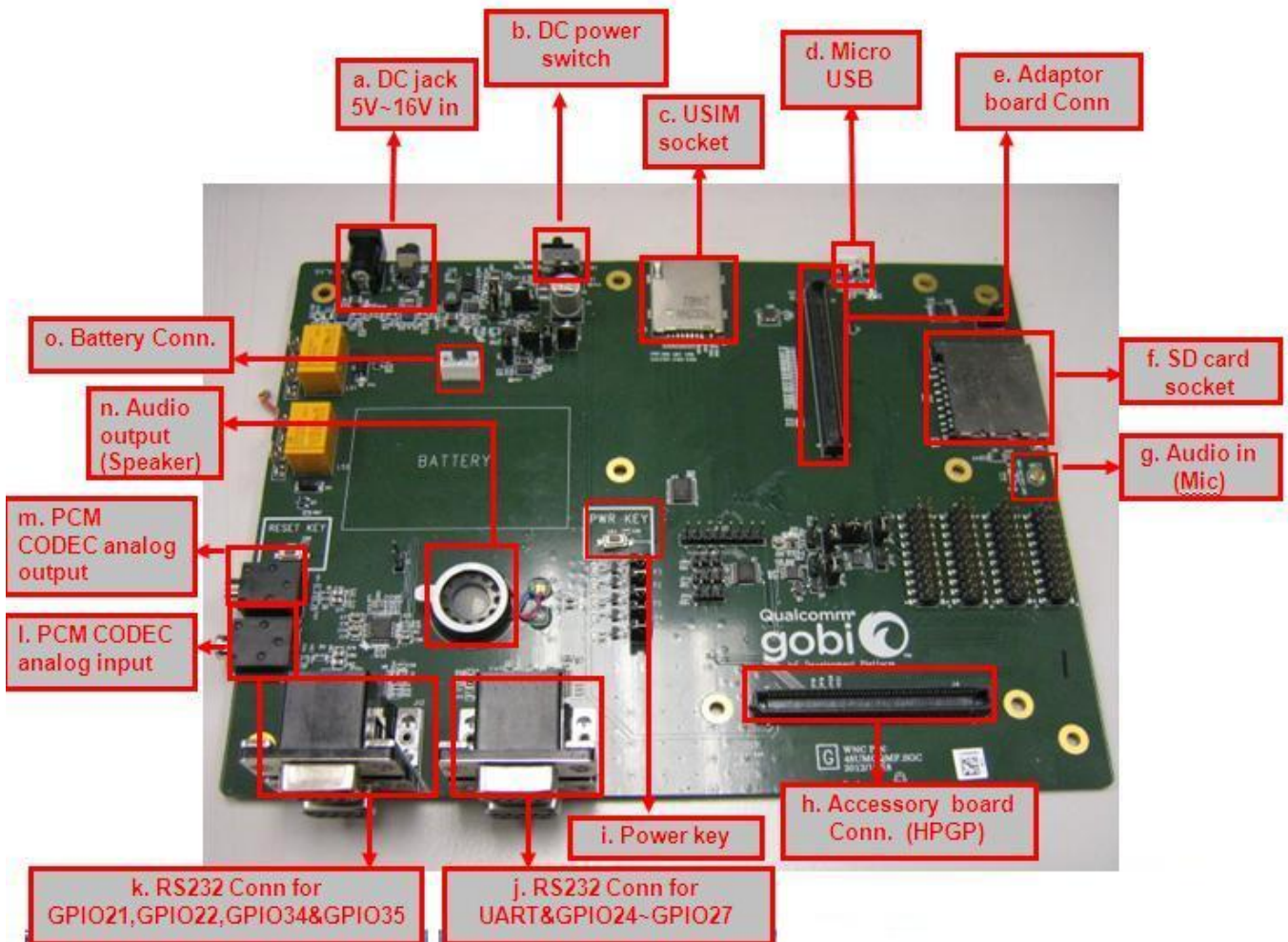
B-2. Jumper setting

Section C: Jumper default setting

## **Section A: Main Board user guide**

A-1. Function description of all key components





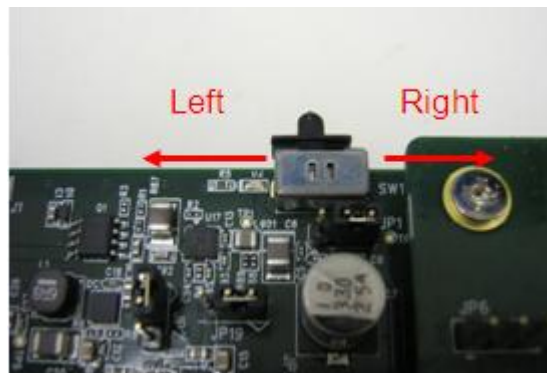
**Interface board connection directions:**

**a. DC jack**

The adapter must be in the range 5V~6.5V and can supply over 1.5A.

**b. DC power switch**

Switch to right direction for supplying VBAT to the module.  
Otherwise, switch to left direction to turn off VBAT.



**c. USIM socket**

The purpose of the socket is to insert SIM card.

**d. Micro USB**

This USB has some main functions:

- (a)Download firmware.
- (b)Send AT command.
- (c)Trace GPS log

**e. Adaptor board Conn.**

This is for the purpose of connecting main board and adaptor board.

**f. SD card socket**

The purpose of the socket is to insert SD card or some SDIO interface module.

**g. Audio in (mic)**

This is a differential input microphone.The audio generator can generate a tone to 6270T module through this jack for testing.

**h. Accessory board Conn. (HPGP)**

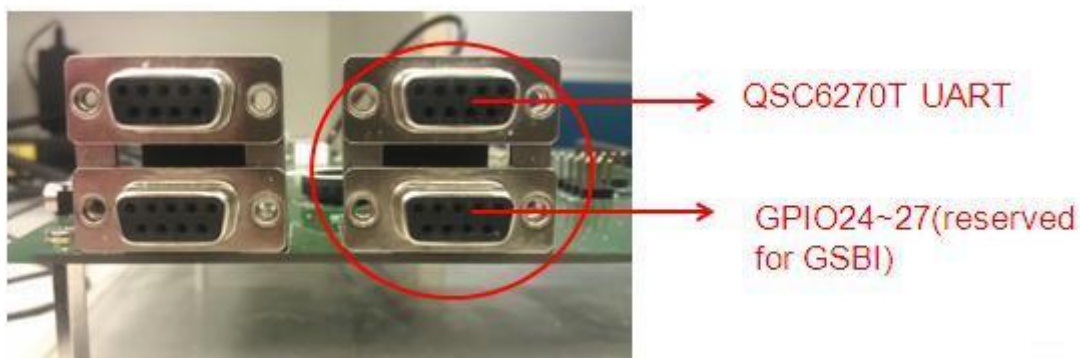
This is for the purpose of connecting main board and accessory board(HPGP).

**i. Power key**

Press this key to power on/off 6270T module.

**j. RS232 Conn for UART&GPIO24~GPIO27**

This is a stacked DSUB-9 connector. The upper one is for QSC6270T UART and the other is reserved for GSBI UARTs in the future (like 9x15).

**k. RS232 Conn for GPIO21,GPIO22,GPIO34&GPIO35**

These DSUB-9 connectors are reserved for GSBI UARTs in the future (like 9x15).



**I. PCM CODEC input**

The analog audio pass through this jack and encoded by PCM CODEC(TLV320AIC1110).

**m. PCM CODEC output**

6270T PCM signals are decoded by PCM CODEC(TLV320AIC1110) and Output from this audio jack.

**n. Audio output(Speaker)**

This is analog audio output path of 6270T module

**o. Battery Conn**

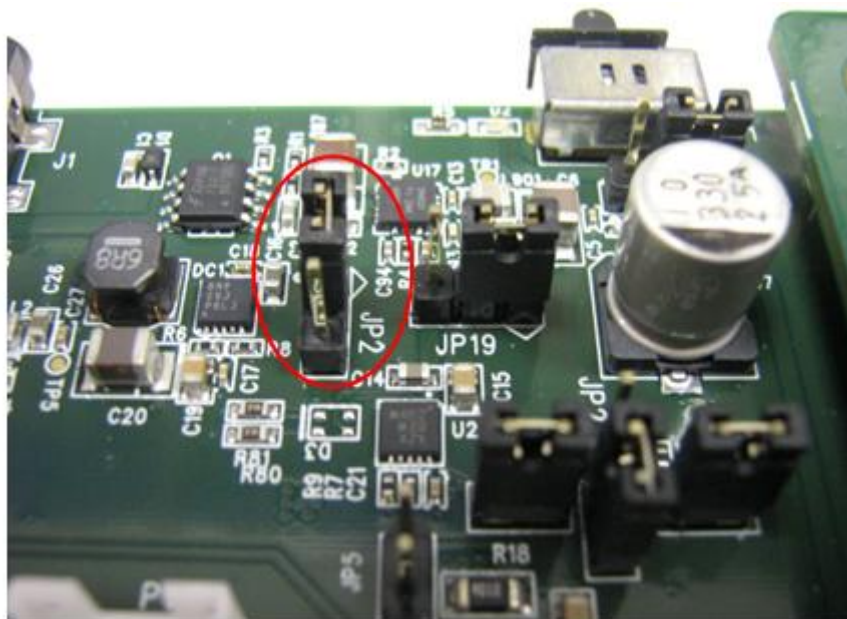
This is battery connector which supplies VBAT to 6270T module.

**A-2. JUMP setting**

**A-2.1 VREG\_IN:**

JP2.1 short to JP2.2 → Translated to 5V/3.3V/1.8V/1.2V from adapter.

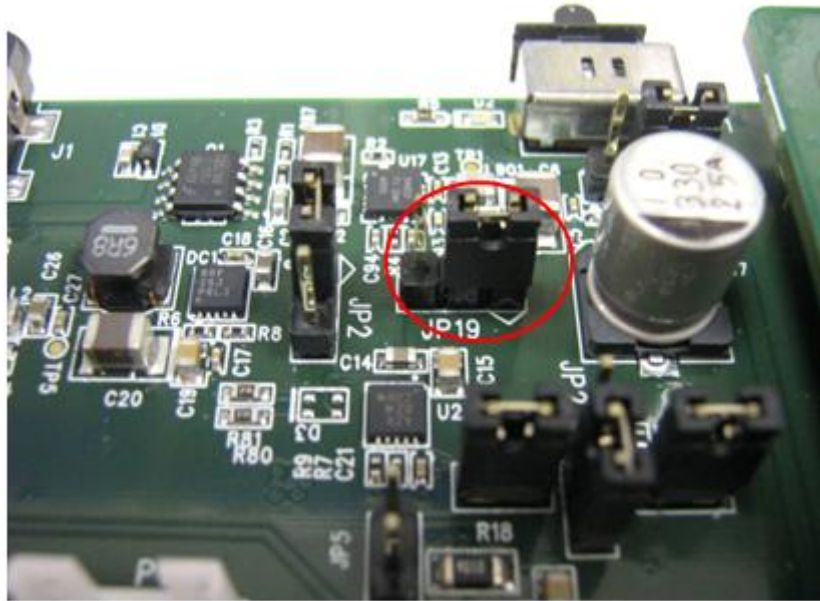
JP2.2 short to JP2.3 → Translated to 5V/3.3V/1.8V/1.2V from battery.



### A-2.2 Battery charger switch

JP19.1 short to JP19.2 → Use internal (QSC6270T) charger function.

JP19.2 short to JP19.3 → Use external (charger IC on main board) charger function.



### A-2.3 BATT\_THERM to Charge IC

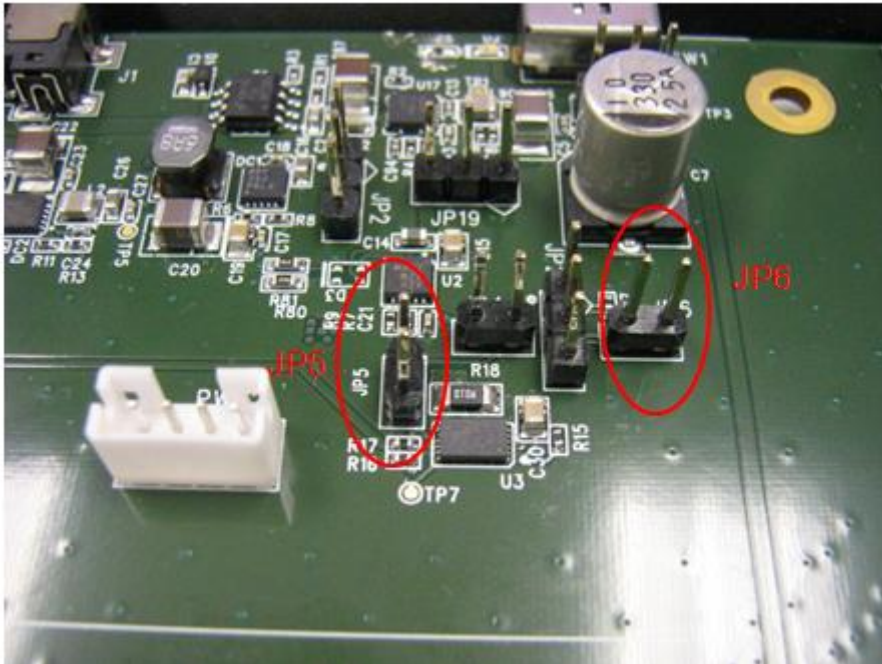
Short this JP4 to connect BATT\_THERM to external charge IC on main board.



### A-2.4 BATT\_THERM to Fuel Gauge IC

Short this jump(JP5) to connect BATT\_THERM to Fuel Gauge IC thermostat.

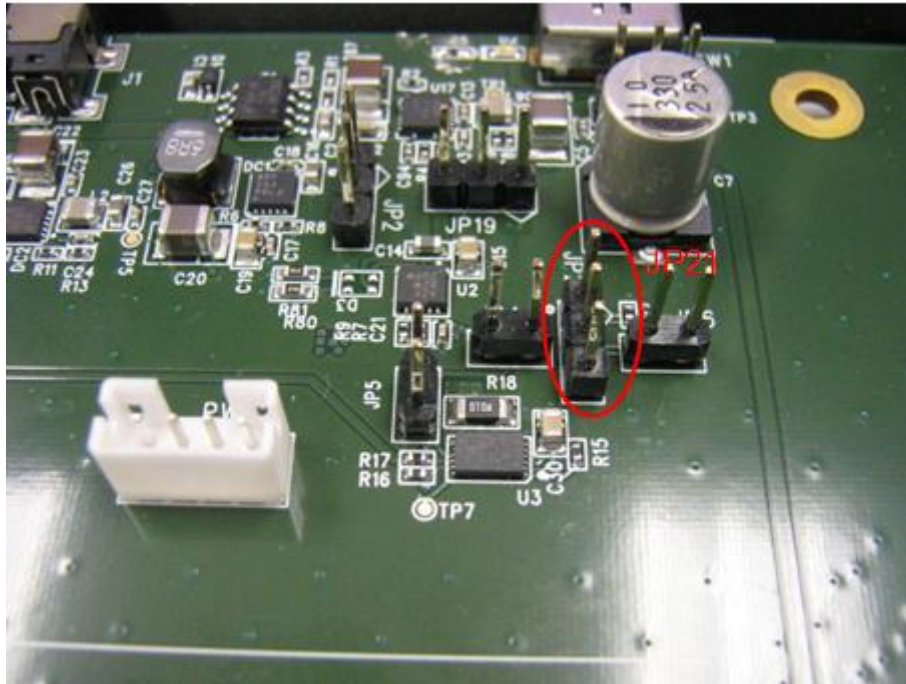
To avoid BATT\_THERM read interference, if short JP5, suggest to remove JP6 jump (Disconnect BATT\_THERM with QSC6270T).



### A-2.5 Battery thermostat switch

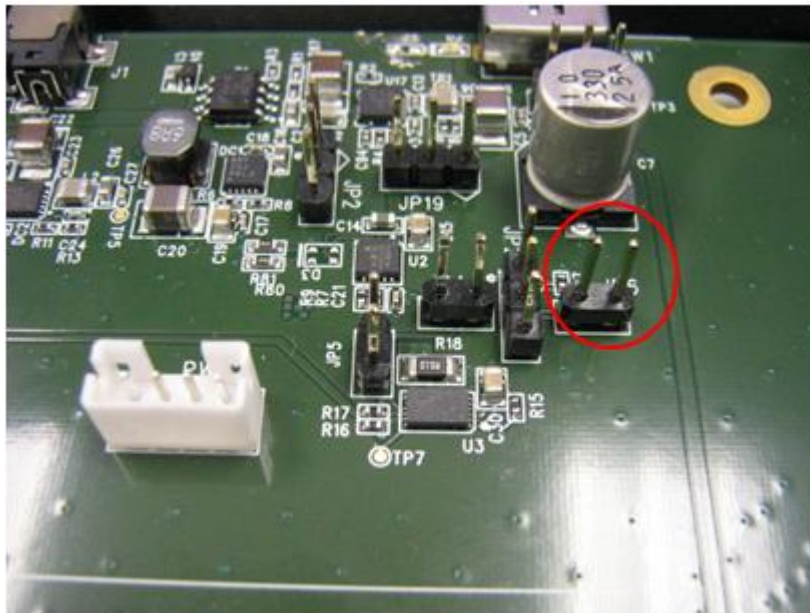
JP21.1 short to JP21.2 → Use 22kΩ resistor as battery thermostat for testing.

JP21.2 short to JP21.3 → Use the real external battery thermostat.



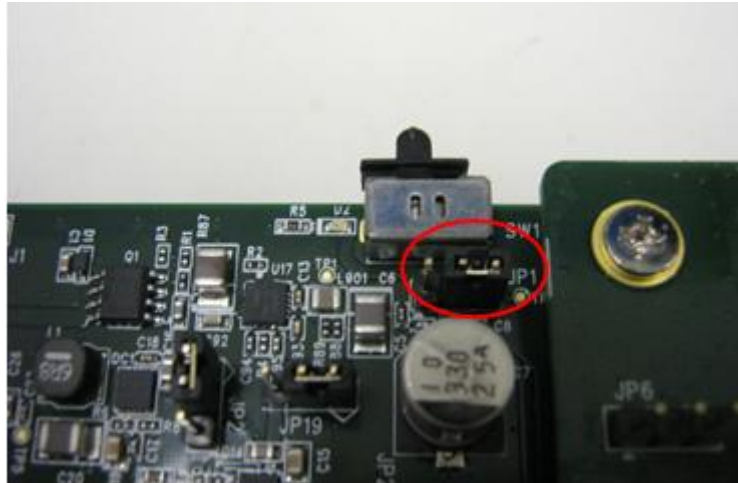
**A-2.6 BATT\_THERM path to 120 pin connector**

Short this jump(JP6) to connect BATT\_THERM to QSC6270T.

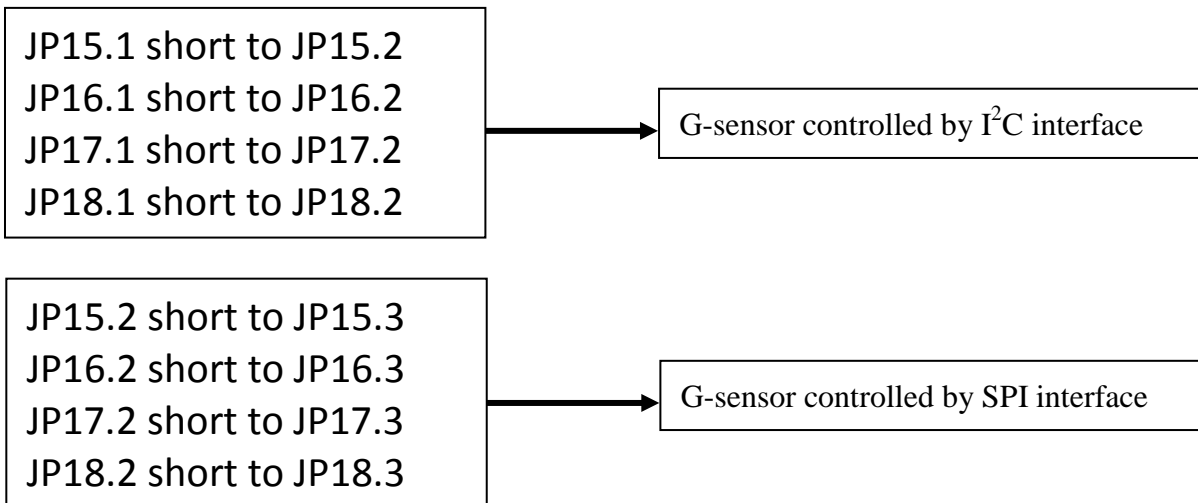


### A-2.7 VBAT switch

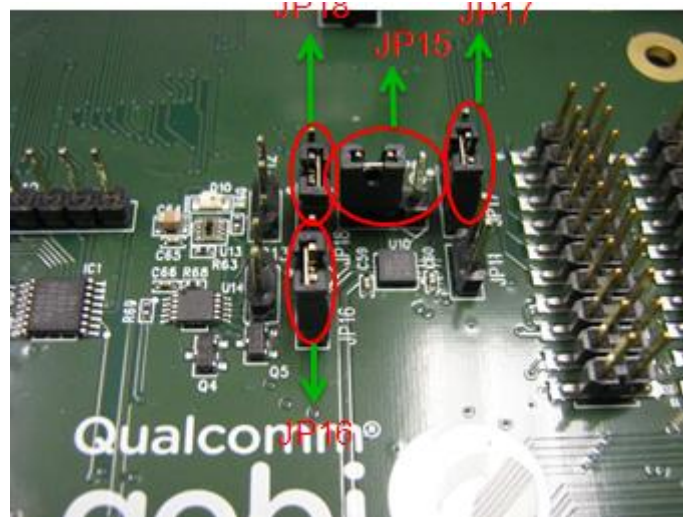
JP1.1 short to JP1.2 → Use 5V~6.5V DC jack power to supply VBAT to  
JP1.2 short to JP1.3 → Use external battery power to supply VBAT to  
module.



### A-2.8 G-sensor interface switch

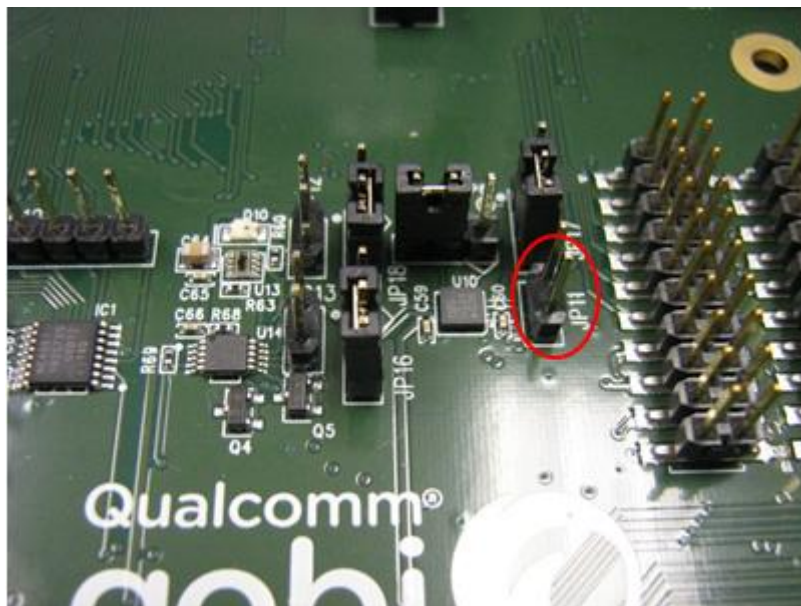






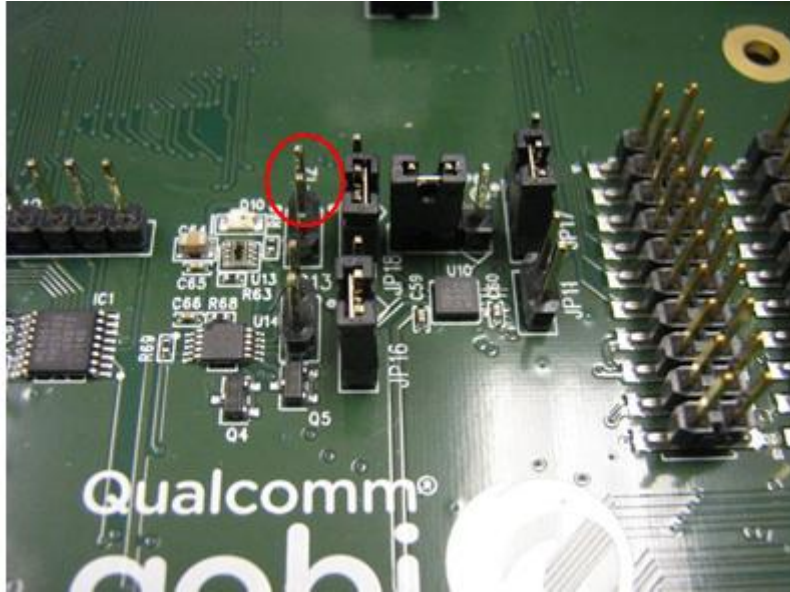
### **A-2.9 G-sensor switch**

Short this JP11 to connect GPIO6 with G-sensor interrupt pin,  
If GPIO6 has been reserved for other use, disconnect JP11 for avoiding  
interference.



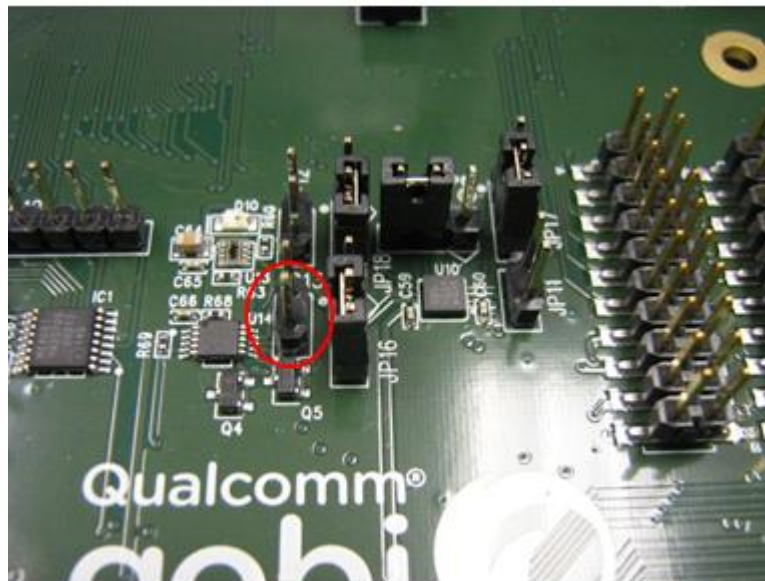
### **A-2.10 GPIO7 switch**

Short this JP12 to connect GPIO7 with Light-sensor interrupt pin,  
If GPIO7 has been reserved for other use, disconnect JP12 for avoiding  
interference



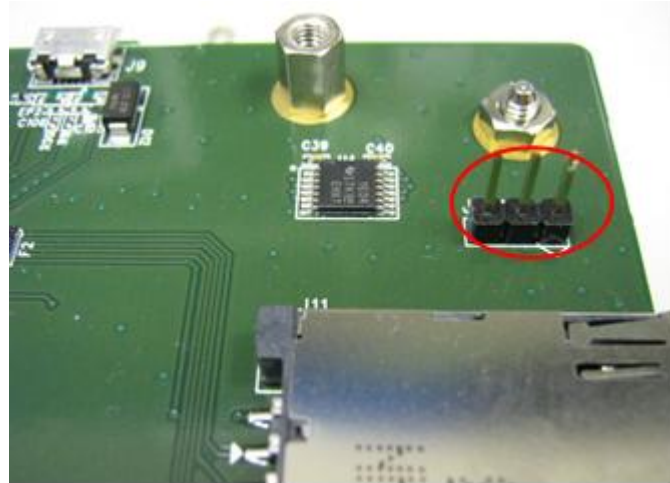
### A-2.11 GPIO9 switch

Short this JP13 to connect GPIO9 with Temperature-sensor interrupt pin,  
If GPIO9 has been reserved for other use, disconnect JP13 for avoiding interference.



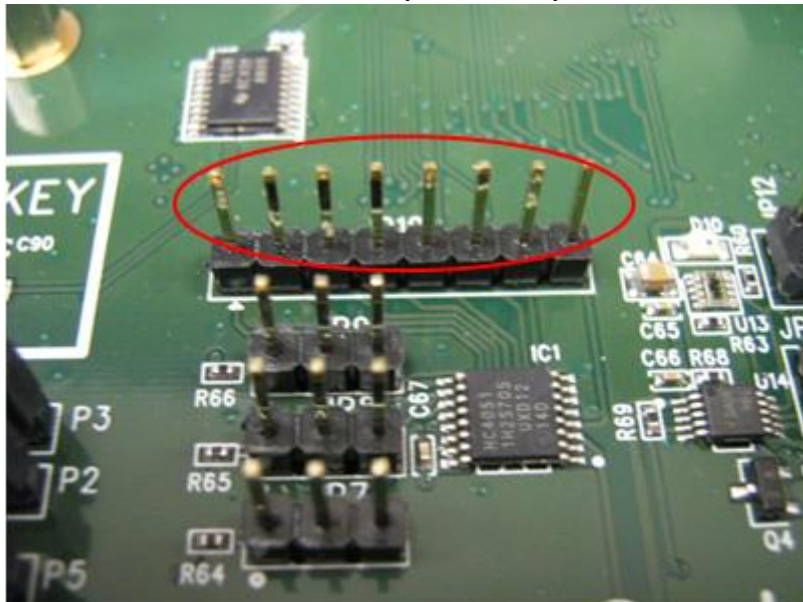
### A-2.12 SPI level shifter

JP14.1 short to JP14.2 → Put the jumps on JP14 pin1/2 to select level shifter 3.3V voltage for SPI  
JP14.2 short to JP14.3 → Put the jumps on JP14 pin2/3 to select level shifter 1.8V voltage for SPI



### A-2.13 ADC Multiplexer input

Header JP10 is external ADC Multiplexer input.



### A-2.14 ADC Multiplexer channel switch

The ADC Multiplexer supports up to 8 channels. And these jumpers configure the Multiplexer channel connection to 6270T ADC.

JP7.1 short to JP7.2 → configure GPIO1 to high

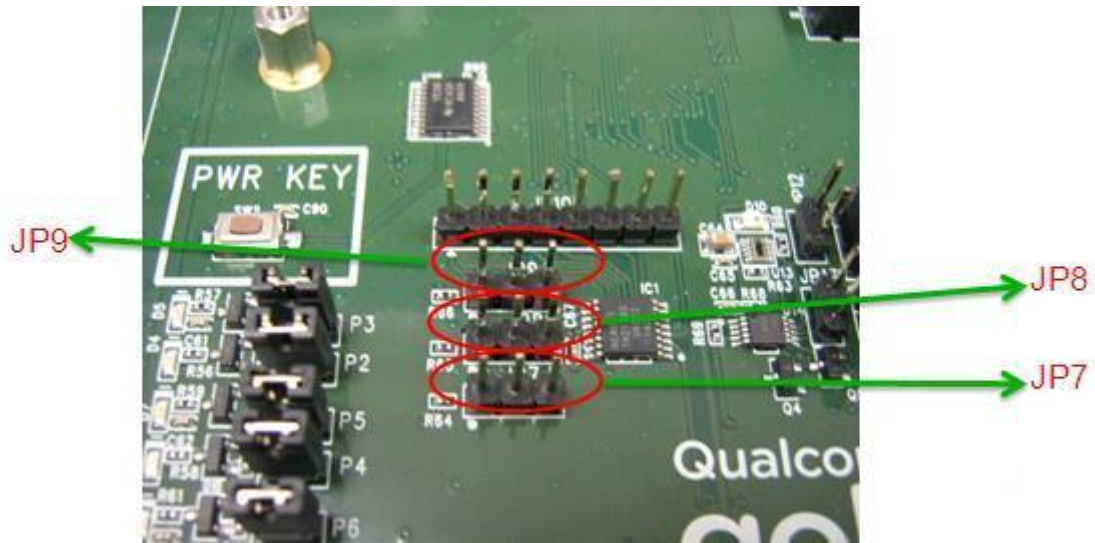
JP7.2 short to JP7.3 → configure GPIO1 to low

JP8.1 short to JP8.2 → configure GPIO2 to high

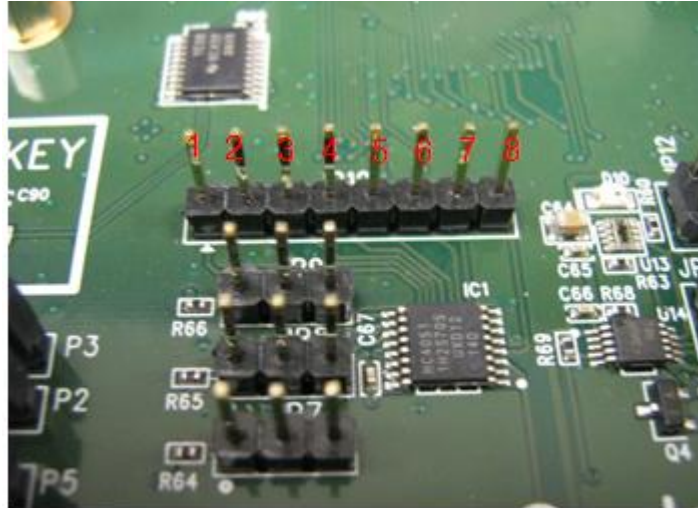
JP8.2 short to JP8.3 → configure GPIO2 to low

JP9.1 short to JP9.2 → configure GPIO3 to high

JP9.2 short to JP9.3 → configure GPIO3 to low

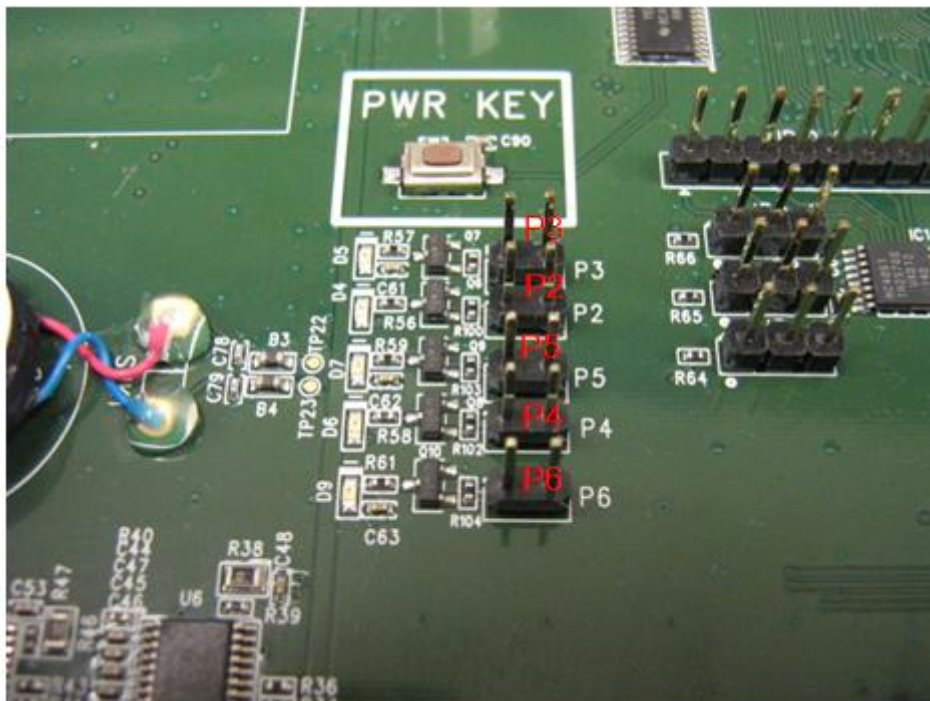


GPIO3	GPIO2	GPIO1	Multiplexer channel
L	L	L	1
L	L	H	2
L	H	L	3
L	H	H	4
H	L	L	5
H	L	H	6
H	H	L	7
H	H	H	8



**A-2.15 GPIO14/GPIO15/GPIO16/GPIO17/GPIO18 indicator**

- P2 → GPIO14. Short P2 to connect GPIO14 to LED indicator.
- P3 → GPIO15. Short P3 to connect GPIO15 to LED indicator.
- P4 → GPIO16. Short P4 to connect GPIO16 to LED indicator.
- P5 → GPIO17. Short P5 to connect GPIO17 to LED indicator.
- P6 → GPIO18. Short P6 to connect GPIO18 to LED indicator.



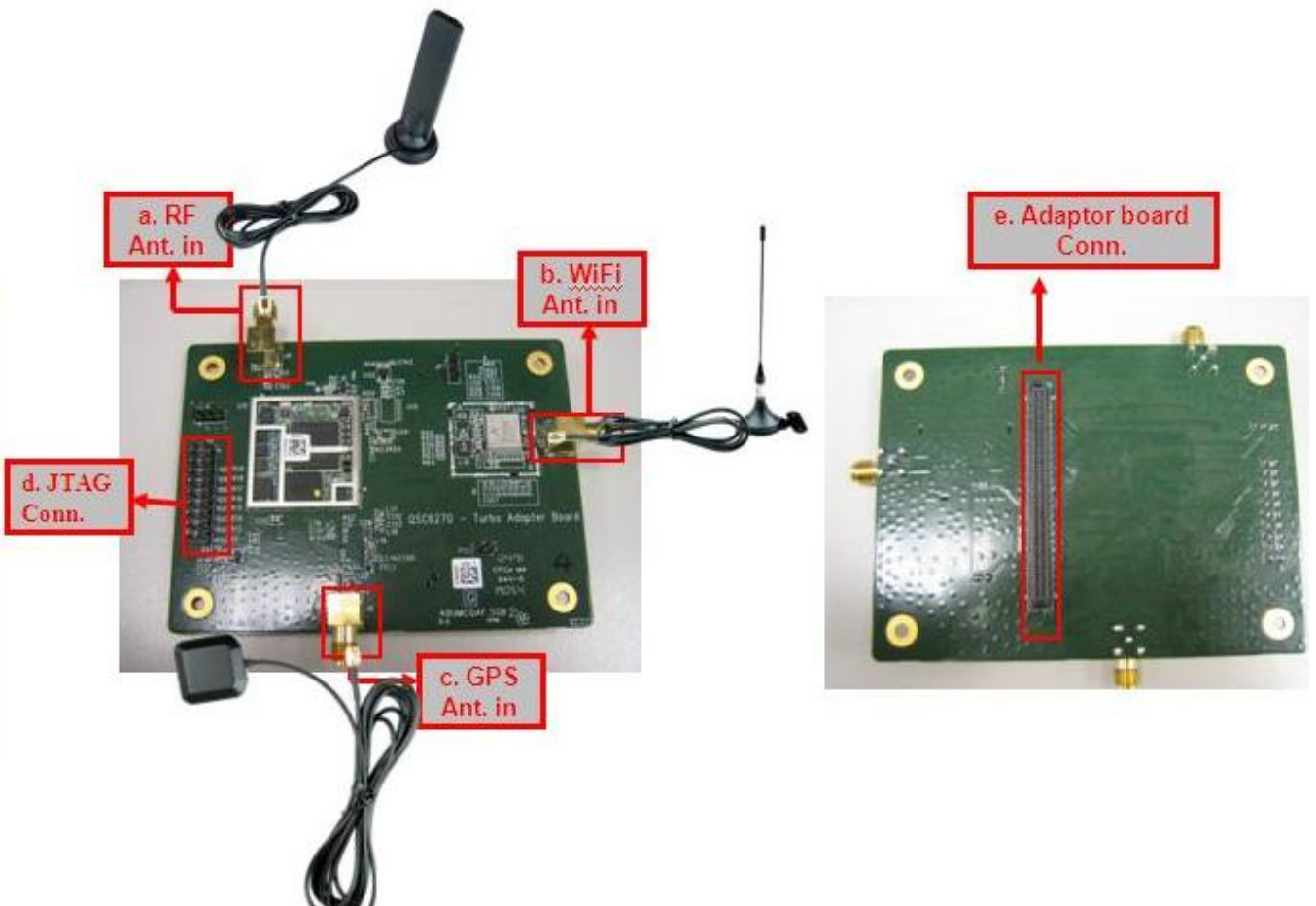
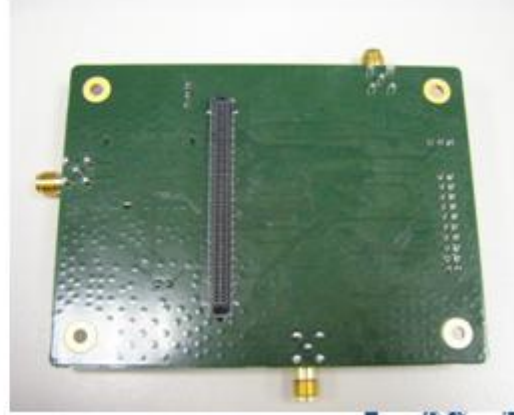
**Section B: Adapter Board user guide**

**B-1. Function description of all key components**

top



bottom



**a. RF Antenna in**

This is for the connection with GSM/UMTS antenna.



**b. Wifi Antenna in**

This is for the connection with WiFi antenna.



**c. GPS Antenna in**

This is for the connection with GPS antenna.



**d. JTAG connector**

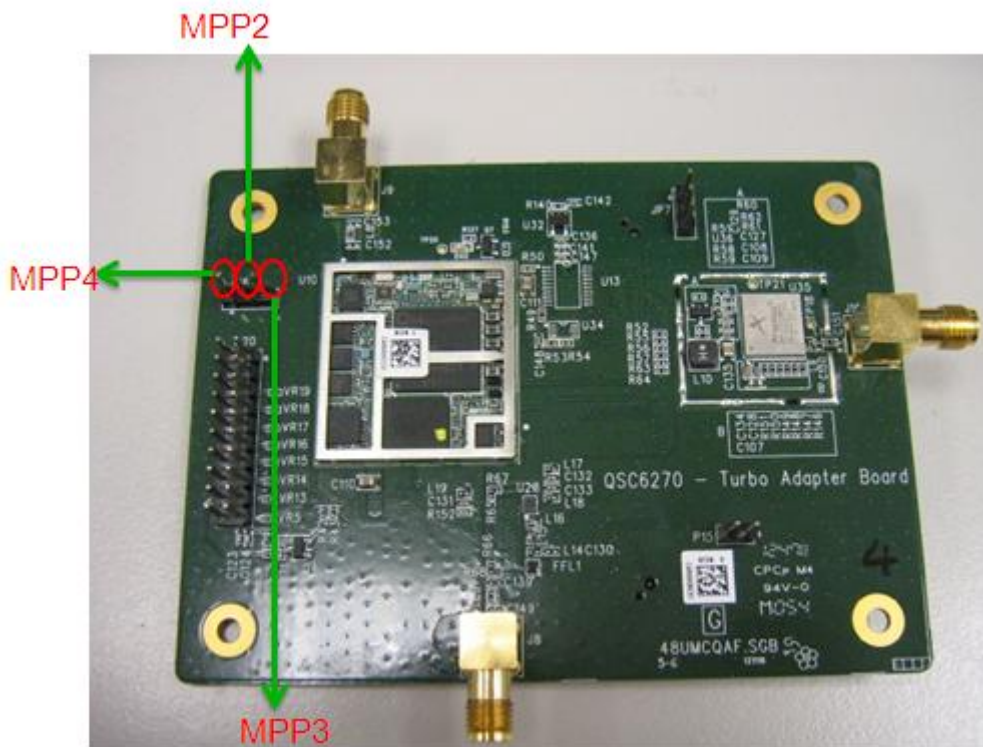
JTAG ICE connector.

**e. Adaptor board connector**

This is for the purpose of connecting main board and adaptor board.

**B-2 JUMP setting**

**B-2.1** Header JP6 is a test header of MPP1~MPP3.



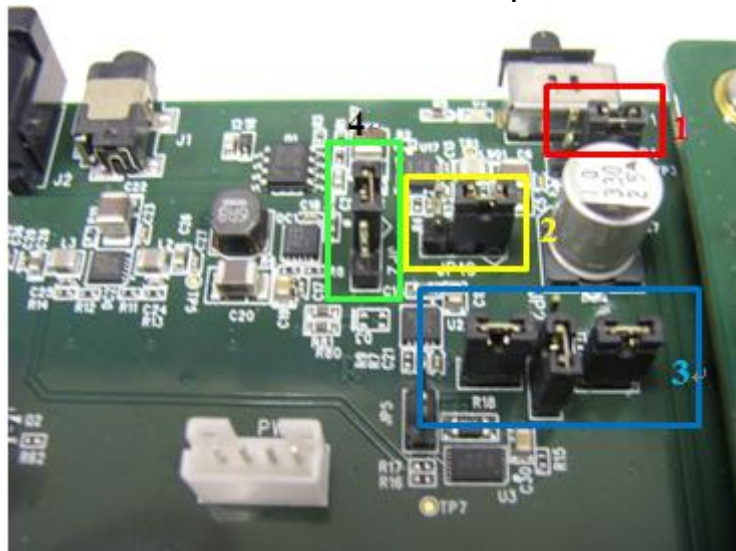
**Section 3: Jumper default setting**





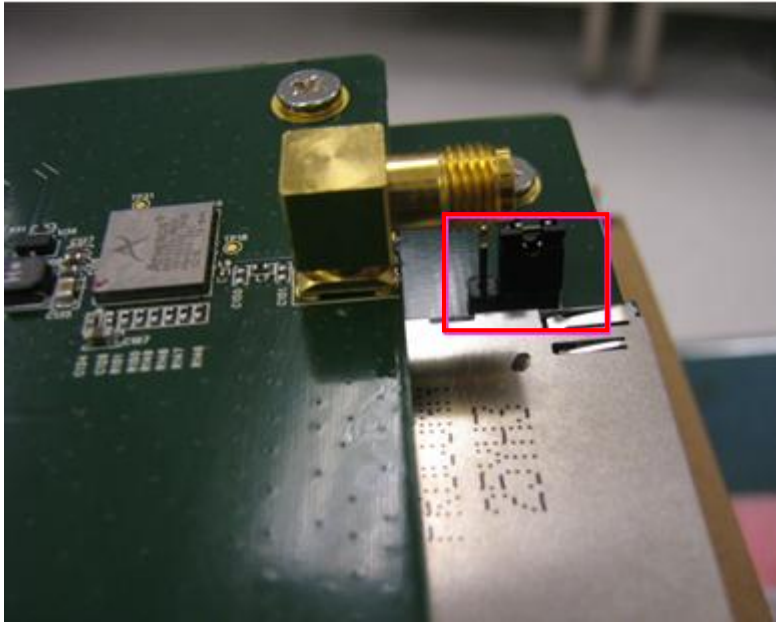
6270T whole system board

- : 1. Use battery as module VBAT supply.  
**(Please insert battery connector to PWR2 before power on module)**
- : 2. Use QSC6270T internal charger function.
- : 3. Connect Battery internal thermistor (10K ohm) to QSC6270T.
- : 4. Translated to 5V/3.3V/1.8V/1.2V from adapter.





## 7. Select SPI level shifter to 3.3V level.



### **Federal Communication Commission Interference Statement**

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.

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

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

**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.