

**TH80GA**  
**Wireless Motherboard Guide**

## **FEDERAL COMMUNICATIONS COMMISSION** **INTERFERENCE STATEMENT**

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 or more 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.

### **CAUTION:**

Any changes or modifications not expressly approved by the grantee of this device 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.

## End Product Labeling

This transmitter module is authorized only for use in device where the antenna may be installed such that 20cm may be maintained between the antenna and users. The final end product must be labeled in a visible area with the following: "**Contains FCC ID: WL6-TH8AG20GA4**"

## Information for the OEMs and Integrators

The following statement must be included with all versions of this document supplied to an

OEM or integrator, but should not be distributed to the end user.

- 1) This device is intended for OEM integrators only.
- 2) Please see the full Grant of Equipment document for other restrictions.

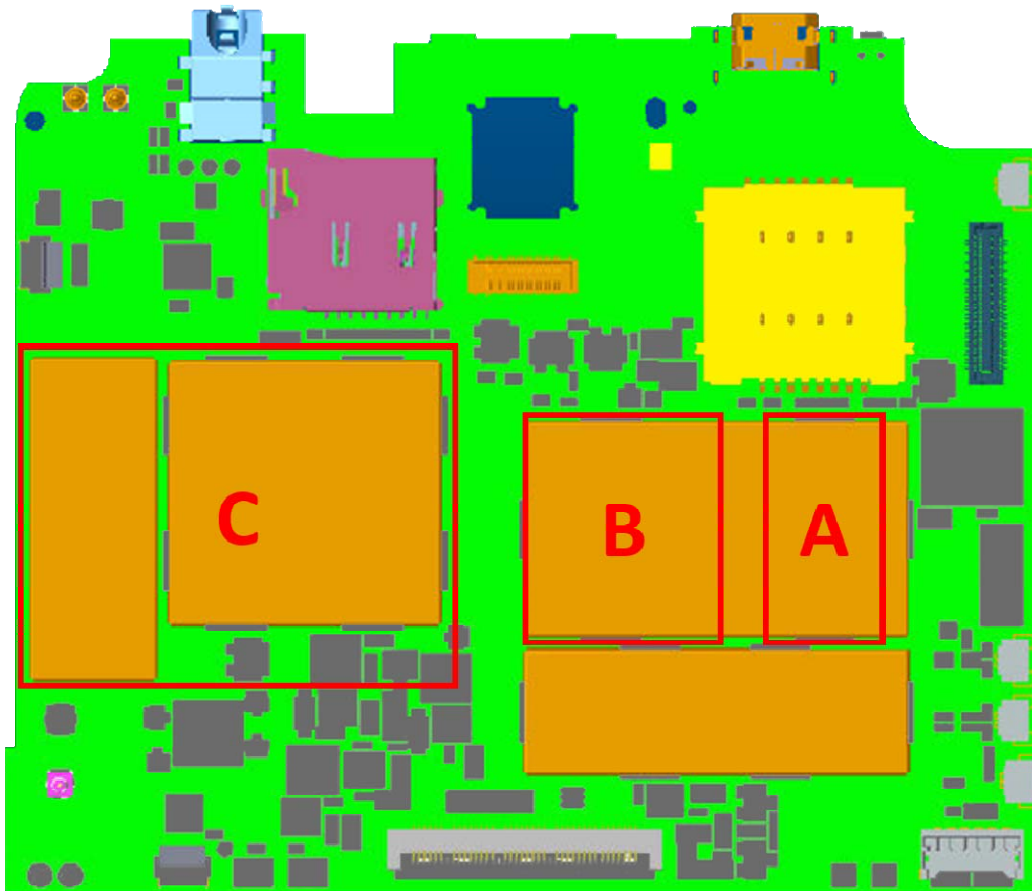
This radio transmitter **FCC ID: WL6-TH8AG20GA4** has been approved by FCC to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

## Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	SOUTH STAR	13H130-JJ5370	PIFA Antenna	2.71 dBi for 2.4GHz
2	SOUTH STAR	13H130-JJ5451	PIFA Antenna	0.46 dBi for 850MHz 1.32 dBi for 1900MHz

# Motherboard layout

## Main components



Mark	Component
A	eMCP
B	CPU
C	RF

System connectors



No.	Name
1	WiFi & GPS Antenna Connector
2	TP Connector
3	Battery Connector

4	LCD Connector
5	RF Antenna Connector

## I/O Ports and Buttons



No.	Name
1	Power Connector
2	Headphone plug
3	Micro SD card slot
4	Micro USB port

5	SIM card slot
6	SAR Connector

## Features

<b>Processor</b>	<ul style="list-style-type: none"> <li>● 64-bit Intel® Atom™ Processor</li> <li>● Quad-core, 1.2 GHz</li> </ul>
<b>Memory</b>	<ul style="list-style-type: none"> <li>● Default 1 GB</li> <li>● Up to 2 GB</li> </ul>
<b>Storage</b>	<ul style="list-style-type: none"> <li>● Default 8 GB</li> <li>● Up to 16 GB</li> </ul>
<b>Wireless</b>	<ul style="list-style-type: none"> <li>● Wi-Fi 802.11 b/g/n</li> <li>● Bluetooth 4.0 LE</li> <li>● 2G and 3G</li> <li>● HSDPA+ 21Mhz /HSUPA 5.76 Mbps</li> </ul>
<b>Touchscreen</b>	<ul style="list-style-type: none"> <li>● 8-inch IPS LCD</li> <li>● Resolution: 800x1280 pixels</li> <li>● 10-points multi-touch</li> </ul>
<b>Cameras</b>	<ul style="list-style-type: none"> <li>● Front: 2M</li> <li>● Rear: 5M</li> </ul>
<b>Battery</b>	<ul style="list-style-type: none"> <li>● Li-polymer</li> <li>● 3600 mAh</li> </ul>

<b>Input/Output</b>	<ul style="list-style-type: none"> <li>● 1 x micro-USB 2.0 OTG port (Type B)</li> <li>● 1 x Mic/head phone jack combo</li> <li>● 1 x micro-SD card slot (32G max)</li> </ul>
<b>Speaker &amp; Mic</b>	<ul style="list-style-type: none"> <li>● Build-in Speaker x 1</li> <li>● Analog MIC</li> </ul>
<b>USB charger</b>	<ul style="list-style-type: none"> <li>● DC Output: 5V/2A/10W</li> <li>● Input Voltage: 100 - 240VAC</li> <li>● Input Frequency: 47 - 63Hz</li> </ul>
<b>Operating system</b>	<ul style="list-style-type: none"> <li>● Android 6.0</li> </ul>
<b>Dimension (mm)</b>	<ul style="list-style-type: none"> <li>● 209 (W) x 125 (H) x 10.5 (D)</li> </ul>
<b>Weight</b>	<ul style="list-style-type: none"> <li>● 500 g (w/o adapter)</li> </ul>