# TA70CA1

# **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.

#### RF Exposure Warning

This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmittermust be installed to provide a separationdistance of at least 20cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

End-users and installers must be provide with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

#### **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: WI 6-TARC7CA1"

#### 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.
- Please see the full Grant of Equipment document for other restrictions.

This radio transmitter FCC ID: WL6-TABC7CA1 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.

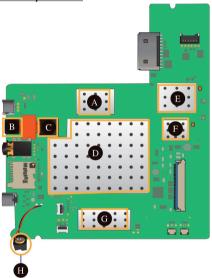
#### Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	JEM	13H130- JV6070	PIFA Antenna	2.98 dBi for 2.4GHz
2.	WGT	13H130- JV6050	PIFA Antenna	2.48 dBi for 2.4GHz

Note: The antenna connector is I-PEX type.

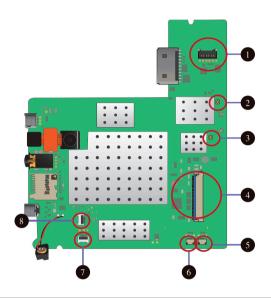
# **Motherboard layout**

### Main components



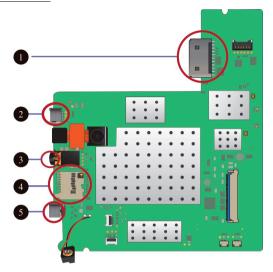
No.	Name	No.	Name
Α	Charger IC	Е	WiFi/BT IC
В	Front facing camera	F	GPS IC
С	Rear facing camera	G	Audio Codec
D	CPU+PMIC+DDR+EMMC	Н	Microphone

## System connectors



No.	Name	No.	Name
1	Battery Connector	5	Speaker Connector
2	WiFi Antenna Connector	6	Speaker Connector
3	GPS Antenna	7	Side Key FPC
3	Connector	′	Connector
4	LCD Connector	8	TP Connector

## I/O Ports



No.	Name	No.	Name
1	3G card slot	4	Micro SD card slot
2	Micro USB port	5	Micro HDMI port
3	Headphone plug		

# Features

Processor	<ul><li>Intel Clovertrail+ Z2520</li><li>Up to 1.2GHz, Dual core</li></ul>
Memory	<ul><li>8bit, LP DDR2 Mobile RAM PoP</li><li>1GB / 2GB (optional)</li></ul>
Storage	Single eMMCv4.4.1     Default 8GB
Wireless	<ul> <li>Wi-Fi 802.11 b/g/n</li> <li>Wi-Fi hotspot</li> <li>Bluetooth 2.1+EDR support</li> </ul>
Display	LVDS interface Resolution: 1024(H) × 3 (RGB) × 600(V) pixels Support 5-points multi-touch
Cameras	<ul> <li>Front camera: 2.0 M</li> <li>➤ MIPI-CSI</li> <li>➤ Mirror mode</li> <li>➤ Support 4:3 aspect ratio</li> <li>➤ Support Indicate</li> <li>Rear camera: 5.0 M</li> <li>➤ MIPI-CSI</li> <li>➤ Normal non-mirror mode</li> <li>➤ Support 16:10 aspect ratio</li> <li>➤ Auto-focus</li> </ul>

Input/Output	<ul> <li>1 x micro-USB 2.0, OTG port (Type A/B)</li> <li>1 x Mic/head phone jack combo</li> <li>1 x micro-HDMI 1.4</li> <li>1 x micro-SD card slot (128M-32G)</li> <li>1 x 3G card slot</li> </ul>
Speaker & Mic	<ul><li>Build-in Speaker x 2</li><li>Internal Analog MIC x 1</li></ul>