ThunderSoft®

ThunderSoft
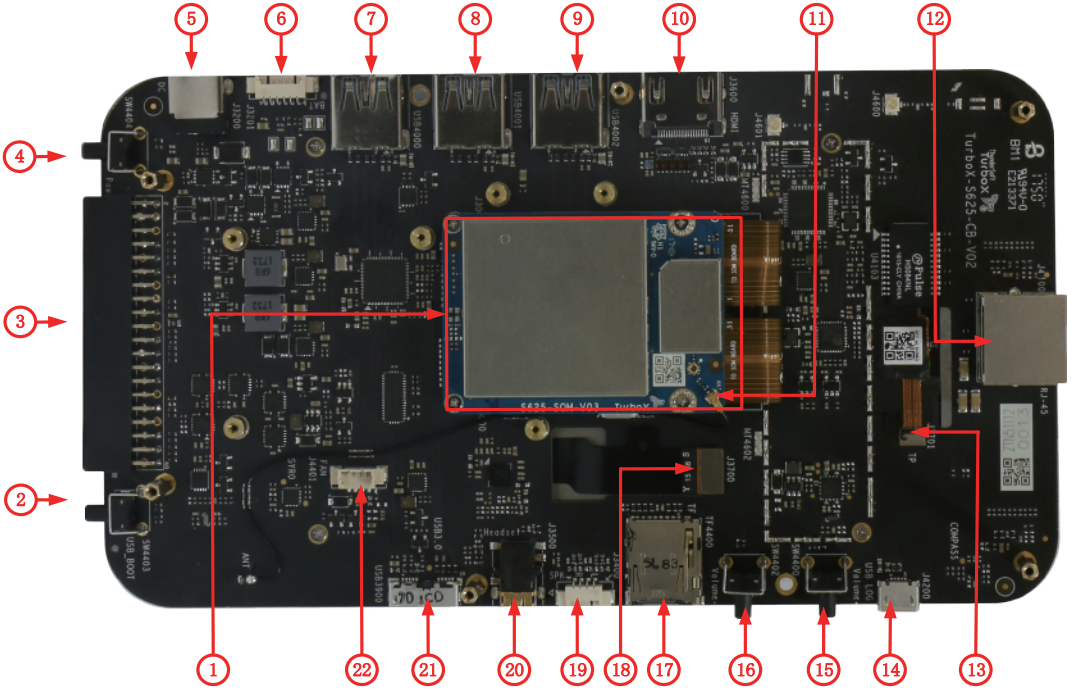TurboX® S625 EVB

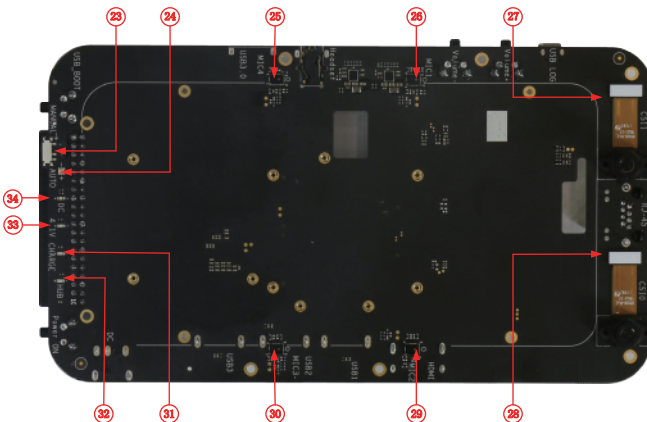Snapdragon™ 625 Processor-based Tiny System on Module

Quick Start Guide
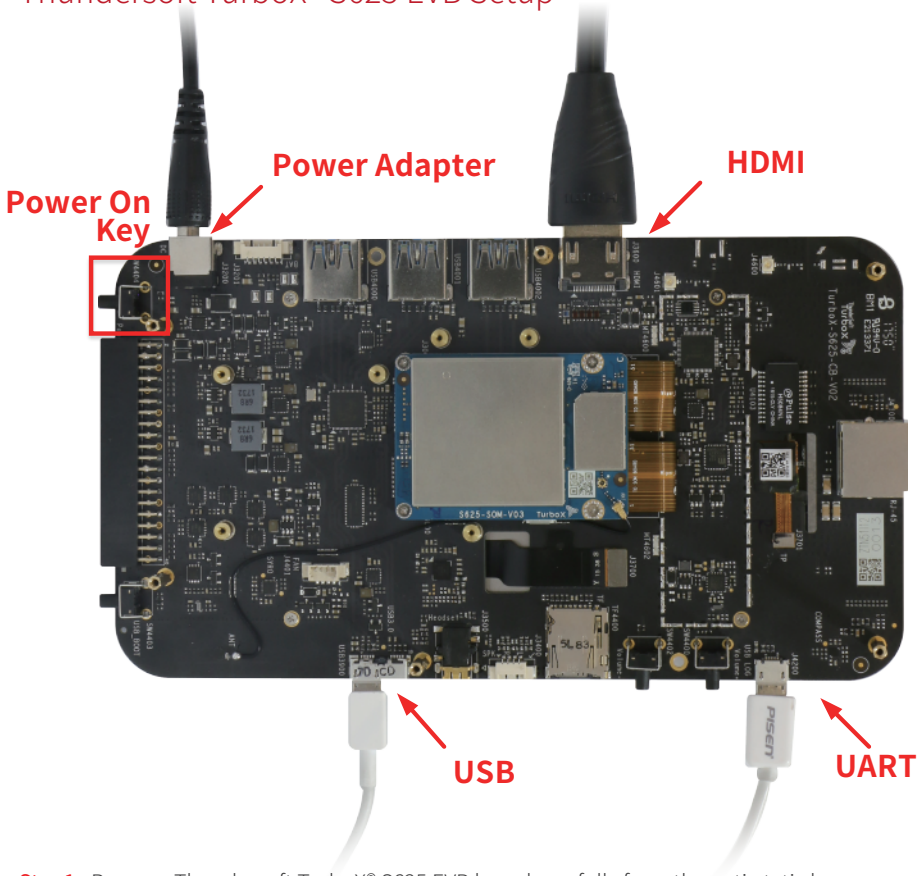
Top View of Thundersoft TurboX® S625

1. Thundersoft TurboX® S625 SOM
2. Force USB Boot Key
3. General Purpose Header
4. POWER ON Key
5. 12V DC Jack
6. Battery
7. USB 3.0 Type A 1
8. USB 3.0 Type A 2

9. USB 3.0 Type A 3
10. HDMI OUT Type A
11. WLAN ext. ant.
12. 10Base/100Base Ethernet
13. Touch Panel
14. Debug UART
15. Volume Up Key
16. Volume Down or Reset Key

17. TF Card
18. LCD
19. Speakers
20. 3.5mm CTIA Header Audio Jack
21. MicroB USB3.0
22. Fan

Bottom View of Thundersoft TurboX® S625

23. Switch for Power on mode
24. Status LDE
25. DMIC 1
26. DMIC 2
27. Camera CSI 1
28. Camera CSI 0
29. DMIC 3
30. DMIC 4
31. Charge LED
32. USB HUB LED
33. 4.1V LED
34. 12V LED

Thundersoft TurboX® S625 EVB Setup

Power On Key

Power Adapter

HDMI

USB

UART

Step1: Remove Thundersoft TurboX® S625 EVB board carefully from the anti-static bag

Step2: Assemble IMX214 Camera to the corresponding as show Picture.

Step3: Connect Thundersoft TurboX® S625 EVB to Display with HDMI.

Step4: Connect 12V, 2.0A Power Adapter to the Thundersoft TurboX® S625 EVB.

Step5: Press power button for 4 seconds, the board will begin to boot-up automatically.

Step6: Connect USB or UART to debug if needed.

Thundersoft TurboX® S625 EVB Support

How to download documentation and software

- To access the documentation (schematics, user guides, datasheets, programming guides, tech notes…), platform BSP software and more, please registry on:

  www.thundercomm.com.

- If you require more information or assistance, you can contact us at:

  https://www.thundercomm.com/contact-support

- Thundercomm also provides technical information on Snapdragon processors at:

  https://www.thundercomm.com/resources

- If you require additional technical support for your Thundersoft TurboX® S625 EVB you can easily purchase a block of technical support hours from the thundercomm store:

  http://store.thundercomm.com/collections/technical-support-packages

Thank you for purchasing the Thundersoft TurboX® S625 EVB.

Any questions, you can send email to contact us.

Email: service@thundercomm.com

The Thundercomm Support Team

The device has been evaluated to meet general RF exposure requirement. TurboX S626 is a moudule without antenna,It is recommended to use type of antenna :pcb antenna gain:4dbi   Antenna manufacturer: shenzhen bats wireless technology co., LTD

FCC statements:

This device complies with part 15 of the FCC rules. Operation is subject to thefollowing two conditions: (1) this device may not cause harmful interference, and (2)this device must accept any interference received, including interference that maycause undesired operation.

NOTE: The manufacturer is not responsible for any radio or TV interference causedby unauthorized modifications or changes to this equipment. Such modifications or changes could void theuser's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for aClass B digital device, pursuant to part 15 of the FCC Rules. These limits aredesigned to provide reasonable protection against harmful interference in aresidential installation. This equipment generates uses and can radiate radiofrequency energy and, if not installed and used in accordance with the instructions,may cause harmful interference to radio communications. However, there is noguarantee that interference will not occur in a particular installation. If thisequipment does cause harmful interference to radio or television reception, whichcan be determined by turning the equipment off and on, the user is encouraged totry 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 thereceiver is connected.
-Consult the dealer or an experienced radio/TV technician for help.

A certified modular has the option to use a permanently affixed label, or an electronic label. For a permanently affixed label, the module must be labelled with an FCC ID: 2AOHHTURBOXSOMS626. The OEM manual must provide clear instructions explaining to the OEM the labelling requirements, options and OEM user manual instructions that are required

For a host using a this FCC certified modular with a standard fixed label, if (1) the module's FCC ID is notvisible when installed in the host, or (2) if the host is marketed so that end users do not have straightforward commonly used methods for access to remove the module so that the FCC ID of the module is visible; then an additional permanent label referring to the enclosed module:

"Contains Transmitter Module FCC ID: 2AOHHTURBOXSOMS626 or "FCC ID: 2AOHHTURBOXSOMS626 " must be used. The host OEM user manual must also contain clear instructions on how end users can find and/or access the module and the FCC ID.

Host product is required to comply with all applicable FCC equipment authorizations regulations, requirements and equipment functions not associated with the transmitter module portion. compliance must be demonstrated to regulations for other transmitter components within the host product; to requirements for unintentional radiators (Part 15B). To ensure compliance with all non-transmitter functions the host manufacturer is responsible for ensuring compliance with the module(s) installed and fully operational. If a host was previously authorized as an unintentional radiator under the Declaration of Conformity procedure without a transmitter certified module and a module is added, the host manufacturer is responsible for ensuring that the after the module is installed and operational

the host continues to be compliant with the Part 15B unintentional radiator requirements. Since this may depend on the details of how the module is integrated with the host,

we suggest the host device to recertify part 15B to ensure complete compliance with FCC requirement: Part 2 Subpart J Equipment Authorization Procedures , KDB784748 D01 v07, and KDB 997198 about importation of radio frequency devices into the United States. Please use PCB antenna with 4 dBi when the modular used the in the end product.If the end userdidn't use the required antenna, it may need to have FCC change.

CE statements:

Do not use the moudule in the environment at too high or too low temperature, never expose the moudule under strong sunshine or too wet environment.
The suitable temperature for the product and accessories is -20℃-80℃.

RF exposure information: The Maximum Permissible Exposure (MPE) level has been calculated based on a distance of d=20 cm between the device and the human body. To maintain compliance with RF exposure requirement, use product that maintain a 20cm distance between the device and human body.

Receiver category:1

BT Maximum output power: 9dBm; BT Frequency band: 2402~2480 MHz;
Wi-Fi Max Output Power: 19 .9dBm (2.4G); 12 dBm (5G);
Wi-Fi Frequency Band: 2412~2472 MHz (2.4G); 5150~5250 MHz, 5725~5850 MHz (5G).
5150~5250 MHz can be used indoor only.

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AT	BE	BG	HR	CY	CZ	DK
EE	FI	FR	DE	GR	HU	IE
IT	LV	LT	LU	MT	NL	PL
PT	RO	SK	SI	ES	SE	UK

EU Regulatory Conformance

Hereby, Thundercomm Technology Co., Ltd declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU.
For the declaration of conformity, visit the Web
sitewww.thundercomm.com./certification.

CE