



# SuperTT Dongle



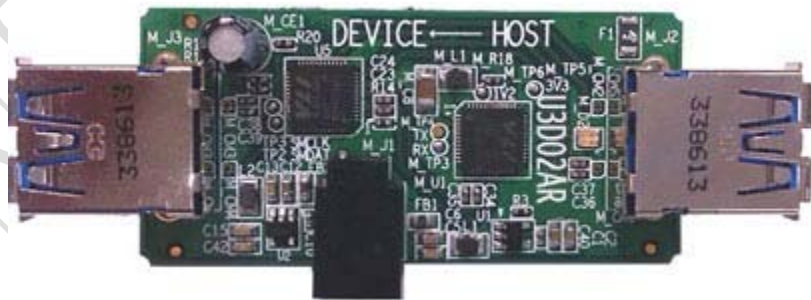
User Manual

SuperTT Dongle

EPU3D02ARSM

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## SuperTT Dongle

### 1. Introduction

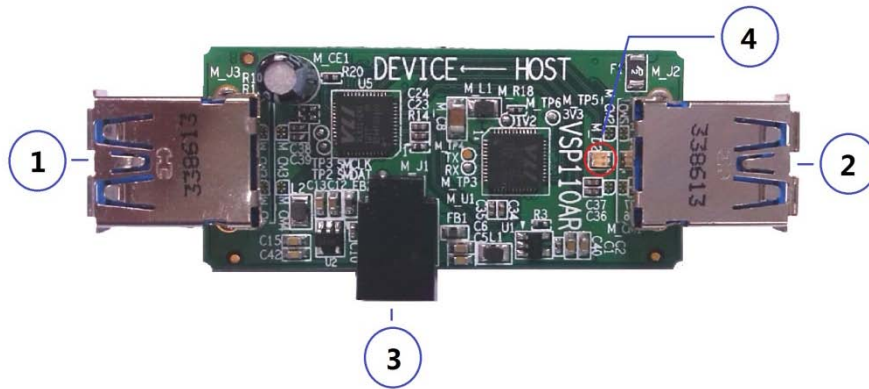
EPU3D02ARSM is a new-generation USB 3.0 dongle integrated with U3TT technology designed by VLI Beijing System Product Division. EPU3D02ARSM can convert the USB 2.0/1.1/1.0 devices connected on the downstream port to USB 3.0 devices, allowing these USB 2.0/1.1/1.0 devices to use the upstream SuperSpeed signal path. EPU3D02ARSM can use only SuperSpeed path on the upstream facing port when connected to USB 3.0 host, so it is easy to use Active Optical Cable (AOC) to extend the transmission distance of USB 2.0/1.1/1.0 devices to more than 100 meters.

#### *Feature List*

- The downstream and upstream ports are compatible with USB 3.0 standard
- Plug & Play support
- No need for driver
- Single 5V power supply, self-power
- Downstream and upstream port with USB 3.0 Standard-A receptacle
- Upstream port supports USB 3.0 AOC and active power supply for USB 3.0 AOC
- Upstream port can connect to USB 2.0/3.0 host/hub
- Downstream port supports USB 3.0/ 2.0 devices/hubs
- In system firmware upgrading support
- Energy-saving mode supported
- Double-color LED for state indication

### 2. Product Specification

#### *Port Definition*

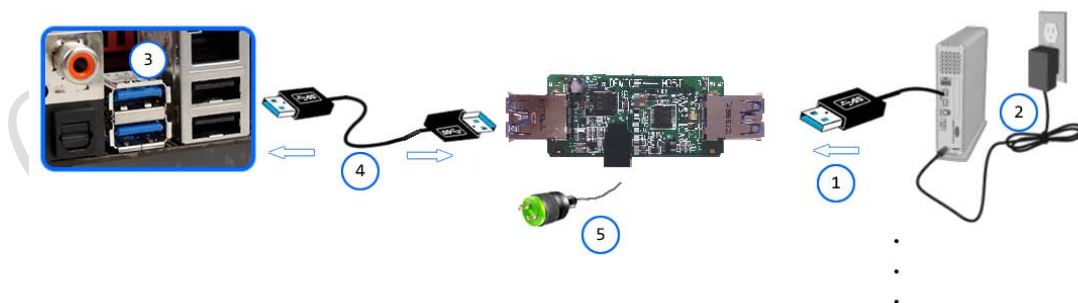


1. USB 3.0 downstream facing port
2. USB 3.0 upstream facing port
3. 5V DC Jack
4. Dongle status double color LED

### 3. Hardware Setup

EPU3D02ARSM can be powered by external DC only. The external DC adaptor should have capacity to provide more than 1.2 amperes.

The upstream port should be connected to the host/hub using standard A-A USB 3.0 cable or AOC.



- 1) Connect USB device to dongle downstream port.
- 2) If the USB device is self-powered, connect the external power of the device.
- 3) Connect the standard USB 3.0 A-A cable to the USB 3.0 host (or hub).
- 4) Connect the standard USB 3.0 A-A cable to the upstream port of the



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dongle.

- 5) Connect the external +5V DC power of the dongle.

Notes: the sequence of the steps is irrelevant.

### 4. Troubleshooting Guide

1. Device could not be enumerated by host

Checking items listed below to clear this issue.

- a. Check your hardware, make sure it is setup as described in this guide
- b. Check if USB 3.0 hub and USB 2.0 hub have been enumerated
- c. Check your USB device and host, make sure they work normally
- d. Check the power, make sure the voltage is 5V and the green LED of the corresponding port is off
- e. Check the self-powered USB device power, make sure it is turned on
- f. Re-power the dongle, make sure the red LED flashes twice. If not, the firmware or hardware may be broken.

2. Device does not work in USB 3.0 Mode

- a. Check your host, make sure it is a USB 3.0 host and is not disabled
- b. Check your cable between host and dongle, make sure it is a qualified USB 3.0 cable
- c. Check the USB Hub between host and dongle, make sure it is a USB 3.0 Hub and is not disabled
- d. Check if the USB 3.0 hub and USB 2.0 hub has been enumerated by the host

### 5. Frequently Asked Questions (FAQs)

- Q: Can I connect USB 3.0 device on the downstream port?

A: Yes. If you connect USB 3.0 device on the downstream port, the

SuperSpeed signals will not transmit through the SuperTT but directly to the



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USB 3.0 hub IC.

- Q: What should I do if the devices are very far away from the host?

A: If the distance between the devices and host is more than 7m, it highly recommended using AOC on the upstream port. The length of AOC can be up to 100m.

- Q: How should I choose the adapter for EPU3D02ARSM?

The DC adopter should have the capacity to output more than 1.2 amperes to provide enough power on the downstream port. Otherwise some power hungry devices such as USB hard disk diver will not function properly.

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### NOTE:

- 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.
- 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.
- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.