# **RDKB RPI Setup Information**

- Required Hardware
- USB to Serial Debug converter Link and set up
- Dongles Information Links

## **Required Hardware**

The equipment listed below is required for complete functionality of the standalone environment. The only devices that are tested to work properly in this solution are the specific brands and models listed below. Support for other types of equipment is not available at this time.

- 1. Raspberry Pi 3 b or Raspberry Pi 3 b+, RPI 4B device
- 2. Standard USB keyboard
- 3. Television set/monitor with HDMI input.
- 4. Ethernet cables
- 5. USB-Ethernet Adapter
- 6. SD Card ( Preferably 8GB or more )
- 7. Tp-link dongles
- 8. USB to Serial Debugging Adaptor ( Needed only for serial debugging )

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RPI 3B

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RPI 3B+

#### USB to Serial Debug converter Link and set up

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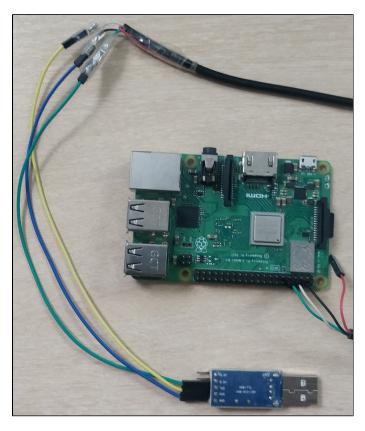
Purchase Link(PL2303) - USB to Serial

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**RPI 3 Pin Diagram** 

The above mentioned adaptor (PL2303) will support Linux host machine ( ubuntu ) with proper connection between RPI (for both 3B and B+) as below

- Connect GND (Pin 6) of RPI with PL2303 GND Pin
- Connect GPIO14 (Pin 8) of RPI with PL2303 RX Pin
- Connect GPIO15 (Pin 10) of RPI with PL2303 TX Pin



After connection, please run minicom in host machine to establish serial connection with RPI

https://help.ubuntu.com/community/Minicom

Note: In usual, adaptor will have device name as ttyUSB0 after connected to host PC ( can be checked using dmesg command in host ). Please configure minicom accordingly.

## **Dongles Information Links**

- For xfinity-wifi 2g Purchase Link TP-LINK TL-WN823N
- For Private-wifi and xfinity-wifi 5g Purchase Link TP-Link AC1300

## Supported drivers for USB-to-Ethernet Adapters

- ASIX based drivers
- r8152 driver (realtek)

#### Validated USB-to-Ethernet Adapters

- Linksys ASIX AX88772 USB 2.0 Ethernet driver
- cable matters r8152 driver

If any additional driver support required, please edit the below cfg file to enable your driver.

 $https://code.rdkcentral.com/r/plugins/gitiles/rdk/components/generic/rdk-oe/meta-cmf-raspberrypi/+/refs/heads/rdk-next/recipes-kernel/linux/files/remove\_unused\_modules.cfg\\$