NVIDIA Jetson Orin AGX + CYW55573 Debian Package Bring-Up Steps

Draft version

About this document

Scope and purpose

This document provides the steps for debian package installation on Jetson Orin AGX + CYW55573 board to bring it up.

Intended audience

Internal

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1 Introduction

The steps outlined in the document describe how to install the Debian package in order to enable the WLAN module on the Jetson Orin AGX platform.

2 Pre-requisite

Make sure that you have installed the default kernel image that comes with Jetpack 5.0.2 and have the kernel version 5.10.105. Once this prerequisite is met, you may proceed with the instructions given below.

3   Hardware

- Jetson Orin AGX board
- CYW55573 M.2 module
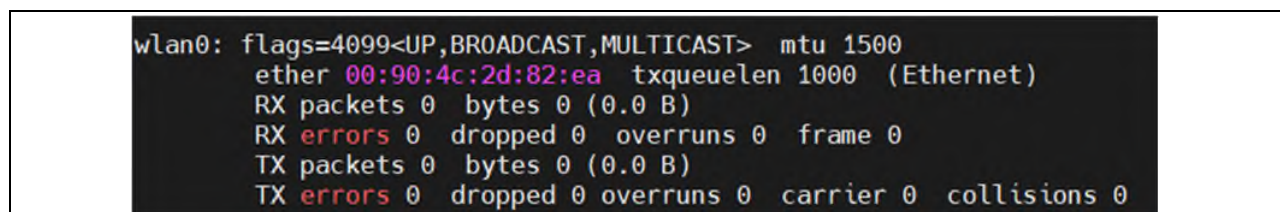

Figure 1   Hardware setup

4   Debian package bringup

1. Install the package cyw55573-jetson-orin-agx-1.0-1-arm64.deb

    ```
    sudo dpkg -i cyw55573-jetson-orin-agx-1.0-1-arm64.deb
    ```

2. Use the following command to check if the wlan0 interface is available:
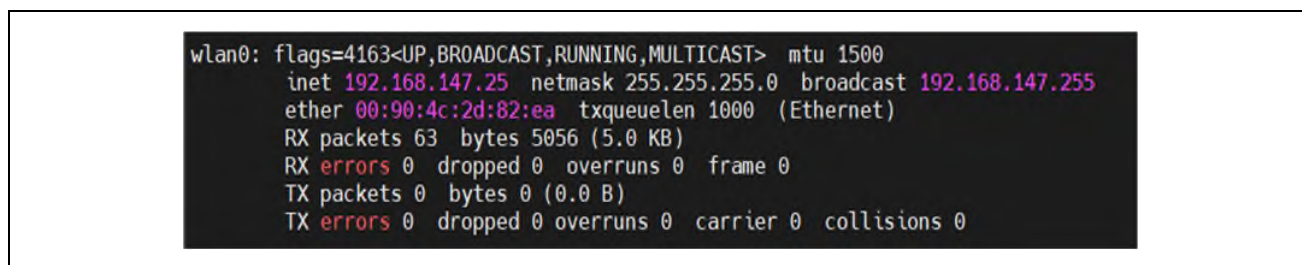
    ```
    ifconfig
    ```


Figure 2   Ifconfig output

3. To assign a static IP address to the wlan0 interface, use the command provided below:
    ```
    sudo ifconfig wlan0 192.168.47.25 up
    ```

4. The IP address subnet should match that of IP address of AP. Once you have assigned an IP address, check the output of the `ifconfig` command.

Figure 3   Ifconfig output after IP address assigned

5. Navigate to the /etc directory and modify the wpa_supplicant.conf file to match your Access Point settings.
6. The example below demonstrates how to configure an SSID e.g "JetsonSSID" with open mode in the Orin.

Figure 4   **wpa_supplicant.conf**

7. After modifying the wpa_supplicant.conf file with your Access Point's SSID and passphrase, execute the file to establish a connection.

```
sudo wpa_supplicant -B -i wlan0 -c /etc/wpa_supplicant.conf
```

8. If you encounter an error message similar to the one below, use the command provided to stop the wpa_supplicant service:

```
sudo rm -r /var/run/wpa_supplicant/
```


Figure 5   **Error message**

9. To view the status of your Wi-Fi connection, use the following command:

```
sudo wpa_cli status
```

Debian **package bringup**

Figure 6   Connection status -"connected" (wpa_state=COMPLETED)

Revision history

Document version	Date of release	Description of changes
Draft	03-March-2023	Debian pkg bringup steps.

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