



190h-1e-wifi-hotspot-v2-hl-YY-jm- 2024-6-17.odp

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We design, develop and manufacture AI
enabled smart rollators/walkers and
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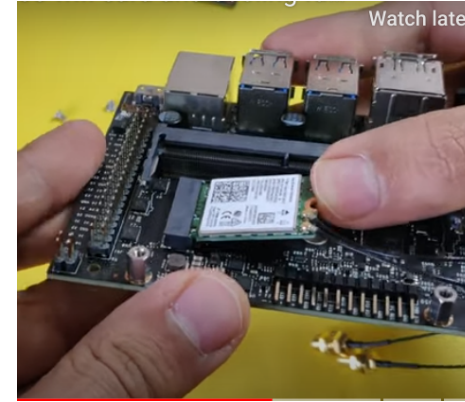
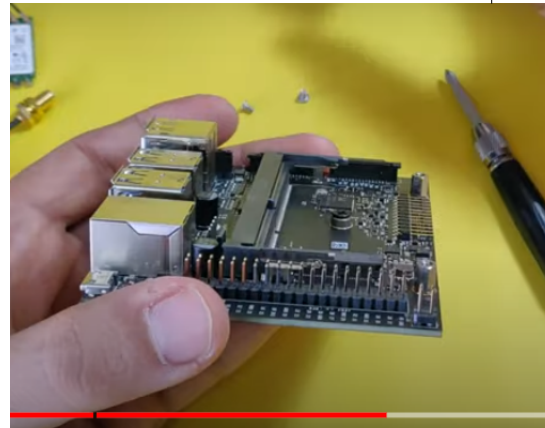
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June. 17, 2024



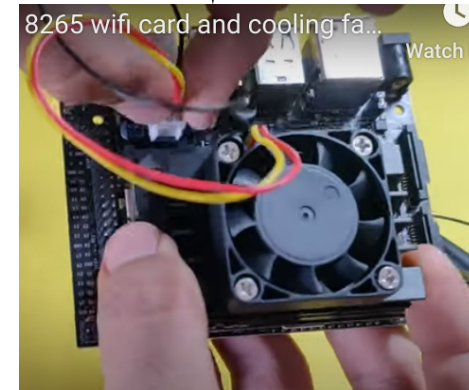
Installing Intel 8265 Wifi Card and FAN on Jetson NANO (3/18,2024)

https://www.google.com/search?q=how+to+install+intell+8265+card+on+jetson+nano&oq=how+to+install+intell+8265+card+on+jetson+nano&gs_lcrp=EgZjaHJvbWUyBggAEEUYOTIJCAEQIRgKGKABMgkIAhAhGAoYoAEyCQgDECEYC higATIJCAQQIRgKGKAB0gEKMjI0MTJqMGoxNagCALACAA&sourceid=chrome&ie=UTF-8#fpstate=ive&vld=cid:ef557009,vid:OOESeo9QH3s,st:0



Intel 8265 Wifi Module beneath the CPU/GPU module

CPU/GPU cooling FAN



25p91 usd Makeronics 8265AC/8265NGW Wireless NIC Module M.2 NGFF for Jetson Nano Support 2.4GHz / 5GHz 300Mbps / 867Mbps Dual Band WiFi and Bluetooth 4.2



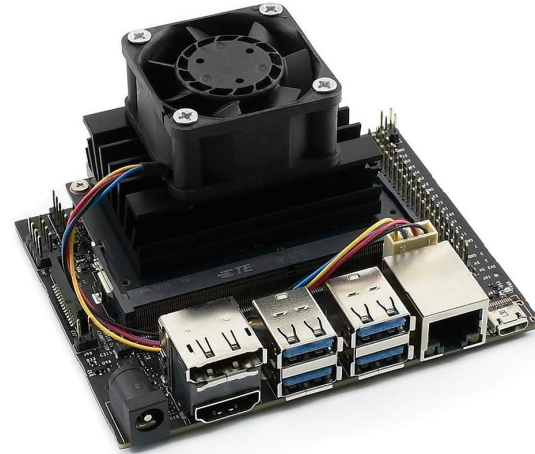
https://www.amazon.com/Makeronics-Wireless-Bluetooth-Assembly-Instruction/dp/B07X2NLL85/ref=sr_1_2_sspa?crid=PQPJ05355OP5&dib=eyJ2IjoiaMSJ9.Flrh0HTOtcNv-OfjezcaiLPwjT5CtgGr6htwQgeR7cARYkfPJwLszBul_ETLh6rbhxfH5rjyJf03wOEDLrmBShPVPOa8Q93zadbI7-2vQ7Z7imengHBG4flyshLVSIf940yHtVEcPotmvsinNtD1jbBEvWfVvmSKZChH2CvB2V9byQbzlgVWlpJAR_nMT-vVjkr2xZu6Mv4vcgy3yw1enqt6KdgnmsF8eATNO7Vjl.c5LE9jQSMua6O--KSehJv5FzqWMdqx4FIERAPw7BALM&dib_tag=se&keywords=intel+8265+wifi+kit&qid=1710823122&sprefix=intel+8265+wifi+kit%2Caps%2C147&sr=8-2-spons&sp_csd=d2lkZ2V0TmFtZT1zcF9hdGY&psc=1



Installing Cooling FAN on Jetson NANO (3/18,2024)

2 Pack Dedicated DC 5V Cooling Fan Compatible with NVIDIA
Jetson Nano Developer Kit and B01 Version PWM Speed
Adjustment Strong Cooling Air Fan

13p50 usd [https://www.amazon.com/dp/B07TC21414?
psc=1&smid=A2SA28G0M1VPHD&ref_=chk_typ_imgToDp](https://www.amazon.com/dp/B07TC21414?psc=1&smid=A2SA28G0M1VPHD&ref_=chk_typ_imgToDp)





Create Wifi Hot Spot on Jetson NANO (3/18,2024)

Wi-Fi Hotspot Setup - NVIDIA Jetson Developer Kits - YouTube

<https://www.youtube.com/watch?v=GAOvGAdwiHk&t=76s>



Search

13,407 views Premiered Oct 5, 2021

Setting up a Wi-Fi Hotspot on a Jetson Dev Kit is simple, but may configure the Hotspot, and how you would access the Hotspot fr

[00:00](#) Intro

[00:20](#) Network Manager Automatic Setup

[00:54](#) Configuration Workaround

[02:53](#) Jetson as Wi-Fi Router

[03:40](#) Network Manager Manual Configuration

[05:25](#) Connect to Jetson Wirelessly via SSH

[06:12](#) Overview of Command Line Wireless Configuration Tools

Amazon affiliate link for Intel 8265 wireless card and antennas:

<https://amzn.to/3A77tm0>

The demo on the youtube is running on a NVIDIA Jetson Nano with an Intel 8265 wireless card. The Jetson is running L4T 32.6.1 an Ubuntu 18.04 variant. The full JetsonHacks Amazon Storefront:

<https://www.amazon.com/shop/jetsonhacks>

Website: <http://jetsonhacks.com>

Github:

<https://github.com/jetsonhacksnano>

Twitter: [@jetsonhacks](#)



Configure Jetson NANO as Wifi AP Router (3/18,2024)

<https://chat.openai.com/c/1fe57388-4344-4a0a-a749-6509655e29ac>

1. Update your Jetson Nano:

Before starting, it's a good practice to update your system packages to their latest versions:

2. Install hostapd and dnsmasq:

These are the packages needed to set up the access point and DHCP server.

3. Configure hostapd:

Edit the hostapd configuration file:

4. Edit hostapd default configuration:

Edit the hostapd default file to point to the custom configuration file:

5. Configure dnsmasq:

6. Enable IP forwarding:

Edit sysctl.conf:

7. Configure IP tables:

Set up IP forwarding and NAT rules:

8. Save iptables rules:

9. Make iptables rules persistent:

Edit rc.local:

10. then reboot.

General reference for ubuntu machines Wifi AP router <https://chat.openai.com/c/3877592f-6c04-458d-8281-0e4b8df8bce6>

1. Check your wireless card compatibility:

Make sure your wireless card supports AP mode. Not all wireless cards support this feature.

2. Install necessary packages: hostapd dnsmasq

3. Configure DHCP server:

Edit the dnsmasq configuration file:

4. Configure HostAPD:

Create a configuration file for hostapd:

5. Update hostapd configuration:

Edit the hostapd default file:

6. Enable IP forwarding:

Uncomment the following line in /etc/sysctl.conf:

7. Start services:

8. Configure iptables (if needed):

If you want to share your internet connection, configure iptables:



Create Wi-Fi Hot Spot on Jetson NANO Using Commands (6/17,2024)

Step 1: Create the Wi-Fi Hot Spot by running:

```
$ sudo nmcli device wifi hotspot con-name USB-HS ifname wlan0 ssid jetbot-HS password 11111111
```

The Marked part could be modified as needed.

Note:

USB-HS is the internal name of the hotspot used by the system.

jetbot-HS is the name of hotspot recognized by the user.

And the password should be at least 8 characters.

When you run the command above, the hotspot should be automatically opened.

Step 2: Open and close the hotspot

The hotspot can be handelly open or closed by running:

```
$ sudo nmcli connection up USB-HS
```

```
$ sudo nmcli connection down USB-HS
```

Step 3 (Optional): Setting auto-activate the hotspot

The hotspot can be automatically opened when the system boots by editing its configure file:

1. Open the hotspot configure file by running:

```
$ sudo vim /etc/NetworkManager/system-connections/USB-HS
```

2.Change the 'autoconnect=false' under 'conenction' section inside the file into 'true'.

3. Add 'autoconnect = false' to the file of your current connected Wi-Fi file, this will make sure only the hotspot is automatically connected.

4. Restart the network manger by running:

```
$ sudo systemctl restart NetworkManager
```



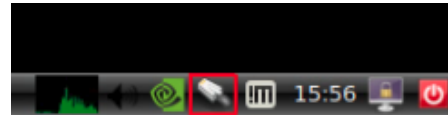
Create Wi-Fi Hot Spot on Jetson NANO Using GUI (6/17,2024)

1. Create a Wi-Fi Hot Spot by running:

- 1.1. (Start Menu) → Preference → Network Connections
- 1.2. Choose a Connection Type: Wi-Fi
- 1.3. Input the parameters below in the Wi-Fi tab;
Connection name: ctione-w100
SSID: ctione-w100
Mode: Hotspot
Band: Automatic (default)
Channel: default (default)
Device: wlan0() Choose the USB Wi-Fi module
Cloned MAC address: (empty) (default)
MTU automatic (default)
- 1.4. Choose the General tab and check if “Automatically connect to this network when it is available” is on
- 1.5. Choose Wi-Fi Security tab, choose WPA & WPA2 Personal, and type Password as “citone2024”
- 1.6. Push the Save button

2. Start the hotspot

- 2.1 Click the network icon at the bottom right of screen



- 2.2 Choose ctione-w100
ctione-w100 Wi-Fi network will start

Step 3 (Optional): Setting auto-activate the hotspot

Turn off auto activate of other Wi-Fi connection

- 3.1 (Start Menu) → Preference → Network Connections
- 3.2 Choose one of Wi-Fi connections
- 3.3 Choose the General tab and check off “Automatically connect to this network when it is available”

Repeat 3.2 and 3.3 to turn off not hotspot connection's auto-activate

The hotspot Wi-Fi provides: 10.42.0.0/24 network by default and W100's IP address is 10.42.0.1



Reference URL (6/13,2024)

Wi-Fi Hotspot Setup – NVIDIA Jetson Developer Kits

<https://jetsonhacks.com/2021/10/05/wi-fi-hotspot-setup-nvidia-jetson-developer-kits/>

Creating Wifi AP Hotspot on Jetson Nano

<https://forums.developer.nvidia.com/t/creating-wifi-ap-hotspot-on-jetson-nano/72982>



Discontinued Market Status of Intel 8265 and Its Replacement AX200NGW (7/8-6/13,2024)

<https://www.intel.com/content/www/us/en/products/sku/94150/intel-dual-band-wirelessac-8265/specifications.html>

There is, in fact, a replacement module that represents a good upgrade. The Intel AX200 module (~US\$20 on Amazon:

<https://www.amazon.com/Intel-Network-AX200-NGWG-NV-AX2002230-Retail/dp/B07ZVYKRW9>)

adds support for Wireless-AX and WiFi 6 and improves speed potential to 2.4Gb/s.



for Intel Dual Band Wireless
AX200NGW - WiFi 6 AX200 WiFi
Adapter - 2.4GHz 574Mbps/5G...

4.6 ★★★★★ 230

\$21⁰⁴