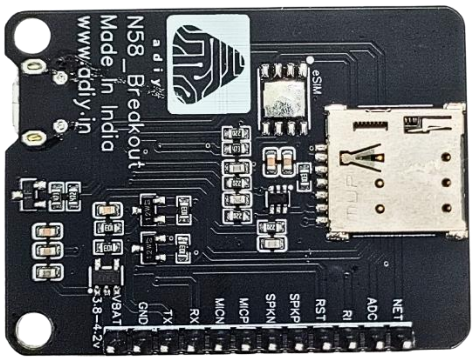
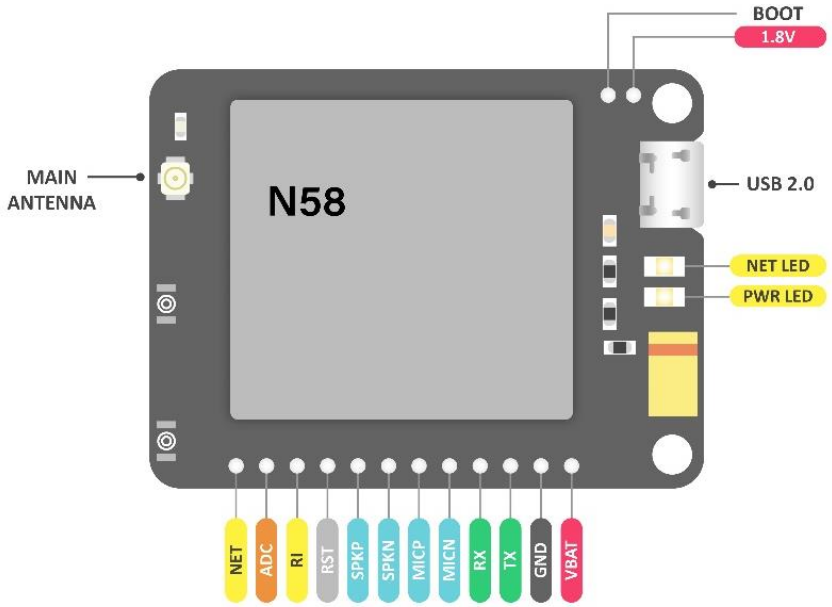
ADIY N58 LTE
Breakout Board User Guide



Description:

ADIY N58 LTE breakout board is designed to test the N58 module. It provides one power interface, one UART interfaces, one USB interface, one SIM card interface, one antenna interface. You can connect it to a power supply and a computer through the USB cable or serial-to-USB cable to communication functions of the module.



VBAT: 3.4 V to 4.3 V, typical value: 3.8 V

Push-pull Nano SIM CARD Holder available on BACK SIDE.

POWER ADC AUDIO INTERFACES INDICATION
GND UART CONTROL

Pin Functions:

1. VBAT: 3.4 V to 4.3 V, typical value: 3.8 V / 2A
2. GND connected Ground
3. UART (TX, RX): Logic level transmitter and received communication from external controller or any serial communication module
4. Audio and speaker pinouts (MICN, MICP, SPKN and SPKP)
5. RST: Reset the module
6. RI: Ring signal output pin
7. ADC: 12-bit ADC channel which can be used for temperature detection and other related detections.
8. NET: Network indication signal
9. PWR: power LED indicator
10. Main antenna: Main antenna is for GSM, GPRS, TCP/UDP, FTP, HTTP and MQTT data communicating
11. USB: N58 can implement program download, data communications, and debugging through the USB interface. Only slave mode is supported for USB of the module
12. SIM connector: Nano SIM card connector.

Communication through USB Port:

Perform the following steps to commission N58 through USB port:

Step 1: Use the DC power supply power, power up the Adiy N58 breakout and connect it to the computer through USB and the module starts up.

Step 2: Install the N58 USB drivers on your computer.

https://adiy.in/wp-content/uploads/2024/08/Neoway-USB-Drivers.zip

1. Decompress the N58 tool package that Neoway provides.
2. Open the folder of the driver for your OS.
3. Double-click the DPInst execution file and install the drivers by following the installation Wizard.

Step 3: For communication we use QCOM tool/ Arduino IDE software.

Installing the Arduino IDE Software:

You can install this software by clicking on the link below: -

https://www.arduino.cc/en/software

According to your operating system you can select OS from given options. In my case it's Windows 10.

Installing the QCOM tool Software:

You can install this software by put the link below in chrome: -

https://github.com/ADIY-TECH/QCOM-tool.git

How to use N58 breakout board:

Step 1: Before supplying power, carefully inspect the board's pinouts and component labels. Ensure the SIM card is inserted correctly, and the antenna connections are secure. Also check the driver for N58 is installed.

Step 2: Provide a 3.8V power supply to the VBAT pin of the module. This should automatically power on the module.

Step 3: Check the network LED. If LED is ON, the network is available. For more detailed information, refer to the AT commands manual.

Step 4: Connect the board to your computer using a USB cable.

Step 5: Check if you have already installed N58 USB Drivers on your computer.

Step 6: Then open device manager in your computer to check the COM port for AT commands.

Step 7: Select the same COM port in QCOM tool/ Arduino IDE software and start sending AT commands.