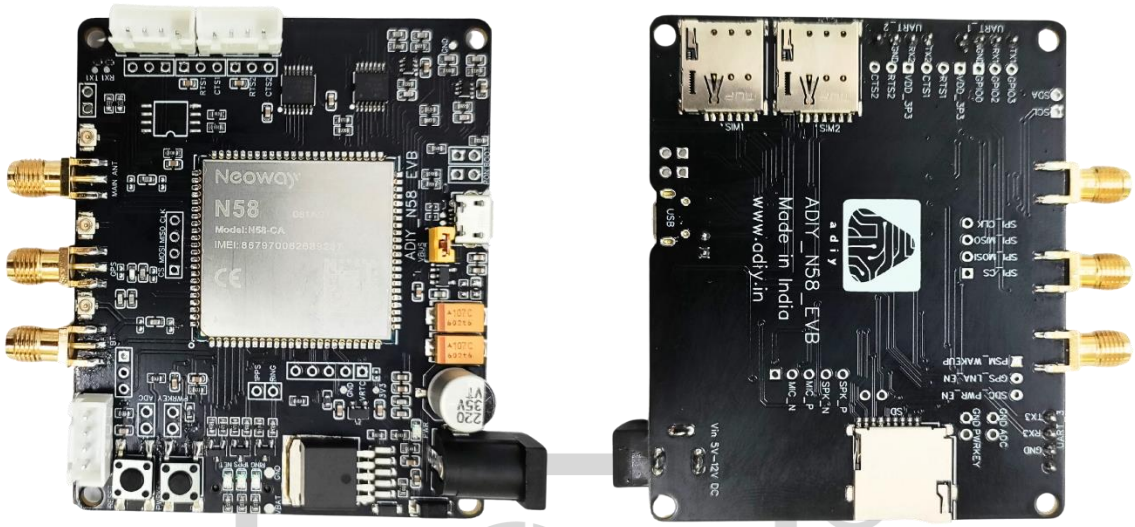
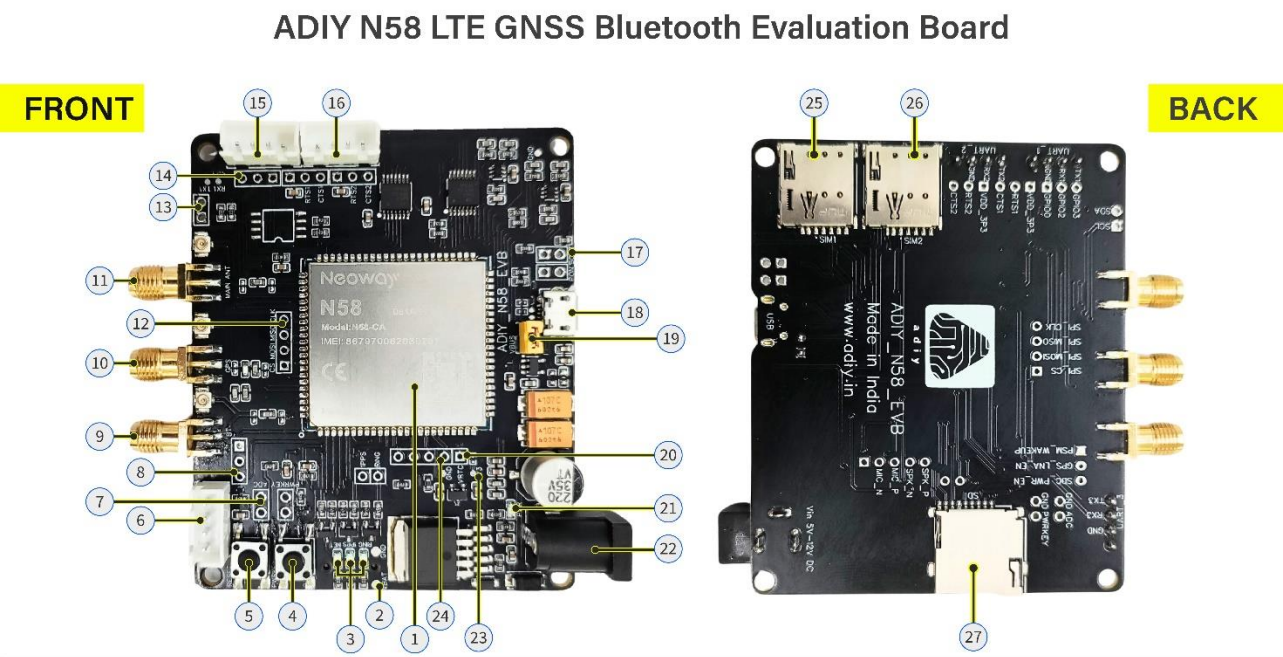
ADIY N58 LTE GNSS Bluetooth Evaluation Board User Guide



Neoway N58 is ideal solution for M2M and IoT applications N58 is an industrial LTE module that is developed based on the UNISOC UIS8910DM platform. This module supports GSM, FDD-LTE (Cat 1), and TDD-LTE (Cat 1) network modes. It provides a variety of hardware interfaces, supports audio and video functions, Wi-Fi positioning, and BT/BLE wireless connectivity, and supports GNSS (optional). This module is applicable to IoT communications devices, including wireless meter reading terminals, in-vehicle terminals, handheld POS terminals, and industrial routers.

This module has excellent RF performance, and it supports low power consumption and ultra-wide operating temperature range. N58 integrates various network protocols and provides industry-standard interfaces. With abundant functionalities and USB serial drivers for Windows 7/8/8.1/10, Linux, and Android, N58 is an optimal option for energy metering, telematics, industrial router, industrial PAD, video surveillance, environmental monitoring, etc.

Pin Diagram:



Communication connection:

- Neoway communication many chip boards through communicate ex: CP210X, FT2232, PL2303, CH340,
- To use the UART function, install the USB-to-UART driver first.
- Serial UART is connected to the N58 EVB through 4-pin cables, which have been soldered to the power board in a sequence of red, black, yellow, and green at one end and should be inserted into the plug of the EVB at the other end.
- Module TXD, outputs of CMOS level RXD pin
- Module RXD, outputs of CMOS level TXD pin
- N58 Module GND to UART Module GND (common Ground)

Through Serial Port:

- Initially it'll come open CPU firmware, we can change the AT firmware then communicate.
- **Step 1:** Use the 5V-12V/3A adapter to supply power, power up the N58 EVB and connect it to the computer through the M5X0-PWR board or any serial communication boards (Ex:CP2102).

  Hold the PWR_KEY button for 1 second, and the Neoway N58 module starts up. Either jumper can keep it, it's automatically N58 Module can be Turn ON
- **Step 2:** Install the serial UART drivers

  Obtain the driver package from Neoway FAE or download it from the internet.
- **Step 3:** Start the Qcom_Tool either any serial monitor tool or send AT commands.

  All AT commands check here:

  Check all individual functions through UART1 like: General commands, SMS commands, TCP/UDP client commands, TCP server commands, TCP/UDP transparent commands, FTP commands, HTTP commands, Call control, wi-fi function, MQTT, Network controller, Main antenna communication, GNSS communication, BT communication, SD card, SIM card, ADC, audio recording commands

Through USB port Serial communication

- Perform the following steps to communication N58 with USB port:
- **Step 1:** Use the 5V adapter to supply power, power up the N58 EVB and connect it to the computer through USB. Then USB jumper can keep otherwise it's act like a open circuit,

  Hold the PWR_KEY button for 1 second, and the module starts up either jumper can keep it, it's automatically N58 Module can be Turn ON,
- **Step 2:** Install the N58 USB drivers on your computer.

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

  b. Decompress the N58 tool package that Neoway provides.

  c. Open the folder of the driver for your OS.

d. Double-click the DPInst execution file and install the drivers by following the installation Wizard.

- **Step 3:** Start the QCom_Tool and send AT commands.

  All AT commands check here: