Introduction

The A7670G is an integrated wireless communication module featuring 4G CAT1 (with an uplink speed of 5Mbps and a downlink speed of 10Mbps). It extensively supports multiple bands, including LTE-FDD, LTE-TDD, and GSM, making it suitable for global regions and most operators' networks. The module is compatible with Raspberry Pi, Arduino, and LattePanda single-board computers, and can be used as a 4G network card.

The specific bands are as follows:

LTE-TDD: B38/B39/B40/B41

LTE-FDD: B1/B2/B3/B4/B5/B7/B8/B12/B13/B18/B19/B20/B25/B26/B28/B66

GSM: 850/900/1800/1900MHz

Additionally, the A7670G module integrates support for various network protocols including TCP/IP, IPV4, Multi-PDP, FTP, FTPS, HTTP, HTTPS, DNS, and more. This allows for complex network communications using AT commands without the need to learn or understand the underlying network protocols, offering strong compatibility and ease of use.

The A7670G communication module comes equipped with both UART and USB interfaces. It can connect to other MCUs or main controllers via UART or to computers, Raspberry Pi, etc., as a USB network card through the USB interface. It supports mainstream operating system drivers (Windows, Linux, Android, and other USB drivers).

Furthermore, the A7670G module includes a microphone and audio power amplifier circuit, enabling it not only to function for data transmission but also for making calls and sending text messages.

The CAT1 SIM7600G 4G Communication Module can be connected to single-board computers like Raspberry Pi, LattePanda, etc., and can be used as a 4G network card for SBCs.

Connection Diagram of CAT1 A7670G 4G Communication Module and LattePanda 3 Delta single board computer
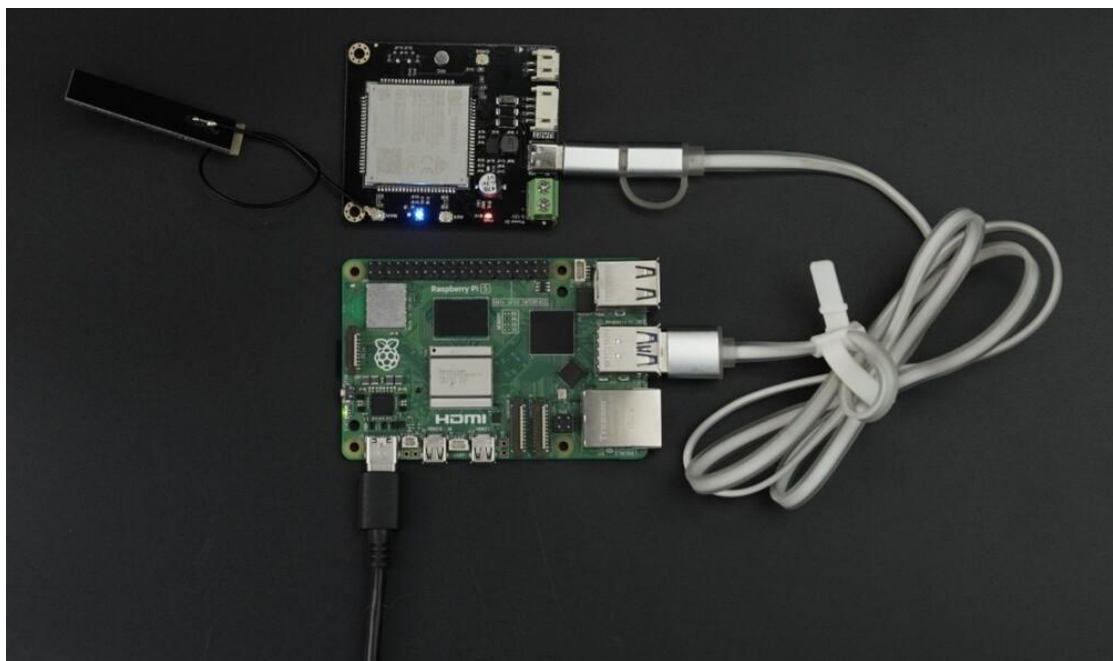
Connection Diagram of CAT1 A7670G 4G Communication Module and Raspberry Pi 5 single board computer

The SIM series wireless communication modules offer multiple products to choose

from. This series of 4G products is differentiated by communication rates and satellite positioning capabilities. Click here to check **the selection guide of 4G communication modules.**
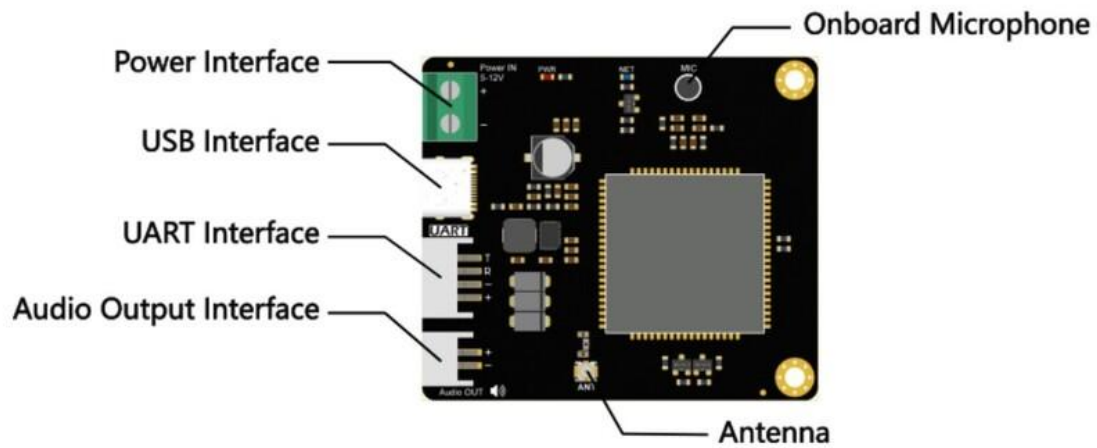
Functional Diagram of A7670G 4G Module
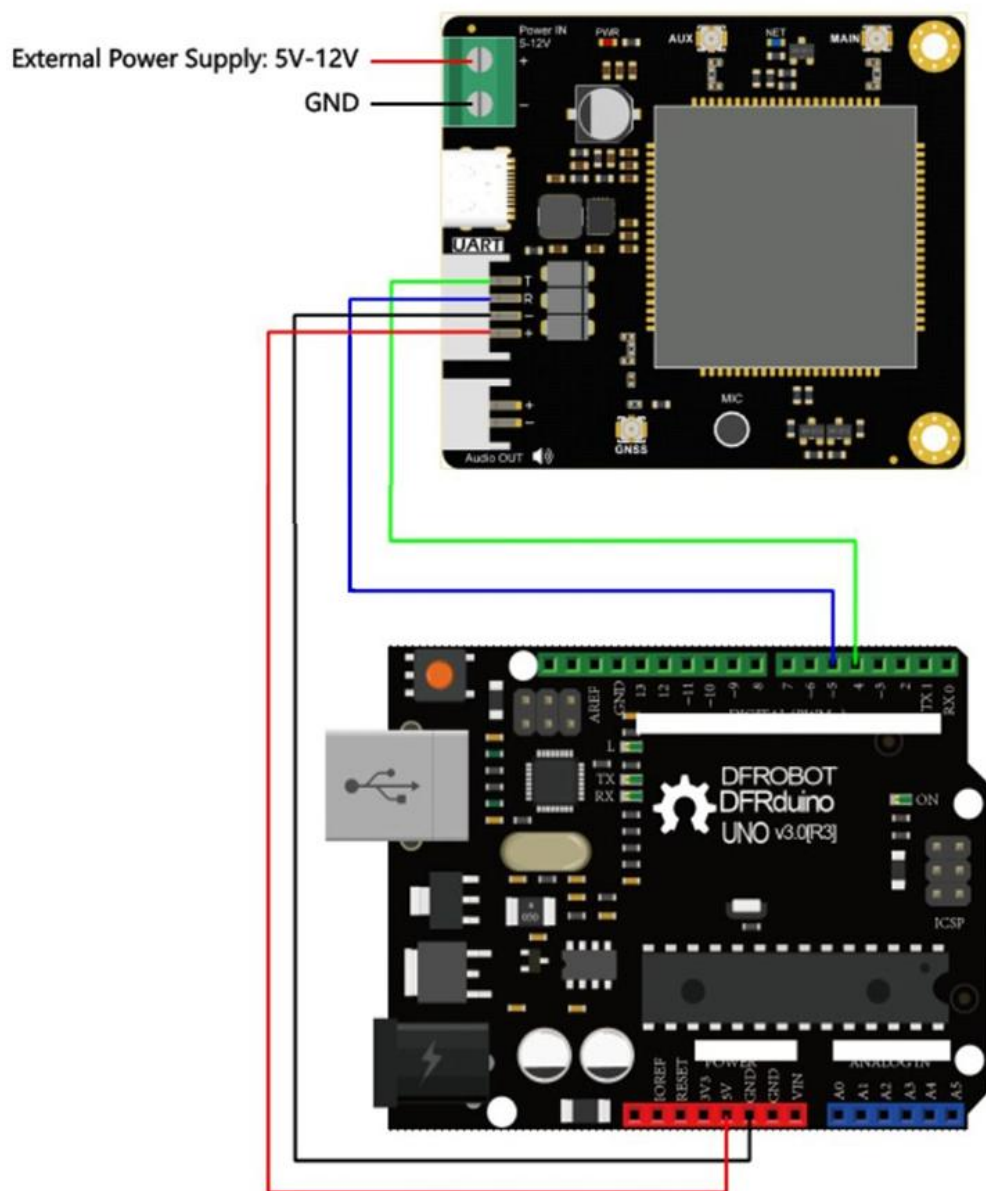
Connection Diagram of A7670G 4G Module and Arduino UNO

Features

Controlled via AT commands, eliminating the need to learn complex underlying network protocols.

Supports multiple frequency bands including LTE-FDD, LTE-TDD, and GSM.

SMS functionality supports MT, MO, CB, Text, and PDU modes.

Supports various network protocols such as TCP/IP, IPV4, Multi-PDP, FTP, FTPS, HTTP, HTTPS, and DNS.

Capable of data communication, voice calls, and SMS functionalities.

Provides USB network card functionality.

Applications

IoT data transmission and remote control.

Mobile device monitoring.

Logistics and transportation.

Warehousing and theft prevention.

Surveillance and positioning.

Specification

Power Supply Voltage: Terminal connector: 5-12V
TYPE-C: 5V

UART Interface: Voltage level: 3.3V-5V
Physical interface: PH2.0-4P Gravity sequence standard

Audio Output Interface: PH2.0-2P

Frequency Band Applicable Regions: Global

Supported Bands:
LTE-TDD: B38/B39/B40/B41
LTE-FDD:
B1/B2/B3/B4/B5/B7/B8/B12/B13/B18/B19/B20/B25/B26/B28/B66
GSM: 850/900/1800/1900MHz

4G Communication Rate: CAT1 (Uplink speed 5Mbps, Downlink speed 10Mbps)

4G Antennas: MAIN antenna IPEX male connector ×1

Voice Microphone: ×1

SIM Card Slot: Push-lock type

LED Indicators: Power status: Red   Network status: Blue

Operating Temperature: -40°C ~ 85°C

Product Dimensions: 60mm×52mm

Documents

Product wiki

Schematic

AT Command Set

2D_CAD

2D_DXF

3D_STP

Shipping List

CAT1: A7670G 4G Communication Module x1

4G antenna: x1

Triple-cut universal SIM card adapter x1

Gravity PH2.0-4P Communication Connection Cable ×1