

一. 4G/LTE USB DONGLE产品介绍

4G/LTE USB DONGLE PRODUCTS INTRODUCTION

为了方便用户快速评估 4G 应用，推出了 4G usb dongle 无线通讯模块评估套件。本产品采用 LCC 模组贴片方式，并集成了必要的电源电路和 SIM 卡插座，通过 USB 2.0 协议通讯。在设计时考虑要兼顾实用和方便评估，转接板的背面是 mircoSIM 卡插座，正面是 4G 模组，用户在设计自己的应用底板时，本产品可作为一个“大器件”，直接插在用户底板上使用，通过标准 USB 座子提供电气连接和固定孔位固定。

In order to facilitate users to quickly evaluate 4G applications, the 4G usb dongle wireless communication module evaluation Kit has been launched. This product adopts the LCC module mode, and integrates the necessary power circuit and SIM card holder, and communicates via USB 2.0 protocol. In the design, practical and convenient evaluation should be considered. The back of the adapter board is a mircoSIM card holder, and the front is a 4G module. When users design their own application bottom board, this product can be used as a "large device", which can be directly plugged into the user's bottom board. Electrical connection and fixing holes are provided via standard USB sockets.



正面
front



背面
back

4G/LTE USB DONGLE 版本 4G/LTE USB DONGLE VERSION

本产品中提供 USB 2.0 通讯接口，方便用户安装的工控机、广告机，摄像机模组等工控产品上。

This product provides USB 2.0 communication interface, which is convenient for users to install industrial computer, advertising machine, camera module and other industrial control products.

图片为USB连接座子，也可以使用 4PIN座子2.0间距或者2.54间距。

The picture is a USB connection header, which can also use a 4-pin header with 2.0 spacing or 2.54 spacing.



图片为2.0间距4PIN座子 USB

Picture for 2.0 pitch 4PIN seat son USB

本产品为EC20 R2.1 模组，兼容整个EC20 R2.1 系列和EC25 系列模组

This product is EC20 R2.1 module, compatible with the entire EC20 R2.1 series and EC25 series modules

4G 模组驱动请参考EC20 R2.1 驱动， LINUX 免驱版本型号： EC20CEFHLG，双天线1+1 数据版本

For the 4G module driver, refer to the EC20 R2.1 driver, LINUX no-drive version model: EC20CEFHLG, dual antenna 1+1 data version

二.硬件接口 Hardware interface

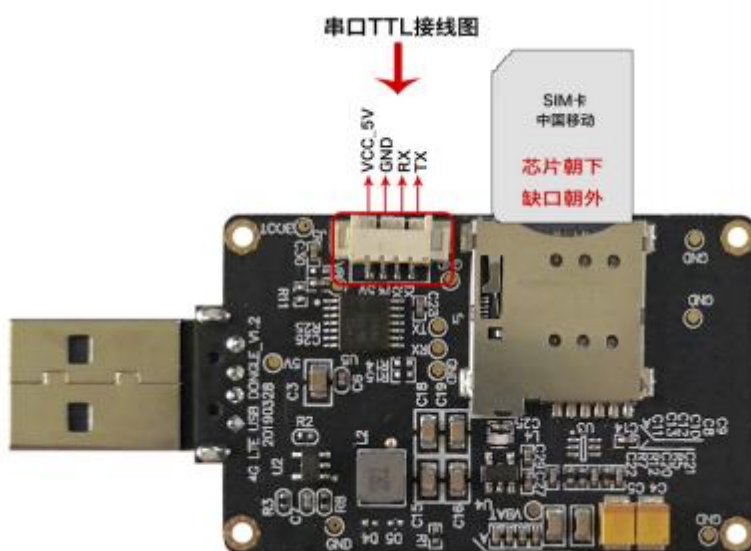
1. USB 接口 USB interface



标准 USB2.0 接口通讯协议

2. SIM 卡座朝向及串口TTL 定义

Orientation and Serial TTL Definition of SIM Card Holder



SIM Card 为自弹式SIM 卡座，标准mirco 卡

串口TTL 电压为3.3V，供电为5V USB 供电

The SIM Card is a self-ejecting SIM card holder, standard mirco card
The serial port TTL voltage is 3.3V, and the power supply is 5V USB

3. 天线接口定义 Antenna Interface Definition



注：因EC20 版本的差异，请咨询销售人员。4G 模块必须接主天线MAIN

Note: Due to differences in EC20 versions, please consult sales personnel. The 4G module must be connected to the main antenna main

4. LED 灯实时显示 Real time display of LED lights

LED_WWAN#从3G/4G 模块直接引出，在工业级 mini PCI-E 转接板上连接了一个LED 指示灯 LED1，用于指示模块的工作状态，信号灯的具体含义请参考所作用 4G 模块的数据手册。

Led_WWAN # is directly led out from the 3G/4G module and connected to an industrial grade mini PCI-E adapter board with an LED indicator light, LED1, used to indicate the working status of the module. For the specific meaning of the signal light, please refer to the data manual of the 4G module being used.

4.产品尺寸图 Size of the Products

