

RAK811 Arduino Library Use Guide

Shenzhen Rakwireless Technology Co., Ltd.

www.rakwireless.com

info@rakwireless.com

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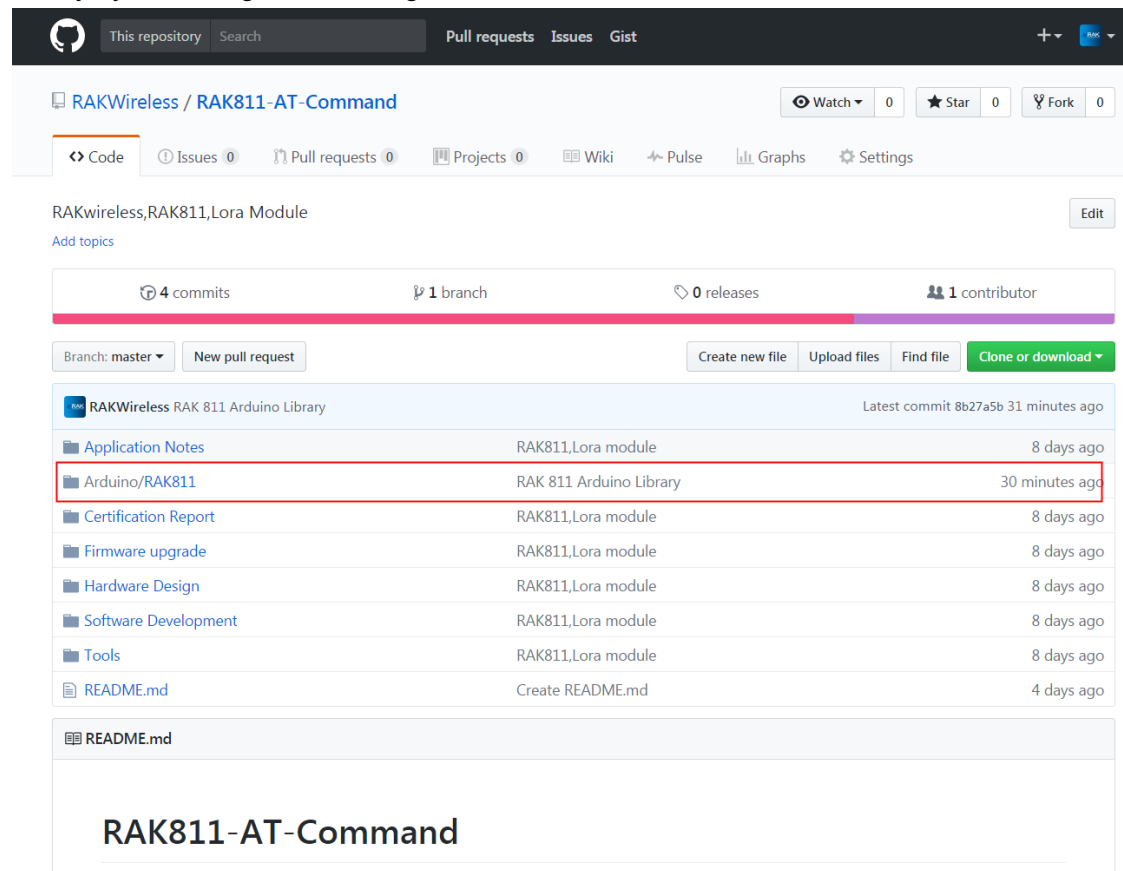
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1. Download

We upload the RAK811 Arduino library code to the official github. You can find this library by searching RAK811 at github..



RAKWireless / RAK811-AT-Command

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README.md

RAK811-AT-Command

2. Add to Arduino IDE

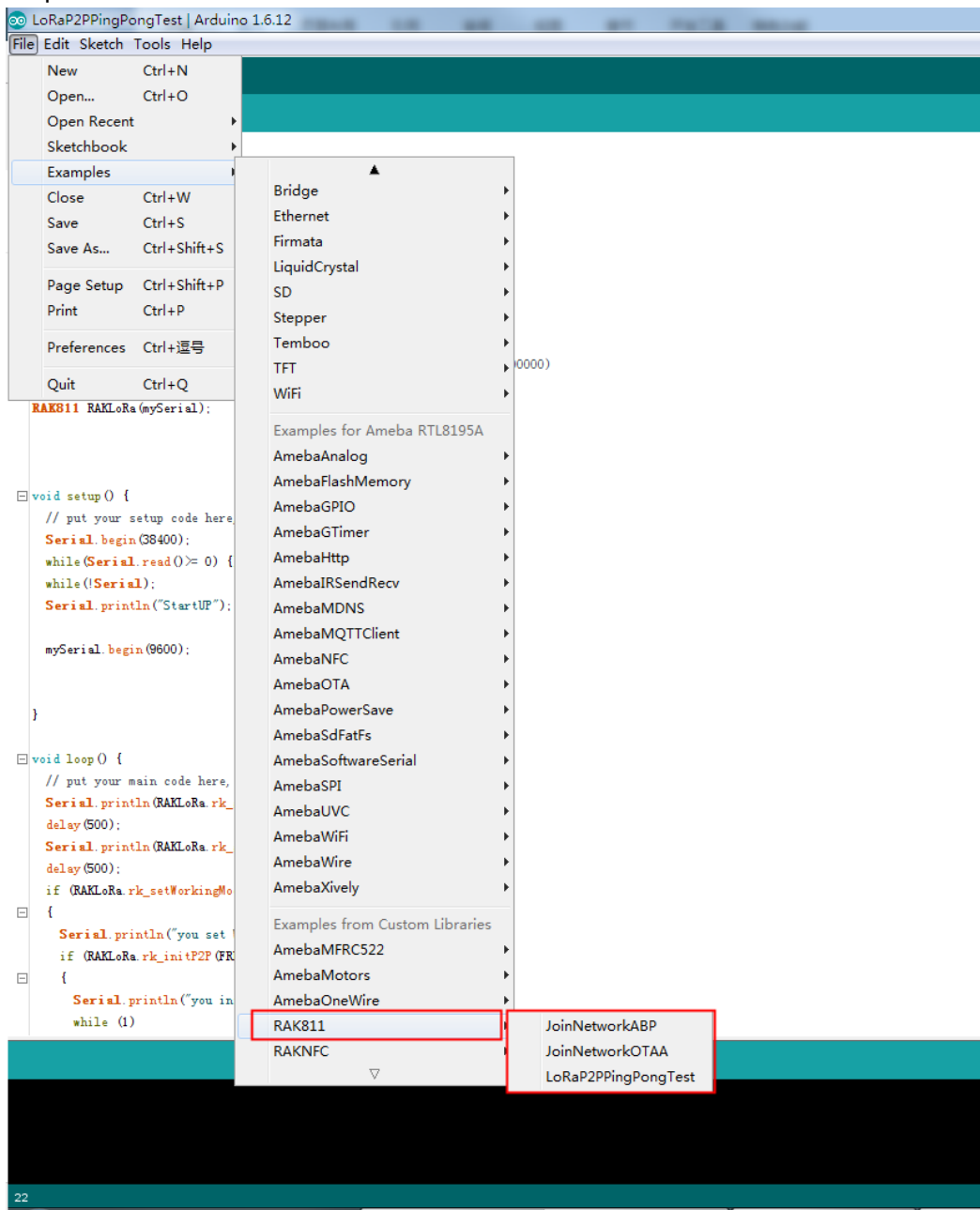
①Download the RAK811 Arduino library and find the downloaded file.

名称	修改日期	类型	大小
Application Notes	2017-05-08 下午...	文件夹	
Arduino	2017-05-12 下午...	文件夹	
Certification Report	2017-05-08 下午...	文件夹	
Firmware upgrade	2017-05-08 下午...	文件夹	
Hardware Design	2017-05-08 下午...	文件夹	
Software Development	2017-05-08 下午...	文件夹	
Tools	2017-05-08 下午...	文件夹	

②Copy the RAK811 folder to the Arduino library folder.

Users > Administrator > 我的文档 > Arduino > libraries			
帮助(H)			
共享 电子邮件 新建文件夹			
名称	修改日期	类型	大小
AmebaMotors	2017-04-19 下午...	文件夹	
OneWire	2017-04-19 下午...	文件夹	
RAK811	2017-05-12 下午...	文件夹	
RAKNFC	2017-04-22 下午...	文件夹	
RFID-RC522	2017-04-22 下午...	文件夹	
readme.txt	2016-10-20 上午...	文本文档	1 KB

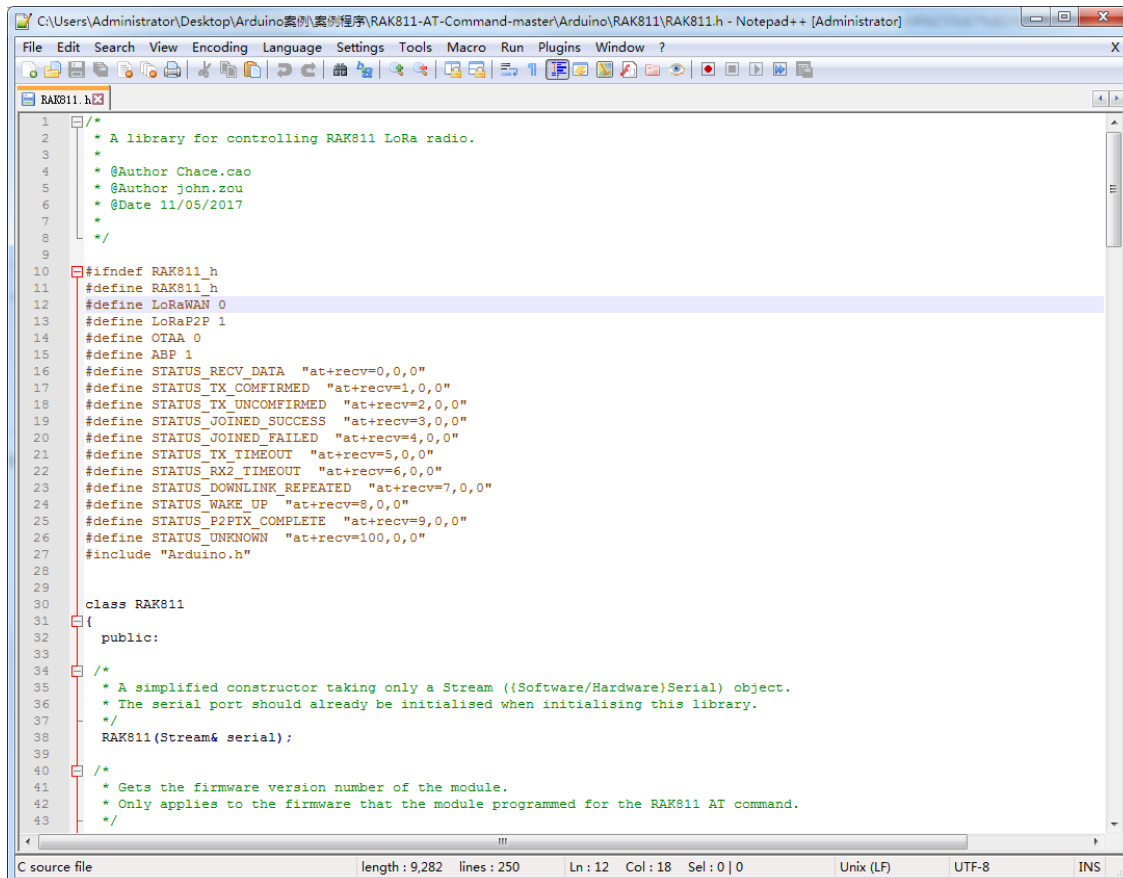
③ And then open the Arduino IDE, you can see the RAK811 sample code in the Arduino example.



3. Code introduction

The RAK811Arduino library contains a total of three typical application example code, respectively, the module LoRaWAN mode through the OTAA way to join the gateway and module LoRaWAN mode through the ABP way to join the gateway and the module to do LoRaP2P mode between the two modules to send data between each other.

On the library contains the available functions, the user can refer to the RAK811.h file, which has a detailed note on the use of each function.



```

1  /*
2   * A library for controlling RAK811 LoRa radio.
3   *
4   * @Author Chace.cao
5   * @Author john.zou
6   * @Date 11/05/2017
7   */
8
9
10 #ifndef RAK811_h
11 #define RAK811_h
12 #define LoRaWAN 0
13 #define LoRaP2P 1
14 #define OTAA 0
15 #define ABP 1
16 #define STATUS_RECV_DATA "at+recv=0,0,0"
17 #define STATUS_TX_CONFIRMED "at+recv=1,0,0"
18 #define STATUS_TX_UNCONFIRMED "at+recv=2,0,0"
19 #define STATUS_JOINED_SUCCESS "at+recv=3,0,0"
20 #define STATUS_JOINED_FAILED "at+recv=4,0,0"
21 #define STATUS_TX_TIMEOUT "at+recv=5,0,0"
22 #define STATUS_RX2_TIMEOUT "at+recv=6,0,0"
23 #define STATUS_DOWNLINK_REPEATED "at+recv=7,0,0"
24 #define STATUS_WAKE_UP "at+recv=8,0,0"
25 #define STATUS_P2PTX_COMPLETE "at+recv=9,0,0"
26 #define STATUS_UNKNOWN "at+recv=100,0,0"
27 #include "Arduino.h"
28
29
30 class RAK811
31 {
32 public:
33
34 /*
35  * A simplified constructor taking only a Stream ((Software/Hardware)Serial) object.
36  * The serial port should already be initialised when initialising this library.
37  */
38  RAK811(Stream& serial);
39
40 /*
41  * Gets the firmware version number of the module.
42  * Only applies to the firmware that the module programmed for the RAK811 AT command.
43  */

```

If you have any questions, welcome to our forum to ask your question:
<http://support.rakwireless.com/>.

You can also send your question to this email: ken.yu@rakwireless.com