

WizFi360

Application Note – http client

Version 1.0.0



<http://www.wiznet.io/>

Contents

1	Document Revision History	2
2	Introduction	3
3	Hardware Environment	3
4	Library Download	4
5	RUN.....	5
5.1	Example Open.....	5
5.2	Code.....	5
5.3	Result	6

1 Document Revision History

Version	Date	Descriptions
Ver. 1.0.0	1AUG2019	Initial Release

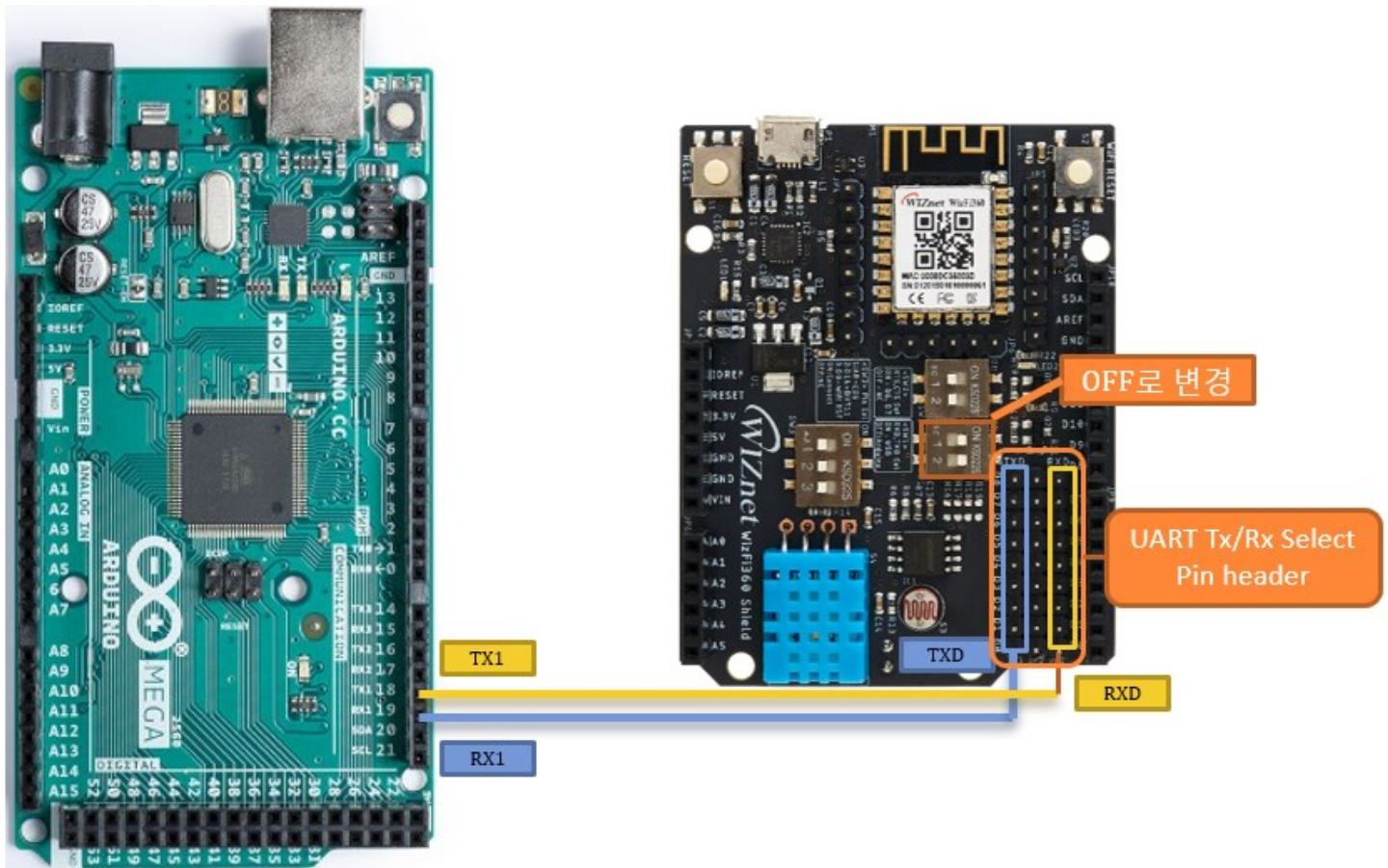
2 Introduction

HTTP(Hypertext transfer protocol) is a communication protocol for exchanging data between server and client on the Web. HTTP exchanges data in the form that the client sends the request and the server sends the reply to the request. At this time, Server transmits response such as HTML, JSON, etc., and uses port 80. HTTP is a TCP-based protocol. WizFi360 can communicate the HTTP communication by creating TCP Server. The HTTP protocol must be implemented by the user.

3 Hardware Environment

This document uses Arduino Mega2560 and WizFi360EVB. To communicate with the WizFi360EVB using UART1 in the Arduino Code, connect the TX1 and RX1 pins of Arduino to the RXD and TXD pins of the WizFi360EVB. In the WizFi360EVB, change the RXD / TXD Selector to OFF to enable UART communication via the pin, not the USB.

You can also use D0 ~ D8 Pin as TXD / RXD Pin by using UART Select Pin header. If you use it, you can connect WizFi360 without Wiring by placing WizFi360 on Arduino.

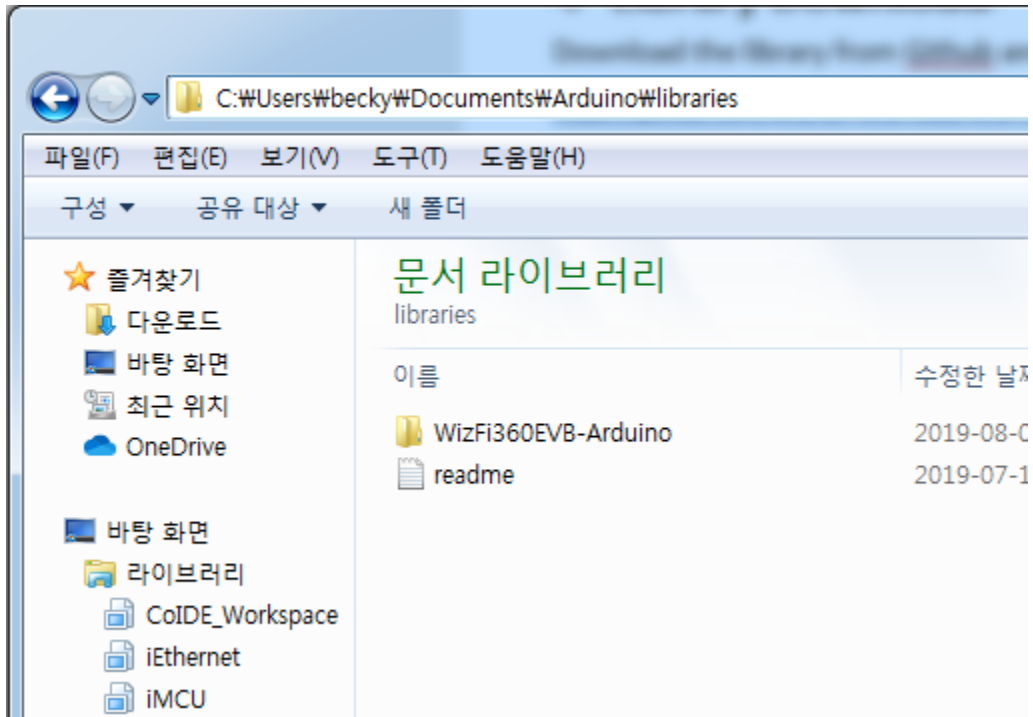


https://store-cdn.arduino.cc/usa/catalog/product/cache/1/image/1000x750/f8876a31b63532bbba4e781c30024a0a/s/0/a000067_front_1.jpg

4 Library Download

Download the library from Github and move it to the Arduino libraries folder as below.

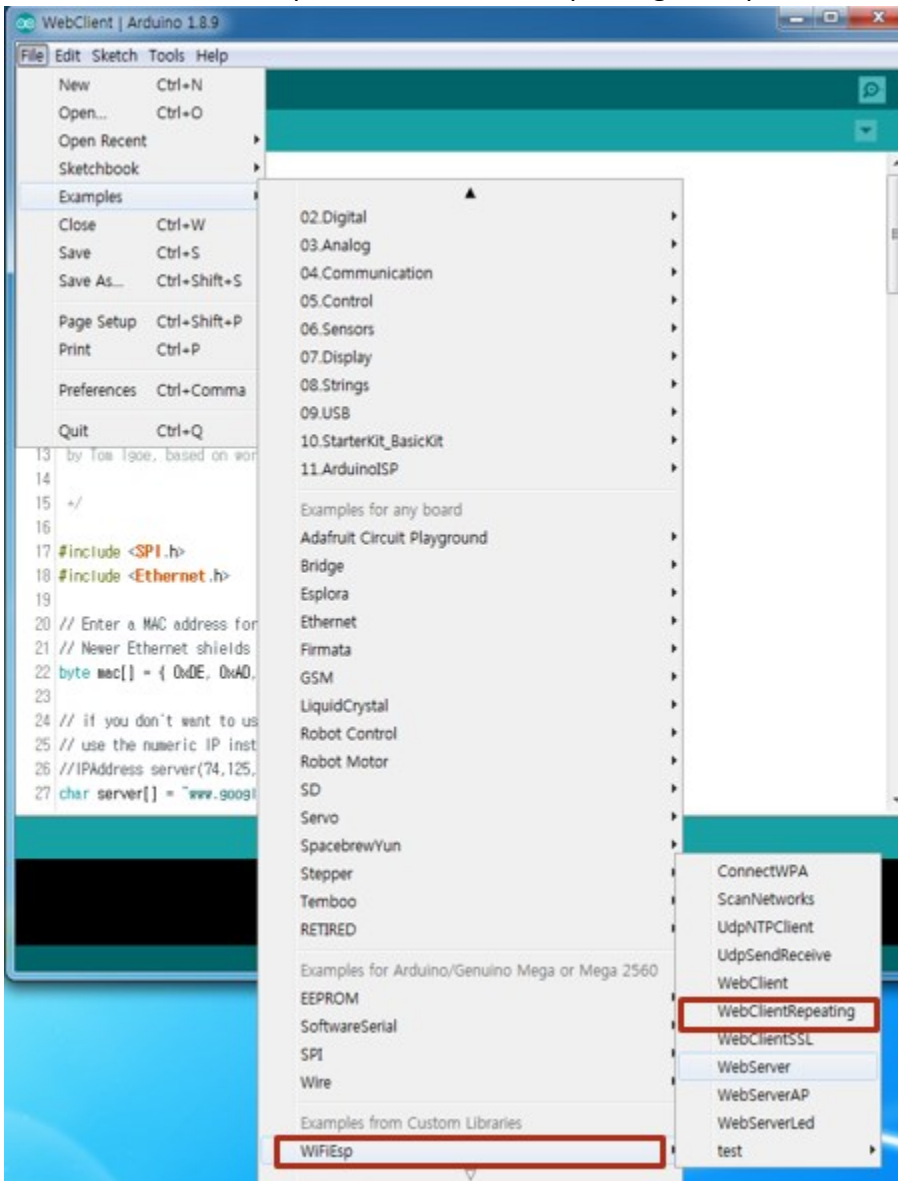
<https://github.com/WIZnet-WizFi360/WizFi360EVB-Arduino>



5 RUN

5.1 Example Open

Launch Arduino and Open the WebClientRepeating example as shown below.



5.2 Code

Change the value of ssid and pass to join information of AP to connect WizFi360.

Serial1 is the serial communicating with Arduino and WizFi360 and should have the same baud rate as WizFi360. The factory default baud rate for WizFi360 is 115200, and if you have not changed it, enter 115200.

Enter the address of the HTTP server to connect to server. You can enter ip address or domain address. In this case, connect to arduino.cc.

```
19 char ssid[] = "wizns1";           // your network SSID (name)
20 char pass[] = "maker0701";        // your network password
21 int status = WL_IDLE_STATUS;      // the Wifi radio's status
22
23 char server[] = "arduino.cc";
24
25 unsigned long lastConnectionTime = 0; // last time you connecte
26 const unsigned long postingInterval = 10000L; // delay between updates,
27
28 // Initialize the Ethernet client object
29 WiFiEspClient client;
30
31 void setup()
32 {
33   // initialize serial for debugging
34   Serial.begin(115200);
35   // initialize serial for ESP module
36   Serial1.begin(115200);
37   // initialize ESP module
38   WiFi.init(&Serial1);
```

In this article, Arduino (WizFi360EVB) connects to Web Server and sends the following data. Request /asciilogo.txt using the GET method.

```
// if there's a successful connection
if (client.connect(server, 80)) {
  Serial.println("Connecting...");

  // send the HTTP PUT request
  client.println(F("GET /asciilogo.txt HTTP/1.1"));
  client.println(F("Host: arduino.cc"));
  client.println("Connection: close");
  client.println();
```

5.3 Result

Receive the following data from the server.

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