

WiFi

20170214

I'm going to study experiments because I bought ESP-WROOM-02 module.
ESP-WROOM-02 module is wireless LAN communication module.
(including ESP8266,Xtal,flashmemory,TCP/Ipprotocol stack and Atcommand API).
It need external 3.3V-PowerSupply because ESP-WROOM-02 module temporaly use 500mA.

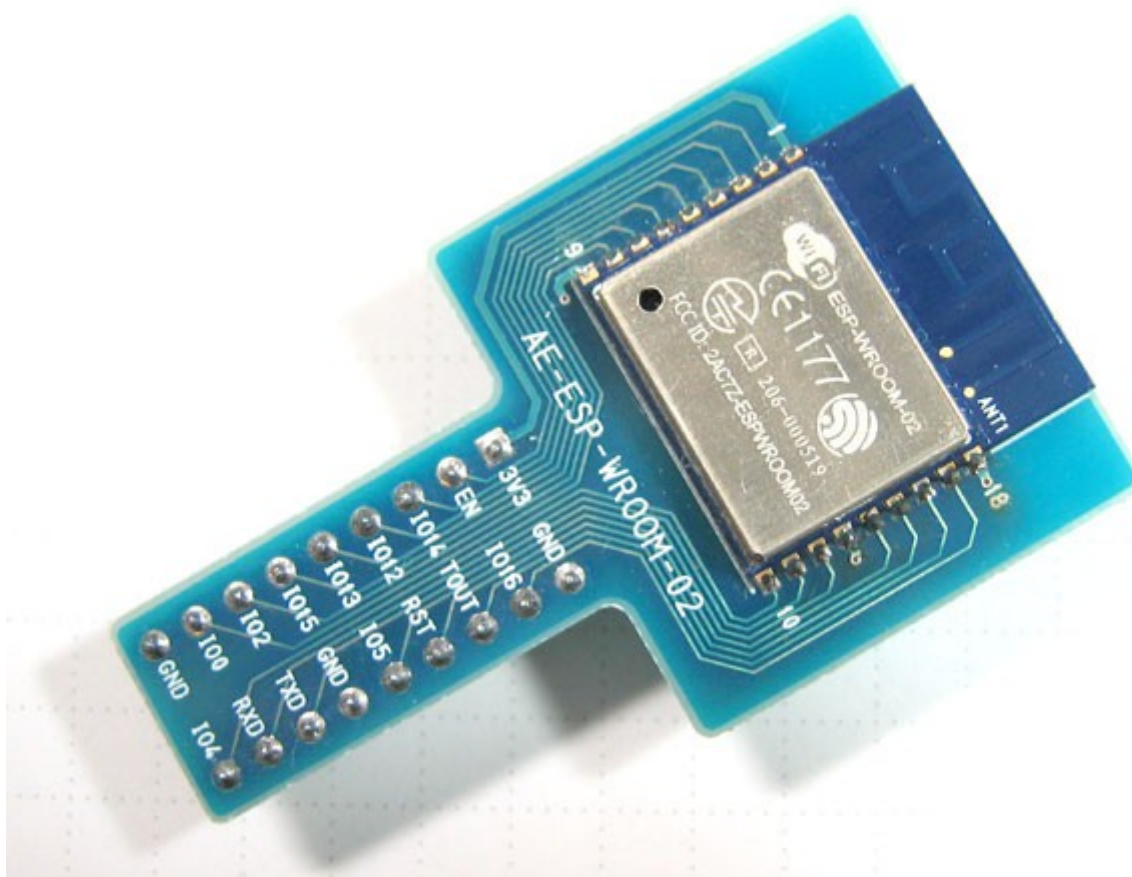
It use Flash-Boot-Mode(UART default:115200baud).

GPIO15:Lo

GPIO0:Hi

GPIO2:Hi

EN:Hi



Telnet telnet_0.1.f

Operated ESP-WROOM-02 as telnet-server.

TeraTerm operate as telnet-client on Windows8.1(inside same network)

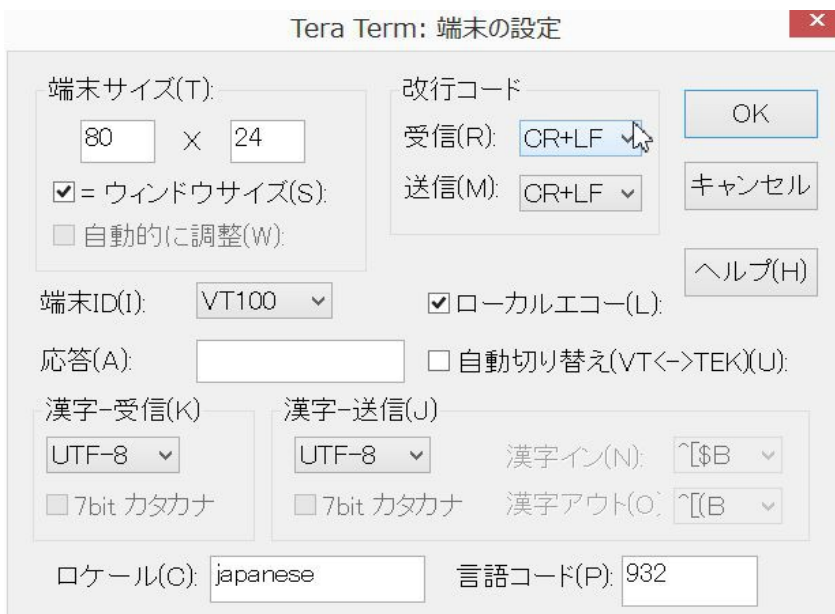
Host:192.168.2.103

Port:23



The screenshot shows the 'Tera Term: 新しい接続' (New Connection) dialog box. The 'TCP/IP' radio button is selected. The 'ホスト(T):' (Host) field contains '192.168.2.103'. The 'サービス' (Service) section has 'Telnet' selected, with 'SSH' and 'その他' (Other) options also visible. The 'TCPポート#(P):' (TCP Port) field contains '23'. The 'プロトコル(C):' (Protocol) dropdown is set to 'UNSPEC'. There are 'OK', 'キャンセル' (Cancel), and 'ヘルプ(H)' (Help) buttons at the bottom.

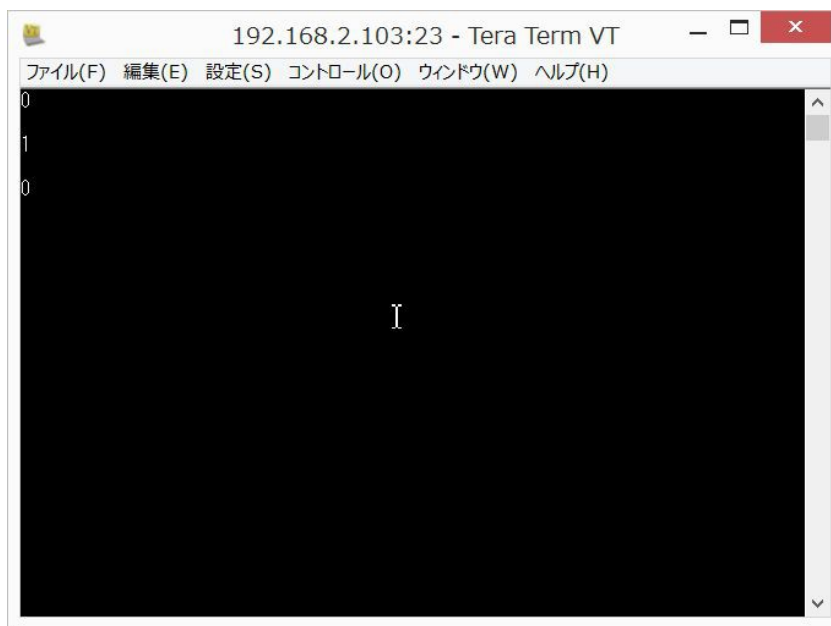
Checked local-echo on terminal menu.



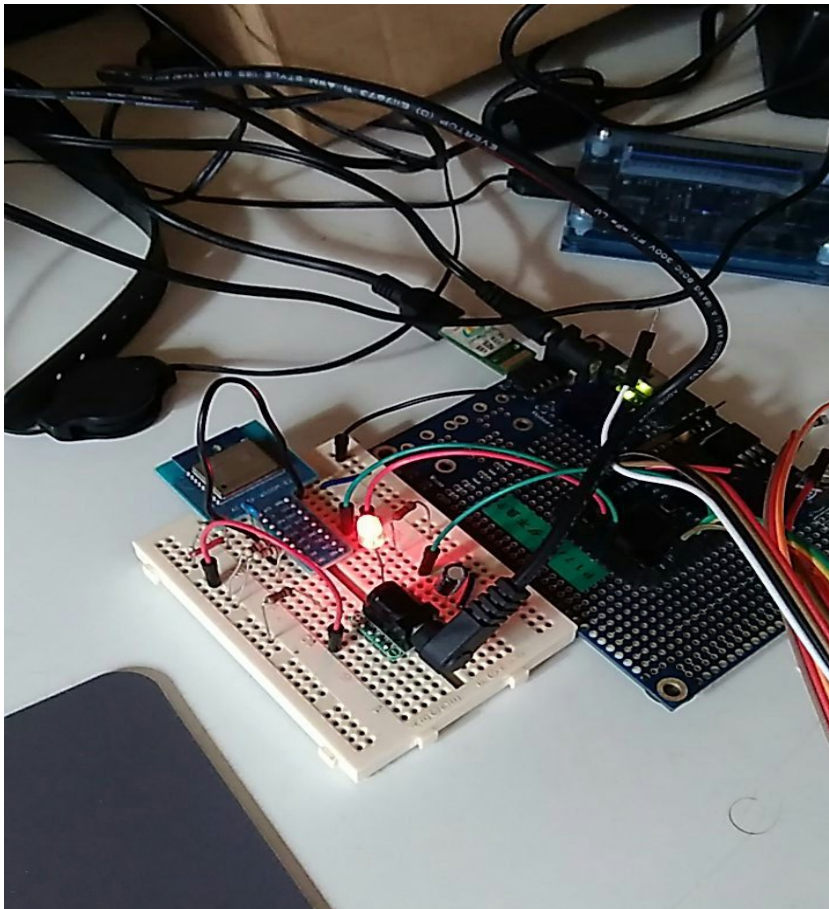
The screenshot shows the 'Tera Term: 端末の設定' (Terminal Settings) dialog box. The '端末サイズ(T):' (Terminal Size) is set to 80 x 24. The '改行コード' (Line Code) section has '受信(R):' (Receive) and '送信(M):' (Send) both set to 'CR+LF'. The '端末ID(I):' (Terminal ID) is 'VT100'. The 'ローカルエコー(L):' (Local Echo) checkbox is checked. The '漢字-受信(K):' (Kanji Receive) and '漢字-送信(J):' (Kanji Send) are both set to 'UTF-8'. The 'ロケール(C):' (Locale) is 'japanese' and the '言語コード(P):' (Language Code) is '932'. There are 'OK', 'キャンセル' (Cancel), and 'ヘルプ(H)' (Help) buttons on the right.

LED is on when 1 entered.

LED is off when 0 entered.



LED connected to P3 is on when sent 1 from telnet client.



Prop0 Cog6 ok
testTelnet
9 characters

19_100_00_009:
19_100: 065 084 013 013 010 013 010 079 075 067 108 101 097 114 032 105 AT.....OKClear i
AT

OK
110 characters

19_100_00_110:
19_100: 013 010 065 084 043 071 077 082 013 013 010 065 084 032 118 101 ..AT+GMR...AT ve
19_116: 114 115 105 111 110 058 048 046 052 048 046 048 046 048 040 065 rsion:0.40.0.0(A
19_132: 117 103 032 032 056 032 050 048 049 053 032 049 052 058 052 053 ug 8 2015 14:45
19_148: 058 053 056 041 013 010 083 068 075 032 118 101 114 115 105 111 :58)..SDK versio
19_164: 110 058 049 046 051 046 048 013 010 099 111 109 112 105 108 101 n:1.3.0..compile
19_180: 032 116 105 109 101 058 065 117 103 032 049 049 032 050 048 049 time:Aug 11 201
19_196: 053 032 049 055 058 048 050 058 049 056 013 010 079 075 032 099 5 17:02:18..OK c

AT+GMR

AT version:0.40.0.0(Aug 8 2015 14:45:58)

SDK version:1.3.0

compile time:Aug 11 2015 17:02:18

OK
24 characters

19_100_00_024:
19_100: 013 010 065 084 043 067 087 077 079 068 069 095 067 085 082 061 ..AT+CWMODE_CUR=
19_116: 049 013 013 010 013 010 079 075 052 048 046 048 046 048 040 065 1.....OK40.0.0(A

AT+CWMODE_CUR=1

OK
84 characters

19_100_00_084:
19_100: 013 010 065 084 043 067 087 074 065 080 095 067 085 082 061 034 ..AT+CWJAP_CUR="
19_116: 101 108 101 099 111 109 050 103 045 100 052 057 053 100 054 034 elecom2g-d495d6"
19_132: 044 034 051 055 054 050 052 048 054 052 053 053 051 051 049 034 , "3762406455331"
19_148: 013 013 010 087 073 070 073 032 067 079 078 078 069 067 084 069 ...WIFI CONNECTE
19_164: 068 013 010 087 073 070 073 032 071 079 084 032 073 080 013 010 D..WIFI GOT IP..
19_180: 013 010 079 075 101 058 065 117 103 032 049 049 032 050 048 049 ..OKe:Aug 11 201

AT+CWJAP_CUR="elecom2g-d495d6", "3762406455331"

WIFI CONNECTED

WIFI GOT IP

OK
82 characters

19_100_00_082:

19_100:	013	010	065	084	043	067	073	070	083	082	013	013	010	043	067	073	..AT+CIFSR...+CI
19_116:	070	083	082	058	083	084	065	073	080	044	034	049	057	050	046	049	FSR:STAIP,"192.1
19_132:	054	056	046	050	046	049	048	051	034	013	010	043	067	073	070	083	68.2.103"...+CIFS
19_148:	082	058	083	084	065	077	065	067	044	034	049	056	058	102	101	058	R:STAMAC,"18:fe:
19_164:	051	052	058	101	101	058	054	057	058	050	051	034	013	010	013	010	34:ee:69:23"...
19_180:	079	075	079	075	101	058	065	117	103	032	049	049	032	050	048	049	OK0Ke:Aug 11 201

```
+CIFSR:STAIP,"192.168.2.103" ←-- IP address
```

OK
20 characters

OK
26 characters

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14 characters
19_100 00_014:
19_100: 013 010 043 073 080 068 044 048 044 051 058 048 013 010 024 255  ..+IPD,0,3:0....

+IPD,0,3:0
----- Keyin "1" on TeraTerm -----
14 characters
19_100 00_014:
19_100: 013 010 043 073 080 068 044 048 044 051 058 049 013 010 024 255  ..+IPD,0,3:1....

+IPD,0,3:1
----- Keyin "0" on TeraTerm -----
14 characters
19_100 00_014:
19_100: 013 010 043 073 080 068 044 048 044 051 058 048 013 010 024 255  ..+IPD,0,3:0....

+IPD,0,3:0
----- Keyin "1" on TeraTerm -----
19_100 00_014:
19_100: 013 010 043 073 080 068 044 048 044 051 058 049 013 010 024 255  ..+IPD,0,3:1....

+IPD,0,3:1
----- TeraTerm terminated -----
10 characters
19_100 00_010:
19_100: 048 044 067 076 079 083 069 068 013 010 058 049 013 010 024 255  0, CLOSED...:1....
0, CLOSED

```

Using under Linux

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echo "1" > /dev/tcp/192.168.2.103/23  ← LED on
echo "0" > /dev/tcp/192.168.2.103/23  ← LED off

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