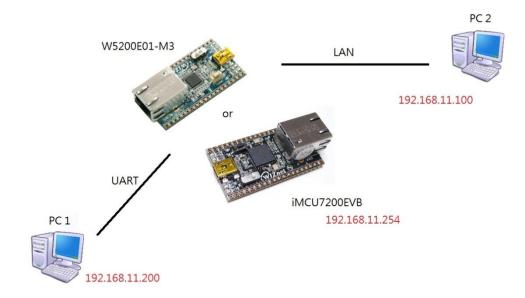


W5200 Power Down Mode Application Note

1. Diagram





2. Configuration

IAR Embedded Workbench



Type.h

```
If the module is W5200E01-M3, the definiation of W7200 is disable. #define __DEF_W5200__ //#define __DEF_W7200__
```

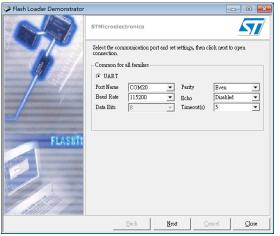
If the module is iMCU7200EVB, the definiation of W5200 is disable.

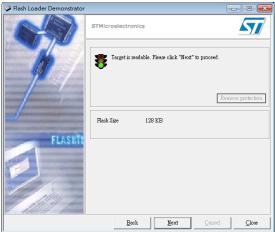
```
//#define __DEF_W5200__
#define __DEF_W7200__
```

Flash Loader Demonstrator



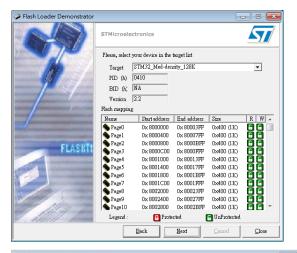
Open the Flash Loader Demo software to program into iMCU7200EVB or W5200E01-M3. The program step as follows:

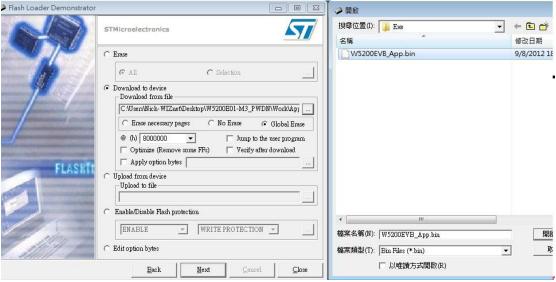


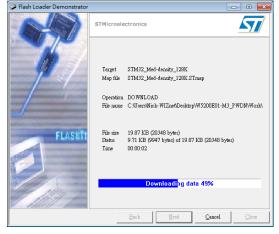


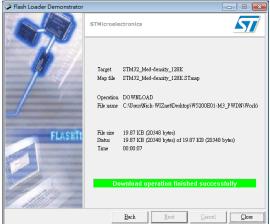








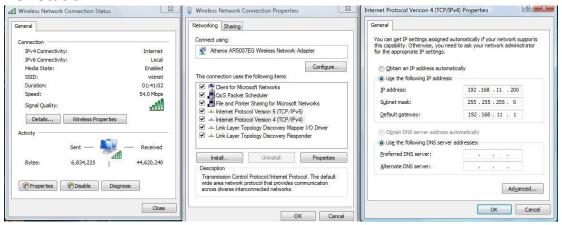






W5200 Power Down Mode Application Note

PC1 Static IP



Serial terminal Program

Serial port COM20 opened

MAC[0]: 0x 0

MAC[1]: 0x 8

MAC[2]: Oxdc

MAC[3]: 0x11

MAC[4]: 0x22

MAC[5]: 0x33

W5200E01-M3

Network Configuration Information

MAC: 00.08.DC.11.22.33

IP: 192.168.11.254 SN: 255.255.255.0 GW: 192.168.11.1

DNS server: 168,126,63,1



SMTP Client using W 5200 STM 32-Discovery This Application is basic example of UART interface with	
APPLICATION MENU:	
1 - Set LD1 on	
2 - Set LD1 off	
3 - Show network setting	
4 - Set network setting	
5 - Run TCP Loopback	

7 - Enable PHY Power Down

6 - Run UDP Loopback

8 - Disable PHY Power Down

Enter your choice:

For the W5200E01-M3_PWDN program is default to disable PHY power down mode. PHY Power Down means that control the ethernet PHY. So, PWDN enable means W5200 can not send&receive any packets.

7. Enable PHY Power Down

Enter your choice: 7

Enabling...

Enabled PHY Power Down!!!

8. Disable PHY Power Down

Enter your choice: 8

Disabling...

Disabled PHY Power Down!!!



3. Ping test

PC 1 ping to iMCU7200EVB(192.168.11.254). If PC1 use the serial terminal program to change the W5200 from 8. Disable PHY Power Down to 7. Enable PHY Power Down, PC 1 cannot ping the iMCU7200EVB and show the message "Request timed out".

```
C:\Users\Nick-WIZnet>ping 192.168.11.254 -t
Pinging 192.168.11.254 with 32 bytes of data:
Reply from 192.168.11.254: bytes=32 time<1ms |
                                                                             192.168.11.254: bytes=32 time<1ms
    Reply from 19
Request timed
                                                                                                       out.
                                                         timed
timed
    Request
                                                                                                        out.
                                                                                                        out.
    Request
                                                           timed
timed
                                                                                                        out.
   Request
   Request
                                                                                                        out.
   Request
                                                           timed
timed
                                                                                                       out.
   Request
                                                                                                       out.
  Request
                                                           timed
                                                                                                       out.
   Request
                                                                     imed
                                                                                                       out.
  Request timed out.
```

Conversely, If PC1 uses the serial terminal program to change the W5200 from 7. Enable PHY Power Down to 8. Disable PHY Power Down, PC 1 can ping the iMCU7200EVB again.

```
timed
timed
timed
timed
Request
                       out.
Request
                       out.
Request
                       out.
                       out.
Request
             timed
timed
Request
                        out.
                       out.
Request
             timed
timed
Request
                        out.
                       out.
Request
                  ned out.
192.168.11.254:
192.168.11.254:
192.168.11.254:
Request timed
Reply from
Reply from
Reply from
                                              bytes=32 time=2ms
                                              bytes=32
                                                             time=1ms
                                              bytes=32
                                                             time=1ms
                  192.168.11.254:
192.168.11.254:
192.168.11.254:
192.168.11.254:
192.168.11.254:
192.168.11.254:
192.168.11.254:
192.168.11.254:
192.168.11.254:
192.168.11.254:
                                                                             TTL=128
                                              bytes=32
bytes=32
Reply from
Reply from
                                                             time=1ms
time<1ms
                                                                             TTL=128
Reply
          from
from
                                              bytes=32
bytes=32
Reply
                                                             time<1ms
Reply
                                                             time=1ms
                                              bytes=32
bytes=32
          from
Reply
                                                             time=1ms
Reply
          from
                                              bytes=
                                                              time=2ms
 Reply
          from
                                               bytes=32
                                                              time=1ms
                                                              time<1ms
 Reply
          from
                                               bytes=
                                                             time<1ms
time<1ms
          from
                                               bytes=32
 Reply
                    92.168.11.254:
92.168.11.254:
 leply
          from
                                               bytes=32
          from
                                               bytes=32
                                                              time<1ms
 leply
                  192.168.11.254:
192.168.11.254:
          from
                                                              time<1ms
         from
                                              bytes=32
                                                             time<1ms
```