ETH_100 Quick Demonstration Gudiance V1.0

January,2013

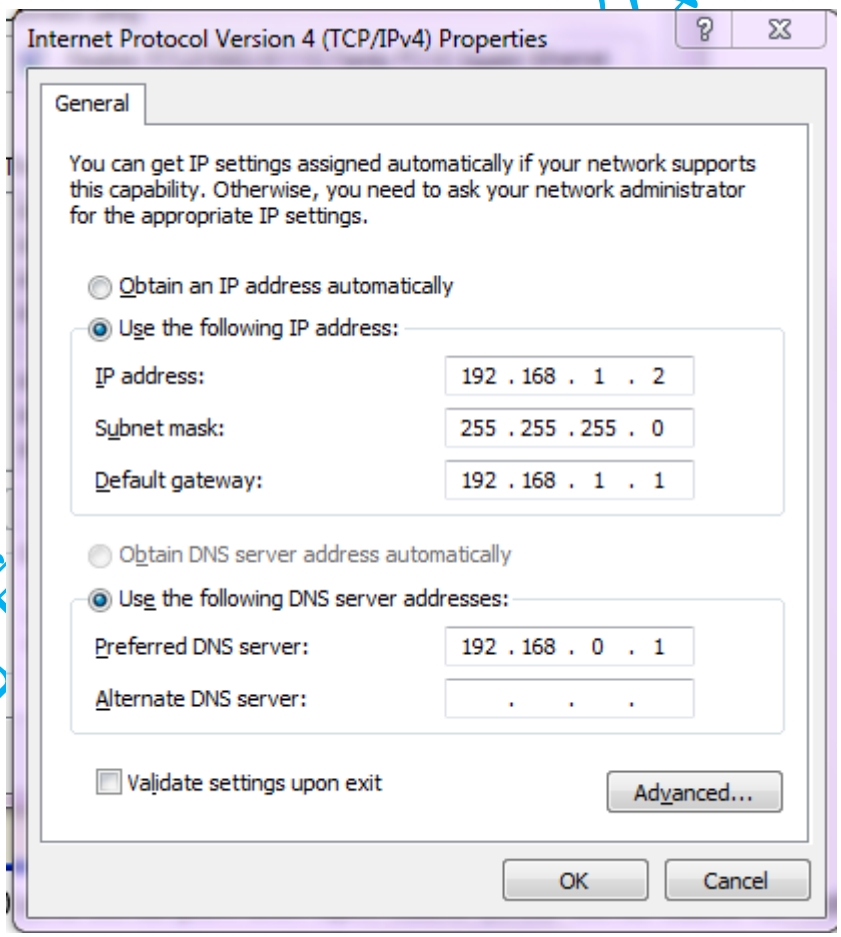
The following parts illustrate how to quickly demonstrate the network communication capabilities of ETH_100. The demonstration mainly sends data to ETH_100 through the serial port, and ETH_100 can correctly send the data to computer through TCP protocol.

1. Required tools and hardware:

- ✧ SSCOM32 Serial Debugging Assistant;
- ✧ TCP Debugging Assistant V1.11;
- ✧ ETH_100 software;
- ✧ ETH_100 board (with shielding case);
- ✧ Power (available for 6v-24v);
- ✧ Computer with USB-serial cable (or HDL661)

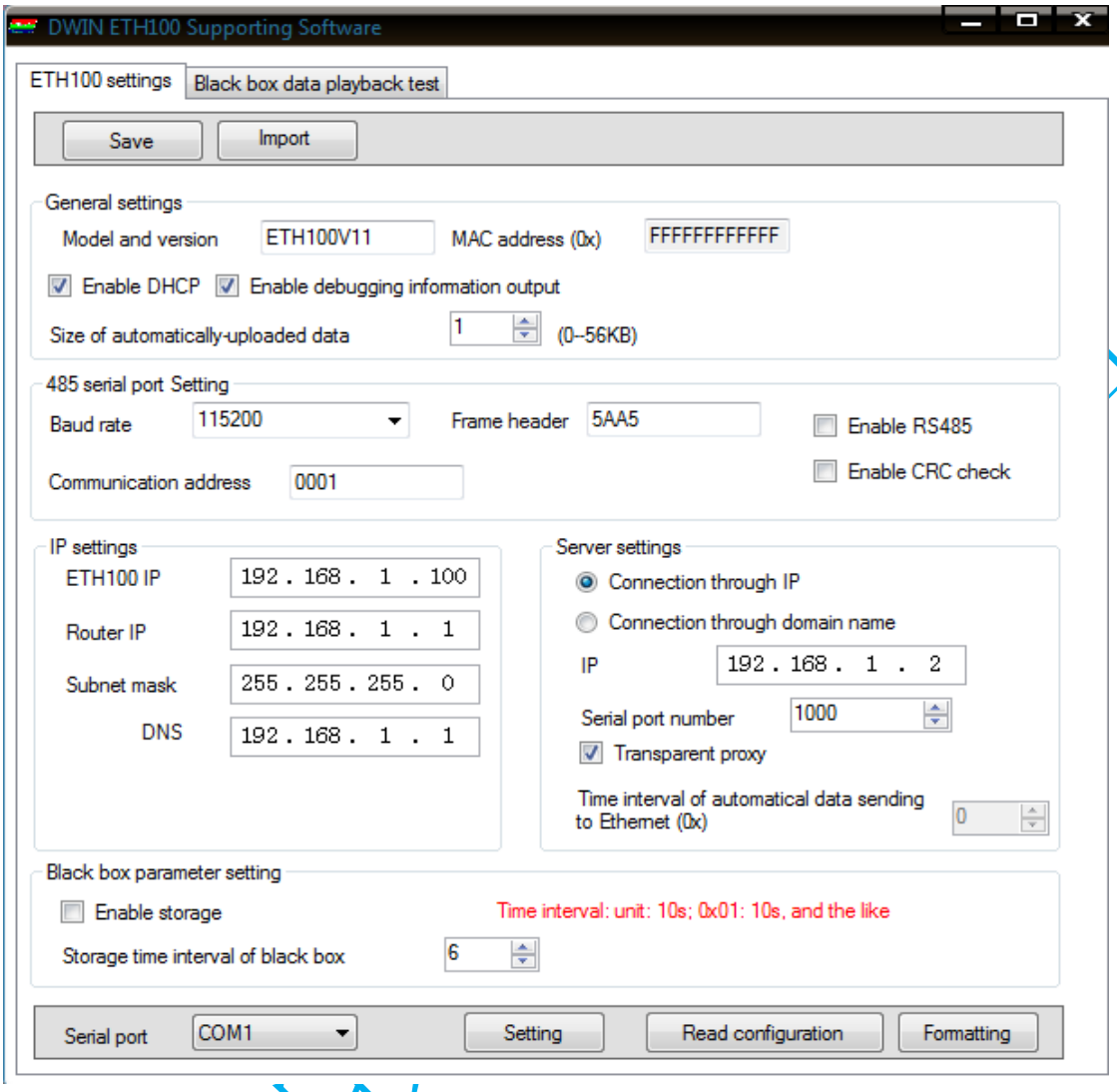
2. Connection preparation:

1. Connect the notebook computer and ETH_100 interface with network cable, and set the network configuration of the notebook computer as follows:



2. Connect ETH_100 and serial port with 8pin cable (USB-serial cable for notebook computer).
   Important note: TXD and RXD of 8pin cable of ETH_100 are opposite to those of DGUS LCMs; therefore, exchange TXD and RXD when 8pin cable is used.

3. After power-on, confirm that ETH_100 board is under static mode (can be closed by DHCP), deselect the check box of "enable DHCP" with ETH_100 supporting software, and then set ETH_100. Other parameters remains and adopt default setting. Set IP of ETH_100 as 192.168.1.100, IP of target server as 192.168.1.2, and port number as 1000. Make sure the serial port number is correct during the setting.



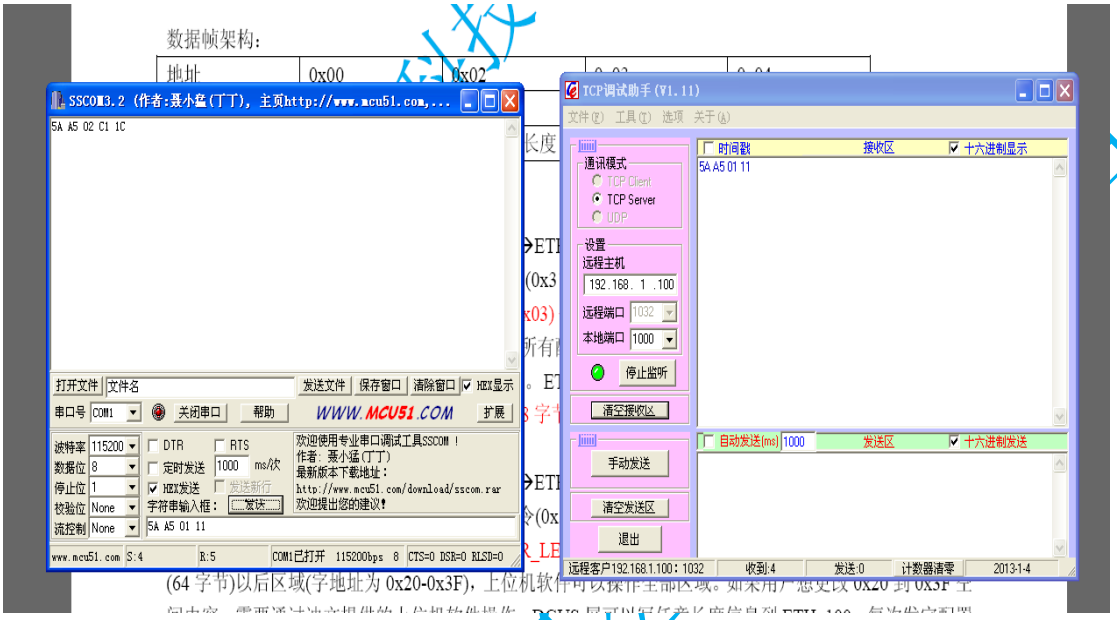
If the setting is successful, the pop-up box of “Setting is completed” will be displayed.

3. Start demonstration:

1. After the setting is completed, the connection indicating lamp of ETH_100 will flash. Open TCP Debugging Assistant software, set the notebook computer as TCP host and monitor port as 1000, and then click the button of “start monitoring”.

2. If the above settings are correct, the connection indicating lamp of ETH_100 will quickly change from flash to always-on, and TCP Debugging Assistant software will display successful connection of user in the lower left corner. This shows that ETH_100 has established TCP connection with the notebook computer through TCP protocol. Select “hexadecimal display” and “hexadecimal sending” in the software.

3. Demonstrate how ETH_100 sends received serial port data to the network: open the serial debugging assistant, and set baud rate as 115200bps. Input 5A A5 01 11 in the sending box, and hit the "manually send" button; TCP Debugging Assistant displays receipt of 5A A5 01 11, and we can see that serial debugging assistant receives 5A A5 01 11.



4. Demonstrate how ETH_100 sends data received from network to the user's serial port: input 5A A5 01 11 in TCP Debugging Assistant, and hit the button of manually send; we can see that the serial debugging assistant receives 5A A5 01 11.