SW5100 Test with Arduino

Test Information

The SW5100 is an Ethernet module with the core chip W5100 from WIZnet company. It supports TCP, UDP, ICMP, IGMP, IPv4, ARP, PPPoE, Ethernet.



In order to use the module correctly, you should understand the pins of it first.



To use it on the Arduino, you just connect the SPI_EN pin to 5V or 3.3V with a pull-up resistor, connect SCLK, SCS, MISO, MOSI to the SPI port of Arduino, connect the INT pin to the digital 2 of Arduino, connect the RESET of Arduino, and

don't forget to connect the VCC (3.3V) and GND. But if you have a Communication shield, the connection could be much easier. All you need to do is just plug the pins into the two rows of slots marked W5100 on the communication shield, and the connection is done.



Connect this module with PC via net cables.

Open the Arduino IDE, find the example **WebServer**:

0	sketch_jun16a Arduing	0022	-			
File	Edit Sketch Tools H					
	New	Ctrl+N				
	Open Sketchbook	Ctrl+O				¢
	Examples	•	1	.Basics	÷	· · ·
	Close	Ctrl+W	2	2.Digital	F	
	Save	Ctrl+S	з	3.Analog	۲	
	Save As	Ctrl+Shift+S	4	l.Communication	×	
	Upload to I/O Board	Ctrl+U	5	o.Control	F	
	Page Setup	Ctrl+Shift+P	6	5.Sensors	×	
	Print	Ctrl+P	7	.Display	1	
	Preferences	Ctrl+Comma	4	8.strings ArduinoISP ArduinoTestSuite	•	
	Quit	Ctrl+Q	4			
			E	EPROM	×.	
			E	Ethernet	۲	BarometricPressureWebServer
			E	thernet_ENCJ60	Þ	ChatServer
			F	Firmata	•	PachubeClient
1			I	TDB02	•	PachubeClientString
			L	.iquidCrystal	۲	TelnetClient
			P.	Matrix	•	UdpNtpClient
			5	SD	•	UDPSendReceiveString
			S	od⊦at	1	WebClient
			5	bervo	•	WebServer

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Change the code:

byte mac[] = { OxDE, OxAD, OxBE, OxEF, OxFE, OxED }; // set the MAC address

byte ip[] = { 192,168,1,177 };

//Set IP

Server server(80);

//Set port, usually 80

Upload the program to Arduino.

Please do not forget to configure the IP on your local PC:

On Windows OS, open Control Panel -> Network and Internet -> Network Connection, double click Local Area Connection (the one your ENCI60 module connected to)

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Local Area Connection Properties							
Networking Sharing							
Connect using:							
Realtek PCIe GBE Family Controller							
Configure							
This connection uses the following items:							
Client for Microsoft Networks							
🗹 💂 Winpk Filter Driver							
🗹 💂 Kaspersky Anti-Virus NDIS 6 Filter							
File and Printer Sharing for Microsoft Networks							
Internet Protocol Version 6 (TCP/IPv6)							
Internet Protocol Version 4 (TCP/IPv4)							
🗹 🔺 Link-Layer Topology Discovery Mapper I/O Driver							
🗹 🔺 Link-Layer Topology Discovery Responder							
Install Uninstall Properties							
Description							
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.							
OK Cancel							

Click Internet Protocol Version 4 (TCP/IPv4) and then Proerties

General								
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.								
🔘 Obtain an IP address automatic	ally							
• Use the following IP address: -								
IP address:	192 . 168 . 1 . 2							
Subnet mask:	255 . 255 . 255 . 0							
Default gateway:	192 . 168 . 1 . 1							
Obtain DNS server address auto	S server address automatically							
O Use the following DNS server addresses:								
Preferred DNS server:								
Alternate DNS server:	• • •							
Validate settings upon exit	Advanced							
	OK Capcel							

Click OK to apply.

Open one brower and input: http://192.168.1.177:80/

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<u>F</u> ile <u>E</u> dit <u>V</u> iew Hi <u>s</u> tory <u>B</u> ookmarks <u>T</u> ools <u>H</u> elp										
🔇 🕑 - C 🗙 🏠 🗋 http://192.188.1.177/ 🛧 - 🛂- Google 🔎	2									
http://192.168.1.177/	4									
http://192.168.1.177/ ☆ analog input 0 is 616 analog input 1 is 682 analog input 2 is 628 analog input 3 is 523 analog input 4 is 463 analog input 5 is 403										
Done										