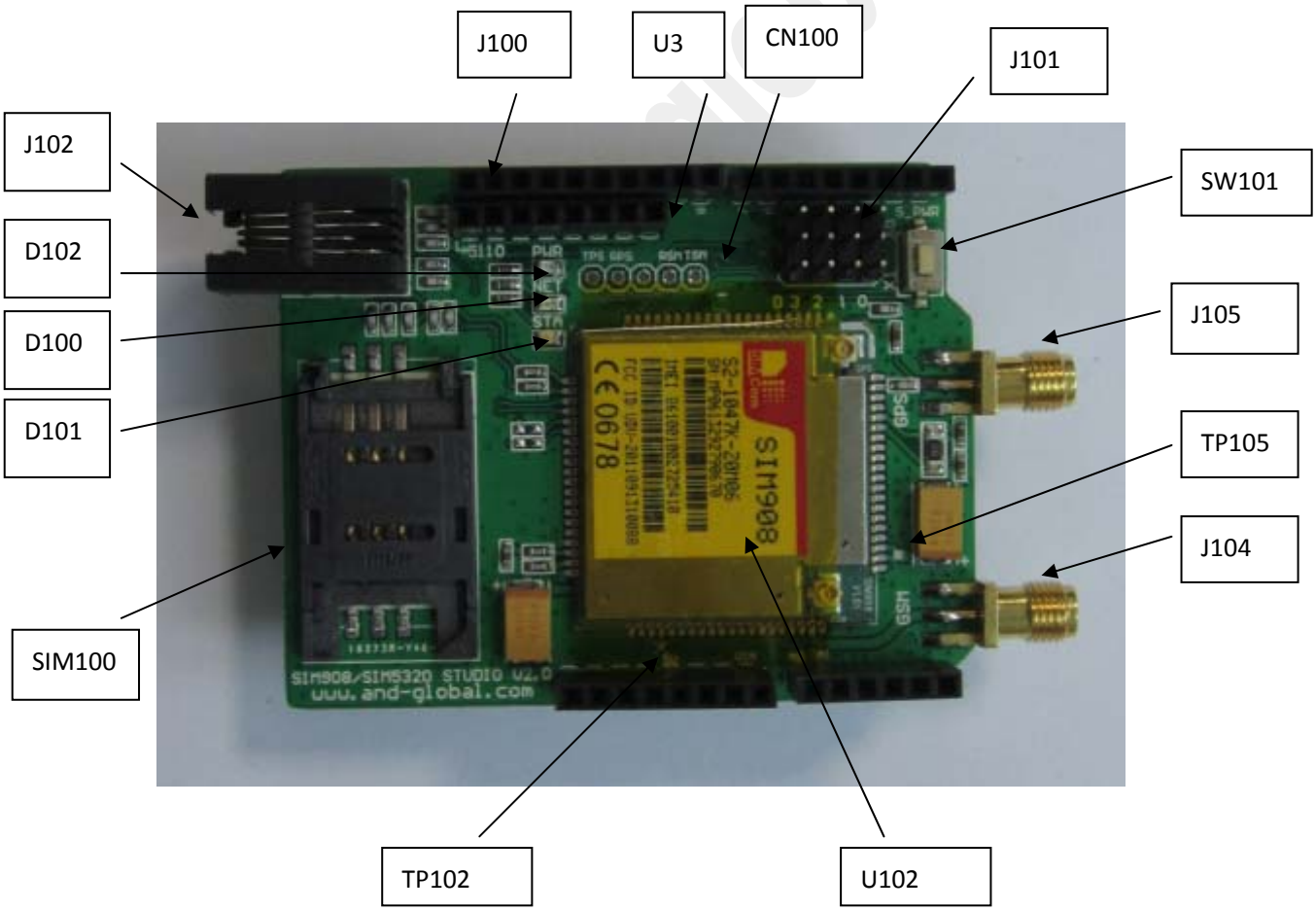
Configuration:

Name	Qty	Unit
SIM908 shield board	1	Pcs
Power Adapter	1	Pcs
LCD 5110	1	Pcs
GSM antenna	1	Pcs
GPS antenna	1	Pcs
Arduino UNO	**Don't include**	**(Option)**

Overview:



J100	Arduino UNO connection
U3	LCD 5110 connector
CN100	Over design for GSM/GPS port
J101	Software UART
SW101	ON/OFF Button
J105	GPS Antenna connector
J104	GSM Antenna connection
U102	SIM908 module
SIM100	SIM Card socket
D101	SIM908 ON indicator
D100	Net indicator
D102	Power indicator
J102	Telephone Handle connector
TP105	SIM908 VBAT
TP102	SIM908 VDD-EXT
Bottom Layer	VRTC Capacitor, Power Circuit, Short-Circuit protection

Feature:

•Quad-Band 850/900/18001900MHz
•GPRS multi-slot class 10
•Control via AT commands (GSM 07.07,07.05 and SIMCom enhanced AT Commands)
•Supply voltage:6-12V(**Please note to use external 9V/1A power adapter to meet the GSM current requirement.**)
•Ultra small dimension: 68.6*53.3mm (Same with Arduino UNO board)
•Integrated TCP/IP stack
•100uF capacitor for RTC
•GPS technology for satellite navigation
- 42-channel,GPS L1 C/A code,
- Tracking Sensitivity: -160 dBm
- Horizontal position Accuracy : <2.5m CEP

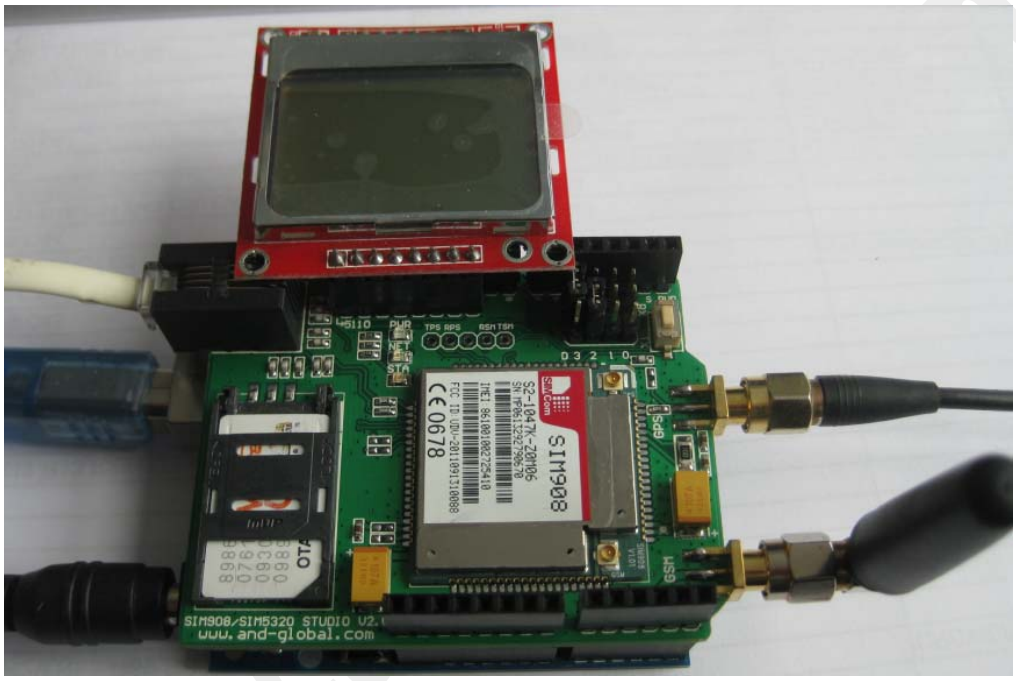
Introduction

This shield is designed by AND Technologies, with a Quad-band GSM/GPRS engine, It also supports Global Navigation Satellite System. All arduino board interfaces is fan out, easy for you to add your own application board.

The combination of GSM/GPRS/GPS solution allows controlling system, vehicles and people to be tracked anytime and anywhere with signal coverage.

Using Procedure of SIM908 STUDIO basing on Arduino UNO

1.Connect the LCD, GSM antenna, power supply(9V/1A), USB cable. Please Note: Must use extra Power adapter to guarantee the SIM908 current requirement.

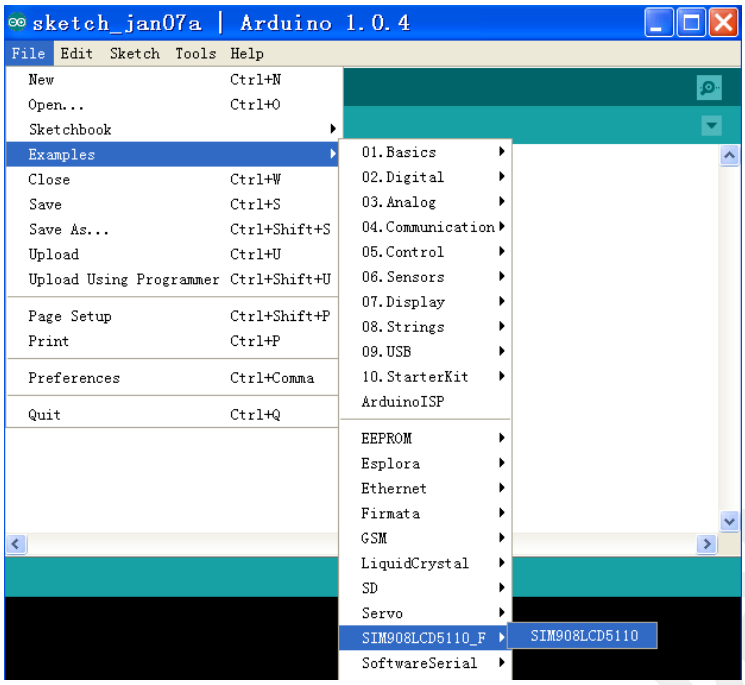


2.Unzip SIM908LCD5110.rar file

3.Copy SIM908LCD5110_F file to arduino-1.0.4-windows\arduino-1.0.4\libraries\

4.Open arduino.exe(Double click arduino.exe) and open SIM908LCD5110.ino project as below

ADDR : F5, NiuLanQian building, Minzhi Road, LongHua District, Shenzhen, China
Tel : +86-755-28099797
Website : www.and-global.com
Golden supplier on Alibaba : http://and-global.en.alibaba.com
Email : info@and-global.com



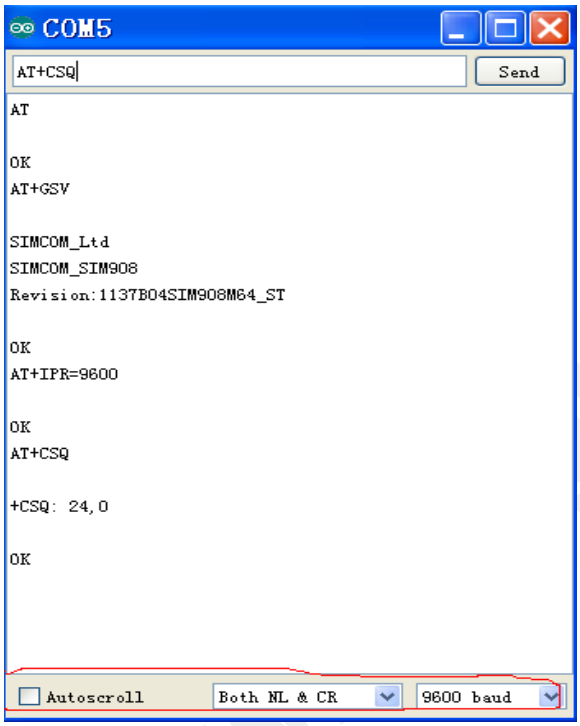
5.Verify the project and upload the code.

6.You will find the LCD is as below

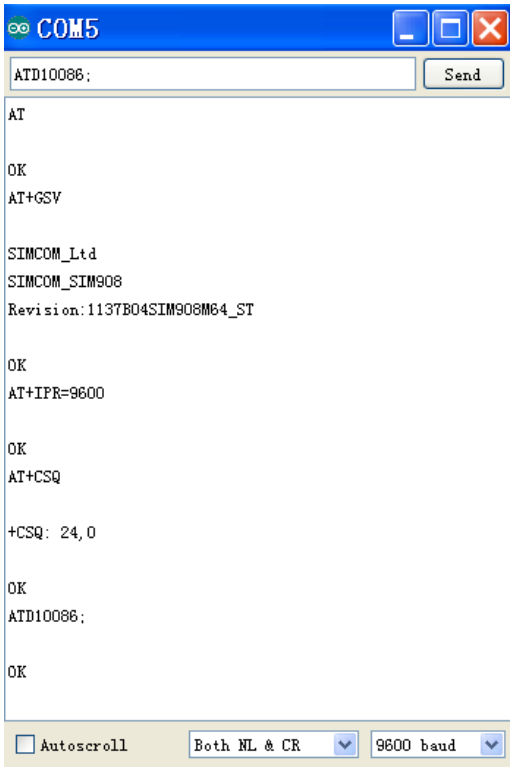
7. Push down the S_PWR button, You will find “STA” LED is ON, “NET” LED is blinking. You can judge the SIM908 status according to “NET” LED.

Status	SIM908 behavior
Off	SIM908 is not running
64ms On/ 800ms Off	SIM908 not registered the network
64ms On/ 3000ms Off	SIM908 registered to the network
64ms On/ 300ms Off	PPP GPRS communication is established

8.Open the serial monitor, input AT, and click the Send button. Please note the setting.

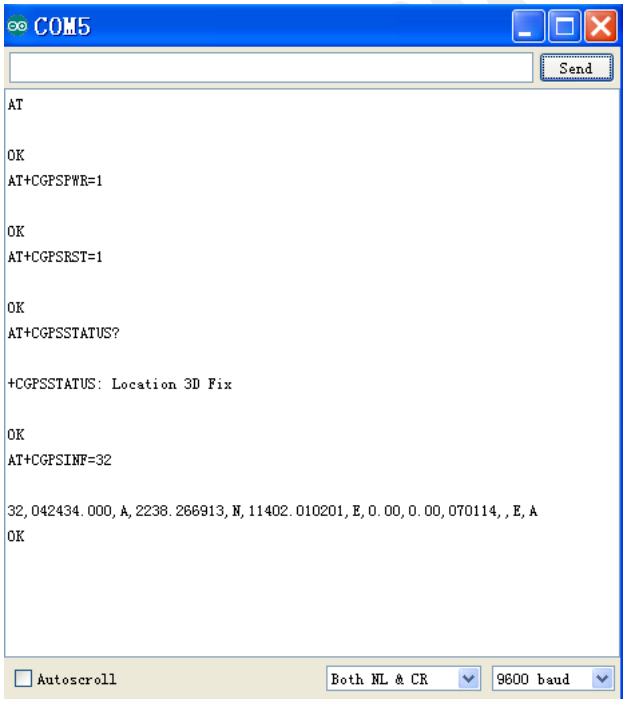


9. You can dial the phone number to verify the audio.



10. Because SIM908 and SIM900 share same GSM part, You can follow “SIM900 DNS TCP.pdf” document to send any AT command.

11. For GPS, you can use below AT command to get GPS information.



ADDR : F5, NiuLanQian building, Minzhi Road, LongHua District, Shenzhen, China
Tel : +86-755-28099797
Website : www.and-global.com
Golden supplier on Alibaba : http://and-global.en.alibaba.com
Email : info@and-global.com

Appendix Source code:

///Please use Arduino 1.0 or later, Arduino 1.0.4 is strong recommended.use this sketch instead:
//Arduino will patch a serial link between the computer and the GPRS Shield at 9600bps 8-N-1
//Computer is connected to Hardware UART and GPRS Shield is connected to the Software UART D2/D3
//Nokia 5110 LCD is connected to D9,D10,D11,D12,D13.
// SoftwareSerial.h is got form Arduino 1.0.4 LCD5110_Graph.h is got in the document.

```
#include <LCD5110_Graph.h>
#include <SoftwareSerial.h>

extern uint8_t SmallFont[];

#define rxPin 2
#define txPin 3

SoftwareSerial mySerial(rxPin, txPin);

LCD5110 myGLCD(9,10,11,12,13);

extern uint8_t SmallFont[];


void setup()
{
  myGLCD.InitLCD();     //Initial LCD
  myGLCD.setFont(SmallFont); //set the Font
  mySerial.begin(9600);                  // the GPRS baud rate
  Serial.begin(9600);                   // the GPRS baud rate


  myGLCD.clrScr();    // clear the LCD screen
  myGLCD.print(" ANDTech", CENTER, 0);
```

```
  myGLCD.print("AND-GLOBAL.COM", LEFT, 15);
  myGLCD.print("SIM908 Beta V1.0", LEFT, 30);
  myGLCD.update();
  pinMode(11, OUTPUT);
  digitalWrite(11,LOW);
}

void loop()
{
    if (mySerial.available())
      Serial.write(mySerial.read());    // Arduino send the computer command to SIM908

    if (Serial.available())
      mySerial.write(Serial.read());    //Arduino send the sim908 feedback to computer
}
```

The Method to generate the .hex code:
Open the arduino.exe
Open File->preferences to find preferences.txt file path.
Open preferences.txt, and amend build.path=D:\AND\Arduino\hex,save it.
Verify the project and upload the code.
You can find the .hex code under the D:\AND\Arduino\hex\ path.
Note：1：hex file can be saved to any path