

The GPRS/GSM board with MMS!

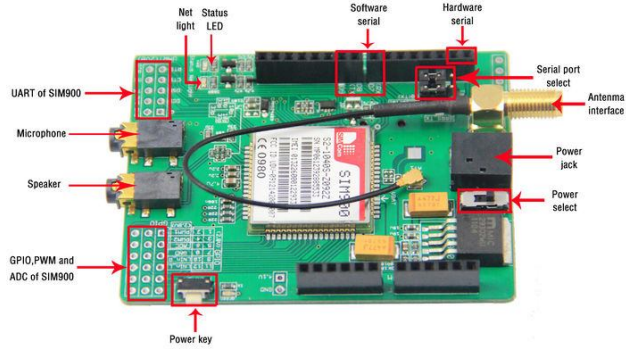
Description:

The GPRS Shield is based on SIM900 module from SIMCOM and compatible with Arduino and its clones. The GPRS Shield provides you a way to communicate using the GSM cell phone network. The shield allows GPRS and Audio via UART by sending AT commands (GSM 07.07 ,07.05 and SIMCOM enhanced AT Commands). The shield also has the 12 GPIOs, 2 PWMs and an ADC of the SIM900 module(They are all 2V8 log

Feature:

1. Quad-Band 850 / 900 / 1800 / 1900 MHz - would work on GSM networks in all countries across the world.
2. GPRS multi-slot class 10/8
3. GPRS mobile station class B
4. Compliant to GSM phase 2/2+
5. Class 4 (2 W (AT) 850 / 900 MHz)
6. Class 1 (1 W (AT) 1800 / 1900MHz)
7. Control via AT commands - Standard Commands: GSM 07.07 & 07.05 | Enhanced Commands: SIMCOM AT Commands.
8. Short Message Service - so that you can send small amounts of data over the network (ASCII or raw hexadecimal).
9. Embedded TCP/UDP stack - allows you to upload data to a web server.
10. RTC supported.
11. Selectable serial port.
12. Speaker and Headphone jacks
13. Low power consumption - 1.5mA(sleep mode)
14. Industrial Temperature Range - -40°C to +85 °C

Hardware Diagram



- \$ Power select - select the power supply for GPRS shield(external power or 5v of arduino)
- \$ Power jack - connected to external 4.8-5VDC power supply
- \$ Antenna interface - connected to external antenna
- \$ Serial port select - select either software serial port or hardware serial port to be connected to GPRS Shield
- \$ Hardware Serial - D0/D1 of Arduino
- \$ Software serial - D7/D8 of Arduino
- \$ Status LED - tell whether the power of SIM900 is on
- \$ Net light - tell the status about SIM900 linking to the net
- \$ UART of SIM900 - UART pins breakout of SIM900
- \$ Microphone - to answer the phone call
- \$ Speaker - to answer the phone call
- \$ GPIO, PWM and ADC of SIM900 - GPIO, PWM and ADC pins breakout of SIM900
- \$ Power key - power up and down for SIM900
- \$ Pins usage on Arduino
- \$ D0 - Unused if you select software serial port to communicate with GPRS Shield
- \$ D1 - Unused if you select software serial port to communicate with GPRS Shield
- \$ D2 - Unused
- \$ D3 - Unused
- \$ D4 - Unused
- \$ D5 - Unused
- \$ D6 - Unused
- \$ D7 - Used if you select software serial port to communicate with GPRS Shield
- \$ D8 - Used if you select software serial port to communicate with GPRS Shield
- \$ D9 - Used for software control the power up or down of the SIM900
- \$ D10 - Unused
- \$ D11 - Unused
- \$ D12 - Unused
- \$ D13 - Unused
- \$ D14(A0) - Unused
- \$ D15(A1) - Unused
- \$ D16(A2) - Unused
- \$ D17(A3) - Unused
- \$ D18(A4) - Unused
- \$ D19(A5) - Unused
- \$ Note: A4 and A5 are connected to the I2C pins on the SIM900. The SIM900 however cannot be accessed via the I2C .