

# GPRS Module

## -SIM900 GSM/GPRS Module

### Overview



GPRS module is a breakout board and minimum system of SIM900 Quad-band GSM/GPRS module. It can communicate with controllers via AT commands (GSM 07.07 ,07.05 and SIMCOM enhanced AT Commands).

### Features

- Quad-Band 850/900/1800/1900MHz
- GPRS multi-slot class 10/8
- GPRS mobile station class B
- Compliant to GSM phase 2/2+
- Class 4 (2W@850/900MHz)
- Class 1 (1W@1800/1900MHz)
- Control via commands (GSM 07.07, 07.05 and SIMCOM enhanced AT Commands)
- Short message service
- Free serial port selection
- 3.5 inch standard sonic sockets for MIC and phone
- Operation temperature: -40°C ~ +85°C

## Specifications

PCB size	71.4mm X 66.0mm X 1.6mm
Indicators	PWR, status LED, net LED
Power supply	5V
Communication Protocol	UART
RoSH	Yes

## Electrical Characteristics

Specification	Min	Type	Max	Unit
Power Voltage(Vsupply)	4.5	-	5.5	VDC
Input Voltage VH:	0.7VCC	-	5.5	V
Input Voltage VL:	-0.3	0	0.3VCC	V
Current Consumption(pulse)	-	-	2000	mA
Current Consumption(Continues)			500	mA
Baud rate		115200		bps

## Hardware

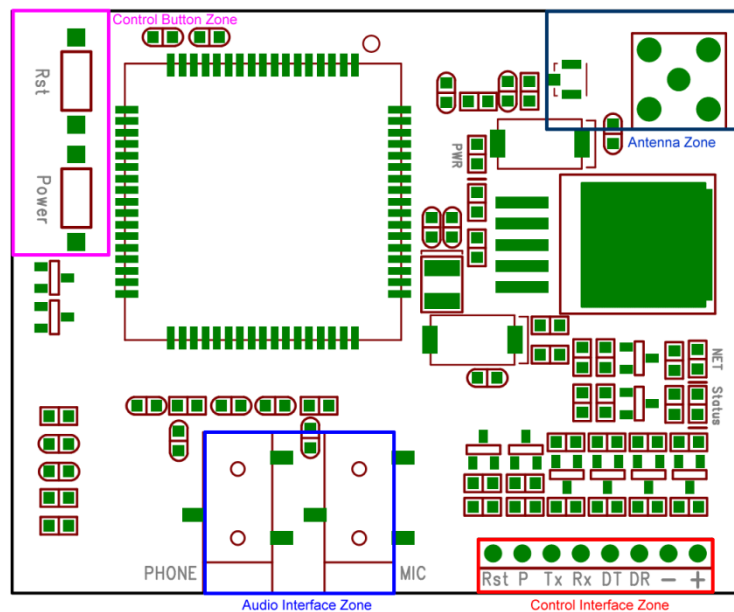


Figure 1 Top Map

Interface	Pin	Description
Rst	1	Reset the SIM900 module
P	2	Power switch pin of SIM900 module

Tx	3	UART data output
Rx	4	UART data in
DT	5	Debug UART data output
DR	6	Debug UART data input
-	7	GND
+	8	VCC

## Installation

### Power on GPRS module

User can power on the GPRS module by pulling down the PWR button or the P pin of control interface for at least 1 second and release.

When power on procedure is completed, GPRS module will send following URC to indicate that the module is ready to operate at fixed baud rate.

### Indicator LED and Buttons:

**LED:** (The status of the NETSTATUS LED is listed in following table):

Status	Description
Off	SIM900 is not running
64ms On/800ms Off	SIM900 not registered the network
64ms On/3000ms Off	SIM900 registered to the network
64ms On/300ms Off	GPRS communication is established

**STATUS:** Power status of SIM900.

**PWR:** Power status of GPRS module.

### Buttons:

**PWR:** After the GPRS module power on, press the POWER button for a moment to power on the SIM900 module.

**RESET:** Reset the SIM900 module.

## Revision History

Rev.	Description	Release date
v1.0	Initial version	2011-12-06