

# **GSM/GPRS Module**





## SIM800L

SIM800L is a complete Quad-band GSM/GPRS solution in a LGA type which can be embedded in the customer applications.

SIM800L support Quad-band 850/900/1800/1900MHz, it can transmit Voice, SMS and data information with low power consumption. With tiny size of 15.8\*17.8\*2.4 mm, it can fit into slim and compact demands of customer design.

## **Smart Machine Smart Decision**

#### **General features**

- •Quad-band 850/900/1800/1900MHz
- •GPRS multi-slot class 12/10
- •GPRS mobile station class B
- •Compliant to GSM phase 2/2+
  - Class 4 (2 W @ 850/900 MHz)
  - Class 1 (1 W @ 1800/1900MHz)
- •FM: 76~109MHz worldwide bands with 50KHz tuning step
- •Dimensions: 15.8\*17.8\*2.4 mm
- •Weight: 1.35g
- •Control via AT commands (3GPP TS 27.007, 27.005 and SIMCOM enhanced AT Commands)
- •Supply voltage range 3.4 ~ 4.4V
- •Low power consumption
- •Operation temperature:-40°C ~85°C

#### **Specifications for GPRS Data**

- •GPRS class 12: max. 85.6 kbps (downlink/uplink)
- •PBCCH support
- •Coding schemes CS 1, 2, 3, 4
- •PPP-stack
- •CSD up to 14.4 kbps
- •USSD
- •Non transparent mode

#### Specifications for SMS via GSM/GPRS

- •Point to point MO and MT
- •SMS cell broadcast
- •Text and PDU mode

#### Software features

- •0710 MUX protocol
- •Embedded TCP/UDP protocol
- •FTP/HTTP
- •MMS
- •E-MAIL
- •DTMF
- •Jamming Detection

## Specifications for voice

- •Tricodec
  - Half rate (HR)
  - Full rate (FR)
  - Enhanced Full rate (EFR)
- •AMR
  - Half rate (HR)
  - Full rate (FR)
- •Hands-free operation (Echo suppression)

#### **Interfaces**

88 LGA pads including:

- Analog audio interface
- •PCM interface
- •RTC backup
- Serial interface
- •USB interface
- •Interface to external SIM 3V/1.8V
- •Keypad interface
- •GPIO
- •ADC
- GSM Antenna pad
- •FM Antenna pad

#### Compatibility

•AT cellular command interface

#### Certifications(Plan):

- •CE
- •GCF
- •FCC
- •ROHS •REACH