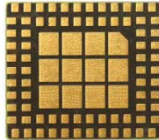# GSM/GPRS Module

SIM800H

SIM800H is a complete Quad-band GSM/GPRS solution in a LGA type which can be embedded in the customer applications.

SIM800H 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. Featuring Bluetooth, FM and Embedded AT, it allows total cost savings and fast time-to-market for customer applications.

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 @ 850/900MHz)
    – Class 1 (1 W @ 1800/1900MHz)
• Bluetooth: compliant with 3.0+EDR
• FM: 76~109MHz worldwide bands with 50KHz tuning step
• Dimensions: 15.8*17.8*2.4mm
• 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℃ ~85℃

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
• Audio Record
• TTS
• Embedded AT (optional)

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
• Bluetooth Antenna pad

Compatibility
• AT cellular command interface

Certifications(Plan):
• CE
• GCF
• FCC
• ROHS
• REACH