SIM900D

GSM/GPRS Module



The SIM900D is a complete Quad-band GSM/GPRS solution in a SMT module which can be embedded in the customer applications.

Featuring an industry-standard interface, the SIM900D delivers GSM/GPRS 850/900/1800/1900MHz performance for voice, SMS, Data, and Fax in a small form factor and with low power consumption. With a tiny configuration of 33mm x 33mm x 3 mm, SIM900D can fit almost all the space requirements in your M2M application, especially for slim and compact demand of design.

- SIM900D is designed with a very powerful single-chip processor integrating AMR926EJ-S core
- Quad band GSM/GPRS module with a size of 33mmx3mmx3mm
- SMT type suit for customer application
- An embedded Powerful TCP/IP protocol stack
- Based upon mature and field-proven platform, backed up by our support service, from definition to design and production

General featrues

- Quad-Band 850/ 900/ 1800/ 1900 MHz
- GPRS multi-slot class 10/8
- GPRS mobile station class B
- Compliant to GSM phase 2/2+
 - Class 4 (2 W @850/900 MHz)
 - Class 1 (1 W @ 1800/1900MHz)
- Dimensions: 33* 33 * 3 mm
- Weight: 6.2g
- Control via AT commands (GSM 07.07,07.05 and SIMCOM enhanced AT Commands)
- SIM application toolkit
- Supply voltage range 3.4 ... 4.5 V
- Low power consumption
- Operation temperature:
 -30 °C to +80 °C

Specifications for fax

Group 3, class 1

Specifications for data

- GPRS class 10: max. 85.6 kbps (downlink)
- PBCCH support
- Coding schemes CS 1, 2, 3, 4
- CSD up to 14.4 kbps
- USSD
- Non transparent mode
- PPP-stack

Specifications for SMS via GSM

/ GPRS

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

Drivers

MUX Driver

Specifications for voice

- Tricodec
 - Half rate (HR)
 - Full rate (FR)
 - Enhanced Full rate (EFR)

- Hands-free operation (Echo suppression)
- AMRHalf Rate(HR)Full Rate(FR)

Interfaces

- Interface to external SIM 3V/ 1.8V
- analog audio interface
- RTC backup
- SPI interface
- Serial interface
- Antenna pad
- GPIO
- PWM
- ADC
- Charge interface for LI battery

Compatibility

AT cellular command interface

Approvals (in planning)

- CE
- FCC
- ROHS
- PTCRB
- GCF

Pin Assignment

