GSM/GPRS Module

SIM900D

SIMCom presents an ultra compact and reliable wireless module-SIM900D. This is a complete Quad-band GSM/GPRS module in a SMT type and designed with a very powerful single-chip processor integrating AMR926EJ-S core, allowing you to benefit from small dimensions and cost-effective solutions. Furthermore, SIM900D can be compatible with SIM340DZ.

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 applications, especially for slim and compact demands of design.

Smart Machine Smart Decision

General features
- 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)
- SAIC (Single Antenna Interference Cancellation) support
- 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 : 3.2 ... 4.8V
- Low power consumption: 1.0mA(sleep mode&BS-PA-MFRMS=9)
- Operation temperature: -40 ° C to +85° C

Specifications for Fax
- Group 3, class 1

Specifications for GPRS Data
- GPRS class 10: max. 85.6 kbps (downlink)
- PBCCH support
- Coding schemes CS 1, 2, 3, 4
- PPP-stack

Specifications for CSD Data
- 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
- FOTA (available at Q3 2010)

- MMS (available at Q3 2010)
- Embedded AT (available at Q3 2010)

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
- Interface to external SIM 3V/ 1.8V
- Analog audio interface
- RTC backup
- SPI interface (option)
- Serial interface
- Embedded SIM (option)
- Antenna pad
- GPIO
- ADC
- Charge interface for Li battery
- PWM

Compatibility
- AT cellular command interface

Approvals:
- ROHS
- REACH
- GCF
- CE

Approvals (on going)
- FCC
- IC