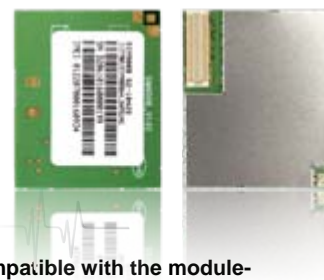# GSM/GPRS Module

SIM900B

SIMCom presents a compact and reliable wireless module-SIM900B which is compatible with the module-SIM300/340 and SIM340E. This is a complete Quad-band GSM/GPRS module in a B2B 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.

Featuring an industry-standard interface, the SIM900B delivers GSM/GPRS 850/900/1800/1900MHz performance for voice, SMS, Data, and Fax in a small form factor and with low power consumption. SIM900B can fit almost all requirements in your M2M applications.

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: 40* 33 * 3 mm
- Weight: 7g
- 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

Enhanced version add following features:
- 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
- 60 PIN Board-to-board connector
- Interface to external SIM 3V/ 1.8V
- Two analog audio interface
- RTC backup
- SPI interface
- Serial interface
- SIM Card
  - Option1: SIM Holder
  - Option 2:Embedded SIM
- Keypad
- GPIO
- PWM
- ADC
- Antenna connector

Compatibility
- AT cellular command interface

Approvals (on going)
- CE
- FCC
- ROHS
- PTCRB
- AT&T
- GCF
- IC
- ICASA

More about SIMCom SIM900B
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