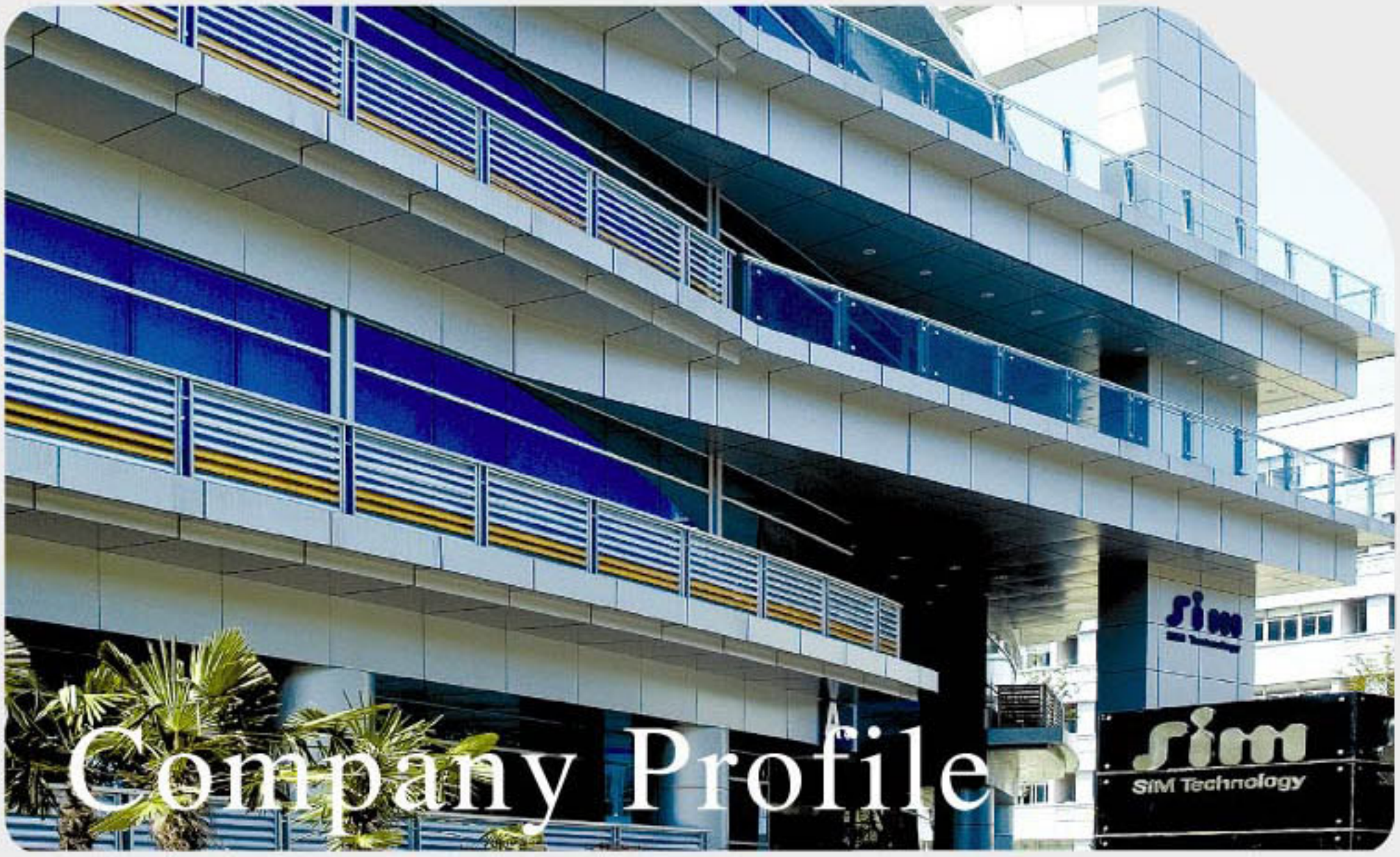
A company of SIM Tech

Wireless Module Solutions

SIMCom Wireless Solutions



Company Profile

SIMCom Wireless Solutions, a subsidiary of SIM Technology Group Ltd., is the leader in high quality wireless modules for different technology platforms in GSM/GPRS/EDGE, WCDMA/HSPA and TD-SCDMA. From ABI Research 2006, the Cellular Module shipment based on SIMCom Wireless's solution has placed the company in the No.3 position in the worldwide market.

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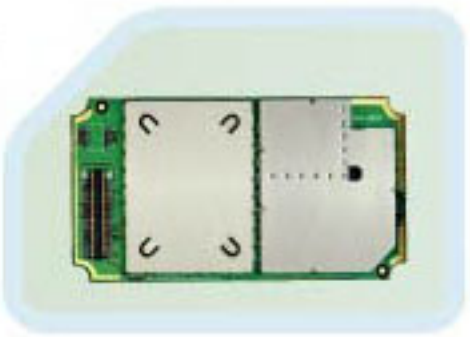
WCDMA/HSDPA

SIM5212

SIM5212 is a WCDMA/HSDPA/GSM/GPRS/EDGE module solution which supports up to 7.2Mbps downlink speed and 384K uplink speed data service. It also has strong capability with rich interfaces including UART, USB2.0, I2C, GPIO, etc.

With high speed HSDPA functionality and strong capability in extension, SIM5212 is ideal for a wide arrange of products including USB modems, gateways, routers, PDAs, security solutions and much more.



Advanced Features

- Tri-Band WCDMA/HSDPA 850/1900/2100MHz
- Quad-Band GSM/GPRS/EDGE 850/900/1800/1900MHz
- HSDPA 7.2Mbps
- USB 2.0 full speed or UART support
- WCDMA Equalizer
- WCDMA Diversity (at 2100MHz & 850MHz)

Technical Profiles

- HSDPA 7.2Mbps
- Tri-Band WCDMA/HSDPA 850/1900/2100MHz
- Quad-Band GSM 850/900/1800/1900MHz
- GPRS multi-slot class 12
- EDGE multi-slot Class 12
- WCDMA/HSDPA 3GPP release 5
- GSM 3GPP release 99
- Max output power
  - WCDMA 2100: 0.25W
  - WCDMA 1900: 0.25W
  - WCDMA 850: 0.25W
  - GSM850/GSM900: 2W (GMSK), 0.5W (8-PSK)
  - DCS1800/PCS1900: 1W (GMSK), 0.4W (8-PSK)
- Control Via AT Commands
- Supply voltage range: 3.4V~ 4.2V
- Dimension: 58mm x 30.5mm x 4.5mm
- Normal operation Temperature: -15°C to +55°C
- Restricted operation temperature: -20°C to -15 °C or +55°C to +70°C
- Storage temperature: -40°C to +85°C

Interfaces

- USB2.0
- UART
- SIM card
- Audio: 2 analog input, 3 analog output
- GPIO

Specification for Data

- HSDPA
  - Max. 7.2Mbps (DL)
  - UE Category: 6, 8, 12
- WCDMA
  - Max.384Kbps (DL),Max.384Kbps (UL)
- EDGE Class
  - Max. 236.8Kbps (DL),Max.118Kbps (UL)
- GPRS
  - Max. 85.6Kbps (DL), Max. 42.8Kbps (UL)
- CSD
  - GSM Data rate 14.4Kbps
  - WCDMA date rate 57.6kbps

Specification for SMS

- Point to point MO and MT
- Text and PDU mode

Specification for Voice

- Voice Codec HR, FR, EFR
- AMR
- DTMF

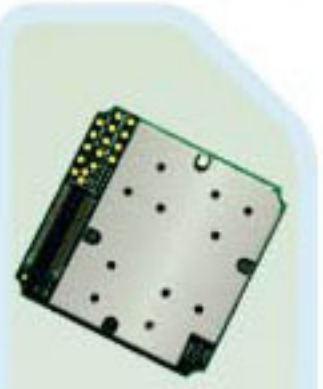
Other features

- USB Driver for Microsoft Windows 2000/XP/Vista
- Firmware update via USB

SIM5210

SIM5210 is a HSDPA/WCDMA/GSM/GPRS/EDGE module solution which supports up to 7.2M downlink speed and 384K uplink speed data service. It also has strong capability with rich interfaces including UART, USB2.0, GPIO, TCP/IP protocol stack, etc.

With high speed HSDPA functionality and strong capability in extension, SIM5210 is ideal for a wide arrange of products including USB modems, gateways, routers, PDA, security solutions and much more.



Advanced Features

- Single-band UMTS/HSDPA 2100MHz
- Quad-band GSM/GPRS/EDGE 850/900/1800/1900MHz
- HSDPA 7.2Mbps
- USB 2.0 full speed or UART support
- Integrated TCP/UDP/IP protocol stack

Technical Profiles

- Network Frequency: WCDMA 2100MHz GSM 850/900/1800/1900MHz
- Dimension: 35mm x 35mm x 4.5mm
- Support data and audio services

Interfaces

- USB2.0 (default)
- UART
- SIM card
- Audio: 2 analog input, 3 analog output
- I^2C interface
- GPIO

Data Services

- HSDPA data speed (max): 7.2 Mbps
- WCDMA data speed (max): 384 Kbps(DL & UL)
- GPRS/EDGE

TD-SCDMA

SIM4100

SIM4100 is a dual-mode TD-SCDMA module which works at 2010-2025MHz on the TD-SCDMA mode and Tri-Band 900/1800/1900MHz on the GSM mode. The leading features of SIM4100 make it ideal for virtually unlimited applications, such as WLL applications (Fixed cellular terminal), M2M applications, handheld devices, PC card and much more.

- **AMR voice**
- **SMS/MMS**
- **PS: Uplink (up to 128Kbps)**
  Downlink (up to 384Kbps)
- **Average idle current: 8mA**
- **Board interface: 80pin B2B connector**
- **Based upon mature and field-proven platform, backed up by SIMCom support service, from definition to design and production**

General features

- TD-SCDMA 2010-2025MHz
- Tri-Band GSM/GPRS 900/1800/1900MHz
- Compliant to 3GPPclass B +24dBm
- Dimension: 61.0mm x 34.0mm x 3.0mm
- Weight: 15g
- AT commands (GSM07.07, 07.05 and SIMCom enhanced AT commands)
- SIM application toolkit
- Battery voltage range: 3.4V to 4.5V
- Low power consumption
- Normal operation temperature: -20 °C to +60 °C
- Restricted operation temperature: -30 °C to -20 °C or +60 °C to +80 °C
- Storage temperature: -40 °C to +85 °C

Specifications for PS

- 128/384 Kbps support
- CSD 64Kbps
- USSD
- PPP stack
- TCP/IP stack

Specifications for voice

- AMR
- Internal amplifier for 8ohm speaker

Interfaces

- USIM interface 3V/1.8V
- Two differential analog audio interfaces
- USB 2.0
- I² C
- PCM
- USC
- GPIO
- Keypad interface: 5*5
- LCD interface: SPI
- RTC backup
- AT interface with flow control
- Debug interface
- Antenna connector and antenna pad

EDGE

SIM600

SIM600 is a complete Quad-Band GSM/GPRS/EDGE solution in a compact plug-in module which is ideal for virtually unlimited applications, such as WLL applications (Fixed Cellular Terminal), M2M applications, PC card, USB modem,and much more.

- **Customized MMI and keypad/LCD support**
- **Based upon mature and field-proven platform, backed up by our support service, from definition to design and production**

General features

- Quad-Band GSM/GPRS/EDGE 850/900/1800/1900MHz
- GPRS multi-slot class 12
- GPRS mobile station class B
- Compliant to GSM phase 2/2+
  GMSK:
  – Class 4 (2 W @ 850/900MHz)
  – Class 1 (1 W @ 1800/1900MHz)
  8PSK:
  – Class E2 (0.5W @ GSM850/EGSM900)
  – Class E2 (0.4W @ DCS1800/PCS1900)
- Dimension: 54mm x 33mm x 2.8mm
- Weight: 10 g
- Control via AT commands (GSM 07.07, 07.05 and SIMCom enhanced AT Commands)
- SIM application toolkit
- Supply voltage range 3.4V... 4.5 V
- Low power consumption
- Normal operation temperature: -20°C to +60°C
- Restricted operation temperature: -30°C to -20°C and +60°C to +80°C
- Storage temperature: -40°C to +85°C

EDGE

SIM700D

The new EDGE module is a complete Quad-Band GSM/GPRS/EDGE solution in a compact SMT module. Featuring an industry-standard interface, it delivers GSM/GPRS/EDGE 850/900/1800/1900MHz performance for Data, Voice, SMS, and Fax in a small form factor and with low power consumption. The leading features of the module make it ideal for virtually unlimited applications, such as PC card, USB modem, handheld devices, M2M applications and much more.

General feature

- Quad-Band GSM/GPRS/EDGE 850/900/1800/1900MHz
- Mobile station class B
- Multi-slot class 12
- Uplink or downlink max throughput: 236.8Kbps
- Output power:
  GMSK:
  – Class 4 (2W @ GSM850/EGSM900)
  – Class 1 (1W @ DCS1800/PCS1900)
  8PSK:
  – Class E2 (0.5W @ GSM850/GSM900)
  – Class E2 (0.4W @ DCS1800/PCS1900)
- GPRS/EDGE multi-slot class 12
- Coding scheme:CS1~4, MS1~9
- Mobile station class B
- Control via AT commands (GSM 07.07, 07. 05 and SIMCom enhanced AT Commands)
- Embedded Multiplexer protocol stack
- Embedded TCP/IP protocol
- SIM application toolkit
- Supply voltage range 3.4 ... 4.5 V
- Low power consumption
- Normal operation temperature: -20°C to +60°C
- Restricted operation temperature: -30°C to -20 °C and +60°C to+80°C
- Storage temperature: -40°C to +85°C
- Low power consumption
- Dimension: 43.5mmx26mmx2.9mm

Specifications for fax

- Group 3, class 1

Specifications for data

- CSD: up to 14.4Kbps, non-transparent
- GPRS: max: 85.6Kbps
- EDGE: DL&UL max: 236.8Kbps
- Support PBCCH
- Support USSD

Specifications for voice

- Half Rate (ETS 06.20)
- Full Rate (ETS 06.10)
- Enhanced Full Rate (ETS 06.50 / 06.60/06.80)
- Echo cancellation
- Noise reduction

Compatibility

- AT cellular command interface

Drivers

- Multiplexer driver for Microsoft Windows

Interfaces

- Power supply
- Two analog audio channel
- RTC backup
- Serial port
- USB slave
- Bluetooth port
- Antenna pad
- Charge interface
- LCD
- SIM Card
- GPIO

SIM700

The new EDGE module is a complete Quad-Band GSM/GPRS/EDGE solution in a compact plug-in module. Featuring an industry-standard interface, it delivers GSM/GPRS/EDGE 850/900/1800/1900MHz performance for Data, Voice, SMS, and Fax in a small form factor and with low power consumption. The leading features of the Module make it ideal for virtually unlimited applications, such as PC card, USB modem, handheld devices, M2M applications and much more.

General feature

- Quad-Band GSM/GPRS/EDGE 850/900/1800/1900MHz
- Output power:
  GMSK:
  – Class 4 (2 W @ 850/900MHz)
  – Class 1 (1 W @ 1800/1900MHz)
  8PSK:
  – Class E2 (0.5W@ GSM850/EGSM900)
  – Class E2 (0.4w@ DCS1800/PCS1900)
- GPRS /EDGE multi-slot class 12
- Coding scheme: CS1~4, MS1~9
- Mobile station class B
- 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
- Normal operation temperature: -30°C to +80°C
- Restricted operation temperature: -30°C to -40 °C and +80°C to+85°C
- Storage temperature: -45°C to +90°C
- Dimension: 45mmx34mmx3mm

Specifications for fax

- Group 3, class 1

Specifications for data

- CSD: up to 14.4Kbps, non-transparent
- GPRS: max: 85.6Kbps
- EDGE: DL&UL max: 236.8Kbps
- Coding scheme: CS1~4, MCS1~9
- Support PBCCH
- Support USSD

Specifications for voice

- Half Rate (ETS 06.20)
- Full Rate (ETS 06.10)
- Enhanced Full Rate (ETS 06.50 / 06.60 / 06.80)
- Echo cancellation
- Noise reduction
- AMR

Compatibility

- AT cellular command interface

Interfaces

- Power supply
- Two analog audio channels
- RTC backup
- Dual - serial ports
- USB slave
- Antenna pad and antenna connector
- Charge interface
- SIM Card
- I² C BUS

GSM/GPRS+GPS

SIM508C/548C

SIM508C/548C module is a compact Dual-Band/Quad-Band GSM/GPRS-enabled module that is also equipped with GPS technology for satellite navigation. The compact design of the SIM508C/SIM548C makes it easy to integrate GSM/GPRS & GPS as an all-in-one solution. You will save significantly both time and cost for the integration of additional hardware components.

Featuring an industry-standard interface and GPS function, the combination of both technologies allows goods, vehicles and people to be tracked seamlessly at any location and anytime.

General features

- Dual-Band GSM 900/1800MHz or Quad--Band GSM 850/900/1800/1900MHz
- GPRS multi-slot class 10
- GPRS mobile station class B
- Compliant to GSM phase 2/2+
  - Class 4(2W @ GSM850/900MHz)
  - Class 1(1W @ GSM1800/1900MHz)
- Control via AT commands (GSM 07.07 and 07.05 and SIMCom enhanced AT commands)
- SIM application tool kit
- Low power consumption
- Supply voltage range 3.4…4.5 V
- Normal operation temperature: –30°C to +80°C
- Restricted operation temperature: –30°C to –40°C and +80°C to +85°C
- Storage temperature: –45°C to +90°C
- Dimension: 50mmx33mmx8.8mm

Specifications for GPS

- Receiver 20 channels, L1 1575.42 MHz, C/A code 1,023 MHz chip rate
- Accuracy Position 2.5 m CEP
  - without SA/Velocity 0.1 m/s,
  - without SA/Time 1 µs synchronized to GPS time
- Position with DGPS/SBAS: 2.0 CEP
- Date WGS-84
- Acquisition rate (TTFF defined at 95% of first position local station)
  - Hot start < 1 s, average, open sky
  - Warm start: 35 s, average, open sky
  - Cold start: 35 s, average, open sky
- Support AGPS
- Operating voltage 3.3 V DC ±5%
- Low power consumption 160mW at 3.3 V (full power)
- Protocols
  - NMEA-0183
  - SiRF binary
  - RTCM SC-104
- Crystal oscillator (TCXO), temperature compensated with frequency stability of ±0.5 ppm
- Memory 4 Mb flash and 1Mb SRAM

Interfaces

- 60-pin DIP connector
- Interface to external SIM 3V or 1.8V
- Dual analog audio interface
- AT commands via serial interface
- Embedded SIM card holder
- LCD Interface
- RTC Backup
- Charge interface
- Serial interface and Debug interface
- Dual serial interfaces for GPS
- Two separate antenna connectors for GSM/GPRS & GPS and two antenna pads for GSM/GPRS & GPS

SIM508/548

SIM508/548 module is a Tri-Band/Quad-Band GSM/GPRS-enabled module that is also equipped with AGPS technology. The compact design of the SIM508/548 makes it easy to integrate GSM/GPRS & GPS as an all-in-one solution. You will save significantly both time and cost for the integration of additional hardware components.

The combination of both technologies can fit almost all the space requirement in your applications, such as PDA phone, GPS hand-held device and other mobile device, it allows vehicles and people to be tracked seamlessly at any location and anytime.

Physical features

- Overall dimensions: 55mmx34mmx3mm
- Weight: approx.12g
- Normal operation temperature: -20°C to +60°C
- Restricted operation temperature: -30°C to -20°C and +60°C to +80°C
- Storage temperature: -40°C to +85°C

GSM/GPRS specifications

- Tri-Band GSM 900/1800/1900MHz, or Quad-Band GSM 850/900/1800/1900 MHz
- GPRS multi-slot class 10/8
- GPRS mobile station class B
- Compliant to GSM phase 2/2+
  - Class 4(2W @ GSM850/900MHz)
  - Class 1(1W @ GSM1800/1900MHz)
- Control via AT commands (GSM 07.07 and 07.05 and SIMCom enhanced AT commands)
- SIM application tool kit
- Low power consumption
- Supply voltage range: 3.4V - 4.5V

Specifications for GPS

- Receiver 20 channels, L1 1575.42 MHz, C/A code 1,023MHz chip rate
- Accuracy Position 2.5m CEP
  - without SA/Velocity 0.1m/s
  - without SA/Time 1µs synchronized to GPS time
- Position with DGPS/SBAS: 2.0m CEP
- Date WGS-84
- Acquisition rate (TTFF defined at 95% of first position local station)
  - Hot start < 1s, average, open sky
  - Warm start :35s, average,open sky
  - Cold start :35s, average, open sky
- Operating voltage 3.3V DC ±5%
- Low power consumption about 160mW at 3.3 V(full power)
- Protocols
  - NMEA-0183
  - SiRF binary
  - RTCM SC-104
- Crystal oscillator (TCXO), temperature compensated with frequency stability of ±0.5ppm
- Memory: On-chip 4Mbit FLASH and 1Mbit SRAM

SIM300C/340C

The SIM300C/340C is a complete Tri-Band/Quad-Band GSM/GPRS solution in a compact plug-in module with DIP board-to-board connector.

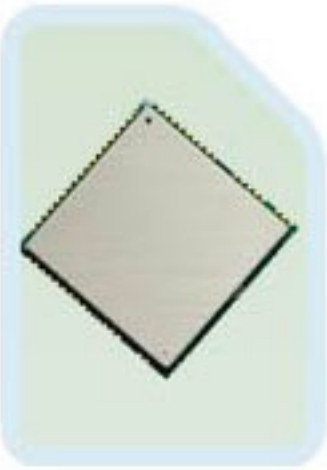
SIM300C/340C with a tiny configuration can fit almost all the space requirements in your industrial applications, such as telemetry, telemetric and other mobile data communication systems.

- **DIP type board-to-board connector suit for vehicle application**
- **Customized MMI and keypad/LCD support**
- **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 features

- Tri-Band GSM/GPRS 900/1800/1900MHz or
  Quad-Band GSM/GPRS 850/900/1800/1900MHz
- GPRS multi-slot class 10/8
- GPRS mobile station class B
- Compliant to GSM phase 2/2+
  - Class 4 (2W @ 850/900MHz)
  - Class 1 (1W @ 1800/1900MHz)
- Dimension: 50mmx33mmx6.2mm
- Weight: 13.8 g
- Control via AT commands (GSM 07.07, 07.05 and SIMCom enhanced AT Commands)
- SIM application toolkit
- Supply voltage range 3.4V...4.5V
- Low power consumption
- Normal operation temperature: -30°C to +80°C
- Restricted operation temperature: -30°C to -40°C and +80°C to +85°C
- Storage temperature: -45°C to +90°C

SIM300D/340D



The SIM300D/340D is a complete Tri-Band/Quad-Band GSM/GPRS solution in a SMT module.

SIM300D/340D with a tiny configuration can fit almost all the space requirements in your industrial applications, especially for slim and compact handset applications.

- **SMT type suit for customer applications**
- **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 features

- Tri-Band GSM/GPRS 900/1800/1900MHz or
  Quad-Band GSM/GPRS 850/900/1800/1900MHz
- GPRS multi-slot class 10/8
- GPRS mobile station class B
- Compliant to GSM phase 2/2+
  - Class 4 (2W @ 850/900MHz)
  - Class 1 (1W @ 1800/1900MHz)
- Dimension: 33mm x 33mm x 3mm
- Weight: 7.8 g
- Control via AT commands (GSM 07.07, 07.05 and SIMCom enhanced AT Commands)
- SIM application toolkit
- Supply voltage range 3.4V...4.5V
- Low power consumption
- Normal operation temperature: -20°C to +60°C
- Restricted operation temperature: -30°C to -20°C and +60°C to +80°C
- Storage temperature: -40°C to +85°C

SIM300E/340E

The SIM300E/340E is a Tri-Band/Quad-Band GSM/GPRS solution in a compact plug-in module.

The leading features of SIM300E/340E make it ideal for virtually unlimited applications, such as WLL applications, M2M application, handheld devices and much more.

- **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 features

- Tri-Band GSM/GPRS 900/1800/1900MHz or Quad-Band GSM/GPRS 850/900/1800/1900MHz
- GPRS multi-slot class 10/8
- GPRS mobile station class B
- Compliant to GSM phase 2/2+
  - Class 4 (2W @ 850/900MHz)
  - Class 1 (1W @ 1800/1900MHz)
- Integrated with SIM Holder
- Dimension: 40mmx33mmx5.5mm
- Weight: 8 g
- Control via AT commands (GSM 07.07, 07.05 and SIMCom enhanced AT Commands)
- SIM application toolkit
- Supply voltage range 3.4V...4.5V
- Low power consumption
- Normal operation temperature: -20°C to +60C
- Restricted operation temperature: -30°C to -20°C and +60°C to +80°C
- Storage temperature: -40°C to +85°C

SIM300S/340S

The SIM300S/340S is a complete Dual-band/Quad-band GSM/GPRS solution in a module which can be embedded in the customer applications.

Featuring an industry-standard interface, the SIM300S/340S delivers Dual-band GSM900/1800MHz or Quad-band GSM850/900/1800/1900MHz performance for voice, SMS, Data, and Fax in a small form factor and with low power consumption.

The leading features of SIM300S/SIM340S make it ideal for virtually unlimited applications, such as WLL applications, M2M applications, handheld devices and much more.

General features

- Dual-band GSM 900/1800MHz or Quad-band 850/900/1800/1900MHz
- GPRS multi-slot class 10/8
- GPRS mobile station class B
- Compliant to GSM phase 2/2+
  - Class 4 (2 W @ 850/900MHz)
  - Class 1 (1 W @ 1800/1900MHz)
- Dimension: 40mmx33mmx2.9mm
- Weight: 8 g
- 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
- Normal operation temperature: -20°C to +60°C
- Restricted operation temperature: -30°C to -20°C and +60°C to +80°C
- Storage temperature: -40°C to +85°C

Specifications for fax

- Group 3, class 1

Specifications for data

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

Specifications for SMS via GSM

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

Specifications for voice

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

Interfaces

- Interface to external SIM 3V/1.8V
- Two analog audio interfaces
- RTC backup
- Serial interface and debug interface
- LCD interface
- Keypad interface
- Antenna connector and antenna pad

Compatibility

- AT cellular command interface

SIM305/345

The SIM305/345 is a complete Dual-band/Quad-band GSM/GPRS solution in a compact plug-in module.

Featuring an industry-standard interface, the SIM305/345 delivers GSM/GPRS 850/900/1800/1900MHz performance for Voice, SMS, Data, and Fax in a small form factor and with low power consumption.

The leading features of SIM305/345 make it ideal for virtually unlimited applications, such as AMR, AVL, Security, and other M2M applications.

General features

- Dual-Band GSM/GPRS 900/1800MHz or Quad-Band GSM/GPRS 850/900/1800/1900MHz
- GPRS multi-slot class 10
- GPRS mobile station class B
- Compliant to GSM phase 2/2+
  - Class 4 (2 W @ 850/900MHz)
  - Class 1 (1 W @ 1800/1900MHz)
- Dimension: 58mm×32mm×3.9 mm
- Weight: <12g
- SIM application toolkit
- Supply voltage range 3.4 ... 4.5 V
- Low power consumption
- Normal operation temperature:-30 °C to +80 °C
- Restricted operation temperature: -30°C to -40°C and +80°C to +85°C
- Storage temperature: -45°C to +90°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

Specifications for voice

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

Interfaces

- Interface to external SIM 3V/1.8V
- 60 Pins Board-to-Board connector
- Two analog audio interfaces
- SPI/I2C interface
- RTC backup
- Two UART interfaces
- Antenna connector and antenna pad

SIM300/340

The SIM300/340 is a Tri-Band/Quad-Band GSM/GPRS solution in a compact plug-in module.

The leading features of SIM300/340 make it ideal for virtually unlimited application, such as WLL applications, M2M applications, handheld devices and much more.

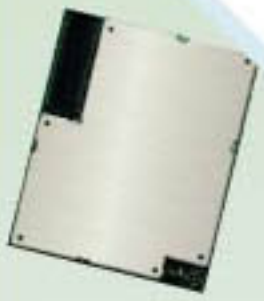
- **An embedded Powerful TCP/IP protocol stack**
- **Based upon mature and field-proven platform, backed up by our support service, from definition to design and production.**

General features

- Tri-Band GSM/GPRS 900/1800/1900MHz or Quad-Band GSM/GPRS 850/900/1800/1900MHz
- GPRS multi-slot class 10/8
- GPRS mobile station class B
- Compliant to GSM phase 2/2+
  - Class 4 (2W @ 850/900MHz)
  - Class 1 (1W @ 1800/1900MHz)
- Dimension: 40mmx33mmx2.9mm
- Weight: 8 g
- Control via AT commands (GSM 07.07, 07.05 and SIMCom enhanced AT Commands)
- SIM application toolkit
- Supply voltage range 3.4V...4.5V
- Low power consumption
- Normal operation temperature: -20°C to +60°C
- Restricted operation temperature: -30°C to -20°C and +60°C to +80°C
- Storage temperature: -40°C to +85°C

GSM/GPRS

SIM306



SIM306 is a complete Tri-Band GSM/GPRS solution in a compact plug-in module. The leading features of SIM306 make it ideal for virtually unlimited application, such as WLL applications, M2M applications, handheld devices and much more.

SIM306 supports MMS transmission through AT command. By serial port you can send the picture to other mobile terminal use MMS.

- **Customized MMI and keypad/LCD support**
- **An embedded Powerful TCP/IP and MMS protocol stack**
- **Based upon mature and field-proven platform, backed up by our support service, from definition to design and production**

General features

- Tri-Band GSM/GPRS 900/1800/1900MHz
- GPRS multi-slot class 10
- GPRS mobile station class B
- Compliant to GSM phase 2/2+
  - Class 4 (2W @ 900MHz)
  - Class 1 (1W @ 1800/1900MHz)
- Dimension: 40mmx33mmx2.9mm
- Weight: 8 g
- Control via AT commands (GSM 07.07, 7.05 and SIMCom enhanced AT Commands)
- SIM application toolkit
- Supply voltage range 3.4V...4.5V
- Low power consumption
- Normal operation temperature: -20°C to +60°C
- Restricted operation temperature: -30°C to -20°C and +60°C to +80°C
- Storage temperature: -40°C to +85°C

GSM-only

SIM301S/341S

The SIM301S/SIM341S is a Dual-Band/Quad-Band GSM-only solution.

Featuring an industry-standard interface, the SIM301S/341S delivers Dual-band GSM900/1800MHz or Quad-band GSM850/900/1800/1900MHz performance for Voice, SMS, Data and Fax in a small form factor and with low power consumption.

General features

- Dual-band GSM 900/1800MHz or Quad-band GSM/GPRS 850/900/1800/1900MHz
- Compliant to GSM phase 2/2+
  - Class 4 (2 W @ GSM 850/900MHz)
  - Class 1 (1 W @ GSM1800/1900MHz)
- Dimension: 40mmx33mmx2.9mm
- Weight: 8g
- Control via AT commands (GSM 07.07, 07.05 and SIMCom enhanced AT Commands)
- SIM application toolkit
- Supply voltage range 3.4V - 4.5 V
- Low power consumption
- Normal operation temperature: -20°C to +60°C
- Restricted operation temperature: -30°C to -20°C and +60°C to +80°C
- Storage temperature: -40°C to +85°C

Specifications for fax

- Group 3, class 1

Specifications for data

- PBCCH support
- Coding schemes CS 1, 2, 3, 4
- CSD up to 14.4 Kbps
- USSD
- Non transparent mode

Specifications for SMS via GSM

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

Specifications for voice

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

SIM20

SIM20 is a Narrow-band transceiver which meets standards like: ETSI EN 300-200, FCC Part 90, FCC Part 15, FCC Part 95, ARIB STD-T67.

The leading features of SIM20 make it ideal for the application of low cost, wireless data transfer, remote control/security systems, wireless metering, private mobile radio, wireless medical telemetry service (WMTS), keyless entry, home automation, process and building control and Pagers.

General Features

- Frequency compensation vs temperature by software
- Frequency precision after compensation: 2ppm
- Perfect receiving sensitivity: -125dBm (test conditions: 2kbps, 433.92MHz)
- Low power supply:3.3V to 5.6V
  Low current: transmitting (18dBm) 60mA
  receiving 22mA
  idle 30uA
- Frequency bands: 80MHz to 650MHz
  862MHz to 940MHz
  Modulation schemes: 2GFSK, 2FSK
  Spectral shaping: Gaussian and raised-cosine filtering
  Data rates supported: 0.05Kbps to 25Kbps
- Outside interface: IIC
- Working temperature: -20°C to + 55°C
- Programmable output power: -10ddBm to +18dBm in 63 steps
  Automatic PA ramp control
  Receiver sensitivity: -125dBm at 1 Kbps, 2 FSK
  Digital RSSI
  On-board Tx / Rx switch
- On-board 10 bit temperature sensor

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