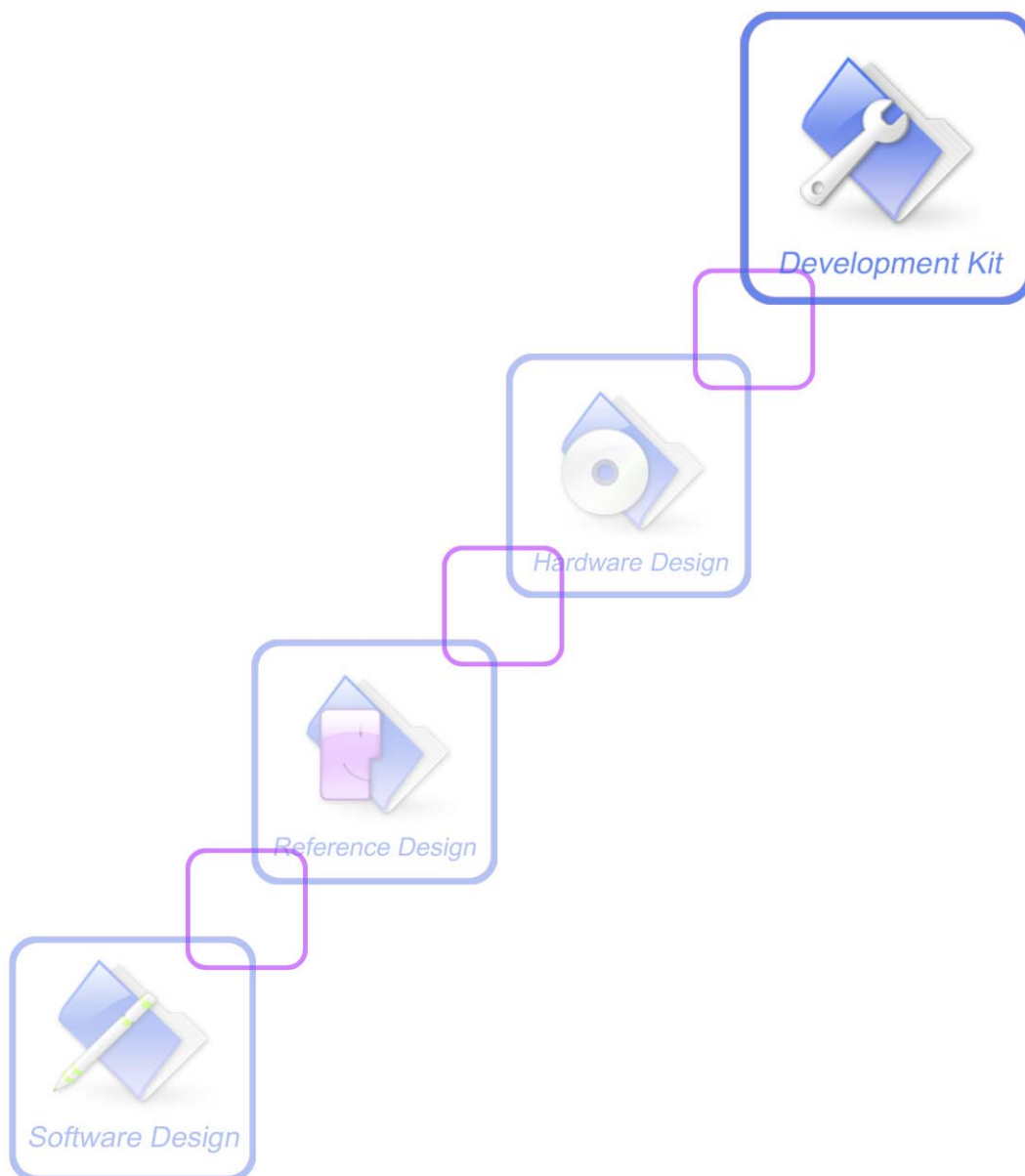




A company of SIM Tech

SIM800H-EVB_User Guide_V1.00



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Version History

| Data | Version | Description of change | Author |
|------------|---------|-----------------------|--------|
| 2013-07-22 | 1.00 | Origin | Lee |
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1. SIM800H EVB

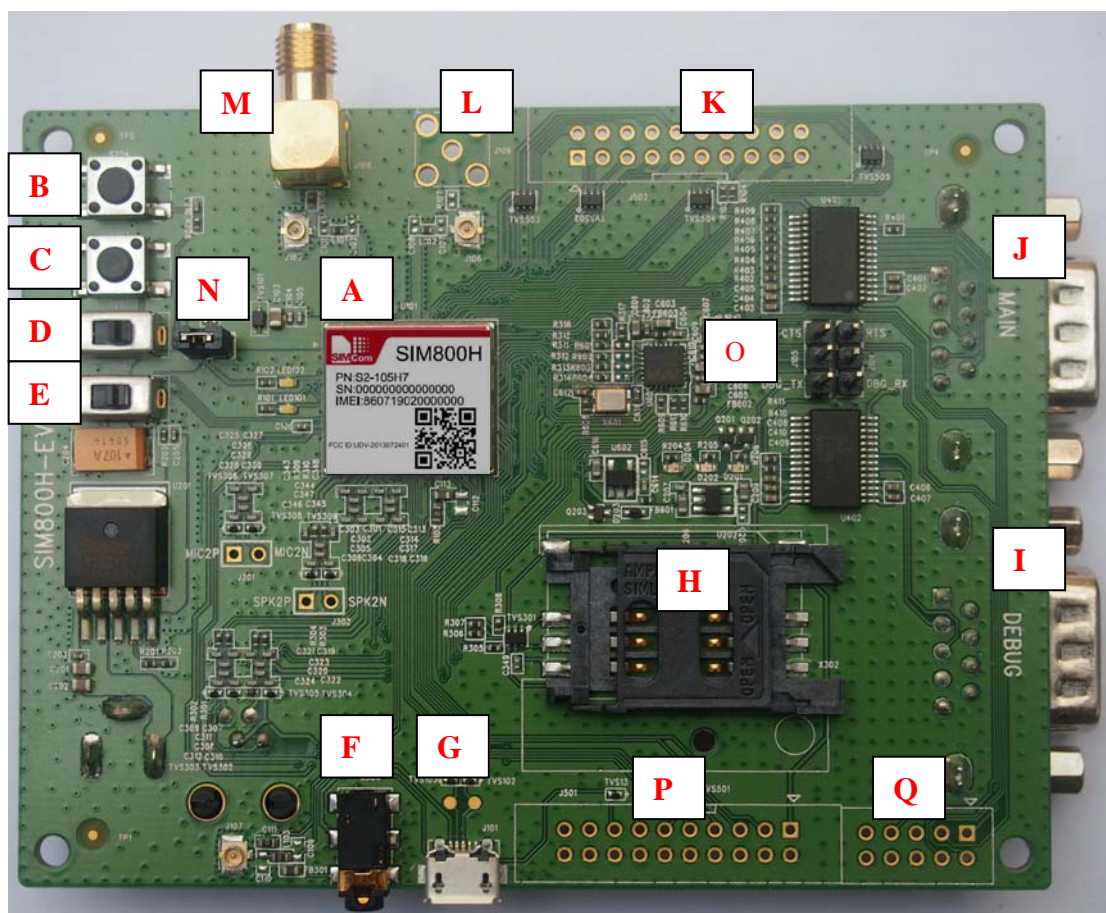


Figure 1: EVB TOP view

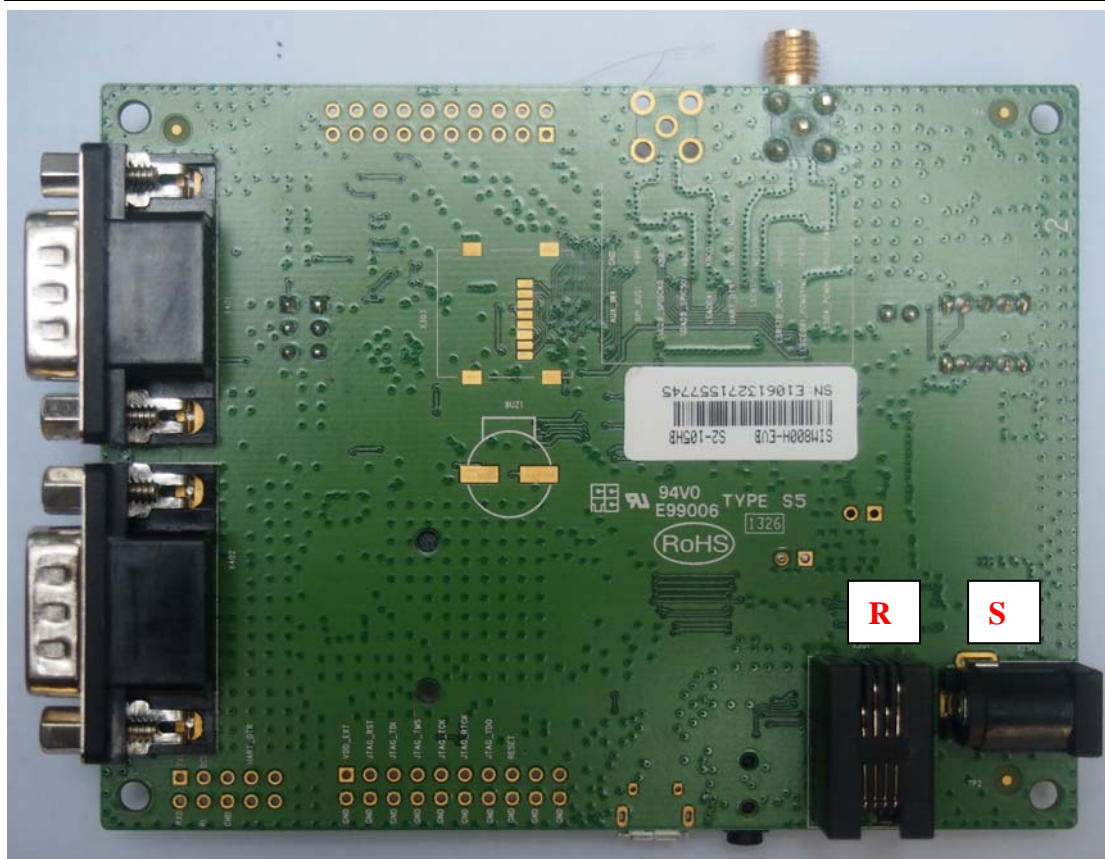


Figure 2: EVB BOTTOM view

- A. SIM800H module
- B. Power key (module ON/OFF control)
- C. Reset key (reset the module)
- D. Power switch (download control)
- E. Charge switch (charge ON/OFF control)
- F. Headset interface
- G. USB
- H. SIM card interface
- I. Debug serial port
- J. MAIN serial port
- K. Test point interface
- L. Bluetooth antenna interface
- M. GSM antenna interface
- N. Switch 1
- O. Switch 2
- P. Test point interface
- Q. Test point interface
- R. Headphones interface
- S. Source adapter interface

2. EVB Accessory

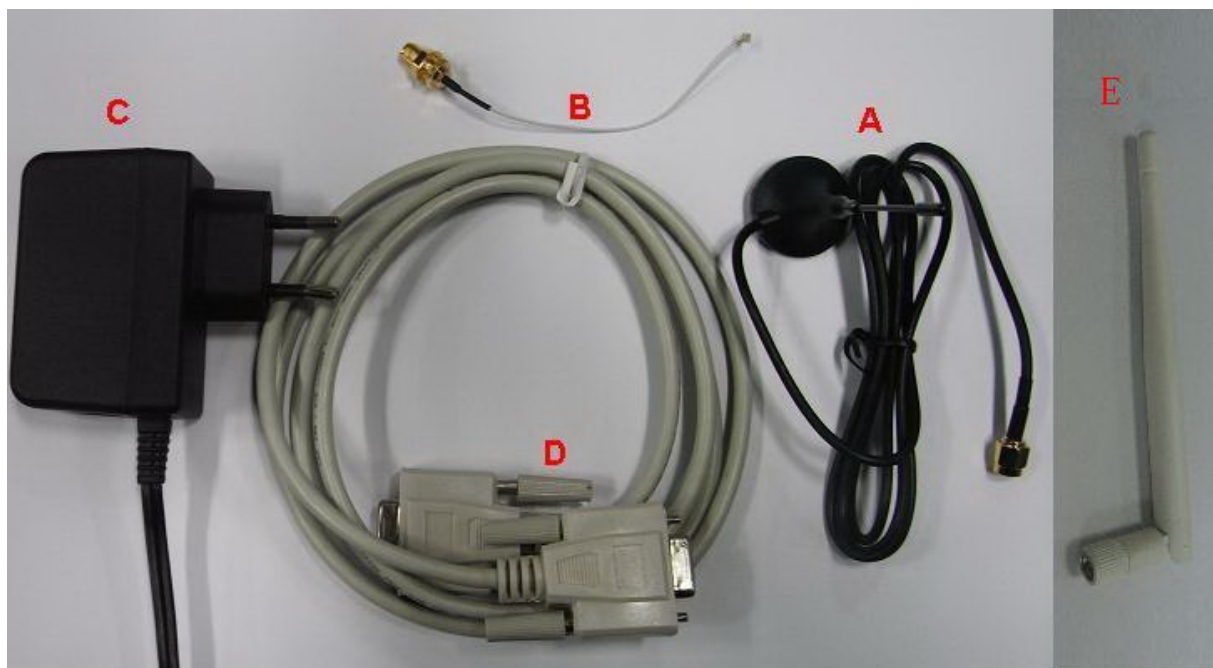


Figure 3: EVB accessory

A: GSM antenna

Model GSM antenna: WT-C&G-28-90

Frequency Range (MHz) 824 ~ 960 1710 ~ 1990

VSWR ≤ 1.5 (900MHz) ≤ 2 (1800MHz)

Gain: 3dBi

Input Impedance (Ω): 50

Polarization Type: Vertical

Connector Type: SMA

B: Antenna transmit line

C: 5V DC source adapter

D: Serial port line

E: Bluetooth antenna

Frequency Range: 2.4 GHz ~ 2.5GHz & 5.15 GHz ~ 5.825 GHz

Impedance: 50 Ohms nominal

VSWR: ≤ 1.92

Gain: 2.0dBi

Admitted power radiation: 1W

Radiation: Omni

Polarization: Vertical

Connector Type: SMA P/S

3. Accessory Interface

3.1 Power Interface



Figure 4: Power Interface

| Pin | Signal | I/O | Description |
|-----|---------------|-----|-------------------------|
| 1 | Adapter input | I | 5V/2.5A DC source input |

3.2 Audio Interface

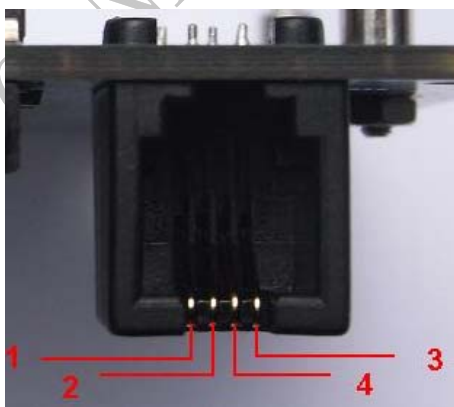


Figure 5: Audio Interface

Headset interface:

| Pin | Signal | I/O | Description |
|-----|--------|-----|---------------------------|
| 1 | MIC1P | I | Positive microphone input |
| 2 | SPK1P | O | Positive receiver output |
| 3 | MIC1N | I | Negative microphone input |

| | | | |
|---|-------|---|--------------------------|
| 4 | SPK1N | O | Negative receiver output |
|---|-------|---|--------------------------|

3.3 SIM card interface



Figure 6: SIM card interface

3.4 RS232 Interface

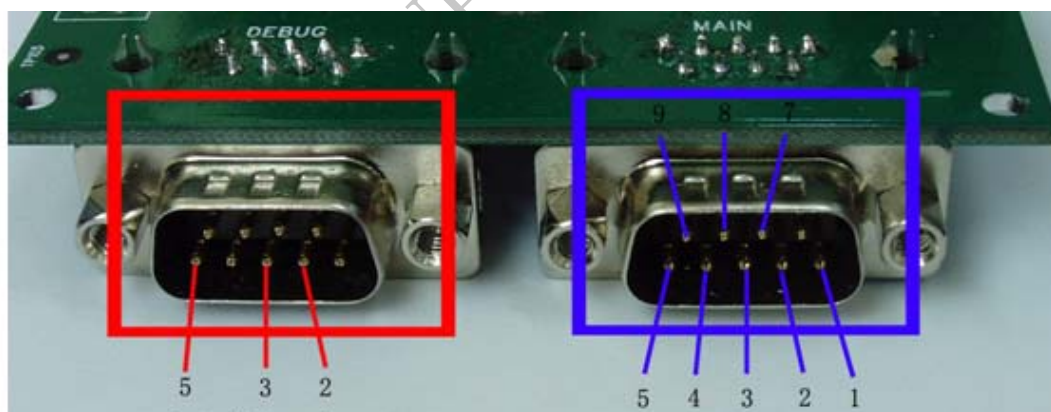


Figure 7: Serial Ports

Serial Port 1——MAIN Interface

Serial Port 2——DEGUG Interface

Main Interface:

| Pin | Signal | I/O | Description |
|-----|--------|-----|------------------------|
| 1 | DCD | O | Data carrier detection |

| | | | |
|---|-----|---|---------------------|
| 2 | TXD | O | Transmit data |
| 3 | RXD | I | Receive data |
| 4 | DTR | I | Data Terminal Ready |
| 5 | GND | | GND |
| 7 | RTS | I | Request to Send |
| 8 | CTS | O | Clear to Send |
| 9 | RI | O | Ring Indicator |

Debug Interface:

| Pin | Signal | I/O | Description |
|-----|----------|-----|---------------|
| 2 | DEBUG_TX | O | Transmit data |
| 3 | DEBUG_RX | I | Receive data |
| 5 | GND | | GND |

4. Illustration:

4.1 Running:

- (1) Inserting 5V direct current source adapter, switching the S101,S102 switch on **off** state, S105 switch on **ON** state;
- (2) Press the PWRKEY for about 1 second, and then SIM800H module begins running.

You can see the light Q3 on the EVB flashing at a certain frequency. By the state, you can judge whether the EVB and SIM800H can run or not. No function and test can be executed when we have not connected necessary accessories.

4.2 Connecting Net and calling

- (1) connect the serial port line to the MAIN serial port, open the HyperTerminal(AT command windows) on your Personal computer, the location of the HyperTerminal in windows2000 is START → accessory → communication → HyperTerminal. Set correct Baud Rate and COM number. The Baud Rate of SIM800H is 115200, and the COM number based on which USB port your serial port line insert in, you should select such as COM3 or COM4 etc.
- (2) Connect the antenna to the SIM800H-TE with SIM800H module using an antenna transmit line, insert SIM card into the SIM card interface, insert headphones or headset into its interface.
- (3) Act on the step of **running** which mentioned above, power on the system, typing the AT command in the HyperTerminal, and then the SIM800H module will execute its corresponding function.

4.3 Downloading

Connect the serial port line to the **MAIN** serial port, connect the direct current source adapter, run the download program and press the **START** key, then switch the S105 switch on **ON** state, S102 switch on **ON** state, then EVB provide the function of downloading.

4.4 Turns off

Turn off SIM800H module: press the PWRKEY for about 2 second, SIM800H module will be turned off.

Contact us:

Shanghai SIMCom Wireless Solutions Ltd.

Add: SIM Technology Building, No.633, Jinzhong Road, Changning District,
Shanghai P.R. China 200335

Tel: +86 21 3235 3300

Fax: +86 21 3235 3301

URL: www.sim.com/wm

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