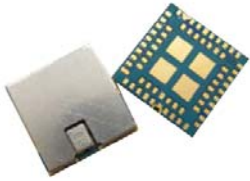


# GC6687

## 802.11g/b/n + Bluetooth 2.1 + EDR + FM SiP Module



The GC6687 is a small size and low power consumption combo function SiP (System In Package) module. This module integrates the function of WLAN, Bluetooth and FM. The WLAN function follows IEEE 802.11b/g/n standard which includes a internal SMS4 encryption hardware for WAPI security in China.

The Bluetooth function follows Bluetooth Test Specification power class 2 and support EDR (Enhance Data Rate). Its data rate can achieve up to 3Mbps.

The FM full supports US/European (87.5 to 108MHz) and Japanese (76 to 90MHz).The maximum 4.5dBm FM transmit, excellent receive sensitivity, selectivity, and audio quality.

It supplies well Wi-Fi and Bluetooth co-existence. Customer is able to access internet and play stereo music at the same time and no lag or audio distortion can be find. There are sharp BPF (Band pass Filter), EEPROM, and Oscillator inside. This highly integrated module is especially developed for handheld, portable and handheld applications.

- 802.11 g/b/n + Bluetooth 2.1 + EDR + FM(rx) +FM(tx)
- Dimension =10.0 x 10.0 x 1.4 mm
- HW WAPI
- Co-existence optimized
- Single antenna for WiFi/BT application
- No external clock source needed
- RoHS compliant/Lead Free



# General Specifications

<b>Product Name</b> GC6687	<b>Operating Voltage</b> 3.3V±5%, 1.8V+/- 5%,
<b>Dimensions</b> 10.0 x10.0 x 1.4 mm	<b>RF transmit power</b> 802.11g/n: 13 dBm (Typ)
<b>Module connection</b> 72 pin, LGA	802.11b: 15 dBm (Typ) BT: Up to 2.0 dBm (Typ)
<b>HW interface</b> WiFi: SDIO BT: UART FM: UART	<b>RF receive sensitivity</b> 802.11b 11Mbps: -86 dBm (Typ) 802.11g 54Mbps: -72 dBm (Typ) 802.11n 58.5Mbps: -72 dBm (Typ)
<b>Standard</b> 802.11b: DSSS 802.11g/n: OFDM BT: Bluetooth 2.1 + EDR	<b>Security</b> WEP (64/128 bits) WPA (TKIP + 802.1X) 802.11i (AES, TKIP, 802.1X)
<b>Data rate(Mbps)</b> 802.11b: 11 (Max) 802.11g: 54 (Max) 802.11n: BT: 2.0(EDR) of 1, 2 and 3	<b>Temperature Range</b> 0~65°C (operating) -40~85°C (storage)
<b>Frequency range</b> 802.11b/g: 2.4 ~ 2.484GHz BT: 2.4GHz	<b>Humidity</b> Max. 95% Non-Condensing
	<b>Compliance</b> RoHS compliant/Lead Free