

EGIGATEK eGM-A17 Brief

(CSR BC4 ROM HCI based Bluetooth 2.1+EDR mini Module)

1. Description

eGM-A17 is a EEPROM integrated bluetooth class 2 module, using CSR BlueCore4-ROM solution to build in module, the device become bluetooth enabled, and can communicate wirelessly with other bluetooth device in a line-of-sight short range (>10 meters).

eGM-A17 implements the HCI commands for the bluetooth hardware by accessing lower layer stacks commands and registers. With its sufficient pin definitions, high receiving sensitivity, low power consumption and low cost, eGM-A17 is suitable for numerous electronic devices.

2. Features

- Comply with full qualified bluetooth specification V2.1+EDR(Enhanced Data Rate)
- Build in CSR BC04 ROM(A07)
- Full-speed bluetooth operation with full Piconet support
- Scatternet support
- Low Power Consumption
- Support for 802.11 Co-existence, support 2-wire and 3-wire.
- Support standard HCI (UART, USB) host interface
- Integrated 26MHz Reference Clock
- Integrated 16kbits EEPROM
- RoHS Compliant
- Support V2.1 mandatory functionality
 - Adaptive Frequency Hopping (AFH)
 - Faster connections
 - Flow and Flush timeout
 - LMP improvements
 - Parameter ranges
 - Extended SCO (eSCO), eV3 +CRC, eV4, eV5
 - Scatter mode
 - LMP Absence Masks, Quality of service and SCO handle
 - L2CAP flow and error control

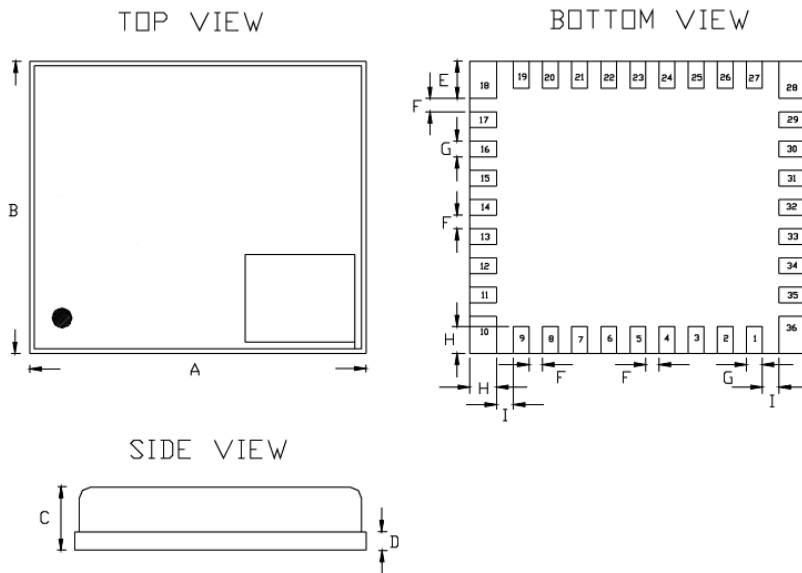
➤ Synchronization

- Mini form factor **7.5 * 6.5 * 1.6mm** and Low Profile using high-density packaging technology for space critical applications.
- RF output power $-20\text{dBm} \sim +4\text{ dBm}$ (class 2).
- High receiving sensitivity (-83 dBm 0.1%BER).
- Manufactured in conformance with RoHS
- The Qualified Design ID (QDID) is: B018374

3. Applications

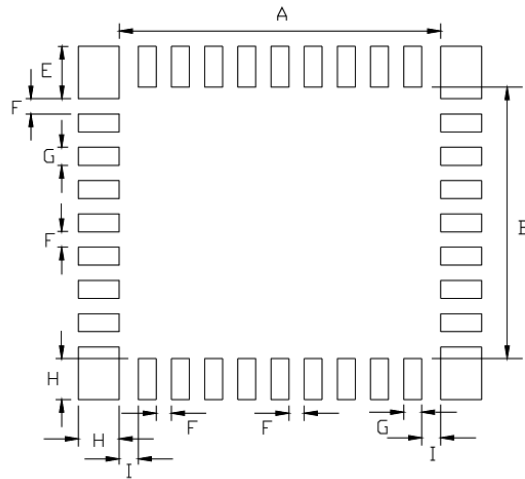
USB dongle, NB, Pocket PC, PDAs, USB/UART adapter, MP3 Player, Cellular Phones, Digital Cameras and other high volume consumer products.

4. Pin Placement and Dimensions (in mm)



A	$7.5 \pm 0.2\text{mm}$	D	$0.4 \pm 0.05\text{mm}$	G	$0.35 \pm 0.05\text{mm}$
B	$6.5 \pm 0.2\text{mm}$	E	$0.825 \pm 0.05\text{mm}$	H	$0.6 \pm 0.05\text{mm}$
C	1.6mm max.	F	$0.3 \pm 0.05\text{mm}$	I	$0.375 \pm 0.05\text{mm}$

5. Layout Guide



A	$6.3 \pm 0.1\text{mm}$	E	$1.025 \pm 0.05\text{mm}$	G	$0.35 \pm 0.05\text{mm}$
B	$5.3 \pm 0.1\text{mm}$	F	$0.3 \pm 0.05\text{mm}$		
H	$0.8 \pm 0.1\text{mm}$	I	$0.375 \pm 0.05\text{mm}$		