

EGIGATEK eGM-A1E Brief

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

1. Description

eGM-A1E is a EEPROM integrated bluetooth class 2 module, using CSR BlueCore4-ROM A07 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-A1E 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.

2. Features

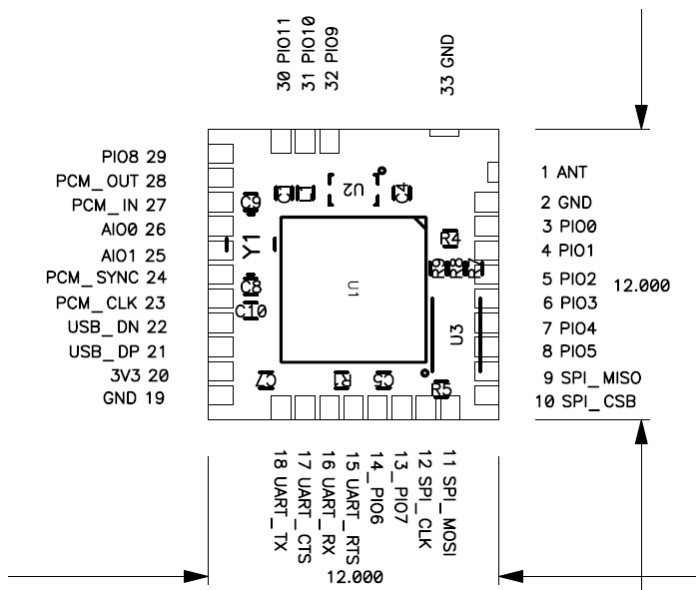
- Comply with full qualified bluetooth specification V2.1+EDR(Enhanced Data Rate)
- Build in CSR BC04 ROM A07
- Full-speed bluetooth operation with full Piconet support
- Scatternet support
- Low Power Consumption
- Support for 802.11 Co-existence
- Support standard HCI (UART, USB) host interface
- Integrated 26MHz Reference Clock
- Integrated 32Kbits EEPROM
- RoHS Compliant
- Support V2.1 mandatory functionality
 - Adaptive Frequency Hopping (AFH)
 - Faster connections
 - Flow and Flush timeout
 - LMP improvements
 - Parameter ranges
- Support optional V2.1 functionality
 - Extended SCO (eSCO), eV3 +CRC, eV4, eV5
 - Scatter mode
 - LMP Absence Masks, Quality of service and SCO handle
 - L2CAP flow and error control
 - Synchronization

- Small form factor 12.0*12.0*2.0mm
- RF output power -20dBm ~ +3 dBm (class 2).
- High receiving sensitivity (-80 dBm 0.1%BER)
- Manufactured in conformance with RoHS

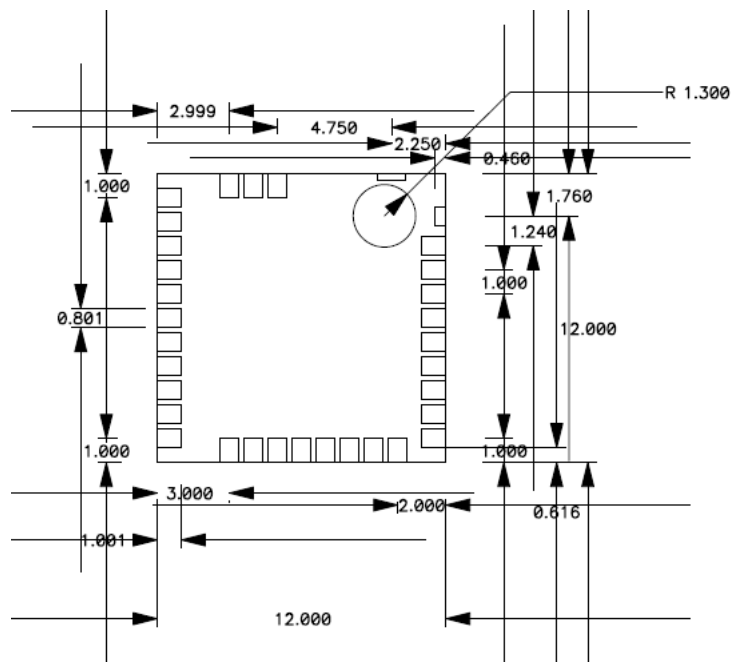
3. Applications

USB dongle, UART adapter, Cellular Handsets, Personal Digital Assistants, Mice and game pads, Digital cameras and other high volume consumer products

4. Pin Placement and Dimensions (in mm)



5. Layout Guide



1. PCB size : 12.0 * 12.0mm.
2. In addition to the ANT pin size is 0.801 * 0.46mm ,and the other pin are 0.80 * 1.001mm.
3. All pin pitch are 1.00mm.
4. The ANT pin behind need to clearance some space approach R1.30.