

EGIGATEK eGM-A20 Brief

【CSR1010(MS) based Bluetooth 4.0 LE Single Mode Module】

1. Description

eGM-A20 is a highly flexible product from CSR's single mode BLE solution. CSR μ Energy enables ultra low-power connectivity and basic data transfer for applications previously limited by the power consumption, size constraints and complexity of other wireless standards. The CSR μ Energy platform provides everything required to create a Bluetooth low energy product with RF, baseband, MCU, qualified Bluetooth v4.0 stack and customer application running on a single IC.

2. Features

- Bluetooth Low Energy available with CSR1010 QFN
- Bluetooth v4.0 specification
- Single mode Bluetooth low energy
- 7.5dBm Bluetooth low energy maximum TX output power
- -92.5dBm Bluetooth low energy RX sensitivity
- Support for Bluetooth v4.0 specification host stack including:
ATT, GATT, SMP, L2CAP, GAP
- RSSI monitoring for proximity applications
- <600nA ultra low consumption in dormant mode
- Integrated 32kHz and 16MHz crystal or system clock
- Switch-mode power supply
- Programmable general purpose PIO controller
- 10-bit ADC
- 11 digital PIOs
- 3 analogue AIOs
- UART
- 512KB EEPROM
- 3 PWM modules
- Wake-up interrupt
- 64KB RAM and 64KB ROM

- Watchdog timer
- Dimensions:
 - eGM-A20A : 11.75 mm x 14.0 mm x 2.5 mm
 - eGM-A20B/C with antenna : 16.0 mm x 14.0 mm x 2.5 mm
- Storage temperature range: -40°C ~ +85°C
- Operating temperature range: -30°C ~ +85°C
- Manufactured in conformance with RoHS

3. Applications

Building an ecosystem using Bluetooth low energy

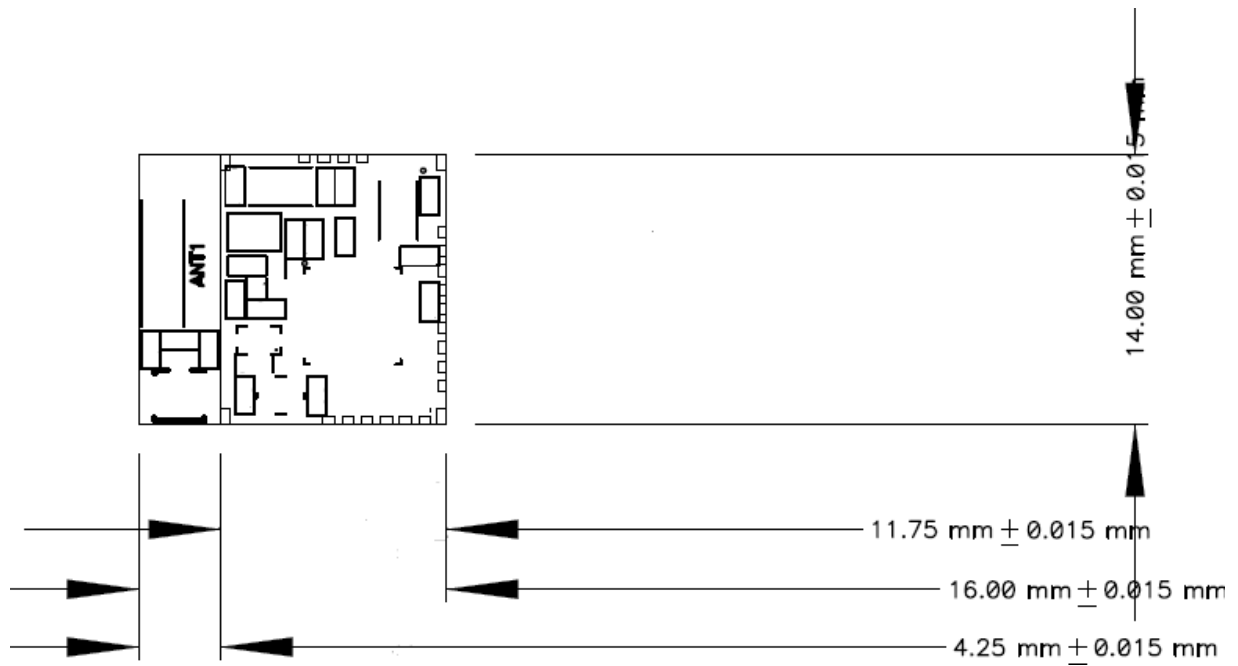
Bluetooth low energy enables the transfer of simple data sets between compact devices opening up a completely new class of Bluetooth applications such as watches, TV remote controls, medical sensors and fitness trainers.

Bluetooth low energy takes less time to make a connection than conventional Bluetooth wireless technology and can consume approximately 1/20th of the power of Bluetooth Basic Rate. Supports profiles for sensors, watches, HID's and time synchronization.

Typical Bluetooth low energy applications:

- Wearable devices
- Medical devices
- Sensors and actuators
- Industrial automation
- Lighting
- Automotive

4. Dimensions



5. Land Pattern

