

Overview

EH-ES201 is designed to support ultra-compact applications where size is at a premium, such as smart watches, wearable devices, trackers and digital cameras.

The ES201 is a fully-integrated, Bluetooth 5.0 module, with reliable high performance RF, low-power consumption and easy application development are key requirements.

Measuring just 7*7*1.4mm.

The module supports the 2 Mbps bitrate of Bluetooth 5 giving increased application throughput and up to 50 % savings in energy usage.

Integrated antenna, no external processor needed, module also provides flexible hardware interfaces to connect sensors, simple user interfaces and even displays directly to the module.



Key Features

- Bluetooth 5, Bluetooth mesh, 802.15.4 Thread, support high throughput and long range
- Powerful & ultra-efficient 64MHz 32-bit ARM® Cortex™ M4 CPU and 192 KB Flash + 24 KB RAM
- Highly flexible GPIO & a strong digital and analog peripheral set that can interact without the CPU
- 0.3 μ A in System OFF, no RAM retention; 1.5 μ A in System ON, full RAM retention and RTC

Quick Specifications

- Supply: 1.7V – 3.6V
- +4dBm TX power
- -96dbm RX sensitivity
- Pins: 8 GPIO
- Interfaces: UART, I2C, SPI, GPIO, PWM, I2S
- Memory: 192 KB Flash + 24 KB RAM
- Dimensions: 7*7*1.4mm
- Operating Temp: -30° C to +85° C

Applications

- Smart buildings, Smart cities
- Industry 4.0, including smart lighting systems
- Low-Power Sensor Networks
- Fitness / Sports / Health
- Smart Home
- iBeacons™ / Proximity
- BLE Mesh applications
- Smart Toys / accessories

