Easy-BLE V1.1 Datasheet

Bluetooth Low Energy Beacon & Asset Tracking Module

Product Overview

The **Easy-BLE V1.1** module is a compact, low-power Bluetooth Low Energy (BLE) 5.3-compliant solution designed specifically for beacon and asset tracking applications. It provides seamless connectivity with enhanced privacy and security features, while offering ease of pre-configuration and operation without the need for complex software programming. The small form factor, combined with low power consumption, makes it perfect for a wide range of applications such as industrial, retail, and IoT.

Key Features
Privacy

- **Enhanced Privacy Mode**: Supports resolvable private addresses for secure communication.

Memory

- **4KB eFuse Memory**: Stores advertising payloads, manufacturer IDs, and configuration settings.
- **4KB SRAM**: Dynamically stores advertising data for flexible payload management.

Low Power Consumption

- **Sub-microwatt Operation**: Enables multi-year operation using a tiny battery, making it suitable for remote deployments.
- **Sleep Mode**: Consumes less than 650nA with 24MHz RC oscillator running, extending battery life.

Power Supply

- **Low Leakage:** Operates within a voltage range of 1.1V to 3.6V batteries.

Beacon and Asset Tracking Applications
Beacon Functionality

- **Retail and Location-Based Services**: The Easy-BLE V1.1 enables retail beacons for promotional notifications, product information and indoor location services.

Asset Tracking

- **Real-Time Location System (RTLS)**: Ideal for tracking assets such as equipment, and personnel within facilities. The Easy-BLE V1.1 beacon can be attached to assets to provide real-time updates on their indoor location, significantly reducing loss and improving operational efficiency.

Technical Specifications

Parameter	Value
Bluetooth Version	BLE 5.3
Operating Voltage	1.1V - 3.6V
Sleep Mode Current	< 650nA
Operating Temperature	-40°C to +60°C (industrial)
Package Type	ABS Enclosure

Typical Applications

- Standalone Retail Beacon Systems
- Asset Tracking