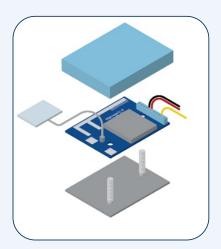
## BEEKs™ BLE Module

## Enables the creation of custom OEM solutions for IoT applications

MAIN BODY small intro write up goes here and can continue below...Volorep taeseni dus autaquist, optatutatur ressunt accusdi cepuda in endunt nonsers pelique necepudauda in endunt ea dolor sinum, esserum que nusam volrest, solorem st, solorem quate iurite iuriass itatur niscia quiasse escia dollabo.



The HID BEEKs BLE module is a general-purpose PCBA board that can be customized to provide solutions for a variety of verticals, including industrial and manufacturing, health care, hospitality, retail, commercial, and restaurants. The module can collect data from an external sensor and/ or CPU, then advertising that data in BLE packets, which can be read with BluFi™ and sent to the Bluzone™ cloud for remote management and data collection.

This product is intended to enable HID partners and resellers to create their own custom products and solutions based on the market needs that they identify. This enables the creator of the solution to design a custom enclosure and select custom sensors to support their application.

Default firmware supports the collection of raw (bit) data via UART, and the BLE module acts as a passthrough to send the raw UART packets to Bluzone cloud. This approach allows the solution provider to develop their own encoding and decoding of the data.

Custom firmware can be created for reading single sensors via digital protocols (I2C, SPI) or analog (using built-in 12-bit ADC). This custom firmware will require a joint development effort with HID, which we are happy to support upon request.

The BLE circuit is designed and certified as a sub-assembly on the board, meaning that the regional radio certifications (FCC, CE) that HID obtains for the BLE module can be used by the solution provider to minimize additional testing and certifications to reduce time-to-market.

The module supports external antennas via U.FL connector. The optimized BLE stack allows the BEEKs BLE module to broadcast reliably even in densely populated WiFi environments.

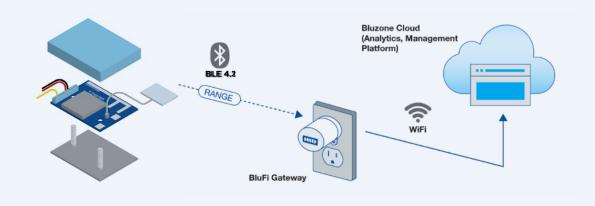
For further information, contact iotsales@hidglobal.com.



## KEY BENEFITS:

- **Reduce** time-to-market by utilizing embeddable BLE board
- Flexible firmware, antenna and sensor options
- Compatible with HID Bluzone™ remote management, Eddystone and iBeacon





|   | BEEKs™ BLE Module  |
|---|--|
|   |  |
| Model Number  | MOD001   |
| Configuration Types   | MOD001 Most comprehensive board with components to support generic data input through I2C, SPI and analog sensors  |
| Part Number   | BVBMD1   |
|   | RF SPECIFICATIONS  |
| Standard Protocol   | Bluetooth Low Energy 4.2   |
| Frequency Band (No. of Channels)  | 2400-2483.5 MHz (40 channels)  |
| Max Output Power  | <10 dBm (e.i.r.p.)   |
| Modulation  | GFSK   |
| Antenna / Gain  | Integral pcb, 0 dBi, Omni-Directional  |
| Mode of Operation   | Half-duplex  |
| Data Rates  | 1 Mbit/s   |
| Antenna (External) Optional   | TAOGLAS WCM.01.0111 2.4GHz Button Antenna  |
| Antomia (External) Optional   | THOUSE NO WORK THE STATE BUILDING MICHING  |
| Antoinia (External) Optional  | FEATURES   |
| BLE Application Supported   |  |
|   | FEATURES   |
| BLE Application Supported   | FEATURES Eddystone, iBeacon, sBeacon   |
| BLE Application Supported Processor Type  | FEATURES  Eddystone, iBeacon, sBeacon  ARM Cortex M3 and M0  128 KB flash (MCU)  |
| BLE Application Supported Processor Type Memory   | FEATURES  Eddystone, iBeacon, sBeacon  ARM Cortex M3 and M0  128 KB flash (MCU) 512 KB additional flash  |
| BLE Application Supported Processor Type Memory Sensor Inputs Supported   | FEATURES  Eddystone, iBeacon, sBeacon  ARM Cortex M3 and M0  128 KB flash (MCU) 512 KB additional flash  Digital: SPI, I2C, UART; Analog (12-bit ADC, 200 KSamples/s)  |
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| BLE Application Supported Processor Type Memory Sensor Inputs Supported Power Supply Dimensions   | Eddystone, iBeacon, sBeacon  ARM Cortex M3 and M0  128 KB flash (MCU) 512 KB additional flash  Digital: SPI, I2C, UART; Analog (12-bit ADC, 200 KSamples/s)  Input Voltage 3.6—30 VDC  PHYSICAL  |
| BLE Application Supported Processor Type Memory Sensor Inputs Supported Power Supply  Dimensions (Length × Width x Height)  | Eddystone, iBeacon, sBeacon  ARM Cortex M3 and M0  128 KB flash (MCU) 512 KB additional flash  Digital: SPI, I2C, UART; Analog (12-bit ADC, 200 KSamples/s)  Input Voltage 3.6—30 VDC  PHYSICAL  1.2 x 0.92 x 0.29 in (30.5 x 23.5 x 7.5 mm)   |
| BLE Application Supported Processor Type Memory Sensor Inputs Supported Power Supply  Dimensions (Length × Width x Height)  | Eddystone, iBeacon, sBeacon  ARM Cortex M3 and M0  128 KB flash (MCU) 512 KB additional flash  Digital: SPI, I2C, UART; Analog (12-bit ADC, 200 KSamples/s)  Input Voltage 3.6—30 VDC  PHYSICAL  1.2 x 0.92 x 0.29 in (30.5 x 23.5 x 7.5 mm)  Embed  |
| BLE Application Supported Processor Type Memory Sensor Inputs Supported Power Supply  Dimensions (Length × Width x Height) Mounting Method                                | Eddystone, iBeacon, sBeacon  ARM Cortex M3 and M0  128 KB flash (MCU) 512 KB additional flash  Digital: SPI, I2C, UART; Analog (12-bit ADC, 200 KSamples/s)  Input Voltage 3.6—30 VDC  PHYSICAL  1.2 x 0.92 x 0.29 in (30.5 x 23.5 x 7.5 mm)  Embed  THERMAL   |
| BLE Application Supported Processor Type Memory Sensor Inputs Supported Power Supply  Dimensions (Length × Width x Height) Mounting Method                                | FEATURES  Eddystone, iBeacon, sBeacon  ARM Cortex M3 and M0  128 KB flash (MCU) 512 KB additional flash  Digital: SPI, I2C, UART; Analog (12-bit ADC, 200 KSamples/s)  Input Voltage 3.6—30 VDC  PHYSICAL  1.2 x 0.92 x 0.29 in (30.5 x 23.5 x 7.5 mm)  Embed  THERMAL  -22° to +140° F (-30° to +60° C)                                   |
| BLE Application Supported Processor Type Memory Sensor Inputs Supported Power Supply  Dimensions (Length × Width x Height) Mounting Method                                | FEATURES  Eddystone, iBeacon, sBeacon  ARM Cortex M3 and M0  128 KB flash (MCU) 512 KB additional flash  Digital: SPI, I2C, UART; Analog (12-bit ADC, 200 KSamples/s)  Input Voltage 3.6—30 VDC  PHYSICAL  1.2 x 0.92 x 0.29 in (30.5 x 23.5 x 7.5 mm)  Embed  THERMAL  -22° to +140° F (-30° to +60° C)  -22° to +140° F (-30° to +60° C) |
| BLE Application Supported Processor Type Memory Sensor Inputs Supported Power Supply  Dimensions (Length × Width x Height) Mounting Method  Storage Operating Temperature | Eddystone, iBeacon, sBeacon  ARM Cortex M3 and M0  128 KB flash (MCU) 512 KB additional flash  Digital: SPI, I2C, UART; Analog (12-bit ADC, 200 KSamples/s)  Input Voltage 3.6—30 VDC  PHYSICAL  1.2 x 0.92 x 0.29 in (30.5 x 23.5 x 7.5 mm)  Embed  THERMAL  -22° to +140° F (-30° to +60° C) -22° to +140° F (-30° to +60° C)  OTHER     |



