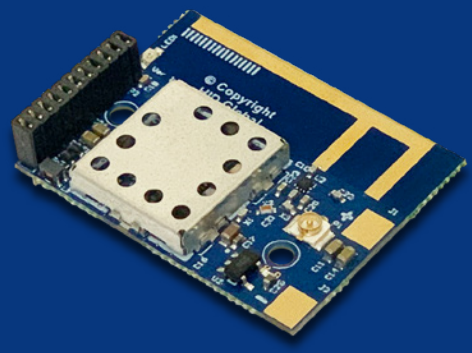
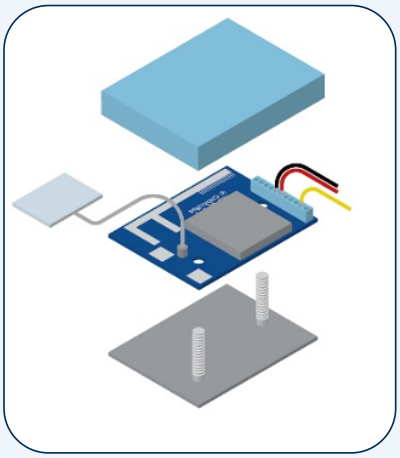
BEEKs™ BLE Module

Enables the creation of custom OEM solutions for IoT applications





The HID BEEKs Bluetooth® Low-Energy (LE) 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 Bluetooth® LE 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 Bluetooth® LE 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 Bluetooth® LE 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 Bluetooth® LE module can be used by the solution provider to minimize additional testing and certifications to reduce time-to-market.

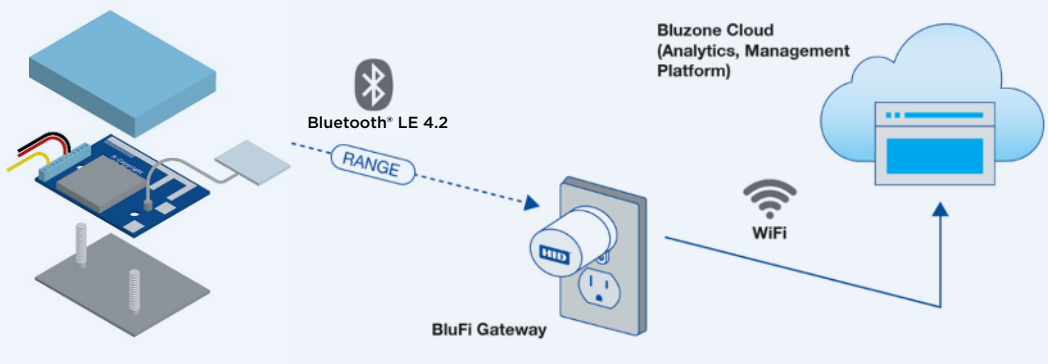
The module supports external antennas via U.FL connector. The optimized Bluetooth® LE stack allows the BEEKs Bluetooth® LE module to broadcast reliably even in densely populated WiFi environments.

KEY BENEFITS:

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

RFIDCanada Automating Identification

HID



	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
	FEATURES
Bluetooth® LE Application Supported	Eddystone, iBeacon, sBeacon
Processor Type	ARM Cortex M3 and M0
Memory	128 KB flash (MCU) 512 KB additional flash
Sensor Inputs Supported	Digital: SPI, I2C, UART; Analog (12-bit ADC, 200 KSamples/s)
Power Supply	Input Voltage 3.6—30 VDC
	PHYSICAL
Dimensions (Length × Width x Height)	1.2 x 0.92 x 0.29 in (30.5 x 23.5 x 7.5 mm)
Mounting Method	Embed
	THERMAL
Storage	-22° to +140° F (-30° to +60° C)
Operating Temperature	-22° to +140° F (-30° to +60° C)
	OTHER
Standards	FCC / CE (in progress)
Box Size	1 pc.
Warranty	2 years

HID

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