

Bluetooth Low Energy (BLE) Module

Manufacturers	Microchip Technology, Inc
Package/Case	SMD
Product Type	RF Integrated Circuits
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for BM70BLES1FC2-0B03AA or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The BM70 Bluetooth Low Energy module is designed for easy implementation into a broad range of applications. It delivers up to 2.5x throughput improvement and more secure connections vs. Bluetooth 4.1 based products. Developers can easily interface to the device via a standard UART interface, available on most Microcontrollers and Processors. The BM70 has a completely integrated Bluetooth software stack, and offers a shielded regulatory certified version with built-in antenna. Developers are freed from the complexities of Bluetooth Software and RF development and can simply utilize the BM70 as a wireline replacement. Perfect for IoT (Internet of Things) applications, when interfaced to a BLE enabled smartphone or Bluetooth Internet Gateway, applications can be monitored, controlled and updated from anywhere in the world.

The Microchip Bluetooth Data (MBD) mobile app is available to speed up development for both Android and iOS.

Microchip's complimentary and confidential Wireless Check online design review service is available for customers who have selected our products for their application design-in*. *The online design review service is subject to Microchip's Program Terms and Conditions and requires a myMicrochip account.

Firmware Release Summary, see Software Release Notes for details:

BM70BLEx1FC2-0B04AA - FW 1.11 - Fixes bug with invalid Bluetooth address. Refer to Errata document for more information.

BM70BLEx1FC2-0B03AA - FW 1.06 - Added support for the BM71 among other bug fixes.

BM70BLEx1FC2-0002AA - FW 1.03 - Initial Release.

Features

Bluetooth 5 Certified

Module certified for use in USA, Canada, Europe, Japan, Korea, Taiwan and China

Mobile Application supported in Microchip Bluetooth Data (MBD)

Latest Firmware Revision: 1.11 (BM70BLEx1FC2-0B04AA)

Supports LE Secure Connections levels 1-3

UART interface

3 x PWM supported

Main Crystal : 32MHz

Temperature sensor supported

12 bits ADC supported for 8CH input ports and battery voltage detection

Wake up by any GPIO

Average current: TX 3.87mA/RX 3.06mA with Buck, @>

RSSI Monitor

ISM Band 2.402 to 2.480 GHz operation

Channels 0-39

Rx Sensitivity: -90 dBm@ BLE, in typical

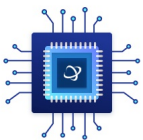
Tx Power: +2 dBm

RSSI monitor

Ceramic Chip Antenna (BM70BLES1FC2)

External Antenna Connection (BM70BLE01FC2)

Related Products



[BM-78-PICTAIL](#)

Microchip Technology, Inc

N/A



[BM77SPPS3MC2-0007AA](#)

Microchip Technology, Inc

SMD



[BM71BLE01FC2-0002AA](#)

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[BM70BLE01FC2-0B05BA](#)

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