

BM71BLES1FC2-0B02AA

Data Sheet

Bluetooth 4.2, 1.9V to 3.6V Supply, -90dBm Sensitivity

Manufacturers	Microchip Technology, Inc	
Package/Case	SMD	
Product Type	RF Integrated Circuits	
RoHS		
Lifecycle		Images are for reference only
Please submit RFQ for BM71BLES1FC2-0B02AA or Email to us: sales@ovaga.com We will contact you in 12 hours. RFO		

General Description

The BM71 is a small form factor, Bluetooth Low Energy module measuring only $9 \times 11.5 \times 2.1$ mm. The BM71 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 BM71 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 BM71 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 tospeed 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 Notesfor details:

BM71BLEx1FC2-0B04AA - FW 1.11 - Fixes bug with invalid Bluetooth address. Refer to Errata document for more information.

BM71BLEx1FC2-0002AA - FW 1.06 - Initial Release.

Features

Bluetooth 5 Certified	
Module certified for use in USA, Canada, Brazil, Europe, Japan, Korea, Taiwan and China	
Mobile Application supported in Microchip Bluetooth Data (MBD)	
Latest Firmware Revision: 1.11 (BM71BLEx1FC2-0B04AA)	
Supports LE Secure Connections levels 1-3	
UART interface	
1 x PWM supported	
Main Crystal: 32MHz	
Temperature sensor supported	
12 bits ADC supported for 5CH 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 (BM71BLES1FC2)	
External Antenna Connection (BM71BLE01FC2)	

Related Products



BM-78-PICTAIL

Microchip Technology, Inc N/A



BM77SPPS3MC2-0007AA

Microchip Technology, Inc SMD



BM71BLE01FC2-0002AA

Microchip Technology, Inc SMD



BM71BLES1FC2-0B04AA

Microchip Technology, Inc 16-SMD SMD



BM71BLES1FC2-0002AA

Microchip Technology, Inc SMD



BM70BLES1FC2-0B03AA Microchip Technology, Inc

SMD



BM70BLES1FC2-0B04AA

Microchip Technology, Inc 33-SMD SMD

BM70BLE01FC2-0B05BA

Microchip Technology, Inc SMD