

Bluetooth v4.2 (BLE) + EDR SMART SOC Class II IoT 1Mbps 30-Pin Tray



Images are for reference only

Manufacturer: [Microchip Technology, Inc](#)

Package/Case: MODULE30

Product Type: RF Integrated Circuits

RoHS: RoHS Compliant/Lead free 

Lifecycle: Active

Inquiry

General Description

The BM78 is a fully-certified Bluetooth® dual-mode (BR/EDR/LE) module for designers who want to easily add dual mode Bluetooth wireless capability to their products. Delivering local connectivity for the Internet of Things (IoT), the BM78 bridges your product to Smart Phones and Tablets for convenient data transfer, control and access to cloud applications. This Bluetooth SIG certified module provides a complete wireless solution with Bluetooth stack on-board, integrated antenna, and worldwide radio certifications in a compact surface mount package, 22 x 12 x 2.4 mm. It supports GAP, SDP, SPP, and GATT profiles. Data is transferred over the Bluetooth link by sending/receiving data via transparent mode over UART, making it easy to integrate with any processor or Microcontroller with a UART interface. Configuration is made easy using a Windows® based GUI or directly via UART by a microcontroller.

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:

BM78SPPx5MC2-0004AA - FW 1.35 - Enhancements to UITool configurations and other bug fixes.

BM78SPPx5MC2-0002AA - FW 1.20 - Initial Release. Not recommended for new designs.

BM78SPPx5NC2-0002AA - ROM 1.00 - Initial Release. Not recommended for new designs.

Key Features

Bluetooth 5 Certified

Dual-Mode Bluetooth Classic and Bluetooth Low-Energy

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

Mobile Application supported in Microchip Bluetooth Data (MBD)

Latest Firmware Revision: 1.35

On-board embedded Bluetooth Stack

Easy to use transparent mode for data transfer via UART

Easy to configure with Windows® GUI or direct by MCU

Multiple I/O pins for control and status

Secure AES128 encryption

GAP, SDP, SPP, GATT profiles

Firmware can be field upgradable via UART

Compact surface mount module: 22 x 12 x 2.4 mm

Castellated surface mount pads for easy and reliable host PCB mounting

Recommended For You

BM64SPKS1MC2-0001AA

Microchip Technology, Inc
MODULE-43

BM78SPPS5NC2-0002AA

Microchip Technology, Inc
MODULE

BM83SMI-00AA

Microchip Technology, Inc
Module

BM62SPKS1MC2-0001AA

Microchip Technology, Inc
MODULE-40

BM20SPKS1NBC-0001AA

Microchip Technology, Inc
SMD-40

BM70BLES1FC2-0002AA

Microchip Technology, Inc
MODULE

BM20SPKA1NBC-0001AA

Microchip Technology, Inc
MODULE-40

BM78SPPS5MC2-0002AA

Microchip Technology, Inc
MODULE

BM83SMI-00TA

Microchip Technology, Inc
MODULE-50

BM83SMI-00AB

Microchip Technology, Inc
Module

BM63SPKA1MGA-0001AC

Microchip Technology, Inc
MODULE

BM78SPP05NC2-0001AA

Microchip Technology, Inc
30Module

BM78SPP05MC2-0004AA

Microchip Technology, Inc

MODULE

BM70BLE01FC2-0B04AA

Microchip Technology, Inc

MODULE

BM23SPKS1NB9-0B02AA

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MODULE-43