

# Bluetooth LE Module

## MS88SF3



## Datasheet

V 1.0.0





# MS88SF3-nRF52833


## High-performance, 42 I/O ports, , multi-protocol Bluetooth 5.4 module


The MS88SF3 is a low-power, cost-effective wireless BLE 5.4 module based on the nRF52833 SoC. It has an ARM core Cortex-M4F RF transceiver, the core running speed of 64Mhz, in addition, it also comes with 512kB FLASH program space, 128kB RAM, integrated 2.4 GH transceiver, and other powerful supporting resources for Bluetooth connectivity to provide the perfect solution. nRF52833 can support ANT, BLE, BLE MESH, ZIGBEE and THREAD protocols, BLE MESH, ZIGBEE and THREAD protocols. With a data rate of 125kbps, its range in open space is estimated to be up to 250 meters.

### FEATURES

  
Bluetooth 5.4

  
High-performance

  
Leads 42 I/O ports

  
Support ANT, BLE, BLE MESH, ZIGBEE and THREAD protocols, etc

### KEY PARAMETER

MS88SF3-nRF52833			
Chip Model	nRF52833	Antenna	PCB/IPEX
Module Size	18.5×12.5×2mm	GPIO	42
Flash	512KB	RAM	128KB
Receiving Sensitivity	-96dBm(1Mbps) -103dBm(125kbps)	Transmission Power	-40 ~ +8dBm
Current(TX)	0dBm-4.9mA	Current(RX)	4.6mA

### APPLICATION

  
Smart Buildings

  
Consumer electronics

  
Intelligent medical care

  
Smart agriculture

  
Security equipment

  
Automotive equipment

### CERTIFICATION

 Bluetooth®







REACH RoHS



## COPYRIGHT STATEMENT

This manual and all the contents contained in it are owned by Shenzhen Minewsemi Co., Ltd. and are protected by Chinese laws and applicable international conventions related to copyright laws.

The certified trademarks included in this product and related documents have been licensed for use by MinewSemi. This includes but is not limited to certifications such as BQB, RoHS, REACH, CE, FCC, BQB, IC, SRRC, TELEC, WPC, RCM, WEEE, etc. The respective textual trademarks and logos belong to their respective owners. For example, the Bluetooth® textual trademark and logo are owned by Bluetooth SIG, Inc. Other trademarks and trade names are those of their respective owners. Due to the small size of the module product, the "®" symbol is omitted from the Bluetooth Primary Trademarks information in compliance with regulations.

The company has the right to change the content of this manual according to the technological development, and the revised version will not be notified otherwise. Without the written permission and authorization of the company, any individual, company, or organization shall not modify the contents of this manual or use part or all of the contents of this manual in other ways. Violators will be held accountable in accordance with the law.

## RELATED DOCUMENTS

- nRF52833\_Chip\_Datasheet  
[https://en.minewsemi.com/file/nRF52833\\_Chip\\_Datasheet\\_EN.pdf](https://en.minewsemi.com/file/nRF52833_Chip_Datasheet_EN.pdf)
- MinewSemi\_Product\_Naming\_Reference\_Manual\_V1.0  
[https://en.minewsemi.com/file/MinewSemi\\_Product\\_Naming\\_Reference\\_Manual\\_EN.pdf](https://en.minewsemi.com/file/MinewSemi_Product_Naming_Reference_Manual_EN.pdf)
- MinewSemi\_Connectivity\_Module\_Catalogue\_V2.0  
[https://en.minewsemi.com/file/MinewSemi\\_Connectivity\\_Module\\_Catalogue\\_EN.pdf](https://en.minewsemi.com/file/MinewSemi_Connectivity_Module_Catalogue_EN.pdf)



For product change notifications and regular updates of Minewsemi documentation, please register on our website: [www.minewsemi.com](http://www.minewsemi.com)

# MINESEMI



## SHENZHEN MINEWSEMI CO., LTD.



0086-755-2801 0353



<https://minewsemi.com>



[minewsemi@minew.com](mailto:minewsemi@minew.com)



<https://store.minewsemi.com>



No.8, Qinglong Road, Longhua District, Shenzhen, China