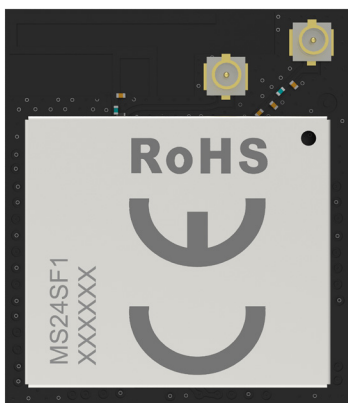


LoRa Module

MS24SF1



Datasheet

V 1.0.0



MS24SF1-nRF52840+SX1262

Ultra-long-range,IPEX+PCB design,high-sensitivity,BLE5.3, Dual-low-power-chip-combo

MS24SF1 module integrates both BLE and LoRa wireless connectivity modes, supporting FSK, GFSK, and LoRa modulation modes. It enables point-to-point communication and supports data transmission via BLE. The device is initially shipped as a blank module with demo firmware for testing purposes. It offers long-range communication capabilities, extremely low power consumption. LoRa™ modulation technology resolves the challenge of simultaneously achieving long-distance communication, interference resistance, and low power consumption, which traditional design approaches struggle with.

FEATURES



Available with ARM Cortex-M4 core



Low power and dual low-power chip combo



Long range transmission, City environment 5KM



Exclusive dual IPEX+PCB design, flexible antenna optional



BLE antenna support PCB and IPEX optional



BLE5.3, support BLE long-range



More IO port support, UART, SPI, I2C, etc.

KEY PARAMETER

MS24SF1			
Chip Model	nRF52840+SX1262	Antenna	PCB+IPEX
Module size	27x23.5x2.8mm	GPIO	35
Receiving Sensitivity	LoRa: -146dBm BLE: -96dBm, 1Mbps -103dBm, 125Kbps	Transmission Power	LoRa: +22dBm BLE: -40 ~ +8dBm
Current(TX)	122.8mA	Current(RX)	9.3mA

APPLICATION



Smart city



smart medical care



Cold chain transport



Security warning equipment



Environmental sensor



Instrument and meter Smart meter



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

- SX1261-2_Chip_Datasheet
https://en.minewsemi.com/file/SX1261-2_Chip_Datasheet_EN.pdf
- nRF52840_Chip_Datasheet
https://en.minewsemi.com/file/nRF52840_Chip_Datasheet_EN.pdf
- MinewSemi_Product_Naming_Reference_Manual_V1.0
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



For product change notifications and regular updates of Minewsemi documentation, please register on our website: www.minewsemi.com

MINESEMI

SHENZHEN MINEWSEMI CO., LTD.



0086-755-2801 0353

<https://minewsemi.com>minewsemi@minew.com<https://store.minewsemi.com>

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