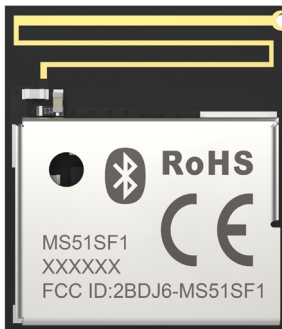


Bluetooth LE Module

MS51SF1



Datasheet

V 1.0.1




MS51SF1-nRF52833


Bluetooth master-slave pass-through module that supports master-slave switching, serial command configuration, and iBeacon broadcast mode

The MS51SF1 is a master-slave module that can switch between master and slave modes through commands. The master and slave modes cannot work simultaneously and only support one-to-one connections. By default, the device operates in master mode. In master mode, it can scan and connect to devices through commands. The scan can be configured to filter by broadcast name or MAC address to locate relevant devices. Connections can only be initiated by specifying the MAC address. The device communicates with an MCU via a UART interface. In command mode, the UART can be used to send commands to modify parameters such as scan interval, scan timeout, connection interval, broadcast interval, custom broadcast data, and baud rate. The MCU can send a command through UART to switch to slave mode. In slave mode, the device can be in broadcast or connection state, allowing the master device to connect and serve as a bridge for transparent data transmission between the master and the MCU.


FEATURES




Supports master-slave switching




Maximum transmission speed up to 11kB/s




Supports serial port instruction configuration



Support power supply voltage detection



One-to-one connection



Support iBeacon broadcast mode

KEY PARAMETERS

MS51SF1-nRF52833			
Chip Model	Nordic nRF52833	Antenna	PCB
Module Size	9.8×8.4×1.6mm	GPIO	20
Flash	512kB	RAM	128KB
Receiving Sensitivity	-96dBm	Transmitting Power	-40~ +8dBm
Current (TX)	0dBm-4.8mA	Current (RX)	4.6mA
Firmware	Master-slave switching pass-through firmware		

APPLICATIONS



Smart Home



Consumer Electronics



Smart Healthcare



Security Equipment



Automotive Equipment



Smart Wearable Devices

CERTIFICATIONS







REACH

RoHS

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RELATED DOCUMENTS

- nRF52833_Chip_Datasheet
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