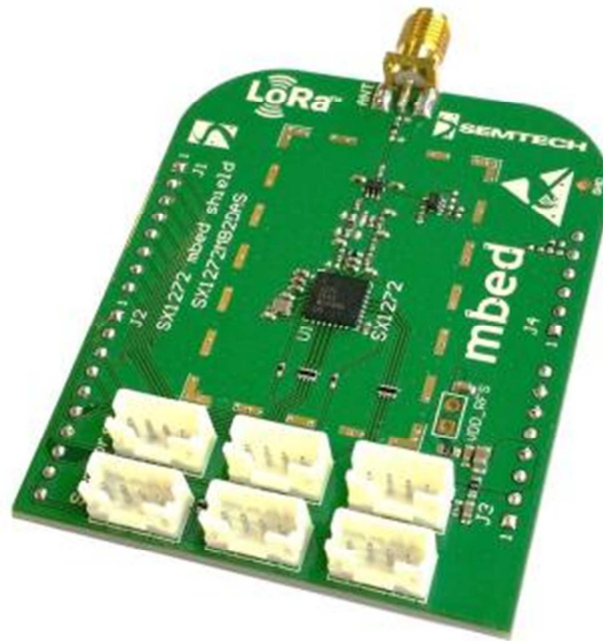


SX1272MB2DAS

Hardware Description



1 Introduction

The SX1272/73 transceivers feature the LoRa™ long range modem that provides ultra-long range spread spectrum communication and high interference immunity whilst minimizing current consumption. Using Semtech's patented LoRa™ modulation technique SX1272/73 can achieve a sensitivity of over -137 dBm using a low cost crystal and bill of materials. The high sensitivity combined with the integrated +20 dBm power amplifier yields industry leading link budget making it optimal for any application requiring range or robustness. LoRa™ also provides significant advantages in both blocking and selectivity over conventional modulation techniques, solving the traditional design compromise between range, interference immunity and energy consumption. These devices also support high performance (G)FSK modes for systems including WMBus, IEEE802.15.4g. The SX1272/73 deliver exceptional phase noise, selectivity, receiver linearity and IIP3 for significantly lower current consumption than competing devices.

2 Ordering Information

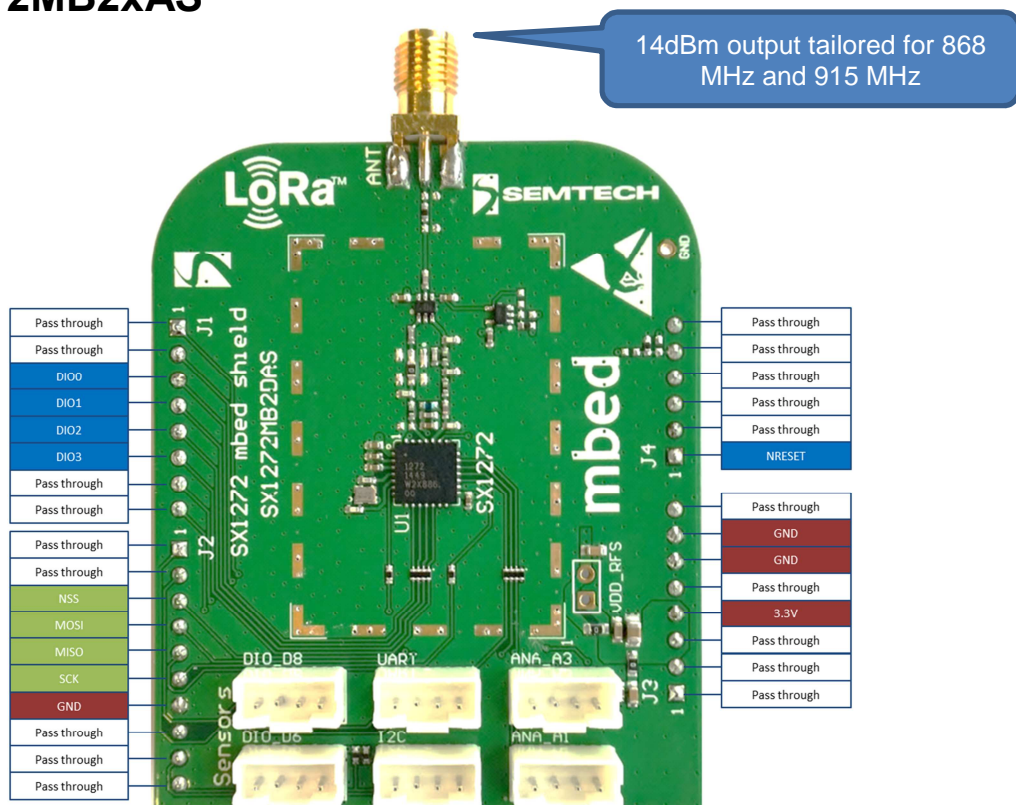
When ordering, please refer to the following parts numbers:

SX1272MB2DAS SX1272MB2xAS version + 868 / 915 MHz Compatible Antenna

The SX1272MB2DAS can be ordered in quantities from various distributors. Please visit the Semtech webpage to find your closest reseller.

<https://developer.mbed.org/components/SX1272MB2xAS/>

3 SX1272MB2xAS



4 MBED Libraries

MBED libraries can be downloaded from Semtech webpage on MBED.

<https://developer.mbed.org/components/SX1272MB2xAS/>

5 Connectivity

The SX1272MB2xAS is controlled through the SPI bus at a maximum speed of 10Mbps. The connections are identical on each board so that the same software can be used on any boards. All “Pass through” pins are not used in the operations of the SX1272MB2xAS boards and can therefore be used in connections of other boards for various purposes. The I2C and UART have especially been let free so that a variety of sensors can be connected to the boards, and thus enable long distance control of them.

SX1272MB2xAS	MBED Pin
SCK	D13
MOSI	D11
MISO	D12
NSS	D10
DIO0	D2
DIO1	D3
DIO2	D4
DIO3	D5
NRESET	A0

6 Contact Information

Semtech Corporation
Wireless & Sensing Products
Division 200 Flynn Road, Camarillo, CA 93012
Phone: (805) 498-2111
Fax: (805) 498-3804
E-mail: sales@semtech.com
support_rf@semtech.com
Internet: <http://www.semtech.com>