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nRF905-C868, nRF905-C433 Datasheet

Document Version: 1.1



1: Background:

The nRF905-Cxxx is a carrier module for the popular nRF905 Transceiver chip from Nordic Semiconductor. The module provides a simple way to interface to the nRF905 chip, with all impedance matching and peripheral components already included on the module. Only the digital interface pins are provided on a DIP-24 compatible 14-pin footprint, relieving the designer of the difficulties of fine-pitch PCB layout and impedance matching.

The nRF905-Cxxx is an ideal tool for designers who want to evaluate the performance of the nRF905 chip before committing their design to the chip. Because of the module's compact footprint and low cost, it can also be used in small to medium production runs. The nRF905-Cxxx provides a 50-ohm RF connection where the user can either connect a 50-ohm coaxial cable or an SMA connector.

2: Schematic

The nRF905-Cxxx carrier board more or less implements the recommended application schematic for a 50-ohm load as shown in the nRF905 device datasheet.

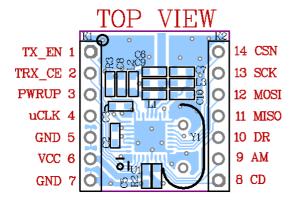
The nRF905-C868 is populated with components to optimize matching for the 868/915MHz bands, while the nRF905-C433 is optimized for the 433MHz band.

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3: Pin-Outs

All required pins are connected to 14 external pins as shown in the diagram. See the nRF905 device datasheet for a complete description of the pins.



4: 50 Ohm Output

The 50 ohm output pads are provided for the user to connect either RF connectors or coaxial cable directly. Edge mounted SMA or MMCX connectors (among others) fit nicely on the pads. Alternatively, one can solder coaxial cable directly to the pads as in the picture below.



5: nRF905 Datasheet

This datasheet assumes the reader has a copy of the nRF905 device datasheet. The information contained in this document **IS NOT** sufficient to enable a designer to use the module. Copyright Laws prohibits the reproduction of any part of the nRF905 datasheet; therefore, please see the latest datasheet for the nRF905 device. The newest copy is available online at: http://www.nordicsemi.no/



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6: Physical Dimensions

TOP VIEW 2.5mm 2.5mm 2.54mm 2.54mm

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