
nRF24L01 Evaluation kit

nRF24L01-EVKIT

INTRODUCTION

The Evaluation Kit for the nRF24L01 Single Chip 2.4 GHz RF Transceiver has been developed to enable customers to get hands-on experience with the functionality of the device in their applications.

The nRF24L01 Evaluation Kit is convenient for use in the prototyping phase when developing, testing and debugging PC software, microcontroller code and/or electronic circuitry for interfacing towards nRF24L01 and a wireless communication link.

In the nRF24L01 EVKIT two nRF configuration boards is also included. This helps the customer through the getting started phase. Through the nRF configuration board, configuration and Shock Burst™ communication are easily managed through PC software.

Detailed description of the nRF24L01 EVBOARD, the nRF configuration board and suggestions for test benches for evaluation of performance parameters are given in the nRF24L01 EVBOARD documentation [1].

GETTING STARTED

The nRF24L01 Evaluation Kit contains the following items:

- Two evaluation boards with the nRF24L01 transceiver and PCB antenna
- Two motherboards for PC interface
- Two standard USB A/B cables
- CD-ROM containing:
 - nRF24L01EC: configuration and control software for PC
 - nRF24L01EC documentation [2]
 - nRF24L01 EVBOARD documentation [1]
 - nRF24L01-EVKIT documentation (this document)

The nRF24L01 datasheet can be downloaded from the Nordic Semiconductor web pages:
<http://www.nordicsemi.no>.

Combined with the antenna, the nRF24L01 EVBOARD is a complete radio module with a digital interface for connection to the customer's application circuitry.

Figure 1 shows a typical set-up with the nRF24L01 EVBOARD connected to the customer's application circuitry in order to develop and debug a complete wireless communication link.

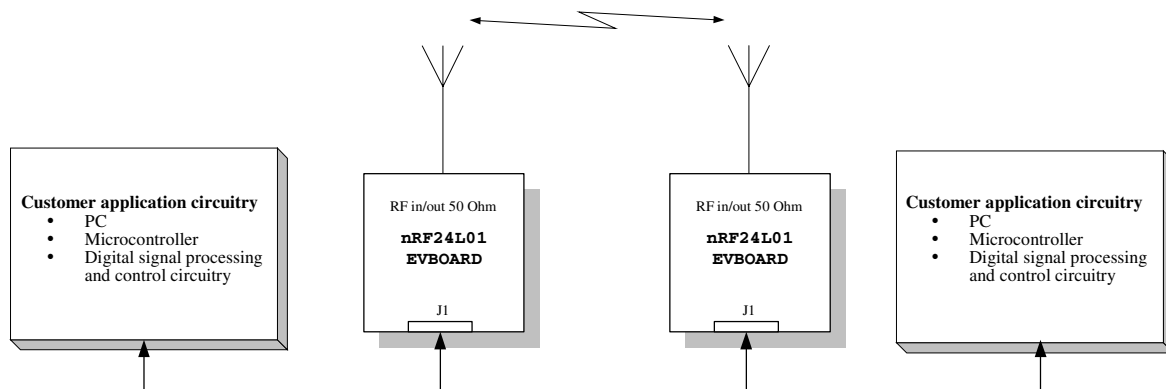


Figure 1 Set-up with the nRF24L01 EVBOARDS connected to the customer's application circuitry

The following precautions should be taken when connecting to the nRF24L01 EVBOARD without using the motherboard:

- A twisted pair flat cable should be used to connect to header J1 on the nRF24L01 EVBOARD. The cable length must be kept as short as possible.
- Ensure that the peak-to-peak voltage level of the data input signal DATA and the control signals never exceed the nRF24L01 device absolute maximum ratings.

Details regarding digital input/output voltage levels, configuration and timing requirements for control of the nRF24L01 device can be found in the nRF24L01 datasheet.

REFERENCES

- [1] nRF24L01 EVBOARD product specification.
- [2] nRF24L01EC Getting Started user guide



LIFE SUPPORT APPLICATIONS

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