

nRF2401 Evaluation Kit

nRF2401-EVKIT

INTRODUCTION

The Evaluation Kit for the **nRF2401** 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 **nRF2401** 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 a **nRF2401** wireless communication link.

In the **nRF2401 EVKIT** two nRF configuration boards is also included. Trough the nRF configuration board, configuration of **nRF2401** and ShockBurstTM communication are easily managed trough PC software.

Detailed description of the **nRF2401 EVBOARD**, the **nRF configuration board** and suggestions for test benches for evaluation of performance parameters are given in the **nRF2401 EVBOARD** documentation.

GETTING STARTED

The nRF2401 Evaluation Kit contains the following items:

- Two **nRF2401 Evaluation Boards** with the nRF2401 transceiver
- Two **nRF Configuration Boards** for PC interface
- Two 2.4 GHz half wave antennas
- nRF240x configurator documentation
- nRF2401 EVBOARD documentation
- **nRF2401-EVKIT** documentation (this document)
- **nRF240x Configurator**: configuration and control software for PC

The **nRF2401**datasheet can be downloaded from the Nordic VLSI web pages: http://www.nvlsi.no.

Combined with the antenna, the **nRF2401 EVBOARD** is a complete radio module with a digital interface for connection to application circuitry.

Figure 1 shows a typical set-up with the **nRF2401 EVBOARDS** connected to application circuitry in order to develop and debug a complete wireless communication link.

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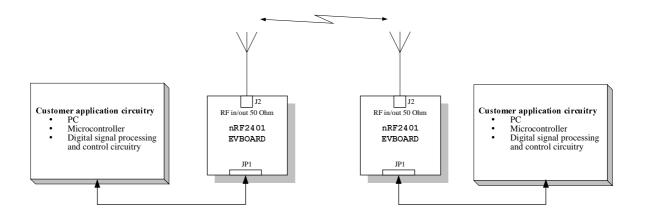


Figure 1 Set-up with the nRF2401 EVBOARDS connected to application circuitry

The following precautions should be taken when connecting to the **nRF2401 EVBOARD**:

- A twisted pair flat cable should be used to connect to header JP1 on the nRF2401 EVBOARD. The GND-wires in the twisted pair cable must be connected to both the nRF2401 EVBOARD and the customer's application circuitry board. The cable length must be kept as short as possible.
- The power supply wire and the ground wire connected to the power input connector should be twisted together and 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 **nRF2401** device power supply level.

Details regarding digital input/output voltage levels, configuration and timing requirements for control of the nRF2401 device can be found in the nRF2401 product specification.

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DEFINITIONS

Product specification

This Evaluation Kit documentation contains final product specifications. Nordic VLSI ASA reserves the right to make changes at any time without notice in order to improve design and supply the best possible product.

Limiting values

Stress above one or more of the limiting values may cause permanent damage to the device. These are stress ratings only and operation of the device at these or at any other conditions above those given in the Specifications sections of the specification is not implied. Exposure to limiting values for extended periods may affect device reliability.

Application information

Where application information is given, it is advisory and does not form part of the specification.

Table 1. Definitions

Nordic VLSI ASA reserves the right to make changes without further notice to the product to improve reliability, function or design. Nordic VLSI does not assume any liability arising out of the application or use of any product or circuits described herein.

LIFE SUPPORT APPLICATIONS

These products are not designed for use in life support appliances, devices, or systems where malfunction of these products can reasonably be expected to result in personal injury. Nordic VLSI ASA customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Nordic VLSI ASA for any damages resulting from such improper use or sale.

Product specification. Revision Date: 28.02.2003.

nRF2401 Evaluation Kit order code : 280203-nRF2401-EVKIT.

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PRODUCT SPECIFICATION

TV

nRF2401 Evaluation kit

YOUR NOTES

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