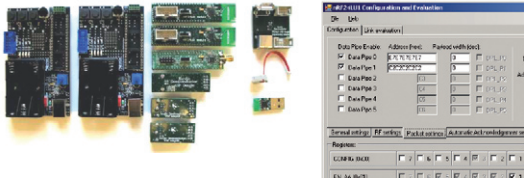


PRODUCT SUMMARY

Get started with nRF24LU1

The nRF24LU1 Development Kit

The nRF24LU1 Development Kit includes everything needed to evaluating and get started developing with the nRF24LU1, single chip 2.4GHz transceiver with USB, microcontroller and flash memory.



Modular development hardware

Basic feature boards and radio modules

The development kit is built around a flexible basic feature board and a selection of modules that can be connected to it.

The basic feature board includes:

- A USB connector for connecting the development kit to the PC USB port
- Power supply, selectable power from the USB or from the on board regulators
- 40-pin DIL connector for connecting the radio module
- A SPI connector that can be used for flash programming or connecting expansion modules
- 3 buttons and 3 diodes that can be used as input and output for demo applications

Two different radio modules are included:

- One with low cost PCB antenna and one with SMA connector for RF testing
- Both modules integrates the nRF24LU1 along with requires passives a 16MHz crystal as well as a JTAG connector for hardware debugging using System Navigator from First Silicon Solutions (must be purchased separately)

Also included are programming adaptors for flash programming both for the radio modules and for the USB dongle.

Quick configuration and evaluation

Using the Configuration and Evaluation Suite

The included Configuration and Evaluation PC application enables developers to quickly configure and evaluate the nRF24LU1. Key features provided are:

- Access to set all transceiver configuration setting
- Exporting configuration settings to ANSI-C source code
- Easy way to set up the transceiver in constant transmit mode

The application also enables developers to use the configuration settings to do basic performance evaluation of an Enhanced ShockBurst™ link layer connection. This is a key tool to evaluate for designing robust protocols for the nRF24LU1. Supported features include:

- Configurable packet rate
- Selectable data file for transmission
- Comprehensive link report including total transmission time, average data rate, packet error rate and number of retransmissions.



RF Silicon

Software

Reference Design

Development Tools

PRODUCT BRIEF

Nordic Semiconductor

nRF24LU1 Development Kit

nRF24LU1-DK

KEY FEATURES

- Complete evaluation and development platform for nRF24LU1
- Enables development of full-custom applications with the nRF24LU1
- Supports hardware debugging with System Navigator from first Silicon Solutions
- Flexible Basic Feature Board
- nRF24LU1 radio module with PCB antenna and JTAG connector
- nRF24LU1 radio module with SMA connector for RF testing
- 5 samples of the nRF24LU1 chip
- Adaptors for programming the embedded flash on the nRF24LU1
- Evaluation and Configuration application suite
- Easy access to all radio configuration settings in the nRF24LU1
- Export configuration setting to ANSI-C
- Easy to set up transceiver in constant transmit mode
- Easy Enhanced ShockBurst™ link evaluation for RF protocol development
- Selectable file for data transfer
- Configurable packet rate
- Comprehensive link report including total transmission time, average data rate, packet error rate and number of retransmissions.
- FCC/ETSI compliant
- Full-speed USB 2.0 compliant
- Complete set of design files for the radio modules
- Comprehensive set of documentation including Getting Started Guide and User Guide
- Seamless integration with the nRF24LU1 Software Development Kit for firmware development

SUMMARY OF BENEFITS

- Turnkey solution for development with the nRF24LU1 enabling faster time to market, low development cost and risk.
- Enables quick RF performance evaluation
- Single flexible platform for development of full-custom applications using the nRF24LU1

Product content

Hardware, software and comprehensive documentation

The nRF24LU1-DK contains everything needed to develop product with the nRF24LU1:

- 2 Basic Feature Boards
- 2 nRF24LU1 radio modules with PCB antenna
- 1 nRF24LU1 radio module with SMA connector
- 1 nRF24LU1 USB dongle
- 1 flash programming dongle
- 5 samples of nRF24LU1
- Flash programming application
- Configuration and Evaluation PC application suite
- The nRF24LU1 Software Development Kit
- Getting Started Guide
- User Guide
- RF qualification report
- USB compliance test report
- Design files for radio modules

Get started with firmware development

Using the included nRF24LU1 Software Development Kit

As the nRF24LU1-DK includes the nRF24LU1-SDK it easy to start firmware development, it provides integration with the Keil µVision IDE, a qualified USB firmware as well a complete RF protocol stack for wireless control devices.

Ordering information

Ordering code	Description
nRF24LU1-DK	nRF24LU1 Development Kit

About Nordic Semiconductor ASA

Ultra low power RF silicon solutions

Nordic Semiconductor is fabless semiconductor company specializing in ultra low power short-range wireless communication. Nordic is a public company listed on the Norwegian stock exchange.

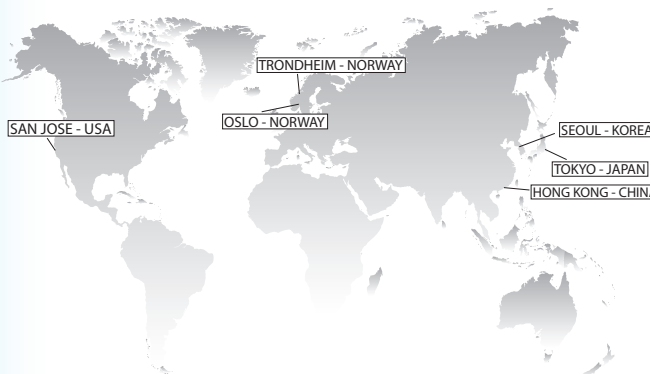
Nordic provides RF Silicon solutions including:

- Highly integrated RF silicon
- Sophisticated and flexible development tools
- Application specific communication software
- Complete reference designs

Worldwide office locations

Headquarter

Trondheim, Norway
 Telephone: +47 72 89 89 00
www.nordicsemi.no



True hardware debugging

Using System Navigator from First Silicon Solution

The radio modules in the development kit feature a JTAG connector that can be connected to a System Navigator hardware debugger from First Silicon Solutions. With this set up firmware developers can control and monitor all internal operations (memory, register, IO) in the nRF24LU1 from the PC.

The hardware debugger must be purchased separately from First Silicon Solutions (www.fs2.com)

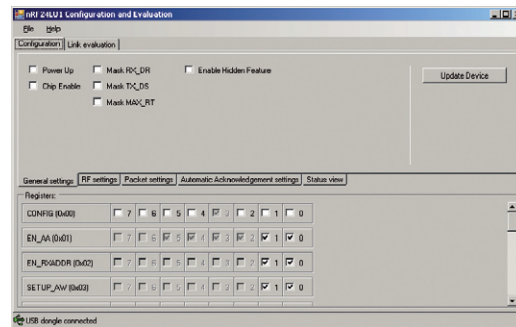
nRF24LU1 Radio module

With PCB antenna and JTAG interface



nRF24LU1 Configuration and Evaluation

Screenshot



Related Products

nRF24LU1	Single chip 2.4GHz transceiver with USB, microcontroller and flash memory
nRF24LU1-SDK	Software Development Kit for nRF24LU1
nRF24LU1-DONGLE	USB dongle reference design for nRF24LU1
nRF24L01	Single chip 2.4GHz transceiver

Visit www.nordicsemi.no for Nordic Semiconductor sales offices and distributors worldwide.