Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

nRF52 Preview DK

Development Kit for Bluetooth Smart, ANT and 2.4GHz applications.

Product Overview

The nRF52 Preview DK is a single-board development kit for Bluetooth® Smart, ANT and 2.4GHz proprietary applications using the nRF52 Series SoC. This kit supports development for nRF52832 SoC.

The kit is compatible with the Arduino Uno Revision 3 standard, making it possible to use 3rd-party shield that are compatible to this standard with the kit.

It supports the standard Nordic tool-chain software using Keil, IAR and GCC. Program/Debug option is Segger J-Link OB for standard tool-chain. The kit gives access to all I/O and interfaces via connectors and has 4 LEDs and 4 buttons which are user-programmable.

A range of software examples are available from the nRF52 Software Development Kit (SDK) to support Bluetooth Smart, ANT and 2.4GHz applications.
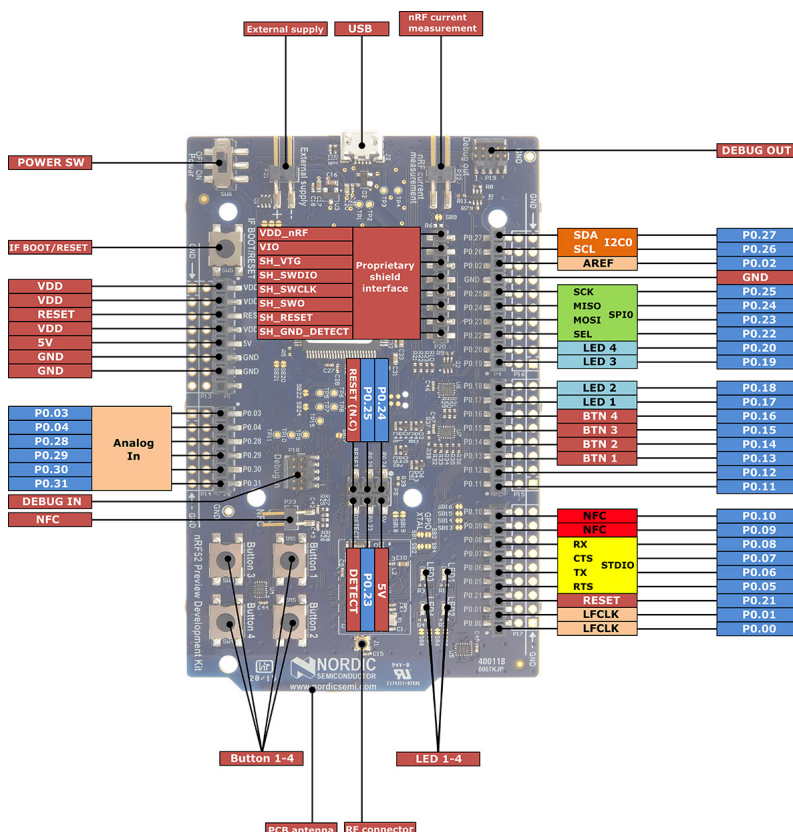
KEY FEATURES

- Affordable, Rapid prototyping and development solution for nRF52 Series SoCs
- Kit supports nRF52832 development
- Supports Bluetooth Smart, ANT and 2.4GHz proprietary development
- Arduino Uno Rev. 3 compatible connector for use with 3rd party shields
- All I/O and interfaces available via connectors
- Segger J-Link OB Program/Debug supported
- Support for Program/Debug of external target boards
- Integrated PCB antenna
- Connector for external NFC antenna
- Connector for RF measurements
- Pins for power consumption measurements
- Coin-cell battery holder
- 3.6v -1.7v, battery and USB, external

APPLICATIONS

- Internet of Things (IoT) - Sensors and Hubs
- Wearables – Sensors and Hubs
- Appccessories – Sensors and Hubs
- Desktop peripherals
- Remote controls
- Sports & Medical
- Smartwatch
- Smarthome sensors
- Toys
- Industrial sensors
- A4WP wireless charging control

KIT CONTENT

- nRF52 Preview DK board
- 2032 battery
- NFC antenna

Application

SoftDevice

nRF52 SoC

nRF52 Series software architecture

The nRF52 Series software architecture offers a clean separation between application code and Nordic's embedded protocol stacks (called SoftDevices). This means compile, link and run-time dependencies with the protocol stack and associated de-bugging challenges are removed. Application code can be developed and compiled independently of the protocol stack. This simplifies overall development efforts and reduces the possibility and complexity of bugs during development.

SoftDevices

The nRF52 Preview DK is supported by a range of protocol stacks. These Nordic protocol stacks are known as SoftDevices and complement the nRF52 Series SoCs. SoftDevices can support Bluetooth Smart, ANT and Bluetooth Smart/ANT combinations. SoftDevices are pre-compiled binary files for nRF52 Series SoCs and are available from Nordic Semiconductor as downloads. This brings maximum flexibility to application development and allows the latest stack version and associated features to be programmed into the nRF52 Series SoC.

nRF52 Preview DK compatible SoftDevices

S132	Bluetooth Smart concurrent central/ peripheral/ broadcaster/observer stack
S212	ANT/ANT+ 8 link stack
S332	Bluetooth Smart concurrent central/ peripheral/ broadcaster/observer stack / ANT 8-link stack

nRF 52 Series Software Development Kit

The nRF52 Software Development Kit (SDK) is available from Nordic Semiconductor to support the nRF52 Series SoCs. The nRF52 SDK contains a wide range of software modules, complete examples and useful utilities. The nRF52 SDK is a great starting point for beginning building your applications.

SoftDevices and the nRF52 SDK are available to download at www.nordicsemi.com

The nRF52 Preview DK is supported by a number of tool-chains. **Nordic offers support for the following:**

- Keil MDK
- IAR Workbench
- GCC

About Arduino Uno Rev 3 connector standard

The Arduino Uno Rev. 3 is a popular HW format for simple, rapid prototyping using Arduino Uno compatible shields. Shields conforming to the Arduino Uno Rev. 3 standard can be used with the nRF52 Preview DK.

RELATED PRODUCTS

nRF52832	Bluetooth Smart and 2.4GHz propri-etary multi-protocol SoC

ORDER INFORMATION

nRF52-Preview-DK	Development Kit for Bluetooth Smart, ANT and 2.4GHz applications

The nRF52 Preview DK is available from the following online partners:

WORLD WIDE OFFICE LOCATIONS

Headquarters:
Trondheim, Norway
Tel: +47 72 89 89 00

For more information
Visit **www.nordicsemi.com** for the complete product specification about this and any other wireless ULP products.

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