nRF51 Toolchain & Software Development kit
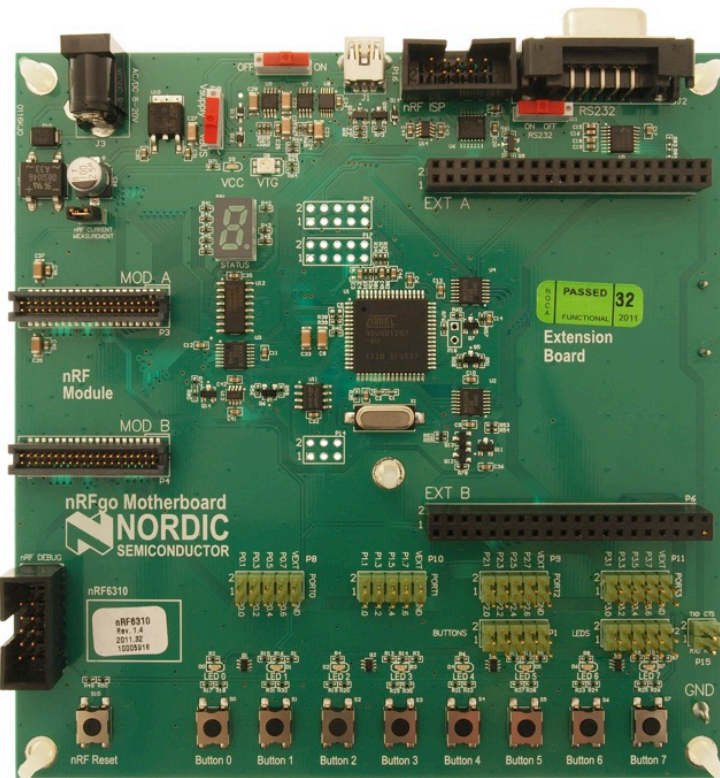
Agenda

- Development Kit
- Evaluation Kit
- Debugger
- SDK

nRF51 Series Environment

Development hardware	Protocols / SoftDevices	IDE Support and tools	Documentation
Development kits Evaluation kits	2.4 GHz (Gazell, ESB libraries) ANT™ (S210 SoftDevice) BLE (S110 SoftDevice)	SDK nRFGo Studio Master Emulator 3rd party tools • Keil µVision • ANTware • ++	Reference manual Product specification SoftDevice specification Kit User guides SDK documentation

NORDIC
SEMICONDUCTOR

GLOBAL tech TOUR

nRFGo mother board

Feature highlights

- Flexible configuration
- Supports all Nordic product lines
- Pin access to all GPIO's
  - Can be routed buttons or LEDs
- Support for extension boards
- Serial output connection
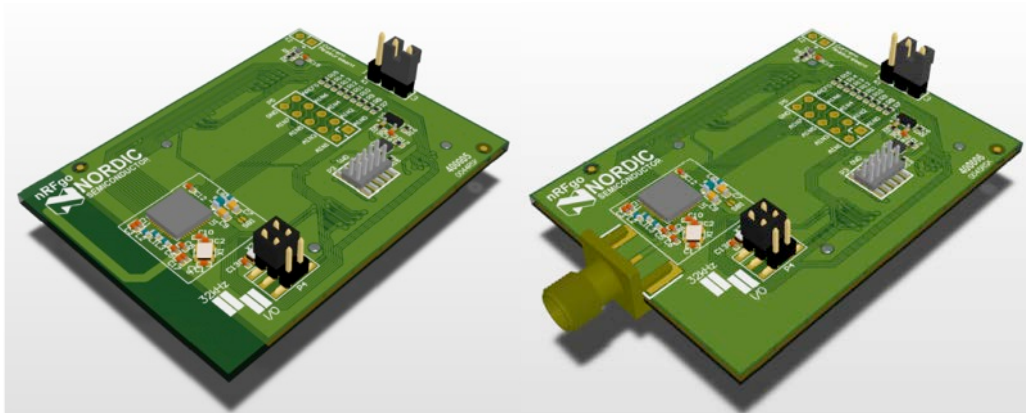- Powered externally, by battery, or via USB

Debugger support

- Segger
  - On board
  - Stand alone
- 2-pin Serial Wire Debug (SWD) interface
- Breakpoints
- Single stepping
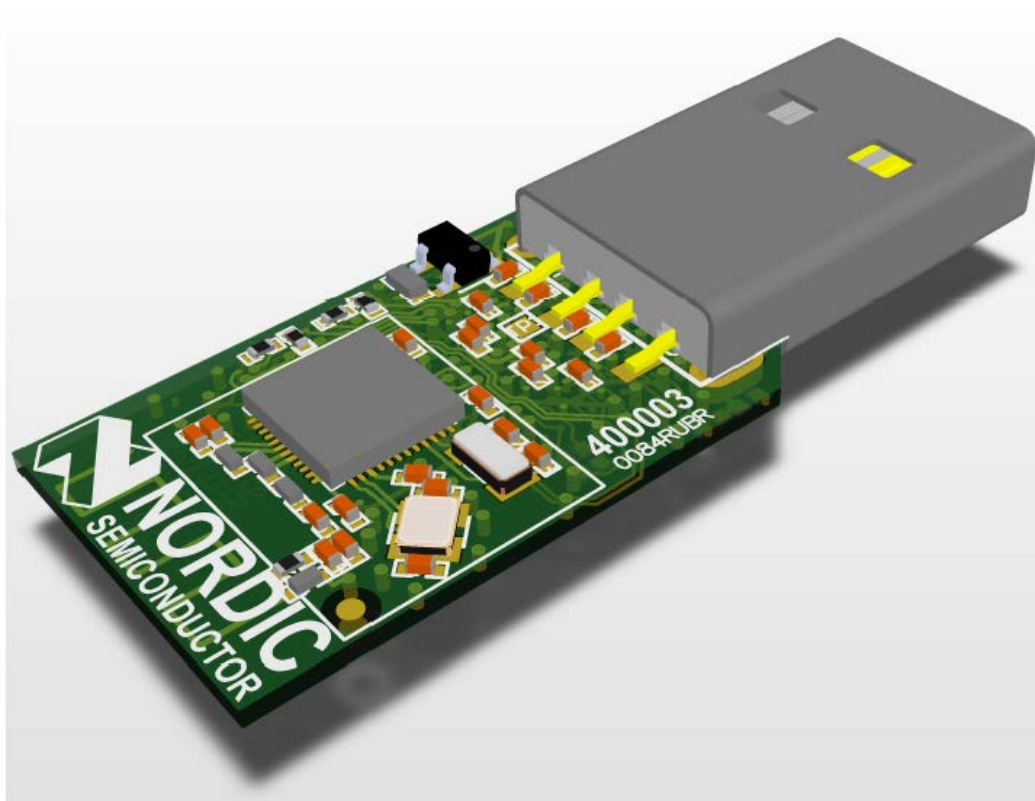
nRF51822 Development Kit contents

Dev-kit module

Feature highlights

- Works with nRFgo Motherboard
- PCB/ SMA antenna solutions
- Serial Wire Debug (SWD) access
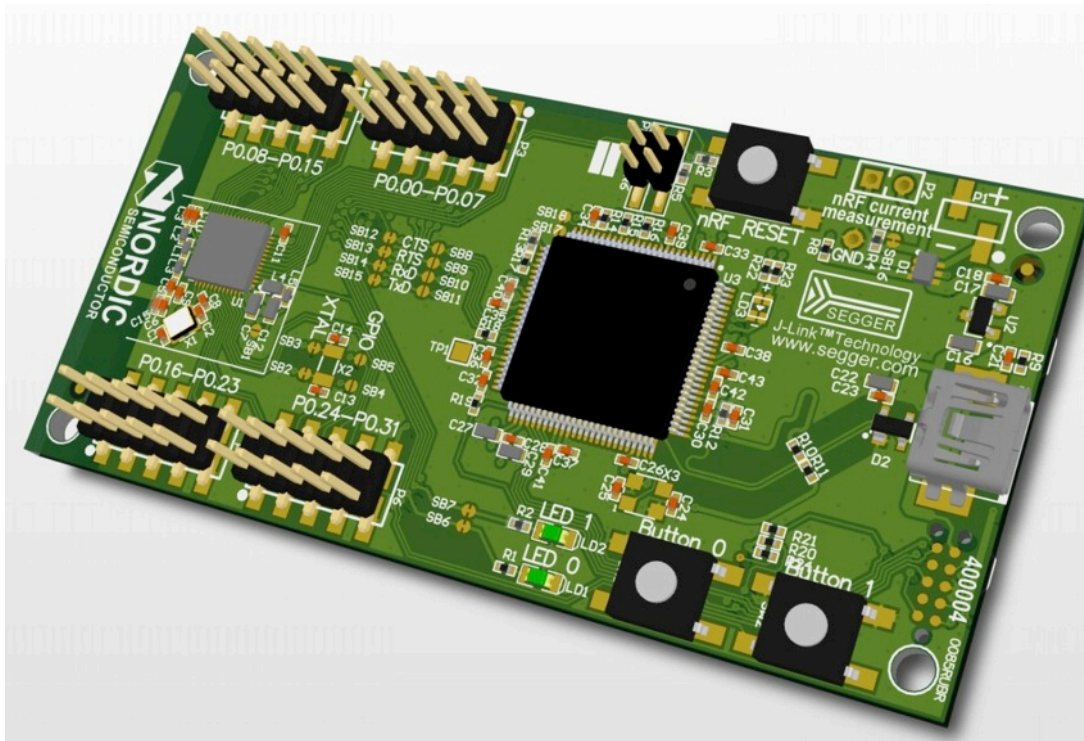
nRF51 Development Dongle, PCA10000

Feature highlights

- nRF51822 6x6mm 48-pin QFN
- PCB antenna
- On-board Segger hardware
  - Debugger / programmer
  - USB to UART bridge

nRF51822 Evaluation Kit contents

nRF51822 Evaluation Board, PCA10001

Feature highlights

- nRF51822 6x6mm 48-pin QFN
- PCB antenna
- Battery holder
- On-board Segger hardware
    - Debugger / programmer
    - USB to UART bridge
- Pin headers, LEDs and buttons

Software Development Kit (SDK) portfolio

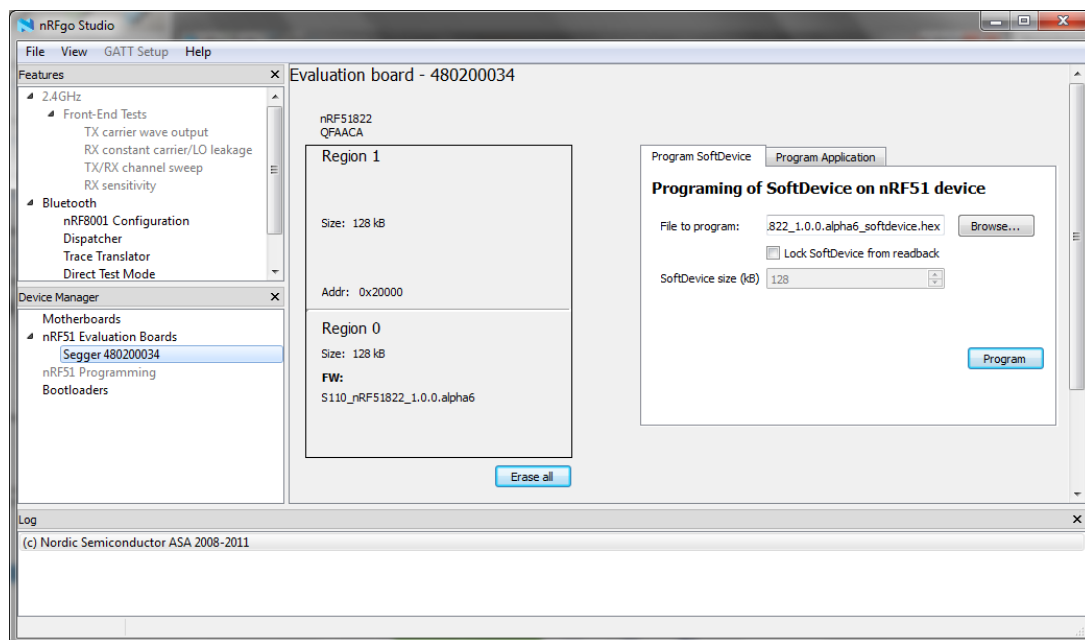| Name	Examples for	Content	Compatible SoftDevice
nRF514	ANT™	• nRF51 libraries and examples • ANT+ ready profiles* • ANT FS • Documentation	S210 Pre-programmed on nRF51422
nRF518	BLE 2.4GHz Gazell / ESB	• nRF51 libraries and examples • BLE profiles • Gazell link layer • Enhanced Shock Burst link layer • Various examples (BLE, ESB, GZLL) • Documentation	S110 Only required for BLE examples

*ANT+ network keys are needed. Register as ANT+ adopter at <ins>www.thisisant.com</ins> to get the keys

NORDIC SEMICONDUCTOR

GLOBAL techTOUR nRF SERIES

IDE Support

- Keil µVision

- Free µVision available! (32K code size limit)
  - SoftDevice size is not part of this limit!

- nRF51 SDK integration
  - Program direct from the IDE
  - Debug support
  - System viewer window

nRFGo Studio

Feature highlights

- Low level device programming*
  - SoftDevices
  - Applications
  - Read back protection
- Connected device identification
  - Chip version
  - Available flash memory
  - SoftDevice version and size
- Board configuration
  - Set voltage level for nRFGo motherboards
- Radio Test feature

*restrictions may apply to various chip configurations

Download documentation and SDK, SoftDevice and supported software

http://www.nordicsemi.com