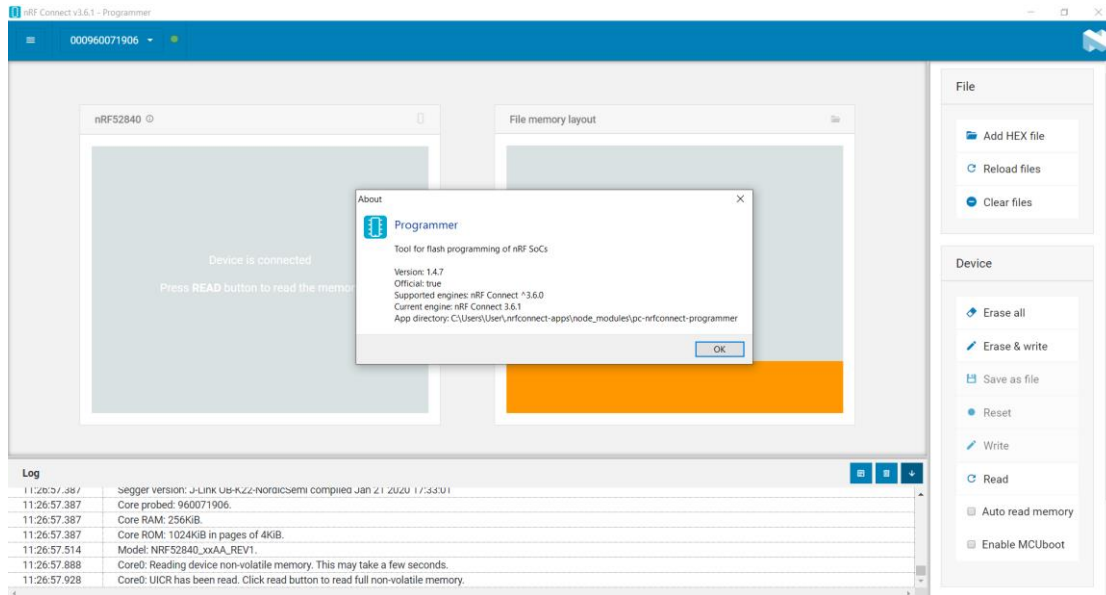


nRF connect and programmer version:

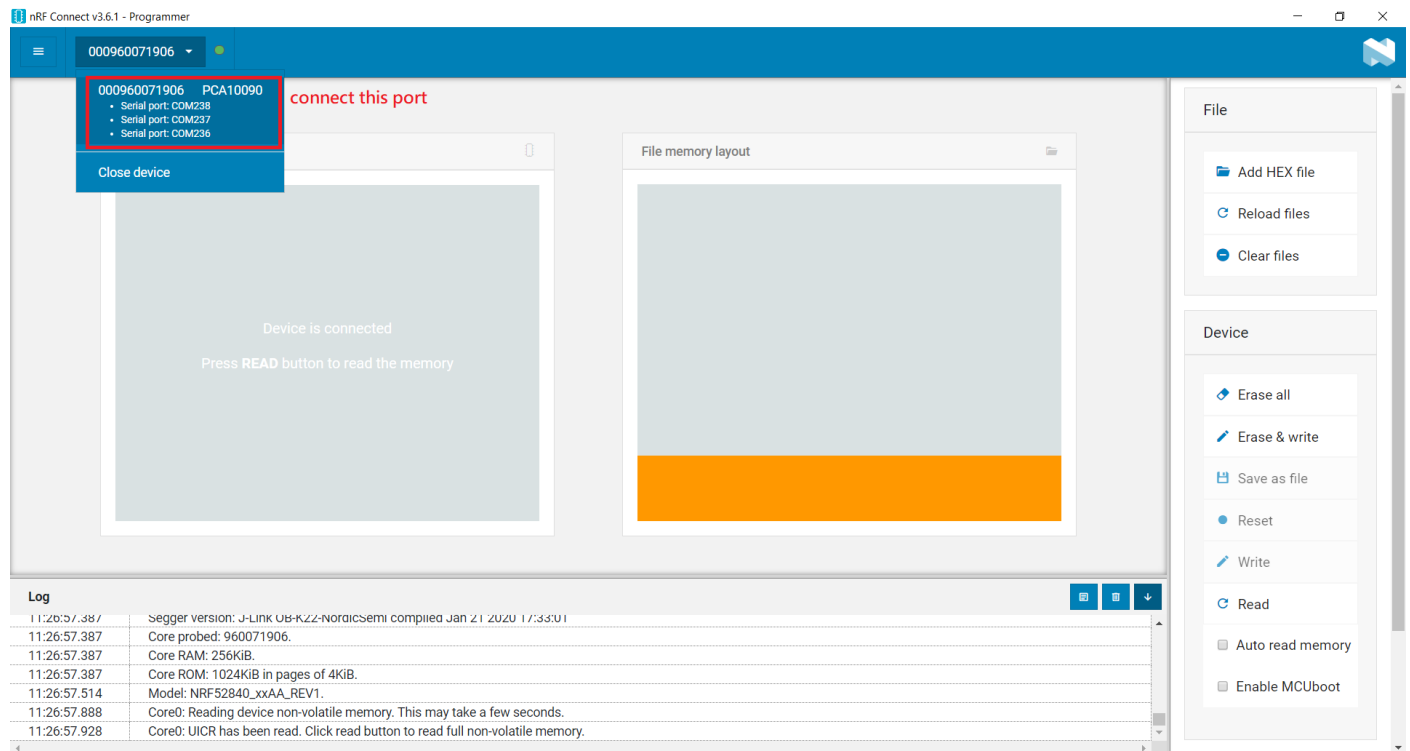


Test FW hex file:

<https://drive.google.com/file/d/1QWHlft7kVfll1PYe2UaTvcTjwwz8YfGk/view?usp=sharing>

nRFf9160DK- Nrf52840 write hex file:

step1:



Step2: Successfully read nRF52840 IC.

The screenshot shows the nRF Connect v3.6.1 - Programmer interface. The top bar displays the serial number 000960071906. The main area is divided into two panels: 'nRF52840' and 'File memory layout'. The 'nRF52840' panel shows a dropdown menu with the following information:

- Serial Number: 000960071906
- Port: COM238
- Communication Type: JLink
- Core Number: 1
- Device memory is loaded?: No

The 'File memory layout' panel shows a large orange bar at the bottom, indicating the memory layout. The right sidebar contains a 'File' section with buttons for 'Add HEX file', 'Reload files', and 'Clear files'. Below it is a 'Device' section with buttons for 'Erase all', 'Erase & write', 'Save as file', 'Reset', 'Write', 'Read', 'Auto read memory', and 'Enable MCUboot'. The bottom 'Log' section shows the following messages:

```
11:41:10.171 Segger version: J-Link OB-KZZ-Nordicsemi compiled Jan 21 2020 17:33:01
11:41:10.176 Core probed: 960071906.
11:41:10.176 Core RAM: 256KiB.
11:41:10.176 Core ROM: 1024KiB in pages of 4KiB.
11:41:10.293 Model: NRF52840_xxAA_REV1.
11:41:10.718 Core0: Reading device non-volatile memory. This may take a few seconds.
11:41:10.758 Core0: UICR has been read. Click read button to read full non-volatile memory.
```

Step3: Erase & write hex file.

The screenshot shows the nRF Connect v3.6.1 - Programmer interface. The top bar displays the serial number 000960071906. The main area is divided into two panels: 'nRF52840' and 'File memory layout'. The 'nRF52840' panel shows the text 'Device is connected' and 'Press READ button to read the memory'. The 'File memory layout' panel shows a large orange bar at the bottom, indicating the memory layout. The right sidebar contains a 'File' section with buttons for 'Add HEX file', 'Reload files', and 'Clear files'. Below it is a 'Device' section with buttons for 'Erase all', 'Erase & write', 'Save as file', 'Reset', 'Write', 'Read', 'Auto read memory', and 'Enable MCUboot'. The 'Erase & write' button is highlighted with a red box. The bottom 'Log' section shows the following messages:

```
11:41:10.171 Segger version: J-Link OB-KZZ-Nordicsemi compiled Jan 21 2020 17:33:01
11:41:10.176 Core probed: 960071906.
11:41:10.176 Core RAM: 256KiB.
11:41:10.176 Core ROM: 1024KiB in pages of 4KiB.
11:41:10.293 Model: NRF52840_xxAA_REV1.
11:41:10.718 Core0: Reading device non-volatile memory. This may take a few seconds.
11:41:10.758 Core0: UICR has been read. Click read button to read full non-volatile memory.
```

Step4: After burning, can see the device in nRF connect.

Log: <https://drive.google.com/file/d/1VFQZCO3e6SSvMLce3UI3CqCbmgdzVxP6/view?usp=sharing>

The screenshot shows the nRF Connect v3.6.1 - Programmer interface. The main window displays two panels: "nRF52840" on the left, which says "Device is connected" and "Press READ button to read the memory", and "File memory layout" on the right, which shows a memory map with an orange bar at the bottom. A "Log" panel at the bottom left shows the following text:

```
11:44:33.733 Segger version: J-Link UB-KZZ-Nordicsemi compiled Jan 21 2020 17:33:01
11:44:33.733 Core probed: 960071906.
11:44:33.733 Core RAM: 256KiB.
11:44:33.733 Core ROM: 1024KiB in pages of 4KiB.
11:44:33.853 Model: NRF52840_xxAA_REV1.
11:44:34.224 Core0: Reading device non-volatile memory. This may take a few seconds.
11:44:34.304 Core0: UICR has been read. Click read button to read full non-volatile memory.
```

On the right side, there are two panels: "File" with buttons "Add HEX file", "Reload files", and "Clear files"; and "Device" with buttons "Erase all", "Erase & write", "Save as file", "Reset", "Write", "Read", "Auto read memory", and "Enable MCUBoot".

The screenshot shows the nRF Connect v3.6.1 - Programmer interface. The top bar shows "Devices" and "STOP SCANNING". Below the bar, there are three tabs: "SCANNER", "BONDED", and "ADVERTISER". The "SCANNER" tab is selected. Below the tabs, there is a "No filter" dropdown menu. The list of discovered devices is as follows:

Device Name	MAC Address	Status	Signal Strength	Latency
Nordic Discovery Sample	F4:AE:AE:32:71:EA	NOT BONDED	-55 dBm	102 ms
LE-Bose Ola	28:11:A5:D2:68:26	NOT BONDED	-62 dBm	553 ms
LE-reserved_C	28:11:A5:D2:58:77	NOT BONDED	-59 dBm	551 ms

Our module write hex file:

Step1: Successfully read nRF52840 IC.

The screenshot shows the nRF Connect v3.6.1 - Programmer interface. The top bar displays the device ID 000960071906. The main area is divided into two panels: 'nRF52840' and 'File memory layout'. The 'nRF52840' panel shows a dropdown menu with the following information:

- Serial Number: 000960071906
- Port: COM238
- Communication Type: JLink
- Core Number: 1
- Device memory is loaded?: No

The 'File memory layout' panel shows a diagram of the memory layout with a blue bar at the bottom. The 'Log' panel at the bottom shows the following messages:

```
11:51:24.255 Segger version: J-Link UB-KZ2-Noracsemi compiled Jan 21 2020 17:33:01
11:51:24.282 Core probed: 960071906.
11:51:24.282 Core RAM: 256KiB.
11:51:24.282 Core ROM: 1024KiB in pages of 4KiB.
11:51:24.410 Model: NRF52840_xxAA_REV2.
11:51:24.789 Core0: Reading device non-volatile memory. This may take a few seconds.
11:51:24.830 Core0: UICR has been read. Click read button to read full non-volatile memory.
```

The right sidebar contains the 'File' and 'Device' sections. The 'File' section has buttons for 'Add HEX file', 'Reload files', and 'Clear files'. The 'Device' section has buttons for 'Erase all', 'Erase & write', 'Save as file', 'Reset', 'Write', 'Read', 'Auto read memory', and 'Enable MCUboot'.

Step2: Erase & write hex file.

The screenshot shows the nRF Connect v3.6.1 - Programmer interface. The top bar displays the device ID 000960071906. The main area is divided into two panels: 'nRF52840' and 'File memory layout'. The 'nRF52840' panel shows a dropdown menu with the following information:

- Serial Number: 000960071906
- Port: COM238
- Communication Type: JLink
- Core Number: 1
- Device memory is loaded?: No

The 'File memory layout' panel shows a diagram of the memory layout with a blue bar at the bottom. The 'Log' panel at the bottom shows the following messages:

```
11:52:21.410 Core RAM: 256KiB.
11:52:21.410 Core ROM: 1024KiB in pages of 4KiB.
11:52:21.530 Model: NRF52840_xxAA_REV2.
11:52:21.912 Core0: Reading device non-volatile memory. This may take a few seconds.
11:52:21.955 Core0: UICR has been read. Click read button to read full non-volatile memory.
11:53:03.993 Parsing HEX file: C:\Users\User\Desktop\DK_zephyr_52840.hex
11:53:03.993 File was last modified at 3/31/2021, 11:25:07 AM
```

The right sidebar contains the 'File' and 'Device' sections. The 'File' section has buttons for 'Add HEX file', 'Reload files', and 'Clear files'. The 'Device' section has buttons for 'Erase all', 'Erase & write', 'Save as file', 'Reset', 'Write', 'Read', 'Auto read memory', and 'Enable MCUboot'. The 'Erase & write' button is highlighted with a red box.

Step3: show red word, i cannot see the ble device on nRF connect.

nRF Connect v3.6.1 - Programmer

000960071906

nRF52840

File memory layout

Log

```
11:53:43.296 The log in this view has been shortened. Open the log file to see the full content.
11:53:42.954 [Debug] [Debug_Probe-960071906] --just_connect_to_device
11:53:42.954 [Debug] [Debug_Probe-960071906] --just_read_u32
11:53:42.954 [Debug] [Debug_Probe-960071906] --just_invalidate_cache
11:53:42.954 [Info] [Debug_Probe-960071906] [Info] [JLink] JLINK_ExecCommand("InvalidateCache", ...).
11:53:42.954 [Info] [Debug_Probe-960071906] [Info] [JLink] - 0.008ms returns 0x00
11:53:42.954 [Info] [Debug_Probe-960071906] [Info] [JLink] JLINK_HasError()
11:53:42.954 [Info] [Debug_Probe-960071906] [Info] [JLink] JLINK_ReadMemU32(0x4001E400, 0x1 Items)
11:53:42.954 [Info] [Debug_Probe-960071906] [Info] [JLink] CPU_ReadMem(4 bytes @ 0x4001E400)
11:53:42.954 [Info] [Debug_Probe-960071906] [Info] [JLink] Data: 01 00 00 00
11:53:42.954 [Info] [Debug_Probe-960071906] [Info] [JLink] - 0.531ms returns 1 (0x1)
11:53:42.954 [Info] [Debug_Probe-960071906] [Info] [JLink] JLINK_HasError()
11:53:42.954 [Debug] [Debug_Probe-960071906] Just_nvmc_config_control
11:53:42.954 [Debug] [Debug_Probe-960071906] write_u32
11:53:42.954 [Debug] [Debug_Probe-960071906] --just_connect_to_device
11:53:42.954 [Debug] [Debug_Probe-960071906] --just_write_u32
11:53:42.954 [Info] [Debug_Probe-960071906] [Info] [JLink] JLINK_WriteU32_64(0x4001E504, 0x00000002)
11:53:42.954 [Info] [Debug_Probe-960071906] [Info] [JLink] CPU_WriteMem(4 bytes @ 0x4001E504)
```

File

- Add HEX file
- Reload files
- Clear files

Device

- Erase all
- Erase & write
- Save as file
- Reset
- Write
- Read
- Auto read memory
- Enable MCUboot

Log: <https://drive.google.com/file/d/1IFST-LCmxoSu-mlDt6nNBLMcxZ7RU3ol/view?usp=sharing>

schematic

