

st25r3916 lib with ECP patch & nfcaccess for homekit instruction

1. Download NCS 2.4
2. Open command prompt for NCS 2.4, enter path like : C:\Work\ncs\v2.4.0>

Download HomeKit code

3. west config manifest.group-filter +homekit
4. west list homekit
Output : homekit homekit v2.4.0 <https://github.com/nrfconnect/sdk-homekit>
5. west update
6. Homekit directory should be there after completed.

Download ST25r3916 lib code

7. Goto C:\Work\ncs\v2.4.0\nrf\lib
8. Git clone https://github.com/guangli2015/libst25r3916_ncs2.3.0.git
9. Change directory name from "libst25r3916_ncs2.3.0" to "st25r3916"
10. Copy C:\Work\ncs\v2.4.0\nrf\lib\st25r3916\st25r3916.patch into C:\Work\ncs\v2.4.0\nrf\lib\
11. Apply st25r3916.patch

Download ST25r3916 example code

12. Goto C:\Work\ncs\v2.4.0\nrf\samples\nfc
13. Git clone https://github.com/guangli2015/tag_reader_3916.git
14. Copy C:\Work\ncs\v2.4.0\nrf\lib\st25r3916\include\ st25r3916_nfca.h into
C:\Work\ncs\v2.4.0\nrf\include
15. Go to C:\Work\ncs\v2.4.0\nrf\samples\nfc\tag_reader_3916
16. west build -b nrf52840dk_nrf52840 -p
17. connect the NFC06A1 with 52840DK board



- 18.
19. west flash
20. Touch the ST25R3916 NFC reader with a Type 2 Tag or Type 4 Tag. Observe the output in the terminal. The content of the tag is printed there.

Download [nfc_access_ncs2_4.patch](#) for homekit & apply

21. Download [nfc_access_ncs2_4.patch](https://github.com/guangli2015/nfccaccess_homkit24_ncs24.git) from https://github.com/guangli2015/nfccaccess_homkit24_ncs24.git
22. Copy [nfc_access_ncs2_4.patch](#) into C:\Work\ncs\v2.4.0\homekit
23. Apply the patch
24. Goto C:\Work\ncs\v2.4.0\homekit\tools\haptools to install haptools (check the readme)
25. Goto C:\Work\ncs\v2.4.0\homekit\samples\lock

26. Build the sample

West build -b nrf52840dk_nrf52840 -- -D DEBUG=y -D NFC=y

West flash --recover

Reference: [ncs/v2.4.0/homekit/doc/html/samples/samples_building.html](#)

27. Provisioning

Reference: [ncs/v2.4.0/homekit/doc/html/samples/samples_provisioning.html](#)

You can only use one of the supported provisioning methods. According to HAP specification, NFC and QR codes cannot work simultaneously. (When provisioning for a multiprotocol application, the --ble flag is required because initial commissioning is always made from Bluetooth)

a. Provisioning with QRcode

haptools provision ncs ble -c 6 -p 0x1122334455667788 -q qrcode --device NRF52840

b. Provisioning with NFC

1. generate the info.hex

2. haptools provision ncs {thread --ble | ble [--device <DEVICE>]} --nfc -c <category> -p <product data> [-s <xxx-xx-xxx>] [--eui <custom_EUI>] [--snr <jlink_id>] [-u <mfi token uuid>] [-m <mfi token>]

haptools provision ncs ble --nfc -c 5 -p 03d8a775e3644573 --device NRF52840

nrfjprog -f nrf52 --sectorerase --program _generated/<provisioned_setup_info_name>.hex --reset