- 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 v2.4.0 <a href="https://github.com/nrfconnect/sdk-homekit">https://github.com/nrfconnect/sdk-homekit</a>
- 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 <a href="https://github.com/guangli2015/libst25r3916">https://github.com/guangli2015/libst25r3916</a> 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. Less 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 from https://github.com/guangli2015/nfcaccess\_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