

Peripheral:

LED 1 «on»: coded phy

LED 1 «slow blinking»: 1Mbps

LED 2 «on»: 0 dBm

LED 2 «slow blinking»: 8 dBm

LED 3 «fast blinking»: non-connectable advertising

LED 4 «fast blinking»: connectable advertising

LED 4 «on»: connected state

Button 1: switch between coded phy and 1Mbps

Button 2: switch between 0 dbm and 8 dBm

Button 3: switch between non-connectable and connectable advertising

Button 4: Reset PER calculation

Central:

LED 1 «on»: coded phy

LED 1 «slow blinking»: 1Mbps

LED 2 «on»: 0 dBm

LED 2 «slow blinking»: 8 dBm

LED 3 «slow blinking»: scanning

LED 3 «on»: scanning, trying to connect

LED 4 «toggling»: changing state upon received adv report

LED 4 «on»: connected state

Button 1: switch between coded phy and 1Mbps

Button 2: switch between 0 dbm and 8 dBm

Button 3: switch between «scanning» and «scanning, trying to connect»

Default parameters peripheral:

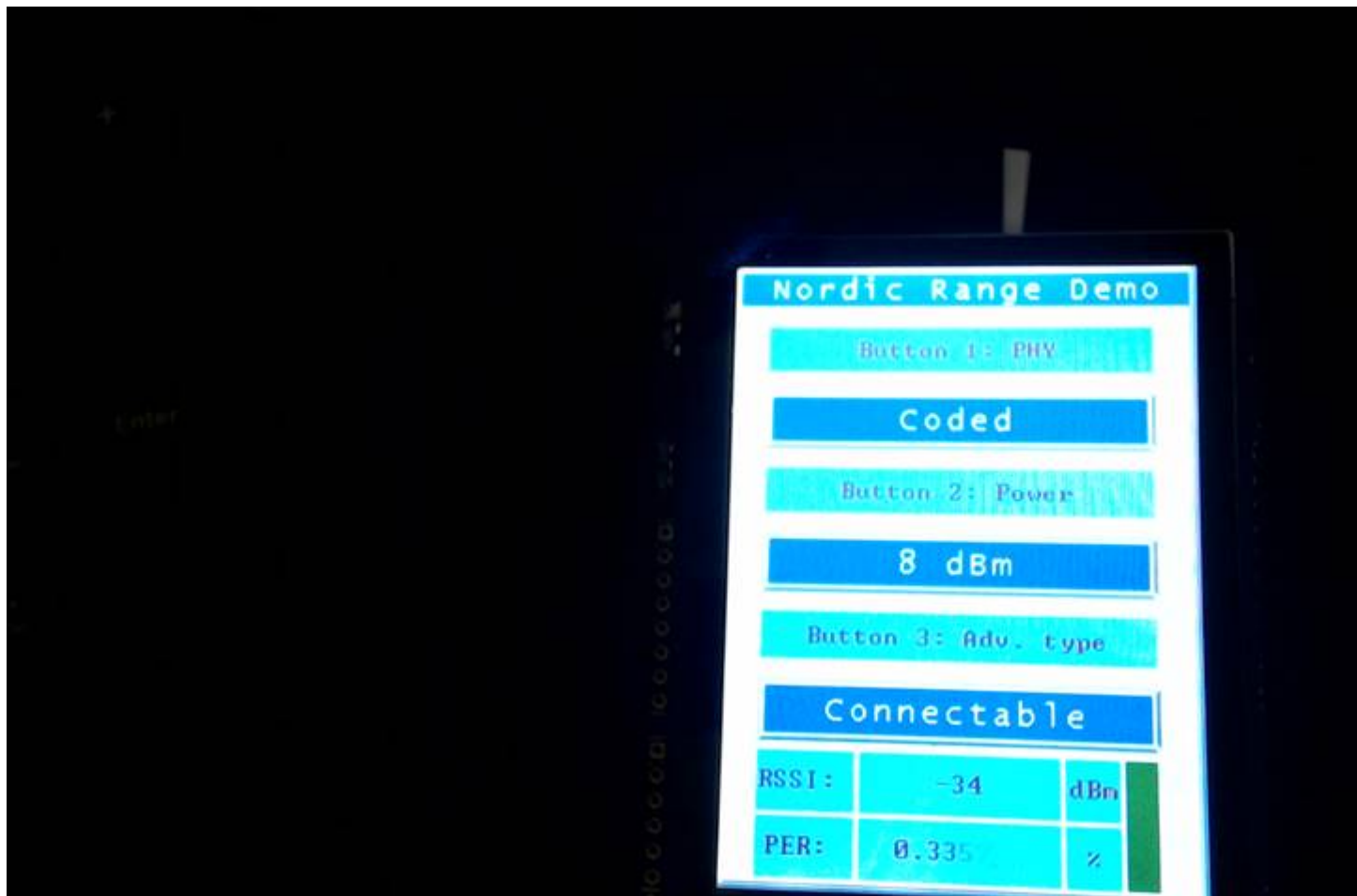
- Coded phy
- 8 dBm
- Connectable advertising

Default parameters central:

- Coded phy
- (8 dBm)
- Scanning only
- If connected to PC: log RSSI over UART/RTT

Either build the demo with SES or use the pre-compiled HEX files to flash the two nRF52840 DKs.

Here is a picture of the demo:



Below are instructions to flash and run the merged hex files (merged with SoftDevice 6.1.0):

Plug in one '840 DK with the display (the board w/ display is the Peripheral) and flash:

```
Mark@maqu /cygdrive/c/tmp/merge/bt5-long-range-demo/peripheral
$ nrfjprog --family NRF52 --program peripheral_LR-GUI-demo-SD_6.1.0-merged.hex --chiperase --verify
Parsing hex file.
Erasing user available code and UICR flash areas.
Applying system reset.
Checking that the area to write is not protected.
Programming device.
Verifying programming.
Verified OK.
```

Power cycle the board.

Power off the Peripheral board, plug in the other '840 DK (without display), and program it with the Central HEX file:

```
Mark@maqu /cygdrive/c/tmp/merge/bt5-long-range-demo/central
$ nrfjprog --family NRF52 --program central_LR-GUI-demo-SD_6.1.0-merged.hex --chiperase --verify
Parsing hex file.
Erasing user available code and UICR flash areas.
Applying system reset.
Checking that the area to write is not protected.
Programming device.
Verifying programming.
Verified OK.
```

Power cycle the board.

Instructions to run demo

Press button 3 on the Central to switch it to <<scanning, trying to connect>> and you should see the link box on the Peripheral's display turn green and RSSI and PER being updated on the screen.