

# NILE

Bluetooth Low Energy 5.4

## MULTILINK\_CENTRAL

## 1 Overview

The Multilink Central App Note is going to explain how to connect two or more peripheral devices with the central device at a time and communicates

## 2 Hardware Requirements

- NILE DVK – 3 or more
- Micro USB Cable – 3 or more
- PC/Laptop with latest SEGGER Embedded Studio and nRF5 SDK

## 3 Software Requirements

- SEGGER Embedded Studio IDE. Click on the below link to download the IDE, [SEGGER Embedded Studio](#) and extract the downloaded file
- NRF5 SDK latest version. Click on the below link to download the latest SDK, [nRF5 SDK](#) and extract the downloaded file
- Install nRF Connect APP in mobile from App Store/Google Play store

## 4 Procedure

- Connect the NILE DVK to the PC or Laptop with the micro USB cable (J2)
- Power ON the DVK by toggling the power switch (SW8) and observe that LED5 is ON on DVK.
- Open nRF5 SDK->Examples->ble\_central->ble\_app\_multilink\_central->pca10056->s140->SES-> open Embedded Project file (.EM PROJECT FILE)
- Compile and run the application. Observe that LED1 is ON on DVK. This indicates that the central is scanning for peripherals.
- Now connect the other NILE DVK to the PC or Laptop with the micro USB cable(J2)
- Power ON the DVKs by toggling the power switch (SW8) and observe that LED5 is ON on DVKs.
- Open nRF5 SDK->Examples->ble\_peripheral->ble\_app\_blinky->pca10056->s140->SES-> open Embedded Project file (.EM PROJECT FILE)
- Compile and run the application. Observe that LED1 is ON on the DVKs. This indicates that the device is advertising.
- Now observe on the central DVK that LED1 is ON. This indicates that it can able to connect with more number of peripherals and also observe LED2 is ON this indicates that it is connected to peripherals.  
**NOTE:** In case if LED1 turns OFF on central DVK it indicates central has reached the maximum number of connections.
- Press user button 1 on central DVK and observe the response on peripheral DVKs that LED3 toggles.
- Press user button1 on any of the peripheral DVK and observe the response on central DVK that LED3 toggles.

- Press the reset button on central DVK and observe that the peripheral DVKs automatically get reconnected.