The MBN52832 Development Kit (MBN52832DK) supports the evaluation and development of smart IoT wireless networking products using BLE and NFC. It consists of an evaluation board (EVB), a user guide and this quick start guide. The EVB consists of two parts, the Interface Module (IM) and the Breakaway Module (BM). IM provides a dual USB-SWD and USB-UART interface to support firmware download and application software debugging and development; BM contains a MBN52832 module (ordering part number WSM-BL241-ADA-008) preconfigured with an onboard 2.4GHz antenna, LEDs, 32 KHz sleep clock and a NFC antenna. There is also an u.FL connector for RF evaluation. The BM can be separated from the IM and used as a standalone carrier board of MBN52832 for product prototyping.



Figure 1 WSM-BL241-ADA-008 DK configuration

To start using the kit, follow the steps below:

- 1. Power up the board through a micro USB cable connected to a PC. Ignore any "Found new USB device" message on the PC. The default WDK firmware only needs the USB interface to provide the +5V power.
- 2. Confirm that LED1 on the BM is pulsating.
- 3. Use buttons SW1 and SW2 on the IM to choose between LED1 and LED2.
- 4. Hold a NFC enabled smart phone close to the NFC antenna located near the center of the BM to read the URL stored in the module.
- 5. Grant the request when the phone prompts for permission to open the URL. The smart phone browser should then display a web page to the URL.

The <u>nRFgo Studio</u> tool can be used to erase this preloaded application and program the MBN52832DK with another hex binary image.

The MBN52832DK is designed to facilitate application development using the <u>Nordic nRF52</u> <u>SDK</u>. The EVB supports the same J-Link USB-SWD and USB-UART interfaces as those provided by the nRF52 DK, so the software debugging and development process can follow that used for the nRF52 DK. Users can develop their own applications on the EVB by using the following steps:

- 1. Download and install the latest nRF52 SDK and Keil MDK-ARM or Eclipse tool chains
- 2. Create and compile an application
- 3. Load the application into the EVB
- 4. Run and debug the application

Please refer to "MBN52832 DK User Guide" for more details.

