DEEP SLEEP APP NOTE

1.Overview

This Power demo application allows each of the various low mode modes to be selected, using a simple user interface via the serial port.

2.Hardware Requirements

- Carrier Main Board(JN5189)
- ARNO Mezzanine Card
- Mini USB Cable
- PC or Laptop

3.Software Requirements

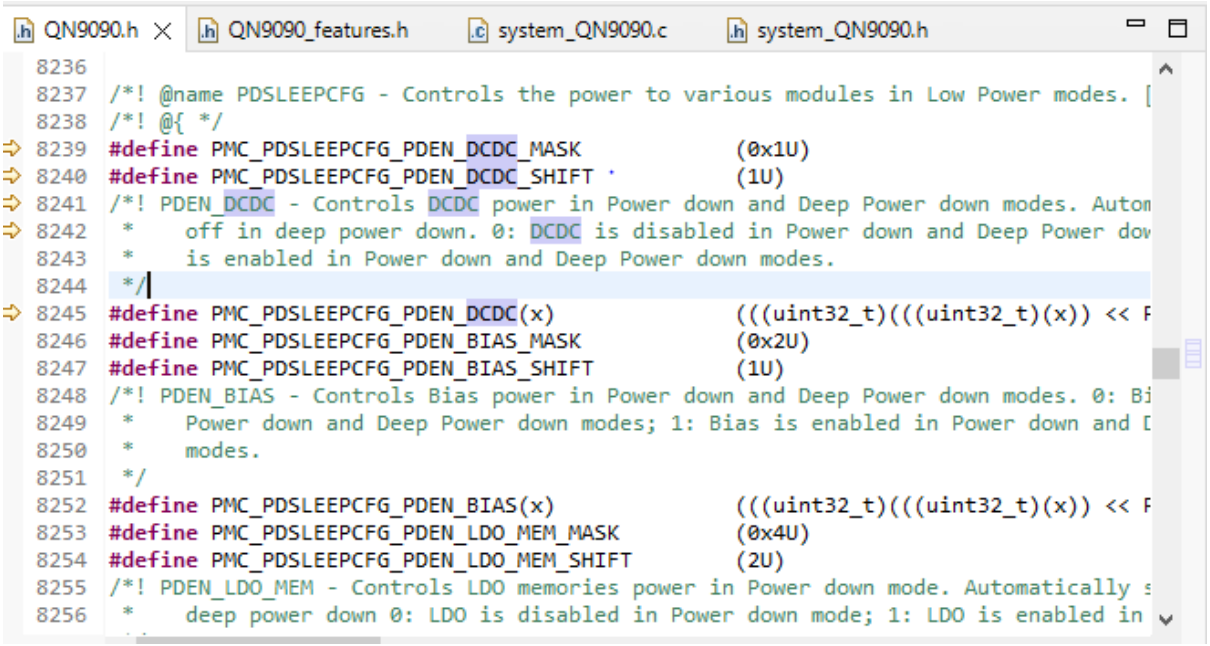
- MCUXpresso IDE
- QN9090 SDK latest version
- Install IoT Toolbox in mobile from App Store/Google Play store

4.Procedure

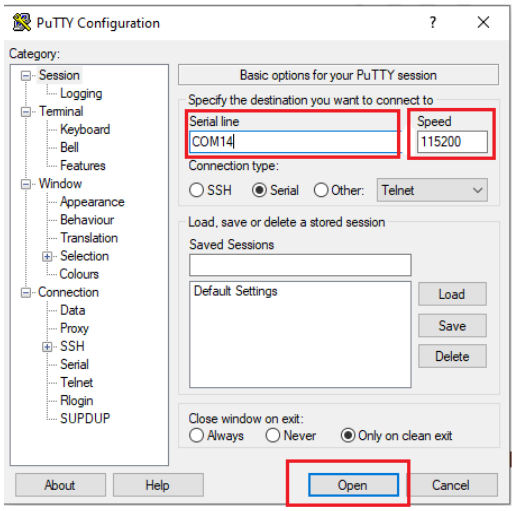
Note: To make changes in QN9090 SDK for the ARNO module refer to ARNO module working procedure in ARNO User Guide.

- Insert the ARNO Mezzanine Card on the Carrier board as shown in below figure

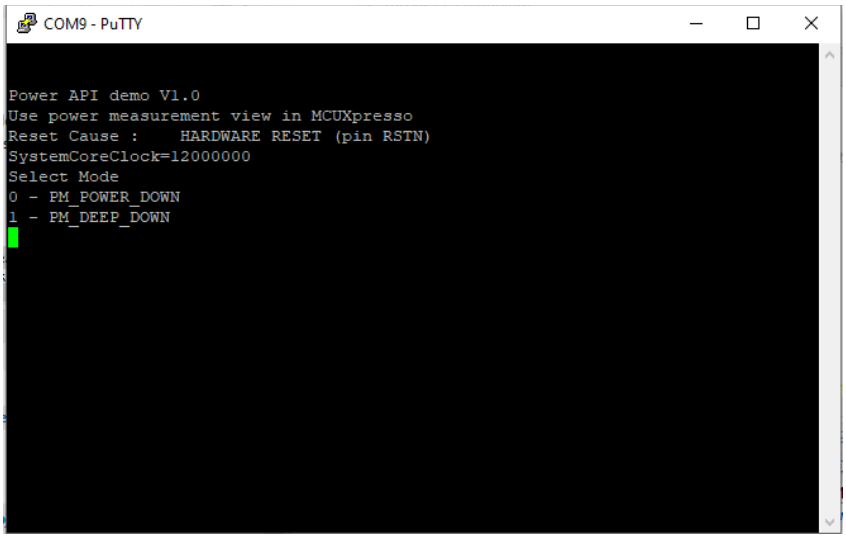
- Connect the ARNO DVK to the PC or Laptop with the mini USB cable
- Before going to run the application, we have to enable the DC to DC power in the QN9090.h file in device.In 8240 line by default it is 0U we have to change it to 1U for getting low power



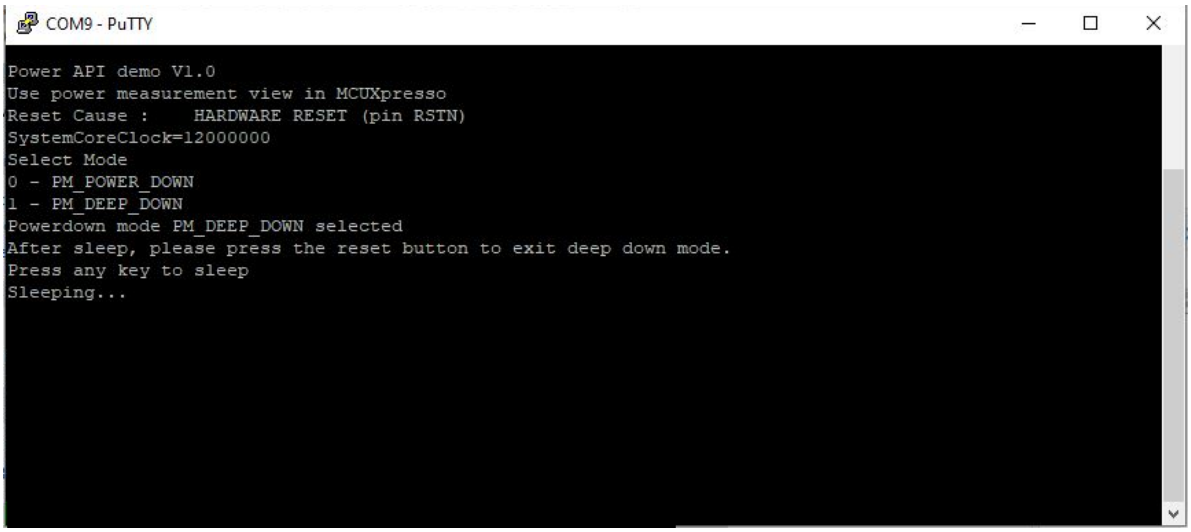
- Compile and run the application
- Press the reset button on the DVK
- Open the device manager and check for the COM port
- Open the putty terminal in PC, change the serial line with the com port number and the speed with the 115200 and then click on open



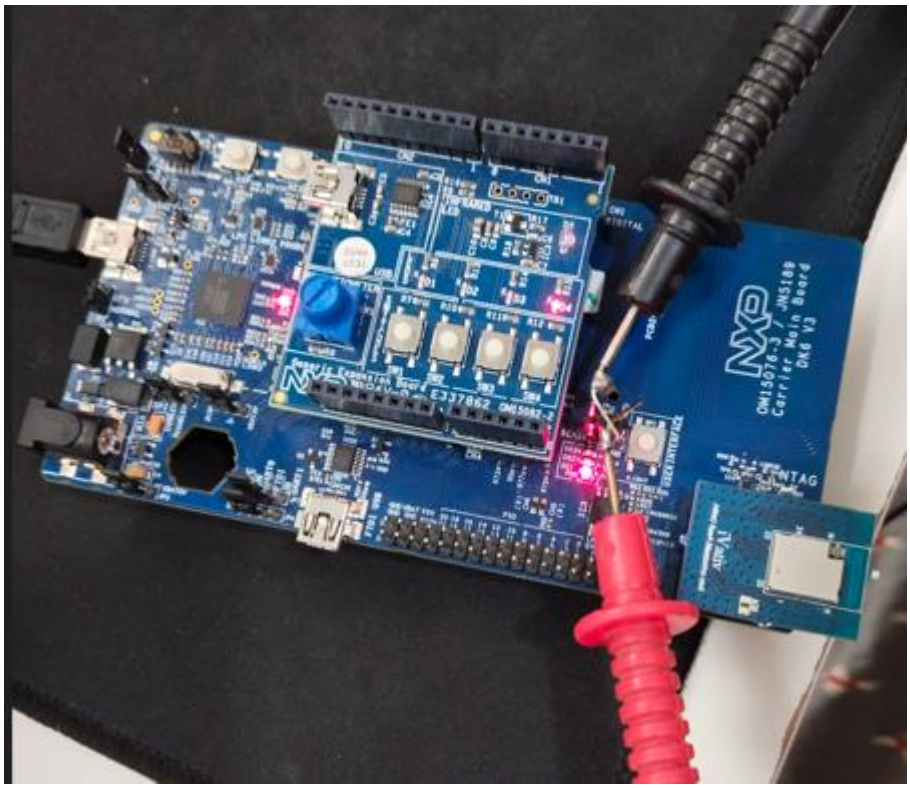
- Options can be observed on the serial terminal on the putty like below figure



- User must select PM_DEEP_DOWN and press enter to enter into deep power down mode



- Now, we have to measure the current with multi meter by connecting positive terminal to the jumper(J14) pin 1 and negative terminal to the jumper(J14) pin2 then we will get 0.0003 milliamps i.e., converted into nano amps i.e., 300 nano amps.
- Multi meter connections are made as shown in below figure



- we will get 0.0003milli amps as shown in below figure i.e., converted into Nano amps i.e., 300 Nano Amps of current


RISH Multi 18S
00003
AUTO
MAN
DATA
MIN / MAX
ON
OFF