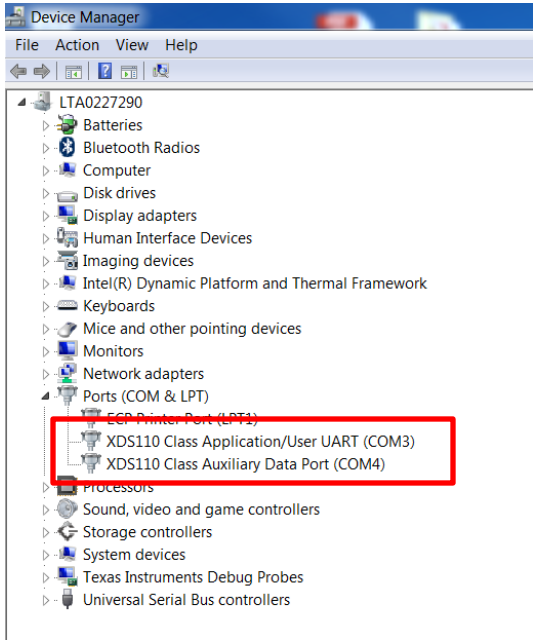
# Lab 1: mmWave Demo

8/9/2017

# Connect EVM

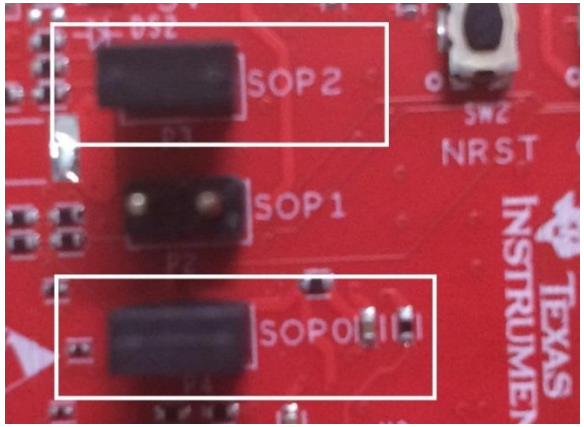
- Connect EVM to your PC and Check the COM Ports in Device Manager




- If above Ports are not seen, Check your CCS installation.
- XDS110 drivers must be present at below path in CCS installation directory:

  C:\ti\ccsv7\ccs_base\emulation\windows

# Configure Flash Mode



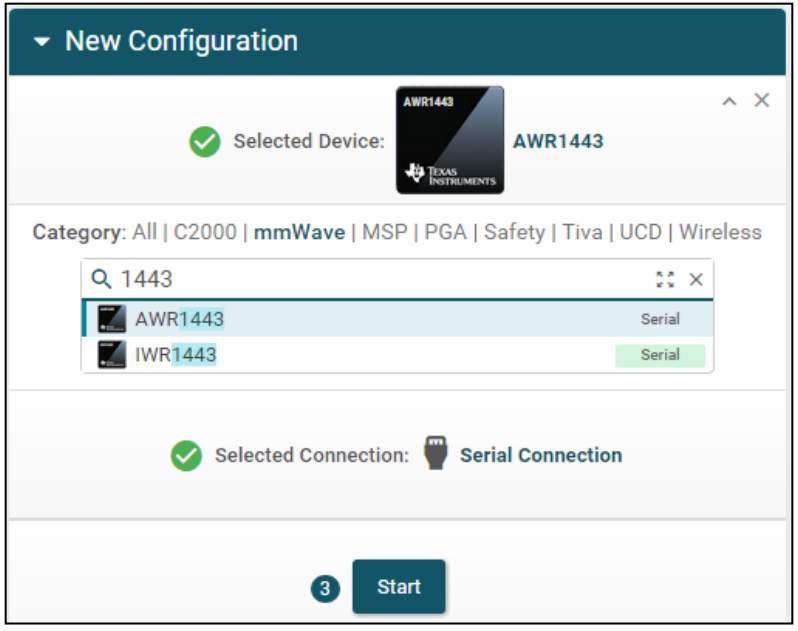

1. **Setup the Booster Pack EVM for Flashing**

   Refer to the EVM User Guide to understand the bootup modes of the EVM and the SOP jumper locations. To put the EVM in flashing mode, power off the board and place jumpers on pins marked as SOP2 and SOP0 .

| SOP2 | SOP1 | SOP0 | Bootloader mode & operation |
|---|---|---|---|
| **0** | 0 | 1 | **Functional Mode**<br>Device Bootloader loads user application from QSPI Serial Flash to internal RAM and switches the control to it |
| **1** | 0 | 1 | **Flashing Mode**<br>Device Bootloader spins in loop to allow flashing of user application to the serial flash. |

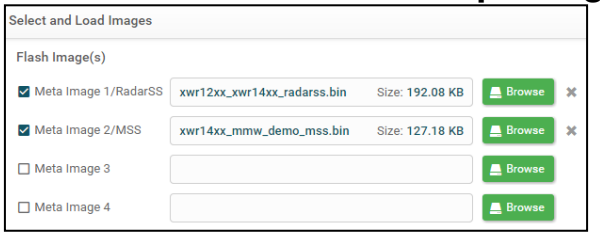
# Flash the Device

- Open UniFlash
- Within the **New Configuration** section, locate and select the appropriate device (xWR14xx) and select **Serial Connection**
- Click **Start**



# Flash the Device

- Navigate to the **Program** tab and load the appropriate binaries as shown below
  - The RadarSS firmware is located in the SDK folder under the **firmware\radarss** directory
  - The MSS firmware is located in the SDK folder under the **packages\ti\demo\xwr14xx\mmw** directory



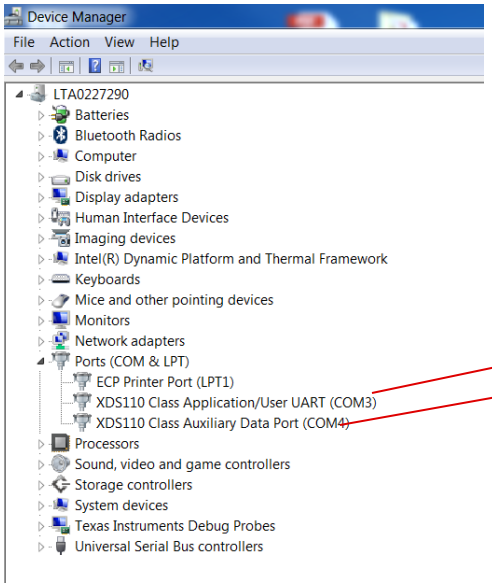

- Navigate to the **Settings & Utilities** tab and select the UART COM port shown in your device manager as in Slide 1

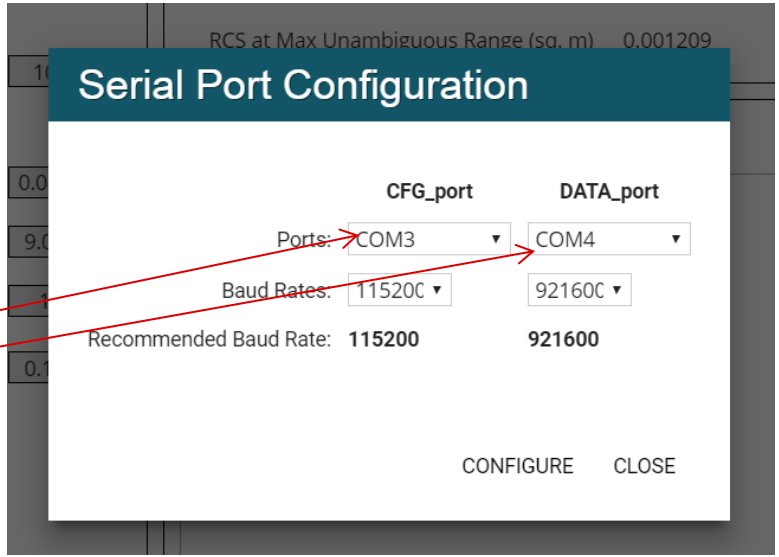

- Return to the **Program** tab and click on **Load Images** to load the firmware. Upon successful completion you should see the following message:

[SUCCESS] Program Load completed successfully

# Run the Demo

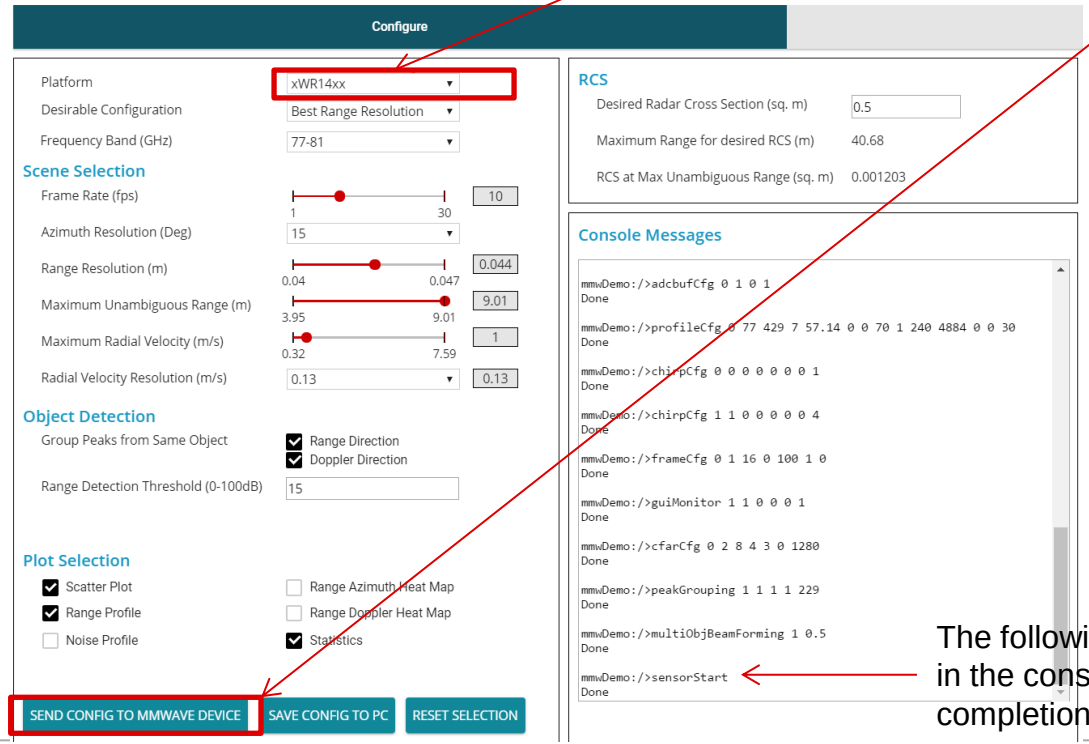
- Remove the **SOP2** jumper and power cycle the board
- Open a web browser and navigate to **https://dev.ti.com/gallery/view/534566/mmWave_Demo_Visualizer/**
  - Note: the web GUI does not work with Internet Explorer
- Install any required software if prompted by the web GUI
- Click on the **Options** tab at the top of the GUI and configure the COM ports



# Run the Demo

- In the **Configure** tab of the GUI, select the xWR14xx Platform and press **SEND CONFIG TO MMWAVE DEVICE**




The following message should appear in the console window upon successful completion

# Run the Demo

- Click on the **Plots** tab of the GUI to see the demo running