## Changing the IP Address of DCA1000EVM

## If the current DCA100EVM IP address is unknown:

- 1. Place **SW2.6** to the **ON** position (towards pin 11).
- 2. Power cycle the DCA1000EVM (This loads the default ethernet settings from the DCA1000EVM's fpga).
- 3. The IP address for the DCA1000EVM is now 192.168.33.180.
- 4. Set the IPv4 address on active PC LAN port to 192.168.33.30.
  - i. Search on Windows start menu "View Network Connections" and press "Enter".
  - ii. Right click on LAN port and select "Properties".
  - iii. Select "Internet Protocol Version 4 (TCP/IPv4)" from the list.
  - iv. Click "Properties".
  - v. Enter the following:

IP address: 192.168.33.30 Subnet mask: 255.255.255.0

- vi. Press "OK" then press "Close" to finish setting your LAN port to the fixed IP address.
- 5. Follow instructions beginning below.

## • If current DCA100EVM IP address is known:

- 1. Modify DCA1000EVM configuration file (.json):
  - i. Open the default cf.json file located in:

C:\ti\mmwave studio xx xx xx xx\mmWaveStudio\PostProc\

ii. Lines 9 - 20 will have the following format:

```
[9]
       "ethernetConfig": {
       "DCA1000IPAddress": "192.168.33.180",
[10]
                                             < - - current DCA IP Address
       "DCA1000ConfigPort": 4096,
[11]
       "DCA1000DataPort": 4098
[12]
[13]
[14]
       "ethernetConfigUpdate": {
       "systemIPAddress": "192.168.33.30",
                                                    < - - future System IP Address
[15]
       "DCA1000IPAddress": "192.168.33.180",
                                                    < - - future DCA IP Address
[16]
       "DCA1000MACAddress": "12.34.56.78.90.12",
[17]
       "DCA1000ConfigPort": 4096,
[18]
       "DCA1000DataPort": 4098
[19]
[20]
       },
```

- Ensure that the IP address on line 10 matches the current IP address of the DCA1000EVM.
- iv. Change the IP addresses on lines 15 16 to the new IP address.
- v. Save the json file under a new name, such as: **newIP.json**.
- 2. Sending the new configuration file to DCA1000EVM:
  - i. Power cycle the DCA1000EVM.
  - ii. Open Powershell.
  - iii. Use the following commands to enter the correct directory and update the DCA1000EVM's EEPROM.

cd "C:\ti\mmwave\_studio\_xx\_xx\_xx\mmWaveStudio\PostProc\" .\DCA1000EVM\_CLI\_Control.exe eeprom newIP.json

- 3. Set the IPv4 address on active PC LAN port to the **new System IP Address**:
  - i. Search on Windows start menu "View Network Connections" and press "Enter".
  - ii. Right click on LAN port and select "Properties".
  - iii. Select "Internet Protocol Version 4 (TCP/IPv4)" from the list.
  - iv. Click "Properties"
  - v. Enter the following:

IP address: 192.168.xxx.xxx < - - **new System IP Address**Subnet mask: 255.255.255.0

- vi. Press "**OK**" then press "**Close**" to finish setting your LAN port to the new IP address.
- 4. Update json file:
  - i. In the json file, change line 10 to match the IP address on line 15.
  - ii. Save changes.
- 5. Verify changes:
  - i. Place **SW2.6** to the **OFF** position (towards pin 6).
  - ii. Power cycle the DCA1000EVM. (This loads the ethernet settings from the DCA1000EVM's EEPROM).
  - iii. Open Powershell.
  - iv. Use the following commands to enter the correct directory and verify system status.

cd "C:\ti\mmwave\_studio\_xx\_xx\_xx\_xx\mmWaveStudio\PostProc\" .\DCA1000EVM\_CLI\_Control.exe query\_sys\_status newIP.json

- v. If response is "System is connected" then the device is functioning properly. If the response is "System is disconnected" then ensure that the following are true:
  - SW2.6 is in the OFF position (towards pin 6).
  - PC's IP Address is set to the correct IP Address for the system and not the IP Address for the DCA.
  - Correct json file is called when running 'query\_sys\_status' command.

<sup>\*</sup>Note: If you want to use different IP address with mmWaveStudio, make sure the json is called **cf.json**.