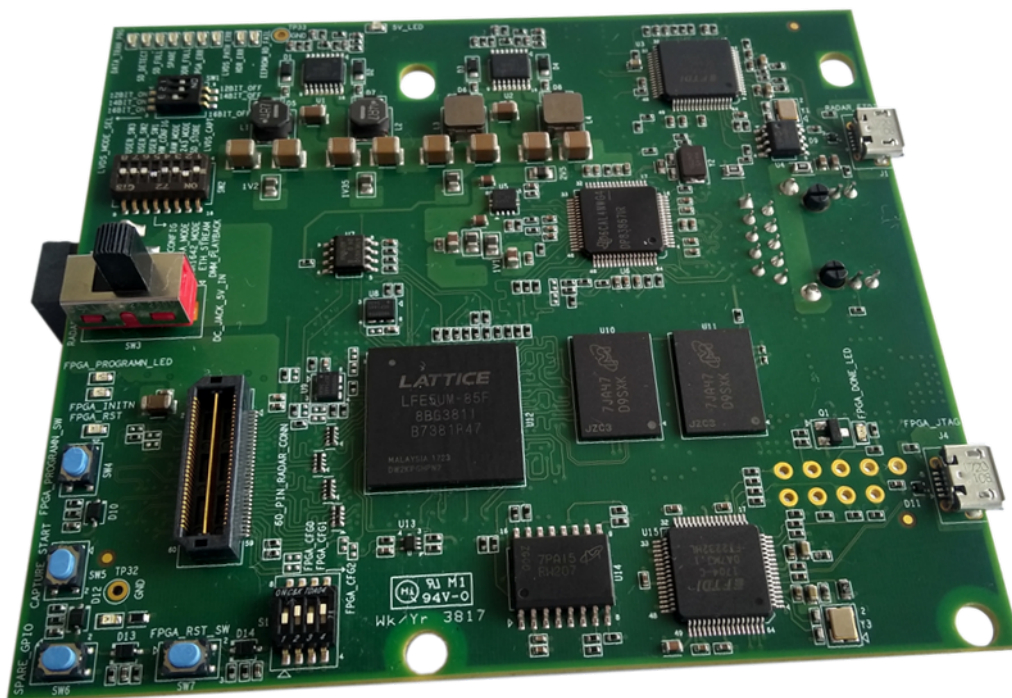


## DCA1000EVM Quick Start Guide



This guide describes how to get started with raw ADC data capture from the xWR mmWave sensor EVMs.

### **WARNING**

**This is a Class A product. In a domestic environment, this product may cause radio interference, and the user may be required to take adequate measures.**

### **Contents**

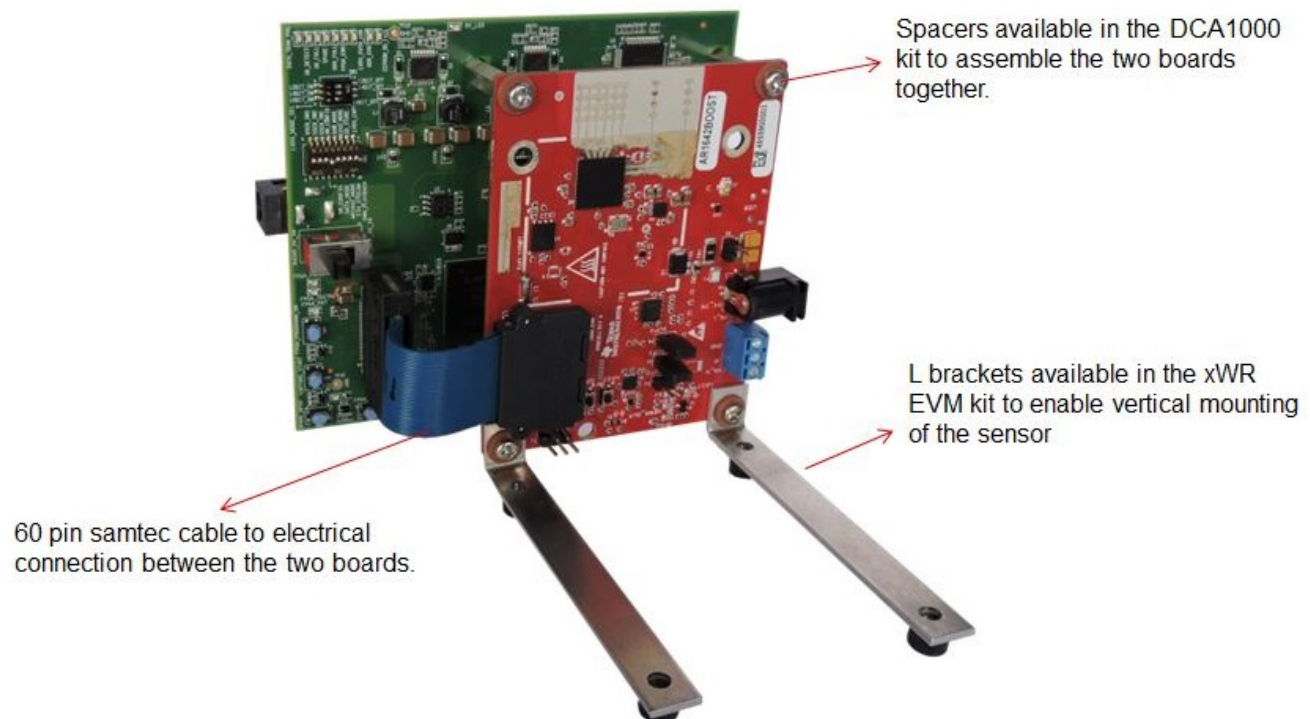
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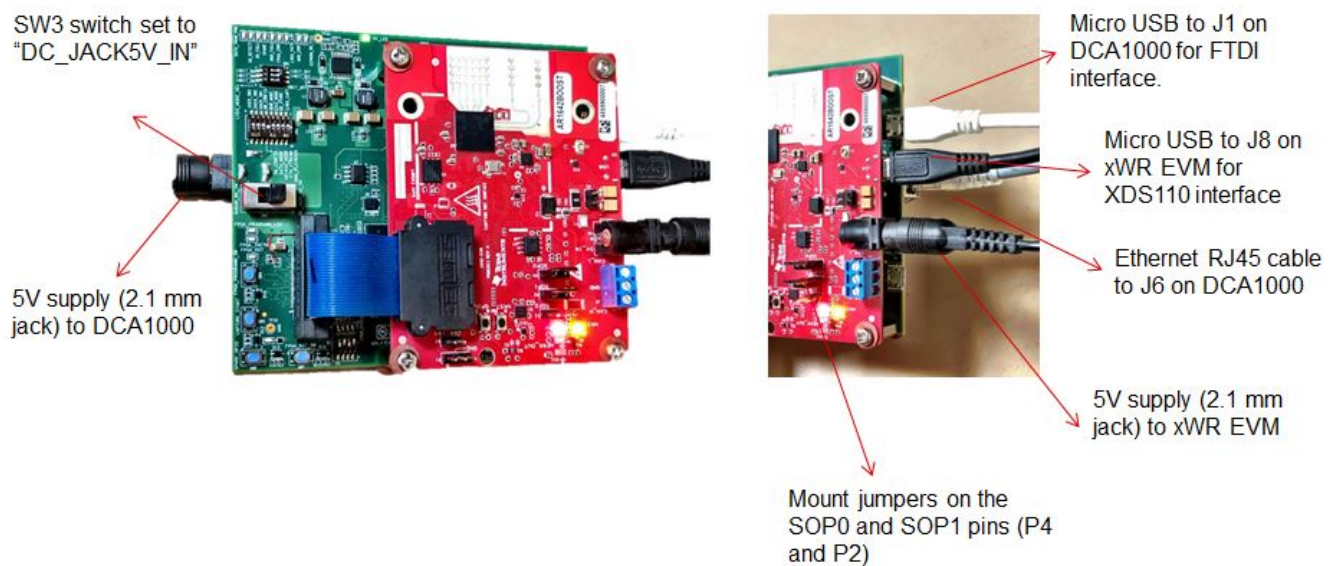
## 1 Getting Started

- Interface the DCA1000 board with the xWR mmWave sensor EVMs, as shown in [Figure 1](#).



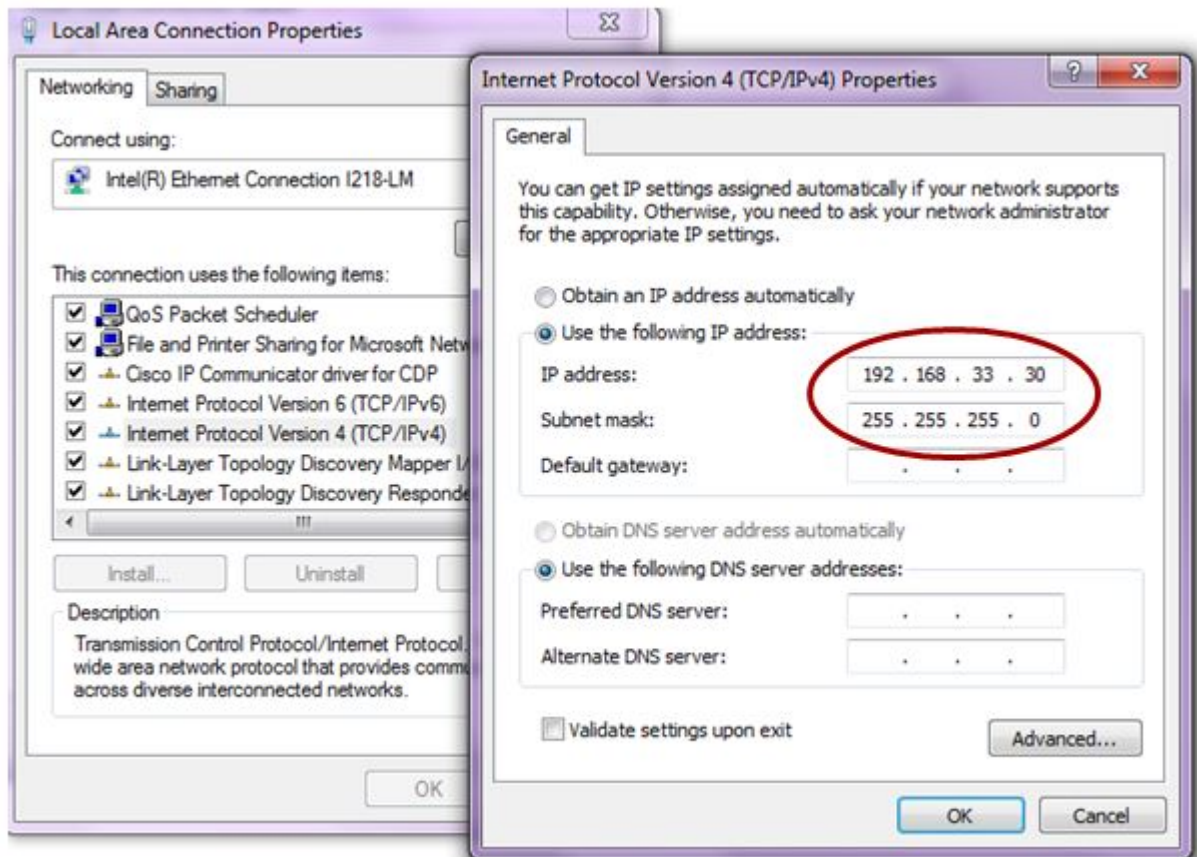
**Figure 1. Hardware Connection: DCA1000 With xWR mmWave Sensor EVMs**

- Connect the microUSB and Ethernet cables to the PC interface, as shown in [Figure 2](#). The DCA1000 and the xWR EVM are powered with 5-V, 2.5-A supplies.



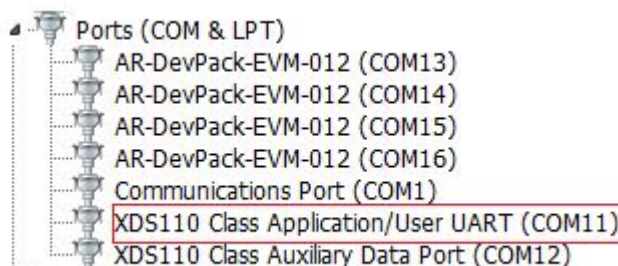
**Figure 2. Data and Supply Cable Connections**

3. Select the static IP address in the PC local area network properties, as shown in Figure 3.



**Figure 3. Configure Static IP Address on the PC**

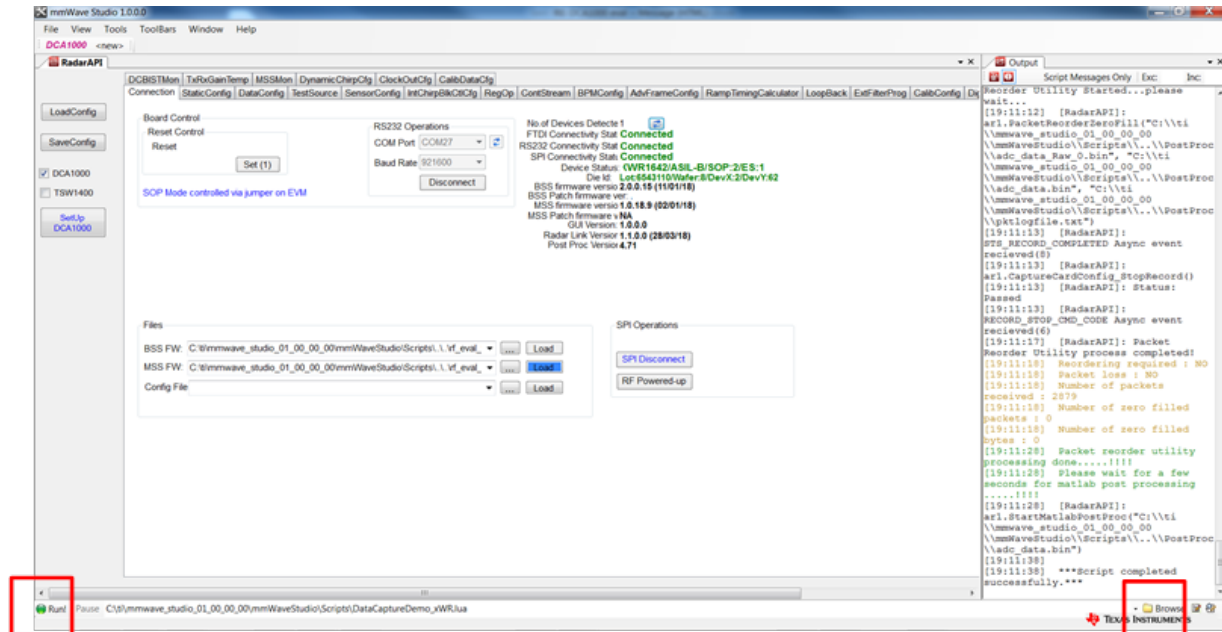
4. Download and install the mmWave Studio tool from the following link: <http://www.ti.com/tool/MMWAVE-STUDIO>. Install the Matlab Runtime Engine from [here](#).
5. When the EVMs are powered and connected to the PC, install the FTDI drivers available from the mmWave Studio installer package. For details on the FTDI driver installation, refer to the [mmWave Studio User Guide](#).
6. The device manager shows the COM ports, as shown in Figure 4. The RS232 COM port is shown as XDS110 Class Application/User UART.



**Figure 4. COM Ports**

**NOTE:** If the XDS110 ports do not appear in the device manager, install the EMUPACK from [http://processors.wiki.ti.com/index.php/XDS\\_Emulation\\_Software\\_Package](http://processors.wiki.ti.com/index.php/XDS_Emulation_Software_Package).

7. Issue a board reset and connect the RS232 COM port.
8. Select the DataCapturedemo\_xWR.lua file from the \mmwaveStudio\Scripts\ folder by clicking on the browse button, then click on the run button.



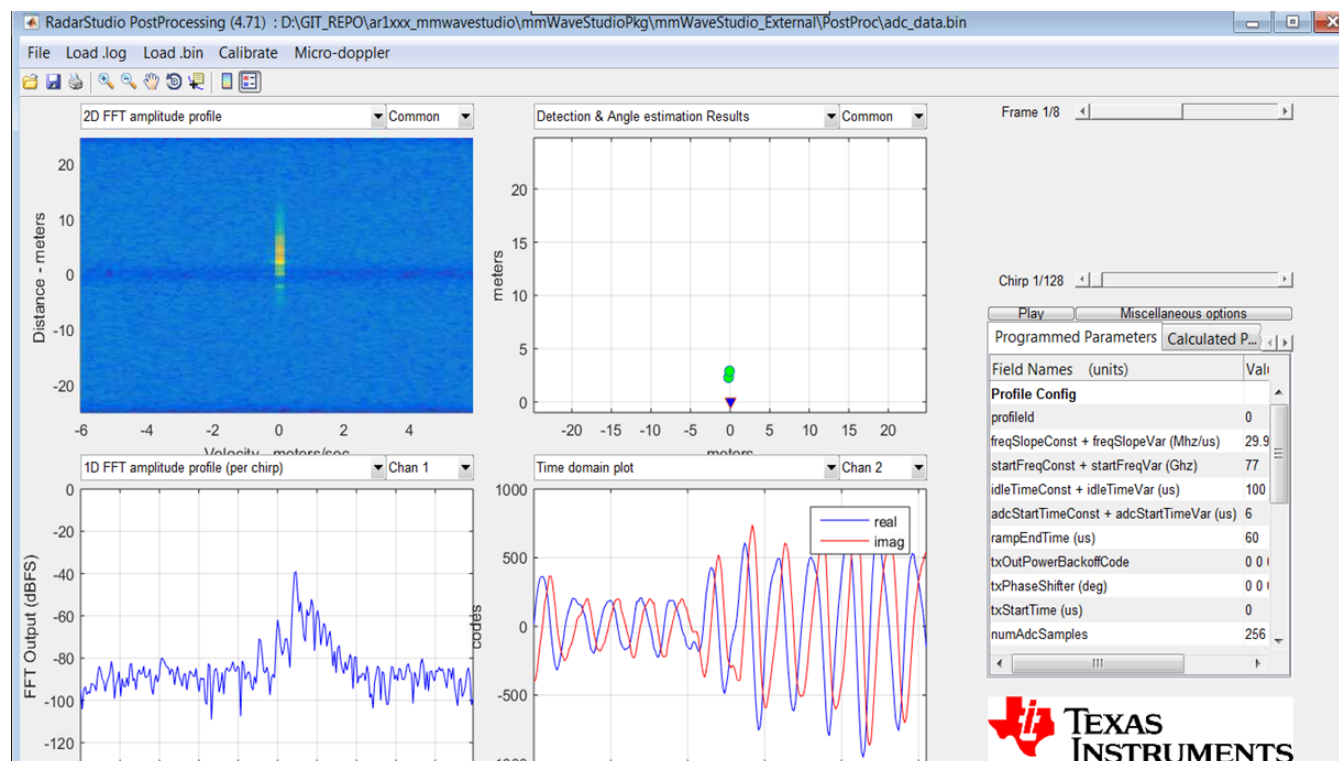
Click 'Run' after selecting the file

Click 'Browse' and select DataCaptureDemo\_xWR.lua

**Figure 5. Capture and Post ADC Data**



Data is captured by the captured card for a sample profile and frame, and the captured data is processed and displayed as shown in Figure 6.



**Figure 6. Visualization of the Captured Raw ADC Data**

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