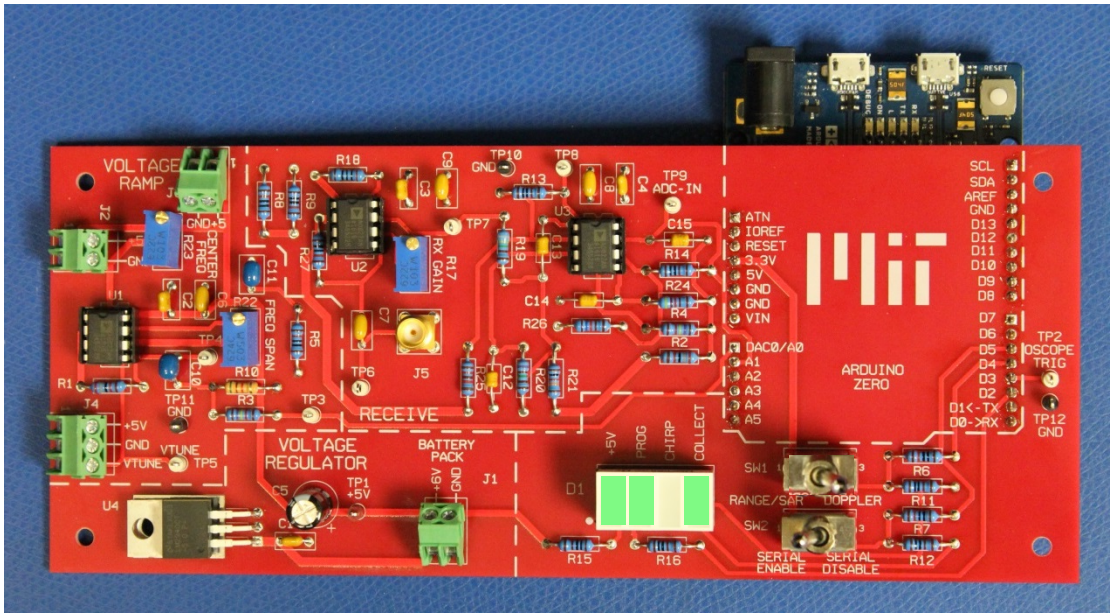
Doppler Mode Hardware Set-Up

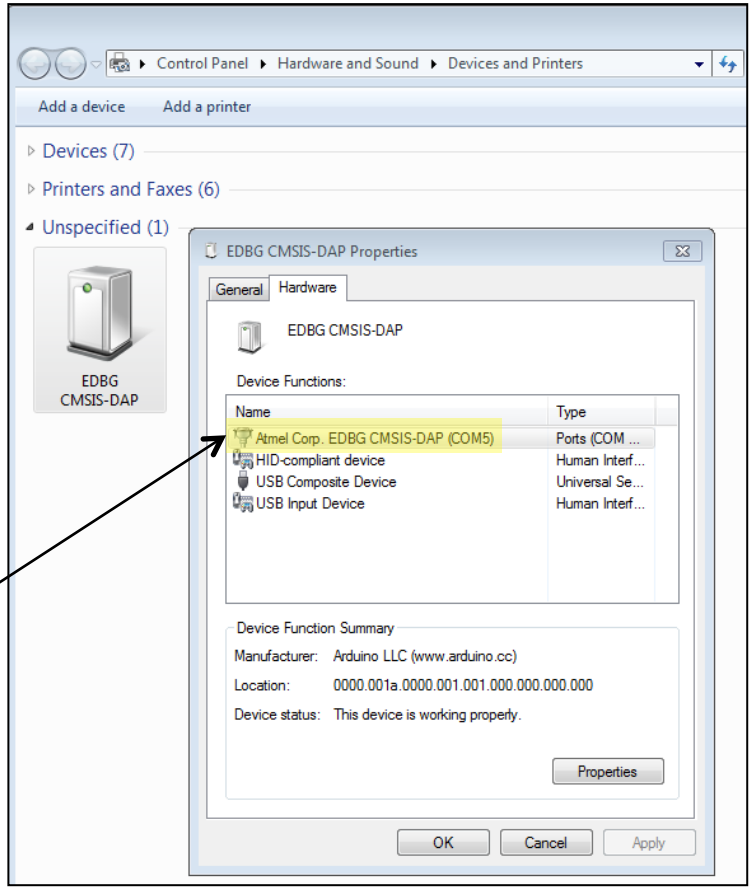


- **Connect USB cable from the Arduino Zero “Debug” port to your laptop**
- **Turn the battery pack ON**
- **Set SW1 to DOPPLER and SW2 to SERIAL ENABLE**
  - **CHIRP LED should be OFF; all others are ON**

Doppler Mode Software Set-Up

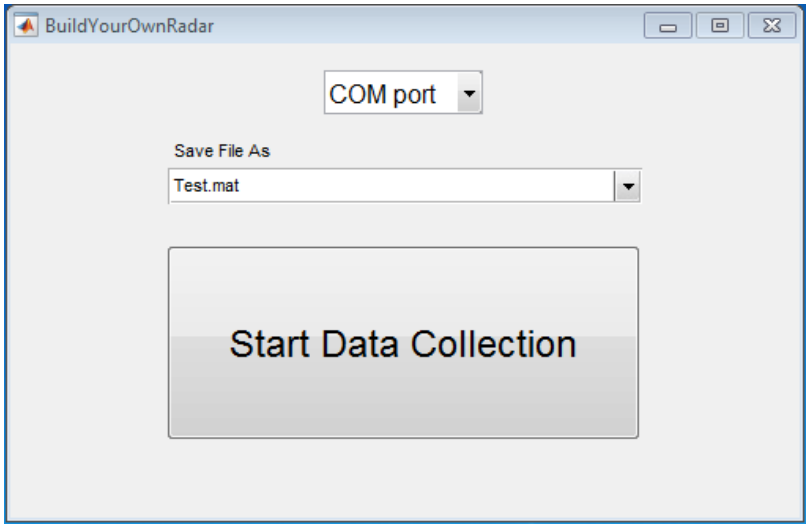
Find out which COM port the radar is connected to by:

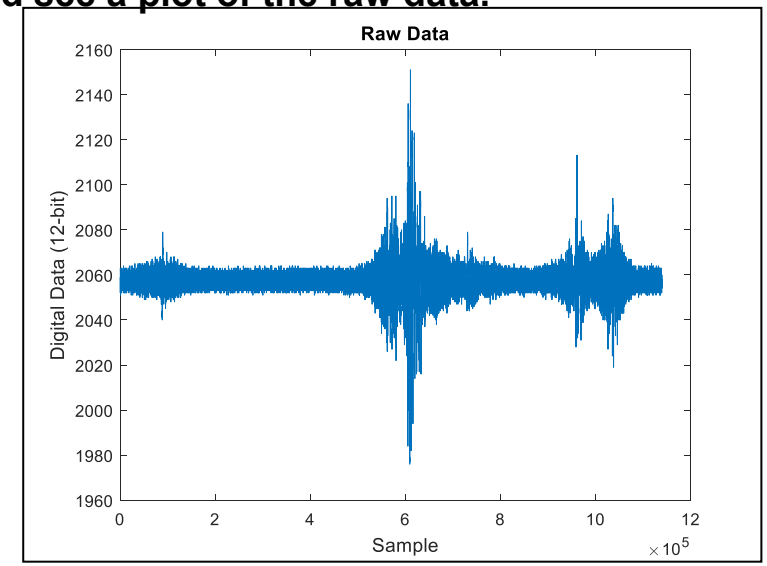
- **On Windows:**
  - **Go to START > Devices and Printers**
  - **Look for "EDBG CMSIS-DAP" under 'Unspecified'**
    - **Right click EDBG CMSIS-DAP, and go to Properties**
    - **In this example, the radar is connected to COM5**



Data Collection

- Run DataCollection.m
- Select the COM port the radar is connected to.
- Select the directory and file name you want the raw data to be saved to (*.mat format).
- To start collecting data, click “Start Data Collection.”
- Click “Stop Data Collection” when you are done.
- Once Data Collection is stopped, you should see a plot of the raw data.





Doppler Digital Signal Processing

- **Run DopplerProcessing('*yourfilename*.mat')**
  - **NOTE: running DopplerProcessing with no input arguments uses example data**

Example Data: Cars departing and approaching on a residential street, and a mail truck approaching and stopping at mailboxes before arriving.