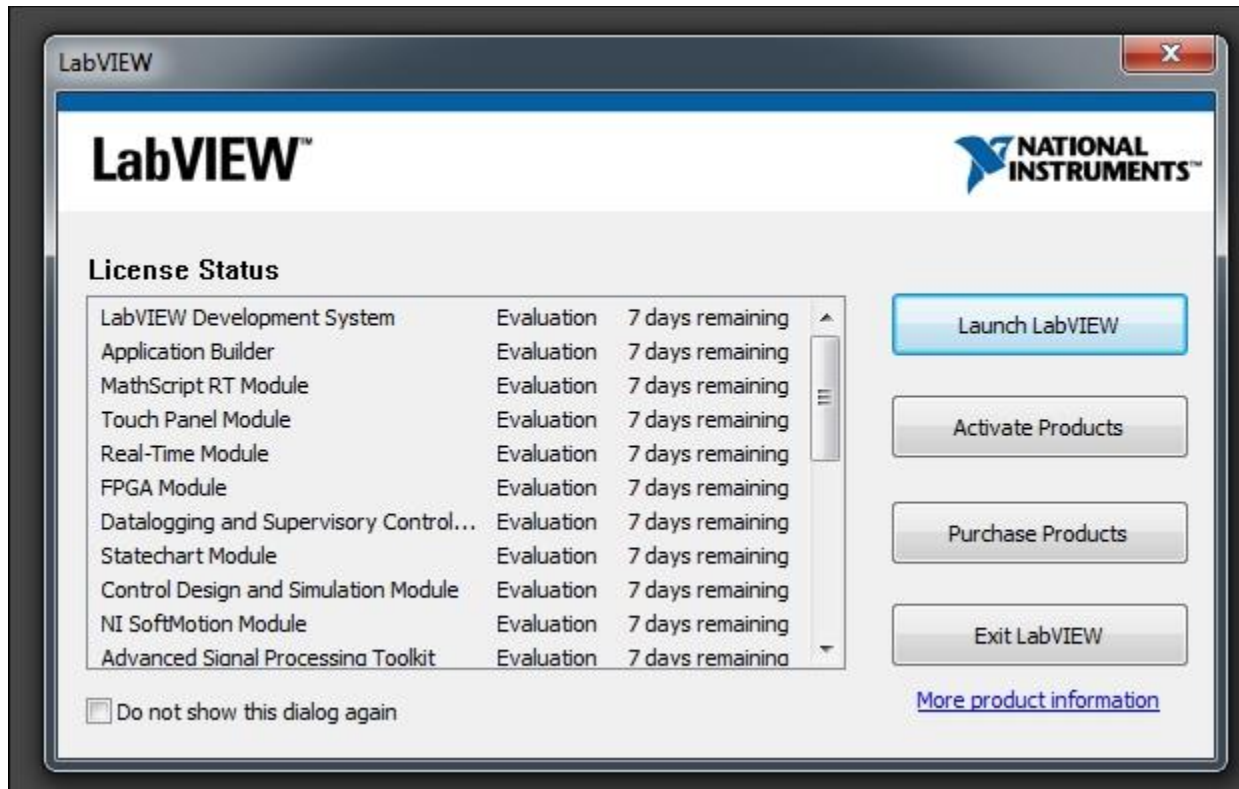
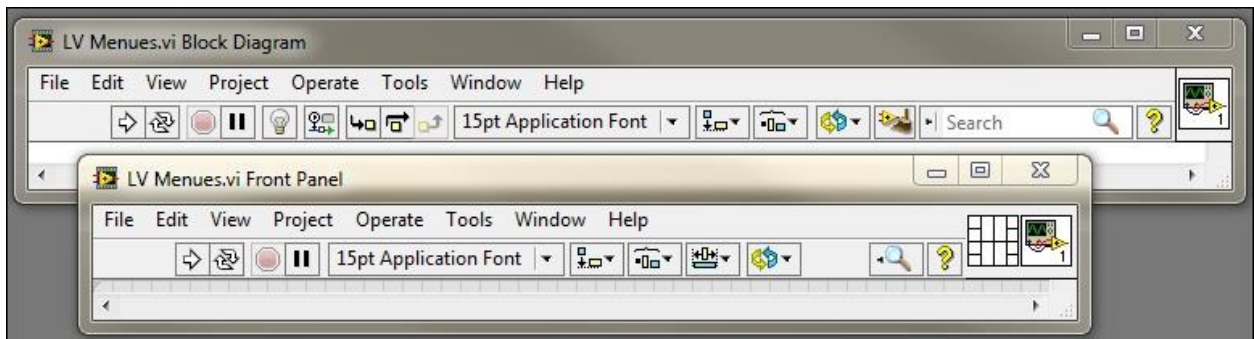
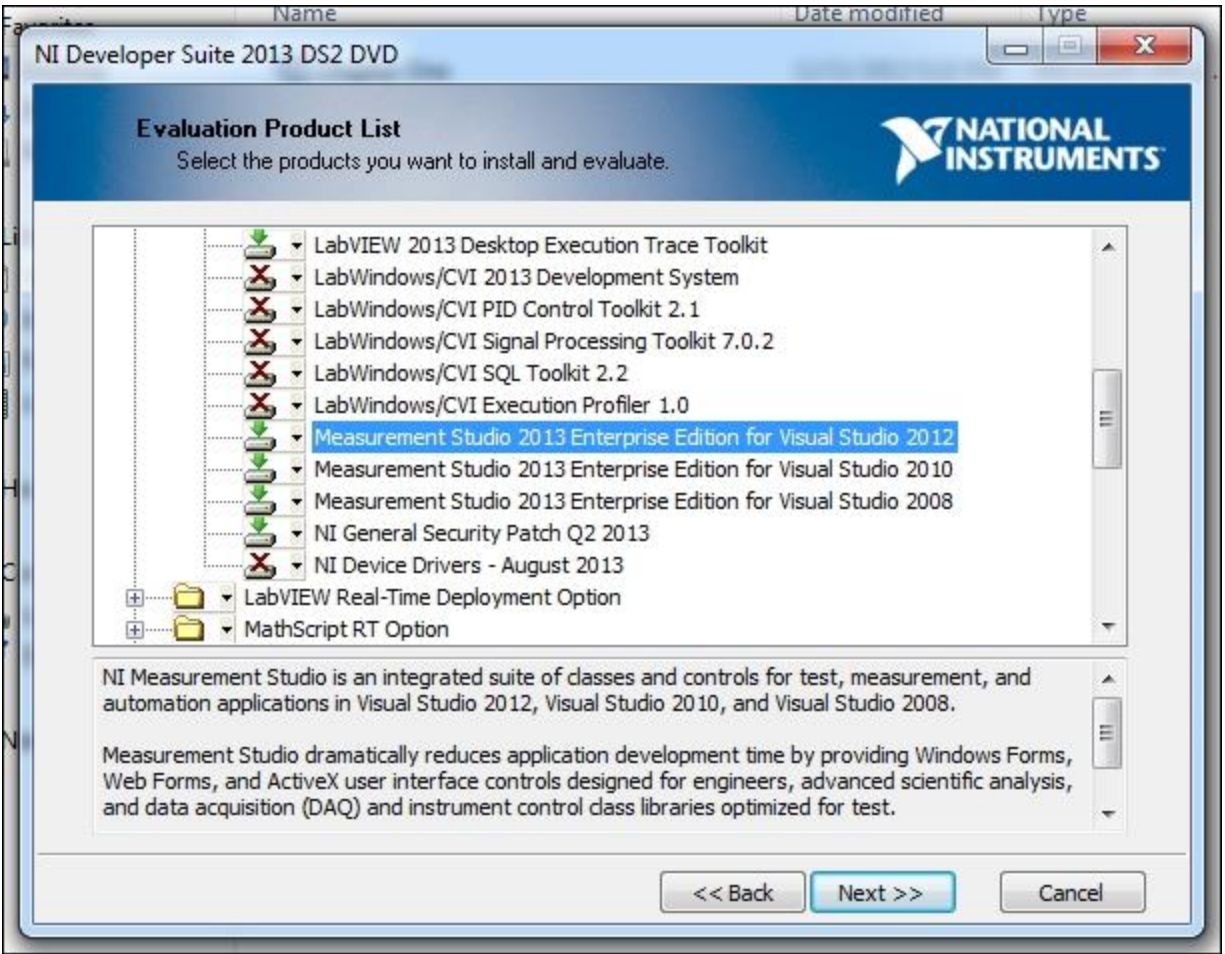
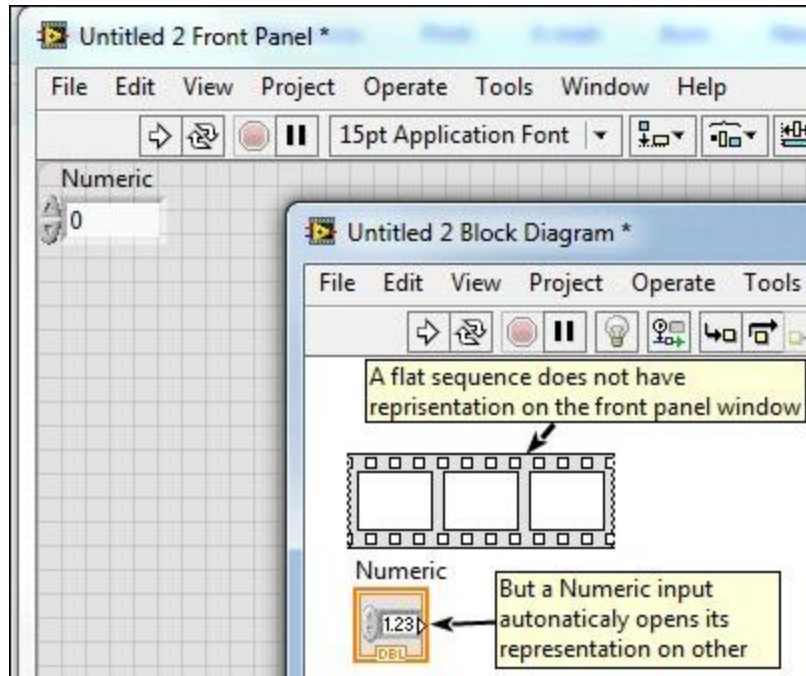
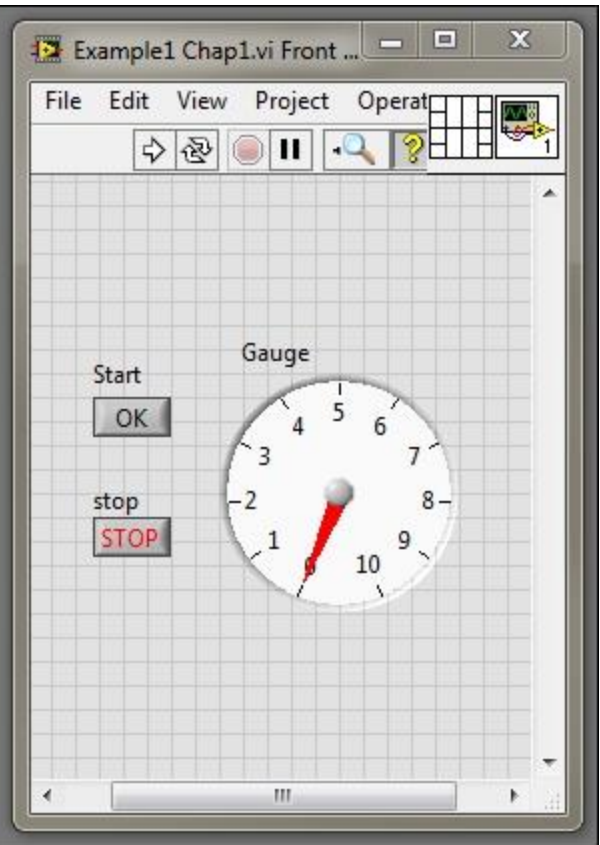
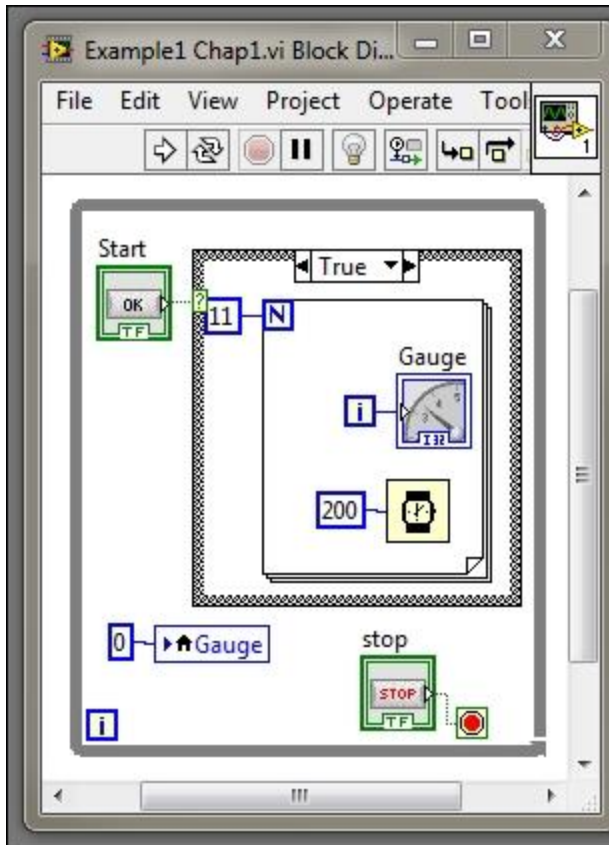


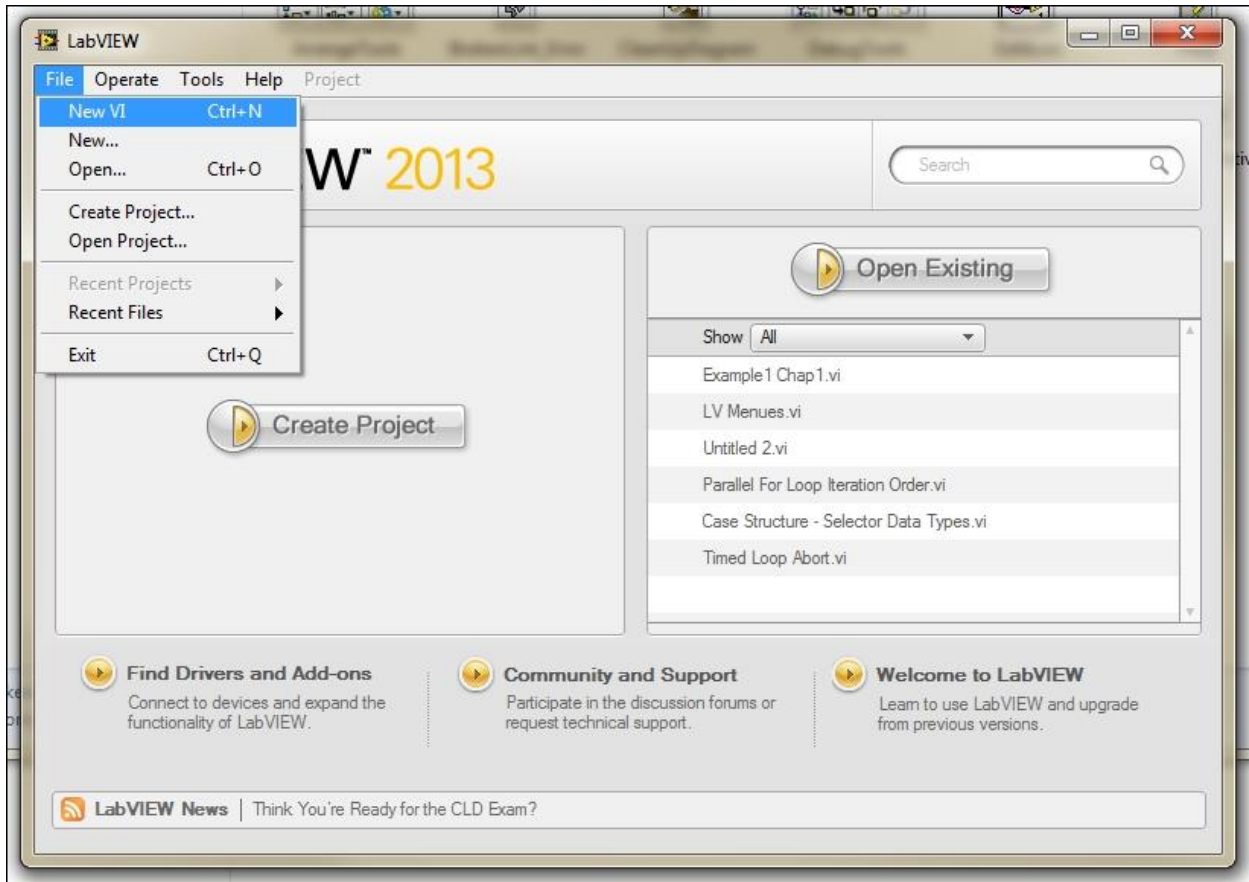
Chapter 1: LabVIEW Basics

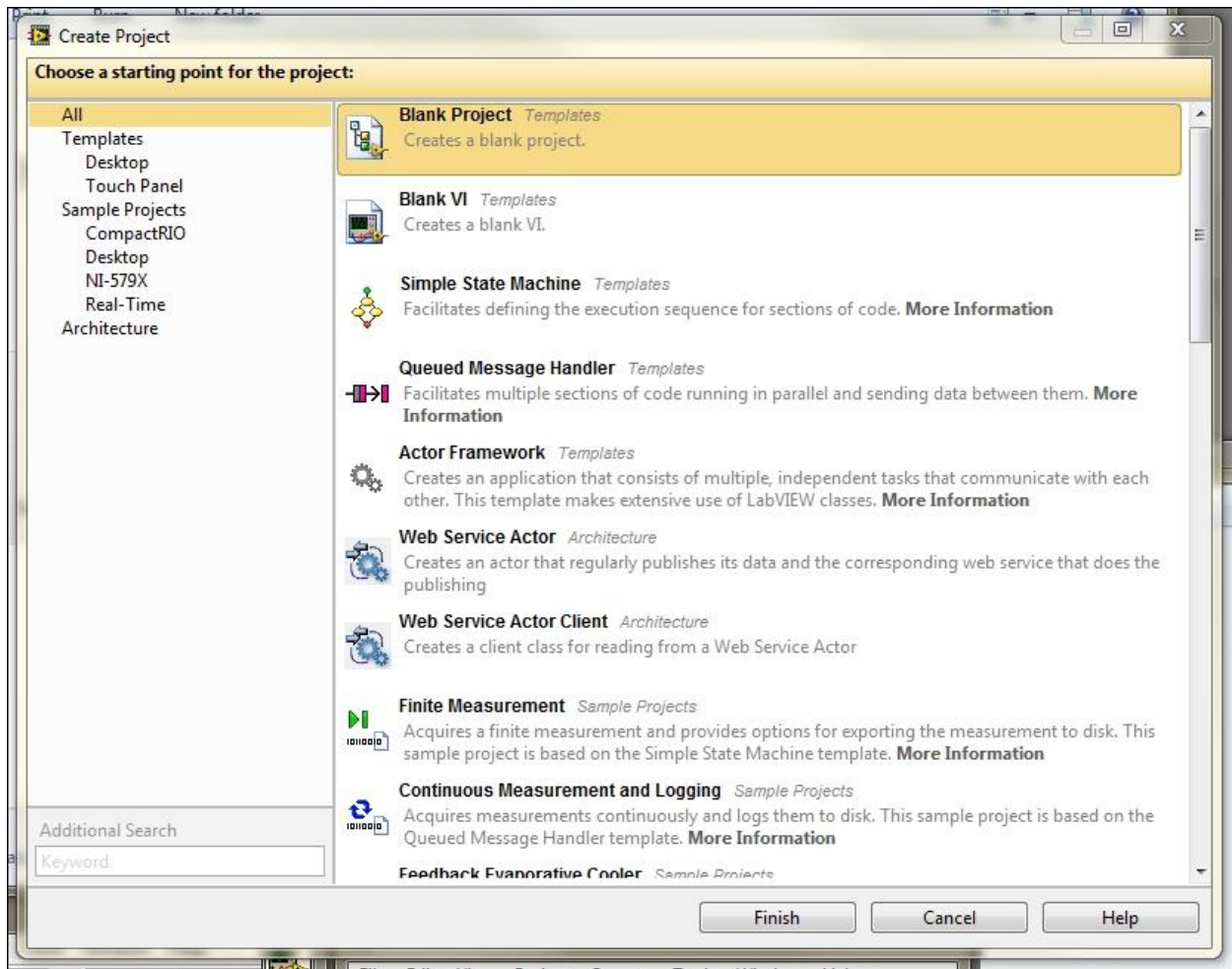




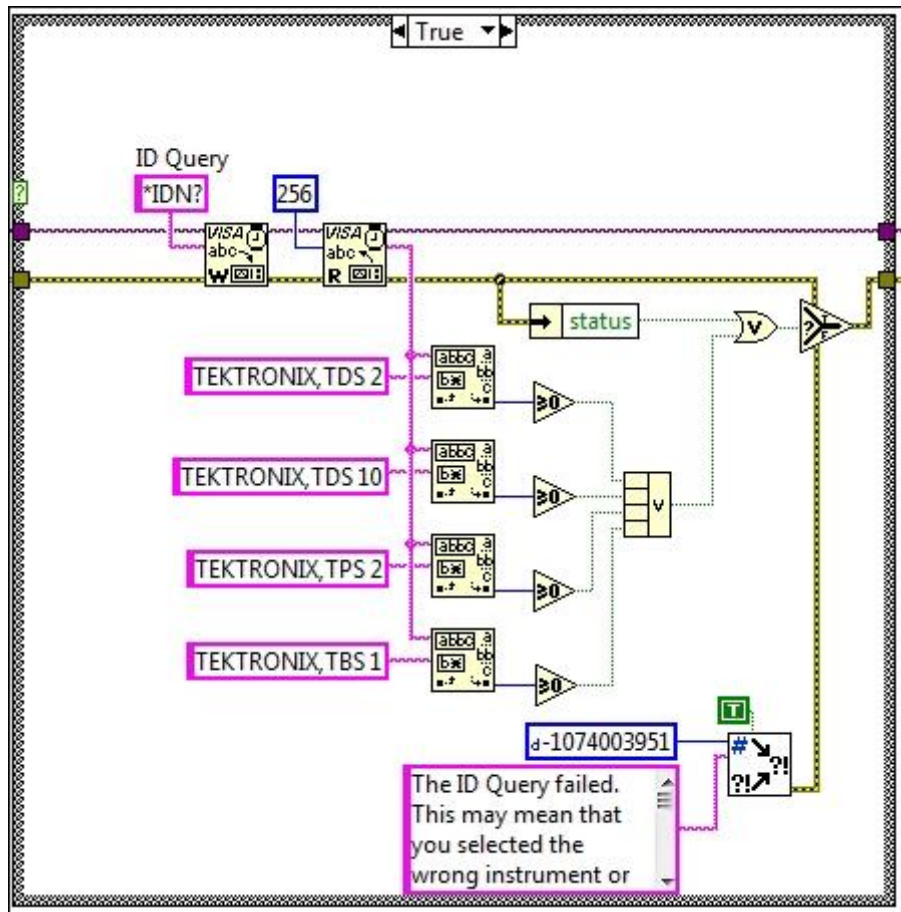


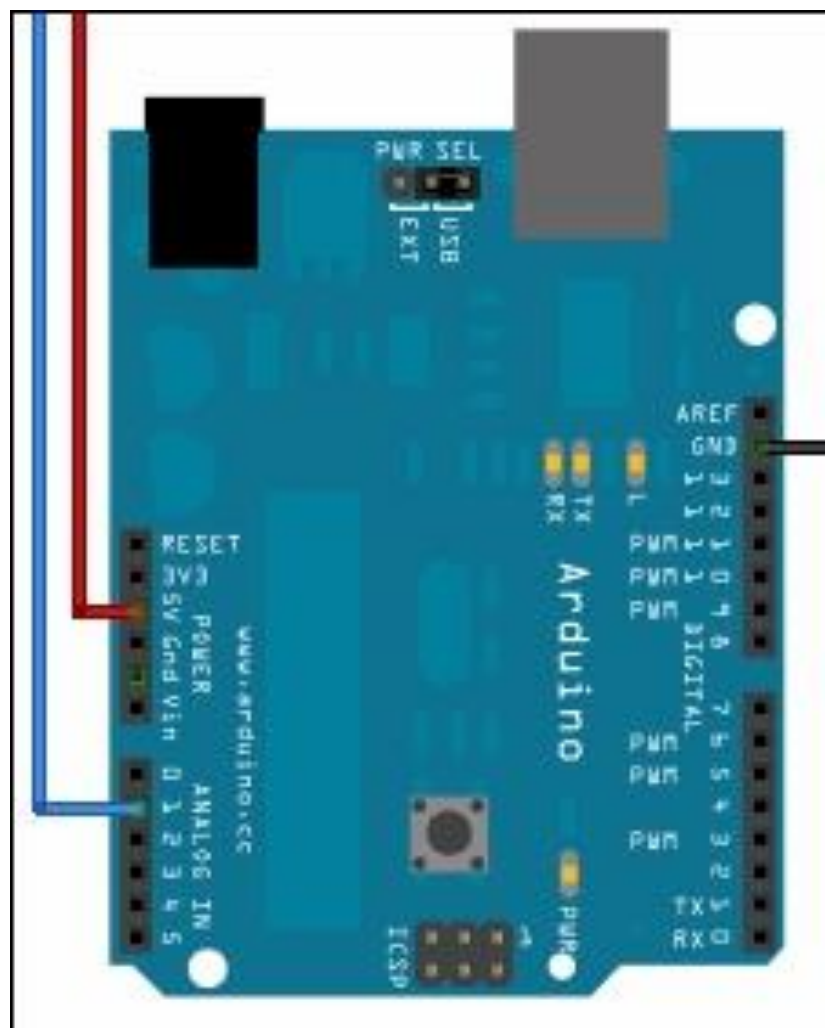
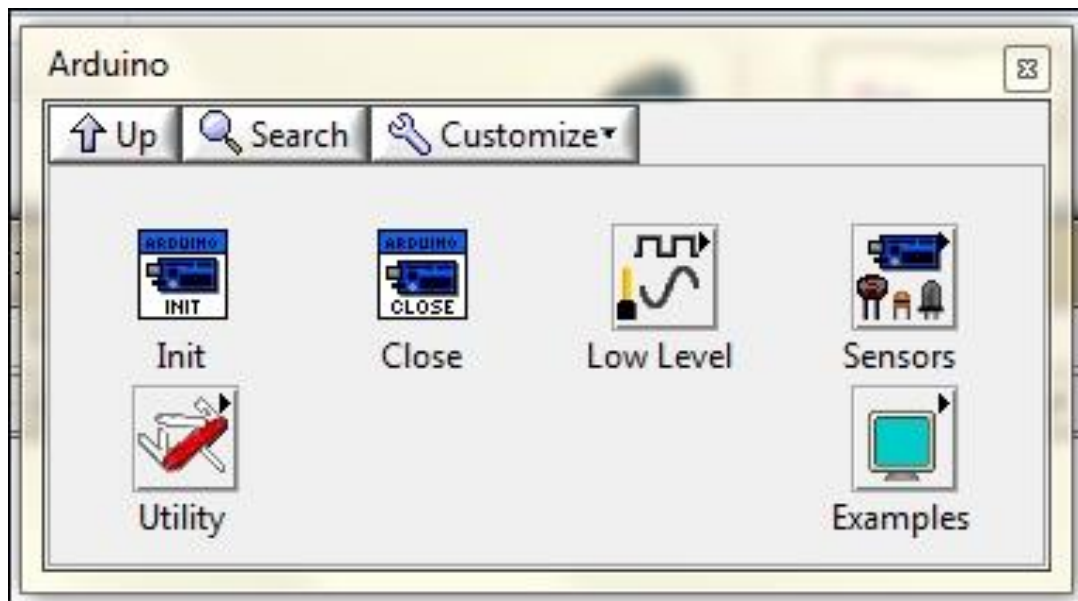


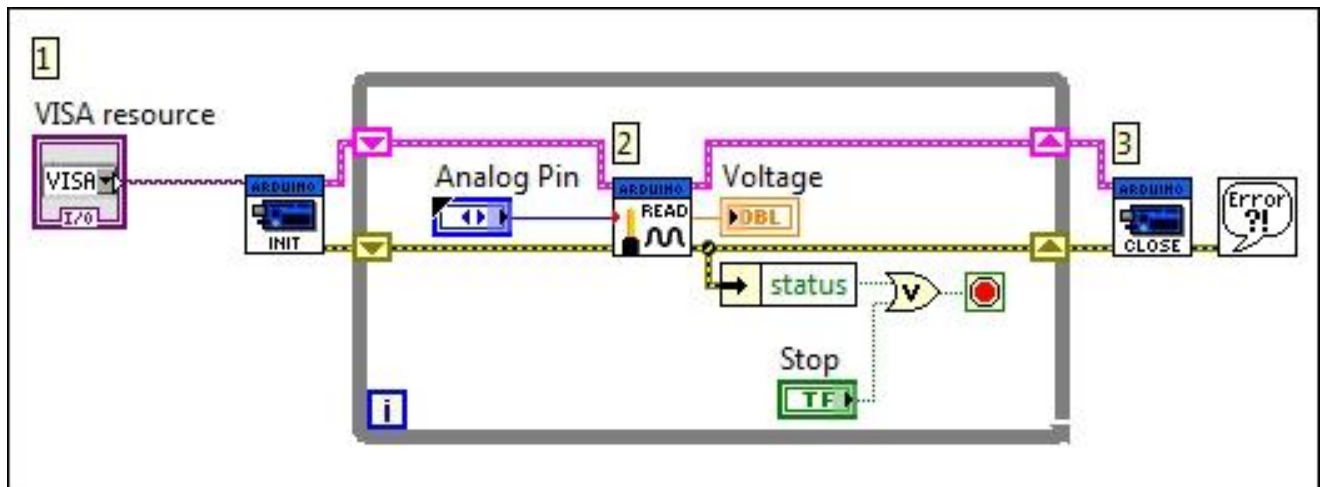
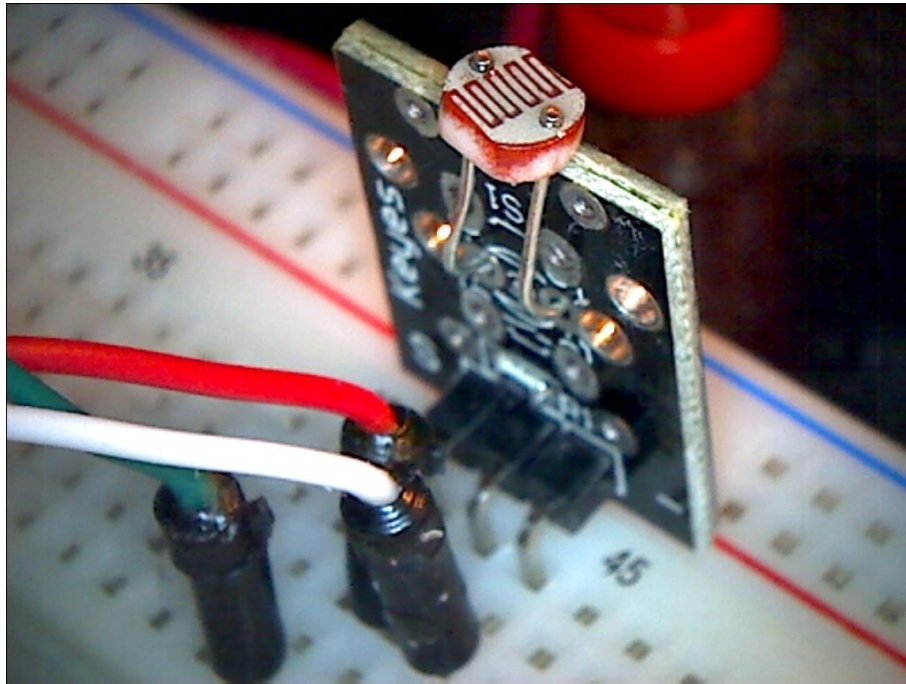




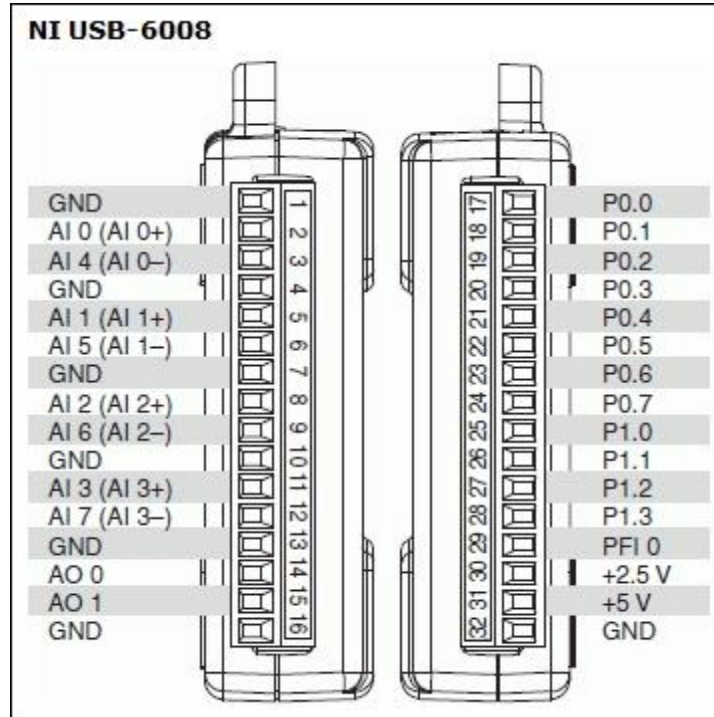
Chapter 2: Most Common Communication Buses








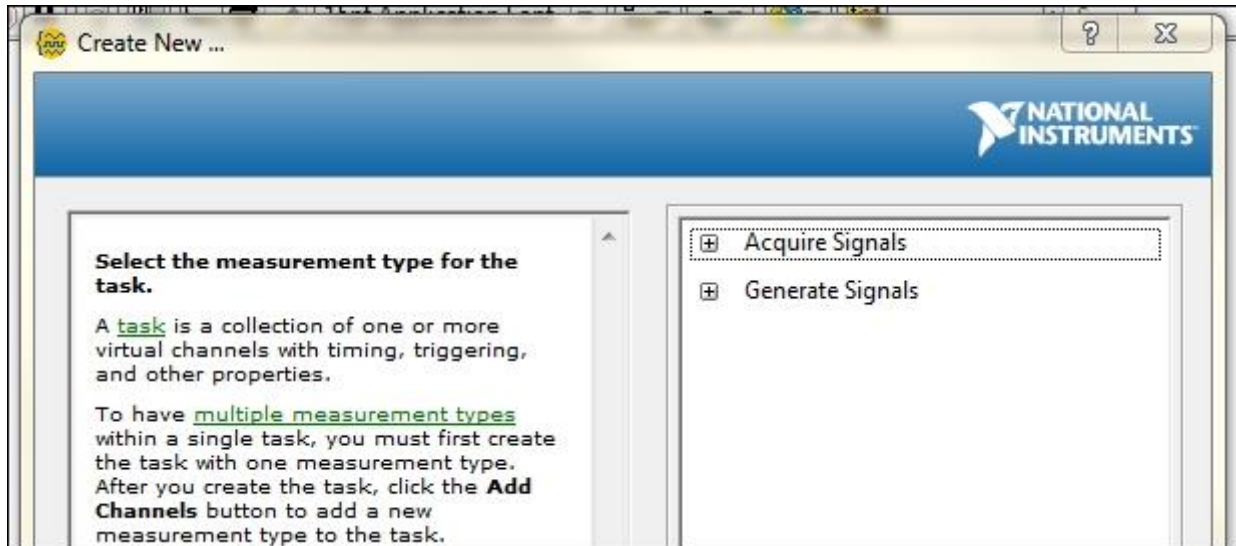
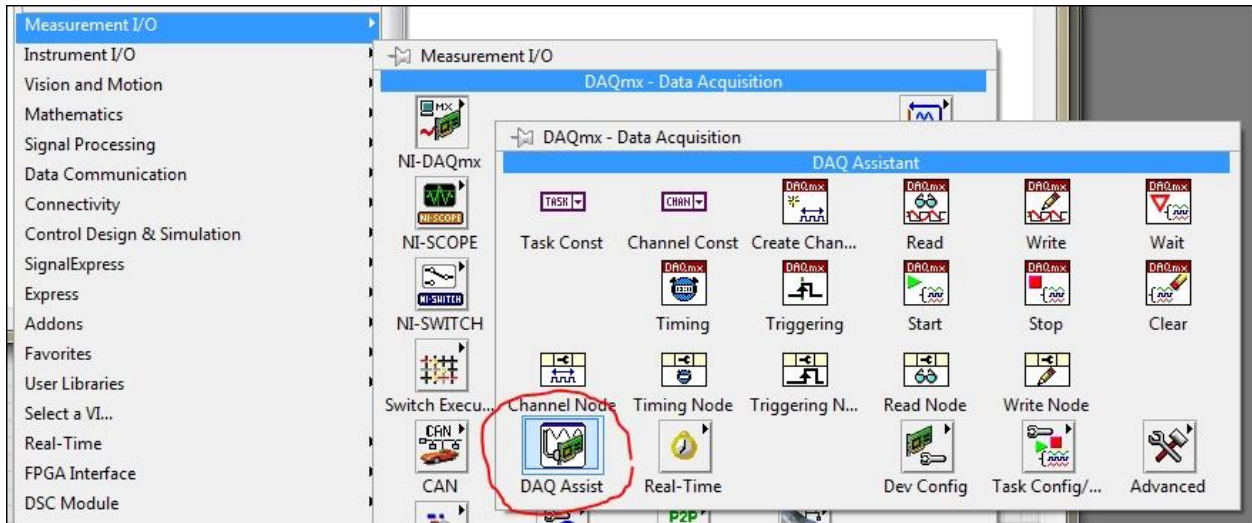


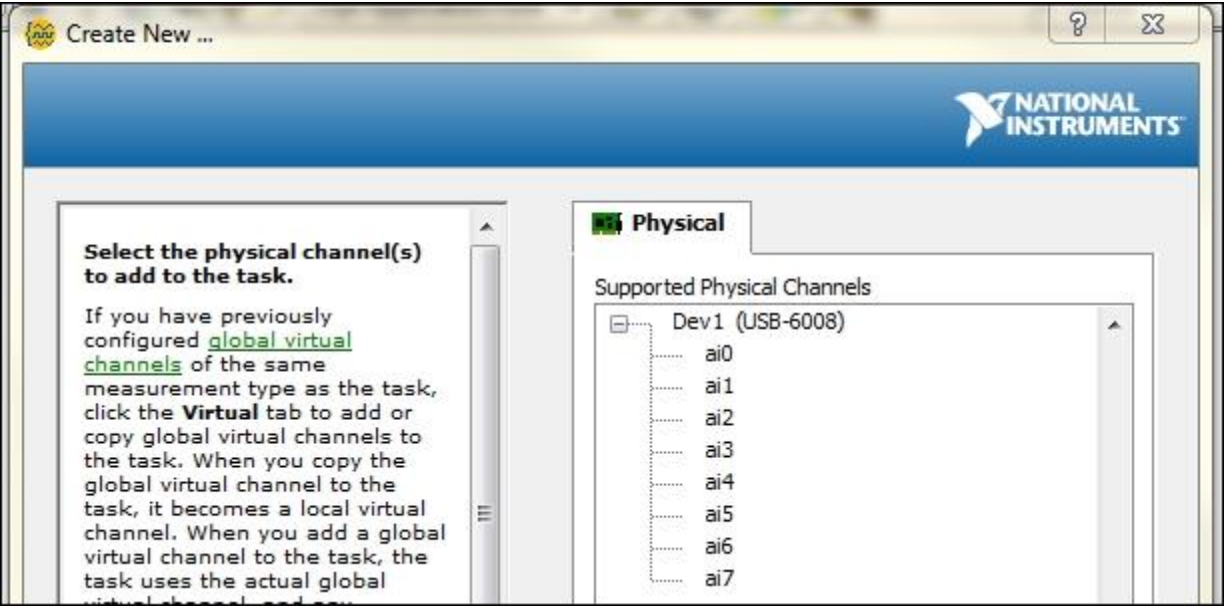
Chapter 3: Using the DAQ Assistant to Automatically Generate LabVIEW Code

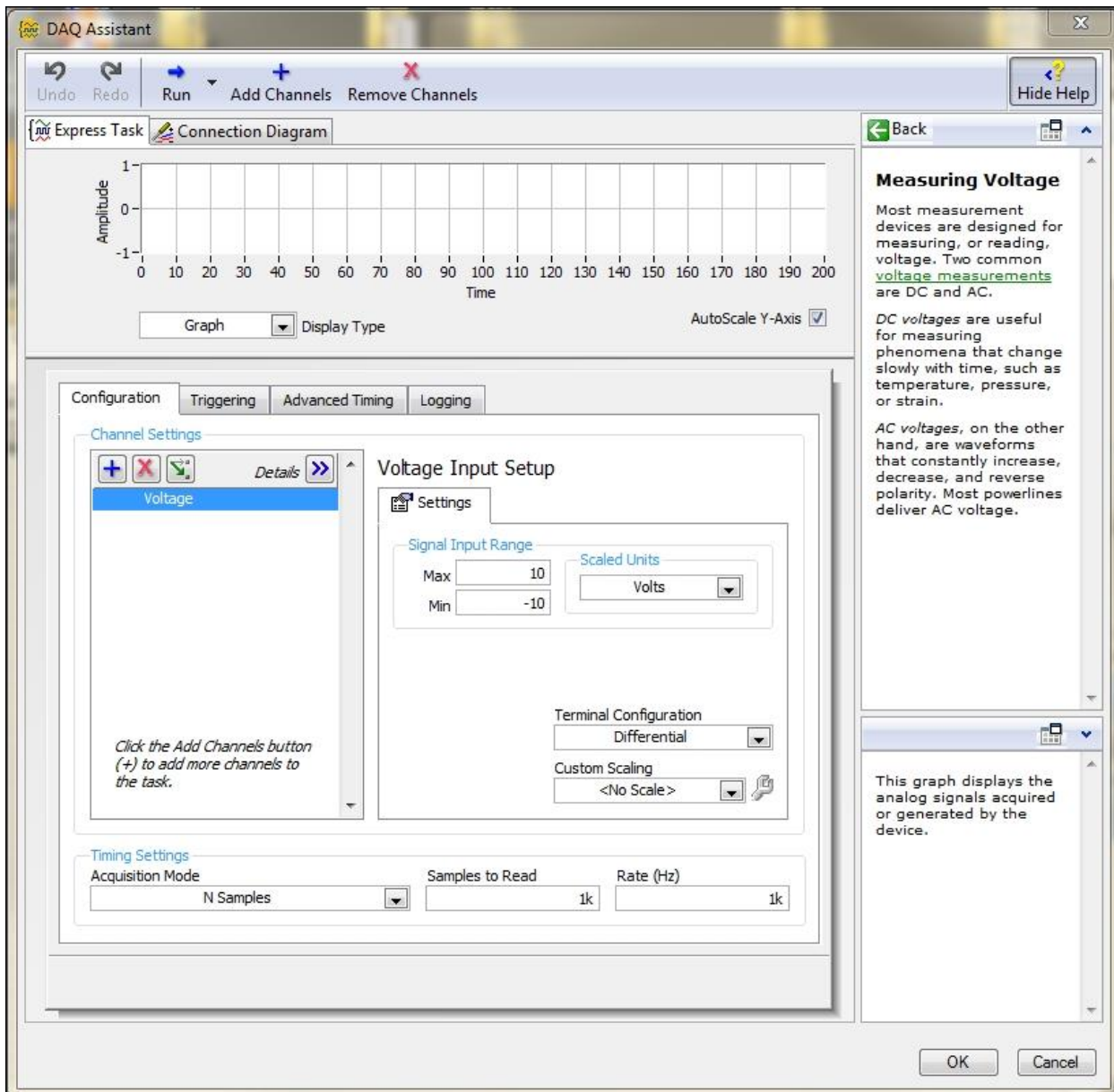


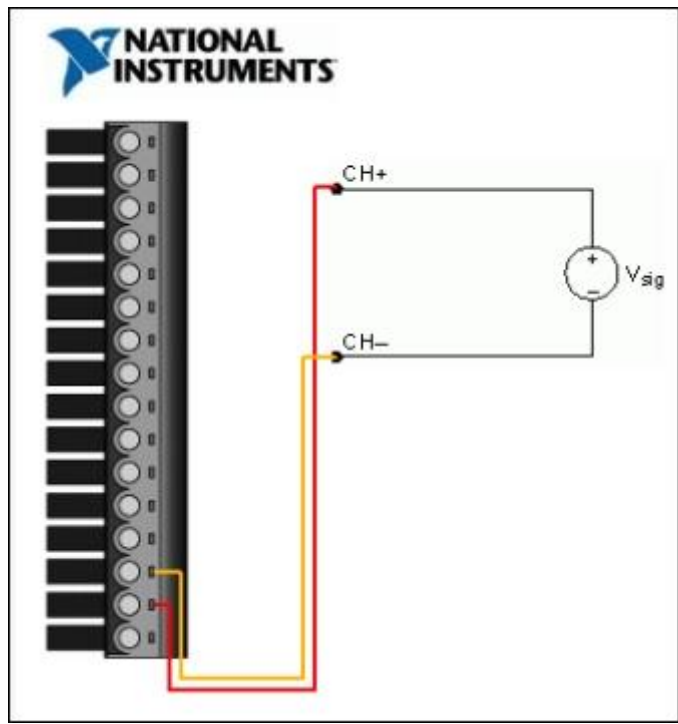


 <p>DAQ Assistant</p> <ul style="list-style-type: none"> data ▶ error out ▶ task out ▶ ▶ device name ▶ error in ▶ number of samples ▶ rate ▶ stop (T) ▶ timeout (s) 	 <p>Write To Measurement File</p> <ul style="list-style-type: none"> ▶ Signals ▶ Comment ▶ DAQmx Task ▶ Enable ▶ error in (no error) ▶ Filename ▶ Reset 	 <p>Read From Measurement File</p> <ul style="list-style-type: none"> ▶ Signals ▶ Comment ▶ Description ▶ EOF? ▶ error out ▶ Filename Out ▶ Enable
---	---	--









Voltage Input Setup

Settings

Signal Input Range

Max

Min

Scaled Units

Terminal Configuration

Custom Scaling

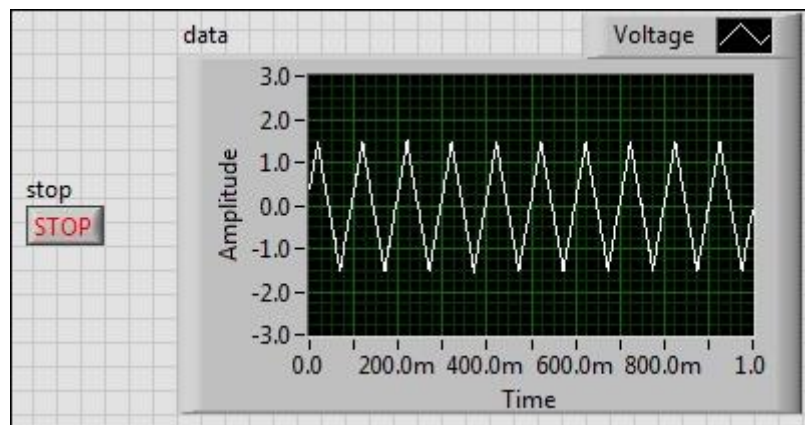
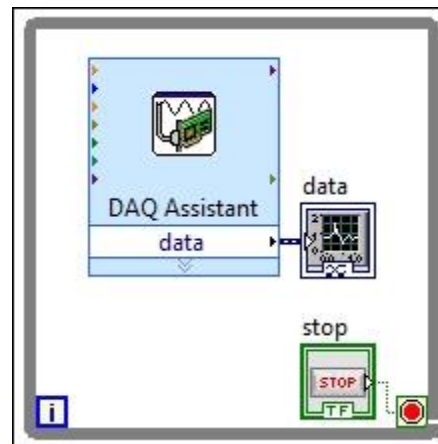
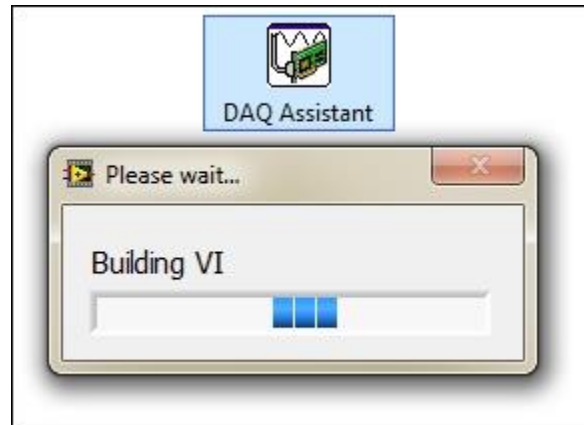
Timing Settings

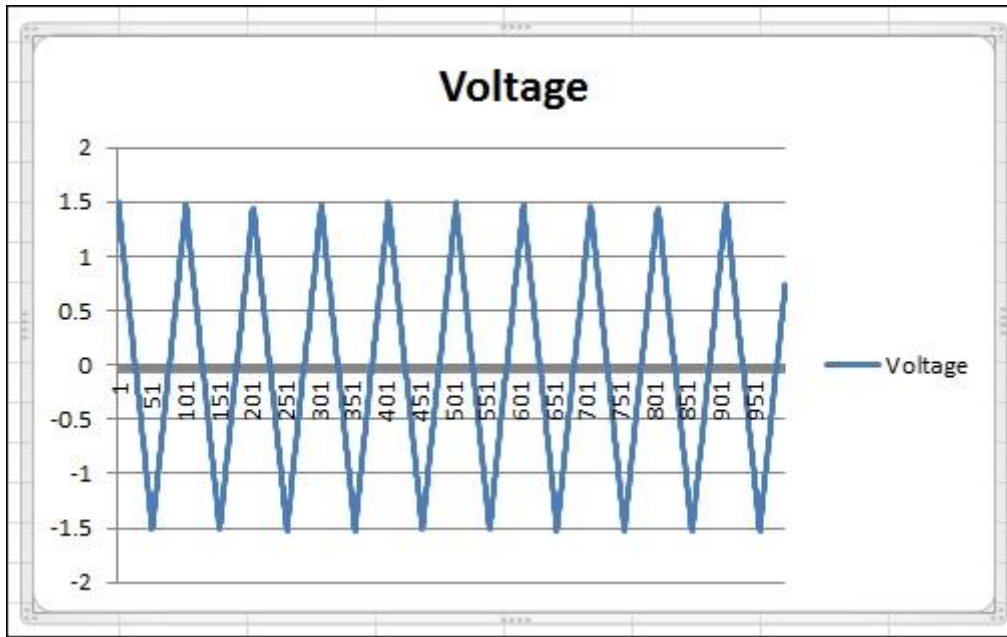
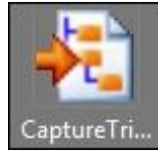
Acquisition Mode

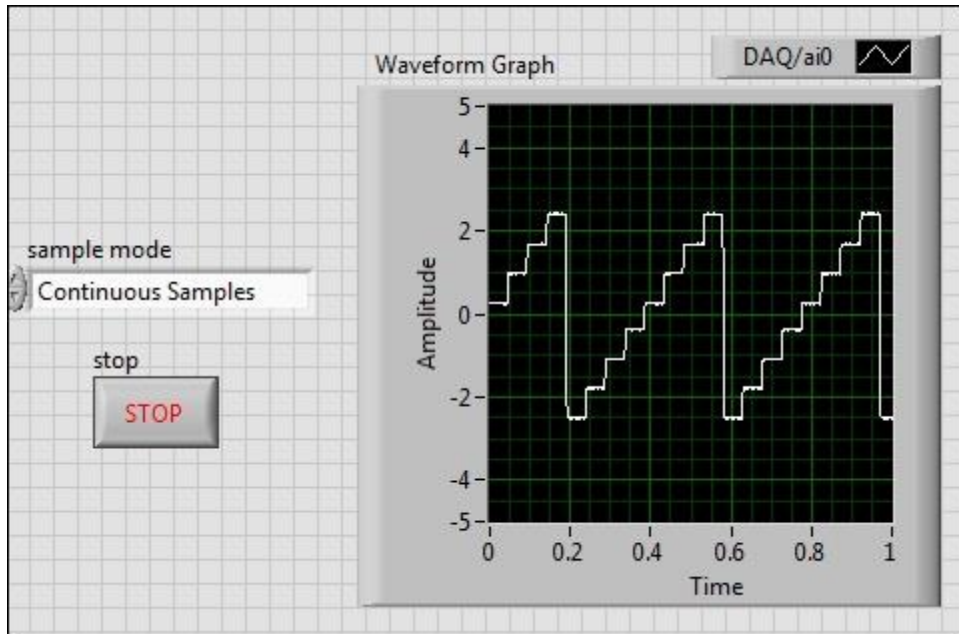
- 1 Sample (On Demand)
- 1 Sample (HW Timed)
- ✓ N Samples
- Continuous Samples

Samples to Read

Rate (Hz)







TDS 2022 "Scope" - Measurement & Automation Explorer

File Edit View Tools Help

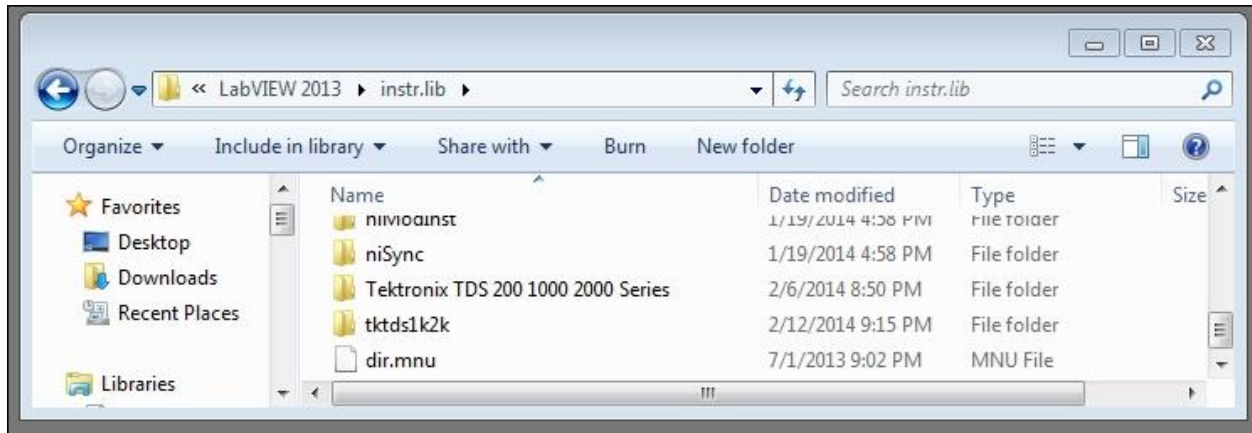
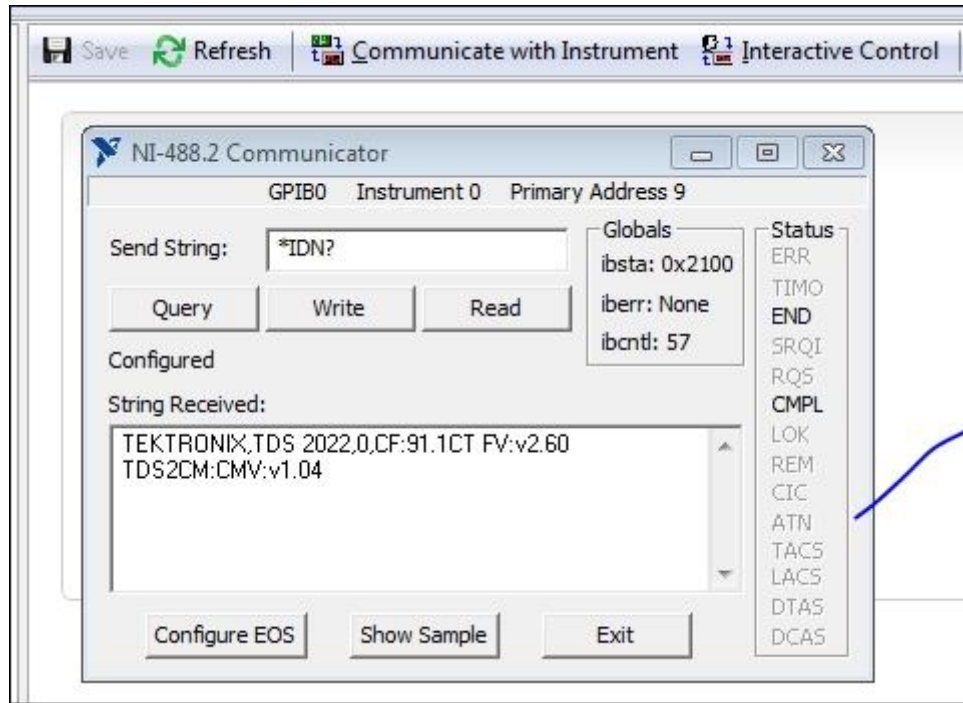
Save Refresh Communicate with Instrument Interactive Control

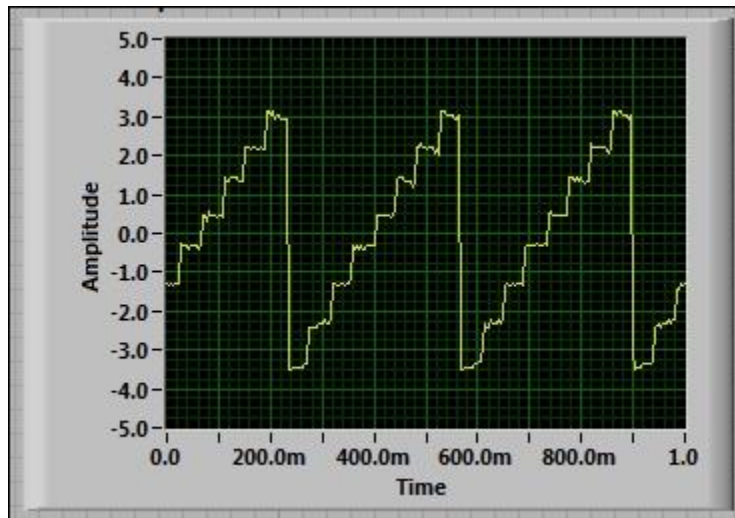
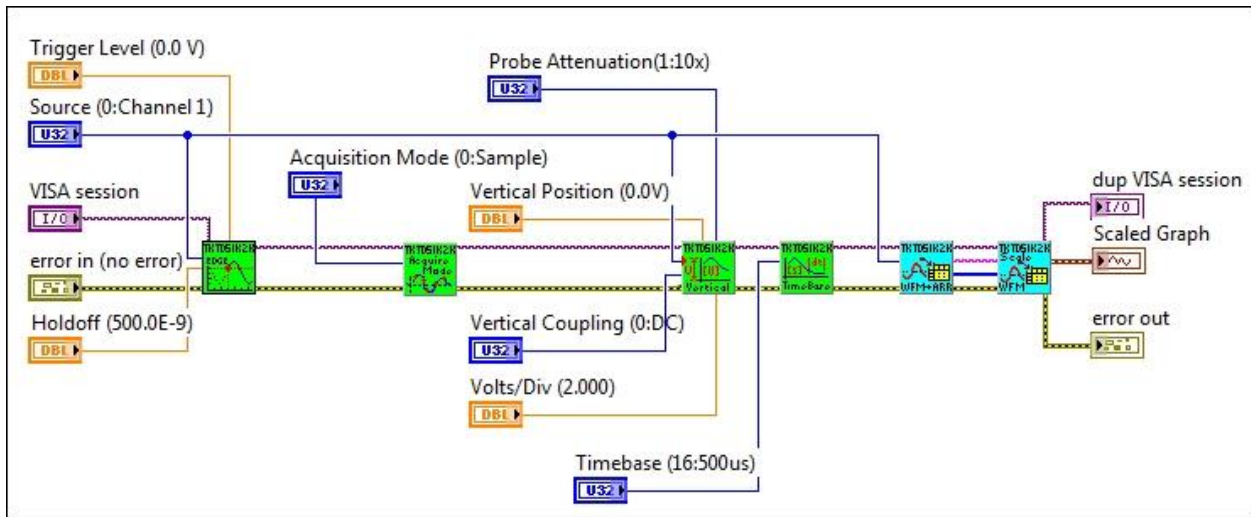
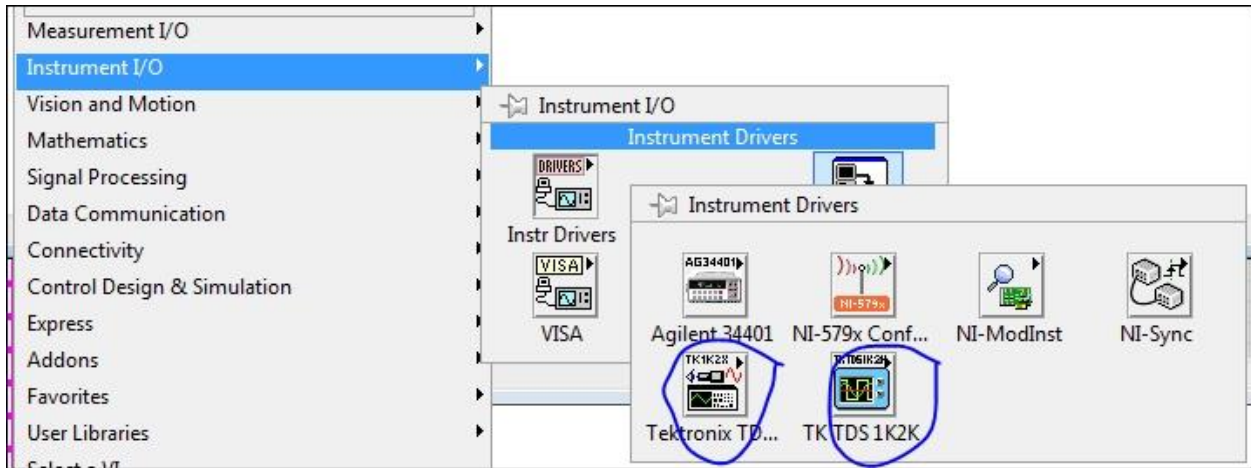
Settings

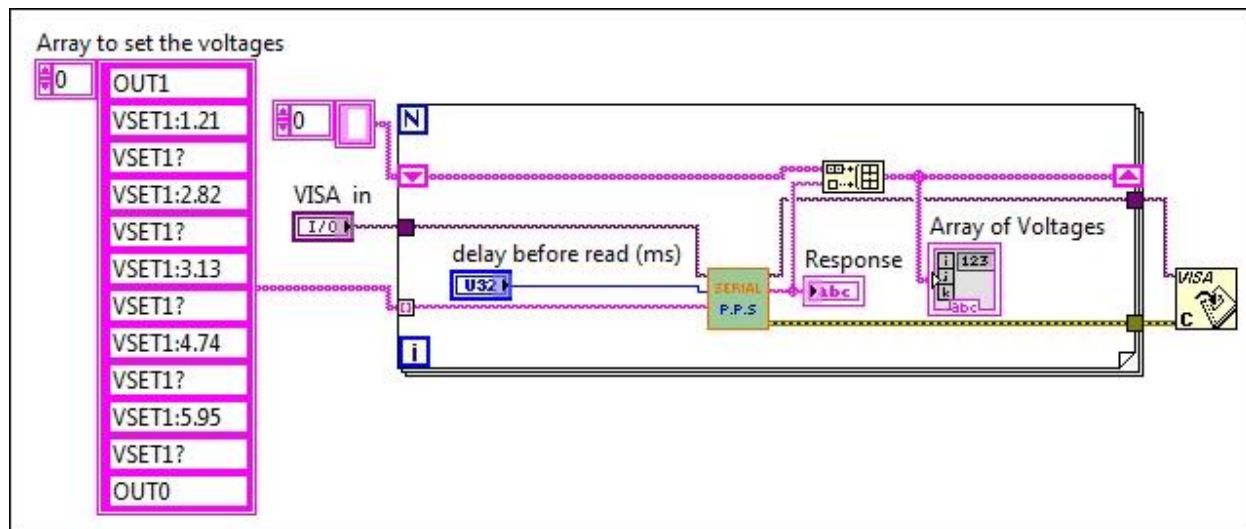
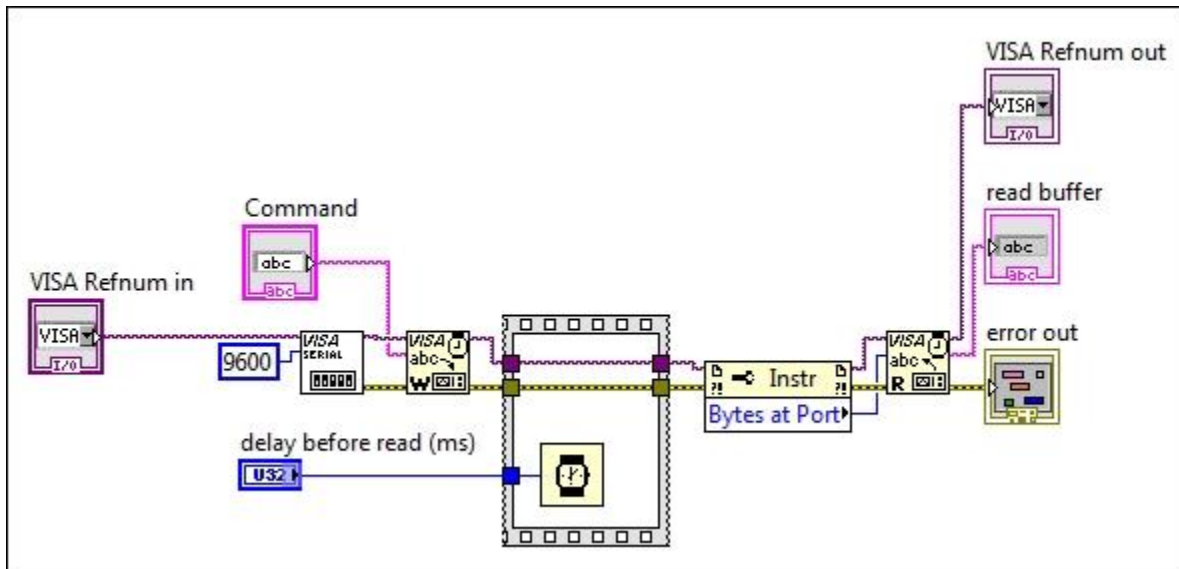
Name	Scope
Vendor	TEKTRONIX
Model	TDS 2022
Serial Number	0
Firmware Revision	CF:91.1CT FV:v2.60 TDS2CM:CMV:v1.04
Status	Present
VISA Resource Name	GPIB0::9::INSTR

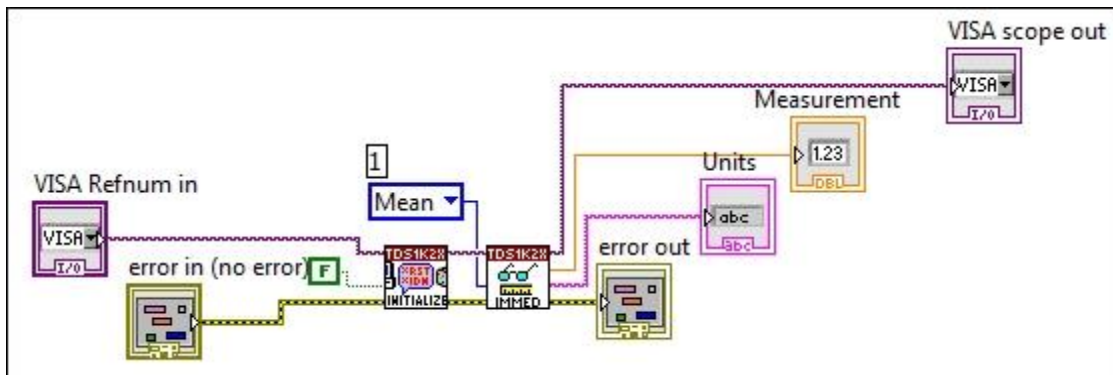
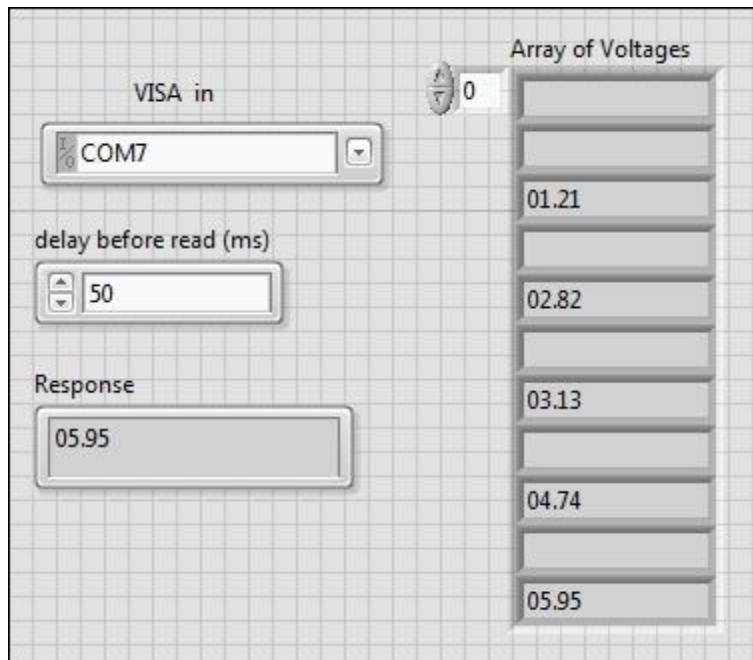
My System

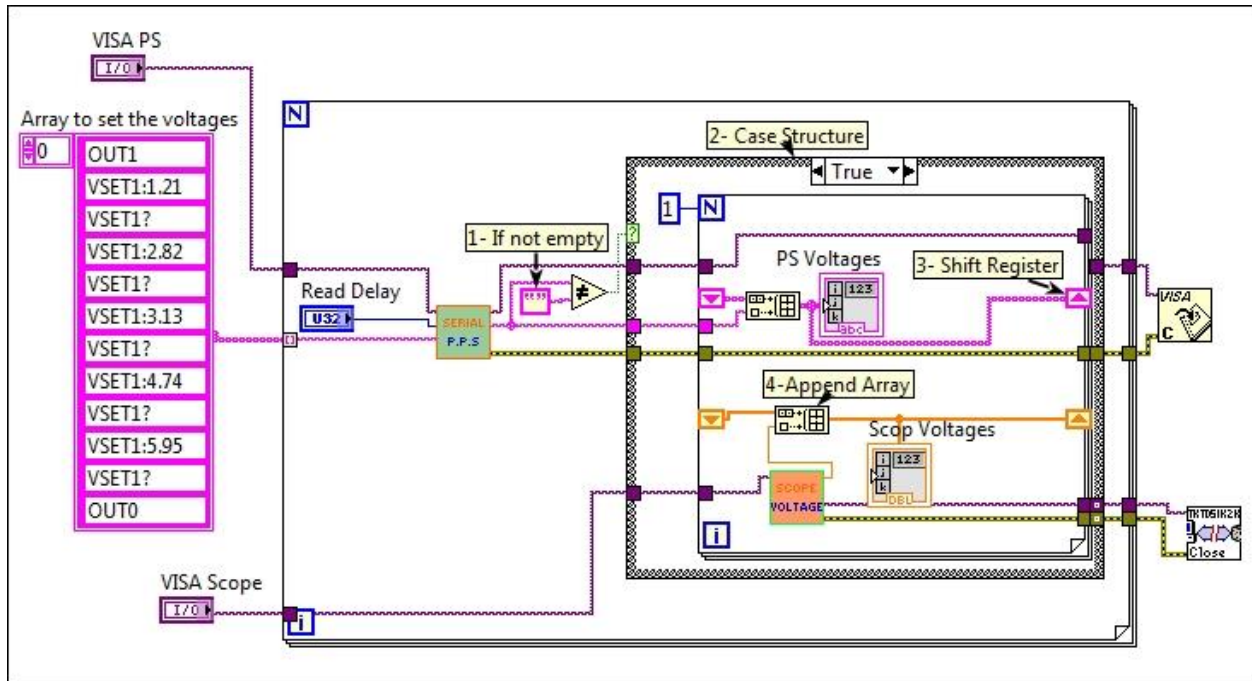
- Data Neighborhood
 - Devices and Interfaces
 - ASRL3::INSTR "COM3"
 - ASRL6::INSTR "COM6"
 - ASRL7::INSTR "COM7"
 - NI USB-6008 "DAQ"
 - GPIB-USB-HS "GPIB0"
 - TDS 2022 "Scope"
 - Network Devices
 - Scales
 - Software
 - IVI Drivers
 - Remote Systems





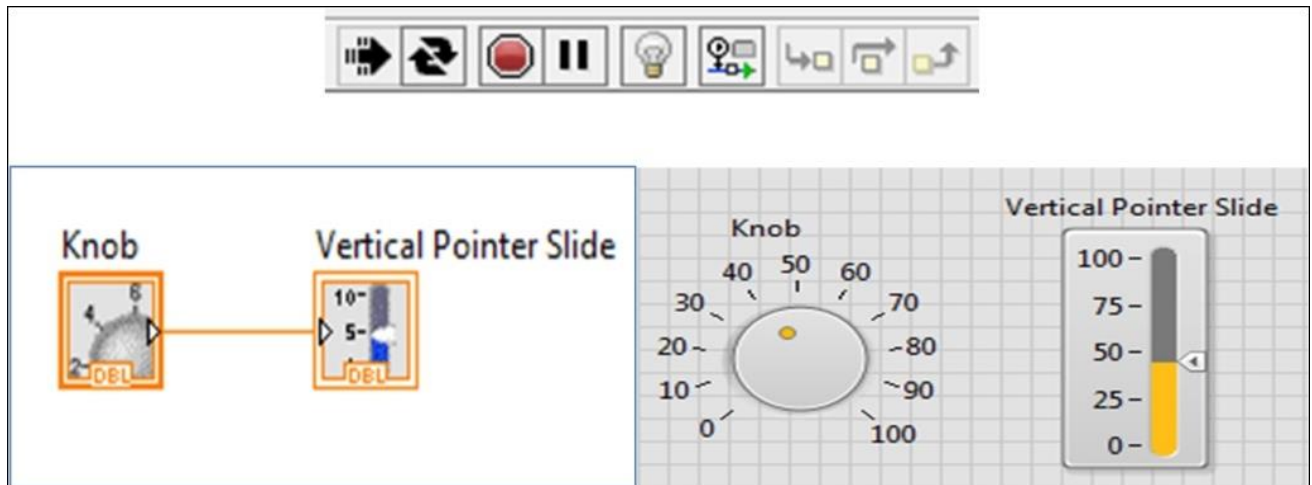
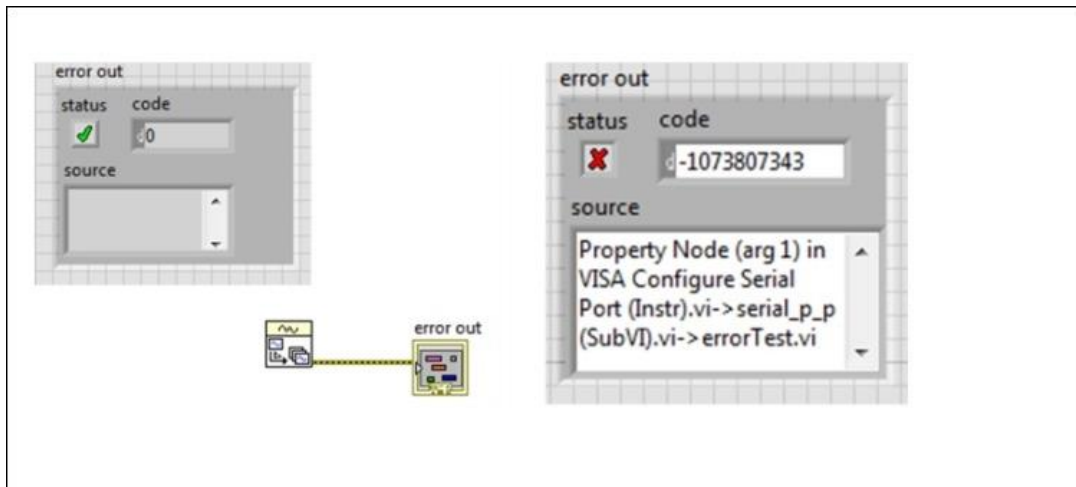
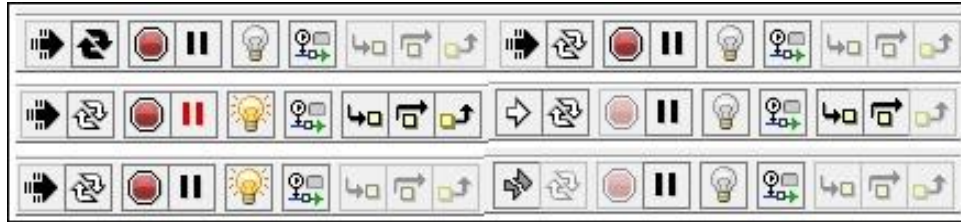


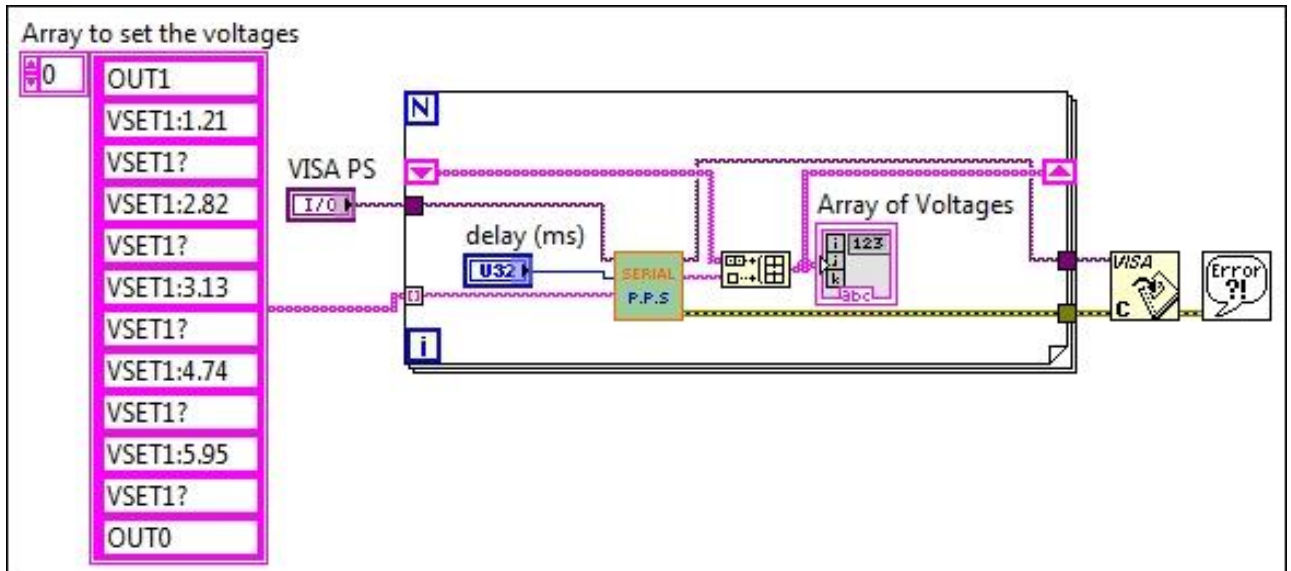
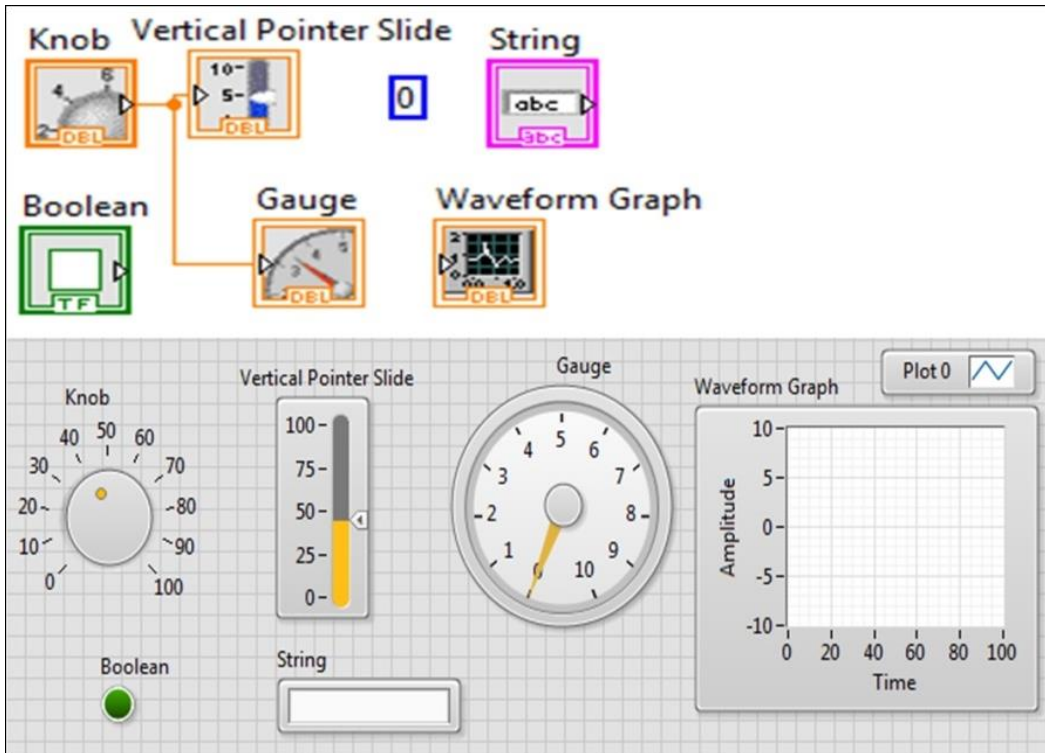


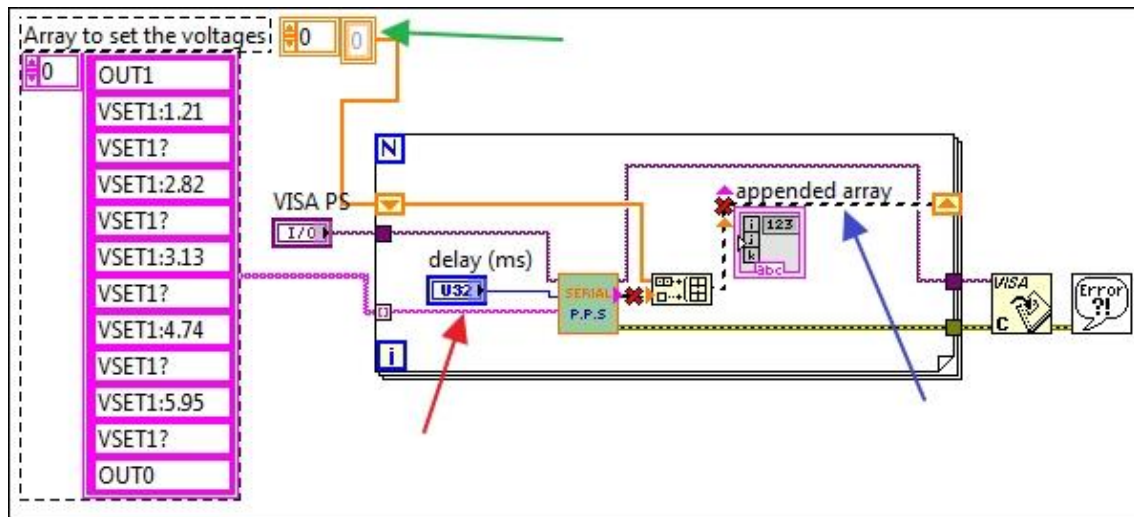
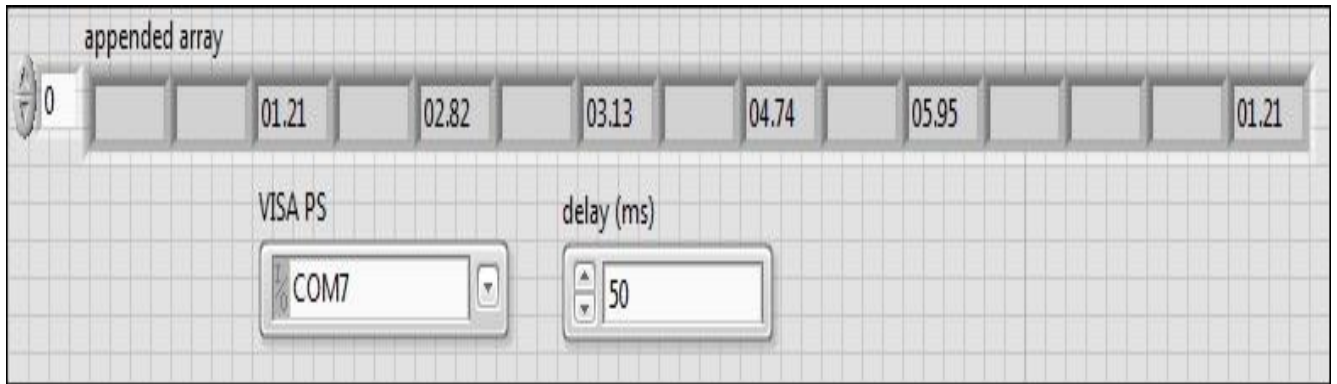


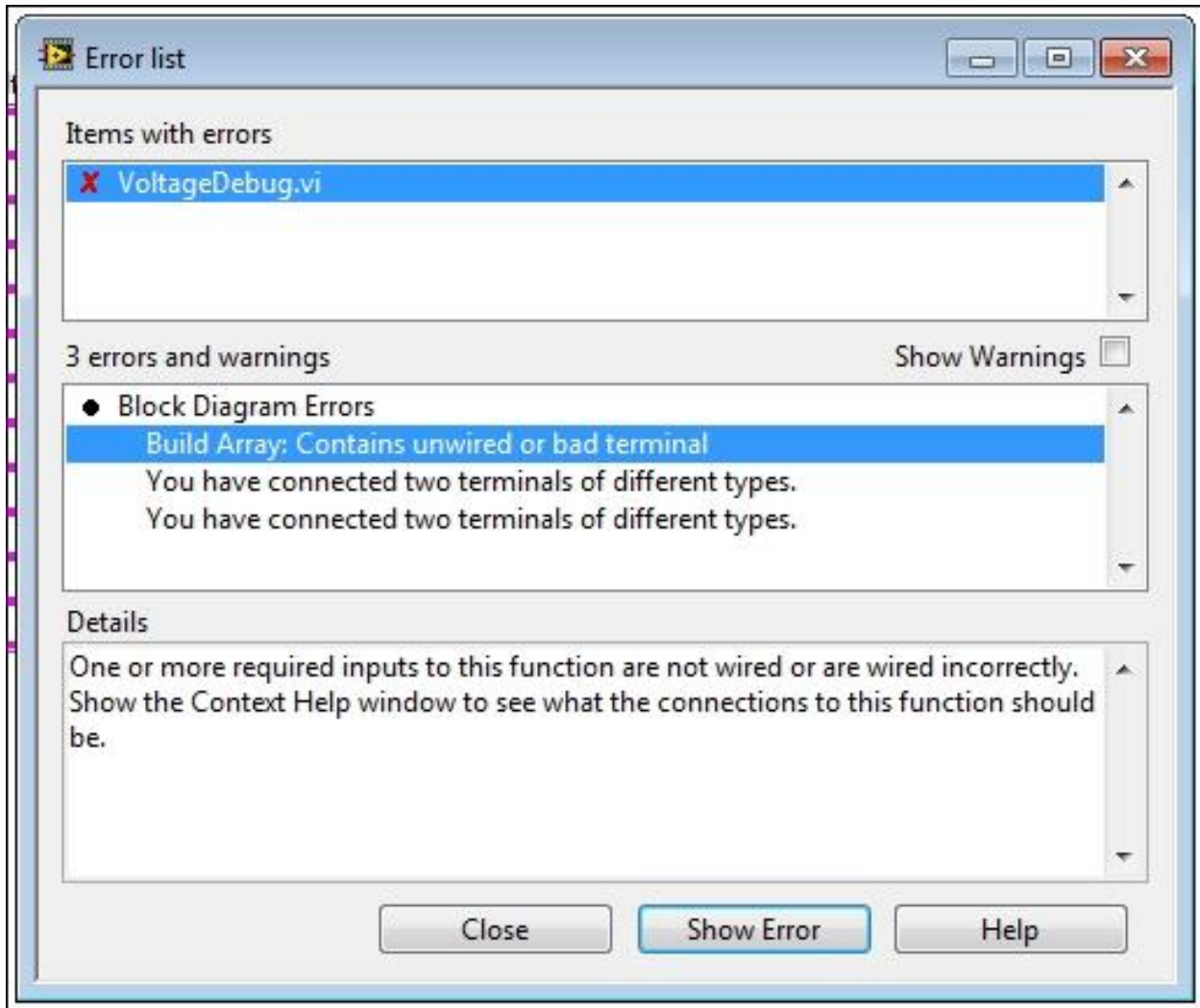
		PS Voltages	Scop Voltages
VISA Scope	0	01.21	1.22654
Scope		02.82	2.85108
VISA PS		03.13	3.13658
COM7		04.74	4.78006
Read Delay	500	05.95	5.9898
			0
			0
			0
			0
			0

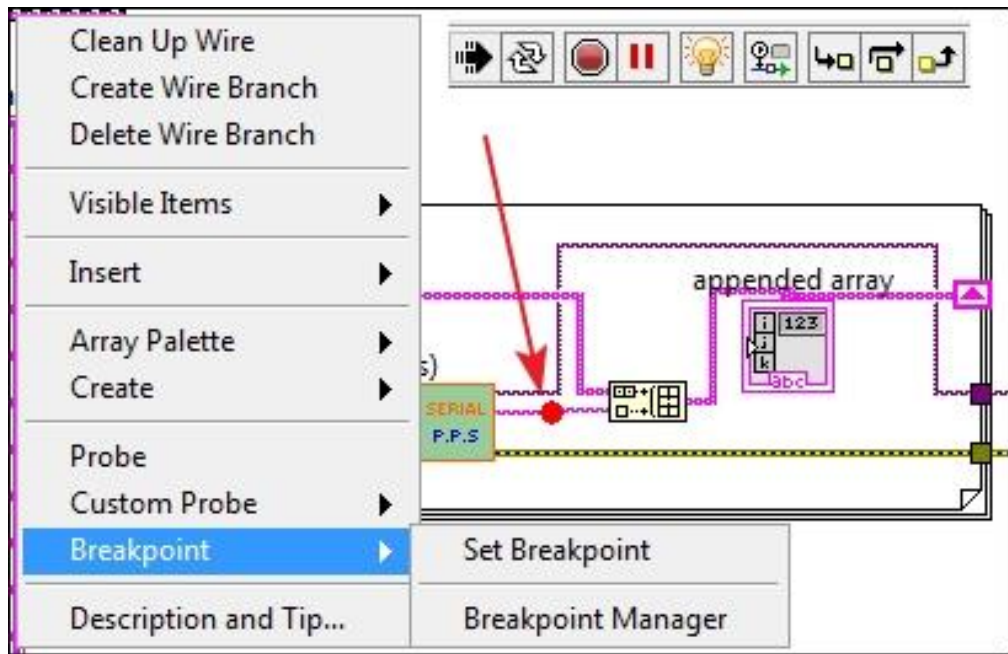
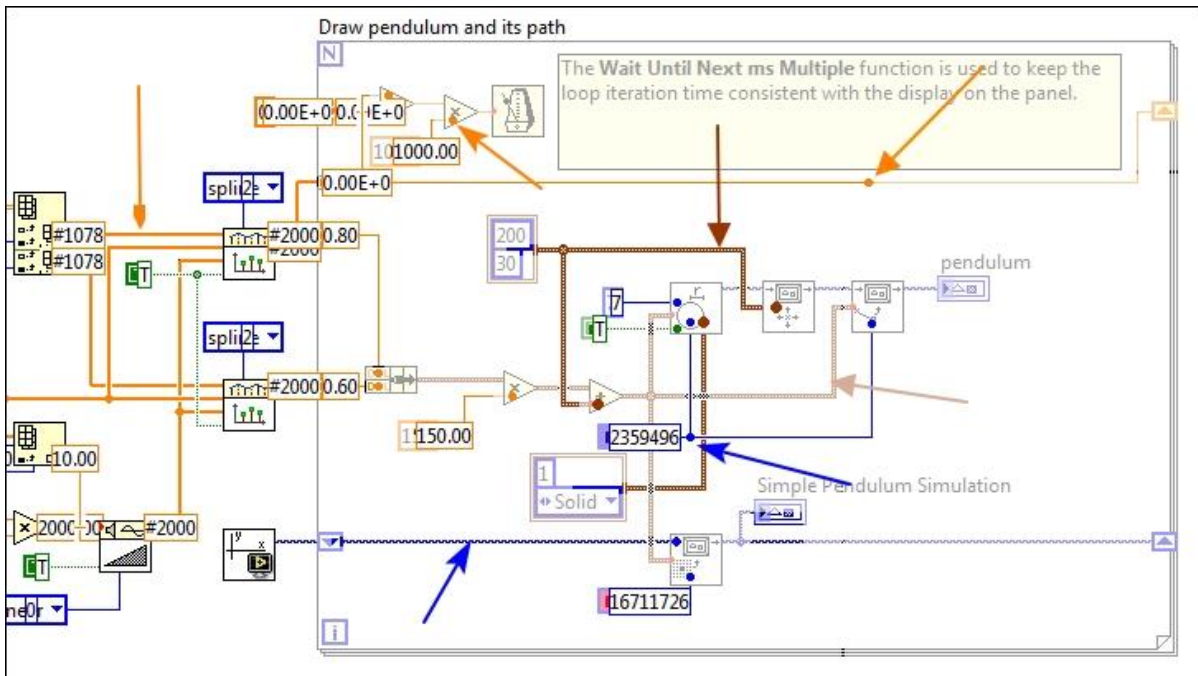
Chapter 5: Debugging Techniques

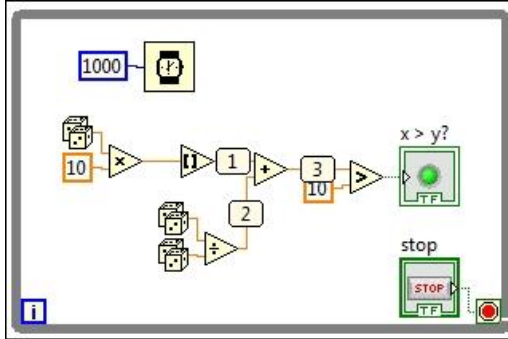












Probe Watch Window

Probe(s)	Value	Last Update
Probe.vi		
[1] Probe	6.000E+0	2/24/2014 2:03:24 A
[2] Probe	2.023E+0	2/24/2014 2:03:24 A
[3] Probe	8.023E+0	2/24/2014 2:03:24 A

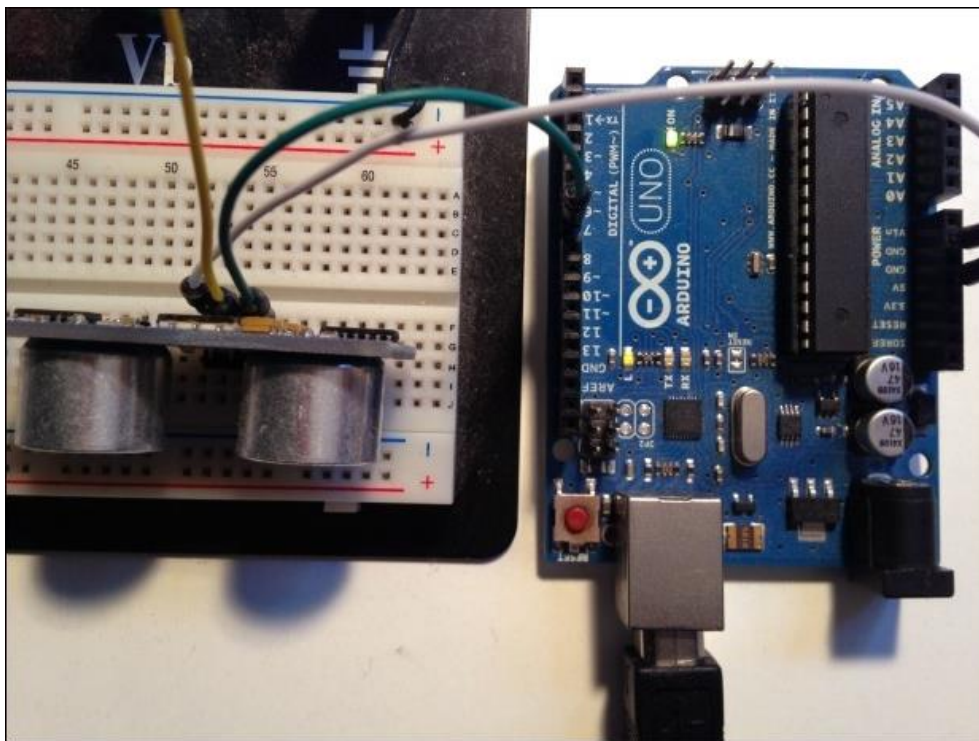
Probe Display

8.02261

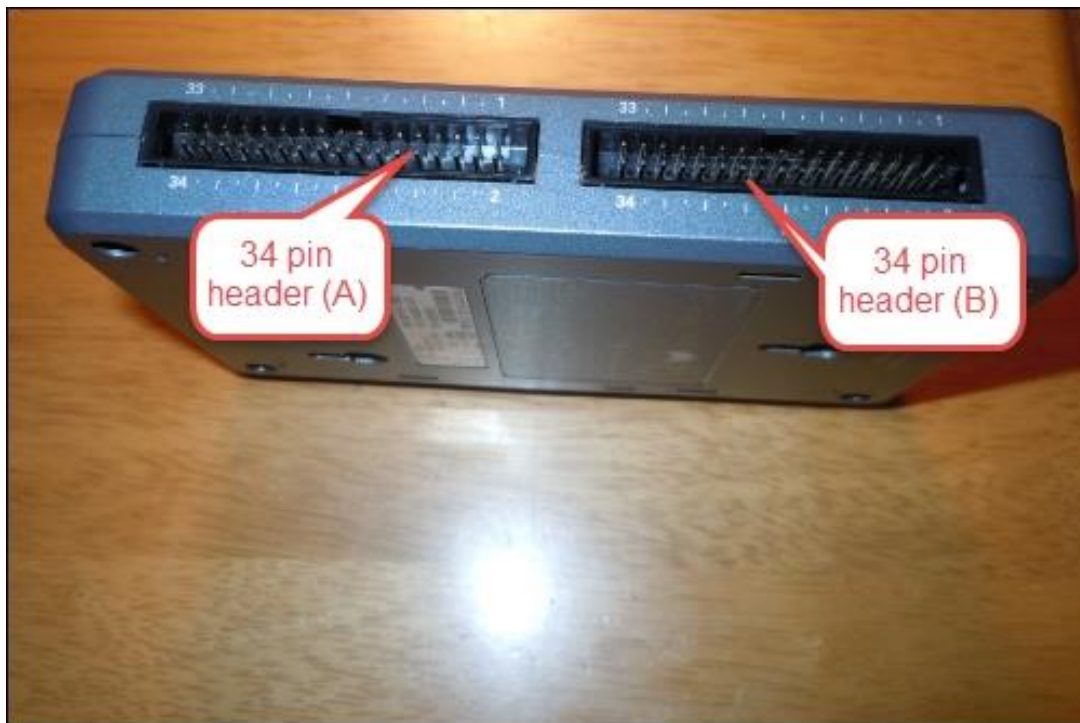
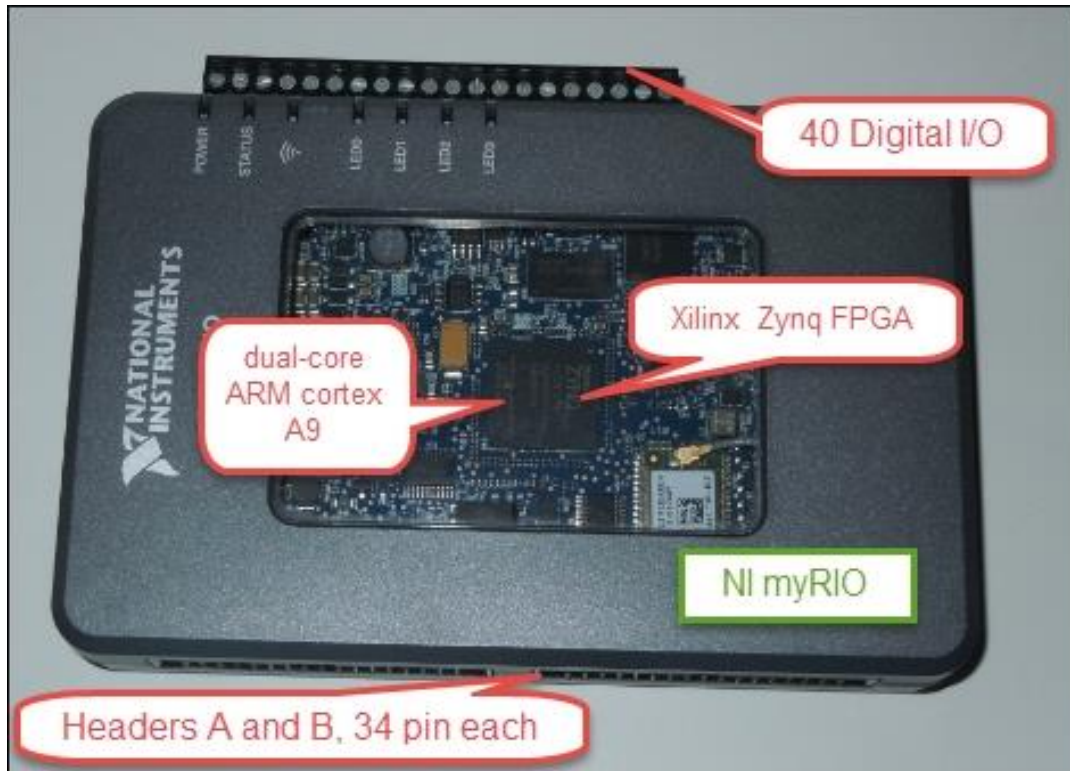
Chapter 6: Real-World DAQ Programming Techniques

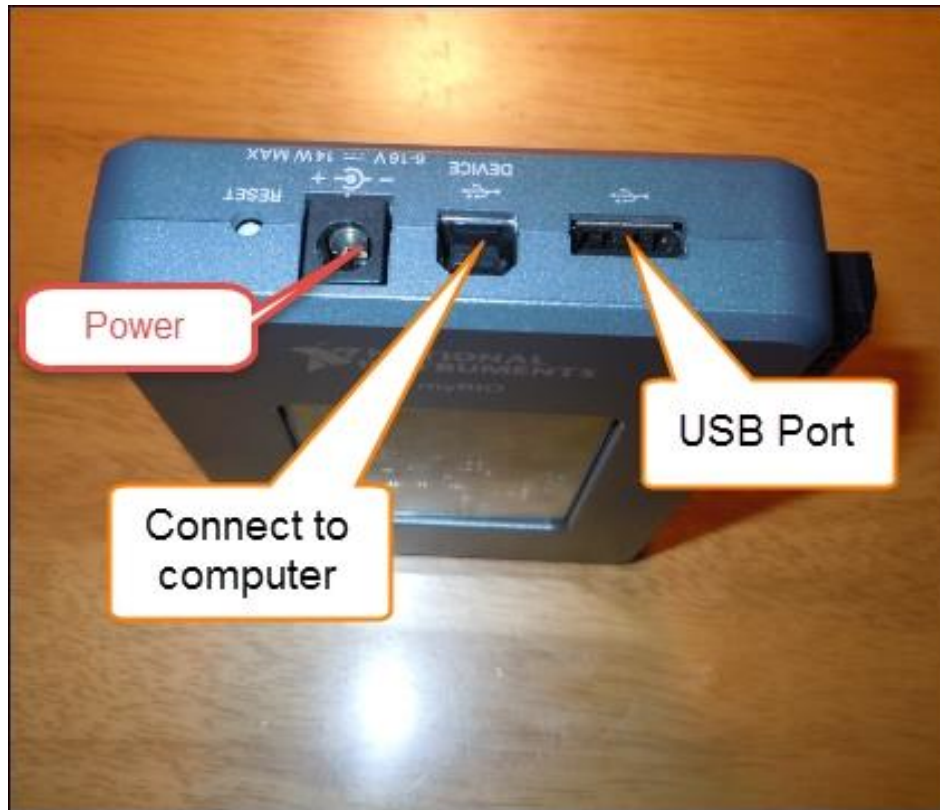
Name	Date modified	Type	Size
0_SuperCap Load	12/27/2012 2:35 PM	Text Document	1 KB
1_Radio Load	12/27/2012 2:33 PM	Text Document	1 KB
2_system_load	12/27/2012 5:24 PM	Text Document	1 KB
3_supercap_PS			
4_harvest_PS			

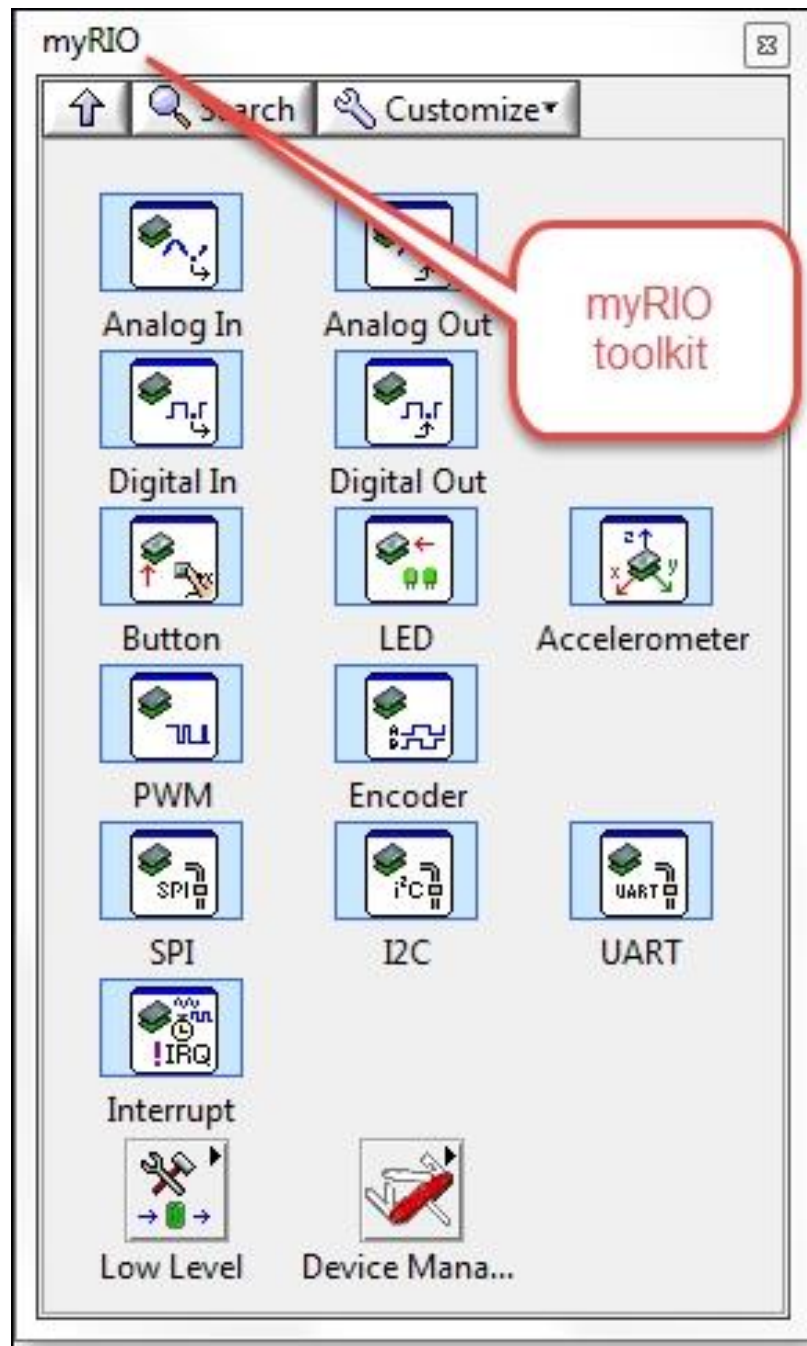
4_harvest_PS - Notepad			
File Edit Format View Help			
device ID	4		
local_or_remote_mode		remote	
output_state	off		
output_voltage	5.0		
output_current	1.5		



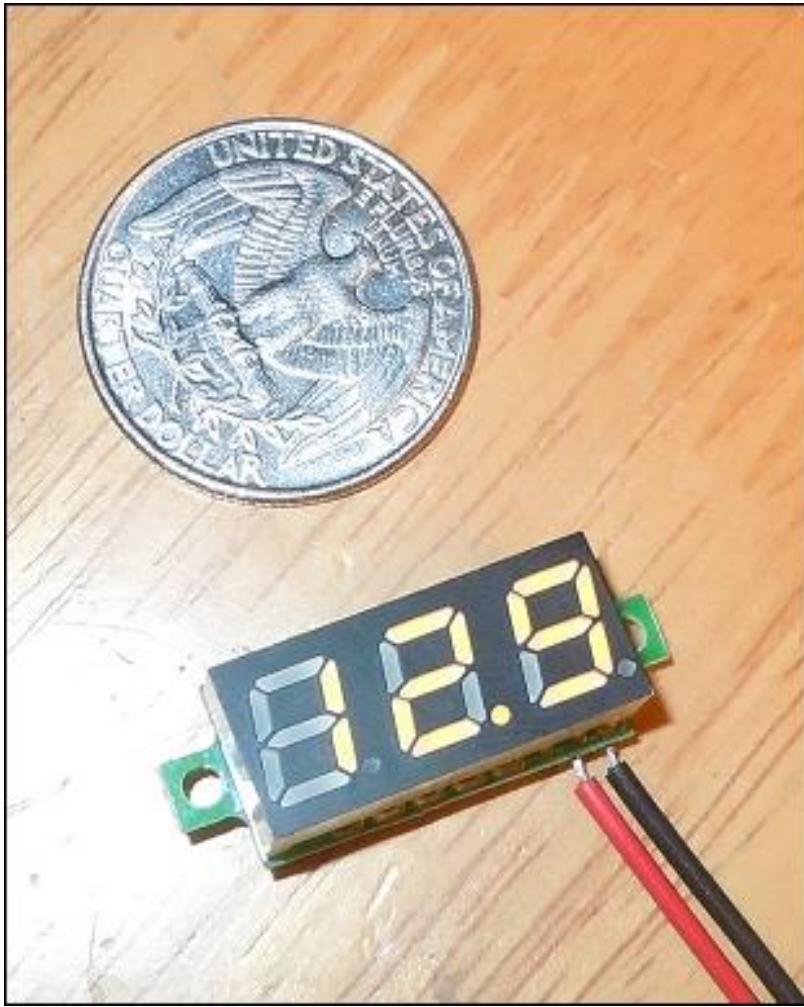
Chapter 7: Real-Time Issues



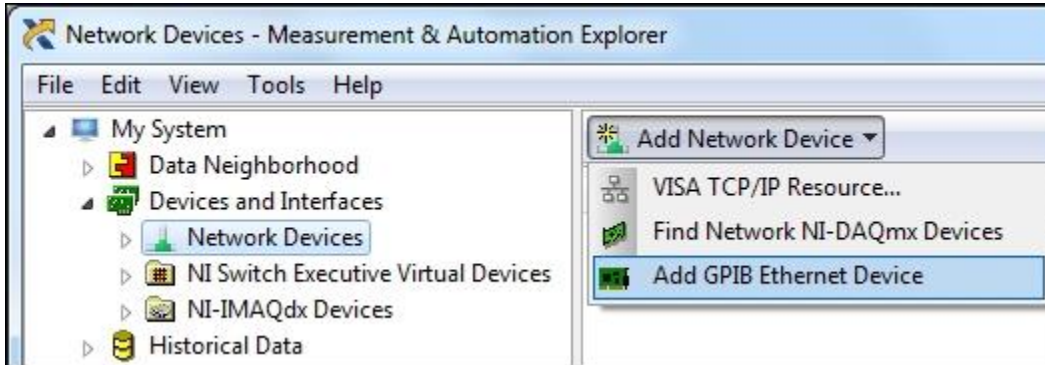


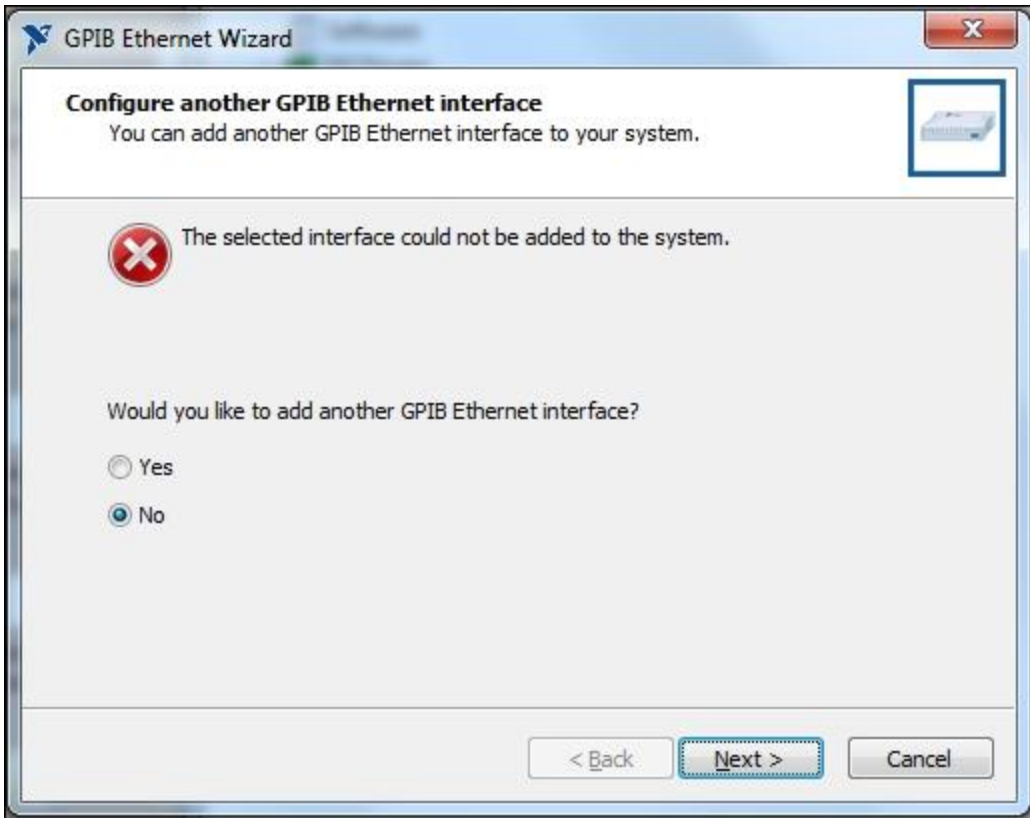


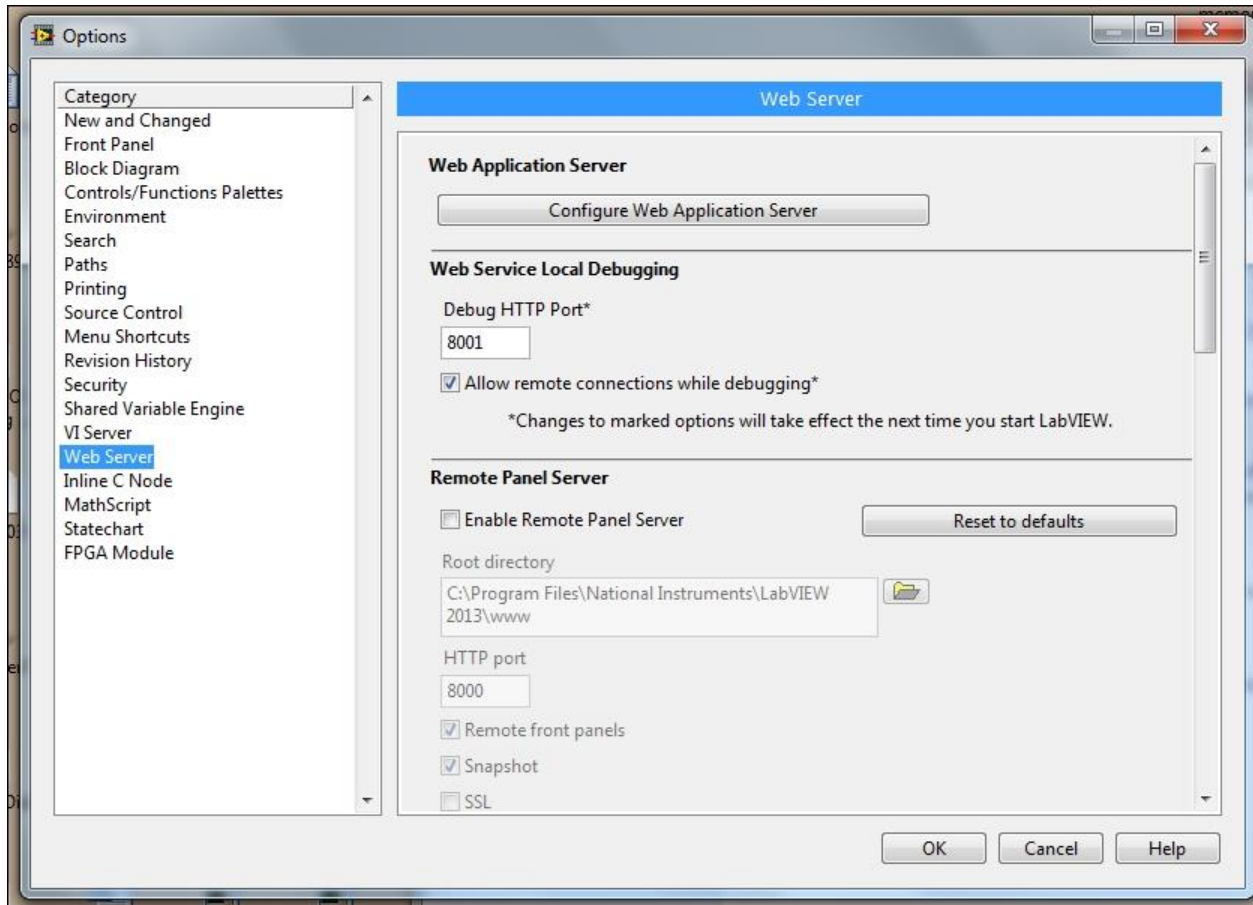


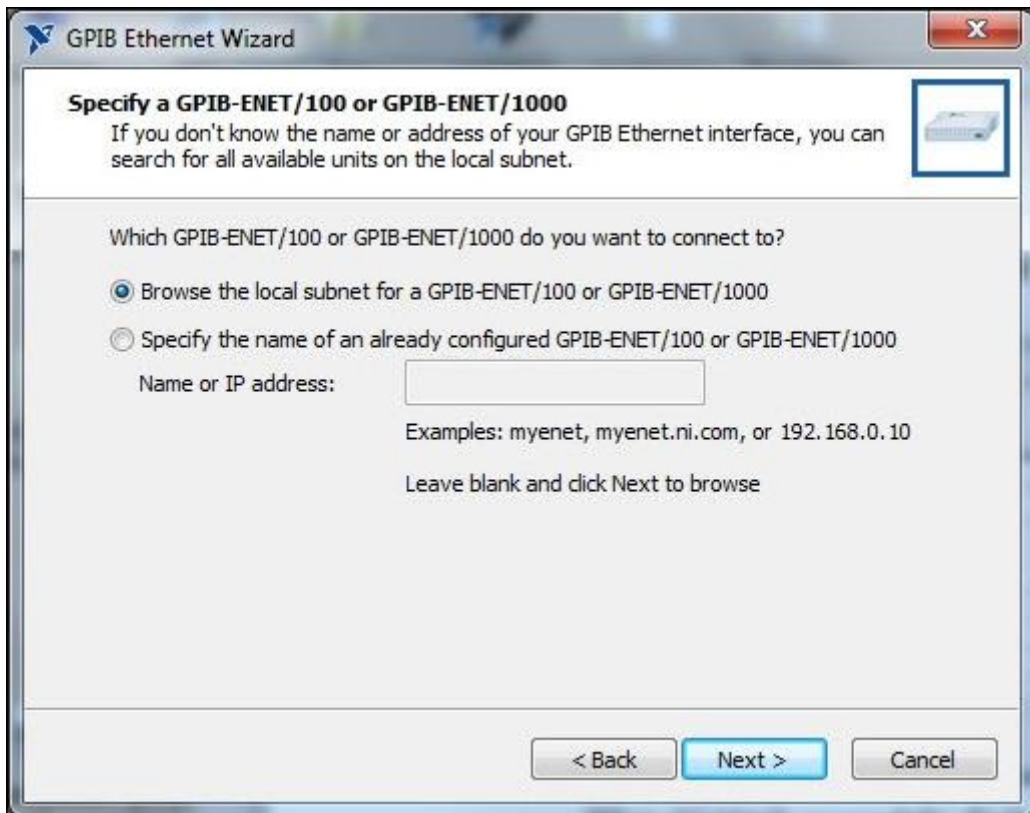
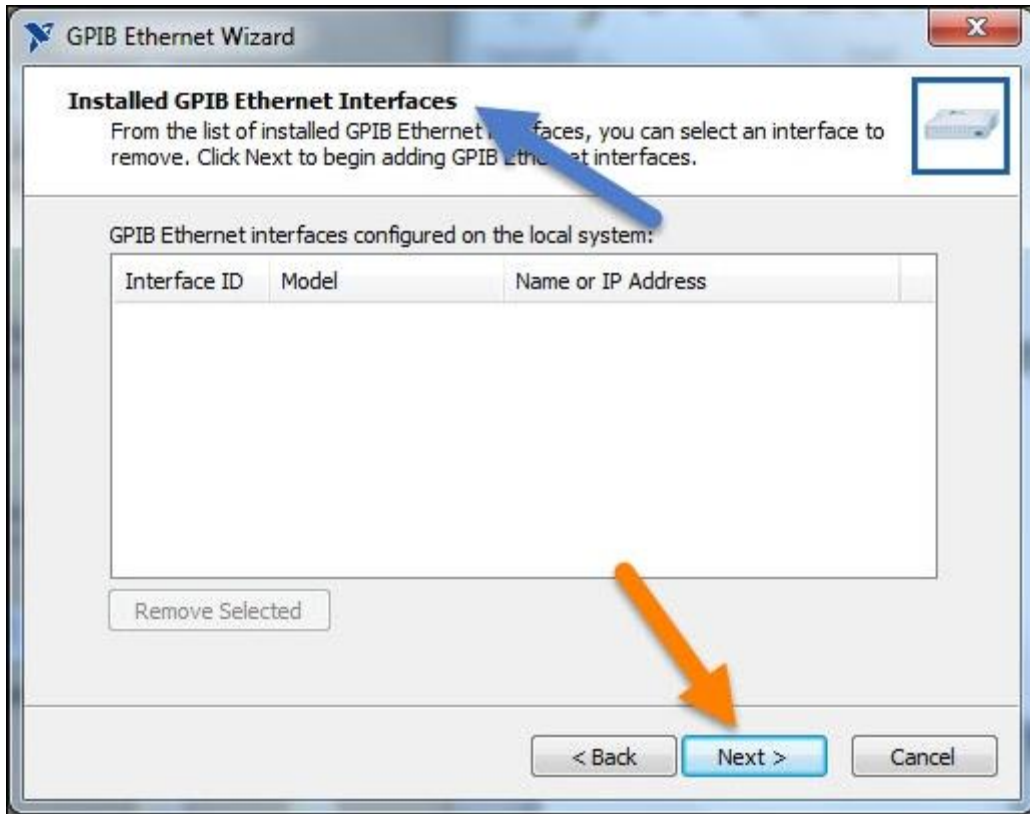


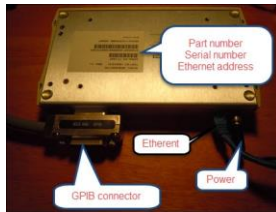
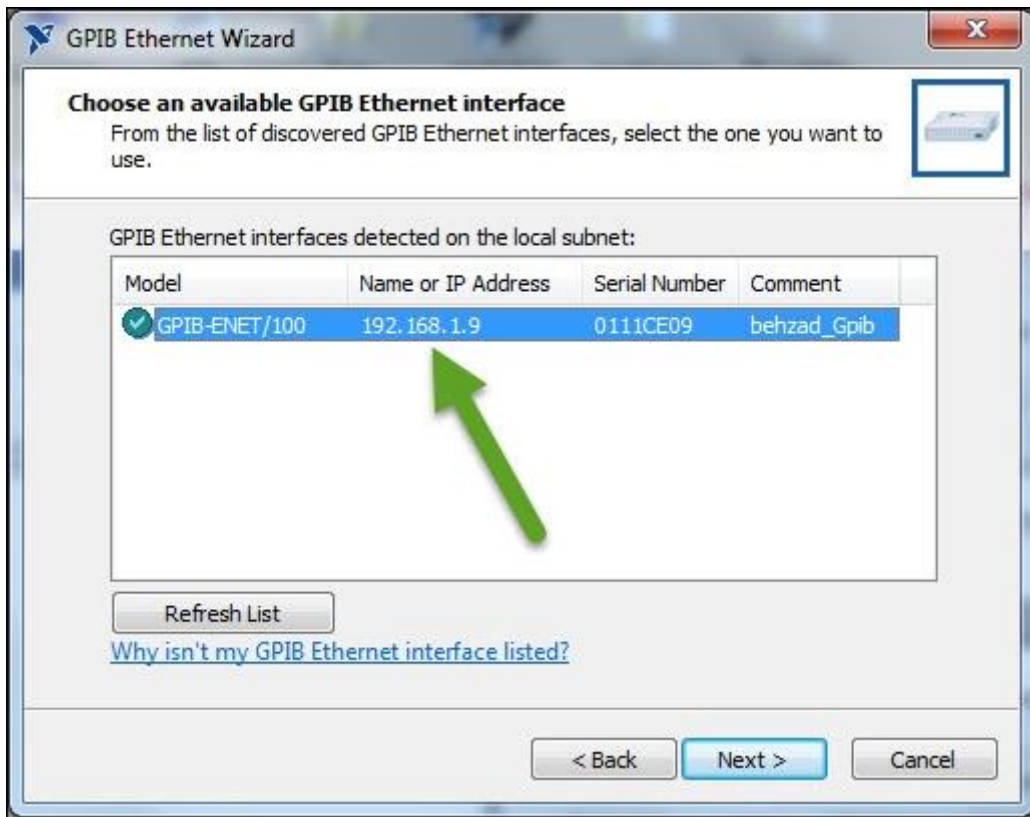
Chapter 8: DAQ at a Distance - Network and Distributed Systems

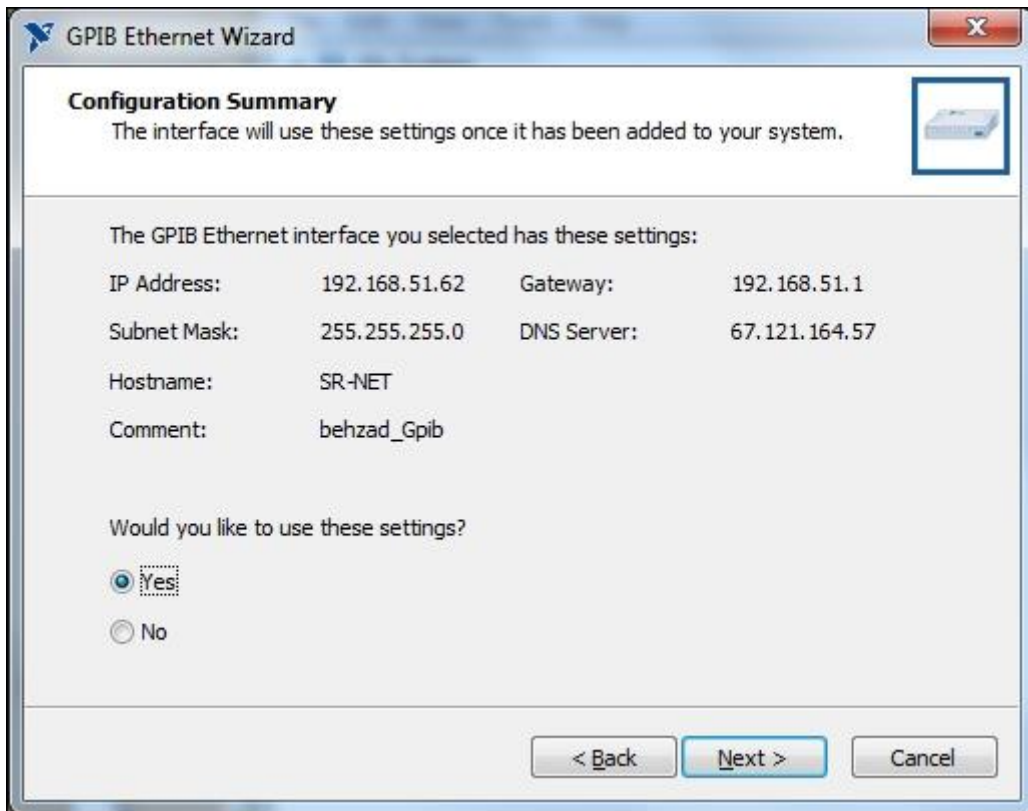












```
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

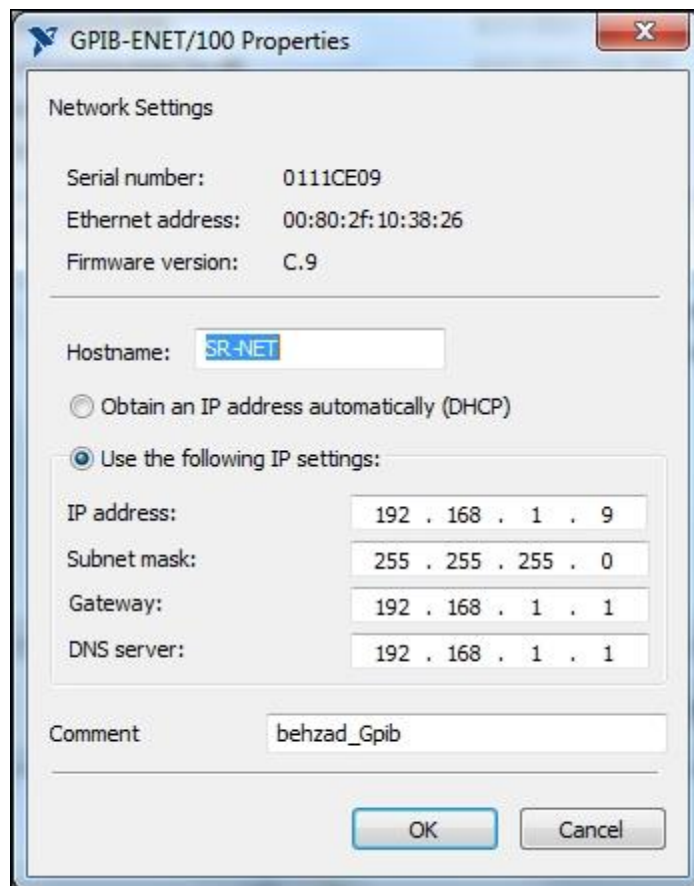
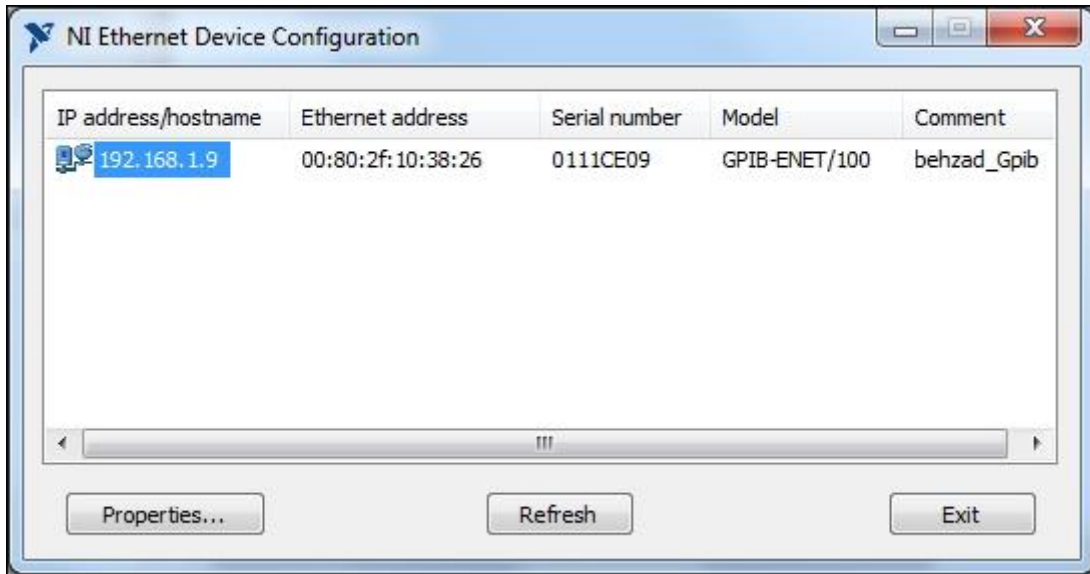
C:\Users\Ketaab>ping 192.168.1.9

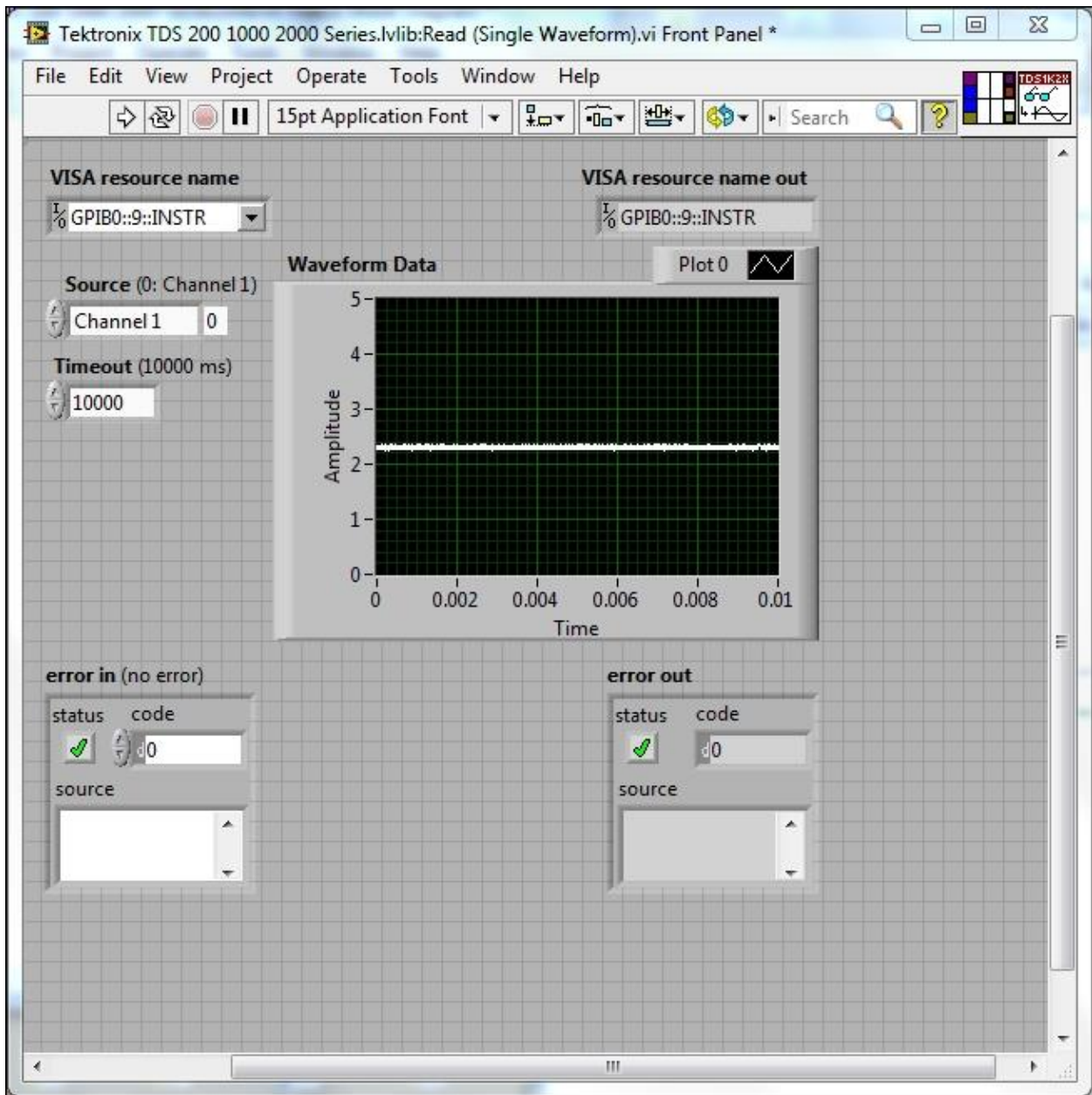
Pinging 192.168.1.9 with 32 bytes of data:
Reply from 192.168.1.9: bytes=32 time=1ms TTL=255
Reply from 192.168.1.9: bytes=32 time=3ms TTL=255
Reply from 192.168.1.9: bytes=32 time=1ms TTL=255
Reply from 192.168.1.9: bytes=32 time=1ms TTL=255

Ping statistics for 192.168.1.9:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 3ms, Average = 1ms

C:\Users\Ketaab>
```







Select an instrument Code generation
VISA Code Generation

Timeout (ms) Termination character

Do 488.2 error checking
Note: error checking

Warning!

You have selected an instrument, but you have not inserted any steps that communicate with your instrument. To communicate with your instrument, add one of the following steps:


- 1) Write
- 2) Read and Parse
- 3) Query and Parse

Do you still want to exit Instrument I/O Assistant?

Do not show this dialog again.



Have you tried finding an instrument driver for your instrument? Instrument drivers simplify instrument control and reduce test program development time by eliminating the need to learn the programming protocol for each instrument. Locate and download an instrument driver for your instrument by selecting "Help>>Find Instrument Drivers" from the LabVIEW menu.

Resolve Load Conflict


 An item named **Tektronix TDS 200 1000 2000 Series.lvlib:Error Query.vi** has been loaded from a path that **Tektronix TDS 200 1000 2000 Series.lvlib:Read (Multiple Waveforms).vi** does not expect.


If you continue loading, LabVIEW will update **Tektronix TDS 200 1000 2000 Series.lvlib:Read (Multiple Waveforms).vi** to refer to the new path.


Conflicting Items

Path	LabVIEW Version
 C:\Users\Ketab\Desktop\Tektronix TDS 200 1000 2000 Series\Public\Utility\Error	12.0
 C:\Program Files\National Instruments\LabVIEW 2013\instr.lib\Tektronix TDS 200	???

Details for Selected Item

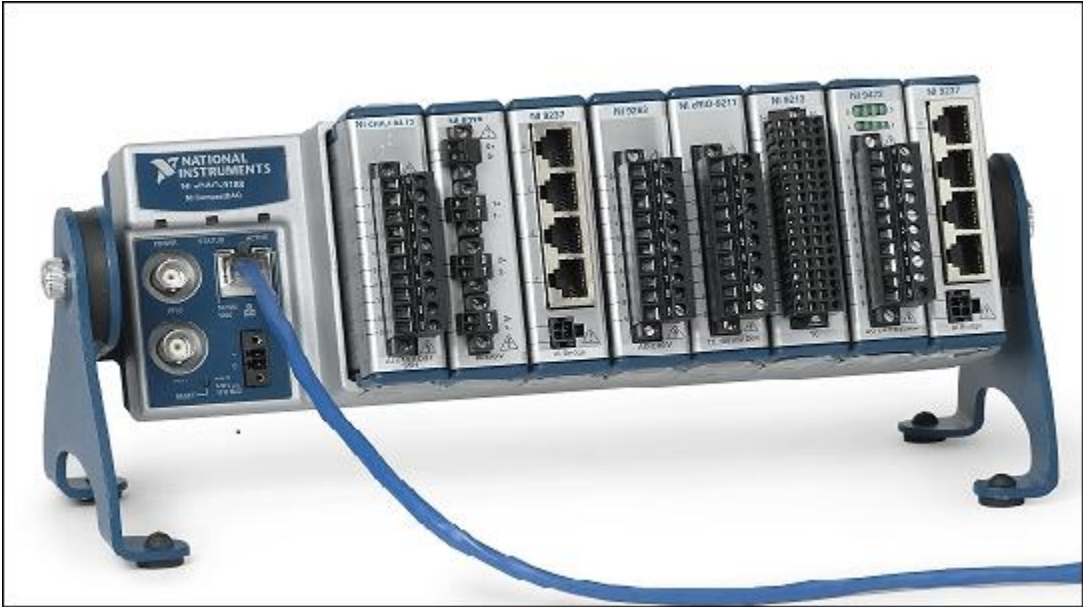
 Path: C:\Users\Ketab\Desktop\Tektronix TDS 200 1000 2000 Series\Public\Utility\Error
Query.vi
 Qualified name: **Tektronix TDS 200 1000 2000 Series.lvlib:Error Query.vi**
 File created: 2/1/2016 6:06:31 PM
 File modified: 2/6/2014 8:46:19 PM

 **Tektronix TDS 200 1000 2000 Series.lvlib:Read (Multiple Waveforms).vi** does not expect **Tektronix TDS 200 1000 2000 Series.lvlib:Error Query.vi** at this path. If this is not the correct path, cancel loading and close this copy of **Tektronix TDS 200 1000 2000 Series.lvlib:Error Query.vi**.

 **Tektronix TDS 200 1000 2000 Series.lvlib:Error Query.vi** is already loaded at this path.

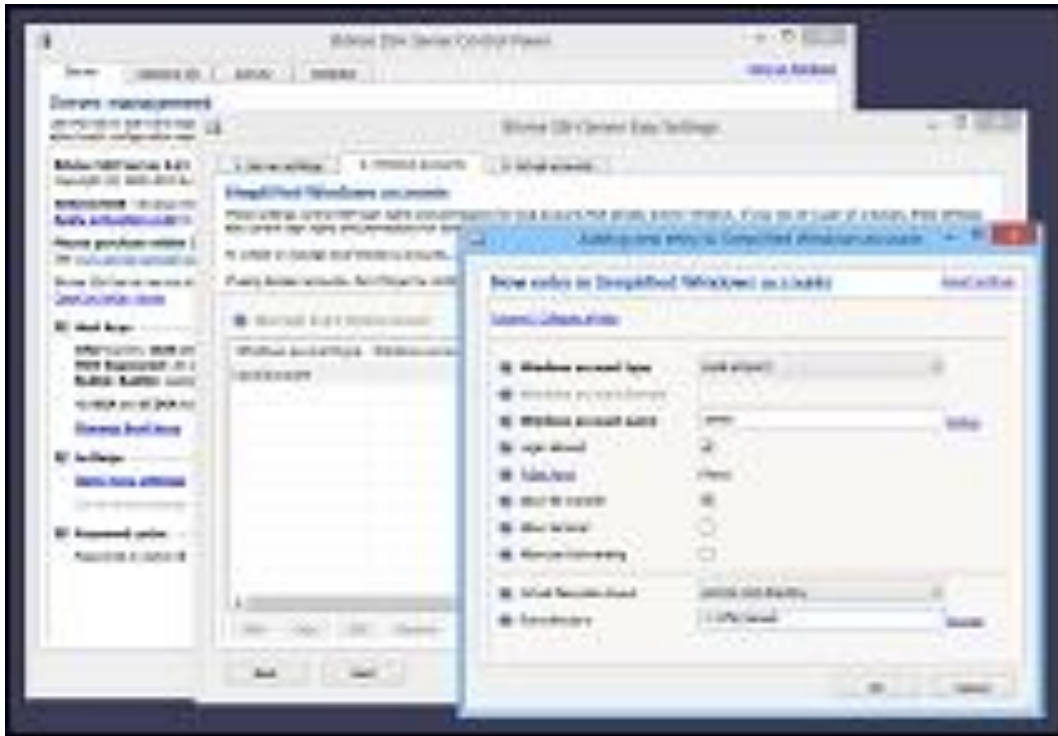
Tektronix TDS 200 1000 2000 Series Readme.html: [Warning: has been deleted, renamed, or moved]

Chapter 9: Alternate Software for DAQ









Chapter 10: Non-National Instrument Devices DAQ



