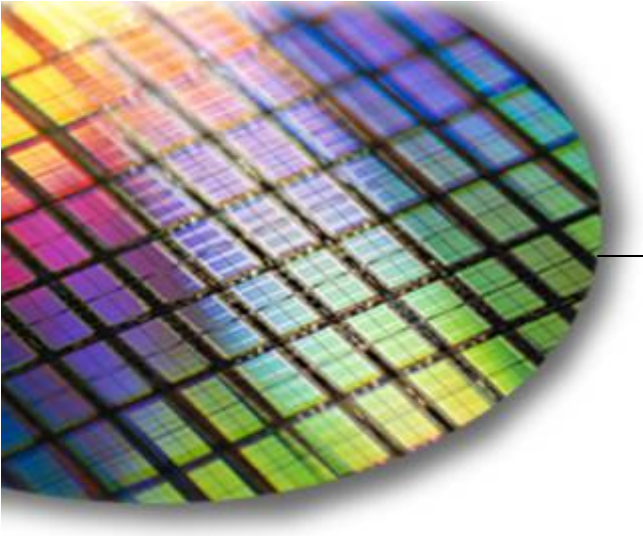


The World Leader in High Performance Signal Processing Solutions

*i*Sensor®

ADIS16135 Evaluation Tool Overview

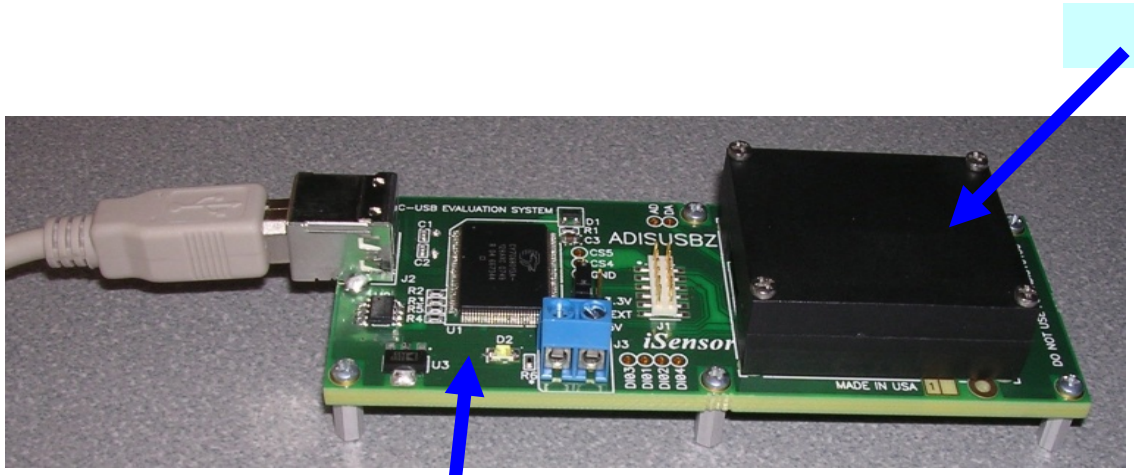
Mark Looney
***i*Sensor® Application Engineer**
July 2011

ANALOG DEVICES

*i*Sensor® The Simple Solution for Sensor Integration

PC-Based Evaluation

- **The ADISUSBZ provides PC-based demonstration and basic evaluation support for the ADIS16135BMLZ.**
  - This system provides a simple USB interface, along with a simple graphical user interface (GUI) package, for evaluating most of the ADIS16135 functions and performance.
  - This system is most useful for basic data collection and performance validation.
  - This is not a real-time development system. No SDK available.
  - Part number for ordering: (1) ADIS16135BMLZ, (1) ADISUSBZ



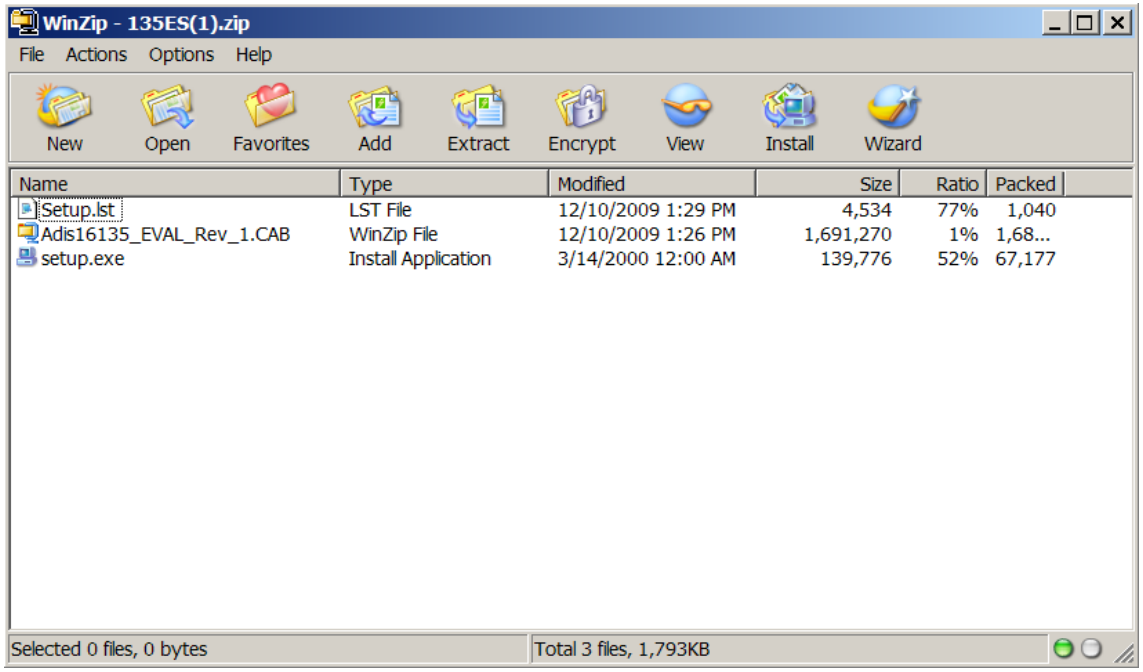
ANALOG DEVICES

*i*Sensor® The Simple Solution for Sensor Integration

ADIS16135 Demonstration Software Installation

The ADIS16135 demonstration software can be found at
www.analog.com/ADIS16135

1. Click on “Evaluation Software Downloads”
2. Click on 135ES.zip and save it to a temporary directory
3. Open it and double click on setup.exe.



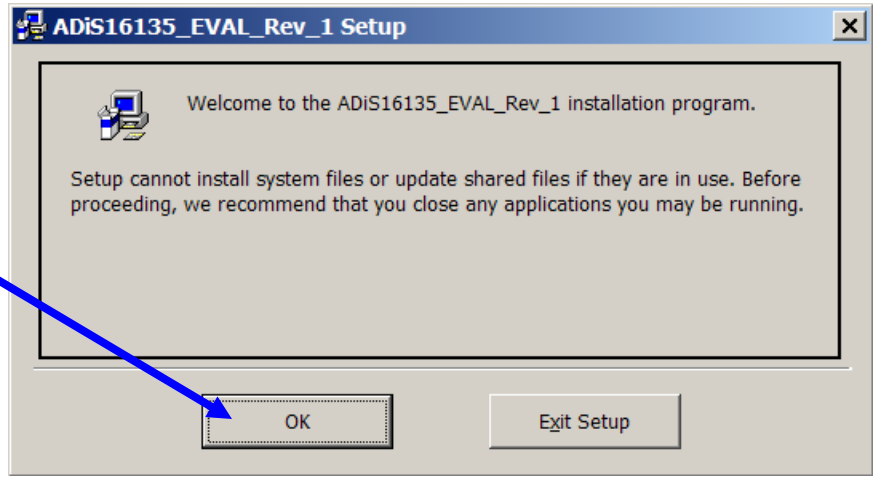
ANALOG DEVICES

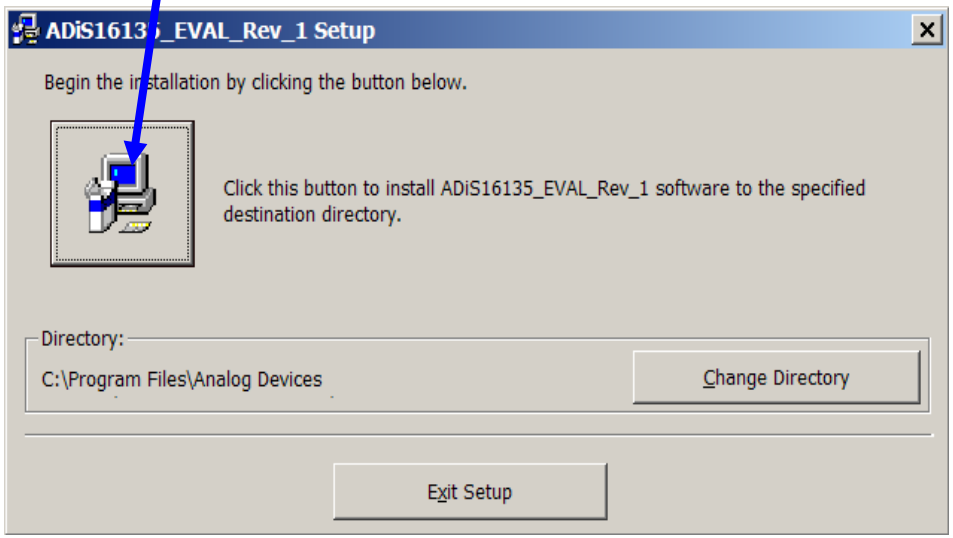
*i*Sensor® The Simple Solution for Sensor Integration

ADIS16135 Demonstration Software Installation

Installation Steps (continued)

4. Click **OK** on next screen
5. Click here to start installation





ANALOG DEVICES

*i*Sensor® The Simple Solution for Sensor Integration

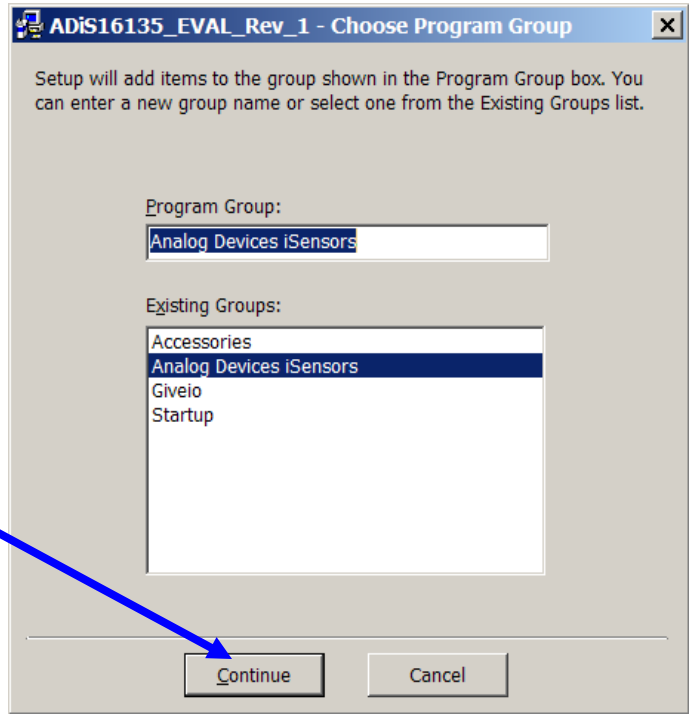
ADIS16135 Demonstration Software Installation

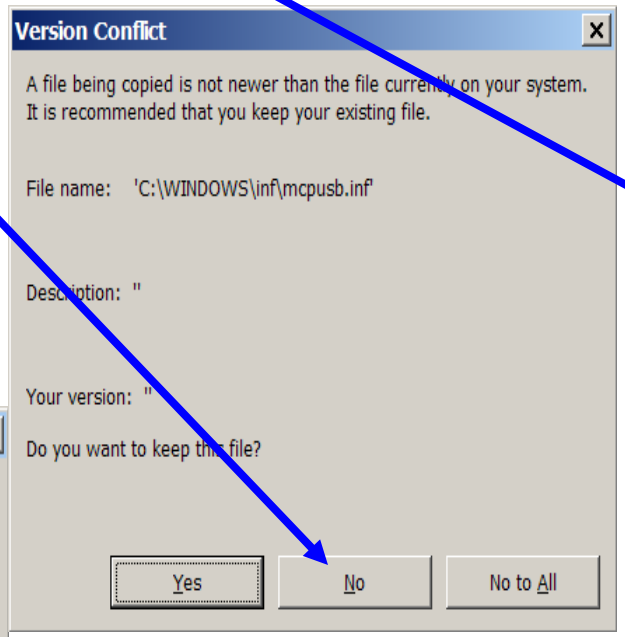
Installation Steps (continued)

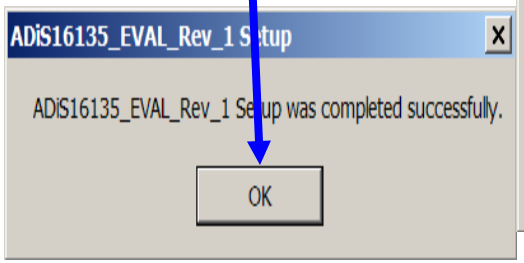
6. Click **Continue**

7. If this message comes up, click on **No**

8. Click **OK**







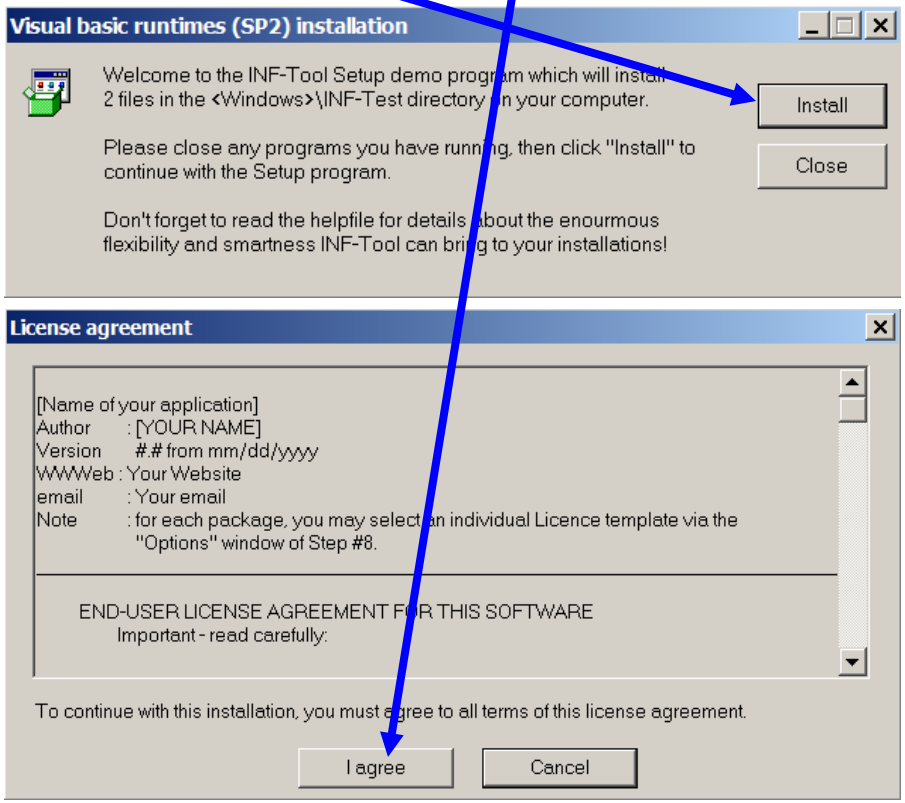
ANALOG DEVICES

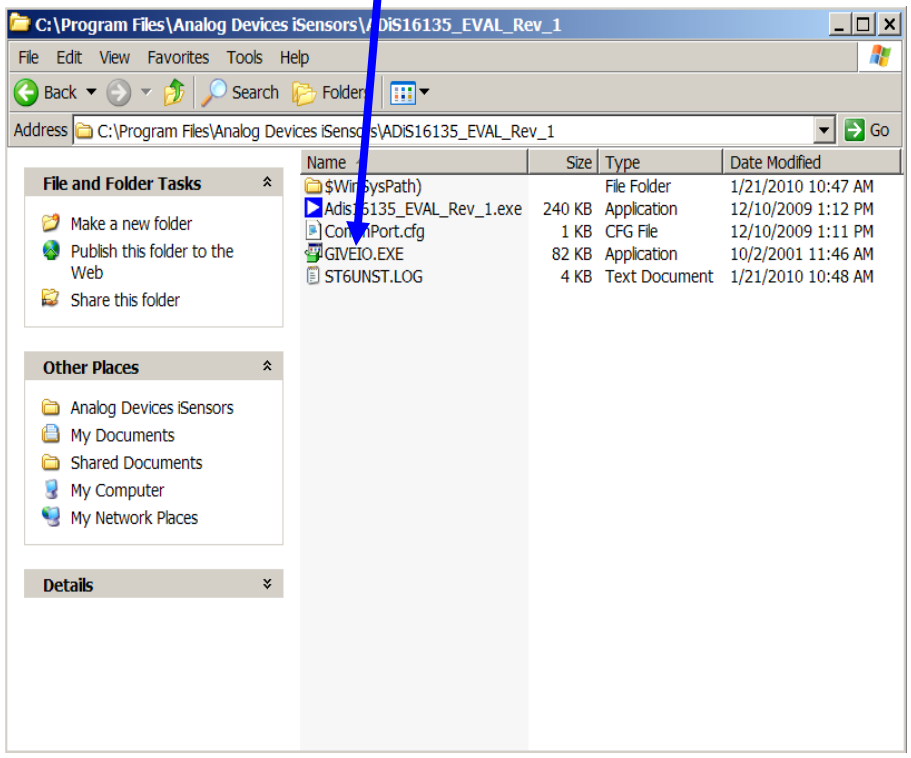
*i*Sensor® The Simple Solution for Sensor Integration

ADIS16135 Demonstration Software Installation

Installation Steps (continued)

9. Open the newly created directory and double-click onto **GIVEIO.EXE**
10. Click **Install,** then **I agree**





ANALOG DEVICES

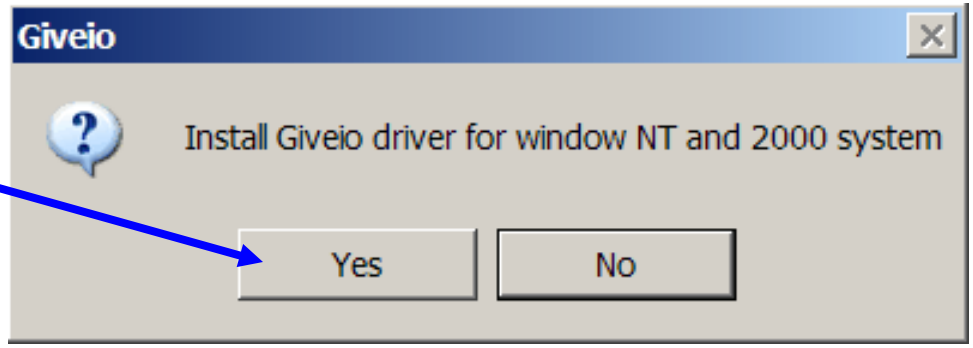
*i*Sensor® The Simple Solution for Sensor Integration

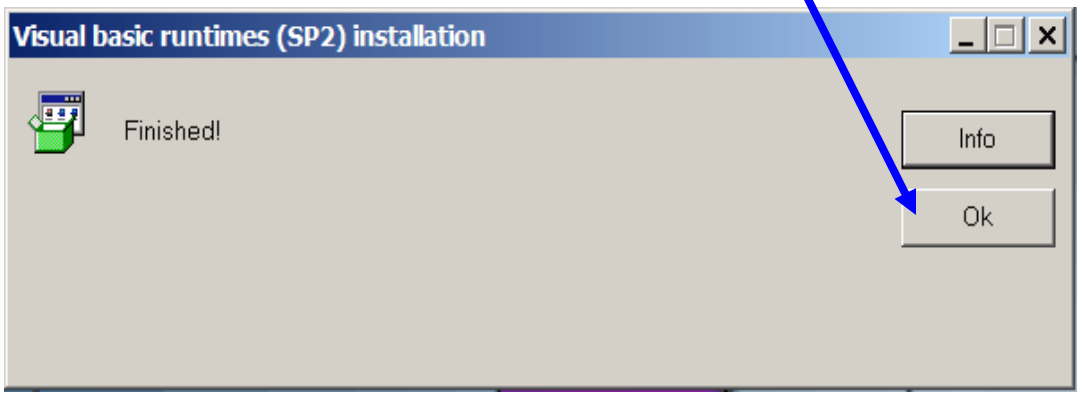
ADIS16135 Demonstration Software Installation

Installation Steps (continued)

11. Click **Yes**

12. Giveio Driver complete, click **OK**





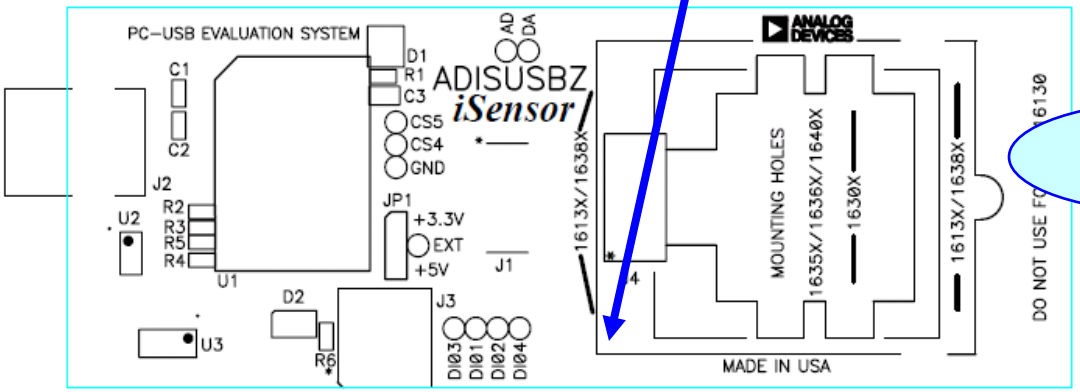
ANALOG DEVICES

*i*Sensor® The Simple Solution for Sensor Integration

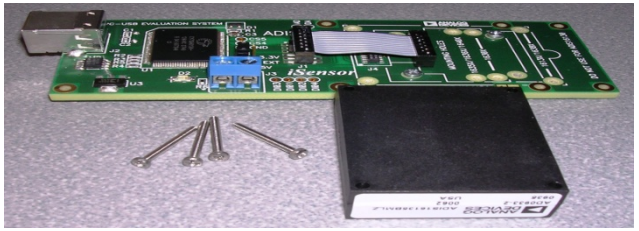
ADIS16135BMLZ Installation on ADISEVALUSBZ-135

Installation Steps (continued)

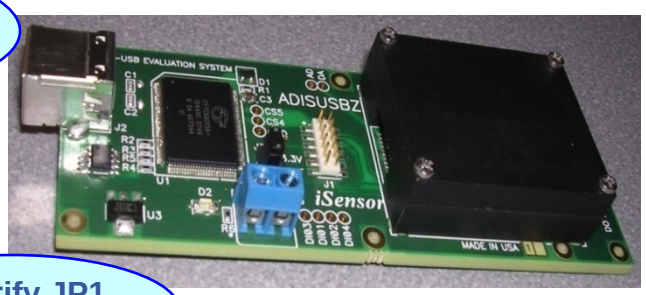
13. Install ADIS16135BMLZ on ADISEVALUSBZ
14. Remove ribbon cable and screws
15. Carefully insert the ADIS16135BMLZ into the J4 connector
16. Secure part with 2x18mm screws



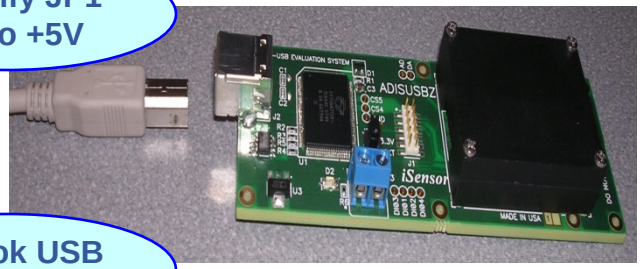
1. Secure with 2x18mm screws



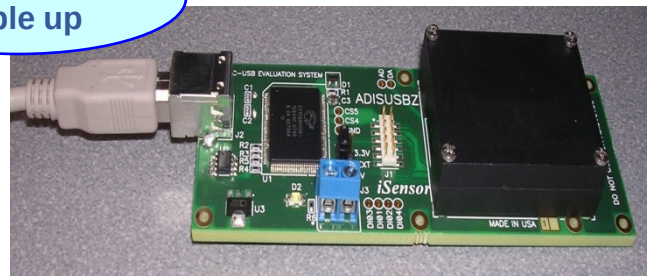
2. Attach 135/PCBZ to J4 Connector



3. Verify JP1 set to +5V



4. Hook USB cable up



ANALOG DEVICES

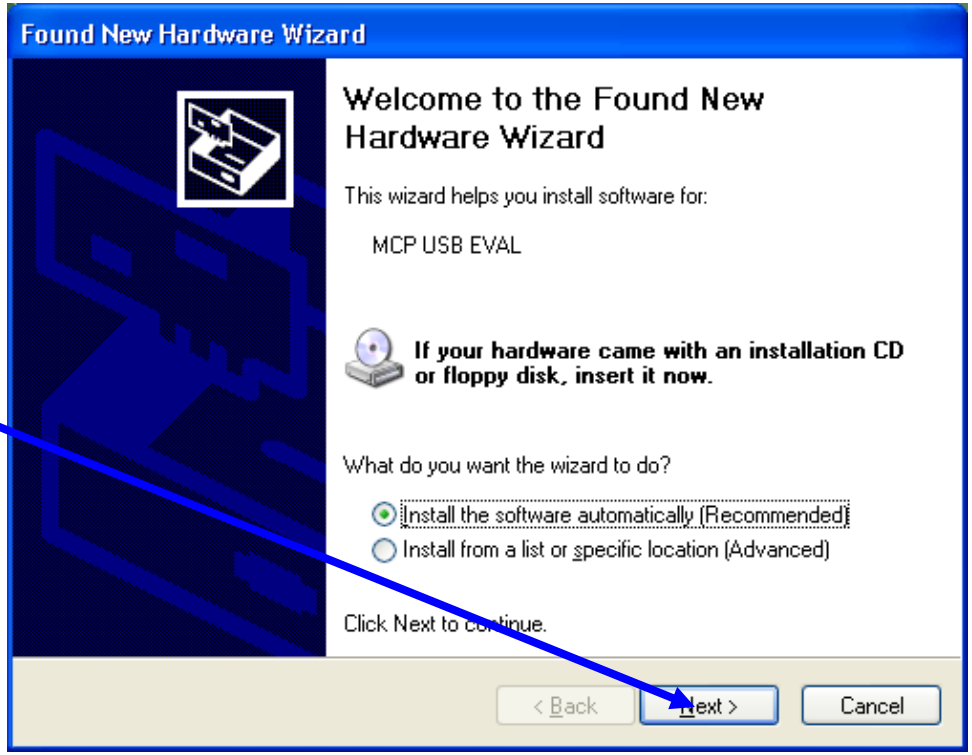
*i*Sensor® The Simple Solution for Sensor Integration

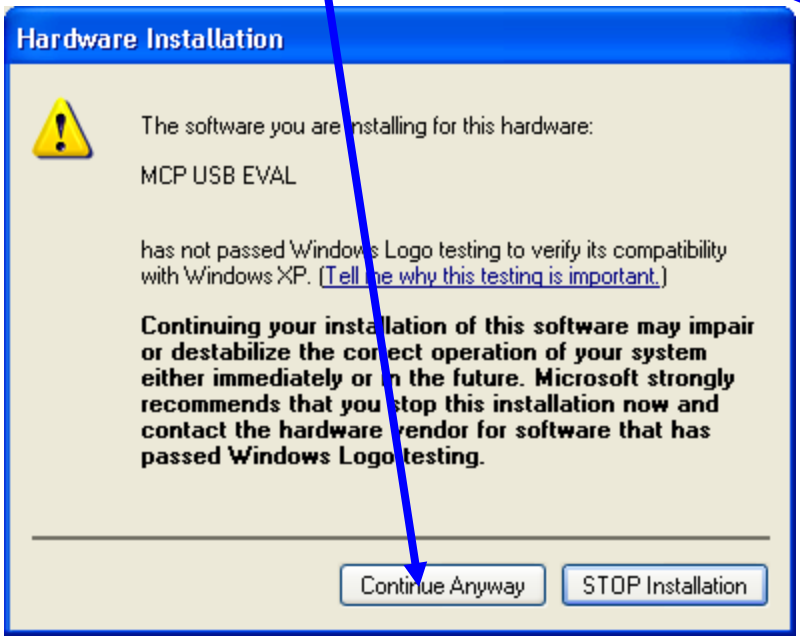
ADIS16135 Demonstration Software Installation

Installation Steps (continued)

17. USB Driver screen will pop-up
    Click **Next** to start this process

18. Then click on
    Continue Anyway



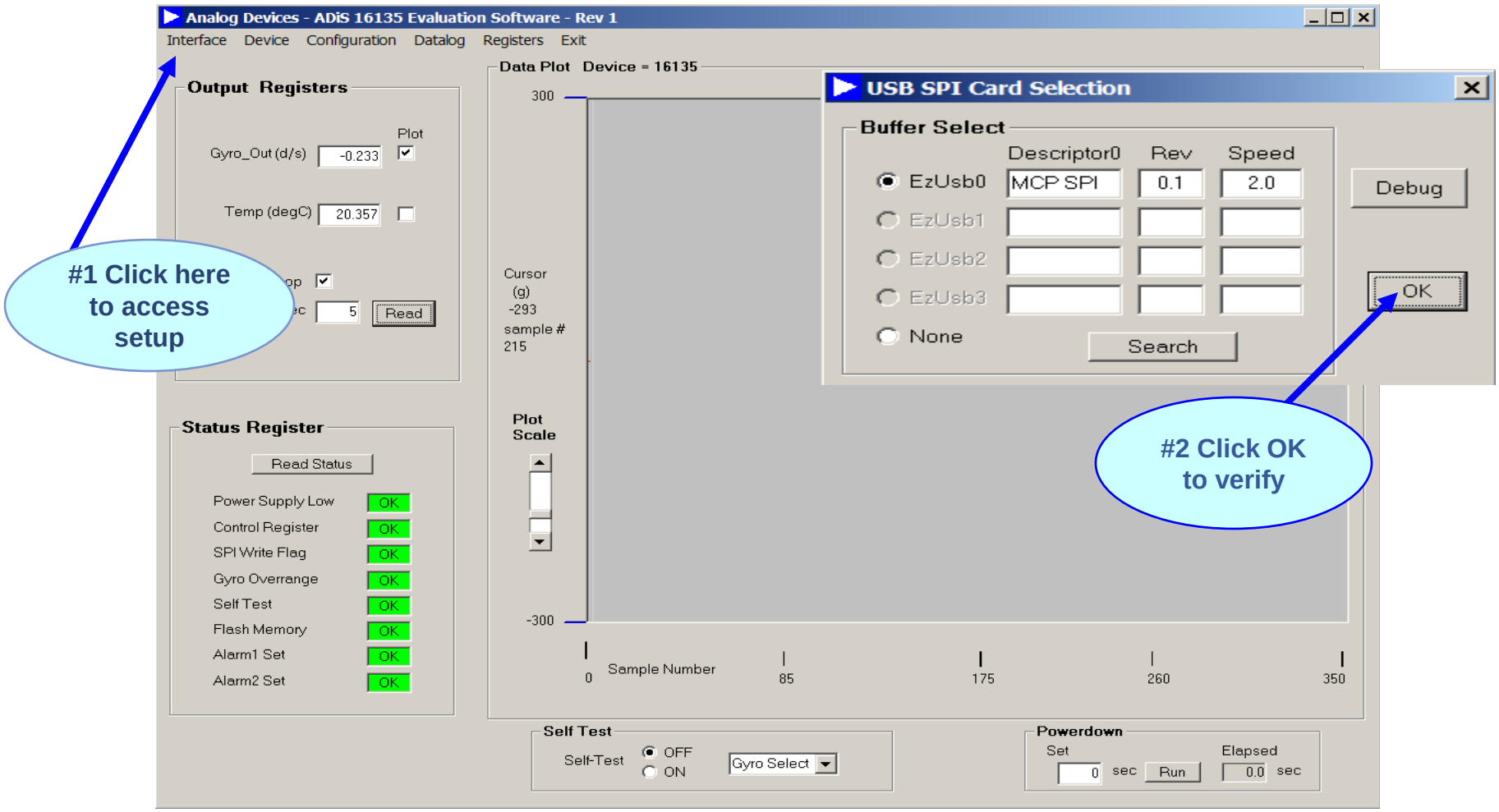


This process will repeat for a second driver file. Just follow the instructions and allow it to go through one more time. After completing this, the devices is ready for test.

ANALOG DEVICES

*i*Sensor® The Simple Solution for Sensor Integration

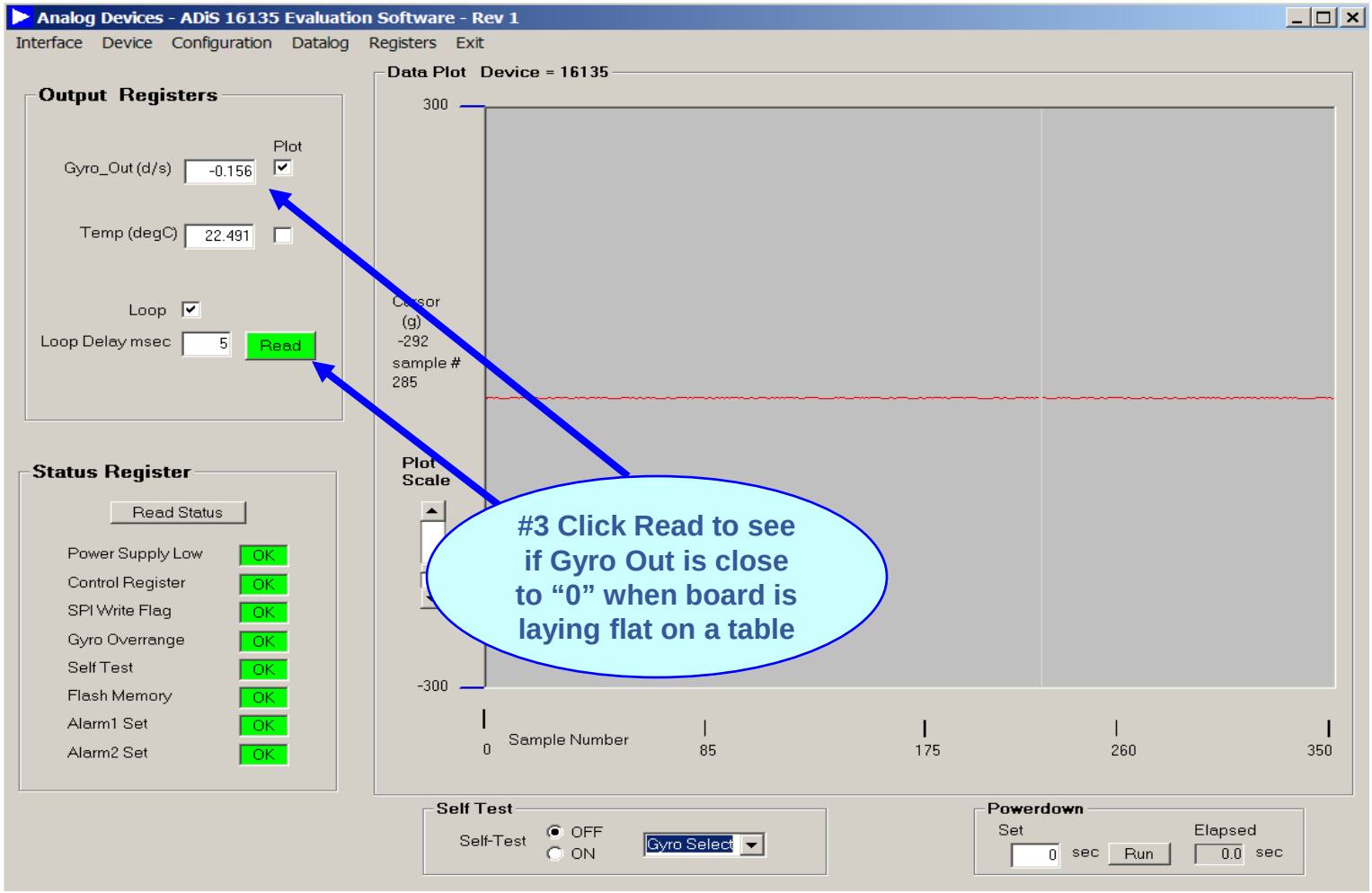
ADIS16135 Demonstration Tips—Verify USB Driver



ANALOG DEVICES

*i*Sensor® The Simple Solution for Sensor Integration

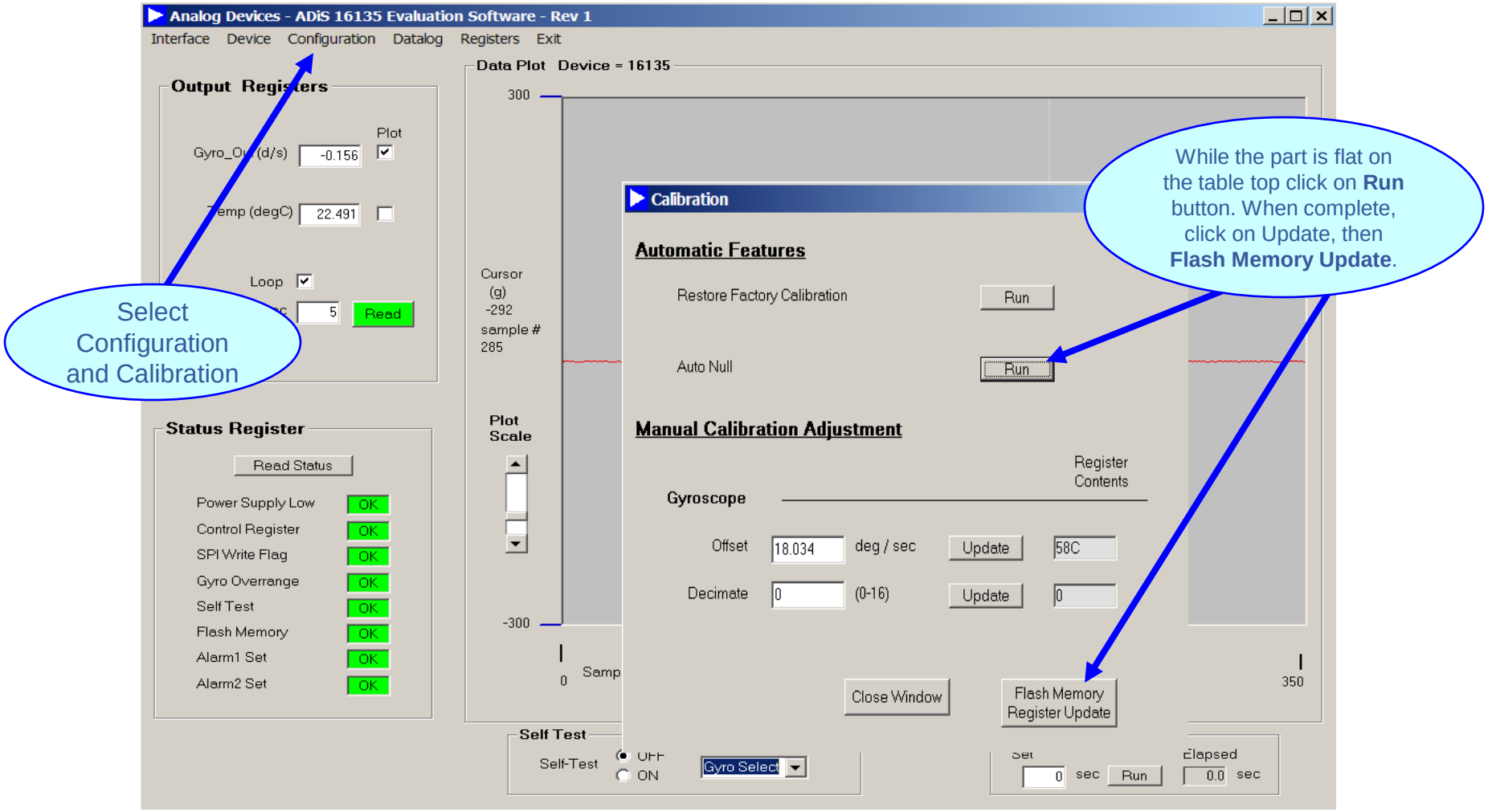
ADIS16135 Demonstration Tips— Initial Start up



ANALOG DEVICES

*i*Sensor® The Simple Solution for Sensor Integration

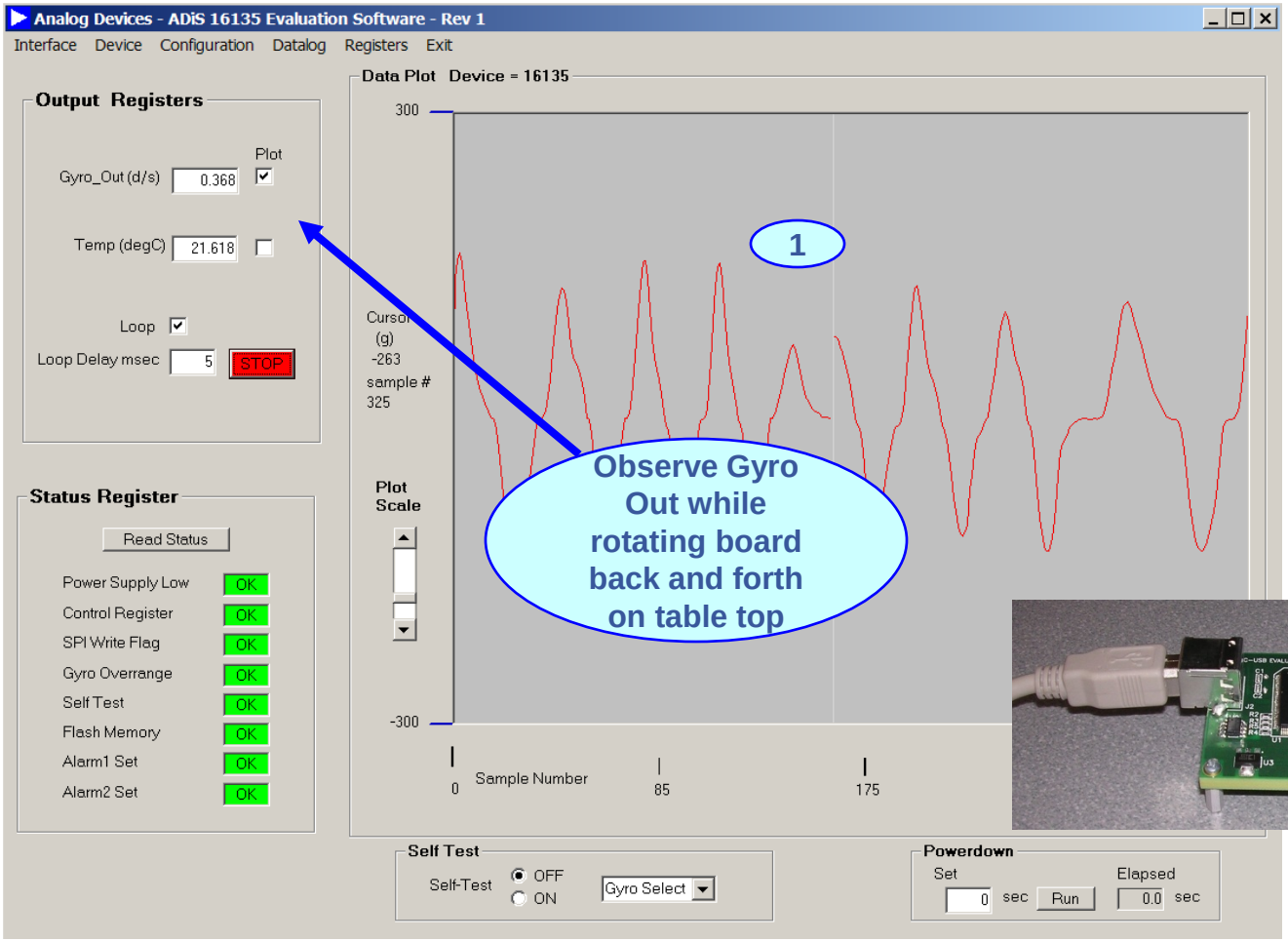
ADIS16135 Demonstration Tips—AUTO-Null

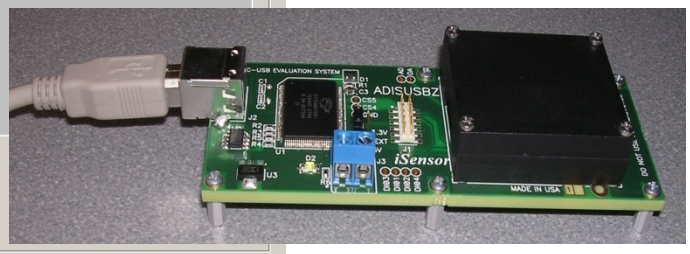


ANALOG DEVICES

iSensor® The Simple Solution for Sensor Integration

ADIS16135 Demonstration Tips— Gyro

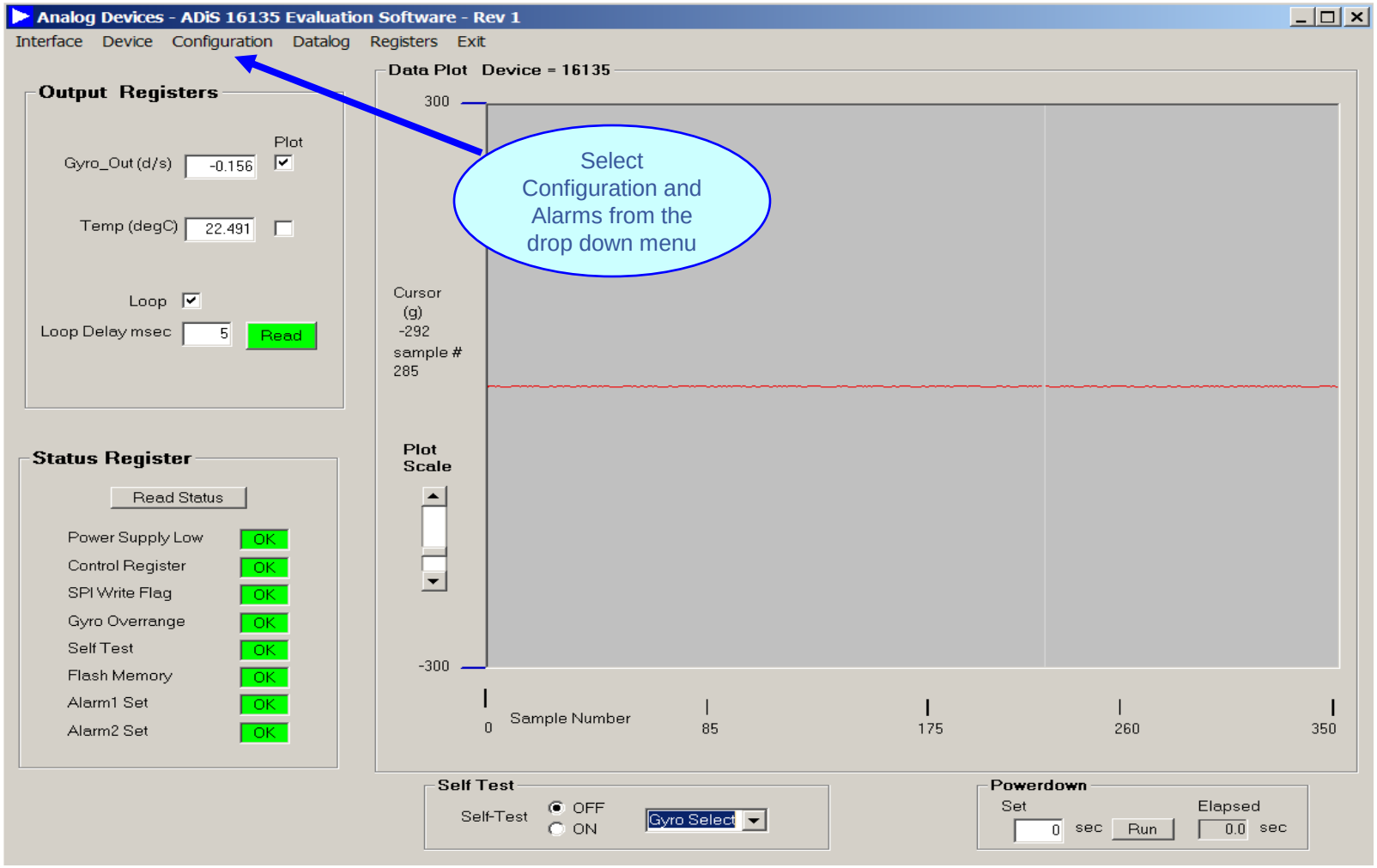




1. **Watch the Gyro Out response on screen.**

iSensor® The Simple Solution for Sensor Integration

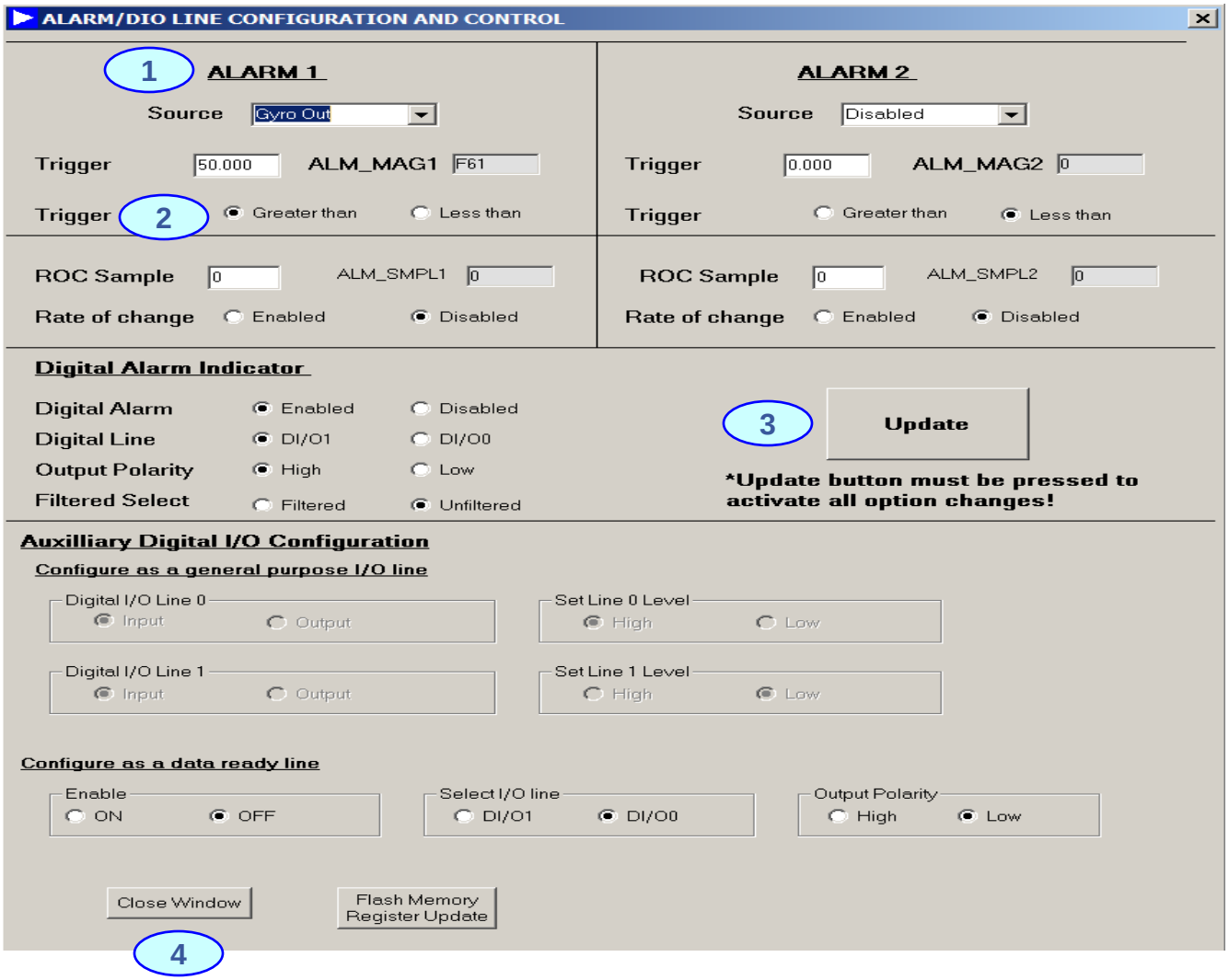
ADIS16135 Demonstration Tips— Alarms??



ANALOG DEVICES

*i*Sensor® The Simple Solution for Sensor Integration

ADIS16135 Demonstration Tips— Alarm Set up

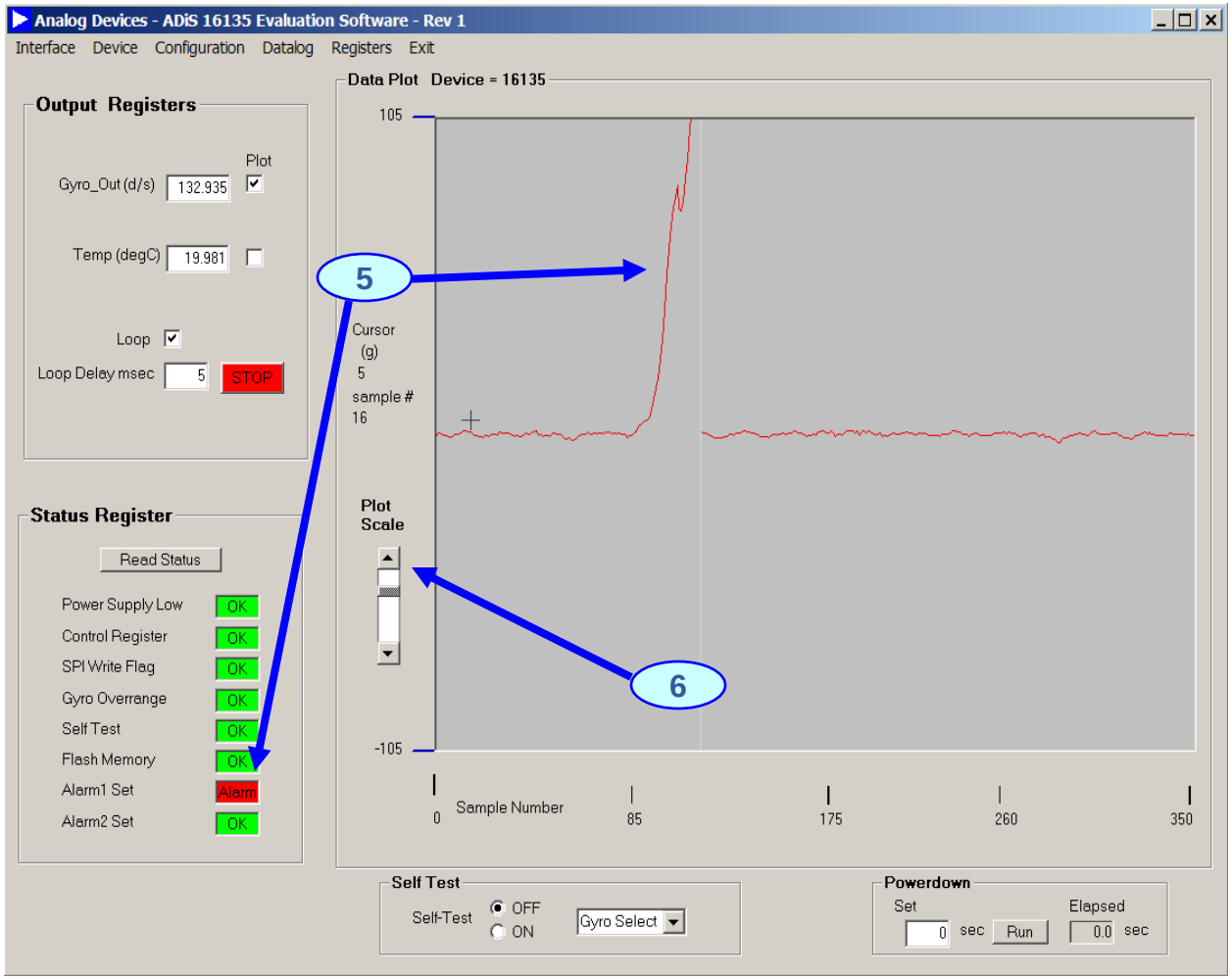


1. **Set Alarm 1 source for Gyro Out.**
2. **Set the Trigger level to 50 and Greater Than**
3. **Click the Update button to accept changes**
4. **Click on Close Window to return to the main screen**

ANALOG DEVICES

iSensor® The Simple Solution for Sensor Integration

ADIS16135 Demonstration Tips— Alarms Continued

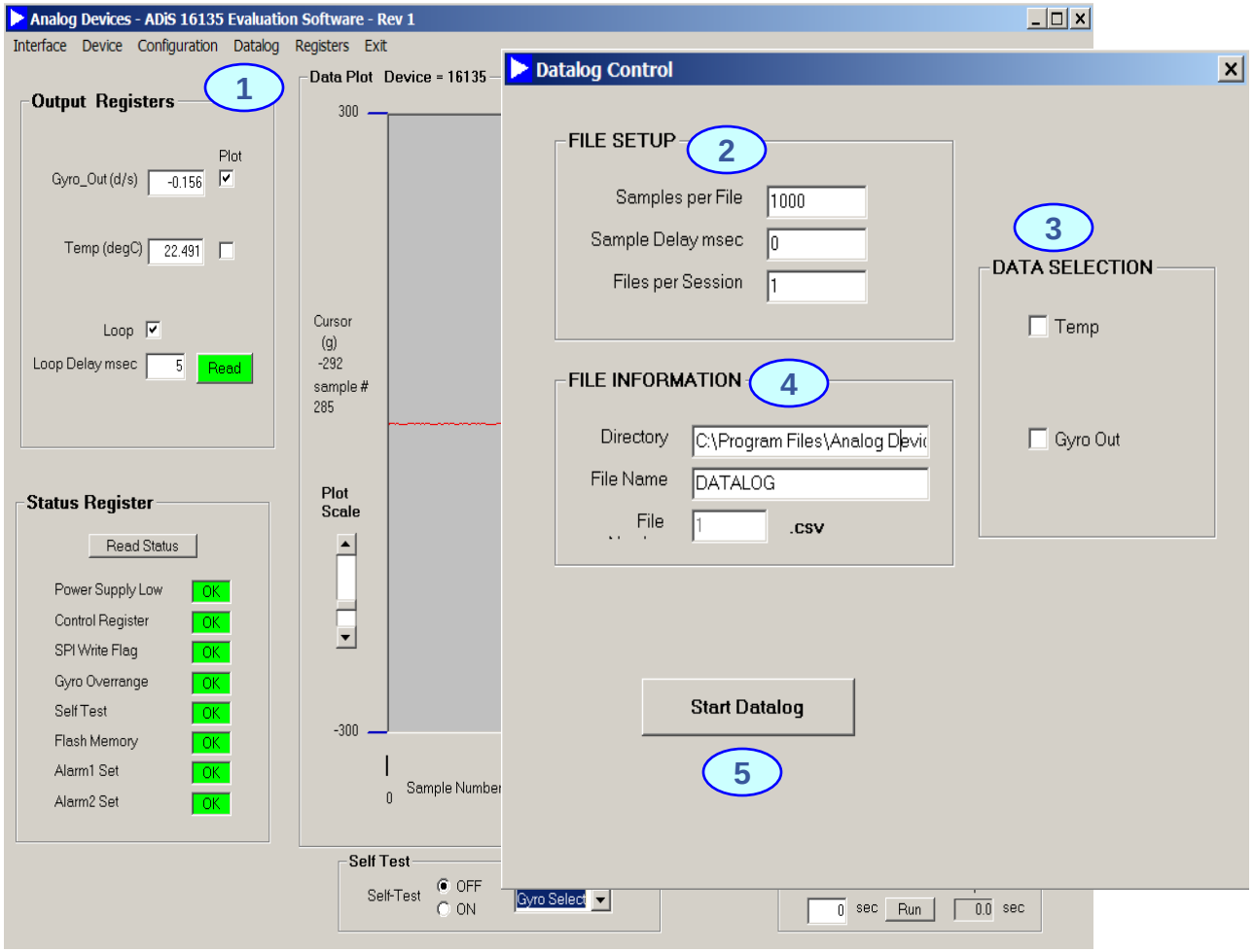


5. **Alarm 1 is set when the Gyro level is above 50**
6. **The Plot Scale can be changed for a more accurate reading by moving the slider**

ANALOG DEVICES

iSensor® The Simple Solution for Sensor Integration

ADIS16135 Demonstration Tips— Collect Data



1. Select Datalog on the main screen
2. File Setup- enter # of samples delay and # of files
3. Data Selection- Choose the output data you want
4. File Information- Enter the file name and # of files
5. Start Datalog- Click the button to begin data processing

a. File is output to program file folder created during installation

- **CONTACTS:**
  - **APPLICATIONS ENGINEER:** **Mark Looney, 1-336-605-4139**
  - **MARKETING:** **Bob Scannell, 1-336-605-4031**

Analog Devices, Inc.
7910 Triad Center Drive
Greensboro, NC 27409
EMAIL: mark.looney@analog.com