## USER GUIDE

# NI USB-634*x*/635*x*/636*x* OEM

## X Series USB-6341/6343/6356/6361/6363/6366 OEM Devices

This document provides dimensions, pinouts, and information about the connectors, switch, LEDs, and mounting holes of the National Instruments USB-6341 OEM, USB-6343 OEM, USB-6356 OEM (32 MS), USB-6361 OEM, USB-6363 OEM, and USB-6366 OEM (64 MS) devices. It also explains how to modify the USB device name in Microsoft Windows.

**Caution** The protection provided by the NI USB-634*x*/635*x*/636*x* OEM device can be impaired if it is used in a manner not described in this document or the *X Series User Manual*.

**Caution** There are no product safety, electromagnetic compatibility (EMC), or CE marking compliance claims made for the NI USB-634*x*/635*x*/636*x* OEM devices. Conformity to any and all compliance requirements rests with the end product supplier.

**Caution** The NI USB-634*x*/635*x*/636*x* OEM device *must* be installed inside a suitable enclosure prior to use.

Figure 1 shows the NI USB-6341/6356/6361/6366 OEM and NI USB-6343/6363 OEM devices.

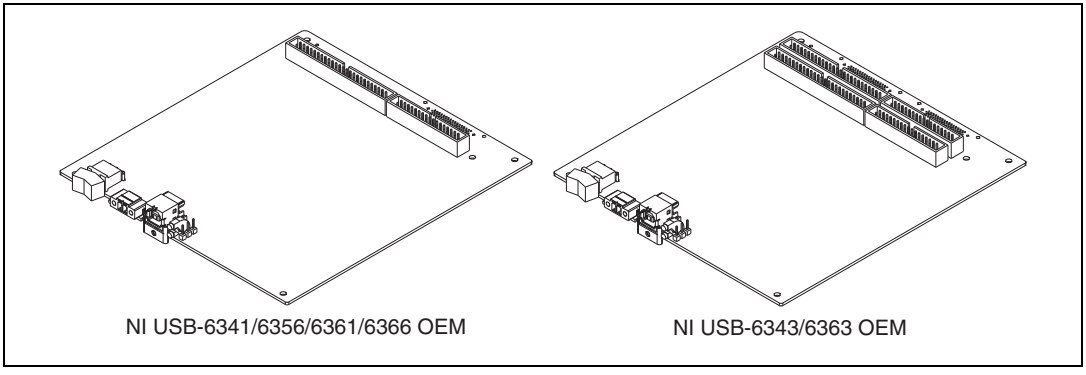



**Figure 1.** NI USB-634*x*/635*x*/636*x* OEM Devices

NATIONAL INSTRUMENTS

X Series devices use the NI-DAQmx driver. NI-DAQmx includes a collection of programming examples to help you get started developing an application. NI USB-634*x*/635*x*/636*x* OEM devices are supported by NI-DAQmx 9.5 and later.

Refer to the *X Series User Manual* for more information about NI USB-634*x*/635*x*/636*x* devices. You can find this document at `ni.com/manuals`.

# X Series OEM Device Specifications Addendum

The *Weight* and *Dimensions (PCB)* sections contain specification exceptions for the X Series OEM devices to the main specification documents. Refer to the appropriate specification document for your X Series OEM device:

- *NI 634x Specifications* for NI USB-6341/6343 OEM specifications
- *NI 6356/6358 Specifications* for NI USB-6356 OEM specifications
- *NI 6361/6363 Specifications* for NI USB-6361/6363 OEM specifications
- *NI 6366/6368 Specifications* for NI USB-6366 OEM specifications

You can find all documentation at `ni.com/manuals`.

## Weight

NI USB-6341/6361 OEM.....156 g (5.4 oz)

NI USB-6343/6363 OEM.....167 g (5.8 oz)

NI USB-6356/6366 OEM.....172 g (6.0 oz)

## Dimensions (PCB)

NI USB-6341/6356/6361/6366 OEM.....175.3 × 162.6 mm (6.9 × 6.4 in.), Refer to Figure 2

NI USB-6343/6363 OEM.....175.3 × 162.6 mm (6.9 × 6.4 in.), Refer to Figure 3

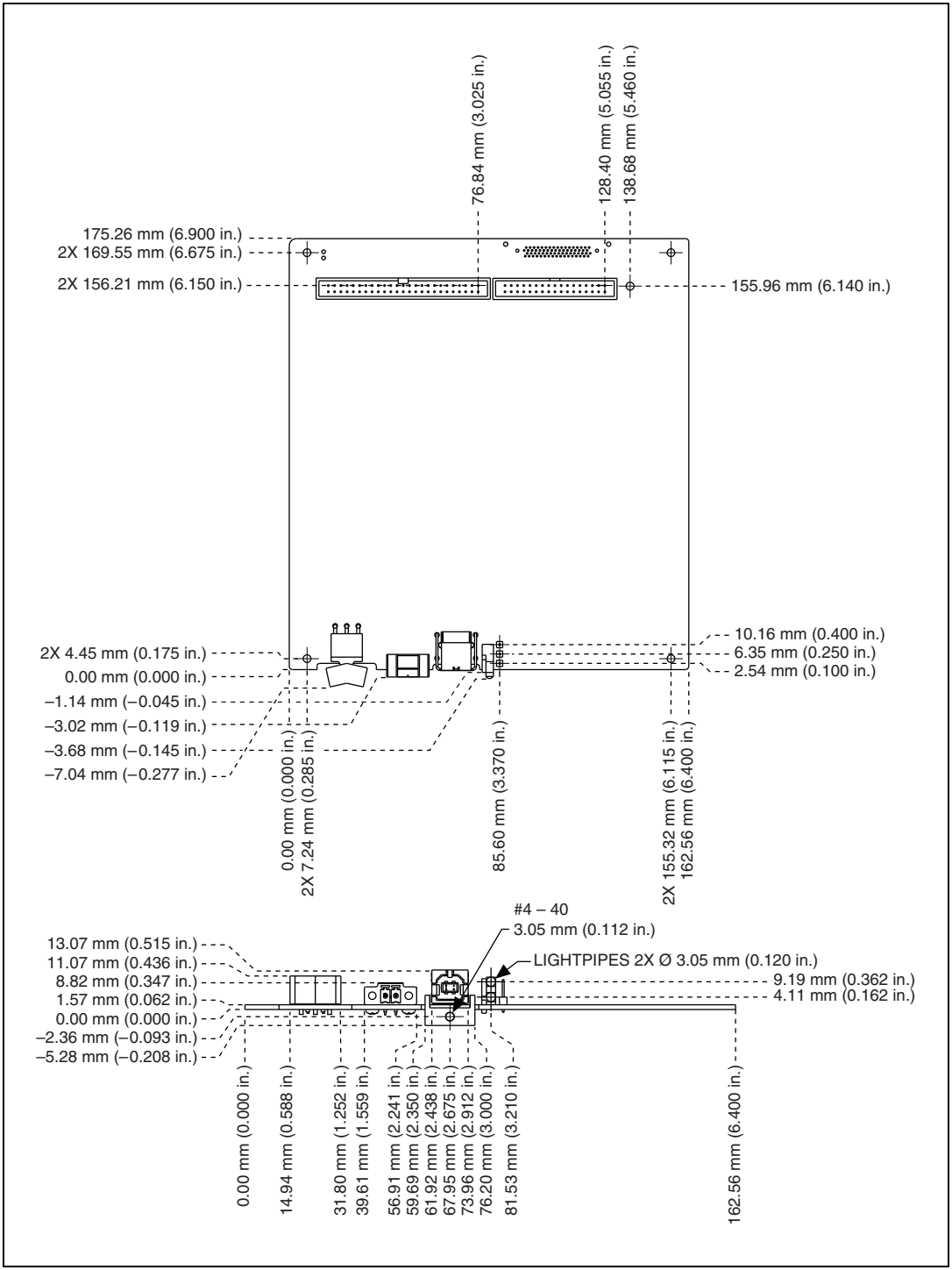



**Figure 2.** NI USB-6341/6356/6361/6366 OEM Dimensions

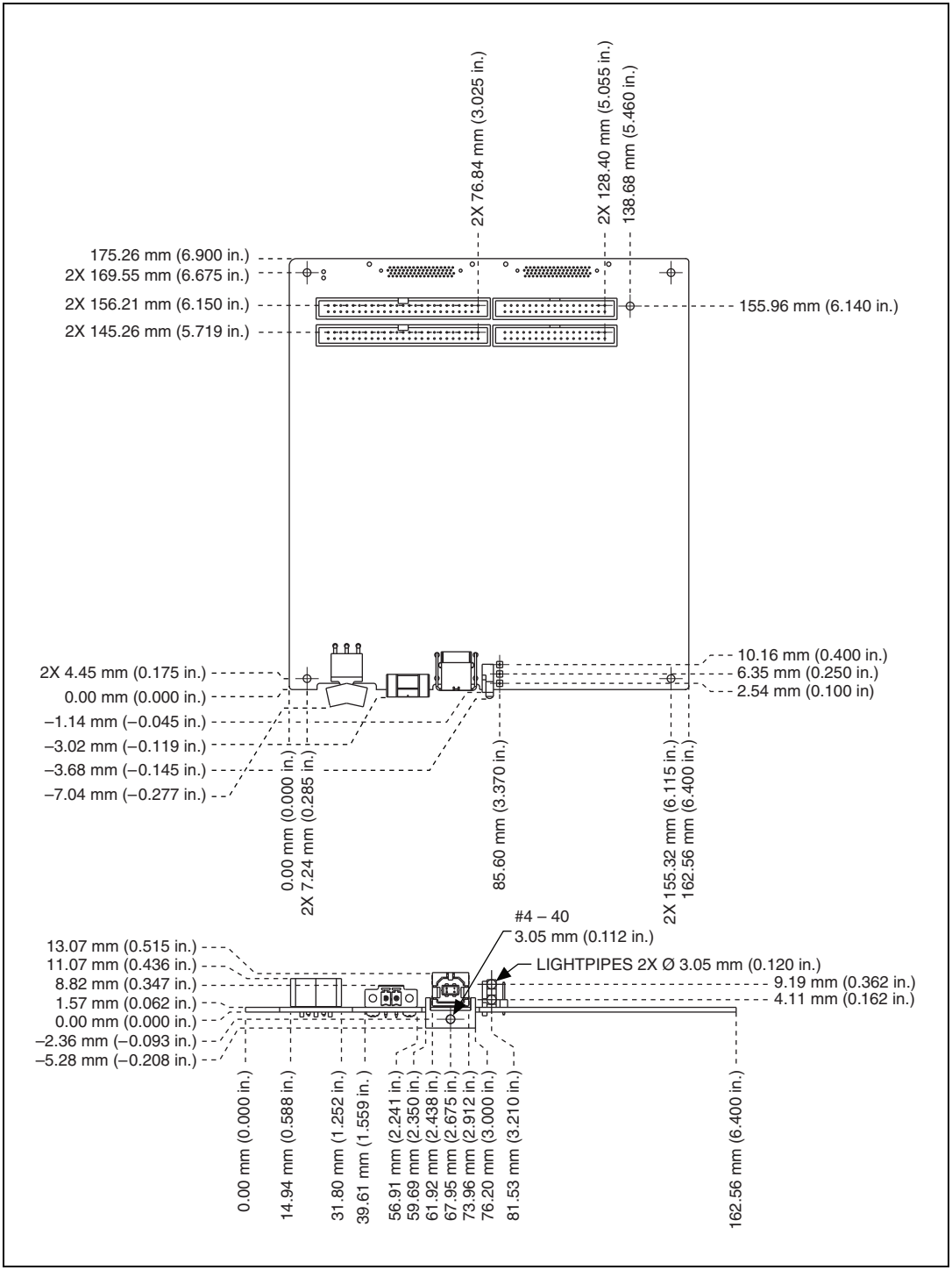
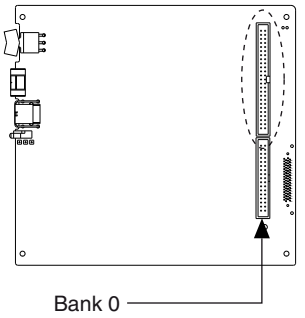



**Figure 3.** NI USB-6343/6363 OEM Dimensions

# I/O Connector Pinouts

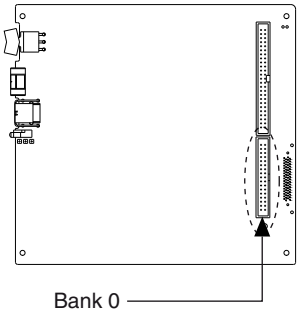
Figures 4 through 8 show the connector pinouts for the NI USB-6341 OEM, NI USB-6343 OEM, NI USB-6356/6366 OEM, NI USB-6361 OEM, and NI USB-6363 OEM devices.

Refer to the *X Series User Manual* at `ni.com/manuals` for more information about X Series OEM device signals and how to connect them.




50-Pin Digital Connector

| | | | |
|---|---|---|---|
| | Bank 0 | | |
| +5 V | 50 | 49 | +5 V |
| D GND | 48 | 47 | PFI 15 |
| D GND | 46 | 45 | PFI 14 |
| D GND | 44 | 43 | PFI 13 |
| D GND | 42 | 41 | PFI 12 |
| D GND | 40 | 39 | PFI 11 |
| D GND | 38 | 37 | PFI 10 |
| D GND | 36 | 35 | PFI 9 |
| D GND | 34 | 33 | PFI 8 |
| D GND | 32 | 31 | PFI 7 |
| D GND | 30 | 29 | PFI 6 |
| D GND | 28 | 27 | PFI 5 |
| D GND | 26 | 25 | PFI 4 |
| D GND | 24 | 23 | PFI 3 |
| D GND | 22 | 21 | PFI 2 |
| D GND | 20 | 19 | PFI 1 |
| D GND | 18 | 17 | PFI 0 |
| D GND | 16 | 15 | P0.7 |
| D GND | 14 | 13 | P0.6 |
| D GND | 12 | 11 | P0.5 |
| D GND | 10 | 9 | P0.4 |
| D GND | 8 | 7 | P0.3 |
| D GND | 6 | 5 | P0.2 |
| D GND | 4 | 3 | P0.1 |
| D GND | 2 | 1 | P0.0 |



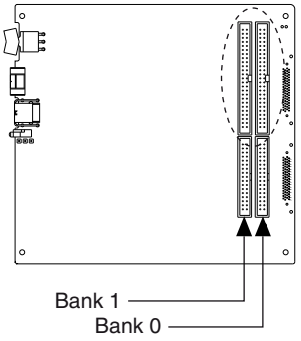

34-Pin Analog Connector

| | | | |
|---|---|---|---|
| | Bank 0 | | |
| AI GND | 34 | 33 | AI 15 (AI 7–) |
| AI 7 (AI 7+) | 32 | 31 | AI GND |
| AI 14 (AI 6–) | 30 | 29 | AI 6 (AI 6+) |
| AI GND | 28 | 27 | AI 13 (AI 5–) |
| AI 5 (AI 5+) | 26 | 25 | AI GND |
| AI 12 (AI 4–) | 24 | 23 | AI 4 (AI 4+) |
| AI GND | 22 | 21 | AI 11 (AI 3–) |
| AI 3 (AI 3+) | 20 | 19 | AI GND |
| AI 10 (AI 2–) | 18 | 17 | AI 2 (AI 2+) |
| AI GND | 16 | 15 | AI 9 (AI 1–) |
| AI 1 (AI 1+) | 14 | 13 | AI GND |
| AI 8 (AI 0–) | 12 | 11 | AI 0 (AI 0+) |
| AI GND | 10 | 9 | AI SENSE |
| AI GND | 8 | 7 | NC |
| AI GND | 6 | 5 | AO GND |
| AO 1 | 4 | 3 | AO GND |
| AO 0 | 2 | 1 | AO GND |

NC = No Connect

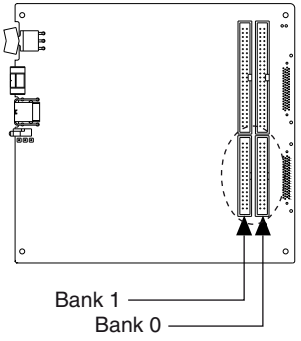
**Figure 4.** NI USB-6341 OEM Connector Pinout

50-Pin Digital Connectors




| Bank 1 | | | | Bank 0 | | | |
|---|---|---|---|---|---|---|---|
| +5 V | 50 | 49 | +5 V | +5 V | 50 | 49 | +5 V |
| D GND | 48 | 47 | P0.31 | D GND | 48 | 47 | PFI 15 |
| D GND | 46 | 45 | P0.30 | D GND | 46 | 45 | PFI 14 |
| D GND | 44 | 43 | P0.29 | D GND | 44 | 43 | PFI 13 |
| D GND | 42 | 41 | P0.28 | D GND | 42 | 41 | PFI 12 |
| D GND | 40 | 39 | P0.27 | D GND | 40 | 39 | PFI 11 |
| D GND | 38 | 37 | P0.26 | D GND | 38 | 37 | PFI 10 |
| D GND | 36 | 35 | P0.25 | D GND | 36 | 35 | PFI 9 |
| D GND | 34 | 33 | P0.24 | D GND | 34 | 33 | PFI 8 |
| D GND | 32 | 31 | P0.23 | D GND | 32 | 31 | PFI 7 |
| D GND | 30 | 29 | P0.22 | D GND | 30 | 29 | PFI 6 |
| D GND | 28 | 27 | P0.21 | D GND | 28 | 27 | PFI 5 |
| D GND | 26 | 25 | P0.20 | D GND | 26 | 25 | PFI 4 |
| D GND | 24 | 23 | P0.19 | D GND | 24 | 23 | PFI 3 |
| D GND | 22 | 21 | P0.18 | D GND | 22 | 21 | PFI 2 |
| D GND | 20 | 19 | P0.17 | D GND | 20 | 19 | PFI 1 |
| D GND | 18 | 17 | P0.16 | D GND | 18 | 17 | PFI 0 |
| D GND | 16 | 15 | P0.15 | D GND | 16 | 15 | P0.7 |
| D GND | 14 | 13 | P0.14 | D GND | 14 | 13 | P0.6 |
| D GND | 12 | 11 | P0.13 | D GND | 12 | 11 | P0.5 |
| D GND | 10 | 9 | P0.12 | D GND | 10 | 9 | P0.4 |
| D GND | 8 | 7 | P0.11 | D GND | 8 | 7 | P0.3 |
| D GND | 6 | 5 | P0.10 | D GND | 6 | 5 | P0.2 |
| D GND | 4 | 3 | P0.9 | D GND | 4 | 3 | P0.1 |
| D GND | 2 | 1 | P0.8 | D GND | 2 | 1 | P0.0 |

34-Pin Analog Connectors



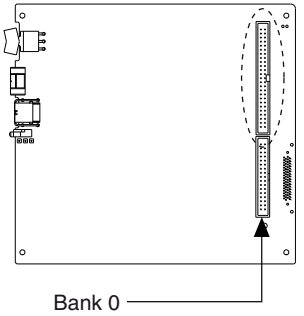

| Bank 1 | | | | Bank 0 | | | |
|---|---|---|---|---|---|---|---|
| AI GND | 34 | 33 | AI 31 (AI 23–) | AI GND | 34 | 33 | AI 15 (AI 7–) |
| AI 23 (AI 23+) | 32 | 31 | AI GND | AI 7 (AI 7+) | 32 | 31 | AI GND |
| AI 30 (AI 22–) | 30 | 29 | AI 22 (AI 22+) | AI 14 (AI 6–) | 30 | 29 | AI 6 (AI 6+) |
| AI GND | 28 | 27 | AI 29 (AI 21–) | AI GND | 28 | 27 | AI 13 (AI 5–) |
| AI 21 (AI 21+) | 26 | 25 | AI GND | AI 5 (AI 5+) | 26 | 25 | AI GND |
| AI 28 (AI 20–) | 24 | 23 | AI 20 (AI 20+) | AI 12 (AI 4–) | 24 | 23 | AI 4 (AI 4+) |
| AI GND | 22 | 21 | AI 27 (AI 19–) | AI GND | 22 | 21 | AI 11 (AI 3–) |
| AI 19 (AI 19+) | 20 | 19 | AI GND | AI 3 (AI 3+) | 20 | 19 | AI GND |
| AI 26 (AI 18–) | 18 | 17 | AI 18 (AI 18+) | AI 10 (AI 2–) | 18 | 17 | AI 2 (AI 2+) |
| AI GND | 16 | 15 | AI 25 (AI 17–) | AI GND | 16 | 15 | AI 9 (AI 1–) |
| AI 17 (AI 17+) | 14 | 13 | AI GND | AI 1 (AI 1+) | 14 | 13 | AI GND |
| AI 24 (AI 16–) | 12 | 11 | AI 16 (AI 16+) | AI 8 (AI 0–) | 12 | 11 | AI 0 (AI 0+) |
| AI GND | 10 | 9 | AI SENSE 2 | AI GND | 10 | 9 | AI SENSE |
| AI GND | 8 | 7 | NC | AI GND | 8 | 7 | NC |
| AI GND | 6 | 5 | AO GND | AI GND | 6 | 5 | AO GND |
| AO 3 | 4 | 3 | AO GND | AO 1 | 4 | 3 | AO GND |
| AO 2 | 2 | 1 | AO GND | AO 0 | 2 | 1 | AO GND |

NC = No Connect

NC = No Connect

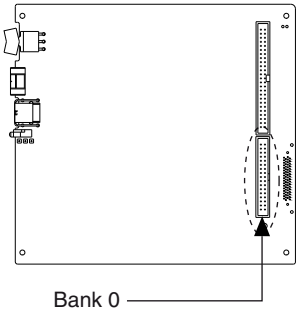
**Figure 5.** NI USB-6343 OEM Connector Pinout

50-Pin Digital Connector




| | Bank 0 | | |
|---|---|---|---|
| +5 V | 50 | 49 | +5 V |
| D GND | 48 | 47 | PFI 15 |
| D GND | 46 | 45 | PFI 14 |
| D GND | 44 | 43 | PFI 13 |
| D GND | 42 | 41 | PFI 12 |
| D GND | 40 | 39 | PFI 11 |
| D GND | 38 | 37 | PFI 10 |
| D GND | 36 | 35 | PFI 9 |
| D GND | 34 | 33 | PFI 8 |
| D GND | 32 | 31 | PFI 7 |
| D GND | 30 | 29 | PFI 6 |
| D GND | 28 | 27 | PFI 5 |
| D GND | 26 | 25 | PFI 4 |
| D GND | 24 | 23 | PFI 3 |
| D GND | 22 | 21 | PFI 2 |
| D GND | 20 | 19 | PFI 1 |
| D GND | 18 | 17 | PFI 0 |
| D GND | 16 | 15 | P0.7 |
| D GND | 14 | 13 | P0.6 |
| D GND | 12 | 11 | P0.5 |
| D GND | 10 | 9 | P0.4 |
| D GND | 8 | 7 | P0.3 |
| D GND | 6 | 5 | P0.2 |
| D GND | 4 | 3 | P0.1 |
| D GND | 2 | 1 | P0.0 |

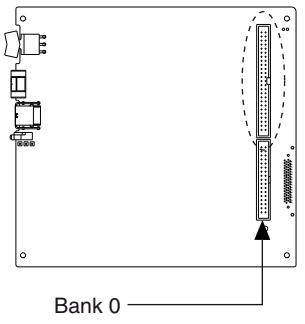
34-Pin Analog Connector



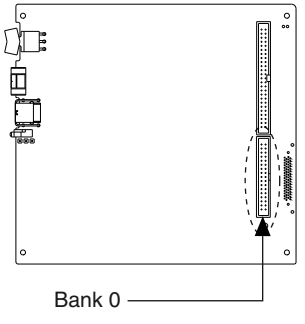

| | Bank 0 | | |
|---|---|---|---|
| AI GND | 34 | 33 | AI 7– |
| AI 7+ | 32 | 31 | AI GND |
| AI 6– | 30 | 29 | AI 6+ |
| AI GND | 28 | 27 | AI 5– |
| AI 5+ | 26 | 25 | AI GND |
| AI 4– | 24 | 23 | AI 4+ |
| AI GND | 22 | 21 | AI 3– |
| AI 3+ | 20 | 19 | AI GND |
| AI 2– | 18 | 17 | AI 2+ |
| AI GND | 16 | 15 | AI 1– |
| AI 1+ | 14 | 13 | AI GND |
| AI 0– | 12 | 11 | AI 0+ |
| AI GND | 10 | 9 | NC |
| AI GND | 8 | 7 | APFI 0 |
| AI GND | 6 | 5 | AO GND |
| AO 1 | 4 | 3 | AO GND |
| AO 0 | 2 | 1 | AO GND |

NC = No Connect

**Figure 6.** NI USB-6356/6366 OEM Connector Pinout



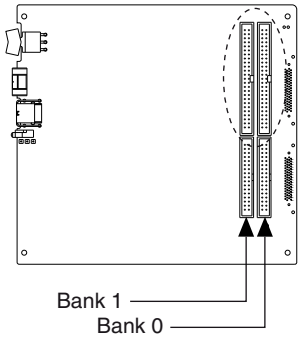

| | Bank 0 | | |
|---|---|---|---|
| +5 V | 50 | 49 | +5 V |
| D GND | 48 | 47 | PFI 15 |
| D GND | 46 | 45 | PFI 14 |
| D GND | 44 | 43 | PFI 13 |
| D GND | 42 | 41 | PFI 12 |
| D GND | 40 | 39 | PFI 11 |
| D GND | 38 | 37 | PFI 10 |
| D GND | 36 | 35 | PFI 9 |
| D GND | 34 | 33 | PFI 8 |
| D GND | 32 | 31 | PFI 7 |
| D GND | 30 | 29 | PFI 6 |
| D GND | 28 | 27 | PFI 5 |
| D GND | 26 | 25 | PFI 4 |
| D GND | 24 | 23 | PFI 3 |
| D GND | 22 | 21 | PFI 2 |
| D GND | 20 | 19 | PFI 1 |
| D GND | 18 | 17 | PFI 0 |
| D GND | 16 | 15 | P0.7 |
| D GND | 14 | 13 | P0.6 |
| D GND | 12 | 11 | P0.5 |
| D GND | 10 | 9 | P0.4 |
| D GND | 8 | 7 | P0.3 |
| D GND | 6 | 5 | P0.2 |
| D GND | 4 | 3 | P0.1 |
| D GND | 2 | 1 | P0.0 |




| | Bank 0 | | |
|---|---|---|---|
| AI GND | 34 | 33 | AI 15 (AI 7–) |
| AI 7 (AI 7+) | 32 | 31 | AI GND |
| AI 14 (AI 6–) | 30 | 29 | AI 6 (AI 6+) |
| AI GND | 28 | 27 | AI 13 (AI 5–) |
| AI 5 (AI 5+) | 26 | 25 | AI GND |
| AI 12 (AI 4–) | 24 | 23 | AI 4 (AI 4+) |
| AI GND | 22 | 21 | AI 11 (AI 3–) |
| AI 3 (AI 3+) | 20 | 19 | AI GND |
| AI 10 (AI 2–) | 18 | 17 | AI 2 (AI 2+) |
| AI GND | 16 | 15 | AI 9 (AI 1–) |
| AI 1 (AI 1+) | 14 | 13 | AI GND |
| AI 8 (AI 0–) | 12 | 11 | AI 0 (AI 0+) |
| AI GND | 10 | 9 | AI SENSE |
| AI GND | 8 | 7 | APFI 0 |
| AI GND | 6 | 5 | AO GND |
| AO 1 | 4 | 3 | AO GND |
| AO 0 | 2 | 1 | AO GND |

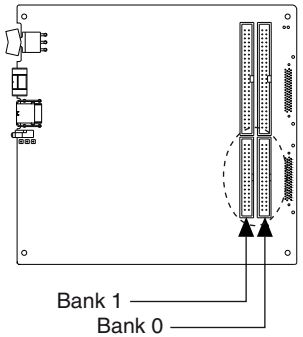
**Figure 7.** NI USB-6361 OEM Connector Pinout

50-Pin Digital Connectors




| Bank 1 | | | | Bank 0 | | | |
|---|---|---|---|---|---|---|---|
| +5 V | 50 | 49 | +5 V | +5 V | 50 | 49 | +5 V |
| D GND | 48 | 47 | P0.31 | D GND | 48 | 47 | PFI 15 |
| D GND | 46 | 45 | P0.30 | D GND | 46 | 45 | PFI 14 |
| D GND | 44 | 43 | P0.29 | D GND | 44 | 43 | PFI 13 |
| D GND | 42 | 41 | P0.28 | D GND | 42 | 41 | PFI 12 |
| D GND | 40 | 39 | P0.27 | D GND | 40 | 39 | PFI 11 |
| D GND | 38 | 37 | P0.26 | D GND | 38 | 37 | PFI 10 |
| D GND | 36 | 35 | P0.25 | D GND | 36 | 35 | PFI 9 |
| D GND | 34 | 33 | P0.24 | D GND | 34 | 33 | PFI 8 |
| D GND | 32 | 31 | P0.23 | D GND | 32 | 31 | PFI 7 |
| D GND | 30 | 29 | P0.22 | D GND | 30 | 29 | PFI 6 |
| D GND | 28 | 27 | P0.21 | D GND | 28 | 27 | PFI 5 |
| D GND | 26 | 25 | P0.20 | D GND | 26 | 25 | PFI 4 |
| D GND | 24 | 23 | P0.19 | D GND | 24 | 23 | PFI 3 |
| D GND | 22 | 21 | P0.18 | D GND | 22 | 21 | PFI 2 |
| D GND | 20 | 19 | P0.17 | D GND | 20 | 19 | PFI 1 |
| D GND | 18 | 17 | P0.16 | D GND | 18 | 17 | PFI 0 |
| D GND | 16 | 15 | P0.15 | D GND | 16 | 15 | P0.7 |
| D GND | 14 | 13 | P0.14 | D GND | 14 | 13 | P0.6 |
| D GND | 12 | 11 | P0.13 | D GND | 12 | 11 | P0.5 |
| D GND | 10 | 9 | P0.12 | D GND | 10 | 9 | P0.4 |
| D GND | 8 | 7 | P0.11 | D GND | 8 | 7 | P0.3 |
| D GND | 6 | 5 | P0.10 | D GND | 6 | 5 | P0.2 |
| D GND | 4 | 3 | P0.9 | D GND | 4 | 3 | P0.1 |
| D GND | 2 | 1 | P0.8 | D GND | 2 | 1 | P0.0 |

34-Pin Analog Connectors




| Bank 1 | | | | Bank 0 | | | |
|---|---|---|---|---|---|---|---|
| AI GND | 34 | 33 | AI 31 (AI 23–) | AI GND | 34 | 33 | AI 15 (AI 7–) |
| AI 23 (AI 23+) | 32 | 31 | AI GND | AI 7 (AI 7+) | 32 | 31 | AI GND |
| AI 30 (AI 22–) | 30 | 29 | AI 22 (AI 22+) | AI 14 (AI 6–) | 30 | 29 | AI 6 (AI 6+) |
| AI GND | 28 | 27 | AI 29 (AI 21–) | AI GND | 28 | 27 | AI 13 (AI 5–) |
| AI 21 (AI 21+) | 26 | 25 | AI GND | AI 5 (AI 5+) | 26 | 25 | AI GND |
| AI 28 (AI 20–) | 24 | 23 | AI 20 (AI 20+) | AI 12 (AI 4–) | 24 | 23 | AI 4 (AI 4+) |
| AI GND | 22 | 21 | AI 27 (AI 19–) | AI GND | 22 | 21 | AI 11 (AI 3–) |
| AI 19 (AI 19+) | 20 | 19 | AI GND | AI 3 (AI 3+) | 20 | 19 | AI GND |
| AI 26 (AI 18–) | 18 | 17 | AI 18 (AI 18+) | AI 10 (AI 2–) | 18 | 17 | AI 2 (AI 2+) |
| AI GND | 16 | 15 | AI 25 (AI 17–) | AI GND | 16 | 15 | AI 9 (AI 1–) |
| AI 17 (AI 17+) | 14 | 13 | AI GND | AI 1 (AI 1+) | 14 | 13 | AI GND |
| AI 24 (AI 16–) | 12 | 11 | AI 16 (AI 16+) | AI 8 (AI 0–) | 12 | 11 | AI 0 (AI 0+) |
| AI GND | 10 | 9 | AI SENSE 2 | AI GND | 10 | 9 | AI SENSE |
| AI GND | 8 | 7 | APFI 1 | AI GND | 8 | 7 | APFI 0 |
| AI GND | 6 | 5 | AO GND | AI GND | 6 | 5 | AO GND |
| AO 3 | 4 | 3 | AO GND | AO 1 | 4 | 3 | AO GND |
| AO 2 | 2 | 1 | AO GND | AO 0 | 2 | 1 | AO GND |

**Figure 8.** NI USB-6363 OEM Connector Pinout

## Default NI-DAQmx Counter/Timer Pins

By default, NI-DAQmx routes the counter/timer inputs and outputs to the PFI pins, shown in the following table.

| Counter/Timer Signal | Default Terminal Name |
|---|---|
| CTR 0 SRC | PFI 8 |
| CTR 0 GATE | PFI 9 |
| CTR 0 AUX | PFI 10 |
| CTR 0 OUT | PFI 12 |
| CTR 0 A | PFI 8 |
| CTR 0 Z | PFI 9 |
| CTR 0 B | PFI 10 |
| CTR 1 SRC | PFI 3 |
| CTR 1 GATE | PFI 4 |
| CTR 1 AUX | PFI 11 |
| CTR 1 OUT | PFI 13 |
| CTR 1 A | PFI 3 |
| CTR 1 Z | PFI 4 |
| CTR 1 B | PFI 11 |
| CTR 2 SRC | PFI 0 |
| CTR 2 GATE | PFI 1 |
| CTR 2 AUX | PFI 2 |
| CTR 2 OUT | PFI 14 |
| CTR 2 A | PFI 0 |
| CTR 2 Z | PFI 1 |
| CTR 2 B | PFI 2 |
| CTR 3 SRC | PFI 5 |
| CTR 3 GATE | PFI 6 |
| CTR 3 AUX | PFI 7 |
| CTR 3 OUT | PFI 15 |
| CTR 3 A | PFI 5 |
| CTR 3 Z | PFI 6 |
| CTR 3 B | PFI 7 |
| FREQ OUT | PFI 14 |

NI USB-634*x*/635*x*/636*x* OEM devices have two LEDs that reflect the device state. The ACTIVE LED (at reference designator DS4) indicates activity over the bus. The READY LED (at reference designator DS3) indicates whether or not the device is configured. Refer to the *X Series User Manual* for more information about LED behavior on the X Series OEM devices.

If you are putting the NI USB-634*x*/635*x*/636*x* OEM device in an enclosure, you can either seat the supplied lightpipe in the holes (at reference designators DS3 and DS4) on the device, as shown in Figure 9, or attach external LEDs, as described in the *Attaching External LEDs* section. When the lightpipe is attached, the top LED is the ACTIVE LED, and the bottom LED is the READY LED.

## Attaching External LEDs

Three connectors on the device—E1, E2, and E3—allow you to connect an external LED circuit to the device, as shown in Figure 9.

To connect an external READY LED, use E1 as the positive connection (+5 V) and E2 as the negative connection.

To connect an external ACTIVE LED, use E1 as the positive connection and E3 as the negative connection.

NI recommends that you limit the current to 10 mA per LED. You can limit this current by using external resistors, as shown in Figure 9.

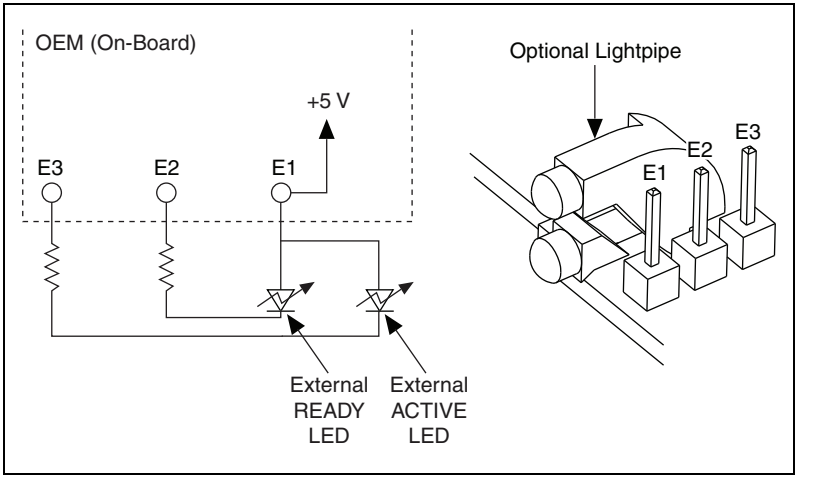



**Figure 9.** Schematic for External LED Circuits

# Power Switch

The power switch on the NI USB-634*x*/635*x*/636*x* OEM device powers the device on and off. Figure 10 shows the pins on the power switch and power circuitry.

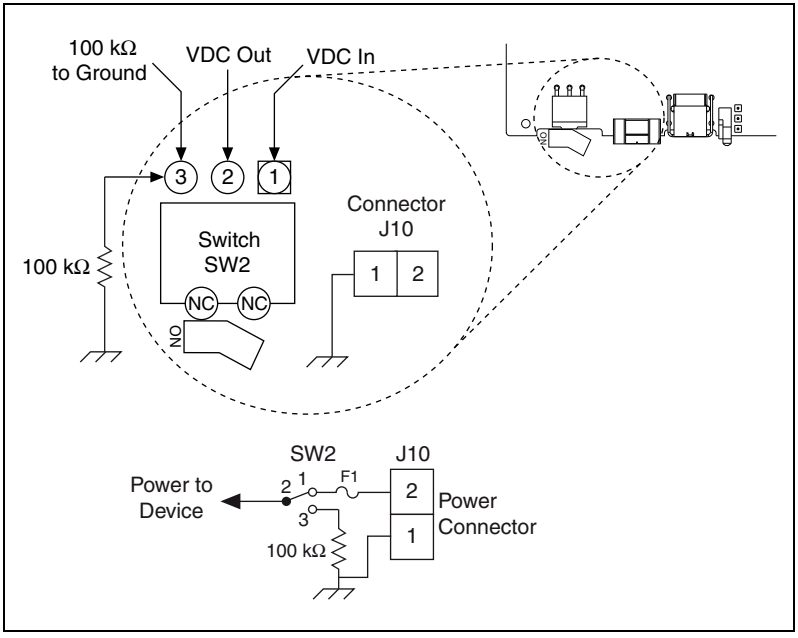



**Figure 10.** Schematic for the Power Switch (Switch Shown in ON Position)

Pin 1, VDC In, is connected to VDC through a non-user-replaceable fuse (reference designator F1). The VDC is the voltage provided by the power supply through pin 2 of the power connector (reference designator J10) and must be 11 to 30 VDC, 30 W.

Pin 2, VDC Out, provides power to the circuitry on the device. When the switch is in the ON position, the VDC power supply from pin 1 is routed to pin 2.

Pin 3, 100 kΩ to Ground, connects pin 2 to ground through a 100 kΩ resistor when the switch is in the OFF position.

# Connecting the NI USB-634*x*/635*x*/636*x* OEM Device to Your Chassis

The NI USB-634*x*/635*x*/636*x* OEM device features five mounting holes, shown in Figure 11. Three of the mounting holes are plated for customer grounded connections.

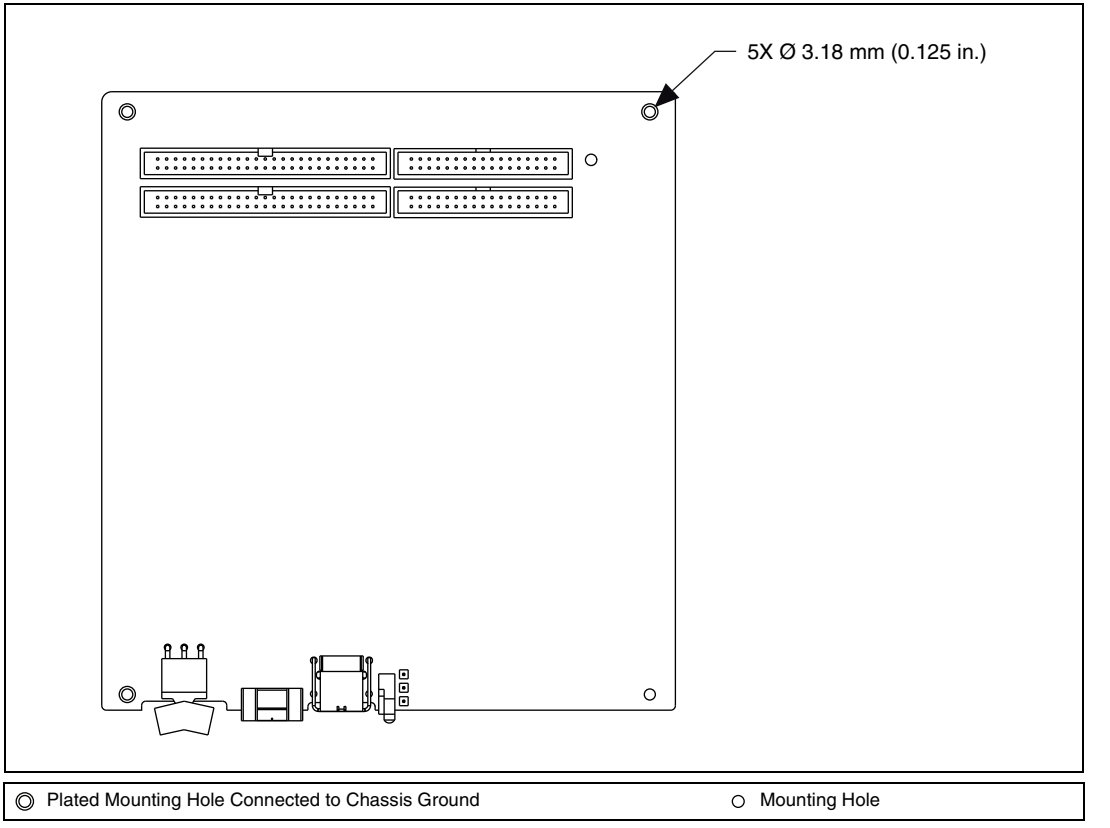



**Figure 11.** Customer Mounting Holes (NI USB-6343/6361/6366 OEM Shown)

# Device Components

Table 1 contains information about the components used for interfacing and interacting with the X Series USB OEM devices.

**Table 1.** X Series USB OEM Components

| Component(s) | Reference Designator(s) on PCB | Manufacturer | Manufacturer Part Number |
|---|---|---|---|
| LEDs | DS3, DS4, DS1*, DS2* | SunLED | XZBB54W-1TN |
| Lightpipe | — | Dialight | 515-1061F |
| 34-pin connector(s) | **(USB-6341/6356/6361/6366)** J3 | 3M | N2534-6002RB |
| | **(USB-6343/6363)** J3, J4 | | |
| 50-pin connector(s) | **(USB-6341/6356/6361/6366)** P1 | 3M | N2550-6002UB |
| | **(USB-6343/6363)** P1, P2 | | |
| USB connector | J9 | AMP | 292304-1 |
| Power connector | J10 | Phoenix Contact | 1727566 |
| Power switch | SW2 | C&K | E101J1AQE2 |
| 68-pin connector(s)† | **(USB-6341/6356/6361/6366)** J12 | Molex | 71430-0013 |
| | **(USB-6343/6363)** J11, J12 | | |

* Optional LED locations near the mass termination connectors. These are not populated by default.
† Optional mass termination connectors. These are not populated by default.

# Modifying the OEM Device Name in Microsoft Windows

You can change how the NI USB-634*x*/635*x*/636*x* OEM device name appears in the Windows Device Manager[1] when users install the device, as shown in Figure 12.

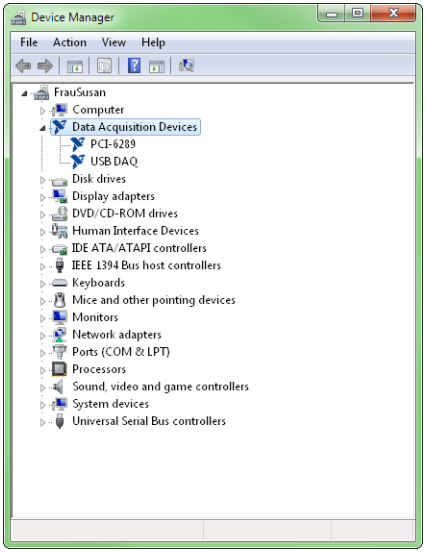



**Figure 12.** NI USB-6363 OEM Device "USB DAQ" in the Windows Device Manager (Windows 7 Shown)

To modify the device name in the Windows Device Manager in Microsoft Windows 7/Vista/XP, and in the Found New Hardware Wizard in Microsoft Windows XP, complete the following steps.

**Note** You *must* have NI-DAQmx 9.5 or later installed on your PC.

1. Locate the `OEMx.inf` file in the `y:\WINDOWS\inf\` directory, where `x` is the random number assigned to the INF file by Windows, and `y:\` is the root directory where Windows is installed.

   Security updates to Microsoft 7/Vista/XP and NI-DAQmx create random INF files for NI hardware. Windows assigns random file numbers to all INF files, which causes the user to search through several INF files until the correct file is located.

   If you want to revert back, save a copy of this file as `OEMx_original.inf` in a different location.

[1] **(Windows XP)** You can change how the NI USB-634*x*/635*x*/636*x* OEM device name appears when users install the device in both the Found New Hardware Wizard that appears when the device is initially installed and in the Windows Device Manager.

2. Edit the device INF file by opening `OEMx.inf` with a text editor.

   At the bottom of this file, in the *[Strings]* section, are the descriptors where Windows looks to identify the device. Locate the four lines of text that contain in quotes the descriptors for the device name you are modifying. Change the descriptor on *all four* lines to the new device name, as shown in Figure 13.

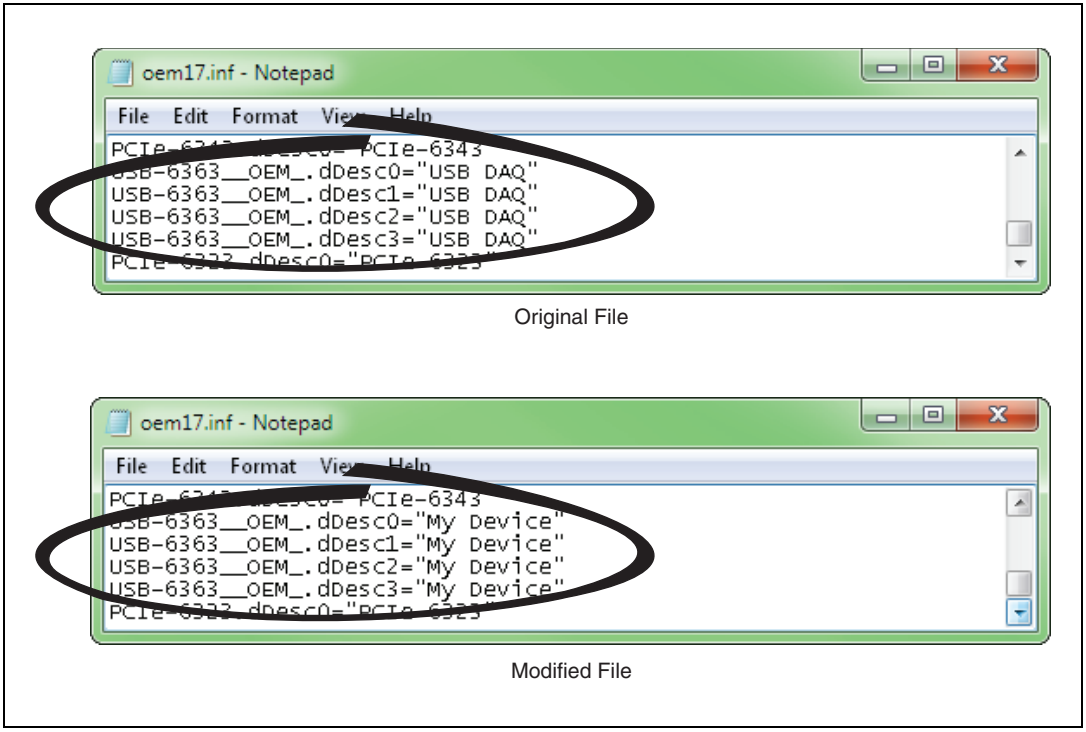



**Figure 13.** INF File Descriptors Changed to “My Device” (Windows 7 Shown)

3. Save and close the INF file.
4. Open the Windows Device Manager.

   **(Windows 7/Vista)** In the Device Manager, notice that the OEM device now appears as `My Device`, as shown in Figure 14.

   **(Windows XP)** In the Device Manager, right-click the OEM device under Data Acquisition Devices, and select **Uninstall**. Power down the OEM device and disconnect the USB cable from your PC.

When you reconnect and power on the device, it appears as `My Device` in Windows Device Manager, as shown in Figure 14.

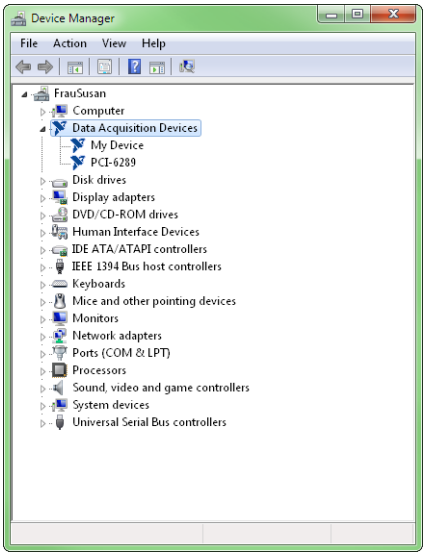



**Figure 14.** "My Device" in the Windows Device Manager (Windows 7 Shown)

**Note** When the device is initially installed, Windows may display the following messages: **`USB DAQ detected!`**, and then **`USB DAQ: Device driver software installed successfully`**. These alert messages cannot be changed.

**Note** Modifying the INF file will *not* change the NI USB-634*x*/635*x*/636*x* OEM device name in Measurement & Automation Explorer (MAX).