MULTIFUNCTION I/O DEVICE MANUAL

USB-6211 Pinout

Version: Multifunction I/O Device

Last Modified: September 18, 2017

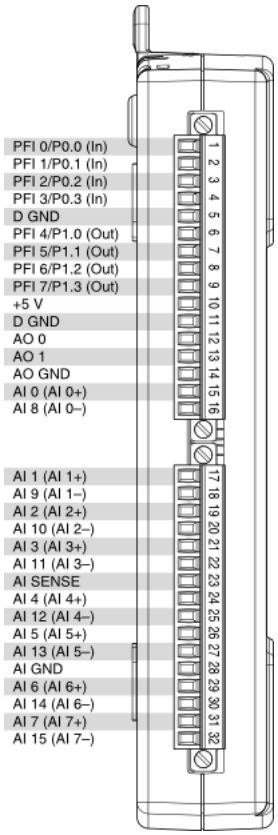

Table 1. Default Counter/Timer Terminals

Counter/Timer Signal	Default PFI Terminal
CTR 0 SRC	PFI 0
CTR 0 GATE	PFI 1
CTR 0 AUX	PFI 0
CTR 0 OUT	PFI 4
CTR 0 A	PFI 0
CTR 0 Z	PFI 2
CTR 0 B	PFI 1
CTR 1 SRC	PFI 3
CTR 1 GATE	PFI 2
CTR 1 AUX	PFI 3
CTR 1 OUT	PFI 5
CTR 1 A	PFI 3
CTR 1 Z	PFI 1
CTR 1 B	PFI 2

FREQ OUT	PFI 6

Table 2. Signal Descriptions

Signal	Reference	Description
AI GND	—	Analog Input Ground—These terminals are the reference point for single-ended AI measurements in RSE mode and the bias current return point for DIFF measurements. All ground references—AI GND, AO GND, and D GND—are connected on the device.
AI<0..15>	Varies	Analog Input Channels—For single-ended measurements, each signal is an analog input voltage channel. In RSE mode, AI GND is the reference for these signals. In NRSE mode, the reference for each AI Signal is an AI SENSE. For differential measurements, AI 0 and AI 8 are the positive and negative inputs of differential analog input channel 0. Similarly, the following signal pairs also form differential input channels: AI <1,9>, AI <2.,10>, and so on.
AI SENSE	—	Analog Input Sense—In NRSE mode, the reference for each AI <0..15> signal AI SENSE.
AO <0,1>	AO GND	Analog Output Channels—These terminals supply voltage output.
AO GND	—	Analog Output Ground—AO GND is the reference for AO. All ground references—AI GND, AO GND, and D GND—are connected on the device.
D GND	—	Digital Ground—D GND supplies the reference for port 0, port 1 digital channels, PFI, and +5 V. All ground references—AI GND, AO GND, and D GND—are connected on the device.
+5 V	D GND	+5 V Power Source—These terminals provide a +5 V power source or can be used to externally power the digital outputs.
PFI<0..3>/P0.<0..3>	D GND	Programmable Function Interface or Static Digital Input Channels—Each PFI terminal can be used to supply an external source for AI, AO, or counter/timer inputs. You also can use these terminals as static digital input lines.
PFI<4..7>/P1.<0..3>	D GND	Programmable Function Interface or Static Digital Output Channels—You can route many different internal AI, AO, or counter/timer output to each PFI terminal. You also can use these terminals as static digital output lines.

Table 3. LED State/Device Status

POWER/ACT	Device Status
Off	Device is not powered or device error. Refer to `ni.com/support` if device is powered.
On	Device error. Refer to `ni.com/support`.
Single-blink	Device operating normally. Device connected to USB Hi-Speed port.
Double-blink	Device connected to USB Full-Speed port. Device performance might be affected.