

PCI-1716/1716L

16-bit, 250kS/s High-Resolution Multifunction Card

PIN Assignment

AI0	68	34	AI1
AI2	67	33	AI3
AI4	66	32	AI5
AI6	65	31	AI7
AI8	64	30	AI9
AI10	63	29	AI11
AI12	62	28	AI13
AI14	61	27	AI15
AIGND	60	26	AIGND
DA0_REF	59	25	DA1_REF
DA0_OUT	58	24	DA1_OUT
AOGND	57	23	AOGND
DI0	56	22	DI1
DI2	55	21	DI3
DI4	54	20	DI5
DI6	53	19	DI7
DI8	52	18	DI9
DI10	51	17	DI11
DI12	50	16	DI13
DI14	49	15	DI15
DGND	48	14	DGND
DO0	47	13	DO1
DO2	46	12	DO3
DO4	45	11	DO5
DO6	44	10	DO7
DO8	43	9	DO9
DO10	42	8	DO11
DO12	41	7	DO13
DO14	40	6	DO15
DGND	39	5	DGND
CNT0_CLK	38	4	PACER_OUT
CNT0_OUT	37	3	TRG_GATE
CNT0_GATE	36	2	EXT_TRG
+12V	35	1	+5V

Signal Name	Reference	Direction	Description
AI<0..15>	AIGND	Input	Analog Input Channels 0 through 15. Each channel pair, AI<i>, i+1> (i = 0, 2, 4...14), can be configured as either two single-ended inputs or one differential input.
AIGND	-	-	Analog Input Ground.
AO0_REF AO1_REF	AOGND	Input	Analog Output Channel 0/1 External Reference.
AO0_OUT AO1_OUT	AOGND	Output	Analog Output Channels 0/1.
AOGND	-	-	Analog Output Ground. The analog output voltages are referenced to these nodes.
DI<0..15>	DGND	Input	Digital Input channels.
DO<0..15>	DGND	Output	Digital Output channels.
DGND	-	-	Digital Ground. This pin supplies the reference for the digital channels at the I/O connector as well as the +5VDC supply.
CNT0_CLK	DGND	Input	Counter 0 Clock Input. The clock input of counter 0 can be either external (up to 10 MHz) or internal (1 MHz), as set by software.
CNT0_OUT	DGND	Output	Counter 0 Output.
CNT0_GATE	DGND	Input	Counter 0 Gate Control.
PACER_OUT	DGND	Output	Pacer Clock Output. This pin pulses once for each pacer clock when turned on. If A/D conversion is in the pacer trigger mode, users can use this signal as a synchronous signal for other applications. A low - to- high edge triggers A/D conversion to start.
TRG_GATE	DGND	Input	A/D External Trigger Gate. When TRG_GATE is connected to +5 V, it will enable the external trigger signal to input. When TRG_GATE is connected to DGND, it will disable the external trigger signal to input.
EXT_TRG	DGND	Output	A/D External Trigger. This pin is external trigger signal input for the A/D conversion. A low - to-high edge triggers A/D conversion to start.
+12V	DGND	Output	+12 VDC Source.
+5V	DGND	Output	+5 VDC Source.

* Pins 23~25 and pins 57~59 are not defined for PCI-1716L