

ISA DAS/DIO Selection Guide

Multi-Function DAQ Cards							Analog Output Cards	
	ACL-8316/8312	ACL-8112 HG/DG	ACL-8112 PG	ACL-8216	ACL-8113A	ACL-8111	ACL-6126	ACL-6128A
Analog Input								
Analog Inputs	16 SE/8 DI	16 SE/8 DI	16 SE	16 SE/8 DI	32 SE	8 SE/8 DI	–	–
Isolation	–	–	–	–	Yes	–	–	Yes
DMA Transfer	Yes	Yes	Yes	Yes	–	–	–	–
Max. Sampling Rate (S/s)	100 k	100 k	100 k	100 k	30 k	50 k	–	–
AD Resolution (bits)	16/12	12	12	16	12	12	–	–
FIFO Size (samples)	1k	–	–	–	–	–	–	–
Bipolar Input Ranges	±10 V ±5 V ±2.5 V ±1.25 V	ACL-8112DG ⁽¹⁾ ACL-8112HG ⁽²⁾	±10 V ±5 V ±2.5 V ±1.25 V ±0.625 V	±10 V ±5 V ±2.5 V ±1.25 V	±10 V ±5 V ±2.5 V ±1.25 V ±0.625 V	±5 V ±2.5 V ±1.25 V ±0.625 V ±0.3125 V	–	–
Unipolar Input Ranges	–	ACL-8112DG ⁽³⁾ ACL-8112HG ⁽⁴⁾	–	–	0-10 V 0-5 V 0-2.5 V 0-1.25 V	–	–	–
Analog Output								
Voltage Outputs	2	2	2	2	–	1	6	2
Current Outputs	–	–	–	–	–	–	6	2
DA Resolution (bits)	12	12	12	12	–	12	12	12
Settling Time	30 μs	30 μs	30 μs	30 μs	–	30 μs	30 μs	60 μs
Bipolar Output Ranges	±10 V	±10 V ±5 V	±10 V ±5 V	–	–	–	±10 V ±5 V	±10 V ±5 V
Unipolar Output Ranges	0-10 V	0-0 V 0-5 V	0-10 V 0-5 V	0-10V 0-5V	–	0-10 V 0-5 V	0-10 V 0-5 V	0-10 V 0-5 V
Current Output Ranges	–	–	–	–	–	–	0-20 mA	0-20 mA
Digital I/O, Timer/Counter, and External Trigger								
Digital I/O	16DI, 16DO	16DI, 16DO	16DI, 16DO	16DI, 16DO	–	16DI, 16DO	16DI, 16DO	–
Timer/Counter	1, 16-bit	1, 16-bit	1, 16-bit	1, 16-bit	–	–	–	–
Pacer Trigger	Yes	Yes	Yes	Yes	–	Yes	–	–
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Legend: • Supported - Not available

Notes:

(1) ±10 V, ±5 V, ±2.5 V, ±1.25 V, ±0.625 V

(2) ±10 V, ±5 V, ±1 V, ±500 mV, ±100 mV, ±50 mV, ±10 mV, ±5 mV

(3) 0-10 V, 0-5 V, 0-2.5 V, 0-1.25 V

(4) 0-10 V, 0-1 V, 0-0.1 V, 0-10 mV

Digital Input/Output & Timer/Counter Cards							
	ACL-7120A	ACL-7130	ACL-7122	PET-48DIO	ACL-7125	ACL-7225	ACL-8454
Digital I/O							
Digital Input	32 TTL DI	16 Isolated DI 16 TTL DI	144 TTL DIO	48 TTL DIO	8 Isolated DI	16 Isolated DI	16 TTL DI
Digital Output	32 TTL DI	16 Isolated DO 16 TTL DO					
Max. Transfer Rate (Byte/s)	500 k	10 k	500 k	500 k	10 k	10 k	500 k
Timer/Counter							
Timer	1, 16-bit	1, 32-bit	–	1, 32-bit	–	–	2, 32-bit
Counter	4, 16-bit	1, 16-bit	–	1, 16-bit	–	–	8, 16-bit
Accessory							
Termination Board	ACLD-9188 ACLD-9185 ACLD-9182A ACLD-9178	ACLD-9188 ACLD-9137 DIN-37D	TB-24 TB-24P/24 TB-24R/24 TB-24R/12 TB-16P8R DIN-50P DIN-24G DIN-24P/24 DIN-24R/24 DIN-24R/12	TB-24 TB-24P/24 TB-24R/24 TB-24R/12 TB-16P8R DIN-50P DIN-24G DIN-24P/24 DIN-24R/24 DIN-24R/12	ACLD-9138 ACLD-9137 DIN-37D	ACLD-9138 ACLD-9137 DIN-37D	ACLD-9138 ACLD-9137 DIN-37D
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