

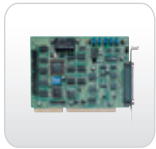
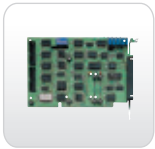
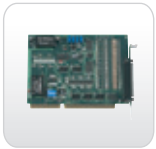
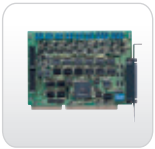
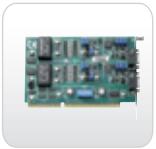
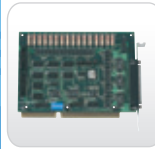
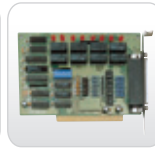
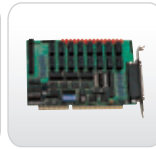
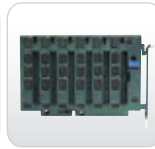

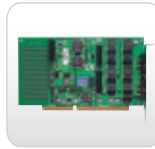
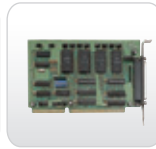


# ISA Multi-Function DAQ/Analog Output Cards

	Multi-Function DAQ Cards					Analog Output Cards	
							
Model Name	ACL-8316/L, ACL-8312/L	ACL-8216	ACL-8112DG/HG/PG	ACL-8111	ACL-8113A	ACL-6126	ACL-6128A
<b>Analog Input</b>							
Analog Inputs	16 SE/8 DI	16 SE/8 DI	16 SE/8 DI or 16 SE <sup>(1)</sup>	8 SE	32 SE	–	–
Isolation	–	–	–	–	●	–	–
DMA Transfer	●	●	●	–	–	–	–
Max. Sampling Rate (S/s)	100 k	100 k	100 k	50 k	30 k	–	–
AD Resolution (bits)	16/12	16	12	12	12	–	–
FIFO Size (samples)	1 k	–	–	–	–	–	–
Bipolar Input Ranges	±10 V ±5 V ±2.5 V ±1.25 V	±10 V ±5 V ±2.5 V ±1.25 V	ACL-8112DG <sup>(2)</sup> ACL-8112HG <sup>(3)</sup> ACL-8112PG <sup>(4)</sup>	±5 V ±2.5 V ±1.25 V ±0.625 V ±0.3125 V	±10 V ±5 V ±2.5 V ±1.25 V ±0.625 V	–	–
Unipolar Input Ranges	–	–	ACL-8112DG <sup>(5)</sup> ACL-8112HG <sup>(6)</sup> ACL-8112PG <sup>(7)</sup>	–	0-10 V, 0-5 V, 0-2.5 V, 0-1.25 V, 0-0.625 V	–	–
<b>Analog Output</b>							
Voltage Outputs	–	2	2	1	–	6	2
Current Outputs	–	–	–	–	–	6	2
Isolation	–	–	–	–	–	–	●
DA Resolution (bits)	–	12	12	12	–	12	12
Settling Time	–	30 μs	30 μs	30 μs	–	70 μs	30 μs
Bipolar Output Ranges	–	–	–	–	–	±10 V, ±5 V	±10 V, ±5 V
Unipolar Output Ranges	–	0-10 V 0-5 V	0-10 V 0-5 V	0-10 V 0-5 V	–	0-10 V 0-5 V	0-10 V 0-5 V
Current Output Ranges	–	–	–	–	–	4-20 mA	0-20 mA, 4-20 mA
<b>Digital I/O, Timer/Counter, and External Trigger</b>							
Digital I/O	16 DI, 16 DO	16 DI, 16 DO	16 DI, 16 DO	16 DI, 16 DO	–	16 DI, 16 DO	–
Timer/Counter	1, 16-bit	1, 16-bit	1, 16-bit	–	–	–	–
Pacer Trigger	●	●	●	●	–	–	–

Legend: ● Supported - Not available  
 Notes: (1) 16 SE/8 DI for ACL-8112DG/HG, 16 SE for ACL-8112PG  
 (2) ±10 V, ±5 V, ±2.5 V, ±1.25 V, ±0.625 V  
 (3) ±10 V, ±5 V, ±1 V, ±500 mV, ±100 mV, ±50 mV, ±10 mV, ±5 mV  
 (4) ±10 V, ±5 V, ±2.5 V, ±1.25 V, ±0.625 V  
 (5) 0-10 V, 0-5 V, 0-2.5 V, 0-1.25 V  
 (6) 0-10 V, 0-1 V, 0-0.1 V, 0-10 mV  
 (7) Not available

# ISA DIO Cards

	Digital Input/Output & Timer/Counter Cards						
							
Model Name	ACL-7130	ACL-7125	ACL-7225	ACL-7122	PET-48DIO	ACL-7120A/6	ACL-8454/12
<b>Digital I/O</b>							
Digital Input	16 Isolated DI 16 TTL DI	8 Isolated DI	16 Isolated DI	144 TTL DIO	48 TTL DIO	32 TTL DI	16 TTL DI
Digital Output	16 Isolated DO 16 TTL DO	8 Relay DO	16 Relay DO			32 TTL DI	8 TTL DO
Max. Transfer Rate (Hz)	10 k	10 k	10 k	500 k	500 k	500 k	500 k
<b>Timer/Counter</b>							
Timer	1, 32-bit	–	–	–	1, 32-bit	2, 16-bit	2, 32-bit
Counter	1, 16-bit	–	–	–	1, 16-bit	4, 16-bit	8, 16-bit
<b>Accessory</b>							
Termination Board (Cables are not included. For information on mating cables, refer to Section 9.)	ACLD-9188 ACLD-9137 DIN-37D	ACLD-9137 ACLD-9138 DIN-37D	ACLD-9137 ACLD-9138 DIN-37D	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-24P/24 TB-24R/24 TB-24R/12 TB-16P8R DIN-50P DIN-24G DIN-24P/24 DIN-24R/24 DIN-24R/12	ACLD-9188 ACLD-9185 ACLD-9182A	ACLD-9137 ACLD-9138 DIN-37D

## ACL-8316L/8312L

### 16-CH 16/12-Bit 100 kS/s Multi-Function DAQ Cards

- Up to 16-bit A/D resolution
- Up to 100 kS/s sampling rate
- 16-CH single-ended or 8-CH differential inputs
- DMA transfer for analog inputs
- Programmable gains



## ACL-8216

### 16-CH 16-Bit 100 kS/s Multi-Function DAQ Card

- 16-bit A/D resolution
- Up to 100 kS/s sampling rate
- 16-CH single-ended or 8-CH differential inputs
- DMA for analog inputs
- Programmable gains



## ACL-8112 Series

### 16-CH 12-Bit 100 kS/s Multi-Function DAQ Cards

- 12-bit A/D resolution
- Up to 100 kS/s sampling rate
- 16-CH single-ended or 8-CH differential inputs
- DMA for analog inputs
- Programmable gains



## ACL-8111

### 8-CH 12-Bit 50 kS/s Low-Cost Multi-Function DAQ Card

- 12-bit A/D resolution
- Up to 50 kS/s sampling rate
- 8-CH single-ended inputs
- Programmable IRQ level for A/D data transfer
- Programmable gains



## ACL-8113A

### 32-CH 12-Bit 30 kS/s Isolated Analog Input Card

- 12-bit A/D resolution
- Up to 30 kS/s sampling rate
- 32-CH single-ended inputs
- Programmable gains
- 2500 VRMS optical isolation



## ACL-6126

### 6-CH 12-Bit Analog Output Card

- 12-bit D/A resolution
- 6-CH voltage outputs
- 6-CH current outputs
- Bipolar or unipolar analog output ranges
- 16-CH TTL digital inputs & 16-CH TTL digital outputs



## ACL-6128A

### 2-CH 12-Bit Isolated Analog Output Card

- 2-CH 12-bit multiplying analog outputs
- Bipolar or unipolar voltage output ranges
- Unipolar current output ranges
- 2500 VRMS optical isolation
- Compact, half-size PCB



## ACL-7130

### 16-CH Isolated DI & 16-CH Isolated DO Card

- 16-CH isolated digital inputs and 16-CH isolated digital outputs
- 2500 VRMS optical isolation
- Sink current up to 500 mA on each isolated output
- 16-CH TTL digital inputs and 16-CH TTL digital outputs
- Two external interrupt sources



## ACL-7125

### 8-CH Relay Outputs & 8-CH Isolated DI Card

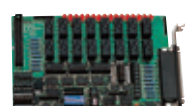
- 4-CH SPDT (Form C) and 4-CH SPST (Form A) relays
- Non-latching relays
- Onboard relay driving circuits
- Onboard LED indicators for relay status
- 8-CH isolated digital inputs



## ACL-7225

### 16-CH Relay Outputs & 16-CH Isolated DI Card

- 8-CH SPDT (Form C) & 8-CH SPST (Form A) relays
- Non-latching relays
- Onboard LED indicators for relay status
- Onboard relay driving circuits
- 16-CH isolated digital inputs



## ACL-7122

### Opto-22 Compatible 144-CH Card

- High-density 144-CH digital inputs/outputs
- TTL/DTL compatible digital I/O channels
- Direct interface with OPTO-22 compatible I/O modules
- Buffered circuits for high driving capacity
- Programmable interrupt handling



## PET-48DIO

### Opto-22 Compatible 48-CH Card

- High-density 48-CH digital inputs/outputs
- TTL/DTL compatible digital I/O channels
- Direct interface with OPTO-22 compatible I/O modules
- Buffered circuits for high driving capacity
- Programmable interrupt handling



## ACL-7120A/6

### 32-CH DIO & Timer/Counter Card

- 32-CH TTL digital inputs and 32-CH TTL digital outputs
- High output driving capacity
- 3 independent programmable 16-bit down counters
- One 16-bit event counter for interrupt generation
- One cascaded 32-bit timer with a 4 MHz timebase



## ACL-8454/12

### 8-CH 16-Bit Counters, 2-CH 32-Bit Timer & Digital I/O Card

- 8-CH timers/counters
- 2-CH cascaded 32-bit timer with 1 MHz base clock
- Onboard multiple base clocks ranging from 100 kHz to 2 MHz
- External gate control and clock inputs for each counter
- 8-CH TTL digital outputs and up to 16-CH TTL digital inputs



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PCI/PCI Express DAQ Cards

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PCI DIO Cards

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PC/ 104-Plus Products

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ISA DAS/ DIO Cards

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Wiring Termination Boards

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Motion, HSL, Vision, COM & GEME

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Remote I/O Modules

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Industrial Computers