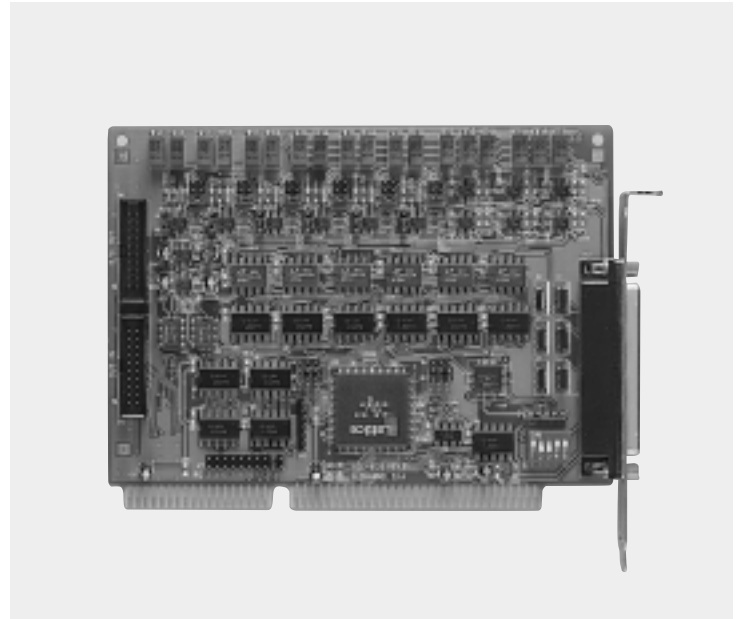


ACL-6126

6-CH Voltage & Current Output Card

Features

- 6 multiplying analog output channels
- 12 bit resolution, double buffered D/A converters
- Multiple Voltage Range (jumper selectable)
 - Bipolar: $\pm 5V$, $\pm 10V$,
 - Unipolar: $0\sim 10V$, $0\sim 5V$
- All D/A outputs are set to 0V after RESET or POWER-ON
- 16 digital input and 16 digital outputs
- Compact, half size PCB
- Surface mount component design
- PC/AT Bus architecture
- IRQ Level: IRQ3,....., IRQ 15 from external interrupt source
- Register structure compatible with PCL-726



Specifications

Analog Output (D/A)

- Number of channels: 6
- Resolution range: 12-bit, double buffered
- Converter: DAC7541 AJP or equivalent, Monolithic multiplying
- Voltage output range
 - Unipolar: $0\sim 5V$ or $0\sim 10V$
 - Bipolar: $\pm 5V$ or $\pm 10V$
- Reference voltage
 - Internal: $-5V$ or $-10V$
 - External: $+10V$ or $-10V$ max.
- Voltage output settling time: Max 30 μs (from $-10V$ to $+10V$)
- Linearity: $\pm 1/2$ bits LSB
- Accuracy: $\pm 0.012\%$ full scale range
- Temperature drift: 5 PPM/ $0^\circ C$
- Voltage output driving capability: $\pm 5mA$ max.
- Current loop (sink): 4 to 20 mA with external DC power supply, at 8V (min.) up to 36V (max.)
- Current output settling time: Max 70 μs (from 4 to 20mA)
- Output initial status: 0V (after RESET or POWER-ON)

Digital Output

- Number of channels: 16 channels
- Level: TTL compatible
 - Low: $-0.5V$ min. to $+0.8$ max
 - High: $2.4V$ min. to $5.0V$ max

Digital Input

- Number of channels: 16 channels
- Input logic low: Max. 0.8V
- Input logic high: Min. 2.0V

General Specifications

- I/O address allocated: 16 consecutive address locations
- I/O connector: DB-37 female and two 20-pin header connectors
- Operating temperature: $0^\circ\sim 55^\circ C$
- Storage temperature: $-20^\circ\sim 80^\circ C$
- Humidity: 5~95%, non-condensing
- Power requirement
 - $+5V$ @ 360mA typical
450mA max
 - $+12V$ @ 60mA typical
180mA max
 - $-12V$ @ 20mA typical
90mA max.
- Dimension: 163 mm x 123 mm

Termination Boards

- ACLD-9137 • ACLD-9188
- ACLD-9185 • ACLD-9182A
- ACLD-9178 • DIN-37D

Ordering Information

ACL-6126

6-CH, 12-bit Analog Output Card

Pin Assignments for the DB-37 Connector

DA1 Vout	(1)	○	(20) DA5 Vout
DA1 Vref	(2)	○	(21) DA5 Vref
DA1 Iout	(3)	○	(22) DA5 Iout
A.GND	(4)	○	(23) A.GND
DA2 Vout	(5)	○	(24) DA6 Vout
DA2 Vref	(6)	○	(25) DA6 Vref
DA2 Iout	(7)	○	(26) DA6 Iout
A.GND	(8)	○	(27) A.GND
DA3 Vout	(9)	○	(28) --
DA3 Vref	(10)	○	(29) --
DA3 Iout	(11)	○	(30) --
A.GND	(12)	○	(31) A.GND
DA4 Vout	(13)	○	(32) --
DA4 Vref	(14)	○	(33) --
DA4 Iout	(15)	○	(34) --
A.GND	(16)	○	(35) A.GND
ExtIntrupt	(17)	○	(36) A.GND
D.GND	(18)	○	(37) A.GND
+5V	(19)	○	