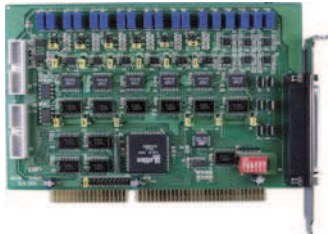


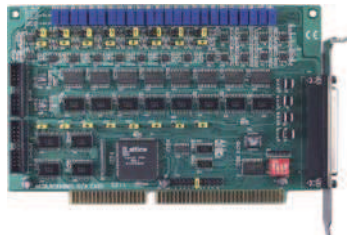
## ISA Analog Output Board

# A-626/A-628

## 6 & 8-channel 12-bit analog output board



A-626



A-628

### Functional Description

The A-626 and A-628 are 12-bit analog output boards with 16-channel digital input and 16-channel digital output. The A-626 and A-628 boards support both current and voltage output. The output channels can be jumper-selectable for different voltage range  $\pm 10V$ ,  $\pm 5V$ ,  $0\sim 5V$ ,  $0\sim 10V$ . It can also sink 4~20 mA current loop when connected to an external voltage source. On-board BB Ref-01 chip is used for solving the thermo-drifting problem of the reference voltage. A-626 is much better than other products on the market for long period operation. On-board lattice FPGA increases the stability.

### Applications

- Servo control
- Programmable voltage source
- Programmable current sink
- Product testing

### Specifications

#### Analog Output

- Number of channels: 6 (A-626); 8 (A-628)
- Resolution: 12-bit
- Type: AD 7541 or equivalent
- Differential linearity:  $\pm 1/2$  LSB max over temperature
- Settling time: less than  $65 \mu s$
- Temperature drift: 5ppm /  $^{\circ}C$  max
- Relative accuracy:  $\pm 1$  LSB max
- Voltage output range:  $0\sim 5V$ ,  $0\sim 10V$ ,  $\pm 5V$ ,  $\pm 10V$
- Output driving capability: 5 mA max
- Current output range: 4~20 mA
- Current loop exciting voltage: 8V ~ 35V
- Reference voltage: Internal -5V or -10V  
External +10V or -10V max

### Features

- 6 or 8 analog output channels
- 12-bit resolution
- $0\sim 5V$ ,  $0\sim 10V$ ,  $\pm 5V$ ,  $\pm 10V$  output ranges
- 4-20 mA current loop capability, sink to ground
- On-board reference -5V, -10V
- External reference  $\pm 10V$  (max.) AC or DC
- IRQ level from IRQ 3-IRQ 15
- 16-channel digital input and 16-channel digital output

- 16 TTL-level input
- Input low  $V_{IL} = 0.8 V_{max}$ ;  $I_{IL} = -0.4$  mA max
- Input high  $V_{IH} = 2.0 V_{min}$ ;  $I_{IH} = 20 \mu A$  max
- 16 TTL-level Output
- Output low  $V_{OL} = 0.5 V_{max}$ ;  $@I_{OL} = 8$  mA max
- Output high  $V_{OH} = 2.7 V_{min}$ ;  $@I_{OH} = -400 \mu A$  max

### General Specifications

- I/O connector: one 37-pin D-Sub female  
two 20-pin ribbon male
- Power requirements:

Power	Typical A-626/A-628	Maximal A-626/A-628
+5V	450/500 mA	900/1100 mA
+12V	50/60 mA	110/130 mA
-12V	14/15 mA	90/105 mA

- Operating temperature:  $0 \sim 60^{\circ}C$
- Operating humidity:  $0 \sim 90\%$  non-condensing
- Storage temperature:  $-20 \sim 70^{\circ}C$
- Dimensions: 184 mm x 123 mm (A-626);  
198 mm x 123 mm (A-628)

### Ordering Information

#### Standard

- A-626:** 6-channel 12-bit analog output board
- A-626/S:** A-626 with DN-37
- A-628:** 8-channel 12-bit analog output board
- A-628/S:** A-628 with DN-37

#### Optional

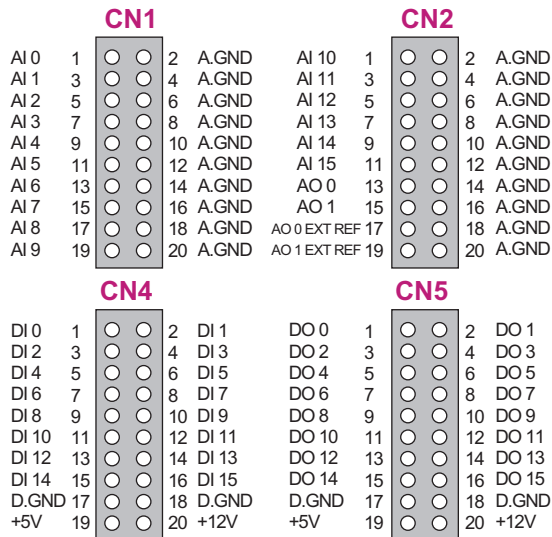
- DN-37:** DIN-rail mounting terminal board
- DB-37:** Directly connection terminal board
- DB-16P:** 16-channel isolated digital input board
- DB-16R:** 16-channel SPDT relay board
- DN-20:** DIN-rail mounting terminal board
- ADP-20:** 20-pin extender

# Pin Assignment

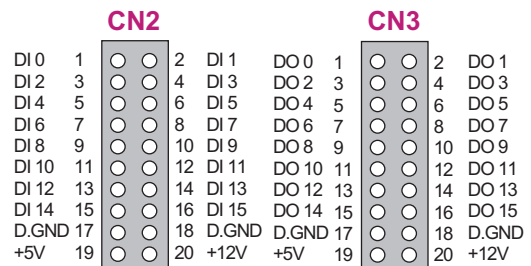
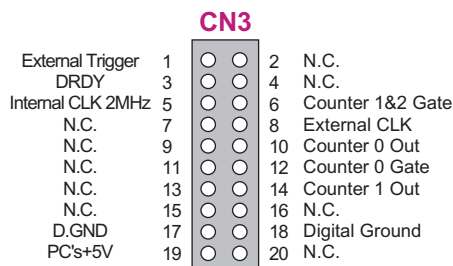
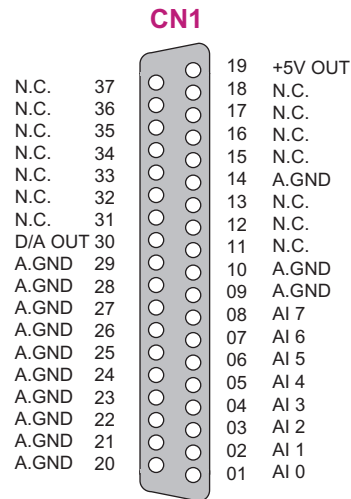
A-812PG/A-8111/A-626/A-628

## Pin Assignment

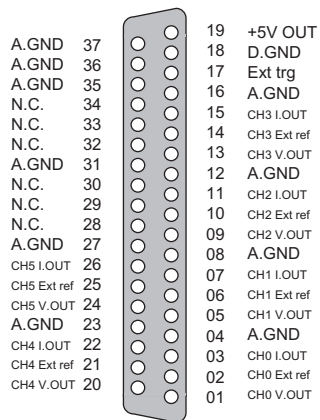
### A-812PG



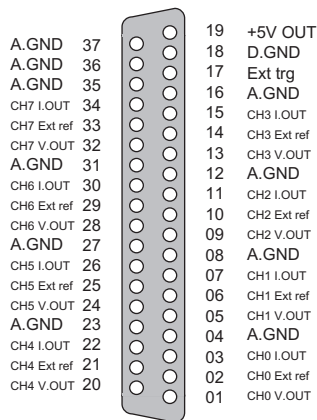
### A-8111



### A-626 6-channel analog output



### A-628 8-channel analog output



### A-626/A-628 DIO

