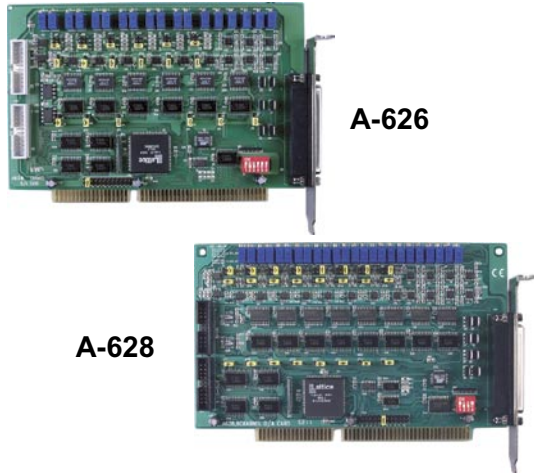


ISA Analog Output Board

A-626/A-628

6 & 8-channel 12-bit analog output board



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: ± 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

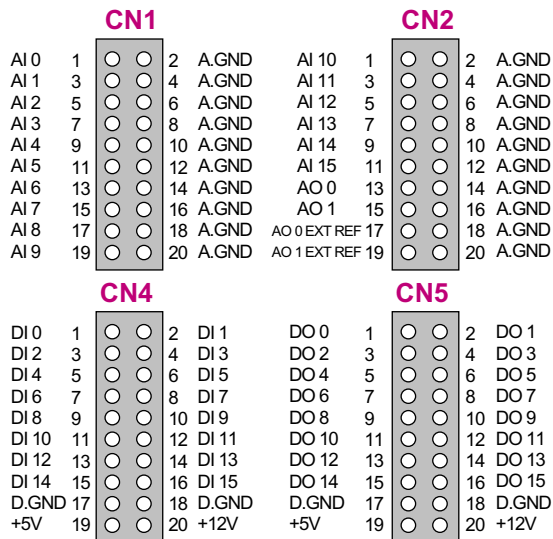
- DN-37:** DIN-rail mounting terminal board
- DB-37:** Directly connection terminal board
- DB-16P:** 16-channel isolated digital input board
- DB-16R:** 16-channel SPDT relay board
- DN-20:** DIN-rail mounting terminal board
- ADP-20:** 20-pin extender

Pin Assignment

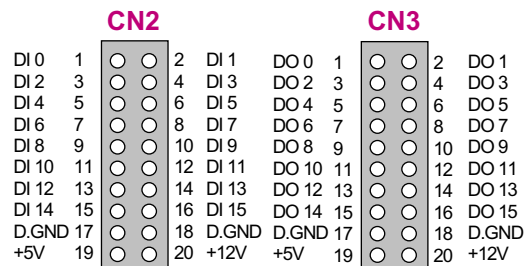
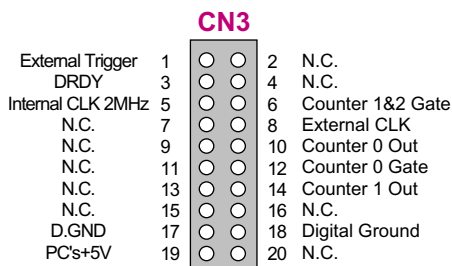
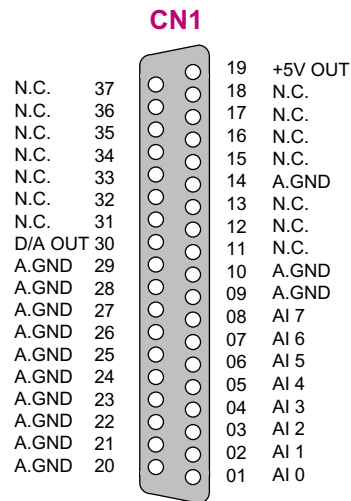
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Pin Assignment

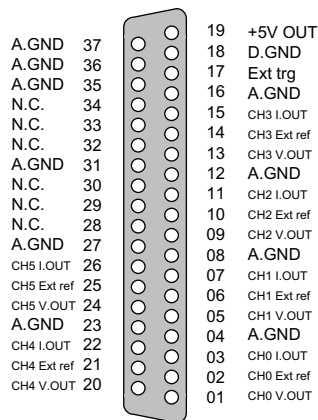
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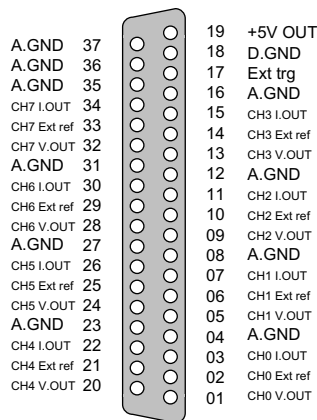
A-8111



A-626 6-channel analog output



A-628 8-channel analog output



A-626/A-628 DIO

