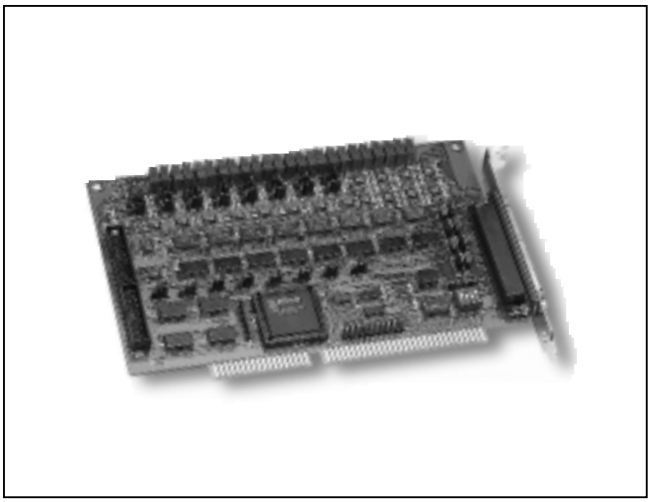
A-626/A-628

6 & 8 Channel 12 Bit Analog Output Board



Functional Description

The A-626, A-628 are 12-bit analog output boards with 16 digital input channel and 16 output digital output. The A-626, A-628 boards support both current and voltage output. The output channels can be jumper selectable for different voltage range;+/-10V, +/-5V, 0-5V, 0-10V and can sink 4-20mA current when connected to an external voltage source. On board reference chip BB Ref-01 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. Lattice FPGA on board can increase the stability.

Features

- 6 or 8 analog output channels
- 12-bit resolution
- 0~5V, 0~10V, ±5V, ±10V output ranges
- 4-20mA current loop capability, sink to ground
- On board reference -5V, -10V
- External reference ±10V (max.) AC or DC
- External Interrupt request signals, IRQ level from IRQ 3-IRQ 15
- 16 channel digital input and 16 channel digital output
- Connects directly to DB-16P, DB-16R, DN-20, DN-37, 782, and 785 families

Applications

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

Specifications

■ Analog Outputs

Number of analog output channels:
A-626: 6 Channel; A-628: 8 Channel
Resolution: 12-bits
Type: AD 7541 or equivalent
Differential linearity: ±1/2 LSB max. over temperature
Settling time: less than 65 μS
Temperature drift: 5ppm /°C max.
Relative Accuracy: +/- 1 LSB max.
Output Driving Capability: 5mA max.
Current Loop Exciting Voltage: 8V ~ 35V
Reference Voltage: Internal -5V or -10V
External +10V or -10V max.

■ Digital I/O

Inputs (LSTTL): 16
Input low VIL = 0.8 V max.; IIL =-0.4mA max.
Input high VIH = 2.0V min; IIH = 20μA max.
Outputs (LSTTL): 16
Output low VOL = 0.5 V max.; @IOL =8mA max.
Output high VOH = 2.7V min; @IOH = -400μA max.
Interrupt channel: 3~15

■ Power Requirements :

Power	Typical A-626/A-628	Maximal A-626/A-628
+5V	450/500mA	0.9/1.1A
+12V	50/60mA	110/130mA
-12V	14/15mA	90/105mA

■ General Environment

Operating temp: 0-50°C
Storage temp: -20°C to 70°C
Humidity: 0 to 90%
Dimensions: A-626: 184mm x 123mm
A-628: 198mm x 123mm

Software

- A-626 Development Toolkit for DOS
- A-626 Development Toolkit for Win95
- A-626 Development Toolkit for WinNT

A-626/A-628

6 & 8 Channel 12 Bit Analog Output Board

Order Description

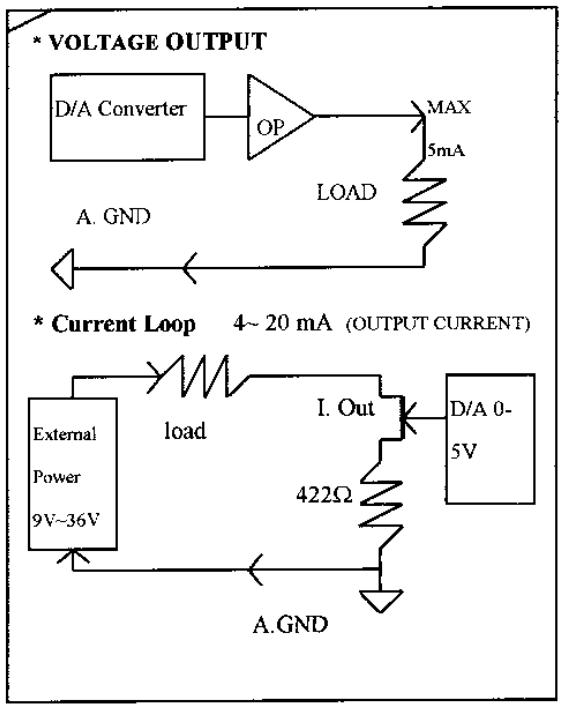
- A-626: 6 CHANNEL 12-BIT Analog Output and Digital I/O Board
- A-628: 8 CHANNEL 12-BIT Analog Output and Digital I/O Board

Options

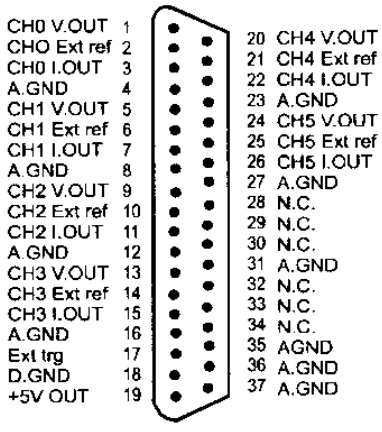
- DB-16P: 16 Channel isolated digital input Board
- DB-16R: 16 Channel SPDT Relay Board
- DB-37: Directly connect signals to the back of A-626 / A628
- DN-37: I/O Connector Block with DIN Rail Mounting and 37-PIN D-SUB Connector
- DN-20: I/O Connector Block with DIN Rail Mounting and 20-PIN Header
- ADP-20: 20-pin Extender
- A-626 LabVIEW Development Toolkit for Win95
- A-626 LabVIEW Development Toolkit for WinNT

NOTE:
The A-626 & A-628 provide current loop. The user should need a external power supply to provide a bias voltage for FET.
Please refer to the right hand side figure.

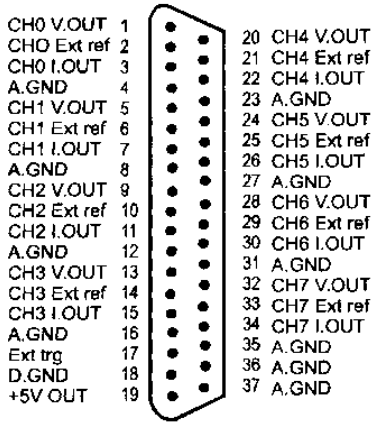
TYPICAL OUTPUT CONFIGURATION



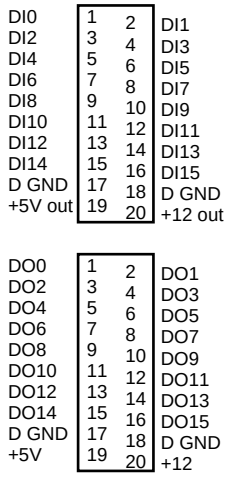
A-626 6 channel analog output
37pin connector pin assignment



A-628 8 channel analog output
37pin connector pin assignment



A-626/A-628 DIO
Pin assignment



Note :

V.OUT Voltage output
Ext ref: External reference input
A.GND :analog ground
DI :digital input
I.OUT: Current output
Ext trg : External trigger
D.GND :digital ground
DO:digital output