

A-812PG

70KS/s 12-Bit Analog & Digital I/O Board



Functional Description

The A-812PG are 12 bit multifunction analog and digital I/O boards for the PC/AT compatible computer. The A-812PG offer 16 single-ended plus two channels of analog output with 12-bits resolution. In addition, The A-812PG has 16 digital input, 16 digital output, one timer/counter channel. The A-812PG Provides gain of 1, 2, 4, 8, 16. It has a maximum sampling rate of 65K samples /s, DMA operation is jumper selectable for levels 1 or 3. Interrupts are jumper selectable between 3 and 15.

Features

- ✂ 12-bit A/D converter
- ✂ 12-bit D/A converter
- ✂ 16 single-ended
- ✂ 65 k/s sampling rate
- ✂ Two 12-bit analog output channel
- ✂ Analog Output Range : 0~5V, 0~10V
- ✂ Software programmable gain :
A-812PG: 1, 2, 4, 8, 16
- ✂ Interrupt handling A/D Trigger modes : Software Trigger, Pacer Trigger, External Trigger, Event Trigger A/D data transfer modes : polling, interrupt, DMA
- ✂ 16 digital input & 16 digital output

Applications

- ✂ Signal analysis
- ✂ Industrial automation
- ✂ Laboratory automation
- ✂ Sensor interface
- ✂ FFT & frequency analysis
- ✂ Transient analysis
- ✂ Production test
- ✂ Process control

Option

- DN-20 : Screw Terminal Board with DIN Rail Mounting
- DB-16P : 16-channel Isolated Digital Input Daughter Board
- DB-16R : 16-channel Relay Output Daughter Board
- DB-24C : 24-channel Open-Collector Output Daughter Board
- DB-24SSR : 24-channel SSR Output Daughter Board

Software

- ✂ Toolkit for **DOS**
- ✂ Toolkit for **Windows 95/98**
- ✂ Toolkit for **Windows NT**

Ordering Information

A-812PG	70KS/s 12-Bit Analog & Digital I/O Board
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Specifications

Analog Input

Channels : 16-channel single-ended
 Resolution : 12-bits
 Conversion rate : 65K sample /sec
 Input Impedance: 10M Ohm //6pf
 Over Voltage Protection : +/- 35Vdc
 INL (Max) : +/- 1 bit
 Sample & hold : On chip
 Zero Drift : 15ppm / deg C of Full Scale

Analog Input Range

A-812PG Input Range

Gain	1 Jumper setting	1	2	4	8	16
Bipolar(V)	+/- 10	+/- 5	+/- 2.5	+/- 1.25	+/- 0.625	+/- 0.3125
Throughput	65K/s	65K/s	65K/s	65K/s	65K/s	65K/s

D/A Outputs

Channels	2 independent
Type	12-bit double buffered
Linearity	0.006% FS
Output range	Internal reference 0~5V,0~10V
External reference	max +10V or -10V
Output Driving	5mA

Digital I/O

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

Timer/Counter

Programmable Interval Timer	(0.0045Hz~0.5MHz)
Type	82c54
A/D pacer	32 bit counter (A-822PGH/L)
A/D pacer	16 bit counter (A-823PGH/L)
Interrupt channel	3-15 jumper selectable

General Environmental

Power Requirements	+5V @350mA max.
Operating temp	0-50(C)
Storage temp	-20 to 70(C)
Humidity	0 to 90 non-condensing
Dimensions	170mm x 122 mm

