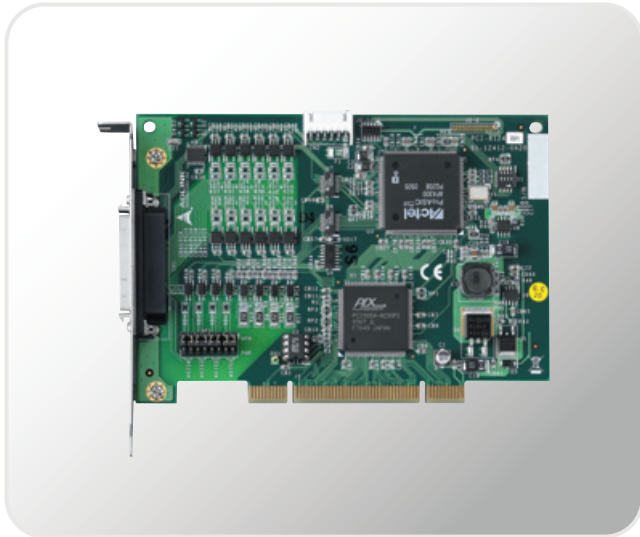


# PCI-8124



## Advanced 4-CH Trigger Board



### Features

- 32-bit PCI bus, Rev. 2.2, 33MHz
- Card index switch selection
- Four 32-bit encoder input and trigger output channels
- Encoder input frequency: Up to 5MHz
- Trigger output frequency: Up to 1MHz
- Encoder input interface: OUT/DIR, CW/CCW, and 1x, 2x, 4x A/B phase
- Input / output circuit source can be selectable: TTL / Open Collector (with isolation)
- Four 32-bit comparators where source can be configurable
- Internal high-speed FIFO for 4 32-bit comparators
- Capacity for each channel: Up to 512 points
- Support point array assignment and linear function generation for comparing points
- Trigger pulse width adjustable
- High-speed position latch
- Homing by EZ index with edge trigger
- Support force trigger
- Programmable interrupt sources

### Software Support

#### Windows Platform

Driver support for Windows 2K/XP

VB/VC++/BCB/Delphi are recommended programming tools

### Ordering Information

PCI-8124

4-CH trigger board

### Specifications

#### Counter

Number of channels	4
Maximum trigger pulse frequency	1MHz
Encoder counter	4, 32-bit
Comparator	4, 32-bit
FIFO capacity	512 points/channel
Maximum encoder input frequency	5MHz
Trigger pulse width	0.5 $\mu$ s to 1.6ms

#### I/O Signals

Partial I/O signals	optically isolated with 2500Vrms isolation voltage
Partial I/O signals	TTL type
encoder signals input pins	EA and EB
Encoder index signal input pin	EZ
Position latch input pin	LTC
Trigger pulse output pin	TRG

#### General Specifications

Connectors	50-pin SCSI-type connector
Operating Temperature	0°C - 50°C
Storage Temperature	-20°C - 80°C
Humidity	5 - 85%, non-condensing

#### Power Consumption

Slot power supply (input)	+5V DC $\pm$ 5%, 900mA(max)
External power supply (output)	+5V DC $\pm$ 5%, 500mA(max)

#### Pin Assignment

INCOM1	1	26	INCOM3
LTC1	2	27	LTC3
INCOM2	3	28	INCOM4
LTC2	4	29	LTC4
OUTCOM1	5	30	OUTCOM3
TRG1	6	31	TRG3
OUTCOM2	7	32	OUTCOM4
TRG2	8	33	TRG4
EA1+	9	34	EA3+
EA1-	10	35	EA3-
EB1+	11	36	EB3+
EB1-	12	37	EB3-
EZ1+	13	38	EZ3+
EZ1-	14	39	EZ3-
EA2+	15	40	EA4+
EA2-	16	41	EA4-
EB2+	17	42	EB4+
EB2-	18	43	EB4-
EZ2+	19	44	EZ4+
EZ2-	20	45	EZ4-
TTL-IN1	21	46	TTL-IN3
TTL-IN2	22	47	TTL-IN4
TTL-OUT1	23	48	TTL-OUT3
TTL-OUT2	24	49	TTL-OUT4
DGND	25	50	DGND