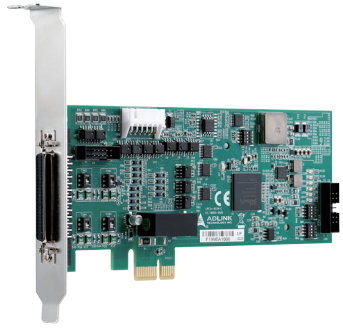
LPCIe-8124-C

Advanced 4-CH Encoder Card with High-Speed Triggering Function

Features

- Card index switch selection
- Four 32-bit quadrature encoder input and trigger output channels
- Encoder input interface: OUT/DIR, CW/CCW, and 1x, 2x, 4x A/B phase
- Trigger output up to 4.4MHz
- Encoder input up to 18MHz
- Programmable trigger pulse width: 0.1us to 3.2765ms
- TTL output, 5 to 24V open collector output, and differential output interface



Introduction

The LPCIe-8124-C delivers versatile position comparison & high speed trigger output, making it ideal for a wide range of applications such as AOI and distance measurement. With a PCIe interface, LPCIe-8124-C is compatible with a wide variety of high performance systems.

With its versatile position comparison & high speed trigger function including manual, linear, table, and timer triggering, flexible comparison modes from 14 built in comparators, the LPCIe-8124-C is fully compatible with any AOI application, and 4 latch input channels further support a range of inspection machine types. In addition, the LPCIe-8124-C delivers complete compatibility with multiple trigger output interfaces, including TTL output, 5 to 24V open collector output, and differential output for any device. Moreover, ADLINK's included TriggerMaster Windows-based application development tool delivers simple and powerful configuration and testing management.

Software Support

- **OS Information**
  Windows® 8.1/7
  RTX 8.1a/2009SMP
- **Software Compatibility**
  VB/VC++/BCB
  Various sample programs with source codes
- **Software Recommendations**
  TriggerMaster

Ordering Information

- **LPCIe-8124-C**
  Advanced 4-CH encoder card with high-speed triggering function

Optional Accessories

- **DIN-50S-01**
  Terminal board with one 50-pin SCSI-II connector and DIN-rail mounting
- **ACL-10250-1**
  50-pin SCSI-II cable (mating with AMP-787082-5), 1 M

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Specifications

Counter	
Number of Channels	4-CH
Trigger Pulse Frequency	4.4MHz (max.)
Encoder Counter	4, 32-bit
Comparator	14, 32-bit
FIFO Capacity	1,023 points/channel
Encoder Input Frequency	18MHz (max.) @ 4 x AB mode
Trigger Pulse Width	0.1μs to 3.2765ms
I/O Signals	
Partial I/O Signals	Optically isolated with 2500 VRMS 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 to +50˚C (32˚F to 122˚F)
Storage Temperature	-20˚C to +80˚C (-4˚F to 176˚F)
Humidity	5% to 85%, non-condensing
Power Consumption	
Slot Power Supply (input)	900 mA (Max.) ±5%, 900 mA (Max.)
External Power Supply (output)	+5 VDC ±5%, 500 mA (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

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