PCI-8132

Entry-level 2-axis Servo & Stepper Motion Controller with 32-CH GPIO

ADLINK GREEN RoHS Compliant





Features

- **32-bit PCI bus, Rev 2.2, 33 MHz**
- **Pulse output rate up to 2.4 MHz**
- **Pulse output options: OUT/DIR, CW/CCW**
- **Encoder input frequency up to 2.4 MHz under 4 x AB mode**
- **2 axes linear interpolation**
- **Programmable acceleration and deceleration time**
- **Trapezoidal and S-curve velocity profiles**
- **Easy interface to any stepping motors, AC or DC servo, linear or rotary motors which have pulse train input mode**
- **28-bit up/down counter for incremental encoder**
- **All digital inputs and outputs are 2500 VRMS isolated**
- **Change speed override**
- **Multi-axis, simultaneous start/stop**
- **Dedicated I/O interface for PEL, MEL, ORG, EZ, INP, ERC, ALM**
- **Programmable interrupt sources**
- **Manual pulser input interface**
- **Supports up to 12 cards in one system**
- **Hardware position compare and trigger pulse output**
- **16-CH general purpose input/16-CH general purpose output**
- **3 home return modes**
- **More than 100 thread safe API functions**

Software Support

Windows® Platform

- Available for Windows 7/Vista (32-bit)/XP/2000
- Recommended programming environments: VB/VC++/BCB/Delphi
- Various sample programs with source codes
- Customized API functions

LabVIEW® VIs

- Motion VIs of the PCI-8132 for LabVIEW are available.

Linux Platform

- Redhat 9, kernel 2.4.x
- Fedora Core 3, kernel 2.6.9
- Fedora Core 4, kernel 2.6.11
- Fedora Core 5, kernel 2.6.15

MotionCreatorPro™

MotionCreatorPro™ assists motion system developers in debugging any cabling problems and resolving complex system configuration before programming.

Specifications

Pulse Type Motion Control	
Number of Axes	2
Pulse Output Rate	0.03 pps to 2.4 Mpps programmable
Pulse Command Output	DIR/OUT, CW/CCW
Max. Acceleration Rate	91 Mpps[2]
Speed Resolution	16-bit
Encoder Input Rate	2.4 MHz @ 3 M cable
Encoder Counter Resolution	28-bit
Positioning Range	-134,217,728 to +134,217,727 pulses (28-bit)
Max. Number of Cards in One System	12
Motion Interface I/O Signals	
Position Latch Input Pin	LTC (1 kHz for continous triggering)
I/O Pin	Differential and 2500 VRMS optically isolated
Incremental Encoder Signals Input Pin	DIR/OUT, EA/EB
Encoder Index Signal Input	EZ
Mechanical Limit Switch Signal Input Pin	±EL, ±SD, and ORG
Servomotor Interface I/O Pin	INP, ALM, ERC
General DO Pin	SVON
General DI Pin	RDY
Pulser Signal Input	PA and PB
Simultaneous Start/Stop Signal I/O Pin	STA and STP
General-purpose I/O	
16-CH input & 16-CH output	

Ordering Information

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Accessories

For more information on terminal boards & cables, please refer to page 6-29.

Terminal Boards

DIN-812M0
Terminal board for Mitsubishi MR-J2S-A servo amplifier

DIN-100S-01
Terminal board with one 100-pin SCSI-II connector and DIN-rail mounting

Cabling

ACL-102100-1
100-pin SCSI-II cable
(mating with AMP-787082-9), 1 M

Pin Assignment

PCI-8132 Pin Assignment of the 100-pin SCSI-type Connector

VPP+5V	1	51	DO COM+
EXGND	2	52	EXGND
OUT1+	3	53	DO0
OUT1-	4	54	DO1
DIR1+	5	55	DO2
DIR1-	6	56	DO3
SVON1	7	57	DO4
ERC1	8	58	DO5
ALM1	9	59	DO6
INP1	10	60	DO7
RDY1	11	61	DO8
EXGND	12	62	DO9
EA1+	13	63	DO10
EA1-	14	64	DO11
EB1+	15	65	DO12
EB1-	16	66	DO13
EZ1+	17	67	DO14
EZ1-	18	68	DO15
VPP+5V	19	69	EXGND
EXGND	20	70	EXGND
OUT2+	21	71	DI COM+
OUT2-	22	72	DI COM-
DIR2+	23	73	DI0
DIR2-	24	74	DI1
SVON2	25	75	DI2
ERC2	26	76	DI3
ALM2	27	77	DI4
INP2	28	78	DI5
RDY2	29	79	DI6
EXGND	30	80	DI7
EA2+	31	81	DI8
EA2-	32	82	DI9
EB2+	33	83	DI10
EB2-	34	84	DI11
EZ2+	35	85	DI12
EZ2-	36	86	DI13
PEL1	37	87	DI14
MEL1	38	88	DI15
PSD1	39	89	EXGND
MSD1	40	90	EXGND
ORG1	41	91	PA+
EXGND	42	92	PA-
PEL2	43	93	PB+
MEL2	44	94	PB-
PSD2	45	95	EXGND
MSD2	46	96	CMP1
ORG2	47	97	CMP2
EXGND	48	98	EXGND
EXGND	49	99	VPP+24V
EXGND	50	100	VPP+24V

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