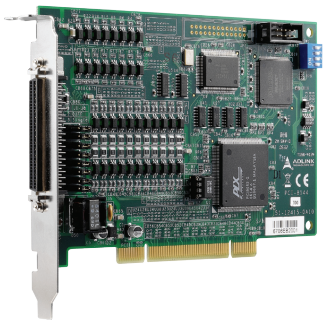
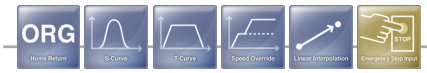
PCI-8144

4-axis Stepper Motion Controller





Features

- **32-bit PCI bus, Rev. 2.2, 33 MHz**
- **Card index switch selection**
- **Pulse output rates up 2.4 Mpps for stepper motor control**
- **Pulse output options: CW/CCW**
- **Speed change on-the-fly**
- **3 home return modes**
- **Programmable acceleration and deceleration time**
- **Trapezoidal and S-curve velocity profile**
- **Simultaneously start/stop with external signal control (STA/STP)**
- **Programmable interrupt control**
- **Supports up to 12 cards in one system**
- **Security protection for user's program**
- **General purpose isolated I/O: 8 DI and 8 DO**
- **Emergency stop input via STP pin**
- **All digital I/O are 2500 VRMS isolated**
- **More than 30 thread safe API functions**
- **2-phase stepping motor excitation optional**

Software Support

OS Information
- Windows® 8/7/XP

Software Compatibility
- VB/VC++/BCB/Delphi
- Various sample programs with source codes

Software Recommendations
- MotionCreatorPro2

Specifications

Pulse Type Motion Control	
Number of Axes	4
Pulse Output Rate	0.5 pps to 2.4 Mpps
Max. Acceleration Rate	737 Mpps²
Speed Resolution	16-bit
Motion Interface I/O Signals	
I/O Pin	Differential and 2500 VRMS optically isolated
End Limit Signal Pin	PEL and MEL
Slow Down Signal Pin	PSD and MSD
Home Sensor	ORG
GPIO	8 DI and 8 DO
General Specifications	
Connector	68-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	
Power Supply (Input)	+24 VDC ±5%
External Power Supply (Output)	+5 VDC ±5%, 100 mA (max.)

Ordering Information

PCI-8144
4-axis stepper motion controller

Accessories

For more information on terminal boards & cables, please refer to page 6-31.

Terminal Board

DIN-68S-01
Terminal board with one 68-pin SCSI-II connector and DIN-rail mounting

Cabling

ACL-10569-1
68-pin SCSI-II cable
(mating with AMP-787082-7), 1 M

Pin Assignment

VDD	1	35	VDD
EGND	2	36	EGND
CW0+	3	37	CW2+
CW0-	4	38	CW2-
CCW0+	5	39	CCW2+
CCW0-	6	40	CCW2-
PEL0	7	41	PEL2
MEL0	8	42	MEL2
PSD0	9	43	PSD2
MSD0	10	44	MSD2
ORG0	11	45	ORG2
EGND	12	46	EGND
CW1+	13	47	CW3+
CW1-	14	48	CW3-
CCW1+	15	49	CCW3+
CCW1-	16	50	CCW3-
PEL1	17	51	PEL3
MEL1	18	52	MEL3
PSD1	19	53	PSD3
MSD1	20	54	MSD3
ORG1	21	55	ORG3
STP/EMG	22	56	STA
DIN0	23	57	DOUT0
DIN1	24	58	DOUT1
DIN2	25	59	DOUT2
DIN3	26	60	DOUT3
DIN4	27	61	DOUT4
DIN5	28	62	DOUT5
DIN6	29	63	DOUT6
DIN7	30	64	DOUT7
VDD	31	65	DO_COM
VDD	32	66	DO_COM
EGND	33	67	EGND
EX+24V	34	68	EX+24V

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