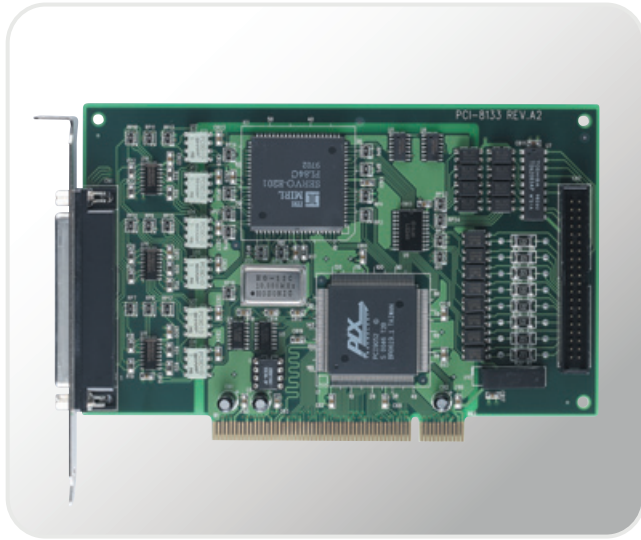


PCI-8133

3-CH Quadrature Encoder and 3 PWM Output Card



Features

- 32-bit PCI Bus, Plug and Play
- Three 16-bit counters
- Counters for quadrature AB phase encoder or general purpose up/down counter
- On-board 5000V_{dc} isolation circuits and digital de-glitch filters for every encoder input signal
- Programmable frequency for digital de-glitch filter
- Three PWM waveform generators
- 12-bit PWM signal resolution
- Isolated general purpose 8 DI & 8 DO
- Dual interrupt from two timer clock signals
- Compact, half-size PCB
- One 37-pin rugged connector for encoder signals, one 40-pin header connector for digital I/O expansion

Software Support

Windows Platform

Driver supports for Windows XP/2K/NT/98.

VB/V++/BCB/Delphi are recommended programming tools.

Termination Board

- ACLD-9137
- ACLD-9188
- DIN-37D
- ACL-10137-1/2 MM

Ordering Information

PCI-8133

3-CH quadrature phase encoder and PWM output card

Specifications

Counter of Encoder Input

Number of channels	3
Counter resolution	16-bit
Encoder counter features	A, B phase and index input Up-down counter Digital filter for input signal
Counter 1 input signal types	A, B phase decoder input VCO (CCW/CW pulse) input
Counter 2 input signal types	A, B phase decoder input VCO (CCW/CW pulse) input Pulse command input
Counter 3 input signal types	A, B phase decoder input Counter status read back
Filter type	3-order digital filter
Digital filter frequency	programmable 10MHz, 5MHz, 2.5MHz, 625KHz

PWM Signal Output

Number of channels	3
Signal resolution	12-bit
Base frequency	10MHz
	PWM cycle is synchronized with interrupt signal

Isolated Digital Output/Input

Number of channels	8 DI
Number of output channels	8 DO
Input voltage	0-24V _{dc} , differential input signal pairs
Input resistance	1.2KΩ@0.5W
Digital output type	Darlington Transistors, open collector up to 40V _{dc}
Current sink	200mA max.
Isolated voltage	5000V _{RMS}

General Specifications

Connector	one 37-pin D-type female and one 40-pin header connector
Interrupt sources (Dual Interrupt)	Internal Timer Clock A Internal Timer Clock B
Operating temperature	0 ~ 55°C
Storage temperature	-20 ~ 80°C
Humidity	0~95%, non-condensing
Dimension	162mm x 105mm

Pin Assignment of the 37-pin Connectors

IGND (1)	○	(20) PHA1-	○	Iso.+5V (1)	○	(20) Iso.+5V
PHA1+ (2)	○	(21) PHB1-	○	Iso.+5V (2)	○	(21) Iso.+5V
PHB1+ (3)	○	(22) PHC1-	○	IN0+ (3)	○	(22) IN0-
PHC1+ (4)	○	(23) PHA2-	○	IN1+ (4)	○	(23) IN1-
PHA2+ (5)	○	(24) PHB2-	○	IN2+ (5)	○	(24) IN2-
PHB2+ (6)	○	(25) PHC2-	○	IN3+ (6)	○	(25) IN3-
PHC2+ (7)	○	(26) PHA3-	○	IN4+ (7)	○	(26) IN4-
PHA3+ (8)	○	(27) PHB3-	○	IN5+ (8)	○	(27) IN5-
PHB3+ (9)	○	(28) PHC3-	○	IN6+ (9)	○	(28) IN6-
PHC3+ (10)	○	(29) PIN0-	○	IN7+ (10)	○	(29) IN7-
PIN0+ (11)	○	(30) PIN1-	○	VPP (11)	○	(30) VPP
PIN1+ (12)	○	(31) PIN2-	○	OUT0+ (12)	○	(31) DO.GND
PIN2+ (13)	○	(32) IGND	○	OUT1+ (13)	○	(32) DO.GND
IGND (14)	○	(33) N.C.	○	OUT2+ (14)	○	(33) DO.GND
GND (15)	○	(34) OENA	○	OUT3+ (15)	○	(34) DO.GND
U+ (16)	○	(35) U-	○	OUT4+ (16)	○	(35) DO.GND
V+ (17)	○	(36) V-	○	OUT5+ (17)	○	(36) DO.GND
W+ (18)	○	(37) W-	○	OUT6+ (18)	○	(37) DO.GND
+5V (19)	○			OUT7+ (19)	○	