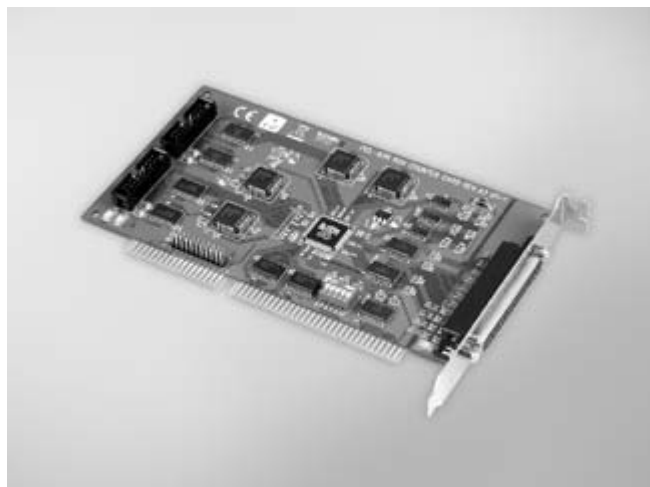


# PCL-836

## 6-ch, 16-bit Counter/Timer ISA Card



### Features

- Periodic interrupt generation
- 6 independent 16-bit counters
- Digital filter for noise reduction
- Binary or BCD counting
- Programmable frequency output
- Complex duty-cycle output
- Single-shot output
- 16-bit TTL input and 16-bit TTL output ports
- Selectable interrupt input channel
- Up to 10 MHz input frequency
- Pulsewidth and period measurement
- Time-delay generation
- F/V conversion and accumulation

### Introduction

PCL-836 is a general purpose counter/timer and digital I/O card for PC/AT compatible computers. It provides six 16-bit counter channels. It also includes 16 digital outputs and 16 digital inputs. Two 8254 chips provide a variety of powerful counter/timer function modes to match your industrial and/or laboratory applications.

#### Unique Digital Filter

PCL-836 includes a unique digital filter to eliminate noise on the input signal. The frequency can be adjusted to provide more stable output readings.

### Specifications

#### Digital Input

- Channels 16
- Compatibility 5 V/TTL
- Input Voltage Logic 0: 0.8 V max.  
Logic 1: 2.0 V min.

#### Digital Output

- Channels 16
- Compatibility 5 V/TTL
- Output Voltage Logic 0: 0.8 V  
Logic 1: 2.0 V
- Output Capability Sink: 8 mA @ 0.8 V  
Source: -0.4 mA @ 2.0 V

#### Counter/Timer

- Channels 6
- Resolution 16 bits
- Compatibility 5 V/TTL
- Max. Input Frequency 10 MHz
- Reference Clock Internal: 10 MHz  
External clock: 10 MHz
- Counter Modes 6 programmable counter modes
- Interrupt Capable Ch. IRQ 2, 4, 5, 7, 10, 11, 12, 15 (jumper selectable)
- PWM Channels 3
- Digital Noise Filter 1.6 ms to 52 ms (programmable)

#### General

- Power Consumption Typical: 5 V @ 360 mA  
Max.: 5 V @ 400 mA
- Operating Temperature 0 ~ 60° C (32 ~ 140° F)
- Storage Temperature -20 ~ 70° C (-4 ~ 158° F)
- Operating Humidity 5 ~ 95% RH non-condensing (refer to IEC 68-2-3)
- Connector 1 x DB37 female connector for counter  
2 x 20-pin box header for digital I/O
- Dimensions (L x H) 185 x 100 mm (7.3" x 3.9")

### Ordering Information

- PCL-836 6-ch, 16-bit Counter/Timer ISA Card
- PCL-10137-1 DB37 Cable, 1 m
- PCL-10137-2 DB37 Cable, 2 m
- PCL-10137-3 DB37 Cable, 3 m
- ADAM-3937 DB37 DIN-rail Wiring Board
- PCLD-880 Wiring Board w/ Two 20-pin Flat Cables & Adapter

### Pin Assignments

CLK1	1	20	OUT1
GATE1	2	21	GND
CLK2	3	22	OUT2
GATE2	4	23	GND
CLK3	5	24	OUT3
GATE3	6	25	GND
CLK4	7	26	OUT4
GATE4	8	27	GND
CLK5	9	28	OUT5
GATE5	10	29	GND
CLK6	11	30	OUT6
GATE6	12	31	GND
Interrupt Input	13	32	Interrupt Enable
PWM1	14	33	PWM2
PWM3	15	34	GND
Fout1	16	35	Fout2
Fout3	17	36	Fout4
Fout5	18	37	Fout6
+5V	19		