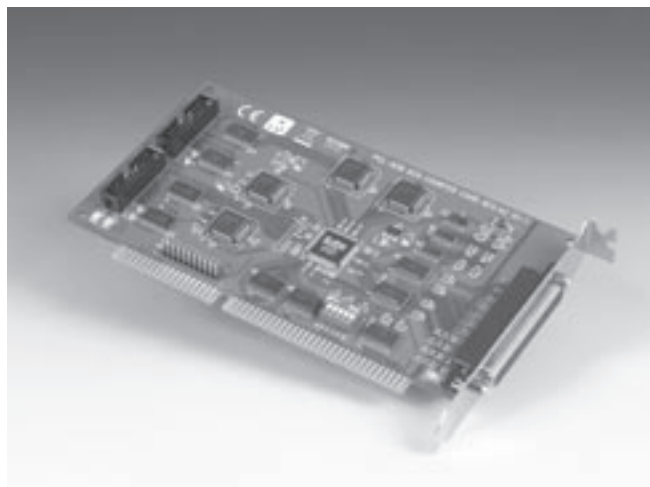# PCL-836

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** — +5 V @ 360 mA (typical)
  +5 V @ 400 mA (max.)
- **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 — One 37-pin D-type female connector for counter I/O
  Two 20-pin male flat-cable connector for digital I/O
- **Dimensions (L x H)** — 185 x 100 mm (7.3" x 3.9")

Ordering Information

- **PCL-836** — 6-ch Counter/Timer Card
- **PCL-10137-1** — DB37 cable assembly, 1 m
- **PCL-10137-2** — DB37 cable assembly, 2 m
- **PCL-10137-3** — DB37 cable assembly, 3 m
- **PCLD-880** — Screw terminal board
- **ADAM-3937** — DB-37 wiring terminal for DIN-rail mounting

Pin Assignments

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