



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

The 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

The 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.

Applications

- Event counting
- Industrial automation (flowmeter/wattmeter monitoring)
- Programmable frequency synthesis
- Frequency counter

Specifications

Programmable counter

- **Counter:** Six independent 16-bit counter channels
- **Modes:** Six programmable counter modes
- **Programmable digital noise filter:** 1.6 msec. to 52 msec.
- **3 PWM output**
- **TTL compatible input/output**
- **Interrupt:** IRQ 2, 4, 5, 7, 10, 11, 12, 15 (jumper selectable)

Digital input/output

- **16 TTL input channels:**
Logic level 0: 0.8 V max.
Logic level 1: 2.4 V min.

- **16 TTL output channels:**
Logic level 0: 0.5 V max. @ 8 mA
Logic level 1: 2.4 V min. @ 0.4 mA

General

- **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:** 37-pin D-type female connector for counter I/O
20-pin male flat-cable connector for digital I/O
- **Dimensions:** 185 mm (L) x 100 mm (H) (7.3" x 3.9")

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		

Ordering Information

- **PCL-836:** 6-channel counter/timer card, user's manual and utility diskette
- **PCL-10137:** DB-37 cable assembly, 1 m
- **PCLD-880:** Screw terminal board
- **PCLS-OCX:** ActiveX Control for data acquisition and control.
- **ADAM-3937:** DB-37 wiring terminal for DIN-rail mounting