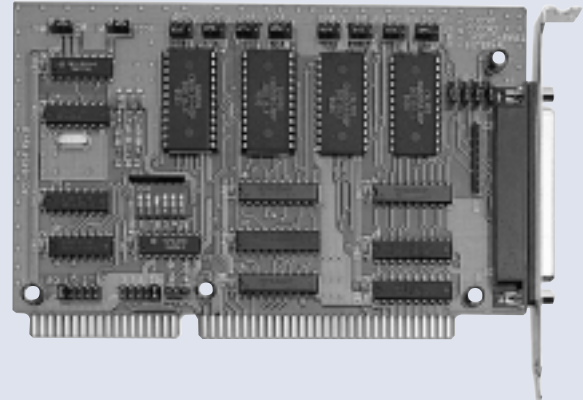


ACL-8454

8-CH Counter, 2-CH Timer & Digital I/O Card

Features

- Two (Four) 8254 programmable interval timer
- Total six (twelve) 16-bit down counters / timers
- 8 independent counters
- Two 32-bit timers
- Flexible clock source and gate control setting
- Internal periodic and external interrupt source
- 8-bit digital outputs and 16-bit digital inputs
- 9 IRQ level selectable (IRQ3 ~ IRQ15), partition as dual interrupt system
- 37-pin D-sub type connector



Introduction

The ACL-8454 is a general purpose timer/counter and digital I/O card for PC/AT or compatibles. It uses the most popular 82C54 timer / counter chip for event counting, pulse measurement, frequency measurement, and pulse generation. In addition, 8 digital outputs and up to 16 digital inputs are supported on this card.

On the ACL-8454, two 84C54 chips are on board and up to four 84C54 chips can be supported. It provides at least six and up to twelve 16-bit down counter. Each counter can be configured as a different clock sources and gate control by the jumper selection.

Specifications

Programmable Counter

- Type of counter: Intel 8254 or equivalent
- Counter mode: Down (Binary or BCD)
- Max. input frequency: 8 MHz
- CLK period: 125 ns min.
- Counters: 4 (or 8) independent 16-bit down counters
- Timers: 4 (or 8) independent 16-bit down counters
- Input low voltage: -0.5V min., 0.8V max.
- Input high voltage: 2.0V min., VCC +0.5V max.
- Output low voltage: 0.45V max.

- Output high voltage: 2.4V max.
- Base frequency: 4 MHz
- Frequency stability: ± 100 PPM

Digital Input / Output

- Number of DO channels: 8
- Number of DI channels: 8 (up to 16)
- Electricity characteristics: All inputs and outputs are TTL/ compatible

General Specifications

- Connector: 37-pin D-type female
- I/O port address: 8 address
- Interrupt level: (Dual Interrupt)
 - IRQ 3,5,6,7,9
 - IRQ 10,11,12,15
- Operating temperature: 0° ~ 60°C
- Storage temperature: -20° ~ 80°C
- Humidity: 0~95%, non-condensing
- Power requirement:
 - +5V @ 230 mA typical
 - 280 mA max.
- Dimension: 162mm x 105mm

Termination Boards

- ACLD-9137 • DIN-37D
- ACLD-9188

Ordering Information

ACL-8454/6

4-CH counter + 1-CH 32-bit timer card
(include development kit for DOS, Win-95/98/NT)

ACL-8454/12

8-CH counter + 2-CH 32-bit timer card
(include development kit for DOS, Win-95/98/NT)

Pin Assignments for the DB-37 Connector

GND (1)	○	(20) GND
ECLK1(DI0)(2)	○	(21) ExtG1(DI4)
COUT1 (3)	○	(22) ExtG2(DI5)
ECLK2(DI1)(4)	○	(23) COUT2
ECLK3(DI2)(5)	○	(24) ExtG3(DI6)
COUT3 (6)	○	(25) ExtG4(DI7)
ECLK4(DI3)(7)	○	(26) COUT4
ECLK7(DI8)(8)	○	(27) ExtG7(DI12)
COUT7 (9)	○	(28) ExtG8(DI13)
ECLK8(DI9)(10)	○	(29) COUT8
ECLK9(DI10)(11)	○	(30) ExtG9(DI14)
COUT9 (12)	○	(31) ExtG10(DI15)
ECLK10(DI11)(13)	○	(32) COUT10
COUT6 (14)	○	(33) COUT12(INT)
DO0 (15)	○	(34) DO1
DO2 (16)	○	(35) DO3
DO4 (17)	○	(36) DO5
DO6 (18)	○	(37) DO7
+5V out (19)	○	