PCI-8554

## 10-CH Counter Timer & Digital I/O Card

Features

- 32-bit PCI Bus, Plug and Play
- Four 82C54 Timer/Counter chips on board
- 10 independent 16-bit down counters
- Cascaded counters based on 8 MHz system clock
- Programmable four clock sources for every counter
- De-bounce filter for external clock input signals and external interrupt signal
- De-bounce clock frequency is programmable
- General purpose 8 TTL DI & 8 TTL DO
- Dual interrupt system
- Provide protected 5V and 12V power supply
- Compact, half-size PCB
- 100-pin rugged SCSI-II connector
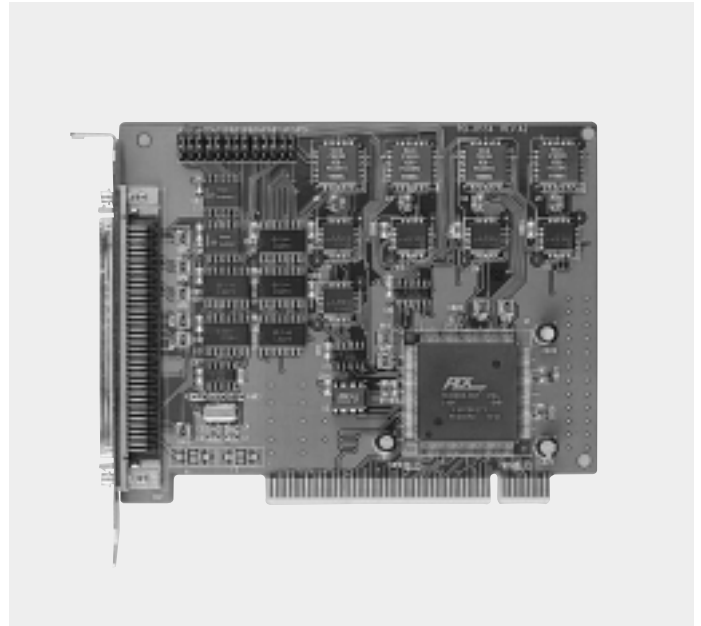
Specifications

Counter / Timer

- Counter devices: 8254 or equivalent
- Number of counters / timer:
  - 10 independent counters
  - Cascaded 32-bit counters with fixed 8MHz internal clock
- Counter mode: 16-bit down counter (Binary or BCD)
- Max. input frequency: 8 MHz
- Clock sources of independent counters: four sources for every counter
  - External clock
  - Prior counter output
  - CK1 (programmable)
  - Clock #10 output
- CK1 clock sources: programmable
  - 8 MHz internal base clock
  - Programmable Counter 11 out

Digital Filter Circuits

- Device: MC14490
- De-bounce clock: (programmable)
  - 8 MHz internal base clock
  - Programmable Counter#11 out

Digital Output / Input

- Number of channels: 8 DI and 8 DO
- Driving capacity: All inputs and outputs are TTL compatible

General Specifications

- Connector: 100-pin SCSI-type female connector
- +5V,+12V power supply output: maximum current 0.5A (protected by resetable fuses)
- On-board gate signal invertor can be used for frequency measurement
- Interrupt sources: (dual Interrupts)
  - External interrupt source
  - Timer #12 pacer output
- Operating temperature: 0˚~ 60˚C
- Storage temperature: -20˚~ 80˚C
- Humidity: 0~95%, non-condensing
- Power requirement: +5V @ 350mA typical
- Dimension: 134 mm x 107 mm

Termination Boards

- DIN-100S
- DIN-502S

Ordering Information

PCI-8554
12-CH Counter/Timer & DIO Card

PCI-8554/D
PCI-8554+DIN-100S

Pin Assignments of the 100-pin SCSI-type Connector

	Pin	Pin	
+12V	1	51	GND
+12V	2	52	Gout2
+12V	3	53	Gin2
+5V	4	54	GND
+5V	5	55	Gout1
+5V	6	56	Gin1
N/C	7	57	Ext.INT
DI6	8	58	D17
DI4	9	59	D15
DI2	10	60	D13
DI0	11	61	D11
DO6	12	62	DO7
DO4	13	63	DO5
DO2	14	64	DO3
DO0	15	65	DO1
N/C	16	66	N/C
GND	17	67	COUT12
GND	18	68	GND
GND	19	69	COUT11
GND	20	70	GND
GND	21	71	COUT10
GND	22	72	GATE10
GND	23	73	ECLK10
GND	24	74	COUT9
GND	25	75	GATE9
GND	26	76	ECLK9
GND	27	77	COUT8
GND	28	78	GATE8
GND	29	79	ECLK8
GND	30	80	COUT7
GND	31	81	GATE7
GND	32	82	ECLK7
GND	33	83	COUT6
GND	34	84	GATE6
GND	35	85	ECLK6
GND	36	86	COUT5
GND	37	87	GATE5
GND	38	88	ECLK5
GND	39	89	COUT4
GND	40	90	GATE4
GND	41	91	ECLK4
GND	42	92	COUT3
GND	43	93	GATE3
GND	44	94	ECLK3
GND	45	95	COUT2
GND	46	96	GATE2
GND	47	97	ECLK2
GND	48	98	COUT1
GND	49	99	GATE1
GND	50	100	ECLK1