

# PCI/cPCI-8554

## 10-CH General Purpose Timer/Counter & 8-CH DIO Cards

**PCI CompactPCI**



PCI-8554

cPCI-8554

### Features

- Supports a 32-Bit 5 V PCI bus (PCI-8554)
- 3U Eurocard form factor, CompactPCI compliant (PICMG 2.0 R3.0) (cPCI-8554)
- Onboard four 8254 programmable timer/counter chips
- 10-CH independent 16-Bit down counters
- 1-CH 32-Bit cascaded timer
- Onboard 8 MHz clock source
- Four programmable clock sources for each timer/counter
- Programmable de-bounce filters for external clock & external interrupt inputs
- Programmable interrupt sources
- 8-CH TTL digital inputs & 8-CH TTL digital outputs
- +12 V and +5 V power available on the connector
- Onboard resettable fuses for power output protection
- Supported Operating System
  - Windows 7/8 x64/x86, Linux
- Driver and SDK
  - LabVIEW, MATLAB, C/C++, Visual Basic, Visual Studio.NET
- Software Utility
  - AD-Logger

### Specifications

#### General-Purpose Timer/Counters

- Number of channels: 10
- Counter width: 16 Bit
- Compatibility: 5 V/TTL
- Base clock available: 8 MHz or external clock up to 10 MHz
- Programmable clock sources
  - cascaded 32-Bit timer output
  - external clock
  - timer/counter output of the last channel
  - Onboard 8 MHz clock

#### Cascaded Timer

- Number of channels: 1
- Counter width: 32 Bit
- Compatibility: 5 V/TTL
- Base clock available: 8 MHz, fixed

#### Programmable De-bounce Filters for External Clocks

- Number of channels: 11
- Filtered inputs: external clock, external interrupt
- Glitch rejection pulse width: 4 periods of the debounce clock
- De-bounce clock: up to 2 MHz, programmable

#### Interrupt

- Number of interrupt sources: 2
- Sources: external interrupt input and output of counter #12

#### Digital I/O

- Number of channels: 8 inputs and 8 outputs
- Compatibility: 5 V/TTL
- Data transfers: programmed I/O

#### General Specifications

- I/O connector: One 100-pin SCSI-II female
- Operating temperature: 0°C to 60°C (32°F to 140°F)
- Storage temperature: -20°C to 80°C (-4°F to 176°F)
- Relative humidity: 5% to 95%, non-condensing
- Power requirements

Device	+5 V
PCI-8554/cPCI-8554	350 mA typical

- Dimensions (not including connectors)
  - 134 mm x 107 mm (5.22" x 4.17") (PCI-8554)
  - 160 mm x 100 mm (6.24" x 3.9") (cPCI-8554/8554R)

### Terminal Boards & Cables

#### DIN-1005-01

Terminal Board with One 100-pin SCSI-II Connector and DIN-Rail Mounting (Cables are not included. For more information about mating cables, please refer to P3-48/49.)

**Note:**  
Legacy DIN-5025 can be replaced by two DIN-50S-01 and ACL-10252-1 (100-Pin to two 50-Pin Cable, 1 M)

### Ordering Information

#### ■ PCI-8554

10-CH General Purpose Timer/Counter & 8-CH DIO Card

#### ■ cPCI-8554

12-CH 16-Bit Timer/Counter & Digital I/O Card