Introduction

ADLINK’s PCI/cPCI-8554 are 10-CH 16-bit timer/counter and digital I/O cards which provides ten independent timer/counters and one cascaded 32-bit timer. The clock source for each timer/counter can be software selected from the cascaded 32-bit timer, external clock source, timer/output of the last channel, and the onboard 8 MHz clock. USB, power output protection. The flexible architecture makes it easy to re-configure the hardware; for example, up to ten timer/counters can be cascaded to form a 160-bit timer/counter. The USB, digital I/O cards can also generate interrupts from either the external interrupt sources or the output of the cascaded 32-bit timer.

The programmable de-bounce filters provide eleven channels of glitch-filtered external clock inputs for timer/counters and the external interrupt input. This feature further improves the reliability for counting applications.

The PCI/cPCI-8554 also provides 8-CH TTL digital inputs and 8-CH TTL digital outputs. ADLINK PCI/cPCI-8554 delivers cost-effective and reliable solutions for event counting, frequency measurement, baud-rate generation, watchdog timer, and other industrial applications.

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 counter
- 1-CH 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
- Operating Systems
  - Linux
- Recommended Software
  - AD-Logger
  - VB.NET/VC.NET/VB/VC++/BCB/Delphi
  - DAQ/Bench
  - Driver Support
  - DAQWorks for LabVIEW™
  - DAQ-MTLB for MATLAB®
  - PCIS-DAS/Windows
  - PCIS-DASK/X for Linux
- Compatibility: 5 V/TTL
- Counter width: 32 bits
- Number of channels: 1
- Onboard 8 MHz clock timer/counter output of the last channel
- Programmable clock sources
  - cascaded 32-bit timer output
  - external clock
  - timer/counter output of the last channel
- Onboard 8 MHz clock

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 P2-61/62.)
  - DIN-100S-01
  - CompactPCI-8554
  - GATE11/12/N/A* for PCI, N/A for cPCI

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