

# PCI-7200

## 12 MB/s High Speed 32-CH DI & 32-CH DO Card

### Features

- Support a 32-bit 5 V PCI bus
  - 32-CH TTL digital inputs and 32-CH TTL digital outputs
  - Up to 12 MB/s transfer rate
  - Bus mastering DMA for both digital inputs and outputs
  - On-board programmable timer pacer clock
  - Timed digital input sampling controlled by an on-board timer
  - Timed digital output update controlled by an on-board timer
  - Supports handshaking digital I/O transfer mode
  - Multiple programmable interrupt sources
  - 5 V power available on connectors
  - Compact, half size PCB
- **Operating Systems**
    - Windows 2000/NT/XP/9x
    - DOS
    - Red Hat Linux
    - Windows CE (call for availability)
  - **Recommended Software**
    - VB/VC++/BCB/Delphi
    - DAQBench
  - **Driver Support**
    - PCIS-DASK for Windows 2000/NT/XP/9x
    - PCIS-DASK/X for Red Hat Linux
    - PCIS-OCX ActiveX controls
    - PCIS-LVIEW/PnP **NEW!**



### Introduction

ADLINK PCI-7200 is a high-speed digital I/O card. It consists of 32 digital input channels, and 32 digital output channels. High performance designs and the state-of-the-art technology make this card suitable for high speed data transfer and pattern generation applications.

The PCI-7200 performs high-speed data transfers using bus-mastering DMA via 32-bit PCI bus architecture. The maximum data transfer rates can be up to 12MB per second. Several digital I/O transfer modes are supported, such as direct programmed I/O control, timer pacer control, external clock mode and handshaking mode. It is very suitable for interfacing high-speed peripherals with your computer system.

### Specifications

#### Digital I/O

- Number of channels
  - 32-CH digital inputs
  - 32-CH digital outputs
- Compatibility: 5 V/TTL
- Data transfer rate
  - 12 MB/s with external 3 MHz clock, handshaking or external strobe
  - 8 MB/s with internal 2 MHz timer pacer
- Digital logic levels
  - Input high voltage: 2-5.25 V
  - Input low voltage: 0-0.8 V
  - Output high voltage: 2.7 V minimum
  - Output low voltage: 0.5 V maximum
- Output driving capacity
  - Source current: 3.0 mA
  - Sink current: 24 mA
- Data transfers: programmed I/O, interrupt, bus mastering DMA

#### Programmable Counter

- Base clock: 4 MHz
- Timer 0: DI clock source
- Timer 1: DO clock source
- Timer 2: Base clock source of timer 0 & 1

#### Interrupt

- Sources: EO\_ACK, EI\_REQ, Timer 0, Timer 1 or Timer 2

#### General Specifications

- I/O connector
  - 37-pin D-sub female
  - 40-pin ribbon male
- Operating temperature: 0 to 60 °C
- Storage temperature: -20 to 80 °C
- Relative humidity: 5 to 95%, noncondensing
- Power requirements

Device	+5 V
PCI-7200	720 mA typical

- Dimensions (not including connectors)  
148 mm x 102 mm

### Termination Boards

- **DIN-37D**  
Termination Board with a 37-pin D-sub Connector and DIN-Rail Mounting (Including One 1-meter ACL-10137 Cable)
- **ACLD-9137**  
General-Purpose Termination Board with a 37-pin D-sub Male Connector
- **ACLD-9137F**  
General-Purpose Termination Board with a 37-pin D-sub Female Connector
- **ACLD-9138**  
General-Purpose Termination Board with a 37-pin D-sub Connector (Including One 1-meter ACL-10237 Cable)

### Pin Assignment

#### CN1

DI0	1	20	DO0
DI1	2	21	DO1
DI2	3	22	DO2
DI3	4	23	DO3
DI4	5	24	DO4
DI5	6	25	DO5
DI6	7	26	DO6
DI7	8	27	DO8
DI8	9	28	DO7
DI9	10	29	DO9
DI10	11	30	DO10
DI11	12	31	DO11
DI12	13	32	DO12
DI13	14	33	DO13
DI14	15	34	DO14
DI15	16	35	DO15
+5Vout	17	36	GND
I-ACK	18	37	I-TRG
I-REQ	19		

#### CN2

DI16	1	2	DO16
DI17	3	4	DO17
DI18	5	6	DO18
DI19	7	8	DO19
DI20	9	10	DO20
DI21	11	12	DO21
DI22	13	14	DO22
DI23	15	16	DO23
DI24	17	18	DO24
DI25	19	20	DO25
DI26	21	22	DO26
DI27	23	24	DO27
DI28	25	26	DO28
DI29	27	28	DO29
DI30	29	30	DO30
DI31	31	32	DO31
+5Vout	33	34	GND
O-ACK	35	36	O-TRG
O-REQ	37	38	N/C
N/C	39	40	N/C

### Ordering Information

- **PCI-7200**  
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