# PCI-9812/9812A/9810

## 4-CH 10/12-bit 20 MS/s Simultaneous-Sampling Analog Input Cards

### Features

- Supports a 32-bit 5 V PCI bus
- 12-bit A/D resolution (PCI-9812 and PCI-9812A)
- 10-bit A/D resolution (PCI-9810)
- Up to 20 MS/s simultaneous-sampling rate
- >17 MHz -3 dB bandwidth
- 4-CH single-ended inputs
- Bipolar analog input ranges
- User-selectable input impedance of 50 Ω or high input impedance
- On-board 32 k-sample A/D FIFO (PCI-9810 and PCI-9812)
- On-board 128 k-sample A/D FIFO (PCI-9812A)
- Analog and digital triggering
- External clock input for customized conversion rate
- Bus-mastering DMA for analog inputs
- 3-CH TTL digital inputs
- 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**

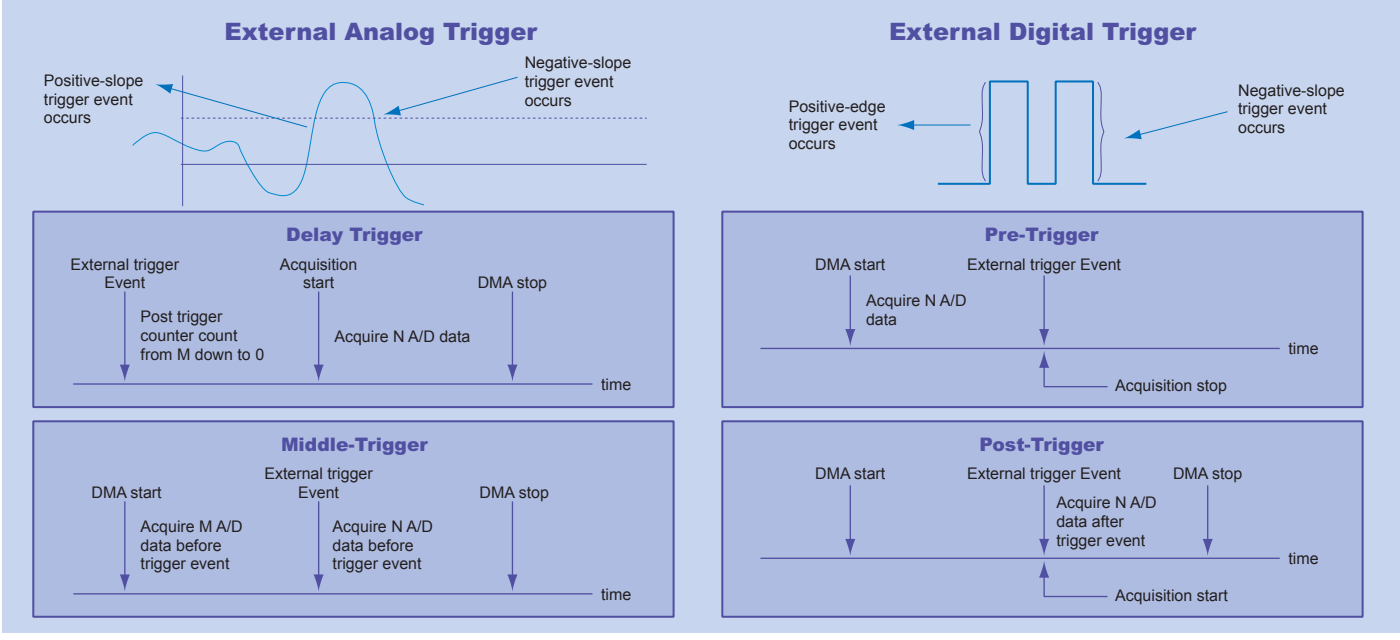
- PCIS-DASK for Windows 2000/NT/XP/9x
- PCIS-DASK/X for Red Hat Linux
- PCIS-OCX ActiveX controls
- PCIS-LVIEW/PnP for LabVIEW ***NEW!***

### Introduction

ADLINK PCI-9812, PCI-9810 and PCI-9812A are 4-CH, 10 or 12-bit, 20 MS/s simultaneous-sampling analog input cards. The high-speed analog input channels are single-ended, with hardware programmable input ranges of ±1 V, ±5 V and input impedances of 50 Ω, 1.25 kΩ and 1 MΩ. The on-board 32k-sample A/D FIFO can buffer the sampled data. When the data throughput is less than 100 Mbytes/s, the FIFO performs as the temporary A/D sample buffer, and as a rule of thumb, no data loss will happen. When four channels operate at 20 MS/s simultaneously, each sample generates two bytes, resulting in 160 Mbyes/s (4 channels* 20M * 2 bytes) throughput, which exceeds the peak 132 Mbyte/s bandwidth of PCI bus. To avoid data loss, the 32k-sample FIFO is the limitation of sample count. For applications needing a larger number of samples at full sampling rate, the PCI-9812A features 128K-sample A/D FIFO for storage.

In addition to the on-board 40MHz time base, users are able to supply the external time base in either sine wave or digital forms. The PCI-9810 and PCI-9812 also feature external digital trigger and programmable analog trigger, thus the conversion start point of multiple cards can be synchronized to external events. The trigger modes include software-trigger, pre-trigger, post-trigger, middle-trigger and delay trigger, further expands the capabilities of these high-speed devices.

ADLINK PCI-9812, PCI-9810 and 9812A deliver cost-effective and reliable data acquisition capabilities and are ideal for vibration testing, image digitizing, ultrasonic measurement, biomedical research, ATE and other high-end Industrial/Scientific/Military applications.






*All specifications are subject to change without further notice.