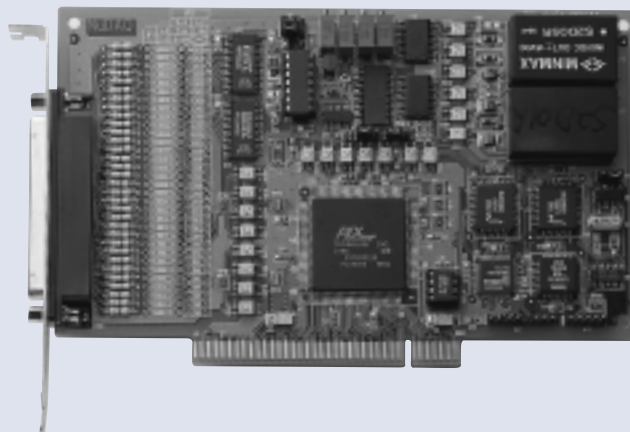


Features

- 32-bit PCI-Bus, Plug and Play
- 32-CH single-ended or 16-CH differential inputs
- On-board low pass filter for signal conditioning or attenuation
- Isolation voltage: 2500Vrms
- 12-bit A/D converter
- Programmable gain of 1, 10, 100
- Sampling rate up to 100KHz for single channel
- Bipolar or Uni-polar analog input ranges
- Trigger mode: software trigger, timer tacer trigger
- On-board 1024 samples FIFO memory
- Auto-scanning channel selection
- Compact , half-size PCB
- Rugged DB-37 connector



Specifications

Analog Input (A/D)

- Number of input channels:
(jumper selectable)
 - 32 single-ended
 - 16 differential inputs
- A/D converter & resolution: 12-bit ADS774 or equivalent
- Conversion type: Successive approximation
- Input impedance:
 - 10 MΩ (without signal conditioning)
 - Control by on-board low pass filter.
- Accuracy: 0.015% of reading ± 1 bit
- Isolated voltage by photo-coupler
 - 2500 V rms continuous isolation
- Input range: (jumper set range and programmable gain x1,10,100)
 - 20V Range**
 - Bipolar: $\pm 10V$, $\pm 1V$, $\pm 0.1V$
 - 10V Range**
 - Bipolar: $\pm 5V$, $\pm 0.5V$, $\pm 0.05V$
 - Unipolar: $0\sim 10V$, $0\sim 1V$, $0\sim 0.1V$
- Sampling Rate: 100KHz maximum for single channel
- Non-linearity: ± 1 bit LSB
- Trigger mode: Software trigger, pacer trigger
- Data transfer: Polling, interrupt, FIFO half-full interrupt, FIFO polling

General Specifications

- Connector: DB-37 female connector
- Operating temperature: $0^{\circ} \sim 55^{\circ}C$
- Storage temperature: $-20^{\circ} \sim 80^{\circ}C$
- Humidity: 5~95%, non-condensing

- Power requirement:
 - +5V @ 960mA typical
- Dimension: 173 mm x 102 mm

Termination Boards

- ACLD-9881 • ACLD-9137
- ACLD-9188 • DIN-37D

Ordering Information

PCI-9113A

32SE/16DI Isolation 12-bit A/D Card

PCI-9113A/37

PCI-9113A + ACLD-9137

PCI-9113A/81

PCI-9113A + ACLD-9881

(Includes 1m cable ACL-10137-1)

Note: The above products are shipped with software development kit for DOS/Win-95/98/NT/2000, PCIS-LVIEW, PCIS-VEE and DAQ Creator.

Pin Assignments for The DB-37 Connector of PCI-9113A

CN1 (For Single-Ended Input)

AI0	1	20	AI1
AI2	2	21	AI3
AI4	3	22	AI5
AI6	4	23	AI7
AI8	5	24	AI9
AI10	6	25	AI11
AI12	7	26	AI13
AI14	8	27	AI15
IGND	9	28	IGND
IGND	10	29	IGND
AI16	11	30	AI17
AI18	12	31	AI19
AI20	13	32	AI21
AI22	14	33	AI23
AI24	15	34	AI25
AI26	16	35	AI27
AI28	17	36	AI29
AI30	18	37	AI31
IGND	19		

CN1 (For Differential Input Mode)

AI0H	1	20	AI1H
AI2H	2	21	AI3H
AI4H	3	22	AI5H
AI6H	4	23	AI7H
AI8H	5	24	AI9H
AI10H	6	25	AI11H
AI12H	7	26	AI13H
AI14H	8	27	AI15H
IGND	9	28	IGND
IGND	10	29	IGND
AI0L	11	30	AI1L
AI2L	12	31	AI3L
AI4L	13	32	AI5L
AI6L	14	33	AI7L
AI8L	15	34	AI9L
AI10L	16	35	AI11L
AI12L	17	36	AI13L
AI14L	18	37	AI15L
IGND	19		