

DAQ-2000 Series

4-CH, 14/16-Bit, Up to 2 MS/s Simultaneous-Sampling Multi-Function DAQ Cards

Features

- Supports a 32-bit 3.3 V or 5 V PCI bus
- 4-CH differential analog inputs
- Up to 2 MS/s simultaneous-sampling rate (DAQ-2010)
- 14-bit A/D resolution (DAQ-2010)
- 16-bit A/D resolution (DAQ-2005 & DAQ-2006)
- Up to 8 k-sample A/D FIFO (DAQ-2010)
- Bipolar or unipolar analog input ranges
- Programmable gains of x1, x2, x4, x8
- Scatter-gather DMA for both analog inputs and outputs
- 2-CH 12-bit multiplying analog outputs with waveform generation
- 24-CH TTL digital input/output
- 2-CH 16-bit general purpose timer/counter
- Analog and digital triggering
- Fully auto calibration
- Multiple cards synchronization through SSI (System Synchronization Interface) bus

Operating Systems

- • Windows 2000/NT/XP/98
- • Red Hat Linux
- • Windows CE (call for availability)

Recommended Software

- • VB/VC++/BCB/Delphi
- • DAQBench

Driver Support

- • D2K-DASK:
 - Windows 2000/NT/XP/98 driver
- • D2K-DASK/X: Red Hat Linux driver
- • D2K-LVIEW: LabVIEW driver
- • D2K-MTLB: MATLAB driver
- • D2K-OCX: 32-bit ActiveX controls



Introduction

ADLINK DAQ-2010, DAQ-2005, and DAQ-2006 are simultaneous-sampling multifunction DAQ cards to meet a wide range of application requirements. The devices can simultaneously sample 4 AI channels with differential input configuration in order to achieve maximum noise elimination. They also provide 2-CH 12-bit analog outputs with waveform generation capability, which can be performed together with analog input functions. If more analog input or output channels are required, multiple cards can be synchronized through the SSI (system synchronization interface) bus. This makes the DAQ-2000 series ideal for the stimulus/response test.

The DAQ-2000 series also feature analog and digital triggering, 24-CH programmable digital I/O lines, and 2-CH 16-bit general-purpose timer/counters. The auto-calibration functions adjust the gain and offset to within specified accuracies such that you do not have to adjust trim pots to calibrate the cards.

Termination Boards

DIN-68S/1M

Termination Board with a 68-pin SCSI-II Connector and DIN-Rail Mounting (Including One 1-meter ACL-10568 Cable)



SSI bus cable for multiple cards synchronization

SSI Bus Cables (for multiple cards synchronization)

ACL-SSI-2

SSI Bus cable for 2 devices

ACL-SSI-3

SSI Bus cable for 3 devices

ACL-SSI-4

SSI Bus cable for 4 devices



Termination board DIN-68S/1M

Pin Assignment

Connector Pin Assignment

CH0+	1	35	CH0-
CH1+	2	36	CH1-
CH2+	3	37	CH2-
CH3+	4	38	CH3-
EXTATRIG	5	39	AIGND
DA1OUT	6	40	AOGND
DA0OUT	7	41	AOGND
AOEXTREF	8	42	AOGND
SDI3_1 / NC*	9	43	SDI3_0 / NC*
SDI2_1 / NC*	10	44	SDI2_0 / NC*
SDI1_1 / NC*	11	45	SDI1_0 / NC*
SDI0_1 / NC*	12	46	SDI0_0 / NC*
AO_TRIG_OUT	13	47	EXTWFTRG
AI_TRIG_OUT	14	48	EXTDTRIG
GPTC1_SRC	15	49	DGND
GPTC0_SRC	16	50	DGND
GPTC0_GATE	17	51	GPTC1_GATE
GPTC0_OUT	18	52	GPTC1_OUT
GPTC0_UPDOWN	19	53	GPTC1_UPDOWN
EXTTIMEBASE	20	54	DGND
AF11	21	55	AF10
PB7	22	56	PB6
PB5	23	57	PB4
PB3	24	58	PB2
PB1	25	59	PB0
PC7	26	60	PC6
PC5	27	61	PC4
DGND	28	62	DGND
PC3	29	63	PC2
PC1	30	64	PC0
PA7	31	65	PA6
PA5	32	66	PA4
PA3	33	67	PA2
PA1	34	68	PA0

*Pin 9~12 and pin 43~46 are SDI<0..3>_n for DAQ-2010 ; NC for DAQ-2005 and DAQ-2006

Ordering Information

DAQ-2010

4-CH 14-Bit 2 MS/s Simultaneous-Sampling Multi-Function DAQ Card

DAQ-2005

4-CH 16-Bit 500 kS/s Simultaneous-Sampling Multi-Function DAQ Card

DAQ-2006

4-CH 16-Bit 250 kS/s Simultaneous-Sampling Multi-Function DAQ Card