PXI-2000 Series

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

Features

- PXI specifications Rev. 2.0 compliant
- 3U Eurocard form factor, CompactPCI compliant (PICMG 2.0 R3.0)
- 4-CH differential analog inputs
- Up to 2 MS/s simultaneous-sampling rate (PXI-2010)
- 14-bit A/D resolution (PXI-2010)
- 16-bit A/D resolution (PXI-2005 and PXI-2006)
- On-board 8k-sample A/D FIFO (PXI-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
- On-board 2k-sample D/A FIFO
- 24-CH TTL digital input/output
- 2-CH 16-bit general purpose timer/counter
- Analog and digital triggering
- Fully auto calibration
- Multiple modules synchronization through PXI trigger 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 PXI-2010, PXI-2005, and PXI-2006 are simultaneous-sampling multifunction PXI modules to meet a wide range of application requirements. These products can simultaneously sample 4 AI channels with differential input configurations to achieve maximum noise elimination. They also provide 2-CH 12-bit analog outputs with waveform generation capabilities, which can be performed together with analog input functions. If more analog input or output channels are required, multiple modules can be synchronized through the PXI trigger bus. This makes the PXI-2000 series ideal for stimulus/response tests.

The PXI-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 feature adjusts the gain and offset to a specified accuracy, eliminating the need to calibrate the modules by adjusting trimpots.

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)

Termination board DIN-68S/1M

Ordering Information

PXI-2010
4-CH 14-Bit 2 MS/s Simultaneous-Sampling Multi-Function PXI Module

PXI-2005
4-CH 16-Bit 500 kS/s Simultaneous-Sampling Multi-Function PXI Module

PXI-2006
4-CH 16-Bit 250 kS/s Simultaneous-Sampling Multi-Function PXI Module

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
AFI1	21	55	AFI0
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 PXI-2010 ; NC for PXI-2005 and PXI-2006