PCIe-8620 NEW

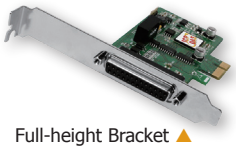
PCI Express, 200 kS/s High-speed, 16-bit, 8-channel Simultaneously Sampled Analog Input Board with 4-channel Isolated DI/O

Introduction

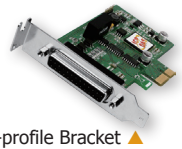
The PCIe-8620 is a bus-type, isolated high-speed Analog Input board with isolated DI/O. The simultaneously sampled AD offers a mix of up to 8 single-ended 16-bit Analog Input channels with a 2 k Sample hardware FIFO. All channels feature a programmable input range of ±10 V or ±5 V with a sampling rate up to 200 kS/s per channel. The PCIe-8620 provides 4 isolated Digital Input channels and 4 isolated Digital Output channels. The isolation range of the board has been increased to 2500 VDC, making it one of the most cost-effective solutions when considering isolated AD with DI/O boards.

PCIe-8620 also includes a second-order anti-alias analog filter where the -3 dB frequency for the ±5 V input range is typically 15 kHz, and is typically 23 kHz for the ±10 V input range.

The PCIe-8620 is a low-profile PCI Express board that is suitable for computers with limited space, and is also suitable for standard-size computers since the board is shipped with both full-height and low-profile brackets.



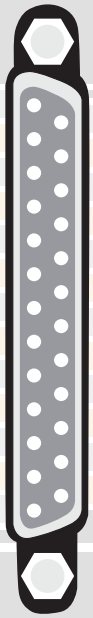
Full-height Bracket ▲



Low-profile Bracket ▲

Pin Assignments

Pin Assignment	Terminal No.		Pin Assignment
AI 0	01	14	A_GND
AI 1	02	15	A_GND
AI 2	03	16	A_GND
AI 3	04	17	A_GND
AI 4	05	18	A_GND
AI 5	06	19	A_GND
AI 6	07	20	A_GND
AI 7	08	21	D_GND
D_GND	09	22	DI 0
DI 1	10	23	DI 2
DI 3	11	24	DO 0
DO 1	12	25	DO 2
DO 3	13		



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Ordering Information

PCIe-8620 CR	PCI Express, 200 kS/s, 16-bit, 8-ch Simultaneously Sampled Analog Input Board and 4-ch Isolated DI/O (RoHS). Includes one CA-PC25M D-sub Connector and one Low-profile Bracket.

Features

- PCI Express x1 Interface, Full-profile or Low-profile
- 4-channel Isolated Digital Input
- 4-channel Isolated Digital Output
- 8 Single-ended Analog Input Channels
  - Synchronous Sample and Hold
  - Analog Input Range: ±10 V, ±5 V
  - 16-bit, 200 kS/s Sampling Rate for each channel
  - Hardware FIFO for Analog Input with a total of 2048 Samples
  - Built-in MagicScan Controller

Software

Drivers

- ✓ 32/64-bit Windows XP/2003/2008/7/8

Sample Programs

- ✓ VB/VC/Delphi/BCB/VB.NET/C#.NET/VC.NET/MATLAB Demo

Hardware Specifications

Analog Input	
Isolation Voltage	2500 VDC (Bus-type)
Channels	8 Single-ended
Resolution	16-bit
Sampling Rate	200 kS/s (Each Channel)
Bipolar Input	±10 V, ±5 V
FIFO Size	2 k Samples (Total)
Accuracy	0.05% of FSR ±1 LSB @ 25°C, ±10 V
Digital Input	
Channels	4
Isolation Voltage	2500 VDC
Digital Output	
Channels	4
Isolation Voltage	2500 VDC
General	
Bus Type	PCI Express x1
Card ID	Yes (4-bit)
Connectors	Female DB25 x 1
Dimensions (L x W x D)	Full-profile: 107 mm x 120 mm x 22 mm Low-profile: 107 mm x 80 mm x 22 mm
Operating Temperature	0°C to +60°C
Humidity	5 to 85% RH, Non-condensing

Accessories

CA-2520	25-pin D-sub Cable, 2.0 m
DN-25 CR	DIN-Rail Mountable I/O Connector Block with 25/9-pin D-sub Connector (RoHS) Include: CA-0920 Cable x 1 and CA-2520 Cable x 1