

PCIe-7350

50 MHz 32-CH High-Speed Digital I/O Card



Features

- x1 lane PCI Express® Interface
- Maximum 50 MHz clock rate from internal timer or 100 MHz from external clock
- 200 MB/s maximum throughput
- Software selectable voltage level of 1.8 V, 2.5 V, and 3.3 V
- 16-steps phase shift in external clock mode
- Per group (8-Bit) input/output direction selectable
- Supports I²C and SPI programmable serial interfaces for external device communication
- Scatter-gather DMA support
- Flexible handshaking and external digital trigger modes
- 8-channel auxiliary programmable I/O
- Supported Operating System
 - Windows 7/8 x64/x86, Linux
- Driver and SDK
 - LabVIEW, MATLAB, C/C++, Visual Basic, Visual Studio.NET

Specifications

Digital I/O

- Number of channels: 32, per group (8-channel) input/output direction selectable
- Logic levels: 1.8 V, 2.5 V, 3.3 V (software selectable)
- Power-up status: All digital inputs
- Impedance:
 - Input: 10 k Ω
 - Output: 50 Ω
- Input protection: -1 to 6 V
- Data transfer: Programmable I/O, bus-mastering DMA with scatter-gather
- Maximum data transfer rate: 200 MB/s
- Digital logic levels:

Logic Levels		1.8 V	2.5 V	3.3 V
Digital Input	Min. input high voltage	1.2 V	1.6 V	2 V
	Max. input low voltage	0.63 V	0.7 V	0.8 V
Digital Output	Min. output high voltage	1.6 V	2.3 V	3.1 V
	Max. output low voltage	0.2 V	0.2 V	0.2 V
	Max. output driving current	8 mA	16 mA	32 mA

Clocking mode

- Internal clock: Max. 50 MHz (100 MHz / N; 2 < N < 65535)
- External clock: Max. 100 MHz (support 8/16-Bit data width only, data throughput must be less than 200 MB/s)
- Handshaking
- Burst handshaking

Trigger sources

- Software trigger
- External digital trigger: AFI[0...7]

Trigger modes

- Post trigger, Retrigger, Pattern match, Handshaking

Change of State Interrupt

- Interrupt sources: Any of 32 channels or a pre-define channel Change-of-State

Application Function I/O

- Number of channels: 8
- Supporting modes: static I/O, I²C or SPI master node, external clock input/output, external digital trigger input, handshaking

Terminal Boards & Cables

DIN-68H-01

Terminal Board with One 68-pin SCSI-VHDCI Connector and 0 or 50 Ω Jumper Selectable Impedance (Cables are not included).

ACL-10279

68-pin SCSI-VHDCI Cable with 50 Ω Impedance

SMB-SMB-1M

SMB to SMB Cable, 1M

* For more information about mating cables, please refer to P3-48/49.

Ordering Information

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