

PXI-2022

16-CH 16-Bit 250 KS/s Simultaneous Sampling DAQ Cards



Features

- Supports 3.3 V and 5 V PCI signaling
- PXI specification Rev 2.2 compliant
- 16-CH differential analog inputs
- Bipolar analog input
- Programmable gains of x1, x4
- Scatter gather DMA transfer for AI continuously data acquisition
- 4-CH TTL digital input/output
- 3U EuroCard form factor
- 2-CH 32-Bit general purpose timer/counters
- Digital triggering
- Fully auto calibration
- Multiple cards synchronization through PXI trigger bus
- Onboard 8 K-sample (16 KB) memory for data storage
- Supported Operating System
 - Windows 7/8/10/11 x64/x86, Linux
- Driver and SDK
 - LabVIEW, MATLAB, C/C++, Visual Basic, Visual Studio.NET
- Software Utility
 - AD-Logger

Ordering Information

- **PXI-2022**
16-CH 16-Bit 250 KS/s Simultaneous Sampling Card

Terminal Boards & Cables

- **DIN-68S-01**
68-pin SCSI-II Termination board with DIN-Rail Mounting
(Cables are not included.)
- **ACL-10568-1**
SCSI 68P(M) to VHDCI 68P cable, 1M

Accessories

- **SMB-SMB-1M**
RF Cable, SMB(F) to SMB(F), 1M
- **SMB-BNC-1M**
RF Cable, BNC(M) to SMB(F), 1M

Specifications

Model Name	PXI-2022
Analog Input	
Resolution	16 Bit
Number of Channels	16 differential channels
Input Impedance	1 G Ω /pF
Input Coupling	DC
Bipolar Input Signal Range	± 10 V, ± 2.5 V
Programmable gain	1, 4
Overvoltage Protection	Power on: ± 30 V continuous Power off: ± 30 V continuous
Max Sampling Rate	250 KS/s
Data FIFO Size	8 K-sample (16 KB)
DNL (gain =1)	± 0.8 LSB
INL (gain =1)	± 1.5 LSB (typical), ± 3.0 LSB (MAX)
Offset Error (gain =1)	0.6 mV (typical)
Gain Error (gain =1)	0.05% of input
Data Transfer	16 differential channels
Digital I/O	
Number of Channel	4 input/output
Compatibility	TTL / CMOS
Input Logic Levels	Input low voltage: 0.8 V (max) Input high voltage: 2.0 V (min)
Output Logic Levels	Output low voltage: 0.4 V (max) Output high voltage: 2.8 V (min)
Output Driving Capacity	± 24 mA
Power-on State	Input, pull-low with 10 K Ω resistor
Data Transfer	Polling mode
General Specifications	
Auto Calibration	Yes (+5 V, ± 3 ppm/ $^{\circ}$ C)
Dimensions	Single 3U PXI module, 100 mm x 160 mm (not including connector)
Connector	ACL-10568-1, 68-pin VHDCI-type female
Operating Environment	Ambient temperature: 0 $^{\circ}$ C to 55 $^{\circ}$ C (32 $^{\circ}$ F to 131 $^{\circ}$ F) Relative humidity: 10% to 90% non-condensing
Storage Environment	Ambient temperature: -20 $^{\circ}$ C to 80 $^{\circ}$ C (-4 $^{\circ}$ F to 176 $^{\circ}$ F) Relative humidity: 5% to 95% non-condensing