NI PCI-6132

14-Bit, 2.5 MS/s/ch, Simultaneous Sampling Multifunction DAQ

- 4 simultaneously sampled analog inputs, up to 2.5 or 3 MS/s in warp mode (see Overview tab)
- 4 input ranges from ±1.25 to ±10 V
- Deep onboard memory (16 MS)
- 8 hardware-timed digital I/O lines; two 24-bit counters; analog and digital triggering
- Included NI-DAQmx driver software and LabVIEW SignalExpress interactive data-logging software
- Optimized integration with NI LabVIEW, LabWindows™/CVI, and Measurement Studio
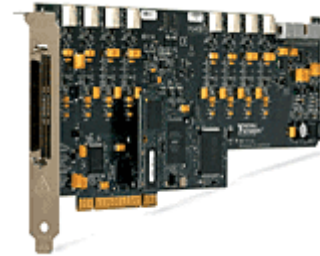
Overview

The NI PCI-6132 S Series multifunction DAQ board features a dedicated analog-to-digital converter (ADC) per channel for maximum device throughput and higher multichannel accuracy.

The PCI-6132 is a full-length PCI board. Please verify with your PC vendor that the computer chassis has sufficient room to house this board. See the KnowledgeBase article in the Resources tab for more information.

Enable Warp Mode to Achieve Maximum Sampling Rates

PCI-6132 analog inputs sample up to 2.5 MS/s using the onboard sample clock; they can sample up to 3 MS/s using an external reference as the sample clock. Download the LabVIEW example from the Resources tab to enable warp mode and achieve the maximum sampling rates.

Application Software

With NI LabVIEW software, you can create custom data acquisition applications with the ease of graphical programming and power of more than 500 analysis functions and advanced programming tools. NI S Series DAQ devices are compatible with the following versions (or later) of NI application software - LabVIEW 7.x, LabWindows/CVI 7.x, or Measurement Studio 7.x and LabVIEW SignalExpress 1.x. S Series DAQ devices are also compatible with Visual Studio .NET, ANSI C/C++, and Visual Basic 6.0.

NI-DAQmx Driver Software

Quickly gather real-world data with NI-DAQmx driver software featuring measurement-ready virtual channels and configuration abilities using the DAQ Assistant.

The mark LabWindows is used under a license from Microsoft Corporation. Windows is a registered trademark of Microsoft Corporation in the United States and other countries.

Specifications

Specifications Documents

- Specifications
- Data Sheet

Specifications Summary

General

Product Name	PCI-6132
Product Family	Multifunction Data Acquisition
Form Factor	PCI
Part Number	779422-01
Operating System/Target	Real-Time , Linux , Windows
LabVIEW RT Support	Yes
DAQ Product Family	S Series
Measurement Type	Quadrature encoder , Digital , Voltage , Frequency
RoHS Compliant	No
Analog Input	
Channels	4 , 0
Single-Ended Channels	0
Differential Channels	4
Resolution	14 bits
Sample Rate	2.5 MS/s
Max Voltage	10 V
Maximum Voltage Range	-10 V , 10 V
Maximum Voltage Range Accuracy	4660 µV
Maximum Voltage Range Sensitivity	432 µV
Minimum Voltage Range	-1.25 V , 1.25 V
Minimum Voltage Range Accuracy	740 µV
Minimum Voltage Range Sensitivity	68.8 µV
Number of Ranges	4
Simultaneous Sampling	Yes
On-Board Memory	32 MB
Analog Output	
Channels	0
Digital I/O	
Bidirectional Channels	8

Input-Only Channels	0
Output-Only Channels	0
Timing	Hardware
Maximum Clock Rate	10 MHz
Logic Levels	TTL
Input Current Flow	Sinking , Sourcing
Output Current Flow	Sinking , Sourcing
Programmable Input Filters	No
Supports Programmable Power-Up States?	No
Current Drive Single	24 mA
Current Drive All	192 mA
Watchdog Timer	No
Supports Handshaking I/O?	No
Supports Pattern I/O?	Yes
Maximum Input Range	0 V , 5 V
Maximum Output Range	0 V , 5 V
Counter/Timers	
Counters	2
Number of DMA Channels	1
Buffered Operations	Yes
Debouncing/Glitch Removal	No
GPS Synchronization	No
Maximum Range	0 V , 5 V
Max Source Frequency	20 MHz
Pulse Generation	Yes
Resolution	24 bits
Timebase Stability	100 ppm
Logic Levels	TTL
Physical Specifications	

Length	31.2 cm
Width	10.6 cm
I/O Connector	68-pin male SCSI-II type
Timing/Triggering/Synchronization	
Triggering	Digital , Analog
Synchronization Bus (RTSI)	Yes

Pricing

NI PCI-6132 Complete Package

Each NI PCI-6132 requires:

1 Connector Block	1 Cable	NI PCI-6132	Software

Roll over icons above to learn why you need each item in the package.

NI PCI-6132 and Accessories

Hardware Subtotal: Kč 59 955

NI PCI-6132 - 779422-01	Qty	Kč 48 000 each

Required Accessories

Connector Block - BNC Terminal BNC-2110 - 777643-01	Qty	Kč 8 770 each

Cable - Shielded SH68-68-EP Cable (2m) - 184749-02 Select length: 1m 2m 5m 10m	Qty	Kč 3 185 each

Change Accessories
Learn about all compatible accessories and get recommendations based on your application needs.

Optional Accessories Show

Software

Software Subtotal: Kč 0

Note : You should only purchase this device without software if you already own compatible application software. [View Full List]

NI Developer Suite Core for Windows (English) , 1 year SSP	Qty 1	Kč 126,000 each

Change Software
Learn about all compatible software and get recommendations based on your needs.

Estimated Shipping Days: 5 - 10
Package Price: Kč 59 955

Add to Cart >>

Guarantee your price for 30 days (learn more) Instant Quote

Save for Later

Since your device does not have direct signal connectivity, you need a connector block to act as an interface between your sensors/signals and your device. A connector block provides easy access to the inputs and outputs of your hardware.
You need a cable to transmit signals between your device and your signal connections on your connector block.
You need software to interface with your hardware and to collect, analyze, present, and store your measurements. This board is compatible with a variety of programming languages, including LabVIEW, C/C++, Visual Basic, and .NET. LabVIEW provides the easiest integration with all of your NI hardware and is recommended to maximize your hardware investment.
You have selected Česká Republika as the country where you will use the product(s) (change).

Services

Extended Warranties

National Instruments designs and manufactures all products to minimize failures, however unexpected failures can still occur. Extended warranties provide a fixed economical price at the time of system purchase, covering any repair costs for up to three years. In addition, they offer the following benefits:

- Significant cost savings compared to individual repair incidents
- Fault location, diagnostics, and repair by NI any time the system product fails
- All parts and labor costs covered as well as any adjustments needed to restore the hardware to manufacturing specifications

For more information about your warranty options:

- Learn More About Warranty Services [http://www.ni.com/services/warranty.htm]
- Talk to an Expert About Extended Warranties [javascript:openCallMeWindowCTA(document.referrer,%20'US')]
- View Warranty Repair Policies [http://www.ni.com/services/warranty_repair_policies.htm]

Calibration

NI recognizes the need to maintain properly calibrated devices for high-accuracy measurements. NI provides manual calibration procedures, services to recalibrate your products, and automated calibration software to calibrate many NI measurement products.

- Learn More About Calibration Services [http://www.ni.com/services/calibration.htm]

Training

NI training is the fastest, most certain route to productivity with NI tools and successful application development.

- Learn More About NI Training and Certification [http://www.ni.com/training/]
- Find a Course Near You and View Schedules [http://sine.ni.com/tacs/app/fp/p/ap/ov/pg/1/]

Repair Services

Return your registered product under warranty at no additional labor and parts cost. NI offers fault location, diagnostics, and repair any time the system fails as well as any adjustments needed to restore the hardware to manufacturing specifications.

- Learn More About Repair Services [http://www.ni.com/services/warranty.htm]
- Contact NI to obtain a Return Material Authorization (RMA) form and shipping instructions. [http://sine.ni.com/apps/utf8/nicc.call_me]
- View your RMA support request status online. [https://sine.ni.com/srm/app/myServiceRequests]
- Register your product [http://www.ni.com/register] .

Technical Support

ni.com/support [http://www.ni.com/support/]

Resources

Additional Product Information

- Manuals (6)
- Dimensional Drawings
- Product Certifications

Related Information

- What Is the Difference Between Half-Length and Full-Length PCI Slots?
- Enable Warp Mode to Achieve Maximum Sampling Rates
- Learn About Simultaneous Sampling DAQ Architectures
- Download Free Ultrasonic Test Resources
- Learn to Use S Series as Transient Recorders
- Data Acquisition Benefits to Multiple ADC Architectures - View the Webcast on Demand
- Need Faster Sampling Rates? See High-Speed Digitizers