



**Technical Sales**  
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## NI PCI-6259

### 16-Bit, 1 MS/s (Multichannel), 1.25 MS/s (1-Channel), 32 Analog Inputs

- Four 16-bit analog outputs (2.8 MS/s); 48 digital I/O; 32-bit counters
- NIST-traceable calibration certificate and more than 70 signal conditioning options
- NI-MCal calibration technology for increased measurement accuracy
- Correlated DIO (32 clocked lines, 10 MHz); analog and digital triggering
- Get improved measurement accuracy, resolution, and sensitivity by choosing high-accuracy M Series.
- NI-DAQmx driver software and NI LabVIEW SignalExpress LE interactive data-logging software



## Overview

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The National Instruments PCI-6259 is a high-speed multifunction M Series data acquisition (DAQ) board optimized for superior accuracy at fast sampling rates. For increased measurement accuracy, consider the high-accuracy M Series devices with an 18-bit analog-to-digital converter providing a 4X resolution increase.

High-speed M Series devices incorporate advanced features such as the NI-STC 2 system controller, NI-PGIA 2 programmable amplifier, and NI-MCal calibration technology to increase performance and accuracy. High-speed M Series devices have an onboard NI-PGIA 2 amplifier designed for fast settling time at high scanning rates, ensuring 16-bit accuracy even when measuring all channels at maximum speeds. To learn more about M Series technologies, device specifications, and information on recommended cables and accessories, please refer to the data sheet and specifications.

### Driver Software

M Series devices work with multiple operating systems using three driver software options including NI-DAQmx, NI-DAQmx Base, and the Measurement Hardware DDK. Browse the information in the Resources tab to learn more about driver software or download a driver. M Series devices are not compatible with the Traditional NI-DAQ (Legacy) driver.

### Application Software

With NI LabVIEW, 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. LabVIEW Full and Professional Development Systems include LabVIEW SignalExpress for interactive data logging. M Series data acquisition 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; LabVIEW SignalExpress 1.x; or LabVIEW with the LabVIEW Real-Time Module 7.1. M Series data acquisition devices are also compatible with Visual Studio .NET, C/C++, and Visual Basic 6.

## Specifications

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### Specifications Documents

- Specifications
- Data Sheet

### Specifications Summary

General	
Product Name	PCI-6259
Product Family	Multifunction Data Acquisition
Form Factor	PCI
Part Number	779072-01
Operating System/Target	Windows , Real-Time , Linux , Mac OS
LabVIEW RT Support	Yes
DAQ Product Family	M Series
Measurement Type	Quadrature encoder , Digital , Voltage , Frequency
Isolation Type	None
RoHS Compliant	Yes
Analog Input	
Channels	32 , 16
Single-Ended Channels	32
Differential Channels	16
Resolution	16 bits
Sample Rate	1.25 MS/s
Max Voltage	10 V
Maximum Voltage Range	-10 V , 10 V
Maximum Voltage Range Accuracy	1920 $\mu$ V
Maximum Voltage Range Sensitivity	112 $\mu$ V
Minimum Voltage Range	-100 mV , 100 mV
Minimum Voltage Range Accuracy	52 $\mu$ V
Minimum Voltage Range Sensitivity	6 $\mu$ V
Number of Ranges	7
Simultaneous Sampling	No
On-Board Memory	4095 samples
Analog Output	
Channels	4
Resolution	16 bits

Max Voltage	10 V
Maximum Voltage Range	-10 V , 10 V
Maximum Voltage Range Accuracy	2080 $\mu$ V
Minimum Voltage Range	-5 V , 5 V
Minimum Voltage Range Accuracy	1045 $\mu$ V
Update Rate	2.86 MS/s
Current Drive Single	5 mA
Digital I/O	
Bidirectional Channels	48
Input-Only Channels	0
Output-Only Channels	0
Timing	Software , Hardware
Clocked Lines	32
Maximum Clock Rate	10 MHz
Logic Levels	TTL
Input Current Flow	Sinking , Sourcing
Output Current Flow	Sinking , Sourcing
Programmable Input Filters	Yes
Supports Programmable Power-Up States?	Yes
Current Drive Single	24 mA
Current Drive All	1 A
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	2
Buffered Operations	Yes
Debouncing/Glitch Removal	Yes

GPS Synchronization	No
Maximum Range	0 V , 5 V
Max Source Frequency	80 MHz
Pulse Generation	Yes
Resolution	32 bits
Timebase Stability	50 ppm
Logic Levels	TTL
Physical Specifications	
Length	15.5 cm
Width	9.7 cm
I/O Connector	68-pin VHDCI female
Timing/Triggering/Synchronization	
Triggering	Digital , Analog
Synchronization Bus (RTSI)	Yes

## Pricing

# NI PCI-6259 Complete Package

Each NI PCI-6259 requires:

2 Connector Block	2 Cables	NI PCI-6259	Software
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Roll over icons above to learn why you need each item in the package.

## NI PCI-6259 and Accessories

Hardware Subtotal: \$ 2,416

NI PCI-6259 - 779072-01	Qty	\$ 1,500 each
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### Required Accessories

#### Connector Block - Screw Terminal

SCB-68A - 782536-01	Qty	\$ 319 each
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#### Cables - Shielded

SHC68-68-EPM Cable (2m) - 192061-02	Qty	\$ 139 each
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Change Accessories  
Learn about all compatible accessories and get recommendations based on your application needs.

**Optional Accessories Show**

## Software

**Software Subtotal: \$ 0**

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

<b>LabVIEW Full Development System for Windows</b> (English) , 1 year SSP - 776670-35	Qty	\$ 2,699 each
<b>LabVIEW Application Builder for Windows</b> - 776675-35	Qty	\$ 999 each

[Change Software](#)

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

Estimated Shipping Days: 1 - 3

**Package Price: \$ 2,416**

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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 **United States** 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) [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) [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/tp/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](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) [<http://www.ni.com/support/>]

## Resources

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### Additional Product Information

- Manuals (6)
- Dimensional Drawings
- Product Certifications

### Related Information

- Obtain superior accuracy in your measurements with 18-bit, high-accuracy M Series
- Upgrade to S Series with simultaneous sampling
- Learn about LabVIEW Graphical Programming
- Learn about Data Acquisition Driver Software
- Learn about academic pricing and product kits
- Obtain OEM pricing information
- Download NI drivers
- Read More About NI Software Maintenance and Support
- View an introductory video on getting started with NI data acquisition