

PXI Multifunction I/O Bundles

PC-based multifunction I/O devices with expansion capability

Use these bundles for

- Automated device validation
- High-channel-count test applications
- Combining measurements from different instruments in one system



Popular Features

Scalability

Simplify your benchtop by combining instruments in a single “box”

Channel Density

Up to 80 analog input channels, up to 4 analog output channels, and up to 48 bi-directional digital channels in one card

Synchronization

Multi-instrument synchronization by sharing timing and trigger signals through the PXI backplane



Do more in one box with NI PXI

The NI PXI Multifunction I/O Bundles include a PXIe multifunction I/O module in a 5-slot PXI Express based measurement system that is controlled through your laptop's Thunderbolt™ USB-C port.

Achieve high accuracy, high productivity, and higher speeds with the standard for automated test and automated measurement: NI PXI (PCI eXtensions for Instrumentation).



The PXI multifunction I/O modules provide a mix of analog I/O, digital I/O, counter/timer, and triggering functionality in a single PXI module.

	PXIe-MI05100 P/N: 867123-01	PXIe-MI05101 P/N: 867124-01
What is Included		
Chassis	PXIe-1083	
Module	PXIe-6345	PXIe-6363
Accessories	Thunderbolt cable Power cable, US* SHC68-68-EPM Shielded Cable x 2 SCB-68A Connector Block x 2	
Key Specifications		
Max no. of single-ended Analog Input channels	80	32
Max Sample Rate	500 kS/s	2 MS/s
Analog Input Resolution	16 bits	16 bits
No. of Analog Output channels	2	4
Max Update Rate	2.86 MS/s	2.86 MS/s
No. of Bidirectional digital channels	24	48

*Check the product datasheet for part numbers with different regional power cords



Upgrade and do more with your system!

Don't be limited by vendor-defined configurations. Use the remaining 4 slots to build on top of your system and manage change. Add measurements, more channels, or new analysis routines without having to purchase a whole new instrument.

Start with these best-selling modules



P/N: 783129-01

Digital Multimeter

PXIe-4080

- 6 ½ digit, ± 300 V, ± 1 A
- 2- or 4-wire resistance measurements up to $5\text{ G}\Omega$
- Isolated Digitizer mode - Up to 1.8 MS/s
- Frequency/period measurements
- Diode tests



P/N: 783590-02

Oscilloscope

PXIe-5105

- 8 simultaneously-sampled channels
- 12-bit vertical resolution
- 60 MHz Bandwidth
- 60 MS/s sample rate



P/N: 782856-03

Source Measure Unit

PXIe-4139

- 1-channel
- ± 60 V, ± 3 A DC, ± 10 A Pulsed
- 100 fA Current sensitivity
- Up to 40 W max power



P/N: 785114-01

Waveform Generator

PXIe-5413

- 20 MHz Bandwidth
- Up to two 16-bit channels
- 800 MS/s
- ± 12 V output range



P/N: 779647-11

Power Supply

PXIe-4110

- Two isolated channels
- Single non-isolated channel
- Up to 20 V, 1 A per channel
- Up to 46 W output power
- Hardware timing and triggering
- Output disconnect relays
- Four-wire remote sense



P/N: 780587-27

Multiplexer Switch

PXIe-2527

- 32 channel, 2-wire, 300 V, 2 A
- Electromechanical relay
- Supports 64x1 1-wire, 32x 2 2-wire, 16x1 4-wire configurations
- Onboard relay counting

Explore over 600 different PXI modules ranging from DC to mmWave.
Contact your NI product expert to get help solving your test challenges.

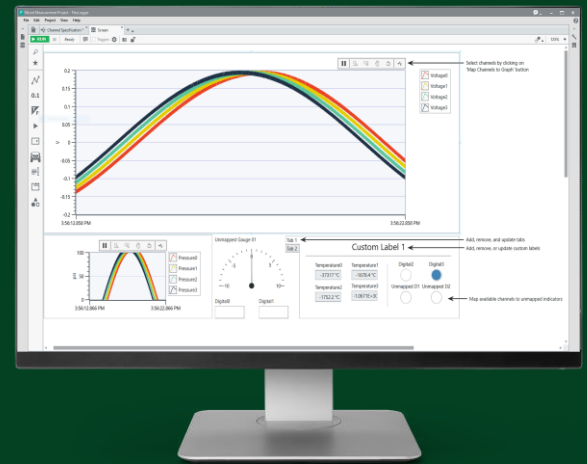


Select your software

Interactive Measurement with FlexLogger

- **Acquire** data from instruments in an intuitive no-code application software.
- **View** test with customizable dashboards, **save** data, and **analyze** with inline calculations.
- **Set** alarms to be notified of unexpected behavior

[Free Trial – Download](#)



FlexLogger – Fast, Flexible, No-Code Software

Graphical Programming in LabVIEW

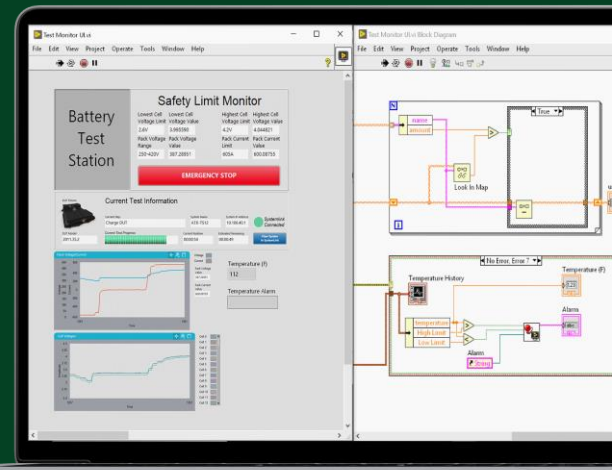
- **Acquire, process, and analyze data** from NI hardware or any 3rd party instrument
- **Create interactive UIs** for test monitoring and control.
- **Save data** to .csv, .tdms, or any custom-defined binary file.

Use Your Programming Language of Choice

- **Drivers** for Python, C, C++, C#, .NET, and MATLAB®*

A Bundle of Software for Test

- **Develop** test systems faster with graphical programming in LabVIEW
- **Create** automated test sequences with TestStand
- **Build** web applications for test with G Web Development Software
- **Analyze** your data interactively with DIAdem
- **Perform** data acquisition and logging with FlexLogger



"The move to a COTS approach using PXI and LabVIEW was critical to this production-test success at Philips. The combination of best-in-class modular hardware along with industry-standard software was pivotal to the millions of dollars and hundreds of hours saved in production test engineering"

-Neil Evans
Senior Manager, Philips

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