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).

Thunderbolt 3 connectivity for instrument control from your PC

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

PXIe Multifunction I/O module

4 additional PXIe slots- Simplify your benchtop configurations by combining instruments in one PXI System.

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-MIO5100 P/N: 867123-01	PXIe-MIO5101 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

Digital Multimeter
PXIe-4080
- 6 ½ digit, ±300 V, ±1A
- 2- or 4-wire resistance measurements up to 5 GΩ
- Isolated Digitizer mode - Up to 1.8 MS/s
- Frequency/period measurements
- Diode tests

P/N: 783129-01

Oscilloscope
PXIe-5105
- 8 simultaneously-sampled channels
- 12-bit vertical resolution
- 60 MHz Bandwidth
- 60 MS/s sample rate

P/N: 783590-02

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: 782856-03

Waveform Generator
PXIe- 5413
- 20 MHz Bandwidth
- Up to two 16-bit channels
- 800 MS/s
- ±12 V output range

P/N: 785114-01

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: 779647-11

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

P/N: 780587-27

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

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

FlexLogger – Fast, Flexible, No-Code Software
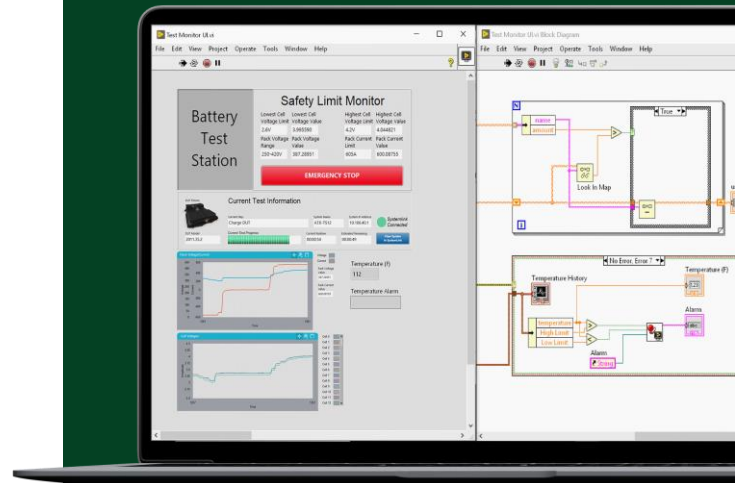
"The move to a COTS approach using PXI and LabVIEW was critical to this production-test success at Philips. The combination of best-in-class modular hardware along with industry-standard software was pivotal to the millions of dollars and hundreds of hours saved in production test engineering"

-Neil Evans
Senior Manager, Philips