
PXle-8822/42/62 Specifications

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Note Specifications are subject to change without notice.



Caution Using the PXIe-8822/42/62 controller in a manner not described in this user manual can impair the protection the controller provides.

Features

Model	PXIe-8822	PXIe-8842	PXIe-8862	PXIe-8862 Removable Drive
CPU	Intel® Core™ i3-11100HE	Intel® Core™ i5-11500HE	Intel® Core™ i7-11850HE	
Cache	8 MB Smart Cache	12 MB Smart Cache	24 MB Smart Cache	
Memory	8 GB standard (16 GB maximum), single channel DD4-3200 MHz, non-ECC SODIMM		2 x 8 GB standard (2 x 16 GB maximum), dual channel DD4-3200 MHz, non-ECC SODIMM	
Storage	512 GB (or greater) M.2, NVMe SSD		512 GB (or greater) M.2, NVMe SSD	960 GB U.2, NVMe SSD
Video	1 DisplayPort 1.4	1 DisplayPort 1.4	2 DisplayPort 1.4	
Ethernet	1 i225 port, 1588, 10M/100M/1000M/2.5G Base-T	2 i225 port, 1588, 10M/100M/1000M/2.5G Base-T	2 i225 port, 1588, 10M/100M/1000M/2.5G Base-T	
PCI Express Link Speed	2.5 GT/s	5.0 GT/s	8.0 GT/s	
PXI Express 4 Link Configuration	x4, x4, x4, x4			
PXI Express 2 Link Configuration	x8, x8			

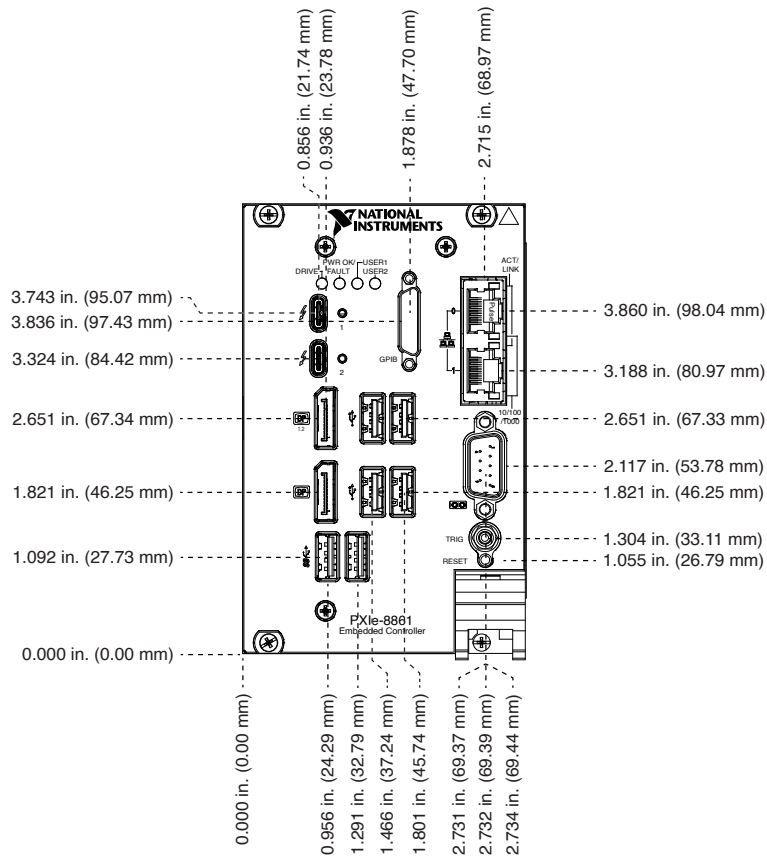
Model	PXIe-8822	PXIe-8842	PXIe-8862	PXIe-8862 Removable Drive
GPIB (IEEE 488 Controller)	N/A	1 mini-GPIB	1 mini-GPIB	
Serial Port (RS-232)	1 DB-9			
Thunderbolt 4 Ports	N/A	1 Type-C	2 Type-C	
Hi-Speed USB (2.0) Ports	2 Type-A	4 Type-A	4 Type-A	
SuperSpeed USB (3.0) Ports	2 Type-A			
PXI Trigger Bus Input/Output	1 SMB			
Installed Operating System	Windows 10 IoT or Linux RT			
Trusted Platform Module	Optional TPM 2.0 (Infineon/ST TPM for global market, NationsTech TPM for China market)			

Table 1. PXIe-8822/42/62 Features

Front Panel Dimensions

The following figure shows the front panel layout and dimensions of the PXIe-8822/42/62. Dimensions are in inches (millimeters).

Figure 1. PXIe-8822/42/62 Front Panel Layout and Dimensions



Electrical



Note Does not include any attached devices.

Voltage (V)	Current (Amps) Typical	Current (Amps) Maximum
+3.3 V	3.75 A	4.25 A
+5 V	2.0 A	2.5 A
+12 V	6.0 A	7.6 A
-12 V	0 A	0 A
+5 V _{Aux}	0.75 A	0.8 A



Note Power delivered to external loads through USB or Thunderbolt 3 ports should be included in system power budgets that include this controller module and peripheral modules.

Physical

Board dimensions	Four-wide 3U PXI Express module
Slot requirements	One system slot plus three controller expansion slots
Compatibility	Fully compatible with PXI Express Specification 1.0
Weight	1.2 kg (2.6 lb) typical

Environmental

Maximum altitude	4,600 m (570 mbar) (at 25 °C ambient)
Pollution Degree	2

Indoor use only.

Operating Environment



Caution The operating temperature must not be exceeded, even when used in a chassis with a higher temperature range.

Ambient temperature range	0 °C to 55 °C (Tested in accordance with IEC-60068-2-1 and IEC-60068-2-2. Meets MIL-PRF-28800F Class 3 low temperature limit and MIL-PRF-28800F Class 2 high temperature limit.)
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Relative humidity range 10% to 90%, noncondensing (Tested in accordance with IEC-60068-2-56.)

Storage Environment

Ambient temperature range^[1] -40 °C to 71 °C (Tested in accordance with IEC 60068-2-1 and IEC 60068-2-2. Meets MIL-PRF-28800F Class 3 limits.)

Relative humidity range 5% to 95%, noncondensing (Tested in accordance with IEC 60068-2-56.)

Shock and Vibration

Operating shock 30 g peak, half-sine, 11 ms pulse (Tested in accordance with IEC 60068-2-27. Meets MIL-PRF-28800F Class 2 limits.)

Random vibration

Operating 5 Hz to 500 Hz, 0.3 g_{rms} (with solid-state hard drive)

Nonoperating¹ 5 Hz to 500 Hz, 2.4 g_{rms} (Tested in accordance with IEC 60068-2-64. Nonoperating test profile exceeds the requirements of MIL-PRF-28800F, Class 3.)

¹ CPU performance may decrease for some workloads if a unit is stored at the extreme ambient temperature range and then subjected to max nonoperating random vibration limits.

