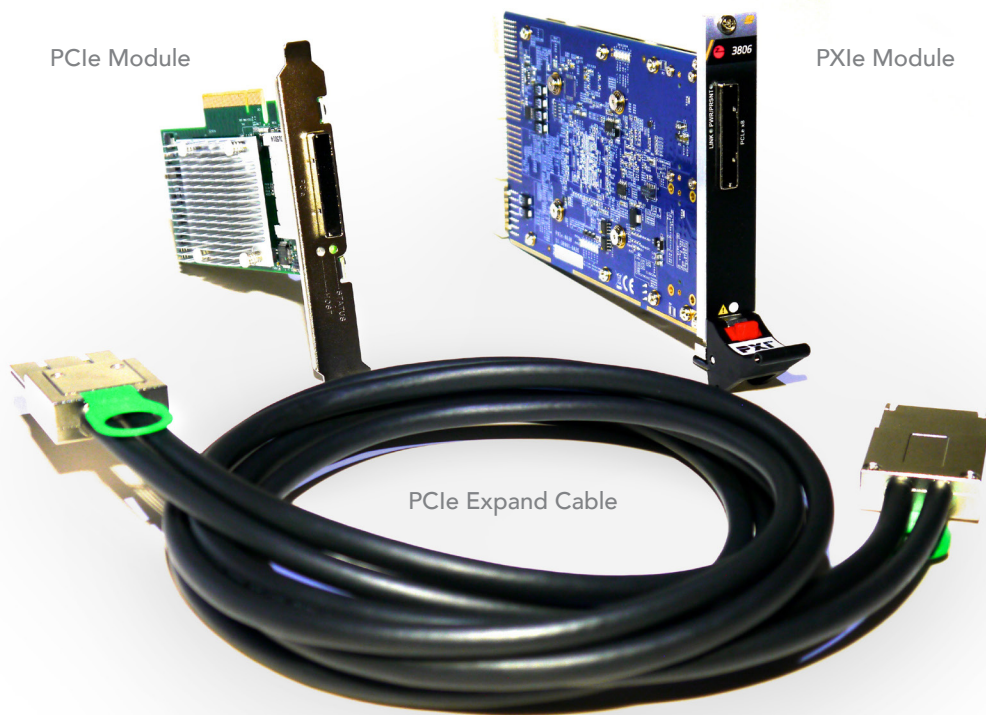


z3806 PCIe-to-PXIe Expansion Kit

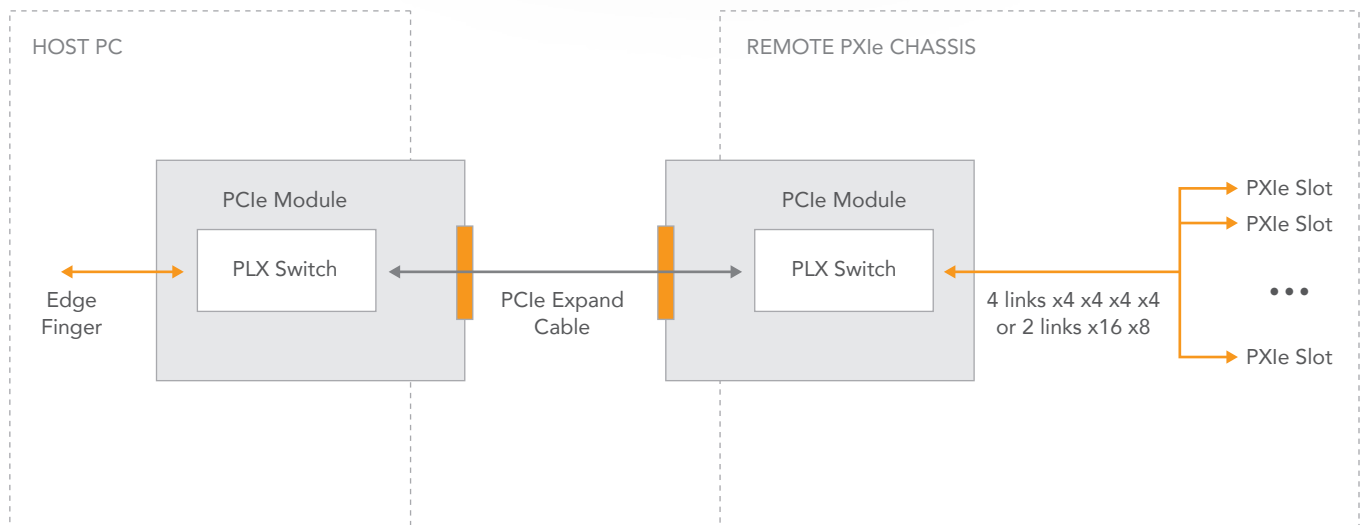


Overview

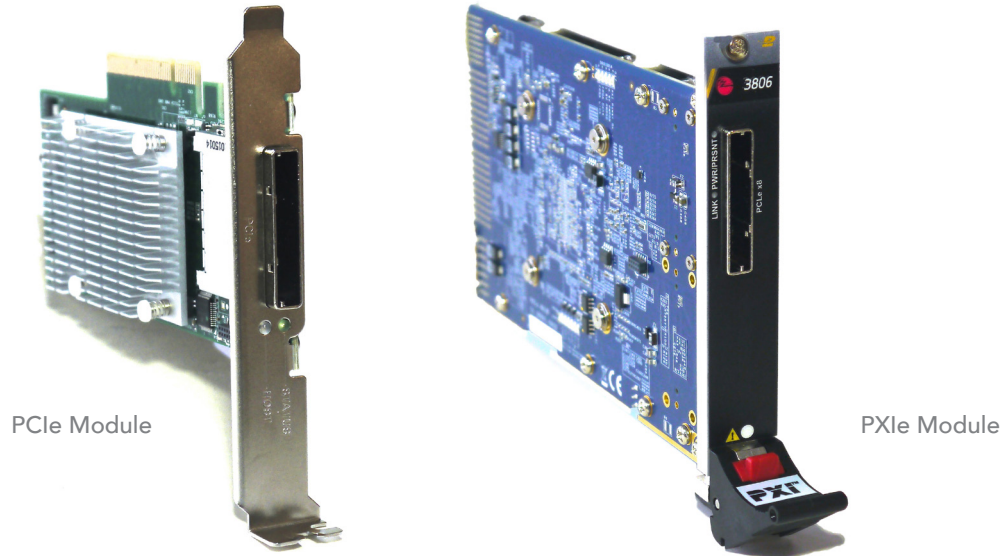
The z3806 PCIe-PXIe expansion kit connects a host computer to a remote PXIe chassis using high bandwidth PCIe technology. The expansion kit consists of a PCIe adapter installed in the host computer, a PCIe x8 cable, and a PXIe remote controller with the 3U expansion module installed in a remote PXIe chassis. Complex testing setups require multiple PXI or PXIe modules; the z3806 offers a practical solution by adding PXI instrument slots to the host computer. In addition, the z3806 can provide up to 4GB/s using PCIe Gen 2 x8 signaling.



z3806 Diagram



Port Descriptions



PCIe Module

PXIe Module

PCIe Module

Element	Description	Notes
Status LED	Off: No power	
	Orange: Power OK	
	Green: PXIe present	
Host LED	Off: No link	PCIe- PXIe Link status
	0.5Hz Blinking: Link in PCIe Gen1 signaling	
	1Hz Blinking: Link in PCIe Gen2 signaling	
Switch	Default settings ON: Pin3	
	Default settings OFF: Pins 1,2,4	

PXIe Module

Element	Description	Notes
PWR/PRSNT LED	Off: No power	
	Orange: Power OK	
	Green: PCIe present	
Link LED	Off: No link	PCIe- PXIe Link status
	0.5Hz Blinking: Link in PCIe Gen1 signaling	
	1Hz Blinking: Link in PCIe Gen2 signaling	
	Default settings OFF: Pins 1,2,4	

General Specifications

PCIe Module

Specification	Value
Typical Power	4 W
Maximum Power	8 W

PXle Module

Specification	Value	
Power rail	12 V	3.3 V
Typical current	0.85 A	1.3 A
Maximum current	1.7 A	2.6 A
Link configuration	4 links: x4 x4 x x4	
	2 links: x16 x8	

Cable Connector: PCIe x8 cable

Specification	Value
Data Throughput	4 GB/s
Length	2 m

Physical & Environmental

Size

Specification	Value
PCIe dimensions (W x H)	14.2 cm x 6.9 cm (5.59 in. x 2.72 in.)
PXle dimensions (W x H)	17.5 cm x 10.7 cm (6.89 in. x 4.21in.)

Temperature & Humidity

Specification	Value
Operating temperature	0°C to +55°C, ambient
Storage temperature	-20°C to +70°C, ambient
Relative humidity	10% to 90%, non-condensing

Terminology

Numeric Prefixes

When referring to numeric values, this document will use SI (International System of Units) and IEC (International Electrotechnical Commission) standard prefixes. Prefix definitions are in the following table.

Prefix	Multiplier
n (nano)	$1/(1000 \times 1000 \times 1000)$
μ (micro)	$1/(1000 \times 1000)$
m (milli)	$1/1000$
k/K (kilo)	1000
M (Mega)	1000×1000
G (Giga)	$1000 \times 1000 \times 1000$
Ki (Kibi)	1024
Mi (Mebi)	1024×1024
Gi (Gibi)	$1024 \times 1024 \times 1024$

Differential Outputs

Single-Ended is used to refer to the output on either the + or – output pin

Differential is used to refer to the output between the + and- output pins

Vd indicates Volts differential

Vppd indicates Volts peak-to-peak differential

Safety

This product is designed to meet the requirements of the following standard of safety for electrical equipment for measurement, control and laboratory use: EN 61010-1

Electromagnetic Compatibility

CE Marking EN 61326-1:1997 with A1:1998 and A2:2001 Compliant

FCC Part 15 (Class A) Compliant

Emissions

EN 55011	Radiated Emissions, ISM Group 1, Class A, distance 10 m, emissions < 1 GHz
EN 55011	Conducted Emissions, Class A, emissions < 30 MHz Immunity
EN 61000-4-2	Electrostatic Discharge (ESD), 4 kV by Contact, 8 kV by Air
EN 61000-4-3	RF Radiated Susceptibility, 10 V/m
EN 61000-4-4	Electrical Fast Transient Burst (EFTB), 2 kV AC Power Lines
EN 61000-4-5	Surge
EN 61000-4-6	Conducted Immunity
EN 61000-4-8	Power Frequency Magnetic Field, 30 A/m
EN 61000-4-11	Voltage Dips and Interrupts

CE Compliance

This product meets the necessary requirements of applicable European Directives for CE Marking as follows:

73/23/EEC Low Voltage Directive (Safety)

89/336/EEC Electromagnetic Compatibility Directive (EMC)

See Declaration of Conformity for this product for additional regulatory compliance information.

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