Specification Guide

M9010A, M9018B, M9019A

Keysight PXIe Chassis Family

KEYSIGHT TECHNOLOGIES

Notices

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Contents

How to Use this Document

This document contains technical specifications and characteristics for all versions, to the publication date of this Specification Guide, of the M9010A, M9018B, and M9019A PXIe chassis.

NOTE The specification, characteristics, and typical data in this version of the Specification Guide supersedes the information in all previous versions.

Some specifications in this document may apply only to a specific manufacturing version of the chassis. When a specification applies only to a specific version, the version number is listed next to that specification in the table.

Technical Specification and Characteristics

Terminology definitions

Term	Definition
Specification (Spec.)	Warranted performance. Specifications include guard bands to account for the expected statistical performance distribution, measurement uncertainties, and changes in performance due to environmental conditions. All specifications and characteristics apply over the operating environment outlined in the “Environmental and Regulatory” sections of this specification Guide. In addition, the following conditions must be met: • Instrument is within its calibration cycle if calibration is required. • Instrument has been stored for a minimum of one hour within the operating temperature range prior to turn-on and after a 30 minute warm-up period.
Characteristic (Char.)	Characteristics describe product performance that is useful in the application of the product, but that is not covered by the warranty. Characteristics are often referred to as Typical or Nominal values.
Typical (Typ.)	Expected performance of an average unit when operated over a 20 to 30 °C temperature range. Typical performance is not warranted. The instrument must be within its calibration cycle if calibration is required.
Nominal (Nom.)	Nominal describes representative performance that is useful in the application of the product when operated over a 20 to 30 °C temperature range. Nominal performance is not warranted.

Requirements for Temperature Control

For optimal cooling and proper operating temperatures,

- Any empty module slot in the chassis should be fitted with a slot blocker (from kit Y1212A) and EMC filler panel (from kit Y1213A).
- If a PCIe Cable Interface module is used in place of a controller, the open area to the left of the interface module should be filled with the filler panel and bracket (from kit Y1214B).
- All lower and side vents should remain unobstructed.
- The chassis fan speed should be set to HIGH.

Additional Information

- All data are measured from multiple units at room temperature and are representative of product performance within the controlled temperature range unless otherwise noted.
- The specifications contained in this document are subject to change.

M9010A Technical Specifications

Chassis characteristics		
Standards compliance		
	PXI-5 PXI Express hardware specification PXI-1 hardware specification rev 2.2 PICMG EXP.0 R2.0 specification	
Backplane		
	Module size	3U
	Total slots	10
	Hybrid compatible slots	8
	PXIe system slot	1 (with three system expansion slots)
	PXIe timing slot	1 (also accepts PXIe module)
	Module compatibility	PXIe, PXI-Hybrid, PXI-1 (J1 only), and cPCI (J1 only)
	System slot link configuration (fixed)	2-Link configuration: x8, x16
	Backplane speed	PCIe revision 3.0 (Gen 3)
Mechanical		
	Size	322.5 mm W x 194.8 mm H x 552.5 mm D (with feet installed) 322.5 mm W x 177.8 mm H x 552.5 mm D (with feet removed)
	Weight (without modules)	14.02 kg (30.91 lbs)

Power supply characteristics		
AC input		
	Operating voltage/power (low-line)[1]	100/120 V, 734 W Maximum
	Operating voltage/power (high-line)[1]	220/240 V, 1100 W Maximum
	Input frequency range	50/60 Hz
	Mains supply voltage fluctuations are not to exceed ±10% of the nominal voltage.	
	Transient over-voltages typically present on the Mans supply (installation CAT II).	
	Over current protection	Internal fuse in line
Available DC output power (for module slots)		
	Total DC power[2]	
	220/240 V input:	830 W
	100/120 V input:	470 W

1. Auto switching between high line and low line.

2. No derating required for temperature or altitude.

Power supply characteristics (continued)						
DC Supplies						
	Voltage	Maximum Current[1] 45 °C, <10kft	50 °C, 10kft	Load Regulation	Maximum ripple and noise (20 MHz BW)	
	+3.3 V	58.8 A	48.8 A	5%	1.5% (pk-pk)	
	+5 V	36 A	31.5 A	5%	1% (pk-pk)	
	+12 V	40 A	35 A	5%	1% (pk-pk)	
	-12 V	4 A	3.5 A	5%	1% (pk-pk)	
	5 Vaux	2 A	2 A	5%	50mV (pk-pk)	
Backplane pin current capacity						
	Slot	+3.3 V	+5 V	+12 V	–12V	5 Vaux
	System controller slot	9 A	9 A	11 A	0 A	1 A
	System timing/PXIe slot	6 A	0 A	4 A	0 A	1 A
	PXIe hybrid slot	6 A	6 A	4 A	1 A	1 A
Chassis cooling and power dissipation characteristics						
	Slot airflow direction			Bottom of module to top of module		
	Chassis cooling intake			Rear of chassis		
	Chassis cooling exhaust			Front top of chassis		
	Chassis cooling fans			Two 120 cfm fans on rear panel with HIGH/AUTO speed selector		
	Power dissipation, system slot			140 W max		
	Power dissipation, user slot			42 W max[2]		
	Power dissipation, timing slot			42 W max[2]		

1. The total power supplied for all rails must not exceed 470 W (100/120 V) or 830 W (220/240 V).

2. Maximum per slot power dissipation at 55 °C with 15 °C temperature rise; requires: a) that the chassis bottom is not blocked (1U rack space below or sitting on bench with feet extended) OR b) two air inlet modules in slots 9, 10, or 11, and a slot blocker in empty controller slots. Module cooling can be impacted by each module's resistance to air flow.

Clocks and Triggers		
10 MHz system clock (PXI_CLK10)		
	Maximum slot-to-slot skew	200 ps
	Accuracy	30 ppm
	Output amplitude (10 MHz REF Out BNC)	1 V pk-pk ±20% square-wave into 50Ω
		2 V pk-pk unloaded
	Output impedance (10 MHz REF Out BNC)	50Ω ±5Ω
100 MHz system clock (PXIe_CLK100)		
	Maximum slot-to-slot skew	125 ps
	Accuracy	30 ppm
External 10 MHz clock source input requirements		
	Frequency input	10 MHz ±100 ppm
	Input signal (10 MHz REF In BNC)	100 mVPP to 5 Vpp (square or sine wave)
	Input signal (PXI timing slot PXI_CLK10_IN)	5V or 3.3 V TTL signal
PXI star trigger		
	Maximum slot-to-slot skew	250 ps
PXI differential star triggers		
	Maximum slot-to-slot skew	150 ps
	Maximum differential skew	25 ps
Front panel triggers (trig 1 and trig 2 SMBs)		
	Direction control	Input or Output (configurable)
	Output level	3.3 V CMOS (TTL Compatible, 5 V tolerant)
	Output impedance	50 Ω (typ)
	Output trigger source	PXI_Trig0 - PXI_Trig7 (Segment 1)
	Input level	3.3 V CMOS (TTL Compatible, 5 V tolerant)
	Input impedance	3 kΩ (typ)
	Input trigger destination	PXI_Trig0 – PXI_Trig7 (Segment 1)
	Input threshold	1.65 V (typ)
	Minimum swing	250 mV
	Minimum pulse width	100 ns (typ)

Environmental Characteristics[1,2]		
Operating and storage conditions		
	Operating	Storage
Temperature	0 °C to 55 °C	–40 °C to 70 °C
Altitude	Up to 10,000 ft (3048 m)	Up to 15,000 ft (4572 m)
Humidity	Type-tested at 95% (non-condensing)	
Vibration		
	Operating random vibration: type-tested at 5 to 500 Hz, 0.21 g rms	
	Survival random vibration: type-tested at 5 to 500 Hz, 2.09 g rms	
Acoustical emissions (referenced to 1 pW)		
	Auto fan (25 ˚C ambient)	High Fan
Sound pressure level[3]	45 dBA	58 dBA
Sound Power	50 dBA	66 dBA
Regulatory Characteristics		
Safety	Complies with the essential requirements of the European LVD Directive of the following standards (dates and editions are cited in the Declaration of Conformity): – IEC/EN 61010-1 – Canada: CSA C22.2 No. 61010-1 – USA: UL std no. 61010-1	
Acoustic statement (European Machinery Directive)	Acoustic noise emission LpA < 70 dB Operator position Normal operation mode per ISO 7779	
EMC	Complies with European EMC Directive of the following standards (dates and editions are cited in the Declaration of Conformity): – IEC/EN 61326-1 – CISPR pub 11 group 1, class A – AS/NZS CISPR 11 – ICES/NMB-001 This ISM device complies with Canadian ICES-001. Cet appareil ISM est conforme a la norme NMB-001 du Canada	

1. Samples of this product have been type tested in accordance with the Keysight Environmental Test Manual and verified to be robust against the environmental stresses of storage, transportation and end-use. Those stresses include but are not limited to temperature, humidity, shock, vibration, altitude and power line conditions.

2. Test Methods are aligned with IEC 60068-2 and levels are similar to MIL-PRF-28800F Class 3.

3. At operator position

Recommended Configuration

Configure the Keysight M9010A PXIe chassis as follows:

- Select a PXIe system module (the Keysight M9022A, M9023A or M9024A System Interface Modules are recommended) or embedded controller (M9037A).
- If an external computer is being used, select an appropriate PC interface card (the Keysight M9048B or M9049A Host Adapter Interface modules are recommended).
- Select an appropriate cable to connect the computer interface board to the chassis interface (the Y1202A is recommended to connect the M9048B and M9022A).
- Select accessories as required.

Multi-chassis Configuration

The M9010A can be used in multi-chassis configurations with other PXIe chassis (including the M9010A, M9018A, M9018B, M9019A and the AXIe chassis (M9502A and M9505A). In general, up to four chassis can be connected together depending on the controller and operating system used. Different topologies include cascade and star.

M9018B Technical Specifications

Chassis characteristics		
Standards compliance		
	PXI-5 PXI Express hardware specification PXI-1 hardware specification rev 2.2 PICMG EXP.0 R2.0 specification	
Backplane		
	Module size	3U
	Total slots	18
	Hybrid compatible slots	16
	PXIe system slot	1 (with three system expansion slots)
	PXIe timing slot	1 (also accepts PXIe module)
	Module compatibility	PXIe, PXI-Hybrid, PXI-1 (J1 only), and cPCI (J1 only)
	System slot link configuration (configurable)	2-Link (2x8) and 4-Link (4x4) plus M9021A configuration (1x8)
	Backplane speed	PCIe revision 2.0 (Gen 2)
Mechanical		
	Size	444.4 mm W x 194.8 mm H x 466 mm D (with feet installed) 444.4 mm W x 177.8 mm H x 466 mm D (with feet removed) 4U x 1 rack width
	Weight (without modules)	13.5 kg (29.8 lbs)

Power supply characteristics		
AC input		
	Operating voltage/power (low-line)[1]	100/120 V, 1200 W Maximum
	Operating voltage/power (high-line)[1]	220/240 V, 1300 W Maximum
	Input frequency range	50/60 Hz
	Mains supply voltage fluctuations are not to exceed ±10% of the nominal voltage.	
	Transient over-voltages typically present on the Mans supply (installation CAT II).	
	Over current protection	Internal fuse in line
Available DC output power (for module slots)		
	Total DC power[2]	
	220/240 V input:	858 W
	100/120 V input:	708 W

Power supply characteristics

1. Auto switching between high line and low line.

2. No derating required for temperature or altitude.

DC Supplies					
	Voltage	Maximum Current[1] 45 ˚C, <10kft	50 ˚C, 10kft	Load Regulation	Maximum ripple and noise (<20 MHz BW)
	+3.3 V	70 A	67 A	5%	1.5% (pk-pk)
	+5 V	60 A[2]	52.5 A[2]	5%	1% (pk-pk)
	+12 V	57.4 A[2]	49.9 A[2]	5%	1% (pk-pk)
	-12 V	4 A	4 A	5%	1% (pk-pk)
	5 Vaux	2 A	2 A	5%	50mV (pk-pk)

Backplane pin current capacity						
	Slot	+3.3 V	+5 V	+12 V	–12V	5 Vaux
	System controller slot	9 A	9 A	11 A	0 A	1 A
	System timing/PXIe slot	6 A	0 A	4 A	0 A	1 A
	PXIe hybrid slot	6 A	6 A	4 A	1 A	1 A

Chassis cooling and power dissipation characteristics		
	Slot airflow direction	Bottom of module to top of module
	Chassis cooling intake	Bottom of front bezel, side panels, and bottom panel of chassis
	Chassis cooling exhaust	Rear of chassis
	Chassis cooling fans	Three 186 cfm fans on rear panel with HIGH/AUTO speed selector
	Power dissipation, system slot	140 W max
	Power dissipation, user slot	42 W max[3]
	Power dissipation, timing slot	42 W max[3]

1. The total power supplied for all rails must not exceed 708 W (100/120 V) or 858 W (220/240 V).

2. The total power supplied for 5 V and 12 V rails must not exceed 689 W at 45 $^{\circ}$C, <10k ft, or 599 W at 50 $^{\circ}$C, 10k ft.

3. Maximum per slot power dissipation at 55 $^{\circ}$C with 15 $^{\circ}$C temperature rise; requires: a) that the chassis bottom is not blocked (1U rack space below or sitting on bench with feet extended) OR b) two air inlet modules in slots 9, 10, or 11, and a slot blocker in empty controller slots. Module cooling can be impacted by each module's resistance to air flow.

Clocks and Triggers		
10 MHz system clock (PXI_CLK10)		
	Maximum slot-to-slot skew	155 ps
	Accuracy	30 ppm
	Output amplitude (10 MHz REF Out BNC)	1 V pk-pk 20% square-wave into 50Ω
		2 V pk-pk unloaded
	Output impedance (10 MHz REF Out BNC)	50Ω ±5Ω
100 MHz system clock (PXIe_CLK100)		
	Maximum slot-to-slot skew	125 ps
	Accuracy	30 ppm
External 10 MHz clock source input requirements		
	Frequency input	10 MHz ±100 ppm
	Input signal (10 MHz REF In BNC)	100 mVPP to 5 Vpp (square or sine wave)
	Input signal (PXI timing slot PXI_CLK10_IN)	5V or 3.3 V TTL signal
PXI star trigger		
	Maximum slot-to-slot skew	250 ps
PXI differential star triggers		
	Maximum slot-to-slot skew	150 ps
	Maximum differential skew	25 ps
Front panel triggers (trig 1 and trig 2 SMBs)		
	Direction control	Input or Output (configurable)
	Output level	3.3 V CMOS (TTL Compatible, 5 V tolerant)
	Output impedance	PXI_Trig0 – PXI_Trig7 (Segment 2)
	Output trigger source	316 Ω pulled up to 3.3 V
	Input level	3.3 V CMOS (TTL Compatible, 5 V tolerant)
	Input impedance	3 kΩ (typ)
	Input trigger destination	PXI_Trig0 – PXI_Trig7 (Segment 2)
	Input threshold	1.65 V (typ)
	Minimum swing	250 mV
	Minimum pulse width	100 ns (typ)

Environmental Characteristics[1,2]		
Operating and storage conditions		
	Operating	Storage
Temperature	0 °C to 55 °C	–40 °C to 70 °C
Altitude	Up to 10,000 ft (3048 m)	Up to 15,000 ft (4572 m)
Humidity	Type-tested at 95% (non-condensing)	
Vibration		
	Operating random vibration: type-tested at 5 to 500 Hz, 0.21 g rms	
	Survival random vibration: type-tested at 5 to 500 Hz, 2.09 g rms	
Acoustical emissions (referenced to 1 pW)		
	Auto fan (25˚C ambient)	High Fan
Sound pressure level[3]	53 dBA	69 dBA
Sound Power	59 dBA	77 dBA
Regulatory Characteristics		
Safety	Complies with the essential requirements of the European EMC Directive as well as current editions of the following standards (dates and editions are cited in the Declaration of Conformity): – IEC/EN 61010-1 – Canada: CSA C22.2 No. 61010-1 – USA: UL std no. 61010-1	
Acoustic statement (European Machinery Directive)	Acoustic noise emission LpA < 70 dB Operator position Normal operation mode per ISO 7779	
EMC	Complies with European EMC Directive of the following standards (dates and editions are cited in the Declaration of Conformity): – IEC/EN 61326-1 – CISPR pub 11 group 1, class A – AS/NZS CISPR 11 – ICES/NMB-001 This ISM device complies with Canadian ICES-001. Cet appareil ISM est conforme a la norme NMB-001 du Canada	

1. Samples of this product have been type tested in accordance with the Keysight Environmental Test Manual and verified to be robust against the environmental stresses of storage, transportation and end-use. Those stresses include but are not limited to temperature, humidity, shock, vibration, altitude and power line conditions.

2. Test Methods are aligned with IEC 60068-2 and levels are similar to MIL-PRF-28800F Class 3.

3. At operator position

Recommended Configuration

Configure the Keysight M9018B PXIe chassis as follows:

- Select a PXIe system module (the Keysight M9022A, M9023A, or M9024A System Interface Modules are recommended) or embedded controller (M9037A).
- If an external computer is being used, select an appropriate PC interface card (the Keysight M9048B or M9049A Host Adapter Interface modules are recommended).
- Select an appropriate cable to connect the computer interface board to the chassis interface (the Y1202A is recommended to connect the M9048B and M9022A).
- Select accessories as required.

Multi-chassis Configuration

The M9018B can be used in multi-chassis configurations with other PXIe chassis (including the M9010A, M9018A, M9018B, M9019A and the AXIe chassis (M9502A and M9505A). In general, up to four chassis can be connected together depending on the controller and operating system used. Different topologies include cascade and star.

M9019A Technical Specifications

Chassis characteristics		
Standards compliance		
	PXI-5 PXI Express hardware specification PXI-1 hardware specification rev 2.2 PICMG EXP.0 R2.0 specification	
Backplane		
	Module size	3U
	Total slots	18
	Hybrid compatible slots	16
	PXIe system slot	1 (with three system expansion slots)
	PXIe timing slot	1 (also accepts PXIe module)
	Module compatibility	PXIe, PXI-Hybrid, PXI-1 (J1 only), and cPCI (J1 only)
	System slot link configuration (fixed)	2-link configuration (x8, x16)
	Backplane speed	PCIe revision 3.0 (Gen 3)
Mechanical		
	Size	444.4 mm W x 194.8 mm H x 466 mm D (with feet installed) 444.4 mm W x 177.8 mm H x 466 mm D (with feet removed) 4U x 1 rack width
	Weight (without modules)	13.3 kg (29.3 lbs)

Power supply characteristics		
AC input		
	Operating voltage/power (low-line)[1]	100/120 V, 1200 W Maximum
	Operating voltage/power (high-line)[1]	220/240 V, 1300 W Maximum
	Input frequency range	50/60 Hz
	Mains supply voltage fluctuations are not to exceed ±10% of the nominal voltage.	
	Transient over-voltages typically present on the Mans supply (installation CAT II).	
	Over current protection	Internal fuse in line
Available DC output power (for module slots)		
	Total DC power[2]	
	220/240 V input:	800 W
	100/120 V input:	650 W

Power supply characteristics

1. Auto switching between high line and low line.

2. No derating required for temperature or altitude.

DC Supplies					
	Voltage	Maximum Current[1] 45 ˚C, <10kft	50 ˚C, 10kft	Load Regulation	Maximum ripple and noise (<20 MHz BW)
	+3.3 V	70 A	67 A	5%	1.5% (pk-pk)
	+5 V	60 A[2]	52.5 A[2]	5%	1% (pk-pk)
	+12 V	52.5 A[2]	45 A[2]	5%	1% (pk-pk)
	-12 V	4 A	4 A	5%	1% (pk-pk)
	5 Vaux	2 A	2 A	5%	50mV (pk-pk)

Backplane pin current capacity					
	Slot	+3.3 V	+5 V	+12 V	–12V	5 Vaux
	System controller slot	9 A	9 A	11 A	0 A	1 A
	System timing/PXIe slot	6 A	0 A	4 A	0 A	1 A
	PXIe hybrid slot	6 A	6 A	4 A	1 A	1 A

Chassis cooling and power dissipation characteristics		
	Slot airflow direction	Bottom of module to top of module
	Chassis cooling intake	Bottom of front bezel, side panels, and bottom panel of chassis
	Chassis cooling exhaust	Rear of chassis
	Chassis cooling fans	Three 186 cfm fans on rear panel with HIGH/AUTO speed selector
	Power dissipation, system slot	140 W max
	Power dissipation, user slot	42 W max[3]
	Power dissipation, timing slot	42 W max[3]

1. The total power supplied for all rails must not exceed 650 W (100/120 V) or 800 W (220/240 V).

2. The total power supplied for 5 V and 12 V rails must not exceed 630 W at 45 $^{\circ}$C, <10k ft, or 540 W at 50 $^{\circ}$C, 10k ft.

3. Maximum per slot power dissipation at 55 $^{\circ}$C with 15 $^{\circ}$C temperature rise; requires: a) that the chassis bottom is not blocked (1U rack space below or sitting on bench with feet extended) OR b) two air inlet modules in slots 9, 10, or 11, and a slot blocker in empty controller slots. Module cooling can be impacted by each module's resistance to air flow.

Clocks and Triggers		
10 MHz system clock (PXI_CLK10)		
	Maximum slot-to-slot skew	155 ps
	Accuracy	30 ppm
	Output amplitude (10 MHz REF Out BNC)	1 V pk-pk 20% square-wave into 50 Ω
		2 V pk-pk unloaded
	Output impedance (10 MHz REF Out BNC)	50Ω ±5 Ω
100 MHz system clock (PXIe_CLK100)		
	Maximum slot-to-slot skew	125 ps
	Accuracy	30 ppm
External 10 MHz clock source input requirements		
	Frequency input	10 MHz ±100 ppm
	Input signal (10 MHz REF In BNC)	100 mVPP to 5 Vpp (square or sine wave)
	Input signal (PXI timing slot PXI_CLK10_IN)	5V or 3.3 V TTL signal
PXI star trigger		
	Maximum slot-to-slot skew	250 ps
PXI differential star triggers		
	Maximum slot-to-slot skew	150 ps
	Maximum differential skew	25 ps
Front panel triggers (trig 1 and trig 2 SMBs)		
	Direction control	Input or Output (configurable)
	Output level	3.3 V CMOS (TTL Compatible, 5 V tolerant)
	Output impedance	50 Ω (typ)
	Output trigger source	PXI_Trig0 – PXI_Trig7 (Segment 2)
	Input level	3.3 V CMOS (TTL Compatible, 5 V tolerant)
	Input impedance	3 kΩ (typ)
	Input trigger destination	PXI_Trig0 – PXI_Trig7 (Segment 2)
	Input threshold	1.65 V (typ)
	Minimum swing	250 mV
	Minimum pulse width	100 ns (typ)

Environmental Characteristics[1,2]		
Operating and storage conditions		
	Operating	Storage
Temperature	0 °C to 55 °C	–40 °C to 70 °C
Altitude	Up to 10,000 ft (3048 m)	Up to 15,000 ft (4572 m)
Humidity	Type-tested at 95%, +40˚C (non-condensing)	
Vibration		
	Operating random vibration: type-tested at 5 to 500 Hz, 0.21 g rms	
	Survival random vibration: type-tested at 5 to 500 Hz, 2.09 g rms	
Acoustical emissions (referenced to 1 pW)		
	Auto fan (25˚C ambient)	High Fan
Sound pressure level[3]	53 dBA	69 dBA
Sound Power	59 dBA	77 dBA
Regulatory Characteristics		
Safety	Complies with the essential requirements of the European LVD Directive of the following standards (dates and editions are cited in the Declaration of Conformity): – IEC/EN 61010-1 – Canada: CSA C22.2 No. 61010-1 – USA: UL std no. 61010-1	
Acoustic statement (European Machinery Directive)	Acoustic noise emission LpA < 70 dB Operator position Normal operation mode per ISO 7779	
EMC	Complies with European EMC Directive of the following standards (dates and editions are cited in the Declaration of Conformity): – IEC/EN 61326-1 – CISPR pub 11 group 1, class A – AS/NZS CISPR 11 – ICES/NMB-001 This ISM device complies with Canadian ICES-001. Cet appareil ISM est conforme a la norme NMB-001 du Canada	

1. Samples of this product have been type tested in accordance with the Keysight Environmental Test Manual and verified to be robust against the environmental stresses of storage, transportation and end-use. Those stresses include but are not limited to temperature, humidity, shock, vibration, altitude and power line conditions.

2. Test Methods are aligned with IEC 60068-2 and levels are similar to MIL-PRF-28800F Class 3.

3. At operator position

Recommended Configuration

Configure the Keysight M9019A PXIe chassis as follows:

- Select a PXIe system module (the Keysight M9022A, M9023A, or M9024A System Interface Modules are recommended) or embedded controller (M9037A).
- If an external computer is being used, select an appropriate PC interface card (the Keysight M9048B or M9049A Host Adapter Interface modules are recommended).
- Select an appropriate cable to connect the computer interface board to the chassis interface (the Y1202A is recommended to connect the M9048B and M9022A).
- Select accessories as required.

Multi-chassis Configuration

The M9019A can be used in multi-chassis configurations with other PXIe chassis (including the M9010A, M9018A, M9018B, M9019A and the AXIe chassis (M9502A and M9505A). In general, up to four chassis can be connected together depending on the controller and operating system used. Different topologies include cascade and star.

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