

PXS0108 6-Slot MicroTCA



μ TCA[®]

PXS0108 KEY FEATURES

- μ TCA[®] System Platform based on the PICMG[®] MicroTCA.0 R1.0 specification
- 19" x 1U x 9" deep
- RoHS compliant
- Redundant or non-redundant backplane configurations available
- AMCs are hot swappable
- In redundant configuration, MCH fail-over support and MCHs are hot swappable
- Superior cooling configuration for airflow with a push-pull, side-to-side configuration removes the need for expensive Cooling Units (CUs)
- Maximum 400W redundant or non-redundant power
- Active backplane removes the need for expensive Power Modules (PMs)
- Six AMCs (Mid-height) in non-redundant configuration, 4 in redundant configuration.

The PXS0108 is a versatile MicroTCA[®] chassis ideal for a wide range of embedded applications including industrial and defense applications. Enhanced ruggedization options are available for defense applications. The PXS0108 leverages over 20 years of superior cooling, backplane, and packaging innovation with proven Kaparel and Rittal technologies.

The PXS0108 has an active backplane that alleviates the need for expensive Power Modules (PMs). The backplane provides a power manager for each slot that controls and limits the management and payload power to the maximum allowed. Payload power is limited to 8 Amps per slot. On power-up, payload power is delayed to allow the MCH(s) to fully come online. The AMCs are then sequentially enabled allowing for a smooth power up sequence.

The PXS0108 has configuration options that allow redundant power supplies, backplane topologies and FRU information devices.

Pixus Technologies can modify this product to meet specific customer requirements without NRE (minimum order placement is required).

Power

The PXS0108 provides for a maximum of 400W of 12V power for the entire chassis.

The cooling system consumes 35W leaving 365W for the MCH(s) and AMCs. That averages 52W per module in a non-redundant configuration and 60W in a redundant configuration.

All Slots are limited to 100W (8.35A) maximum power consumption on payload power and 0.64W (0.195A) for management power.

Cooling

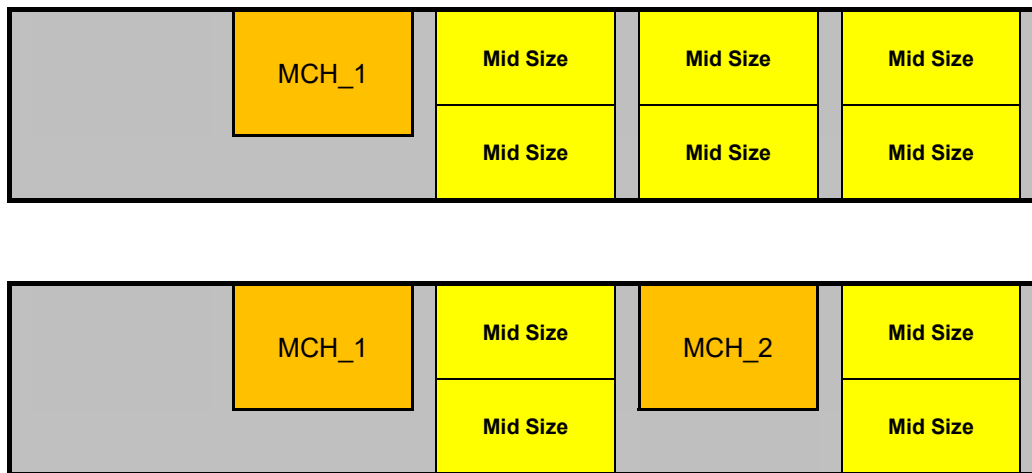
The PXS0108 has nine fixed fans. Eight provide for a push-pull configuration in the module area and one provides cooling in the power supply area. Airflow is from right to left.

The fans are fixed and are not managed and therefore constantly operate a full speed.

There is no air inlet filter on the PXS0108.

Slot Configuration

The following figures outline the slot configurations for option C = 1 or 3 and C = 2 respectively.



Specifications

Architecture		
Physical	Dimensions	Height 1U (1.75")
		Width: 19"
		Depth 9" ¹
Type	uTCA Shelf	1 MCH + 6 (Mid-height) AMCs or 2 MCHs + 4 (Mid-height) AMCs
Standards		
PICMG	Type	MicroTCA.0 R1.0
Configuration		
Power	PXS0108-X1 PXS0108-X2	400W DC (36V—72V) 13 Amps Maximum
		400W AC (90V—264V) 6 Amps Maximum
		Dual redundant or non-redundant
Environmental	Temperature	Operating temperature: 0° to 55°C
		Storage temperature: -40° to +70°C
	Altitude	10,000ft operating
		40,000ft. non-operating
Relative humidity	5 to 95 percent, non-condensing	
Conformal coating		Upon request (See page 4 selection "J" for available options)
Other		
MTBF	MIL Handbook 217-F @ TBD Hrs.	
Certifications	Designed to meet FCC, CE and EN/UL/TUV certifications where applicable	
Compliance	RoHS	
Warranty	Two years	
Trademarks and logos	The Pixus Logo is a registered trademark of Pixus Technologies Inc. other registered trademarks are the property of their respective owners. Specs. subject to change without notice.	

Ordering Options

PXS0108-0BC-DEF-00J Not used

B = Power

- 1 = DC Redundant
- 2 = AC Redundant
- 3 = DC Non-Redundant
- 4 = AC Non-Redundant
- 5 = AC/DC Redundant

C = CLK3

- 1 = Non-redundant (Telco)
- 2 = Non-redundant (Fabric CLK)
- 3 = Redundant
- 4 = Other

D = Ports 2 and 3

- 1 = To MCH
- 2 = Direct Connection
- 3 = Other

E = MCH Mode

- 1 = Single MCH (6 AMC available)
- 2 = Dual redundant (4 AMC available)
- 3 = Other

F = Backplane Fabric

- 1 = x8 PCIe (Ports 4-11)
- 2 = x8 GbE (Ports 4-11)
- 3 = x4 PCIe (Ports 4-7), x4 GbE (Ports 8-11)
- 4 = Other

J= Conformal Coating

- 0 = None
- 1 = Humiseal 1A33 Polyurethane
- 2 = Humiseal 1B31 Acrylic

