

PXES-2785

18-Slot 3U 24GB/s PXI Express Chassis – Up to 8 GB/s, 50 W power and cooling capacity per slot

Features

- PXI™-5 PXI Express hardware specification Rev.1.0 compliant
- 18-slot PXI Express chassis with one system slot, one system timing slot, six hybrid peripheral slots, and ten PXI Express peripheral slots
- PXI Express System Slot routed as 2 Link Configuration x8 x16
- Up to 24 GB/s (PCI Express 3.0 x8 x16 link) system bandwidth
- Up to 8 GB/s (PCI Express 3.0 x8 link) bandwidth for all peripheral slots
- 0°C to 55°C extended operating temperature range
- Two BNC connectors for PXI 10MHz reference clock input and output
- Replaceable maintenance unit with fan and power supply unit
- Low-jitter internal 10 MHz reference clock for PXI/PXI Express slots with ± 1 ppm stability
- Low-jitter internal 100 MHz reference clock for PXI Express slots with ± 1 ppm stability
- Remote chassis monitoring through Ethernet port
- Variable speed fan controller optimizes cooling and acoustic emissions
- Through inhibit connector, including remote power button and voltage monitor

Preliminary



Introduction

The ADLINK PXES-2785 chassis combines a high-performance 18-slot PXI Express backplane with a high-output power supply and a structural design that has been optimized for maximum usability in a wide range of applications. The chassis' modular design ensures a high level of maintainability and offers replaceable power supplies for high-availability applications, resulting in a very low mean time to repair (MTTR). The PXES-2785 chassis fully complies with the PXI™-5 PXI Express Hardware Specification, offering advanced timing and synchronization features.

ADLINK PXES-2785, using PCI Express 3.0 technology, features 24GB/s of system bandwidth for high-throughput, peer-to-peer data transfer applications, and up to 8 GB/s bandwidth for all peripheral slots. Moreover, the chassis offers 990W power in total, and 50W of power cooling capacity per slot so that PXES-2785 can provide higher power budgets for high performance and power PXI modules. The PXI Express timing and synchronization feature functions are for high clock accuracy and external clock and trigger routing.

The PXES-2785 is equipped with a smart system monitoring controller, reporting chassis status including fan speed, system voltages, and internal temperature, remote chassis monitoring via Ethernet port, and inhibit control.

Specifications

Power Supply

AC Input

Input voltage range: 100 to 240 VAC

Input voltage frequency: 50 to 60 Hz

DC Output

DC Power Current Capacity and Dissipation Capacity

DC Power Current Capacity	Maximum Current Per Slot			Total Power Budget
	PXle System Slot	PXle Peripheral/ System Timing Slots	PXle Hybrid Peripheral Slot	
Slot Number	1	2,3,4,5,6, 10,14,15, 16,17,18	7,8,9, 11,12,13	Total of slot 1~18
12V	11A	4A	4A	72A
3.3V	9A	6A	6A	77A
5V	9A	-	2A	21A
-12V	-	-	0.25A	1.5A
5Vsb	1A	0.5A (Shared)		1.5A
Power Dissipation Capacity	140W max	50W max*		990W max (200~240VAC) 790W max (100~120VAC)

*Boost dissipation mode supports maximum dissipation with 15 °C temperature rise at 55 °C environment.

System and Peripheral Slots

Type of Slot	Q'ty	Slot Number	Bus
PXI Express System Slot	1	1	*1
PXI Express System Timing Slot	1	10	*2
PXI Express Hybrid Peripheral Slot	6	7,8,9,11,12,13	*2 *3
PXI Express Peripheral Slot	10	2,3,4,5,6,14,15,16,17,18	*2

*1 PCIe 3.0 x8 x16 support up to 24 GB/s system bandwidth.

*2 PCIe 3.0 x8 supports up to 8 GB/s peripheral bandwidth.

*3 PCI Bus 32bit at 33MHz and 5V VIO.

IO/Switch on Rear Panel

Two BNC connectors for 10MHz reference clock input and output

Fan mode setting switches

Remote inhibit and voltage monitoring connector

Cooling

Fans: 3 x 223 CFM fans

Per-slot cooling capacity: 50W(Boost Mode), 38W(Normal Mode)

Dimensions

464.3 mm (W) x 191.4 mm (H) x 465.3 mm (D) (18.1" x 7.46" x 18.14")

Weight: 11.9 kg (26.2 lbs)

Acoustic Emission Sound Pressure Level (dBA)

TBD

Operating Environment

Ambient temperature: 0°C to 55°C (32°F to 131°F)

Relative humidity: 10% to 90%, non-condensing

Storage Environment

Ambient temperature: -20°C to 70°C (-4°F to 158°F)

Relative humidity: 10% to 90%, non-condensing

Shock and Vibration

Functional shock: 30 G, half-sine, 11 ms pulse duration

Random vibration

• Operating: 5 to 500 Hz, 0.3 Grms, 3 axes

• Non-operating: 5 to 500 Hz, 2.46 Grms, 3 axes

Emissions Compliance

EN 61326-1

FCC Class B

CE Compliance

Safety: EN 61010-1

Immunity: EN 61326-1

PXES-2785 Backplane PXle Switch Fabric - 2 Link x16 x8

