

PXES-2785

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

Features

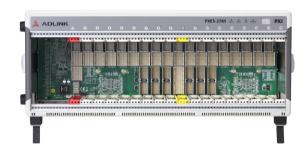
- PXI[™]-5 PXI Express hardware specification Rev.1.0 compliant
- 18-slot PXI Express chassis with one system slot, one system timing slot, six hybrid peripheral slots, and ten PXI Express peripheral slots
- PXI Express System Slot routed as 2 Link Configuration x8 x16
- Up to 24 GB/s (PCI Express 3.0 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

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 1170W power in total, and 50W/82W 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.



Ordering Information

- PXES-2785/US/EU
 18-slot Gen3 PXI Express chassis with removable PSU and US/EU power cord
- PXES-2785/CN
 18-slot Gen3 PXI Express chassis with removable PSU and CN power cord

Accessories

- Rack-mount kit PXES-2780/PXES-2785
 19 inch Rack-mount kit for PXES-2780/PXES-2785
- Air inlet module
 Air inlet module for PXES-2780/PXES-2785/PXES-2590, 1 slot
- PXI EMC filler panel kit
 PXI EMC filler panels, 3U3slot x1pc, 3U1slot x6pcs
- PSM kit PXES-2785
 Power supply module kit for PXES-2785
- Fan for PXES-2785 power supply module
- Fan cable for PXES-2785 power supply module

Specifications

Power Supply

AC Input

Input voltage range: 100 to 240 VAC Input voltage frequency: 50 to 60 Hz

DC Output

Total DC output power 1170/1000W (0°C ~ 45°C 220/110VAC) 990/790W (45°C ~ 55°C 220/110VAC)

DC Power Current and Dissipation Capacity

DC Davisa	Maximum Current Per Slot			Maximum	
DC Power Current Capacity	PXIe System Slot	PXIe Peripheral/ System Timing Slots Peripheral Slot		Current Per Chassis	
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	30A	6A	6A	72A	
3.3V	15A	9A	9A	77A	
5V	15A	-	6A	20A	
-12V	-	-	1A	4A	
5Vsb	3A	1A (Shared)		4A	
Power Dissipation Capacity	140W max	38W/50W/82W* max			

^{*}Refer to cooling specification.

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 PCle 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 System slot cooling capacity: 140W

Peripheral slot cooling capacity:

38W (Normal fan mode, and max ambient 55°C)

50W (Boost fan mode, and max ambient 55°C)

82W (Boost fan mode, max ambient temp 45° C, and heat dissipation of modules at both sides of the slot shall not exceed 50W)

Dimensions

444.4 mm (W) \times 177.8 mm (H) \times 480.5 mm (D) (7.0" \times 17.5" \times 18.9") Net weight: 11.9 kg (26.2 lbs) Gross(Freight) weight: 14.6 kg (32.2 lbs)

• 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: -40°C to 71°C (-40°F to 159.8°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

EMC Compliance

EN 61326-1 Class A emissions; Basic immunity FCC 47 CFR Part 15 Subpart A ICES-001/ICES-003 AS/NZS CISPR 11/32

Safety Compliance

Safety: EN 61010-1:2010

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

