XIOS 2U

Extreme I/O server (2U) with ten PCIe 2.0 x8 slots

Description

The XIOS 2U is a 2U server for I/O-intensive applications. It has ten PCIe 2.0 x8 slots, with cooling and power to support an average of 45 watts per slot.

The server has one CPU module, two removable I/O modules, and up to four removable 2.5" disk drives (each up to 2 TB, SATA or SSD). Each of the three modules has its own cooling fan and temperature sensor.

The PICMG 1.3 CPU module has two PCIe slots, one to two Intel Xeon processors, and rear-panel I/O. Each processor is 1.8 to 3.3 GHz with four, six, eight, or ten cores (up to twenty cores total). The two removable I/O modules (four slots each) are offset to allow unique exit paths for the high volume of cooling air.

The front panel has four ports (two USB, one I/O, one audio output); a power switch; a status LED; and access to the DVD and removable disk drives.

The rear panel has six ports (two RJ45 for 10/100/1Gb ethernet, two USB, one serial, one audio output); a power connector; and a 15-pin D-sub miniature VGA.

The server accepts EDT or third-party boards. It comes with a DVD and handles; slides are optional.

Features

2U server with extreme power and cooling

Ten PCIe slots: two on CPU module, four on each of two removable I/O modules

45 watts per slot

One or two Intel Xeon multicore 1.8 to 3.3 GHz processors, up to 20 cores total

One to four removable 2.5" disk drives, each up to 2 TB (SATA or SSD)

Applications

High performance I/O

High performance FPGA processing

Applications requiring a server with maximum cooling and power

Specifications

Product Type	I/O-intensive server with ten PCIe slots; it works with numerous models of EDT or third-party boards.			
Processors	One or two Intel Xeon			
Memory	Computer		4 / 8 / 16 / 32 / 48 GB	
Storage	Disk drives (removable)		Four 2.5″ − each up to 2 TB (SATA or SSD)	
Data Rates	Dependent on such factors as data format, interfaces, and system variables.			
Data format (I/O)	**For this data type**	**In this format**	**Use this all-in-one board**	**Or this mezzanine + PCIe8 LX / FX / SX board**
	Optical	OC3/STM1 − OC192/STM64	PCIe8g3 S5 / KU	3P
	Ethernet (up to 40Gb)	Optical or electrical	PCIe8g3 S5 / KU	3P
	Electrical	Various (contact EDT)	PCIe8 CDa	SSE, ECL/LVDS-E/RS422-E, or others (contact EDT)
	As an alternative, third-party boards can be used.			
Panel Features & Access	Front		Four ports: two USB; one I/O; and one audio output	
			One power switch	
			One status LED	
			One DVD	
			Up to four disk drives	
	Back		Six ports: two I/O RJ45 (10 / 100 / 1GbE); two USB; one serial; one audio output	
			One power connector	
			One 15-pin D-sub miniature VGA	
Connectors and Cabling	Dependent on boards used; consult EDT for purchase options.			
Optional Accessories	Slide assembly			
Physical	Weight		Approximately 50 lb. (with slide assembly)	
	Dimensions (2U)		Including front panel & handles: 27.72 x 19.0 x 3.5 in.	
			Excluding front panel & handles: 26.5 x 17.316 (inside rails) x 3.5 in.	
Environmental	Temperature (operating / non-operating)		0° to 40° C / -40° to 70° C	
	Humidity (operating / non-operating)		1% to 90%, non-condensing at 40° C / 95%, non-condensing at 45° C	
System and Software	CentOS or Linux Red Hat OS			

Ordering Options

- Processor: 1 or 2 (each 4, 6, 8, or 10 core)
- Memory: 4 / 8 / 16 / 32 / 48 GB
- Storage: 1 to 4 removable (SATA or SSD)
  disk drives, each up to 2 TB

- I/O boards : Up to ten (options above)
- Operating system (specify preference)
- Slide assembly

For more options, see mezzanine and main board detail. **Ask** about custom options.