

Server System

VIA VDLM-100-S/X

Deep learning machine for AI model training, data analysis, research, smart manufacturing, and defect detection applications



Features

- 4U Server Chassis (3U Rackmount with 4U Top Front Cover)
- Powered by Intel Xeon Gold Processors
- DRAM 512GB, 16 DIMM, 6 channel DDR4 2666 R DIMM
- Eight RTX 2080Ti for S-type/ Tesla V100 for X-type with Nvidia Turing GPU Architectures
- Supports eight double width GPGPU cards
- Supports two RJ-45 GLAN
- 2TB NVMe, and 2TB SSD for S-type/4TB SSD for X-type

Specifications

Model Name	VDLM-100-S/X
System	
Form Factor	- 3U Rackmount with 4U Top Front Cover (optional)
Dimensions	- 722.3mm x 430mm x 170.35 mm
Processor System	
CPU	- Supports Intel Xeon Scalable Processors
Socket	- Dual Socket P
Chipset	- C621
System Memory	
Capacity	- 16 DIMM slots
Type	- 6 Channel DDR4 memory technology 2666/2400/2133 RDIMM/LRDIMM
Voltage	- 1.2V
Expansion Slot	
Switch IC	- PLX 8747
Supports GPU Card	- 8 GPGPU card or 8 GPGPU/MIC (Supports PCIe 3.0 x16)
GPGPU Watts	- Max. 300W per card
Supports GPGPU	- 8 GPGPU card or 8 GPGPU/MIC (Supports PCIe 3.0 x16)
Ethernet	
Interface	- 1000/100/10Mbps
LAN Controller	- 2 RJ-45 GLAN by Intel i350
External Drive Bay	
Front Side Drive Bay	- 6 2.5" SATA HDD (6Gb/s) Bay or 6 SAS* (12Gb/s)
	*Need add a PCIe RAID card for SAS support.
Storage	
SATA Controller	- PCH: 8 SATA3 + 1 M.2
Front Panel	
Buttons	- Power button - UID button - Reset button - NMI button
LEDs	- 2 LAN LEDs (L1, L2 LED) - 2 Front LEDs - HDD LED - System event LED
I/O Ports	- 2 USB 2.0 ports - 1 VGA port
Rear Panel I/O	
VGA Port	- 1 D-Sub
USB 3.1 Gen1 Port	- 2
LAN Port	- 1(IPMI) LAN port (RJ-45) - LAN ports with LED (ACT/LINK LED and SPEED LED)
UID Button/UID LED	- 1
Management	
BMC Controller	- ASPEED AST2500
IPMI Dedicated GLAN Features	- 1 Realtek RTL8211E for dedicated management GLAN - Watchdog - NMI

Hardware Monitor	
Temperature	- CPU Temperature Sensing - System Temperature Sensing - Card Side Temperature Sensing
Fan	- CPU/Rear/Front Fan Tachometer - CPU Quiet Fan (Allow CPU Fan Speed Auto-Adjust by CPU Temperature) - CPU/Rear/Front Fan Multi-Speed Control
Voltage	- Voltage Monitoring: CPU1/2, VCCM_AB/CD/EF/GH, +1.50_PCH, 3V/5V/ 12V, +1.05V_PCH, +BAT, 3VSB, 5VSB
Power Supply	
Type	- 4 (3+1), Redundant
Output Watts	- 1200W, Platinum
Environment	
Temperature	- Operating temperature: 10°C ~ 35°C - Non-operating temperature: -40°C ~ 70°C
VIA AI Stack	
Operating System	- Linux OS 64-bit Desktop
GPU Driver	- Nvidia drivers, CUDA, cuDNN
Framework	- TensorFlow, Keras, PyTorch, Caffe, Caffe2, Sklearn
Upgrade Package	- VIA Easy Upgrade
Labeling Toolkit	- VIA AI Labeling Toolkit