

Server System

VIA VDLM-100-B

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



Features

- 4U Server Chassis
- Powered by Intel Xeon W-3200 Processors
- DRAM 128GB, 8 x DIMM, 4 Channel DDR4 2666 RDIMM
- Four RTX 2080Ti with Nvidia Turing GPU Architectures
- Supports four double width GPGPU cards
- Intel Dual 10GLAN
- 2TB NVMe

Specifications

Model Name	VDLM-100-B
System	
Form Factor	- 4U Server Chassis
Dimensions	- 596mm x 430.4mm x 174.8mm
Processor System	
CPU	- Intel Xeon Scalable Processor (Max 205W) and Intel Xeon W Processor (Max 255W)
Socket	- Single Socket P
Chipset	- Intel C621
System Memory	
Capacity	- 8 DIMM slots
Type	- 4 Channel memory technology - Supports DDR4 2933/2666/2400 RDIMM, LR DIMM, and Intel Optane DC Persistent Memory in memory mode
Voltage	- 1.2V
Expansion Slot	
PCIe 3.0 x16	- SLOT1: Gen3 x16 link* - SLOT3: Gen3 x16 link, auto switch to x8 link if SLOT2 is occupied - SLOT5: Gen3 x16 link, auto switch to x8 link if SLOT4 is occupied - SLOT7: Gen3 x16 link, auto switch to x8 link if SLOT6 is occupied *PCIe1 is only supported for Intel Xeon W-3200 Processors.
PCIe 3.0 x8	- SLOT2: Gen3 x8 link - SLOT4: Gen3 x8 link - SLOT6: Gen3 x8 link
Ethernet	
Interface	- 10Gbps/1000Mbps/100Mbps
LAN Controller	- 2 RJ-45 10GbE by Intel X550-AT2 - Supports Wake-On-LAN - Supports Energy Efficient Ethernet 802.3az - Supports Dual LAN with Teaming function - Supports PXE - LAN1 supports NCSI
Drive Bay	
External	- 2 2.5" (Hot Swap)
Internal	- 8 3.5"
Storage	
SATA Controller	- PCH: 10 SATA3 (2 mini-SAS HD, 2 M.2)
Front Panel	
Buttons	- Power Switch - System Reset
LEDs	- Power Status LED - HDD - System Fail LED - LAN Activity LEDs
I/O Ports	- 2 USB 3.0 ports

Rear Panel I/O	
VGA Port	- 1 D-Sub
USB 3.1 Gen2 Port	- 1 (type C)
LAN Port	- 2 RJ-45: 2 10GbE by Intel X550-AT2 - 1 IPMI dedicated LAN - LAN Ports with LED (ACT/LINK LED and SPEED LED)
Audio	- 1 (5+1 jack)
Management	
BMC Controller	- ASPEED AST2500
IPMI Dedicated GLAN	- 1 Realtek RTL8211E for dedicated management GLAN
Features	- NMI
Hardware Monitor	
Temperature	- CPU Temperature Sensing - System Temperature Sensing
Fan	- CPU/Rear/Front Fan Tachometer - CPU Quiet Fan (Allow Chassis Fan Speed Auto-Adjust by CPU Temperature) - CPU/Rear/Front Fan Multi-Speed Control
Voltage	- Voltage Monitoring: +12V, +5V, +3.3V, CPU Vcore, DRAM, 1.05V_PCH, +BAT, 3VSB, 5VSB
Power Supply	
Form Factor	- 1+1 CPRS Redundant
Output Watts	- 1600W
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