

Lenovo Lenovo NVIDIA GB300 NVL72

72x B300

Blackwell Ultra

rack

OVERVIEW

—	—	—	135.0 kW
Peak Dense	Aggregate Memory	Aggregate Bandwidth	Aggregate Power

CONFIGURATION		POWER & EFFICIENCY	
Accelerator	B300 SXM 288GB	Aggregate Power	135.0 kW
Count	72	TDP per GPU	1400 W
Memory per GPU	288 GB	Efficiency	—
Bandwidth per GPU	8.0 TB/s	Aggregate Bandwidth	—

SYSTEM DETAILS

Vendor: Lenovo	Family: NVL	Architecture: Blackwell Ultra
Form Factor: rack	Release Year: —	Process Node: 4nm

INTERCONNECT

Fifth-generation NVLink across all 72 GPUs through nine switch trays, joined by a rear cable cartridge backplane; the NVLink domain is contained within one rack, with no inter-rack scaling, and each compute tray adds up to three PCIe Gen 5 x16 slots for networking

NOTES

Lenovo's build of NVIDIA's GB300 NVL72, a 48U MGX rack holding 72 Blackwell Ultra GPUs and 36 Grace CPUs across eighteen 1U compute trays, with nine switch trays and either six or eight power shelves joined by a rear cable cartridge backplane. Two rack base options exist, C5RK with non-redundant power and six shelves and C5RJ with redundant power and eight; they differ only in power, not in compute. Cooling is deliberately hybrid rather than fully liquid: CPUs, GPUs and the NVSwitches are liquid cooled while the OSFP modules, drives and power distribution board are air cooled, which Lenovo puts at roughly 90 percent of rack heat captured to liquid and 10 percent to air, and which lets the whole thing drop into a standard 19 inch cabinet. Each rack consumes 135 kW of thermal design power, rising to about 155 kW at peak depending on workload. Each compute tray carries two Grace processors of 72 Arm Neoverse V2 cores with up to 960 GB of LPDDR5x between them, up to eight E1.S NVMe drives and an M.2 boot device. Lenovo publishes no accelerator memory total and no throughput figure; the memory it does state is the Grace side rather than HBM.