INDIAN INSTITUTE OF TECHNOLOGY BOMBAY

MATERIALS MANAGEMENT DIVISION

PR No: 1000058975 RFx No. 6100003233

Technical Specifications

Item Description: High End GPU Server (Qty.-1)

S. No.	Item Description	Detailed Technical Specification	Technical Compliance (yes/no)	Additional Information (if any)
1	**Processor**	The proposed system should be equipped with high-performance dual-socket processors, preferably either Intel Xeon 6 (or later) or 5th Generation AMD EPYC (or later) architecture. The configuration should include two identical processors, each delivering 64 physical cores for a combined total of 128 cores, operating at a base frequency of 3.1 GHz or higher with 128 MB or higher of cache per processor		
2	**RAM**	The system should be equipped with a minimum of 1536 GB of RAM in a balanced configuration, operating at a speed of 5200 MT/s or higher. It should have a 24 DDR5 memory channel architecture supporting 256 GB per RDIMM, allowing for total system memory expansion of up to 6 TB.		
3	**OS Drive / SSD**	The system should be equipped with a minimum of 2 x 3.84 SSDs configured in RAID 1.		
4	**RAID controller**	The system should be equipped with a hardware RAID controller, SAS Gen-3 (12 Gbps), supporting RAID levels 0, 1, 5, 6, and 10, with a minimum of 4 GB cache or higher.		
5	**GPU Accelerator**	The system should include **eight (8)** GPU accelerator cards, with each card meeting or exceeding the following high-performance technical specifications: • **Memory Capacity & Type:** Minimum 48 GB GDDR7 memory or higher • **Tensor Cores:** Fifth generation or higher		

		• **CUDA Cores:** 14,080 or higher **Memory Bandwidth:** 1,344 GB/s or higher		
6	**NIC**	The system should be equipped with an integrated networking architecture featuring dual 1GbE Base-T RJ45 ports high-speed enterprise connectivity.		
7	**Management Port**	The system should include a dedicated 1 Gbps RJ45 out-of-band management port for administrative use, supporting standard remote management protocols (e.g., IPMI 2.0/iDRAC/REST/Secure access) with web-based GUI, command-line interface, hardware monitoring, remote power control, console redirection, and secure access.		
8	**Expansion Slots**	The offered system should include an expansion slot configuration consisting of eight (8) x16 PCIe 5.0 FHFL slots, one (1) x8 PCIe 5.0 FHHL slot, and one (1) x8 PCIe 5.0 OCP NIC 3.0 slot.		
9	**Ports**	The system should include an I/O interface configuration consisting of six (6) USB 3.2 Gen 1 ports, one (1) DB-15 display port, and one (1) dedicated RJ45 management port.		
10	**Power Supply**	The offered system includes a sufficient number of minimum 2700W Titanium Grade redundant power supplies in an 3+1 configuration to fully support the fully configured server.		
11	**Form Factor**	The server should be housed in a maximum 4U rackmount chassis, having hot-swappable drive bays designed to support four (4) 2.5- inch NVMe drives and twenty (20) 2.5-inch SATA/SAS drives.		
12	**Warranty & installation**	A comprehensive 3-year warranty coverage. Server installation and commissioning must be carried out by a certified OEM engineer.		
13	**Other Deliverables**	Rack mounting kit and all the required cables to make the system functional.		