Specification for High end Computing workstation for ISV certified applications

Features	Minimum Requirement
CPU	Intel Xeon 5218, 2.3GHz, 2666MHz 16C CPU or better , support up to 2 x 28 core or more from Intel Xeon Skylake SP family, with efficient cooling solution.
Chipset	Intel C620 series chipset with minimum PCIe x 8 uplink
RAM	256GB (8x32GB) DDR4 2933 DIMM ECC Registered Memory, 24 DIMM slots, RAM upgradability up to 3 TB
Drive controller	Onboard 10-Channel or more 6Gbps SATA (RAID 0,1,5,10)
HDD	2TB 2.5in SATA Solid State Drive 6TB 7200RPM SATA 3.5in Enterprise 2nd HDD 6TB 7200RPM SATA 3.5in Enterprise 3rd HDD Provision for upgrading with in total 8 x SAS and 4 x SATA drives or more in future
Optical Drive	9.5mm Slim Super Multi DVDRW or better
Graphic Card	NVIDIA Quadro P5000 16GB Graphic card DisplayPort to DVI-D Adapter and all relevant drivers Provision to install 3 x250W double width/full height graphics card and 2x375W graphic cards/ GPU (GP 100 & GV 100) or higher. Suitable power supply & PCIe slots should be available in the system
Keyboard	OEM USB keyboard and Mouse or better
Monitor	23 inch Professional series monitor or higher with below specifications Native resolution 1920 x 1080 @ 60 Hz Contrast ratio Static: 1000:1; Dynamic: 5,000,000:1 Viewing angle Horizontal: 178 degrees; Vertical: 178 degrees Response rate: 7 ms gray to gray Aspect ratio 16:9 1 audio input USB:3 Integrated USB 2.0 hub with (1) Upstream and (2) Downstream ports TCO 6.0 Certification, ENERGY STAR® Qualified, EPEAT® Gold Monitor should be of the same make that of the workstation
Communications	Integrated Intel® I219-LM PCIe® GbE and Dual Port 10GBase-T NIC Module or better
Drive Bays	Minimum 6 bays or more with acoustic dampening rail assemblies to reduce the noise, System should be able to support a total of 16 drives or more along with a DVD drive.

Expansion Slots	Minimum 7 PCI Express including 4 PCI Express X16 for storage devices with optional slots.
Ports	Minimum 10 USB 3.1 including 2 USB 3.1 Type C, 2 RJ45 (1GbE) 2 sSATA , 8 SATA (AHCI) Ports or more
Operating System supported	Red Hat Enterprise Linux (RHEL) preinstalled with one year paper license. System should also support Windows, Ubuntu & SUSE Linux (latest version). All relevant drivers should be available on OEM website
Form Factor with Tool free design	Minitower / Tower Rackable or equivalent
Power supply	Min. 1600 W or higher- 90% Efficient wide-ranging, active Power Factor Correction EPEAT Gold qualified configuration should be available. Tool-less, rear access direct-connect (blind-mate). Power supply should be self-sufficient for a fully configured system.
Security	Provision for Keyed Cable Lock Kit, chassis intrusion sensor (both to be provided). System should be TPM 2.0 certified. Self-healing BIOS which automatically detect, stop and recover from a BIOS attack or BIOS corruption without service support. (Please enclose technical details)
System Management features	The system should provide all or more of the features listed below: • Assess system health at boot time with selectable levels of testing. • Allows a new or existing system to boot over the network and download software, including the operating system • System should automatically detect addition of new hardware. • Monitor the temperature state within the chassis. • Recovers system BIOS in corrupted Flash ROM.
Remote Collaboration Solution	Hardware or Software based Remote Collaboration system which can help remotely access 3D data across network has to be supplied with the system. - Should work on both Linux and Windows, and should be inter-operable.
Availability of bundled software/ utility	1. The OEM of workstation should supply an automatic system performance tuning and monitoring software on Windows. 2. The tuning software should have modules for resource monitoring over a long period of time, and should be capable of showing GPU utilization (GPU, Graphics memory and Codec activity) for both Graphics and GPU Compute cards. 3. A complete Offline Diagnostics and Asset Discovery software suite should be supplied along with the system.
Audio	Integrated audio, support for Realtek ALC221 or equivalent
Warranty	3 years onsite warranty for system and monitor from OEM
System configuration details	The bidder has to provide OEM's Bill of Material with part numbers along with technical bid failing which the bid will be rejected.

Application software certification	System should be certified to run CAD/CAM/CAE software like Solidworks, Autodesk, Ansys, Abaqus, Image processing software like ArcGIS, Erdas, Matlab etc. These certifications should be available in public domain of workstation OEM. System should be capable of running machine learning, deep learning application under windows & Linux both. System should be EPEAT Gold certified in its country of origin.
Service & Support	Bidder & respective OEM both should have Local service center within 50km of installation site to provide the service 24x5x365x3
Market standing	The OEM should be in top 3 of IDC list. Please enclose IDC latest report
Firm's authorization	The firm (bidder) must be authorized by the manufacturer or OEM to supply, install and maintain the system. Specific authorization by the manufacturer for participating in this tender has to be enclosed with technical bid.
UPS	1500 VA Off line UPS (APC or Equivalent)

Note for technical bid:
Specifications are basic essence of the product. It must be ensured that the offers must be strictly as per our specifications. At the same time it must be kept in mind that merely copying our specifications in the quotation shall not make the parties eligible for consideration of the quotation. A quotation has to be supported with the printed technical leaflet/literature of the quoted model of the item by the quoting party/ manufacturer and the specifications mentioned in the quotation must be reflected/supported by the printed technical leaflet/literature. The specifications asked invariably be highlighted in the leaflet/ literature enclosed with the quotation and relevant page no. to be mentioned in technical compliance. Non-compliance of the above shall be treated as incomplete/ambiguous and the offer can be ignored without giving an opportunity for clarification/negotiation etc. to the quoting party.