## VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY, ODISHA, BURLA

(Formerly University College of Engineering, Burla)

Technical Education Quality Improvement Programme (TEQIP-II)

P.O. Engineering College Burla, Dist: Sambalpur, Odisha, (India)

PIN: 768018



Ph: 0663-2430211 Fax: 0663-2430204 Website: www.vssut.ac.in E-mail: vcvssut@gmail.com

No.VSSUT/TEQIP/ 173/ 2016

Dated: 27/12/2016

## QUOTATION FOR SUPPLY AND INSTALLATION OF BLADE SERVER

Sealed quotations are invited from all reputed Manufacturer / Firms/ Suppliers / Dealers / Agencies having Sales Tax Clearance for supply and installation of Blade Server as per specification given below by 02/01/2017 up to 4.00 PM through registered post. The quotation may be addressed to the Coordinator TEQIP Cell, VSSUT, Burla.

Sr.	Item Name	Specifications
No		
1	Blade Chassis	Solution to house the required number of blade servers in smallest number of enclosures. Industry standard suitable for housing in Standard Server Racks Should have support for full height and half height blades in the same enclosure, occupying a max of 6U rack height
2		Same enclosure should support Intel and AMD, RISC/EPIC based blades
3		Should support Hot Pluggable & Redundant Management Modules with onboad KVM functionality
4		Should provide an highly reliable and high performance mid- plane/back-plane design in the blade enclosure. Should provide detailed technical information.
5		Should be able to accommodate the blade servers mentioned in the specifications in the proposed blade enclosures.
6		Support simultaneous remote access for different servers in the enclosure.
7	Interconnect	Should support simultaneous housing of Ethernet, FC, SAS interconnect fabrics offering Hot Pluggable features
8	LAN/ Network	Network switch with atleast 4 gigabit uplink ports.
9	Fiber Channel SAN	8/24 port SAN switch with at least 4 Gb auto-negotiating FC uplinks and also at least 8Gb auto-negotiating downlinks to all server bays.
10	Power Supply	The enclosure should be populated fully with power supplies of the highest capacity available with the vendor. Power supplies should support N+N as well as N+1 redundancy configuration, where N is greater than 1.  Should offer a single phase power subsystem for flexibility in connecting to datacenter power enabled with technologies for lower power consumption and high energy efficiency levels. Vendors should provide documents certifying the claims.
11	Cooling	Each blade enclosure should have a cooling subsystem consisting of redundant hot pluggable fans or blowers enabled with technologies for improved power consumption and acoustics
12	Warranty	3 years of onsite comprehensive warranty
13	System Software	All required System software has to be from the OEM itself.
14	Remote Management	Must provide a remote management functionality to operate the server in both in-band and out-of-band. Must be part of the server without the need to install any additional hardware or software.
15		Must have a real time Virtual KVM functionality and be able to perform a remote Power sequence. Must provide both Java & Java- free browsing options.

16		Must have the shility to man the remote media to the server and shility to transfer
10		Must have the ability to map the remote media to the server and ability to transfer files from the user's desktop/laptop folders to the remote server with only the network connectivity.
17	1 - 2 - 2	Must have the ability to capture the video sequence of the last failure and the boot sequence and also playback the video capture or equivalent technology.
18		Must have the ability for multiple administrators across remote locations to collaborate on the remote session in a server with multiple sessions even in server powered OFF mode.
19	Power Management	Must be able to show the actual power usage and actual thermal measurement data the servers.
	USTABLE IN	ITEM No. 2 – BLADE SERVER
Quai	ntity - 1	
Sr. No.	Item Description	
1	CPU	Two number of latest generation Intel 6 Core 1.9Ghz E5-2609v3 processor
2	CPU L3 CACHE Memory	15MB (1 x 25 MB) L3 cache
3	Motherboard	Intel® C610 Series Chipset
4	Memory	64 GB DIMMS scalable to at least upto 512GB, using DDR4 RDIMM/LRDIMM memory modules. Should be capable of identifying and reporting whether genuene OEM memory is installed for system reliability. Each LRDIMM should work at 2133MHz, 1. 2V even after populating all the DIMMs in the channel.
5	Memory Protection	Advanced ECC with multi-bit error protection and memory online spare mode
6	Hard disk drive with carrier	2 * 2TB NL SAS drives. The drive should have intutive icon based display along with "DO NOT REMOVE" caution indicator that gets activated automatically in order to aviod dataloss/downtime due to wrong drive removal.
7	Storage Controller	Integrated PCIe 3.0 based 12G SAS Raid Controller with RAID 0, 1 with 1GB of Flash backed write cache onboard.
8	Networking features	Dual port 10Gbps ethernet.
9	Interfaces	Minimum of 1 * internal USB 3.0 port and 1* internal SDHC card slot
10	FC HBA	1 no dual port 16Gbps FC HBA
11	Bus Slots	Minimum of 2Nos of 3.0 PCIe x16 based mezzanine slots supporting Converged Ethernet, Ethernet, FC adapters, SAS and IB adaptors
12	Graphics	Integrated G200eh video controller
13	Industry Standard Compliance	ACPI 2.0, Microsoft® Logo certifications, USB 3.0 Support, IPMI 2.0, Secure Digital 2.0, TPM 1.2 Support, specific IEEE standards depending on Ethernet adapter card installed, Advanced Encryption Standard (AES), 3DES, SNMP, SSL 2.0, DMTF, SMASH CLP, Active Directory v1.0, PCIe 3.0, ASHRAE A3
14	Embedded system management	Should support monitoring ongoing management, service alerting, reporting and remote management with embedded Gigabit out of band management port Server should support configuring and booting securely with industry standard Unified Extensible Firmware System should support RESTful API integration System management should support provisioning servers by discovering and deploying 1 to few servers with Intelligent Provisioning System should support embedded remote support to transmit hardware events directly to OEM or an authorized partner for automated phone home support
15	Security	Power-on password, Administrator's password, Keyboard password (QuickLock), Out of band remote management Chipset with: SSL encryption Secure Shell version 2 Advanced Encryption Standard (AES) and Triple Data Encryption Standard (3DE: on browser, CLP and XML scripting interface AES and RC4 encryption of video External USB port enable/disable Network served.

alanti estimenta per per per al la conservación de la conservación de la conservación de la conservación de la

		Serial interface control
	Charles Charles	TPM (Trusted Platform Module) 1.2 option Advanced Encryption Standard (AES)
		Intel® Advanced Encryption Standard-New Instructions (AES-NI) FIPS 140-2
	2	Level-2 certification pending
		Microsoft Windows Server, Red Hat Enterprise Linux (RHEL), SUSE Linux
6	OS Support	Enterprise Server (SLES),
		Canonical Ubuntu, Oracle Solaris, Vmware, Citrix XenServer
		System should support Encryption of the data on both the internal storage and cache
7 .	Secure	module of the array controllers using encryption keys. Should support local key
	encryption	management for single server and remote key management for central management for enterprise- wide data encyption deployment.
8	Warranty	3 year of onsite 24x7 4Hour response comprehensive warranty
0	Waitality	Essential tools, drivers, agents to setup, deploy and maintain (not the OS) the server
19	Provisioning	should be embedded inside the server. There should be a built -in update manager
,	Trovisioning	that can update these tools online.
		System remote management should support browser based Graphical Remote
		Console along with Virtual Power button, Remote boot using USB / CD/ DVD
20		Drive. It should be capable of offering upgrade of software and patches from a
	Remote	remote client using Media / image/folder; It should support server power capping and
	Management	historical reporting and should have support for multifactor authentication.
		Dedicated remote management port should be provided and it should be able to
21		download the firmware from the website directly or from internal system. Server
		should support automated firware update.
		Server should support agentless management using the out-of-band remote
22		management port. Remote management port should have 4GB NAND falsh with
_	9	1GB available for user access. NAND flash should be used for keeping system logs
		and downloading firmware from HP website or internal repository
	and the second	The server should support Active Health System which monitors and records
		continiously every hardware change, every configuration change, temperature and
23		voltage variations, and alerts changes in the server hardware and system
		configuration without impacting server performance. This assists in diagnosing
24		problems and delivering rapid resolution when system failures occur.
.4		Applications to access the server remotely using popular handheld devices based on Android or Apple IOS should be availabile
	7	Should support managing multiple servers as one via Group Power Control
25		Group Power Capping Group Firmware Update Group Configuration Group Virtual
-5		Media Group License Activation
		Should support remote console sharing upto 6 users simultaneously during pre-OS
		and OS runtime operation, Console Replay that captures and stores and supports
		replay of the console video during a server's last major fault or boot sequence,
26		Microsoft Terminal Services Integration, 128 bit SSL encryption and Secure Shell
26		Version 2 support.
		Should provide support for AES and 3DES on browser. Should provide remote
		firmware update functionality. Should provide support for Java free graphical remote
		console.
		Software should support dashboard view to quickly scan the managed resources to
27	Server	assess the overall health of the data center. It should provide an at-a-glance visual
	Management	health summary of the resources user is authorized to view.
	1	The Dashboard minimum should display a health summary of the following:
28		• Server Profiles
		• Server Hardware
		• Enclosures
		Logical Interconnects     Appliance elects
29	+	Appliance alerts  The Systems Management coffware should provide Pole based security.
47	-	The Systems Management software should provide Role-based security
30		Software should support serach for resource-specific information such as specific instances of resource names, serial numbers, WWNs, IP and MAC addresses to help

THE LAND OF

31	Tarita per Mil	Management software should support integration with popular virtualization platform management software like vCenter, SCVMM and RedHat RHEV
32		Should help provide proactive notification of actual or impending component failure alerts on critical components like CPU, Memory and HDD.
33		Should provide an online portal that can be accessible from anywhere. The portal should provide one stop, online access to the product, support information and provide information to track warranties, support contrats and status. The Portal should also provide a Personalised daskboard to monitor device heath, hardware events, contract and warranty status. Should provide a visual status of individual devices and device groups. The Portal should be available on premise (at our location - console based) or off premise (in the cloud).
34		Should help to proactively identify out-of-date BIOS, drivers, and Server Management agents and enable the remote update of system software/firmware components.
35		The Server Management Software should be of the same brand as of the server supplier.
36	1 No	Microsoft Windows Server Std core 2016 SNGL OLP 2Lic NL ACDMC Core LIC
37	1 No	UPS 5 KVA 1 hour back up
38	1 No	Antivirus for 3 year server license

Sd/-Nodal Officer, Procurement, TEQIP, VSSUT, Burla

Memo No. VSSUT/TEQIP/174/2016

Dated: 27/12/2016

Copy to PA to Vice chancellor for kind information.
 Copy to Steno to Registrar for information.
 Copy to Dean F&P for uploading in the website.

Nodal Officer, Procurement, TEQIP, VSSUT,Burla Nodal Officer, Procurement TEQIP, VSSUT, Burla, Odisha