

Bid Document

Bid Details	
Bid End Date/Time	27-07-2020 17:00:00
Bid Opening Date/Time	27-07-2020 17:30:00
Bid Life Cycle (From Publish Date)	90 (Days)
Bid Offer Validity (From End Date)	30 (Days)
Ministry/State Name	Ministry Of Railways
Department Name	Na
Organisation Name	N/a
Office Name	Western Railway
Total Quantity	1
Item Category	Server
MSE Exemption for Years of Experience and Turnover	No
Startup Exemption for Years of Experience and Turnover	No
Bid to RA enabled	No
Inspection Required	No

EMD Detail

Required	No
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ePBG Detail

Required	No
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Splitting

Bid splitting not applied.

Server (1 pieces)

Technical Specifications

[* As per GeM Category Specification](#)

Specification	Specification Name	Values	Bid Requirement (Allowed Values)
Processor	Processor Architecture	CISC(X86)	*
	Processor Make	Intel	Intel
	Number of Cores per Processor	8	8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36,

			38, 40, 64, 11 Or higher
	Processor Base Frequency (GHz)	3.2	3, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 4 Or higher
	Processor Turbo Frequency (GHz)	3.7	*
	Total Cache (L1+L2+L3)(MB)	24.75	18.5 - 256.0 Or higher
	Processor Description/ Number	Intel Xeon Gold 6134	*
Chassis	Form Factor	Rack	*
	Size (RU)	2	*
Motherboard	Chipset compatible with CPU	Intel C621	*
	Expansion Slots Gen 3 (PCIe x1)	0	*
	Expansion Slots Gen 3 (PCIe x4)	0	*
	Expansion Slots Gen 3 (PCIe x8)	2	*
	Expansion Slots Gen 3 (PCIe x16)	4	*
	Maximum number of Sockets available on Server	2	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 Or higher
	Maximum number of Sockets populated with Processors available on Server	2	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 Or higher
Co Processor / GPU	Availability of Co Processor /GPU	No	Yes, No Or higher
	If Yes, Maximum Number of Slots available for Co-Processor/GPU	0	*
	If Yes, Maximum Number of slots populated with Co processor/GPU	0	*
	If Yes, Co Processor /GPU Description	NA	*
Memory	Type of RAM	DDR4 SDRAM with ECC	DDR4 SDRAM with ECC
	Total Number of DIMM Slots available	24	*
	Number of DIMM Slots populated with DDR SDRAM	4	*
	Number of DIMM Slots populated with DDR NVRAM	0	*
	DDR SDRAM Size(GB)	128	128.0 - 6144.0 Or higher
	DDR NVRAM Size (GB)	0	0.0 - 1600.0 Or higher
	DDR SDRAM upgradable upto using spare DIMM Slots (GB)	1024	*
	DDR NVRAM upgradable upto using spare DIMM Slots (GB)	0	*

SSD Storage	Type of Interface for SSD	NA	NA
	Type of SATA SSD	NA	*
	SATA SSD Hot Swappable	NA	*
	Endurance for SATA SSD (DWPD - Drive Writes Per Day) (X)	0	*
	Total Number of Slots available for SATA SSD	0	*
	Number of Slot Populated with SATA SSD	0	*
	Capacity offered per SATA SSD (GB)	0	*
	Total Capacity Offered with SATA SSD (GB)	0	More than 0.0 Or higher
	Type of SAS SSD	NA	*
	SAS SSD Hot Swappable	NA	*
	Endurance for SAS SSD (DWPD - Drive Writes Per Day) (X)	0	*
	Total Number of Slots available for SAS SSD	0	*
	Number of Slots populated with SAS SSD	0	*
	Capacity Offered per SAS SSD (GB)	0	*
	Total Capacity Offered with SAS SSD (GB)	0	More than 0.0 Or higher
	Type of NVMe SSD	NA	*
	NVMe SSD Hot Swappable	NA	*
	Endurance for NVMe SSD (DWPD - Drive Writes Per Day) (X)	0	*
	Total Number of Slots available for NVMe SSD	0	*
	Number of Slots populated with NVMe SSD	0	*
	Capacity Offered per NVMe SSD (GB)	0	*
	Total Capacity Offered with NVMe SSD (GB)	0	More than 0.0 Or higher
HDD Storage	Type of Interface for Hard Disk Drive	SAS	SAS
	Total number of Slots available for SATA Drive	0	*
	Number of Slots populated with SATA Drive	0	*
	Capacity offered per SATA Drive (GB)	0	*
	SATA drive speed (hot plug or better) (RPM)	NA	*
	Total Storage Capacity	0	More than 0.0 Or higher

	offered with SATA Drive (GB)		
	Total number of slots available for SAS drive	8	*
	Number of Slots populated with SAS Drive	4	*
	Capacity offered per SAS Drive (GB)	300	*
	SAS drive Speed (Hot plug or better) (RPM)	10K	*
	Total Storage Capacity offered with SAS Drive (GB)	1200	More than 1200.0 Or higher
	Total number of slots available for NL SAS drive	0	*
	Number of Slots populated with NL SAS Drive	0	*
	Capacity offered per NL SAS Drive	0	*
	NL SAS drive speed (hot plug or better) (RPM)	NA	*
	Total Storage Capacity offered with NL SAS Drive (GB)	0	More than 0.0 Or higher
RAID	RAID level	5	*
	No of RAID Controller Ports	8	8 Or higher
	Speed of RAID Controller Ports (Gbps)	12	12 Or higher
	RAID Controller Cache (GB)	0	*
Ports & Interfaces	Network Card Supported	1G,10G	*
	Number of Networking Interface Cards (LAN)	1	2, 3, 4, 5, 6, 7, 8, 1 Or higher
	Whether Network Interface Card Embedded	Yes	*
	Total Number of Ethernet Ports required in Server	4x1G,4x10G RJ 45	4x10G RJ 45, 4x1G
	Networking Interface Card Features	Asset Feature Tracking,Security Management,Remote Wake up	*
	Server Network Ports should Support SR-IOV Feature	No	*
	Server network ports should support DPDK and it should deliver zero packet loss as per RFC 2544 and deliver 100% line rate for all the packet sizes over 64 Bytes, Vendor to submit latest DPDK test report for the same	No	*
	Number of Single port FC HBA card	0	0, 1, 2, 3, 4 Or higher

	Number of Dual port FC HBA card	0	0, 1, 2, 3, 4 Or higher
	Number of Quad port FC HBA card	0	0, 1, 2, 3, 4 Or higher
	FC HBA Speed (Gbps)	NA	8, 16, 32, NA Or higher
	vHBA Card Features Supported	Yes	*
	Number of Converged Network Adaptor (CNA)	0	0, 1, 2, 3, 4 Or higher
	Number of Ports per CNA card	NA	Dual Port, Quad Port, NA Or higher
	CNA Port Speed (Gbps)	0	10, 25, 40, 50, 100, 200, 0 Or higher
	Length of LC-LC Cable per SFP+ Port (meter)	0	5, 10, 15, 0 Or higher
	Length of LC-LC Cable per HBA Port (meter)	0	5, 10, 15, 0 Or higher
	Length of LC-LC Cable per CNA Port (meter)	0	5, 10, 15, 0 Or higher
	Length of Twinax Breakout Cables per Port (meter)	0	*
	Video Controller (support VGA or above resolution)	Yes	*
	Keyboard Port	No	*
	Mouse Port	No	*
	DVD ROM (Internal/Exrternal)	No	*
	USB Ports (version 2point0/3point0)	3	*
	Total number of Spare Bays Available for Future Upgradation (Internal)	4	*
	Total number of Spare Bays Available for Future Upgradation (Hot Plugable)	0	*
Certifications	Certifications/Compliance (OS)	Windows,Red Hat Linux,Suse Linux,Ubuntu,Cent OS	Windows, Red Hat Linux, Suse Linux, Ubuntu, Cent OS
	Certification/Compliance (Virtualization/Cloud Platform)	HyperV,Red Hat Virtualization,OpenStack,Kubernetes	*
Features	Management Features-1	Remoter power On/ Shutdown of server,,Remote Management of Server over LAN & WAN with SSL encryption through gigabit management port,,Should have virtual Media support with all required licenses.,Remote KVM,Server Health Logging,Out of Band Management	Remoter power On/ Shutdown of server,, Remote Management of Server over LAN & WAN with SSL encryption through gigabit management port,, Should have virtual Media support with all required licenses., Remote KVM, Server Health Logging, Out of Band Management
	Management Features-2	Platfrom inventory and helath status	*

	Security Features-1	Secure Boot(Firmware and Bios Level Security),Provision to lock the system on breach,Hardware root of trust/Dual Root of Trust,Server should provide policy based security,Server should provide server intrusion detection,	Secure Boot(Firmware and Bios Level Security), Provision to lock the system on breach, Hardware root of trust/Dual Root of Trust, Server should provide policy based security, Server should provide server intrusion detection,
	Security Features-2	Network Card secure firmware boot	*
	Server scalability to be achieved within the box & without adding nodes	Yes	*
	support for high availability clustering and virtualization	Yes	*
Generic	Redundant Power Supply	Yes	*
	Hot Swappable (Redundant Power Supply)	Yes	*
	Power Supply Efficiency	Platinum	Platinum, Titanium Or higher
	Redundant Fan	Yes	*
	Hot Swappable (Redundant Fan)	Yes	*
	Server Main Supply	230 +/- 10%Vac	*
Benchmark	SPEC int_rate_base 2017 for the product (must be available on SPEC dot ORG before evaluation)	110	More than 110.0 Or higher
	SPEC fp_rate_2017 for the product (must be available on SPEC dot ORG before evaluation)	133	More than 133.0 Or higher
	SPEC int_speed_base 2017 for the product (must be available on SPEC dot ORG before evaluation)	110	*
	SPEC fp_speed_2017 for the product (must be available on SPEC dot ORG before evaluation)	133	*
Miscellaneous	Maximum power consumption of the system (Watts)	500	*
	BIS Registration under CRS of MeitY	Yes	*
	BIS Registration Number Under CRS of MeitY and its validity	-	*
	Other Certifications Available	UL/EN/CE/IEC-60950 for Safety,E-Waste Regulation Compliance/Registration	*
	RoHS Compliance	Yes	*
	Availability of the type test report from Central	No	*

	Government / NABL / ILAC accredited laboratory covering verification of all features & functional parameters & environmental tests sequence		
	a) Dry heat: test - for 16 hrs at 45 deg C as per IS: 9000/pt-3/sec-5/1977 b) Cold test - for 4 hrs at 0 deg C as per IS: 9000/pt-2/sec-4/1977 c) Damp Heat Cyclic Test - for 2 cycles of 24 hrs at 40 deg C & 95% RH as per IS: 9000/pt-5/sec-1/1981	NA	*
	The server has been checked for all the parameters before conditioning, After completion of the environmental tests sequence, with a recovery period of 1 to 2 hrs, the server found to be functional	NA	*
	Test Report Number & date	-	*
	Name & Address of Lab	-	*
Scope of Supply	Installation and Commissioning shall be included in the scope of supply	Yes	*
Warranty	On Site OEM Warranty (Year)	3	3, 4, 5, 7 Or higher

* Specifications highlighted in bold are the Golden Parameters.

* Bidders may note that In respect of non-golden Parameters, the specifications 'Values' chosen by Buyer will generally be preferred over 'Bid requirement (allowed Values) by the Buyer.

Additional Specification Documents

Consignees/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
1	Chandrashekhar Bhagwat Mahajan	400008, SENIOR SECTION ENGINEER, TELECOM STORE, RAJDHANI POH BUILDING, 3RD FLOOR, MUMBAI CENTRAL - E, NEAR DRM OFFICE, 400008	1	21

Bid Specific Additional Terms and Conditions

1.Scope of supply (Bid price to include all cost components) : Only supply of Goods

[This Bid is also governed by the General Terms and Conditions](#)

---Thank You---