

MOD 2 - 2023-263-01 - Attachment 1 (Technical Specifications)

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384 Gb RAM Data Center Rack Server

Detailization of components per one unit		
Reference Model: PowerEdge R650 Server		
Component	Description	QTY
FRONT STORAGE	8x2.5 Front Storage	1
BACKPLANE	SAS/SATA Backplane	1
REAR STORAGE	No Rear Storage	1
Trusted Platform Module	Trusted Platform Module 2.0 V3	1
Chassis Configuration	2.5" Chassis with up to 8 Hard Drives (SAS/SATA), 3 PCIe Slots, 2 CPU	1
Processor	Intel Xeon Silver 4314 2.4G, 16C/32T, 10.4GT/s, 24M Cache, Turbo, HT (135W) DDR4-2666	1
Additional Processor	Intel Xeon Silver 4314 2.4G, 16C/32T, 10.4GT/s, 24M Cache, Turbo, HT (135W) DDR4-2666	1
Processor Thermal Configuration	Heatsink for 2 CPU configuration (CPU less than or equal to 165W)	1
Memory Configuration Type	Performance Optimized	1
Memory DIMM Type and Speed	3200MT/s RDIMMs	1
Memory Capacity	32GB RDIMM, 3200MT/s, Dual Rank 8Gb BASE x4	12
RAID Configuration	RAID 1	1
RAID/Internal Storage Controllers	PERC H355 Controller Front	1
RAID/Internal Storage Controllers	Front PERC Mechanical Parts, front load	1
Hard Drives	960GB SSD SATA Read Intensive 6Gbps 512 2.5in Hot-plug AG Drive, 1 DWPD	2
BIOS and Advanced System Configuration Settings	Power Saving BIOS Settings	1
Embedded Systems Management (Multi)	iDRAC9, Enterprise 15G	1
Fans	4 High Performance Fans for 2 CPU	1
Power Supply	Dual, Hot-plug, Power Supply Redundant (1+1), 800W, Mixed Mode, NAF	2
Power Cords	C13 to C14, PDU Style, 10 AMP, 6.5 Feet (2m), Power Cord	2
PCIe Riser	Riser Config 0, 2CPU, Half Length, Low Profile, 3 x16 Slots, SW GPU Capable	1
Motherboard	PowerEdge R650 Motherboard with Broadcom 5720 Dual Port 1Gb On-Board LOM, Ti	1
OCP 3.0 Network Adapters	Intel X710 Dual Port 10GbE SFP+, OCP NIC 3.0	1
Additional Network Cards	Broadcom 57414 Dual Port 10/25GbE SFP28 Adapter, PCIe Low Profile, V2	1
Quick Sync	No Quick Sync	1
Password	iDRAC,Factory Generated Password	1
Group Manager	iDRAC Group Manager, Enabled	1
Bezel	Standard Bezel	1
Bezel	Luggage Tray x8 and x10 Chassis, R650	1
Boot Optimized Storage Cards	BOSS Blank	1
Rack Rails	Cable Management Arm	1
Rack Rails	ReadyRails Sliding Rails Without Cable Management Arm or Strain Relief Bar	1
Advanced System Configurations	UEFI BIOS Boot Mode with GPT Partition	1
Operating System	No Operating System	1
OS Media Kits	No Media Required	1
Extended Service	ProSupport and Next Business Day Onsite Service Extension, min 24 Month(s)	1

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256 Gb RAM Data Center Rack Server

Detailization of components per one unit		
Reference Model: PowerEdge R650 Server		

Component	Description	QTY
FRONT STORAGE	8x2.5 Front Storage	1
BACKPLANE	SAS/SATA Backplane	1
REAR STORAGE	No Rear Storage	1
Trusted Platform Module	Trusted Platform Module 2.0 V3	1
Chassis Configuration	2.5" Chassis with up to 8 Hard Drives (SAS/SATA), 3 PCIe Slots, 2 CPU	1
Processor	Intel Xeon Silver 4310 2.1G, 12C/24T, 10.4GT/s, 18M Cache, Turbo, HT (120W) DDR4-2666	1
Additional Processor	Intel Xeon Silver 4310 2.1G, 12C/24T, 10.4GT/s, 18M Cache, Turbo, HT (120W) DDR4-2666	1
Processor Thermal Configuration	Heatsink for 2 CPU configuration (CPU less than or equal to 165W)	1
Memory Configuration Type	Performance Optimized	1
Memory DIMM Type and Speed	3200MT/s RDIMMs	1
Memory Capacity	32GB RDIMM, 3200MT/s, Dual Rank 8Gb BASE x4	8
RAID Configuration	RAID 1	1
RAID/Internal Storage Controllers	PERC H355 Controller Front	1
RAID/Internal Storage Controllers	Front PERC Mechanical Parts, front load	1
Hard Drives	480GB SSD SATA Read Intensive 6Gbps 512 2.5in Hot-plug AG Drive, 1 DWPD	2
BIOS and Advanced System Configuration Settings	Power Saving BIOS Settings	1
Embedded Systems Management (Multi)	iDRAC9, Enterprise 15G	1
Fans	4 High Performance Fans for 2 CPU	1
Power Supply	Dual, Hot-plug, Power Supply Redundant (1+1), 800W, Mixed Mode, NAF	2
Power Cords	C13 to C14, PDU Style, 10 AMP, 6.5 Feet (2m), Power Cord	2
PCIe Riser	Riser Config 0, 2CPU, Half Length, Low Profile, 3 x16 Slots, SW GPU Capable	1
Motherboard	Motherboard with Broadcom 5720 Dual Port 1Gb On-Board LOM, Ti	1
OCP 3.0 Network Adapters	Intel X710 Dual Port 10GbE SFP+, OCP NIC 3.0	1
Additional Network Cards	Broadcom 57414 Dual Port 10/25GbE SFP28 Adapter, PCIe Low Profile, V2	1
Quick Sync	No Quick Sync	1
Password	iDRAC, Factory Generated Password	1
Group Manager	iDRAC Group Manager, Enabled	1
Bezel	Standard Bezel	1
Bezel	Luggage Tray x8 and x10 Chassis,	1
Boot Optimized Storage Cards	BOSS Blank	1
Rack Rails	Cable Management Arm	1
Rack Rails	ReadyRails Sliding Rails Without Cable Management Arm or Strain Relief Bar	1
Advanced System Configurations	UEFI BIOS Boot Mode with GPT Partition	1
Operating System	No Operating System	1
OS Media Kits	No Media Required	1
Extended Service	ProSupport and Next Business Day Onsite Service Extension, min 24 Month(s)	1

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512 Gb RAM Data Center Rack Server

Detailization of components per one unit		
Reference Model: PowerEdge R650 Server		
Component	Description	QTY
FRONT STORAGE	8x2.5 Front Storage	1
BACKPLANE	SAS/SATA Backplane	1
REAR STORAGE	No Rear Storage	1
Trusted Platform Module	Trusted Platform Module 2.0 V3	1
Chassis Configuration	2.5" Chassis with up to 8 Hard Drives (SAS/SATA), 3 PCIe Slots, 2 CPU	1
Processor	Intel Xeon Silver 4310 2.1G, 12C/24T, 10.4GT/s, 18M Cache, Turbo, HT (120W) DDR4-2666	1

Additional Processor	Intel Xeon Silver 4310 2.1G, 12C/24T, 10.4GT/s, 18M Cache, Turbo, HT (120W) DDR4-2666	1
Processor Thermal Configuration	Heatsink for 2 CPU configuration (CPU less than or equal to 165W)	1
Memory Configuration Type	Performance Optimized	1
Memory DIMM Type and Speed	3200MT/s RDIMMs	1
Memory Capacity	64GB RDIMM, 3200MT/s, Dual Rank, 16Gb	8
RAID Configuration	RAID 1	1
RAID/Internal Storage Controllers	PERC H355 Controller Front	1
RAID/Internal Storage Controllers	Front PERC Mechanical Parts, front load	1
Hard Drives	480GB SSD SATA Read Intensive 6Gbps 512 2.5in Hot-plug AG Drive, 1 DWPD	2
BIOS and Advanced System Configuration Settings	Power Saving BIOS Settings	1
Embedded Systems Management (Multi)	iDRAC9, Enterprise 15G	1
Fans	4 High Performance Fans for 2 CPU	1
Power Supply	Dual, Hot-plug, Power Supply Redundant (1+1), 800W, Mixed Mode, NAF	2
Power Cords	C13 to C14, PDU Style, 10 AMP, 6.5 Feet (2m), Power Cord	2
PCIe Riser	Riser Config 0, 2CPU, Half Length, Low Profile, 3 x16 Slots, SW GPU Capable	1
Motherboard	Motherboard with Broadcom 5720 Dual Port 1Gb On-Board LOM, Ti	1
OCP 3.0 Network Adapters	Intel X710 Dual Port 10GbE SFP+, OCP NIC 3.0	1
Additional Network Cards	Broadcom 57414 Dual Port 10/25GbE SFP28 Adapter, PCIe Low Profile, V2	1
Quick Sync	No Quick Sync	1
Password	iDRAC, Factory Generated Password	1
Group Manager	iDRAC Group Manager, Enabled	1
Bezel	Standard Bezel	1
Bezel	Luggage Tray x8 and x10 Chassis,	1
Boot Optimized Storage Cards	BOSS Blank	1
Rack Rails	Cable Management Arm	1
Rack Rails	ReadyRails Sliding Rails Without Cable Management Arm or Strain Relief Bar	1
Advanced System Configurations	UEFI BIOS Boot Mode with GPT Partition	
Operating System	No Operating System	1
OS Media Kits	No Media Required	1
Extended Service	ProSupport and Next Business Day Onsite Service Extension, min 24 Month(s)	1

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12 HDDs with 2.4 Tb Data Center Storage Server

Detailization of components per one unit		
Reference Model: Dell ME5024 Storage Array		
Component	Description	QTY
Controller Cards	25Gb iSCSI 8 Port Dual Controller	1
25G/SFP28 iSCSI Optics and DAC Cables	Networking, Cable, SFP28 to SFP28, 25GbE, Passive Copper Twinax Direct Attach Cable, 2 Meter	8
Hard Drives	Hard Drive Filler 2.5in, single blank	12
Hard Drives	2.4TB 10K RPM SAS ISE 12Gbps 512e 2.5in Hot-plug Hard Drive	12
Rack Rails	Rack Rails 2U	1
Power Supply	Power Supply, 580W, Redundant, WW	1
Bezel	Series 2U Bezel	1
Power Cords	European Power Cord 220V	2
Extended Service	ProSupport and Next Business Day Onsite Service Extension, min 24 Month(s)	1