

Attachment B: Required Items for Each Lot

Note: Please see Attachment C regarding Hawaii General Excise Tax Exemption for items marked **

LOT (A): Infiniband Networking - (A)	
Quantity	Item Description
1	(A) - MQM8790-HS2R 40 port HDR Infiniband Nvidia/Mellanox Switch
1	(A) - Four-Year Extended Warranty for a Total of Five Years Bronze for QM8700 Series Switch **

LOT (B): 200Gbit Infiniband Cables - (B)	
Quantity	Item Description
4	(B) - MCP1650-H00AE30 or fiberstore Q56-PC005 (#155616) , 0.5 M, Copper 200Gbit HDR cable
11	(B) - MCP1650-H001E30 or fiberstore Q56-PC01 (#155617), 1 M, Copper 200Gbit HDR cable
5	(B) - MCP1650-H002E26 or fiberstore Q56-PC02 (#155619), 2 M, Copper 200Gbit HDR cable
5	(B) - MFS1S00-H305E or fiberstore Q56-AO30 (#135681), 30 M, AOC 200Gbit HDR cable

LOT (C): 100Gbit Ethernet Cables - (C)	
Quantity	Item Description
17	(C) - Fiberstore Q28-AO30 (#65884), Arista compatible, 30 M, 100G QSFP28 Active Optical Ethernet Cable
5	(C) - Fiberstore Q28-AO15 (#65881), Arista compatible, 15 M, 100G QSFP28 Active Optical Ethernet Cable
7	(C) - Fiberstore Q-4S28AOxx (#70537), Arista compatible, 10M, 100G QSFP28 to 4x 25G SFP28 Active Optical Ethernet Cable

LOT (D): 100Gbit Ethernet Switch - (D)

Quantity	Item Description
1	(D) - DCS-7050CX3-32S-R , Arista 7050X3, 32x100GbE QSFP+ & 2xSFP+ switch, rear-to-front air, 2xAC, 2xC13-C14 cords
24	(D) - SVC-7050CX3-32S-1M-NB, 1 Month A-Care Software & NBD Hardware Replacement/Same Day Ship for 7050CX3-32S **

LOT (E): 1/10 Gbit Ethernet Switch - (E)

Quantity	Item Description
1	(E) - GSM4352S-100NES, Netgear M4300-52G 48x1G, 2x10G, 2xSFP+ Managed Switch
1	(E) - APS150W-100NES, Netgear secondary power supply for Netgear M4300-52G switch

LOT (G): Flash Storage Array - (G)

Quantity	Item Description
1	(G) - SuperChassis 216BE2C-R609JBOD (dual expander), 2U 24 Disk Enclosure, dual expander with 11x 15.36TB SAS SSDs, minimum of 1 DWPD * If substituting for an equivalent product, the JBOD should not require vendor locked drives. * Drives should also be compatible with the ZFS filesystem
1	(G) - Five-Year Advance Replacement Warranty on disks and JBOD**
4	(G) - If not included with JBOD (4 per JBOD): 3M, External HD Mini SAS 4x (SFF-8644)

LOT (H): High Density Storage Disk Array - (H)

Quantity	Item Description
2	(H) - WesternDigital Ultrastar Data60 4U 60 disk JBOD, dual controller with 60x 18TB SAS 7200 RPM Hard Drives * If substituting for an equivalent product, the JBOD should not require vendor locked drives. * Drives should also be compatible with the ZFS filesystem
2	(H) - Five-Year Advance Replacement Warranty on Disks and JBOD**
4	(H) - If not included with JBOD (2 per JBOD): 3M, External HD Mini SAS 4x (SFF-8644)

LOT (F): Metadata and Object Storage Servers - (F)

Quantity	Item Description
4	(F) - SuperMicro A+ SERVER 1114S-WN10RT 1x AMD EPYC 7543P 16x 32GB PC4-25600 3200Mhz RDIMM 2x 480GB Micron 5300 PRO Series 2.5" SATA 6.0Gb/s Solid State Drive 1x ConnectX-6 200Gbit HDR PCIe 4.0 x16 MCX653105A-HDAT 2x Broadcom HBA 9500-8e (Equivalent HBA cards would be accepted, but must be pci-e 4.0) 2x 10G Base-T 1x Dedicated IPMI port
4	(F) - Five-Year Advance Replacement Warranty **
16	(F) - 1 Meter, External HD Mini SAS 4x (SFF-8644)

LOT (J): Routing Servers - (J)

Quantity	Item Description
1	(J) - 1x A+ Server 2014TP-HTR, 2U quad chassis with 4 blades each with: 1x AMD EPYC 7313P 8x 16GB PC4-25600 3200Mhz RDIMM 2x 480GB Micron 5300 PRO Series 2.5" SATA 6.0Gb/s Solid State Drive, 1DWPD 2x ConnectX-6 200Gbit HDR PCIe 4.0 x16 MCX653105A-HDAT 1x AOC-M25G-i2SM (25 G, 2 port, PXEBoot support, Mellanox or Intel) 1x Dedicated IPMI port
1	(J) - Five-Year Advance Replacement Warranty **

LOT (K): Virtual Host Servers - (K)

Quantity	Item Description
1	(K) - Supermicro A+ Server 2014TP-HTR, 2U quad chassis with 4 blades each with: 1x AMD EPYC 7543P 8x 32GB PC4-25600 3200Mhz RDIMM 2x 480GB Micron 5300 PRO Series 2.5" SATA 6.0Gb/s Solid State Drive, 1DWPD 4x 480GB Micron 7300 PRO Series M.2 PCIe 3.0 x4 NVMe Solid State Drive, 1 DWPD 1x ConnectX-6 200Gbit HDR PCIe 4.0 x16 MCX653105A-HDAT 1x ConnectX-6 dual port 100Gbit Ethernet PCIe 4.0 x16 MCX653106A-ECAT 1x AOC-MTG-b2TM(Broadcom, 2x 10G base-T, PXEboot support) 1x Dedicated IPMI port
1	(K) - Five-Year Advance Replacement Warranty (chassis and blades) **
1	(K) - Supermicro A+ Server 2014TP-HTR, 2U quad chassis, 4 blades total 2x blades with: 1x AMD EPYC 7543P 8x 32GB PC4-25600 3200Mhz RDIMM 2x 480GB Micron 5300 PRO Series 2.5" SATA 6.0Gb/s Solid State Drive, 1DWPD 4x 480GB Micron 7300 PRO Series M.2 PCIe 3.0 x4 NVMe Solid State Drive, 1 DWPD 1x ConnectX-6 200Gbit HDR PCIe 4.0 x16 MCX653105A-HDAT 1x ConnectX-6 dual port 100Gbit Ethernet PCIe 4.0 x16 MCX653106A-ECAT 1x AOC-MTG-b2TM (2x 10G base-T, PXEboot support) 1x Dedicated IPMI port 2x blades with: 1x AMD EPYC 7543P 8x 32GB PC4-25600 3200Mhz RDIMM 2x 480GB Micron 5300 PRO Series 2.5" SATA 6.0Gb/s Solid State Drive, 1DWPD 4x 960GB Samsung PM983 Series M.2 PCIe 3.0 x4 NVMe Solid State Drive, 1 DWPD 1x ConnectX-6 200Gbit HDR PCIe 4.0 x16 MCX653105A-HDAT 1x ConnectX-6 dual port 100Gbit Ethernet PCIe 4.0 x16 MCX653106A-ECAT 1x AOC-MTG-b2TM (2x 10G base-T, PXEboot support) 1x Dedicated IPMI port
1	(K) - Five-Year Advance Replacement Warranty (chassis and blades) **

LOT (L): HPC CPU Nodes - (L)

Quantity	Item Description
2	(L) - 2U quad chassis with 4 blades each with 2x Intel Xeon Gold 6342 256 GB ram 1x ConnectX-6 100G HDR, PCIe 4.0 x16, 1, port MCX653105A-ECAT 1x 25G, 2 port Mellanox or Intel Network card, Support for PXEboot 1x Dedicated IPMI port no hard drives
2	(L) - Five-Year Advance Replacement Warranty (chassis and blades) **

LOT (M): HPC GPU Nodes - (M)

Quantity	Item Description
6	(M) - 2U GPU servers 2x Intel Xeon Gold 6342 256 GB ram 2x Nvidia A30 24G 1x ConnectX-6 100G HDR, PCIe 4.0 x16 , 1 port, MCX653105A-ECAT 1x 25G, 2 port Mellanox or Intel Network card, Support for PXEboot 1x Dedicated IPMI port no hard drives
6	(M) - Five-Year Advance Replacement Warranty **

LOT (N): High Density HPC GPU Node - (N)

Quantity	Item Description
4	(N) - 4U GPU servers 2x Intel Xeon Gold 6342 256 GB ram 10x Nvidia RTX A4000 16G 1x ConnectX-6 100G HDR, PCIe 4.0 x16 , 1 port, MCX653105A-ECAT 1x 25G, 2 port Mellanox or Intel Network card, Support for PXEboot 1x Dedicated IPMI port no hard drives
4	(N) - Five-Year Advance Replacement Warranty **

LOT (P): 200Gbit to 2x 100Gbit Infiniband Cables - (P)

Quantity	Item Description
9	(P) - MCP7H50-H002R26, 2M, copper HDR200 to 2x HDR100