

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
11	(B) - MCP1650-H002E26 or fiberstore Q56-PC02 (#115636), 2 M, DAC 200Gbit HDR cable
4	(B) - MFS1S00-H005E or fiberstore Q56-AO05 (#135677), 5 M, AOC 200Gbit HDR cable
7	(B) - MFS1S00-H010E or fiberstore Q56-AO10 (#135678), 10 M, AOC 200Gbit HDR cable
5	(B) -MFS1S00-H030E or fiberstore Q56-AO30 (#135681), 30 M, AOC 200Gbit HDR cable

LOT (C): 100Gbit Ethernet Cables - (C)	
Quantity	Item Description
9	(C) - 2M 100G DAC
19	(C) - Fiberstore Q28-AO07 (#50184), Arista compatible, 7 M, 100G QSFP28 Active Optical Ethernet Cable

LOT (D): 10Gbit Ethernet Cabling- (D)	
Quantity	Item Description
10	(D) - Fiberstore SFPP-PC03 (#39661), Netgear compatible, 3 M, 10G SFP+ Passive Direct Attach Copper Twinax Cable
24	(D) -Fiberstore SFP-10GSR-85 (#12345), Netgear compatible, 10GBASE-SR SFP+ 850nm 300m DOM Duplex LC MMF Optical Transceiver Module

LOT (E): 400/100Gbit Ethernet Switch - (E)	
Quantity	Item Description
1	(E) - DCS-7280CR3-32D4-R , Arista 7280CR3-32D4, 32x100GbE QSFP+ & 4x 400G QSFP-DD switch, rear-to-front air, 2xAC, 2xC13-C14 cords
24	(E) - SVC-7280CR3-32D4-1M-NB, 1 Month A-Care Software & NBD Hardware Replacement/Same Day Ship for 7280CR3-32D4 [2 years per switch] **

LOT (F): 10Gbit Ethernet Switch - (F)	
Quantity	Item Description
1	(F) - XSM4348S, Netgear M4300-24X24F 24x10Gbase-T, 24x10G SFP+ Managed Switch
1	(F) - APS250W, Netgear secondary power supply for Netgear M4300-24X24F switch

LOT (G): Ethernet Tools- (G)	
Quantity	Item Description
1	(G) -Fiberstore FS-BOX-V4 (#141408), FS Box, Multi-Functional Transceiver Tool Kit, Support FS Transceivers & DAC/AOC Cables, Yellow

LOT (H): Flash Storage Array - (H)	
Quantity	Item Description
2	(H) - SuperChassis 216BE2C-R609JBOD (dual expander), 2U 24 Disk Enclosure, dual expander with 13x 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
2	(H) - Five-Year Advance Replacement Warranty on disks and JBOD**
8	(H) - If not included with JBOD (4 per JBOD): 2M, External HD Mini SAS 4x (SFF-8644)

LOT (I): High Density Storage Disk Array - (I)	
Quantity	Item Description
4	(I) - WesternDigital Ultrastar Data60 4U 60 disk JBOD, dual controller with 60x 20TB 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
4	(I) - If not included with JBOD Five-Year Advance Replacement Warranty on Disks and JBOD**
8	(I) - If not included with JBOD (2 per JBOD): 3M, External HD Mini SAS 4x (SFF-8644)

LOT (J): Object Storage Servers - (J)	
Quantity	Item Description
4	(J) - 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	(J) - Five-Year Advance Replacement Warranty **
8	(J) - 1 Meter, External HD Mini SAS 4x (SFF-8644)
8	(J) - 2 Meter, External HD Mini SAS 4x (SFF-8644)

LOT (K): Virtual Host Servers - (K)	
Quantity	Item Description
1	(K) - Supermicro A+ Server 2014TP-HTR, 2U quad chassis, 4 blades total 4x 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 AOC-MH25G-m2S2T (2x 25G, 2x 10G base-T, PXEboot support) 1x Dedicated IPMI port
1	(K) - Five-Year Advance Replacement Warranty (chassis and blades) **

LOT (L): Breakers - (L)	
Quantity	Item Description
4	(L) - Starline busway tap box, Circuit breaker Unit with 6-foot drop cord power plug for B225/B225G Systems, 560C9W Conn. Body, standard Housing Ground, 208V, 22,000 Short Circuit Amps, Starline 225 power bus compatible. Universal Electric Corporation CBDC225HE12-6-560C9W-4

LOT (M): Active Cooling Doors- (M)	
Quantity	Item Description
2	(M) - ColdLogik CL20-C14+ 42U x 800W rear door cooler with Air temperature probes (set of 6 per) Usystems- Packaged Pair 3.7 Meter Silicone Hose (12ft) NPT Fittings 2 Way Ball Valve 1" NPT, Nom Flow, USA, B222 Usystems- Packaged Rotary Actuator 5Nm AC/DC 24V PWM 0-10VDC LR24A-MF Interface Frame 52u, 800w, White Custom color to match white Chatsworth server rack (see Notes 1)
1	(M) - USystems - Packaged Belimo ZTH Service Tool For Actuator Programming
1	(M) - Usystems - CL-20 PGDN Commissioning Tool And 1M RJ12 Lead
1	(M) - Usystems - Packaged FERNOX LS-X LEAK SEALER 50ML
2	(M) - 3 year extended warranty **
	NOTE: Chatsworth F-Series TeraFrame Gen 3 cabinets. Part Number: FF2L-111-E62 Width: EIA 19" Available Rack Mount spaces available: 42 (top 3 saved for structured wiring) Depth (rail to rail): 38." Depth (door to door): 43"

LOT (N): SAS Switch - (N)	
Quantity	Item Description
2	(N) - Astek A54812-SW-03, 12-Port (48-Lanes) Gen3 SAS Switch, 12Gbps per lane, 48Gbps/port, Air Flow from back to front, all cable connections in the front
2	(N) - 3 year extended warranty **