STATEMENT OF WORK

1. Objective/Requirements

This requirement is for the acquisition of a Supermicro Superserver **or equal** for NASA Langley Research Center (LaRC). The information listed below is required to complete this purchase.

2. Characteristics, Scope, and Specs

QTY	DESCRIPTION
-	SuperServer 222C-TN **or equal** with the following configuration:
1	RAID Configuration Supermicro SuperServer 222C-TN - 2U - 24x 2.5" Hybrid NVMe - AIOM - 2000W 1+1 Redundant [NVMe, 24 ports] No RAID (*OS) -> 2 x 1.92TB Kioxia CD8P-R Series PCIe 5.0 x4 NVMe Solid State Drive (SIE) No RAID -> 1 x 7.68TB Kioxia CD8P-R Series PCIe 5.0 x4 NVMe Solid State Drive (SIE) - Supermicro SuperServer 222C-TN - 2U - 24x 2.5" Hybrid NVMe - AIOM - 2000W 1+1 Redundant - 2 x Intel Xeon 6520P Processor: 24 Cores, 2.4GHz / 4.0GHz, 144MB Cache, 6400 MT/s, 210W TDP - 8 x 32GB PC5-51200 6400MHz DDR5 ECC RDIMM - 2 x 1.92TB Kioxia CD8P-R Series PCIe 5.0 x4 NVMe Solid State Drive (SIE) - 2 x 7.68TB Kioxia CD8P-R Series PCIe 5.0 x4 NVMe Solid State Drive (SIE) - 2 x NVIDIA H200 NVL GPU - 141GB HBM3e - PCIe 5.0 x16 - Passive Cooling - 600W - Supermicro AIOM - 2x 10GbE RJ45 - Broadcom BCM57416 - AOC-ATG-b2TG - Supermicro Update Manager (SUM) (OOB Management Package), included - 2 x IEC320 C19 to C20 Power Cable, 12AWG, 250V/20A, Black - 6ft - No Operating System - 3 Year Advanced Parts Replacement Warranty (Zone 0)

The chosen vendor shall provide the following configuration **or equal**:

Barebone:

Memory Technology - DDR5 ECC Registered

Chipset - System on Chip

Form - Factor 2U

Color – Silver

Memory Slots - 32x 288-pin DIMM Socket

Ethernet - Via AIOM

Power - 2x 2000W Redundant (1 + 1) Titanium Level (96%) power supplies

External Bays - Default: Total 24 bays
24 front hot-swap 2.5" NVMe/SAS/SATA drive bays

M.2 - M.2 Interface: 2 PCIe 5.0 x4
Form Factor: 2280/22110
Key: M-Key

Expansion Slots - 4 PCIe 5.0 x16 (in x16) FHFL slots
1 PCIe 5.0 x8 (in x16) FHFL slot

Front Panel - HDD activity LED
LAN1 activity
LAN2 activity
Power Fail
Power status LED
System information
Power On/Off
UID button

Dimensions - (WxHxD) 17.25" (438 mm) x 3.47" (88 mm) x 30.7" (780 mm

GPUs:

Max Memory Size - 141 GB

Max Memory Bandwidth - 4.8TB/s

Memory:

Technology - DDR5

Type - 288-pin DIMM

Capacity - 32 GB

Speed - 6400 MHz

Error Checking – ECC

Signal Processing Registered

Networking:

Speed - 10Gb Ethernet

Connector - RJ45

Interface – AIOM

Processor:

Product Line - Xeon 6 SP

Socket - LGA4710

Clock Speed - 2.4 GHz

Smart Cache - 144MB

Cores/Threads - 24 / 48

Intel Hyper-Threading – Yes

TDP Wattage - 210W

Solid State Drive:

Storage Capacity - 1.92TB
7.68TB

Interface - PCIe 5.0 x4 NVMe
PCIe 5.0 x4 NVMe

Endurance - 1x DWPD
1x DWPD

Read IOPS - 1,600K IOPS
2,000K IOPS

Write IOPS - 150K IOPS
200K IOPS

Read Speed - 12,000 MB/s
12,000 MB/s

Write Speed - 3,500 MB/s
5,500 MB/s

NAND - BiCS FLASH TLC
BiCS FLASH TLC

3. **Place of Performance**

   NASA Langley Research Center
   4 W. Taylor Street
   Hampton, VA 23681

4. **Period of Performance**

   30 days ARO