



ASTI-FM 03-11
REV 1/13 January 2020

**DOST-ASTI Bids and Awards Committee
Invitation to Bid (Public Bidding)**

ITB No:	22-02-3756	Date:	February-18-2022
PR No:	ALAM-22-01-13148	Date:	February-07-2022
Source of Funds:			
Total ABC:	Php 32,000,000.00		
Time, Date & Venue of Pre-bid Conference:	March 03, 2022, 10:00 AM at Via videoconferencing		
Time and Date of Submission of Bids:	March 15, 2022, 09:00 AM		
Time, Date & Venue of Opening Bids:	March 15, 2022, 10:00 AM at DOST-ASTI and Videoconferencing		
Date of availability of Complete Set of Documents:	February 23, 2022		
Deadline of Potential Bidder's Clarifications:	March 05, 2022		
Deadline of ASTI's Supplemental Bid Bulletin:	March 08, 2022		
Delivery Schedule:			

The Advanced Science and Technology Institute (ASTI), through its Bids and Awards Committee (BAC), hereby invites all interested bidders to submit their bids for the item(s) listed below. Guidelines regarding the format, eligibility, technical and financial documents needed are described in the Instruction to Bidders of the Philippine Bidding Documents

Bidding will be conducted through open competitive bidding procedures using a non discretionary "pass/fail" criterion as specified in the 2016 R-IRR of RA 9184.

A complete set of Bidding Documents may be purchased by interested bidders upon payment of a fee for the Bidding Documents. It is also downloadable for free of charge at DOST-ASTI's website - www.asti.dost.gov.ph

For further inquiries, contact ASTI's BAC Secretariat via email at bac-sec@asti.dost.gov.ph. Interested bidders may also call the number - (632)-426-7423 and look for ASTI's BAC Secretariat.

Respectfully,

BAYANI BENJAMIN R. LARA
BAC Chairman

NO.	TECHNICAL SPECIFICATIONS	QTY	UNIT	UNIT PRICE(Php)	TOTAL PRICE(Php)
1	<p>One (1) Lot Deep Learning Supercomputing System</p> <p>1. General Overview</p> <p>1.1. The Advanced Science and Technology Institute is seeking qualified and competent for the delivery of one (1) lot Deep Learning Supercomputing System.</p> <p>1.2. The approved budget for the contract is inclusive of all applicable government taxes and service charges.</p> <p>1.3. The technical specifications indicated herein are minimum requirement, unless otherwise specified.</p> <p>2. Technical Specifications</p> <p>2.1. GPU Server</p> <p>2.1.1. Number of Units: Two (2)</p> <p>2.1.2. CPU</p> <p>2.1.2.1. Count: 2</p> <p>2.1.2.2. Cores: 64</p>	1	lot	32000000.00	32,000,000.00

- 2.1.2.3. Threads: 128
- 2.1.2.4. Base Clock: 2.45Ghz
- 2.1.3. GPU
 - 2.1.3.1. 8x A100 40GB
 - 2.1.3.2. Tensor cores: 3456
 - 2.1.3.3. CUDA cores: 55296
 - 2.1.3.4. Aggregate GPU Memory: 320GB
 - 2.1.3.5. GPU to GPU bandwidth: 600Gb/s
- 2.1.4. Memory: 16x 64GB 3200MHz DDR4 ECC
- 2.1.5. Storage
 - 2.1.5.1. 2x 1.9Tb PCIe Gen3 NVMe U.2 SSD
 - 2.1.5.1.1 MTBF: 2M hours
 - 2.1.5.2. 4x 3.84Tb PCIe Gen4 NVMe U.2 SSD
 - 2.1.5.2.1 MTBF: 2M hours
- 2.1.6. Network
 - 2.1.6.1. 2x QSFP56 upto 200Gb Infiniband/Ethernet port
 - 2.1.6.2. 2x SFP+ 10G Ethernet
 - 2.1.6.3. 1x GbE RJ45 OOB Management port
- 2.1.7. Formfactor: 4U Rackmount
- 2.1.8. Power: Quad 3000W 80 Plus Redundant Power Supply
- 2.1.9. Server Management Features
 - 2.1.9.1. Redfish support
 - 2.1.9.2. Web based Dashboard
 - 2.1.9.3. JAVA Based Serial Over LAN
 - 2.1.9.4. KVM over HTML5
 - 2.1.9.5. Sensor Monitor
 - 2.1.9.6. Sensor Reading History Data
 - 2.1.9.7. FRU Information
 - 2.1.9.8. Hardware Inventory
 - 2.1.9.9. Fan Profile
 - 2.1.9.10. System Firewall
 - 2.1.9.11. Power Consumption
 - 2.1.9.12. Power Control
 - 2.1.9.13. LDAP / AD / RADIUS Support
 - 2.1.9.14. Backup & Restore Configuration
 - 2.1.9.15. Remote BIOS/BMC/CPLD Update
 - 2.1.9.16. Event Log Filter
 - 2.1.9.17. User Management
 - 2.1.9.18. Media Redirection Settings
 - 2.1.9.19. PAM Order Settings
 - 2.1.9.20. SSL Settings
 - 2.1.9.21. SMTP Settings
- 2.2 Infiniband Switch
 - 2.2.1. Number of Units: One (1)
 - 2.2.2. Ports
 - 2.2.2.1. 40x QSFP56 non-blocking ports
 - 2.2.2.2. 1x 100/1000 RJ45 Management Port
 - 2.2.2.3. 1x RS232 Console port
 - 2.2.3. Features
 - 2.2.3.1. 40x 200Gb HDR infiniband
 - 2.2.3.2. 16Tb/s aggregate switch throughput
 - 2.2.3.3. Sub-130ns switch latency
 - 2.2.3.4. Compliant with IBTA 1.21 and 1.3
 - 2.2.3.5. 9 virtual lanes: 8 data + 1 management
 - 2.2.3.6. 256 to 4Kbyte MTU
 - 2.2.3.7. Adaptive Routing
 - 2.2.3.8. Congestion control
 - 2.2.3.9. Port Mirroring

- 2.2.3.10. VL2VL mapping
- 2.2.3.11. 4X48K entry linear forwarding database
- 2.2.4. Power supply: 100-127VAC, 200-240VAC
1100W Redundant power
- 2.2.5. Formfactor: 1U Rackmount
- 2.2.6. Cooling: Front to back air flow cooling

2.3 Flash Storage Server

- 2.3.1. Number of units: Three (3)
- 2.3.2. Processor
 - 2.3.2.1. Count: 2
 - 2.3.2.2. Cores: 24
 - 2.3.2.3. Threads: 48
 - 2.3.2.4. Base Clock: 2.65 GHz
- 2.3.3. Memory: 16x 8GB 3200MHz DDR4 ECC RDIMM
- 2.3.4. Storage
 - 2.3.2.1. 2x 200GB SATA SSD
 - 2.3.2.1.1 MTBF: 2M hours
 - 2.3.2.2. 24x 3.84Tb PCIe Gen4 NVMe U.2 SSD
 - 2.3.2.2.1 MTBF: 2M hours
- 2.3.5. Network
 - 2.3.5.1 2x 200Gb QSFP56 HDR Infiniband port
 - 2.3.5.2. 2x 10G SFP+ port
 - 2.3.5.3. 1x GbE RJ45 OOB Management port
- 2.3.6. Formfactor: 2U Rackmount
- 2.3.7. Power: 1600W 80 Plus Redundant Power Supply
- 2.3.8. Server Management Features
 - 2.3.8.1. Redfish support
 - 2.3.8.2. Web based Dashboard
 - 2.3.8.3. JAVA Based Serial Over LAN
 - 2.3.8.4. KVM over HTML5
 - 2.3.8.5. Sensor Monitor
 - 2.3.8.6. Sensor Reading History Data
 - 2.3.8.7. FRU Information
 - 2.3.8.8. Hardware Inventory
 - 2.3.8.9. Fan Profile
 - 2.3.8.10. System Firewall
 - 2.3.8.11. Power Consumption
 - 2.3.8.12. Power Control
 - 2.3.8.13. LDAP / AD / RADIUS Support
 - 2.3.8.14. Backup & Restore Configuration
 - 2.3.8.15. Remote BIOS/BMC/CPLD Update
 - 2.3.8.16. Event Log Filter
 - 2.3.8.17. User Management
 - 2.3.8.18. Media Redirection Settings
 - 2.3.8.19. PAM Order Settings
 - 2.3.8.20. SSL Settings
 - 2.3.8.21. SMTP Settings
- 2.3.9. OS: No OS

3. Accessories

- 3.1. GPU Server Accessories
 - 3.1.1. 2x 10G SR-SFP+ transceiver
 - 3.1.2. 2x 1-5M QSFP56 Infiniband HDR Direct attached copper cable
 - 3.1.3. 2x 5-10M LC-LC Multimode fiber cable
 - 3.1.4. Rack railing kits
 - 3.1.5. 4x 0.5-1M c19-c20 power cable
- 3.2. Flash Storage Server Accessories
 - 3.2.1. 2x 10G SR-SFP+ transceiver
 - 3.2.2. 2x 1-5M QSFP56 Infiniband HDR Direct attached

- copper cable
- 3.2.3. 2x 5-10M LC-LC Multimode fiber cable
- 3.2.4. Rack railing kits
- 3.2.5. 2x 0.5-1M c13-c14 power cable

4. Warranty and after sales support

- 4.1. Supplier warrants the items against defects in manufacturing and shipping and delivery issues.
- 4.2. Defective and incorrect items shall be replaced.
- 4.3. Three (3) - year warranty that covers defects in materials and workmanship.
- 4.4. Five percent (5%) warranty security in the form of either retention money or special bank guarantee.
- 4.5. End-user must be able to request technical support by phone, email or through a website.
- 4.6. Onsite technical support may be requested for special cases or critical severity issues.
 - 4.6.1. Four (4) business hours, and updates every 3 business days for critical severity issues that impact a lot of staff.
 - 4.6.2. Eight (8) business hours, and updates every 5 business days for high severity issues that incur serious degradation to application performance or functionality.
 - 4.6.3. Twenty-Four (24) business hours, and updates by request for medium severity issues that moderately impact user operations.
 - 4.6.4. Forty-Eight (48) business hours, and updates by request for low priority issues such as inquiries or issues with limited impact to user operations.

5. Payment and Delivery Terms

- 5.1. The price of bid must be inclusive of government taxes and additional fees.
- 5.2. Government terms, payment upon complete delivery.
- 5.3. Delivery of goods shall be made by the supplier within sixty (60) calendar days upon issuance of Notice to Proceed.

TOTAL APPROVED BUDGET FOR THE CONTRACT (ABC):

Php 32,000,000.00

RESERVATION CLAUSE

The Advanced Science and Technology Institute reserves the right to accept or reject any proposal, to annul the bidding process, and to reject all proposals at any time prior to contract award, without thereby incurring any liability to the affected proponent or proponents.