

All-India Institute of Medical Sciences
Ansari Nagar, New Delhi-29
(RESEARCH SECTION)

Ref. No. 62/Stores/Ped/RL/2017-18/RS

Dated: 08.03.2018

Subject: Purchase of Deep Learning Server with GPUs and CPU-GPU high speed interconnect (NVLink), for the Deptt. of Pediatrics, AIIMS, New Delhi-29 on proprietary basis- Inviting comments thereon.

The request has been received from Dr. Rakesh Lodha, Deptt. of Pediatrics, AIIMS to purchase the subject item from M/s Megahertz Infotech Pvt. Ltd. (Mfg. by M/s IBM India Pvt. Ltd.). on proprietary basis. The proposal submitted by M/s Megahertz Infotech Pvt. Ltd. and Performa Invoice and Departmental PAC certifications are attached.

The above documents are being uploaded for open information to submit objections, comments, if any, from any manufacturer regarding proprietary nature of the equipment/item within issue of 15 days giving reference **No. 62/Stores/Ped/RL/2017-18/RS**. The comments should be received by office of Stores Officer (RS), Research Section at AIIMS on or before **23/03/2017 upto 12:00 p.m.**, failing which it will be presumed that any other vendor is having no comment to offer and case will be decided on merits.

STORES OFFICER (RS)

Encl: Related documents enclosed.

- 1. Departmental PAC Certificate enclosed.**
- 2. Performa Invoice**

**DEPARTMENT OF PEDIATRICS
ALL INDIA INSTITUTE OF MEDICAL SCIENCES**

Item name	Deep Learning Server withGPUs, CPU-GPU high speed interconnect (NVLink)
Quantity	01 (One)
Cost approx. Rs	Rs. 17 Lakh
Warranty/Guarantee	3 Years comprehensive warrantyonsite

Specification for Deep Learning Server withGPUs, CPU-GPU high speed interconnect (NVLink)

Form Factor	2 U, Rack Mount.
Processor	2 x 10 cores 2.86GHz power8 processor with NVlink
GPU	NVIDIA P100, 2 Qty
CPU-GPU Interconnect	High speed (80 GBPS) NVLink Interconnect
Cache Memory	8 MB L3 Cache per core, 64 MB L4 cache per socket
Motherboard	Power8 architecture Chipset
RAM	8 x 64GB DDR4 Memory
HDD Bays	Support for 2 SSD drives
Storage	2 x 1.92TB Read Intensive SDD
Networking Ports	2 port 1/10GbE BaseT RJ45
Interfaces	1 USB Portand 1 USB (3.0 support) 1 MicroSD slot, 1 VGA, 1 serial (9Pin)
PCIeBus Slots	Should provide total 3 PCIe bus slots along with 4 x NvidiaNVlink SXM2 slots
Power Supply and fans	2 x 1300W Power supply
Industry Standard Compliance	ACPI 2.0b Compliant PCIe 3.0 compliant petitboot USB 3.0 and 2.0 support Various Power Saver mode Open Power Abstraction Layer
Service Processor Management	Remote Management Port with IPMI 2.0 and Data Center Management Interface 1.5 Support. It should provide service Indicator LED management. Power fault Monitring Fan/thermal control Serial over LAN(SOL) Event reporting through Systems Event Logs (SEL) multiple firmware image coexist
Reliability	Processor enhancements integration I/O subsystem Memory subsystem
Security	Serial Interface control UEFI/OPAL Should support direct services integration
Operating systems Support	CentOS

P.T.O

Artificial Intelligence Software	PowerAI with Distributed Deep Learning Library, TensorFlow, IBM Caffe Compatible and optimized for Python, NumPy, and Keras
Warranty	3 Years onsite OEM Warranty with Next Business Day response for all components
Support	All the components of the Server should be supplied by the same OEM and without any third party bids for individual components. Detailed BOM of the server with OEM part code should be submitted. The OEM should have sales and support setup in India for at least 7 Years.
Driver and Firmware	Essential tools, drivers, agents to setup, deploy and maintain the server should be embedded inside the server.
Compliance	ROHS, UL 60950-1:2007, CAN/CSA22.2 No. 60950-1-07, IEC 60950-1 2nd Edition
Manufacturer Authorization	Only Manufacturer Authorized Vendors with prior experience of at least 2 installations at reputed institutions are allowed to participate. Proof of manufacturer authorization and prior experience should be provided along with the applications for the tender.

"Certified that the space and manpower are available for installation of the equipment immediately after receiving the equipment in the Institute"

Dr. Rakesh Lodha
Professor & Principal Investigator
Project Code: ECF-01



Dr. RAKESH LODHA
Professor
Department of Pediatrics
All India Institute of Medical Sciences
New Delhi-110028

Dr. S K Kabra
Professor
Department of Pediatrics, AIIMS

Dr. Amit Lathwal
Associate Professor
Deptt. of Hospital Administration

Mr. S Barua
Senior Programmer
Computer Facility, AIIMS

22nd February 2018

Dr. Rakesh Lodha
All India Institute of Medical Sciences
New Delhi



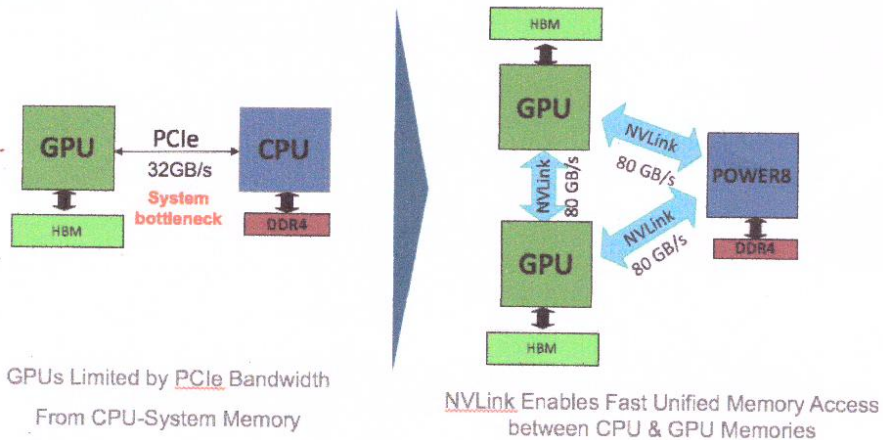
Dear Sir,

Sub: Proprietary Certificate for IBM Power 8 Servers S822LC- GTB

We would like to bring to your kind notice that the "IBM Power 8 Servers S822LC - GTB" is a proprietary product of IBM Corporation, USA and is sold through a network of distributors and partners worldwide. NV link between CPU and GPUs is only provided by IBM currently in the market.

The Power8 Architecture with CPU<->GPU NVlink along with Power AI provides a comprehensive hardware plus software stack for Deep Learning and Artificial Intelligence research. CPU-GPU commotion is 2.5x with respect to others. Design is fat and flat, and

POWER8 with NVLink: 2.5x Faster CPU-GPU Connection



GPUs Limited by PCIe Bandwidth
From CPU-System Memory

NVLink Enables Fast Unified Memory Access
between CPU & GPU Memories

Yours Sincerely,
For IBM India Pvt Ltd.

Product Manager-IBM Power

MEGAHERTZ INFOTECH PVT. LTD.

Address :
508, Eros Appartment, 56 Nehru Place,
New Delhi- 110019 Ph.: 46644000, 28898276
E-mail : madhu@megahertzinfotech.com



To,

28th Feb 2018

Dr. Rakesh Lodha, M.D
Professor
Department of Pediatrics
All India Institute of Medical Sciences
Ansari Nagar, New Delhi-110029

Subject:- Quote for IBM Power 8 Server With P100 GPU

With reference to the above said subject that we are pleased to quote our best price for **IBM Power 8 Server With P100 GPU** card along with all the required documents & Commercial terms and condition for your kind perusal.

S.No	Description	Qty	Unit price	Total Price
1	IBM Power 8 Server With P100 GPU	1	1571428	1571428

Commercial Terms & Condition:-

- Price Basis : FOR Destination
- Taxes : GST Extra As per Actual
- Delivery Period : 6 week from the date of Purchase order
- Warranty : 3yrs onsite
- Validity : 90 days

We are looking forward for your valuable order at the earliest.

Thanking & anticipating for your positive response.

Yours Sincerely,


Sanjeev Kumar
Mb#8373916824
sanjeev@megahertzinfotech.com
For MEGAHERTZ INFOTECH PVT. LTD.