

RUDRA SERVER PLATFORM

Rudra, C-DAC's indigenous server platform with Intel Xeon 2nd Generation Cascade Lake processor supporting DDR4 memory, with two expansion slots for GPU and Accelerator cards.

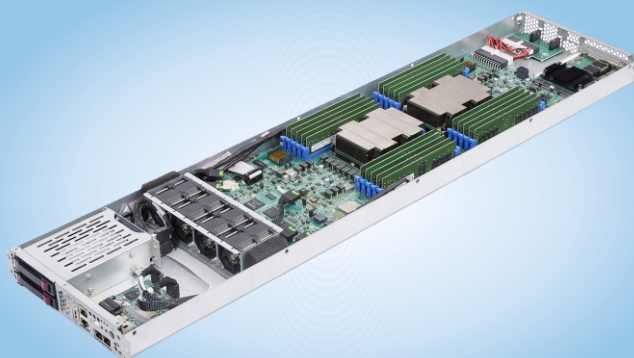
Key Features

- Dual Socket, 2nd Gen Intel® Xeon® Scalable Processors
- 20 DIMM Slots
- 2933/2666 ECC DDR4 LRDIMM, RDIMM
- Intel® Optane™ Persistent Memory (NVDIMM)
- Two PCI-e 3.0 x16 slots with GPU/Accelerator support
- Onboard 2 x 10Gbps Ethernet Interfaces
- One additional high speed network slot (Up to 100 Gbps, OCP NIC 3.0 compatible)
- Two U.2 NVMe/SATA

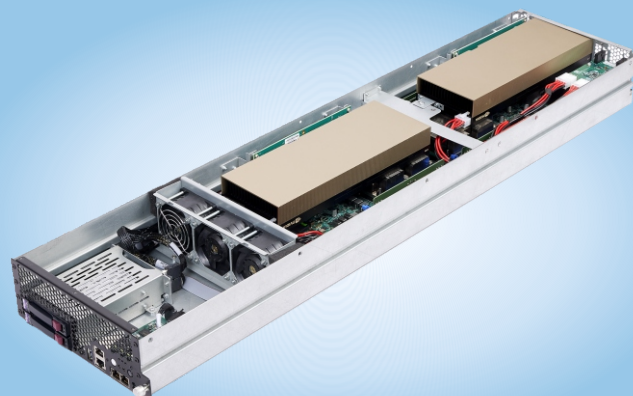
Key Applications

- High Performance Computing (HPC)
- Cloud and Edge computing and communication

Rudra Server: ½ Width 1U



Rudra Server: ½ Width 2U



Processor/Cache

CPU

- Dual Socket, 2nd Gen Intel® Xeon® Scalable processors
- 2 UPI up to 10.4 GT/s
- Supports CPU with up to TDP 165W
- Up to 24C/48T, up to 35.75 MB Cache per socket

System Memory	
Memory	<ul style="list-style-type: none"> Memory Capacity: 20 DIMM slots Memory Type: 2933 MHz ECC DDR4 NVDIMM Support

Expansion Slots	
PCI Express (PCIe 3.0 x16)	<ul style="list-style-type: none"> Slot 1: Riser0 Slot 2: Riser1 Slot 3: OCP 3.0

System BIOS	
BIOS Type	<ul style="list-style-type: none"> AMI UEFI

Management	
Software Features	<ul style="list-style-type: none"> IPMI 2.0 Intel Node Manager KVM via BMC 1G management interface. Redfish/REST interface. Watch Dog Standard IPMI client tools like ipmitool. Power Configuration: ACPI Power Management
Power Configurations	<ul style="list-style-type: none"> ACPI Power Management

On-Board Devices	
Chipset	<ul style="list-style-type: none"> Intel® C624
Network Connectivity	<ul style="list-style-type: none"> 2x 10 GbE 1x 1GbE BMC Management Interface
BMC	<ul style="list-style-type: none"> ASPEED AST2500

Storage	
U.2	<ul style="list-style-type: none"> Two U.2 NVMe/SATA

PC Health Monitoring	
CPU	<ul style="list-style-type: none"> Monitor CPU error signals, CPU voltages and temperatures. Event logging based on sensor thresholds and CPU events
FAN	<ul style="list-style-type: none"> Fans with tachometer monitoring Temperature: Fan speed control based on CPU, GPU and chassis environment temperature

Dimensions and Weight	
Height	<ul style="list-style-type: none"> 1U : 1.64" [41.65mm] 2U : 3.291" [83.60mm]
Width	<ul style="list-style-type: none"> ½ width 8.359" [212.31mm]
Depth	<ul style="list-style-type: none"> 35.498" [901.61mm]

Power Supply	
+12V	<ul style="list-style-type: none"> Centralized Power Supply (19.2 kW)