Introduction

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Component	Description
GPU	Support HGX 8-GPU SXM5 with GPU BB Sled AMD: MI300X 750W CPU-GPU Interconnect: 8xPCIe Gen5x16 (Refer to the PCIe topology in Figure 4 and 5)
CPU	2 x AMD SP5 sockets, LGA6096 Compatible with AMD EPYC™ 9004 and 9005 Series CPU
Storage (OS)	1 x PCIe Gen3 NVMe M.2 (on board/HPM) + Dual M.2 PCIe Gne4 NVME SSD
Storage (Data Cache)	Up to 16x 2.5” NVMe U.2 (PCIe SW) + 8X2.5” SAS/SATA (optional by SAS RAID card)
Network (Cluster) card	8 x Gen 5 x16 HHHL Slots compatible with InfiniBand and Ethernet InfiniBand (default): Up to 400Gbps Ethernet: 400GbE, 200GbE, 100GbE, 50GbE, 40GbE, 25GbE, and 10GbE
Network (North-South) card	5 x Gen5 x16 FHHL Slots compatible with Infini Band and Ethernet Ethernet (default): 400GbE, 200GbE, 100GbE, 50GbE, 40GbE, 25GbE, and 10GbE InfiniBand: Up to 400Gbps
System Memory (DIMM)	24 x DDR5 DIMM Slots, up to 4800 / 6400 MHz, depends on CPU Model, Total capacity up to 6TB

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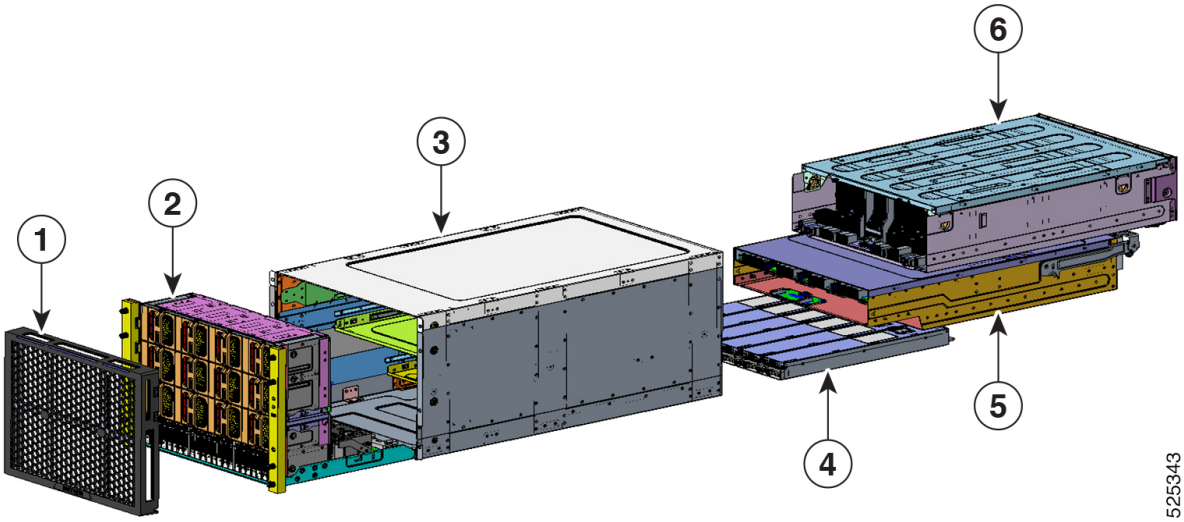
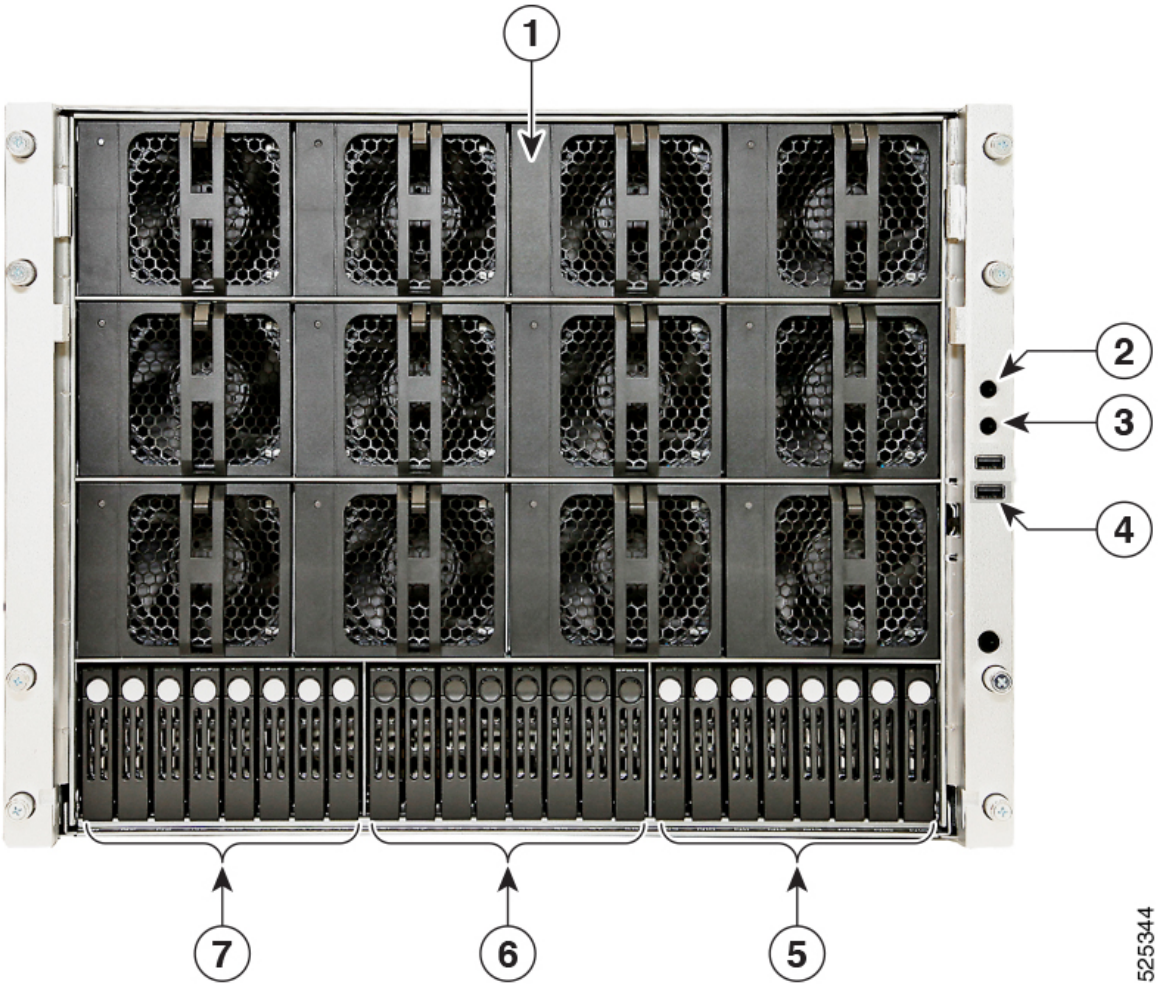
Component	Description
DC-SCM (out-of-band system management)	1 GbE RJ45 interface Supports IPMI 2.0, KVM, and Watchdog
OCP NIC 3.0	1 x OCP 3.0 SFF Slot, supporting Ethernet from 1G to 10G
Power Supply	6 x 3 kW + 2 x 2.4 kW

Figure 1: System Exploded Drawing



1	Front Bezel
2	Fan 12x Storage 16+8
3	19``@800mm Main Chassis
4	PSU
5	CPU Sled
6	HGBB Sled

Figure 2: System Front View



1	80105 Fan X 12
2	Power Button with LED
3	UID Button with LED
4	USB2.0 X 2
5	NVMe SSD X 8
6	SAS / SATA SSD X 8
7	NVMe SSD X 8

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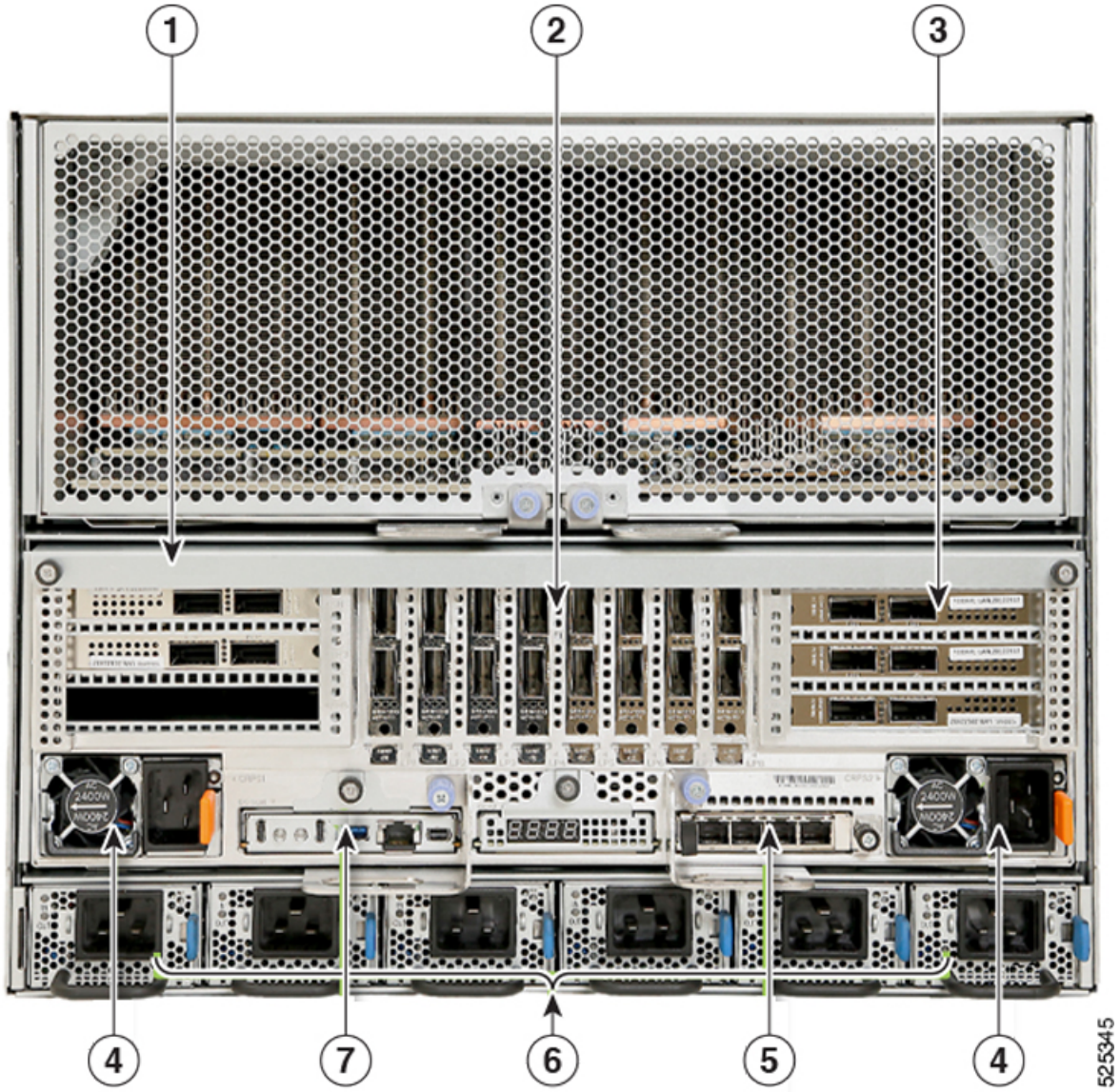
Figure 3: System Rear View



1	FHHL PCIe X 2 (Max.)
2	LP PCIe X 8 (Max.)
3	FHHL PCIe X 3 (Max.)
4	2400W PSU
5	OCP Module
6	3000W*6 PSU
7	DC-SCM

Figure 4: Block diagram (8U GPU Server with NV H100 and H200)

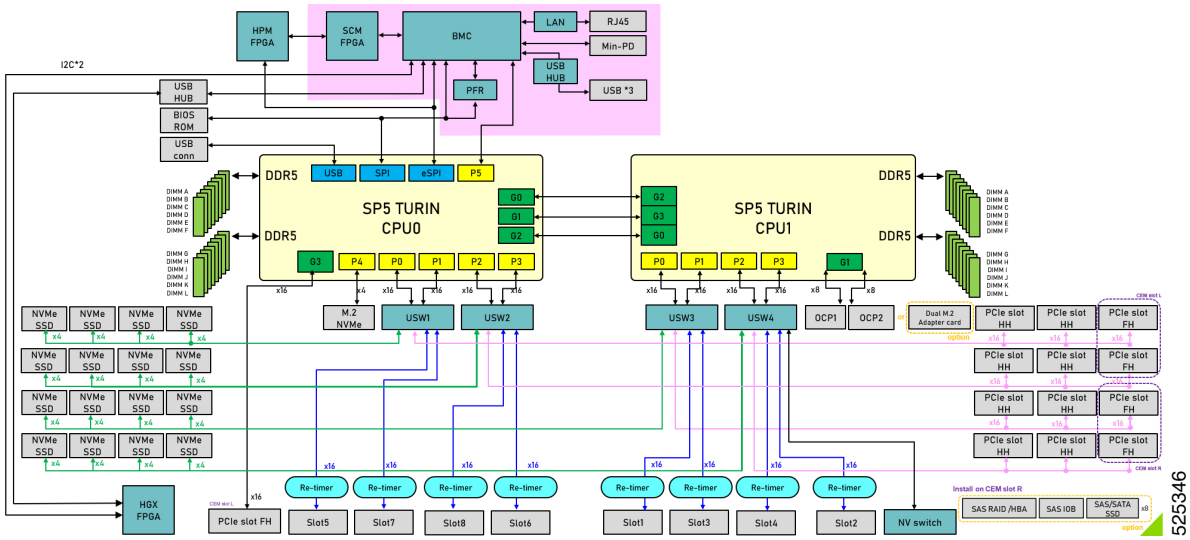
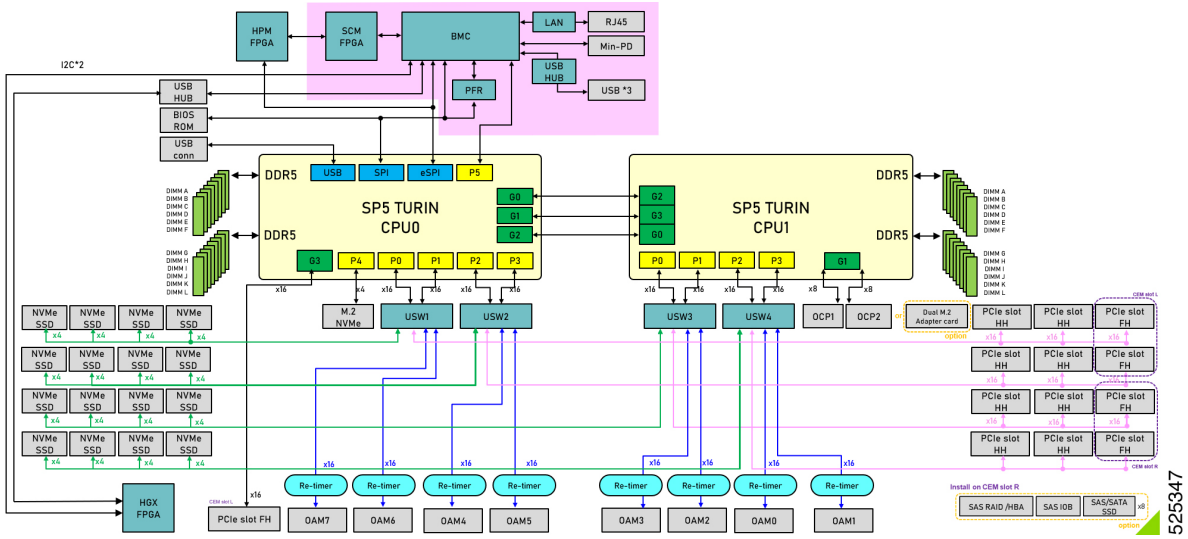


Figure 5: Block diagram (8U GPU Server w/ AMD MI300)



Terminology

Term	Definition
CPU	Central Processing Unit. Common reference to both CISC (complex instruction set computer) and RISC (reduced instruction set computer) processors
FHHL	PCIe card form factor, Full Height Half Length
GPU	Graphics Processing Unit
NIC	Network Interface Card
NVMe	Non-Volatile Memory Express

Term	Definition
OCP	Open Compute Project
PCIe	Peripheral Component Interconnect Express. Refers to a communication like defined within PCISIG standards body.
BMC	Baseboard Management Controller
FRU	Field Replace Unit
DCSCM	Datacenter Secure control Module Specification
IPMI	Intelligent Platform Management Interface