

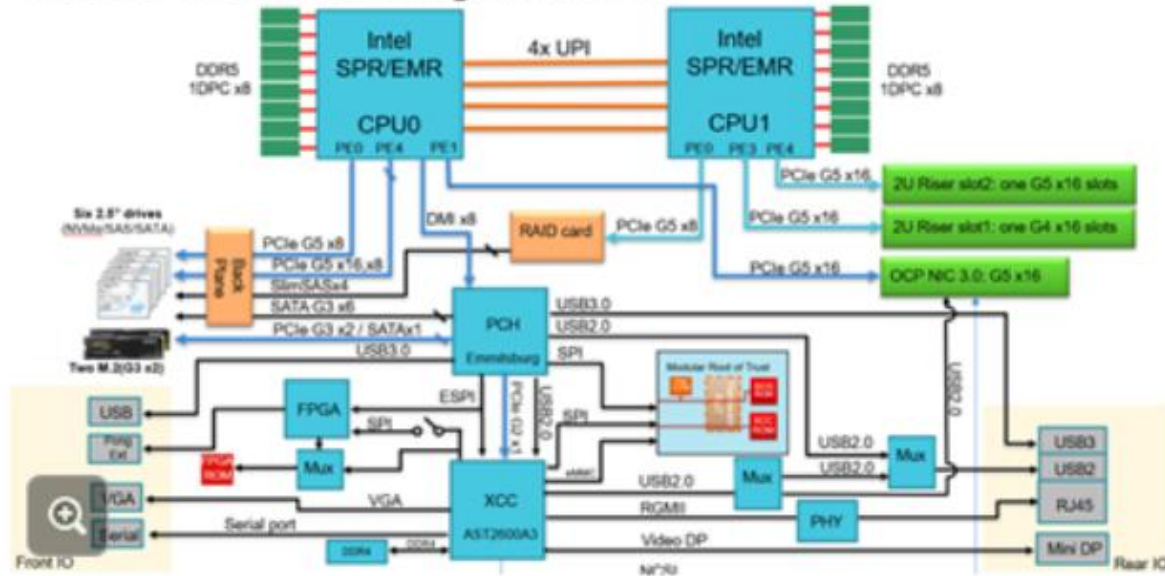
SD550 V3 configurations and diagrams

System block diagram and hardware configurations

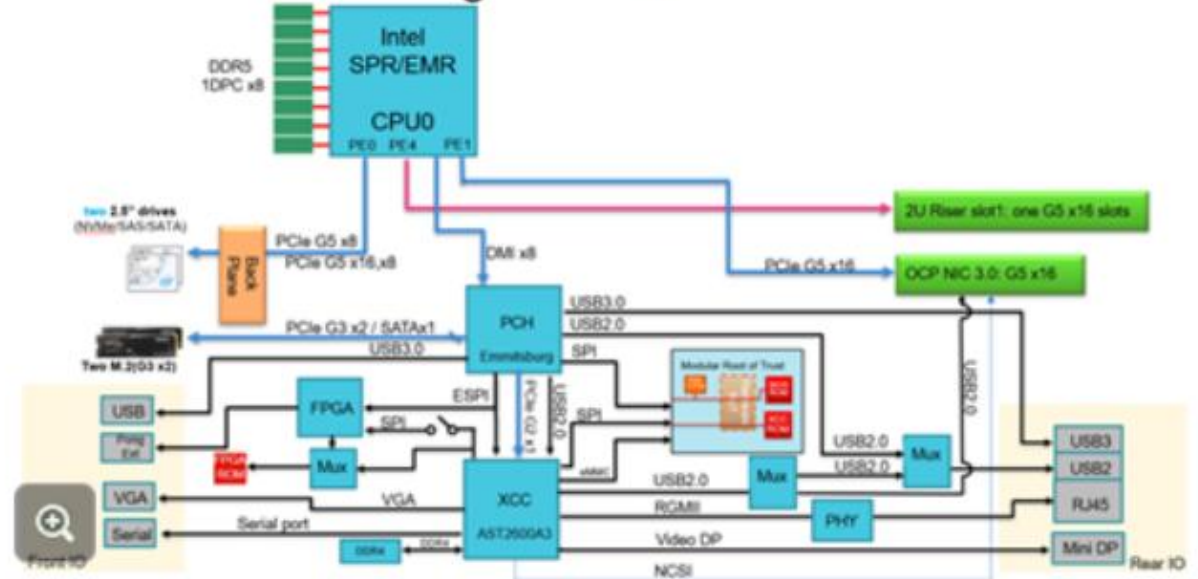
Lenovo

System block diagrams

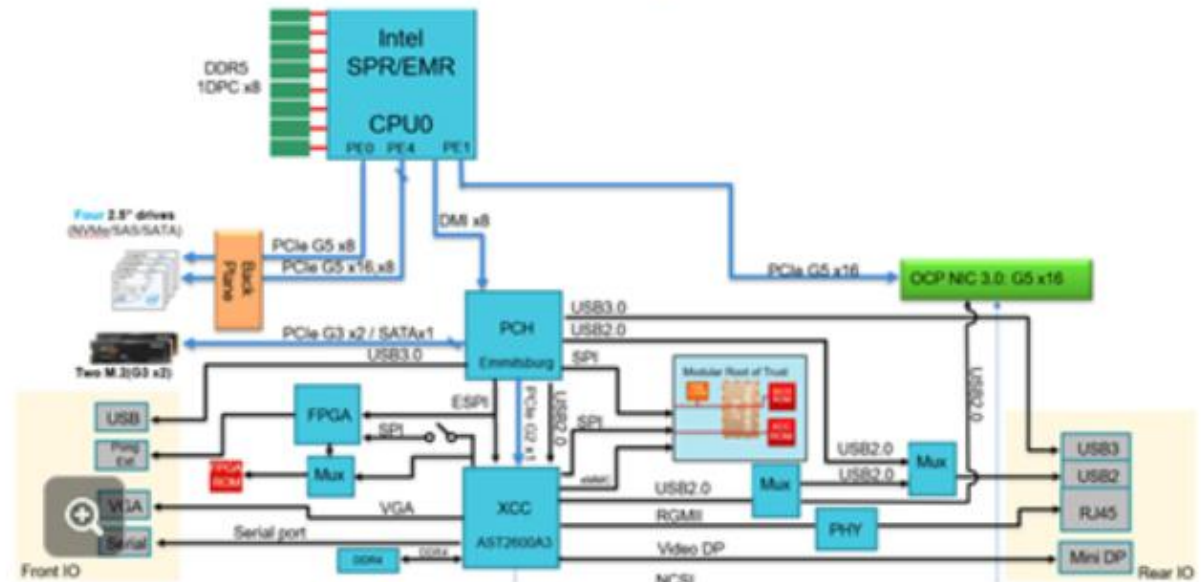
SD550 V3 Block Diagram 2U2S



SD550 V3 Block Diagram 2U1S



SD550 V3 Block Diagram 2U1S



Supported configurations

The SD550 V3 supports three system configurations.

CPU support condition	2.5-inch drives / Quantity	PCIe card / Quantity	OCP card / Quantity	RAID card / Quantity
SD550 V3 2U2S	6	2	1	1
SD550 V3 2U1S	6	X	1	X
SD550 V3 2U1S	2	1	1	X

Storage backplane type	Specification
Two 2.5-inch SAS/SATA/NVMe	SAS3/SATA3/NVMe (Gen4/Gen5)

Thermal limitations

Node	CPU sockets	Slot capability	Storage configuration	CPU power & ambient temp support	DIMM capability	CPU heat sink solutions	Fan solutions
SD550 V3	2S	- Two FHHL PCIe - One four-port OCP	- Six 2.5-inch SATA/SAS/NVMe - Two M.2 SATA/NVMe boot drives	350 W / 330 W @ 30°C 300 W / 270 W @ 35°C	Sixteen 96 GB	- Front: 2U STD - Rear : 2U Wing	Three 6056 fans per node
				250 W @ 35°C	Sixteen 96 GB	- Front: 2U STD - Rear : 2U STD	Three 6056 fans per node
		- Two FHHL PCIe - One four-port OCP	- Six 2.5-inch SATA/SAS/NVMe - Two M.2 SATA/NVMe boot drives	350 W / 330 W @ 25°C 300 W / 270 W @ 30°C	Sixteen 128 GB	- Front: 2U STD - Rear : 2U Wing	Three 6056 fans per node
				250 W @ 30°C	Sixteen 128 GB	- Front: 2U STD - Rear : 2U STD	Three 6056 fans per node
		- Two GPU L4/ Flex 140 W/ air duct - One four-port OCP	- Six 2.5-inch SATA/SAS/NVMe - Two M.2 SATA/NVMe boot drives	350 W / 330 W @ 25°C 300 W / 270 W @ 30°C	Sixteen 96 GB	- Front: 2U STD - Rear : 2U Wing	Three 6056 fans per node
				250 W @ 30°C	Sixteen 96 GB	- Front: 2U STD - Rear : 2U STD	Three 6056 fans per node
		- N/A PCIe - One four-port	Six 2.5-inch SATA/SAS/NVMe	350 W / 330 W @ 35°C	Eight 128 GB	Front: 2U STD	Three 6056 fans per node

Thermal limitations

Node	CPU sockets	Slot capability	Storage configuration	CPU power & ambient temp support	DIMM capability	CPU heat sink solutions	Fan solutions
SD550 V3		Flex 140 W / air duct • One four-port OCP	SATA/SAS/NVMe • Two M.2 SATA/NVMe boot drives	25°C • 300 W / 270 W @ 30°C	GB	• Rear : 2U wing	fans per node
				• 250 W @ 30°C	Sixteen 96 GB	• Front: 2U STD • Rear : 2U STD	Three 6056 fans per node
	1S	• N/A PCIe • One four-port OCP	• Six 2.5-inch SATA/SAS/NVMe • Two M.2 SATA/NVMe boot drives	• 350 W / 330 W @ 35°C	Eight 128 GB	• Front: 2U STD	Three 6056 fans per node
		• One FHHL PCIe • One four-port OCP	• Two 2.5-inch SATA/SAS/NVMe • Two M.2 SATA/NVMe boot drives	• 350 W / 330 W @ 35°C	Eight 128 GB	• Front: 2U STD	Three 6056 fans per node
		• One GPU L4/ Flex 140 W / air duct • One four-port OCP	• Two 2.5-inch SATA/SAS/NVMe • Two M.2 SATA/NVMe boot drives	• 350 W / 330 W @ 35°C	Eight 128 GB	• Front: 2U STD	Three 6056 fans per node

System device numbering - front

The D3 chassis can accommodate two SD550 V3 nodes. Node 1 has a standard installation on the left, and node 2 is installed upside down on the right.



System device numbering - rear

All PCIe slots are x16 bandwidth, and the OCP slots can support two-port or four-port OCP modules for network connectivity.

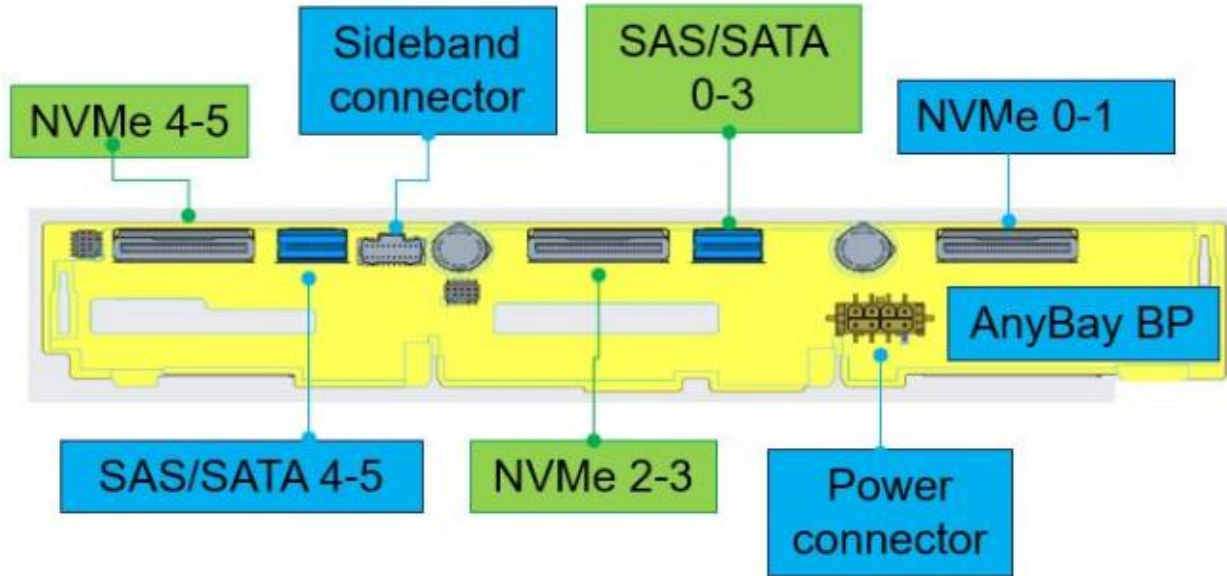


PCIe Slot 1 supports Gen4

PCIe Slot 2 supports Gen5



AnyBay HDD backplane



The HDD backplane is vertically installed in the chassis and secured with plungers.

