ThinkAgile HX Series with 4th Generation Intel Xeon Scalable processors

Overview and system configurations

Specification overview

| Model | HX630 V3 ROBO | HX630 V3 | HX650 V3 Storage | HX650 V3 |
|------------------|--|--|---|---|
| Base platform | SR630 V3 | SR630 V3 | SR650 V3 | SR650 V3 |
| Processor | Two Intel Xeon SP Gen 4 | Two Intel Xeon SP Gen 4 | Two Intel Xeon SP Gen 4 | Two Intel Xeon SP Gen 4 |
| Memory | 64 GB to 4 TB | 64 GB to 8 TB | 64 GB to 8 TB | 64 GB to 8 TB |
| Drives (max) | Four front 3.5-inch and two rear 2.5-inch drives | 10 front 2.5-inch and two rear 2.5-inch drives | 12 front 3.5-inch and four rear 2.5-inch drives | 16 2.5-inch or 24 2.5-inch drives |
| SSD options | 1.92 TB to 7.68 TB | 1.92 TB to 7.68 TB | 1.92 TB to 7.68 TB | 1.92 TB to 7.68 TB |
| HDD options | 4 TB to 20 TB | none | 4 T to 20 TB | none |
| GPU | none | none | none | Up to three double-width GPUs or seven single-width GPUs. |
| Network | Two to four 25 Gb ports | Two to four 25 Gb ports | Two to four 25 Gb ports | Two to four 25 Gb ports |

Note: For the latest ThinkSystem hardware specifications and features, refer to the <u>Lenovo Press</u> website.

Supported GPUs

| GPU | Feature code | HX630 V3 maximum support | HX650 V3 – 16 drives maximum support | HX650 V3 – 24 drives maximum support |
|---|-----------------|--------------------------------|---|---|
| ThinkSystem NVIDIA A40 48GB PCIe Gen4 Passive GPU | BEL4 | 0 | 3 | 0 |
| ThinkSystem NVIDIA A40 48GB PCIe Gen4 Passive GPU w/o CEC | BQZQ | 0 | 3 | 0 |
| ThinkSystem NVIDIA A16 64GB Gen4 PCle Passive GPU | BNFE | 0 | 3 | 2 |
| ThinkSystem NVIDIA A16 64GB Gen4 PCle Passive GPU w/o CEC | BQZU | 0 | 3 | 2 |
| ThinkSystem NVIDIA A30 24GB PCIe Gen4 Passive GPU | BJHG | 0 | 3 | 2 |
| ThinkSystem NVIDIA A100 80GB PCle Gen4 Passive GPU w/o CEC | BLK1 | 0 | 3 | 2 |
| ThinkSystem NVIDIA A2 16GB PCIe Gen4 Passive GPU w/o CEC | BQZT | 1 | 7 | 4 |

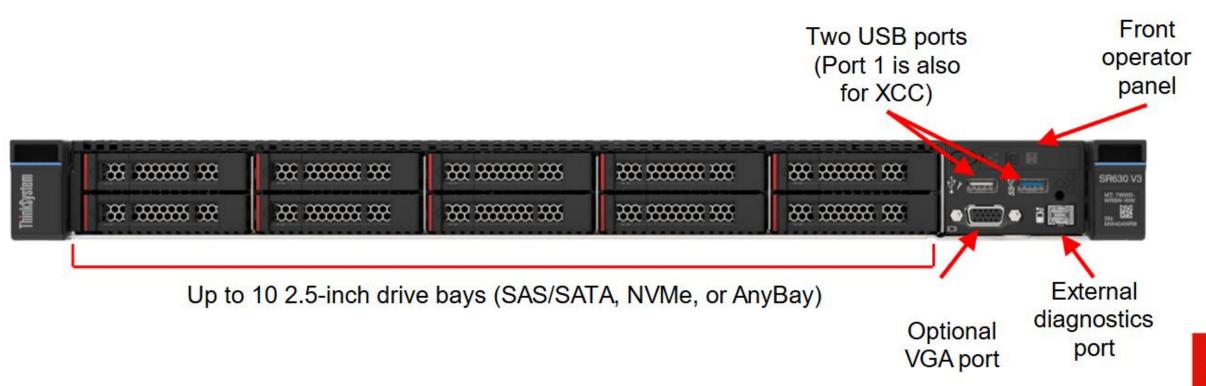
Note: For the latest list of supported GPUs, refer to the Lenovo Press website.

System configuration changes

- NVMe drives are available on the HX630 V3 and HX650 V3
 - The HX630 V3 supports up to 12 NVMe drives
 - The HX650 V3 configuration with 24 drives supports two to eight NVMe drives with or without SAS/SATA SSDs
 - The HX650 V3 configuration with 16 SAS/SATA drives uses a CFF 440-16i card for GPUs
- The Broadcom 57504 adapter is supported
- Boot drive and adapter changes
 - The 5350 RAID adapter is supported
 - The HX630 V3 and HX650 V3 are enabled with a single-drive boot
 - The HX630 V3 cannot support M.2 boot use a 7 mm rear drive boot kit
- 2.5-inch hard drives
 - The HX630 V3 and HX650 V3 now only use 2.5-inch all-flash drives

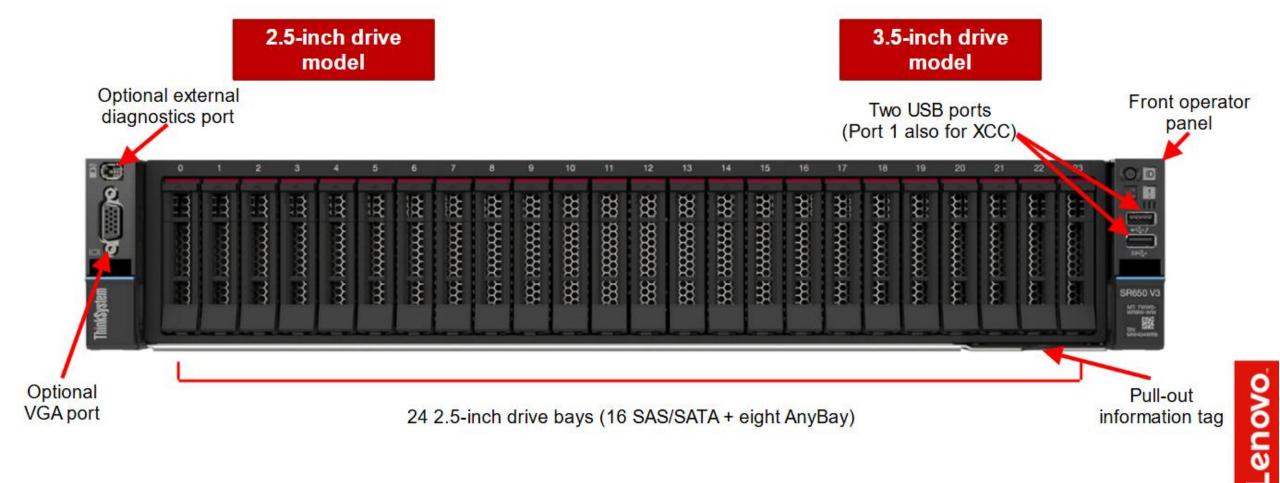
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Front view of the HX630 V3



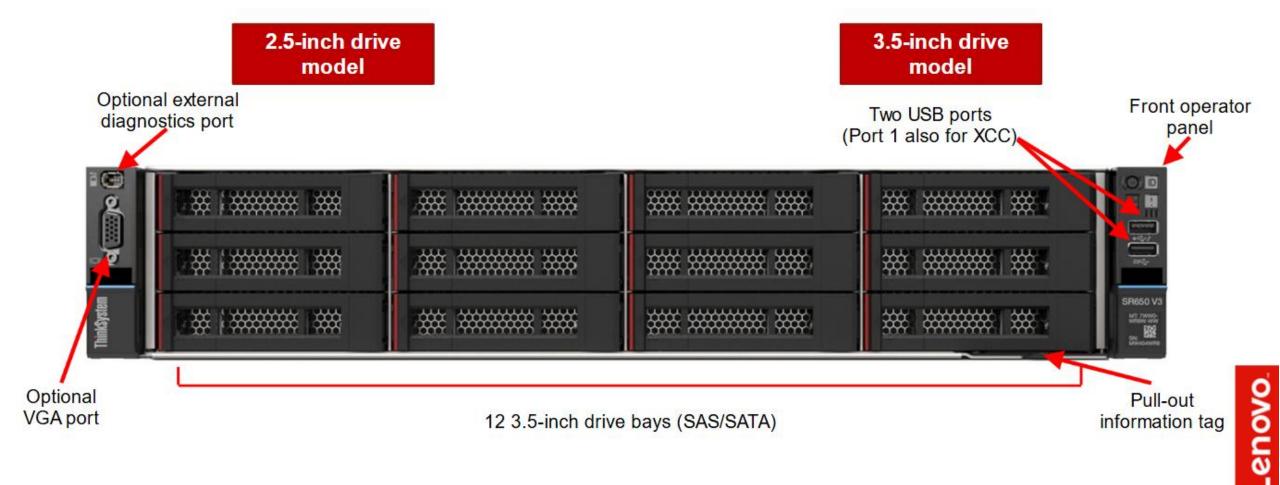
Front views of the HX650 V3

Click the buttons to see the 2.5-inch and 3.5-inch drive models



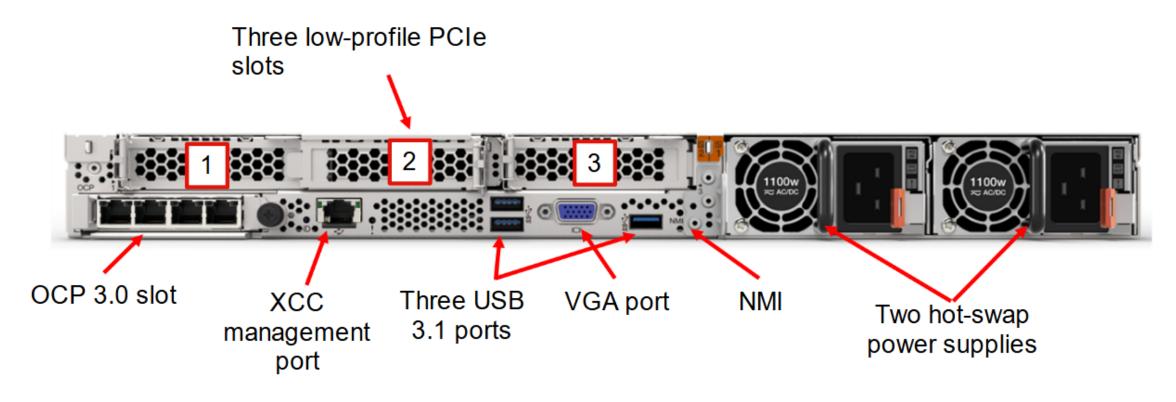
Front views of the HX650 V3

Click the buttons to see the 2.5-inch and 3.5-inch drive models



Rear views of the HX630 V3

The following figure shows the rear components in a system configured with three PCIe slots. Slots 2 and 3 can be used as one FHHL PCIe slot or two 2.5-inch hot-swap drive bays. Click HERE to see these configurations.





Two PCIe slots



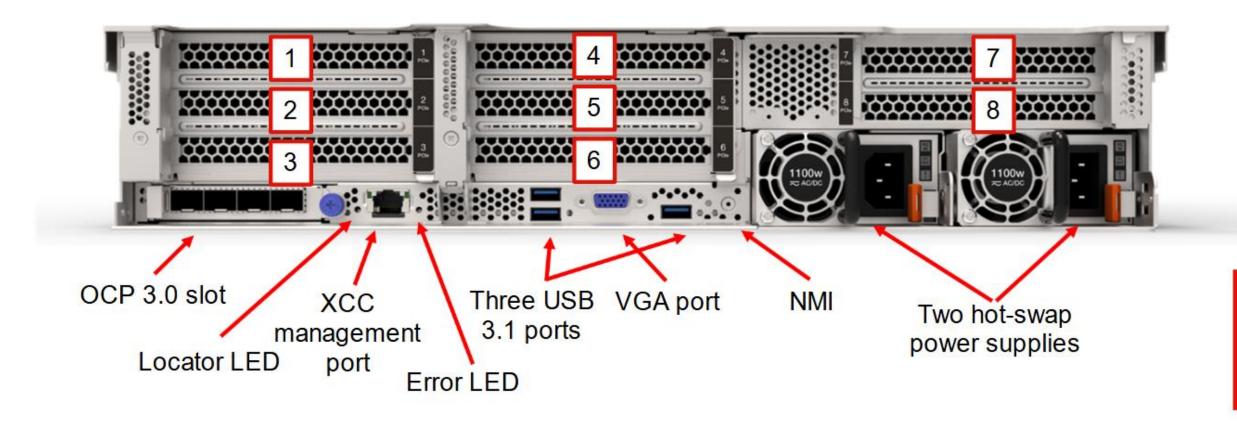
One PCIe slot and two 2.5-inch hot-swap drive



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Rear view of the HX650 V3

The following figure shows the components visible at the rear of the system. The SR650 V3 server can support configurations with eight PCIe slots.



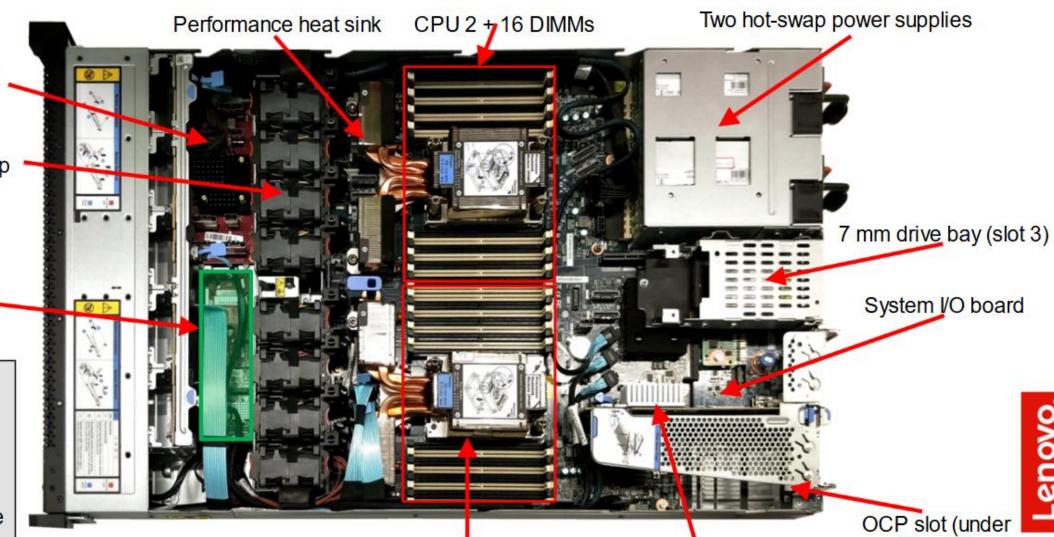
Inside view of the HX630 V3

Internal RAID adapter (cabled)

Eight hot-swap fans

M.2 module

Note: The 7 mm drive bay and M.2 module cannot be used in the same configuration. There is only support for one of these components.



CPU 1 + 16 DIMMs

Riser 1)

Riser 1 for slot 1 and 2

Inside view of the HX650 V3

