Specifications

Product features, technical specifications

SR850 V4 specifications

Attribute	Specifications
Form factor	2U rack
Processor	Two or four Intel Xeon 6700 P-Series Scalable processors
Memory	• Up to 64 DIMM slots (16 DIMMs per processor) on the system board assembly – each processor has eight memory channels, with two DIMMs per channel. Lenovo TruDDR RDIMMs and 3DS RDIMMs are supported DIMMs operate at up to 6400 MHz at 1 DPC and 5200 MHz at 2 DPC • Supports up to 128 GB E3.S 2T CXL memory modules
Front bays	Up to 24 2.5-inch hot-swap drive bays at the front: • Up to 24 SAS/SATA hot-swap drive bays • Up to 24 AnyBay drive bays (support for SAS, SATA, Gen4 NVMe, or Gen5 NVMe drives) Up to 32 E3.S 1T hot-swap drive bays Up to 16 E3.S 2T non-hot-swap CXL memory module bays
Boot drives	• Up to two M.2 internal non-hot-swap boot drives • Up to two M.2 rear hot-swap boot drives

Note: For the latest specifications, refer to the SR850 V4 product guide on Lenovo Press.

Lenovo

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	• Up to 24 AnyBay drive bays (support for SAS, SATA, Gen4 NVMe, or Gen5 NVMe drives) Up to 32 E3.S 1T hot-swap drive bays Up to 16 E3.S 2T non-hot-swap CXL memory module bays
Boot drives	• Up to two M.2 internal non-hot-swap boot drives • Up to two M.2 rear hot-swap boot drives
Network interfaces	Two dedicated OCP 3.0 SFF slots with a PCIe Gen 5 x16 host interface Support for a variety of two-port and four-port OCP adapters
PCIe slots	Up to 12 PCIe slots
GPU support	Support for up to four single-width GPUs or up to two double-width GPUs
Thermal	• Six hot swap fans and support for N+1 redundancy • Supports
Power	Two hot-swap redundant AC power supplies
Management	Standard XClarity management tools for ThinkSystem V4 servers

Note: For the latest specifications, refer to the SR850 V4 product guide on Lenovo Press.

Limitations

Two-processor only configuration

With only two processors, the SR850 V4 has the following capabilities:

- DIMMs: Support for up to 32 DIMMs for an 8 TB maximum
- E3.S: No support for E3.S drives or CXL memory modules – the system must have all four processors installed to support E3.S devices
- PCIe adapters: Support for up to four FHHL adapters or six HHHL adapters
- GPUs: Support for up to two single-width GPUs and selected double-width GPUs

Full-length PCIe adapter:

Systems with full-length PCIe adapters (for example, double-width GPUs) require the use of 1U heat sinks for the rear processors. With these heat sinks, processors are limited to a maximum TDP of 270 W.

Cable management arm

An SR850 V4 chassis configured for E3.S devices will be longer than a standard chassis. Due to space limitations, there is no support for the cable manage arm in the rear of the server.

Intel VMD feature with E3.S CXL

Currently, the E3.S CXL configuration cannot support the Intel VMD feature. Users cannot enable the Intel VMD feature in the UEFI.

PSU types

The SR850 V4 supports the following types of PSU:

CFFv5 PSUs

- Support for zero output mode
- Support for over subscription (OVS) mode
- Support for 1+0 (2700 W model only) or 1+1 redundancy modes

CRPS PSUs:

- Support for 1+1 redundancy mode only
- No support for OVS or zero output mode on CRPS PSUs
- Cannot be mixed with CFFv5 PSUs