

The Lenovo ThinkSystem SR680a V3 with NVIDIA H200 GPUs

Organizations are turning to hybrid or private Al deployments that provide greater control and performance. Signal65 went hands-on with the Lenovo ThinkSystem SR680a V3 to prove its value proposition for a wide range of Al use cases and model sizes.





The Lenovo
ThinkSystem SR680a
V3 with NVIDIA H200
GPUs represents a
compelling solution for
deploying Al workloads
securely on-premises.



Tech Specs

- 5U GPU server with Neptune liquid cooling
- Dual 5th Gen Intel Xeon Scalable processors
- Up to 8x NVIDIA H200 GPUs with 141GB HMB per GPU
- NVLink and Infinity Fabric support
- Modular 3-2-1 design for future scalability

Performance Overview

The Lenovo ThinkSystem SR680a V3 was able to scale enterprise Al workload performance with a variety of model sizes, using additional GPUs in **Figure 1**, and through increased batch sizes seen in **Figure 2**.

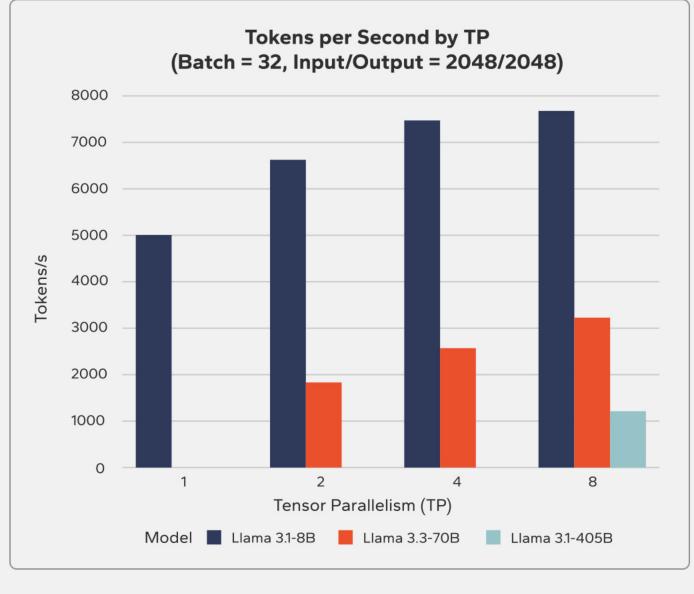


Figure 1: Scaling Tokens per Second across GPUs with Various LLMs (Source: Signal65)

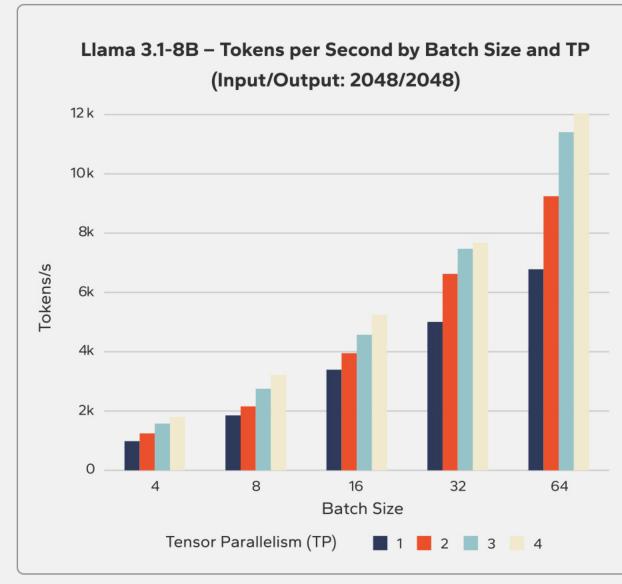


Figure 2: Scaling Tokens per Second by Batch-Size across 3 LLMs (Source: Signal65)

Based on hands-on testing by Signal65, the Lenovo ThinkSystem SR680a V3 is well-equipped to handle these key Al workload areas:

Create



Content Creation, including audio, text, video and computer code.

Engage



Customer service engagement support including chatbots, website content, language translation and customer service agents.

Assist



Knowledge Assistants for Legal, HR, Finance and other workplace assistants.