

Top Global Systems Makers Accelerate Adoption of NVIDIA Grace and Grace Hopper

Atos, Dell Technologies, GIGABYTE, Hewlett Packard Enterprise, Inspur, Lenovo and Supermicro Join First Wave Planning NVIDIA Grace-Powered HGX Systems for HPC and Al

NVIDIA today announced that a range of the world's leading computer makers are adopting the new NVIDIA Grace™ superchips to create the next generation of servers turbocharging AI and HPC workloads for the exascale era.

Atos, Dell Technologies, GIGABYTE, HPE, Inspur, Lenovo and Supermicro are planning to deploy servers built with the NVIDIA Grace CPU Superchip and NVIDIA Grace Hopper™ Superchip.

All these new systems benefit from the just-announced <u>Grace and Grace Hopper designs in the NVIDIA HGX™ platform</u>, which provide manufacturers the blueprints needed to build systems that offer the highest performance and twice the memory bandwidth and energy efficiency of today's leading data center CPU.

"As supercomputing enters the era of exascale AI, NVIDIA is teaming up with our OEM partners to enable researchers to tackle massive challenges previously out of reach," said lan Buck, vice president of Hyperscale and HPC at NVIDIA. "Across climate science, energy research, space exploration, digital biology, quantum computing and more, the NVIDIA Grace CPU Superchip and Grace Hopper Superchip form the foundation of the world's most advanced platform for HPC and AI."

Early Adopters Leading Innovation

Leading supercomputing centers in the U.S. and Europe will be among the first with systems featuring the superchips.

Today, Los Alamos National Laboratory announced that Venado, its next-generation system, will be the first system in the U.S. to be powered by NVIDIA Grace CPU technology. Built using the HPE Cray EX supercomputer, Venado is a heterogeneous system that will feature a mix of Grace CPU Superchip nodes and Grace Hopper Superchip nodes for a wide and emerging set of applications. When completed, the system is expected to exceed 10 exaflops of Al performance.

"By equipping LANL's researchers with the performance of NVIDIA Grace Hopper, Venado will continue this laboratory's commitment to pushing the boundaries of scientific breakthroughs," said Irene Qualters, associate director for Simulation and Computation at LANL. "NVIDIA's accelerated computing platform and expansive ecosystem are removing performance barriers, allowing LANL to make new discoveries that will benefit the nation and society as a whole."

Alps, the Swiss National Computing Center's new system, also to be built by HPE using the <u>HPE Cray EX supercomputer</u>, will use the Grace Hopper Superchip to enable breakthrough research in a wide range of fields. It will serve as a general-purpose system open to the research community in Switzerland, as well as the rest of the world.

NVIDIA Grace Speeds Up Compute-Intensive Workloads

The NVIDIA Grace CPU Superchip features two Arm[®]-based CPUs, connected coherently through the high-bandwidth, low-latency, low-power NVIDIA NVLink[®]-C2C interconnect. This breakthrough design features up to 144 high-performance Arm Neoverse cores with scalable vector extensions and a 1 terabyte-per-second memory subsystem.

The Grace CPU Superchip interfaces with the latest PCle Gen5 protocol to enable maximum connectivity with the highest-performing GPUs, as well as with NVIDIA ConnectX. Smart network interface cards and NVIDIA BlueField. DPUs for secure HPC and AI workloads.

The Grace Hopper Superchip pairs an NVIDIA Hopper GPU with an NVIDIA Grace CPU in an integrated module connected with NVLink-C2C to address HPC and giant-scale AI applications.

The NVIDIA Grace-powered systems will run the portfolio of NVIDIA AI and NVIDIA HPC software for full-stack, integrated computing.

Learn more about NVIDIA Grace technologies during the <u>ISC special address</u> with Buck, taking place on Monday, May 30, at 9:30 a.m. PT.

About NVIDIA

NVIDIA's (NASDAQ: NVDA) invention of the GPU in 1999 sparked the growth of the PC gaming market and has redefined modern computer graphics, high performance computing and artificial intelligence. The company's pioneering work in accelerated computing and AI is reshaping trillion-dollar industries, such as transportation, healthcare and manufacturing, and fueling the growth of many others. More information at https://nvidianews.nvidia.com/.

Certain statements in this press release including, but not limited to, statements as to: the benefits, performance, impact and

abilities of our products and technologies, including NVIDIA Grace and Grace Hopper; a range of the world's leading computer makers adopting the new NVIDIA Grace superchips; supercomputing entering the era of exascale AI; NVIDIA teaming up with our OEM partners to enable researchers to tackle massive challenges previously out of reach; leading supercomputing centers in the U.S. and Europe building systems featuring the NVIDIA Grace superchips and the impact thereof; and NVIDIA's accelerated computing platform and expansive ecosystem removing performance barriers are forwardlooking statements that are subject to risks and uncertainties that could cause results to be materially different than expectations. Important factors that could cause actual results to differ materially include: global economic conditions; our reliance on third parties to manufacture, assemble, package and test our products; the impact of technological development and competition; development of new products and technologies or enhancements to our existing product and technologies; market acceptance of our products or our partners' products; design, manufacturing or software defects; changes in consumer preferences or demands; changes in industry standards and interfaces; unexpected loss of performance of our products or technologies when integrated into systems; as well as other factors detailed from time to time in the most recent reports NVIDIA files with the Securities and Exchange Commission, or SEC, including, but not limited to, its annual report on Form 10-K and quarterly reports on Form 10-Q. Copies of reports filed with the SEC are posted on the company's website and are available from NVIDIA without charge. These forward-looking statements are not guarantees of future performance and speak only as of the date hereof, and, except as required by law, NVIDIA disclaims any obligation to update these forwardlooking statements to reflect future events or circumstances.

© 2022 NVIDIA Corporation. All rights reserved. NVIDIA, the NVIDIA logo, BlueField, ConnectX, NVIDIA Grace, NVIDIA Grace Hopper, NVIDIA HGX and NVLink are trademarks and/or registered trademarks of NVIDIA Corporation in the U.S. and other countries. Arm is a registered trademark of Arm Limited (or its subsidiaries) in the U.S. and/or elsewhere. Other company and product names may be trademarks of the respective companies with which they are associated. Features, pricing, availability and specifications are subject to change without notice.

Alex Shapiro Enterprise Networking 1-415-608-5044 ashapiro@nvidia.com