Taiwan’s Tech Titans Adopt World’s First NVIDIA Grace CPU-Powered System Designs

New Class of Data Center Systems for Digital Twins, AI, High Performance Computing, Cloud Graphics and Gaming to Come From ASUS, Foxconn Industrial Internet, GIGABYTE, QCT, Supermicro, Wiwynn

COMPUTEX -- NVIDIA today announced that Taiwan’s leading computer makers are set to release the first wave of systems powered by the NVIDIA Grace™ CPU Superchip and Grace Hopper Superchip for a wide range of workloads spanning digital twins, AI, high performance computing, cloud graphics and gaming.

Dozens of server models from ASUS, Foxconn Industrial Internet, GIGABYTE, QCT, Supermicro and Wiwynn are expected starting in the first half of 2023. The Grace-powered systems will join x86 and other Arm-based servers to offer customers a broad range of choice for achieving high performance and efficiency in their data centers.

“A new type of data center is emerging — AI factories that process and refine mountains of data to produce intelligence — and NVIDIA is working closely with our Taiwan partners to build the systems that enable this transformation,” said Ian Buck, vice president of Hyperscale and HPC at NVIDIA. “These new systems from our partners, powered by our Grace Superchips, will bring the power of accelerated computing to new markets and industries globally.”

The coming servers are based on four new system designs featuring the Grace CPU Superchip and Grace Hopper Superchip, which NVIDIA announced at its two most recent GTC conferences. The 2U form factor designs provide the blueprints and server baseboards for original design manufacturers and original equipment manufacturers to quickly bring to market systems for the NVIDIA CGX™ cloud gaming, NVIDIA OVX™ digital twin and the NVIDIA HGX™ AI and HPC platforms.

Supercharging Modern Workloads

The two NVIDIA Grace Superchip technologies enable a broad range of compute-intensive workloads across a multitude of system architectures.

- The Grace CPU Superchip features two CPU chips, connected coherently through an NVIDIA NVLink®-C2C interconnect, with up to 144 high-performance Arm V9 cores with scalable vector extensions and a 1 terabyte-per-second memory subsystem. The breakthrough design provides the highest performance and twice the memory bandwidth and energy efficiency of today’s leading server processors to address the most demanding HPC, data analytics, digital twin, cloud gaming and hyperscale computing applications.

- The Grace Hopper Superchip pairs an NVIDIA Hopper™ GPU with a Grace CPU over NVLink-C2C in an integrated module designed to address HPC and giant-scale AI applications. Using the NVLink-C2C interconnect, the Grace CPU transfers data to the Hopper GPU 15x faster than traditional CPUs.

Broad Grace Server Portfolio for AI, HPC, Digital Twins and Cloud Gaming

The Grace CPU Superchip and Grace Hopper Superchip server design portfolio includes systems available in single baseboards with one-, two- and four-way configurations available across four workload-specific designs that can be customized by server manufacturers according to customer needs:

- NVIDIA HGX Grace Hopper systems for AI training, inference and HPC are available with the Grace Hopper Superchip and NVIDIA BlueField®-3 DPU.

- NVIDIA HGX Grace systems for HPC and supercomputing feature the CPU-only design with Grace CPU Superchip and BlueField-3.

- NVIDIA OVX systems for digital twins and collaboration workloads feature the Grace CPU Superchip, BlueField-3 and NVIDIA GPUs.

- NVIDIA CGX systems for cloud graphics and gaming feature the Grace CPU Superchip, BlueField-3 and NVIDIA A16 GPUs.

NVIDIA is extending its NVIDIA-Certified Systems™ program to servers using the NVIDIA Grace CPU Superchip and Grace Hopper Superchip, in addition to x86 CPUs. The first certifications of OEM servers are expected soon after partner systems ship.

Supported Software

The Grace server portfolio is optimized for NVIDIA’s rich computing software stacks, including NVIDIA HPC, NVIDIA AI, Omniverse™ and NVIDIA RTX™.

To learn more about NVIDIA Grace, watch the Computex keynote on Tuesday, May 24, at 11 a.m. Taiwan time.
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, impact, performance, specifications, and availability of our products and technologies, including the NVIDIA Grace CPU Superchip, the Grace Hopper Superchip, and the Grace server portfolio; Taiwan’s leading computer makers releasing the first wave of systems powered by the NVIDIA Grace CPU Superchip and Grace Hopper Superchip; the emergence of a new type of data center; new systems bringing the power of AI to new markets and industries globally; and the expected timing of the first certifications of OEM servers using the NVIDIA Grace CPU Superchip and Grace Hopper Superchip are forward-looking 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 forward-looking statements to reflect future events or circumstances.

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