Acceleration, AI and the Metaverse at GTC
Article

The NVIDIA GTC 2022 AI Developer conference has wrapped up and, by all accounts, was another successful event.

This year, the theme of GTC was The Accelerated Computing Conference for the Era of AI and the Metaverse. This title is telling and indicates the broadening of focus for GTC and for acceleration in general, indicating progress being made in three areas:

- Accelerated Computing
- Artificial Intelligence
- The metaverse

We're excited to see the progress NVIDIA and our partners are making in these areas and were delighted to share advances we at Lenovo are making there as well. If you didn't have the opportunity to visit us virtually at this year's GTC, here's some of what we shared, as well as much of the buzz at the conference.

Advances in Acceleration – Unleashing the full potential of Hopper

Firstly, we were excited to see NVIDIA announcing that the NVIDIA H100 Tensor Core GPU is in full production. We're eager to provide our customers with access to this exciting technology and look to begin rolling out the first wave of products and services based on the groundbreaking NVIDIA Hopper architecture in October. Unveiled in April, the H100 incorporates 80 billion transistors and benefits from a range of technology breakthroughs. Among them are the powerful new Transformer Engine and an NVIDIA NVLink interconnect to accelerate the largest AI models, like advanced recommender systems and large language models, and drive innovations in such fields as conversational AI and drug discovery.

We recognize the importance of these ground-breaking innovations, to the extent that we don't simply support this new architecture, we're fully unleashing its potential for our customers. To that end, we've been partnering with NVIDIA to extend our Neptune direct-cooling technology to support the H100. This means that customers purchasing our AI and HPC-class servers can do so with component-level water cooling, applied directly to these new GPUs, as well as CPUs and other system components that typically generate significant heat. By ensuring these new accelerators run cool and stable, even with sustained rates of extreme utilization, we're helping our customers make the most of their AI and HPC infrastructure.

AI Innovators – Accelerating the adoption of Artificial Intelligence

We are excited to announce the new Lenovo AI Innovators program and to welcome more than 30 artificial intelligence Independent Software Vendors (ISVs) across various applications and services, representing more than $1 billion in venture capital investment. The program reinforces Lenovo's commitment to AI solutions using our global partner ecosystem of ISVs, distributors, and technology partners.

Lenovo AI engineers conceived this program to address the fact that customers need help on their AI Journey. Determining the right mix of hardware and software is often difficult to implement quickly and reliably. Recognizing these obstacles was the catalyst to making AI more straightforward and accessible for our customers.

Designed as a one-stop shop for enterprise AI, Lenovo's partner ecosystem offers unique and diverse technology providers, ISVs, industry-focused solutions, hardware, and more, ensuring innovators can quickly access and deploy scalable solutions using validated providers that best suit their business needs.

Advances in the Metaverse – OVX moves forward!

Through collaboration with NVIDIA, Lenovo is eager to make deploying the metaverse easier. Lenovo has joined forces with NVIDIA to spearhead the deployment of this new category of technology, being the first vendor to announce a certified solution in June of 2022 with our Lenovo EveryScale OVX Solution for NVIDIA Omniverse. In partnering with NVIDIA, we are bringing our joint customers innovative solutions and infrastructures to support their Intelligent Transformations with smarter technology for all. Now, we're supporting the L40 GPU's third-generation RT Cores and fourth-generation Tensor Cores will deliver powerful capabilities to Omniverse workloads running on OVX, including accelerated ray-traced and path-traced rendering of materials, physically accurate simulations, and photorealistic 3D synthetic data generation. The L40 will also be available in Lenovo Scalable Infrastructure.

Through solution-level interoperability testing Lenovo can warrant a fully end-to-end supported environment based on proven best practices while still tailoring it exactly to the customer's needs. That means that the infrastructure is not just supported on a component break and fix or "box"-level, but with a holistic perspective including software, firmware and even firmware-settings.

We're excited about these innovations, and already looking forward to the next GTC!

Related product families

Product families related to this document are the following:

- Artificial Intelligence

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