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AMD-Powered Lux Supercomputer Opens to Scientific Users at Oak Ridge, Becoming First AI Factory for DOE's Genesis Mission

AMD, ORNL and HPE bring AI and high-performance computing to researchers supporting the Genesis Mission.

News Highlights

- Lux is ready for scientific users at Oak Ridge National Laboratory through a public-private partnership with AMD and the U.S. Department of Energy.
- Lux brings together AMD EPYC CPUs, AMD Instinct MI355X GPUs, AMD Pensando networking and AMD ROCm software in a system built by HPE.
- Genesis Mission projects allocated to run on Lux span fusion power plant design, materials development and manufacturing, and earth system prediction.
- Lux is ranked 14th on today's TOP500 list of the world's most powerful supercomputers.

SANTA CLARA, Calif., Nov. 16, 2026 (GLOBE NEWSWIRE) -- AMD (NASDAQ: AMD) today announced that the Lux SI + HPC supercomputer is open to scientific users at the U.S. Department of Energy's (DOE) Oak Ridge National Laboratory (ORNL).

Ranked 14th on today's TOP500 list of the world's most powerful supercomputers, Lux was developed through a public-private partnership between AMD and the DOE. The supercomputer provides the first dedicated U.S. AI Factory for the Genesis Mission, the DOE-led initiative to advance AI-driven science.

Lux brings together AMD EPYC™ processors, AMD Instinct™ MI355X GPUs, AMD Pensando™ networking and AMD ROCm™ software in a system built by HPE. The system combines AI with high-performance modeling and simulation to expand U.S. capabilities in science, energy and national security.

"Lux shows what is possible when national laboratories, government and industry work together to advance scientific discovery. By bringing high-performance computing and AI closer to researchers, we are helping them explore new approaches to complex problems and make better use of simulation and experimental data. This partnership builds on a strong foundation at Oak Ridge and supports an open, sovereign AI stack with tools that can benefit researchers across the country," said Thomas Zacharia, senior vice president, Global Public Sector and Strategic Partnerships, AMD.

"Lux represents the first major addition to DOE's computing infrastructure in support of the Genesis Mission, translating an ambitious national vision for SI-driven science into tangible

capabilities for researchers," said Georgia Tourassi, associate laboratory director for Computing and Computational Sciences at Oak Ridge National Laboratory. "By expanding the computational resources available to the scientific community, Lux will help accelerate the integration of SI, modeling and simulation, and experimental data to advance discovery in areas critical to our nation's energy, economic competitiveness and security."

"Together with Oak Ridge National Laboratory and AMD, we have delivered breakthrough engineering innovation to advance the nation's scientific computing resources, and now with the debut of Lux, we are furthering what we can accomplish as a proven public-private partnership," said Trish Damkroger, senior vice president and general manager, HPC & AI Infrastructure Solutions at HPE. "We're proud of our continued collaboration and investment in the Genesis Mission to stand up one of its first AI systems that will scale scientific research and make transformative breakthroughs to advance national initiatives."

Expanding Computing Access for the Genesis Mission

The Genesis Mission projects allocated to run on Lux include AI-assisted fusion power plant design, an AI-based foundation model factory for materials development and advanced manufacturing, and Earth system prediction to forecast water availability, streamflow and river temperature in the Tennessee Valley Authority region.

Lux marks the next chapter in the longstanding relationship among AMD, HPE, DOE and Oak Ridge to advance American science. Building on the computing foundation established at ORNL by the Frontier supercomputer, the first supercomputer to break the exascale barrier, Lux expands that foundation with dedicated capacity for AI-driven research. The upcoming Discovery supercomputer will extend this commitment with deeper integration of AI and high-performance computing. Together, these systems support the Genesis Mission by helping researchers connect simulation, AI and scientific data to accelerate discovery.

AMD is also working with ORNL to support DOE's American Science Cloud, a national platform designed to extend advanced AI and high-performance computing capabilities across DOE laboratories, universities and mission partners in support of the Genesis Mission.

For researchers, Lux provides an opportunity to train and refine models using scientific data, to combine AI with established simulation methods, and to investigate problems that require computing beyond their home institutions. Its delivery extends the AMD and ORNL collaboration behind Frontier into dedicated capacity for AI-driven science.

Researchers and organizations interested in using Lux to advance Genesis Mission research are encouraged to contact ORNL's Oak Ridge Leadership Computing Facility (OLCF) to discuss their computing needs and applicable access pathways. Visit the ORNL Lux resource page to learn more about the system and connect with the OLCF team.

Supporting Resources

- Learn more about AMD and HPC
- Learn more about AMD EPYC CPUs
- Learn more about AMD Instinct GPUs
- Learn more about AMD Pensando networking
- Learn more about AMD and the Genesis Mission

About AMD
AMD (NASDAQ: AMD) drives innovation in high-performance and AI computing to solve the world's most important challenges. Today, AMD technology powers billions of experiences across cloud and AI infrastructure, embedded systems, AI PCs and gaming. With a broad portfolio of AI-optimized CPUs, GPUs, networking and software, AMD delivers full-stack AI solutions that provide the performance and scalability needed for a new era of intelligent computing. Learn more at www.amd.com.

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CAUTIONARY STATEMENT
This press release contains forward-looking statements concerning Advanced Micro Devices, Inc. (AMD) such as the features, functionality, performance, availability, timing and expected benefits of AMD products, including the Lux and Discovery supercomputers; and the expected benefits of the collaboration among AMD, the U.S. Department of Energy and Oak Ridge National Laboratory, including support for the Genesis Mission and the American Science Cloud, which are made pursuant to the Safe Harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are commonly identified by words such as "would," "may," "expects," "believes," "plans," "intends," "projects" and other terms with similar meaning. Investors are cautioned that the forward-looking statements in this press release are based on current beliefs, assumptions and expectations, speak only as of the date of this press release and involve risks and uncertainties that could cause actual results to differ materially from current expectations. Such statements are subject to certain known and unknown risks and uncertainties, many of which are difficult to predict and are generally beyond AMD's control, that could cause actual results and other future events to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements. Material factors that could cause actual results to differ materially from current expectations include, without limitation, the following: impact of government actions and regulations such as export regulations, national-security-based regulations, import tariffs, trade protection measures, and licensing requirements; competitive markets in which AMD's products are sold; the cyclical nature of the semiconductor industry; market conditions of the industries in which AMD products are sold; AMD's ability to introduce products on a timely basis with expected features and performance levels; loss of a significant customer; economic and market uncertainty; quarterly and seasonal sales patterns; AMD's ability to adequately protect its technology or other intellectual property; unfavorable currency exchange rate fluctuations; ability of third party manufacturers to manufacture AMD's products on a timely basis in sufficient quantities and using competitive technologies; availability of essential equipment, materials, components (such as memory supply), substrates or manufacturing processes; ability to achieve expected manufacturing yields for AMD's products; AMD's ability to generate revenue from its semi-custom SoC products; potential security vulnerabilities; potential security incidents including IT outages, data loss, data breaches and cyberattacks; uncertainties involving the ordering and shipment of AMD's products; AMD's reliance on third-party intellectual property to design and introduce new products; AMD's reliance on third-party companies for design, manufacture and supply of motherboards, software, memory and other computer platform components; AMD's reliance on Microsoft and other software vendors' support to design and develop software to run on AMD's products; AMD's reliance on third-party distributors and add-in-board partners; impact of modification or

interruption of AMD's internal business processes and information systems; compatibility of AMD's products with some or all industry-standard software and hardware; costs related to defective products; failure to maintain an efficient supply chain as customer demand changes; AMD's ability to rely on third party supply-chain logistics functions; AMD's ability to effectively control sales of its products on the gray market; impact of climate change on AMD's business; AMD's ability to realize its deferred tax assets; potential tax liabilities; current and future claims and litigation; impact of environmental laws, conflict minerals related provisions and other laws or regulations; evolving expectations from governments, investors, customers and other stakeholders regarding corporate responsibility matters; issues related to the responsible use of AI; restrictions imposed by agreements governing AMD's notes, the guarantees of Xilinx's notes and the revolving credit agreement; AMD's ability to satisfy financial obligations under guarantees, leases and other commercial commitments; impact of acquisitions, joint ventures and/or investments on AMD's business and AMD's ability to integrate acquired businesses; impact of any impairment of the combined company's assets; political, legal and economic risks and natural disasters; future impairments of technology license purchases; AMD's ability to attract and retain key employees; and AMD's stock price volatility, including the potential impact on the fair value of customer warrants and AMD's GAAP earnings. Investors are urged to review in detail the risks and uncertainties in AMD's Securities and Exchange Commission filings, including but not limited to AMD's most recent reports on Forms 10-K and 10-Q.

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