

# Three of the World's Top Five Supercomputers Powered by NVIDIA Tesla GPUs

## GPU Supercomputers Make Their Mark in Supercomputer World Rankings

NEW ORLEANS, LA -- SC10 -- The November 2010 list of the "Top500" fastest supercomputers in the world was released today on <u>www.top500.org</u> and it revealed that NVIDIA® Tesla<sup>TM</sup> GPUs are now powering three of the top five systems.

Tesla GPUs were featured in the number one, three and four slots with the recently announced Tianhe-1A system taking the top spot with a performance record of 2.507 petaflops. The five highest-ranked systems were as follows (GPU-enabled systems in green):

| Rank |   | Name        | Location | Li |
|------|---|-------------|----------|----|
|      | 1 | Tianhe-1A   | China    |    |
|      | 2 | Jaguar      | USA      |    |
|      | 3 | Nebulae     | China    |    |
|      | 4 | Tsubame 2.0 | Japan    |    |
|      | 5 | Hopper      | USA      |    |
|      |   |             |          |    |

The top three GPU supercomputers deliver more performance than the rest of the Top 10 systems combined. The most notable new entry to the Top500 is Tsubame 2.0, the new supercomputer from Tokyo Institute of Technology. The system delivers petaflop-class performance while remaining extremely efficient, consuming just 1.340 megawatts, dramatically less power than any other system on the top five.

"Tsubame 2.0 is an impressive achievement, balancing performance and power to deliver the most energy efficient petaflop-class supercomputer ever built," said Bill Dally, chief scientist at NVIDIA. "The path to exascale computing will be forged by groundbreaking systems like Tsubame 2.0."

GPUs have quickly become the enabling technology behind the world's top supercomputers. They contain hundreds of parallel processor cores capable of dividing up large computational workloads and processing them simultaneously, significantly increasing system performance. Heterogeneous systems, built with GPUs and CPUs, require less space and consume less power, making supercomputing more affordable and more accessible than ever before.

Dally is the Plenary speaker at this week's SC'10 supercomputing conference in New Orleans and will present on Wednesday, Nov. 17 on the subject of "GPU <u>Computing: To Exascale and Beyond</u>." For more information on NVIDIA Tesla high performance GPU computing products, go <u>here</u>.

## About NVIDIA

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NVIDIA (NASDAQ: NVDA) awakened the world to the power of computer graphics when it invented the GPU in 1999. Since then, it has consistently set new standards in visual computing with breathtaking, interactive graphics available on devices ranging from tablets and portable media players to notebooks and workstations. NVIDIA's expertise in programmable GPUs has led to breakthroughs in parallel processing which make supercomputing inexpensive and widely accessible. The company holds more than 1,600 U.S. patents, including ones covering designs and insights which are essential to modern computing. For more information, see <a href="http://www.nvidia.com">www.nvidia.com</a>.

Certain statements in this press release including, but not limited to, statements as to: the benefits and impact of NVIDIA Tesla GPUs; and the impact of the company's patents on modern computing; 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: our reliance on third parties to manufacture, assemble, package and test our products; global economic conditions; development of faster or more efficient technology; the impact of technological development and competition; 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 reports NVIDIA files with the Securities and Exchange Commission, or SEC, including its Form 10-Q for the fiscal period ended August 1, 2010. 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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### About NVIDIA

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