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WORLD'S FASTEST CLUSTER SUPERCOMPUTER POWERED BY FORCE10 TERASCALE E-SERIES SWITCH/ROUTERS

SAN JOSE, Calif., November 17, 2008 – Force10 Networks®, the pioneer in building and securing reliable networks, today announced that its TeraScale E-Series® family of switch/routers is powering the world's first petaflop supercomputer and world's fastest cluster supercomputer as listed by Top500.org. The "Roadrunner" supercomputer at Los Alamos National Laboratory (LANL) in New Mexico also ranks as the third "greenest" worldwide, based on its efficient footprint, cooling, and power usage. With the ability to move up to 1 billion packets over each of its 1.6875 Tbps non-blocking switch fabrics, the 15 Force10 E1200 switch/routers played a pivotal role in the IBM-based system reaching 1.026 petaflop per second, becoming the first supercomputer ever to reach this milestone.

"The Force10 E-Series switch/routers have efficiently and reliably provided the extremely high performance and reliability needed to support the thousands of I/O operations of storage in our clustered environment," said Dr. Andy White, Deputy Associate Laboratory Director for Theory, Simulation and Computation, Los Alamos National Laboratory. "Architecting and deploying a new scale of supercomputer is a tremendous accomplishment and one of the pleasant surprises was the system's stability as it scaled up in size. Force10 architecture plays a pivotal role in distributing the incredible amount of compute power harnessed by this machine that will further the country's national security initiatives and aid in new scientific discoveries."

Unmatched line-rate density and scalability on the E-Series switch/routers enables the devices to provide network services for Roadrunner's 1.5 Petabyte cluster that includes more than 10,000 CPUs. To accommodate the computing cluster's rapidly growing mix of smaller transactions and enormous files, the E1200 scales up to 1,260 Gigabit Ethernet (GbE) and 224 10 GbE ports per chassis with access control lists (ACLs) on all ports. LANL is leveraging the computing power

and the mission-critical data for researching a broad range of initiatives ranging from alternate energy sources to weapons systems.

“The Force10 solution allows us to do storage at high bandwidth rates without network down time or data corruption,” says Dr. White. “The cluster depends on storage and we depend on Force10 for maximum up time and high throughput to our global parallel files system. With a cluster as large as Roadrunner, it’s essential to supply it with data and be able to do large checkpoints.”

Due to the mission-critical nature of research conducted at LANL, 100 percent uptime performance is an essential requirement. The E1200 architecture and Force10 operating system (FTOS) work together to ensure robust functionality and answer the most demanding supercomputing requirements. All of the major device components are hot-swappable as well as 1+1 redundant route processor modules and 9:1 redundant switch fabric modules (SFMs).

“The Force10 network switch/routers are architected specifically to handle the rigors seen in supercomputing environments,” says Sachi Sambandan, vice president of engineering, Force10 Networks. “In particular, the TeraScale E-Series delivers the reliable performance, scalable density, and uncompromising resiliency that Roadrunner users at Los Alamos need to leverage the unique benefit of having the fastest supercomputer in the world.”

In addition to its ranking as the world’s fastest supercomputer, Roadrunner is ranked as the world’s third most energy efficient supercomputer as ranked by Green500.org. Roadrunner’s ranking reinforces the fact that energy efficiency is as important as raw performance for modern supercomputers and that energy efficiency and performance can coexist. According to the most recent ranking from the Top500.org, Force10 Networks switch/routers are integral to more than 30 percent of the top 40 most powerful supercomputers in the world.

About Force10 Networks

Force10 Networks is a pioneer in building and securing reliable, high performance networks. With its no-compromise approach to networking and advances in high density Gigabit and 10 Gigabit Ethernet switching, routing and security, Force10 delivers the innovative technologies that allow customers to transform their networks into strategic assets at the lowest total cost of ownership. For additional information, please visit www.force10networks.com.

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