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FOR IMMEDIATE RELEASE

Ciena 100G Innovations ‘Light Up’ Supercomputing 2011

Powerful coherent optical networking solutions improve collaboration in research & education and show real-world benefits of 100G and beyond

LINTHICUM, Md. – November 10, 2011– [Ciena](#)[®] Corporation (NASDAQ: CIEN), the network specialist, today announced details of its advanced optical networking demonstrations at the 24th annual [SC Conference 2011](#) (SC11), the international conference on high-performance computing, networking storage and analysis, taking place in Seattle, November 12-18. Ciena will showcase its industry-leading coherent optical transport and OTN switching innovations in demonstrations that show how high-speed, high-capacity networks can have a direct and meaningful impact on the way scientific research is conducted worldwide. In addition, for the fourth year in a row, Ciena will provide 100G optical infrastructure for [SCiNet](#), the high-performance network built to deliver high-bandwidth connectivity to SC11 conference attendees to enable their demonstrations.

Ciena SC11 demonstrations:

Ciena’s demonstrations involve close collaboration with several of the world’s leading research institutions, including:

- **Internet2 and ESnet** (*Internet2 Booth #1327 and ESnet Booth #512*): Ciena’s [coherent 100G optical solutions](#) will support several separate demonstrations of 100G networking capabilities in groundbreaking scenarios created by Internet2 and ESnet. The demonstrations will showcase the speed and robustness of [Internet2](#) and the Department of Energy’s Energy Sciences Network’s ([ESnet](#)) newly deployed 100G networks, created to support modern science research. Ciena [recently](#) teamed up with Internet2 and ESnet to complete the world’s first transcontinental deployment of 100G coherent technology. Built on Ciena’s [6500 Packet-Optical Platform](#), the new 8.8 Terabit per second network, equipped with 100G optical backbone connections, operates between New York, Washington D.C., Cleveland, Chicago, Kansas City, Denver, Salt Lake City, Atlanta and Sunnyvale, California; and now Seattle.
- **NASA/iCAIR** (*NASA Booth #615 and LAC/iCAIR Booth # 2615*): In collaboration with [NASA](#) and the International Center for Advanced Internet Research at Northwestern University ([iCAIR](#)), Ciena is participating in a demonstration of low-cost, disk-to-disk data transfer and massive-scale traffic switching for [petascale](#) science and supercomputing over a high-performance transport network. Ciena will provide spectrally-efficient 100G wavelength connectivity and Layer 2 OTN switching between the NASA booth and the LAC/iCAIR booth on the show floor. NASA will originate traffic from the [Goddard Space Flight Center](#) in Maryland, and local data streams in Chicago where traffic

and local streams will switch through Ciena's [5410](#) Reconfigurable Switching System at [StarLight International/National Communications Exchange's](#) new StarWave multi-100G facility.

- **BCNET, CANARIE, Caltech, University of Victoria** (*Booth #3445*): In collaboration with British Columbia's advanced network and shared services organization for higher education ([BCNET](#)), and Canada's Advanced Research and Innovation Network ([CANARIE](#)), Ciena's [coherent 100G optical solutions](#) will be leveraged to show how high-speed, high-capacity networks can improve research velocity and scientific discovery. Spanning nearly 212 kilometers from the [University of Victoria Computing Centre](#) (UVIC) located in Victoria, British Columbia, to the Washington State Convention Center in Seattle; demonstrators will use the 100G network to transfer high-energy physics data between UVIC and the [Caltech](#) booth (#1223). To illustrate the power of such a network, consider that the typical full-length movie is approximately 10 gigabits, and this network can transfer 10 movies per second. According to [Wikipedia](#), the US Library of Congress held 235 terabytes of data in April 2011; this network would be able to transfer the entire contents in five hours. In addition, one petabyte of data from [particle physics](#) experiments such as [ATLAS](#) and [CMS](#) could be transferred in just one day.
- **University of Amsterdam (UvA)** (*Ciena Booth #635 and Dutch Research Consortium Booth #0642*): The "Playing with Light" demonstration will be presented by the [University of Amsterdam](#) via multiple 40G connections between the [Dutch Research Consortium](#) and Ciena. UvA will manipulate transmission content at different light frequencies and colors, as well as the use of dynamically reconfigurable photonic devices to provide high-capacity services to media applications. This will show the ability to optimize optical and Ethernet connections depending on different types of traffic, content or nature of the application; like selecting a wavelength based optimum service path – similar to tuning into a radio station.

Ciena SC11 Speaking Engagements:

- Rodney Wilson, Senior Director of External Research, will present on "Advances in High-Performance Research Networks" on November 15 at 2:30 p.m. in WSCC 611/612.
- Kim Roberts, Senior Director of Optical Signal Processing, will speak on a panel titled, "Terabit Networks: Opportunities and Challenges in Extreme-Scale Science and Massive Data Movement" on November 17 at 12:15 pm in TCC LL3.
- Bob Kimball, CTO of Ciena Government Solutions, will speak in a panel titled "Data Centers Have Gone Green (Or Haven't They?) When Will Networks Follow?" on November 13 at 3:30 p.m. in the Grand Hyatt Leonesa III.

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About Ciena

Ciena is the network specialist. We collaborate with customers worldwide to unlock the strategic potential of their networks and fundamentally change the way they compete. With focused innovation, Ciena brings together the reliability and capacity of optical networking with the flexibility and economics of Ethernet, unified by a software suite that delivers the industry's leading network automation. We routinely post recent news, financial results and other important announcements and information about Ciena on our website. For more information, visit www.ciena.com.

Note to Ciena Investors

Forward-looking statements. This press release contains certain forward-looking statements based on current expectations, forecasts and assumptions that involve risks and uncertainties. These statements are based on information available to the Company as of the date hereof; and Ciena's actual results could differ materially from those stated or implied, due to risks and uncertainties associated with its business, which include the risk factors disclosed in its Report on Form 10-Q, which Ciena filed with the Securities and Exchange Commission on September 8, 2011. Forward-looking statements include statements regarding Ciena's expectations, beliefs, intentions or strategies regarding the future and can be identified by forward-looking words such as "anticipate," "believe," "could," "estimate," "expect," "intend," "may," "should," "will," and "would" or similar words. Ciena assumes no obligation to update the information included in this press release, whether as a result of new information, future events or otherwise.