



Optical Networks Daily

7 November 2006

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Foreword

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JDSU's mixed first quarter

The JDSU [first quarter results](#) reported last week were really quite a mixed bag and somewhat difficult to decipher given the company's unusual mix of products, chequered history, large cash pile, one-for-eight stock conversion and ongoing acquisition of assets of smaller competitors such as Metconnex and Optovia.

Generally the company was helped by a persistent improvement in sales growth across the whole of the optical communications sector over the last year, also indicated at a lower level by [Avanex](#), and by associated margins. Though even after a substantial recovery, the JDSU shares still stand at well under 50% of the year's adjusted high point.

The company's poor showing on immediate growth, mainly due to a fall off in the substantial T&M business, put down to a hiatus in spending plans by large communications companies as a result of major consolidations, was compensated by a bullish revenue forecast for the current quarter, well above the market consensus.

Kevin Kennedy confirmed that JDSU's ex-Agility plant in Santa Barbara had outgrown capacity, and that the company planned to triple its tunable transponder capacity by the end of 2007.

Kennedy's celebration of JDSU's first non-GAAP profit for five years (\$6.8 million or 3 cents EPS) was certainly a marker point that the market could get its teeth into. There was a secondary surge in the U.S. shares on Monday November 6, of 1.9% or 32 cents to \$16.90.

This was marginally helped, perhaps, by the company's announcement that it had received an unsolicited (and pointless) mini-tender offer from TRC Capital to buy up to 3 million shares, or 1.4%, of the company's outstanding common stock, for \$14 per share. This represents a 17% discount to JDSU's Nasdaq closing price of \$16.90 per share on Monday, and even 3.6% below the company's closing price of \$14.53 per share on October 31, when the offer was made. For sure TRC Capital's offer was a classic example of very poor timing!

As far as can be seen this retrospectively bizarre offer was merely a specific example of a standard tactic adopted by TRC for opportunistic arbitrage based on gambling that the shares would go the other way, though given the nature of JDSU, one cannot imagine this would actually have worked.

Compared to [Avanex](#) (62 cents to \$3.50 over 52 weeks) and [Bookham](#) (\$2.29 to \$10.36), JDSU shares have traded within a narrower range for fairly obvious reasons, including a much broader product range, and the pretty certain assumption that, given \$1.2 billion in the bank, it is not likely to go under anytime soon.

One not widely observed attraction of the shares is JDSU's relatively good geographical distribution of sales, with a lowish 57% of business originating from the Americas, making this a rather more genuinely international business than most U.S.-based companies.

2) Hitachi AMN1220 GST product for home/small business becomes first GPON ONT certified by MoCA

November 7th [Hitachi Telecom](#) of Atlanta, Georgia, a subsidiary of Hitachi America,

- a. Supplying telecommunications equipment for the North American market, including ITU-compliant voice, video and data systems for FTTP applications, and ultra high-speed optical networking equipment such as DWDM and SONET systems.
- b. Whose AMN1220 family of ITU-T G.984-compliant GPON products for residential, business and institutional FTTP applications, includes the GST, a single family/small business ONT, providing a Gigabit Ethernet line rate interface to the subscriber.

Announced that the [Multimedia over Coax Alliance](#) (MoCA), an open, industry driven initiative developing and promoting specifications for the transport of digital video, entertainment and information content over in-home coaxial cable, has issued its first GPON ONT certification to the Hitachi AMN1220 GST

The AMN1220 provides data rates of 2.488 Gbit/s downstream and 1.244 Gbit/s upstream. Legacy TDM services such as T1 are handled in their native formats using GPON Encapsulation Mode (GEM) framing.

The MoCA standard defines a "MoCA LAN" between MoCA-enabled devices within a residence, supporting bi-directional communications among the devices and providing a logical backbone for whole home entertainment networks of multiple wired and wireless products.



See also [video presentations](#) from Hitachi Telecom on the **Moonlight Channel**.

3) Ibsen Photonics offers pulse compression gratings for 1064 nm and 800 nm femtosecond laser wavelength regions

November 6th [Ibsen Photonics](#) of Copenhagen, Denmark, a supplier of holographic phase masks and transmission diffraction gratings for a wide range of telecom, sensing and laser markets,

- a. Whose products are specifically used in optical spectrometer modules for FBG sensor interrogation systems and telecom DWDM networks.
- b. Currently pursuing partnerships in other industries to expand its high-resolution spectrometer platform based on pure fused silica holographic diffraction gratings.

Announced that following the release in 2005 of a grating designed for pulse compression in the 1064 nm region, it is now introducing an additional 800 nm grating.

Kristian Buchwald, Grating Product Manager at Ibsen Photonics, was quoted as saying, "Our fused silica grating technology is perfectly suited to high-power femtosecond applications, where laser manufacturers have been hitting the energy ceiling of grating types available up till now".

While president and CEO Torben Jacobsen remarked, "The rapid success we have seen with our new pulse compression grating line is based on two factors - firstly, we have over the past fifteen years developed unique, patented fused silica processing technology which we can now rapidly apply to new fields, and secondly the demise of the reflection grating paradigm is picking up speed as optical designers see the benefits of transmission grating-based designs".

In September 2005, Ibsen Photonics introduced polarisation independent telecom gratings based on holographic stepper technology and built from 100% dielectric material-based diffraction gratings, designed to offer thermal and environmental reliability, combined with high diffraction efficiency and low PDL. These gratings were described as well-suited for telecom ROADM / WSS applications on account of their low angle sensitivity and convenient module design through the transmission principle.

In February 2006, the company released a new USB interfaced version of its I-MON Interrogation Monitor built on its high-resolution spectrometer technology, utilising fused silica transmission gratings, which enables the I-MON to offer fast measurement frequency and compact size as well as low power consumption.

4) BridgePort Networks raises Series C \$13m to scale-up deployment of network convergence gateway

November 6th BridgePort Networks of Chicago, Illinois, a supplier of mobile to voice over IP roaming network convergence using a single phone number,

- a. Founded in 2002 with \$3 million in seed financing, followed by \$10 million Series A funding in January 2004 and \$25 million in Series B funding in September 2004, in a round led by TD Capital Ventures.
- b. Whose core product, the NomadicONE Network Convergence Gateway (NCG), uses roaming technology to extend single identity phone number services over multiple access networks including cable, DSL and WiFi.

Has announced a new Series C investment of \$13 million from existing investors TD Capital Ventures, Polaris Venture Partners, General Catalyst Partners and BCE Capital, bringing total capital raised by the company to \$51 million.

BridgePort said the funds will be used for working capital to support the many channel partners and integrators currently working on market trials of the company's NomadicONE core network convergence software with service providers, as well as to broaden applications for its MobileSTICK USB-SIM solution, designed to transform PCs into voice, multimedia messaging and presence terminals for mobile operator services, leveraging standards-based VoIP technology.

Mike Mulica, president and CEO of Bridgeport Networks, commented:

- "BridgePort Networks has largely completed its product and solution development phases and is mid-way through channel development and enablement, with several major relationships already in place".
- "As the FMC market transitions to commercial deployment, this new funding positions the company well for the scale-up phase that will occur during 2007 and 2008".
- "In particular, we are increasing our investment in our MobileSTICK solution, which is experiencing strong demand from Tier 1 mobile and integrated operators, and can quickly scale without dependencies on new converged phones, new standards or IMS deployment".

5) Univ of Pittsburgh Medical Centre selects Alcatel for IP network migration project under \$300m contract

November 6th [Alcatel](#) has announced a \$300 million, multi-year agreement with the University of Pittsburgh Medical Centre (UPMC) to lead an IP network transformation project starting in early 2007.

Under the agreement, Alcatel will upgrade UPMC's wired and wireless data infrastructure, enterprise telephony system, and contact centre platforms and applications to a new converged single voice, data and video network IP infrastructure.

As part of the agreement, Alcatel will also establish a joint venture to develop advanced communications technologies and applications focused on the health care industry, in which Alcatel and UPMC plan to each invest \$25 million.

Initially focused on the area of public safety, the joint venture has a goal of creating systems, processes and technologies that will ensure first responders, key decision makers and health care providers are able to securely share and access critical information and applications during a crisis.

The University of Pittsburgh Medical Centre, with annual revenue of nearly \$6 billion, consists of 19 tertiary, speciality and community hospitals, 400 outpatient sites and doctors' offices, retirement and long-term care facilities, an insurance plan and international ventures. Since April 2005, the UPMC has signed joint development agreements with IBM, Cerner, Alcatel and dbMotion, valued at more than \$175 million.

6) QPC Lasers terminates license agreement with Finisar following payment of \$6m termination fee

November 6th QPC Lasers, parent of Quintessence Photonics of Los Angeles, California, a supplier of high brightness, high power semiconductor lasers for the industrial, defence and medical markets,

- a. Initially focused on the fibre optic telecommunications market but having partially refocused on applications in the \$1 billion per year materials processing market, plus printing, medical and defence/homeland security laser industries.

- b. Whose Surface Emitting Array technology permits fabrication of complete high power arrays on a single chip, novel processes for fabricating diodes that operate at 300% of the power of conventional chips without burning out, and laser diode designs that can produce ten times the brightness of conventional diode lasers.
- c. Which in 2001 received \$12 million investment from [Finisar](#), currently owner of 6.75 million shares of QPC stock, and in September 2003 announced an agreement whereby Finisar obtained a nonexclusive license to certain of QPC's technology and intellectual property.

Announced that QPC has now terminated its license agreement with Finisar following the signing of a License Termination Agreement dated September 18 2006, in which QPC agreed to pay Finisar \$6 million as a termination fee pursuant to the terms of a secured promissory note.

QPC quoted CFO George Lintz as saying:

- "We are pleased to terminate this license agreement and thereby secure the exclusive rights to our intellectual property as our business grows".
- "Finisar was an early investor in QPC, and we are happy that they remain a major stockholder".

7) Voltaire unveils 10 Gigabit Ethernet switching capabilities for Grid Director multi-service switches

November 6th [Voltaire](#) of Billerica, Massachusetts, a supplier of grid interconnect hardware and software solutions based on InfiniBand technology,

- a. Supplying multi-service switches, including specifically the highly scalable Voltaire Grid Director ISR 9288, and offering integrated InfiniBand, Gigabit Ethernet and Fibre Channel connectivity used to build clusters and grids ranging from tens to thousands of nodes.
- b. Having established OEM agreements with server vendors such as IBM, HP, SGI, and strategic sales relationships with Sun, NEC and Hitachi.
- c. Whose products are deployed in many large grids and supercomputers in the world, including NASA Ames, Sandia National Laboratories, Lawrence Livermore National Laboratories, Los Alamos National Laboratories, CERN, and India's Institute of Genomics and Integrative Biology.

Announced that as from the second quarter of 2007 it will add 10 Gigabit Ethernet switching capabilities to its Grid Director multi-service switches enabling customers to take advantage of the high bandwidth, low latency characteristics of InfiniBand while at the same time seamlessly integrating into existing LAN/WAN network infrastructures with no performance penalties.

Voltaire's 10 Gigabit Ethernet switching services are based on a new 24-port line board designed for the 96 and 288-port Grid Director switches, which

1. At its core, has a new custom switching/routing ASIC chip with InfiniBand and 10 Gigabit Ethernet ports, also designed to enable transparent Layer 2, 3, and 4+ switching, virtualisation and TCP/UDP offload.
2. Is able to switch InfiniBand and Ethernet traffic at a rate of 10 million packets per second per port, and offer latencies of less than 1 microsecond.

3. Supports 22 x 4 x 10 Gbit/s or 20 Gbit/s InfiniBand ports and two x 10 Gigabit Ethernet ports, thus enabling a single Grid Director 288 port switch to connect more than 240 servers to a high-speed InfiniBand backbone, with up to 24 aggregated 10 Gigabit Ethernet ports connected to the network and multiple Fibre Channel ports connected to external storage.
4. Enables the switch to be dynamically provisioned to provide multiple virtual LAN and SAN networks spanning different interfaces, a solution otherwise requiring a complex configuration of more than ten large 10 Gigabit Ethernet director switches as well as additional Fibre Channel director switches.
5. Uses industry standard protocols, does not require custom software or drivers and integrates seamlessly into existing environments.

Voltaire SVP of Marketing, Patrick Gay, stated:

- "Voltaire Grid Director switches offer customers a 'no compromise' data centre".
- "Rather than debate about which technology to use, Voltaire has taken the approach of developing solutions which maximise application performance regardless of the physical connection".
- "IT can now use InfiniBand - the best backplane technology on the market - within the server rack and Ethernet for LAN connectivity, without sacrificing any performance and using a uniform set of management tools and protocols".
- "This frees IT to focus on meeting the performance, scalability and reliability requirements of their applications, rather than worrying about the underlying technology".

Yaron Haviv, Voltaire CTO, added, "Routing InfiniBand and Ethernet and providing Layer 2-4 functionality is inherently complex and typically slow and expensive if done with CPUs".

While Glenn Newell, IT Manager at Synopsys, a global specialist in semiconductor design software, was quoted as saying:

- "Voltaire's new multi-service switch enables us to incorporate 10 Gigabit Ethernet in our InfiniBand cluster fabric".
- "This allows us to move data to and from multiple sources and locations outside of our fabric at high speeds".

8) Acacia Research acquires rights to patent on aligned wafer bonding technology

November 6th Acacia Research of Newport Beach, California, a 14-year old company engaged in the development, acquisition and licensing of patented technologies, comprising two operating groups:

- a. Acacia Technologies, controlling 53 patent portfolios covering technologies used in a wide variety of industries.
- b. CombiMatrix, developing a platform to produce customisable active biochips for applications such as DNA synthesis/diagnostics and immunochemical detection.

Announced that Acacia Patent Acquisition, a wholly owned subsidiary of Acacia Technologies, has acquired rights to a patent relating to aligned wafer bonding technology.

This patent relates to the precision alignment and bonding of micromechanical, electrical and optical structures and can be used for the bonding of surface features in the fabrication of MEMs and semiconductor devices, including high end microprocessors.

9) Tzero Technologies claims wide adoption of wireless video technology by STB and gateway manufacturers

November 6th Tzero Technologies of Sunnyvale, a fabless supplier of wireless video semiconductor technology,

- a. Founded in 2003 by current CTO Rajeev Krishnamoorthy, with early funding from August Capital and US Venture Partners.
- b. Whose Tzero TZ 7000 chipset is claimed to be the only wireless solution that meets the link reliability and packet error rate requirements defined by global consumer equipment manufacturers Panasonic, Philips, Samsung, Sharp and Sony.

Announced that a number of set-top box, residential gateway and network DVR manufacturers, including Amedia, Complete Media Systems, Entone Technologies, Magnum Semiconductor, Siemens Home and Office Communication Devices and UTStarcom, have now demonstrated and introduced advanced video solutions using technology from Tzero.

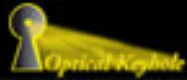
In addition to working with the major set-top box and gateway providers, Tzero said it is also enabling a number of major original design manufacturers to support ultra wideband solutions, including:

1. AboCom: a provider of mobile computing products and high-speed Internet access solutions targeted at the SOHO marketplace.
2. Arcadyan Technology: a provider of wireless products including ADSL/IAD solutions, 802.11 access points/gateways, wireless home A/V platforms and wireless modules.
3. Asustek Computer: described as the world's largest producer of computer mother boards and a leading manufacturer of wireless products including cell phones, Wi-Fi routers and access points.

The Tzero chipset is based on standards from the WiMedia Alliance and is guaranteed to coexist with other WiMedia-compliant devices.

Mike Gullett, president and CEO of Tzero Technologies, was quoted as saying:

- "Tzero is the only company now delivering a high-bandwidth solution that can easily handle multiple video streams and deliver them throughout a home".
- "The addition of Tzero's UWB technology to our customers' offerings enables them to provide an exceptional value in the marketplace, and service providers adopting these solutions will be able to quickly differentiate themselves, gain consumer mindshare, and increase market-share".



More Beans

(Links against the company name illustrate the entire history of the company; those against the "more" legend bring up the individual story).

IP Infusion demos L-2 /-3 VPNs, VPLS, IP Multicast applications over resilient hybrid optical transport at Fall 2006 Isocore testing [more](#)

Israeli carrier Bezeq deploys [RAD Data](#) CPE devices to support up to 155 Mbit/s Ethernet over SDH service [more](#)

Eschelon Telecom closes acquisition of Arizona-based Mountain Telecommunications for \$40m in cash [more](#)

[AT&T](#) expands availability of Homezone integrated Internet, TV + home networking offering across broadband footprint [more](#)

[SeaChange](#) unveils MediaLibrary 1G with clustered NAS technology offering 0.5 Petabyte storage capacity [more](#)

[EXFO](#) introduces compact FTB-8510G PacketBlazer 10 GBE module for QoS testing in LANs / WANs [more](#)

[Allied Telesis](#) introduces AT-9400Ts series enterprise switch delivering 10 Gbit/s bandwidth to wiring closet [more](#)

[BigBand](#) enhances BMR platform with addressable advertising capability [more](#)

Beijing City Government Information Office signs MoU with [EMC](#) for cooperation on Digital Beijing project [more](#)

[Tekelec](#) reports Q3 sales of \$155.2m, up 43% yr/yr, net loss of \$87.5m, \$1.30 LPS, to make further cuts at SSG unit [more](#)

[Orckit](#) reports Q3 revenue of \$15.0m, vs \$14.7m in Q2, net income of \$1.0m or 6c per share, sees FY'06 sales of \$63m [more](#)

Excel terminates proposed merger agreement with [Coherent](#) following German Federal Cartel Office prohibition order [more](#)

[Performance Technologies](#) appoints Patrick Rice, previously with Tekelec and Nortel, as VP Global Signalling Sales / Marketing [more](#)

[Lumera](#) appoints Kimberly Trapp, formerly with Agere and Bell Labs and Lucent, to board [more](#)

Delaware PSC awards [Verizon](#) cable franchises covering counties of Kent, New Castle and Sussex [more](#)

[Verizon](#) launches FiOS TV in Greenburgh, Westchester County, additional hamlets in Town of Clarkstown in New York [more](#)

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