

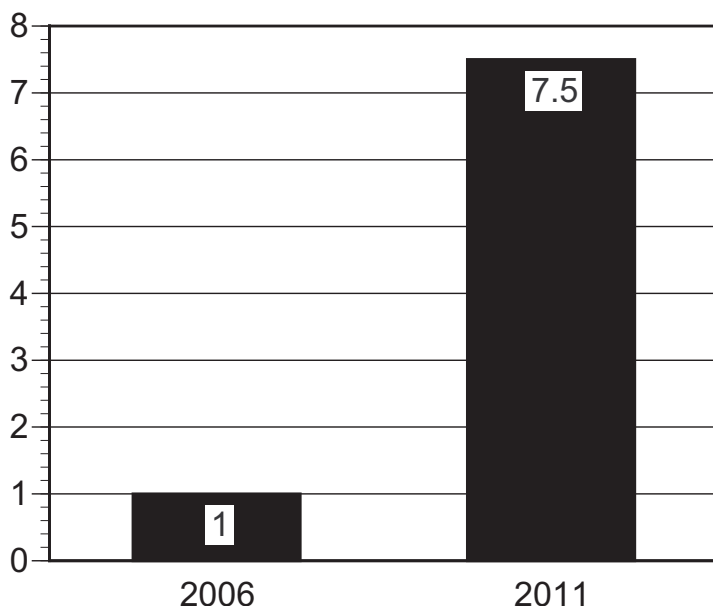
# Home Networks

A Monthly Newsletter

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**NAS-on-chip market  
(millions of units)**



Source: ABI Research

## PARTNERSHIPS

### Conexant and Conax team to secure set-top box design-win and improve HDTV broadcast security

Conexant Systems Inc., a provider of semiconductor solutions for broadband communications and the digital home,

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announced that Humax, an international manufacturer of digital set-top boxes (STBs), has selected the company's CX2417X/CX2418X high-definition television (HDTV) STB system solution for a new receiver that will be deployed by ComHem, Sweden's largest triple-play voice, video, and data operator. Conexant collaborated with Conax AS, a supplier of conditional access solutions for digital TV, to secure the design-win and deliver an integrated solution that improves the security of HDTV pay-television programming.

"The combination of our advanced HDTV decoders and Conax's proven encryption technology improves the security of pay-TV services, which is important for operators such as ComHem because it has a direct impact on their bottom line," said Lewis Brewster, executive vice president and general manager of Conexant's Broadband Media Processing business. "As a result of our collaboration with Conax, Humax can provide ComHem with a customized set-top box that will help them safeguard their programming and maximize their revenue opportunity."

"We have worked with Conexant on multiple programs, and they have consistently demonstrated their willingness to deliver differentiated products that meet the requirements of our diverse customer base," said Dr. JuHa Park, vice president and general manager of Humax' Set-top Box division. "This flexibility, coupled with their superior set-top box system solutions, is why we chose to work with them on this important project."

"The increased availability of HDTV programming has elevated the need for better safety measures to protect this valuable content," said Geir Bjørndal, chief operating officer and vice president of sales and marketing for Conax.

"We are pleased that our collaboration with Conexant will provide operators and set-top box developers with a solution for this important requirement."

Conexant's CX2417X/CX2418X family features a complete suite of hardware and interfaces to process, format, and display high-definition digital content with full support of high-bandwidth digital content protection (HDCP). The multiformat decoders support MPEG-1, MPEG-2/H.264 video, Dolby Digital, Dolby Digital Plus, MPEG-4 advanced audio coding (AAC), and aacPlus audio. The product family is compatible with industry broadcast standards including DVB and ATSC.

Conexant offers a comprehensive suite of digital STB components and system solutions for worldwide satellite, terrestrial, cable, and IP entertainment broadcasting networks.

The company's product offering includes silicon tuners, demodulators, MPEG audio and video decoders, and dialup and DOCSIS modems.

Complete reference designs that help manufacturers reduce cost and speed time-to-market are also available, bundled with a range of operating systems, middleware, drivers, and development tools.

### **WiLife announces channel reseller program**

WiLife Inc. announced the launch of a new reseller program for IT value-added resellers (VARs), security dealers, and custom installers. The WiLife Reseller Program extends plug-and-play video security sales opportunities to a variety of channel partners.

"We are building a network of resellers to bring WiLife Video Security to homeowners and small businesses," said Kerry Brock, vice president of sales and channels at WiLife. "Our professional-grade video security system is an affordable alternative to more costly and complex systems and offers big business security at a small business price."

This program offers a tremendous opportunity for solution providers to sell and install full-featured digital video security with far less complexity and cost than traditional network cameras and components."

WiLife's Reseller Program launches with an online signup process and access to a dedicated inside sales team. Authorized resellers will have access to a multimedia product technology tour; links to downloadable product images, product guides, sales and marketing tutorials; and a host of collateral material to provide dealer training and support. Various participation levels and program discount structures offer flexibility for any size reseller. D&H, a national distributor, is partnering with WiLife to enable easy distribution of product to WiLife's expanding reseller channel.

WiLife's innovative LukWerks technology, joined with WiLife's new Reseller Program, offer various opportunities to different segments of the channel. IT VARs have the opportunity to easily move into digital video security sales. Custom installers and security system resellers are touting the ability to offer video security with no wires to pull or complex networks to configure.

Roger Resley, president of Elite Technology Company, said, "The ease of use of LukWerks technology has been a big plus for my customers. The robust dealer support provided by the new WiLife Reseller Program gives me everything my sales reps need to sell WiLife's products — video tours, product collateral materials, and Web-based product training."

The LukWerks video security system is Windows based. Once software is loaded on the PC, the LukWerks cameras are plugged into electrical outlets and the PC software creates a video security command center in minutes. HomePlug powerline technology enables video recording to a PC's hard drive over existing electrical wires.

Motion-based recording, customizable security alerts, and powerful search tools easily manage recorded video for up to six cameras. Secure, free remote viewing from any Web browser makes this the most robust system at a remarkably affordable price.

Interested resellers should call 844.585.9375 or visit <http://www.wilife.com/partners>.

## BUSINESS

### **PMC-Sierra and ZTE demonstrate interoperability between ZTE GPON OLT and PMC-Sierra GPON ONT reference designs**

PMC-Sierra Inc. and ZTE Corporation, a Chinese manufacturer and provider of communications equipment and solutions, demonstrated interoperability between the ZTE GPON OLT and PMC-Sierra's GPON ONT reference design during the ITU Telecom World 2006 conference in Hong Kong. This was the first live demonstration of PMC-Sierra's reference design for ITU-T GPON FTTH ONT.

PMC-Sierra's GigaPASS-based ONT delivers both line-rate processing and line-rate throughput for all packet sizes, a feature that ensures a high level of quality of service (QoS) that is essential for successful delivery of triple-play services (video, voice, and data) in the access network.

"ZTE is a leading manufacturer of communications equipment in China, with a growing global presence. We are pleased to be collaborating with them and to demonstrate our GPON ONT reference design working with the ZTE OLT," said Victor Vaisleib, general manager of the FTTH Business Unit at PMC-Sierra.

"PMC-Sierra is the market leader in the PON market in Asia, so they understand the need for interoperability in developing high volume markets," said Mr. Xu Ming, general manager of ZTE's Network Business Unit. "Our joint GPON testing exceeded our expectations. Our GPON product line is targeted to meet the needs of global markets."

PMC-Sierra's ONT is based on the Gbps GigaPASS FTTH architecture deployed in high volume in the EPON FTTH product line. The GigaPASS device architecture combines a wire-speed data path with an OEM-programmable

control processor with software OS and middleware software stacks. The GigaPASS architecture supports QoS-aware line-rate processing for all packet sizes, which is essential for guaranteeing services in all network traffic scenarios and making the network future-proof for future applications.

“Since its announcement last year, the industry has been awaiting to see PMC-Sierra’s GPON silicon,” said Jag Bolaria, senior analyst for The Linley Group. “Meeting specifications is one thing, but interoperability in the field will be an important factor in determining if PMC-Sierra can repeat in the GPON market the success they have enjoyed in EPON markets. Obviously, ZTE is an excellent partner given their wide range of communications equipment and their broad-based presence in many global markets.”

### **CEA-CompTIA DHTI+ certification beta exam now available**

The Computing Technology Industry Association (CompTIA), a provider of vendor-neutral certifications for information technology (IT) workers around the world, and the Consumer Electronics Association announced the availability of a beta version of the new CEA-CompTIA Digital Home Technology Integrator+ certification.

CEA-CompTIA DHTI+ is a credential that validates a technician’s knowledge and skills to configure, integrate, maintain, troubleshoot, and comprehend the basic design concepts of electronic and digital home systems.

Target candidates for this certification are expected to come from a variety of industries and job roles related to home technology, including technology integrators; security system technicians; cable, satellite, telecommunications, and A-V installers; electricians; and network administrators.

The new CEA-CompTIA DHTI+ beta exam (HT1-201) is intended for individuals with 18-24 months’ experience in some area of home integration technology. Individuals who pass the

beta exam will be certified as CEA-CompTIA DHTI+ professionals.

The CEA-CompTIA DHTI+ beta exam is available worldwide in English. The exam consists of 115 multiple-choice questions. Individuals will have two hours to complete the test. Candidates who take the beta exam will be notified by mail of their test results approximately six to eight weeks after the beta exam period closes. The beta exam is free and available for a limited time only.

The beta test is used to ensure that the final certification exam is fair and reliable. Candidates who take the beta exam are helping CompTIA to establish the appropriate requirements for the certification. After a targeted number of candidates have taken the exam, the results are analyzed and a passing exam score is established. The permanent CEA-CompTIA DHTI+ certification exam is then launched. Test takers who pass the beta exam will be certified as CEA-CompTIA DHTI+ technicians.

The CEA-CompTIA DHTI+ beta exam is available through all Thomson Prometric and Pearson VUE testing centers around the world. To register for an exam, visit [www.comptia.org-registerforexam](http://www.comptia.org-registerforexam). Additional information on CEA-CompTIA DHTI+ is available at [http://certification.comptia.org/hti/dhti\\_faq.aspx](http://certification.comptia.org/hti/dhti_faq.aspx).

## **CONTRACTS**

### **Village Homes selects Lagotek home automation system**

After an extensive test period, Village Homes, a home builder headquartered in Englewood, Colorado, has selected the Lagotek Home Intelligence Platform (HIP) as an upgrade feature for both buyers of Village Homes’ some 600 new homes per year and as an enhancement for past home buyers. Since Lagotek is based upon a wireless system design, new or existing homes can be installed with ease. This agreement is a first step towards



Lagotek's goal of making home automation a standard feature of every new or remodeled home. Lagotek's Dual Wireless approach and focus on the ease of installation and ease of use brings home automation within the reach of all homeowners. Village Homes buyers will be introduced to home automation and Lagotek HIP at the Distinctive Choices Studio, which includes the TECHTouch Showroom. Village Homes TECHTouch department provides its buyers with the latest in home technology, entertainment, communication, and security.

"Lagotek Home Intelligence Platform is an ideal choice for our buyers. It offers a rich set of features combined with ease of use, and ease of installation. Wireless solutions offered by Lagotek provide the lowest total cost of ownership for any system we have tested," said Josh Stewart, TECHTouch sales manager.

Lagotek was founded with the vision of bringing automation to the mass market. The Village Homes relationship represents a major step toward making this vision a reality.

Unlike many previous home automation solutions that have been primarily hardware based and hard wired, Lagotek is offering dual wireless technology where functionality is provided through the use of software running on an open hardware platform.

Current software applications (Fusion Suite v 2.0) for the HIP platform from Lagotek and its partners include the following:

- Climate control with multiple zones of heating and air conditioning
- Lighting
- Distributed audio
- Video Surveillance
- Irrigation

Many more applications, such as security, LED lighting, shade and curtain controls, intercom, and many others, will be available from Lagotek and its partners in the near future.

"We are excited to offer Lagotek Home Intelligence Platform to our customers," says

Todd Baker, vice president of sales for Village Homes. "We see automation as an integral part of new homes going forward, that provide convenience, comfort and efficiency that previously was available only on the high-end. Lagotek's simple and intuitive interface helps people fully realize all the potential of their home systems. We are looking forward to being an industry leader in making home automation an integral part of every home."

In today's homes, people are forced to accept the wall clutter created by multiple keypads that are located in various parts of the home. Each has its own system for use, which is not very intuitive. Lagotek's approach is to provide a touch-screen interface from wall panels (HIP100) that are installed in the most lived-in areas of the home. From these panels, the owner can control every system in the house with a simple button click. These panels serve as one interface between people and the technologies.

Dual-wireless, dual-processor panels offer a very powerful and reliable solution. Lagotek sees the future in integration of nonproprietary technologies controlled through one user interface.

The CEO of Lagotek, Eugene Luskin, noted, "We are delighted to work with Village Homes and its TECHTouch department. They have the vision, technical knowledge and dedication to quality that make them a great partner. We are looking forward to many happy customers who will live in Village homes and use Lagotek systems every day."

Lagotek approaches home automation from the customer's perspective. The HIP100 touch-screen panels, from which the users control the functionality of their homes, were designed to be elegant but unobtrusive, easily blending with interior decor when not in use. Due to the wireless nature of the product, there is no need to run new wires, since the panels fit into a standard 2-gang electrical box replacing the "20th century" dimmers and switches.

The Lagotek Fusion Suite Version 2.0 represents Lagotek's initial collection of software applications developed for the Home Intelligence Platform. Taking a page from the Microsoft history of success, Lagotek provides an open platform that allows third-party independent software vendors (ISVs) to develop new applications and provide support for many different types of home systems and appliances. These applications will run on the Lagotek Home Intelligence Platform in synergy with Lagotek's own applications.

All these applications will benefit from Lagotek's "secret sauce" technologies, known as Scenes and Modes. These technologies allow the user to set all the systems in the house to the desired state by pressing just one button (Scene) or switch from state-to-state or from Scene-to-Scene based on time or any other event. The objective is to make the system fully automated and minimize the need for human interaction.

For example, pressing one "Good Night" Scene button triggers multiple events such as changing the temperature in the house, arming of the security zones, turning off the indoor lights and turning them on outdoors, etc. The "Good Morning" Scene button turns the lights on, raises the temperature to the desired level, turns on the coffee maker and does many other things the homeowner would normally engage independently. "Vacation Scene" invokes routines for lighting and music so the home will appear to be occupied while the homeowner enjoys a vacation.

Lagotek HIP100 panels run Wi-Fi and Z-Wave. Z-Wave is a low-cost, two-way, mesh network communications technology that enables everyday devices to be controlled and monitored wirelessly and securely from anywhere in the world. Z-Wave is a fully developed, proven, affordable, easy-to-use, and interoperable technology that is available in more than 150 wireless home control and automation products today.

## NEW PRODUCTS

### **Arkados to unveil turnkey reference designs at CES**

Arkados will unveil numerous reference designs at the Consumer Electronics Show (CES) in Las Vegas, January 8-11, 2007. The company's turnkey reference designs for a variety of high-demand home audio and video applications, such as solutions to enable whole-house audio and IPTV, have been gaining increased attention with global consumer electronics players over the past year.

Jim Reeber, director of marketing for Arkados, said, "Our unique applications orientation and our implementation of HomePlug standards have great appeal, especially as the industry drives harder and harder towards cost-effective and timely productization to meet consumer demands for digital home connectivity." Two Arkados applications were chosen to be displayed at the HomePlug Powerline Alliance exhibit at CES.

Mr. Logvinov, Arkados president and CEO, will be a panelist on "The State of Home Networking," held on Tuesday, January 9 at 1:30 p.m. in the Las Vegas Convention Center (LVCC) South Hall, Room S106-107. He will discuss the powerline networking industry and interoperability as a key factor for ubiquity and user acceptance.

Powerline communications is at its best when it is built into products rather than added on with an adapter, and Arkados solutions are designed to make built-in connectivity easier.

Additional information on CES 2007 can be found at <http://www.cesweb.org>.

### **Ubicom brings media streaming to JVC's Sophisti DD-3 and DD-8 home entertainment systems**

Ubicom Inc., a provider of communications processor and software solutions, has been selected by JVC, the audiovisual equipment provider, to add media

streaming capability to its Sophisti DD-3 and DD-8 advanced living entertainment systems. Ubicom's StreamEngine wireless processor will enable videos and music to be streamed from a LAN-connected PC to the Sophisti DD-3 or DD-8 media center. StreamEngine technology prioritizes time-sensitive traffic over a home network, enabling it to meet the high-bandwidth demands required for uninterrupted real-time video playback.

The Sophisti DD-3 and DD-8 media systems are DLNA-certified devices and allow users to play audio, video, and photo files from their PCs on a flat-screen TV with surround-sound speakers, creating a complete at-home entertainment system. Ubicom's StreamEngine chipset provides low-latency connectivity, allowing the Sophisti DD-3 or DD-8 instant access to digital media stored on other devices across the home network. Even when multiple applications operate simultaneously on the network, StreamEngine technology regulates the traffic flow to minimize the delays which cause degraded images, poor audio, or pauses in playback. Digital media content gains priority over other network traffic, such as file downloads and emails, allowing users to watch videos on the Sophisti DD-3 or DD-8 without frustrating interruptions.

"As video becomes more accessible online, we have seen a spike in demand for Internet video compatibility in home theaters," said Bart Somsen, corporate communications manager for JVC Europe Ltd. "In order to stay at the forefront of the home entertainment system market, we have moved to incorporate wireless video streaming technology into our advanced living entertainment systems with the Sophisti DD-3 and DD-8. Ubicom's StreamEngine technology gives our product a competitive edge with its ability to ensure seamless delivery of video content from the Web to the screen."

"JVC continues to improve upon its class-leading audiovisual equipment," said Keith

Morris, vice president of marketing at Ubicom. "Ubicom's StreamEngine technology enhances the Sophisti DD-3 and DD-8 by providing embedded quality of service (QoS) management.

Customers can relax and enjoy movies on the best audiovisual equipment without the annoyance of broken or stalled video streaming."

The Sophisti DD-3 and DD-8 series are now widely available through authorized JVC dealers across Europe.

### **PMC-Sierra introduces family of carrier-grade multiservice residential gateway reference platforms for triple-play services**

PMC-Sierra Inc. announced a suite of multiservice residential gateway reference platforms for the industry's broadest range of advanced broadband access protocols.

The MSP7100-based platforms are available today in a range of WAN interface configurations, including ADSL2+, VDSL2, Ethernet, and EPON, to enable robust delivery of carrier-grade services into the digital home.

These platforms, based on PMC-Sierra's VoIP-enabled Multi-Service Processor family, allow OEMs and ODMs to rapidly develop high-performance residential gateways optimized for enhanced triple-play service delivery.

Carriers and cable operators are focused on delivering new high-bandwidth voice, video, media, and data services. Enabling these services is driving billions of dollars of investment into solving the "last mile bottleneck" by accelerating wide-scale deployments of ADSL2+, VDSL2, and fiber-to-the-home/curb (FTTH/FTTC) infrastructure.

Using a common system-on-chip (SoC) architecture and open-source software model, PMC-Sierra offers the following VoIP-enabled multiservice residential gateway reference designs and evaluation platforms:

- PM2326-KIT ADSL2+ residential gateway based on the MSP7120

multiservice processor and PM4381 ADSL2+ AFE

- PM2327-KIT VDSL2 residential gateway based on the MSP7130 multiservice processor and PM4380 VDSL2 AFE
- PM2325-KIT Fast Ethernet residential gateway based on the MSP7130 multiservice processor
- PM2328-KIT EPON residential gateway based on the MSP7130 multiservice processor and PMC-Sierra's PAS6201 EPON chipset

"Carriers must support multiple broadband access technologies when faced with a wide range of physical plant conditions in their networks," said Dino Bekis, vice president of marketing and applications for PMC-Sierra's Communication Products Division.

"Coupled with demand for new high-bandwidth services, they must deliver a full suite of robust DSL, PON and Ethernet solutions. With these reference platforms, PMC-Sierra has done much of the difficult design work to accelerate time-to-market."

Based on a powerful hardware multi-threaded MIPS32 system processor, the MSP7100 solutions deliver the following:

- High performance, including wire-rate VDSL2 and processing headroom to support RG-hosted service expansion such as gateway-attached storage, remote-access servers, and fixed-mobile convergence
- Robust QoS protocols necessary to support delivery of carrier-grade IP services into a multi-service home network, including delivery of video and voice with zero-packet loss and minimum packet jitter
- Full-rate 802.11n wireless LAN bridging with no system performance impact
- Integrated high-performance IPSec security engine
- Dynamic multiprocessing core technology, which allows a gateway to

simultaneously perform multiple critical functions with deterministic performance

- An open-standard programming model using standard MIPS tool chains and C-language programming, enabling developers to leverage a wide range of ecosystem resources

The MSP7100 gateway platform is supported by the MSP7100 Linux Residential Gateway Software Development Kit (SDK). Based on the Linux 2.6 OS, this SDK enables customers to quickly design high-performance, multimedia, and multiservice, VoIP-enabled broadband residential gateways.

PMC-Sierra's multiservice residential gateway reference platforms are available now. The MSP7100 reference designs also provide a two-channel VoIP terminal adaptor, including two FXS ports and one FXO port, a USB2.0 interface, up to three mini-PCI slots, and support for multiple home-area-networking interfaces as well as 802.11g and 802.11n. Product briefs and a whitepaper, "Next-Generation Residential Gateways," may be found on PMC-Sierra's Web site at [www.pmc-sierra.com/digital-home](http://www.pmc-sierra.com/digital-home). A comprehensive support package, including programmers' guides, is available upon request.

### **SiConnect's first powerline transceiver enhances performance of in-home powerline networks**

SiConnect has launched its first digital powerline transceiver chip. Providing a 16-level managed quality of service (QoS), whole-home coverage, and compliance with global EMC regulations, the \$5 PLT050 aims to enhance the performance of a wide range of applications making use of existing electrical wiring to carry audio, video, voice, and data around the home.

Designed to support ADSL speeds, the PLT050 achieves a real payload throughput of 14Mbps, equaling the performance of rival solutions claiming headline bandwidths of 85Mbps. The SiConnect chip will handle standard-definition TV in triple-play applications, home theatre, and uncompressed audio



distribution, as well as VoIP and PC networking. Microcontroller based, the PLT050 embeds SiConnect's proprietary POEM technology to deliver digital modem, baseband signal, and control processing functions.

Used in conjunction with a bidirectional analog/digital interface IC (AD9865), a simple coupler circuit, an industry-standard PHY (Ethernet, USB, or serial), and a 512-kbit EEPROM for system firmware and configuration upload, the chip requires minimal external components to create a complete powerline transceiver solution. It is expected that SiConnect's first chip will prove an attractive proposition for Ethernet adaptor manufacturers.

Unlike alternative powerline transceiver solutions, the POEM technology-based PLT050 makes use of a Synchronous Multiple Access/Contention Resolution (SMA/CR) protocol and a 16-service level QoS management technique to guarantee fair and prioritized distribution of competing audio, video, VoIP, and IP data streams.

Whole-home coverage is also assured by the PLT050, irrespective of electrical wiring topology. Using a peer-to-peer meshed network topology, POEM technology enables each node to act as an intelligent repeater to create ad hoc networks. Since networks self-configure, user installation is very much "plug and play," and POEM's in-built encryption capability ensures that privacy and security are maintained.

Importantly, the PLT050 will enable designers throughout the world to produce products that can comply with global EMC regulations, including FCC Part 15, CISPR 22, and its European derivative EN55022 — a mandatory requirement for the marketing of consumer electronic products in Europe.

The PLT050 offers three configurable GPIO pins for application-specific control or display purposes.

It requires core and I/O voltages of 1.8V and 3.3V, respectively, is provided in a space-efficient 80-pin LQFP package and is specified

for commercial temperature range operation (0-70 degrees C).

The chip is priced at \$5 in 10,000-piece quantities.

## MERGERS AND ACQUISITIONS

### **NDS announces acquisition of Jungo Ltd., a provider of software for residential gateways**

NDS Group Plc, a provider of technology solutions for digital pay-TV, announced the acquisition of 100 percent of the share capital of Jungo Ltd, a provider of residential gateway software, for an aggregate consideration of up to \$107.5 million in cash.

This includes \$17 million of earn-out payment contingent on the attainment of certain fiscal targets for the 12-month period following completion. Completion is expected to occur during the first calendar quarter of 2007.

Jungo's numerous innovations include OpenRG, a complete and integrated middleware software platform for deployment on network devices in the digital home and small office, including triple-play residential gateways, home/SOHO routers, wireless access points, cable/DSL routers, and voice gateways. Jungo's customers are leading residential gateway manufacturers like Actiontec, Cisco, Pirelli, Sagem, Siemens, and Westell, who sell their residential gateways to major broadband pay-TV operators such as France Telecom, NTT, Qwest, Telecom Italia, Verizon, and others.

Residential gateways have grown in sophistication and are increasingly deployed by telcos as the main service termination point in the customer premises for the delivery of a variety of value-added services including broadband data, IPTV, voice-over-Internet protocol (VoIP) telephony, video telephony, and convergent wireless/wireline telephony.

The residential gateway and the software contained in it act as the interface between the broadband network and the various consumer

electronic devices that are attached in the home network, including IPTV set-top boxes.

The residential gateway plays a key role in controlling the quality and management of the individual services, such as video, data, and telephony. Providing the key underlying software for both the residential gateway and the set-top box will allow NDS to offer a unique solution for an enhanced, optimized, and managed video-over-broadband service. In addition, the collaboration between the two devices in the home network will accelerate the introduction of new and innovative convergent services such as enabling the set-top box to access music, video, and pictures stored on PCs in the home network, archiving of digital content stored on the DVR, and videoconferencing via VoIP.

Jungo is a profitable and fast-growing company. In the nine months ending September 30, 2006, the company's revenues grew by more than 100 percent to US\$11.4 million.

Dr Abe Peled, NDS president and CEO, said, "The acquisition of Jungo positions NDS to better serve the ever-increasing need of pay-TV and telecom network operators to offer reliable video over broadband services. We are extremely excited about joining forces with the Jungo team to achieve our shared vision of securing and enabling content any time anywhere and on any device. We are of course committed to serving all of Jungo's current customers after the transaction closes, as well as helping the Jungo team expand their market penetration worldwide."

Jungo will continue to operate as a separate unit within NDS under the leadership of the current management team. It will focus its activities on the residential gateway software market, while closely collaborating with other NDS business groups to forge stronger relationships with broadband customers and to offer new and innovative end-to-end solutions.

Ofer Vilenski, CEO of Jungo, commented, "This is an exciting time for Broadband. Residential gateways are enabling

television, data services, telephony and a host of new services to be delivered over IP networks. Our association with NDS will allow both companies to deliver to consumers new and innovative applications and services.

We are delighted about joining NDS, and about the confidence our customers will have using our products, now backed by such an accomplished and innovative company. Jungo's success was made possible by our extremely talented employees, whose expertise and teamwork gave us the ability to define and lead this market."

Joel Fisch, director of Intel Capital/Israel Digital Home Investments and a Jungo investor, commented, "Following our initial investment, Intel and Jungo joined forces to bring Linux-based solutions to the embedded gateway market.

Jungo and Intel both continue to derive great value from this long-standing relationship which has served both parties well for the past five years. Intel Capital has supported Jungo in its financing rounds and is pleased to see Jungo become part of NDS, a great company with which Intel works closely."

Tamir Fishman & Co. acted as an exclusive financial advisor to NDS Group in this transaction, and Herzog Fox Neeman as its legal advisor in Israel. Jefferies Broadview acted as an exclusive financial advisor to Jungo, and Ori Rosen & Co. as its legal advisor.

## STANDARDS

### **UPnP Implementers Corp. reaches milestone to make UPnP specifications international standards**

The UPnP Implementers Corporation (UIC) announced the recent submission of the UPnP Device Architecture and 15 UPnP Device Control Protocol (DCP) specifications to the International Organization for Standardization/International Electrotechnical Commission Joint Technical Committee 1 (ISO/IEC JTC1) for

approval as Publicly Available Specifications (PAS).

UPnP technology helps create seamless, simple network-enabled consumer electronic equipment, PCs, and printers.

The UPnP Forum, a non-profit association open to any company or individual, was created in 1999 to provide an ongoing, open process to develop the UPnP architecture and device specifications.

The forum now has more than 800 member companies from the consumer electronics, computing, home automation and security, home appliance, computer networking, and related industries.

The UIC, which is closely associated with the forum, acts as the certification authority that enables member companies that implement UPnP technology to certify devices as compliant with the UPnP specification. Companies also obtain the right to use the UPnP logo.

Previously, the ISO/IEC JTC1 had approved the UIC as a submitter of PAS.

This approval allowed the submission of UPnP specifications directly to the ISO/IEC and initiated the standards approval process. UIC anticipates the process to conclude in mid-2007 with UPnP specifications being recognized as International Standards.

UIC's president, Tom McGee, said, "Becoming an approved PAS submitter and submitting the UPnP specifications represents significant steps forward for UPnP technology.

As an internationally recognized standard, more companies will be interested in certifying devices; and therefore, it will result in increased market adoption."

Alan Messer, chair of the UPnP Forum Steering Committee, said, "With submission of the UPnP Device Architecture and all published DCPs to JTC1, a major milestone to increase adoption worldwide of UPnP technology has been achieved.

This is great news for users and implementers of UPnP technology." UPnP

technology makes home networking simple and affordable so that the connected-home experience becomes a mainstream experience for users and a great opportunity for the industry. UPnP device and service standards have been defined and published for Internet gateways/routers, audio-video media devices, printers, scanners, climate control, lighting, and wireless LAN access points.

The UPnP architecture offers pervasive network connectivity between all types of devices, including network-enabled consumer electronics equipment, intelligent appliances, portable wireless devices, PCs, etc.

The UPnP architecture leverages TCP/IP and other Web technologies to enable seamless integration of these devices into existing network infrastructures.

UPnP technology can be implemented on nearly any operating system and works with essentially any type of physical networking media that supports IP — wired or wireless — providing maximum user and developer choices, which result in higher economic benefits for everyone.

The UPnP Implementers Corporation (UIC) is the non-profit corporation that promotes the adoption of UPnP technology by manufacturers of hardware and software products. The UIC administers the UPnP device certification process and the UPnP mark licensing.

There are now more than 275 UPnP-certified products. UPnP certification creates the foundation for interoperability and provides an easy way for retailers and consumers to recognize products that have been developed and tested to comply with the UPnP device standards. The UPnP certification program is required by the Digital Living Networking Alliance (DLNA) as a prerequisite to its certification program.

For more information about certifying products with the UIC, please visit <http://www.upnp-ic.org>.

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**MARKET INTELLIGENCE****Parks Associates: Market for wireless multimedia networking to exceed 50 million units by 2010**

Industry adoption of next-generation specifications will provide a substantial boost to the market for wireless multimedia networking, prompting growth in excess of 50 million wireless network devices by 2010, according to "The Wireless Multimedia LANs: Requirements and Outlook." This new report from Parks Associates predicts that annual sales and shipments of wireless multimedia-capable devices, including home networking gears, personal computers, and fixed and mobile consumer electronics, will grow from 2.5 million units in 2006 to nearly 52 million units by year-end 2010, due in large part to standardization in the market.

"Multiple factors are driving the move by both manufacturers and service providers in embracing wireless connectivity," said Kurt Scherf, vice president and principal analyst with Parks Associates. "Service providers are looking for greater ownership in developing home networking solutions, operators need to reduce CapEx costs in deploying home networking equipment, new content services are on the rise, and consumers are invariably in favor of eliminating cables. These are all positive signs that the 802.11n and WiMedia solutions — among the many home networking options — will continue to drive growth in new home networking applications."

"The Wireless Multimedia LANs: Requirements and Outlook" is a comprehensive industry report that probes the features and applications of next-generation Wi-Fi 802.11n technology, examines market requirements for wireless multimedia networking, compares and contrasts competing technologies, analyzes industry issues and the competitive landscape, and predicts market size and demand for a variety of wireless multimedia applications,

including home networking equipment, computers, and fixed and mobile entertainment CE devices.

For additional information on "The Wireless Multimedia LANs: Requirements and Outlook," visit <http://www.parksassociates.com> or contact 972-490-1113 or [sales@parksassociates.com](mailto:sales@parksassociates.com).

**ABI Research finds consumers choosing network storage for media management as devices become cheaper and more powerful**

While data backup has long been the traditional reason for an individual to purchase a network drive, more consumers today are looking to network attached storage (NAS) as a way to manage the exploding volume of digital media they are acquiring. From digital photos and video to content purchased online, consumers are looking not only to more traditional storage solutions such as USB hard drives, but to the more evolved NAS solutions that are becoming available at attractive price points.

"There are a number of competing alternatives for centralized storage and management of content," said ABI Research director Michael Wolf. "ABI Research believes game consoles and Media Center PCs will outnumber NAS devices for media management by a large margin, but for those looking for low-cost content storage and management solutions, NAS will continue to grow as a viable option."

Part of the reason for the growing interest in NAS devices is the technology's rapidly declining price points. This decrease in pricing and increase in overall functionality has been driven by the emergence of NAS-on-chip processors from vendors such as Marvell and Agere. These devices are specifically designed to handle tasks for advanced media management. The NAS-on-chip market will grow from under 1 million units shipped in 2006 to over 7.5 million units shipped by 2011.



“Today, home network storage is definitely an advanced consumer market,” concluded Wolf. “However, we are increasingly seeing enthusiasts of such applications as digital photography and home video adopting NAS to manage their content, and we believe it’s only a matter of time before mainstream consumers look to NAS for entertainment media management as well.”

A recent ABI Research study, “Consumer Network Storage Market Analysis” ([http://www.abiresearch.com/products/market\\_research/Consumer\\_Network\\_Storage\\_Market\\_Analysis](http://www.abiresearch.com/products/market_research/Consumer_Network_Storage_Market_Analysis)) examines the consumer market for consumer network attached storage. This report examines the varied form factors and the enabling silicon for the different products in this market. It forms part of the company’s Home Networking Research Service ([http://www.abiresearch.com/products/service/Home\\_Networking\\_Research\\_Service](http://www.abiresearch.com/products/service/Home_Networking_Research_Service)), which also includes other Research Reports, Research Briefs, Market Data, Online Databases, ABI Insights, and analyst inquiry support.

### **The move from PLC to BPL in Australia could lead to a third national broadband platform to the home**

Research and Markets has announced the addition of “2006 Australia Broadband Power Line — Moving into Home Management” to their offering.

Power Line Communications (PLC) has been used since the 1890s to send low-level telecoms signals out to activate or deactivate devices along the electricity grid.

This technology was further developed over the last century and is used, for example, for the off-peak hot water service that most electricity companies offer their customers nowadays.

Broadband Power Line (BPL) started to arrive in the late 1990s. Simultaneously, the

energy companies are also being forced to look for telecoms solutions for their core business and are looking at demand-side management services to better manage their network, offer better services to their customers and handle the gigantic increase in electricity demand throughout the world and at the same time manage security issues and the environmental impact of all of that. The move from PLC to BPL could well lead to a third national broadband platform to the home next to telecoms and digital TV.

For more information, please visit <http://www.researchandmarkets.com/reports/c46989>.

### **Government policy spawning digital cable set top box boom in China, reports In-Stat**

The deployment of Whole System Shift, a government effort to speed up the conversion of urban households from analog to digital cable TV, is driving China’s digital cable set-top box (STB) market, reports In-Stat (<http://www.in-stat.com>). As a result, unit shipments of digital cable STBs are projected to quadruple, from 3 million in 2005 to 12 million in 2010, the high-tech market research firm says.

“Most of the digital STB shipment increases will come from basic set-top boxes,” says Rebecca Tan, In-Stat analyst. “Most cable operators that are now installing Whole System Shift provide only basic services, and networks have not yet begun to install two-way networks. Operators’ ability to provide interactive services is limited in the short term; therefore, operators prefer basic boxes.”

Recent research by In-Stat found the following:

- Following several trials of Whole System Shift, the digital-cable TV subscriber base jumped dramatically from 800,000 to 2.7 million by the end of 2005.
- There will be steady growth in advanced-box shipments, reaching 1.5 million by 2010.

- Total revenue of cable STBs in China is projected to reach US\$586 million by 2010.

The research, "Digital Cable STBs in China" (#IN0603228CCM), covers the Chinese market for cable TV set-top boxes, with insightful analysis on China's cable TV digitization process. It also provides average selling price, unit shipment, and revenue forecasts of digital cable set top boxes in China for 2006-2010. Key domestic set-top box vendors are profiled.

**The set-top box landscape is shifting dramatically as service providers seek ever-greater functionality at lower prices**

Research and Markets has announced the addition of "Set-top Boxes: Analysis and Forecasts" to their offering.

As competition among television service providers increases, the expanded role of the set-top box as a receiver, aggregator, storage device, and sharing platform will grow

considerably. This report looks at the next generation of set-top box platforms, examining use cases from DVRs to home networking media servers. It analyzes the market for set-top box components and solutions, from drives to software, as well as the role of industry and open standards.

"The platform most closely linked to the television remains the critical component to unlocking greater customer loyalty and revenue," said Kurt Scherf, vice president and principal analyst. "The set-top box landscape is shifting dramatically as service providers seek ever-greater functionality at lower price points to defend against encroaching competition."

The Bottom Line is a concise, executive-level summary of the current state of the market, evolutionary path, and the implications for companies doing business in this space.

For more information, please visit <http://www.researchandmarkets.com/reports/c45478>.

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