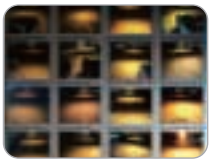
Express

Spring 2011

NEXCOM

3 Smart Ways

to Apply VTC Series in Transportation Market



White Paper
Adding Video Analytics to Analog Surveillance

intel IDF2011 INTEL DEVELOPER FORUM

2011 IDF
Beijing, China

13 Latest Innovative Products
Available in Q2

Dear Partners,

Following the 40% organic growth of 2010, NEXCOM has grown a further 35% in the 1st quarter of 2011. Throughout the next quarter, I predict that NEXCOM's business will continue to grow at a rate comparable with the 1st Quarter of 2011. Furthermore, improvements in global economic conditions should mean that NEXCOM is about to enter a sustained period of business expansion.

Because NEXCOM's revenue is generated by our partners, many of you must also have experienced a significant increase in business activity in the past few months. We all know that business expansion comes from more projects and bigger projects, which in turn is derived from more products and better products. No secrets at all! Yes, NEXCOM made more products and better products available last year, and even more products and even better products will be available in the forthcoming year.

In Q2, we'll launch two new product lines, the NexPOS "Point of Service" series, and the NViS "Intelligent Surveillance" series. Both solutions are exciting new innovations which address the increasing demands of these rapidly expanding markets and aim to leapfrog the products of existing suppliers.

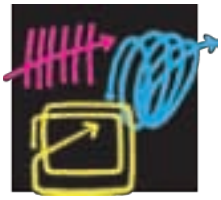
NEXCOM's NViS Intelligent Surveillance series includes the world's first HD CCTV solution of its type. For POS, NEXCOM is also among the leading companies, shipping systems based on the Intel® D525 CPU and DDR3 memory.

Our famous product lines, such as the NISE series, the VTC series, the NDiS series, and the NSA/ DNA series, have all be expanded with the introduction of several new platforms which are based on the high performance Sandy Bridge, and the low power Tunnel Creek architectures. We are now further expanding our product offerings to satisfy both power hungry users, as well as the cost sensitive customers. By providing solutions that satisfy both the top end and the bottom end of the market pyramid, I think we will further boost our business and in turn help our partners win new projects.

To help replicate success stories in every corner of the world, we are preparing an increased number of application stories in conjunction our professional partners. We have won many major projects from major accounts, which are applicable to other countries with the same demands. By sharing these valuable experiences among our partners, we'll help each other to win more major projects. NEXCOM is working on a global distribution network. The scale of business with our senior partners has doubled, even tripled in the past 3 years. Let's build the strong connections between you and NEXCOM, from the executive level down to the operational staff. Guaranteed we'll grow faster and faster through the tight collaborations on all new projects and all new products! And, don't forget that our new factory is ready to take more orders from you, our close partners!

Clement Lin

IN THIS ISSSUE



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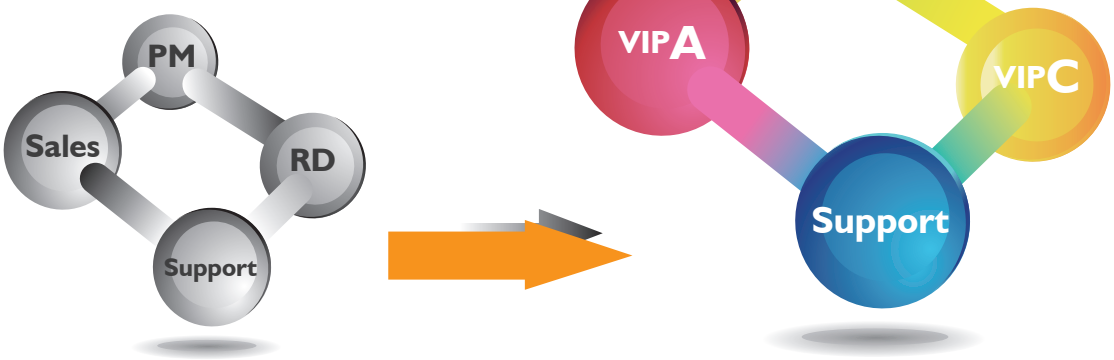
About NEXCOM

NEXCOM offers a world-class range of industrial fanless computers, embedded computers, Panel PC, video analytic systems, POS, digital signage media players, rugged tablet PCs, in-vehicle computers, and network security appliances.

Organization Restructures for Market Focus

To focus on specific vertical markets and to serve targeted customers, NEXCOM's business unit has been reorganized from function centric to application centric. The core concept is to set up product departments (PD) with dedicated product managers, design engineers and sales team. With dedicated resources for selected vertical applications, the business scope is well defined and key customers are clearly targeted.

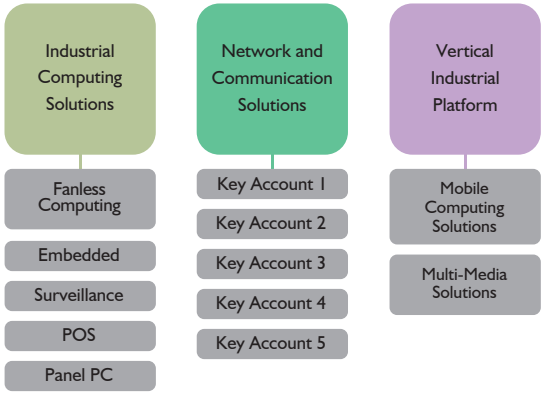
The following diagram shows the concept :



By Function

By Market Segement

With PD centric organization, NEXCOM has identified new opportunities to pursue. In ICS business unit, three new PD have been setup, these include; surveillance, Point of Services (POS), and Panel PC. Together with two existing PD, the NISE fanless computer and embedded, NEXCOM now has five PD in ICS units. For other business units, the same concept applies. The right-hand side figure shows the PD formation.



2011
IDF in Beijing, China

NEXCOM joins in 2011 Intel Developer Forum (IDF) in Beijing, China. IDF is one of the key technology events of the year, where the Intel Corporation and the ecosystem come together to share the latest innovations, inspiring new possibilities. Please visit NEXCOM booth for our latest innovations equipped with Intel® Core™ i5/i7, Intel® Xeon® and Intel® Atom™ E6xx processors in security surveillance, network security platforms, digital signage platforms and in-vehicle computers.

Date: April 12-13, 2011
Exhibit Center: China International Convention Center, Beijing, China
Booth No.: C22

2011
SPS Italia in Parma, Italy

SPS ITALIA trade fair presents the latest innovations in industrial automation market from electrical components to complete systems, including integrated automation solutions. Please visit NEXCOM booth in 2011 SPS Italia, for our latest innovations including fanless computers, Panel PC, embedded computing and in-vehicle computing solutions etc.

Date: May 22-26, 2011
Exhibition Center: Fiere di Parma
Booth No.: Hall 5, Booth L065

Brand-new
NEXCOM Website is Going to Take a Leap

To provide a better information platform to our valued customers, NEXCOM's rebuilt website is going to be launched in late April, 2011. The upcoming rejuvenated NEXCOM.com features friendly share and subscribe tools, demonstration videos, and online publications for product selections or corporate brochures. Please visit us at **www.nexcom.com** to experience the brand-new information platform.

ICES 267

NEX 880

Total Solutions for Embedded Market Segments

Following the recent launch of the 2nd generation Intel® Core™ i7/i5/i3 processors, NEXCOM has developed a number of different product solutions which utilize these superb technologies.

Computer on Module: ICES 267
Industrial Motherboard: NEX 880
Digital Signage Player: NDiS 166
Hybrid NVR: NViS 6200
Network Security Appliance: NSA 5130
Network Appliance: OSA 5130

ICES 267 Computer on Module

As demand increases for larger size screens for various uses, so the demand for streamlined video quality has increased. Combining audio and video functionalities of ICES 267 with Intel® HD Graphics, the capabilities of full HD video quality, graphics intensive and multimedia applications easily satisfy the diverse challenges in this rapid changing market.

In line with market requirements, ICES 267 gives users a multitude of expansion options. ICES 267 COM Express Module featuring 2nd generation Intel® Core™ processor, provides the computing power whilst customized functionalities rely on application-specific carrier boards. Developers can always utilize ICES 267 with scalable I/O design on customized carrier board to develop unique applications and add value.

NEX 880 Industrial Motherboard

Featuring the 2nd generation Intel® Core™ i7/i5/i3 processor, NEX 880 carrier board achieves 20% higher system performance compared to the previous generations of CPU. With such capability, NEX 880 is excellent for applications that require rich multimedia content handling, such as gaming machines.

Users also benefit from brilliant expansion scalability. With availability of PCIe x16, PCIe x4 and PCIe x1 slot, users are able to integrate additional expansion devices such as RAID card, graphic add-on card or HD video capture card for surveillance. NEX 880 featuring SATA 3.0 6Gb/s is able to conquer diverse requirements for different applications, such as HD video surveillance and storage server for mass data.

HIGHLIGHTS
2nd Generation Intel® Core™ Processors

Performance

Built around new 32nm micro architecture, the Intel® Core™ i7/i5/i3 processors have a number of significant benefits over previous Intel® Core™ processor-based platforms. These include, enhanced media/3D performance and reduced power consumption.

NDiS 166

NViS 6200

NDiS 166 Digital Signage Player

NDiS 166 is an advanced digital signage player which exceeds customer's expectation of dual display with full HD video support that assures superb playback ability. With excellent system performance and support for full HD video, NDiS 166 is housed in a compact and fanless chassis which provides users with the flexibility to mount behind the large-size display devices, such as LCD TV.

NDiS 166 incorporates an Intel® QM67 graphics controller, 2nd generation Intel® Core™ processor and two DDR3 memory sockets up to 16GB. This technology enhances overall performance by up to 20% and offers a 30% increase in graphics capability compared to the previous generations of Intel CPU, and thus guarantees excellent computing performance.

NViS 6200 Hybrid NVR

NEXCOM NViS 6200 is a truly hybrid security surveillance system which is capable of incorporating both IP and analog cameras within one system and supporting up to 32 channels of analog and IP cameras with D1 resolution or 32 channels of megapixel IP cameras.

An abundance of expansion options are one of the key points that differentiate NViS 6200 security surveillance from other products. Equipped with PCIex16 slot, users have great scalability to connect to an external VGA card if required. For backing up recorded data, NEXCOM NViS 6200 is uniquely fitted with a 6Gb SATA 3.0 HDD, enabling the user to store mass data in incredibly fast times.

NSA 5130 Network Security Appliance

The NSA 5130 is positioned as a mainstream 1U 19" rack-mount network security platform which is designed for enterprise level applications which require high performance network security and modest bandwidth data capabilities.

The upgraded functions of NSA 5130 include increased computing power, sorting capabilities, compatibility with tested third-party control software and easy operation without constant IT disruptions.

The Intel® Turbo Boost technology provides NSA 5130 with an on-demand boost in the clock speed and saves power from idle core to make the system more power efficiency.

OSA 5130 Network Appliance

Targeting enterprise level applications and telecommunication systems, the OSA 5130, 1U rack-mount network appliance, offers full configuration of best-of-breed module designs with 8 GbE LAN ports and 1+1 redundant power supply.

Utilizing the fast, intelligent and multi-core Intel® Xeon® E3 processor family, the OSA 5130 network appliance is capable of offering mighty computing performance with a multitude of expansions options.

NEXCOM OSA 5130 features 2 PCIe slots, allowing users to insert 2 VoIP cards to meet customer's business need for video calls delivery, text messaging and location-based services and other high-demand services over mobile or VoIP.

Hardware Support

With support for both quad-core and dual-core configurations, these processors improve performance and efficiency of multi-threaded applications. In addition, processors offer unprecedented hardware support for security and management functions.

Applications

When paired with the Intel® Q67 chipset or Intel® B65 chipset, these two platforms provide ideal solutions for embedded market segments such as retail and transaction solutions, digital signage, digital security surveillance, gaming, medical, communications, and industrial automation/control.

Adding Video Analytics to Analog Surveillance

New Intel® Processors Provide Performance Gains for Hybrid IP/Analog Security Solutions

Figure 1. A hybrid NVR enables flexible management, intelligent alerts, and remote viewing for both analog and digital camera streams.

Video surveillance today is in the midst of a paradigm shift. Gone are the days of security staff watching fuzzy images on closed circuit TV (CCTV). In their place, high-resolution Internet protocol (IP) cameras are improving video quality and enabling new applications like video content analytics. This shift is also driving the integration of security and surveillance into broader enterprise IT infrastructures, enabling new cost efficiencies. However, the large installed base of analog cameras presents a critical question: **How can end customers take advantage of digital technology while preserving their investments in analog cameras?**

The solution to this quandary lies in the hybrid network video recorder (NVR), which receives, processes and records video from both analog and digital cameras.

The recent introduction of Intel® 2nd generation Core™ processors provides these devices with significant new advances for accelerating video processing and video content analytics. This article will describe these advancements, as well as how NEXCOM is using these processors in their NEXCOM* NViS 6200 NVR to provide a comprehensive solution for providing video intelligence and advanced management capabilities.

Why Hybrid Surveillance?

Hybrid surveillance systems, with the capability to incorporate both IP and older analog cameras within one system, are experiencing strong adoption in the surveillance market. Such solutions allow end users to:

- Preserve existing investment in analog cameras while adding IP-based performance, intelligence and manageability.
- Digitize analog camera video streams for transmission across the IP network, remote access/viewing, data storage, and video content analysis.
- Provide a cost-effective transition path to a total IP video surveillance system as legacy equipment reaches end of life and is retired.

One great advantage of IP video surveillance is that it provides a way for digital intelligence to replace security staff. Video content analysis (VCA) allows computer algorithms to intelligently monitor real-time video for unusual movements, crowd formation, people counting, license plate reading, left-behind objects, and much more. VCA can also be used to search recorded video for particular events.

To illustrate the advantages of a hybrid NVR, consider its utility for metropolitan police departments. As illustrated in Figure 1, police departments can use hybrid systems to:

- Manage and view both IP camera and digitized analog camera feeds across the city through a Central Management System (CMS).
- Remotely view camera streams through whatever network-enabled device they're using (even a smart phone) for more intelligent and appropriate response to incidents in progress.
- Simultaneously share with emergency response personnel the same video feed simultaneously for better coordination.
- Receive email alerts on potential incidents that have been detected by video content analysis software.
- Have cameras read license plates and report on stolen vehicles or driver identity.
- Search stored video for particular incidents flagged by video content analysis software.

NViS 6200

Handling the High Processing Demands of IP Video Surveillance

While video analytics brings many benefits to surveillance systems, it imposes large computational loads on the NVR. Hybrid NVRs face additional workloads due to the need to encode analog video. Finally, NVRs that transmit video to networked devices must perform trancoding in order to convert high-resolution camera feeds into a more network-friendly format. Together these workloads present a major computational burden.

2nd generation Intel® Core™ processors are ideally suited for this kind of work. The graphics and media capabilities built into 2nd generation Intel® Core™ processors provide performance levels that previously required a separate graphics card. The graphics engine moves video encoding, decoding and transcoding functions usually done in software into dedicated hardware known as Intel® Quick Sync Video. This hardware provides native support for all mainstream codecs and the ability to handle multiple 1080p streams simultaneously. To illustrate the advantages of this new hardware, processor power is cut in half over previous generation for HD video playback.

Additional graphics optimizations come from the new Intel® Clear Video HD Technology. This advanced video processing logic provides better performance in de-noise, de-interlace, sharpen, scaling, and color processing operations. This suite of hardware and software technologies uses advanced video techniques to remove jitter and create crisper visuals – all the better for reading license plates or identifying a face.

To improve analytics performance, 2nd generation Intel® Core™ processors include the new Intel® Advanced Vector Extensions (Intel® AVX) instruction set, an advanced form of Intel® Streaming SIMD Extensions (Intel® SSE). Intel® AVX widens the data path from 128 bits to 256 bits and introduces other upgrades that provide up to double peak FLOPS performance compared to Intel® SSE4 instructions. This performance boost is no small matter when a single NVR can have up to 32 channels of megapixel cameras feeding it video.

Applying 2nd Generation Performance Gains to a Hybrid NVR

To enable security customers to take advantage of 2nd generation Intel® processor performance gains, NEXCOM has developed the NViS 6200 (Figures 2). This intelligent, hybrid NVR is a 2U rackmount system designed to accept uncompressed analog video input from older analog cameras, as well as digital video input from IP cameras and high-resolution IP megapixel cameras.

In addition to leveraging all of Intel's recent advancements, the NViS 6200 includes smart technology of its own. While many hybrid solutions depend on add-in cards to capture feeds from analog camera, the NViS 6200 includes embedded video capture chips that can capture 32 channels of video at D1 resolution (Figure 3). This reduces the risk of compatibility problems with add-in cards and simplifies system design.

Taking Full Advantage of Intel's Hardware-Accelerated Video Codecs

The NViS 6200 is also designed to take advantage of the Intel® Media Software Development Kit (Intel® Media SDK). This SDK provides a standard application programming interface (API) to help create high-performance video solutions. The API exposes the media acceleration capabilities of 2nd generation Intel® Core™ processor platforms for encoding, decoding and video preprocessing. This improves utilization of the hardware-accelerated video codecs of these processors, thus enhancing the NViS 6200's handling of the continual stream of video from a surveillance system's cameras and the conversion of this video into different formats for viewing and storage.

The advantage of the NViS 6200 is that, by using 2nd generation Intel® Core™ processors, it can handle a wide range of workloads, giving system integrators much greater flexibility in camera selection and system design. The power of the system is also important in the use NVR-based video content analysis to search for and retrieve video of specific events from stored video.

Figure 2. The NViS 6200 (motherboard shown here) is a 2U rackmount system.

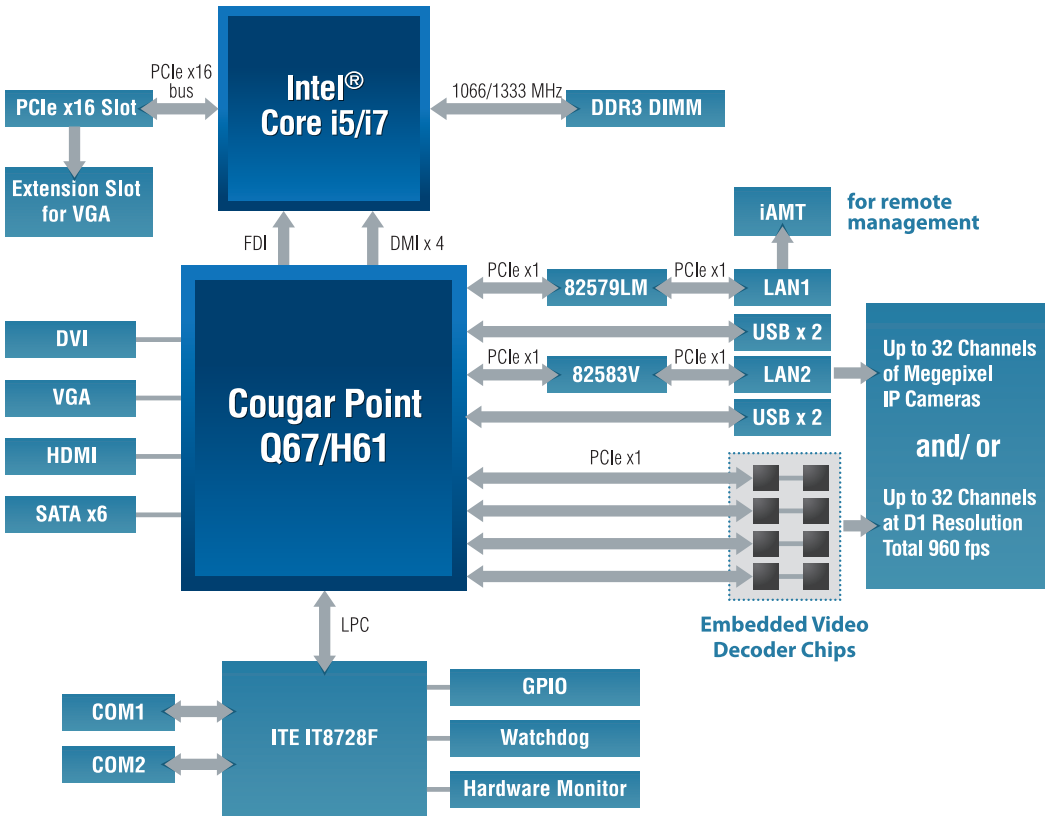


Figure 3. NEXCOM's architecture includes 32-channel video capture incorporated on the motherboard.

Abundance of Expansion Options

Another valuable feature of NEXCOM's hybrid surveillance solution is its abundance of expansion options. Users who want to expand the system with their own devices will find 16 PCI Express* (PCIe) 2.0 lanes slot for exceptional scalability. Moreover, a Mini PCIe socket is available for wireless communication, which is especially useful for transmitting real-time alerts, video and images. For backing up recorded data, NEXCOM's NViS 6200 includes 6 Gb/s SATA 3.0 hard drive options in a variety of capacities. This enables the NViS 6200 to store massive amounts of video.

Efficient Remote Management

One final feature of the NViS 6200 is noteworthy from a maintenance and management point of view. 2nd generation Intel® Core™ vPro™ processor platforms include a collection of capabilities known as Intel® vPro™ technology. One of these capabilities, Intel® Active Management Technology (Intel® AMT), provides intelligent, hardware-assisted remote management features that can help IT departments and third-party IT providers to query, fix, update, and protect networked embedded devices, even when they're powered off, not responding or have software issues. With Intel® AMT activated, IT staff in a central location can manage a large number of NViS 6200 NVRs spread all over a site or many sites. This can significantly reduce total cost of ownership (TCO), greatly minimizing the number of physical visits IT staff has to make to monitor and service equipment.

Low Cost and High Performance

By combining legacy analog cameras with high-definition IP cameras and video content analytics, hybrid surveillance systems offer a cost-effective yet high-performance solution. The NEXCOM NViS 6200 shows how to realize these benefits by leveraging the 2nd generation Core™ processors, which offer powerful encoding and decoding accelerators as well as signal processing features that support advanced analytics.

* This white paper is also published in Intel® Embedded Innovator Newsletter, Spring 2011.

NEXCOM Ultra Reliable In-Vehicle PC Performs True Navigation

Cargo trucks accurately deliver a large volume of passengers' luggage between different airports terminals without any delay. To ensure the correct route for luggage management, a popular airport in Asia has integrated NEXCOM's VTC 6110 car PC into a cargo truck for better navigation management.

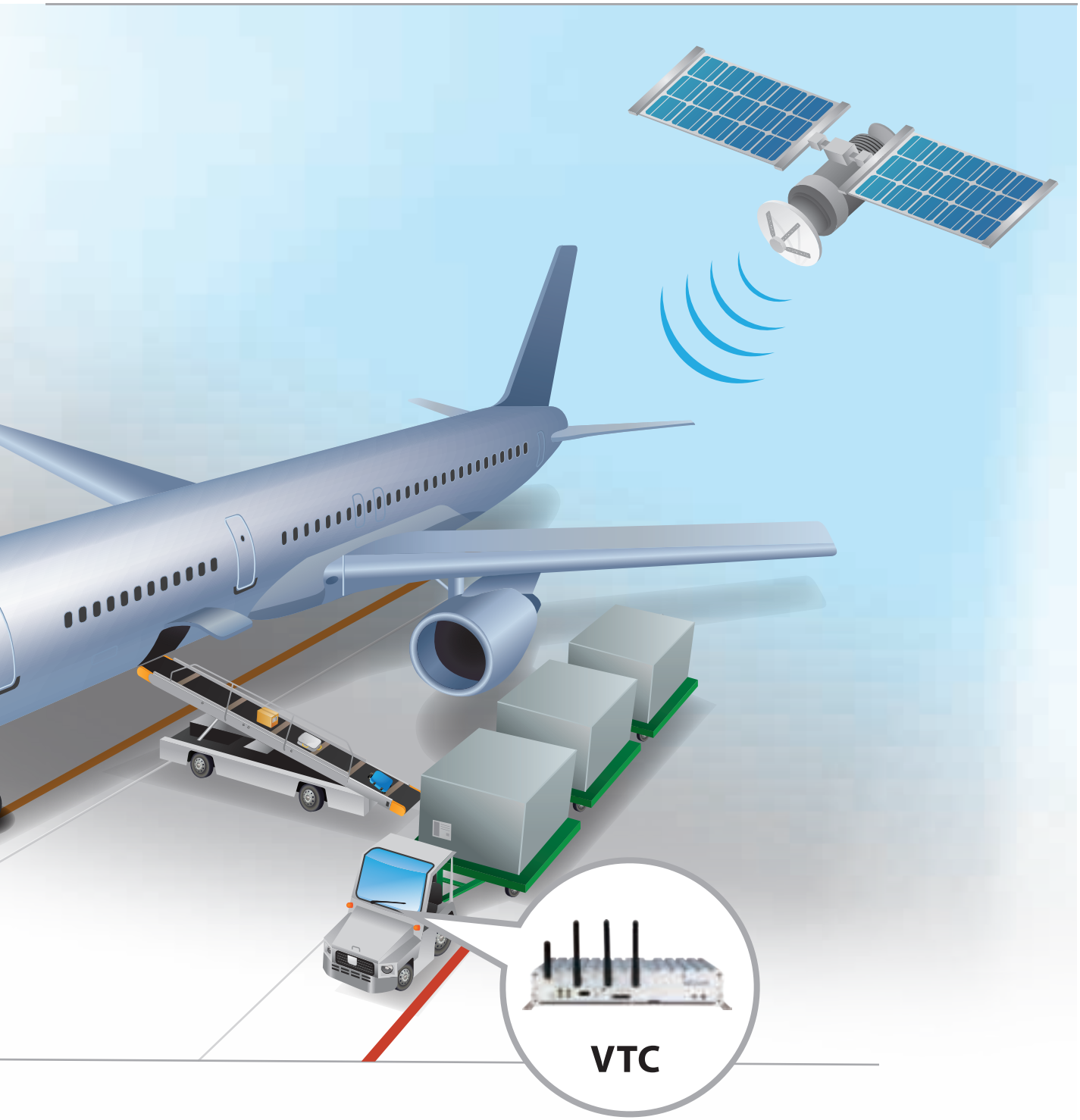
Initially the customer used a conventional PC for this application; however these devices were unable to resist the extreme shock and vibration conditions associated with in-vehicle operation. Therefore the customer wanted a more reliable alternative to a conventional PC, they also wanted a solution that was specifically designed for in-vehicle operation, which could be powered by the vehicles battery and featured wireless connectivity. It was at this point that the customer decided to speak to world leaders in in-vehicle PC technology, NEXCOM, who provided the ideal solution in the form of the VTC 6110 transportation computer.

NEXCOM's VTC 6110 transportation computer has passed eMark certification test; a standard which is recognized by the automotive industry covering the safety requirements for in-vehicle operation. In addition, VTC 6110 transportation computer supports smart vehicle function. "The VTC 6110 is designed for vehicle telematics use. To avoid running down a vehicle's battery, the energy efficient VTC 6110 drains very little power from the battery. In addition, the VTC 6110 is capable of detecting the condition of a vehicle battery. If a vehicle's battery is too low, the VTC 6110 will automatically switch itself off." Said the customer.

The most impressive feature of NEXCOM's VTC 6110 car PC for the customer is its maintenance free, fanless design which makes for exceptional reliability. The platform also reduces the need for additional equipment and cabling to connect with external communication devices. Equipped with 3G connectivity, users are able to make calls and transmit data over the air.

The customer is happy not only with robust and reliable computing system, but also with excellent technical support. After using NEXCOM VTC 6110 car PC, NEXCOM has become the customer's No. 1 choice for their telematics projects.

3 Smart Ways



to Apply VTC Series in Transportation Market

The image is used under the customer's permission.

Simplicity and Versatility

Make NEXCOM In-Vehicle Computer a Valuable Tool for Electronic Ticketing

Located in the city of Curitiba Brazil, a leader in intelligent transport technology has utilized NEXCOM's VTC 2000 to streamline its bus electronic ticketing system.

By incorporating VTC 2000 in-vehicle computer into its system, the customer has had more than 4,000 commercial validators (devices that are used to validate smart cards) which have served more than 15 municipalities, including 4 major cities. NEXCOM's in-vehicle computer has therefore become an integral part of a buses electronic ticketing system.

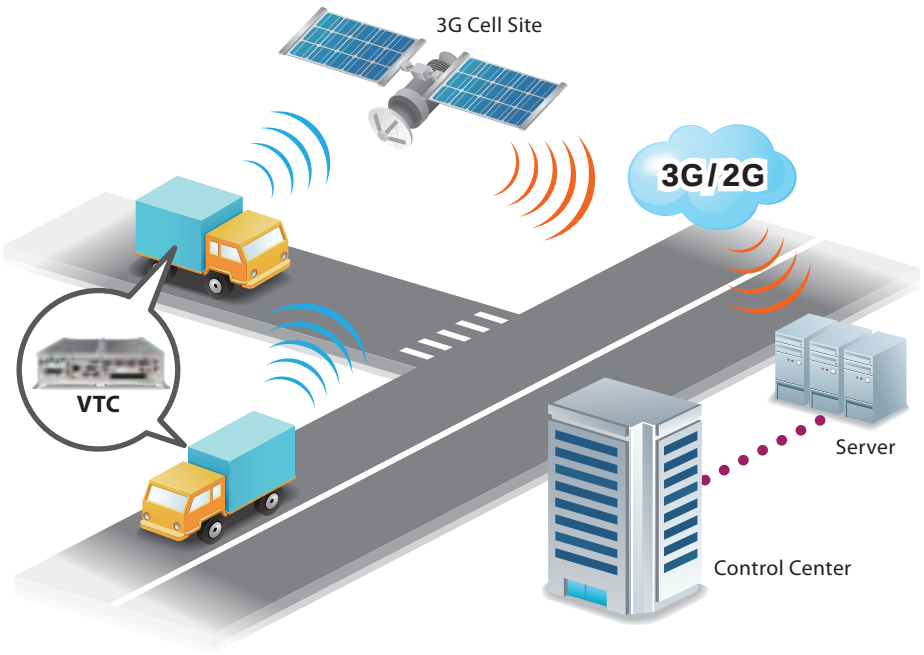
One of the main reasons why the company decided to use NEXCOM's VTC 2000 in-vehicle computer was 3G connectivity for convenient data transmission and collection. Equipped with GSM/GPRS interface, VTC 2000 enabled the company greater flexibility in terms of data transmission and data analysis.

Another key feature of the VTC 2000 which proved essential to this application was the integrated GPS function, which allowed the user to monitor a buses velocity, position and route; therefore delivering enhanced operational efficiency and control.

During the customers rigorous environmentally testing, VTC 2000 demonstrated its excellent performance which exceeding all the customer's expectations for resistance to vibration, and extreme temperatures.

"Unlike one of the competitions products, NEXCOM's VTC 2000 has proved itself in a variety of environmental conditions. VTC 2000 is the best solution we've ever tested", according to the customer.

NEXCOM's VTC 2000 in-vehicle computer has enabled the company to replace its traditional paper-based ticketing process with a digital system. The system can be utilized to provide data on passenger numbers and travelling behavior; and can therefore provide accurate revenue projections. The main benefit to the passenger is that the system reduces the time taken to purchase a ticket and thus reduces passenger waiting times.



NEXCOM's In-Vehicle Computer

Optimizes Mobile Network Detection

Every mobile operator aims at providing customers the best call quality. A professional enterprise in China has endeavored to provide mobile operators with integrated solutions to benchmark and optimize the performance and quality of wireless networks, services, and content to maximize customers' satisfaction. For this project the company deployed NEXCOM's VTC in-vehicle computer in service fleets to perform analysis, optimization, bench-marking, troubleshooting, diagnostics, and health check on mobile communication network dynamically all over the locations where the service covering.

Conventional in-vehicle computers are not equipped with power on/off control mechanism over the air. This means service fleet drivers have to wait for an in-vehicle computer to be activated after a vehicle is switched on, a delay which is both time consuming and expensive. To resolve this issue, NEXCOM's VTC in-vehicle computer is equipped with over the air remote power on/off control mechanism which is able to automatically activate the system before a vehicle is switched on thus reducing driver inactivity and increasing efficiency.

The other key feature of NEXCOM's VTC in-vehicle computer was its performance to provide real-time data updates. With an integrated wireless network modem, the customer can conveniently log data and instantly analyze the quality of service. There's no need to wait anymore for data updates – vehicles can be used right away on schedule.

The customer was also impressed with the support of multiple wireless network modems, which differentiates NEXCOM's VTC in-vehicle computer from others. It's multiple wireless network modems allow the customer to monitor multiple networks in different RF bands. By inserting multiple mobile SIM cards, the customer was capable of effectively monitoring network performance of different mobile carriers. The customer is very happy that NEXCOM's VTC in-vehicle computer has greatly enhanced the way it monitoring and optimizing mobile networks performance for mobile operators.

13 Latest Innovative Products Available in Q2

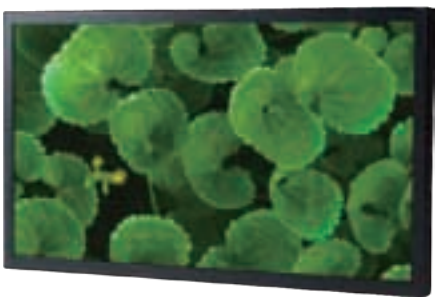
APPC 1720T

Powerful 17" Flush Touch Panel with IP65 Compliant Front Panel

Fanless APPC 1720T is 17" industrial-grade Panel PC featuring full-flat plastic surface touch screen with powerful performance. Designed with a seamless flat-bezel touch screen display, APPC 1720T gives the platform a visual appealing appearance which effectively prevents dust and dirt.

The front IP65 compliant panel provides protection from water and moisture damage and can even withstand high-pressure water jets enabling the surface to be easily cleaned. This feature makes the APPC 1720T especially suitable for food and beverages industry applications where stringent hygiene levels are important. With a wide range power inputs, from 12V to 30V, APPC 1720T is also ideal for telecoms applications, and for installation in a wide variety of industrial and machine devices, such as forklift and truck.

- 4:3 17" 1280x 1024 industrial grade LCD panel with 5-wire flush touch panel
- Intel® Atom™ D525 (1.8GHz, 1M Cache), Dual Core, DDR3 support
- 2.5" HDD bracket, Dual GbE, 2nd display - VGA, USB x 4
- 2 x Mini PCIe socket, 1 x external CF socket, 2 x RS232/422/485, PS2 KB/MS
- IP65 compliant front panel



MPPC 3220T

32" High Performance Multi-Media Panel PC

MPPC 3220T is a 32" multi-media fanless Panel PC incorporating a 16:9 Full-HD LCD panel. Equipped with outstanding Intel® Core™ D525 dual core processor and DDR3 memory, the MPPC 3220T features high performance and low power consumption. The built-in dual Ethernet or optional Wi-Fi module offers users the connectivity. With slim x86-based touch terminal and bezel design, the MPPC 3220T provides either SAW or resistance touch screen to meet different demands. The MPPC 3220T can be widely applied in retails, hospitability, POS, and Kiosk etc.

- 16:9 32" 1920x1080 Full-HD LCD panel with SAW/ Resistance touch
- View angle: 89(U)/89(D)/89(R)/89(L), good for portrait/ landscape position
- Intel® Atom™ D525 (1.8GHz, 1M Cache) Dual Core, DDR3 support
- 1x 2.5" HDD bracket, 2x GbE, USBx 4
- 2x mini-PCIe socket, 1x external CF socket, PS2 KB/MS, 2x RS232/422/485

NISE 103

Cost Effective and Reliable Solution in Automation and Control Environments

Equipped with Intel® Atom™ D425 1.8GHz CPU and DDR 3 memory, NISE 103 EZ controller features fanless design, low power consumption and high computing performance.

NISE 103 has three RS232, one RS232/422/485, two 10/100/1000 LAN ports, four USB ports, 4 x digital input and 4 x digital output, one VGA display and audio jack and one external CF card socket. The on-board Mini PCIe socket and SIM card holder expansion offers users the benefits of wireless communication. In addition, optional Wi-Fi module is available. The rugged and compact design makes NISE 103 ideal for gate control, public information, self-service system, POS, Kiosk and transportation applications.

- On-board Intel® Atom™ D425 1.8 GHz processor
- Dual Intel 10/100/1000 Mbps LAN ports
- 4x digital input, 4x digital output
- 1 x RS232/ 422/ 485 and 3x RS232
- 1 x Mini PCIe with two antenna holes and one SIM card holder
- +12V DC input

NROK 500

Rail PC Designed with Intel® Atom™ D525 Platform for Train Applications

Specifically designed for railway applications, NROK 500 fanless computer is equipped with low-power consumption Intel® Atom™ D525 1.8GHz CPU.

For transportation automation, NROK 500 incorporates M12 Ethernet connector, which are specifically designed to be used in industrial applications in a variety of environments, therefore incorporate features to ensure stable operation such as exceptional resistance to shock and vibration. In addition, NROK 500 is equipped with SIM card holder, CF socket, and min-PCIe socket for optional 3G wireless connection and therefore offers user total flexibility for data acquisition. NROK 500, as a train PC, will be compliant to EN50155 regulations.

- On-board Intel® Atom™ Dual Core D525 (1.8GHz, 1M Cache) processor, 1x DDR2 SO-DIMM socket
- Support 10/100 LAN port in M12 connector
- 1 x mini-PCIe with SIM card holder
- 24V DC input with ignition function and 500V DC isolation protection
- Fanless system with EN50155 validation

NPT 1500
Your First High Value Point-of-Sales Terminal

The NPT 1500 is a high value Point-of-Sale (POS) hardware solution which is designed to fulfill your POS hardware requirements. The fanless design features low power consumption, and provides users the benefit of minimal maintenance. The small footprint is ideal for space-limited installations in stores. For added flexibility the NPT 1500 enables connection to a wide variety of POS peripherals and the water-spill resistant design enables reliable operation in restaurants and retail outlets.

- 15" 1024 x 768 LCD panel with 5-wire resistive touch screen
- Intel® Atom™ D525 Dual-Core processor, 1.8GHz, 1M L2 Cache
- Support DDR3 SO-DIMM memory
- 4x powered COM, 4x USB, 1x printer port, 1x VGA, 1x GbE LAN, 1x cash drawer
- 2.5" removable SATA HDD
- Detach base as wall-mount type Panel PC solution

Front

Back

PBOX 050
Feature-Rich Small Form Factor for Industrial Automation Applications

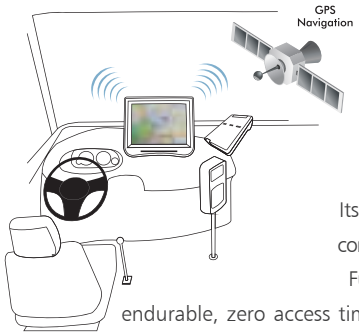
The PBOX 050 automation embedded controller features low-power consumption, fanless design and high performance computing to meet industrial application demands. The PBOX 050 integrates the latest embedded Intel® Atom® E600 Series processor and Intel® Platform Controller Hub EG20T with no more than 5.5W power consumption. This small form factor, in size of 172x 140x 56 mm, can be easily incorporated into display devices. Designed for 24/7 operation, it cost-efficiently ensures users industrial-grade reliability.

The PBOX 050 includes 512MB of DDR2 667/800 MHz SDRAM system memory, with one CAN bus and a Mini PCI Express slot for Wi-Fi or WiMAX wireless connection. The feature-rich I/Os and compact design make PBOX 050 an ideal solution for digital signage media player, Kiosk, POS, communication appliances, thin-client, automation controller, industrial control, and other applications. It also supports Windows XP, Windows 7, and Windows Embedded Standard.

- Intel® Atom™ E600 processor and Platform Controller Hub EG20T
- Ultra-low power consumption with no more than 5.5W
- Compact, reliable and energy efficient
- Internal mini PCIe slot with 3G module support option
- CAN Bus interface for automotive applications

VTC 1000

Intel® Atom™ E640 Fanless In-Vehicle Computer for Instant Information Delivery



VTC 1000, a rugged compact computer designed for in-vehicle operation, adopts Intel® Atom™ E640 processor. Its compact design does not compromise its functionality. Furthermore, its on-board endurable, zero access time FRAM is designed for critical data storage to increase its operation reliability. Through SMS remote wake up feature, your entire operation can be run more efficiently. It is ideal for limited-space taxis and trucks.

- Compact and fanless design, support CAN bus V2.0b
- Built-in accelerometer, built-in FRAM non-volatile memory
- Variety wireless communication options
- Wake on RTC/ SMS via WWAN Module (option)
- Certified by CE/ FCC/ e13 Mark

VMD 1000

Industrial-Grade 7-inch WVGA TFT LCD Display Monitor with Touch Screen and Smart Brightness Control

VMD 1000, a 7-inch vehicle display, incorporates an industrial high brightness LCD panel with LED backlight. With automatic brightness control and an IP54 compliant front panel, VMD 1000 is highly differentiated from products in the commercial monitor market. It also provides USB and card reader features, and has an optional camera sensor. These user-friendly interfaces are an obvious benefit to technicians during maintenance. It is ideal for use with any product in the VTC range via the 26-pin LVDS cable.

- 7" WVGA TFT LCD with LED backlight
- Automatic/ manual brightness control
- Support USB 2.0 and card reader
- Camera sensor on front panel (optional)
- Front panel compliant with IP54

VTC 6201

Designed for Railway Applications for Connectivity Excellence

The VTC Series has been extended with a platform which is specifically designed for rail applications. With the same mechanical housing as the popular VTC 6200-NI and an onboard Intel® Atom™ D510 processor, VTC 6201 additionally supports multiple Ethernet LAN ports and dual SIM card slot. With two optional M12 connectors to replace RJ45, it is suitable for railway applications where connectivity is often lost due to extreme vibration. With two SIM cards utilized, VTC 6201 ensures that a signal is available even in distant rural areas or in different regions/countries.

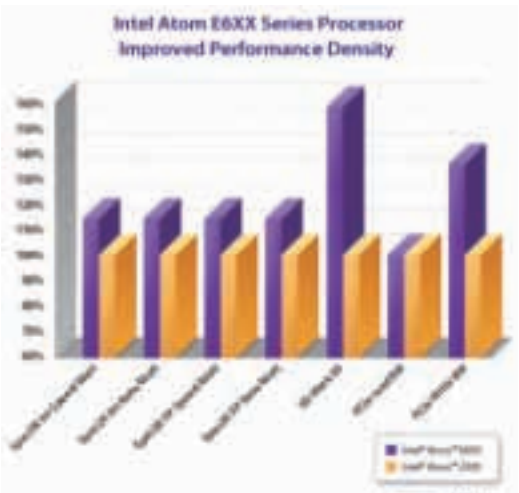
- Built-in Intel® Atom™ D510 Dual Core 1.66Ghz processor
- Support three Ethernet LAN ports (optional two M12 connectors available)
- Dual SIM card slots available for vary carriers
- 8~60V wide range DC power input
- Rugged fanless design to meet MIL standard

NDiS 111

Excellent Graphic Performance for Full-HD Playback

NDiS 111 is an Intel® Atom™ E6xx based digital signage player which is targeted at customers looking for affordable entry-level solutions. Powered by Intel® Atom™ E6xx Series CPU, the top design power (TDP) of E620 Processor only reaches 2.7W. NDiS 111 is equipped with maintenance-free fanless design, users thus benefit from a lower Total Cost of Ownership yet exceptional reliability. Moreover, NDiS 111 utilizes the Intel® Atom™ E620 Series CPU with integrated graphics engine and hardware video decoder which enhance graphics performance by up to 50%.

- Intel® Atom™ E620 platform
- Full-HD video support
- Ultra low power consumption
- Slim and Fanless
- TV tuner/ WLAN support

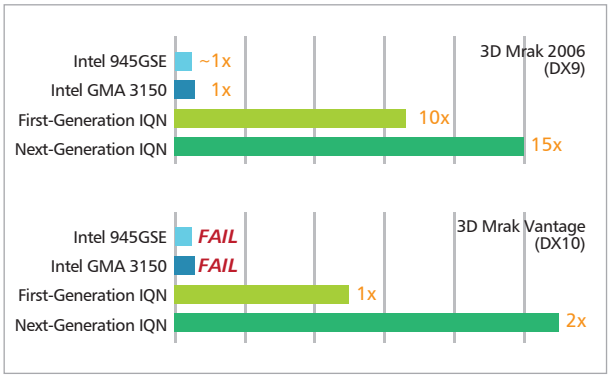


Resource: Intel IDF 2010

NDiS 125-L

Cost Effective and Great Graphic Performance

NDiS 125-L is powered by 1.8GHz Intel® Atom™ D525 Dual Core processor. This advanced Intel® based technology boosts 50% better performance than the previous generation of Atom™ N270 CPU, with only a small increase in power consumption. Equipped with NVIDIA® ION2 GPU, the NDiS 125-L is capable of supporting 1080P video playback. NDiS 125-L is housed in a maintenance-free fanless chassis which reduces moving parts and therefore increases component life span. Users thus benefit from a lower TCO (Total Cost of Ownership) yet industrial grade reliability.



Resource: NVIDIA

- Intel® Atom™ D525 platform
- Powerful NVIDIA® ION2 GPU
- Low power consumption
- Compact and fanless
- Hyper-threading support

DNA 110

1st Network Security Platform Implements Intel® Atom™ E600 Series CPU

The DNA 110 is the first network security platform to implement Intel® Atom™ E600 series processor technology. This latest Intel® system-on-chip (SoC) product for embedded applications allows homes and small businesses to better use/manage energy in network security. As an entry-level desktop network security platform in compact design, DNA 110 is designed to act as the solid foundation on which to host Virtual Private Network (VPN) or Firewall Gateway.

Front

Back

- Intel® Atom™ E600 series processor
- Up to 1GB DDR2 memory
- Support 3 GbE Ethernet ports
- One SATA DOM
- Fanless design

DNA 2120

Entry-Level Desktop Security Platform for Small Office or Home Office Applications

The DNA 2120 is positioned as an entry-level desktop network security platform for small office and home office applications, requiring high performance of network security and modest bandwidth data capabilities. The fanless DNA 2120 is built the superb technology of Intel® Atom™ D425/ D525 processor which has the capability to provide high performance yet low power consumption. By using the high-tech DDR3 on-board memory design, DNA 2120 can meet the requirements of both industrial and military class customers.

- Intel® Atom™ D425 single core/ D525 dual core
- One DDR3 SO-DIMM socket with on board 2 GB DDR3 memory
- Support 6 GbE Ethernet ports
- One 2.5" SATA HDD, One CF socket
- Fanless design

ADDITIONAL Product information

please contact your NEXCOM sales representatives or visit **www.nexcom.com**.

One Step forward

Explored Opportunities of Multimedia Age in 2011 Intel Solutions Summit, USA

In response to the rising demand for digital signage and security surveillance, Intel brought its channel partners and embedded suppliers together for the Intel Solution Summit, held in Las Vegas during Feb. 27-28, to explore future opportunities and reach more customers. NEXCOM participated and demonstrated its exceptional digital signage solutions by showcasing the Intel® Core™ i7 based NDiS 166 along with NDiS 125 and NDiS 111. The striking live demo of NDiS 166 with multimedia advertising presented the best DS application, thus, drew lots of attention from SMB and channel distributors. Starting from building the connection with potential channel partners, we are moving the business of digital signage one step forward.

Technology Breakthrough

NEXCOM Presented ICES 267 and VTC 1000 in 2011 Embedded World, Germany

Invited by Intel Corporation, NEXCOM presented its ICES 267 COM Express in Intel® Core™ i5/ i7 processors and VTC 1000 in-vehicle computer in Intel® Atom™ E640 CPU in 2011 Embedded World (EW).

Designed to accommodate the Intel® Core™ Mobile processor, NEXCOM ICES 267 offers mighty computing performance, superior graphics display support and great expansion capability. This Type 2 COM Express module pairs an Intel® QM67 PCH with 2nd generation Intel® Core™ processor family and one DDR3 SO-DIMM memory socket up to 4GB. The technology enhances overall performance by up to 20% and offers a 30% increase in graphics performance compared to the previous generations, and thus guarantees excellent computing performance.

VTC 1000, a compact rugged computer, adopts Intel® Atom™ E640 CPU and is designed for the transportation applications. Despite its compact dimensions the functional VTC 1000 is equipped with a multitude of features including RS-232/422/485, LAN connection, CAN bus, and a FRAM design. An advanced optional GPS receiver with dead reckoning is available for wireless communication. With a fanless design and the ability to operate in a wide range of temperatures, VTC 1000 is suited for a wide variety of in-vehicle applications.

For additional product information, please contact your NEXCOM sales representative or visit **www.nexcom.com**.

Ride High on Innovations

2011 Europe Partner Conference in Majorca, Spain

In the sun drenched Spanish Island of Majorca, NEXCOM held it 2011 European Partner Conference (EPC) on the 8th March.

In this one-day conference, Peter Yang, President of NEXCOM, outlined NEXCOM's strategy for business growth which is built around a focus on vertical markets, leading technology and worldwide branding with valued partners. The shared latest innovations included two new product lines of intelligent security surveillance (NViS series) and POS system (NexPOS series) as well as the latest NISE fanless computers, Panel PC, digital signage and in-vehicle computer platforms. In addition to innovation highlights, Mr. Dusty Lutz, General Manager of NCR, was invited to share his perspectives on how to bridge the gap between channels for future digital signage markets.

For additional information regards our latest innovations, please contact your NEXCOM sales representative or visit **www.nexcom.com**.

Express

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