







VTC 6110 In-Vehicle Computer Proudly Certified by AT&T



Versatile Solutions for the Multimedia age



NEXCOM
NSA 5130 Arrives
with Intel® Xeon®
Processor E3



## Dear Partners,

As temperature goes down in "Fall", so does economy as US and Europe are in economic turmoil. Although news has confirmed that we are stepping into another recession, demands for more connection, more bandwidth, and more infrastructure service are still very clear and strong.

According to some report, there will be 15 billion connected devices in the world by 2015, and the number will rocket to 35 trillions by 2020 because of Internet of Things (IoT). The number itself gives an exciting indication. Not to mention significant growth in video streaming, flat/touch panel computing, great potentials of ARM-based entry-level embedded appliances, and various back-end apparatus in the cloud environment.

Regardless of all the ups and downs of the world economy, we always believe that everything will go back to normal and that embedded applications are still riding on robustly growing IT mega trend. In Q3, we actively engaged in many marketing activities with partners in North America, Europe, China and Japan, promoting NEXCOM products and brand. Most important of all, we moved NEXCOM headquarters into a new building with bigger space, wonderful facilities and utilities. Welcome to NEXCOM!

Moving on! Yes, keep moving on, we'll surpass all competitors if they still wait and see. We have outflanked our peer by delivering many platforms running on Intel<sup>®</sup> Atom™ E600 series and various products powered by 2<sup>nd</sup>

generation Intel<sup>®</sup> Core<sup>™</sup> family processors. Our Cedar Trail boards are ready for customer evaluation, and to land in many projects.

Looking into Q4, not only reaping from the efforts and investments together with you-our great partners- we are also sowing more seeds for the future. NEXCOM is ridding its success to become one of industry pioneers in vertical business lines, in-vehicle applications, POS/Panel platforms, Full HD/Mobile Surveillance series, etc. NEXCOM is determined to lead in the general purpose platform and vertical application market!

Also in Q4, you'll see a full series of NEXCOM ARM-based embedded platforms in various form factors like Q7 modules, tablets, and NISE boxes. With strong backup of our new subsidiary, the GreenBase Technology (GBT), either NEXCOM or GBT now can offer ARM-based programming and customization support to harvest fertilized application fields. Compatible OS will be WIN CE, Linux, Android, and the upcoming WIN 8.

We are undergoing a profound paradigm shift, either in economy or in IT industry. Though the future still remains ambiguous, we are certain that an "IT embedded economy" or an "IT embedded world" will prevail. Moving forwards in economy downturn and leading in the embedded IT world will keep NEXCOM in the "Winner's Club"!

Clement Lin

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# **NEXCOM EXPRESS**

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# WEB

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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.



# Taiwan Headquarters Moves to New Corporate Building

o keep pace with its repaid growth, NEXCOM Taiwan headquarters has moved to a new corporate building located in New Taipei City in September 2011. Many friendly features are housed in the new headquarters, not only for working, but also for improved cooperation. In addition, the customer-oriented arrangement is considered into the headquarters floor planning. It is meant to be with better visiting, meeting and co-working areas. A few offices are set for co-development long stay.

You are cordially welcome to visit NEXCOM's new corporate building at any time to enjoy our hospitality and new facility.

# Information of NEXCOM's New Corporate Building

Add: 15F., No. 920, Chung-Cheng Road, Zhonghe District,

New Taipei City, 23586, Taiwan

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# VVTC 6110 In-Vehicle Computer Proudly Certified by AT&T

s mobile applications are thriving, US giant wireless carrier AT&T encourages developers to write programs to keep stronghold on telecommunication market and to entice potential customers. In its developer program, NEXCOM's VTC 6110



in-vehicle computer is proudly certified as one of mobile devices that is compatible to AT&T carrier network.

VTC 6110 is a robust in-vehicle computer for use in car, truck, bus or other service vehicle applications. Not only does the car PC comply with automobile industry standards, eMark, it also features power ignition delay control, low-power protection and SMBus connection, etc. It is a complete system which can satisfy client's requirements of in-vehicle platform. Also, VTC 6110 is in line with NEXCOM in-vehicle products. It supports turn-by-turn GPS function and will navigate drivers towards efficiency. The 802.11b/g/n, 3.5G, and Bluetooth connectivity bring wider applications coverage to VTC 6110 in-vehicle PC.

# NEXCOM NSA 5130 Arrives with Intel<sup>®</sup> Xeon<sup>®</sup> Processor E3

EXCOM 1U 19" rack-mount NSA 5130 supports Intel® Xeon® processors E3-1225/1275 with Intel® C206 chipset delivering enhanced computing performance with energy efficiency. Network security platform NSA 5130 has outstanding cryptography capability and can protect data from security breaches. In addition, NSA 5130 is compatible with verified third-party applications and comes with rich I/O options. Add to that NSA 5130 can run for long hours. The platform shows security, flexibility, and reliability at one time.

Based on quad-core Intel<sup>®</sup> Xeon<sup>®</sup> processor E3-1225/1275 with C206 chipset, NSA5130 is driven by high clock speed of 3.1/3.4GHz, 6/8MB cache. Along with Intel advanced technologies, NSA 5130's performance is significantly accelerated. It runs faster in peakload, carries out multiple tasks and business applications smoothly without slowing down, and switches to and from idle modes more quickly.

Thanks to the 32nm Xeon® processor, power consumption of NSA 5130 is also reduced.

NSA 5130 is further guarded against security breaches. The Xeon®-based network security platform with outstanding computing capabilities can accomplish data encryption and decryption at high speeds. It is also defended from potential network threats, data loss or corruption.

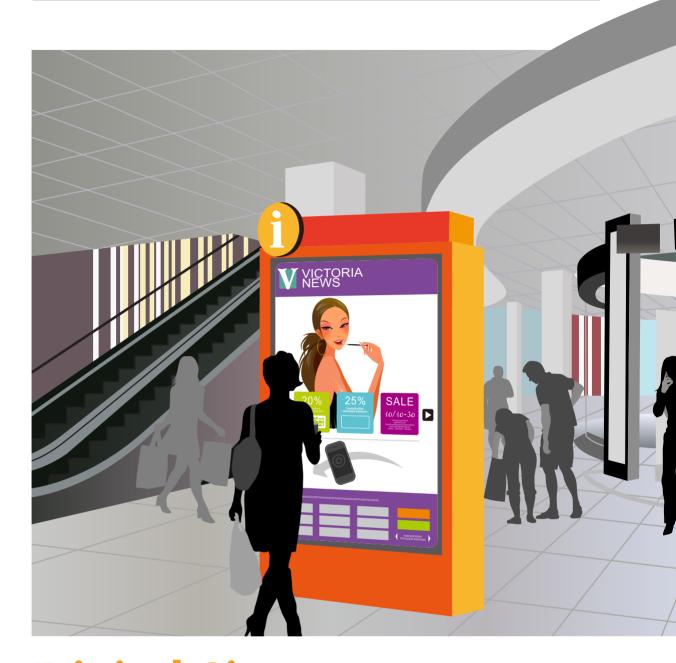
NSA 5130 also features extra flexibility. The platform has 8+8 GbE ports, four bypasses, up to 16GB DDR3 memory, one CF expansion slot, one 3.5" SATA HDD, one PCI expansion slot, and one Mini-PCI slot. NSA 5130 can also be tailored for SSL, xDSL card, or Wireless card. Beyond various I/O options, NSA 5130 can run third-party software as well demonstrating flexibility for expansion and software performance.





# Xeon® Processor E3 Highlights

- Outstanding computing capability
- Lower power consumption
- · Smooth multitasking
- Fast data encryption and decryption
- · Increased manageability, security and flexibility



# **Digital Signage**Responds to Its Audience

iDigital signage as an advertising tool aims to convey ideas, leave impressions and persuade an audience to take actions. Informative messages, extraordinary visual images and sound effects are used to catch the audience's attention. As new technologies

emerge, digital signage providers are currently playing with the idea of audience interaction and assessing its commercial potential. Digital signage is increasingly integrated with interactive technology which can not only be used for advertising but also react to the trend of



social, local and mobile (SoLoMo). Prevailing interactive technologies include anonymous video analysis, gesture recognition, touch screen, and smartphone integration.

# Anonymous Video Analysis Seizes Power of Information

Digital signage capable of video analysis helps advertisers seize the power of information. While playing advertisements, digital signage can detect a viewer's presence, count dwell time, complete a head count and gather other important demographic data, such as gender, age and ethnicity. Based on this information, an advertiser can tell whether the content displayed is compelling, what captures the viewer's attention, which groups of viewers are attracted, whether the digital signage is installed in the correct location and evaluate if digital signage is a good investment.

Before video analysis, evaluation of return on investment for digital signage was difficult to measure; this is because an advertiser could only gauge a viewer's reaction by physically watching the person viewing the deployment. Therefore, interactive digital signage; which can gather data on audience behavior, is extremely beneficial to advertisers. In addition, digital signage with capability of video analysis can also help advertisers to deliver a better message to the right audience.

For example, a promotion targeting a teen audience should obviously be targeted at this particular audience. Once the advertisement is active, advertisers can run analysis to see whether the message is effective and has been viewed by the right audience. If not, advertisers can make amendments to the campaign content or signage location to improve overall effectiveness.

The collection of any form of data collection can raise issues regarding privacy. In response to these concerns, video analysis has moved towards anonymity to protect viewers who prefer to be invisible. Anonymous video analysis which collects data in real time for marketing analysis whilst allowing viewers to remain "off the radar" is the obvious way forward.

# **Gesture Control Lets Body Speak**

While some digital signage software can perform video analysis, others allow viewers to communicate without physical contact. Digital signage equipped with cameras can capture body movements, which will be interpreted as command, and act on them.

For instance, American retailer Wal-Mart used interactive digital signage for a holiday sales promotion, which allowed the audience to choose selected products by waving their arms in the air. Thus to acquire detailed product information including retail price, product

specifications and other key data, the audience would just have to point at the selected item.

The virtue of a gesture-based interface is that the audience can interact with digital signage without having to make any form of physical contact. Gesture recognition is so convenient that even people with a handful of shopping bags can participate without putting down their belongings.

In addition, the camera and software is so advanced that it can be programmed to detect and recognize gestures of people that are several meters away from the screen. This feature allows advertisers to use larger screens with wider viewing angles to enhance the viewing experience.

# Let the Fingers Do the Talking

Touch screen technology is another predominant method of interaction. Different from gesture recognition, touch interfaces require physical contact. It can precisely distinguish a viewer's intention and leave positive impressions.

MasterCard installed touch screen digital signage to promote its online shopping service. It allows viewers to browse various promotional offers and get bargains by entering an email address with the on-screen keyboard. This kind of promotional activity is not possible with gesture recognition systems.

In fact, gesture recognition may be affected by environmental factors. For instance, a gesture can be recognized differently under different illumination conditions. As a result, there is a chance digital signage could display undesired information and disappoint viewers. Therefore when highly accurate information is required, touch interface can be useful and improve customer satisfaction.

Furthermore, touch command like online behaviors can be monitored and used to track what content the audience is interested in. This information can also be analyzed to help advertisers plan marketing strategies in the future.

# Smartphone, the Digital Signage in Your Pocket

It's a well known fact that smartphone has distracted people from digital signage. Those who usually glance around, now have their eyes glued to a small phone screen. As consumer behavior changes, digital signage begins to integrate mobile technology to hold on to every opportunity to win public attention. Smartphone



has a screen, wireless connectivity, camera, third party applications, and various features opening opportunities for more interaction for digital signage, too.

As a matter of fact, a smartphone can be regarded as extension of digital signage. Digital signage can send advertisements to viewers who can store information on their own mobile gadgets, carry the information around and access it whenever it is required.

For example retailers can deliver more detailed product information to smartphone via digital signage. Museums can provide floor plan and tour guides to visitors. Those who read information on smartphones essentially interact with digital signage.

With downloaded content, a smartphone essentially becomes a miniature digital signage player which can break time and space boundaries. In addition, with digital signage now moving onto smartphone advertisers can communicate with multiple viewers at the same time.



Smartphone integration also allows viewers to interact with digital signage in various ways. Mobile technologies which can be exploited also include QR codes, web browsers, short message service (SMS), near field communication (NFC), radio frequency identification (RFID) and Wi-Fi.

For instance, the Discovery channel once erected digital signage in New York to promote a new TV Series called "Storm Chasers". This digital signage campaign created the augmented reality of viewers blown off their feet by storms. Viewers could either text to a number to receive a link to the photo on Facebook or have photo sent via email.

Though digital signage can not initiate the connection, advertisers can provide incentives, such as exciting experiences, coupons and exclusive offers to encourage viewer engagement. For example, digital signage in the retail store can send product details alone with coupon to smartphone users. In the best-case scenario, it will tickle viewer's fancy and awaken desire of purchase.

#### Conclusion

Digital signage combines interactive elements like anonymous video analysis, gesture recognition, touch screen, and smartphone integration providing more information to both viewers and advertisers. It also stands for fun and satisfies individual needs for information. In comparison with conventional digital signage which only provides unilateral communication, interactive digital signage increases display effectiveness, enhances viewer experiences and has a better chance to leave impressions and to elicit purchase.

## **REFERENCE**

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# Travel Back to Medieval Cracow with a NEXCOM Digital Signage Player



NEXCOM digital signage player has landed in an underground museum in Cracow, Poland. The museum, home to relics, monuments and scale models, uses advanced computer technologies to recreate the atmosphere of the middle ages. It utilizess multiple displays, touch screens and other devices to bring magnificent history to life. This crowd pleasing display, is driven by NEXCOM's high performance NDiS 163 Digital Signage Player which is programmed from a remote location.

## A Feast for Eyes

Cracow, once Poland's capital, was the art, cultural, academic and economic hub of the nation. To restore the city's glory, the museum; with the help of NEXCOM's NDiS 163 Digital Signage Player; literally merged virtuality and reality together to show the true colors of ancient Cracow on an archaeological-architectural preserve.

NDiS 163 was powered by Intel<sup>®</sup> Core<sup>™</sup> 2 Duo 2.26GHz processor with GM45 chipsets and Graphic Media Accelerator 4500MHD; it smoothly

delivered images and videos of better resolution and intensity up to Full HD 1080p.

Incorporating a multitude of I/O options including VGA, DVI-D, HDMI, and SPDIF interfaces, the player is configured to amaze the public with substantial animations, 3D holograms, 3D digital reconstruction of buildings, multimedia posts, documentaries and films.

The NDIS 163, positioned as a highperformance digital signage player, is designed to deliver spectacular visual and sound effects. In this museum, large-size LCD, plasma, touch and projection screens were used extensively. A 3-meter wide screen was set up







to playback a video of medieval marketplace scenes. Major events in the history of Cracow were played on a 190 degree projection screen as well. Thanks to NDiS 163, tourists were immersed in the thriving era of Cracow and left with unforgettable experiences.

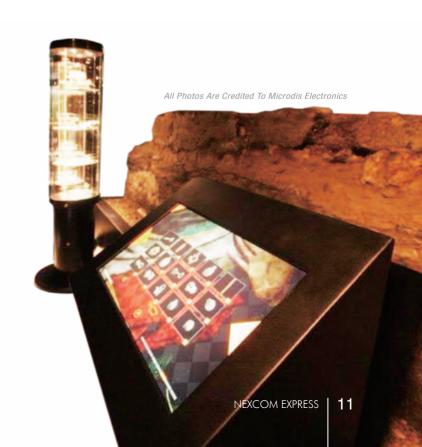
# **Bask In Everlasting Glory**

Like many digital signage systems, the one deployed by the museum is controlled remotely. Though located in Cracow, NDiS 163 is installed in a data center far away from the museum. With built-in network interface, NDiS 163 can transmit control signals, audio data, and video data over Ethernet.

Moreover, the durability and reliability of NDiS 163 is deeply admired. System slow down or failure caused by overheating was prevented by engineering design. The fanless construction of the NDiS 163 gives it added protection from dust. Whilst the aluminum top of the

unit acts as a heat sink, enabling the digital signage player to faithfully perform its duties without rest.

With help from Microdis Electronics, the Polish computer distributor in this project, comprehensive aspects of Cracow were unveiled by sophisticatedly integration of historical heritage and digital signage. Using NDiS 163, the museum allowed tourists to participate in the fascinating history of Cracow in medieval times.



# **NEXCOM Digital Signage Player**

# **Called to Serve with Italian Navy**



card the NDiS 161 is able to stream live television.

In this application, NDiS 161 is used in conjunction with Aitek's TVIP platform which enables the system to receive and decode various signals over IP network. The system, provided by Aitek to ADT Italy-a company of Tyco International Group-will not only bring live TV and radio programs to the sea, but also retrieve data from cluster severs and stream video on demand (VOD), movies and music to six new multimission frigates (FREMM) of Italian Navy.

In addition, the system is compliant with all digital video standards around the world-PAL, SECAM, and NTSC. It can deliver TV programs to Italian Navy wherever they sail.

EXCOM's high performance digital signage player NDiS 161 has been enlisted in the Italian Navy. NDiS 161, working jointly with a digital entertainment platform developed by Italian company Aitek, will serve as an infotainment solution. The platform gives users access to IPTV as well as information updates and announcements. NDiS 161 therefore gives personnel in the Italian Navy an enjoyable way to spend leave time, whilst being able to receive important notifications from the Navy control centre.

# Spread Joy to Every Corner of the World

Designed for use with large-size displays, NDiS 161 is powered by an Intel<sup>®</sup> Core<sup>™</sup> 2 Duo processor with 945GME Express chipset which can support Full HD 1080p resolutions on dual independent display via two DVI-D ports. When configured with optional TV tuner

## Navy Goes Overboard for NDiS 161

As well as being an entertainment centre, NDiS 161 is also used as an information portal. Programs can be interrupted at any time by important announcements which are issued by Navy control centre, to onboard staff.

Navy vessels can spend several weeks or even months at sea, it is therefore vital that any hardware platform utilized onboard is supremely reliable. To that end, NDIS 161 is based on a rugged fanless design which eliminates systems failure and maintenance costs.

The infotainment system powered by the NDiS 161 will improve morale of the Italian Navy and therefore help sailors overcome the loneliness of onboard life.

# Dynamic NDiS 541

# **Gets Your Pulse Racing**

EXCOM multi-display digital signage player NDiS 541 brings the great thrill of live sport to retail betting outlets in Spain. The custom digital signage system allows the audience to catch all information in one glance, overwhelming the audience with the energy and vitality of live sport. Best of all, it provides enhanced visual experience with good value, assisting the bookmaker to cut installation cost at least by half. In addition, the system with internet capability supports centralized control. It helps the audience grasp every beat of worldwide games while simplifies system management for the bookmaker.

Catch All in One Glance

NDIS 541 running on Genus<sup>TM</sup> Multiview, the bespoke software developed by British system provider 2DB, supports various layouts and four large LCD screens via HDMI interconnect. Each screen is divided into different zones to show multiple contents. Along with multiple screens stacked together, the digital signage player allows the audience to have access to all information all at once.

In this project, various media contents are displayed on the same screen at the same time. The audience can watch live soccer broadcast on the left side of screen with half an eye on betting odds and upcoming events displayed one the right. Also the screen is separated into parts to cover greyhound races taking place in different racecourses, basketball games, and tennis matches.

# **Deliver More with Less**

The best part of Genus<sup>™</sup>-based NDiS 541 is that it halves time and cost of system deployment. To show multiple

contents, the bookmaker used to set up more than twenty small screens with each connected to single player. By contrast, the new system-utilizing layout and one player to power multiple displays-fulfills entertainment, information, and marketing functions with less hardware. The new solution reduces not only more than 50% of cost of system installation and also system complexity for each betting shop.

Though installed in individual retail outlet, this versatile NEXCOM digital signage player is controlled remotely from the head office in Madrid. This connectivity allows system administrators to remotely update betting odds and distribute content to over 60 shops right across Madrid and the Aragon region of Spain.

NEXCOM working jointly with 2DB allows punters at each shop to bet on their chosen sporting event and then check all facts in one view. Moreover, the bookmaker is able to better serve its sports crazed customers with cost-effective system.

15 Bristal City 0:0 Portsmouth

16 Bristal City 0:0 Portsmouth

17 Bristal City 0:0 Portsmouth

18 Bristal City 0:0 Portsmouth

19 Bristal City 0:0 Portsmouth

10 Bristal City 0:0 Portsmouth

**NDiS 541** 

The Image Is Credited To 2DB

# **Make Your Embedded Dreams Work by NEXCOM**

# **COM Express Competence** Center (CCC) Service

OM Express design not only retains flexibility for future upgrade but favors multi model development. Though COM Express CPU module can fit in different carrier boards, circuitries and firmware compatibility can pose challenges to developers.

To help embedded customers design-in COM Express with their own unique carrier board, NEXCOM launches COM Express Competence Center (CCC) service to smooth the development process and reduce design risk.

ICES 267S COM Express Type II, 2<sup>nd</sup> Generation of Intel<sup>®</sup> Core<sup>™</sup> i5/i7 Processor/ QM67



# **COM Competence Center (CCC) Service**

**Business** Model NEXCOM's COM Module

Customer Designed Carrier Board

NEXCOM's COM Module NEXCOM Customized

NEXCOM's COM Module Customer's Existing Carrier Board

**NEXCOM CCC Services** 

**COM Product & Document Support** 

- EXT & COM-Expres Modules
- Evaluation Board
- Document
- Design Guide
- EB's Schematic
- Mechanical Drawing
- Certification

Customized Services

- Customized Carrier **Board Design**
- Customized Thermal Solution
- Manufacturing
- · On-site Tech Support

Design Assistance Service

- Schematic Review
- Placement/Layout
- Review
- Debugging Design Training
- Design Database

**Embedded OS** Services

- Customized BIOS
- Modularized BIOS
- eOS Installation
- Custom OS Image
- Device Driver
- BSP Support



# Successful Application Story Background

The customer specialized in gaming/lottery industry. The customer usually applied off-the-shelf computer into their gaming system. New system validation process was time consuming because of the complexity when integrating their control system and the off-the-shelf computers.

### **Customer Project Request**

In this project, a fast yet flexible for future upgrade solution is what the customer needs. Customer requires a high performance processor because of the intensive graphic/multimedia in gaming applications. In addition, a lower power consumption model targeting value market segment is to be launched later. NEXCOM designs one carrier board for both projects allowing the customer to focus its R&D manpower into integration of carrier board, BIOS, Embedded Linux OS.

### **Customer Technical Request**

The customer prefers BGA Type of 2<sup>nd</sup> generation of Intel<sup>®</sup> Core <sup>™</sup> i5/i7 processor (B810E+QM67) while needs a flexibility solution which can be upgraded with Chief River platform, next generation IVY Bridge solution complying with Type II COM Express standard. Other requests include proprietary board form factor to fit system chassis design, isolated GPIO (General Purpose Input & output) to control and monitor the status of door for security, and multiple independent display output to address the need of multimedia applications. The module also needs to support wide range of DC power input from 9V to 36V and specific DC power output of 5V as well as 12V for custom peripherals.

# **NEXCOM CCC Service**

NEXCOM product manager visited the customer and offered a platform proposal comprising a selection of COM Express & custom carrier board. NEXCOM confirmed those request and provided customer its off-the-shelf COM Express Evaluation Kit (ICES 200 Core 2 Dual)

for performance evaluation. The customer laid down requirement of custom carrier board and picked NEXCOM ICES 267S which is based on Intel most advanced 2<sup>nd</sup> generation Intel<sup>®</sup> Core™ processor family.

After the project kicked off, NEXCOM offered the first engineering samples in only 1.5 months to customer for system integration and validation. NEXCOM assisted customer in enabling 4 different LCD panels, building Ubuntu Linux OS & drivers set, and doing the system regulation pre-scan (CE/FCC). Reliability tests such as thermal cycling were also performed.

During the project, additional specifications and adjustments emerged. Nevertheless, NEXCOM got customer approval after revision and started the first shipment 2 months after customer approval. In addition, NEXCOM transferred custom carrier board design package (schematics, Layout board file, Ubuntu Linux package) so the customer can perform internal product maintenance. Customer is happy with fast delivery and good design quality, which makes NEXCOM happy, too!

#### **Customer Benefit from the CCC Service**

Choosing NEXCOM CCC service, the customer got fast customization solution in short time, 1.5 month in this case, and saved cost and resources from validation, development, and production. Moreover, the customer could carry out upgrade simply by swapping COM Express modules. NEXCOM also helped the customer with customized BIOS and Embedded Linux in same project scope. With the leading platform solution, the customer is allowed to enjoy more market advantages.

# **Key Customer Benefits**

#### Secure Knowledge

Strong enginnering know-how is the key to success for most applications. Customer can keep key design specifications on the carrier board, limiting disclousre to design partners outside the company.

### **Time to Market**

80% of design efforts go into COM module. Partner with NEXCOM, customers can focus on their own carrier boards.



#### Save Cost Assembly & Upgrade Cost

To reduce the cost of making daughter boards or I/O cables.
 COM module can be upgraded easily along with computing demanding application upgrade.

# **Flexibility**

No need to create a new board. The modularized design can fit into several carrier boards for different applications.

# Upcoming 13 Pioneering Technologies

# APPC 0820T / APPC 0820TC

# World's Most Compact 8" Industrial Panel PC

anless APPC 0820T is 8" industrial-grade Panel PC with rich I/O options and APPC 0820TC is the slimmest panel PC. The series is upgraded with dual-core Atom™ processor. RAM, mini-PCle, and CF card are aligned on the same side of the motherboard. The dedicated embedded board not only pursues slimness, it also allows easy expansion and maintenance.

- 8" 4:3 SVGA 800x 600 industrial grade LCD panel & 5-wire flush touch panel integrated.
- Fanless system with Intel<sup>®</sup> Atom<sup>™</sup> dual core processor D525 (1.8GHz, 1M Cache) with DDR3 DRAM.
- ${\, \cdot \,}$  Resistant to temperatures up to 50  ${\, ^{\circ} \text{C}}$  and high antivibration levels
- IP65 front panel

The APPC 0820TC has a multitude of I/O interfaces including 1x power switch, 1x reset button, 1x RS-232, 2x

USB, 1x Line-out and 1x VGA. For more sophisticated automation processes, the APPC 0820T provides additional I/O interfaces including 2x USB, 1x Line-in, 1x Mic-in, 1x GPIO (4 inputs and 4 outputs), 1x RS232/422/485 and PS/2 keyboard and mouse. All these features are protected by metal and IP65 certified front panel.



APPC 0820T / APPC 0820TC
Intel® Atom™ Dual Core

# **NISE 3142**

# Fanless Computer NISE 3142 Sweeps Dual Display Applications

EXCOM open architecture fanless computer NISE 3142 supports Intel® Core™ 2 Duo and Celeron® socket type processor. It is upgraded to CFast SATA interfaces and transfers data faster than its predecessor NISE 3140. Coming with two DVI-Ds, NISE 3142 can present high-definition images simultaneously in dual large independent displays.

Along with fanless design, it can adapt to filthy environments rife with greasy dusts. In addition, NISE 3142 with multiple I/O options is a future proof solution. It is ideal for applications within industrial automation, factory automation, automatic optical inspection, ATMs, public infotainment, in-vehicle signage, and surveillance as well as data acquisition.

- Support Intel<sup>®</sup> Core<sup>™</sup> 2 Duo/ Celeron<sup>®</sup> processor
- Intel<sup>®</sup> GM45 chipsets
- Dual Intel® 82574L Gigabit Ethernet ports
- Dual DVI-D independent display
- 5x RS232 and 1x RS232/422/485 with Auto Direction Control
- On external locked CFast socket (SATA Interface)
- Support ATX power mode and PXE / WoL / LAN Teaming



NISE 3142 Dual DVI-D Displays

#### **NViS 6210**

# 32-Channel Embedded Hybrid DVR Bundles with VMS

U rackmount NViS 6210 is powered by 2<sup>nd</sup> generation Intel<sup>®</sup> Core<sup>™</sup> i7/i5 processor. It features compatible and software-ready platform, 32 channels with D1 resolution, onboard video capture encoder, efficient remote management and a multitude of expansion options. In addition, NViS 6210 provides up to 16TB of storage space when all of its eight 3.5" SATA HDDs are utilized, offering massive storage capacity with good value. Abundant expansion options include VGA cards, wireless connectivity and 6GB SATA 3.0 making NViS 6210 the only one of its kind in surveillance market.

- 2U 19" rackmount standard
- Supports 2<sup>nd</sup> generation of Intel<sup>®</sup> Core<sup>™</sup> i7/i5 quad-core processors
- Up to 32 channel, 960FPS @D1 resolution
- · Techwell video chips onboard
- 8x 3.5" SATA HDD bays for external





**NViS 6210** 2U with 32 Ch-D1 CCTV

#### **NViS 8480**

# **NEXCOM HD CCTV Surveillance Captures the Finest Detail**

owered by 2<sup>nd</sup> generation Intel<sup>®</sup> Core<sup>™</sup> i7/i5 desktop processors with Q67 chipset, NViS 8480 is able to display and playback Full HD videos through 8 channels. In addition, the storage capacity NViS 8480 holds can be as large as 12TB when all of its six 3.5" SATA HDDs are utilized, offering massive storage capacity with good value. The feature-rich PCI express expansion (4x PCI by 4 slots) makes NViS8480 an ideal solution for HD CCTV surveillance.

- 4U 19" rackmount standard
- Supports 2<sup>nd</sup> generation Intel<sup>®</sup> Core<sup>™</sup> i7/i5 quad core processors
- 6x USB2.0/1x VGA/ 1x DVI-D
- 4x PCIe expansion slots
- 6x 3.5" SATA HDD bays for external



#### **nTUF 600**

# Fanless Marine Computer Rides on a Wave

anless marine computer nTUF 600, powered by Intel® Atom™ processor D525, is designed for maritime applications with IEC60945 and E10 compliance. Integrated with fanless construction, locked I/O interfaces and affixed CFast socket, nTUF 600 is resilient to wind and waves in the rough sea. Working with navigator, sonar or communication equipments, nTUF 600 is an ideal marine computer for naval ships, boats, yachts, power boats, and fishing vessels.

nTUF 600 provides a multitude of I/O options including 4xUSB, 2xPS/2, 2x Intel GbE M2 LAN, 1xVGA and 2x RS232 with DB9 and 24V DC. In addition, isolated design on NMEA and DC input gives nTUF 600 added protections, ensuring system stability and reliable signal transmission. The fanless design, swappable SSD tray and CFast card socket will make system maintenance an easy task.

- Intel<sup>®</sup> Atom<sup>™</sup> processor D525 on board
- 2G pre-installed memory
- Two cold swappable 2.5" SSD tray
- 1x front accessible & screwed CFast card socket
- 2x Intel® GbE M12 LAN
- 1x VGA, 4x USB, 2x PS/2 Keyboard & Mouse

**nTUF 600**Marine Compliance



# nROK 3000

# **Fanless In-Vehicle Computer for Railway Application**

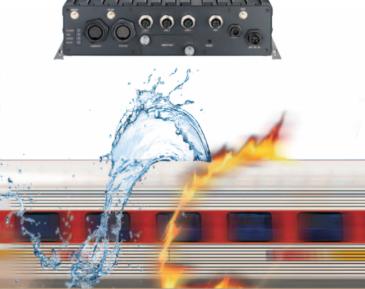
ROK 3000, a truly rugged computer box, is specially designed for train application. With the lockable connector, the in-vehicle computer can fasten the cable so no need to worry about losing connection on rolling stocks.

Most I/O options are aligned in the front panel for easy maintenance. nROK 3000 also uses removable 2.5" SSD tray for easy replacement of data storage units . Also, two USB ports capped with a secure cover are located in the rear allowing repair, maintenance and upgrade.

Besides its user-friendly design, nROK 3000 is a robust platform which is protected by IP65 compliant chassis. Moreover, it is an EN50155 certified computer, which is resistant to shock and vibration. In addition, cables and wires can be securely fastened by circular connectors.

- · Fanless and rugged design
- Rich I/O interface with secure lock
- Removable 2.5" SSD tray
- · Easy maintenance
- · Compliant with IP65
- EN50155 certified

nROK 3000



# **VMC 1000**

# A Brand New In-Vehicle Computer with 7" LCD Display Save You from Disarray

" VMC1000 in-vehilce computer is a compact all-in-all solution which comes with computer system and 7" LCD touch screen. VMC 1000 addresses space concern and can be tucked under driver's seat. As a in-vehicle computers, VMC 1000 has GPS function and provides optional Wi-Fi and WWAN connectivity for data transmission.

Wake-On-SMS and Wake-On-RTC is another add-in alternative. Texting from mobile phone allows clients to control the in-vehicle compute from a distance This function will improve management efficiency and save cost. Moreover, the system can sustain vibration and shock. It also complies with IP54.



- 7" WVGA TFT LCD with LED backlight
- · Compact and fanless design
- Wake on RTC /SMS
- · Variety wireless communication options
- Compliant with IP54
- Certified by CE/ FCC/ e13 Mark

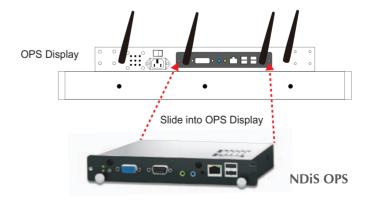
# **NDIS OPS**

# Simplify Digital Signage Installation, Use, Maintenance and Upgrade

DIS OPS is an OPS-compliant platform, which is specifically designed to meet Open Pluggable Standard. It provides a COM Express architecture slot with optional COM Express Type II module and SATA

half-slim SSD for storage. NDIS OPS is a compact and powerful media player, which supports the highly-efficient  $2^{nd}$  generation Intel® Core™ dual core processor i5-2515E for digital signage applications.

- Embedded 2<sup>nd</sup> generation Intel<sup>®</sup> Core<sup>™</sup> dual core processor i5-2515E
- Intel<sup>®</sup> Integrated Graphics 3000
- Design compliant to Open Pluggable Standard
- · Slot-in integration, easy maintenance
- Supports DVI, DP, UART, and USB2.0 via JAE 80-pin connector
- TV tuner/ WLAN support



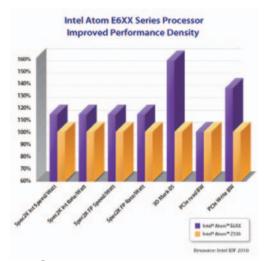
# **NDiS 111**

# **Excellent Graphic Performance for Full-HD Playback**

DiS 111 is an Intel® Atom™ E6xx-based digital signage player which targets customers looking for affordable entry-level solutions. Powered by Intel® Atom™ E6xx Series CPU, the top design power (TDP) of E620 Processor only reaches 3.3W. NDiS 111 adopts 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%.

**NDiS 111** 





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

### **NDiS 166**

# **High Performance Digital Signage Player**

# Powered by 2<sup>nd</sup> Generation Intel<sup>®</sup> Core<sup>™</sup> Processor i3/i5/i7

DiS 166 is a powerful new digital signage player which is built around the superb technology of Intel® Core™ i3/i5/i7 processor family with Intel® new HD graphics engine and QM67 chipset. Fanless NDiS 166 is capable of offering impressive system performance and can easily support dual Full HD display.

NDiS 166 incorporates Intel® QM67 Platform Controller Hub (PCH), Intel® Core™ i3/i5/i7 processor and two DDR3 memory sockets up to 8GB. 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.



- 2<sup>nd</sup> generation Intel<sup>®</sup> Core<sup>™</sup> i3/i5/i7 processor
- Intel<sup>®</sup> Integrated Graphics Engine
- Compact and fanless design
- Dual independent display
- Dual GbE LAN
- · WLAN/ TV tuner support

# PowerDigiS V2

# **NEXCOM PowerDigiS Bridges Communication Gap**



EXCOM's PowerDigiS V2 Digital Signage Software which expands supported file formats and integrates new interactive elements. It also features a web-based user interface allowing easy access to central management console anytime and everywhere.

# **Elicit by Design**

PowerDigiS V2 recognizes different communication signals allowing digital signage players to interact with audience diversely. For instance, a touch screen interface is integrated to deliver the most intuitive control experience.

It is also able to pick up satellite signals. Working jointly with GPS receiver, the software will enable players to feed audience predefined content based on location and therefore turn the players into mobile information stands. Types of communication include general purpose input/output (GPIO) and infrared, enabling the system to be remotely operated. Serial port, time-out and barcode can also be used to trigger players.

## Easier than Ever

PowerDigiS V2 adopts web-based user interface providing full access to central management system through web browser. Users can log in either Player Management Console for standalone player management or CMS Management Console for multiple player management.

Scene Editor enables users to separate display area into several zones to create layouts, arrange contents and add widgets.

Time-based scheduling is another notable feature which makes display scheduling simple. Users can select among

different timeframe, from hour, day, week, month, to year. Drag and drop a playlist into the timeframe, and contents in the playlist will be played by turns.

In addition, changing content based on location can be easier than ever. With Google Map embedded in PowerDigiS V2, what and where to show can be set by simple map search.

Zone Sync can synchronize originally irrelevant contents displayed in different zones to convey related messages simultaneously. Once specific content in master zone is played, subordinate contents in slave zones will be shown.

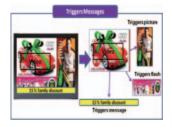
In addition, widgets such as time and weather can be added as well to save time for program design.

#### **Access Control**

Beyond simplicity, the latest PowerDigiS provides security, too. Access control function restricts access to management console based on user roles.

# **Main Features**

- Content playback capabilities
- Digital signage networking
- Time-based scheduling
- Wed-based UI
- Zone contents sync
- Event trigger
- Embedded widget
- · Access control list
- Alpha test website



#### **NSA 5130**

# Smarter Defender, Enterprise-Level Network Security Platform

SA 5130 platform supports recently launched Intel® Xeon® E3/Core™ i3 processors. Leveraging the fast, intelligent and multi-core 32nm Intel® Xeon® processor E3 family for embedded market. It is also the first to implement the Intel® Sandy Bridge series technology on network security platform. The long-term available NSA 5130 network platform is capable of offering mighty computing performance and great expansion capability.

NSA 5130 not only speeds up multitasks but also delivers incredible computing performance to safeguard against all network threats. Moreover, in order to adapt to the diversification of the network security appliance market, NSA 5130 is compatible with verified third-party applications and comes with rich I/O options. NSA 5130 can show more security, flexibility, and reliability and satisfies the market at one time.

- Intel<sup>®</sup> Xeon<sup>®</sup> E3-1275; E3-1225; Core<sup>™</sup> i3-2120;
   Pentium<sup>®</sup> G850 processors
- 8 GbE LAN ports (Optional 8x GbE LAN ports)
- 4 latch bypass
- · 4 DDR3 1066/1333 memory, up to 16GB
- Intel<sup>®</sup> C206 chipset integrated with VGA controller
- · Support one PCIe slot for VoIP extensibility
- 1U 19" rackmount platform with physical dimensions: 430x 450x 44 mm (Wx Dx H)

#### NSA 5130



## **OSA 5130**

# **Extensible VoIP Network Security Platform**

he first network security platform implemented with Intel's latest technology, OSA 5130 supports recently launched Intel® Xeon® E3/Core™ i3 family processors. Leveraging the fast, intelligent and multi-core 32nm Intel® Xeon® processor E3 family for embedded market.

Effectively protecting existing interconnect and access network infrastructure and itself, OSA 5130 helps to ensure that VoIP services are continuously available, while performance is unaffected by outside attack. Management is streamlined and operating overhead reduced because OSA 5130 centralizes management operations in a single interface for policy-based routing and advanced call tracing as well as fault monitoring, configuration, accounting, performance, and security functions.

- Intel<sup>®</sup> Xeon<sup>®</sup> E3-1275; E3-1225; Core<sup>™</sup> i3-2120; Pentium<sup>®</sup> G850 processors
- Support Two PCIe slots for VoIP extensibility
- 8 GbE LAN port
- · 4 latch bypass
- · 4 DDR3 1066/1333 memory, up to 16GB
- Support 1+1 redundant power supply
- 1U 19" rack-mount platform with physical dimensions: 430x 450x 44 mm (Wx Dx H)



**OSA 5130** 

# A Booming Future of Digital Signage

# 2011 Multi-Media Solutions Conference in Düsseldorf, Germany

EXOCM and its partners flocked together jointly exploring opportunities in prospering digital signage market on 21<sup>st</sup> September. In the conference, NEXCOM updated its outstanding growth, shared market perspectives, and thoroughly discussed challenges and opportunities lying ahead in digital signage market. In addition, Intel Corporation also shared its technology roadmap for digital signage market.

Undoubtedly, new technology developments will be driving forces pushing digital signage market for prosperity. As interaction, location base, and mobility are increasing integrated in the digital signage, NEXCOM unveiled its latest innovation to ride the market wave. Products showed in the conference included high-performance player NDiS 166, cost-effective players, and multi-display player NDiS 542.

Not only did NEXCOM's digital signage players shine in the conference, NEXCOM partners-RDM, 2DB, Aitek, Microdis, and fabbricadigitale-also shared their interesting application cases in medical, cinema, retail, museum, and military fields. Positive feedback received from our partners just provided the most solid proof.



# In-Vehicle Applications Hit the Road

# Top Three Tips to Build Market Proven In-Vehicle System

EXCOM attracted 200ish potential customers to its recent In-vehicle Computing Seminar in Taipei on September 6. During the seminar, top three elements were highlighted in developing an in-vehicle system. These were reliability, power management, and expansion.

The requirement to develop new Intelligent Transportation Systems has never been so huge; however all such systems must be truly reliable and can operate in the harshest environments. NEXCOM's in-vehicle systems are born to be rugged. They can operate over a wide temperature range, and withstand dramatic levels of shock and vibration. The fanless design ensures the longevity and reliability of the systems.

Secondly, right power ignition on/off delay control and low-battery protection must be considered to protect systems and cars whilst to ensure fully data transmission.

The integrated PoE provides power to peripheral devices via Ethernet. Also, a wide range of power input is basic for multinationals operations.

System requirements vary from vehicle to vehicle and country to country. Thus, the configuration must be expansible and timely customization must be offered. NEXCOM gains its profound knowledge and experience from real cases, which enables NEXCOM to offer market proven in-vehicle solutions throughout the world.



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