

Express

NEXCOM

Summer 2011



Trusted Patrolling Fanless Computer



Shine at NCR
User Conference



Smarter Solutions
for In-Vehicle
Signage and
Infotainment



Add Intel® Atom™
E600 Series
Processor into
Product Selections



Dear Partners,

In line with my forecast in Spring Issue of NEXCOM Express, NEXCOM saw business growth of around 35% in Q2 of 2011. Thanks to all our partners for your contribution towards our great performance. Furthermore, we have even more good news to share with you!

Our website has been restructured and renewed for a better user experience. Go visit NEXCOM website, you'll find it's far more responsive, and far quicker to find what you are looking for with less clicks. In addition, we also have more and more product videos on the new website, which are also available in Youtube. Enjoy it and feel free to give us comments for improvements.

In addition to NEXCOM's upgrade in hyperspace, we also have a major upgrade of NEXCOM in the physical world, this is because NEXCOM has relocated its global headquarters to a much larger facility in New Taipei City. With triple the space, we now have enough headroom to grow five times bigger or even bigger.

We have many friendly features built into the new

headquarters, not only for working, but also for improved working co-operation and for a better working environment. The new Head Quarters has been designed to be "customer oriented", with improved visiting, meeting and discussion areas, furthermore; it is also suitable for business co-development with areas set aside for long stay customers. All of you are cordially invited to visit NEXCOM to enjoy our hospitality and the new facilities.

Back to business, NEXCOM have many more new products available for the Q4 harvesting season. Many Intel® E600 series based models from three BU's will be available finally with the release of the B1 rev. The complete line up of NEXCOM surveillance platforms and solutions, and the various panel PC's, are the highlights of Q3. The Intel® i3/ i5/ i7 based models are now all in mass production...

We have accumulated more and more success stories in many application domains. These exciting scenarios could be applied to any corner of the world. Please consult the NEXCOM sales representatives for related projects without hesitation. And, also share your success stories with the NEXCOM partner family to enrich our knowledge and expand our business together.

Clement Lin

A stylized, handwritten signature in black ink, consisting of several fluid, connected strokes that form the name 'Clement Lin'.

Content

02 Message from CEO

04 What's New

Enjoy Surfing NEXCOM's New Website

05 Technology Focus

NEXCOM Adds Intel® Atom™ E600 Series Processor into Product Selections

08 White Paper

Smarter Solutions for In-Vehicle Signage and Infotainment

11 Market Story

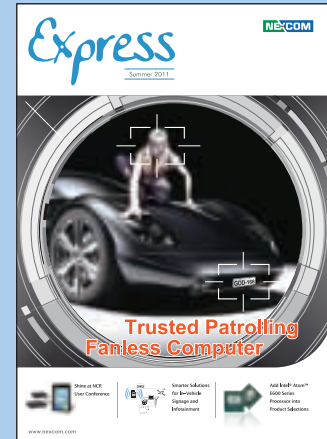
NISE Fanless Computer on Patrol Digital Signage Player that System Integrator Loves Most

15 What's Hot

Latest Products Available in Q3

21 Event Recap

IDF Beijing
Smart Mobile NVR Attracted the Crowd
NEXCOM Shine at NCR User Conference
Stand Out Above the Digital Signage Crowd



NEXCOM EXPRESS Summer 2011

PUBLISHER

NEXCOM

EDITORS

Liyin Lin, Maggie Kao,
Stephen Ritchie

DESIGN

Wayne Chen
Yisa Tsai, Jason Lee,

WEB

www.nexcom.com

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.



Enjoy Surfing NEXCOM's New Website



www.nexcom.com

NEXCOM's new worldwide and EU websites were launched on May 24. The new design offers visitors easier access to information, richer interactions, and better functionality. Surfing NEXCOM's website has never been so much fun.

Easy Info Access

On the home page, impressive banners enable visitors to explore all the latest innovations in NEXCOM products and solutions for vertical markets. Under the main banner, the quick link pages offer fast and easy access to information and give users direct links to targeted product information in all four of NEXCOM's business units. In addition, a mega pull down menu provides the quickest route for information hunters.

Richer Interactions

The new website provides richer interactions including video, RSS, the share function to various social media. The home-page video quick link takes visitors to view the latest videos from solution demos to product, events and testimony videos. RSS can let you to subscribe among different types of information from products, news, solutions, and videos to online catalogs and publications.

And you also can share our web pages to social media with one simple click.

Better functionality

The inter-connections are now better than ever. We enhance the main content with more relevant information. For example, when you are in the Applied Panel PC product section, you can find relevant solutions, news and informative products videos. The in-depth method offers users a better overview of our products and total solutions.

In addition it is now even easier to inquire about a specific product or solution. When you complete the products surfing, click on "send inquiry" and just click on the products you would like to receive information on.

Finally, you can view our latest catalogs and NEXCOM Express quarterly brochures online now without waiting for a hard copy arrive. All publications are present in e-book style with value-added functions, such as search, bookmark, note-taking and print facility (selected pages). We believe the e-publications will become a helpful tool for you at work.

NEXCOM Adds Intel® Atom™ E600 Series Processor to its Product Selections

Based on Intel® Atom™ E600 series processor, NEXCOM has provided rich I/O solutions to allow greater configuration flexibility for embedded applications, such as industrial automation, in-vehicle infotainment systems, digital signage and communication gateway. The following products are a good example of NEXCOM products which utilize this technology:

- **Fanless Computer: NISE 90**
- **Single Board Computer: EBC 310**
- **Automation Embedded Controller: PBOX 50**
- **In-Vehicle Computer: VTC 1000**
- **Digital Signage Player: NDiS 111**
- **Network Security Appliance: DNA 110**



1 NISE 90 Fanless Computer

Equipped with Intel® Atom™ E620/ E620T 0.6GHz processor and Intel® Platform Controller Hub EG20T, the NISE 90 fanless computer features low power consumption (only 15W) with extended operating temperature and an abundance of I/O options to meet the requirements of factory and industrial automation control.

Harsh environment applications often require extended operating temperature support. Featuring a fanless design and wide operating temperature ranges, from -20 to 70°C, the NISE 90 is able to offer optimum reliability and performance.

In addition, the NISE 90 is equipped with an abundance of I/O interfaces, such as 10pin GPIO, CAN BUS, 3 COM

ports, two Intel® GbE LAN and DC Input (either 12V or 24V DC) that provide flexibility for various application designs.

The EBC 310 is a 3.5" embedded SBC (Single Board Computer) based on Intel® Atom™ E640 platform to serve embedded applications, such as industrial automation control, building automation, medical instruments, digital signage, in-vehicle PC and mobile DVR.

2 EBC 310 Single Board Computer

The EBC 310 has great expansion capability, including VGA, LVDS panel support, CAN, SATA, USB 2.0, COM port, digital I/O, two gigabit Ethernet support, HD audio and one mini-PCIe socket.

With Intel® Atom™ E640 processor, the EBC 310 supports low power consumption, from 2.7 watt to 3.9 watt only,

which is ideal for power-critical applications. It is also able to function in severe environments, from -40 to 85°C .

3 PBOX 50 Automation Embedded Controller

The PBOX 50, featuring low-power consumption, fanless design and high performance computing, is able to meet requirements of industrial applications. The PBOX 50 integrates Intel® Atom® E600 series processor and Intel® Platform Controller Hub EG20T with no more than 5.5W power consumption.

With size of 172 x 140 x 56 mm, this small form factor can be easily incorporated into display devices. Designed for 24/7 operation, it also ensures reliability.

The feature-rich I/Os and compact design make PBOX 50 an ideal solution for digital signage media player, Kiosk, POS, communication appliances, thin-client, automation controller and industrial control.

The NDiS 111 is equipped with maintenance-free fanless design which reduces moving parts and therefore increases component life span. Users thus benefit from a lower Total Cost of Ownership yet exceptional reliability.

Powered by Intel® Atom™ E600 series CPU, the top design power (TDP) of E620 processor only reaches 3.3W, which is considered as very low power consumption compared to other products with similar designs.

4 NDiS 111 Digital Signage Player

The NDiS 111 utilizes Intel® Atom™ E620 CPU with integrated graphic engines, hardware video decoder and memory controller which enhance graphics performance by up to 50% compared to the previous generations and thus make it an ideal solution for entry-level digital signage deployments with 1080P video.

Housed in a small size chassis, the VTC 1000 can be easily deployed in vehicles, including train, taxi and bus, for instant information delivery.

5 VTC 1000 In-Vehicle Computer

The VTC 1000 is differentiated by a multitude of I/O interfaces that enable connectivity to a variety of in-vehicle devices. The VTC 1000 fanless in-vehicle computer features interface connections, such as VGA and mini-PCI Express® WLAN/ 3.5G modules, that address in-vehicle infotainment and digital signage applications.

In addition, it reserves FRAM optional design for critical data access to increase its reliability. SMS wake up feature ensures entire operation can be run more efficiently.

6 DNA 110 Network Security Appliance

The DNA 110, NEXCOM's first network security platform implementing Intel® Atom™ E600 series processor technology, provides better usage and management for homes and small businesses.

As an entry-level desktop network security platform in a compact design (272mm x 195mm x 44mm), which is similar to size of router, the DNA 110 is designed to act as the solid foundation on which to host virtual private network (VPN) or firewall gateway.

To ensure the system can function correctly under continuous vibration, the DNA 110 is specifically designed with on-board memory. Moreover, with fanless design, the DNA 110 guarantees quiet operation.



NISE 90 / Fanless Computer

2



EBC 310 / Single Board Computer

3



PBOX 50 / Automation Embedded Controller

4



NDiS 111 / Digital Signage Player

5



VTC 1000 / In-Vehicle Computer

6



DNA 110 / Network Security Appliance



Highlights of Intel® Atom™ Processor E600 Series-Based Platform

The Intel® Atom™ processor E600 series delivers an unprecedented level of I/O flexibility, departing from proprietary interfaces such as FSB and DMI and moving to the open PCI-Express standard for processor-to-chipset interfaces.

Processors in this series can be paired with the Intel® Platform Controller Hub EG20T or I/O hubs from a variety of third-party vendors to meet the specific I/O requirements of many embedded applications.

The Intel® Platform Controller Hub EG20T integrates a range of common I/O blocks required in many market segments such as industrial automation, retail, gaming, and digital signage. These include SATA, USB client, SD/SDIO/ MMC, and Gigabit Ethernet MAC, as well as general embedded interfaces such as CAN, IEEE* 1588, SPI, I2C, UART, and GPIO.

Smarter Solutions for In-Vehicle Signage and Infotainment

The global trend of rural-to-urban migration has become more and more obvious. For many people, living in metropolitan areas means greater reliance on cars, buses and trucks. People end up spending more time in vehicles going from one destination to another. With development of state-of-the-art in-vehicle infotainment (IVI) systems, vehicles are now capable of providing users real-time information, entertainment and network computing services, creating new business opportunities and usage models.

Utilizing compute technology for in-vehicle signage (such as a fare-card reader) and infotainment still has its challenges though. This paper examines how an industrial-grade solution can be deployed with in-vehicle digital multimedia applications to provide rich multimedia content using the Intel® Atom™ processor E600 series for instant information and entertainment delivery.

True Multimedia Handling

Due to space limitations, in-vehicle signage and infotainment systems are small in size and display graphics and video, rather than words, to deliver clear, visual messages to passengers. With the ever-growing demand for multimedia content, the Intel® Atom™ processor E600 series is designed to provide enhanced graphics performance and includes a video hardware decoder that assures full high-definition (HD) video playback and megapixel images which live up to today's end-user expectations.

This processor incorporates the Integrated Intel®

Graphics Media Accelerator (GMA) 600 GPU, a power-optimized 2D/3D graphics engine that provides up to 50 percent better performance than the previous generation solutions⁽¹⁾, enabling the system to handle rich multimedia content. Moreover, the graphics engine provides full hardware-accelerated HD H.264, MPEG-4, VC1, and WMV9 decode, and for the first time, hardware encode of MPEG-4 and H.264. The video hardware decoder supports H.264 baseline, main and high profile, up to L4.1 level. Such brilliant multimedia handling capability enriches user experiences and improves high quality in-vehicle information and entertainment.



Figure 1: With integrated wireless network modem, the VTC 1000 in-vehicle computer can be activated by remote wake-up feature using SMS.

Energy Saving Design

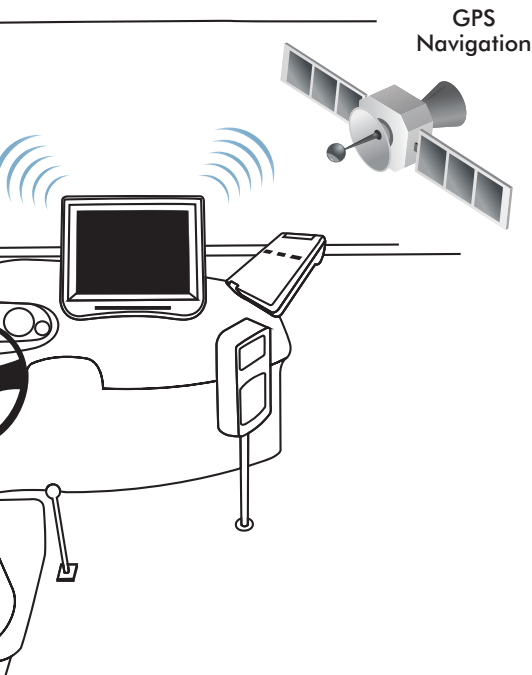
In response to environmental concerns, Intel has developed the Intel® Atom™ processor E600 series to deliver low-power consumption. This is important since an in-vehicle system is powered by a vehicle's battery and power draw is always a consideration when specifying a

(1)Source: <http://embeddedinnovator.com/built-for-embedded-the-new-intel-atom-processor-e6xx-series>

(2)Source: <http://embeddedinnovator.com/built-for-embedded-the-new-intel-atom-processor-e6xx-series>

solution of this type. Unlike full power Intel® architecture (IA) solutions, the Intel® Atom™ processor E600 series can be used with third-party chipsets and perform as a stand-alone system-on-chip (SoC) without an accompanying chipset. This Intel® Atom™ processor-based SoC is available at speeds of 600 MHz to 1.6 GHz, offering a good balance between performance and power, as well as providing the scalability to address a wide variety of applications.

The integrated system management controller takes care of the complete platform start-up, state-transitioning



and power-down procedures. It operates autonomously and reduces the overall system power consumption when entering stand-by or power-down modes. This processor uses Intel's 45nm high-k process to keep power consumption down to just 2.7 to 3.9 watts⁽²⁾, which is considered excellent performance-per-watt. This scalability makes the Intel® Atom™ processor E600 series ideal for both high-end and low-end vehicles.

Extended Operating Temperature

In order to withstand extreme environmental conditions, vehicles have been designed to operate in a wide range of temperatures, making this a key criterion for in-vehicle computing deployments as well. For a number of years, NEXCOM (an Associate member of the Intel® Embedded Alliance) has offered a comprehensive range of in-vehicle solutions, including telematics PCs and rugged mobile computers. For its latest generation of in-vehicle infotainment solutions, NEXCOM has chosen the Intel® Atom™ processor E600 series for its support of a wide range of temperatures. Its cutting edge technology is combined with careful component selection and a mechanical design which dissipates heat to give the new platform an extended operating temperature range of -20 to 70°C.

Expansion for Arbitrary Application Requirements

It is hard to predict all desired product functionalities at the development stage. For this reason, expansion capability for arbitrary application requirements has become essential in in-vehicle designs to allow greater configuration flexibility. A good example of such a design is NEXCOM's compact rugged in-vehicle computer, the VTC 1000, which is differentiated by a multitude of I/O interfaces that enable connectivity to a variety of in-vehicle features. The VTC 1000 fanless in-vehicle computer features interface connections, such as VGA, TV-out and LVDS, that address in-vehicle infotainment and digital signage applications. Other features which are specifically incorporated for application expansion include a PCI-104 slot for CAN bus or COM port and Mini-PCI Express® WLAN/3.5G modules.

Vehicle Power Management

In-vehicle infotainment systems rely on vehicle power to activate the system. However, power fluctuations and spikes occur when a vehicle is switched on and off. In order to ensure the in-vehicle system can be turned on in a safe mode, a power delay function allows the system to be activated a few seconds after the transient voltage condition.

In addition, power control features provide better road management for vehicle tracking with uninterrupted power support. Vehicle tracking has become the backbone to mobile business, enabling users to change the way that

vehicles on the road are managed and driven. Again, the VTC 1000 is a good example here. With a backup smart battery, the VTC 1000 is capable of running continuously when vehicle power is temporarily off. For instance, when a vehicle is filled up with fuel, the vehicle must be turned off for few minutes; with its backup smart battery, the VTC 1000 car PC assures continuous recording of vehicle tracking during this period.

Mobile Network Connectivity

With an integrated wireless network modem, users can utilize mobile network connectivity to conveniently achieve real-time information updates. There's no need to wait anymore for content updates – vehicles can be used right away on schedule. Even when a vehicle is off, the in-vehicle system can be activated by a remote wake-up feature using short message service (SMS). When the system is awakened from a remote site, content can be transmitted through 3.5G wireless connectivity and updated easily. Once the update is completed, the

system can be automatically turned off. Mobile network connectivity has provided users the most convenient way to immediately update information no matter how far away the vehicle is located.

Conclusion

Car manufacturers looking for new ways to compete should invest in the more advanced IVI systems that today's car, truck and fleet buyers seek. Equipped with the Intel® Atom™ processor E600 series, the VTC 1000 is a prime example of the type of platform on which to base such an IVI system. It is capable of handling the rich multimedia content today's users demand. Furthermore, the platform's low power consumption design makes NEXCOM's in-vehicle computer a green product. In addition, hardware designs, various expansion options, and smart vehicle power management, make the VTC 1000 car PC an ideal in-vehicle signage and infotainment hardware platform, providing a real advance in in-vehicle computing.



Figure 2: Content can be easily transmitted and updated through 3.5G wireless connectivity.

NISE FANLESS COMPUTER ON PATROL



Trusted Patrolling Fanless Computer with Built-In DVD Combo

Winning the Police Project with NEXCOM NISE Series

In the never ending fight against crime, police forces throughout the UK are increasingly using digital video recorders as a way of capturing vital evidence. To meet these requirements a UK based pioneer in flexible covert systems has launched a range of intelligent digital video recorder which is based on NEXCOM's high performance NISE series fanless computers that guarantee industrial-grade reliability, functionality and performance.

Application Requirements

When selecting a hardware platform, developers were looking for an off-the-shelf fanless computers solution with an excellent reputation for reliability, functionality and performance. It is for that reason, that the developer selected NEXCOM as its hardware supplier. In particular, developers were looking for a fanless PC which had the

following specifications.

- Built-in DVD player/rewriter device to enable video evidence to be recorded.
- A rugged fanless design which guarantees outdoor operation and minimal engineering effort.
- A flexible configuration, which can support the installation of various capture cards and add-on devices via PCI/ PCIe expansion slots.
- A scalable platform to meet different needs. With socket-type processor, developers can choose from entry-level single-core to advanced Core™ 2 Duo CPU to fit application needs.
- Embedded advanced graphic engine to support high resolution real-time display.
- For multi-channel surveillance applications which require two PCI slots available for optional DVR/CCTV cards.

Reliability

NISE 3145 is constructed from fanless design and the finest industrial grade components giving it reliability under harsh environments and long term product support which at the same time minimize engineering effort.

Functionality

NISE 3145 is equipped with a built-in DVD player/rewriter to enable police evidence to be recorded. IP/Network is also available for convenient remote operation and IP camera connection.

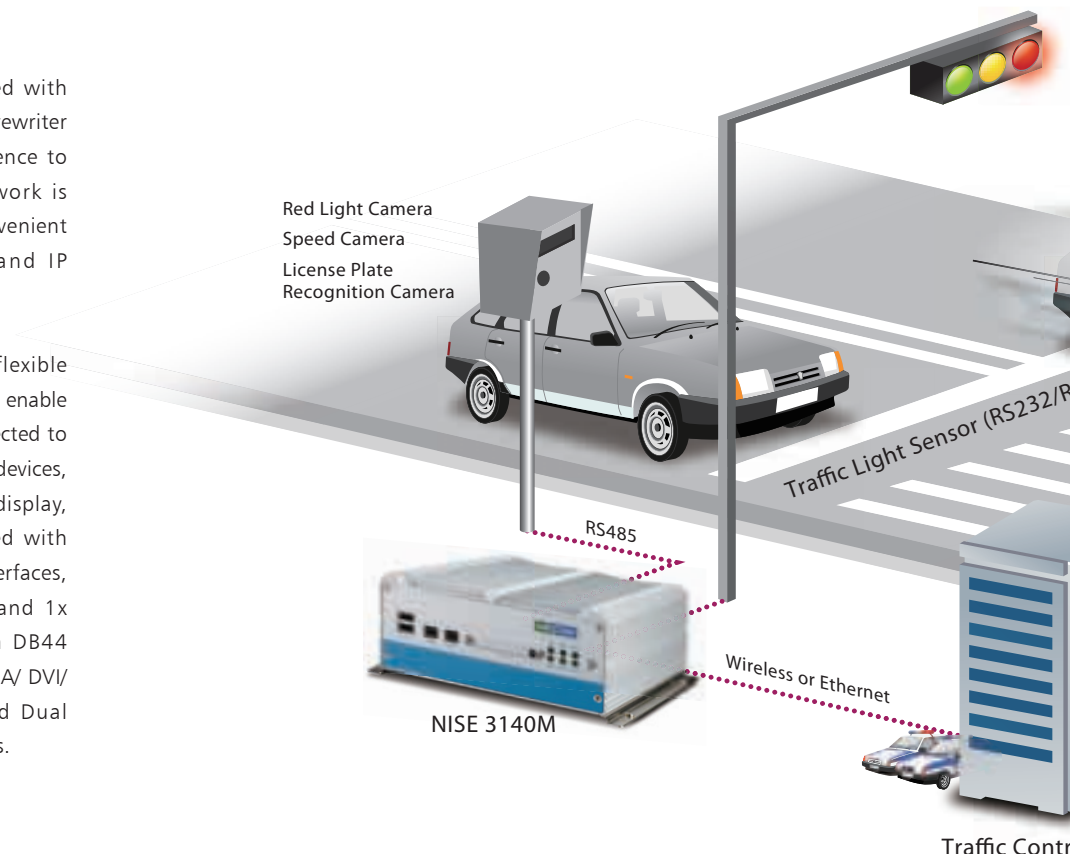
NISE 3145 also has flexible configuration ability. To enable NISE 3145 to be connected to a range of peripheral devices, such as camera and display, NISE 3145 is equipped with a multitude of I/O interfaces, including 3x RS232 and 1x RS232/ 422/ 485 via DB44 Connector, USB2.0/ VGA/ DVI/ Parallel Interface and Dual 10/100/1000 LAN ports.

In addition, for multi-channel surveillance applications which require two PCI slots for DVR/CCTV cards, NEXCOM offered the NISE 3140P2 Industrial fanless PC to meet the requirement.

Performance

NEXCOM offers a scalable platform to meet application needs. With socket-type processor, developers can choose processor ranges from Celeron® up to Core™ 2 Duo according to their needs and project budget. Moreover, NISE 3145 also comes with built-in advanced graphic engine, which enhances high resolution real-time video display.

Designed to comply with UK Home Office regulations, this NISE 3145 based platform has now been adopted by a number of UK Police Forces. In addition, the developer was happy that NEXCOM used its considerable OEM/ODM experience to customize and rebrand the NISE 3145 in line with their requirements. Not only that, NEXCOM's UK based Sales and Technical Centre were able to offer localized support which helped the developer to win the police project.



NEXCOM Fanless Computer Plays Key Role in Police Speed Trap

A traditional security surveillance application relies on human resources for task execution, such as speed-testing and monitoring; however this often results in inefficiency, inaccuracy and increased labor costs. By integrating NEXCOM's fanless computer into their computerized police system, an e-police force in Tianjin, China was able to significantly reduce human resource deployment and simultaneously enhance the systems efficiency and performance.

Application Requirements

A global supplier of advanced video surveillance solutions, which was ranked in the industry's Top 10 by the National Security Brand in China between 2003 and 2010, is committed to delivering reliable and precise solutions for e-policing thus creating a safer environment.

In order to achieve this goal, the company required a solution with exceptional reliability, superb cooling properties and a low maintenance design. In addition, the

company wanted a platform which was suitable for 24/7 outdoor operation and be powerful enough to support image processing and number plate recognition under fanless industrial computer solution. After much market research the vendor chose NEXCOM's hardware as the basis for their professional e-police solution.

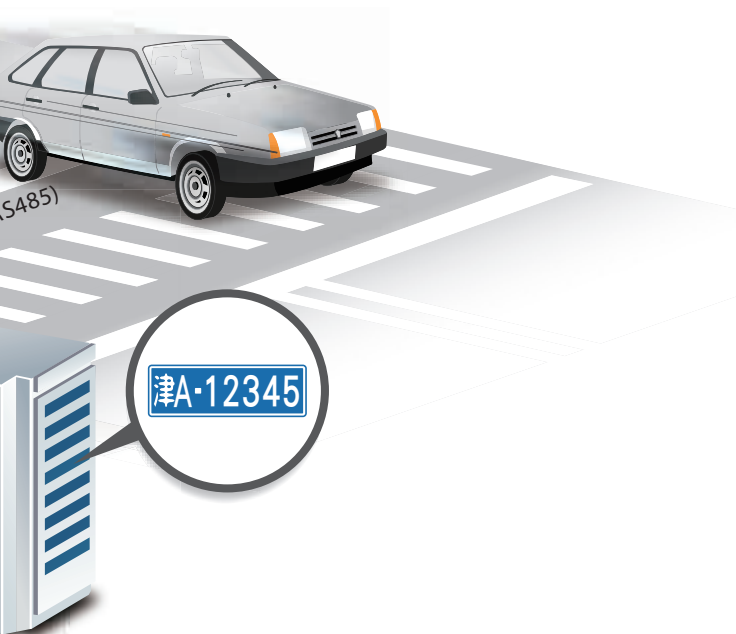
Successful Solutions

NEXCOM's fanless computer, the NISE 3140M, totally meets the customer's expectations. Housed in a compact robust chassis with fanless design, NISE 3140M is a dust-free, totally reliable platform that greatly lowers maintenance costs. Moreover, a wide operating temperature, from -5 to 55°C, and compact dimensions means the NISE 3140M is perfect for meeting the challenges associated with outdoor applications.

The powerful NISE 3140M is equipped with GM45 chipset and Intel® Core™ 2 Duo processor, making it the ideal solution for processing the rich media images usually associated with number plate recognition. This superb performance enables the Police to efficiently remove noise, de-interlace, sharpen and adjust the color on video footage from even HD cameras.

The customer is also happy with the multitude of peripheral interfaces that offer great expansion opportunities. NISE 3140M comes with major interfaces, such as a Gigabit Ethernet LAN port, IEEE 1394b and PCIe, which allow IP-based HD camera connection and SD video capture card integration. Furthermore, dual HDD installation and RAID 0,1 are supported for critical data backup.

After successfully integrating the reliable NISE 3140M fanless computer into an e-police system in Tianjin, China, various tasks such as checking for speeding vehicles has become more efficient and accurate. Most importantly it exceeded all the police's expectations.



Leading Systems Integrator Uses NEXCOM Digital Signage Player for Multi-Display Advertising

A Singapore based company which provides professional digital signage solutions and system integration service in the region, has recently selected NEXCOM's NDiS 540 series digital signage players as their digital signage platform on a number of projects. The company aims to provide real time messaging, as well as mission critical and highly sensitive information display systems. To meet the company's requirements NEXCOM provided the integrator with a high-end, ultra-reliable digital signage player capable of playing multiple display outputs with high quality multimedia content.

Multiple Displays with High Quality Video Playback

When selecting a hardware partner for their deployment, the systems integrator were looking for a purpose-built digital signage player that was capable of playing high quality video on multiple displays, which could boast superb industrial-grade reliability and compact size. It is at this point that NEXCOM provided the perfect solution in the form of the NDiS 540 digital signage player.

The powerful NDiS 540 features 4 independent DVI and audio outputs and is therefore ideal for delivering real time information and advertising across multiple or separate screens. The NDiS 540 eliminates the need for an additional video splitter thus reducing installation costs and TCO.

For deployments that require the streaming of advertisements displayed in specific locations, NEXCOM offered the flexible NDiS 540 digital signage player. This platform comes with an advanced ATI graphic controller, had been used to ensure superior visual effect with 1080P resolution for entertainment and advertisement.

Industrial Grade System, Small in Size, Powerful in Specifications

Housed in a 272 x 195 x 44 (mm) chassis, the NDiS 540 is small in size and specifically designed to be mounted within confined space environments. The customer is not only happy with the size, but also with the industrial grade design of the unit which assures complete reliability. The company does not need to worry about product reliability, a benefit which reduces product down time and reduces maintenance costs.

A representative of the company stated that they were very impressed by the reliability and the ease of implementation of NEXCOM's digital signage solutions. It certainly had a positive impact on their business.

• NDiS 540



Latest Products Available in Q3

NDiS 166

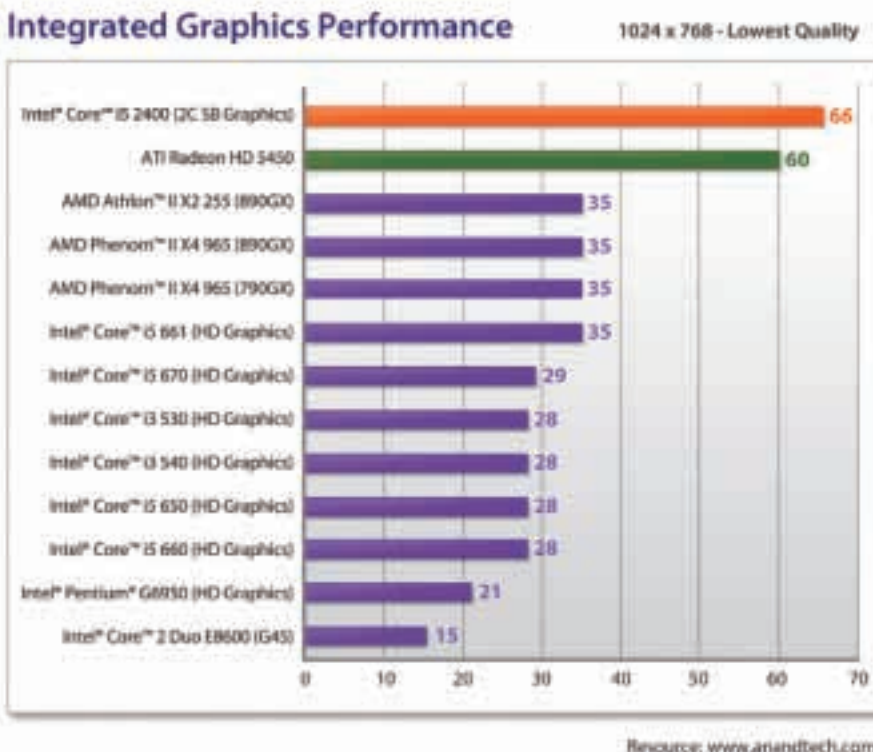
High Performance Digital Signage Player Powered by 2nd Generation Intel® Core™ i3/ i5/ i7 Processor

NDiS 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. The totally fanless NDiS 166 is capable of offering impressive system performance and can easily support dual Full HD video.

NDiS 166 incorporates an 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.

NDiS 166

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



NViS Series Special Edition

Intelligent PoE Ready Mobile NVR for Homeland Security Solution

In response to the rising demand for homeland security solutions, NEXCOM has launched NViS 3540P4 to strengthen its competitive edge in the mobile surveillance market. So what exactly are people looking for regarding homeland security solutions? The answer is NViS 3540P4, a compact yet fanless mobile NVR with high computing Core™ 2 Duo processor to handle Full HD IP cameras. Not only that, it is also a PoE-ready IP camera (up to 8 channels) solution which supports wide range DC power inputs with ignition function. This all-in-one mobile NVR solution can support comprehensive hybrid NVR applications.

Core™ 2 Duo In-Vehicle NVR Computer

By incorporating Intel® Core™ 2 Duo CPU, NViS 3540P4 mobile NVR not only overcomes over-heating challenge, but it is also capable of implementing the turbo boost technology to handle comprehensive computing algorithm for Full HD IP cameras.

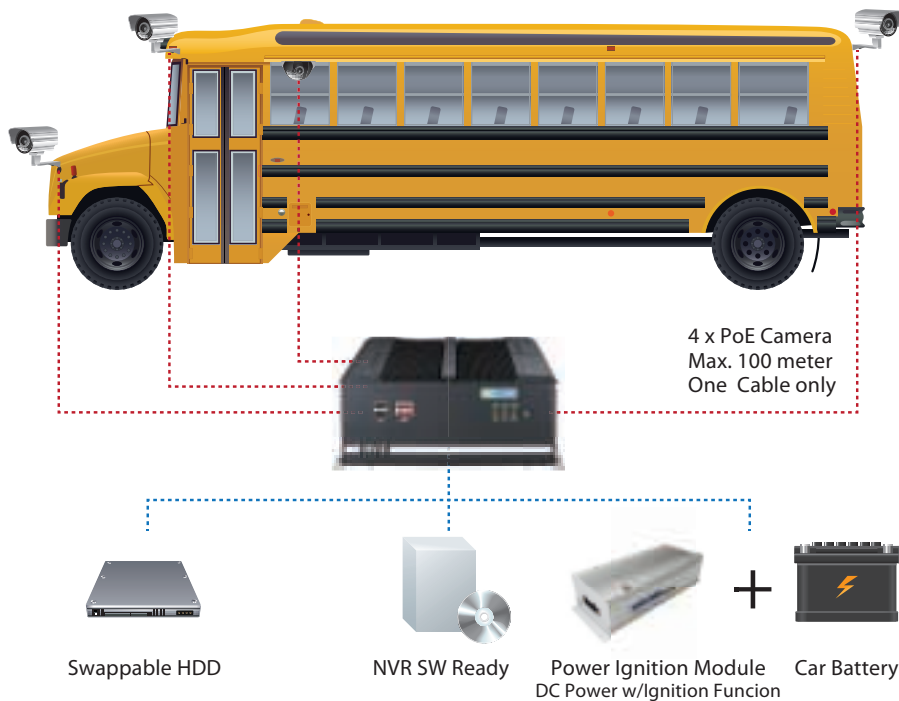
Abundance of Intelligent Designs

Wide Power Input Ranges and PoE Ready

Supporting 4 PoE IP cameras (optional 8 PoE configuration) and wide power input ranges, from 9V to 36V, the NViS 3540P4 is designed for transportation applications. Incorporating with power ignition module, the NViS 3540P4 is able to function even in variable power conditions to offer power on/off delay function.

Smart Fan

The smart fan of the NViS 3540P4 is controlled by the CPU temperature. The fan is activated only when the temperature exceeds the setting range. This feature realizes the intelligent system adjustment and thus increases the component life span.



Wireless Connectivity and Hot Swappable HDD

The NViS 3540P4 supports hot swappable HDD with RAID level 0 and 1 information protection. Drivers can easily grab the hard disk with data recorded at the end of the shift. In addition, real-time data can also be transmitted immediately via wireless connectivity.

Rugged Enclosure and Optional NVR Software

Using optional NVR software, the NViS 3540P4 can perform intelligent video analytic, access control integration, video management and instant response. All intelligent features mentioned above are housed in a robust and rugged enclosure that protects the system from outdoor environments, such as vibration and shock.

MOBILE DVR



NViS 2140H



NViS 3540H

Video Input	Default 4 channels (Mixed IP and/or CCTV camera)
Audio Input	Default 4 channels
Display Rate	Total 120 FPS(NTSC), 100 FPS(PAL) @ D1
Recording Rate	Total 120FPS(NTSC)/100FPS(PAL) @D1(720x480) Real-time
Resolution format	720x480 / 720x576, 720x240/ 720x288, 320x240
TV-out Support	2 x BNC connector
Codec	H.264/Mpge4/Mjpeg
Audio Compression Format	ADPCM Codec
Hardware Watchdog	Yes
S/W	NViS 1.53 S/W
SDK	N/A

MOBILE NVR



NViS 3540P4



NViS 3540P8

Power Over Ethernet (PoE)	4x 10/100 PoE, IEEE 802.3af, full 15.4W per port	8x 10/100 PoE, IEEE 802.3af, full 15.4W per port
Number of IP camera	support up to 32 channels of IP camera	
CPU	Support Intel® Core™ i7/i5 processor up to 2.66GHz	
Memory	2x 240 pin DDR3 socket, support up 4GB memory	
Graphics	QM57 PCH	
HDD	2x 2.5 HDD (support hot swap HDD x 1)	2x 2.5 HDD
RAID	Yes (Raid 0,1)	
Display Port	VGA/ DVI-D	
Gigabit Ethernet	2	
COM port	4	
USB	6	
Power input	DC 9~30V	

APPC 1720T / APPC1721T

Powerful 17" Flush Touch Panel with IP65 Certified 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.



APPC 1720T / APPC 1721T Front View

APPC1721T Rear View



The front IP65 certified 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.

APPC 1720T / APPC1721T

- 4:3 17" 1280 x 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; USBx4
- 2 x Mini-PCIe; 1 x external CF socket; PS2 KB/MS
- 2 x COM ports: COM #1/ COM #2: RS232/422/485
- IP65 certified front panel

Enhanced features of APPC 1721T

- GPIO: 4 x digital in / 4 x digital out
- 4x COM ports: COM #1 / COM #2: RS232/422/485 w/ 2.5kv isolated; COM #3 & COM #4 : 2x RS232

NISE 90

Rugged Extended Temperature Fanless Computer for Harsh Environment

Equipped with Intel® Atom™ E620/ E620T 0.6GHz processor and Intel® Platform Controller Hub EG20T, the NISE 90 fanless computer features low power consumption of only 15W with extended operating temperature range and an abundance of I/O

options to meet the requirements of factory and industrial automation control.

Harsh environment applications often require extended operating temperature support. Featuring fanless design

and wide operating temperature ranges, from -20 to 70°C, the NISE 90 is able to offer optimum reliability and performance. In addition, the NISE 90 is equipped with an abundance of I/O interfaces, such as 10pin GPIO,

CAN BUS, 3 COM ports, two Intel GbE LAN and DC input (either 12V or 24V DC) that provide flexibility for various application designs.



NISE 90

- On-board Intel® Atom™ E620 0.6GHz processor
- On-board 512MB DDR2 memory
- Dual Intel® GbE LAN ports
- 1x RS232/422/485, 3x USB2.0
- 2x RS232, 1x CAN2.0
- 1x VGA, 8x GPI, 8x GPO
- 12V or 24V DC input

NISE 3520

Fanless and Wireless-ready System with High Performance

NISE 3520 utilizes 32nm Intel® Core™ i7/i5 processor, on-processor graphics and two DDR3 800/1066 memory modules up to 4GB. The model provides a wide variety of display I/O configurations and rich I/O interfaces including two Intel® GbE LAN ports, 6x USB ports, 4x GPI, 4x GPO, 4x COM ports, 1x HDMI, 1x VGA, 1x DVI-I and wide range of DC inputs from 9-30V.

High performance system such as NISE 3520 is designed for a broad range of applications which demand intense graphics performance; these include medical diagnostic equipment, medical imaging, data storage, industrial automation, public infotainment, surveillance security applications.



NISE 3520

- Support Intel® Core™ i7/i5 socket processor
- Mobile Intel® QM57 PCH
- Dual Intel® Gigabit Ethernet ports
- Dual independent display via 2x VGA, VGA/DVI or DVI/HDMI
- 3 x RS232 and 1 x RS232/422/485 with Auto Flow Control
- 1x mini-PCIe socket with mobile communication interface and one external SIM card holder
- On-board DC to DC power design to support 9V to 30V DC power input
- Support ATX power mode and PXE / WoL



PEAK 876VL2/PEAK 877VL2

High Computing Performance Surpasses the Requirements of Industrial Applications

PEAK 876VL2/ 877VL2 is PICMG 1.3 full-size Single Board Computer (SBC), which supports Intel® Core™ i7/i5/i3/Pentium® processors with Hyper-Threading technology. The Intel® Core™ i7/i5/i3/Pentium® supports dual channel non-ECC DDR3 1066/ 1333 MHz memory in two DIMM slots. The Q57 Express Chipset PCH manages SATA HDD ports, parallel port. It supports other versatile I/O ports such as two serial ports, eight USB ports, and two PCI Express Gigabit LAN ports. For PEAK 877VL2, it has an XGI Z11 integrated graphics controller. Therefore, the PEAK 876VL2/877VL2 offers a great solution for advanced industrial applications that require processing performance. Both products are applied in the PBOX and NVIS 7281 security surveillance systems.



PEAK 876VL2/PEAK 877VL2

- PICMG 1.3 full-size single board computer (SBC)
- Support Intel® LGA1156, Intel® Core™ i7/i5/i3/Pentium® Processor
- Dual Gigabit Ethernet port Intel® 82578DM with PHY
- Intel® 82574L Support PXE
- Onboard XGI Z11 graphic (For PEAK 877VL2)



uCOMM, US485I / UD485I

Satisfy the Demand on COM Ports, USB to Single Port RS485/Dual Port RS485 with isolation Design

Application requirements mean that customers are increasingly looking for solutions which are equipped with an increased number of COM ports. In response to these demands, NEXCOM has introduced a USB to COM module which enables the user to expand the number of COM Ports.

The NEXCOM USB to COM port is specifically designed for award winning NISE fanless PC system, but is also suitable for use with other NEXCOM products. Housed in a compact 52mm (W) x 72mm (H) enclosure, the module is available in two formats, the first has a RS485 output, and the second is with dual RS485 output via USB cable connector. With external switch, RS485 mode can be switched to RS422 to meet the needs.

Both US485I and UD485I have 2.5KV isolation protection and are therefore designed to avoid the potential severe damage of components connected to the bus. The uCOMM also provides +/-15KV ESD protection on

transceiver interface using the human body model (HBM). These designs enhance the reliability of uCOMM when running in a harsh environment.

uCOMM, US485I / UD485I

- 1x USB type A (connection to computing system)
- 10-pin screw terminal for RS485 (or RS422) signal
- Signal on RS485, DATA + and DATA -
- Signal on RS422, TX+, TX-, RX+, RX-
- 4000 ft (1.2KM) as the max. distance
- Baud rate: 50 bps to 115.2 kbps



Innovations in the Spotlight

2011 IDF Beijing

IDF is one of annual grand occasions for Intel Corporation and its ecosystem, where topnotch industrial players gather to showcase latest innovations.

In this year, NEXCOM ICE 267 was selected to showcase the outstanding performance of 2nd generation of Intel® Core™ Mobile processor in Intel's main booth. This Type 2 COM Express module pairs an Intel® QM67 PCH and one DDR3 SO-DIMM memory socket up to 4GB. The overall performance is enhanced by up to 20% and offers a 30% increase in graphics performance compared to the previous generations of CPU.

Various innovative systems which were showcased at NEXCOM's booth attracted technical experts' eyes. NEXCOM products on display included security surveillance systems, network security platforms, digital signage platforms and in-vehicle computers. By adopting 2nd generation of Intel® Core™ i5/i7 processors, NDiS 166 high-performance digital signage player demonstrates excellent graphics capability with Full-HD video supports.

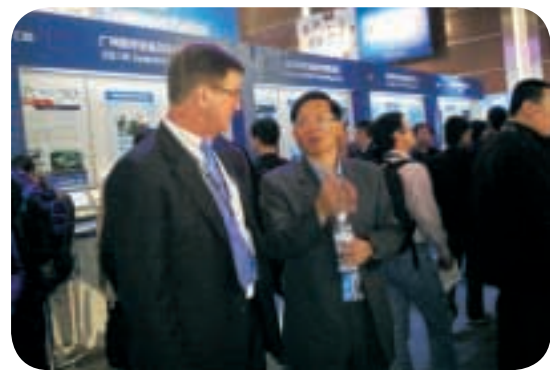
Stand Out Above the Digital Signage Crowd

NEXCOM presented its versatile Scala certified digital signage players at Scala's Connected Signage Conference which took place from the 3rd May to 5th May in the USA. The event drew around 200 of Scala's valued system integrators and resellers.

At this conference, NEXCOM presented its cost-effective NDiS 125, high-performance NDiS 162/163/166 and the multi-display NDiS 541. According to Alexander Su, Operation Director of NEXCOM USA subsidiary, the star of the show was the NDiS 541, which can support four independent outputs.

Alex says, "This matches the findings of the Digital

Signage Future Trends 2011 report from Digital Signage Today. The survey found that nearly 60 % of respondents now say their screens are networked. I'm confident that after they have seen the high-performance NDiS 541 Digital Signage Player in action, that it will be the users' top choice."



Intel ECG Vice President, Rick Dwyer exchanged insights of future development with YC Cheng, NEXCOM Industrial Computing Solution Buisnss Unit, Assistant Vice President of Product Development.

Signage Future Trends 2011 report from Digital Signage Today. The survey found that nearly 60 % of respondents now say their screens are networked. I'm confident that after they have seen the high-performance NDiS 541 Digital Signage Player in action, that it will be the users' top choice."

In addition to high computing power and exceptional graphics performance, the hardware is designed for better I/O access and can be readily mounted for easy maintenance. With fanless design and impressive reliability, NDiS 541 is ideal for medical, education and theater applications which require 24/7 operation.

NEXCOM Digital Signage Players Shine at NCR User Conference

NEXCOM was the sole digital signage hardware provider at the NCR User Conference which took place in the USA from the 2nd to 5th May. Participants included high profile grocery, general merchandise and hospitality retailers from across the Americas.

NEXCOM showcased powerful NDiS 166 and the cost-effective NDiS 125-L with NCR's Netkey Signage Software. NEXCOM's NDiS 166 is built around the superb technology of Intel® Core™ i5/i7 processor with Intel® new HD graphics engine and QM67 chipset. It offers impressive system performance and can easily support dual full-HD video. The NDiS 125-L is powered by

Intel® Atom™ D525 Dual Core processor. Equipped with NVIDIA ION2 GPU, the NDiS 125-L can support 1080P video playback.

Jasmine Chang, Director of Business Development at NEXCOM USA, also gave presentation relating to trends in digital signage hardware. She concluded that experience, engagement and interaction across a variety of media platforms with rich content, were some of the key market trends. And having a suitable high-performance yet extremely reliable media player was critical to success. NEXCOM meets these criteria with a topnotch range of platforms which surpass users' expectations for reliability and quality.



Smart Mobile NVR Attracted the Crowd in 2011 Secutech

Secutech international trade fair was held in Taiwan from 20- 22 April offering over 3,000 IP Security & HD surveillance solutions in various product zones and pavilions.

Among the dazzling array of beautiful exhibits, the smart mobile NVR from NEXCOM won hundreds of inquiries from worldwide visitors. The most popular security surveillance systems are NViS 2410H and NViS 3540P4.

NViS 2140H hybrid DVR provides high quality digital recording on 4-channel D1 resolution, real-time display and supports a wide range of megapixel IP cameras. It also incorporates IP and analog cameras in one system, which offers great integration flexibility. Further equipped with SIM card and mini PCIe socket, NViS 1240H supports 3G network for instant data transfer, Wi-Fi upload, and two-way voice communication, making it an ideal solution for in-vehicle security surveillance applications.

NViS 3540P4 is a compact yet fanless mobile NVR with high computing Core 2 Duo processor to handle Full-HD IP cameras. It is also a PoE-ready IP camera (up to 8 channels) solution whilst supports wide range DC power



inputs with ignition function. This all-in-one mobile NVR solution is capable of supporting comprehensive hybrid NVR applications.



Headquarters

NEXCOM International Co., Ltd.

18F, No. 716, Chung-Cheng Rd., Zhonghe Dist., New Taipei City, 235, Taiwan, R.O.C.

Tel: +886-2-8228-0606

Fax: +886-2-8228-0501

www.nexcom.com.tw

America

USA

NEXCOM USA

3758 Spinnaker Court Fremont,
CA, 94538, USA

Tel: +1-510-656-2248

Fax: +1-510-656-2158

Email: sales@nexcom.com

www.nexcom.com

Asia

Japan

NEXCOM Japan

9F, Tamachi Hara Bldg.,
4-11-5, Shiba Minato-ku,

Tokyo, 108-0014, Japan

Tel: +81-3-5419-7830

Fax: +81-3-5419-7832

Email: sales@nexcom-jp.com

www.nexcom-jp.com

China

NEXCOM China

Room 301, Block E, Power Creative Bldg.,
No.1 Shangdi East Rd., Haidian Dist.,

Beijing, 100085, China

Tel: +86-10-5885-6655

Fax: +86-10-5885-1066

Email: sales@nexcom.cn

www.nexcom.cn

Shanghai Office

Room 1505, Greenland He Chuang Bldg.,
No. 450 Caoyang Rd.,

Shanghai, 200062, China

Tel: +86-21-6150-8008

Fax: +86-21-3251-6358

Email: sales@nexcom.cn

www.nexcom.cn

Nanjing Office

Hall C, Block 17, Tian Xing Cui Lang Bldg.,
No. 49 Yunnan North Rd.,

Nanjing, 210018, China

Tel: +86-25-8315-3486

Fax: +86-25-8315-3489

Email: sales@nexcom.cn

www.nexcom.cn

Shenzhen Office

Western Room 708, Block 210,
Tairan Industry & Trading Place, Futian Area,

Shenzhen, 518040, China

Tel: +86-755-833 27203

Fax: +86-755-833 27213

Email: sales@nexcom.cn

www.nexcom.cn

Europe

France

NEXCOM France

Z.I. des Amandiers
17, Rue des entrepreneurs,
78420 Carrières sur Seine, France

Tel: +33 (0)1 71 51 10 20

Fax: +33 (0)1 71 51 10 21

Email: sales.fr@nexcom.eu

www.nexcom.eu

Germany

NEXCOM GmbH

Leopoldstraße Business Centre,
Leopoldstraße 244,

80807 Munich, Germany

Tel: +49-89-208039-278

Fax: +49-89-208039-279

Email: sales.de@nexcom.eu

www.nexcom.eu

Italy

NEXCOM ITALIA S.r.l

Via Gaudenzio Ferrari 29,
21047 Saronno (VA), Italia

Tel: +39 02 9628 0333

Fax: +39 02 9619 8846

Email: sales.it@nexcom.eu

www.nexcom.eu

United Kingdom

NEXCOM UK

10 Vincent Avenue,
Crownhill Business Centre,

Milton Keynes, Buckinghamshire

MK8 0AB, United Kingdom

Tel: +44-1908-267121

Fax: +44-1908-262042

Email: sales.uk@nexcom.eu

www.nexcom.eu



Please verify specifications before quoting. This guide is intended for reference purpose only.

All product specifications and information are subject to change without notice.

No part of this publication may be reproduced in any form or by any means without prior written permission of the publisher.

All brand and product names are registered trademarks of their respective companies.

©NEXCOM International Co. Ltd. 2011