



## 2012 Industrial Computing Solutions

- Industrial Fanless Computer
- Applied Panel PC
- Video Intelligent Surveillance
- Embedded Computing & Customization Services

## Industrial Computing Solutions

Fanless Computer Multi-Media Panel PC Applied Panel PC Open Frame Panel PC PICMG Single Board Computer

Computer-On-Modules Embedded Computing Video Intelligent Surveillance Point of Services

### Corporate Imformation

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## About NEXCOM

## Reliable Partner for Building the Digital Infrastructure

Founded in 1992 and headquartered in Taipei, Taiwan, NEXCOM is committed to being your trustworthy partner in building the digital infrastructure. To surpass customers' expectations, NEXCOM makes the difference by utilizing its decades of industrial computing experience, a highly talented R&D team, and by providing exceptional levels of customer service. With these core strengths, NEXCOM has enabled its customers to win key projects in a diverse range of industries.

With its focus on delivering these core values to better serve customers, NEXCOM integrates its capabilities and operates four global businesses, which are Multi-Media Solutions (MMS), Mobile Computing Solutions (MCS), Industrial Computing Solutions (ICS), and Network and Communication Solutions (NCS). This strategic deployment enables NEXCOM to offer time-

to-market, time-to-solution products and service without compromising cost.

In addition, the service-to-market business model gives NEXCOM core competence to build a strong world-class service network by providing customized service, global logistics, local access, and real-time support. Operating seven subsidiaries, from China, France, Germany, Italy, Japan, the United States, to the United Kingdom, NEXCOM is able

to better facilitate customers' requirements as well as closely work with global partners in different regions.

Partners should also be assured that NEXCOM's Taiwan based Headquarters and subsidiary offices in China, UK and USA have obtained ISO 9001:2008 Certification.



ICS	<ul> <li>EBC: Industrial Computing (Embedded Computer, Single Board Computer)</li> <li>PPC: Panel PC (Applied Panel PC, Multimedia Panel PC, Factory Panel PC, Healthcare Panel PC, Industrial Panel PC, In-Wall Panel PC)</li> <li>NISE: Industrial Fanless Computing (Fanless Computer)</li> <li>NViS: Video Analytic (Surveillance)</li> <li>POS: Point of Services</li> </ul>
MCS	MCS: Mobile Computing Solutions (Rugged Computer Devices, Rugged Mobile Computer) VTC: Vehicle Telematics Computer (Car PC, Train PC)
MMS	MMS: Multi-Media Solutions (Digital Signage, MOD, Streaming Server)
NCS	NCS: Network and Communication Solutions (Network Security, VolP, IPTV, HCP, ATCA)

### **Corporate Mission**

- An Innovative Supplier in Vertical Application Markets
- A Quality Partner in Engineering, Manufacturing, and Services

### **Corporate Vision**

To become the industrial leader in building the digital infrastructure, NEXCOM utilizes its industry leading technology, localized customer support and worldwide logistics services. This will be achieved by

- Great Team Work
- Cooperation with trusted partners
- Growth through innovation.

### **Business Strategy**

Aim to better support the activities of all its partners, NEXCOM divides its sales force into four dedicated business units to target rapidly expanding vertical markets. This enhances each business unit concentrating on strategic channel accounts and on repeat order business. Moreover, NEXCOM's business units have been set up to serve the requirements of key project accounts, where product ODM and project support are frequently required.

NEXCOM is working with embedded computing solution providers to envision new opportunities for growth. We'll help you deliver reliable vertical industry platform (VIP) solutions, optimized for the next wave of low power, small footprint embedded applications.

## **Research and Development**

## Speed, Quality, Innovation and One-stop Service

Over a decade ago, NEXCOM successfully launched the PEAK series of Single Board Computers onto the IPC market, and in doing so, gained a solid reputation for product quality and innovation. In subsequent years, NEXCOM has enhanced its reputation for R&D excellence with a multitude of high-end technology products, which

has cemented NEXCOM as one of the industry leaders for R&D and innovation.

The mission of NEXCOM R&D team is to design exceptional products that meet the stringent requirements of today's global markets. In order to



achieve this goal, we have recruited hundreds of talented engineers who have the knowledge and expertise to make NEXCOM's products stand out in this highly competitive market.

In 2012, NEXCOM R&D will develop solutions within the following categories, fanless computers, Panel PCs, video analytic, self-service platform, vehicle telematics computers, rugged mobile tablet computers, digital signage platform solutions, and ATCA platforms for telecommunications. The team is encouraged to "Think with New Ideas" and "Know how to make it and do it right first time". In addition, the size of NEXCOM's R&D team has been expanded to over 130 members and remains as one of core competences of the company.

### Versatile Design Capabilities

- Leading industrial fanless computer
- High availability network security platform, blade, and cPCI

- Rugged tablet computer and car PC
- Ultra small footprint computer-on-module
- High speed networking
- Isolated and non-isolated power system
- Isolated and non-isolated industrial I/O
- Wide range of operating temperature

## 24/7 Production Line Optimal Manufacturing Efficiency

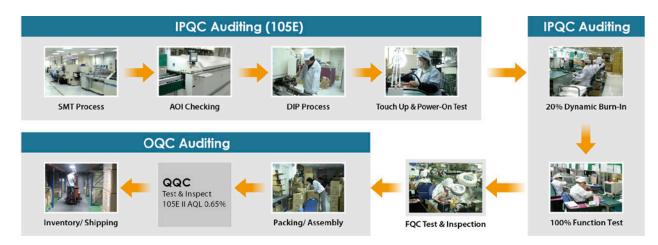
The manufacturing of delicate products requires a highlevel technology, craftsmanship, standards and time-tomarket efficiency. Over years continual investment in advanced manufacturing equipment and systemic training programs has enabled NEXCOM to obtain optimal manufacturing efficiency.

To fulfill the increasing market demand for NEXCOM's products, the company has opened a 24/7 production line. This investment not only furthers the quality of products, but also reduces production lead-time for all global customers.



### **Quality Assurance**

Under a strict Quality Assurance System, product design and reliability are controlled to support all critical solutions, and ensure Total Quality Assurance (TQA) implementation for all NEXCOM products and service. Furthermore, NEXCOM technical support team aims to provide feedback within 24 hours to ensure technical issues are resolved in the shortest possible time.



**Closed-Loop Quality Assurance System** 

### **Green Policy**

As a global citizen, NEXCOM is committed to providing green products and services, which are compliant with WEEE and RoHS



legislation. NEXCOM continues to proactively work

with industry peers and suppliers, to clarify standards, and identify compatible technologies and practices that help reduce hazardous substances from our products and manufacturing processes.



## **Global Fulfillment Service**

Product delivery and customer support are always more effective when delivered locally. NEXCOM localizes support and provides a global customer service network to handle all aspects of global business, from presales, order taking, and system assembly to logistics. For expeditious product delivery, NEXCOM has established four regional service centers: Taiwan (for Asia), USA (for North America and South America), the United Kingdom (for Europe) and China. Therefore, NEXCOM customers benefit from quality assured product assembly and four service centers. NEXCOM has invested heavily to establish operational infrastructures, including advanced equipment and facilities, not only at its global headquarters but also at subsidiary offices. Today, each of our service centers, with ISO 9001:2008 certification, has a purpose built assembly line, RMA/ DOA center and warehouse storage capability.





**NEXCOM Global Service Network** 

### Assembly Line Operation

NEXCOM offers custom-built products based on customers' specific requirements through the build-to-order services. A dedicated 24/7 assembly line and Quality Assurance System are installed in the services center to ensure exceptional production efficiency and superb product performance and reliability.

### Service Pledge and Connection

As a reliable industrial computing platform provider for vertical markets, NEXCOM provides the very best products and the most expeditious service to help customers build the digital infrastructure. Comprehensive types of service are provided to promptly satisfy varying requirements. In addition to the headquarters in Taiwan, seven subsidiaries and distributors in strategic worldwide locations are at your service.



**Service Types** 











RMA/DOA









ODM

Quotation

Project Technical Consultant Support

al S rt A

Solution Alliance

Assembly/ Test

ly/ Global Logistics

Customization s

Original Design Manufacturing

## Your Truly Global Information Resource

### www.nexcom.com

www.nexcom.com is your one-stop platform for the latest information on all NEXCOM products and services. The rejuvenated website not only contains product relevant information and data, solutions/ products demo, up-to-date news, but incorporates online downloads, publications, and technical service supports, such as RMA/ DOA centre. Furthermore to localize service and support, seven NEXCOM sister websites remain to serve visitors in diverse geographical regions.





## Get the Latest Updates Anytime, Anywhere m.nexcom.com

At the end of the year 2011, NEXCOM launches its mobile site, m.nexcom.com. The site aims to cross time and space boundaries by allowing users to access the latest innovation and information of NEXCOM via smartphones. On this website, users will easily find our latest products, news, application stories, white papers, and videos. The mobile site now supports iOS and Android system. Please visit us at m.nexcom.com.

## Design and Manufacturing Services (DMS)

### **Customized Service for Tailor-Made Solutions**

NEXCOM provides cost-effective and time-to-market Design and Manufacturing Services (DMS). The DMS offers product customization from core modular designs to finished products based on customers' specifications in all kinds of industrial field. The levels of the service include manufacturing new CPU boards and system based products to fulfill customers' unique applications.

### **Unique DMS Features**

With vast experience, the know-how, leading technology and innovative design capabilities, NEXCOM DMS incorporates the following features:

### **Prompt Time-to-Market**



NEXCOM posses a dedicated project management team to monitor and ensure each DMS project is delivered on schedule. Thus, a quick time-to-market solution can be offered with timescales varying from one-three months for the design phase, with an average six month period from design to market.

### Flexible Design and Manufacturing



NEXCOM posses a complete R&D team to design and engineer the latest industrial grade products. As R&D engineers grouped into small cross-functional teams, they can develop more reliable products with flexible designs and quicker response to customers' requirements. In addition to our R&D capabilities, the state of art manufacturing facility and production lines enables NEXCOM to offer a flexible manufacturing with highly skilled factory staff.

### **Rigid Quality Control**



NEXCOM is pledged to deliver high quality products, from design to manufacture, and safeguard against defective products by implementing a rigid Quality Assurance System. In this system, at the end of each process, NEXCOM performs various tests to ensure that the product passes the industrial standard before it enters into next stage. Finally, additional tests are performed to ensure all board and system level products function correctly. Tests include "Failure Mode and Effects Analysis", "Vibration test", "Burn-in Chambers", "Drop test", and "AC power source test".



We set higher standards! NEXCOM surpasses your tailor-made product requirements with extensive DMS experiences. We are specialized in X86 architecture and have accumulated invaluable experience and know-how in real working environments. Moreover, with a superb reputation, NEXCOM has under its belt many ODM projects in diverse fields, such as gaming, medical, POS, network security, transportation, marine, blade servers, and Linux BIOS etc.

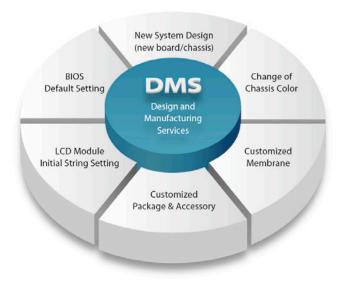
### Scope of DMS Work

### Original Design Manufacturing Service (ODMS)

NEXCOM offers a complete ODM Service starting from the brand new product design right through to the finished product. We can design products based on the customer's unique specifications and application requirements.

### Customization to Order Service (CTOS)

NEXCOM also provides CTOS, which is a quick-to-market solution by modifying the existing products to fit your business requirements, such as BIOS setting, component change by using current PCM layout, chassis color change, and packing accessories etc.



### Service of DMS

With decades of industrial computing experience, NEXCOM has the capability to provide different levels of customized service to manufacture innovative products with exceptional high quality. We can assist you to differentiate from competitors, and save significant time and efforts.

Level 1	Logo Re-brand 🔶	We provide the service to change the membrane to re-brand the company logo on the front panel. Customers need to provide Membrane drawing with all color pantone number. There is a service charge involved.
Level 2	Customerized Build	Customers can change the membrane and chassis color to re-brand the packing. NEXCOM can offer dedicated part numbers and BOM. MOQ and service charge are required.
Level 3	Manufacturing Service	Contract manufacturing. The service scope includes system assembly & burn-in, software loading & testing. MOQ and manufacturing service charge are required.
Level 4	New Project 🔶	The design of new board & system is available. NRE and quantity commitment are required.

## **Professional Conformal Coating Solution**

### Get Ruggedized with NEXCOM Cost-Effective Conformal Coating Service for Hash Environment Protection

### **Prompt Time-to-Market**

NEXCOM recognizes the harsh reality that many embedded systems find themselves operating in unusual hostile environments. When conformal coating is required to protect your application against substantial humidity, dust, chemicals or temperature extremes, we can help!

### Cost Effective Service to Apply Coating Solution in Vertical Market Segments

In addition to the usual military and harsh industrial environments that demand conformal coating, NEXCOM expand our conformal coating to Vehicle Telematic Computing, outdoor traffic control/surveillance, and off-shore Marine applications. These applications demand embedded computing performance with increased reliability through conformal coating process.

To support a wide range of applications in vertical markets, NEXCOM has engineered a diverse range of platforms, which incorporate the latest.

### "State of the Art" Conformal Coating Line

NEXCOM uses automated Conformal Coater equipment for applications that require a high level of accuracy and repeatability in moderate to high volume manufacturing environments. "State of the Art" coating line is a closed-loop robotic platform featuring optical encoder feedback on all axes.





### Smart Masking Technology

Our smart masking technology can pin point specific area on the PCBA for coating. The green, programmable conformal coater equipment allow user to only coat the area selected, which save labor/ material costs.

### **De-Flux Cleaning**

To prepare a PCB for conformal coating, the circuits need to be cleaned. NEXCOM uses automatic defluxing and cleanliness testing systems. The deflux system is equipped with an automatic chemical management system that automatically doses and mixes defluxing chemicals at the turn of a keyed switch.

### **Real Time Cleanliness Testing**

NEXCOM's deflux cleaning system is also equipped with an onboard cleanliness testing system which allows a user to program a desired cleanliness level. This assures that cleanliness levels will be consistent batch after batch.

### **De-Coating RMA Service**

NEXCOM offer De-Coating RMA service upon request. This new service allows you to further cost down and generate higher ROI.

## Quality Assurance Policy and Consistency Guarantee

Conformal coating inspection is a critical factor in determining successful coating application and long term reliability of PCBs. Using the IPC standards allows the coating operator to monitor the coating application performance. NEXCOM offers 100% manual screening by examining the PCB under white and UVA light and Thickness Gauge.

NEXCOM follows IPC-A 610, IPC-CC-830, IPC J-STD-001E regulations to generate consistent, adjustable coating thickness and cleanliness.

## Industrial Automation Solutions



## NISE Fanless Computer, the Ideal Vertical Industry Platform

In today's industrial environment, the quest for greater efficiency, productivity, reliability, energy savings and quality control is practically universal. NISE System, NEXCOM Industrial Smart Embedded System, has been developed as an industrial-grade fanless computing system which incorporates the benefits of rugged design, superb computing power and excellent I/O connectivity. Designed for industrial automation, NISE fanless systems can be utilized within machine automation, automated optical inspection, solar panel inspection, packaging machinery, recycling machinery, and oil-field SCADA etc. NISE fanless embedded systems can be classified into three different product categories for different demands: Performance, Power-efficient and EZ controller.

NISE, has over the years, retained its position as the leading fanless platform in the industrial-grade computing field. This leading positioning comes from its excellent thermal design, component selection, reliability validation, and open architecture. Utilizing state-of-the-art technology,



NISE

Cable-less System

- 6x Serial Port Connection Cable-less System
- Cable-less System

the fanless design of the NISE Series enables it to operate in harsh environments. In addition, NISE fanless system also provides embedded OS BSP (board-support-package) and Image services. For ease of use, NEXCOM Xcare<sup>™</sup> utility can be applied to NISE fanless system under Windows OS. The NISE fanless system is an application-ready platform which can shorten development time and also provide full-service coverage to meet diverse requirements.

### Main Features

- Open architecture: wide-range processor supported in socket type.
   Easy for performance upgrade.
- Same mechanical design: easy for system upgrade with the same system dimension and IO locations.
- Ready to go solution: embedded OS BSP and image ready to shorten development timeframe.
- Robust and low maintenance: fanless and robust design can reduce system down-time.
- Rich I/O interfaces to meet various field devices

### Applications

### **Facility management**

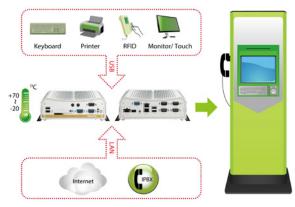
- Access control
- Recycling system
- Production/ energy data analysis

### Machinery automation

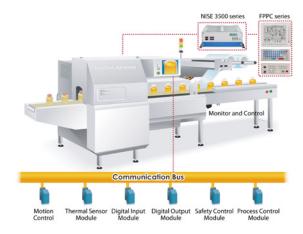
- Injection/ laser etching
- Molding
- CNC/ packaging

### Solution Diagram

### NISE 2100A in Car Rental Kiosk Application



NISE 3500 & FPPC Series in Factory Automation



- Factory inspection systemThickness inspection in solar panel
- Marking inspection on IC
- Surface inspection
- Packing system

### Product Selection











NISE 90 Intel<sup>®</sup> Atom™ E620

FPPC 1220 12 " Panel PC Intel<sup>®</sup> Atom™ D525

Intel<sup>®</sup> Atom™ D425

**NISE 3520** 

**NISE 3142** 

**NISE 2100A** 

System

Support

**NISE 103** 

Intel<sup>®</sup> Core™ i7/i5 with

Communication System

mini-PCIe socket for Wireless

Intel<sup>®</sup> Core™ 2 Duo with Dual

Intel<sup>®</sup> Atom™ Dual Core D525

with Extended Temperature

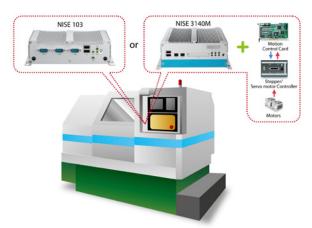
DVI-D Independent Display



### NISE 2000 Series in Recycling Kiosk Machine



#### NISE 103 & NISE 3140 Series in Machinery Automation



Vertical Industry Applications

## **Intelligent Traffic Solutions**



### Perfect for Imaging Processing Systems & Ready to Go Wireless Connectivity

NISE high performance series, NISE 3000 series, is ideal for graphic intensive graphic applications which require performance and/or high computing power, for example, imaging processing systems, automatic optical inspection, digital signage, and surveillance etc.

Integrated with diverse visual device interfaces, NISE 3140 series and NISE 3500 series can be used in conjunction with a microscope via USB ports, Gigabit LAN can be linked with high resolution camera for long-distance demand requirements, and PoE camera can be utilized to save installation and maintenance costs. By utilizing the high computing power, it can readily handle and analyze the complicated data, which is generated from a patternmatching or recognization system. Complicated analysis and imaging checking are not only required in the medical research market, but also can be found in license plate recognization, e-Police, road-side traffic control and Access Control....etc.

NISE power-efficient series, NISE 2000 series, is targeted at wireless applications in harsh environments. NISE 2000 series covers Intel<sup>®</sup> Atom<sup>™</sup> single core and dual core platforms and provide wireless capability including Wi-Fi and mobile 3G/

3.5G connection. With wireless function, NISE 2100 series is an ideal solution for outdoor communication computer or invehicle computing, such as bike rental station, score boards, bus surveillance, self-service kiosk, recycling kiosk, and digital signage etc.



In addition, NISE 2000 series provides a multitude of IO interfaces to meet the requirements of both industrial automation and self-service kiosk, for example, max. 6 serial ports (isolated COM port design in selected models), digital I/O module support, wide-range on DC input, wide-range of operating temperatures, two Intel<sup>®</sup> GbE LAN ports, and additional expansion capability etc. In short, NISE 2000 series is the best choice for industrial automation, factory automation, traffic system, self-service kiosk, surveillance and access control applications.

### Main Features

- High-performance platform integrated with great graphic performance .
- Image processing ready platform via GbE camera or IEEE1394 camera
- Wireless ready platform via Wi-Fi module or GSM 3G/ 3.5G wireless module
- Rich peripheral for field device/ sensor connections
- Wide-range on DC input
- Wide-range on operating temperature
- Fanless & ease-of-use, reducing the maintenance cost

### **Applications**

### Image processing system

- e-Police (speeding/ illegal turn)
- Traffic light control
- Automatic optical inspection

### **Traffic system**

- School bus
- Train station control -
- Access control .

### Solution Diagram

### nTUF 600 at Marine Bridge Computer

### **Product Selection**















Intel<sup>®</sup> Core™ i7/ i5 with mini-PCIe socket for Wireless Communication System

#### NISE 3142 Series

Intel<sup>®</sup> Core™ 2 Duo with Dual DVI-D Independent Display System

#### **NISE 2100A Series**

Intel<sup>®</sup> Atom™ Dual Core D525 with Extended Temperature Support



#### nTUF 600/610 Series Intel<sup>®</sup> Atom™ Dual Core D525 (or 2<sup>nd</sup> generation Intel<sup>®</sup> Core™ i7) Marine Computer







### NISE 2100A / NViS 3540P8 series at School Bus System



## **Medical Solutions**



## EN60601-1-2 Certified the Medical Grade Fanless Computer

NISE 3140M & NISE 3500M are remarkable models for presenting NEXCOM NISE series in medical solution, mainly in interactive visual communication, medical devices, and self-check system etc. Housed in a robust aluminum chassis, the fanless design makes for noise-free and ultra-reliable operation which meets hospital environment needs. With IEEE1394a/b and display interfaces, NISE 3140M & NISE 3500M empower ease of camera use for interactive communication, video diagnose, data analysis, and inspection equipments etc.

In addition, NISE 3140M & NISE 3500M, certified by EN60601-1-2 standard, are ideal solutions for medical devices with energy saving design meeting the demand of dust-free, noise-free, longevity of product, durable, reliable, and data backup via RAID HDD support. With rich I/O interface it provides various data collection devices linked by USB, RS232, RS485, IEEE1394b, LAN, for data communication.

With great imaging process ability, NISE series is an ideal solution for clinical data server, home healthcare or healthcare informatics and patient monitoring applications to get electrocardiogram and physiological data for diagnosis purpose. The vital survey responses and signs measurements, such as weight, blood pressure, pulse, Glucose meter and oxygen saturation, may be automatically collected and transmitted to hospital center.

Real-time monitoring and communication, through Ethernet or GSM data transmission and computer analysis, facilitate efficiency on nursing, clinic arrangement and data collecting. It can be used in ambulance, homecare, or remote monitoring.



### Main Features

- A range of processers are supported: integrated with Intel<sup>®</sup> GM45 chipsets to support socket type of Celeron<sup>®</sup>, Core<sup>™</sup> 2 Duo, Core i5 & i7 solution to meet different performance or budget requirements.
- Robust and noise-free design: sturdy aluminum chassis protects the unit in harsh environments, whilst the fanless design makes NISE suitable in quiet locations.
- Versatile camera interface: available for medical inspection or research use

- Low maintenance cost: the fanless and anti-dust design improves reliability and eliminates systems failure caused by fan breakdown and dust
- Medical grade solution: the platform meets energy saving requirements and is certified to medical standards, EN60601
- Long product life support

### Applications

### Firewire solution in surgery recording

- Remote surgery or telesurgery
- Remote training system

### Medical instrumentations solution

- Inspection instrumentation via USB/ GbE camera
- Research instrumentations via GbE and IEEE1394a/b camera
- Scientific research snstrumentation via GbE & IEEE1394a/b camera

### PoE enables surveillance solution

- Access control at ward
- Security control at emergency
- Patient and asset tracking with RFID

### Solution Diagram

### NISE 3100e/ 3142M Series @ Self-Service Healthcare Kiosk





### Product Selection









**NISE 3142M** 

Intel<sup>®</sup> Core™ 2 Duo with 2x

IEEE1394b and dual DVI-D

independent display support



HPPC 1920T

19" Panal PC Intel<sup>®</sup> Atom™ D525

### HPPC 1920T Series @ Medical Applications



## **Multi-Media Panel PC**



# The Inspiring World of Digital Signage

NEXCOM Multi-Media Panel PC (MPPC) incorporates a 16:9 LCD touch screen panel, industrial motherboard and PowerDigis software. Digital Signage Software making MPPC series the perfect "signage ready" Panel PC solution for self service and Kiosk applications.



MPPC has modular architecture and fanless thermal operation, plus low power consumption. It is available in various different LCD sizes including 21.5" and 32" with resolutions up to 1920 x 1020 (Full HD). Other features include builtin dual Ethernet and optional Wi-Fi module and the slimmest X86 based touch terminal.

Designed for an extended number of applications the MPPC series can be utilized as a thin client computer or within in-vehicle systems, portable devices, digitalized home, POS, and Kiosk terminals. Totally fanless and therefore noise-free, ultra-reliable operation, MPPC series with low voltage single board computer and super slim bezel design is environmentally friendly and easy to upgrade.

## MPPC 3220T

### 32" Fanless Panel Computer



MPPC 3220T is an 32" Panel PC, which boasts modular architecture and fanless thermal operation, plus low power consumption. The MPPC 3220T has a 16:9 widescreen with resolutions up to 1920× 1080 (Full HD). Other features include built-in dual Ethernet ports, optional Wi-Fi module and lightweight design. The devices can fit transportation or factory requirement.

### MPPC 2120T

### 21.5" Fanless Panel Computer



MPPC 2120T is a 21.5" wide 16:9 touch screen Panel PC which can display resolutions up to 1920 x 1080 (Full HD). Based on the Atom<sup>™</sup> D525, MPPC 2120T has low power consumption and a totally fanless design.

Specifically designed for digital signage, POS (point of sale), and Kiosk applications, the totally fanless MPPC 2120T can simultaneously play high quality video, flash and scrolling text. MPPC 2120T is therefore perfect for the 24/7 display of advertising, promotional material or customer information. It will therefore find applications within retail, hospitality, medical and banking environments.

In addition, MPPC 1020T and MPPC 2120T supports extra VGA outputs for dual independent display, 4 x USB 2.0 ports, 2 x Giga LAN and 2 x RS232 COM port.

#### Main Features

- Multi-media : 16:9 LCD panel from 8" to 32"
- Focus content : MPPC series has thin metal frame
- Flexibility : two pieces design, panel and rear box pc
- Fanless system : Atom<sup>™</sup> processor with DDR3 support
- Supports extra VGA for 2 independent displays
- 2 x GbE/ 4 x USB/ Line-out/ 2 x Mini-PCIe
- Support 2.5" SATA HDD
- COM1 RS232/ 422/ 485
- COM2 RS232/ 422/ 485
- Vibration and shock resistant

### **Applications**



School / Education



**Retail Outlet** 



Pub / Bar / Restaurant



Hotel Lobby



Conference Room

## **Applied Panel PC**



## Industrial Functionality with Cost Saving, Green Technology

NEXCOM industrial Panel PC adopts an all-in-one concept that integrates a single board computer, LED display, and user-friendly touch screen within a slick and compact NEMA 4/ IP65 chassis. Designed to serve as a flexible and reliable industrial computing platform, each panel PC is a compact, highly integrated, networkready computer with exceptional I/O connectivity.

The industrial graded panel PC from NEXCOM is designed for use in harsh environments where shock, vibration and resistance are an issue. The NEXCOM panel PC range includes a wide range of platforms with different display dimensions and peripheral I/O alternatives. APPC series, therefore, meets user requirements for a high-performance panel PC with compact design and affordable price.

APPC Series has a IP65 rated touch panel which offers superb protection against dust and water. Designed for use in a variety of environments included factory and transportation, APPC series can receive a wide range of power inputs ranging from 12V to 30V. In addition, there is also an APPC variant available with isolated COM port which is ideal for field applications.

The APPC series is totally fanless, and, therefore, guarantees noise-free, ultra-reliable operation. With integrated low voltage single board computer and super slim bezel design, the APPC Series is environmentally friendly and easy to upgrade.



# The First Industrial Panel PC with Flush Touch Screen

To address applications within field cleaning and maintenance, NEXCOM has launched the APPC 1720T/ 1721T, a 17" SXGA Panel PC with flush touch screen technology. With a scratchfree 3H hardened glass surface, the flush touch screen provides significant benefits, such as multi-touch and easy maintenance, for field operation. The water/dust-free and fulsh touch panel can resist water wash, which makes it ideal for use in the food/ beverage industry. In addition, with glass protection, the touch panel has an extremely long life which ultimately reduces total expenditure.

### APPC 0820T

The APPC 0820T is 8" fanless Panel PC with Atom<sup>TM</sup> D525 processor which can support SVGA (800x600) resolutions. With water-dust protective touch screen, it can operate in most industrial environments. APPC 0820T also has 2GbE, 2 x COMs, and 4 x USB. With power input 12V DC-in, the device is ideal for use in transportation and factory environments.



## APPC 1220T/ 1520T/ 1720T

The APPC 1220T/ 1520T/ 1720T are fanless Panel PCs based on the Atom<sup>™</sup> D525 processor. The 15" 1520T has 350 nits brightness, flush touch screen, 2 GbE LAN, 4 x COMs, 2 x USB, eSATA, PS2 KB/MS, line-out and a wide range power inputs.

With its attractive price and tried-and-tested functionality, the APPC Series is the ideal panel PC for industrial applications. With the fanless 1.8 GHz Intel Atom™ processor, the APPC provides the appropriate computing power for most industrial applications. Also the APPC series can be utilised within confined spaces due to its compact dimensions. Possessing high electromagnetic compatibility, APPC series is suitable for machine-level applications as well.

Operation is realized via the touch screen. The PC is integrated into slim line control panel housing, and equipped with an 8", 12.1", 15", or 17" display. The user benefits not only from the slim design and high computing power, but also from significant energy savings due to the low power consumption of the Atom<sup>™</sup> CPU.

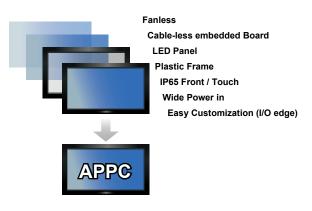
Based on the standard APPC 1220T/ 1520T/ 1720T, two models known as APPC 1221T/ 1521T/ 1721T are designed with isolation module on COM1/COM2.

### Main Features

- 8", 12.1", 15" and 17" 4:3 fanless LED Panel PC (17" is CCFL)
- Dedicated Panel PC board with Atom<sup>™</sup> D525 dual core processor
- Water-dust IP65 proof plastic front protection
- 5-wired flush touch screen with IP65 protection
- 2 x GbE/ 4 x USB/ eSATA/ PS2/ Line-out/ 2 x Mini-PCIe
- Support 2.5" SATA HDD
- 12V- 30V wide range power input
- 4 x serial ports: 2 x RS232, 2 x RS232/ 422/ 485
- COM1/2 RS232/ 422/ 485 Isolation (APPC 1221T/ 1521T)
- Resistance to vibration/ shock

### Applications

- Industrial manufacturing
- Warehouse and logistics
- Harsh industrial
- Access control
- Machine control
- Forklift and truck





## **Open Frame Panel PC**



## Address Market Demand for Highly Customized Enclosures

NEXCOM fanless Open Frame Panel PCs (OPPC) is targeted at self-service applications like ATM, kiosk, and vending machine. Reliable fanless OPPC integrates bezel-less displays, ultra slim appearance, multiple mounting options, and touch technologies. Therefore it can better address market demand for highly customized enclosures and be applied to bill payment, clinic



registration, airport check-in, building directory, ticketing, and DVD rental within retail, healthcare, banking, telecommunication, entertainment, transportation, and tourism industries.

## Ultra Slim with Latitude

OPPC has ultra slim appearance and takes up little space. Along with latitude of mounting options comprised of open frame mount, VESA mount, panel mount, and wall mount, OPPC can be consolidated with customized enclosures, helping system integrators create a distinctive look for individual project. The flexibility of OPPC will also assist system integrators to

expand product lineup for the market including kiosk with minimalist design that combines simplicity and elegance, vending machine with bulk cabinet that houses complicated configurations, and ATM with extended functions to deliver sophisticated self services.

## Industrial-Grade Reliability

Moreover, OPPC without front bezel is a cost-effective alternative for system integrators. It also supports various types of touch screen based on capacitive, resistive, infrared, and surface acoustical wave technologies. Besides, OPPC with fanless design has given thought to thermal dissipation and will bring industrial-grade reliability to self-service applications. Features of vibration resistance and a operating temperature of -5~50  $^{\circ}\mathrm{C}$  will enhance system durability.

### OPPC 1520T / OPPC1720T

OPPC 1520T and OPPC1720T fanless Panel PCs are powered by Intel<sup>®</sup> Atom<sup>™</sup> D525 processor with Intel<sup>®</sup> ICH8M chipset and support for DDR3 memory. OPPC 1520T incorporates a 15" 4:3 touch screen LCD panel with resolutions up to 1024x768 (XGA) and 400 nits brightness. OPPC 1720T incorporates a 17" 4:3 touch screen LCD panel with resolutions up to 1280x1024 (SXGA) and 380 nits brightness. It is specially designed with bezel-less display which allows customers to design front bezel according to their application requirements without any limitation.



### Main Features

- 15" and 17" fanless Panel PC
- Dedicated Panel PC board with Intel<sup>®</sup> Atom<sup>™</sup> D525 dual core processor
- Resistance to vibration
- Ultra slim open frame and depth
- Open frame/ Panel/ wall/ VESA Mount support



### Applications

- Banking
- Entertainment
- Healthcare
- Retail
- Telecommunication
- Transportation
- Tourism



## PICMG Single Board Computer



## **PEAK Performance** Intel<sup>®</sup> Core<sup>™</sup> i3/i5/i7 **Desktop Processors Technology**

NEXCOM is leading the way in the IPC Industry by providing a series of reliable and innovative products with high customer satisfaction. NEXCOM has released a series of PICMG 1.3 PEAK Single full-size Computers that unleash peak performance with Intel<sup>®</sup> Core™ i3/i5/i7 desktop processors technology with lower power consumption to support even the most demanding industrial applications.

For quick integration and to eliminate configuration chassis, NEXCOM has several 2U and 4U system-ready 19" rackmount platforms for unique applications. The NEX series has a versatile I/O configuration and flexible system integrating scalabilities, which are critical for industrial applications requiring superior performance and reliability.

To support a wide range of applications in vertical markets, NEXCOM has engineered a diverse range of platforms, which incorporate the latest



technologies from Intel and AMD. Utilizing the know-how and experience of our R&D term, NEXCOM will be your most trusted partner in the IPC industry by combining the fast time-to-market solutions with

cutting-edge technologies.

### **PICMG Single Board Computers**

#### PEAK 777VL2 PICMG 1.0 SBC





PICMG 1.3 SHB-Express Intel<sup>®</sup> I GA1156 Core™ i5/i3/ Pentium

### **PEAK 877VL2**



PICMG 1.3 SHB-Express Intel<sup>®</sup> I GA1156. Core™ i7/i5/i3/ Pentium

### PEAK 8920VL2



### Passive Backplanes

### NBP 14111





PICMG 1.3 NBP 14-slot backplane with 1 SHB slot, 3x PCI slots, 8x PCI-X slots, 1x PCIe X16

### **NBP 1407P**

PICMG 1.0 NBP 14-slot PICMG/ ISA/ PCI backplane

## PICMG 1.3 full size Single Board Computer

PEAK 876VL2 is PICMG 1.3 full-size Single Board Computer (SBC), which supports Intel<sup>®</sup> Core<sup>™</sup> i7/i5/i3/ Pentium processors with Hyper-Threading technology. The Intel<sup>®</sup> Core<sup>™</sup> i7/i5/i3/Pentium supports dual channel non-ECC DDR3 1066/1333 MHz memory in two DIMM slots and one Core<sup>™</sup> i5/i3/ Pentium integrated graphics controller. The Q57 Express Chipset PCH manages SATA HDD ports and parallel port; it further supports other versatile *I*/ O ports such as two serial ports, eight USB ports, and two PCI Express Gigabit LAN ports.

The PEAK 876VL2, with Intel<sup>®</sup> Core™ i7/i5/i3/Pentium and PCI Express LAN, offers a great solution for advanced industrial application that requires superb display and processing performance.

NEXCOM offers the following 2U and 4U backplanes that support the PICMG 1.3 specification: (1) 2U backplane: NBP 2U220/ NBP 2U040; (2) 4U backplane: NBP 14570/ NBP 14111/ NBP 14210



**PEAK 872VL2** 



**PEAK 876VL2/ PEAK 877VL2** 

### Eliminate Bottlenecks

The overall throughput of the system is determined by the bottlenecks of the bandwidth in the system. For that reason, by design, the PEAK 8920VL2 and PEAK 876VL2/ 877VL2 SBC no longer support legacy ISA ports, which allow the system to distribute more resources and support higher bandwidth for PCIe ports. Hence, the PEAK 8920VL2 and PEAK 876VL2/ 877VL2 SBC can reserve more resources to support new PCIe XI6 interface, SATA, USB, and LAN wakeup on backplane to increase bandwidth and performance.

### Increase Bandwidth

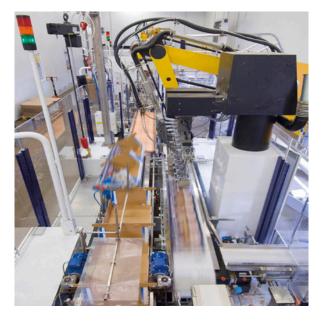
As more sophisticated Industrial applications demand higher performance and computing capability, the bandwidth of the system becomes vital to a reliability of the computing solution. To optimize the bandwidth of throughput, the PEAK 8920VL2 and PEAK 876VL2/ 877VL2 SBC utilize the latest technologies and components.

#### Extended Product Life Cycle

Compared with PICMG 1.0, the PICMG 1.3 greatly improved the performance of the PC bus that can support additional I/O features. The PEAK 8920VL2 and PEAK 876VL2/ 877VL2 SBC support many new connection types, such as PCIe XI6 interface, SATA, USB, and LAN wakeup on backplane to increase over all performance; hence, the PEAK 8920VL2 and PEAK 876VL2/ 877VL2 SBC have an extended product life cycle.

### Applications

- Industrial Automation
- Motion Control Solutions
- Facility Management Systems
- Transportation Management
- Telecommunication
- Digital Surveillances
- Military and Government Applications
- Test and Measurement Platforms



## **Computer-On-Modules**



## COM Competence Center (CCC) Services Ensures Project Success

NEXCOM provides an instant service to customers looking to design COM (Computer-On-Modules) and customized carrier boards (CB) into embedded projects. NEXCOM provides COM Competence Center (CCC) Services to help customers win projects and get their product to market on schedule.

Computer-On-Modules are a great solution for restricted time frame and space critical projects. The quick design-in ETX and COM-Express form factors are perfect solutions for applications which require fast customization. In addition to make sure our products meet unique application requirements; we also offer an I/O customization service. Modifications to the ETX/ COM-express module are not required; instead I/O customization is performed on the carrier board and there is a feature which greatly reduces system development time and risk.

### Applications

- Panel PC and POS
- Medical applications
- Media-rich gaming platforms
- Real-time data analyzer in industrial automation
- Unmanned vehicles and training simulators in military



### NEXCOM Value-added Services

NEXCOM offers following value-added services for valued customers:

- CCC for technical support and comprehensive service
- Reduce regular development time and cost by up to 60%

### **ETX Form Factor**



ICES 170 Intel<sup>®</sup> Atom™ N270 processor 1.6GHz with LVDS interface

COM Express Form Factor

Type 2 Compact, 95x 95 mm<sup>2</sup>



ICES 251 Intel<sup>®</sup> Atom™ N450 1.66GHz processor



ICES 253 Intel<sup>®</sup> Atom™ D525 1.8GHz processor

ICES

ICES 254 Intel<sup>®</sup> Atom™ processor D2700

- Wide range off-the-shelf CPU module
- Flexible custom designed carrier board for all interfaces
- Quick time-to-market
- Lower cost and high engineering effort
- Customized BIOS and WinCE BSP

COM Express Form Factor Type 2 Basic, 95x 125 mm<sup>2</sup>



ICES 267 Intel<sup>®</sup> 2<sup>nd</sup> generation Core Mobile processor



ICES 267S Intel<sup>®</sup> 2<sup>nd</sup> generation Core Mobile processor



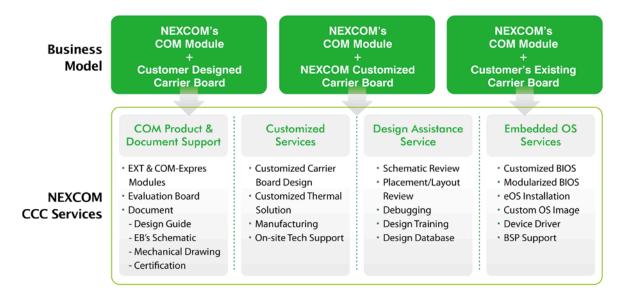
ICES 268 3<sup>rd</sup> generation Intel<sup>®</sup> Core™ processor

COM Express Form Factor Type 6 Basic, 95x 125 mm<sup>2</sup>



ICES 668 3<sup>rd</sup> generation Intel<sup>®</sup> Core™ processor

## COM Competence Center (CCC) Service



## **Embedded Computing**



# The Core Technology for the Digital World

NEXCOM provides versatile embedded form factors with the best of breed product value and competitive cost. Ranged from 3.5", 5.25", and mini-ITX form factor CPU boards to embedded system boards, we offer complete products featuring new generation platforms to satisfy all mission critical embedded and industrial applications.

NEXCOM embedded computing extends board-level solutions including COM (computer-on-modules) solutions for restricted time frame and space critical projects. The quick design-in ETX and COM-Express form factors are perfect solutions for applications which require fast customization. Modifications to the ETX/COM-Express CPU module are not required; instead I/O customization is performed on the carrier board, a feature which greatly reduces system development time and risk.

We offer complete solutions to customers with high performance and low power processor platforms to shorten time-to-market and generate best return on investment. NEXCOM provides value-added customization services to solution providers dominantly in transportation, industrial computer, gaming, POS and medical markets.

### Main Features

- Full range of 3.5"/ 5.25" CPU board
- Wide-range panel support for multi-media application
- High shock and vibration resistance
- Compact for space limited application
- Highly flexibility and hardware integration



### Applications

- Digital signage and multi-media applications
- Medical and healthcare computer
- Gaming machine and vending machine
- Automation and panel PC
- Military and education

### 3.5" ECX SBC













## board with dual GbE

EBC 310

EBC 353 On-board Intel<sup>®</sup> Atom™ processor D2700 2.13GHz with PCI 104/ CRT/ DVI/ LVDS/2x GbE/1x Mici-PCIe

On-board Intel<sup>®</sup> Atom™ E600 series

#### EBC 354

On-board Intel<sup>®</sup> Atom™ processor D2700 2.13GHz with CRT/ DVI/ HDMI/ LVDS/2x GbE/2x Mici-PCIe

#### EBC 342

On-board Intel<sup>®</sup> Atom™ N270 1.6GHz CPU with1x mini-PCle/ 24-bit LVDS/ 2x GbE/ CF

### EBC 352

On-board Intel<sup>®</sup> Atom™ D525 dual core with dual GbE/ PCI 104



5.25" SBC

## X16

EBC 500

EBC 540 On-board Intel<sup>®</sup> Atom™ N270 1.66GHz CPU with 1x mini-PCIe/

1x PCI/ 1x PCI 104/ 2x GbE/ CF

Support Intel<sup>®</sup> Mobile Core™ 2

Duo with dual display/ 1x PCI/

Support Intel<sup>®</sup> Mobile Core™ 2

Duo CPU with 1x PCI / 1x PCIe





### EBC 550

1x PC104+/ 2x GbE

EBC 545

Support Intel<sup>®</sup> Mobile Core™ 2 Duo with dual display/ 1xPCIe X16/ 1xPCIeX4/ 1xPCI/2xGbE

### Solution Diagram



**EBC** 353 Intel® Atom™ processor D2700



**EBC** 354 Intel<sup>®</sup> Atom<sup>™</sup> processor D2700



Dual Display

24-bits LVDS

VGA

DVI-D

DVI-D 24 bits LVDS Single 12 Vdc input 3xRS232 1xRS232/422/485 2x Mini-PCle





HDMI Single 12 Vdc input 2x Mini-PCle 1xPCI slot 4xRS232 Dual Display



2<sup>nd</sup> generation Intel<sup>®</sup> Core™

processor family

Mini-ITX

**COM Express** 

Type 2/ Type 6 Basic, 95x 125 mm<sup>2</sup>

Embedded

Solutions

DVI-D Dual 24-bit LVDS -HDMI Single 12 Vdc input 1x Mini-PCle 1x PCle x16 slot 3xRS232 1xRS232/422/485

Dual Display

=24-bit LVDS

VGA

■VGA

















Intel® Atom™ N270 processor



11

**ICES** 267





**ICES** 267S Intel<sup>®</sup> 2<sup>nd</sup> generation Core Mobile processor

**ICES** 253

Intel<sup>®</sup> Atom™ D525 processor

### Type 2 Compact, 95x 95 mm<sup>2</sup>





## ICES 268/668





Intel<sup>®</sup> Atom<sup>™</sup> processor D2700



## Platform Utility Service-Xcare™



## NEXCOM Xcare<sup>™</sup> 2.0 -Platform Utility Service

New Xcare<sup>™</sup> is a platform utility (Apps) supporting cross H/ W platforms ranging from entry to high performance devices from NEXCOM, Xcare<sup>™</sup> 2.0 CMS works as central networked platform utility to management multiple Xcare<sup>™</sup> 2.0client devices deployed in the Client-Server architecture via Local Area Network (Local LAN) where based on Windows OS Environment (XP/ Windows 7/ WES), The number of connected client-devices is based on LAN bandwidth.

### Benefited to System Integrators

System Integrators and solution assemblers often happened... • Need to configure 50+ device for RTC/ WDT/ GPIO in production line? Is there any easier way to get it done?

- Need to monitor 50+ device installed in field for hardware system status (temperature, fan-speed abnormal, etc.)
- Unfortunately device system is corrupted, can you restore the system back to original setting in minutes?

### Key to Solve All Above Trouble Shootings

### Functionality

 General purpose I/O (GPIO): GPIO allows a variety of custom connections, such as a button, a switch, cash drawer, etc. The status of GPI can be monitored and the status of GPO can be triggered.

Clie	New Xcare™ 2.0 Client and CMS (Central Management System)		
Xcare™ 2.0 Client	← — — — Temperature,	Xcare <sup>™</sup> 2.0 CMS	
OS	Voltage, I Fan speed, I Watchdog, I	OS	
Xcare 2.0 ready platform	GPIO setting	Xcare 2.0 ready platform	
Network	7/ Embedded ← →	Network	

		Xcare™ 2.0 Client and CMS	
	Central Manag	gement System (Xcare <sup>™</sup> 2.0 CMS)	
		Local Area Network (LAN)	
		Xcare <sup>™</sup> 2.0 Local Client Device	
Monitor	Control	Management	System Recovery
Temperature	General purpose I/O	Search mechanism for exploring online Xcare 2.0 Client	Recovery back to origina system image
Fan speed	Watchdog timer	Encrypted data transfer (BASE64)	*Execute in local device ONLY, not thru CMS*
Voltage		Connection status / monitor alert (highlight)	
		Load / save settings	
		Event log	

- Watchdog timer (WDT): Watchdog timer is a device which performs a warn boot after a certain period of time if system crashed.
- Alert: All alerts of temperature, fan speed and temperature can be defined by user with upper and lower limit.

Local/ Remote Monitor temperature/ fan speed/ voltage Local/ Remote Control general purpose I/O and watchdog timer

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Countdown	nde 🔿 Second	Timer	

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input #3		•		_			nd #1		• 1.00	
Post #1				_			18.24			
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SYSPent						91	4.7	*	5.1	
SVSFm2						124	11.7		12.5	~

Xcare<sup>™</sup> 2.0 Central Management Service (CMS)

CMS remote monitoring (temperature)



CMS remote control (GPIO setting)



CMS connected device list



### **Data Recovery**

- OS images that support Data Recovery will have "Recovery" menu option in XCare™
- At system startup, press F9 to boot from the recovery partition
- Recovery system will format hard drive partition and restore original OS image

CPU Temp.	an Speed	Voltage	1, 15
SYS Temp.	49	3.3V	3.33
SYS Fan 1	0	5V	5.02
Countdow	ves	No 0	
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### Xcare<sup>™</sup> Service

The Xcare<sup>™</sup> utility can be applied to following NEXCOM product lines including embedded boards, NISE fanless computer, Panel PC, and security surveillance. The system utility is based on projects and requested through NEXCOM sales representatives or technical support windows per your demands.

### Xcare<sup>™</sup> 2.0 support list

Products and models are listed but not limited, please visit NEXCOM website or contact your sales representatives for updates.

Xcare™ 2.0 Support List				
Board Level		System level		
EBC	SBC	Intelligent Surveillance	Panel PC	Fan-less computer
EBC 342	PEAK 777	NViS 2140	APPC-1720T	NISE 2100
EBC 354		NViS 6200		NISE 2100A
				NISE 2110
				NISE 2110A
				NISE 3100e
				NISE 3100eP2
				NISE 3140
				NISE 3140P2
				NISE 3140P2E
				NISE 3145
OS supports: Windows XP/ Windows Vista/ Windows 7				

## **Extended Temperature Solutions**



## Extreme Ruggedise Fanless Embedded Computing

NEXCOM offers a series of embedded computing solutions with extended temperature ranges which are designed to address a wide variety of rugged and industrial applications. Our rugged solution products can operate in temperatures ranging from -40°C to 85°C and the thermal profile including the validation of extended temperatures, thermal shock and thermal cycle. We provide the thermal design services as well as complete extended temperature solution to customers. Our extended temperature products are not only high performance, but offer low power consumption for critical applications.

### ICES 251X

ICES 251 is a COM Express Module that features Intel® Atom™ N450 1.66GHz and ICH8M in small foot print. ICES

251X supports operating temperature from -40°C to 85°C. It also provides outstanding performance in the combination of high computing power and low thermal dissipation. ICES 251X supports DDR2 667 SO-DIMM memory up to 2GB, and supports 3 x SATA, 1 x IDE, 8 x USB2.0 for fast peripherals. ICES 251X is type 2 COM Express Module support up to 5 Express lanes, 32 bit PCI interface and one IDE and Gigabit LAN. It can fulfill requirements of medical, gaming or outdoor signage applications.

### Key Features

- Wide operating temperature -40°C- 85°C
- High shock and vibration resistance
- Compact design for space limited applications
- Highly flexibility and hardware integration
- Requires low power





### EBC 310X

The EBC 310X is a 3.5" embedded board with an on-board Intel® Atom™ E640 1.0GHz SoC with L2 cache 512 KB and extreme low

power consumption of just 3.6 watts. The EBC 310X supports operating temperatures ranging from -40°C to 85°C and features DDR2 1GB memory on-board, dual display to support independent CRT and LVDS interfaces and build-in HD video decoder/ encoder. Intel® PCH EG20T PCH supports 1x CAN, 3x COM and USB 2.0 controller. It can fulfill requirements of outdoor signage, factory or automation applications.

## Intelligent Surveillance Solutions



# Intelligent Hybrid Embedded DVR/ NVR Solution

In response to increased global demand for intelligent surveillance solutions, NEXCOM has introduced NViS series of integrated PoE and intelligent hybrid embedded DVR/NVR systems, which provide the perfect solution for security protection. With the NEXCOM all-in-one server board, customers are able to save time and cost as well as fulfill demands of CCTV and IP surveillance in the marketplace.

Integrated with cutting-edge Intel technology, NEXCOM's hybrid surveillance system implements advanced intelligent video analysis (IVA) which is capable of handing multiple threads at the same time. For instance, tasks such as flow counting, privacy masking and missing object detection can rapidly be performed.

The NViS 2140/ 2280/ 3540/ 5240 series with built in with Intel® Atom<sup>™</sup> processor, features a compact and energy-efficient design. Incorporating POE and power ignition technology, the three series eradicates the difficulties associated with providing different power sources to devices such as IP camera in buses, police cars, sightseeing buses, and school buses etc.

The NViS 6210 series supports a wide range of Intel® Dual Core or Quad Core CPUs. Embedded with high quality video/ audio capture chips, NViS series is the best design to for use security surveillance deployments.

### Key Features

- Industrial-level for PC-based DVR
- Embedded video decoder chips on motherboard provides steadier and easier operation
- Fanless design improves reliability and eliminates systems failure caused by fan breakdown to retain low maintenance cost
- Power over Ethernet (PoE) device connection
- Hybrid surveillance enrich IVA applications
- Integrated with power ignition
- Wide range of DC input from 9V to 36V for mobile surveillance

### Applications



#### Police car / truck

NViS 2140: 4-channel Full-D1 video, power ignition, and fanless



#### Public bus / vehicle / ambulance

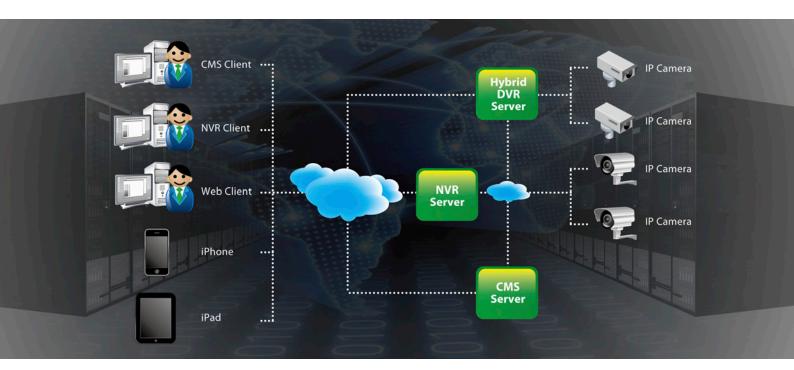
NViS 2280/ 3542P4: 4-channel Full-D1 video, wide range of DC input, and POE



### Supermarket / chain store / bank

NViS 6210: up to 32-channel full-D1 and 2U form factor NViS 5240: up to 16-channel, IP cameras

## **NViS VMS - Video Management Solution**



## Intelligent Surveillance Software

### Key Features

### **Complete VMS Solution**

- NVR Server/Hybrid DVR Server/CMS Server
- NVR Client/Web Client/Mobile Client
- NVR SDK

### Designed for Ease of Integration

- Modular plug-in on Server and Client
- HTTP Protocol Only
- No recompilation required

### Live Monitoring

- Layout patrol
- Instant playback on live view and event
- 2-way audio and broadcast

### Investigation and export evidence

- Add bookmarks
- Review events
- Synchronous playback
- Export video

### Smart Search

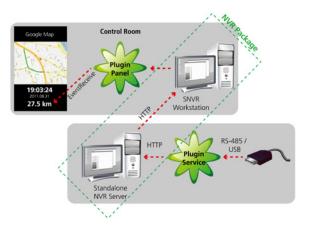
- Sequence Explorer
- Search motion
- Search by Events





# Plug-in Architecture and Customization

NEXCOM's software structure is not only ready for customization but also integration. The communication between any application plug-ins and the NVR server such as live view, PTZ control, and playback etc. goes through only one port and uses only HTTP protocol which makes the integration between any third party application simple and easy. NEXCOM is expert in UI customizations where the logo, colors, icons, size, layout and any application plug-in can all be modified, relocated, resized and enabled/disabled conveniently by modifying a XML file.





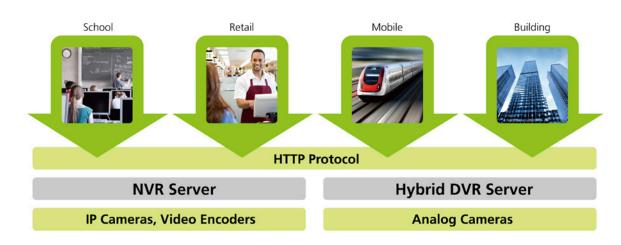


### Applications

NEXCOM's complete VMS solution can be easily turned into a professional vertical market specific solution. NEXCOM understands end user application requirements and can provide flexible customization and professional services tailored toward customer specific needs. NEXCOM currently focus on following vertical market:

- Retail vertical market
- School vertical market
- Mobile vehicle vertical market
- Building automation vertical market

NEXCOM provides Ready-to-Run NViS Solution Starter kit with free trial version of VMS upon customer's request.



## Point of Service Solutions - POS



## NEXPOS, Transform Your Business

Welcome to a new world of interaction - where you can serve your customers how, when and where they choose across point of service, mobile and online channels. It's possible to achieve this when you partner with NEXPOS. Learn how our continuous innovation, global reach and cross-industry knowledge and experience will help you transform your business.



NEXPOS is a newly formed team under NEXCOM's Industrial Computing Solution (ICS) business group, which provides innovative "Point of Service" solutions. We specialize in new hardware solutions, system planning, design implementation, and project management.

Our people have decades of experience in the "Point of Service" industry. They are carefully selected not only for their technical brilliance, but also for their mature attitude in solving and providing expert advice, and innovative hardware technology,

and also providing hardware design solutions for your enterprise systems integration.

### NEXPOS Leadership for Customization Service

- High Performance and Green Technology
- Expert Service Offerings
- Reliability in design and manufacturing (OEM/ODM)
- Outsourced manufacturing second to none

Our approach is always customer centered. Providing industry's leading solutions, we are to help ensure success of your solutions investment.





## NISE 90

Ultra Low Power Atom™ E620, DIN-Rail Computer

- On-board Intel<sup>®</sup> Atom<sup>™</sup> E620 0.6GHz processor
- On-board DDR2 512MB memory chip
- 2x Intel<sup>®</sup> GbE LANs
- 3x USB2.0 / 1x VGA / 3x Serial Ports / 1x CAN bus
- 8CH GPI and 8CH GPO
- Support 1x 2.5" HDD Drive Bay
- Support 12V and 24V DC input

## NISE 91

### Ultra Low Power Atom™ E640, DIN-Rail Computer

- On-board Intel<sup>®</sup> Atom<sup>™</sup> E640 1.0 GHz processor
- On-board DDR2 1G memory chip
- 2x Intel<sup>®</sup> 82574L GbE LANs
- 3x USB2.0 / 1x VGA / 3x serial ports / 1x CAN bus
- 8CH GPI and 8CH GPO
- Support 1x 2.5" HDD drive bay
- Support 12V and 24V DC input

## **NISE 104**

### Atom<sup>™</sup> Dual Core D2700, EZ Controller

- On-board Intel<sup>®</sup> Atom<sup>™</sup> Dual Core D2700 processor, 2.13 GHz
- Intel<sup>®</sup> NM10 Express chipset
- 1x DVI-I & 1x HDMI display output
- Dual Intel<sup>®</sup> 82574L GbE LAN ports
- 2x RS232/422/485 and 2x RS232
- 6x USB 2.0
- 1x external CFast socket
- 1x mini-PCIe with two antenna holes
- Support +12V and 24V DC power input
- Supports ATX power mode, WoL, LAN teaming and PXE function







## NISE 3142

Core<sup>™</sup> 2 Duo, Dual DVI, High Performance Platform

- Support Intel<sup>®</sup> Core<sup>™</sup> 2 Duo / Celeron<sup>®</sup> processor
- Intel<sup>®</sup> GM45 chipsets
- Dual Intel<sup>®</sup> 82574L Gigabit Ethernet ports
- Dual DVI-D independent display
- 5 x RS232 and 1 x RS232/422/485 with Auto Direction Control
- One external locked CFast socket (SATA interface)
- Support 16V to 30V DC power input
- Support ATX power mode and PXE/ WoL/ LAN Teaming

## NISE 3142P2

Core<sup>™</sup> 2 Duo, GM45, Dual DVI, High Performance Platform w/ 2x PCI

- Support Intel<sup>®</sup> Core<sup>™</sup> 2 Duo / Celeron<sup>®</sup> processor
- Intel<sup>®</sup> GM45 chipsets
- Dual Intel<sup>®</sup> 82574L Gigabit Ethernet ports
- Dual DVI-D independent display
- 5x RS232 and 1x RS232/422/485 with Auto Direction Control
- One external locked CFast socket (SATA interface)
- Support 16V to 30V DC power input
- Support ATX power mode and PXE/ WoL/ LAN teaming





## **NISE 3520**

1st Gen. Core i7/i5, QM57 High Performance Platform

- Support Intel<sup>®</sup> Core<sup>™</sup> i7/i5 socket processor
- Mobile Intel<sup>®</sup> QM57 PCH
- Dual Intel<sup>®</sup> Gigabit Ethernet ports
- Dual VGA or VGA/DVI or DVI/HDMI Independent Display
- 3x RS232 and 1x RS232/422/485 with Auto Flow Control
- 1x mini-PCIe socket with one external SIM card holder
- Support 9V to 30V DC power input
- Support ATX power mode and PXE/ WoL



## NISE 3142M

Core<sup>™</sup> 2 Duo, GM45, Dual IEEE1394b, Medical Grade, High Performance Platform w/ PCI

- Support Intel<sup>®</sup> Core<sup>™</sup> 2 Duo/ Celeron<sup>®</sup> processor
- Intel<sup>®</sup> GM45 chipsets
- Dual Intel<sup>®</sup> 82574L Gigabit Ethernet ports
- Dual DVI-D Independent display
- 5x RS232 and 1x RS232/422/485 with Auto Direction Control
- One external locked CFast socket (SATA interface)
- Dual IEEE1394b ports
- Support 16V to 30V DC power input
- Support ATX power mode and PXE/ WoL/ LAN teaming
- 1x PCI Expansion slot

## NISE 3142M2E

Core<sup>™</sup> 2 Duo, GM45, Dual DVI, Medical Grade, High Performance Platform w/ PCI & PCIe

- Support Intel<sup>®</sup> Core<sup>™</sup> 2 Duo/ Celeron<sup>®</sup> processor
- Intel<sup>®</sup> GM45 chipsets
- Dual Intel<sup>®</sup> 82574L Gigabit Ethernet ports
- Dual DVI-D independent display
- 5x RS232 and 1x RS232/422/485 with Auto Direction Control
- One external locked CFast socket (SATA interface)
- Support 16V to 30V DC power input
- Support ATX power mode and PXE/ WoL/ LAN teaming
- 1x PCI & 1x PCI Expansion slot





## **NISE 3520P2E**

1<sup>st</sup> Gen. Core<sup>™</sup> i7/i5 , QM57 High Performance Platform w/ PCI & PCIe

- Support Intel<sup>®</sup> Core™ i7/i5 socket processor
- Mobile Intel<sup>®</sup> QM57 PCH
- Dual Intel<sup>®</sup> Gigabit Ethernet ports
- Dual VGA or VGA/DVI or DVI/HDMI Independent Display
- 3x RS232 and 1x RS232/422/485 with Auto Flow Control
- 1x mini-PCIe socket with one external SIM card holder
- Support 9V to 30V DC power input
- Support ATX power mode and PXE/ WoL

## **NISE 3600E Series**

3<sup>rd</sup> Gen. i5/i3, rPGA, QM77, High Performance Platform

### NISE 3620E Series Q3, 12

3<sup>rd</sup> Gen. i7/i3, BGA, QM77, High Performance Platform

- Support 3<sup>rd</sup> generation Intel<sup>®</sup> Core<sup>™</sup> i7/i5/i3 rPGA / BGA Dual Core processor with QM77 PCH
- 4x USB3.0 & 2x USB2.0 Dual
- Intel<sup>®</sup> GbE LAN ports
- 1x VGA & 1x DVI-D display output, Dual Display Port output
- 5x RS232 and 1x RS232/422/485
- 1x external CFast socket
- Support 9~30V DC power input
- Supports ATX power mode, WoL and PXE function



Model Series	Description		Model Series	Description
NISE3600 Series	Support 3 <sup>rd</sup> Gen. Core™ i5/i3 Socket processor		NISE3620 Series	On-board 3 <sup>rd</sup> Gen. Core™ i7/i3 BGA processor Q3, '12
NISE3600E	1x PCle x4		NISE3620E-i3	On-board 3 <sup>rd</sup> Gen. Core™ i3 processor, 1x PCle x4 Q3, '12
NISE3600E2	2x PCle x4			
NISE3600P2	2x PCI		NISE3620E-i7	On-board 3 <sup>rd</sup> Gen. Core™ i7 processor, 1x PCle x4
NISE3600PE	1x PClex4 & 1x PCl		NISE3620PE-i7	On-board 3 <sup>rd</sup> Gen. Core™ i7 processor, 1x PCIe x4 & 1x PCI

## nTUF 600

Atom<sup>™</sup> D525 Marine Computer

- On-board Intel<sup>®</sup> Atom<sup>™</sup> Dual Core D525 processor, 1.8 GHz
- 4x USB ports
- Dual M12 connector for Intel<sup>®</sup> 82574L GbE LAN ports
- 1x VGA display output
- 2x RS232
- 2x PS/2 for keyboard and mouse
- 1x external CFast socket
- 1x mini-PCIe with two Antenna Holes
- Support +24V DC power input
- Dual cold swappable 2.5" SSD tray
- Supports ATX Power Mode, WoL, LAN teaming and PXE function





# nTUF 610

### 2<sup>nd</sup> Gen. Core<sup>TM</sup> i7 Marine Computer

- On-board Intel<sup>®</sup> 2<sup>nd</sup> generation Core<sup>™</sup> i7-2610UE 1.5 GHz
- 4x USB ports
- Dual M12 connector for Intel<sup>®</sup> 82574L GbE LAN ports
- 1x VGA display output
- 2x RS232
- 2x PS/2 for keyboard and mouse
- 1x external CFast socket
- 1x mini-PCIe with two antenna hole
- Support +24V DC power input
- Dual cold swappable 2.5" HDD tray
- Supports ATX power mode, WoL, LAN teaming and PXE function

## **MPPC 3220T**

32", Full HD, SAW Touch Multi-Media Panel PC

- 16:9 32 " fanless panel computer
- Intel<sup>®</sup> Atom<sup>™</sup> D525, Dual Core, low power consumption CPU
- SAW touch screen
- Dual GbE/ Line-in/ Line-out/ MIC-in/ PS2 KB/ MS4 x USB/ 2x mini-PCIe sockets/ 1x CF/ 2x RS232/422/485
- DDR3 1GB/ 2.5" HDD Bracket/ two speakers
- Optional Wi-Fi module/ 2.5" HDD/ VGA splitter/ panel mount kit
- Panel mount/ VESA mount compliance





## APPC 0820T/ 0820TC

8", SVGA, Ultra Slim Light Industrial Panel PC

- 4:3 8" fanless panel computer
- Intel<sup>®</sup> Atom<sup>™</sup> D525, Dual Core, low power consumption CPU
- Flush panel by 5-wire touch screen
- Dual GbE/ 2<sup>nd</sup> display-VGA/ Line-in/ Line-out/ MIC-in/ PS2 KB/MS
- USB x 4/ 1x mini-PCle sockets/ 1x CF
- 1x RS232/ 1x RS232/422/485/ 1x GPIO
- DDR3 1GB / 2.5" HDD bracket
- Optional Wi-Fi module / 2.5 " HDD
- IP65 compliant front panel
- Mounting support: panel/ wall/ stand/ VESA 100mmx 100mm

## APPC 1220T/ 1221T

12.1", SVGA, Slim Light Industrial Panel PC

- 4:3 12.1" fanless LED panel computer
- Intel<sup>®</sup> Atom<sup>™</sup> D525, Dual Core, low power consumption CPU
- Fully flat 5-wire touch screen
- Dual GbE; 2<sup>nd</sup> display VGA/ Line-in/ Line-out/ MIC-in/ PS2 KB/MS
- USB x 4 / 2x Mini-PCIe/ 1x CF/ 2x RS232/422/485
- Optional Wi-Fi module / 2.5" HDD / 2x COMs / GPIO / CAN Bus
- DDR3 1GB / 2.5" HDD bracket
- IP65 compliant front panel
- Mounting support: panel/ wall/ stand/ VESA 100mmx 100mm
- Wide range power input 12V~ 30V DC





## APPC 1930T/1931T

### 19", SVGA, Light Industrial Panel PC

- 4:3 19" fanless panel computer
- Intel<sup>®</sup> Atom<sup>™</sup> D2700, Dual Core, low power consumption CPU
- Panel by 5-wire touch screen
- Dual GbE/ 2<sup>nd</sup> display-VGA/ Line-in/ Line-out/ MIC-in/ PS2 KB/MS
- USB x 4/ 2x mini-PCle sockets/ 1x CF/ 2x RS232/422/485
- Optional Wi-Fi module/ 2.5" HDD/ 2x COMs/ GPIO/ CAN bus
- DDR3 1GB/ 2.5" HDD bracket
- IP65 compliant front panel
- Mounting support: panel/ wall/ stand/ VESA 100mmx 100mm
- Wide range power input: 12V~ 30V DC

## **OPPC 1520T**

15", XGA, Open Frame Panel PC

- 4:3 15" fanless LED panel computer
- Intel<sup>®</sup> Atom<sup>™</sup> D525, Dual Core, low power consumption CPU
- Dual GbE/ 2<sup>nd</sup> display VGA/ Line-in/ Line-out/ MIC-in/ PS2 KB/MS
- 4 x USB/ 2x mini-PCIe sockets/ 1x CF/ 2x RS232/422/485
- DDR3 1GB / 2.5" HDD bracket
- Optional Wi-Fi module / 2.5"HDD / panel mount kit
- Open frame and panel mount/ VESA mount compliance
- Wide range power input: 12V~ 30V DC





## **OPPC 1720T**

17", SXGA, Open Frame Panel PC

- 4:3 15" fanless panel computer
- Intel<sup>®</sup> Atom<sup>™</sup> D525, Dual Core, low power consumption CPU
- Dual GbE/ 2<sup>nd</sup> display VGA/ Line-in/ Line-out/ MIC-in/ PS2 KB/MS
- 4 x USB/ 2x mini-PCIe sockets/ 1x CF/ 2x RS232/422/485
- DDR3 1GB / 2.5" HDD bracket
- Optional Wi-Fi module / 2.5" HDD / panel mount kit
- Open frame and panel mount/ VESA mount compliance
- Wide range power input: 12V~ 30V DC

# HPPC 1920T

### 19", SXGA, PCT Multi-Touch Medical Grade Panel PC

- 4:3 19" fanless panel computer
- Intel<sup>®</sup> Atom<sup>™</sup> D525, Dual Core, low power consumption CPU
- PCT (Projected Capacitive Touch) touch screen
- Dual GbE/ 2<sup>nd</sup> display VGA/ Line-out/ PS2 KB/MS
- 4x USB/ 2x mini-PCIe sockets/ 1x CF/ 2x RS232/422/485
- Optional Wi-Fi module/ 2.5"HDD
- Optional Wi-Fi module / 2.5"HDD bracket
- IP65 compliant front panel
- Mounting support: stand/ VESA 75mm x 75mm, 100mm x 100mm
- Wide range power input: 12V~ 30V DC





### FPPC 1220 12.1", SVGA, Factory Automation

#### Control Panel PC

- 4:3 12.1" fanless panel computer
- Intel<sup>®</sup> Atom<sup>™</sup> D425, low power consumption CPU
- DDR3 1GB/ 3x GbE/ 2<sup>nd</sup> display-VGA/ Line-out/ MIC-in/ PS2 KB/MS
- USB x 2/ 1x PCI slot/ 1x CF/ 2x RS232/ 1x RS232/422/485
- IP65 compliant front panel
- Mounting support: panel/ wall/ stand/ VESA 75mmx 75mm, 100mm x 100mm

## NPT 1500

#### Atom<sup>™</sup>, 15" Value Fanless Point-of Sale Terminal

- 15" 4:3 XGA (1024\*768) TFT LCD panel
- 15" 5-wire resistive touch screen
- Fanless POS terminal
- Intel<sup>®</sup> Atom<sup>™</sup> D525 Dual-Core processor, 1.8GHz
- Support DDR3 SO-DIMM memory
- 2.5" removable SATA HDD
- Powered COM(4), USB(4), printer port (1), VGA(1), GbE LAN(1), cash drawer(1)
- Water spill resistant front bezel
- Optional VESA 75 x 75mm mounting support





## NPT 1550

Atom™, 15" IP65 Front, Fanless Point-of Sale Terminal

- 15" 4:3 XGA (1024\*768) TFT LCD panel
- 15" 5-wire resistive touch screen
- Fanless POS terminal
- Intel<sup>®</sup> Atom<sup>™</sup> D525 Dual-Core processor, 1.8GHz
- Support DDR3 SO-DIMM memory
- 2.5" removable SATA HDD
- Powered COM(4), USB(4), printer port (1), VGA(1), GbE LAN(1), cash drawer(1)
- Front bezel complies with IP-65 protection standard
- Optional kits for MSR/ fingerprint/ VFD
- Optional VESA 100x 100mm mounting for wall-mount application

## NPT 1551

Atom<sup>™</sup>, 15" IP65 Front, Bezel-Free, Fanless Point-of Sale Terminal

- 15" 4:3 XGA (1024\*768) TFT LCD panel
- 15" 5-wire resistive true flat touch screen
- Fanless POS terminal
- Intel<sup>®</sup> Atom<sup>™</sup> D525 Dual-Core processor, 1.8GHz
- Support DDR3 SO-DIMM memory
- 2.5" removable SATA HDD
- Powered COM(4), USB(4), printer port (1), VGA(1), GbE LAN(1), cash drawer(1)
- Front bezel complies with IP-65 protection standard
- Option kits for MSR/ Fingerprint/ VFD
- Optional VESA 100 x 100mm mounting for wall-mount application





## NPT 1552

Atom<sup>™</sup>, 15", IP65 Front, PCT Touch, Fanless Point-of Sale POS Terminal

- 15" 4:3 XGA (1024\*768) TFT LCD panel
- 15" projected capacitive true flat touch screen
- Fanless POS terminal
- Intel<sup>®</sup> Atom<sup>™</sup> D525 Dual-Core processor, 1.8GHz
- Support DDR3 SO-DIMM memory
- 2.5" removable SATA HDD
- Powered COM(4), USB(4), printer port (1), VGA(1), GbE LAN(1), cash drawer(1)
- Front bezel complies with IP-65 protection standard
- Optional kits for MSR/ fingerprint/ VFD
- Optional VESA 100x 100mm mounting for wall-mount application

## NPT 5850

### Core™ i3/i5/i7, IP65 Front, High Performance Point-of Sale Terminal

- 15" 4:3 XGA (1024\*768) TFT LCD panel
- 15" 5-wire resistive touch screen
- Intel<sup>®</sup> Core™ i3/i5/i7 mobile processor, 2.1GHz
- Support DDR3 1333 SO-DIMM memory
- 2.5" removable SATA HDD
- Powered COM(4), USB(4), printer port (1), VGA(1), GbE LAN(1), cash drawer(1)
- Front bezel complies with IP-65 protection standard
- Option kits for MSR/ Fingerprint/ VFD
- Optional VESA 100 x 100mm mounting for wall-mount application





## NPT 5851

### Core™ i3/i5/i7, IP65 Front, Bezel-Free, Point-of Sale Terminal

- 15" 4:3 XGA (1024\*768) TFT LCD panel
- 15" 5-wire resistive true flat touch screen
- Intel<sup>®</sup> Core<sup>™</sup> i3/i5/i7 mobile processor, 2.1 GHz
- Support DDR3 1333 SO-DIMM memory
- 2.5" removable SATA HDD
- Powered COM(4), USB(4), printer port(1), VGA(1), GbE LAN(1), cash drawer(1)
- Front bezel complies with IP-65 protection standard
- Option kits for MSR/ fingerprint/ VFD
- Optional VESA 100 x 100mm mounting for wall-mount application

## NPT 5852

Core™ i3/i5/i7, IP65 Front, PCT, Bezel-Free, Point-of Sale Terminal

- 15" 4:3 XGA (1024\*768) TFT LCD panel
- 15" projected capacitive true flat touch screen
- Intel<sup>®</sup> Core™ i3/i5/i7 mobile processor, 2.1GHz
- Support DDR3 1333 SO-DIMM memory
- 2.5" removable SATA HDD
- Powered COM(4), USB(4), printer port(1), VGA(1), GbE LAN(1), cash drawer(1)
- Front bezel complies with IP-65 protection standard
- Option kits for MSR/ Fingerprint/ VFD
- Optional VESA 100 x 100mm mounting for wall-mount application





## NViS 2280

#### Atom™ D2700, 4 PoE, Mobile NVR

- Built-in Intel<sup>®</sup> Atom<sup>™</sup> D2700 Dual Core 2.13GHz processor
- Internal wireless communication (3.5G/ WLAN/ BT/ GPS)
- 2x 2.5" hot swappable HDD tray for 750G or above video data
- Dual local display by (VGA+ HDMI)
- 2x Intel<sup>®</sup> 83583V Gigabit Ethernet
- Support 1x isolated RS-232 port
- Optional power ignition
- 9~36V wide range power input

## NViS 3542P4/ 3542P8

Core™ i5/i7, 4 PoE/ 8 PoE, Mobile NVR

- Support Intel<sup>®</sup> Core<sup>™</sup> i7/ i5 Socket processor
- Mobile Intel<sup>®</sup> QM57 PCH
- Dual Intel<sup>®</sup> Gigabit Ethernet ports
- Dual VGA or VGA/ DVI independent display
- 3x R232 and 1x R232/422/485 with Auto Flow Control
- On-board DC to DC power design to support 9V to 30V DC power input
- Support ATX power mode and PXE/ WoL
- Support 3G/ Wi-Fi/ GPS communications
- 4x PoE ports/ 8x POE ports





## NViS 5240

Atom<sup>™</sup> 2700, 4 Bay, Tower SMB/ Retailer NVR

- Built-in Intel<sup>®</sup> Atom<sup>™</sup> D2700 Dual Core 2.13GHz Processor
- 4x 2.5" HDD Tray for 2T or Above Video Data
- Dual Local Display by (VGA+HDMI)
- 2x Intel<sup>®</sup> Gigabit Ethernet
- 1x PCIe x4 or 1x mini-PCIe (either one)
- NViS VMS pre-installed

## NVIS 6210

### Core™ i3/i5/i7, 2U, 32CH Hybrid DVR

- 2U rackmount hybrid DVR with BNC connectors published
- Support Intel<sup>®</sup> Core<sup>™</sup> i3/i5/i7 desktop processors
- Video decoder (TW6816) chips on-board
- Up to 32 CH 960/900FPS @ D1 display & recording
- Dual local display by (VGA+ DVI), (VGA+ HDMI) or (DVI+ HDMI)
- 2x Intel<sup>®</sup> Gigabit Ethernet/ support Intel<sup>®</sup> AMT 7.0 for remote management
- 1x PCIe x16 slot, support SATA3.0, RS232/422/485
- SDK support for Windows operating system





## NViS 6220

#### Core™ i3/i5/i7, 2U Rackmount NVR

- 2U rackmount NVR with 1x PCIe x16 expansion slot available
- Support Intel<sup>®</sup> Core™ i3/i5/i7 desktop processors
- 8x 3.5" HDD tray for 16T or above video data
- Dual local display by (VGA+ DVI), (VGA+ HDMI) or (DVI+ HDMI)
- 2x Intel<sup>®</sup> Gigabit Ethernet/ support Intel<sup>®</sup> AMT 7.0 for remote management
- 1x PCIe x16 slot, support SATA 3.0, RS232/422/485

## NViS 8480/ 8490

### Core™ i3/i5/i7, 4U HDcctv DVR w/ up to 4 PCIe x4/8 Expansion Slots

- 4U 19" rackmount standard
- Supports Intel<sup>®</sup> Core<sup>™</sup> i7/i5 Quad Core processors
- Four DDR3 DIMM sockets, up to 16GB DDR3 1066/1333 MHz SDRAM
- Dual Intel<sup>®</sup> Gigabit Ethernet ports
- 6x USB2.0 / 1x VGA/ 1x DVI-D
- 4x PCIe expansion slots
- 6x 3.5" SATA HDD bays for external
- Supported up to 8-cahnnal HD CCTV





## EBC 353

### 3.5" ECX, PCI-104

- Onboard Intel<sup>®</sup> Atom<sup>™</sup> processor D2700 2.13GHz CPU
- Intel<sup>®</sup> NM10 Express chipset
- One 204-pin SO-DIMM socket supports up to 4 GB DDR3 800/1066 MHz SDRAM
- Display: VGA & DVI-D & LVDS (1 x DF13 20-pin 24-bit Single channel)
- 1x Mini-PCle
- 1x PCI-104
- 2x Intel<sup>®</sup> 82574L PCI Express Gigabit Ethernet
- 2x SATA
- 6x USB, 4-in/4-out GPIO, Mic-in , Speak out
- Serial port: 3x RS232, 1x RS232/422/485 port
- Support AT/ATX mode and single +12 Vdc input

## EBC 354

3.5" ECX, HDMI, 2x Mini-PCIe

- On-board Intel<sup>®</sup> Atom<sup>™</sup> processor D2700 2.13GHz CPU
- Intel<sup>®</sup> NM10 Express chipset
- One 204-pin SO-DIMM socket supports up to 4 GB DDR3 800/1066 MHz SDRAM
- Display: VGA & DVI-D & HDMI & LVDS (1x DF13 20-pin 18/24-bit Single channel)
- 2x Mini-PCle
- 2x Intel<sup>®</sup> 82574L PCI Express Gigabit Ethernet
- 2x SATA
- 6x USB, 4-in/4-out GPIO, Mic-in , Speak out
- Serial port: 3x RS232, 1x RS232/422/485 port
- Support AT/ATX mode and single +12 Vdc input





## NEX 603

#### Mini-iTX, POS Board

- Support Intel<sup>®</sup> Atom<sup>™</sup> Dual Core D525 processor
- Support 2x DDR3 SO-DIMM SDRAM, up to 4GB
- Support dual display VGA and LVDS
- One Gigabit Ethernet
- Support High Definition audio codec with 2W amplifier
- 6x COMs, 6x USB 2.0, 1x cash drawer
- Mini-DIN 4pin DC12V power input

## NEX 604

#### Wi-Fi/ 3.5G/ PCI Expansion Mini-iTX

- Intel<sup>®</sup> Atom<sup>™</sup> Dual-Core D2700/ 2.13GHz processor
- Intel<sup>®</sup> NM10 Express chipset
- Dual 204-pins DDR3 SO-DIMMs support max. 4GB SDRAM memory
- Support VGA/ HDMI, VGA/ LVDS or HDMI/ LVDS dual displays
- 6x USB, 4x COM, 2x GbE, 2x SATA, 1x LPT, 1x PCI
- Audio Mic-in/ Line- out, (internal Line-in)
- 2x Mini-PCIe (1x full/SIM tray, 1x half-size)
- Single DC +12V input by AT/ ATX mode





## **NEX 605**

#### Mini-iTX, NVR Server Board

- Intel<sup>®</sup> Atom<sup>™</sup> Dual-Core D2700/ 2.13GHz processor
- Intel<sup>®</sup> ICH10R to support Intel<sup>®</sup> Matrix Storage RAID 0/ 1/ 5/ 10
- Dual 204-pins DDR3 SO-DIMMs support max. 4GB SDRAM memory
- Support VGA/HDMI, VGA/LVDS or HDMI/LVDS dual displays
- 8x USB, 4x COM, 2x GbE (Intel), 2x eSATA/ 6x SATA, 8x GPIO, 1x LPT
- Audio Mic-in/ Line- out, (internal Line-in)
- 1x Mini-PCle (1x full-size/ SIM tray), 1x PCle x4
- Standard ATX v.2.0 input by AT/ ATX power mode

## NEX 607

Mini-iTX, Dual LVDS-48 bits LCD Display

- 2<sup>nd</sup> generation Intel<sup>®</sup> Core<sup>™</sup> processor family
- Intel<sup>®</sup> QM67 chipset
- Two 204-pin SO-DIMM socket supports up to 8 GB DDR3 1066/1333 MHz SDRAM
- Display: VGA & DVI-D & HDMI & LVDS (2 x DF13 20-pin 18/24/36/48-bit dual channel)
- 1x mini-PCle, 1x PCle x16 slot
- 2x Intel<sup>®</sup> Gigabit Ethernet
- 4x SATA
- 10x USB, 4-in/4-out GPIO, Mic-in , Line-out
- Serial port: 3x RS232, 1x RS232/422/485 port
- Support AT/ATX mode and single +12 Vdc input





## NEX 880

#### Micro-ATX, 4x PCIe Slots

- Support 2<sup>nd</sup> generation Intel<sup>®</sup> Core<sup>™</sup> desktop processors
- 4 x DDR3 DIMM Socket up to 32 GB
- VGA + DVI dual displays
- 2 x Intel<sup>®</sup> Gigabit Ethernet
- Support Intel<sup>®</sup> AMT 7.0
- 1x PCle x16( with PCle x8 signals), 1x PCle x8( with PCle x4 signals), 2x PCle x4 (PCle x 1 signal) slots
- Support SATA 3.0, 2x RS232

## NEX 882

Core™ i3/i5/i7, 32CH SD, Video Chip On-Board, Surveillance Server Board

- Support Intel<sup>®</sup> Core<sup>™</sup> i3/i5/i7 desktop processor
- Video decoder (TW6816) chips on-board
- Up to 32 CH 960/900FPS @D1 display & recording
- 4x DDR3 DIMM sockets up to 16GB
- VGA, DVI, HDMI dual displays
- 2x Intel<sup>®</sup> Gigabit Ethernet, support Intel<sup>®</sup> AMT 7.0
- 1x PCIe x16 slot
- 1x mini-PCle slot
- Micro-ATX





## NEX 890

Micro-ATX, Xeon<sup>®</sup>/ ECC RAM, 2x PCIe x8 & 2x PCIe x4

- Support 2<sup>nd</sup> generation Intel<sup>®</sup> Core<sup>™</sup> workstation processors
- 4 x DDR3 DIMM Socket up to 32 GB, support ECC SDRAM
- VGA + DVI dual displays
- 2 x Intel<sup>®</sup> Gigabit Ethernet
- Support Intel<sup>®</sup> AMT 7.0
- 1x PCIe x16 (with PCIe x8 signals), 1x PCIe x8, 2x PCIe x4 slots
- Support SATA 3.0, 2x RS232

## **ICES 254**

#### COM Express, Rich SATA

- Intel<sup>®</sup> Atom<sup>™</sup> Dual Core processor D2700, 2.13GHz
- Intel<sup>®</sup> ICH10R to support Intel<sup>®</sup> Matrix Storage RAID 0/1/5/10
- 1x DDR3 SO-DIMM socket up to 4GB
- Type 2 COM Express compact size to support
- 5 Express lanes, 32 bit PCI interface, one IDE, Gigabit LAN and HDMI





## **ICES 267S**

#### COM Express, Type 2 Basic, BGA, SDVO

- Intel<sup>®</sup> 2<sup>nd</sup> generation Intel<sup>®</sup> Core<sup>™</sup> i5-2515E
- Intel<sup>®</sup> QM67 PCH chipset
- 1x DDR3 SO-DIMM socket support non-ECC DDR3 800/1066/1333MHz up to 4GB
- Support SDVO
- Type 2 COM Express 2.0 module support 6 Express lanes, 32 bit PCI interface, one IDE and Gigabit LAN

## **ICES 268**

COM Express, Type 2 Basic, BGA, PCIe x16

- Intel<sup>®</sup> 3<sup>rd</sup> generation Intel<sup>®</sup> Core<sup>™</sup> processor
- Intel<sup>®</sup> QM77 PCH chipset with USB3.0 support & SATAIII 6Gbs
- 2x DDR3 SO-DIMM socket supporting non-ECC DDR3 1333/1600 up to 16GB
- Support PCIe x16, VGA, LVDS
- Type 2 COM Express 2.0 module support 6 Express lanes, 32 bit PCI interface, one IDE and Gigabit LAN





## **ICES 668**

COM Express, Type 6 Basic, BGA, PCIe x16, SVDO

- 3<sup>rd</sup> generation Intel<sup>®</sup> Core<sup>™</sup> processor
- Intel<sup>®</sup> QM77 PCH chipset with USB3.0 support & SATAIII 6Gbs
- 2x DDR3 SO-DIMM socket supporting ECC DDR3 1333/1600 up to 16GB
- Type 6 COM Express 2.0 module support PCIe x16, 7x Express
- Lanes, 12x USB2.0/USB3.0, 3x DDI, and Gigabit LAN
- Intel<sup>®</sup> HD Graphic engine support triple independent displays
- Support PCIe x16 and SDVO/DDI

Model				
	NISE90	NISE91	NISE100	NISE101
CPU	Intel® Atom <sup>™</sup> E620 0.6GHz	Intel® Atom <sup>™</sup> E640 1.0GHz	Intel® ATOM <sup>™</sup> N270 1.6GHz	Intel® ATOM <sup>™</sup> N270 1.6GHz
Chipset	Intel® EG20T	Inte <sup>®</sup> I EG20T	Intel <sup>®</sup> 945GSE/ICH7M	Intel® 945GSE/ICH7M
Max. Memory	512MB DDR2 on board	1G DDR2 on board	2GB DDR2	2GB DDR2
HDD Space	1x 2.5" SATA HDD bay			
CF Socket	-	-	-	1 (Internal)
CD-ROM/DVD-ROM	-	-	-	-
VGA	1	1	1 via DVI-I to VGA adapter	1
LVDS	-	Single, 18/24bit (internal)	-	-
DVI	-	-	1 (DVI-I)	1
TV-out	-	-	-	-
HDMI	-	-	-	-
Display Port	-	-	-	-
eSATA	-	-	-	-
IEEE1394	-	-	-	-
USB	3	3	2	2
PS/2	-	-	1	1
Parallel Port	-	-	-	-
Serial Port	3	3	3	2
RS422/485	1	1	1	1
RS422/485 Isolation	-	-	-	-
CANbus	1	1	-	-
Digital I/O	-	-	-	-
miniPCle	-	1	-	1
SIM Card Holder	-	1 (internal)	-	-
GPIO	8-in/8-out	8-in/8-out	4-in/4-out (Internal)	4-in/4-out (Internal)
LAN Ports	2x GbE	2x GbE	1 x GbE	2 x GbE
Audio	-	-	-	Mic-in & Spk-out
Power Input Range	DC 12V DC 24V	DC 12V DC 24V	ATX, DC 12V	ATX, DC 12V
Power Supply Adapter	Optional	Optional	12V, 60W AC/DC	Optional
Expansion	-	-	-	-
Operating temp. (w/HDD) Based on IEC 60068 STD	-5°C ~ 55°C	-5℃ ~ 55℃	-5°C ~ 55°C	-5°C ~ 55°C
System Dimension (WxDxH)	59 x 140 x 167mm	59 x 140 x 167mm	185 x 132 x 50mm	185 x 131 x 54mm
Carton Dimension (WxDxH)	288 x 252 x 181mm	288 x 252 x 181mm	259 x 233 x 129mm	259 x 233 x 129mm



Model	70°C 1 20°C		70 °C 1 20 °C	
	NISE2100A	NISE2110	NISE2110A	NISE3100e
CPU	Intel® Atom <sup>™</sup> D525 1.8GHz	Intel® Atom <sup>™</sup> D525 1.8GHz	Intel® Atom <sup>™</sup> D525 1.8GHz	Intel® Pentium® M/ Celeron® M
Chipset	Intel <sup>®</sup> ICH8M PCH	Intel <sup>®</sup> ICH8M PCH	Intel® ICH8M PCH	Intel <sup>®</sup> 910GMLE/ICH6M
Max. Memory	2GB DDR3	2GB DDR3	2GB DDR3	2GB DDR2
HDD Space	1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay
CF Socket	1 (External)	1 (External)	1 (External)	1 (Internal)
CD-ROM/DVD-ROM	-	-	-	-
VGA	1	1	1	1
LVDS	Single, 18bit (Internal)	Single, 18bit (Internal)	Single, 18bit (Internal)	Dual, 18bit (Internal)
DVI	-	-	-	1 (DVI-D)
TV-out	-	-	-	-
HDMI	-	-	-	-
Display Port	-	-	-	-
eSATA	-	-	-	-
IEEE1394	-	-	-	-
USB	4	4	4	6
PS/2	-	-	-	2
Parallel Port	-	-	-	1 (Internal)
Serial Port	6	6	6	4
RS422/485	-	2	-	1
RS422/485 Isolation	2 (2KV)	-	2 (2KV)	-
CANbus	-	-	-	-
Digital I/O	-	-	-	-
miniPCle	1	1	1	-
SIM Card Holder	1	1	1	-
GPIO	4-in/4-out (External)	4-in/4-out (External)	4-in/4-out (External)	4-in/4-out (Internal)
LAN Ports	2 x GbE	3 x GbE	2 x GbE	2 x GbE
Audio	Spk-out	Spk-out	Spk-out	Mic-in & Spk-out
Power Input Range	ATX, DC + 9V ~ 36VDC	ATX, DC + 9V ~ 36VDC	ATX, DC + 9V ~ 36VDC	ATX, DC +16 ~ 30V
Power Supply Adapter	Optional	Optional	Optional	Optional
Expansion	-	1 x PCl or 1 x PCle (option)	1 x PCl or 1 x PCle (option)	1x PCI
Operating temp. (w/HDD) Based on IEC 60068 STD	-20°C ~ 70°C	-5°C ~ 55°C	-20°C ~ 70°C	-5°C ~ 55°C
System Dimension (WxDxH)	195 x 200 x 65mm	195 x 200 x 90mm	195 x 200 x 90mm	195 x 268 x 80mm
Carton Dimension (WxDxH)	335 x 294 x 193mm	335 x 294 x 193mm	335 x 294 x 193mm	367 x 309 x 234mm

NISE3100eP2	NISE3150e	NISE3110	NISE3110P2	NISE3140	NISE3140E
Intel® Pentium® M/ Celeron® M	Intel® Pentium® M/ Celeron® M	Intel® Core <sup>™</sup> 2 Duo/ Core <sup>™</sup> Duo	Intel® Core <sup>™</sup> 2 Duo/ Core <sup>™</sup> Duo	Intel Core 2 Duo	Intel Core 2 Duo
Intel® 910GMLE/ ICH6M	Intel® 910GMLE/ ICH6M	Intel® 945GME/ICH7M	Intel®945GME/ICH7M	GM45 / ICH9M	GM45 / ICH9M
2GB DDR2	2GB DDR2	4GB DDR2	4GB DDR2	4GB DDR3	4GB DDR3
1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay
1 (Internal)	1 (Internal)	1 (Internal)	1 (Internal)	1 (External)	1 (External)
-	Slim DVD Combo x1	-	-	-	-
1	1	1	1	1	1
Dual, 18bit (Internal)	Dual, 18bit (Internal)	Dual, 18bit (Internal)	Dual, 18bit (Internal)	Dual, 24bit (Internal)	Dual, 24bit (Internal)
1 (DVI-D)	1 (DVI-D)	1 (DVI-D)	1 (DVI-D)	1 (DVI-I)	1 (DVI-I)
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
6	6	6	6	6	6
2	2	2	2	1	1
1 (Internal)	1	1 (Internal)	1 (Internal)	1	1
4	4	4	4	4	4
1	1	1	1	1	1
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
	-	-	-	-	-
-	-	-	-	-	-
4-in/4-out (Internal)	4-in/4-out (Internal)	4-in/4-out (Internal)	4-in/4-out (Internal)	4-in/4-out (Internal)	4-in/4-out (Internal)
2 x GbE	2 x GbE	2 x GbE	2 x GbE	2 x GbE	2 x GbE
Mic-in & Spk-out	Mic-in & Spk-out	Mic-in & Spk-out	Mic-in & Spk-out	Mic-in & Spk-out	Mic-in & Spk-out
ATX, DC +16 ~ 30V	ATX, DC +16 ~ 30V	ATX, DC +12 ~ 30V	ATX, DC +12 ~ 30V	ATX, DC +16 ~ 30V	ATX, DC +16 ~ 30V
Optional	Optional	19V, 120W	19V, 120W	Optinal	Optinal
2x PCI	-	1x PCI	2x PCI	1x PCI	1x PClex1
-5°C ~ 55°C	-5°C ~ 55°C	-5°C ~ 55°C	-5°C ~ 55°C	-5°C ~ 55°C	-5°C ~ 55°C
195 x 268 x 101mm	195 x 268 x 80mm	195 x 268 x 80mm	195 x 268 x 101mm	195 x 268 x 80mm	195 x 268 x 80mm
367 x 309 x 234mm	367 x 309 x 234mm	367 x 309 x 234mm	367 x 309 x 234mm	367 x 309 x 234mm	367 x 309 x 234mm

Model	NISE3140P2	NISE3140P2E	NISE3140M	NISE3140M2E
CPU	Intel <sup>®</sup> Core <sup>™</sup> 2 Duo	Intel® Core <sup>™</sup> 2 Duo	Intel® Core <sup>™</sup> 2 Duo	Intel® Core <sup>™</sup> 2 Duo
Chipset	GM45 / ICH9M	GM45 / ICH9M	GM45 / ICH9M Enhance	GM45 / ICH9M Enhance
Max. Memory	4GB DDR3	4GB DDR3	4GB DDR3	4GB DDR3
HDD Space	1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay	2x 2.5" SATA HDD bay
CF Socket	1 (External)	1 (External)	1 (External)	1 (External)
CD-ROM/DVD-ROM	-	-	-	-
VGA	1	1	1	1
LVDS	Dual, 24bit (Internal)	Dual, 24bit (Internal)	Dual, 24bit (Internal)	Dual, 24bit (Internal)
DVI	1 (DVI-I)	1 (DVI-I)	1 (DVI-I)	1 (DVI-I)
TV-out	-	-	-	-
HDMI	-	-	-	-
Display Port	-	-	-	-
eSATA	-	-	-	-
IEEE1394	-	-	2 (IEEE1394b)	2 (IEEE1394b)
USB	б	6	6	6
PS/2	1	1	1	1
Parallel Port	1	1	1	1
Serial Port	4	4	4	4
RS422/485	1	1	1	1
RS422/485 Isolation	-	-	-	-
CANbus	-	-	-	-
Digital I/O	-	-	-	-
miniPCle	-	-	-	-
SIM Card Holder	-	-	-	-
GPIO	4-in/4-out (Internal)	4-in/4-out (Internal)	4-in/4-out (Internal)	4-in/4-out (Internal)
LAN Ports	2 x GbE	2 x GbE	2 x GbE	2 x GbE
Audio	Mic-in & Spk-out	Mic-in & Spk-out	Mic-in & Spk-out	Mic-in & Spk-out
Power Input Range	ATX, DC +16 ~ 30V	ATX, DC +16 ~ 30V	ATX, DC +16 ~ 30V	ATX, DC +16 ~ 30V
Power Supply Adapter	Optinal	Optinal	Optinal	Optinal
Expansion	2x PCI	1x PCI; 1x PCIex1	1x PCI	1x PCl; 1x PClex1
Operating temp. (w/HDD) Based on IEC 60068 STD	-5°C ~ 55°C	-5°C ~ 55°C	-5°C ~ 55°C	-5℃ ~ 55℃
System Dimension (WxDxH)	195 x 268 x 101mm	195 x 268 x 101mm	195 x 268 x 80mm	195 x 268 x 101mm
Carton Dimension (WxDxH)	367 x 309 x 234mm	367 x 309 x 234mm	367 x 309 x 234mm	367 x 309 x 234mm

		<b></b>			
NISE3142	NISE3142P2	NISE3142M	NISE3142M2E	NISE3145	NISE3500
Intel <sup>®</sup> Core <sup>TM</sup> 2 Duo	Intel® Core <sup>™</sup> 2 Duo	Intel <sup>®</sup> Core <sup>™</sup> 2 Duo	Intel® Core <sup>™</sup> 2 Duo	Intel® Core <sup>™</sup> 2 Duo	Intel® Core <sup>™</sup> i7 / i5 socket
GM45 / ICH9M	GM45 / ICH9M	GM45 / ICH9M Enhance	GM45 / ICH9M Enhance	GM45 / ICH9M	Intel® QM57
4GB DDR3	4GB DDR3	4GB DDR3	4GB DDR3	4GB DDR3	4GB DDR3
1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay	2x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay	1x 2.5" HDD driver bay
1 (External, CFast)	1 (External, CFast)	1 (External, CFast)	1 (External, CFast)	1 (External)	-
-	-	-	-	Slim DVD Combo	-
-	-	-	-	1	1
Dual, 24bit (internal)	Dual, 24bit (internal)	Dual, 24bit (internal)	Dual, 24bit (internal)	Dual, 24bit (Internal)	Dual, 24bit (Internal)
2 (DVI-D)	2 (DVI-D)	2 (DVI-D)	2 (DVI-D)	1 (DVI-I)	1 (DVI-I)
-	-	-	-	-	-
	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	2
-	-	2	2	-	-
6	6	6	6	6	6
	-	-	-	1	1
-	-	-	-	1	1 (Internal)
6	6	6	6	4	4
1	1	1	1	1	1
-	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (Internal)	4-in/4-out (Internal)
2x GbE	2x GbE	2x GbE	2x GbE	2 x GbE	2 x GbE
Mic-in & Spk-out	Mic-in & Spk-out	Mic-in & Spk-out	Mic-in & Spk-out	Mic-in & Spk-out	Mic-in & Spk-out
ATX, DC +16~30V	ATX, DC +16~30V	ATX, DC +16~30V	ATX, DC +16~30V	ATX, DC +16 ~ 30V	ATX, DC +9 ~ 30V
Optional	Optional	Optional	Optional	Optinal	Optinal
1 x PCI	2 x PCI	1 x PCI	1 x PCl 1 x PClex1	-	1x PCI
-5°C ~ 55°C	-5°C ~ 55°C	-5°C ~ 55°C	-5°C ~ 55°C	-5°C ~ 50°C	-5°C ~ 55°C
195 x 268 x 80mm	195 x 268 x 101mm	195 x 268 x 80mm	195 x 268 x 101mm	195 x 268 x 80mm	195 x 268 x 80mm
367 x 309 x 234mm	367 x 309 x 234mm	367 x 309 x 234mm	367 x 309 x 234mm	367 x 309 x 234mm	367 x 309 x 234mm

Model	NISE3500P2	NISE3500M	NISE3500M2E	<b>••••</b>
СРИ	Intel® Core <sup>™</sup> i7 / i5 socket	Intel® Core <sup>™</sup> i7 / i5 socket	Intel® Core <sup>™</sup> i7 / i5 socket	Intel® Core <sup>™</sup> i7/i5 socket
Chipset	Intel <sup>®</sup> QM57	Intel® QM57	Intel® QM57	QM57
Max. Memory	4GB DDR3	4GB DDR3	4GB DDR3	4GB DDR3
HDD Space	1x 2.5" HDD driver bay	1x 2.5" HDD driver bay	2x 2.5" HDD driver bay	1x 2.5" SATA HDD bay
CF Socket	-	-	-	-
CD-ROM/DVD-ROM	-	-	-	-
VGA	1	1	1	1
LVDS	Dual, 24bit (Internal)	Dual, 24bit (Internal)	Dual, 24bit (Internal)	Dual, 24bit (internal)
DVI	1 (DVI-I)	1 (DVI-I)	1 (DVI-I)	1 (DVI-I)
TV-out	-	-	-	-
HDMI	-	1	1	1
Display Port	-	-	-	-
eSATA	2	2	2	-
IEEE1394	-	3 (IEEE1394b)	3 (IEEE1394b)	-
USB	6	6	6	6
PS/2	1	1	1	1
Parallel Port	1 (Internal)	1 (Internal)	1 (Internal)	-
Serial Port	4	4	4	4
RS422/485	1	1	1	1
RS422/485 Isolation	-	-	-	-
CANbus	-	-	-	-
Digital I/O	-	-	-	-
miniPCle	-	-	-	1
SIM Card Holder	-	-	-	1
GPIO	4-in/4-out (Internal)	4-in/4-out (Internal)	4-in/4-out (Internal)	4-in/4-out (internal)
LAN Ports	2 x GbE	2 x GbE	2 x GbE	2x GbE
Audio	Mic-in & Spk-out	Mic-in & Spk-out	Mic-in & Spk-out	Mic-in & Spk-out
Power Input Range	ATX, DC +9 ~ 30V	ATX, DC +9 ~ 30V	ATX, DC +9 ~ 30V	ATX, DC +9 ~ 30V
Power Supply Adapter	Optinal	Optinal	Optinal	Optional
Expansion	2x PCI	1x PCI	1x PCI 1x PClex1	1 x PCI
Operating temp. (w/HDD) Based on IEC 60068 STD	-5°C ~ 55°C	-5℃ ~ 55℃	-5℃ ~ 55℃	-5°C ~ 55°C
System Dimension (WxDxH)	195 x 268 x 101mm	195 x 268 x 80mm	195 x 268 x 101mm	195 x 268 x 80mm
Carton Dimension (WxDxH)	367 x 309 x 234mm	367 x 309 x 234mm	367 x 309 x 234mm	367 x 309 x 234mm

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NISE3520P2	NISE3520P2E	NISE3600	NISE3600E2	nTUF600	nTUF610
Intel® Core <sup>™</sup> i7/i5 socket	Intel® Core <sup>™</sup> i7/i5 socket	3 <sup>rd</sup> Gen Intel® Core <sup>™</sup> i5/i3 socket (2 <sup>nd</sup> Gen Intel® Core <sup>™</sup> i5/i3 socket)	3 <sup>rd</sup> Gen Intel® Core <sup>™</sup> i5/i3 socket (2 <sup>nd</sup> Gen Intel® Core <sup>™</sup> i5/i3 socket)	Intel® Atom <sup>™</sup> D525 1.8GHz	2 <sup>nd</sup> Gen Intel® Core <sup>™</sup> i7-2610UE 1.5GHz
QM57	QM57	QM77	QM77	Intel® ICH8M	QM67
4GB DDR3	4GB DDR3	8GB DDR3	8GB DDR3	2GB DDR2 (pre-install)	2GB DDR3 (pre-install)
1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay	2x 2.5" SATA SSD bay	2x 2.5" SATA SSD bay
-	-	1 (External, CFast)	1 (External, CFast)	1 (External, CFast)	1 (External, CFast)
-	-	-	-	-	-
1	1	1	1	1	1
Dual, 24bit (internal)	Dual, 24bit (internal)	Dual, 24bit (internal)	Dual, 24bit (internal)	-	-
1 (DVI-I)	1 (DVI-I)	1 (DVI-D)	1 (DVI-D)	- (Active by MXM)	1 (DVI-D)
-	-	-	-	-	-
1	1	-	-	- (Active by MXM)	- (Active by MXM)
-	-	2	2	-	-
	-	-	-	-	-
-	-	-	-	-	-
6	6	2 - USB2.0 4 - USB3.0	2 - USB2.0 4 - USB3.0	4	4
1	1	-	-	2	2
-	-	-	-	-	-
4	4	6	6	6	6
1	1	1	1	4 (NMEA)	4 (NMEA)
-	-	-	-	Yes, 2KV	Yes, 2KV
-	-	-	-	-	-
-	-	-	-	4-in/4-out	4-in/4-out
1	1	1	1	1	1
1	1	1	1	1	1
4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (internal)
2x GbE	2x GbE	2x GbE	2x GbE	2x GbE (M12)	2x GbE (M12)
Mic-in & Spk-out	Mic-in & Spk-out	Mic-in & Spk-out	Mic-in & Spk-out	Spk-out, Mic-in	Spk-out, Mic-in
ATX, DC +9 ~ 30V	ATX, DC +9 ~ 30V	ATX, DC +9 ~ 30V	ATX, DC +9 ~ 30V	ATX, DC 24V (Isolation Protection)	ATX, DC 24V (Isolation Protection)
Optional	Optional	Optional	Optional	-	-
2 x PCI	1 x PCI 1 x PClex1	1 x PClex4	2 x PClex4	-	-
-5°C ~ 55°C	-5°C ~ 55°C	-5°C ~ 55°C	-5°C ~ 55°C	-25°C ~ 55°C	-25 ~ 55°C
195 x 268 x 101mm	195 x 268 x 101mm	216 x 270 x 93mm	216 x 270 x 114mm	294 x 200 x 100mm	294 x 200 x 100mm
367 x 309 x 234mm	367 x 309 x 234mm	ТВС	ТВС	399 x 303 x 194mm	399 x 303 x 194mm

Product Selection Guide

# **Applied Panel PC**

Model	APPC 0810T	APPC 1210T/1211T	APPC 1510T/1511T	APPC 0820T/0820TC
LCD Size	8.0" 4:3	12.1" 4:3	15" 4:3	8.0" 4:3
Max Resolution	SVGA, 800 x 600	SVGA, 800 x 600	XGA, 1024 x 768	SVGA, 800 x 600
Luminance(cd/m2)	350	350	350	400
Contrast Ratio	400	300	500	500
Viewing Angle(H-V)	55(U), 65(D), 65(L), 65(R)	50(U), 60(D), 70(L), 70(R)	65(U), 55(D), 65(L), 65(R )	50(U), 70(D), 70(L), 70(R)
Backlight	LED	LED	LED	LED
Touch Screen	Resistive 4-wire	Resistive 5-wire	Resistive 5-wire	Resistive 5-wire (Flush panel type)
CPU	Intel® Atom <sup>™</sup> N270 1.6GHz	Intel® Atom <sup>™</sup> N270 1.6GHz	Intel® Atom <sup>™</sup> N270 1.6GHz	Intel® Atom <sup>™</sup> D525 Dual Core 1.8GHz
Chipset	Intel <sup>®</sup> 945GSE/ICH7M	Intel® 945GSE/ICH7M	Intel® 945GSE/ICH7M	Intel® ICH8M
Memory	1GB DDR2 SO-DIMM module	1GB DDR2 SO-DIMM module	1GB DDR2 SO-DIMM module	1GB DDR3 SO-DIMM module
CF socket	1	1	1	1/ 1 (Optional)
2nd display output	VGA	VGA	VGA	VGA
PS2 KB/MS	Yes	Yes	Yes	1 / 0
Ethernet(10/100/1000)	2	2	2	2
Line out	Line out	Line out	Line out	Line out/ 1
Line in	0	0	0	Line in/ 0
MIC-in	MIC-in	0	0	MIC-in/ 0
USB 2.0	2	4	4	4/ 2
COM port	2xRS232	2x RS232; 422; 485 / Isolation 2x RS232; 422; 485, 2x RS232	2x RS232; 422; 485 / Isolation 2x RS232; 422; 485, 2x RS232	1xRS232, 1x RS232; 422; 485 / 1x RS232
Power Switch	1	1	1	1
Reset Button	0	0	0	1
Power Jack	TERMINAL BLOCKS 3 Pin PHOENIX	DC 4 pin DIN Power Jack with shield, 90°	DC 4 pin DIN Power Jack with shield, 90°	DC 4 pin DIN Power Jack with shield, 90°
GPIO	0	0 / 4-in; 4-out	0 / 4-in; 4-out	0/ 4-in; 4-out
CANbus	0	0	0	0
2.5" Hard Driver Bay	Yes	Yes	Yes	Yes
Expansion	1xMini PCIe	2xMini PCIe	2xMini PCle	1xMini PCle
Construction Front Panel	ABS+PC Plastic front bezel	ABS+PC Plastic front bezel	ABS+PC Plastic front bezel	ABS+PC Plastic front bezel
Mounting	Panel/Wall/Stand/ VESA75x75mm	Panel/Wall/Stand/ VESA100x100mm	Panel/Wall/Stand/ VESA100x100mm	Panel/Wall/Stand/ VESA100x100mm
Power Input	11~28V DC	12~30V DC	12~30V DC	12V DC
Operating Temp.	0°C ~ 45°C	0°C ~ 45°C	0°C ~ 45°C	-5°C ~ 50°C
Storage Temp.	-20°C ~ 75°C	-20°C ~ 75°C	-20°C ~ 75°C	-20°C ~ 75°C
Operating Humidity	10% ~ 90%, Non-condensing	10% ~ 90%, Non-condensing	10% ~ 90%, Non-condensing	10% ~ 90%, Non-condensing
IP Level	Front Frame IP65	Front Frame IP65	Front Frame IP65	Front Frame IP65

Model	APPC 12201/12211	APPC 1520T/1521T	APPC 17201/1721T	APPC 1930T/1931T
LCD Size	12.1" 4:3	15" 4:3	17" 4:3	19" 4:3
Max Resolution	SVGA, 800 x 600	XGA, 1024 x 768	SXGA, 1280 x 1024	SXGA, 1280 x 1024
Luminance(cd/m2)	350	350	380	350
Contrast Ratio	300	500	1000	1000
Viewing Angle(H-V)	50(U), 60(D), 70(L), 70(R)	65(U), 55(D), 65(L), 65(R)	80(U), 80(D), 85(L), 85(R )	80(U), 80(D), 85(L), 85(R )
Backlight	LED	LED	CCFL	LED
Touch Screen	Resistive 5-wire	Resistive 5-wire	Resistive 5-wire (Flush panel type)	Resistive 5-wire
CPU	Intel® Atom <sup>™</sup> D525 Dual Core 1.8GHz	Intel® Atom <sup>™</sup> D525 Dual Core 1.8GHz	Intel® Atom <sup>™</sup> D525 Dual Core 1.8GHz	Intel® Atom <sup>™</sup> D2700 Dual Core 2.13GHz
Chipset	Intel <sup>®</sup> ICH8M	Intel <sup>®</sup> ICH8M	Intel <sup>®</sup> ICH8M	Intel® ICH10R
Memory	1GB DDR3 SO-DIMM module	1GB DDR3 SO-DIMM module	1GB DDR3 SO-DIMM module	1GB DDR3 SO-DIMM module
CF socket	1	1	1	1
2nd display output	VGA	VGA	VGA	VGA
PS2 KB/MS	1	1	1	1
Ethernet(10/100/1000)	2	2	2	2
Line out	Line out	Line out	Line out	Line out
Line in	Line in	Line in	Line in	Line in
MIC-in	MIC-in	MIC-in	MIC-in	MIC-in
USB 2.0	4	4	4	4
COM port	2x RS232; 422; 485 / Isolation 2x RS232; 422; 485, 2x RS232	2x RS232; 422; 485 / Isolation 2x RS232; 422; 485, 2x RS232	2x RS232; 422; 485 / Isolation 2x RS232; 422; 485, 2x RS232	2x RS232; 422; 485 / Isolation 2x RS232; 422; 485, 2x RS232
Power Switch	1	1	1	1
Reset Button	1	1	1	1
Power Jack	DC 4 pin DIN Power Jack with shield, 90°	DC 4 pin DIN Power Jack with shield, 90°	DC 4 pin DIN Power Jack with shield, 90°	DC 4 pin DIN Power Jack with shield, 90°
GPIO	0/ 4-in; 4-out	0/ 4-in; 4-out	0/ 4-in; 4-out	0/ 4-in; 4-out
CANbus	0/1 (Optional)	0/1 (Optional)	0/1 (Optional)	0/1 (Optional)
2.5" Hard Driver Bay	Yes	Yes	Yes	Yes
Expansion	2xMini PCle	2xMini PCle	2xMini PCle	2xMini PCle
Construction Front Panel	ABS+PC Plastic front bezel			
Mounting	Panel/Wall/Stand/VESA 100x100mm	Panel/Wall/Stand/VESA 100x100mm	Panel/Wall/Stand/VESA 100x100mm	Panel/Wall/Stand/VESA 100x100mm
Power Input	12~30V DC	12~30V DC	12~30V DC	12~30V DC
Operating Temp.	-5°C ~ 50°C	-5°C ~ 50°C	-5°C ~ 50°C	-5°C ~ 50°C
Storage Temp.	-20°C ~ 75°C	-20°C ~ 75°C	-20°C ~ 75°C	-20°C ~ 75°C
Operating Humidity	10% ~ 90%, Non-condensing	10% ~ 90%, Non-condensing	10%~90%, Non-condensing	10% ~ 90%, Non-condensing
IP Level	Front Frame IP65	Front Frame IP65	Front Frame IP65	Front Frame IP65

# **Multi-Media Panel PC**

Model	MPPC 0810T	MPPC 2120T	MPPC 2210T	MPPC 3220T
LCD Size	8.9" 16:9	21.5" 16:9	21.6" 16:9	32" 16:9
Max Resolution	WSVGA, 1024 x 600	Full HD, 1920 x 1080	Full HD, 1920 x 1080	Full HD, 1920 x 1080
Luminance(cd/m2)	220	300	300	400
Contrast Ratio	500	1000	1000	4000
Viewing Angle(H-V)	50(U), 60(D), 70(L), 70(R)	80(U), 80(D), 85(L), 85(R)	80(U), 80(D), 85(L), 85(R)	89(U), 89(D), 89(L), 89(R)
Backlight	LED	CCFL	CCFL	LED
Touch Screen	Resistive 5-wire(Optional)	Resistive 5-wire	Resistive 5-wire(Optional)	SAW (Surface Acoustic Wave)
CPU	Intel® Atom <sup>™</sup> N270 1.6GHz	Intel® Atom <sup>™</sup> D525 Dual Core 1.8GHz	Intel® Atom <sup>™</sup> N270 1.6GHz	Intel® Atom <sup>™</sup> D525 Dual Core 1.8GHz
Chipset	Intel <sup>®</sup> 945GSE/ICH7M	Intel® ICH8M	Intel® 945GSE/ICH7M	Intel <sup>®</sup> ICH8M
Memory	1GB DDR2 SO-DIMM module	1GB DDR3 SO-DIMM module	1GB DDR2 SO-DIMM module	1GB DDR3 SO-DIMM module
CF socket	1	1	1	1
2nd display output	VGA	Clone VGA (Optional)	VGA	Clone VGA (Optional)
PS2 KB/MS	0	1	0	1
Ethernet(10/100/1000)	2	2	2	2
Line out	Line out	Line out	Line out	Line out
Line in	0	Line in	0	Line in
MIC-in	MIC-in	MIC-in	0	MIC-in
USB 2.0	4	4	2	4
COM port	1xRS232, 1xRS232/422/485	2xRS232/422/485	1xRS232/422/485	2x RS232/422/485
Power Switch	1	1	1	1
Reset Button	0	1	0	1
Power Jack	DC Jack	DC 4 pin DIN Power Jack with shield, 90°	DC Jack	DC 4 pin DIN Power Jack with shield, 90°
2.5" Hard Driver Bay	Yes	Yes	Yes	Yes
Expansion	0	2xMini PCle	1xMini PCle	2x Mini PCle
Audio Speaker	-	AMP 2W+2W	AMP 2W+2W	AMP 2W+2W
Mounting	Panel/Wall/VESA 75x75mm	Panel/Wall/Stand/VESA 75 x 75/100 x 100/ 400 x 100mm	Panel/Wall/VESA 75 x 75mm/ 100 x 100mm	Panel/ Wall/ Stand/ VESA 75 x 75/100 x 100/ 400 x 200mm
Power Input	12V DC	12~30V DC	12V DC	24V DC
Operating Temp.	0°C ~ 40°C	0°C ~ 45°C	0°C ~ 40°C	0°C ~ 45°C
Storage Temp.	-20°C ~ 75°C	-20°C ~ 75°C	-20°C ~ 75°C	-20°C ~ 75°C
Operating Humidity	5% ~ 90%, Non-condensing	20% ~ 80%, Non-condensing	5% ~ 90%, Non-condensing	10% ~ 90%, Non-condensing

# Open Frame Panel PC/ HPPC/ FPPC

Model	and the second s			
	OPPC 1520T	OPPC 1720T	HPPC 1920T	FPPC 1220
LCD size	15" 4:3	17" 4:3	19" 4:3	12.1" 4:3
Max resolution	XGA, 1024x 768	SXGA, 1280 x 1024	SXGA, 1280 x 1024	SVGA, 800 x 600
Luminance (cd/m2)	400	380	250	370
Contrast ratio	700	1000	1000	450
Viewing angle (H-V)	80(U), 60(D), 80(L), 80(R)	80(U), 80(D), 85(L), 85(R)	80(U), 80(D), 80(L), 80(R)	50(U), 60(D), 70(L), 70(R)
Backlight	LED	CCFL	CCFL	CCFL
Touch screen	Resistive 5-wire	Resistive 5-wire	PCT (Projected Capacitive Touch)	-
CPU	Intel® Atom <sup>™</sup> D525 Dual Core 1.8GHz	Intel® Atom <sup>™</sup> D525 Dual Core 1.8GHz	Intel® Atom <sup>™</sup> D525 Dual Core 1.8GHz	Intel® Atom <sup>™</sup> D425 1.8GHz
Chipset	Intel® ICH8M	Intel <sup>®</sup> ICH8M	Intel® ICH8M	Intel <sup>®</sup> ICH8M
Memory	1GB DDR3 SO-DIMM module	1GB DDR3 SO-DIMM module	1GB DDR3 SO-DIMM module	1GB DDR3 SO-DIMM module
CF socket	1	1	1	1
2nd display output	VGA	VGA	VGA	VGA
PS2 KB/ MS	Yes	Yes	Yes	Yes
Ethernet (10/100/1000)	2	2	2	3
Line out	Line out	Line out	Line out	Line out
Line in	Line in	Line in	0	0
MIC-in	MIC-in	MIC-in	0	MIC-in
USB 2.0	4	4	4	2
COM port	2x RS232/422/485	2x RS232/422/485	2x RS232/422/485	2x RS232, 1x RS232/422/485
Power switch	1	1	1	0
Reset button	1	1	1	0
Power jack	DC 4 pin DIN power jack with shield, 90°	DC 4 pin DIN power jack with shield, 90°	DC 4 pin DIN power jack with shield, 90°	TERMINAL BLOCKS 3 Pin PHOENIX
2.5" hard driver bay	Yes	Yes	Yes	-
Expansion	2x Mini PCle	2x Mini PCle	2x Mini PCle	1x PCI
Mounting	Panel/ Wall/ Stand/ VESA 75x 75, 100x 100mm	Panel/ Wall/ Stand/ VESA 75x 75, 100x 100mm	Panel/ Wall/ Stand/ VESA 75x 75, 100x 100mm	Panel/ Wall/ Stand/ VESA 75x 75, 100x 100mm
Power input	12~30V DC	12~30V DC	12~30V DC	24V DC
Operating temp	-5°C ~ 50°C	-5°C ~ 50°C	0°C ~ 45°C	-5°C ~ 50°C
Storage temp	-20°C ~ 75°C	-20°C ~ 75°C	-20°C ~ 75°C	-20°C ~ 75°C
Operating humidity	10%~90%, non-ondensing limits to be at 90% RH at max 30°C limits to be at 70% RH at max 50°C"	20% ~ 80%, non-condensing	10% ~ 90%, non-condensing	10% ~ 90%, non-condensing

# **Embedded Computing**

Model	EBC 310	EBC 340	EBC 342	EBC 352
PCB size (L/W)	146 x 105 mm	146 x 105 mm	146 x 105 mm	146 x 105 mm
T CD SIZE (L/W)		140 x 105 1111	140 x 105 1111	
CPU	Intel® Atom™ E640 ultra low power consumption SoC	Intel® Atom™ N270	Intel® Atom™ N270	Intel® Atom™ Dual-core D525
Chipset (NB/ SB)	Intel® EG20T (PCH)	Intel® 945GSE ICH7-M	Intel® 945GSE ICH7-M	Intel® ICH8M
CPU FSB(MHz)	800	533	533/ 667	800
Max. Memory	1 GB DDR2 on-board	1 GB DDR2 (1 x SO-DIMM)	2 GB DDR2 (1 x SO-DIMM)	2 GB DDR3 (1 x SO-DIMM)
VGA Interface	Intel Atom <sup>™</sup> E600 series integrated graphic engine, support video decode (MPEG2, MPEG4, 264, VC1, WMV9)/ encode (MPEG4, H.264)	Intel® GMA950	Intel® GMA950	Intel® D525 integrated graphic engine
LCD Interface (LVDS LCD)	Yes (1 CCFL for Inverter Power)	Yes (1 CCFL for Inverter Power)	Yes (1 CCFL for Inverter Power)	Yes (1 CCFL for Inverter Power)
DVI/ HDMI	-	-	-	-
Ethernet (10/ 100)	-	-	-	-
Ethernet (10/ 100/ 1000)	1 x Intel® 82574L 1 x Realtek 8211CL	1 x Realtek 8111C-GR	2 x Realtek 8111C-GR	2 x Intel® 82574L
Wake on LAN	Yes	Yes	Yes	Yes
Audio	Realtek ALC888 CODEC	Realtek ALC888 CODEC	Realtek ALC888 CODEC	Realtek ALC888 CODEC
CF		1	1	1
IDE Interface		-	-	-
Mini-PCI		-	-	-
SATA	2	1	1	2
USB 2.0	6	6	б	6
Serial Port	3	4	3	4
RS422/ 485 Support	Yes	Yes	Yes	Yes
Parallel Port	-	1	1	-
Power Supply	AT/ ATX	AT	AT/ ATX	AT/ ATX
5Vsb Input	-	-	-	-
Expansion	1 x Mini-PCle	1 x PCI-104 Slot	1 x Mini-PCle	1 x Mini-PCle 1 x PCl-104 Slot

EBC 353	EBC354	EBC 540	EBC 545	EBC 550
146 x 105mm	146 x 105mm	203 x146 mm	203 x146 mm	203 x146 mm
Intel® Atom™ D2700	Intel® Atom™ D2700	Intel® Atom™ N270	Intel® Core™ 2 Duo Celeron® M	Intel® Core™ 2 Duo Celeron® M
Intel® NM10 Express chipset	Intel® NM10 Express chipset	Intel® 945GSE ICH7-M	Intel® GM45 ICH9-M	Intel® GM45 ICH9-M
-	-	533	667/ 800/ 1066	667/ 800/ 1066
4GB DDR3 (1 x SO-DIMM)	4GB DDR3 (1 x SO-DIMM)	2 GB DDR2 (1 x DIMM)	8 GB DDR3 (2 x DIMM)	8 GB DDR3 (2 x DIMM)
Intel® Atom™ D2700 integrated graphic engine	Intel® Atom™ D2700 integrated graphic engine	Intel® 945GME GMCH Integrated	Intel <sup>®</sup> 945GME GMCH Integrated	Intel <sup>®</sup> 945GME GMCH Integrated
Yes (1 CCFL for nverter Power)	Yes (1 CCFL for Inverter Power)	Yes (1 CCFL for Inverter Power)	Yes (1 CCFL for Inverter Power)	Yes (1 CCFL for Inverter Power)
1/0	1/1	-	-	-
	-	-	-	-
2x Intel® 82574L	2x Intel® 82574L	2 x Realtek 8111C-GR	2 x Intel® 82574L	2 x Intel® 82574L
Yes	Yes	Yes	Yes	Yes
Realtek ALC886 CODEC	Realtek ALC886 CODEC	Realtek ALC888 CODEC	Realtek ALC888 CODEC	Realtek ALC888 CODEC
-	-	1	-	-
	-	-	-	-
-	-	-	-	-
2	2	2	2	4
6	6	6	6	6
4	4	6	4	4
Yes	Yes	Yes	Yes	No
	-	1	1	1
AT/ATX	AT/ATX	AT/ ATX	AT/ ATX	AT/ ATX
-	-	Yes	Yes	Yes
1x Mini-PCle, 1x PCI-014	2 x Mini-PCle	1 x PCI Slot 1 x PCI-104 Slot	1 x PCI Slot 1 x PC/104+ Slot	1 x PCle x16 Slot 1 x PCle x4 Slot 1 x PCl Slot

# **Embedded Computing**

Model	NEX 605	NEX 607	NEX 608	NEX 882	NEX880	NEX890
DCP cize (LAM)			170x 170mm	244mm (L) x		244 x 244mm
PCB size (L/W)	170 x 170mm	170 x 170mm	170x 170mm	244mm (W)	244 x 244mm	
CPU	Intel® Atom™ processor D2700	Intel® Core™ i5/i7	"Intel® Atom™ Dual-Core D525"	Intel® Desktop Core™ i3/i5/i7	2nd generation Intel® Core™ processor family	2nd generation Intel® Core™ workstation processors
Chipset (NB/ SB)	Intel® 828010R (ICH10R)	Intel® QM67 PCH	Intel <sup>®</sup> ICH8M	Intel® Q67	Intel® Q67 chipset	Intel <sup>®</sup> C206 chipset
CPU FSB(MHz)	-	-	-	-	-	-
Max. Memory	4GB DDR3 (2x SO-DIMM)	8GB DDR3 (2x SO-DIMM)	2GB DDR3 (1x SO-DIMM)	16GB DDR3 (4x DIMM)	32GB DDR3 ( 4 x DIMM)	32GB DDR3 ( 4 x DIMM)
VGA Interface	Intel® Atom™ D27 00 integrated graphic engine	Integrated graphics controll er, Intel® HD Graphics 3000	Intel® D525 integrated graphic engine	Intel® Core™ Desktop Processors Integrated HD Graphics Techwell 6816 Video Decoder Chip On-board (32CH)	CPU integrated HD Graphics	CPU integrated HD Graphics
LCD Interface (LVDS LCD)	Yes (1 CCFL for Inverter Power)	Yes (1 CCFL for Inverter Power)	Yes (1 CCFL for Inverter Power)	Yes (1 CCFL for Inverter Power)	-	-
DVI/ HDMI	0/1	1/1	-	1/1	1/0	1/0
Ethernet (10/ 100)	-	-	-	-	-	-
Ethernet (10/ 100/ 1000)	2x Intel® 82574L	1x Intel®82574L, 1x Intel® 82579LM PHY	3x Realtek RTL8111C	1x Intel® 82583V, 1x Intel® 82579LM PHY	1x Intel® 82583V, 1x Intel® 82579LM PHY	1x Intel® 82583V, 1x Intel® 82579LM PHY
Wake on LAN	Yes	Yes	Yes	Yes	Yes	Yes
Audio	Realtek ALC886 CODEC	Realtek ALC886 CODEC	Realtek ALC888 CODEC	Realtek ALC886 HD Codec	Realtek ALC886 CODEC	Realtek ALC886 CODEC
CF	-	-	1	-	-	-
IDE Interface	-	-	1x 44pins IDE Ultra DMA 100/66/33	-	-	-
Mini-PCI	-	-	-	-	-	-
SATA	1x eSATA+ 5x SATA	4	2	8	6	6
USB 2.0	8	10	6	10	10	10
Serial Port	4	4	4	2	2	2
RS422/ 485 Support	-	Yes	Yes	Yes, COM2	No	No
Parallel Port	Yes	-	-	-	No	No
Power Supply	AT/ ATX	AT/ ATX	AT/ ATX	AT/ATX	ATX	ATX
5Vsb Input	Yes	-	-	Yes	Yes	Yes
Expansion	1x Mini-PCle 1x PCle x4	1x Mini-PCle 1x PCle x16	1x Mini-PCle 1x PCl (32)	1x Mini-PCle 1x PCle x16	1x PCle x8 (x16 conn) 1x PCle x4 1x PCle x1 (x 4 conn) 1x PCle x1	2x PCle x8 (x16 conn) 2x PCle x4

# **PICMG Single Board Computer**

Model			
	PEAK 872VL2	PEAK 876VL2	PEAK 877VL2
Form Factor	Full-size PICMG 1.3	Full-size PICMG 1.3	Full-size PICMG 1.3
СРИ Туре	Intel® LGA775 Core™ 2 Duo/ Pentium® 4/ Pentium® D/ Celeron® D Processors with 533/ 800/ 1066/ 1333 MHz	Intel® LGA1156/ Core™ i3/ Core™ i5/ Core™ i7/ Pentium®	Intel® LGA1156, Core™ i7/ i5/ i3/ Pentium® Intel® Quad Core™ i5/ i7
Chipset	Intel® 82Q45 Intel® ICH 10DO	Intel® Q57 Express Chipset PCH	Intel® Q57 Express Chipset PCH
CPU FSB (MHz)	800/ 1066/ 1333	1066/ 1333	1066/ 1333
Expansive	PCI, PCI Express	PCI, PCI Express	PCI, PCI Express
Max. Memory	4 GB DDR3, Dual Channel (2 x DIMM)	8 GB DDR3, Dual Channel (2 x DIMM)	8 GB DDR3, Dual Channel (2 x DIMM)
VGA	Intel® Q45 GMCH Integrated Intel® GMA 4500	Intel® Core™ i5/ i3/ Pentium® processors Integrated graphics	Integrated graphic engine by XGI Volari Z11 GPU with DDR2 SDRAM throughPCle 1 x Interface
Ethernet(10/ 100)	0	0	0
Ethernet(10/ 100/ 100)	2 x Intel® 82574L	1 x Intel® 82578DM PHY for AMT 6.0 1 x Intel® 82574L PCI Express Gigabit Ethernet	1 x Intel® 82578DMPHY for AMT 6.0 1 x Intel® 82574LPCI ExpressGigabit Ethernet
SATA	6	6	6
IDE Interface	-	-	-
USB	8 ports (USB 2.0)	8 ports (USB 2.0)	8 ports (USB 2.0)
Serial Ports	2	2	2
RS422/ 485 support	-	-	-

Model MICMG 1.3	NBP 14111	NBP 14210	NBP 14570-BX	NBP 0522/A
PCI Bridge	1 x Intel® QG6700PX	1x Pericom 8150	1x Pericom 8152	-
PCI	3	10	7	2
PICMG	1	1	1	1
PCIe X1	0	0	4	2/0
PCIe X4	0	1	0	0/1
PCIe X8	0	0	0	0
PCle X16	1	1	1	0/1
PCI-X	8	0	0	0
SATA	2	2	2	2
USB2.0	4	2	4	2

# PICMG Single Board Computer

Model			
	PEAK 8920VL2	PEAK 765VL2	PEAK 777VL2
Form Factor	Full-Size PICMG 1.3	Full-Size PICMG 1.0	Full-Size PICMG 1.0
СРИ Туре	Dual-Core Intel® Xeon® Processor 5000 Series and Quad-Core Intel® Xeon® Processor 5300 Series(80W)	Intel® LGA775 Core™ 2 Duo/ Pentium® 4/ Pentium® D/ Celeron® D/ Celeron® 440 Processors with 533/ 800/ 1066 MHz	Intel® LGA775 Core™ 2 Duo/ Pentium 4®/ Pentium® D/ Celeron® D Processors with 533/ 800/ 1066/ 1333 MHz
Chipset	Intel® 5000P Intel® 6321ESB	Intel® Q965 Intel®ICH8	Intel® G41 Intel® ICH7
CPU FSB (MHz)	1066/ 1333	533/ 800/ 1066	800/ 1066/ 1333
Expansive	PCI, PCI Express	PCI/ ISA	(32-bit/ 33 HMz) PCI/ ISA
Max. Memory	8 GB DDR2 FB-DIMM Four Channel (4 x DIMM)	4 GB DDR2 Dual Channel (2 x DIMM)	4 GB DDR3 (2 x DIMM)
VGA	ATI ES1000PCI Graphic Controller	Intel® Q965 GMCH integrated Intel® GMA 300	Intergated
Ethernet(10/ 100)	0	0	0
Ethernet(10/ 100/ 100)	2 x Intel® 82573L	2 x Intel® 82573L	2 x Intel® 82574L
SATA	2	4	4
IDE Interface	1 x 40 pin IDE	0	1 x 40 pin IDE
USB	8 ports (USB 2.0)	8 ports (USB 2.0)	8 ports (USB 2.0)
Serial Ports	2	2	2
RS422/ 485 support		-	-

Model MICMG 1.3				
	NBP 20016	NBP 202A6	NBP 2U040	NBP 2U220
PCI Bridge	1 x Intel® QG6700PXH	2 x Pericom8150	-	-
PCI	0	20	4	2
PICMG	1	1	1	1
PCIe X1	0	1	0	0
PCIe X4	0	0	0	1
PCIe X8	0	0	0	0
PCIe X16	0	1	0	1
PCI-X	16	0	0	0
SATA	2	2	2	2
USB2.0	4	4	4	2

Model PICMG 1.3		atom I			
	PBOX 100	PBOX 362	PBOX 240P-872	PBOX 440P-872	PBOX 460P-8920
Form Factor	Compact box	Desktop	2U	4U	4U
Dimension	300 x 194 x 51 mm	239 x 200 x 126 mm	483 x 450 x 88 mm	483 x 450 x 177 mm	483 x 671 x 177 mm
CPU	Intel® Atom™ N270 1.6GHz	Intel® Celeron® 575 Core™ 2 Duo T9400 Core™ 2 Quad Q9100	Intel® Pentium® 4 Celeron® D Core™ 2 Due Core™2 Quad	Intel® Pentium® 4 Celeron® D Core™ 2 Due Core™ 2 Quad	Intel® Quad Core Dual-core Dual Xeon®
Chipset	Intel® 945GSE ICH7M	Intel® GM45 ICH9M	Intel® Q45 ICH10DO	Intel® Q45 ICH10DO	Intel® 5000Pm 6321ESB
RAM	Up to 2GB DDR2	Up to 4GB DDR3	Up to 4GB DDR3	Up to 4GB DDR3	Up to 8GB DDR2
RAM Type	DDR2	DDR3	DDR3	DDR3	FB-DIMM
Gbe (10/100/100)	1	2	2	2	2
СОМ	1	4	2 (Internal)	2 (Internal)	2 (Internal)
PS/ 2 KB	-	1 (Y-cable)	1 (Y-cable)	1 (Y-cable)	1 (Y-cable)
PS/ 2 MS	-	1 (Y-cable)	1 (Y-cable)	1 (Y-cable)	1 (Y-cable)
VGA	1	1	1	1	1
DVI	1	-	-	-	-
USB	4	2 (Front), 2 (Rear)	8 (Internal)	8 (Internal)	6 (Internal)
Line-in	-	-	-	-	-
Line-out	1	1	1	1	-
Mic-in	1	1	1	1	-
SATA	2 Ports	4 Ports	6 Ports	6 Ports	2 Ports
Parallel	-	-	1 (Internal)	1 (Internal)	1 (Internal)
FDD Port	-	-	1 (Internal)	1 (Internal)	-
CF Socket	-	1	1	1	-
HDD Drive	2.5" SATA	2.5" SATA	5.25" HDD x 1	5.25" HDD x 3	5.25" HDD x 3
Mini-PCle	1	1	-	-	-
PCI	1	1	2/4	7/ 10/ 0	-
PCI-X	-	-	-	0/ 0/ 16	16
PCle x4	-	-	1/0	4/ 1/ 0	-
PCle x16	-	-	1/0	1/ 1/ 0	-
Power	60W Power adaptor +12Vdc/5A	270W	400W	400W	500W
Operating Temp	0°C ~ 40°C	0°C ~ 40°C	0°C ~40°C	0°C ~ 40°C	0°C ~ 40°C
Storage temp	-20°C ~ 60°C	-20°C ~ 60°C	-20°C ~ 60°C	-20°C ~ 60°C	-20°C ~ 60°C
Operating Humidity	10% ~ 90%	10% ~ 90%	10% ~ 90%	10% ~ 90%	10% ~ 90%

# Intellignet Survillance Solution (NViS Series)

Model				
	NViS 2140H	NViS 2280P4	NVi\$ 3542	NViS 3542P4/ P8
Form factor	Mobile Hybrid	Mobile NVR	Mobile ANPR DVR	Mobile NVR
Fanless	YES	YES	YES	Smart Fan
Video input	4 (BNC)	4 (PoE)	Customer Capture Card	4/ 8 (PoE)
Video format	Up to 120fps @ D1	H.264, MPEG 4	SD, H.264, MPEG 4 (Capture Card Depends)	H.264, MPEG 4
Video recording	Up to 120fps @ D1	16ch + @ Mega Pixel	Capture Card Depends	32ch + @ Mega Pixel
PoE ports	-	4 (IEEE 802, 3af)	-	4/ 8 (IEEE 802, 3af)
CPU	Intel® Atom™ Dual Core D525 1.8GHz	Intel® Atom™ Dual Core D2700 2.13GHz	Intel® Core™ i7/i5 (rPGA)	Intel® Core™ i7/i5 (rPGA)
Chipset	ICH8M	ICH10R	QM57	QM57
Max. memory	DDR3 2G	DDR3 4G	DDR3 4G	DDR3 4G
HDD	1x 2.5" HDD	2x 2.5" HDD (Hot Swap)	2x 2.5" HDD (1x Hot Swap)	2x 2.5" HDD (1x Hot Swap for NViS 3542P4)
VGA	YES	YES	YES	YES
HDMI	-	YES	YES	YES
Power igniton support	YES (Optional Module ISKIG120)	YES (Optional Module ISKIG120)	YES (Optional Module ISKIG120)	YES (Optional Module ISKIG120)
USB	4	6	6	6
Serial port	YES	YES	YES	YES
SIM card holder	YES	YES	YES	YES
LAN ports	2	2	2	2
Power input range	9 ~ 36	9 ~ 36	9 ~ 30	9 ~ 30
Expansion	1x Mini-PCle / 1x PCle NViS 2140 only	2x Mini-PCle for 3G/ Wi-Fi/ capture card	1x PCIe for capture card	1x Mini-PCle for 3G or Wi-Fi 1x COM for GPS

NViS 5240	NViS 6210	NVIS 6220	NViS 8480
Tower NVR	2U Rackmount Hybrid	2U Rackmount NVR	4U Rackmount HDcctv
Smart Fan	Smart Fan	Smart Fan	Smart Fan
4~16 IP Camera (LAN)	32 (BNC)	32 IP Camera (LAN)	4~16 HDcctv Capture Card Depends
H.264, MPEG 4	Up to 960fps @ D1	H.264, MPEG 4	1920 X 1080P X30FPS 1920 X1080i X60FPS
16ch @ Mega Pixel	Up to 960fps @ D1	32ch @ Mega Pixel	1920 X 1080P X30FPS 1920 X1080i X60FPS
		-	
Intel <sup>®</sup> Atom™ Dual Core D2700 2.13GHz	Intel® Core™ i3/i5/i7 (rPGA)	Intel® Core™ i3/i5/i7 (rPGA)	Intel® Core™ i3/i5/i7 (rPGA)
ICH10R	Q67	Q67	Q67
DDR3 4G	DDR3 16G	DDR3 16G	DDR3 16G
4x 3.5" HDD	8x 3.5" HDD	8x 3.5" HDD	8x 3.5" HDD
YES	YES	YES	YES
YES	YES	YES	-
-	-	-	-
6	6	6	8
YES	YES (Internal)	YES (Internal)	YES
-	-	-	-
2	2	2	2
AC 100 ~ 240	AC 100 ~ 240	AC 100 ~ 240	AC 100 ~ 240
1x Mini-PCle 1x PCle x4	1x Mini-PCle 1x PCle x16 (Internal use)	1x Mini-PCle 1x PCle x16	1x PCle x8 / 1x PCle x4 1x PCle x1 / 1x PCle x1

## 2012 Industrial Computing Solutions

#### **Headquarters**

NEXCOM International Co., Ltd. 15F, No. 920, Chung-Cheng Rd., ZhongHe District., New Taipei City, 23586, Taiwan, R.O.C. Tel: +886-2-8226-7786 Fax: +886-2-8226-7782 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 2F, Block 4, Venus Plaza, Building 21, ZhongGuanCun Software Park, No.8, Dongbeiwang West Road, Haidian District, Beijing, 100193, China Tel: +86-10-5885-6655 Fax: +86-10-5885-1066 Email: sales@nexcom.cn

#### Shanghai Office

www.nexcom.cn

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 7203 Fax: +86-755-833 7213 Email: sales@nexcom.cn www.nexcom.cn

#### **Europe**

#### France

**NEXCOM France** 

Z.I. des Amandiers 2.1. 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.I** 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 EUROPE

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



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