



INDUSTRIAL COMPUTERS

- I RUGGED BOX COMPUTERS
- I ALL-IN-ONE PANEL COMPUTERS
- I TOUCH DISPLAYS
- I RUGGED TABLETS
- I RAILWAY COMPUTERS
- I EMBEDDED BOARDS

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INDUSTRIAL COMPUTERS AS THE BEST CHOICE

INDUSTRIAL COMPUTER DESIGN



OPERATING TIME:
24H/7DAYS

COMPACT
SIZE

STRONG METAL
HOUSING

ANTI-VIBRATION &
SHOCK

DUST RESISTANT

FANLESS DESIGN

LOW POWER
CONSUMPTION

MANY OPTIONS OF
I/O INTERFACES

WIDE INPUT
VOLTAGE RANGE

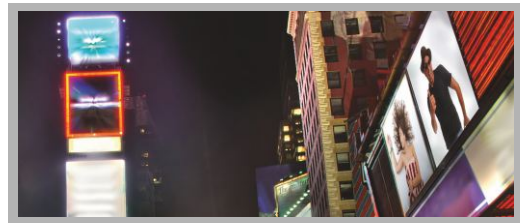
WIDE OPERATING
TEMPERATURE

LONG LIFECYCLE

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INDUSTRIAL COMPUTERS FOR DIGITAL SIGNAGE



What is DIGITAL SIGNAGE?

Digital signage is a form of dynamic communication using industrial computers called Media Players or network of customizable Media Players with display screens or projectors in public places out-of-home.

It offers good opportunity to generate revenue by promoting and advertising customers products to a specific target market on demand and build brand image by influencing customer behaviour and catching the customers eyes.

Low power consumption

When various Digital Signage applications rapidly spread around the world, every participant is looking for a way to maximize return on investment and lower total ownership cost.

NEXCOM NEU X100 – Compact & cost-effective computer



MAIN FEATURES:

- | Fanless design
- | Intel® Apollo Lake N3350/N4200 processor
- | 2x HDMI (4K Resolution) independent displays
- | 2x USB 3.0, 2x GbE LAN & 1x RS232/422/485 port
- | 1x miniPCie socket for optional Wi-Fi / 4G module
- | 1x LVDS dual channel internal connector with LCD backlight
- | -5 - 50°C operating temperature



NEXCOM NDIS B336R – triple video output quad core Atom based computer



MAIN FEATURES:

- | Fanless and slim design
- | 6th generation Intel® Atom™ x7-E3950 processor
- | Triple video output (2x HDMI & DP support 4K2K resolution)
- | 5x USB 3.0, 1x GbE LAN, 1x COM port
- | NGFF/ mini-PCie Slot support Wi-Fi and 4G Module
- | -10 - 60°C operating temperature



Open Pluggable Specification PC

NEXCOM OPS computers follow the electrical and mechanical specifications of the Open Pluggable Specification. They can be plugged into any OPS-compliant display devices to render rich multimedia contents. Thanks to the modular and cable-less design they satisfy the need for quick deployment and hassle-free maintenance of large digital signage network.

NEXCOM NDIS M324, M335, M535, M537 – OPS computers



MAIN FEATURES:

- | Compliant with Open Pluggable Standard (OPS, OPS+)
- | Fanless and compact design
- | 1x HDMI / mini DP & 1x GbE LAN
- | 4x USB 2.0 / 3.0
- | External accessible 2.5" disk slot
- | mini-PCie Slot support Wi-Fi and 4G Module



Taking advantage of the latest Intel technology, they can accelerate 3D rendering, image processing and video decoding to provide highly personalized information based on the result of audience measurement to deliver accurate marketing message to target audience. With availability to playback 4K Ultra HD content NEXCOM OPS computers bring premium graphics capability, improved system responsiveness, convenient remote manageability, and abundant peripheral expansion into the OPS form factor. It can benefit education, retail and enterprise segments.

Middle range Ultra HD Player

NEXCOM NDiS B328-KI3 – value level computer



MAIN FEATURES:

- | Compact and fanless design
- | 7th generation Intel® Core™ i3-7100U, Dual Core 2.4GHz
- | 2x HDMI (4K Resolution) independent displays
- | 4x USB 3.0 & 2x USB 2.0
- | 1x GbE LAN & 1x COM port
- | Optional WLAN Kit with external antenna
- | -20 - 50°C wide operating temperature



Powered by 7th Intel® Core i3 SoC low power CPU can handle very rich multimedia content. It is perfect high performance computer, when installation is required in limited space.

High performance Ultra HD Players

NEXCOM NEU-X300



MAIN FEATURES:

- | Compact and fanless design
- | 8th Generation Intel® Core™ quad core i3/i5/i7 CPU
- | Smooth 4K2K content playback via 3x HDMI
- | 4x USB 3.0, 1x RS-232/422/485, 2x GbE LAN
- | Optional WLAN Kit with external antenna
- | Operating temperature: -5°C to 45°C



NEU-X300 is an ideal high-end embedded player for interactive applications like kiosks or smart retail management. Compact fanless design and high quality components provide high reliability for 24/7 usage.

Wall controller, up to 6 independent displays support



NEXCOM NDiS V1000 – multi-display computer



MAIN FEATURES:

- | On-board AMD Ryzen V1605B APU processor
- | Dual DDR4 SO-DIMM, up to 32G
- | Graphics operating at up to 1.1 GHz
- | 4x HDMI 2.0 for video wall application
- | Support M.2 M/B Key, 2280/2242 size storage device
- | 4x USB 3.0, 2x GbE, 4x USB3.0
- | 1x COM port (support RS232/422/485)
- | M.2 E key slot for optional Wi-Fi module



Powered by the AMD Ryzen processor, NDiS V1000 can smoothly playback multiple 4K@60Hz video clips and is an advanced media player for any applications to demonstrate high quality and high impact contents over multiple displays. It is especially suitable for video wall, security control room, digital menu board or corporate reception.

Kiosk information Panel PC

NEXCOM KPPC series (15.6", 18.5", 21.5") – cost-effective & high performance



MAIN FEATURES:

- | Intel® Skylake i3-6100U CPU
- | Modular design
- | Support mini-ITX Industrial motherboards
- | P-Cap Touchscreen
- | IP65 flat front bezel
- | Rich I/O: 4x COM, 4x USB3.0 & 2x GbE LAN



NEXCOM KPPC is a multi-functional and powerful solution for various markets like health care, gaming, kiosk application, featuring high performance, low cost and high reliability.

AUTOMATION INDUSTRY COMPUTERS

Low Power, compact size computers



APPLICATIONS

Ticket machine
Vision inspection
Communications control
Transportation control system
Self-service computer
M2M server
Machinery computer
Industrial automation
Kiosk computer



NEXCOM NISE 50-J1900 - low cost PC-based controller



MAIN FEATURES:

- | Onboard Intel® Celeron J1900 quad core
- | 2/4G RAM Memory, 16/32G eMMC storage default
- | 1x HDMI Display, 4x USB 2.0
- | 2x Intel® I120AT GbE LAN ports; Support WoL, Teaming and PXE
- | 3x mini-PCIe/M.2 sockets for optional Wi-Fi / 4G LTE modules
- | 2x RS232 & 1x RS422/485 with auto flow control
- | -5 - 55 °C operating temperature
- | Support 12V DC input with +/- 20% range



For wireless connectivity, there are 3x mini-PCIe sockets which can support optional wireless modules for IoT applications, for example: Wi-Fi, Bluetooth & 4G LTE module. NISE 50 is definitely the best choice for M2M system as an intelligent IoT gateway.

NEXCOM NISE 105U- Cost-effective PC-based controller



MAIN FEATURES:

- | On-board Intel® Celeron J1900
- | DVI & HDMI/DP supports dual independent display function
- | 2x USB2.0 & 1x USB3.0, Dual GbE LAN
- | 2x RS232 & 2x RS232/422/485, jumper free setting
- | 1x mini-PCIe socket for optional Wi-Fi / 3.5G / LTE module
- | External CFast socket, SIM card & RTC battery holder
- | 9 - 30V DC power input
- | -5 - 55°C operating temperature



The NISE105U offers excellent performance, rich connectivity I/O and high reliability. It's designed for easy installation and maintenance. This compact fanless computer can fulfil the needs of various factory automation applications ranging from data acquisition server for big data analytics to high-level PC-based automation controller.

NEXCOM NISE 107 - wide operating temperature PC-based controller



MAIN FEATURES:

- | Onboard Intel® Atom E3940 quad core, 1.6GHz
- | 2x display output: 1x DVI-D and 1x DP port
- | 2x GbE LAN ports support WoL, Teaming and PXE
- | 4x USB 3.0
- | 2 x DB9 for RS232/422/485
- | 1x mini-PCIe socket for optional Wi-Fi / LTE modules
- | -20 - 70°C operating temperature
- | 9 - 30V DC power input



Applications

Factory Automation controller, IOT gateway, Self-service machine f.e. Ticket machine, Transportation control system, M2M server

NEXCOM NIFE 200 - PC-based controller with fieldbus expansion



MAIN FEATURES:

- | On-board Intel® Celeron quad core J1900 CPU
- | Dual independent display by DP & DVI-I
- | 3x USB2.0 & 1x USB3.0, Dual GbE
- | 2x RS232/422/485 with 2.5KV isolation protection
- | 2x mini-PCIe socket for optional Wi-Fi / 3.5G / 4G LTE / Fieldbus modules
- | Top access SD card socket & SIM card holder
- | 24V DC power input with +/-20% range
- | -5 ~ 55°C operating temperature
- | Supports WoL, LAN Teaming and PXE Function
- | Optional 2x PCI expansion



The PC-based controller NIFE 200 is designed to operate under tough factory conditions.

To enable cross-protocol communication, the computer supports several fieldbus protocols including PROFIBUS, ProfiNET, DeviceNET, EtherCAT, EtherNet/IP, CANopen, SERCOSIII master module. It can integrate PLCs, remote I/Os and legacy field devices using different protocols and across different control subsystems take field data to the cloud to enable big data analytics.

NEXCOM NISE 3900 - High performance platform



MAIN FEATURES:

- | Support 8th generation Intel® i3 / i5 / i7 CPU
- | 3x GbE LAN, 6x USB3.0 & 4x USB2.0, 2x RS232/422/485
- | HDMI + DVI-D + DP with triple Independent Display function
- | External M.2 socket and SIM card holder
- | 2x mini-PCIe socket for 3.5G / WLAN / Fieldbus
- | 9 - 30V DC power input
- | Expansion slots: up to 2x PCI / 2x PCIe4 as option
- | Optional Dual HDD kit
- | Support ATX power mode and WoL and PXE function
- | Aluminium Chassis with fanless design



NISE 3900 series is a power mixture of scalable computing performance, flexible PCIe expansion, and high-bandwidth interfaces. This series adopts a fresh new industrial design to have reliability escalated to match up its enormous capability and functionality. With computing and graphic performance enhancement, NISE 3900 fulfill any graphic intensive or computing oriented applications, even when tough environment may exist.



WIDE OPERATING TEMPERATURE COMPUTERS

AAEON BOXER-6405 - compact embedded controller



MAIN FEATURES:

- | Intel Celeron N3350 / N4200 Quad Core
- | Slim Boxer Design : 37mm height
- | 2x GbE LAN, 4x USB 3.0
- | HDMI & VGA video output
- | 3x RS232/422/485
- | mSATA storage
- | -30 ~ 60°C operating temperature



AAEON introduces the slimmest product in the Boxer series. With this small form factor customers can fit it almost everywhere and it provides a lot of I/O ports for basic applications. BOXER-6405 adopts fanless design for high reliability to fit in most rugged environment. It's suitable as Automation Controller or in Digital Signage applications.

NEOUSYS POC-300 – DIN-rail embedded controller

MAIN FEATURES:

- | Fanless, rugged
- | Intel® Pentium® N4200 / Atom™ E3950 quad-core processor
- | 3x GbE with optional PoE+, 2x USB3.0 & 2x USB2.0
- | DVI + VGA dual display outputs
- | 1x RS-232/422/485 port & 3x RS-232 / 1x RS422/485
- | MezIO™ interface for easy I/O expansion
- | 1x miniPCIe slot with SIM car socket
- | 8 - 35V DC power input
- | -25 - 70°C extended operating temperature

POC-300 series has an ingenious mechanical design that combines DIN-rail mounting chassis with front-accessible I/O in one ultra-compact enclosure. IEEE 802.3at PoE+ function is available on 2 of the 3 GbE ports to power cameras for machine vision or surveillance applications. Thanks to rich I/O POC-300 could be used in various industrial applications.



NEOUSYS POC-500 - ultra-compact & high performance

MAIN FEATURES:

- | AMD Ryzen™ embedded V1605B/ V1807B series quad-core 15W/ 45W CPU
- | 4x Gb PoE+, 4x USB 3.0
- | M.2 2280 M key NVMe (Gen3 x2) socket for fast storage access
- | DP + VGA dual display outputs
- | Front I/O access and DIN-rail mounting design
- | All data ports come with screw-lock mechanism
- | MezIO™ expansion compatible
- | -25 °C to 70 °C extended operating temperature

POC-500 series is the next generation ultra-compact embedded controller offering performance never seen before in this form factor. Also GPU performance is an unheard of 3.6 TFLOPS in FP16 for an ultra-compact form factor embedded controller. Another amazing feature is that, it manages to incorporate an M.2 2280 NVMe SSD (PCIe Gen3 x2) to support 2x times faster disk read / write speed over typical 2.5" SATA SSDs.



NEOUSYS Nuvo-7000 series – High performance multi-purpose IPC

MAIN FEATURES:

- | Support 8th Gen Intel® Core™ i7 / i5 / i3 35W/65W socket-type CPU
- | Patented Cassette for PCI/PCIe add-on card accommodation
- | MezIO™ interface for easy expansion
- | Up to 6x GbE LAN with optional PoE+,
- | 4x USB3.1 gen1 & 4x USB3.1 gen2, 2x RS-232/422/485 & 2x RS232
- | 2x 2.5" SATA HDD/SSD with RAID 0/1 (One hot-swappable)
- | VGA/DVI/DP support triple independent display and 4K2K resolution
- | M.2 2280 M key socket (Gen3 x4) supporting NVMe SSD or Intel® Optane™ memory
- | M.2 2242 B key socket with dual front-accessible SIM sockets, supporting dual SIM mode with selected M.2 LTE module
- | 8 - 35V DC power input
- | -25 - 70°C extended operating temperature

The new Nuvo-7000 series, powered by Intel® 8th-Gen Core™ i processors with up to 6-core/ 12-thread architecture offers significant performance improvement over previous 6th and 7th-Gen platforms. It includes Neousys' track-proven technologies for superior ruggedness and versatility, such as effective fanless design, patented expansion Cassette and MezIO™ interface. On-board I/O ports (GbE, USB and COM) feature sophisticated protection circuits to endure stress from ESD and power surge. This makes Nuvo-7000 series so far the most rugged embedded computer Neousys have ever created.



GPU Computing

NEOUSYS NUVO-8208GC – Rugged GPU Computing Edge AI platform supporting dual 250W NVIDIA® GPU

MAIN FEATURES:

- | Supports dual 250W NVIDIA® graphics cards up to 28 TFLOPS in FP32
- | Supports Intel® Xeon® E or 9th/ 8th-Gen Core™ i7/ i5 LGA1151 CPU
- | Up to 128GB ECC/ non-ECC DDR4 2133 (4x SODIMM)
- | 2x PCIe x16, 2x PCIe x8, 1x PCIe x4 Gen3 expansion slots
- | 2x hot-swappable 2.5" SATA HDD/ SSD with RAID 0/ 1 support
- | 8- 35V wide-range DC input with built-in ignition power control
- | Patented thermal design for -25°C to 60°C rugged operation* (* R.O.C Pat. M534371)
- | Patented damping brackets* to withstand 1 Grms vibration (* R.O.C Pat. M491752)

Nuvo-8208GC is the world's first dual GPU edge ai platform with industrial-grade design and in-vehicle features. Designed specifically to support two high-end 250W NVIDIA® graphics cards, it offers tremendous GPU power up to 28 TFLOPS in FP32 for emerging GPU-accelerated edge computing, such as autonomous driving, vision inspection and surveillance/ security.



MAIN FEATURES:

- | Supports NVIDIA® GPU graphics card up to 120W TDP
- | Supports 8th-Gen Intel® Core™ i3/i5/i7 35W/ 65W LGA1151 CPU
- | MezzIO™ interface for easy expansion
- | 6x GbE LAN, 4x USB 3.1 Gen2 ports and 4x USB 3.1 Gen1 ports
- | 2x RS-232/422/485 & 2x RS232
- | 2x 2.5" SATA HDD/SSD with RAID 0/1
- | M.2 2280 M key socket (Gen3 x4) supporting NVMe SSD or Intel® Optane™ memory
- | M.2 2242 B key socket with dual front-accessible SIM sockets, supporting dual SIM mode with selected M.2 LTE module
- | VGA/DVI/DP support triple independent display and 4K2K resolution
- | 8 - 35V DC power input
- | -25 - 60°C extended operating temperature
- | Patented ventilation design* for graphics card



Nuvo-7160GC is a ruggedized GPU-aided edge computing platform designed for modern machine learning applications such as autonomous driving, facial recognition and machine vision. GPU delivers 4-6 TFLOPS computing power for inference, as well as Intel® 8th-Gen Coffee Lake Core™ 6-core/ 12-thread CPU, offering up to 50% CPU performance enhancement over previous generations. Thanks to Neosys' patented Cassette design and ingenious ventilation mechanism, Nuvo-7160GC can effectively dissipate the heat generated by the GPU. By introducing the guided airflow from intake to exhaust with powerful fans featuring smart fan control, it allows a 120W GPU to operate at 60°C ambient temperature under 100% GPU loading.

RUGGED TABLET PC

AAEON RTC-600/700/900/1200



MAIN FEATURES:

- | Dual / Quad Core Processor
- | High brightness 5.7" /7" /10" /11.6" (up to Full HD) TFT LCD
- | Projected Capacitive Multi-Touch screen (Gorilla glass)
- | 5M Pixel Rear Camera, 1.2M Pixel Front Camera
- | Wireless connectivity WLAN / 3.5G / Bluetooth
- | Integrated GPS receiver, G-sensor, 3-axis gyroscope. E-compass
- | Two hot-swappable batteries
- | Programmable function keys
- | IP65 compliance for dust and water protection
- | -20 ~ 60°C operating temperature
- | Compliant with MIL-STD-810G from vibration
- | Optional MSR / Barcode reader
- | Optional accessories: docking station, carry bag etc.



This rugged tablet PC utilizes the Android or Windows operating system. RTC-series supports high performance and low power consumption processors. The high capacity battery provides about 12 hours working time for operator usage during the whole working day. The compact size and light weight brings tremendous mobility to any application. The latest design has scratchproof LCD and protect against shock, vibration, water and dust.

INDUSTRIAL PANEL PC

They adopt an all-in-one concept that integrates a single board fanless computer, LED display, and user-friendly touch screen within a slick and compact NEMA4/IP65 chassis. Designed to serve as a flexible and reliable industrial computing platform, each Panel PC is a highly integrated, network-ready computer with exceptional I/O connectivity. The industrial graded machinery and computer is designed for use in harsh environments where shock and vibration are an issue.

AAEON ACP-1074/1104 - ultra-slim 7" / 10" panel PC

MAIN FEATURES:

- | Intel Atom J1900 / N2807 CPU
- | Many I/O ports: 4x USB, 2x GbE LAN, 2x RS232/422/485
- | Wide Screen with Projected Capacitive Multi-touch
- | 7H Anti-Scratch Surface
- | Thickness: 13mm LCD + Touch, And 20mm Chassis
- | Fanless System & Aluminium Design
- | IP65 Compliant True Flat Screen
- | Optional WLAN module
- | VESA / Panel Mount



The ACP series has very slim and attractive design. They support two-point multi-touch function and easy to clean full flat design.

AAEON OMNI-2155 - expandable panel PC (10", 12", 15", 17", 19", 21")



MAIN FEATURES:

- | Intel® Celeron® quad-core J1900/ dual-core N2807 / i5-6300U processor
- | Flat Surface Design with Projected Capacitive or Resistive Touch
- | 2x GbE LAN, 3x USB2.0 & 1x USB3.0, 1x RS-232/422/485
- | Storage: 1x CFast™ Socket & 1x SATA 2.5" HDD bay
- | 2x mini-PCIe expansion socket for WLAN / 3G / LTE module
- | Wide range power input 9 - 30V DC
- | -20°C - 60°C wide operating temperature
- | VESA / Panel mount
- | Easy to customize with OMNI-Modules for additional:
LAN / USB / COM / DIO / CAN bus / Audio modules



NEXCOM APPC xx40T series (8", 12", 15", 17", 19")



MAIN FEATURES:

- | 4:3 8-19" Fanless LED Panel Computer
- | Intel® Celeron J1900 2.0Ghz & 4G RAM default
- | Flush Panel by 5-wire Touch Screen
- | Dual GbE, 2nd display-VGA, Line-in, Line-out, MIC-in, PS2 KB/MS
- | 3x USB, 2x Mini-PCIe sockets, 1x CFast socket,
- | 2x RS232/422/485 / DIO with 2.5kV isolation
- | Optional 3.5G / Wi-Fi module / GPIO
- | IP65 compliant front panel
- | VESA / Panel mount
- | Wide range power input 12 - 30V DC
- | Support optional Fieldbus module (PROFIBUS / ProfiNET / DeviceNET / EtherCAT / Ethernet IP master module and others)



Equipped with diverse fieldbus interfaces, NEXCOM Panel PCs are compatible with programmable logic controllers (PLCs) from several well-known suppliers. The front IP65 compliant panel provides protection from water and moisture damage which allows users to clean the surface directly using high-pressure water jets. This feature makes the APPC series machinery computer especially suitable for applications where stringent hygiene levels are important, such as within the food and beverages industry.

NEXCOM IPPC xx40P



MAIN FEATURES:

- | 16:9 10.1" / 15.6" / 21.5" fanless LED Panel Computer
- | Intel® Celeron® J1900 & 4G RAM default
- | Metal housing with robust aluminium front zero bezel for harsh environment
- | Capacitive 10-points multi-touch
- | Dual GbE, 2nd display-VGA, Line-out, PS2 KB/MS
- | 3x USB, 2x Mini-PCIe sockets, 1x CFast socket,
- | 2x RS232/422/485 / DIO with 2.5kV isolation
- | Optional 3.5G / Wi-Fi module / GPIO
- | IP66 compliant front panel, VESA / Panel Mount
- | Wide range power input 12 - 30V DC
- | -10°C - 60°C wide operating temperature
- | Support optional Fieldbus module (PROFIBUS / ProfiNET / DeviceNET / EtherCAT / Ethernet IP master module and others)



NEXCOM IPPC xx70 - high performance panel PC



MAIN FEATURES:

- | 4:3 / 16:9 15", 17", 19", 21" fanless panel computer
- | Powerful 4th generation Celeron / Pentium / i3 / i5 CPU
- | Resistive / Capacitive up to 10-points touchscreen
- | Two expansion slots for add-on PCI / xPCIe cards
- | 2x RS232/422/485, 4x USB3.0
- | Front accessible USB 2.0 for easy of field maintenance
- | Wide range power input 12 - 30V DC



IPPC series is a heavy industrial panel PC equipped with powerful processors, TFT LCD panel with LED backlight and user-friendly touch screen. It provides two expansion slots to support PROFINET, PROFIBUS, DeviceNet, EtherNet/IP and EtherCAT modules. It's ideal for use in oil and gas rig, wind farms, chemical factories, pharmaceutical factories, and hazardous working area.

Industrial touch displays

NEXCOM APPD series 4:3 12", 15" , 17" , 19"
IPPD series 16:9 15.6" , 21.5"



MAIN FEATURES:

- | Resistive touchscreen in 4:3 ratio / Capacitive 10-points multi-touch in 16:9 ratio
- | Video input: analog VGA and DVI-D (additional DP for IPPD)
- | Dual touch interface: RS-232/USB
- | -10 - 60°C operating temperature
- | 12 - 24V DC power input
- | VESA / Panel mount
- | High shock and vibration resistance

The APPD/IPPD series has also an IP65/IP66 flush front panel, which can keep water and dust off the surface. They are the best solution for NEXCOM NISE fanless computer and APPC/IPPC panel PC when a 2nd display is required.

Stainless water-proof Panel PCs

MAIN FEATURES:

- | 10", 15" 19"
- | Intel Atom E3845 quad core / Celeron N2930
- | Water-Proof M12 connectors
- | Customized I/O
- | 9 - 30V DC power input with isolation protection
- | -20 - 60°C wide operating temperature
- | High shock and vibration resistance
- | Resistive / capacitive Touchscreen
- | IP67 / NEMA4x Compliant Stainless Type 316L System
- | Anti-Scratch Touch Screen: 7H



They are built from highest grade stainless steel type 316L enclosure with polished surface for easy cleaning and maintenance. Device offers protection against extreme vibration and shock, dust accumulation, corrosive acid and alkaline. Power input protection mechanism with over-voltage protection, low-voltage protection and reverse protection make the systems more reliable. These waterproof solutions are ideal for chemical and food industry applications.

IN-VEHICLE INDUSTRIAL COMPUTERS

NEOSYS IGT-21 - ARM-based IoT gateway with CAN bus

MAIN FEATURES:

- | Microsoft Azure Certified for IoT
- | Onboard TI Sitara AM3352 1GHz Processor & 1G RAM
- | Rich Local I/Os: USIM Slot, USB, 10/100M LAN, and RS-232/422/485, DIO
- | miniPCIe socket with SIM card slot for wireless communication
- | 8 - 25V wide-range DC input
- | Operating temperature from -25 - 75°C



Neosys IGT-21 is an ARM-based Fanless In-Vehicle Communication IoT gateway. Unlike System on Module (SoM) that's commonly provided as a barebone component, IGT-21 is based on AM3352 from Texas Instrument's Sitara AM335x family and will be shipped as a ready system pre-installed with Debian. As an In-Vehicle Communication IoT Gateway, IGT-21 has I/Os that are applicable to a range of industrial grade sensors.

NEOSYS POC-351VTC - ultra-compact in-vehicle controller

MAIN FEATURES:

- | Intel® Atom™ E3950 quad-core processor
- | 3x GbE with optional PoE+, One isolated CAN port for in-vehicle communication
- | 2x USB3.0 & 2x USB2.0, DVI + VGA dual display outputs
- | 1x RS-232/422/485 port & 3x RS-232 / 1x RS422/485, 4-CH isolated DI and 4-CH isolated DO
- | One M.2 socket and three mini-PCIe sockets with SIM support
- | 8 - 35V DC power input
- | -25 - 70°C extended operating temperature



POC-351VTC is an ultra-compact, fanless embedded in-vehicle controller powered by Intel® Atom™ Apollo Lake E3950 quad-core processor. It combines good performance, high reliability and affordable cost for versatile in-vehicle applications. POC-351VTC has mechanical design with front-accessible I/O and DIN-rail mounting. Moreover PoE+ function is available on 2 of the 3 GbE ports to power cameras for machine vision or surveillance applications. Wireless and internet access is essential for modern day in-vehicle applications. POC-351VTC has a total of four M.2/ mPCIe sockets and six antenna holes to accommodate a variety of 4G, 3G, WIFI and GPS modules to satisfy in-vehicle communications. An aluminium heat-spreader is designed to dissipate heat generated by modules to maintain superior operating stability, for the system and communication modules.

NEOUSYS NUVO-5608VR - mobile surveillance computer



MAIN FEATURES:

- | Support 6th Gen Intel® Core™ i7 / i5 / i3 35W/65W socket-type CPU
- | 8x 802.3at PoE+ ports and 2x GbE ports
- | 4x USB3.0 & 4x USB2.0, 2x RS-232/422/485 & 1x RS232
- | VGA/DVI/DP support triple independent display and 4K2K resolution
- | 2x 3.5" HDD accommodation, support RAID 0/1 with over 24 TB capacity
- | Dedicated HDD heat-spreader for optimized thermal performance
- | 4x mini-PCIe socket with SIM support
- | 4-CH isolated DI and 4-CH isolated DO, 1x CAN 2.0 port
- | 8 - 35V DC power input with built-in ignition power control
- | -25 - 70°C extended operating temperature
- | Patented damping brackets to withstand 1 Grms vibration



Nuvo-5608VR is Neosys' latest fanless mobile surveillance system designed for real-time video analysis and streaming. It incorporates 6th-Gen Core™ i CPU, IP camera connectivity and massive storage capacity for emerging intelligent surveillance / security applications.

Featuring eight Gigabit PoE+ ports, Nuvo-5608VR provides sufficient bandwidth to collect high-definition video streams from IP cameras, while its 6th-Gen Core™ i7 CPU is capable of performing real-time video analytics. It accommodates two 3.5" hard drives with RAID 0/1 configuration to support more than 24 TB storage capacity for recording 8-CH, 1080p @H.264 video for over 3 months.

RUGGED RAILWAY COMPUTERS

Railway box controllers

GERSYS VC7412 - Apollo Lake based Box PC



MAIN FEATURES:

- | Extremely compact size
- | Only front-side connections
- | Perfect cooling no matter the installation position
- | Versatile and expandable extension via PC/104 and mini PCIe slot possible (f.e., MVB, GSM, WiFi, video)
- | Optional: up to 4 analog video inputs
- | High reliability in extreme climatic conditions
- | Vibration-resistant
- | -40 - 70°C extended operating temperature
- | Wide-range power supply unit: 24-110V DC (+/- 40%)
- | Integrated, maintenance-free UPS with double-layer capacitors (DLC)
- | EN50155 certificate



Gersys VC-series has been especially designed for the operation on railway vehicles. Highlights are the integrated uninterruptible power supply (UPS) and the sophisticated cooling concept, which works at horizontal and vertical installation. The modular concept with different processor technologies, expandability with various interfaces and the universal mounting possibilities with optional mounting frames offer a large bandwidth of potential areas of use.

NEOUSYS NUVO-7200VTC - High Performance IPC with GbE PoE & PCIe expansion



MAIN FEATURES:

- | Support 8th/9th Gen Intel® Core™ i7 / i5 / i3 socket-type CPU
- | 4x USB3.1 gen1 & 4x USB3.1 gen2, 2x RS-232/422/485 & 2x RS232
- | 4x 802.3at Gigabit PoE+ ports via M12 connectors
- | On-board isolated CAN bus for in-vehicle communication
- | 4-CH isolated DI and 4-CH isolated DO
- | 2x hot-swappable 2.5" SATA HDD/SSD with RAID 0/1
- | VGA/DVI/DP support triple independent display and 4K2K resolution
- | 2x M.2 B key and 3x full-size mini-PCIe sockets with SIM card slots
- | 1x M.2 2280 M key socket (PCIe Gen3 x4) for NVMe SSD or Intel® Optane™
- | memory installation
- | 8 - 35V DC power input with built-in ignition control
- | -40 - 70°C extended operating temperature
- | E-Mark & EN 50155 certificate



Nuvo-7200VTC is a rugged in-vehicle controller featuring Neosys' patented Cassette module with a x16 PCIe slot for add-on application card flexibility. With wide range of I/O and high performance CPU is perfect for advanced in-vehicle application. Patented damping bracket and connectors with screw-lock mechanisms guarantee extreme rugged connectivity in shock & vibration environments.

All-in-one devices for Train Control & Management Systems

GERSYS 6.5", 8.4", 10.4", 12.1", 15"

state-of-the-art multi-functional TCMS display with integrated computer

GERSYS

MAIN FEATURES:

- | Latest Intel Apollo Lake processor
- | Rich I/O: RS232/422/485, Ethernet, CAN, USB, PS/2
- | Expansion via PC/104 (f.e. MVB) or miniPCIe (GSM, WLAN)
- | Extremely low installation depth (45mm)
- | USB charging port on the front for tablets and mobile phones
- | PCAP touch screens for multi-touch operation,
- | Custom or UIC612 keyboard layout
- | High-resolution displays with IPS technology for better viewing angles
- | Very low heat generation (thus high MTBF)
- | Versions with protection class IP65 all-round
- | -40 - 70°C extended operating temperature
- | Wide range power supply 24-110V DC (+/- 40%)
- | EN50155 certificate



Gersys engineers are proud from high knowledge about complete systems in cockpits and driver cabins. They are in permanent contact with international railway manufacturers. Computers manufactured by this German company have unusually long lifecycle and maximum product quality.

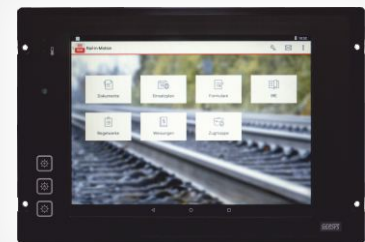
Applications: Data Distribution Service (DDS), Train Radio Display (TRD), Technical and diagnostic display (TDD), Control and command display (CCD), Electronic timetable display (ETD), anti-collision system etc.

GERSYS VM series - professional CCTV 10.4", 12.1", 15" monitors

GERSYS

MAIN FEATURES:

- | Display scaling and mirroring
- | No delays, real-time display
- | Resolution VGA, SVGA and XGA (4:3)
- | Optional PCAP Touch Sensor
- | FBAS port for camera
- | Surface-mounted or panel mounted
- | -40 - 70°C extended operating temperature
- | Wide range power supply 24-110V DC (+/- 40%)
- | EN50155 certificate



GERSYS references: Deutsche Bahn EBUa system, Bombardier, Skoda, Alstom, CAF, Kapsch, Siemens, Haslerail, Stadler, CAT, Voith, Vossloh, Transmashholding etc.

DISPLAYS WITH TOUCHSCREEN

Large format: from 32" up to 98"

Open frame: from 10" up to 65"

Touchscreens: from 10" up to 86"

Desktops: from 17" up to 40"

iivama

MAIN FEATURES:

- | TN / VA / AMVA3 / MVA / IPS panel technology with Full HD & Ultra HD resolution, LED Backlight
- | Projective Capacitive, Infrared or Optical Multi-Touch Technology with up to 50 compatible points
- | Durable and professional design / full metal structure, IP65 front
- | iSignage - you can easily create, publish and manage your own digital signage content from a desktop PC in the same network
- | Anti-glare coating and scratch resistance surface
- | Key lock - You can easily lock and unlock the controls preventing unauthorised change settings
- | USB Media Playback
- | LAN Control - enables making adjustments through your network
- | Black tuner, 1ms response time, overdrive function
- | Fanless design eliminates noise and reduces dust contamination
- | ACR - Advanced Contrast Ratio is a feature that automatically adjusts contrast and brightness of the screen to assure perfect picture quality
- | Flicker-Free & Blue Light - the solution for the comfort and health of your eyes
- | 24h/7 operating time
- | Great viewing angles & exceptional colour clarity
- | Built-in speakers & ambient light sensor
- | Ball-Drop-Test Proof
- | Wide range of video and audio inputs
- | VESA mounting
- | Remote control
- | Expansion slot for Open Pluggable computers
- | Compatible with NEXCOM OPS players



SUNLIGHT READABLE LCDs

LITEMAX Sizes from 6.5" up to 65"

MAIN FEATURES:

- | MTBF 100,000 Hours
- | Blackening Defect Free
- | DC power input
- | Optional Touchscreen
- | Daisy Chain
- | Display via USB

CORE TECHNOLOGY:

- | LED Backlight Technology
- | Low power consumption
- | High efficiency optical design
- | Brightness up to 3000 nits
- | Aluminium base board
- | Fanless design



MaxRGB



Litemax MaxRGB™ - the best-in-class colour calibration and enhancement.

Intelligent Thermal Management Display automatically cools down or heats up

Local dimming Dims the backlight to optimize the heat and save the energy.

Advanced Optical Bonding (AOT) protective glass that is glued in front of the Litemax display to enhance its readability under the sunlight or in high humidity outdoor environments.

Spanpixel



Litemax has an exclusive patent license to design and manufacture innovative stretched displays with ultra-wide, customized aspect ratios. Certified with EN50155 for railways and rolling stock applications.

EMBEDDED BOARDS

MAIN FEATURES:

- | Cost-effective reliable Motherboards from ASROCK Industrial based on latest Intel Atom/Celeron/Pentium/i3/i5/i7 and AMD processors
- | Only Japan-made high-quality Conductive Polymer Capacitors used
- | Fanless design
- | 24/7 operating time
- | 7-15 Years product availability
- | Various form factor: 3.5", UTX, NUC, PICO-ITX, mini-ITX, micro-STX, micro-ATX, ATX, OPS, 4x4 (NUC size),
- | Computers on modules : COM express, Qseven
- | Network M/B
- | Extended temperature boards

Asrock SBC-210D - 3.5" cost-effective M/B

MAIN FEATURES:

- | Intel® Celeron® Processor J1900 onboard
- | Supports Single Channel DDR3L 1333MHz, 1x SO-DIMM, up to 8GB system memory
- | 1x COM (RS-232/422/485), 3x COM (RS-232)
- | 1x HDMI, 1x D-Sub, 1x Dual Channel 24-bit LVDS
- | 2x USB3.0, 6x USB2.0, 2x SATA2
- | 1x mini-PCIe, 1x mSATA (shared)
- | 2x GbE LAN, 1x TPM Header
- | 9-36 VDC input



IMB-1210 - Powerful mini-ITX M/B with PCIe slot

MAIN FEATURES:

- | Socket LGA1151 for Intel® 8th gen i7 / i5 / i3 / Celeron® CPU (Coffee Lake)
- | Supports dual channel DDR4 2400/2666MHz, 2x SO-DIMM, up to 32GB system memory
- | 1x VGA, 2x DP, 1x Dual Channel 24-bits LVDS
- | 4x USB3.1, 4x USB2.0, 4x SATA3, 4x COM
- | 1x PCIe x16, 1x Mini-PCIe, 1x M.2 Key E, 1x M.2 Key M
- | 2x GbE LAN, 1x TPM Header
- | ATX PWR 24+4-pin



Asrock ATHENA A1 - artificial intelligence edge camera (kit option)

MAIN FEATURES:

- | Intel® Atom Apollo Lake J3455 CPU, 4G RAM, 32G eMMC
- | Linux Ubuntu 16.04, AWS greengrass,
- | Partnership with Gorilla IVAR™ Edge AI (Intelligent Video Analytics Recorder)
- | 1x IP camera (2MP, 1080P, @30fps, H.264)
- | 1x Movidius Myriad X (Option)
- | 1x USB3.0, 1x LAN, 1x micro HDMI, 1x SIM socket
- | 1x M.2 2242 (Key B), 1x M.2 2230 (Key E)
- | 12V DC-in/PoE (PD) with 25.5W

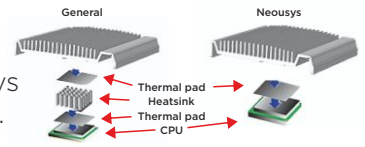


UNIQUE TECHNOLOGY

Excellent Thermal Design

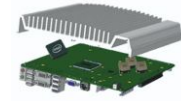
Dedicated Fanless Architecture Design

In order to have all hot components attached directly to the main heatsink Neousys places the I/O connectors under the PCB. It provides a very efficient heat dissipation.



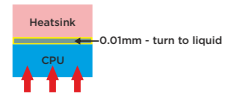
Well-Arrangement of Hot Components

All hot components (e.g. CPU, PCH, GbE, Power Choke and etc.) arranged on the top side of the PCB to contact the heatsink directly.



Phase-Changed Thermal Pad

Phase-changed thermal pad melts when temp. goes over 45° C. It helps CPU cling to heatsink closer and increases the thermal conductivity.



Patented Expansion Cassette

Neousys' Patented Cassette innovates a brilliant way for accommodating add-on card, not only because the modularized design makes easy installation/replacement, but also because the possibility of passive cooling for add-on card brings more reliable operation. You can install any PCI/PCIe card to expand versatility of Neousys' IPC, or choose Neousys' offer of Cassette module with pre-installed heat-spreader to include PoE+, USB 3.0 or independent graphics card.

Cassette modules

FEATURED IN:

- | **CSM-R800** - Cassette module with 4-drives hardware RAID 0/1/10, accommodating four 2.5" HDD/SSD
- | **CSM-POE354** - Cassette module with PCIe-PoE354at and pre-installed passive heat-spreader
- | **CSM-U380** - Cassette module with PCIe-USB380 and pre-installed passive heat-spreader
- | **PB-2500J-CSM** - Intelligent ultracapacitor-based power backup Cassette module with 2500 watt-second energy capacity



The MezIO™ Interface and Modules

MezIO™ is the interface designed for incorporating application-oriented I/O functions into an embedded system. It offers computer signals, power rails and control signals via a high-speed connector. MezIO™ is also mechanically reliable benefited from its 3-point mounted mezzanine structure. A MezIO™ module can leverage these signals to implement comprehensive I/O functions.

Neousys provides various MezIO™ modules, as listed below. Users can also leverage signals/powers on MezIO™ to create a module with specific domain know-how. MezIO™ presents a cost-effective way to build a tailor-made embedded system for your application.

The MezIO™ Modules

- | **MezIO-C180** - 4x RS-232/422/485 ports and 4x RS-232 ports
- | **MezIO-C181** - 4x RS-232/422/485 ports and 4x RS-422/485 ports
- | **MezIO-D220** - 8-CH isolated digital input and 8-CH isolated digital output
- | **MezIO-D230** - 16-CH isolated digital input and 16-CH isolated digital output
- | **MezIO-V20** - ignition power control function and 1x mini-PCIe socket for in-vehicle usage



PARTNERS

Microdis Electronics cooperates only with carefully selected manufacturers

AAEON established in 1992 in Taiwan, and became a member of ASUS Group in 2011. With more than 25 years of experience in developing and producing allows to offer innovative solutions based on brand new technologies for industry, transport, entertainment and others. Aaeon is the guarantee of high quality, world-class design & professional technical and application support. From origins with the core competence of single board computer design, AAEON has expanded its capabilities to award winning Panel PC System Design, BIOS Engineering with multi-vendor expertise, Mechanical Design, Peripheral Device Design, Design Verification and in-house EMI/EMC Debugging.

ASRock Inc. is a well-known manufacturer of motherboards since 2002. The company has been growing fast and became world third largest motherboard brand with headquarter in Taipei, Taiwan and branches in Europe and the USA.

Asrock Industrial established in 2011 and in 2013 started cooperation with Microdis Group. They become leader in manufacturing industrial boards in many form factors. Asrock Industrial keeps perfect balance between the price and quality of their products.

GERSYS is an independent and owner-managed company. They have been developing and manufacturing railway technology at the highest quality levels for the last two decades. Product range includes onboard computers as well as display and driver assistance systems (HMI, IDU, MMI) for railway and special vehicles are developed in accordance to railway standards EN50155 and EN45545. Development and design, production and manufacturing from a single source is located in Wolfratshausen near Munich. GERSYS doesn't outsource core processes. All tasks are completed internally by its team of experts. This is the key to ensure the highest quality and sustainable growth.

iiyama is a Japanese manufacturer of computer monitors. They started in 1973 as small colour TV's supplier. Now they are one of the world's leading player in the market. Efficiency, performance, reliability and user comfort are all key to the development of iiyama products. iiyama success has been achieved by the consistent evolution of high quality product and by bringing them to market at an accessible price.

LiteMAX has been founded in 2001. They are an expert in production of sunlight readable, high brightness and resized industrial displays. LiteMAX technology and innovation can be found in high-performing, ultra-efficient solutions for transportation, industrial, marine, digital signage, rugged portable and data mining.

Neosys Technology, established in 2010, designs and manufactures rugged embedded platforms and modules. With the core expertise ranging from embedded computing to data acquisition and processing, manufacturer's goal is to innovate and integrate feature sets into products for various vertical markets with simple yet elegant architecture. Neosys' effective thermal design ensures reliable wide temperature operation in harsh environment. The efficient heat transfer allows Neosys systems to operate with 100% CPU load under extreme conditions and therefore maximize processing power.

NEXCOM has been founded in 1992 and headquartered in Taipei, Taiwan, NEXCOM is committed to being trustworthy partner in building the intelligent solutions for 24/7 usage in harsh environment. To meet 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. Wide product portfolio allows to match appropriate computer to specified application.

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Currently the Microdis Group employs over 100 people, with a large number of electronic engineers, mostly involved in sales and application support.

As a company with an extensive experience in the distribution of electronic components, and a purchasing center in Germany for many years, we are able to offer almost any product from a wide variety of electronic components. We offer also the production of cable harnesses and programming of crystal oscillators for a customised frequency. Cooperation with a catalogue distributor provides fast deliveries (2 days) of a wide range of catalogue products.

We have certificates of quality management DIN EN ISO 9001:2015 for the distribution of electronic components.



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AEGID
ASROCK INDUSTRIAL
BRIGHTTEK
CAMDENBOSS
EPSON

FISCHER CONNECTORS
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GERSYS
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IYYAMA
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LEAR
MAXTENA
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TAIWAN SEMICONDUCTOR
U-BLOX

WEZAG

Industrial computers and panels
 RFID systems and transponders
 3.5" & mini-ITX industrial boards
 Power, THT and chip LEDs and LED modules
 Interconnect components, electronic housings, 19" cabinets
 Crystals, oscillators, filters and sensors
 Programmable oscillator web-shop
 Military, medical and industrial connectors
 Heatsinks, connectors, 19" and case technology
 Railway computers
 SIM-Holders, memory card connectors, USB connectors
 Large Format Displays
 Optocouplers, optoswitches
 Signal connectors
 Automotive and white goods connectors
 GPS, Galileo, Glonass, Iridium antennas
 Machines and systems for wire crimping
 Reed switches, sensors and relays
 UL/CSA/DIN certified, customized industrial cables
 Terminal block connectors - screw, spring and pins
 Wide-temperature fanless computers
 Industrial computers and panels
 Advanced Frequency control and Timing solutions
 Automotive and white goods connectors
 Semiconductor devices
 GNSS, GSM, UMTS/HSPA/CDMA/LTE/NBIoT modules, WiFi,
 Bluetooth, NFC, V2V/V2X, antennas
 Hand tools for crimping, pneumatic presses

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