



INDUSTRIAL COMPUTERS

- I RUGGED BOX COMPUTERS
- I ALL-IN-ONE PANEL COMPUTERS
- I TOUCH DISPLAYS & PROJECTORS
- I RUGGED TABLETS & LAPTOPS
- I VEHICLE COMPUTERS
- I EMBEDDED BOARDS

INDUSTRIAL COMPUTERS AS THE BEST CHOICE

INDUSTRIAL COMPUTER DESIGN



CONTENT

| | |
|----------------------------|----|
| EMBEDDED BOARDS | 03 |
| SMART CITY SOLUTIONS | 05 |
| AUTOMATION SOLUTIONS | 07 |
| AI SOLUTIONS | 10 |
| INDUSTRIAL TOUCH COMPUTERS | 12 |
| MOBILE COMPUTING SOLUTIONS | 14 |
| SPECIAL USE SOLUTIONS | 16 |
| DISPLAY SOLUTIONS | 17 |
| SUNLIGHT READABLE LCD | 17 |
| UNIQUE TECHNOLOGY | 18 |
| ABOUT MICRODIS PARTNERS | 19 |

THIS FOLDER SHOWS ONLY A PART OF OUR PORTFOLIO.
CONTACT US FOR RECOMMENDATION OF THE OTHER PRODUCTS.

EMBEDDED BOARDS



MAIN FEATURES:

- | Cost-effective reliable Motherboards from ASRock Industrial based on latest Intel and AMD processors
- | Only Japan-made high-quality Conductive Polymer Capacitors used
- | Fanned and fanless designs
- | 24/7 operating time
- | 7-15 years product availability
- | Various form factors: 3.5", UTX, NUC, PICO-ITX, mini-ITX, micro-STX, micro-ATX, ATX, 4x4 (NUC size),
- | Computers on modules : COM express, Qseven, SMARC
- | Network M/B
- | Extended temperature boards, -20 ~ 70°C and wide temp. -40 ~ 85°C options available
- | Boards based on H (Mainstream), Q (Enterprise), and W (Workstation) Intel chipsets

ASRock
—Industrial—

NUC/4x4 10.4 x 10.2 cm



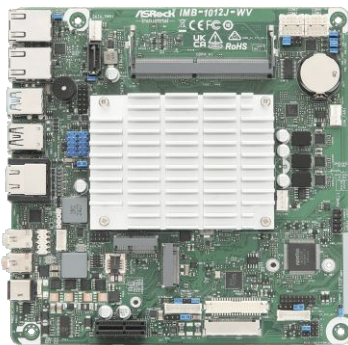
Pico-ITX 10 x 7.2 cm



SMARC 8.2 x 5.0 cm



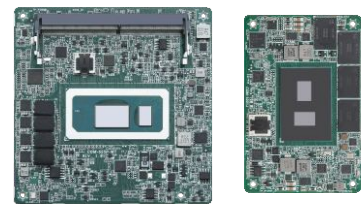
Mini-ITX 17.0 x 17.0 cm



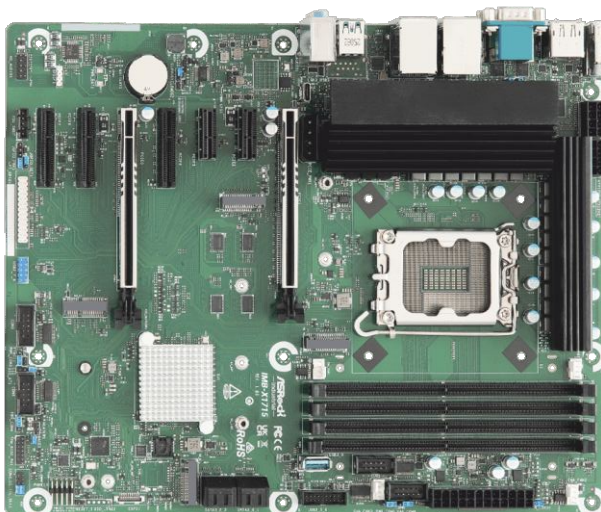
SBC 3.5" 14.7 x 10.2 cm



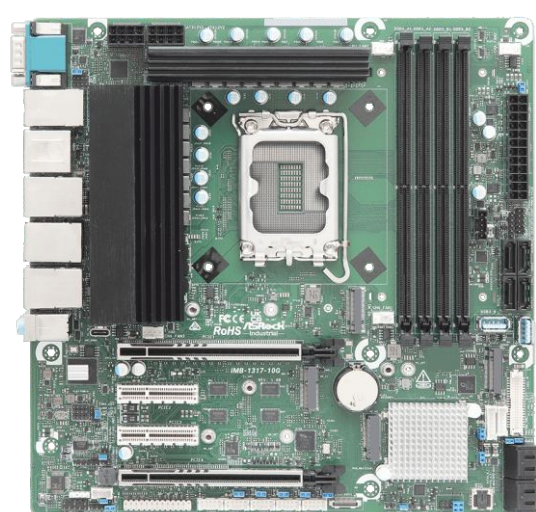
COM Express Type 6 & 10



ATX 30.5 x 24.4 cm



Micro-ATX 24.4 x 24.4 cm



Selecting the appropriate motherboard size is a critical early step in product development, as it significantly influences the overall design and form factor of the final solution. While performance specifications and interface options can often be defined at a later stage, the board size typically sets the foundation.

The sizes presented here represent a selection from our broader portfolio.

EMBEDDED BOARDS

Cost effective solutions

IMB-1006J-WF

- Intel Processor N97
- Up to 3.6GHz, 12W TDP
- RAM up to 32GB DDR4
- Interfaces: PCIe, M.2, HDMI, DP (USB-C), VGA, LVDS or eDP, COM, 2.5GbE LAN, USB 3.2, USB 2.0, SATA3
- Supports triple display
- TPM header present
- 12-28V DC input
- Operating temperature: -20°C to 70°C
- Quad-core CPU



SBC-263J

- Intel Processor N97
- Up to 3.6GHz, 12W TDP
- RAM up to 32GB DDR4
- Interfaces: PCIe, M.2, HDMI, DP (USB-C), VGA, LVDS or eDP, COM, 2.5GbE LAN, USB 3.2, USB 2.0, SATA3
- Supports triple display
- TPM header present
- 9-36V DC input
- Operating temperature: -20°C to 70°C
- Low-profile SBC

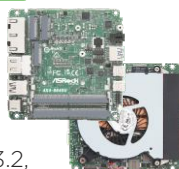


ASRock
—Industrial—

High performance SoC solutions

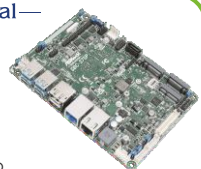
4X4-8840U (BOX option)

- AMD Ryzen 7 8840U
- Up to 5.1GHz, 28W TDP
- RAM up to 96GB DDR5
- Interfaces: M.2, HDMI 2.1, DP (USB4), USB 3.2, USB4, 2.5GbE LAN, 1GbE LAN, audio, COM
- Supports quad display
- AMD FW TPM
- 12V-24V DC input
- Operating temperature: 0°C to 70°C



SBC-375P

- Intel Core Ultra 7 155H (Meteor Lake-H)
- Up to 16 cores, 28W TDP
- RAM up to 96GB DDR5
- Interfaces: PCIe, M.2, HDMI, DP, LVDS or eDP, COM, 2.5GbE LAN, USB 3.2, USB 2.0, SATA3
- Supports quad display
- TPM 2.0 onboard
- 12-36V DC input
- Operating temperature: -20°C to 70°C



ASRock
—Industrial—

Wide temperature solutions

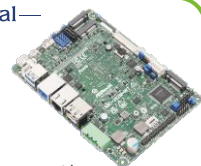
SBC-373P-WT

- Intel Core i7-1365URE (13th G. Raptor Lake-P)
- Up to 10 cores, 15W TDP
- RAM up to 64GB DDR4
- Interfaces: PCIe, M.2, HDMI, DP, LVDS or eDP, COM, 2.5GbE LAN, 1GbE LAN, USB, SATA3
- Supports quad display
- TPM 2.0 onboard
- 12-36V DC input
- Operating temperature: -40°C to 85°C



SBC-262M-WT

- Intel Atom x7433RE (Amston Lake)
- Up to 3.4GHz, 9W TDP
- RAM up to 48GB DDR5
- Intel® TCC and TSN support for Real-Time Computing
- Supports triple display
- TPM 2.0 onboard IC
- 9-36V DC Input
- Operating temperature: -40°C to 85°C



ASRock
—Industrial—

Notable products

IMB-X series

- ATX, Micro-ATX and Mini-ITX socket boards based on Intel W-series chipset (Workstation) or AST2600 chipset for Xeon CPUs
- ECC RAM support, even up to 1TB
- 10 Gigabit LAN option
- Multiple PCIe slots, up to x16 (Gen5)
- Intel® vPro, and up to VMD RAID 0/1/5/10
- 20°C - 70°C operating temperature
- Extensive storage options



IMB-(X)1244-WV

- Intel 14th/13th/12th Gen Core with W680
- up to 96GB DDR5 ECC/non-ECC
- Interfaces: PCIe, M.2, HDMI, DP, VGA, COM, 2.5GbE LAN, USB 3.2, USB 2.0, SATA3
- Supports Quad display
- TPM 2.0 onboard
- 12-28V DC input
- Operating temperature: -20°C to 70°C
- 1 x Right Angle PCIe16 for low profile designs (Gen4, Support riser card x8/x8)



ASRock
—Industrial—

SMART CITY SOLUTIONS

What is VISUAL EDGE?

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.

What is SMART EDGE?

Edge computing places data storage and processing closer to the source, enhancing response times and reducing bandwidth consumption. Implementing local machine vision with AI at the edge further increases system robustness.

Low power consumption

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



The NEXCOM Neu-X

Indoor Edge Computing solutions designed to meet diverse application needs. These box PCs are defined by their compact form, low power consumption, industrial-grade durability, and competitive pricing.

Neu-X300 Series Core i Edge Computing



- Fanless design
- i3/i5/i7/i9 CPU, up to 35W
- Up to 4 4K@60Hz video outputs
- Rich interfaces
 - up to 10x USB (Neu-X302),
 - 6x COM ports (Neu-X302),
 - 2x GbE LAN
- Line-In and Line-Out audio
- Optional Wi-Fi 7 / 5G module
- TPM 2.0 onboard
- Intel® AMT technology (option)
- 12V DC or 12-24V DC (Neu-X304)
- Compact design
 - 210x210mm (Neu-X304)
 - 190x150mm (Neu-X303)
- CE certification (EMC EN55032+EN55035)

Neu-X100 Series Celeron Edge Computing



- Fanless and slim design
- Atom and Celeron, up to 15W, including new N97, N150 & N355
- Up to 16GB RAM
- Dual video output
- Rich interfaces
 - 4x USB ,
 - 6x COM ports (Neu-X101-6C-DC),
 - 2x GbE LAN
- Optional Wi-Fi 7/ LTE module
- TPM 2.0 onboard
- 12V DC Input
- Compact design
 - 179x106x37mm (Neu-X104-N150)
 - 203x106x40mm (Neu-X303-N355)
- CE certification (EMC EN55032+EN55035)

Neu-X60 Series Just-Fit Edge Computing



- Ultra compact design
- Intel N50, with only 6W TDP
- Pre-installed 4G memory
- Pre-installed 128G M.2 storage
- Minimum interfaces for great value
 - 2x USB ,
 - 1x COM ports,
 - 1x GbE LAN
- Optional Wi-Fi or LTE module
- 12V DC Input
- Dimensions:
 - 156x119x31mm
- Palm size
- Weight: 0.56kg
- 0°C to 40°C operating temperature
- Linux and Windows support

Notable products

Neu-X304

- 13th/12th Gen Intel Core i9/i7/i5/i3 processors up to 35W
- Dual channel DDR5 SO-DIMM up to 64GB
- Three HDMI 2.0 outputs at 4K60
- Dual LAN, COM ports, USB ports, Mic-in, Line-out
- TPM 2.0 onboard
- Intel AMT (Q670E only)
- M.2 2280 M for storage, M.2 2230 E for Wi-Fi, M.2 3042/3052 B for LTE/5G
- Power input 12V DC or 12-24V DC (Q670E only)



Neu-X102-N97

- Intel N97 processor
- DDR4 SO-DIMM up to 16GB
- Two HDMI 2.0 outputs at 4K30
- TPM 2.0 onboard
- LAN
- USB 3.2 Gen2
- M.2 2242 M for PCIe & SATA storage
- Mini-PCIe for Wi-Fi/LTE
- 12V DC input

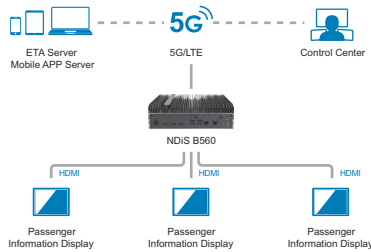


Application example

Passenger information display systems (PIDS) that show announcements, news items and advertisements in a visually appealing way.

Real time information update via Wi-Fi or cellular network.

Extended operating temperature support for bus stops and other semi-outdoor environments.



Bus Stop Display

The NEXCOM NDIS B

Semi-outdoor Visual Edge Computing solutions designed to bring stunning graphics and experiences to drive engagement. Fanless designs, extended temperature ranges, and 24/7 reliability, our solutions ensure smooth, high-resolution content delivery in any environment.

NDIS B56x Series High Performance



- Fanless design
- 12th g. Intel® Core™ i7/i5/i3, 35W
- Up to 64GB DDR5 RAM
- Up to 3 independent 4K@60Hz
- Rich interfaces
up to 8x USB,
4x COM ports,
up to 3x LAN, also 2.5GbE
- Optional Wi-Fi 7 / 5G module
- 3 x M.2 socket Key B/E/M
M.2 2280 Key M (PCIe x4 or SATA)
for storage
- Dual SIM support
- TPM 2.0 onboard
- -20°C to 60°C possible
- Slim H: 39mm (B560S)
- PoE support (B561-PoE)

NDIS B36x Series WT / Slim Core



- Fanless design
- Up to Intel® Core™ Ultra U , 15W
- Up to 96GB DDR5 RAM
- Up to 2 independent 4K@60Hz
- Medium number of interfaces
up to 4x USB,
2x COM ports,
up to 2x LAN, also 2.5GbE
- Optional Wi-Fi 7 / 5G module
- 3 x M.2 socket Key B/E/M
M.2 2280 Key M (PCIe x4 or SATA)
for storage
- Intel® AMT support possible
- TPM 2.0 onboard
- -20°C to 60°C possible
- Compact 200x140x37mm (all)
- Line-out only

NDIS B33x Series WT / Slim Atom



- Fanless design
- Intel Atom® or Celeron®, 10W
- Up to 32GB DDR4 RAM
- Up to 3 video outputs
- Rich interfaces
up to 6x USB,
4x COM ports,
up to 2x LAN, also 2.5GbE
- Optional Wi-Fi / 4G module
- M.2 sockets and miniPCIe for
expansions and storage
- TPM 2.0 onboard
- -20°C to 60°C possible
- +12 to 24V DC In (B339, B338)
- 3-pin terminal block DC-In (B339)
- Line-out and Mic-in
- Extremely slim: 21mm (B336R)

Notable products

NDIS B561/B561-PoE

- 12th Gen Intel Core i7/i5/i3 processor
- Intel PCH Q670E
- Up to 64GB DDR5 RAM
- Three independent 4K60 display outputs (one HDMI 2.1 up to 8K60, two HDMI 2.0)
- USB 3.2 ports
- RS-232/422/485, RS232
- GbE LAN, 2.5G GbE LAN (PoE for B561-PoE)
- M.2 B/E/M keys for storage and expansions



NDIS B339

- Intel Atom x7000RE processor
- Dual HDMI 2.0 up to 3840x2160@60Hz
- TPM 2.0 onboard
- Dual LAN
- USB 3.2 ports
- M.2 2242 M for PCIe & SATA storage
- DDR4 SO-DIMM up to 16GB
- Half-size mini-PCIe for Wi-Fi/BT/4G LTE
- 12-24V DC input



NEXCOM

AUTOMATION SOLUTIONS

Boost Your Factory's Performance with Industrial-Grade Computers

In today's fast-paced manufacturing world, reliability and precision are everything. Industrial-grade computers are purpose-built for factory automation, offering unmatched durability, performance, and connectivity in the harshest environments. These rugged systems are designed to withstand extreme temperatures, vibrations, dust, and electrical noise - where traditional PCs would fail.

Why choose industrial-grade computers?

Reliable Machine Vision: Control and process high-speed image data for quality control, part inspection, and barcode reading with zero downtime.

Robust Robotics Control: Seamlessly coordinate robotic arms and automated guided vehicles (AGVs) on the floor using real-time processing and multiple I/O support.

Edge Data Processing: Analyze production data on-site, reduce latency, and enhance decision-making without relying solely on cloud infrastructure.

Seamless PLC Integration: Connect directly to programmable logic controllers and sensors using standard industrial protocols like Modbus or EtherCAT.

Whether you're building smart production lines, predictive maintenance systems, or automated inspection stations, industrial-grade computers are the backbone of modern, efficient factories. Maximize uptime, precision, and scalability - invest in the tech that drives Industry 4.0 forward.



The NEXAIOT NISE

Specifically engineered for demanding industrial environments, the NISE series of controllers is built for Fanless Edge Computing and backed by EN 61000-6-2 and EN 61000-6-4 certifications, ensuring proven performance and electromagnetic compatibility.

NISE 3000 Series Performance and expansion



- Supports 12th/13th Gen Intel® Core™ i3/i5/i7/i9 processors
- Equipped with Intel® Q670E
- Up to 64GB DDR5 SO-DIMM
- Includes 4 Intel® i226-IT LAN ports with WoL, teaming, and PXE
- Features DP, HDMI, and VGA
- Offers M.2 Key B for LTE/5G and outside-accessible M.2 Key M for NVMe storage
- Up to 6 USB 3.2 Gen 1 and 4 USB 2.0 ports for connectivity
- Multiple RS-232/422/485 ports with isolation and auto-flow cont.
- Options for one or two 2.5" SATA HDD/SSD
- Fanless design with TPM 2.0
- Optional 24V DC input ATX mode

NISE 100 series Compact and efficient



- Intel® Atom and Celeron (Alder Lake-N, J6412, x6211E) processors with fanless design
- Offers dual display output
- Equipped with 2 or 3 Intel® LAN ports supporting WoL, teaming, PXE, and EtherCAT (option)
- Includes multiple USB ports: up to 3 x USB 3.0 and 3 x USB 2.0
- Provides RS232 & RS232/422/485 mSATA, M.2, or 2.5" HDD/SSD
- Expansion available through mini-PCIe and M.2 slots for Wi-Fi/LTE
- Wide voltage input 9-30V DC, AT/ATX power mode support
- Rugged operation with extended temperature from -40°C to 70°C
- Compact size: 185x131x54 mm

NISE 50 Series Slim and low power



- Intel® Atom and Celeron (Alder Lake-N, J6412, x6211E) in a fanless compact design
- Supports up to triple HDMI
- Equipped with 2 to 3 GbE or 2.5GbE LAN ports with WoL, teaming, PXE, and EtherCAT
- Offers multiple USB ports: up to 6
- Includes RS-232/422/485
- Supports dual M.2 SATA SSD storage and additional M.2 slots for Wi-Fi 4/5/6E and 4G/5G
- Expandable via full-size mini-PCIe and internal/front M.2 Key B
- Wide 12-24V DC input range
- Temperature range: -10°C to 60°C
- Compact and slim: 186x150x28 mm

Notable products

NISE 3910E16/E2/P2/P2E



- 12/13th Gen Intel Core i3/i5/i7/i9 LGA1700
- Intel Q670E PCH chipset
- Two DDR5 SO-DIMM up to 64GB
- DP, HDMI, VGA independent display
- M.2 3042/3052 B for LTE/5G
- Outside accessible M.2 2242 M with PCIe x4 NVMe
- USB 3.2 Gen1, USB2.0, Four LAN, Isolated COMs
- Mini-PCIe for Wi-Fi/3.5G/4G LTE
- 2.5" SATA HDD/SSD
- PCI, PCIe, or both expansion slots possible

NISE 110-A01/A02



- Intel Celeron N97 quad-core or Atom x7211E
- HDMI and DP output
- Three 2.5GbE LAN, TSN LAN supported
- Storage via mSATA and M.2 SATA & PCIe
- Mini-PCIe for Wi-Fi/LTE
- USB3.2, USB2.0
- RS232/422/485, RS232
- 40°C to 70°C operating temperature
- 9-30VDC input, AT/ATX mode

NEXAIOT

Application example

Machine Makers often require large amounts of compute and scalability

The NISE3910 series supports

- Intel Core i12/13/14th Socket CPUs
- 6 x Independent Bandwidth USB3.2, 900mA each
- PCIe/PCI expansion cards providing strong support for manufacturers.



Machine Vision



The NEXAIOT NIFE

NEXCOM Industrial Fieldbus Embedded Computer (NIFE) Series integrates widely-used industrial master Fieldbus interfaces including PROFINET, PROFIBUS, DeviceNet, EtherNet/IP and EtherCAT to communicate with programmable logic controllers (PLCs) and remote I/Os from major brand-name suppliers.

NIFE 300 Series Performance and expansion



- Intel® Core™ i7/i5/i3 LGA Automation System
- PCI/PCIe Expansions
- Front access 2.5" SATA HDD tray
- 3 x Intel® GbE LAN ports; support WoL, teaming and PXE
- Dual independent display support
- Support +24VDC input; support ATX power mode
- CE Approval
 - EN61000-4-2
 - EN61000-4-4

NIFE 200 series Connectivity and efficiency



- Factory Automation Fanless
- System with Fieldbus Expansion
- DP++ and HDMI for dual display
- 2.5GbE LAN, two GbE LAN
- RS232/422/485 with isolation
- USB 3.0, USB 2.0
- Front access 2.5" SATA HDD/SSD tray with DuoSSD
- Mini-PCIe for modules and mSATA
- M.2 3042/3052 B
- TPM 2.0 onboard
- PCIe x4 expansion
- 24VDC input, ATX mode



NIFE 100 Series Slim and low power



- Intel N97 quad core or x7433RE processor
- HDMI display
- Three 2.5GbE LAN
- USB 3.2 Gen2, USB-C
- Isolated digital I/O
- RS-232/485
- TPM 2.0 onboard
- Mini PCIe full-size
- M.2 2242/3052 B
- 10°C to 60°C operating
- 12/24VDC input

The NEOUSYS NUVO & POC

The Neosys NUVO and POC series come reliability at their core, featuring innovative thermal solutions. The NUVO line offers fanless operation with a wealth of interfaces or multiple expansion slots for flexibility, while the POC series provides a compact, space-saving solution without compromising performance.

Nuvo-11000 Series Fanless industrial PC



- Intel Core Ultra 200 Series 24C/24T LGA1851 CPU
- Fanless operation -25°C to 70°C
- Up to 5 2.5GbE and 1 GigE ports with optional PoE+
- Up to 8 USB 3.2 Gen2 ports
- 4-channel isolated DI and 4-channel isolated DO
- Optional 10GBASE-T Ethernet Expansion Cassette for PCIe add-on card
- MezIO interface for expansion

Nuvo-10000 Series Expansion Box PC



- Intel Core i9/i7/i5/i3
- Compact footprint with up to seven expansion slots
- Two x16 PCIe, three x8 PCIe, two x4 PCIe slots (Nuvo-10007) USB 3.2 ports with screw-lock
- LAN ports with screw-lock
- Dual display outputs
- SATA HDD/SSD with RAID support
- Supports single NVIDIA GPU up to 115W TDP



POC Series Ultra-compact



- Rugged operation -25°C to 70°C
- Four Gigabit PoE+ ports with screw-lock
- Four USB 3.1 Gen1 ports with screw-lock
- M.2 2280 M NVMe socket for storage
- DP and VGA dual display outputs
- Front I/O access
- DIN-rail mounting design
- MezIO compatible

Unique products

TT300

- High-performance fanless system
- 12th/13th Gen Intel® Core™ CPU support
- Intel® Q670E chipset for industrial reliability
- 4 display outputs via HDMI and DisplayPort
- I/O includes USB 3.0, RS232/422/485 and RS232
- M.2 Key M, M.2 Key B, and mini-PCIe,
- SIM socket
- Designed for 24VDC input and ATX power mode
- quiet and durable operation



CMC 300

- Fanless cabinet-mount PC
- Xeon® E-2278GEL, 8th/9th Gen Core™
- DDR4 up to 64GB
- IP65-rated external heatsink for industrial protection
- Dual easy-access 2.5" SSD trays
- Mini-PCIe slot
- 24 VDC power input
- USB 3.0, USB 2.0, COM I/Os
- Offers 2 x Gigabit Ethernet and
- 1 x DVI-D display output

NEXIOT



AIoT controllers

iEP-9042E

- Compact edge AIoT platform
- Intel® 15th Gen Core™ and H610 chipset
- Supports up to 96GB DDR5
- Includes 3 M.2 slots (Key M, B, E) for flexible expansion
- Multiple I/O: USB 3.2, USB 2.0, COM, SATA, 8 DI/8 DO
- 4 x Intel 2.5G LAN, with 2 supporting PoE
- Supports HDMI 2.0b, DP, and VGA
- Wireless Time-Sensitive
- Networking (WTSN) support
- Expandable version available



iEP-7040E

- Powered by Intel® 15th Gen Core™ Ultra
- Integrated NPU for AI acceleration
- High-performance Intel® Arc™ Graphics for edge computing
- DDR5 memory up to 64GB
- Fanless, rugged design for industrial environments
- Wide operating temperature range: -25°C to 50°C
- Dual wide-range DC input: 9V/19V to 36V
- 3 x Intel® i226-IT, 2 x Intel® i210-AT with PoE
- Features 8DIs/8DOs with
- 36V sink/source isolation (for DIO SKU)



ASRock
—Industrial—

Compact yet powerful

Nuvo-11000

- Intel® Core™ Ultra 200 Series
- 35W/65W TDP
- Fanless, rugged design
- 25°C to 70°C operating temperature range
- Up to 5 x 2.5GbE, 1 x GbE ports with PoE+ and jumbo frame
- Expansion Cassette supports PCIe add-on cards
- Includes MezIO® interface
- Optional 10GBASE-T Ethernet
- Offers up to 8 x USB 3.2 Gen2 ports
- 4 isolated DI and 4 isolated DO channels



POC-700-FT

- Powered by Intel® i3-N305 or Atom® x7425E processors
- Supports up to 16GB DDR5-4800 SODIMM
- Flat-top heatsink design for compact thermal efficiency
- Fanless operation in -25°C to 60°C environments
- 4 x GbE PoE+ ports and 4 x USB 3.2 Gen2 with screw-lock
- 4-CH isolated DI and 4-CH isolated DO
- Dual display output: DP++ and HDMI 1.4b
- MezIO® interface for flexible expansion



NEOSYS
TECHNOLOGY

The BOXERS

BOXER-6647-MTH

- Runs on Intel® Core™ Ultra 5/7 processors
- Supports up to 64GB DDR5 via dual SO-DIMM
- Accessible trays for
- M.2 2280 NVMe and 2.5" SSD
- M.2 3052 B-Key slot for 5G module support
- Offers 4 x USB 3.2 Gen 2 Type-A ports
- Onboard TPM 2.0 for hardware security
- 9V-36V wide range DC input
- Operates in -20°C to 60°C temperature range



BOXER-6711-ADN

- DIN rail mount design for embedded automation
- Intel Atom® x7211E or N-Series processors
- DDR5 4800 up to 32GB
- Wide 9-36V DC input for industrial environments
- Onboard TPM 2.0 for secure applications
- 20°C to 60°C operating temperature
- Compact and reliable for space-constrained deployment
- Ideal for automation and control applications



MECON
Always Agile, Always Ahead.

AI SOLUTIONS

Artificial Intelligence (AI) is rapidly transforming the landscape of industrial automation and control. AI-powered solutions are enabling smarter, faster, and more efficient operations across manufacturing, logistics, and critical infrastructure. Industrial computers designed for AI must deliver powerful processing capabilities, reliability in harsh conditions, and seamless integration with sensors, cameras, and control systems. Modern AI solutions increasingly rely on GPUs, TPUs, and edge accelerators to run machine learning models on-site, minimizing latency and ensuring real-time decision-making.

Key Applications of AI Hardware in the Industrial Sector:

Machine Vision Systems: Used in automated quality control, AI-powered vision systems detect defects, sort products, and ensure precision

Predictive Maintenance: Edge AI devices process sensor data in real time to predict equipment failures, reducing downtime and optimizing maintenance schedules.

Autonomous Mobile Robots (AMRs): rely on AI-driven navigation and object recognition to safely and efficiently operate in dynamic industrial settings.

Energy Management: AI algorithms analyze usage patterns to optimize power consumption, aided by edge AI platforms integrated into management systems.

In the following sections, we will present our lineup of selected AI-ready industrial computers.



The NEXCOM AIEdge Series

Built for the toughest environments, designed for real-time AI processing at the edge. With rugged durability, these units integrate machine vision, deep learning, and automation seamlessly. Whether in factories, logistics, or smart manufacturing, NEXCOM's AI Edge solutions bring efficiency, precision, and intelligence.

AIEdge-X5 Series Intel + NVIDIA



- Ideal for high-performance storage and GPU-based AI workloads
- Supports Intel® AMT
- Features 4 x 2.5" HDD/SSD bays with support for RAID 0/1/5/10
- Expandable via PCIe x16, PCIe x4, and PCI slots for GPU

AIEdge-X3 Series Intel + NVIDIA



- Designed for edge AI workloads
- Compact yet high-performance
- PCIe x16 slot supports high-power graphics cards up to 350W
- Compatible with NVIDIA RTX™ 40 series and Quadro GPUs up to RTX 6000 Ada

AIEdge-X70 NVIDIA Jetson



- Powered by NVIDIA® Jetson Orin™ NX with up to 100 TOPs
- Features 1024-core NVIDIA® Ampere GPU with 32 Tensor Cores
- Includes 4 x Intel® GbE LAN ports for robust networking
- Extended temp. -20°C to 60°C

The NEOUSYS NRU Series

The Neosys NUVO-10000 series combines Intel processors with NVIDIA GPU computing, while the NRU series is built around the NVIDIA Jetson platform, delivering rugged, IP66 waterproof and dustproof AI solutions designed for the most demanding environments and equipped with dedicated GMSL2 cameras

NRU-200 Series High Performance



- Powered by NVIDIA® Jetson AGX Orin™ with JetPack 5.1.1 or 6.0
- Fanless rugged design with operating range from -25°C to 75°C, no throttling at high temps
- Equipped with 2 x 2.5GbE and 4 x PoE+ Gigabit Ethernet ports
- Includes dual front-accessible 2.5" SSD trays and 1 for M.2 NVMe SSD
- M12 coded connectors
- Wide 8V-48V DC input with ignition power control

NRU-100 Series Slim and powerful



- Designed for edge AI applications with up to 100 TOPs inference
- Thermal optimization for zero throttling at high ambient temperatures
- Powered by NVIDIA® Jetson
- Rugged fanless operation with extended temperature ranges from -25°C to 75°C, including IP66
- Support for high-bandwidth camera interfaces such as 8x GMSL/GMSL2 via FAKRA Z



NRU-50 Series Compact



- Powered by NVIDIA® Jetson Orin™ NX or Xavier™ NX modules with JetPack 5.1.1
- Rugged fanless designs with wide operating temperature ranges from -25°C to 70°C and MIL-STD-810H, EN 50155
- Support for 4x PoE++ GbE ports or 4x GMSL2 automotive cameras via FAKRA Z, enabling high-bandwidth video analytics and autonomous vehicle applications

Notable products

NRU-170-PPC Series

- Powered by NVIDIA® Jetson Orin™ NX or Orin™ Nano with JetPack support
- IP66-rated for waterproof and dustproof
- 10.1" touchscreen with 1920x1200 resolution, 1000 nits brightness, 1000:1 contrast
- 25°C to 60°C fanless operation with no throttling at 60°C
- Supports 6x GMSL2 automotive cameras via FAKRA Z connectors (NRU-171V-PPC)
- Provides 4x PoE+ GbE via M12 X-coded (NRU-172S-PPC)
- Equipped with CAN FD and RS232



NRU-52S+ / NRU-52S

- Rugged NVIDIA® Jetson Orin™ NX or Xavier™ NX Edge AI Computer
- 4x PoE++ Ports for Intelligent Video Analytics
- Rugged -25°C to 70°C fanless operation
- 4x IEEE 802.3bt PoE++ GbE ports with screw-lock
- 2x mini-PCIe sockets for WIFI/GNSS/NVMe/CAN modules
- 1x 3042/3052 M.2 B key socket for 4G/5G
- 1x hardware configurable RS232/RS422/RS485 port
- 8V to 35V wide-range DC input with built-in ignition power control



AIoT AI controllers

iEP-6010E

- Based on NVIDIA Jetson Orin NX 16GB SOM, up to 157 TOPS
- 2 x PoE ports with IEEE 802.3AF support
- Designed for shock, vibration, and wide temperature range
- 12-36V Phoenix DC input with optional USB-C (PD3.0)
- Supports mobile use or redundant power via second input
- Wall, DIN-Rail, or VESA mount options depending on SKU
- Offers 2 x four-lane MIPI-CSI2 for camera modules
- Ideal for industrial AI and edge inferencing



NVIDIA Jetson Developer Kits

- Support AGX Orin, Orin NX, and Orin Nano SOMs (4GB to 64GB)
- AI compute power up to 275 TOPS (INT8)
- Includes POE support and wide operating temp tolerance
- Phoenix DC input for flexible industrial power options
- Supports MIPI-CSI2 camera connectors (optional board)
- Suitable for high-performance edge AI prototyping
- Covers full Jetson SOM range from Nano to AGX Industrial
- JetPack software support ensures optimized AI performance



Notable products

AIEdge-X®310

- Industrial AI system with 12th to 14th Gen Intel® Core™ CPUs
- Supports NVIDIA® GPUs up to RTX 6000 Ada, 350W
- 2 x DP, 2 x LAN (1GbE/2.5GbE), 4 x USB 3.2, 2 x COM
- Expandable via PCIe x16 slot for graphics cards
- Supports dual SATA SSDs and M.2 storage
- Modern, compact design for industrial AI deployment
- Handles intensive workloads in harsh conditions
- Suitable for machine vision, robotics, and analytics



AIEdge-X®80

- Jetson Orin™ NX-based compact edge AI system
- Up to 100 TOPS with 16GB version, 70 TOPS with 8GB
- Ampere GPU with 32 Tensor Cores for edge inferencing
- 4 x Intel® GbE LAN, 4 x USB, 2 x COM, 1 x HDMI
- Supports M.2 storage, 5G/LTE, and Wi-Fi via mini-PCIe
- Operates in -20 to 60°C
- DC-in via 24V Phoenix connector
- Ideal for smart city, automation, and surveillance
- Compact, rugged build for AI at the edge



Notable products

MXM-ACMA-PUC

- Intel 12th/13th Gen Core™ CPU
- Up to 35W TDP
- MXM 3.1 Type A GPU support (up to Arc™ A370E)
- Supports up to 64GB DDR5 and multiple M.2 slots
- HDMI + 4 x DP outputs via MXM for multi-display setups
- 3 x 2.5GbE + 1 x 1GbE, plus GPIO and 2 x COM ports
- USB 3.2 Gen 2 x 2 and USB 2.0 x 2
- 19-24V DC input
- Suited for AI vision, medical, and high-performance edge use



UP XTREME I14 EDGE

- Powered by Intel® Core™ Ultra 5/7 processors
- Supports up to 64GB onboard LPDDR5 RAM
- Offers up to 4 simultaneous display outputs
- Features 2 x M.2 M-Key, 1 x M.2 B-Key (5G), 1 x E-Key (Wi-Fi)
- Dual LAN: 2.5GbE + 1GbE for network flexibility
- USB 3.2 Gen 2: 2 x Type-A, 1 x Type-C
- Wide DC input range: 9-36V
- Compact industrial mini PC
- Ideal for AI workloads



INDUSTRIAL TOUCH COMPUTERS

Industrial Panel PCs are a cornerstone of modern automation systems, combining computing performance with ruggedized, touch-enabled displays in a single, compact unit. Engineered to withstand harsh environments, extreme temperatures, dust, vibration, and moisture, Panel PCs serve as reliable human-machine interfaces (HMIs) across a wide range of industrial applications. This chapter explores their essential role in smart manufacturing, control systems, and operational efficiency.

Common Use Cases for Industrial Panel PCs:

Factory Automation: Panel PCs are widely used as HMI terminals for managing and monitoring programmable logic controllers (PLCs), robotic arms, and conveyor systems.

Process Control: In sectors like oil & gas or chemicals, Panel PCs provide secure and stable interfaces for supervising critical operations and sensor data.

Warehouse & Logistics: Mounted on forklifts or at docking stations, they assist with inventory tracking, barcode scanning, and route optimization.

Food & Beverage Industry: With stainless-steel housings and IP69K-rated designs, specialized Panel PCs are ideal for cleanroom environments where frequent washdowns are required.



In the following pages, we present our selection of industrial-grade Panel PCs.

The NEXCOM Panel PC (PPC) Series

Fanless embedded panel PCs with industrial motherboards, slim bezels, and IP65-rated fronts—ideal for vertical applications like self-service kiosks, smart retail, and payment machines, thanks to flexible mounting and robust design.

XPPC Series Indoor solution



- Panel sizes: 10.1, 15.6, 21.5, 23.8 inch
- Intel Core gen.11, or N97, J3455
- Max RAM: 32GB DDR4 (Core)
- Storage: M.2 NVMe or SATA SSD
- Touchscreen: 10-point P-CAP 1280x800(10.1") or 1920x1080
- Fanless, IP65 front,
- 0-50°C operating range
- 12V or 19V DC input
- VESA, panel, open frame

SPPC Series Slim solution



- 15.6 inch touchscreen panel
- With Twin Lake N150 CPU
- AF coating
- Wall flush mount due to the hidden connectors
- 0-45°C operating range
- Extremely small thickness <20mm

HPPC Series Semi-outdoor solution



- 12 and 15.6 inch touchscreen panel
- Amston Lake X7211RE CPU
- AF + AG coating
- Sunlight readable (1800 nits)
- 20-60°C operating range
- Smart cooling solution:
- 2 x PWM Smart Fan
- Auto-dimming control
- Anti-UV & IR treatment
- Power input: DC 12V to 24V

The NEXAIOT Panel PC (PPC) Series

NEXAIOT provides rugged Industrial Panel PCs (IPPC) with powerful Intel® processors, expansion slots, and a durable NEMA 4/IP66 aluminum bezel, ideal for harsh environments. A lighter version (APPC) features a user-friendly touchscreen, compact NEMA 4/IP65 design, and Celeron-grade CPUs.

IPPC Series Harsh environment



- Rugged heavy industrial panel PCs with IP66-rated front panels and wide VESA/panel/wall/stand mounting options
- Touchscreens are 10.1" to 21.5" 10-point P-Cap multi-touch support in flush, zero bezel designs
- CE Certificates including EN61000-6-2/EN61000-6-4
- PCIe Expansion Slots

APPC Series Light industrial environment



- Rugged flush panel PCs with IP65-rated front panels and versatile mounting support
- 12" to 21.5", available in 4:3 XGA/SXGA and 16:9 FHD aspect ratios, with Res or P-Cap touch
- Intel® Celeron Processors like N97 (quad-core, 2.0GHz) in fanless design for silent and reliable operation in harsh environments

nHMI Series PLC/Browser HMI



- Compact and cost-effective HMI panel PCs designed for industrial automation
- 10.2" and 7" widescreen TFT displays with touch interfaces
- Library of symbols, support for multiple automation protocols, remote access
- Reliable HMI operations in industrial environments.

Heavy industry environment

NEXIOT

IPPC 2111-C11

- 21.5" FHD 16:9 industrial panel PC with 10th Gen Intel® Core™ CPU support (up to 35W)
- Stylish metal chassis with zero-bezel P-Cap touchscreen
- Up to 32GB DDR4, dual Intel® GbE LAN, DP++, dual USB 3.0
- Expandable via Mini PCIe, M.2 (3042/3052 & 2242)
- RS-232 and isolated RS-232/422/485,
- 24VDC input,
- PCIe x4 slot for expansion cards



APPC 1960-A01

- 19" SXGA 4:3 flush panel PC with Intel® Processor N97
- Fanless system with resistive 5-wire touch
- Slim bezel design
- 8GB DDR5 installed, additional DP and USB-C for second display
- Dual Intel® 2.5GbE, 3x COM, 2x USB, Mini PCIe and 2x M.2
- IP65 front panel, supports VESA, wall, and stand mounting
- 24V DC input



Light environment

NEXCOM

XPPC 16-10N97

- 15.6" FHD 16:9 panel PC with slim bezel and 10-point P-Cap multi-touch
- Intel® Processor N97, up to 3.60 GHz
- Front panel IP65 rated with VESA/Panel/Open Frame mounting support
- 1x DDR4 SO-DIMM (up to 16GB), 1x M.2 Key M for storage
- 1x full-size miniPCIe for Wi-Fi module
- 12V DC power input



HPPC 15-10X7211

- 15" 4:3 panel PC
- high-brightness (1800 nits)
- with optical bonding and anti-UV/IR coating
- Intel Atom® x7211RE Processor, up to 3.2 GHz
- Embedded light sensor for auto-dimming
- dual PWM smart fans
- 1x DDR4 SO-DIMM (up to 32GB)
- 1x M.2 Key M, 1x Mini PCIe
- Wide DC input range: 12V-24V



Powerful and slim

MEON
Always Agile, Always Ahead.

OMNI-3155-ADP

- 15" XGA modular HMI panel PC with 12th Gen Intel® Core™/Celeron® CPU
- DDR5 4800 MHz, up to 64GB
- P-CAP or resistive touch options
- M.2 2280 M-Key (PCIe x4 NVMe) for storage
- Fanless aluminum chassis
- IP65-rated front bezel
- Supports VESA and built-in panel mounting
- 20°C-50°C operating temperature
- Wide 9-30V DC input



ACP-2106

- 10" WXGA TFT panel PC with Intel® N-series Processor
- DDR5 4800MHz up to 32GB
- Projected capacitive multi-touch
- Aluminum IP65 front bezel
- Fanless design with VESA and built-in panel mount support
- 5°C ~ 50°C operating temperature
- 12V DC jack power input



Harsh environment

ATEX Grade

- 19" ATEX panel PC with 1000 nits LCD and CID2 / ATEX Zone 2 certification
- Intel® Core™ i5-1135G7 processor
- Fanless enclosure
- Intelligent heater supports extreme cold environments down to -40°C
- Streamlined heat dissipation and rugged design for hazardous locations



Stainless steel

- 19" IP69K stainless steel panel PC with Intel® Core™ i5-1235U
- SUS316 housing for food/chemical industry, waterproof to IP69K
- Flat, edge-to-edge easy-clean front design
- optional optical bonding
- Fanless system, glove/rain mode support,
- Waterproof cable conduit
- Supports VESA and optional yoke mounting



MOBILE COMPUTING SOLUTIONS

Industrial-grade computing is not limited to factory floors or control rooms - many mission-critical operations rely on rugged, high-performance PCs in mobile use. Industrial PCs designed for transportation deliver reliable computing power in motion. This chapter focuses on PCs built to meet the stringent standards of railway (EN 50155), marine (DNV/GL), and automotive applications, providing dependable performance under vibration, shock, wide temperature fluctuations, and power instability. Built for 24/7 operation, these systems feature robust enclosures, secure mounting options, and wide-range power input, ensuring uninterrupted functionality.

Key Use Cases for Mobile Industrial PCs:

Passenger Information Systems (PIS): Deliver travel updates, route information, and safety messages through digital signage and audio announcements.

Telematics and Fleet Management: Collect and transmit vehicle data such as location, speed, fuel usage, and diagnostics for efficient fleet monitoring

Surveillance and Security: Power on-board video monitoring systems, integrating multiple IP cameras and storing footage for analysis and compliance.

Maritime Navigation and Control: reliable computing units in ship bridges for radar display, navigation data processing, and engine monitoring under marine certifications.

In the pages ahead, you'll find a selection tailored to meet the demands of modern transportation and logistics environments.



NEXCOM Mobile Computing Solutions

NEXCOM's mobile computing portfolio is structured into three main specialized product lines: the VTC Series for in-vehicle computing, the nROK Series for railway applications, and the ATC/aROK Series for advanced telematics solutions. The portfolio features also VMC Terminals, Jetson based products and accessories.

VTC Series In-Vehicle Computer



- | General purpose high performance telematics computer
- | 5G/LTE, Wi-Fi, BT, CAN/OBD, GPS + DR, POE and multi SIM integration
- | IP Protection
- | Proprietary power management
- | AI application with GPU card add on Backup battery

nROK Series Railway Computer



- | Fanless and rugged design
- | 5G/LTE, Wi-Fi, BT, CAN/OBD, GPS + DR, PoE and multi SIM integration
- | Optional isolated 24-110VDC powerinput
- | AI application with GPU cards add on
- | EN50155 & EN45545 certified

ATC/aROK Series Telematics w/GPU card



- | Design for AI application Rail, ANPR, video analytics and autonomous machines applications
- | Support to add on PCIe16 GPU cards, Google, Hailo TPU modules
- | 5G/LTE, Wi-Fi, BT, CAN/OBD, GPS + DR, POE and multi SIM integration
- | Certified E13, EN50155, EN45545-2,

Smarter Infotainment Onboard

nROK 7270



- | Fanless Rolling Stock Computer for Infotainment Application
- | 12/13/14th Gen Intel® Core™ processor (65W/35W)
- | Modular design for optional expansion boards
- | 2 x 2.5" SSD compatible with 15mm disk
- | 1 x Mini PCIe, 2 x M.2 (Key B for WWAN, 1 x M.2 (Key E) for WLAN
- | Power input 24V/36V DC w/o isolation
- | CE/FCC, UKCA, EN 50155, EN 45545-2 certified

VTC 6231-IP



- | IP66 Fanless In-Vehicle Computer for Infotainment Application
- | Intel Atom® x7433RE quad-core processor
- | 2 x 2.5GbE LAN port
- | Dual display VGA, HDMI output up to 4K support
- | 1 x external accessible 2.5" storage
- | Eight nano-SIM cards
- | Up to four WWAN modules support
- | CE/FCC, UKCA, E mark certified

Intuitive Driver Consoles

VMC 1110-PRO

- 7" Rugged Vehicle Mount Computer
- Built-in Intel Atom® x7211RE dual-core processor, 1.0GHz
- 7" 1024x600, 1000nits TFT LCD
- 4-Wire resistive touch screen
- 5G NR, Wi-Fi 6E optional support
- HDMI® output for additional display
- CE/FCC, UKCA, E13 certified



AI for Public Safety

NEXCOM

VTC 7280-C5

- Fanless In-Vehicle Computer for Video Surveillance Application
- Intel® Core™ Ultra 100H-Series processor
- 1-port 2.5 GbE PoE++ & 4-port 2.5 GbE PoE+, total 80W
- 2 x 2.5" SATA 3.0 storage (removable, 15mm)
- 2 x Mini PCIe
- 1 x M.2 (Key B) for WWAN
- 1 x M.2 (Key E) for WLAN
- 9V-36V DC-IN with ignition control
- CE/FCC, UKCA, E13 certified



In-veh./Rail Accelerated Edge AI

ATC 3750-IP7-8M/WI8MR

- NVIDIA® Jetson AGX Orin™
- IP67 rating Edge AI computer for in-vehicle & railway applications
- 8 x MIPI GMSL2 SerDes ports
- Expandable for GNSS, LTE/5G NR & Wi-Fi 5/6E
- NEXCOM Acceleration Linux (NAL) integrated w/ JetPack™ 6.1
- 24V-110V DC-IN for railway with ignition control
- CE/FCC, UKCA, E mark, EN 50155, EN 45545-2 certified



NEXCOM

ATC 3750-IP7-6C/WI6CR

- NVIDIA® Jetson AGX Orin™
- IP67 rating Edge AI computer for in-vehicle & railway applications
- 6-port GbE PoE+ (X-coded)
- Expandable for GNSS, LTE/5G NR & Wi-Fi 5/6E
- NEXCOM Acceleration Linux (NAL) integrated w/ JetPack™ 6.1
- 9V-36V DC-IN with ignition control
- CE/FCC, UKCA, E mark, EN 50155, EN 45545-2 certified



Data Gateways

VTC 1921-C2IP

- IP67 Fanless 2-CH PoE+ In-Vehicle/Rolling Stock IoT DATA Gateway
- Intel Atom® x7211RE dual-core processor
- 2 x PoE+ support, total 15W
- Built-in 1 x CAN FD
- 1 x CAN bus 2.0B
- Built-in u-blox M9N GNSS
- Option M9N with DR support
- 4 x nano-SIM for WWAN modules
- CE/FCC, UKCA, E13, EN 50155, EN 45545-2 certified



Uninterrupted Operation

NEXCOM

VTK-SCAP-M/S

- SuperCap BBU for In-Vehicle/Railway Application
- High power density EDLC (Electric Double Layer Capacitor) technology
- Over 500,000 cycle life (charging/discharging), up to 200W output
- Operating temperature: -35°C-80°C
- DK for software management
- Max. expansion 1 x master + 3 x slave
- CE/FCC, UKCA, E13, EN 50155 certified



Notable products

POC-751VTC

- Intel® Core™ i3-N305, 15W TDP
- Ultra-compact In-Vehicle Computer
- SocketCAN, and mPCIe for WiFi/ 4G/ 5G Modules
- 4x GbE PoE+ ports/ 4x USB3.2 Gen 2 with screw-lock
- DP++/ HDMI 1.4b dual display outputs
- 2x isolated CAN 2.0 port, supporting SocketCAN in Linux
- 2x mPCIe for WiFi/ 4G/ 5G module with conduction-cooled heatsink
- 8-CH isolated DI & 8-CH isolated DO
- 8V - 35V DC input with built-in ignition power control



FLYC-300

- Low-SWaP AI Mission Computer
- Powered by NVIDIA® Jetson Orin™ NX
- Low Size, Weight and Power (SWaP) at only 297g
- Up to 100 TOPS GPU by NVIDIA® Jetson Orin™ NX
- Supports multiple camera and sensor interfaces
- 2x GbE and 2x USB3 for RGB/ Infrared/ hyperspectral cameras and lidar/ radar
- 2x GMSL2 for HDR/ 3D cameras
- Built-in UART and CAN to interact with flight controller
- 1x M.2 2230 for storage and 4G/5G communication ready



NEOUSYS TECHNOLOGY

Notable products

Nuvo-9100VTC

- Intel® 14th/ 13th/ 12th-Gen Core™.65W TDP in-vehicle computer
- 4x or 8x 802.3at PoE+ ports via M12 or RJ45 connectors
- 1x USB 3.2 Gen2x2 type-C and 8x USB 3.2/ 2.0 type-A ports
- On-board isolated CAN bus for in-vehicle communication
- 4-CH isolated DI and 4-CH isolated DO
- M.2 Gen4 x4 NVMe SSD slot
- 8V to 48V wide-range DC input built-in ignition control
- 2x SATA ports with 1x hot-swappable HDD tray, RAID
- E-Mark/ EN 45545 certified and EN 50155 EMC compliant



PB-9250J-110V

- 9250 w-s Standalone Supercapacitor-based UPS Module with 110V DC Input for Railways
- Universal standalone power backup module
- Supports 43-160V wide-range DC input for railway
- Supercapacitor-based, -40 to 70°C operation for EN 50155 OT4 class conformity
- 9250 watt-second energy capacity, Maximum 120W output
- Over 10 years lifespan, or 500,000 charge/ discharge cycles
- Patented CAP energy management technology
- EN 50155 and EN 45545 certificate



NEOUSYS TECHNOLOGY

SPECIAL USE SOLUTIONS

Military grade & waterproof



SEMIL-2000

- 19" / 2 rack mount IP69K waterproof PC
- Intel® 14th / 13th / 12th-Gen Core™ processor
- 40°C to 70°C wide-temperature fanless operation
- 2x 10GbE, 1x GbE, and 4x 2.5GbE PoE+ via M12 X-coded connectors
- 2x SocketCAN and 2x USB3.2 Gen1 Type-C w/ DP alternative mode
- 8V to 48V wide-range DC input with reverse polarity protection and built-in ignition power control
- MIL-STD-810H compliant



SEMIL-1700GC

- IP67 Waterproof GPU Computer supporting NVIDIA® RTX 2000 Ada or L4
- Intel® Xeon® E or 9th / 8th-Gen Core™ CPU
- Patented waterproof 2U 19" chassis for rack or wall-mount
- Up to eight 802.3at Gigabit PoE+ ports via M12 X-coded connectors
- VGA, USB 2.0 and COM ports via M12 A-coded connectors
- 8-48V wide-range DC input with built-in ignition power control
- MIL-STD-810G and EN 50155 EMC certified



Networking solutions

FWS-7851

- 1U Rackmount Network Appliance
- 12th/13th Generation Intel® Core™ Processors
- Intel® W680 Chipset
- DDR5 SODIMM x 2 ECC/non ECC, up to 64GB
- 2.5" SATA SSD x 2 (Optional: 3.5" x 1), M.2 2242 M-Key (PCIe/[x4/]) for storage
- Intel® I226-V 2.5GbE RJ-45 x 10 (Including 2 pairs Bypass) + Intel® I210-IS GbE SFP x 2, optional: 10GbE SFP+ x 2 (PCIe/[x4/]) via PER-T639)
- Supports NIM Slot x 1



ICS-6280

- DIN Rail Industrial-Grade Network Appliance with
- Intel Atom® Processor X Series, Intel® Pentium®/Celeron® N and J Series Processor
- 10/100/1000Base-TX Ethernet x 4
- Supports up to 2 Pairs LAN Bypass (Optional)
- 260-pin DDR4 3200MT/s SODIMM with IBECC support x 1
- Mini Card Socket x 1, Micro SIM Socket x 1
- 9-48Vdc power redundancy input with Terminal Block x 2
- 2.5" SATA SSD x 1



Industrial tablets

RTC-1010RK

- 10.1" Rugged Tablet
- Android™ 11
- 10.1" WXGA (1280 x 800) 800-nit/300-nit TFT LCD
- Rockchip RK3399 Processor
- Onboard: LPDDR4 Memory, 2GB/4GB (Default) eMMC 64GB (Default)/128GB
- Wi-Fi 802.11 a/b/g/n/ac, Bluetooth 5.2, LTE (Optional)
- 8MP Front and 8MP Rear Camera
- RS-232/422/485 COM Port + 10/100/1000 Base-T RJ-45
- USB 3.2 Gen 1 x 2 (USB Type-C x 1), USB 2.0 x 2



RTC-1020

- 10.1" Rugged Tablet
- 11th Gen Intel® Core™/Celeron® Processors
- 10.1" FHD (1920 x 1200) 450-nit/800-nit TFT LCD
- Onboard LPDDR4X, 8GB (Default)/16GB/32GB
- M.2 SSD, 64GB (Default)/128GB/256GB
- WiFi 802.11 a/b/g/n/ac, Bluetooth 5.1, LTE (Optional)
- 5MP Front and 8MP Rear Camera
- RS-232/422/485 + 10/100/1000 Base-T RJ45
- USB 3.2 Gen 2 x 2 (USB Type-C x 1), USB 2.0 x 2
- 2D Barcode Scanner (Optional)



Robotic control

Handheld robotic controller

- Intel® Core™ i5-1235U
- 10.1" 1920 x 1200 IPS LED panel with direct optical bonding.
- Designed for all-weather use with IP65 rating for dust and water resistance.
- Meets MIL-grade standards for drop, shock, and vibration protection.
- Supports WiFi, Bluetooth, and optional 4G/5G connectivity.
- Includes one removable battery for easy replacement.



Robust suitcase controller

- 15.6" Intel® Core™ i5-1235U
- Rugged Ground Control Station Suitcase
- Built with IP65 dust and water resistance
- Meets MIL-grade standards for drop, shock, and vibration protection
- Includes two replacement batteries for extended use
- Offers long battery life, ideal for UAV pilots
- Housed in a rugged, waterproof case for enhanced protection and easy transport



Rugged mobility

Rugged laptop

- Ultra Rugged Laptop
- 12th generation Intel® Alder Lake processor
- 15.6" FHD PCAP touch panel with anti-glare technology.
- Optional discrete Nvidia GPU available
- Dual hot-swappable batteries ensure all-day operation
- Constructed with magnesium alloy and double injection for drop protection
- Certified IP65 for waterproof and dustproof durability with optional IP66 upgrade



Rugged tablet

- 15.6" Windows Rugged Tablet
- Intel® Core™ i5-1235U
- 15.6" FHD PCAP touch display with sunlight-readable anti-glare solution
- Optional Nvidia and Intel discrete graphics available
- Hot-swappable battery design for extended use
- Supports USB Type-C with PD 3.0 and ALT mode
- Built to MIL-STD-461G and MIL-STD-810H standards
- IP65 rated for water and dust resistance



DISPLAY SOLUTIONS

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"

Projectors

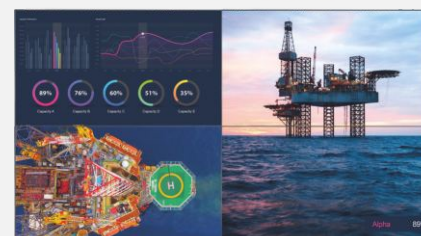
iivama

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



SHARP / NEC



Projectors

Laser projectors - Sharp/NEC laser projection brings benefits through long lasting maintenance-free operation of typically 20,000 - 30,000 hours, leading to significant savings in terms of operational costs. Impressive visualisation with versatile projection characteristics alongside high installation flexibility makes installation easy and worry free.

- | Super silent
- | Long-life and zero maintenance
- | Versatile installation capabilities

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.

LITEMAX®



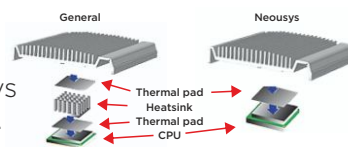
UNIQUE TECHNOLOGY

Used by our partners in their designs

Excellent Thermal Design

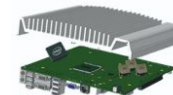
Dedicated Fanless Architecture Design

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.



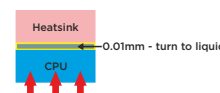
Well-Arrangement of Hot Components

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 the heatsink closer and increases the thermal conductivity.



Patented Expansion Cassette

Neousys' Patented Cassette innovates a brilliant way for accommodating an 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 a 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.

ASRock Industrial Computer was established as an independent company in July 2018, focusing on the fields of motherboards, edge computers, and other products for the manufacturing, business, and retail industries. It is the world's leader in Industrial PC motherboards, with customers located around the globe. Previously, it had been a business unit of ASRock Inc. (est. 2002) that was set up in 2011. ASRock Inc. 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.

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 players 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 devices 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.

NexAloT was incorporated in 2014 and is a subsidiary of the NEXCOM Group. NexAloT is committed in delivering Industry 4.0 total solution to clients globally, which includes iAutomation (Level 1), M2M Gateway (Level 2), IoT Edge (Level 3) and Cloud-based Enterprise War Room (Level 4) of the Industrial IoT ecosystem.

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.

SHARP/NEC founded in 1985 has been constantly developing to its role as a total display solutions company. Headquartered in Tokyo, Japan. In 2020 NEC Display Solutions started business operations as a subsidiary of Sharp and changed its name to Sharp NEC Display Solutions.

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Serbia@microdis.net
Slovakia@microdis.net
Slovenia@microdis.net
Turkiye@microdis.net*
Ukraine@microdis.net

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*Electromechanical Competence Center for Turkiye

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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RICARDO & BARBOSA

RAKON
SAVOY TECHNOLOGY
SHARP/NEC
TRASNA

U-BLOX

WEZAG

Industrial computers and panels
 Industrial motherboards (3.5", mini-ITX, ATX...)
 Power, THT and chip LEDs and LED modules
 Interconnect components, electronic housings, 19" cabinets
 Cellular IoT modules based on the leading Qualcomm technology
 Crystals, oscillators, filters and sensors
 Programmable oscillator web-shop
 Military, medical and industrial connectors
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 SIM-Holders, memory card connectors, USB connectors
 Large Format Displays
 Optocouplers, optoisolators
 Signal connectors
 Automotive and white goods connectors
 GPS, Galileo, Glonass, Iridium antennas
 Machines and systems for wire crimping
 Reed switches, sensors and relays
 Modules: Cellular, AI, Smart (SOM), Short Range
 Terminal block connectors - screw, spring and pins
 Wide-temperature fanless computers
 Industrial computers and panels
 Industry 4.0 computer solutions
 Crimping tools like standard applicators and heavy duty dies for loose terminals
 MIL & Space grade Frequency control solutions
 Automotive and white goods connectors
 Displays & projectors
 Cellular IoT modules (born from u-blox), (e)SIM, chip design, device management
 Modules: GNSS, WiFi, Bluetooth, ZigBee, Thread, Matter, NFC; Services: GNSS antennas
 Hand tools for crimping, pneumatic presses

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