premio

PRODUCT
SOLUTION GUIDE
2025

INDUSTRIAL COMPUTING
SOLUTIONS FROM THE
EDGE TO THE CLOUD

BUILT RUGGED. BUILT READY.

intel partner Titanium

NVIDIA Preferred Partner

aws Qualified Device AWS IoT Greengrass

Ignition! READY

YOUR TOP CHOICE PARTNER IN INDUSTRIAL COMPUTING FROM THE

EDGE TO THE CLOUD

Premio is a global solutions provider specializing in computing technology from the edge to the cloud. We design and manufacture highly reliable, world-class computing solutions for enterprises with complex, highly specialized requirements for over 30 years. Our engineering specialty and agile manufacturing pushes the technical boundaries in Embedded IoT Computers, Rugged Edge Computers, HMI Displays, Panel PCs, and SuperCAP UPS Systems.

At Premio, we go to extraordinary lengths to solve the most formidable challenges faced by our customers. We do so by becoming more than their partner: we become their 'Inside Outsource' - an extension of their businesses, work cultures, manufacturing processes and operations, modulating our solutions to answer their special needs with speed, agility and precision.

Headquartered in Los Angeles, California with a state-of-the-art facility (ISO9001, ISO2001, ISO13485) and strategic locations in worldwide, Premio provides robust product engineering, flexible speed to market, and unlimited manufacturing transparency. Premio shares a promise to deliver the best possible next generation industrial PC solutions compliant with the highest standards and certifications for our customers in:

- Industrial Automation
- Transportation
- Food & Beverage
- Military
- Kiosk & Retail
- Security & Surveillance
- Intelligent Healthcare
- Machine Vision & Robotics

OUR MISSION

Premio dedicates its engineering resources and manufacturing services to meet the incredible demands of computing across industrial and enterprise deployments. Our global teams strive for the highest standards in innovation and technology that translates into the design and mass production of our purpose-built computing solutions.

OUR VISION

"Your Success, Our Commitment." With this simple vision, Premio aims to address computing challenges with purpose-built products. Premio solves challenges for our customers by delivering solutions around the design, integration, validation, and deployment of our computing products in IoT and edge markets. Our 30+ years of industry-knowledge enable our customers to leverage high quality products and application ready hardware for a faster time to market.

OUR VALUE

Apart from our standard computing offerings, Premio also provides unique value to our customers through our robust engineering resources, environmental testing validation, manufacturing scale, supply chain & product lifecycle management, reverse logistics, and next generation computing design and innovation.

OUR CORE VALUES

We deliver our core brand values through the way we conduct business. Premio's core values of Innovation, Commitment, Collaboration, Agility, and Accountability guide our decisions to exceed expectations.

AGILITY
We are flexible, adaptable, and responsive to the change in demands of our customers, the market, and our environment. We are willing to learn and create new ideas to drive and embrace changes actively.

INNOVATION
We constantly strive to drive innovation into all aspects of our business to provide products that deliver reliability, quality, performance, and value creation.

COLLABORATION
We work together to contribute to the development of new products and services that will ensure the success of our customers.

ACCOUNTABILITY
We always hold ourselves accountable for our products, services, and actions to our employees, customers, and partners.

COMMITMENT
We offer our valued customers the highest possible standards of solutions. At Premio, we treat customers with dignity, respect, and courtesy. We listen objectively to their needs and respond in a timely, efficient, and responsible manner.

US BASED COMPANY WITH WORLDWIDE OPERATIONS

A STORY OF GROWTH & EVOLUTION

1989-2000

Premio, which means "Prize" in Spanish, emerged as "Premio PC", a personal computer manufacturer providing computers nationwide to many educational programs (K-12) around the nation. From its inception in 1989 to 2000, Premio pioneered and remained a trusted partner and manufacturer for many educational institutions in the United States.

2000

As computing technology advanced and became more commoditized, Premio proved to be resilient and achieved another milestone by evolving itself from its own personal computer in 2000 into a respectable contract manufacturer – providing a variety of highly specialized turnkey OEM integration processes and business services for some of the world's elite computing companies; many of which still exist today in its global operations.

This monumental shift demanded Premio to move its operational infrastructure into a fully automated 150,000 square feet Los Angeles based manufacturing facility that was fully customized for ultimate flexibility and unlimited scalability. Even today Premio's world-class manufacturing facility continues to be a testament for state-of-the-art automation and assembly for many leading OEMs in computing technology.

2000-2011

Starting from the year 2000, "Premio PC" transformed its brand identity into "Premio Inc." – becoming a pivotal partner and key advisor in manufacturing and servicing premier technology companies around the world. Furthermore, Premio also restructured its mission and core values around a customer-centric business model with "total customer satisfaction" driving its core.

By 2010, Premio Inc. achieved yet another milestone by successfully engaging with over 50+ customers worldwide ranging from enterprise level companies to start-ups that were eventually acquired by major fortune 500 companies.

Present

Today, Premio has successfully evolved into a full-service technology company that specializes in top-notch computing designs, scalable manufacturing for both variety and volume, and robust end-to-end business services that result in streamlined growth and success with global expansion

(Design – Manufacturing – Services)

2011-2017

In 2011 Premio decided to once again refine its business operations and developed more advanced technologies by investing into the research and development of home grown purpose-built Premio products in:

- Enterprise Servers and Storage Solutions
- Industrial Embedded Computing Solutions
- Industrial Touch Display Solutions

By combining our home grown products with our design capabilities plus our renowned OEM services, Premio's advantage lies within its ability in providing a customized turnkey solution that can scale efficiently but also seamlessly align with the goals of our customers, resulting in ROI growth and measurable success over time.

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APPLICATION

RAILWAY & ROLLING STOCK

EN50155 / EN45545

M12 Locking Ports

Shock & Vibration Resistant

High Performance

JCO-6000-ORN Series

NVIDIA Jetson AGX Orin

Visit P.41

8x GMSL2

10x USB Locking

12x M12 PoE

ACO-6000-RPL Series

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In-Vehicle Computer with Intel® 12th/13th Gen Processors

16x M12 PoE

FULL Certification EN50155 EN45545

RCO-3000-RPL Series

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Small Form Factor Computer with Intel® 12th/13th Gen Processors

4x M12 PoE

5G 3x SIM Slot

-25°C to 70°C Wide Temperature

IN-VEHICLE & AGV

Edge AI Enabled

Rich I/O Expansion

Shock & Vibration Resistant

Compact & Fanless

RCO-6000-RPL Series

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Industrial Computer with Intel® 12th/13th Gen Processors

GPU RTX 4000 SFF RTX 2000 ADA

6x SSD Storages

8x M12 PoE

JCO-3000-ORN Series

Mid-Range AI Computer with NVIDIA Jetson Orin NX and Orin Nano

Visit P.40

4x RJ45 PoE

OOB Remote Management

RCO-1000-EHL Series

Compact fanless embedded Computer with Intel® Elkhart Lake x6425E Atom® Processor

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5G 2x SIM Slot

Rich I/O Customizable I/O Modules

MINI 150 x105 x49 mm

-40°C to 70°C Wide Temperature

MACHINE VISION
INDUSTRIAL COMPUTERS

- Robust CPU Performance
- Rich I/O Expansion
- GPU Supports
- Industrial Grade

BCO-6000-RPL Series Visit P.23

High-Performance Industrial Edge Computer with Intel® 12th/13th Gen Processors

GPU
RTX A2000

Cost Effective
Industrial Alternative

VCO-6000-RPL Series Visit P.49

Machine Vision Computer with Intel® 12th/13th Gen Processors

4x
PCIe Gen 4 Slots

600W
GPU Power

Dual GPU
RTX 4000
SFF ADA

4x
PCIe
5.0, 4.0, 3.0

3U
Rackmount

Dual GPU
RTX 4070
RTX A4000 SFF

KCO-3000-RPL Series Visit P.51

3U Rackmount Fanned Industrial Computer with Intel® 12th/13th Gen Processors

SMART MANUFACTURING
TOUCH SCREEN COMPUTERS

High Efficient Computing

10" – 24" Bright Displays

Extended MTBF

Industrial Durability

AIO-200-ADL Series

All-in-One IP65 Industrial Panel PC

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IP65
Front Panel Protection

SLIM
5~6.2 cm Thick

ADL/ASL
Intel N97 and X7835RE CPU

MACHINE VISION MODULAR PANEL PC

VIO/PC600-MTL Series Visit P.62

High-Performance Panel PC with Intel® Meteor Lake CPU

4x
RJ45 POE

IP65
Front Panel Protection

PCIe 4.0
One PCIe x4 Slot

IP68/69K
Dust & Waterproof

SUS316
Corrosion Proof

SIO-300-ADL Series Visit P.67

Stainless Steel Industrial Panel PC

SMART CITY

RICH I/O
Flexible I/O and M.2 Expansions

Mini
150 x 105 x 49 mm

OOB
Remote Management

DCO-1000-ASL Series

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DIN Rail Intel® Atom® X7433RE Amston Lake Processor

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WCO-3000-EHL Series

Waterproof Intel® Atom® X6425E Elkhart Lake Processor

IP68/69K
Dustproof & Waterproof

M12
Optional 2x PoE

-40°C to 60°C
Wide Temperature

Visit P.37

ECO-1000 Series

Supercapacitor UPS Smart Backup System

200W
High Power Output

10Year
Extra Longevity

-25°C to 55°C
Wide Temperature

Cost Effective · **Power Efficient** · **Quick Deployments** · **Industrial Durability**

KIOSK & RETAIL

10“-21“
FHD PCAP Displays

Balanced I/O
Flexible I/O and M.2 Expansions

-10°C to 50°C
Fanless Design

HIO-200-ADL Series

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Open-Frame Panel PC with Intel® Atom® N97

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JCO-1000-ORN Series

NVIDIA Jetson Orin NX and Orin Nano Super

40 TOPS
Edge AI Enabled

Mini
150 x 105 x 61 mm

-20°C to 60°C
Wide Temperature

Rich I/O
Rich I/O Ports and M.2 Expansions

Visit P.20

BCO-500 Series

Intel® Atom® X7835RE and N97

Mini NUC
Intel® NUC Alternative

Dual 4K
DP and HDMI

4G/5G
High-Speed Wireless Connectivity

Rich I/O
Rich I/O Ports and M.2 Expansions

THE EDGE CONTINUUM

Industrial Edge Computer Series

The Edge Continuum spans a broad spectrum of computing solutions, from the remote constrained edge to the cloud edge servers, enabling instant data analytics, seamless connectivity, and robust control across all layers of industrial operations. Our Industrial Computers and Panel PCs seamlessly integrate within the "User Edge," where low-latency computing and industrial-grade durability are paramount. Our computing solutions are segmented into three layers within the User Edge Continuum—Industrial Edge, Rugged Edge, and Specialized Edge.

USER EDGE | SERVICE EDGE / CLOUD


Constrained Edge


End User Edge


Distributed Edge


Data Center Edge Cloud

Industrial Edge

- Controlled Environments
- Fanless Cooling Design
- Dust, Shock, and Vibration Resistant
- Standardized Form Factors
- Long Lifetime Support

Rugged Edge

- Extreme Environments
- Wide Operating Temperature
- Powerful Computing Capabilities
- Supports EDGEBoost Technology for I/O, M.2, and PCIe Customization
- Reinforced Durability

Specialized Edge

- Designed for Industry-Specific Needs
- Validated with Niche Certifications
  - EN50155 (Railway)
  - EN45545 (Fire Safety)
  - E-Mark (In-Vehicle)
  - IP68/IP69K (Waterproof)

BCO Series
Fanless Industrial Computers

The BCO series provides a comprehensive range of computing power, making it ideal for diverse industrial edge applications that require reliable, dust-resistant, and long-lifespan solutions.

RCO Series
Super-Rugged Computers

The RCO series is engineered for ultimate industrial durability and unparalleled customizability, creating a unique blend of ruggedness and flexibility.

JCO Series
Jetson EDGE AI Computers

The JCO series, powered by the NVIDIA Jetson platform, delivers an optimal balance of energy efficiency and AI performance, achieving high throughput (TOPS) in a fanless design built for extreme industrial environments.

DCO Series
DIN RAIL Fanless Computers

WCO Series
IP68/IP69K Waterproof

ACO Series
EN50155 Railway & In-Vehicle

VCO Series
Machine Vision GPU Computers

KCO Series
Rackmount Industrial Computers

DELIVER INTELLIGENCE AT THE END USER EDGE

Our touchscreen computer series are available across the three User Edge segments, providing a wide variety of options for end-user applications. Additionally, the displays on our touchscreen computers (Panel PCs) can be configured with multiple optional features, such as PCAP or resistive touch, optical bonding, high-brightness 1000+ nits displays, and various mounting options. Our Panel PCs are available in sizes ranging from 10" up to 24" with 4:3 and 16:9 Full HD displays. Explore each Panel PC series to discover the unique features each solution offers.

USER EDGE | SERVICE EDGE / CLOUD


Constrained Edge


End User Edge


Distributed Edge


Data Center Edge Cloud

Industrial Edge

- Controlled Environments
- Flexible Performance
- Fanless Cooling Design
- IP65 Front Display
- 10"-21" Full HD Displays
- Extended MTBF

Rugged Edge

- Industrial Environments
- Various Computing Capabilities
- Wide Temperature Range
- Shock & Vibration Resistant
- Reinforced Durability
- Fit for Demanding Edge Applications

Specialized Edge

- Tailored for Industry-Specific Needs
- Includes IP68/IP69K Waterproof, SUS-316 Stainless Steel, and Optical Bonding
- Targeted Functionality for Specialized Applications

AIO Series
All-In-One Touchscreen Computers

The AIO Series is an all-in-one touchscreen computer designed to deliver efficient edge computing through its Intel X86 and Rockchip platforms, supporting various operating systems including Windows, Linux, and Android.

HIO Series
Open-Frame Touchscreen Computers

The HIO Series is an open-frame touchscreen computer with versatile I/O and connectivity options. The HIO Series leverages power-efficient X86 Intel platforms for various kiosks and open-frame mounted applications.

VIO Series
Modular Touchscreen Monitors and Computers

The VIO Series is a unique, modular IP65 touch display system that allows VIO displays to be configured as either a touchscreen computer or a touchscreen monitor. VIO displays can be paired with different modules for monitor (MX Series) or computer (PC Series) functionality.

MX Series

PC Series

SIO Series
SUS 316 Stainless Steel Touchscreen Computers

The SIO Series is an IP68/IP69K-rated Panel PC built with full SUS-316 stainless steel construction, offering superior waterproof and corrosion-resistant protection during intense washdowns.

INDUSTRIAL EDGE COMPUTERS

BCO SERIES
SEMI-RUGGED INDUSTRIAL COMPUTERS

WCO SERIES
IP68/IP69K WATERPROOF INDUSTRIAL COMPUTERS

RCO SERIES
SUPER-RUGGED INDUSTRIAL COMPUTERS

ACO SERIES
RAILWAY & IN-VEHICLE INDUSTRIAL COMPUTERS

JCO SERIES
JETSON AI EDGE INDUSTRIAL COMPUTERS

VCO SERIES
MACHINE VISION INDUSTRIAL COMPUTERS

DCO SERIES
DIN RAIL FANLESS INDUSTRIAL COMPUTERS

KCO SERIES
FANNED INDUSTRIAL COMPUTERS

EDGEBoost Technologies

EDGEBoost Nodes

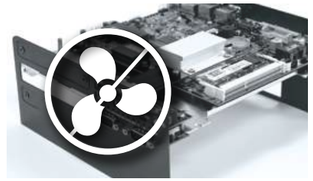
EBND SERIES
EDGE AI PERFORMANCE ACCELERATORS MODULES

EDGEBoost I/O

EBIO SERIES
FLEXIBLE I/O AND M.2 EXPANSION MODULES

EDGEBoost EnergyPack

ECO SERIES
SUPERCAPACITOR UPS BACKUP SYSTEM



FANLESS DESIGN

- Prevent failure/repair/ replacement caused by fan part
- Venting holes no longer needed
- Extended MTBF
- No noise

ONE-PIECE DESIGN

- Robust structure
- Less joint parts and screws for higher shock & vibration tolerance
- Easy assembly, disassembly, maintenance
- Sealed housing to prevent dust

POWER PROTECTION

- Over voltage protection
- Over current protection
- Reverse protection

SHOCK & VIBRATION

RCO & ACO Series comply with MIL-STD 810G on shock & vibration in order to sustain in environment like industrial automation, transportation, military, etc.

EXPANDABLE & MODULARIZATION

The modular design approach helps with the ease of installation to achieve rapid deployment, and provide wide variety of configurable options to achieve scalability.

EXTENDED OPERATING TEMPERATURE RANGE

Premio fanless embedded systems support extended temperature to allow applications to function in difficult and harsh environment.

COMMITMENT TO INDUSTRIAL CYBERSECURITY

We have achieved IEC 62443 certification, reflecting our dedication to implementing and maintaining the highest standards of cybersecurity in industrial automation and control systems. This certification demonstrates our ongoing commitment to safeguarding critical infrastructure and delivering secure, reliable solutions.

IEC 62443-4-1 Cybersecurity

INDUSTRY LEADING SAFETY CERTIFICATIONS

Tested and validated with safety certifications ensure product reliability against safety hazards and allow customers to comply with industry-specific regulatory requirements.

E-Mark Certification

EN50155 & EN45545

BCO SERIES
SEMI-RUGGED INDUSTRIAL COMPUTERS

REAL-TIME DATA PROCESSING FOR RUGGED EDGE COMPUTING

The BCO Series are designed and built to withstand deployment in challenging environments, managing workloads at the rugged edge for processing, storage, connectivity, and machine learning. Available in four series, the BCO-500, BCO-1000, BCO-3000, and BCO-6000 Series are capable of accommodating various edge workloads from power efficient computers to scalable GPU computers.

- Deployment Ready Solution
- Support Expandable GPU
- Fast Time To Market
- Compact & Ruggeddized Design

BCO SERIES

BCO 500 Mini

BCO 1000 Compact

BCO 3000 Balanced Performance

BCO 6000 High Performance

intel

BCO-500 SERIES

- Intel® Alder Lake / Intel® Atom® Processors
- Mini Form Factor
- High-Speed I/O Ports and Wireless Connectivity
- Competitive Price and Long Lifetime Support

BCO-1000 SERIES

- Intel® Alder Lake / Intel® Atom® Processors
- Power Efficient 12W Performance
- Digital and Analog I/O Connectivity
- Competitive Price and Long Lifetime Support

BCO-3000 SERIES

- Intel® Core Processors
- Powerful 35W Edge Performance
- Rich I/O Ports and M.2 Expansions
- Up to Triple Displays / Triple RJ45 LAN Ports

BCO-6000 SERIES

- Intel® Core Processors
- Powerful 35W Edge Performance
- Rich I/O Ports and M.2 Expansions
- 2x PCIe Gen 4 Slots with GPU Support

BCO-500-ADL SERIES

intel. Alder Lake

NEW

Model	BCO-500-ADL
CPU Support	12th Gen Intel® IoTG Alder Lake-N N97 Processor Intel® Core™ i3-N305 Processor
Memory	1x 262-Pin DDR5 4800MT/s SODIMM. Max. up to 16GB (Default 8GB)
Display	1x 4K HDMI 1.4b 1x 4K DisplayPort 1.4a
Storage	1x M.2 B Key (2242/3042, SATA/PCIe x1, support NVMe/SATA)
Expansion	1x M.2 E Key (2230, PCIe x1, USB 2.0, support Wifi/Bluetooth)
I/O	2x RJ45 (2.5GbE) 1x RS-232/422/485 1x RS-232 2x USB 3.2 Gen 2 (10 Gbps) , 2x USB 3.2 Gen 1 (5 Gbps)
Power	3-pin, AT/ATX 12~36V
Operating Temp	-10°C to 50°C (12W CPU)
Certification	CE, FCC Class A, UL, VCCI, RCM
Dimensions (WxDxH)	225 x 130 x 41 (mm)

BCO-1000-ADLN SERIES

MORE

intel. Amston Lake / Alder Lake

NEW

Model	BCO-1000-ADLN	BCO-1000-ADLN-B-3L
CPU Support	12th Gen Intel® IoTG Alder Lake-N N97 Processor	12th Gen Intel® IoTG Alder Lake-N N97 Processor Intel® Atom® x7835RE Processor
Memory	DDR5 4800MT/s SODIMM. Max. up to 16GB (Default 8GB)	
Display	1x 4K DisplayPort 1.4a 1x 4K HDMI 1.4b	
Storage	1x Internal 2.5" SATA SSD Bay (7mm or 9mm)	
Expansion	1x M.2 B Key (2242/2280/3042, SATA/PCIe x1, support NVMe/SATA) 1x M.2 E Key (2230, PCIe x1 & USB 2.0, support Wifi 6E & BT-5.1)	1x M.2 B Key (2242/2280/3042, SATA/PCIe x1/USB3.0 support LTE/4G/Storage Module), 1x M.2 E Key (2230, PCIe x1 & USB 2.0, support Wifi 6E & BT-5.1) 1x Dual SIM Socket (SIM1/SIM2)
I/O	2x RJ45 (2.5GbE) 1x RS-232/422/485 1x RS-232 2x USB 3.2 Gen2 (10 Gbps) 2x USB 3.2 Gen1 (5 Gbps) 2x USB 2.0, 8x GPIO Line-in/Line-out/Mic-in	3x RJ45 (2.5GbE) 1x RS-232/422/485 1x RS-232 2x USB 3.2 Gen1 (5 Gbps) 2x USB 2.0 8x GPIO Line-in/Line-out/Mic-in
Power	3-pin, AT, ATX 9~36V	3-pin, AT, ATX 12~36V
Operating Temp	0°C to 50°C	
Certification	CE, FCC Class A	UL 62368 Ed.3, CE, FCC Class A
Dimensions (WxDxH)	192 x 140 x 68 (mm)	

BCO-2000-WHL-U SERIES

MORE

BCO-2000-RYZ SERIES

MORE

BCO-3000-RPL SERIES

MORE

BCO-6000-RPL SERIES

MORE

intel. Whiskey Lake

Model	BCO-2000-WHL-U
CPU Support	8th Gen Intel® WL-UE Processor, Core™ i5-8365UE or Celeron® 4305UE
Memory	1x 260-Pin DDR4 2400MT/s SODIMM. Max. up to 32GB (Default 8GB)
Display	1x 4K DisplayPort 1x 4K HDMI (optional)
Storage	1x Internal 2.5" SATA HDD Bay (support H=9.5mm), 1x Internal SATA 7P connector 1x mSATA (Shared by 1x Mini PCI Express)
Expansion	2x Full-size Mini PCIe (1x shared by 1x mSATA) 1x Internal SIM slot
I/O Expansion	2x I/O Expansion for USB and COM Ports
I/O	2x RJ45 (2.5GbE) 2x RS-232/422/485 4x USB 3.2 Gen 2 (10 Gbps) 2x USB 2.0 header (internal)
Power	3-pin, AT/ATX 12V
Operating Temp	-20°C up to 60°C
Certification	UL 62368 Ed.3, CE, FCC Class A
Dimensions (WxDxH)	140 x 192 x 61 (mm)

AMD RYZEN EMBEDDED

Model	BCO-2000-RYZ-V1605B
CPU Support	AMD Ryzen™ Embedded V1605B with Radeon™ Vega 8 Graphics, 3.6 GHz (4 Cores)
Memory	2x 260-pin DDR4 2400MT/s SODIMM. Max. up to 32GB (Default: 8GB, ECC/non-ECC)
Display	1x 4K DisplayPort 1.4, DP++ 1x 4K HDMI 2.0b
Storage	1x Internal 2.5" SATA HDD Bay (support H=9.5mm) 1x M.2 B Key (3042, support SATA)
Expansion	1x Full-Size Mini PCIe 1x M.2 B Key (3042/3052, PCIe x1 & USB 3.0, SATA, USIM, Support 4G/5G)
I/O Expansion	2x I/O Expansion for USB and COM Ports
I/O	2x RJ45 (2.5GbE) 2x RS-232/422/485 2x USB 3.2 Gen 2 (10 Gbps), 4x USB 2.0 (internal)
Power	3-pin, AT/ATX 12V
Operating Temp	-20°C to 55°C (25W CPU)
Certification	UL 62368 Ed.3, CE, FCC Class A
Dimensions (WxDxH)	140 x 192 x 57.6 (mm)

intel. Raptor Lake / Alder Lake

NEW

NEW

Model	BCO-3000-RPL	BCO-6000-RPL
CPU Support	12th/13th Gen Intel® Core™ Processor i3/i5/i7/i9, Pentium, Celeron (35W only)	
Memory	2x DDR4 3200MT/s SODIMM. Max. up to 64GB (Default 8GB)	
Display	2x 4K Dual Mode DisplayPort 1.4a 1x 4K HDMI 1.4b	
Storage	1x M.2 M Key (2242/2280, PCIe x4 Gen 3, support Storage/AI Module, Default 128GB)	
Expansion	1x M.2 B Key (3042, PCIe +USB 3.2 Gen 2x1+ USB 2.0, support 5G/4G/LTE Module) 1x M.2 E Key (2230, PCIe x1 + USB 2.0, support Wi-Fi 6E & BT-5.1)	
PCIe	-	2x PCIe x8 or 1x PCIe x16 (PCIe 4.0, support A2000 GPU)
I/O	2x RS232/422/485, 2x RS485 3x RJ45 (2.5GbE) 6x USB 3.2 Gen 2 (10 Gbps), 2x USB 3.2 Gen 1 (5 Gbps), 2x USB 2.0 Type-A	
Power	4-pin, AT, ATX 9~36V	4-pin, AT, ATX 9~36V 24~36VDC for add GPU Card
Operating Temp	0°C to 50°C	
Shock & Vibration	With SSD: 5 Grms (5 - 500 Hz, 0.5 hr/axis) With SSD: 50G half-sin 11ms	
Certification	UL 62368 Ed.3, CE, FCC Class A	
Dimensions (WxDxH)	192 x 240 x 69 (mm)	330 x 240 x 69 (mm)

RCO SERIES

SUPER-RUGGED INDUSTRIAL COMPUTERS

PERFORMANCE, EXPANDABILITY, AND DURABILITY AT THE RUGGED EDGE

The RCO Series is a line of super-rugged x86 industrial computers purpose-built to enable real-time performance in extreme deployments. By leveraging a fanless and cableless design approach with modular EDGEBoost technologies, these systems can provide seamless configurability to meet varying edge-native deployment requirements while maintaining utmost durability. Available in three series, the RCO-1000, RCO-3000, and RCO-6000 Series.

- EDGEBoost I/O Support
- EDGEBoost Nodes Support
- Scalable NVMe, SATA, and RAID Card
- Scalable Robust GPU Cards

RCO SERIES

RCO **1000** Ultra Compact

RCO **3000** Small Form Factor

RCO **6000** High Performance

intel

RCO-1000 SERIES

- Intel Atom® Processors
- Up to 3x EDGEBoost I/O
- Lite AI Performance
- Up to 2x PoE and 2x LAN RJ45
- Wide Operating Temperature -40°C up to 70°C

RCO-3000 SERIES

- Intel® Core Processors
- 1x EDGEBoost I/O
- Mid-AI Performance
- Up to 4x PoE RJ45/M12
- Wide Operating Temperature -25°C up to 70°C
- EN50155 (EMC) Certified

RCO-6000 SERIES

- Intel® Core Processors
- 2x EDGEBoost I/O
- High-AI Performance
- Up to 8x PoE RJ45/M12
- EDGEBoost Nodes Compatible for SSD, GPU and PCIe expansions
- Wide Operating Temperature -25°C up to 70°C

RCO-1000-ASL SERIES

Coming Soon

intel. Amston Lake

Model	RCO-1000-ASL-10	RCO-1000-ASL-20	RCO-1000-ASL-30	RCO-1000-ASL-30-2P
CPU	Intel® Atom® x7835RE Processor, 8 cores, 3.6 GHz (12W TDP) Intel® Atom® x7433RE Processor, 8 cores, 3.4 GHz (9W TDP)			
Memory	1x 262-pin DDR5 4800MT/s SO-DIMM Max. up to 32GB (Non-ECC)			
Display	1x HDMI 1.4b (3840 x 2160), 1x DP (4096 x 2304)			
Storage	1x SATA 3.0 6Gb/s, 1x M.2 B Key: 2242/3042/3052 for AI/Storage/4G/5G			
Expansion	1x M.2 E Key: 2230 (PCIe x1, USB 2.0), 1x M.2 B Key: 3042/3052 for AI/Storage/4G/5G, 2x SIM Socket			
I/O	2x RJ45 (2.5 GbE), 2x RS-232/422/485, 3x USB 3.2, 1x USB 2.0, 2x CAN, 1x I2C 3-pin, 1x Power Ignition Switch			2x 2.5 GbE, 2x RS-232/422/485, 3x USB 3.2, 1x USB 2.0, 2x CAN, 1x I2C 3-pin, 2x GbE RJ45 (PoE), 1x Power Ignition Switch
EDGEBoost I/O Expansion	1x EDGEBoost I/O	2x EDGEBoost I/O	3x EDGEBoost I/O	3x EDGEBoost I/O
OOB	1x RJ45 (Out-of-band Management module)			
Power	3-pin, AT/ATX 9~36VDC			
Operating Temp	-40°C to 70°C			
Dimensions (WxDxH)	150 x 105 x 49 (mm)	150 x 105 x 65 (mm)	150 x 105 x 83 (mm)	

RCO-1000-EHL SERIES

MORE

intel. Elkhart Lake

Model	RCO-1000-EHL-10	RCO-1000-EHL-20	RCO-1000-EHL-30	RCO-1000-EHL-30-2P
CPU Support	Intel® Atom® x6425E Processor (Up to 12W TDP)			
Memory	1x 260-pin DDR4 SO-DIMM. Max. up to 32GB			
Display	2x DisplayPort 1.4, DP++ (4096 x 2160@60Hz)			
Storage	1x Internal 2.5" SATA SSD Bay (support H=9.5 mm)			
Expansion	1x Full-size Mini PCIe, 2x External SIM socket, 1x Universal I/O Bracket			
I/O	2x 2.5 GbE, 3x USB 3.2, 2x RS-232/422/485, 2x CAN			2x RJ45 (PoE)
EDGEBoost I/O Expansion	1x EDGEBoost I/O	2x EDGEBoost I/O	3x EDGEBoost I/O	3x EDGEBoost I/O
Power	3-pin, AT/ATX 9~36VDC			
Operating Temp	-40°C to 70°C			-40°C to 50°C
Shock & Vibration	With SSD: 50G & 5 Grms (1 Grms with HDD)			
Certification	UL 62368 Ed. 3, CE, FCC Class A			CE, FCC Class A
Dimensions (WxDxH)	150 x 105 x 49 (mm)	150 x 105 x 65 (mm)	150 x 105 x 83 (mm)	

RCO-3000-RPL SERIES

MORE

intel. Raptor Lake / Alder Lake

EMC Conformity EN50155 & EN50121-3-2

Model	RCO-3000-RPL
CPU Support	12th/13th Gen Intel® RPL S / ADL Processor i3/i5/i7/i9 (LGA 1700, 35W TDP)
Memory	1x DDR5 4800/5600MHz SODIMM. Max. up to 32GB
Display	4x DisplayPort (1x DP Port Co-layout HDMI Connector)
Storage	2x 2.5" SATA drive bay with RAID 0, 1, 5 support (1x internal, 1x hot-swappable)
Expansion	2x M.2 B key Type: 2242/3042/3052, 1x M.2 B key Type: 2242/3042/3052, 1x M.2 E key slot (2230)
I/O	2x RJ45 (2.5 GbE), 5x RS-232/422/485 (2x internal), 6x USB 3.2 Gen 2, 16x isolated digital I/O, 1x Power Switch
EDGEBoost I/O Expansion	1x EDGEBoost I/O
OOB	1x RJ45 (optional OOB Management module)
SIM Slot	1x External Standard SIM socket, 1x External Dual Nano SIM socket
Power	9~48 VDC, AT/ATX Select, 3-pin Terminal Block
Operating Temp	-25°C to 70°C
Shock & Vibration	With SSD: 50G & 5 Grms
Dimensions (WxDxH)	192 x 227 x 60.3 (mm)

RCO-3000-CML SERIES

MORE

intel. Comet Lake S

EMC Conformity EN50155 & EN50121-3-2

Model	RCO-3000-CML
CPU Support	10th Gen Intel® CML S Processor i3/i5/i7/i9 (LGA 1200, 35W TDP)
Memory	2x 260-Pin DDR4 2666/2933MHz SO-DIMM. Max. up to 64GB (ECC and Non-ECC)
Display	3x DisplayPort (1x DP Port Co-layout HDMI Connector)
Storage	2x 2.5" SATA SSD bay with RAID 0, 1, 5 support (1x internal, 1x hot-swappable), 1x mSATA
Expansion	1x Full-size mini PCIe, 1x M.2 E Key: 2230 (PCIe x1, USB 2.0) 1x M.2 B Key: 2242/3042/3052 for AI/NVMe/4G/5G module
I/O	2x RJ45 (2.5 GbE & 1 GbE), 5x RS-232/422/485 (2x internal), 6x USB 3.2 Gen 2 (10 Gbps), 16x isolated digital I/O, 1x Line-out
EDGEBoost I/O Expansion	1x EDGEBoost I/O
SIM Slot	2x External Standard SIM socket
Power	3-pin, AT/ATX 9~48 VDC
Operating Temp	-25°C to 70°C
Shock & Vibration	With SSD: 50G & 5 Grms
Dimensions (WxDxH)	192 x 227 x 60.3 (mm)

RCO-6000-CML SERIES

MORE

intel. Comet Lake S



Model	RCO-6000-CML	RCO-6000-CML-2-2PWR	RCO-6000-CML-2-4B7M
CPU	10th Gen Intel® CML S Processor i3/i5/i7/i9/Xeon® (LGA 1200, 35W TDP)		
Memory	2x 260-Pin DDR4 2666/2933MHz SO-DIMM. Max. up to 64GB (ECC and Non-ECC)		
Display	2x DisplayPort, DP++ (4096 x 2304) 1x DVI-I (1920 x 1200)		
Storage	3x 2.5" SATA SSD bay with RAID 0, 1, 5 support (1x internal, 2x hot-swappable)		7x 2.5" SATA SSD bay with RAID 0, 1, 5, 10 (1x internal, 6x hot-swappable)
I/O	2x CAN, 2x RJ45 (GbE), 6x USB 3.2 Gen 2 (10 Gbps), 3x USB 3.2 Gen 1 (1x internal), 2x USB 2.0 header (internal), 1x Mic-in, 1x Line-out 8x RS-232/422/485 (6x internal), 16x isolated digital I/O		
EDGEBoost I/O Expansion	2x EDGEBoost I/O		
Expansion	1x M.2 E Key: 2230 (PCIe x1, USB 2.0) 2x Full-size Mini PCIe for Cellular/Wifi/BT	1x M.2 E Key: 2230 (PCIe x1, USB 2.0) 2x Full-size Mini PCIe for Cellular/Wifi/BT 2x PCIe x16 or 1x PCIe x16, 1x PCI	
SIM slot	2x External Standard SIM socket		
Power	5-pin, AT/ATX 9~48 VDC	2x Power Input, AT/ATX Select 5-pin, 9~48 VDC 4-pin, 12~48 VDC (GPU Expansion)	5-pin, AT/ATX 9~48 VDC
Operating Temp	-25°C to 70°C (35W CPU)		
Certification	UL 62368 Ed. 3 & CE, FCC Class A		
Shock & Vibration	With SSD: 50G & 5 Grms (1 Grms with HDD)	With SSD: 20G & 3 Grms (1 Grms with HDD)	With SSD: 50G & 5 Grms (1 Grms with HDD)
Dimensions (WxDxH)	240 x 261 x 79 (mm)	240 x 261 x 126.8 (mm)	

HIGH-PERFORMANCE INDUSTRIAL COMPUTER
RCO SERIES

RCO-6000-RPL SERIES

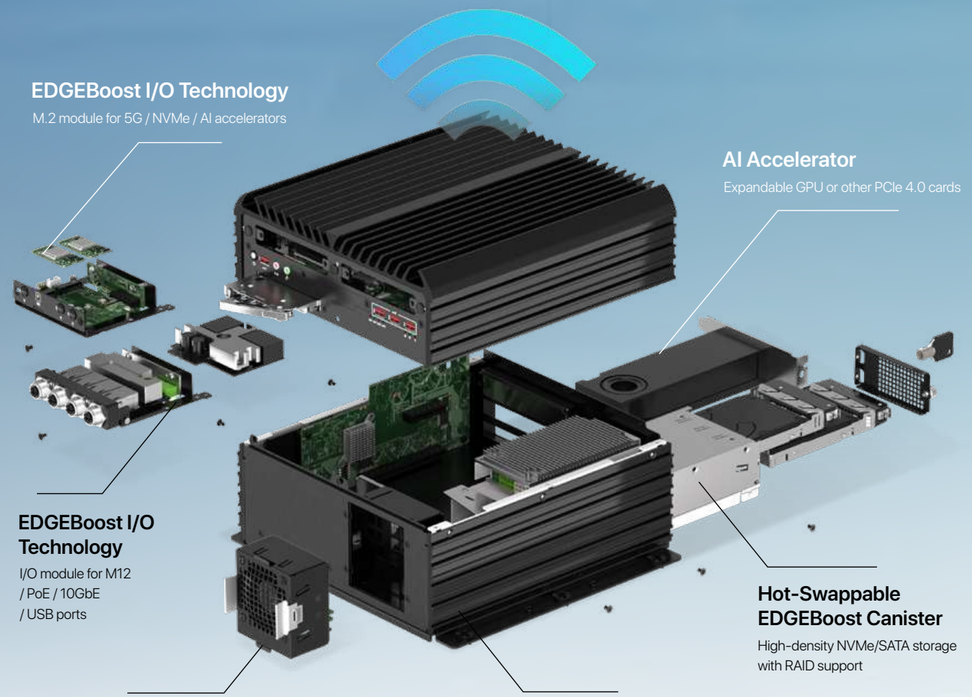
MORE

intel. Raptor Lake / Alder Lake



Model	RCO-6000-RPL	RCO-6000-RPL-8NS	RCO-6000-RPL-4N-1E
CPU	12th/13th Gen Intel® RPL & ADL Processor i3/i5/i7/i9 (LGA 1700, 35W TDP)		
Memory	2x 262-Pin DDR5 4800/5600MHz SO-DIMM. Max. up to 64GB (ECC and Non-ECC)		
Display	2x DisplayPort (Up to 7680 x 4320), 1x DVI-I (1920 x 1200)		
Storage	2x 2.5" SATA SSD bay with RAID 0, 1 support (1x internal, 1x hot-swappable)	2x 2.5" SATA SSD bay (1x internal, 1x hot-swappable), 8x 2.5" NVMe SSD bay (hot-swappable), Support RAID 0, 1, 5, 10	2x 2.5" SATA SSD bay (1x internal, 1x hot-swappable), 4x 2.5" NVMe SSD bay (hot-swappable), Support RAID 0, 1, 5
Expansion	1x M.2 E Key: 2230 for Wifi/BT, 1x M.2 B Key: 2242/3042/3052 for AI/Storage/Cellular 1x Full-size Mini PCIe for Cellular		
GPU	-		1x PCIe x16 (8-lane), 1x PCIe x4 (1-lane), GPU support: NVIDIA RTX A2000, NVIDIA RTX 2000 ADA, NVIDIA RTX 4000 SFF ADA
I/O	2x RJ45 (2.5 GbE), 6x RS-232/422/485 (4x internal), 8x USB 3.2 Gen 2, 1x USB 3.2 Gen 1 (internal), 2x USB 2.0 (internal), 16x isolated digital I/O, 1x Line-out		
EDGEBoost I/O Expansion	Up to 2x EDGEBoost I/O		
SIM slot	2x External SIM socket		
Power	5-pin, AT/ATX 9~48 VDC	AT/ATX, 5-pin, 9~48 VDC, 4-pin, 12~48 VDC for EDGEBoost Node	
Operating Temp	-25°C to 70°C (35W CPU)	-25°C to 60°C (35W CPU)	-25°C to 45°C (35W CPU, with GPU)
Certification	UL 62368 Ed. 3 & CE, FCC Class A		
Shock & Vibration	With SSD: 50G & 5 Grms (1 Grms with HDD)		With SSD: 20G & 3 Grms (1 Grms with HDD)
Dimensions (WxDxH)	240 x 261 x 79 (mm)	240 x 261 x 166.9 (mm)	240 x 261 x 166.9 (mm)

EDGEBoost
TECHNOLOGIES



Introducing our EDGEBoost Technologies – taking modular industrial solutions to new heights. The three versatile EDGEBoost Series are precisely engineered to maximize flexibility, performance, and resilience across our solution lineup. With EDGEBoost Technologies, our industrial computers become easily customizable and upgradable to meet diverse industrial demands.

Modular, Scalable Design | Industrial Ruggedness | Certification-Ready | Cost Effective | No MOQ

EDGEBoost Nodes

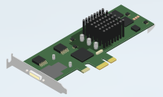
MORE

EDGE AI PERFORMANCE ACCELERATORS MODULES

EDGEBoost Nodes are modular add-on nodes designed for our AI Edge Inference Computer or also known as the RCO-6000 Series. These add-on nodes provide an easy and cost-effective upgrade for the rugged, fanless computer. They elevate computer performance through additional performance accelerators. The EDGEBoost Nodes deliver powerful real-time inferencing capabilities and high-speed data storage performance for intensive industrial-grade Edge AI applications.

Customize Your Performance Accelerators

GPU Card PCIe x16



Multiple PCIe Expansion Slots

Up to 8x NVMe

NVMe/SATA Hotswap Storages

RAID 0, 1, 5, 6, 10

Software & Hardware RAID

20G Shock

3 Grms Vibration

GPU Locking Brackets

Tested & Validated GPU List

Model Name	RAM	CUDA Cores	TDP	Display	Interface	Active Cooling	Slots
NVIDIA T1000	4G	896	50	4x mDP	PCIe 3.0 x16	Yes	1
NVIDIA RTX A2000	12G	3328	70	4x mDP	PCIe 4.0 x16	Yes	2
NVIDIA RTX 2000 ADA	16G	2816	70	4x mDP	PCIe 4.0 x8	Yes	2
NVIDIA RTX 4000 SFF	20G	6144	70	4x mDP	PCIe 4.0 x16	Yes	2

*The EDGEBoost Nodes supports GPU cards with dimension of 235 mm in length, 112 mm in width, and up to 3-slot high.

**The second power supply delivers stable power up to 280W for the GPU card and the NVMe drives with a wide voltage of 12~48VDC support.

EDGEBoost Nodes

MORE

Configuration Guide

The RCO-6000 Series is a standalone, fanless industrial computer that can be enhanced with EDGEBoost Nodes for additional performance upgrades. This two-piece modular design allows the EBND add-on nodes to seamlessly attach to the lower portion of the RCO-6000, delivering advanced performance accelerators optimized for AI edge computing.

Configure Your Fanless Computer

Top - **Compatible RCO-6000 Series**			
RCO-6000-RPL		**RCO-6000-CML**	
	• Intel® 12th/13th Gen ADL/RPL CPU 1x Hotswap SATA SSD (7mm) 1x Internal SATA SSD (9mm) 1x M.2 B Key, 1x M.2 E Key, 1x mPCIe 2x EDGEBoost I/O Slots		• Intel® 10th Gen CML CPU 2x Hotswap SATA SSD (7mm) 1x Internal SATA SSD (9mm) 1x M.2 E Key, 2x mPCIe 2x EDGEBoost I/O Slots

Configure Your EDGEBoost Nodes

Bottom - **Modular "EDGEboost Nodes" Configurations**			
PCI or PCIe Expansion Series		**GPU Series**	
GPU / Other PCIe Cards		• **EBND-2-EXP-G4** (RCO-6000-RPL) 1x PCIe x16 (Gen 4), 1x PCIe x1 (Gen 3) or 1x PCIe x16 (Gen 4), 1x PCIe x8 (Gen 4) • **EBND-2-EXP** (RCO-6000-CML) PCIe x16, PCI Expansions		• **EBND-2-PWR-G4** (RCO-6000-RPL) 1x PCIe x16 (Gen 4), 1x PCIe x1 (Gen 3) or 2x PCIe x8 (Gen 4) 12~48VDC Power Supply (280W) • **EBND-2-PWR** (RCO-6000-CML) PCIe x16, PCI Expansions 12~48VDC Power Supply (280W)
SATA Storage Series				
Storages		• **EBND-2-2SATA** 2x Hot-Swap 2.5" SATA Drives (15mm) RAID 0, 1, 5, 10		• **EBND-2-4SATA** 4x Hot-Swap 2.5" SATA Drives (7mm) RAID 0, 1, 5, 10
NVMe Series				
		• **EBND-2-2NVME-G4** (RCO-6000-RPL only) 2x Hot-Swap 2.5" NVMe SSD Bay (15mm) PCIe Gen 4 Expansion		• **EBND-8NVME-S** 8x Hot-Swap 2.5" U.2 NVMe Drives (7mm) RAID 0, 1, 5, 10
		• **EBND-4NVME-S** 4x Hot-Swap 2.5" U.2 NVMe Drives (15mm) RAID 0, 1, 5, 10		• **EBND-4NVME-H** 4x Hot-Swap 2.5" U.2 NVME Drives (15mm) Hardware RAID 0, 1, 5, 6, 10
NVMe and GPU Series				
Storages + GPU		• **EBND-4NVME-GPU** 1x GPU Expansion 4x Hot-Swap 2.5" U.2 NVMe Drives (7mm)		• **EBND-2NVME-GPU** 1x GPU Expansion 2x Hot-Swap 2.5" U.2 NVMe Drives (15mm)
		• **EBND-4N-1E** 1x PCIe x16, 1x PCIe x1 Slots Hardware RAID 0, 1, 5, 10 4x Hot-Swap 2.5" U.2 NVMe Drives (7mm)		

EDGEBoost I/O

MORE

Flexible I/O and M.2 Expansion Modules

EBIO is the perfect solution for those looking to optimize their edge infrastructure. These flexible add-on modules are a modular and scalable solution that is designed to tackle the limitations that may occur at the rugged edge. EDGEBoost I/Os are built to integrate seamlessly with our industrial computers to provide reliable expandability for mission critical I/O.

Compatible Industrial Computers

Industrial Mini Computers

RCO-1000 Series
Super-Rugged Mini

Edge AI Industrial Computers

RCO-3000 Series
Super-Rugged SFF

RCO-6000 Series
Super-Rugged EDGE AI

JCO-6000 Series
Jetson Edge AI Industrial

ACO-6000 Series
Railway & In-Vehicle

EBIO Modules for Industrial Mini Computers

1x DP + 1x DIO | **1x HDMI** | **4x USB 2.0** | **2x COM**

Digital & Analog Digital and Analog EBIO Modules			
EBIO-DP-DIO	**EBIO-HDMI**	**EBIO-4USB**	**EBIO-2COM**
• 1x DP (4K UHD) • 1x DIO (4 in / 4 out, Isolated)	• 1x HDMI Port (Full-HD)	• 4x USB 2.0, Type A Ports (with USB hub)	• 2x COM Ports (RS-232/422/485)

EBIO Modules for

Edge AI Industrial Computers

MORE

USB Interface Modules

EBIO-4U3	EBIO-4U3-J	EBIO-4U3L-J
• 4x USB 3.0, Type-A Ports		• 4x USB 3.2 Gen 1 (5 Gbps, 900mA) • Type-A Locking Ports

Connectivity & Network Modules

EBIO-4ETH	EBIO-4ETH-J	EBIO-4ETH-M12	EBIO-4ETH-M12-J
• 4x 1GbE LAN, RJ45 Port • Intel® Ethernet Controller I350 • PCIe x1 Gold Fingers Interface (PCIe 3.0 x4 Performance) • Support Power over Ethernet by an optional PoE module		• 4x 1GbE LAN, M12 Port X-code 8-Pin • Intel® Ethernet Controller I350 • PCIe x1 Gold Fingers Interface (PCIe 3.0 x4 Performance) • Support Power over Ethernet by an optional PoE module	

EBIO-4ETH-POE	EBIO-4ETH-POE-J	EBIO-4ETH-POE-M12	EBIO-4ETH-POE-M12-J
	• Up to 25.5 watt per port	• Complies with IEEE 802.3at	

EBIO-D10G	EBIO-D10G-J	EBIO-OOB	EBIO-OOB-J
• 2x 10 GbE LAN, RJ45 Ports • Intel® Ethernet Controller X710-AT2 • PCIe x1 Gold Fingers Interface (PCIe 3.0 x4 Performance)		• RJ45 Hardware-Based Features: Out-of-Band and In-Band • Power Control & Management • OOB Cloud Serial Console Optional: • Backup & Recovery • Temper Detection • Thermo-Guard	

Cellular, Edge AI, and Storage Modules

EBIO-M2BK	EBIO-2M2BK	EBIO-M2MK	EBIO-M2MK-J
• 1x M.2 B-Key 3042/3052 • Supports 4G/5G module • 2x SIM slot, 1x SIM Switch • 1x Dedicated Heat block • Occupied 2x Universal Slots	• 2x M.2 B-Key 2242/3042/3052 • Supports 4G/5G/AI/NVMe modules • 1x Mini SIM Slot (on-board) • 1x Dedicated Heat block • 3x Antenna Holes	• 1x M.2 M-Key 2242/2260 • Supports AI/NVMe module • 1x Dedicated Heat block	

EDGEBoost I/O Series

MORE

Compatible Industrial Computers

Super-Rugged Mini Computers

EBIO Modules	RCO-1000 Series
EBIO-HDMI	●
EBIO-DP-DIO	●
EBIO-2COM	●
EBIO-4U3	●

Super-Rugged SFF Computers

Super-Rugged Edge AI Computers

Railway & In-Vehicle Computers

EBIO Modules	RCO-3000 Series	RCO-6000 Series	ACO-6000 Series
EBIO-4U3	●	●	●
EBIO-4ETH	●	●	●
EBIO-4ETH-POE	●	●	●
EBIO-4ETH-M12	●	●	●
EBIO-4ETH-POE-M12	●	●	●
EBIO-D10G	●	●	●
EBIO-OOB	●		●
EBIO-M2BK		●	●
EBIO-2M2BK	●	●	●
EBIO-M2MK	●	●	●

CE FC EN50155 EN50121-3-2 E-Mark Certification UL CERTIFIED E357184

Jetson AI Edge Industrial Computers

NVIDIA

EBIO Modules	JCO-6000 Series
EBIO-4U3-J	●
EBIO-4U3L-J	●
EBIO-4ETH-J	●
EBIO-4ETH-POE-J	●
EBIO-4ETH-M12-J	●
EBIO-4ETH-POE-M12-J	●
EBIO-D10G-J	●
EBIO-OOB-J	●
EBIO-M2MK-J	●

3 TYPES

of High-Speed Camera Support

8x GMSL2

12x PoE/GigE

10x USB Vision

ECO SERIES

SUPERCAPACITOR UPS BACKUP SYSTEM

POWER REDUNDANCY AND SAFETY AT THE RUGGED EDGE

The ECO-1000 Series EDGEBoost EnergyPack is an industrial-grade supercapacitor that provides reliable power backup, safe shutdown, and power regulation for industrial computers and HMI displays in mission-critical and remote edge deployments, ensuring uninterrupted performance during power fluctuations in unstable environments.

10-Year Lifespan

Wide Temperature, Shock, and Vibration Resistant

UL Safety & CB Scheme IEC 62368-1: 2018

EN50155 (EMC) & EN50121-3-2

ECO-1000 EDGEBOOST ENERGYPACK MORE

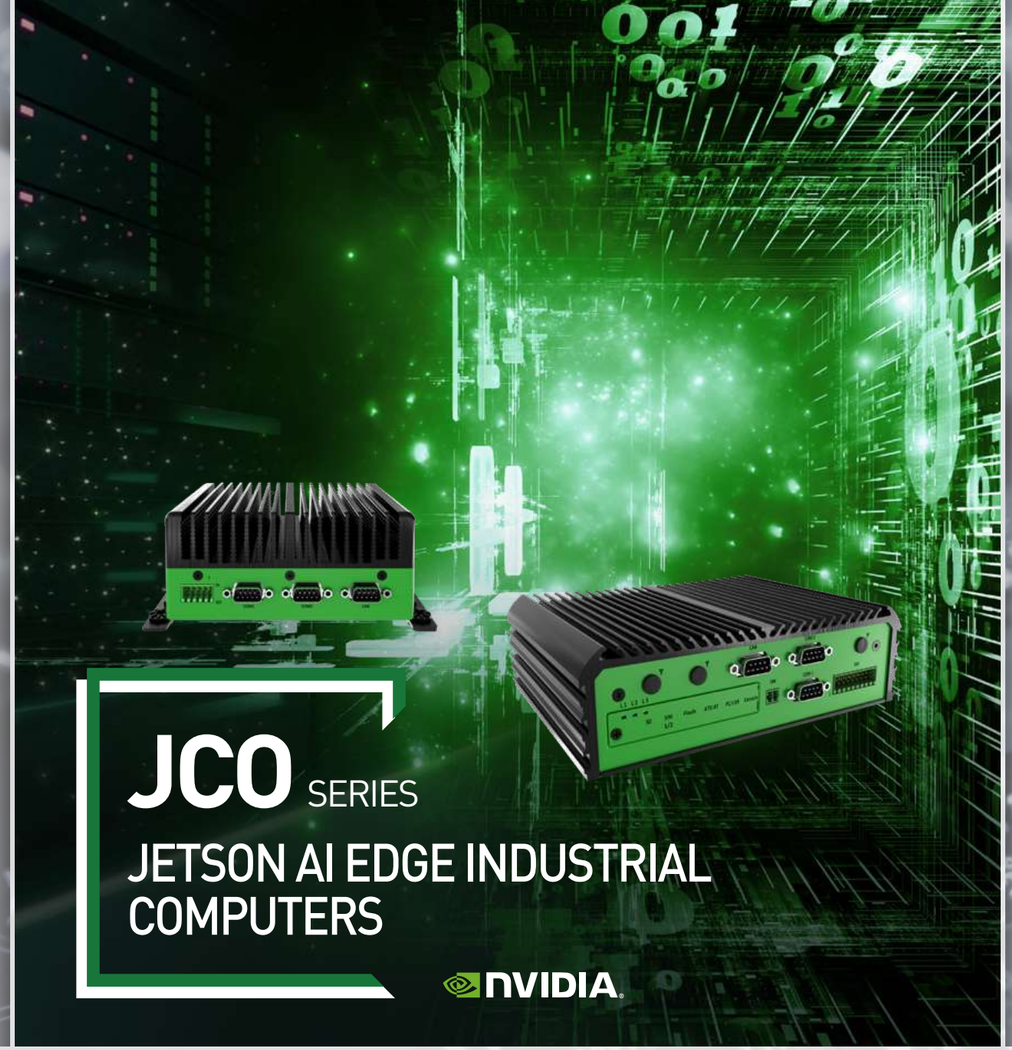
- Up to 200W Max. Power Output
- 1x COM, 1x USB for GUI Remote Management and Monitoring
- Shock and Vibration Resistance (20G, 5Grms)
- 3 Smart Modes with Remote On/Off, Ignition Control, Delay Time
- 12V/24V Compatibility: Industrial PCs, Panel PCs, Displays
- Optional LCM Display Module and Button Control

BC Best Choice AWARD

c UL us

EMC Conformity EN50155 & EN50121-3-2

Model	ECO-1000
Capacity	ECO-1000-8S: 8x 370 Farads Supercapacitors ECO-1000-16S: 16x 370 Farads Supercapacitors
Input Voltage	12 ~ 35 VDC
Input Connector	3-pin Terminal Block (V+, GND, IGN IN)
Output Voltage	Charge mode: DC IN Voltage bypass (DC OUT = DC IN) Available Discharge Mode: 12 or 24V
Output Power	ECO-1000-8S: Max.100W output ECO-1000-16S: Max.200W output
Output Connector	3-pin Terminal Block (V+, GND)
I/O	1x RS-232, 1x USB Type A, 2x DI + 2x DO with isolation Others: 1x Remote Power On/Off, 1x Smart Mode Switch, 1x Mode Reset Switch
Charging Mode	Quick and Normal Charging
Power Ignition	Power Ignition Management
Operating Temp	-25°C to 55°C
Shock & Vibration	20 G; 5 Grms
Certification	CE, FCC Class A, UL 62368-1 Ed. 3 EMC Conformity with EN50155
Dimensions (WxDxH)	100 x 192 x 192 (mm)
Weight	1.8 kg ~ 2.6 kg
Mounting Options	Wall Mounting, DIN Rail Mounting (Optional)



JCO SERIES

JETSON AI EDGE INDUSTRIAL COMPUTERS

NVIDIA

RUGGED EDGE AI POWERED BY NVIDIA JETSON™ MODULES

The JCO Series industrial computer, powered by the advanced NVIDIA Jetson platform, is a standout in AI and industrial computing. This series offers exceptional AI computing capabilities, making it perfect for sophisticated robotics, autonomous machinery, and high-end embedded AI tasks. Designed to withstand harsh industrial conditions, the JCO Series ensures consistent performance even in extreme environments.

- EDGEBoost I/O Support
- Rich I/O Configuration
- World-Class Certification
- Ruggedized Fanless Solution

JCO SERIES

JCO 1000 Ultra Compact

JCO 3000 Small Form Factor

JCO 6000 High Performance

NVIDIA

JCO-1000-ORN SERIES

- Jetson Orin Nano Super 4GB/8GB with 7W-25W Power Options
- Jetson Orin NX 8GB/16GB with 10W-25W Power Options
- 20-100 TOPS of AI Performance
- High-Speed I/O and Wireless Connectivity

JCO-3000-ORN SERIES

- Jetson Orin Nano Super 4GB/8GB with 7W-25W Power Options
- Jetson Orin NX 8GB/16GB with 10W-25W Power Options
- Up to 100 TOPS of AI Performance
- Up to 3X the Performance of Jetson Xavier NX
- Optional 2x LAN or 4x PoE RJ45

JCO-6000-ORN SERIES

- Jetson AGX Orin 32GB/64GB with 15W-60W Power Options
- Up to 275 TOPS of AI Performance
- Up to 8X the Performance of Jetson AGX Xavier
- 2x/4x EDGEBoost I/O Expansions

JCO-1000-ORN SERIES

MORE

JCO-3000-ORN SERIES

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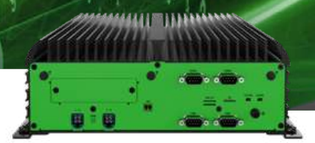
Model	JCO-1000-ORN-A	JCO-3000-ORN-A	JCO-3000-ORN-B
CPU Support	NVIDIA Jetson Orin™ NX 16GB/8GB NVIDIA Jetson Orin™ Nano Super 8GB/4GB		
TOPS	Orin NX: 70-100 TOPS Orin Nano: 20- 67 TOPS		
Display	1x 4K HDMI 2.0	1x 2K HDMI	1x 4K HDMI
Storage	1x M.2 (M Key, 2242/2280, PCIe x4, NVMe) (Default 128GB) 1x Micro 2.0 SD Slot	1x M.2 (M Key, 2242/2280, PCIe x4, NVMe) (Default 128GB)	
Expansion	1x M.2 B Key (2242/3042/3052, PCIe x1, USB 3.2 Gen1, support 4G/5G Module) 1x M.2 E Key (2230, PCIe x1, USB 2.0, support Wi-Fi/Bluetooth) 1x External Dual Nano SIM socket	1x M.2 B Key (3042/3052, USB 3.2 Gen1, support 4G/5G) 1x M.2 E Key (2230, PCIe x1, USB 2.0, support Wi-Fi/Bluetooth) 1x External Micro SIM Socket	1x M.2 B Key (3042/3052, USB 3.2 Gen1, support 4G/5G) 1x M.2 E Key (2230, PCIe x1, USB 2.0, support Wi-Fi/Bluetooth) 1x External Dual Nano SIM socket
I/O	1x RJ45 (2.5 GbE) 1x CAN 2.0 B, 2x RS-232/422/485, 4x USB 3.2 Gen 2 (10 Gbps), 1x USB Type-C (Flash), 1x Micro USB (Console)	2x RJ45 (1GbE) 1x CAN 2.0 A, 2x RS-232/485, 4x USB 3.0, 1x Micro USB (OTG)	1x CAN 2.0 B, 2x RS-232/422/485 4x RJ45 (Optional, PoE+ 120W Module), 4x USB 3.2 Gen 2 (10 Gbps), 1x USB Type-C (Flash), 1x Micro USB (Console)
OOB	1x RJ45 (Optional OOB Management Module)		
Power	3-pin, AT, ATX 9~36V	3-pin, AT 12~24V	3-pin, AT/ATX 9~36V 12V: PoE Power Budget Supports Up to 60W 24V: PoE Power Budget Supports Up to 120W
Operating Temp	-20°C to 55°C (25W, NX Module) -20°C to 60°C (15W, Nano Module)		
Shock & Vibration	With SSD: 5 Grms (5 - 500 Hz, 0.5 hr/axis) With SSD: 50G half-sin 11ms		
Certification	UL 62368 Ed. 3, CE, FCC Class B	UL 62368 Ed.3, CE, FCC Class A	UL 62368 Ed. 3, CE, FCC Class A, E mark
Operating System	Linux Ubuntu 20.04 with JetPack 6.x SDK		
Dimensions (WxDxH)	150 x 105 x 61 (mm)	192 x 140 x 58 (mm)	



JCO-6000-ORN SERIES

MORE

EMC Conformity
EN50155 & EN50121-3-2

Model	JCO-6000-ORN-A	JCO-6000-ORN-B
CPU Support	NVIDIA Jetson AGX Orin™ AI Computer with 8-core/12-core Arm® Cortex®-A78AE v8.2 64-bit CPU	
Memory	AGX Orin 32 GB/64 GB LPDDR5 @ 3200 MHz on SOM	
TOPS	200 TOPS/40W 275 TOPS/60W	
Display	1x 4K HDMI 2.0	
Storage	1x eMMC 5.1, 64 GB, 1x M.2 (M Key, 2280, PCIe x4, support NVMe) (Default 128GB)	
Expansion	1x M.2 (B Key, 3042/3052, USB 3.2 Gen 2, support 4G/5G Module) 1x M.2 (E Key, 2230, PCIe x1, USB 2.0, support Wi-Fi/Bluetooth) 1x Micro SD Socket, 2x Micro SIM Sockets	
I/O Expansion	2x I/O Expansion for USB/LAN/M12/NVMe Storage	4x I/O Expansion for USB/LAN/M12/NVMe Storage
PoE	By Optional PoE Power Module, Support up to 4x RJ45/M12 LAN Module	By Optional PoE Power Module, Support up to 12x RJ45/M12 LAN Module
I/O	2x CAN, 2x RS-232/422/485, 2x RJ45 (1GbE, 10GbE), 1x USB 3.2 Gen 2 (10 Gbps), 1x USB 2.0 (Flash) 1x USB Type C (Console), 8 in / 8 out (Isolated) to I/O Part	
OOB	1x RJ45 (OOB Management Module, Optional)	
Power	3-pin, AT, ATX 9~48V or 48~110V (Optional)	
Operating Temp	-20°C to 55°C	
Shock & Vibration	With SSD: 5 Grms (5 - 500 Hz, 0.5 hr/axis) With SSD: 50G half-sin 11ms	
Certification	CE, FCC Class A, UL 62368 Ed. 3, E-Mark, EMC EN50155	
Operating System	Linux Ubuntu 20.04 with JetPack 6.x SDK	
Dimensions (WxDxH)	270 x 190 x 95 (mm)	

DCO SERIES

DIN RAIL FANLESS INDUSTRIAL COMPUTERS

COMPACT & RICH I/O CONFIGURATION FOR DIN RAIL APPLICATIONS

The DCO-1000-ASL is a compact, fanless din-rail industrial computer designed for demanding IoT environments. Built to operate reliably in extreme temperatures and resist shock and vibration, it's ideal for space-constrained industrial applications requiring advanced remote management and top-tier durability.

Compact Form Factor

Rich I/O Configuration

Industrial IoT Solutions

Ruggedized Fanless Solution

DCO-1000-ASL SERIES

Designed for flexibility, the DCO-1000-ASL features a comprehensive I/O suite and multiple M.2 expansion slots, enhancing connectivity and customization for industrial applications. Perfect for demanding environments, it provides advanced remote management and robust certifications, ensuring reliable performance in automation and smart city infrastructure.

intel.
Amston Lake

Model	DCO-1000-ASL
CPU Support	Intel® Atom® x7433RE Processor
Memory	1x 262-Pin DDR5 4800MT/s SODIMM. Max. up to 16GB (Default 8GB, ECC/Non-ECC)
Display	2x 4K DisplayPort 1.4, DP
Storage	1x M.2 (B Key, 3042/3052, PCIe x2), Default 128GB
Expansion	1x M.2 B Key (3042/3052, USB 3.2 Gen2 + USB 2.0 for 4G/5G Module only) 1x M.2 E Key (2230, PCIe x1 + USB 2.0, support Wifi/Bluetooth) 1x Dual Nano SIM Socket
I/O	4x RJ45 (2.5GbE) 2x RS-232/422/485 2x USB 3.2 Gen 2 (10 Gbps), 2x USB 2.0
OOB	1x RJ45 (OOB Management Module, Optional)
Power	3-pin, AT, ATX 9~36V
Operating Temp	-40°C to 55°C
Shock & Vibration	With SSD: 20G, half sine, 11ms Wall Mounting with NVMe SSD: 5 Grms, 5 - 500 Hz, 0.5hr/axis DIN Rail Mounting with NVMe SSD: 5 Grms, 5 - 500 Hz, 0.5hr/axis
Certification	UL 61010-2-201, CE, FCC Class A
Operating System	Windows 10, Windows 11, Linux kernel 5.X
Dimensions (WxDxH)	150 x 105 x 49 (mm)
Mounting Options	DIN-Rail Mounting Wall Mounting (Optional)

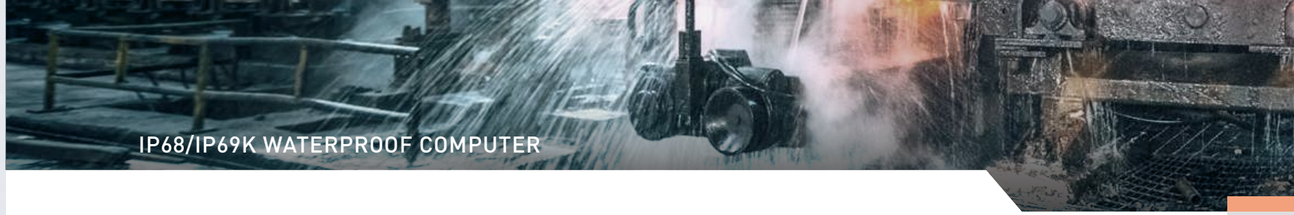
WCO SERIES

IP68/IP69K WATERPROOF INDUSTRIAL COMPUTERS

DELIVER EDGE INTELLIGENCE AMID WATER AND DUST EXPOSURES

The WCO Series unifies advanced CPU compute capabilities, I/O expandability, and AI acceleration for dynamic industrial deployments. The WCO Series is designed to fit into a rugged industrial environment where dust and water resistance are a must. Equipped with fanless design and IP68/IP69K ratings, the WCO series expands the limitation of regular embedded systems in extremely harsh deployments.

- IP68/IP69K Rating
- Wide Range Voltage 9-36V or 48-110V
- Scalable M12 Ports
- High-Quality Compact Construction



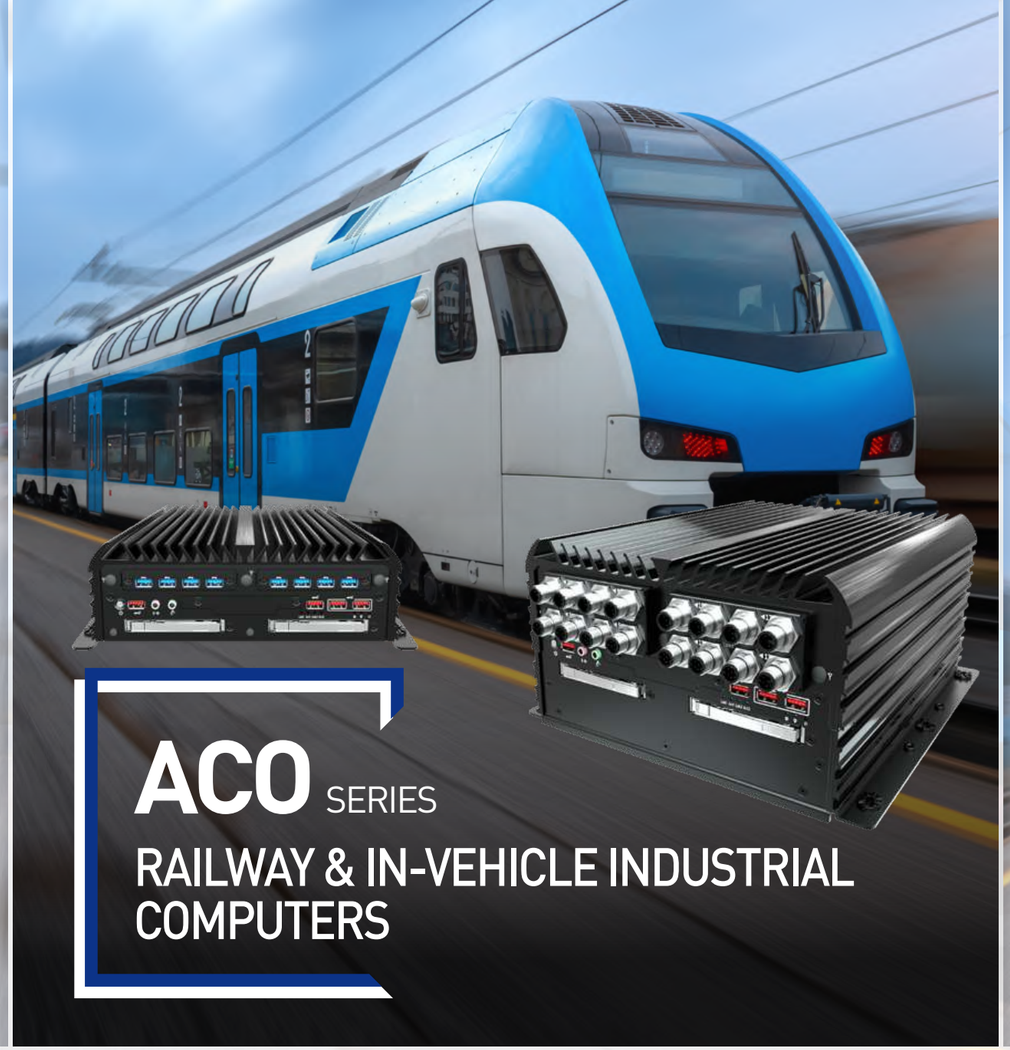
WCO-3000-EHL SERIES MORE

intel. Elkhart Lake

Model	WCO-3000-EHL
CPU	Intel® Atom® Processor x6425E, Quad Core, 1.5 MB Cache, 1.8 GHz, 12W TDP
Memory	1x 260-Pin DDR4 2400/2667/3200MT/s SODIMM. Max. up to 32 GB (Non-ECC)
Display	1x DisplayPort 1.4, DP++ (4K DCI@60Hz) or 1x HDMI (Optional), Single Display, Waterproof
I/O	2x LAN by M12 X-Code (1x 1GbE, 1x 2.5GbE) 2x USB 3.2 Gen 2 Type A (10Gbps, Waterproof) 1x RS-232/422/485 by M12 A-Code 2x M12 Waterproof Cover for PoE or COM Expansion
Storage	1x mSATA shared by 1x Mini PCI Express 1x Internal 2.5" SATA HDD Bay
Expansion	1x M.2 (B Key, 3042/3052, PCIe x1 + USB 3.2 Gen2, Support 4G/5G/Hailo AI Module), 2x Internal SIM socket, 1x Full-size Mini PCIe
Power	AT/ATX, DC IN 9-36 V, DC IN 48-110 V (Optional) M12 S-code 4-pin
Certification	IP68, IP69K, CE, FCC Class A
Operating Temperature	-40 °C to 60 °C
TPM	TPM 2.0
Dimensions (WxDxH)	231 x 292 x 57 (mm)

IP68: A rating standard for dust and water resistance
- 6: Dust-tight, meaning no dust ingress. Full protection against dust.
- 8: Withstand continuous immersion in water (typically up to 1 meter or more)

IP69K: Specifically tested for high-pressure, high-temperature water jets.
- 6: Dust-tight, providing complete protection against dust ingress. (Same as IP68)
- 9K: Withstand high-temperature water jets (water temperatures up to 80°C) & High-pressure water jets (pressure up to 100 bar (1450 psi))



ACO SERIES

RAILWAY & IN-VEHICLE INDUSTRIAL COMPUTERS

DELIVER INTELLIGENCE AT THE MOBILE EDGE

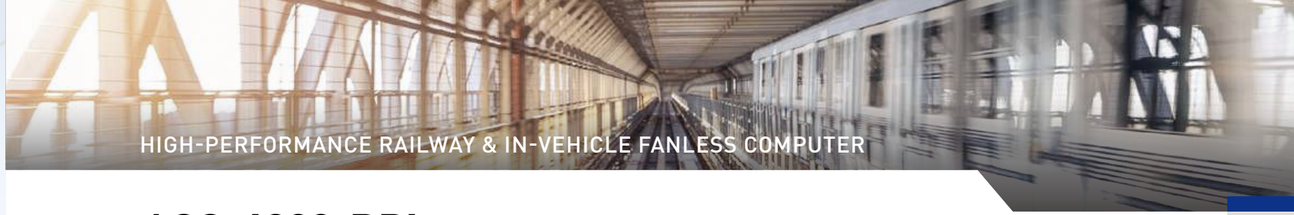
The ACO-6000 Series offers robust, fanless in-vehicle computers, rigorously tested for mission-critical automotive applications. Essential for intelligent transportation, these systems adeptly handle edge data processing for machine learning and intelligence. With the need for highperformance computing in vehicles, they efficiently process data from various sensors and IoT devices, ensuring swift, low-latency communication.

Scalable
16x PoE

EN50155 / EN45545
and E-Mark

Wide Power Range
9~48V, 24V~72V and
48~110V

MIL-STD-810G
Compliant
Method 514 & 517



ACO-6000-RPL SERIES

intel.
Raptor Lake / Alder Lake

NEW

NEW

Model	ACO-6000-RPL	ACO-6000-RPL-1
CPU	12th/13th Gen Intel® RPL & ADL Processor i3/i5/i7/i9 (LGA 1700, 35W TDP)	
Memory	2x 262-Pin DDR5 4800/5600MHz SO-DIMM. Max. up to 64GB (ECC and Non-ECC)	
Storage	2x 2.5" SATA drive bay with RAID 0, 1 support (1x internal; 1x hot-swappable)	
Display	2x DisplayPort (Up to 8K), 1x DVI-I (1920 x 1200)	
I/O	2x RJ45 (2.5GbE), 6x RS-232/422/485 (2x Rear, 4x Internal), 8x USB 3.2 Gen 2 (10 Gbps), 1x USB 3.0 (5 Gbps, Internal), 2x USB 2.0 (internal), 1x 8-in/8-out DIO (Isolated)	
OOB	1x RJ45 (optional OOB Management module)	
Expansion	1x Full-size mPCIe (shared by 1x mSATA), 2x External SIM socket (mPCIe attached) 1x M.2 B Key (PCIe x2 or PCIe x1 & USB 3.2 Gen1) for AI/Storage/4G/5G 1x M.2 E Key (2230, PCIe x1, USB 2.0) for Wi-Fi/BT	
Power	9~48VDC (Default); 24V to 72V (Optional); 48~110VDC (Optional) OVP (Over Voltage Protection); OCP (Over Current Protection); Power Ignition Management	
Certification	FULL EN50155 Certified & EN45545-2 (Fire & Smoke Protection), CE, FCC Class A, E-Mark, UL 62368 Ed. 3	
Temperature	-25°C up to 70°C (35W CPU)	
Shock & Vibration	50G Shock & 5Grms Vibration Resistant (MIL-STD-810G Compliant)	
PCIe Expansion	N/A	1x PCIe x16
EDGEBoost I/O Expansion	Up to 2x EDGEBoost I/O, Up to 8x M12/RJ45 GbE (Optional PoE, 25.5W for each port)	Up to 4x EDGEBoost I/O, Up to 16x M12/RJ45 GbE (Optional PoE, 25.5W for each port)

ACO-6000-CML SERIES

MORE

intel.
Comet Lake S

Model	ACO-6000-CML	ACO-6000-CML-1
CPU	Support 10th Gen Intel® CML S Processor (LGA 1200, 35W TDP), Intel® XEON-W Processors, Intel® Core™ i3 to i9	
Memory	2x 260-Pin DDR4 2666 /2933MHz SODIMM. Max. up to 64GB (ECC and Non-ECC)	
Storage	3x 2.5" SATA HDD bay with RAID 0, 1, 5 support (1x internal; 2x removable & hot-swappable)	
Display	2x DisplayPort, 1x DVI-I	
I/O	2x RJ45 (GbE), 6x USB 3.2 Gen 2, 3x USB 3.2 Gen 1 (1x internal), 2x USB 2.0 header (internal), 8x RS-232/422/485 (6x internal), 8x DI + 8x DO with isolation	
Expansion	1x M.2 (E Key, PCIe x1, USB 2.0, 2230), 2x Full-size mPCIe, 2x External SIM socket (mPCIe attached)	
Power	9~48VDC; 48~110VDC (Optional) OVP (Over Voltage Protection); OCP (Over Current Protection); Power Ignition Management	
Certification	EN50155 EMC, E-Mark, CE, FCC Class A	
Temperature	-25°C to 70°C (35W CPU)	
Shock & Vibration	50G Shock & 5Grms Vibration Resistant (MIL-STD-810G Compliant)	
PCI & PCIe Expansion	N/A	1x PCIe x16, 1x PCI (Optional)
EDGEBoost I/O Expansion	Up to 2x EDGEBoost I/O, Up to 8x M12/RJ45 GbE (Optional PoE, 25.5W for each port)	Up to 4x EDGEBoost I/O, Up to 16x M12/RJ45 GbE (Optional PoE, 25.5W for each port)
Dimensions (WxDxH)	240 x 261 x 79 (mm)	240 x 261 x 127 (mm)

PCIE CARD EXPANSION FOR INTELLIGENT COMPUTER VISION

The VCO-6000 Series is engineered for seamless integration of dual FHFL GPU cards through PCIe Gen 4 and industry-leading external storage expansion drives, delivering optimized processing and data aggregation. Deploy machine vision and AI inference applications with utmost reliability and performance to the rugged edge.

- Dual GPU Support (FHFL)
- PCIe Gen 4 Performance
- Scalable NVMe & SATA Storage
- Shock & Vibration Resistance

VCO-6000-RPL SERIES

MORE

intel.
Raptor Lake / Alder Lake

Model	VCO-6000-RPL-3-2PWR	VCO-6000-RPL-4-2PWR
CPU Support	12th/13th Gen Intel® RPL & ADL i3/i5/i7/i9 Processor (LGA 1700, 35W TDP)	
System Chipset	Intel® R680E Express Chipset	
Memory	2x 262-Pin DDR5 4800/5600MHz SODIMM. Max. 64GB (Default 8GB), (ECC and Non-ECC)	
Storage	1x Hot-Swappable 2.5" SSD, 1x Internal 2.5" SSD, Optional 4x Hot-Swappable 2.5" NVMe 2.5" SSD	
Expansion	1x M.2 B Key, 1x mPCIe, 2x SIM 1x PCIe x16 (Gen4), 2x PCIe x1 (Gen3)	1x M.2 B Key, 1x mPCIe, 2x SIM 2x PCIe x16 (Gen4), 1x PCIe x4 (Gen3)
GPU Card Dimension	310 (L) x 112 (H) mm	
I/O	2x 5K DisplayPort up to 8K), 1x 2K DVI-I 2x RJ45 (2.5GbE), 4x USB 3.2 Gen 2 (10 Gbps)	
Power	5-pin, AT, ATX 9~48V, 12~48V (Optional 300W power for GPU Expansion)	
Operating Temp	-25°C to 70°C (35W CPU)	
Shock & Vibration	With SSD: 3 Grms (5 - 500 Hz, 0.5 hr/axis) With SSD: 20G half-sin 11ms	
Certification	UL 62368 Ed. 3, CE, FCC Class A	
Dimensions (WxDxH)	157 x 340 x 240 (mm)	177 x 340 x 240 (mm)

VCO-6000-CFL SERIES

MORE

intel.
Coffee Lake R

Model	VCO-6000-CFL-2	VCO-6000-CFL-3	VCO-6000-CFL-4	VCO-6000-CFL-5
CPU Support	8th/9th Gen Intel® CFL-R S i3/i5/i7 Processor (LGA 1151, 35W TDP)			
Memory	2x 260-pin DDR4-2400/2666MHz SO-DIMM, up to 64GB (Un-buffered and Non-ECC)			
Power	9-48 VDC, AT/ATX Select, 3-pin Terminal Block			
Operating Temperature	-25°C to 70°C (35W CPU)			
PCI & PCI Express	With two PCI or PCIe expansion slot • 1x PCIe x16 • 1x PCI	With three PCI or PCIe expansion slot • 1x PCIe x16 • 2x PCI	With four PCI or PCIe expansion slot • 2x PCIe x4 • 1x PCIe x16 (8-lane) • 1x PCI	With five PCI or PCIe expansion slot • 2x PCIe x4 • 1x PCIe x16 (8-Lane) • 2x PCI
Dimensions (WxDxH)	137 x 340 x 240 mm	157 x 340 x 240 mm	177 x 340 x 240 mm	197 x 340 x 240 mm

KCO SERIES
FANNED INDUSTRIAL COMPUTERS

ACTIVE COOLING INDUSTRIAL COMPUTER FOR INSPECTION & INTELLIGENT COMPUTER VISION

Introducing the KCO-RPL Series, a line of high-performance fanned industrial computers powered by Intel's latest 13th Gen Raptor Lake processor. These ruggedized edge computers deliver extensive scalability and IIoT-centric flexibility for seamless optimization in high-spec deployment applications. Additionally, the KCO-RPL Series provides a number of edge-native features to accommodate and ensure reliable performance at the rugged edge.

- Support Dual GPU
- Rich M.2 and PCIe Expansions
- Internal Flex Power Supply
- Rackmountable Industrial Solution

HIGH-PERFORMANCE FANNED INDUSTRIAL COMPUTER

KCO RPL SERIES

MORE

intel. Raptor Lake / Alder Lake

NEW

NEW

Model	KCO-2000-RPL	KCO-3000-RPL
CPU	12th/13th Gen Intel® Core™ Processors i3/i5/i7/i9 (LGA 1700, 65W Max TDP)	
Memory	4x DDR4 2133/2400/2666MHz DIMM. Max 128GB	
Display	4x DP++	
Storage	1x 2.5" SATA Drive Bay (Hot-swappable), 4x SATA 3.0 (6Gb/s) Support RAID 0, 1, 5, 10	1x 3.5" SATA HDD drive or 2x 2.5" SSD/HDD, 4x SATA 3.0 (6Gb/s) Support RAID 0, 1, 5, 10
M.2	2x M.2 M Key: 2242/2260/2280 (NVMe/SATA, PCIe x4 Gen 4), 1x M.2 E Key: 2230 (PCIe x2 Gen 3, USB 2.0)	
PCIe	1x PCIe x16 (Gen 5), 1x PCIe x16 (Gen 4), 1x PCIe x4 (Gen 4), 1x PCIe x4 (Gen 4)	
I/O	2x RS-232, 2x RJ45 (2.5GbE & 1GbE), 6x USB 3.1 Gen 2 (10 Gbps), 1x USB 3.2 Gen 2x2 Type C (20 Gbps), 4x USB 2.0	2x RS-232 2x RJ45 (2.5GbE & 1GbE), 6x USB 3.1 Gen 2 (10 Gbps), 1x USB 3.2 Gen 2x2 Type C (20 Gbps), 4x USB 2.0, 2x USB 3.0 Gen 1
Internal I/O	4x RS-232, 2x USB 3.0 Gen 1, 8-bit digital I/O, 1x Front panel audio	4x RS-232, 8-bit digital I/O, 1x Front panel audio
Supported GPU	RTX A2000, RTX 2000 ADA, RTX 4000 SFF ADA	RTX A2000, RTX 2000 ADA, RTX 4000 SFF ADA, RTX 4000 ADA, RTX 4500 ADA, RTX 5000 ADA
Power	100~240 AC, Internal 250W Flex Power Supply	100~240 AC, Internal 500W Flex Power Supply
Operating Temp	0°C to 40°C	0°C to 50°C
Certification	CE, FCC Class A, UL 62368-1 Ed. 3	
Dimensions (WxDxH)	324 x 276 x 89 (mm)	334 x 300 x 133 (mm)

KCO CFL SERIES

MORE

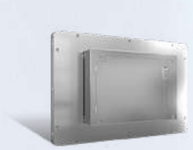
intel. Coffee Lake R

Model	KCO-2000-CFL	KCO-3000-CFL
CPU	8th/9th Gen Intel® CFL-R S Processor i3/i5/i7 (LGA 1151, 65W/35W TDP)	
Memory	4x 288-pin DDR4 DIMM Max. up to 128GB	
Display	2x DP 1.2, 1x DVI, 1x VGA	
Storage	1x 2.5" SATA Drive Bay (Hot-swappable)	1x 3.5" SATA HDD drive or 2x 2.5" SSD/HDD
M.2	2x M.2 M Key: 2242/2260/2280 (NVMe, PCIe x4) for Storage 1x M.2 E Key: 2230 (PCIe x2, USB 2.0) for Wi-Fi/BT	
PCIe	1x PCIe x16 (low profile, up to 9" card length)	1x PCIe x16 (full-height, up to 10" card length), 2x PCIe x4
I/O	4x RS-232/422/485, 2x RJ45 (1GbE), 6x USB 3.1 Gen 2 (10 Gbps), 7x USB 2.0	4x RS-232/422/485, 2x RJ45 (1GbE), 4x USB 3.1 Gen 2 (10 Gbps), 6x USB 2.0
Power	AT/ATX, Internal 250W Flex Power Supply	AT/ATX, Internal 300W Flex Power Supply
Operating Temp	0°C to 35°C	0°C to 45°C
Certification	CE, FCC Class A, UL 62368-1 Ed. 3	
Dimensions (WxDxH)	324 x 276 x 89 (mm)	334 x 300 x 133 (mm)

INDUSTRIAL DISPLAY SYSTEMS

FIO SERIES

IP65 OPEN FRAME
INDUSTRIAL
TOUCHSCREEN
MONITORS



HIO SERIES

IP65 OPEN FRAME
INDUSTRIAL
TOUCHSCREEN
COMPUTERS

AIO SERIES

IP65 ALL-IN-ONE
INDUSTRIAL
TOUCHSCREEN
COMPUTERS

IP65 DISPLAY
INDUSTRIAL
TOUCHSCREEN
MONITORS

VIO SERIES

IP65 MODULAR SYSTEMS
HIGH-BRIGHTNESS
DISPLAY

PC SERIES

VIO COMPUTER MODULES
PC MODULE FOR
INDUSTRIAL
DISPLAY

MX SERIES

VIO MONITOR MODULES
MONITOR MODULE
FOR INDUSTRIAL
DISPLAY

SIO SERIES

IP68/69K STAINLESS STEEL
INDUSTRIAL
TOUCHSCREEN
COMPUTERS

BUILT RUGGED. BUILT READY.

Our industrial touchscreen computers and monitors offer tailored solutions for diverse needs, featuring modular designs, stainless steel washdown panels, and open-frame PCs—built to tackle application challenges with precision and reliability.

Model	**SIO** SERIES	**VIO** SERIES	**AIO** SERIES	**HIO** SERIES	**FIO** SERIES
Ruggedness	Super-Rugged	Rugged	Semi-Rugged	Durable	
System Configuration	Touchscreen Computer	Touchscreen Computer or Monitor	Touchscreen Computer or Monitor	Touchscreen Computer	Touchscreen Monitor
Processor	• Intel® Alder Lake N97 • Intel® Celeron® J1900 • Intel® 8th Gen i5	• Intel® Core™ Ultra 5/7 • Intel® 7th Gen i3/i5 • Intel® Celeron® J6413 • Intel® Celeron® J1900	• Intel® Core™ Ultra 5/7 • Intel® Alder Lake N97 • Intel Atom® X7835RE	• Intel® Alder Lake N97	-
Wireless Connectivity	Wi-Fi 6E, BT 5.x, 5G/4G/LTE			Wi-Fi 6E, BT 5.x	-
IP Rating	Full IP68/69K	Front IP65			
Built Design	Rugged Stainless-Steel SUS 316 Design	Modular Flexible Design	All In One Simple Design	Industrial Open Frame Design	
Screen Sizes	12.1" - 23.8"	12.1" - 23.8"	10.1" - 21.5"		15" - 27"
Touch Options	PCAP	PCAP/Resistive	PCAP		
Optical Bonding	Standard	Optional	-	-	-
Mounting Options	VESA Mount Yoke Mount Panel Mount	VESA Mount Panel Mount		Open-Frame Wall Mount	Open-Frame VESA Mount Panel Mount
Shock & Vibration	20G & 2.4Grms	20G & 1.5Grms	20G & 3Grms MIL-STD-810G Method 516.7 & 514.7 Procedure 1		-
Certifications	CE, FCC, UL 62368 Ed. 3			CE, FCC	CE, FCC, UL

FIO SERIES

INDUSTRIAL OPEN-FRAME TOUCHSCREEN MONITORS

INDUSTRIAL HMI TOUCHSCREENS

The FIO Series are selection of standardized industrial open-frame touchscreen monitors that are designed to seamlessly integrate into both future and existing HMI systems. With the slim industial grade design, extended lifespan and world-class certifications, the FIO Series are purpose-built for ruggedize and various industries required minimal to no maintenance.

10-Points
PCAP Touch

Front Panel
IP65

50,000+
Hours MTBF

World Class Certifications
(UL, CE, FCC)

FIO SERIES

MORE

HMIs (Human-Machine Interfaces) are critical data points for real-time controls, status, and information. Premio's line of rugged open-frame touchscreen monitors, FIO Series, are purpose-built to deliver dedicated data visualization and controls for industrial deployment applications. Designed for flexible compatibility, the FIO Series follows a standardized approach for seamless integration into both existing and future systems.

Open Frame

Model	FIO-XG1500C	FIO-SX1900C	FIO-FH2150C	FIO-FH2700C
LCD Size	15" (4:3)	19" (5:4)	21.5" (16:9)	27" (16:9)
Max. Resolution	1024 x 768 @60Hz	1280 x 1024 @60Hz	1920 x 1080 @60Hz	
Brightness (cd/m2)	350 nits	250 nits		300nits
Contrast Ratio	1000:1		3000:1	
LCD Color	16.7M			
Viewing Angle (H-V)	176/176	178/178		
Internal Speaker	AMP 5W + 5W	AMP 10W + 10W		
Touch Type	Projected Capacitive (PCAP) Touch, Multi-Touch up to 10 points			
I/O	1x Mini Din (External OSD) 1x USB (Type B) 1x DP 1x HDMI 1x VGA			
Power	12 VDC 100-240V AC, 50-60Hz			
Operating Temperature	0°C to 40°C		0°C to 50°C	0°C to 40°C
Certification	FCC, CE, UL 62368-1 3rd Ed			
Mounting Options	VESA: 75×75mm, 100×100 mm Rear Mounting, Side Mounting		VESA: 100×100 mm Rear Mounting, Side Mounting	VESA: 100×100 mm, 100x200 mm Rear Mounting, Side Mounting
Dimensions (WxHxD)	358 x 284.9 x 40.3 mm	420.1 x 348.1 x 42.1 mm	516 x 311 x 37.9 mm	644.2 x 388.4 x 40.8 mm
Weights (Net)	3.52 kg	4.82 kg	5.56 kg	7.35 kg

HIO SERIES

IP65 OPEN-FRAME INDUSTRIAL TOUCHSCREEN COMPUTERS

OEM INTEGRATION READY FOR HUMAN MACHINE INTERFACE SOLUTIONS

The HIO Series is a versatile panel PC solution that unifies high efficient computing capabilities with I/O expandability. Designed for seamless industrial and commercial application integration with its sleek open frame design and advanced functionality.

10-Points
PCAP Touch

Diverse I/O
Customization

Front Panel
IP65

High Computing
Efficiency

HIO SERIES MORE

HIO Series provides a selection of Open Frame Touchscreen Computers ranging from 10.1'' to 21.5'' for seamless integration for HMI deployments. With ultimate screen readability and clarity, this series is front panel IP65 rated with 7H scratch resistant. All while being powered by Intel® Alder Lake N97 processor.

intel. Alder Lake


NEW


NEW


NEW

Model	HIO-W210-ADL	HIO-W215-ADL	HIO-W221-ADL
CPU Onboard	Intel® Alder Lake N97 Processor (6M Cache, up to 3.60 GHz)		
Memory	DDR5 4800MT/s SODIMM Max.16GB (Default 8GB)		
Graphic Output	1x DP (4096 x 2304 Real 4K, 60Hz) 1x HDMI (3840 x 2160 UHD, 30Hz)		
LAN	2x RJ45 (2.5 GbE)		
I/O	4x USB 3.2 Gen 2, 6x USB 2.0 (internal), 2x RS-232/422/485 (internal), 1x Audio out, 2x Pifa Antenna (optional)		
Storage	1x M.2 B key (SATA/PCIe x1), 2242/3042/2280 (Default 128GB)		
Expansion	1x M.2 E Key support Wi-Fi 6e and BT 5.2		
Power	9~36 VDC		
Operating Temp	-10°C to 50°C		
Certification	CE, FCC Class A		
LCD Size	10.1" (16:10) WUXGA	15.6" (16:9) Full HD	21.5" (16:9) Full HD
Brightness (cd/m2)	400 nits	400 nits	500 nits
MTBF	30,000 Hours	30,000 Hours	50,000 Hours
Projected Capacitive	10-point PCAP Touch, 7H/IK07		
Mounting	Open Frame Mount Wall-mount Bracket (optional)		

SIMPLE SOLUTION FOR HUMAN MACHINE INTERFACE DEPLOYMENTS

The AIO Series is a reliable all in one panel PC solution that simplifies HMI solutions with high efficient computing capabilities and advanced I/O connectivity. Designed for simple industrial and commercial applications with its sleek all in one panel design and comprehensive functionality.

All In One Integrated System

10-Point PCAP Touch

Range of Display Size

Triple Independent Displays

AIO SERIES MORE

AIO-200-ADL

intel. Amston Lake / Alder Lake

NEW

AIO-200-ASL

NEW

Model	AIO-200-ADL	AIO-200-ASL-3L
LCD Size	10.1" (16:10), 15.6" (16:9), 21.5" (16:9)	
Max. Resolution	Max 1920 x 1080 (Full HD)	
Brightness (cd/m²)	Max 500 nits	
Viewing Angle (H/V)	Max 89/89/89/89	
MTBF	Max 50,000 Hours	
Processor	Intel® Alder lake N97 Processor	Intel® Atom® x7835RE Processor 6M Cache, up to 3.60 GHz, 8 core, 12W Intel® Alder Lake N97 6M Cache, up to 3.60 GHz, 4 Core, 12W
Memory	DDR5 4800MT/s SODIMM. Max up to 16GB (Non-ECC), (Default 8GB)	
Storage	1x M.2 B Key (Default 128 GB)	1x M.2 B Key (2242/2280/3042) for NVMe/4G/5G (Default 128GB), 1x SATA 3.0 6Gb/s port (Support AHCI)
Display	1x 4K DP, 1x 4K HDMI	
I/O	2x RJ45 (2.5GbE), 2x RS-232/422/485, 4x USB 3.2 Gen 2, up to 6x Antenna	3x RJ45 (2.5GbE), 1x Dual Nano SIM Socket (M.2 B Key), 2x USB 3.2 Gen 2 (10 Gbps), 2x USB 2.0, 2x RS-232-/422/485, up to 6x Antenna
Expansion	1x M.2 E-Key (2230, PCIe x1, USB2.0) for Wifi/Bluetooth	
Operating System	Windows 10, Windows 11, Linux Ubuntu 22.04	
Certification	CE, FCC Class B, CB, UL 62368 Ed, UKCA, IC	
Operating Temp.	-10°C to 50°C	
Power	DC IN 12~36V	AT/ATX Power, DC IN 12~36V

AIO-200-MTL

Coming Soon

AIO Monitor

NEW

Model	AIO-200-MTL-3L	AIO-200-MX
LCD Size	10.1" (16:10), 15.6" (16:9), 21.5" (16:9)	
Processor	Intel® Meteor Lake Core™ Ultra 5/7	-
Memory	DDR5 5600MT/S, Max. 16GB	-
Storage	1x M.2 M Key (Default 128GB)	-
I/O	2x DP, 3x RJ45 (2.5GbE), 2x USB 3.2 Gen 1, 1x USB Type C (5 Gbps), 1x USB 2.0, 2x COM, 2x Nano SIM	1x DP, 1x HDMI (Display Input) 1x USB 2.0 Type B
Expansion	1x M.2 E Key for Wifi/BT 1x M.2 B Key for 4G/5G	-
Operating System	Windows 10/11, Linux Ubuntu	-
Operating Temp.	-10°C to 50°C	-10°C to 50°C
Power	AT/ATX Power, DC IN 12~36V	DC 12V

VIO SERIES

IP65 MODULAR INDUSTRIAL TOUCHSCREEN COMPUTERS & MONITORS

RUGGED IP65 MODULAR PANEL PC

The VIO Series modular touch display systems delivers an industrial-grade IP65 display solution designed specifically for HMI automation, information and communication applications. Its unique modular design makes the display system more flexible and versatile by providing a unique solution for both an industrial panel pc and a touch monitor.

PCAP/Resistive Touch

Modular Design

Wide Operating Temperature

Scratch-Resistant 7H Glass Screen

VIO-200 SERIES

MORE

The VIO-200 Series display module offers a diverse range of standard screen sizes, resolutions, and touch technologies. Designed for seamless integration, it is fully compatible with both the PC Modules and Monitor Module, enabling effortless configuration, upgrades, and maintenance.

16:9 SERIES

Thin Frame

Model	VIO-W215	VIO-W221	VIO-W224
LCD Size	15.6"	21.5"	23.8"
Max. Resolution	1920 x 1080 (Full HD)		
Brightness (cd/m2)	500 nits		450 nits
	1,000 nits (Optional)		
Contrast Ratio	1,000:1		
LCD Color	16.7M		
Life Cycle Time	50,000 Hours	30,000 Hours	
Viewing Angle (H-V)	178 / 178		
Internal Speaker	AMP 10W + 10W		
Touch Type	Resistive 5-wire Touch / Projected Capacitive Touch		
Operating Temperature	-10°C to 60°C	-10°C to 50°C	

4:3 SERIES

Thin Frame

Model	VIO-212	VIO-215	VIO-217	VIO-219
LCD Size	12.1"	15"	17"	19"
Max. Resolution	1024 x 768 (XGA)		1280 x 1024 (SXGA)	
Brightness (cd/m2)	600 nits	350 nits		
	1,000 nits (Optional)			
Contrast Ratio	1000:1		800:1	1000:1
LCD Color	16.2M	16.7M		
Life Cycle Time	50,000 Hours			
Viewing Angle (H-V)	178 / 178	170 / 160	178 / 178	170 / 160
Internal Speaker	AMP 5W + 5W	AMP 10W + 10W		
Touch Type	Resistive 5-wire Touch / Projected Capacitive Touch			
Operating Temperature	-10°C to 60°C			-10°C to 50°C

PC600-MTL SERIES

MORE

intel. Meteor Lake

Model	PC600-MTL	PC600-MTL-1
CPU Onboard	Intel® Core™ Ultra 7 Processor 155U 12M Cache, up to 4.80 GHz Intel® Core™ Ultra 5 Processor 125U 12M Cache, up to 4.80 GHz	
Memory	1x DDR5 5600MT/s SODIMM. Max. up to 32GB (Default 8GB)	
Display	1x 4K DisplayPort 1.2 1x 4K HDMI 2.0b	
Storage	1x Hotswap 2.5" SATA HDD Bay, support RAID 0, 1 1x M.2 M Key (2280, PCIe x4 Gen 4, for NVMe/AI), (Default 128GB)	
Expansion	1x Dual Nano SIM socket 2x M.2 B Key (2242,3052, for NVMe/AI/4G/5G)	
PCIe	-	1x PCIe x4 (x4 Lane, Gen 3)
I/O	4x RS-232/422/485, 2x RS-232/422/485 (internal) 2x RJ45 (2.5GbE) 2x USB 3.2 Gen 1 (5 Gbps) 1x USB-C 3.2 Gen 2, 1x USB 2.0 2x CAN	
Power	3-pin, AT, ATX 9~48V	
Operating Temperature	-20°C to 50°C -10°C to 50°C (with display module)	
Operating System	Windows 10, Windows 11, Linux Kernel 5.X	
Dimensions (WxDxH)	246 x 220 x 42 (mm)	246 x 220 x 64 (mm)

Note:

- The PC600-MTL Series is not compatible with the VIO-200 Series.
- The PC600-MTL Series is only compatible with the upcoming VIO-300 Series display module.

PC100-KBL-U SERIES

MORE

intel. Kabylake-U

Model	PC100-KBL-U	PC100-KBL-U-1
CPU Onboard	Intel® 7th Gen. (Kabylake-U) Processor Core™ i3-7100U/i5-7300U	
Memory	1x 260-Pin DDR4 1866/2133MT/s SODIMM. Max. up to 16GB	
Display	1x DisplayPort, 1x VGA	
Storage	1x 2.5" SATA HDD Bay, support RAID 0, 1 1x mSATA (shared by 1x Mini PCIe) 1x CFast (shared by 1x mSATA)	
Expansion	2x Full-size Mini PCIe 2x External SIM socket	
I/O Expansion	-	2x I/O Expansion (CAN/COM)
I/O	2x RJ45 4x USB 3.0 4x RS-232/422/485	2x RJ45 4x USB 3.0 4x RS-232/422/485 2x RS-232/422/485 (internal)
Power	3-pin, AT, ATX 9~48V	
Operating Temperature	-40°C to 70°C -10°C up to 60°C (with display module)	
Operating System	Windows 10, Linux Kernel	
Certification	UL 62368 Ed. 3, CE, FCC Class A	
Dimensions (WxDxH)	246 x 220 x 42 (mm)	246 x 220 x 64 (mm)

PC100-EHL SERIES

MORE

intel. Elkhart Lake

Model	PC100-EHL	PC100-EHL-1
CPU Onboard	Intel® Celeron® J6413 Processor Quad core (1.5M Cache,1.8GHz up to 3.00 GHz)	
Memory	1x 260-Pin DDR4 2400/2667/3200MT/s SODIMM. Max. 32GB (Default 8GB)	
Display	1x 4K DisplayPort 1.2 1x 4K HDMI 2.0b (Optional)	
Storage	1x mSATA, 1x Removable 2.5" SATA HDD Bay 1x M.2 B Key (2242/3042/3052 for 5G/AI/Storage Module), (Default 128GB)	
Expansion	1x Full-size Mini PCIe (USB 2.0, SATA), 2x External SIM socket, 1x M.2 E Key (2230, PCIe x1, USB 2.0, support Wifi/Bluetooth)	
I/O Expansion	-	1x I/O Expansion (CAN/COM)
PCIe Express	-	1x PCIe x4 (x1 Lane, Gen 3)
I/O	2x RJ45 (GbE, 2.5GbE), 4x RS-232/422/485, 2x RS-232/422/485 (internal) 2x USB 3.2 Gen 2 (10 Gbps), 4x USB 2.0 (2x Internal)	
Power	3-Pin, AT, ATX 9~36V	
Operating Temperature	0°C up to 60°C (with display module)	
Certification	UL 62368 Ed. 3, CE, FCC Class A	

PC100-J1900 SERIES

MORE

intel. Bay Trail

Model	PC100-J1900	PC100-J1900-1
CPU Onboard	Intel® Celeron® Processor J1900 (4 cores, 2MB Cache, 2.0 GHz)	
Memory	1x 204-pin DDR3L-1066/1333MT/s SODIMM, up to 8GB	
Display	1x VGA, 1x DisplayPort	
Storage	1x Removable 2.5" SATA HDD Bay 1x CFast (Shared by 1x mSATA & 1x Mini PCIe) 1x mSATA (Shared by 1x Mini PCIe)	
Expansion	1x Full-size Mini PCIe Socket with uSIM Socket (PCIe + USB + SATA) 1x Full-size Mini PCIe Socket with USIM Socket (PCIe + USB) 2x External SIM socket	
I/O Expansion	-	2x I/O Expansion (CAN/COM)
I/O	2x RJ45, 4x RS-232/422/485 2x RS-232/422/485 (internal), 1x USB 3.0, 3x USB 2.0	
Power	3-Pin , AT/ATX 9~48V	
Operating Temperature	-40°C to 70°C -10°C to 60°C (with display module)	
Certification	UL 62368 Ed. 3, CE, FCC Class A	
Dimensions (WxDxH)	246 x 220 x 42 (mm)	246 x 220 x 64 (mm)

MX100H SERIES

MORE

- 12.1" ~ 23.8" Thin Frame Full Range Touch Monitors
- Projected Capacitive and 5-wire Resistive Touchscreen Available
- 9 to 48 VDC Wide Range Power Input
- Aluminum Die-casting Front Frame
- Front Panel IP65 Rating

Model	MX100H
VGA	1x VGA Input
HDMI	1x HDMI Input
DisplayPort	1x DisplayPort Input
USB	1x USB 2.0 Input
COM Port	1x COM Port Input (Resistive Touch Only)
Audio	1x Audio Input
Power	3-pin, AT/ATX 9-48V
Operating Temperature	-10°C up to 60°C (with display module)
Dimensions (WxDxH)	246 x 220 x 37 (mm)

SIO SERIES

IP68/69K STAINLESS STEEL INDUSTRIAL TOUCHSCREEN COMPUTERS

SUS 316 WASHDOWN TOUCHSCREEN COMPUTER

The SIO Series unifies advanced compute capabilities, I/O expandability and interactive display for dynamic industrial deployments. The stainless steel SIO Series are designed fanless, strong and tightly sealed to sustain punishing temperatures, harsh impacts, caustic contact and intense equipment washdowns.

- Optical Bonding
- Wide Temperature
- Shock And Vibration Resistance
- TPM 2.0 Security Module

SIO-300-ADL SERIES

Coming Soon

intel. Alder Lake

Model	SIO-315-ADL	SIO-W315-ADL	SIO-W321-ADL	SIO-W324-ADL
CPU Onboard	Intel® Alder Lake N97 Processor 4 cores, 3.60 GHz (12W)			
Memory	1x 262-pin DDR5 4800 MT/s SO-DIMM Max. up to 16GB			
I/O	3x 2.5GbE by M12 X-Code 8-pin, 2x RS-232/422/485 by M12 A-Code 8-pin, 1x USB 3.0 by M12 A-Code 8-pin, 4x USB 2.0 by M12 A-Code 8-pin, 1x Pressure Valve			
Storage & Expansion	1x M.2 M Key for NVMe/AI (Default 128GB) 1x M.2 B Key for 4G/5G, 1x M.2 E Key for Wifi/BT			
Power	M12 S-code 4-pin, ATX 110~240V			
Operating Temp	-10°C to 50°C			
LCD Size	15" (4:3) TFT XGA	15.6" (16:9) Full HD	21.5" (16:9) Full HD	23.8" (16:9) Full HD
Brightness (cd/m2)	450 nits	450 nits	400 nits	450 nits
Touch Screen	PCAP, 7H/IK07, Optical Bonding			
IP Level	Full System IP68/69K			
Certification	CE, FCC Class B, UL 62368 Ed. 3			
Mounting	VESA Mount Optional: Yoke Mount, Panel Mount			

SIO-200-J1900 SERIES

MORE

intel. Bay Trail / Whiskey Lake

Model	SIO-215-J1900	SIO-W215-J1900	SIO-W221-8365UE	SIO-W224-8365UE
CPU Onboard	Intel® Celeron® J1900 Processor, 4 cores, 2.0 GHz		Intel® Core™ i5-8365UE Processor, 4 cores, 4.10 GHz	
Memory	1x 204-pin DDR3L SODIMM Max. up to 8GB (Default 8GB)		1x 260-pin DDR4 2400MHz SODIMM Max. up to 32GB (Default 8GB)	
I/O	2x GbE by M12 X-Code 8-pin, 2x RS-232/422/485 by M12 A-Code 8-pin, 4x USB 2.0 by M12 A-code 8-pin, 1x Pressure Valve			
Storage & Expansion	1x mSATA (Default 128GB), 1x Full-size Mini PCIe (internal)			
Power	M12 S-code 4-pin, ATX 110~240V			
Operating Temp	-20°C to 55°C		-10°C to 50°C	
LCD Size	15" (4:3) TFT XGA	15.6" (16:9) Full HD	21.5" (16:9) Full HD	23.8" (16:9) Full HD
Brightness (cd/m2)	300 nits	450 nits	350 nits	450 nits
Touch Screen	Resistive 5-wire Touch / Projective Capacitive, Optical Bonding			
IP Level	Full System IP66/69K			
Certification	CE, FCC Class A			
Mounting	VESA Mount Optional: Yoke Mount, Panel Mount			

INDUSTRIAL BOARD SOLUTIONS

1.8" SERIES

FEMTO ITX
MINI INDUSTRIAL SBC

2.5" SERIES

PICO ITX
COMPACT INDUSTRIAL SBC

3.5" SERIES

3.5-INCH
SFF INDUSTRIAL SBC

MINI-ITX SERIES

RICH I/O
INDUSTRIAL MOTHERBOARD

MICRO ATX SERIES

RICH EXPANSIONS
INDUSTRIAL MOTHERBOARD

ATX SERIES

HIGH-PERFORMANCE
INDUSTRIAL MOTHERBOARD

Our line of industrial motherboards and single board computers represent the standard of embedded computing as well as the future of data processing and I/O connectivity. From OEM /ODM enterprise computing designs to embedded single board computer applications, We provide reliability and longevity with standard off-the-shelf industrial grade motherboards for the most challenging embedded deployments.

We also provide end-to-end engineering services to ensure your configuration requirements and solve your mechanical design challenges. From a full custom solution to a small change in the I/O, we can adapt each motherboard to comply with your specifications without compromising performance.

BOARDS SERIES

MORE

We offer industrial-grade scalability with standard motherboards and OEM system design. Standard form factors include: Single board computers (1.8" Femto-ITX, 2.5" PICO-ITX, and 3.5" SBCs); Mini-ITX; and Micro-ATX.

1.8" FEMTO ITX SERIES

Model	CT-NR101
CPU	AMD Ryzen™ Embedded R1606G with Radeon™ Vega 3 Graphics (3.5GHz/2 Core)
Memory	1x DDR4-2400 Single-Channel Memory 4GB (Up to 8GB, Optional)
Storage	eMMC up to 64GB
Display	2x Micro HDMI 1.4 (4K DCI)
Rear I/O	1x RJ45 (GbE) 1x Type C USB 3.1 Gen 1 (5V/3A) 2x 5-pin header DIO (4-in/4-out)
Internal I/O	1x USB 2.0 (4-pin header, internal)
Expansion	1x Full-size Mini PCIe (PCIe x1, USB 2.0) 1x SMBus
Operating Systems	Windows 10, Linux Kernel 5.x
Power	ACPI, DC IN 12V
Operating Temperature	0°C to 60°C
TPM	TPM 2.0
Dimension	84 x 55 (mm)

2.5" PICO ITX SERIES

Model	CT-PBT01
CPU	Intel® Celeron Processor J1900 (2.0GHz/4 Core/10W)
Memory	1x 204-Pin DDR3L 1066/1333MHz SODIMM. Max. up to 8GB
Storage	1x SATA 3.0Gb/s 1x mSATA (shared by 1x Mini PCIe)
Display	1x HDMI (2048x1080 @60Hz) 1x LVDS
Rear I/O	1x USB 3.0, 1x USB 2.0 1x RJ45
Internal I/O	1x RS-232/422/485, 1x RS-232 2x USB 2.0 1x 8-bit GPIO (4-in/4-out)
Expansion	1x Half-size Mini PCIe 1x Half-size Mini PCIe (Full-size optional)
Operating Systems	Windows 10, Windows 7, WES7 Linux kernel 3.X
Power	ACPI, DC IN 12V
Operating Temperature	-10°C to 70°C
TPM	N/A
Dimension	100 x 72 (mm)

BOARDS SERIES

MORE

3.5" SBC SERIES

intel.
AMD RYZEN EMBEDDED

NEW

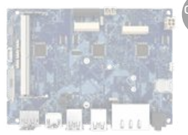
Model	CT-DR101	CT-DWL01	CT-DAL01
CPU	AMD Ryzen™ Embedded V1605B (3.6 GHz/4 Core/15W) AMD Ryzen™ Embedded R1606G (3.5 GHz/2 Core/25W)	8th Gen. Intel® Core™ Processor i3/ i5/i7 Intel® Celeron® Processor (up to 4.4 GHz/4 Core/15W)	12th Gen Intel® IoTG Alder Lake-N Processor N97 QC (3.60GHz/4 core/12W) 12th Gen Intel® IoTG Alder Lake-N Processor Core i3-N305 (3.80GHz/8 Core/9W up to 15W)
Memory	2x 260-pin DDR4 2400 SO-DIMM. Max. up to 32GB (ECC and Non-ECC)	1x 260-Pin DDR4 2400MHz SO-DIMM Max. up to 32GB	1x 262-pin DDR5 4800 SO-DIMM. Max. up to 16GB (Non-ECC)
Storage	1x SATA 7-Pin Connector	2x SATA Gen3	1x SATA 3.0 6Gb/s (Support AHCI)
Display	1x DisplayPort 1.4 (Support DP++, 4K UHD) 1x HDMI 2.0b (4K UHD, Optional) 1x LVDS	1x DisplayPort (4K) 1x HDMI (1920 x 1200, Optional) 1x LVDS & 1x EDP internal connector	1x DisplayPort 1.4 (4K DCI) 1x HDMI (4K UHD) 1x LVDS (FHD)
Rear I/O	2x RJ45 (GbE) 2x USB 3.2 Gen2 (10 Gbps) 2x USB 2.0	2x RJ45 (GbE) 4x USB 3.2 Gen 2 (10 Gbps)	2x RJ45 (2.5GbE) 2x USB 3.2 Gen 2 (10 Gbps) 2x USB 3.2 Gen 1 (5 Gbps)
Internal I/O	2x 6-Pin Front Panel Header for Audio	4x RS-232/422/485 2x USB 2.0 2x 4-bit DIO (4-in/4-out) 1x Front Panel Audio	2x RS-232-/422/485 6x USB 2.0 Internal 2.0 1x 8-pin GPIO (4-in/4-out)
Expansion	1x Full-size mPCIe (PCIe x1, USB 2.0) 1x M.2 B Key, 3042, Support SATA 1x SIM socket (M.2 B Key attached)	2x mPCIe x1 (Gen3)	1x M.2 B Key (2242/3042/2280, SATA/PCIe x1), 1x M.2 E Key (2230, PCIe x1, USB 2.0)
Operating Systems	Windows® 10, Linux Kernel 5.x		Windows® 10 Enterprise, 11 IoT Enterprise Linux Kernel 5.x
Power	AT/ ATX Power, DC IN 12V		AT/ ATX Power, DC IN 9~36V
Operating Temperature	-40°C to 75°C	-40°C to 70°C	-10°C to 60°C
TPM	TPM 2.0	TPM 2.0 Through Infineon	TPM 2.0
Dimension	146 x 102 (mm)		

BOARDS SERIES

MORE

3.5" SBC SERIES

intel.



Coming Soon

NEW

NEW

Model	CT-DAS01	CT-DAL11	CT-DML01
CPU	Intel® Atom® x7433RE Processor (3.40 GHz/4 core/12W) Intel® Atom® x7835RE Processor, (3.60/8 core/20W)	12th Gen Intel® Alder Lake-N Processor N97 (3.60 GHz/4 Core/12W) Intel® Atom® x7835RE Processor (3.60 GHz/8 Core/12W)	Intel® Core™ Ultra 5 Processor 125U, up to 4.30 GHz (2+8+2 core) Intel® Core™ Ultra 7 Processor 155U, up to 4.80 GHz (2+8+2 core)
Memory	1x DDR5 4800 MT/s up to 16GB (Non-ECC)	1x 262-pin DDR5 4800 SO-DIMM. Max. up to 16GB (Non-ECC)	1x 262-Pin DDR5 5200MHz SO-DIMM. Max. up to 32GB
Storage	1x M.2 M Key (2242/2260/2280, PCIe x2) for NVMe SSD	1x SATA 3.0 6Gb/s (Support AHCI)	1x M.2 M Key (2280, PCIe x4 Gen 4/SATA) for NVMe/SATA, auto detect
Display	1x 4K DP 1x 4K HDMI 1x eDP / 1x LVDS	1x DisplayPort 1.4 (4K DCI) 1x HDMI (4K UHD) 1x eDP 1.4b (FHD) 1x LVDS (FHD)	2x DP++ 1.4 (4K UHD) 1x eDP 1.4b (4K UHD) 1x LVDS (WUXGA)
Rear I/O	2x RJ45 (2.5GbE), 2x RS232 1x Nano SIM Socket (Attached to M.2 B Key), 3x USB 3.2 Type A Gen 1 (5 Gbps) 1x USB 3.2 Type C Gen 1 (5 Gbps)	3x RJ45 (2.5GbE) 1x Dual Nano SIM Socket 2x USB 3.2 Gen 2 (10 Gbps)	3x RJ45 (2.5GbE) 2x SIM Nano Socket 1x USB 3.2 Type-C GEN 1 (5 Gbps) 2x USB 3.2 Gen 1 (5 Gbps) 1x USB 2.0
Internal I/O	2x RS232/422/485 2x USB 2.0 1x 4-in / 4-out DIO	2x RS-232/422/485 2x USB 2.0 1x 8-pin GPIO (4-in/4-out)	4x RS-232/422/485 (internal) 1x 8-pin GPIO (4-in/4-out) 4x USB 2.0
Expansion	1x M.2 E Key (2230, PCIe x1, USB 2.0) for Wi-Fi/Bluetooth, 1x M.2 B key (2242/3042/3052, PCIe x1) for NVMe/SATA/4G/5G Module,	1x M.2 B Key (2242/2280/3042) support for NVMe/4G/5G, 1x M.2 E Key (PCIe x1, USB 2.0, 2230) for Wifi/Bluetooth	1x M.2 B Key (3042/3052, PCIe x2 +USB 3.0) for 4G/5G 1x M.2 E Key (2230) for Wifi/Bluetooth
Operating Systems	Windows® 10 Enterprise, Windows® 11 IoT Enterprise Linux Linux Ubuntu 22.04		
Power	AT/ATX Power, DC IN 9~36V	AT/ATX Power, DC IN 12~36V	AT/ATX Power, DC IN 12~24V
Operating Temperature	-40°C to 85°C	-10°C to 60°C	0°C to 60°C
TPM	TPM 2.0		
Dimension	146 x 102 (mm)		

BOARDS SERIES

MORE

MINI ITX SERIES

NEW

Model	CT-XSL01	CT-XCL01	CT-XRL02
CPU	Intel® 6th Gen. Core™ i3/i5/i7 Processor (LGA 1151, 35W)	8th/9th Gen Intel® CFL-R S Processor (LGA 1151, 95W/65W/35W)	12th/13th/14th Gen. Intel i3/i5/i7/i9 (Max 65W)
Memory	2x DDR4 1866/2133MHz SODIMM. Max. 32 GB	2x DDR4 2133/2400/2666 SODIMM. Max. up to 32 GB	2x 260-pin DDR4 SO-DIMMs 3200 MHz (Non-ECC) Max. 64 GB
Storage	4x SATA 6.0Gb/s 1x mSATA (shared by 1x mPCIe) 1x M.2 M-Key (2280)	4x SATA 3.0Gb/s (support RAID 0, 1, 5, 10) 1x M.2 M-Key (2280, SATA)	3x SATA 6.0Gb/s (RAID 0, 1, 5, 10), 1x M.2 M-Key (2242/2280, PCIe x4 Gen 4)
Display	1x DVI-D 1x DisplayPort 1x LVDS	1x DP 1.2, 1x DVI-D 1x HDMI 1.4 1x LVDS	1x HDMI Real 4K 2x Real 4K DP
Rear I/O	2x RJ45 (GbE), 1x RS-232/422/485, 4x USB 3.2 Gen1 (5 Gbps), 2x USB 2.0	2x RJ45 (GbE), 1x RS-232/422/485, 4x USB 3.1 Gen 2 (10 Gbps), 1x USB 3.1 Type-C (optional)	3x RJ45 (2.5GbE) 6x USB 3.2 Gen 2 2x RS-232/422/485
Internal I/O	4x RS-232 2x USB 3.2 Gen1 (5 Gbps), 2x USB 2.0, 1x 8-bit GPIO (4-in/4-out)	4x RS-232 2x USB 3.2 Gen 1 (5 Gbps) 2x USB 2.0 1x 8-bit DIO (4-in/4-out)	2x USB 3.2 Gen 2 (10 Gbps) 1x Front panel audio 2x USB. 2.0 1x 16-bit DIO (8-in/8-out)
Expansion	1x Full-size mPCIe 1x PCIe x16	1x Full-size mPCIe 1x PCIe x16 (Gen 3)	1x PCIe x16 Gen4 Gold Finger for Riser Card Expansion (1x PCIe x16 or 2x PCIe x8), 1x M.2 B-Key 3042 (with Nano SIM for 4G/5G), 1x M.2 E-Key 2230 (for Wifi/BT)
Operating Systems	Windows 10, Windows 8.1, WES8.1, Windows 7, WES7, Linux Kernel 4.X	Windows 10 Linux Kernel 5.X	Windows 10/11 Linux Kernel
Power	ATX Power	ATX Power	ATX-Power 24P, 12V-8P
Operating Temperature	0°C to 60°C		
TPM	TPM 2.0 (Optional)		TPM 2.0
Dimension	170 x 170 (mm)		

BOARDS SERIES

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ATX SERIES

Model	CT-MCL01	CT-MRL01	CT-ARL01
CPU	8th/9th Gen. Intel® Core™ i3/i5/i7 CFL-R S Processor (LGA 1151, 95W/65W/35W TDP)	12th/13th/14th Gen Intel® Core™ i3/i5/ i7/i9 Alder lake-S, Raptor Lake-S (LGA 1700, 65W Max)	12th/13th/14th Gen Intel® Core™ i3/i5/ i7/i9 Alder lake-S, Raptor Lake-S (LGA 1700, 125W Max)
Memory	4x Pin DDR4 2133/2400/2666MHz DIMM. Max. 64 GB	4x DDR4 2133/2400/2666MHz DIMM. Max 128GB	4x DDR5 4400MHz UDIMM (ECC/non-ECC) Max. 128GB
Storage	6x SATA 6.0Gb/s 1x M.2 M-Key (2242/2260/2280, PCIe x4) for NVMe/SATA	4x SATA 6.0Gb/s 2x M.2 M-Key (2242/2260/2280, PCIe x4 Gen4) for NVMe/SATA	4x SATA 3.0 (RAID 0, 1, 5, 10) 1x M.2 M-Key (2280/22110), 1x M.2 M-Key (2242/2280)
Display	1x VGA 1x DVI-D 2x DP 1.2	4x DP++ (4K)	1x 4K DP, 1x 4K HDMI, 1x VGA (WUXGA)
Rear I/O	2x RJ45 (GbE) 2x RS-232/422/485 4x USB 3.2 Gen 2 (10 Gbps)	2x RJ45 (GbE, 2.5GbE) 1x USB-C 3.2 Gen 2x2 (20 Gbps) 6x USB 3.1 Gen 2 (10 Gbps)	4x RJ45 (2.5GbE), 8x USB 3.2 Gen 2, 1x COM, 1x Mic-In, 1x Mix-Out
Internal I/O	4x RS-232 1x USB 3.2 Gen 1 (5 Gbps) 7x USB 2.0 1x 8-bit DIO (4-in/4-out)	6x RS-232 2x USB 3.0 Gen 1 (5 Gbps) 4x USB 2.0 1x 8-bit DIO (4-in/4-out)	2x USB 3.2 Gen 1, 3x USB 2.0, 5x RS-232/422/485, 16x GPIO
Expansion	1x PCIe x16 (Gen3) 2x PCIe x4 (Gen3) 1x PCIe x1 (Gen3) 1x M.2 E-Key (2230, PCIe x2, USB 2.0)	1x PCIe x16 Slot (Gen 5) 1x PCIe x16 (Gen 4, 4-Lane) 1x PCIe x4 (Gen 4, Open End) 1x PCIe x4 (Gen 3, Open End) 1x M.2 E-Key (2230, PCIe x2 Gen3) for USB 2.0	2x PCIe x16 (1x 16-Lane or 2x 8-Lane), 4x PCIe x4, 1x PCIe x1
Operating Systems	Windows 10, Linux Linux Kernel 5.X	Windows 10/11, Linux Kernel 5.X	
Power	ATX Power		
Operating Temperature	0°C to 60°C		
TPM	TPM 2.0		
Dimension	244 x 244 (mm)		305 x 244 (mm)

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PRODUCTS

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Coming Soon

CT-XAR01

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