



C&T SOLUTION INC.

# PRODUCT SOLUTION GUIDE

# 2025

INDUSTRIAL COMPUTING  
SOLUTIONS FROM THE  
EDGE TO THE CLOUD



BEYOND THE RUGGED EDGE

# YOUR TOP CHOICE PARTNER IN INDUSTRIAL COMPUTING FROM THE EDGE TO THE CLOUD

Established in 2011, Taipei, C&T Solution Inc. is becoming one of the fastest-growing companies in the Industrial Computing Systems field. With its obsession with creating the best rugged edge computers as the core of great industrial leading solutions, C&T has become one of the top enterprises in providing world-class industrial embedded systems.

C&T is a global solutions provider specializing in industrial computer and embedded fields. We are committed to developing and manufacturing rugged edge computers, industrial panel PCs, industrial display systems, and industrial motherboards. C&T strives for the highest standards in innovation and technology to stay ahead of competitors in terms of design, technology, reliability, and versatility.

Our teams have worked strongly and closely with the customers to provide the high-quality and high-value creation of robust embedded computers. Moreover, our engineering specialty and agile manufacturing push the technical boundaries in embedded IoT computers. As a result, C&T is determined to become your top choice partner in industrial computing solutions. Therefore, C&T has an extensive customer base through global network and distribution partners from offices located worldwide.



C&T proudly offers diverse industrial technologies to meet various customers' needs based on their applications and industries. Our application-ready solutions are contributing to escalating advancement in a varied array of industrial sectors, including:

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



## OUR MISSION

C&T is dedicated to creating and delivering world-class technology solutions that empower our clients to reach their business goals. We will apply the highest creativity, integrity, quality, and innovation standards to our products and concepts.



## OUR VISION

Our vision is to create the best rugged edge computers as the core of great solutions that transform people's life. We will relentlessly innovate to deliver world-class edge computers for industry-leading solutions.



## OUR VALUE

We strive to exceed our customers' expectations with innovative and competitive solutions. For us, this means providing unsurpassed service, delivering premium value, and offering a competitive edge to our customers. Additionally, our OEM and ODM collaboration constantly aim to deliver high-quality products, reliable partnerships, professional service, and competitive price, service, and competitive price.



## OUR CORE VALUES

We deliver our core brand values through the way we conduct business. C&T 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 C&T, we treat customers with dignity, respect, and courtesy. We listen objectively to their needs and respond in a timely, efficient, and responsible manner.



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C&T's fanless embedded systems are extremely flexible and reliable to provide integrated solutions to meet different needs. With its superior features integration, exceptional system performance, flexible I/O connections, wide range power input, smart management functions, and rugged reliability, C&T fanless embedded systems deliver a compelling platform that is needed in today's demanding workloads and industrial needs.

### BCO SERIES 16

SEMI-RUGGED INDUSTRIAL COMPUTERS



### RCO SERIES 22

SUPER-RUGGED INDUSTRIAL COMPUTERS



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SUPERCAPACITOR UPS BACKUP SYSTEM



### JCO SERIES 36

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MACHINE VISION INDUSTRIAL COMPUTERS



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FANNED INDUSTRIAL COMPUTERS



# 2025

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## INDUSTRIAL PANEL PCS AND TOUCH MONITORS 50

C&T's Industrial Panel PCs and Touch Monitors are purpose-built for the toughest embedded deployments requiring mission-critical reliability. System integrators and automation engineers can easily deploy C&T industrial panel PCs and touch monitors as human machine interfaces to achieve better productivity and operational efficiency in their enterprise projects.

### HIO SERIES 52

IP65 OPEN-FRAME INDUSTRIAL TOUCHSCREEN COMPUTERS



### AIO SERIES 54

IP65 ALL-IN-ONE INDUSTRIAL TOUCHSCREEN COMPUTERS & MONITORS



### VIO SERIES 56

IP65 MODULAR INDUSTRIAL TOUCHSCREEN MONITORS & TOUCHSCREEN COMPUTERS

- Display Module
- PC Module



### SIO SERIES 62

IP68/69K STAINLESS STEEL INDUSTRIAL TOUCHSCREEN COMPUTERS



## INDUSTRIAL BOARD SOLUTIONS 64

C&T offers 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.





## APPLICATION

# RAILWAY & ROLLING STOCK



EN50155 / EN45545



M12 Locking Ports



Shock & Vibration Resistant



High Performance



**JCO-6000-ORN Series** **NVIDIA**  
NVIDIA Jetson AGX Orin [Visit P.39](#)

**8x**  
GMSL2

**10x**  
USB Locking

**12x**  
M12 PoE

**RCO-3000-RPL Series** [Visit P.25](#)

Small Form Factor Computer with Intel® 12<sup>th</sup>/13<sup>th</sup>/14<sup>th</sup> Gen Processors

**4x**  
M12 PoE

**5G**  
3x SIM Slot

**-25°C to 70°C**  
Wide Temperature



RAILWAY  
SIGNALING



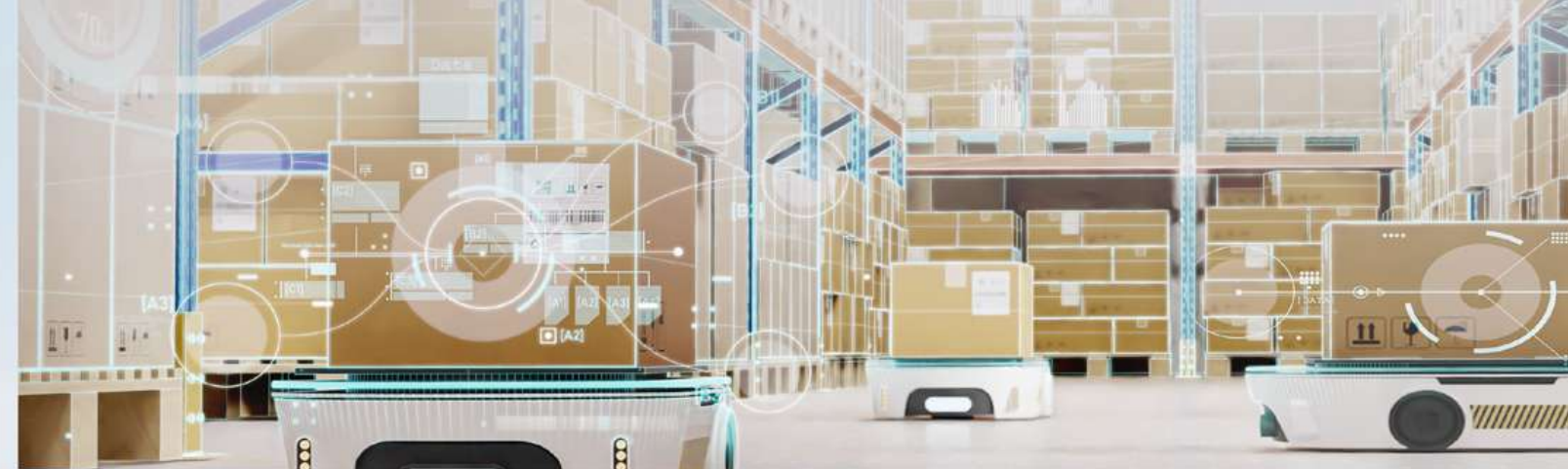
RAILWAY SURVEILLANCE

**ACO-6000-RPL Series** [Visit P.45](#)

In-Vehicle Computer with Intel® 12<sup>th</sup>/13<sup>th</sup>/14<sup>th</sup> Gen Processors

**16x**  
M12 PoE

**FULL Certification**  
EN50155 EN45545



Edge AI Enabled



Rich I/O Expansion



Shock & Vibration Resistant



Compact & Fanless

## IN-VEHICLE & AGV

**RCO-6000-RPL Series** [Visit P.27](#)

Industrial Computer with Intel® 12<sup>th</sup>/13<sup>th</sup>/14<sup>th</sup> Gen Processors

**GPU**  
RTX 4000 SFF  
RTX A2000 ADA

**6x**  
SSD Storages

**8x**  
M12 PoE



L4 AUTONOMOUS DRIVING



AGV/AMR

**NVIDIA**

**JCO-3000-ORN Series**

Mid-Range AI Computer with NVIDIA Jetson Orin NX and Orin Nano [Visit P.38](#)

**4x**  
RJ45 PoE

**OOB**  
Remote Management



VEHICLE TELEMATICS & SURVEILLANCE

**RCO-1000-EHL Series** [Visit P.24](#)

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

**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.21](#)  
High-Performance Industrial Edge Computer with Intel® 12<sup>th</sup>/13<sup>th</sup>/14<sup>th</sup> Gen Processors

**GPU**  
RTX A2000

**Cost Effective**  
Industrial Alternative



QUALITY INSPECTION  
AND DEFECT  
DETECTION

**VCO-6000-RPL Series** [Visit P.47](#)  
Machine Vision Computer with Intel® 12<sup>th</sup>/13<sup>th</sup>/14<sup>th</sup> Gen Processors

**4x**  
PCIe Gen 4  
Slots

**600W**  
GPU Power

**Dual GPU**  
RTX 4000  
SFF ADA



HIGH-SPEED VISION  
AND 3D METROLOGY VISION



RACKMOUNT MACHINE VISION SOLUTION

**4x**  
PCIe  
5.0, 4.0, 3.0

**3U**  
Rackmount

**Dual GPU**  
RTX A4000 SFF

**KCO-3000-RPL Series** [Visit P.49](#)  
3U Rackmount Fanned Industrial Computer with Intel® 12<sup>th</sup>/13<sup>th</sup>/14<sup>th</sup> Gen Processors

# SMART MANUFACTURING

## TOUCH SCREEN COMPUTERS



**AIO-200-ADL Series**  
All-in-One IP65 Industrial Panel PC  
[Visit P.54](#)

**IP65**  
Front Panel  
Protection

**SLIM**  
5~6.2 cm  
Thick

**ADL/ASL**  
Intel N97 and  
X7835RE CPU

**VIO/PC600-MTL Series** [Visit P.58](#)  
High-Performance Panel PC with Intel® Meteor Lake CPU

**4x**  
RJ45 POE

**IP65**  
Front Panel  
Protection

**PCIe 4.0**  
One PCIe x4 Slot



MACHINE VISION MODULAR PANEL PC



**IP68/69K**  
Dust & Waterproof

**SUS316**  
Corrosion Proof



**SIO-300-ADL Series** [Visit P.63](#)  
Stainless Steel Industrial Panel PC

FOOD & FARM PROCESSING PLANTS



# 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

Visit P.41

DIN-Rail Fanless Computer with Intel® Atom® X7433RE Amston Lake Processor



ENERGY MANAGEMENT & SCADA

TRAFFIC MANAGEMENT & ANALYSIS



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### WCO-3000-EHL Series

IP68/69K Waterproof Computer with Intel® Atom® X6425E Elkhart Lake Processor

## IP68/69K

Dustproof & Waterproof

## M12

Optional 2x PoE

## -40°C to 60°C

Wide Temperature

RENEWABLE ENERGY GRID



Visit P.35

### ECO-1000 Series

EDGEBoost EnergyPack Industrial-Grade Supercapacitor UPS

## 200W

High Power Output

## 10Year

Extra Longevity

## -25°C to 55°C

Wide Temperature

## KIOSK & RETAIL



Cost Effective



Power Efficient



Quick Deployments



Industrial Durability

## 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

Visit P.52

Open-Frame Touchscreen Computer with Intel® Atom® N97 Processor



RETAIL VISION



Visit P.38

### JCO-1000-ORN Series

Fanless Mini PC with NVIDIA Jetson Orin NX/Nano Super Module

## 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

SMART KIOSKS



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### BCO-500 Series

Fanless Mini PC with Intel® Atom® X7835RE and N97 Processor

## Mini NUC

Intel® NUC Alternative

## Dual 4K

DP and HDMI

## 4G/5G

High-Speed Wireless Connectivity

## Rich I/O

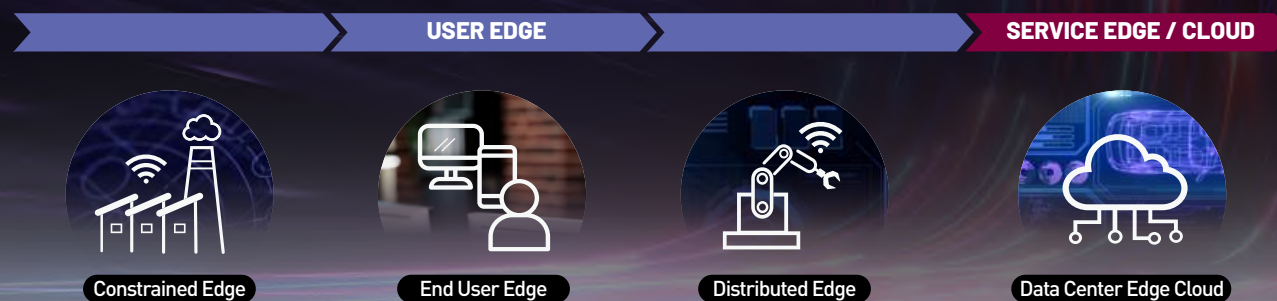
Rich I/O Ports and M.2 Expansions











# 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.

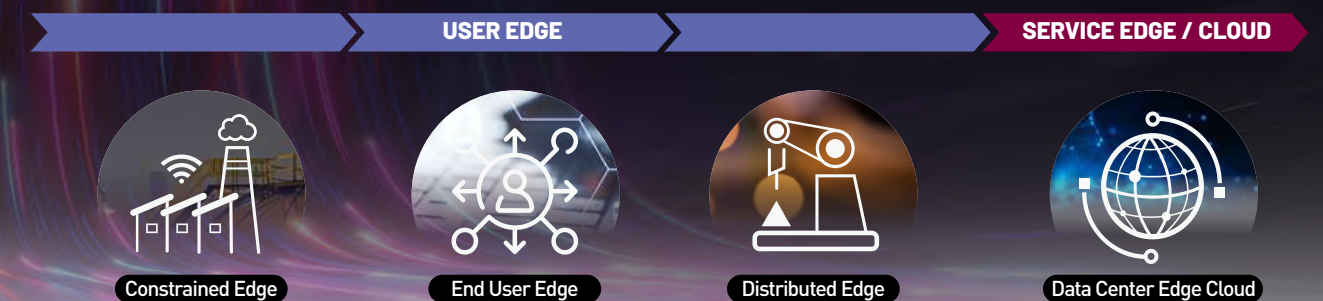








Industrial Edge	Rugged Edge	Specialized Edge
<ul style="list-style-type: none"><li>Controlled Environments</li><li>Fanless Cooling Design</li><li>Dust, Shock, and Vibration Resistant</li><li>Standardized Form Factors</li><li>Durable and Cost-Effective</li><li>Long Lifetime Support</li></ul> <p><b>BCO Series</b> Fanless Industrial Computers</p>  <p>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.</p>	<ul style="list-style-type: none"><li>Extreme Environments</li><li>Wide Operating Temperature</li><li>Powerful Computing Capabilities</li><li>Supports EDGEBoost Technology for I/O, M.2, and PCIe Customization</li><li>Reinforced Durability</li></ul> <p><b>RCO Series</b> Super-Rugged Computers</p>  <p>The RCO series is engineered for ultimate industrial durability and unparalleled customizability, creating a unique blend of ruggedness and flexibility.</p> <p><b>JCO Series</b> Jetson EDGE AI Computers</p>  <p>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.</p>	<ul style="list-style-type: none"><li>Designed for Industry-Specific Needs</li><li>Validated with Niche Certifications<ul style="list-style-type: none"><li>EN50155 (Railway)</li><li>EN45545 (Fire Safety)</li><li>E-Mark (In-Vehicle)</li><li>IP68/IP69K (Waterproof)</li></ul></li></ul> <p><b>DCO Series</b> DIN RAIL Fanless Computers</p>  <p><b>WCO Series</b> IP68/IP69K Waterproof</p>  <p><b>ACO Series</b> EN50155 Railway &amp; In-Vehicle</p>  <p><b>VCO Series</b> Machine Vision GPU Computers</p>  <p><b>KCO Series</b> Rackmount Industrial Computers</p> 

## THE EDGE CONTINUUM

## 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.



Industrial Edge	Rugged Edge	Specialized Edge
<ul style="list-style-type: none"><li>Controlled Environments</li><li>Flexible Performance</li><li>Fanless Cooling Design</li><li>IP65 Front Display</li><li>10"-21" Full HD Displays</li><li>Extended MTBF</li></ul> <p><b>AIO Series</b> All-In-One Touchscreen Computers</p>  <p>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.</p> <p><b>HIO Series</b> Open-Frame Touchscreen Computers</p>  <p>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.</p>	<ul style="list-style-type: none"><li>Industrial Environments</li><li>Various Computing Capabilities</li><li>Wide Temperature Range</li><li>Shock &amp; Vibration Resistant</li><li>Reinforced Durability</li><li>Fit for Demanding Edge Applications</li></ul> <p><b>VIO Series</b> Modular Touchscreen Monitors and Computers</p>  <p>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.</p> <p><b>MX Series</b></p>  <p><b>PC Series</b></p> 	<ul style="list-style-type: none"><li>Tailored for Industry-Specific Needs</li><li>Includes IP68/IP69K Waterproof, SUS-316 Stainless Steel, and Optical Bonding</li><li>Targeted Functionality for Specialized Applications</li></ul> <p><b>SIO Series</b> SUS 316 Stainless Steel Touchscreen Computers</p>  <p>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.</p>



# 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



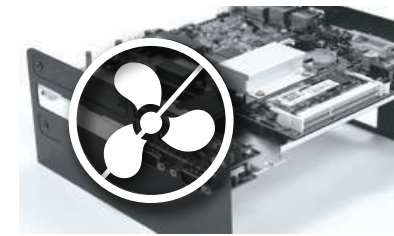
**EDGEBoost I/O**

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



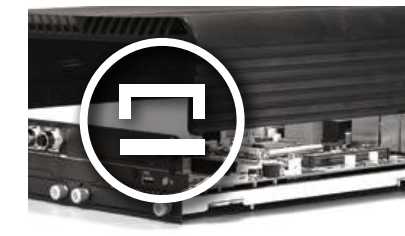
**EDGEBoost EnergyPack**

**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

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

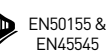
## COMMITMENT TO INDUSTRIAL CYBERSECURITY

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.



## 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.





# 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 &  
Ruggedized 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

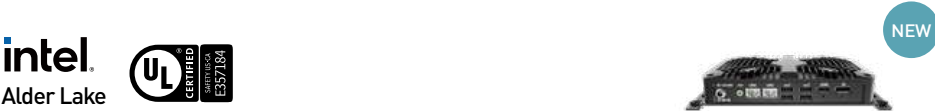
- Intel® Core Processors
- Powerful 35W Edge Performance
- Rich I/O Ports and M.2 Expansions
- Up to Triple Displays / Triple RJ45 LAN Ports

### 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 SERIES



Model	BCO-500-ADL
CPU Support	12 <sup>th</sup> 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 4x USB 3.2 Gen 2 (10 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](#)



Model	BCO-1000-ADLN	BCO-1000-ADLN-B_3L
CPU Support	12 <sup>th</sup> Gen Intel® IoTG Alder Lake-N N97 Processor	12 <sup>th</sup> 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/5G/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 SERIES

MORE

BCO-2000-RYZ SERIES

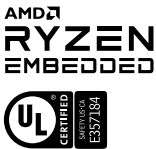
MORE

BCO-3000-RPL SERIES

MORE

BCO-6000-RPL SERIES

MORE



Model	BCO-2000
CPU Support	8 <sup>th</sup> 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)

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)



NEW



NEW

Model	BCO-3000-RPL	BCO-6000-RPL
CPU Support	12 <sup>th</sup> /13 <sup>th</sup> /14 <sup>th</sup> 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

RCO-3000 SERIES



RCO-6000 SERIES



RCO-1000 SERIES



### 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



ULTRA COMPACT RUGGED COMPUTER

SMALL FORM FACTOR RUGGED COMPUTER

RCO-1000-ASL SERIES



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



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



Model	RCO-3000-RPL
CPU Support	12 <sup>th</sup> /13 <sup>th</sup> /14 <sup>th</sup> 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



Model	RCO-3000-CML
CPU Support	10 <sup>th</sup> 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



Model	RCO-6000-CML	RCO-6000-CML-2C-2PWR	RCO-6000-CML-2C-4B7M
CPU	10 <sup>th</sup> Gen Intel® CML S Processor i3/i5/i7/i9/Xeon® (LGA 1200, 35W/65W 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/65W 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)	

RCO-6000-RPL SERIES

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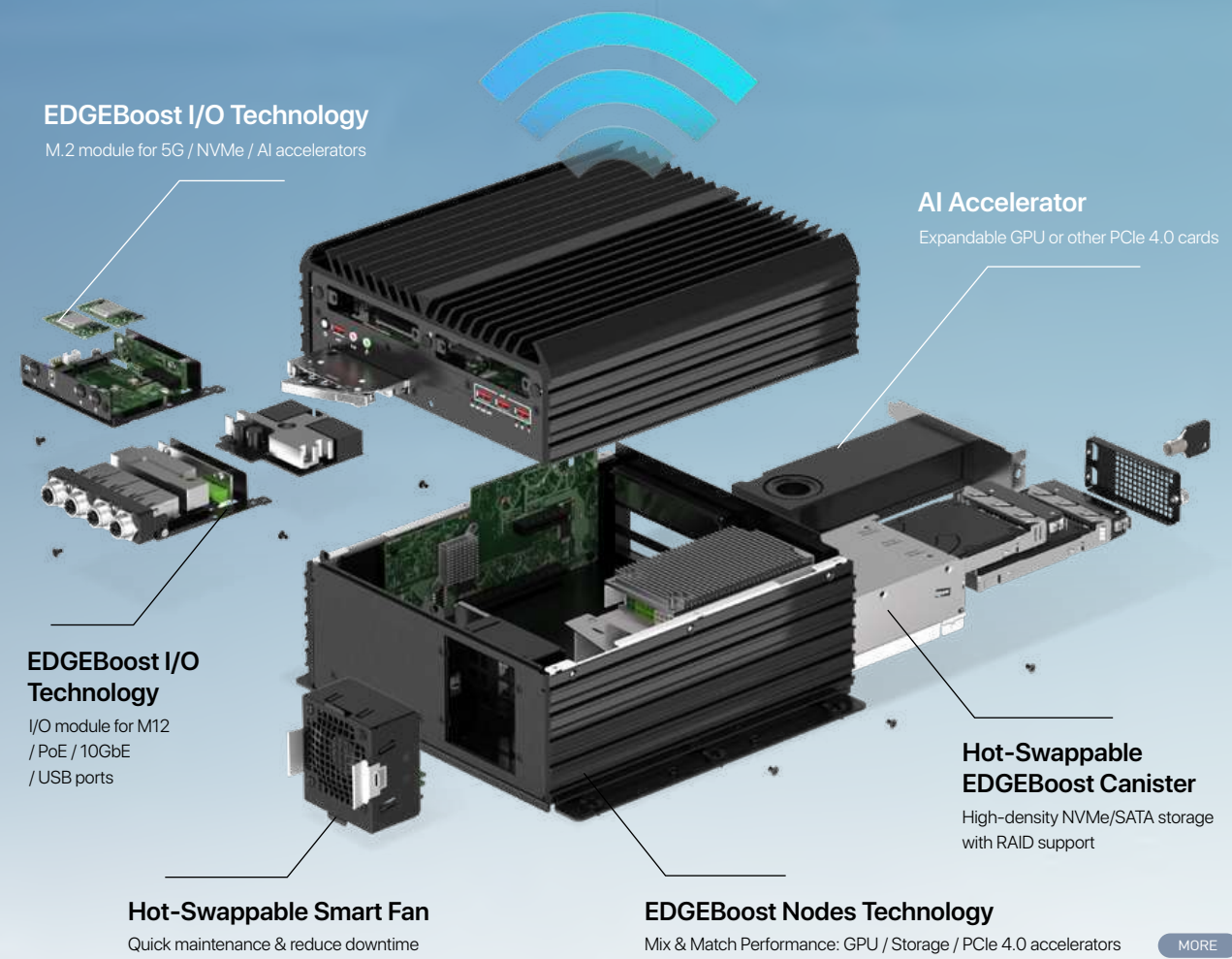


Model	RCO-6000-RPL	RCO-6000-RPL-8NS	RCO-6000-RPL-4N-A2000
CPU	12 <sup>th</sup> /13 <sup>th</sup> /14 <sup>th</sup> Gen Intel® RPL & ADL Processor i3/i5/i7/i9 (LGA 1700, 35W/65W TDP)		
Memory	2x 262-Pin DDR5 4800/5600MHz SO-DIMM. Max. up to 64GB [ECC and Non-ECC]		
Display	2x DisplayPort (Up to 7680 x 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	-		NVIDIA RTX A2000 12GB Other GPU options: NVIDIA RTX 2000 ADA 16GB NVIDIA RTX 4000 SFF ADA 20GB
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 (65W CPU)	-25°C to 60°C (35W/65W CPU) Optional External Fan Kit: Recommended for i9 (CPU/65W)	-25°C to 45°C (35W/65W CPU) Optional External Fan Kit: Recommended for i9 (CPU/65W)
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

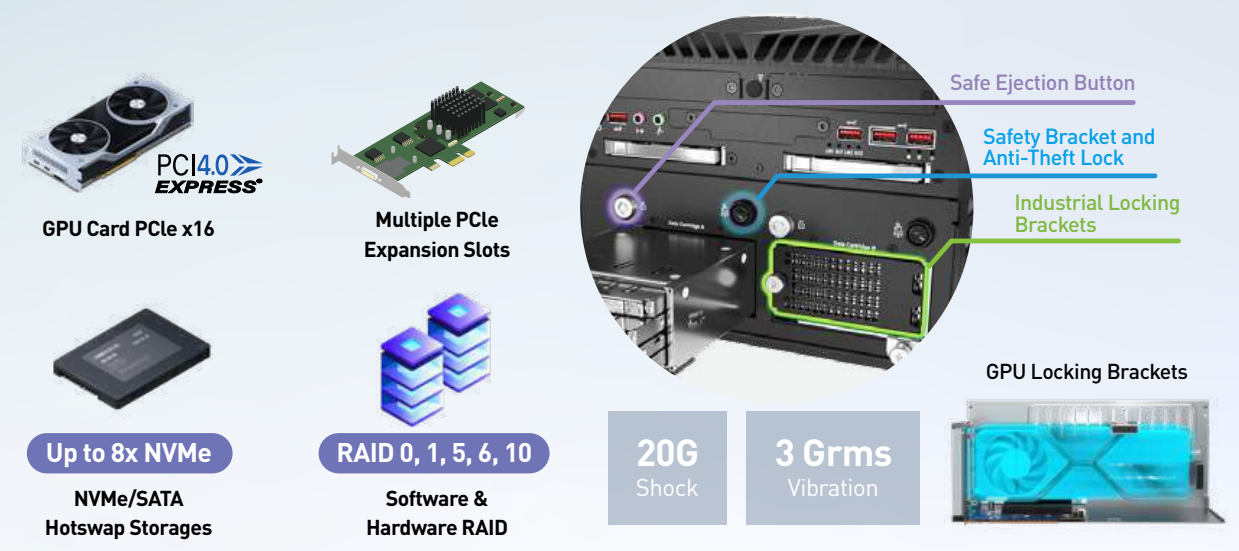
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### EDGE AI PERFORMANCE ACCELERATORS MODULES

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



### 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

## Configuration Guide

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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	
	<ul style="list-style-type: none"><li>Intel® 12<sup>th</sup>/13<sup>th</sup>/14<sup>th</sup> Gen ADL/RPL CPU</li><li>1x Hotswap SATA SSD (7mm)</li><li>1x Internal SATA SSD (9mm)</li><li>1x M.2 B Key, 1x M.2 E Key, 1x mPCIe</li><li>2x EDGEBoost I/O Slots</li></ul>		<ul style="list-style-type: none"><li>Intel® 10<sup>th</sup> Gen CML CPU</li><li>2x Hotswap SATA SSD (7mm)</li><li>1x Internal SATA SSD (9mm)</li><li>1x M.2 E Key, 2x mPCIe</li><li>2x EDGEBoost I/O Slots</li></ul>

## Configure Your EDGEBoost Nodes

GPU / Other PCIe Cards	Bottom - Modular "EDGEboost Nodes" Configurations			
	PCI or PCIe Expansion Series		GPU Series	
		<ul style="list-style-type: none"><li><b>EBND-2-EXP-G4</b> (RCO-6000-RPL)</li><li>1x PCIe x16 (Gen 4), 1x PCIe x1 (Gen 3) or 1x PCIe x16 (Gen 4), 1x PCIe x8 (Gen 4)</li><li><b>EBND-2-EXP</b> (RCO-6000-CML)</li><li>PCIe x16, PCI Expansions</li></ul>		<ul style="list-style-type: none"><li><b>EBND-2-PWR-G4</b> (RCO-6000-RPL)</li><li>1x PCIe x16 (Gen 4), 1x PCIe x1 (Gen 3) or 2x PCIe x8 (Gen 4)</li><li>12~48VDC Power Supply (280W)</li><li><b>EBND-2-PWR</b> (RCO-6000-CML)</li><li>PCIe x16, PCI Expansions</li><li>12~48VDC Power Supply (280W)</li></ul>
	SATA Storage Series			
		<ul style="list-style-type: none"><li><b>EBND-2-2SATA</b></li><li>2x Hot-Swap 2.5" SATA Drives (15mm)</li><li>RAID 0, 1, 5, 10</li></ul>		<ul style="list-style-type: none"><li><b>EBND-2-4SATA</b></li><li>4x Hot-Swap 2.5" SATA Drives (7mm)</li><li>RAID 0, 1, 5, 10</li></ul>
	NVMe Series			
		<ul style="list-style-type: none"><li><b>EBND-2-2NVME-G4</b> (RCO-6000-RPL only)</li><li>2x Hot-Swap 2.5" NVMe SSD Bay (15mm)</li><li>PCIe Gen 4 Expansion</li></ul>		<ul style="list-style-type: none"><li><b>EBND-8NVME-S</b></li><li>8x Hot-Swap 2.5" U.2 NVMe Drives (7mm)</li><li>RAID 0, 1, 5, 10</li></ul>
		<ul style="list-style-type: none"><li><b>EBND-4NVME-S</b></li><li>4x Hot-Swap 2.5" U.2 NVMe Drives (15mm)</li><li>RAID 0, 1, 5, 10</li></ul>		<ul style="list-style-type: none"><li><b>EBND-4NVME-H</b></li><li>4x Hot-Swap 2.5" U.2 NVMe Drives (15mm)</li><li>Hardware RAID 0, 1, 5, 6, 10</li></ul>
	NVMe and GPU Series			
		<ul style="list-style-type: none"><li><b>EBND-4NVME-GPU</b></li><li>1x GPU Expansion</li><li>4x Hot-Swap 2.5" U.2 NVMe Drives (7mm)</li></ul>		<ul style="list-style-type: none"><li><b>EBND-2NVME-GPU</b></li><li>1x GPU Expansion</li><li>2x Hot-Swap 2.5" U.2 NVMe Drives (15mm)</li></ul>
		<ul style="list-style-type: none"><li><b>EBND-4N-1E</b></li><li>1x PCIe x16, 1x PCIe x1 Slots</li><li>Hardware RAID 0, 1, 5, 10</li><li>4x Hot-Swap 2.5" U.2 NVMe Drives (7mm)</li></ul>		

# EDGEBoost I/O

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## Flexible I/O and M.2 Expansion Modules

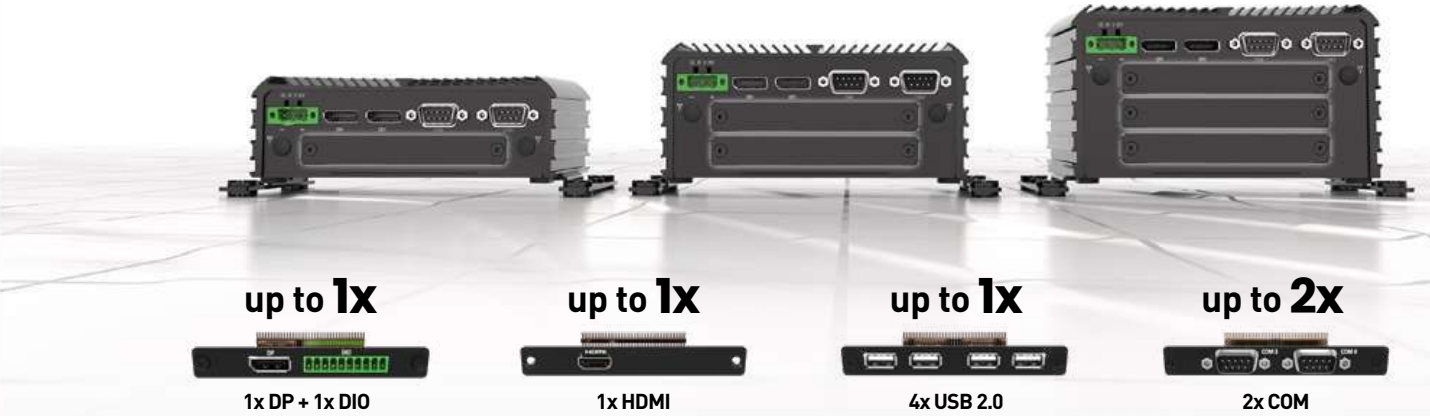


EBIO is the perfect solution for those looking to optimize their edge infrastructure. These flexible add-on modules are a modular and scalable solution that is designed to tackle the limitations that may occur at the rugged edge. EDGEBoost I/Os are built to integrate seamlessly with our industrial computers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

## Compatible Industrial Computers

Industrial Mini Computers	Edge AI Industrial Computers	
		
<b>RCO-1000</b> Series Super-Rugged Mini	<b>RCO-3000</b> Series Super-Rugged SFF	<b>RCO-6000</b> Series Super-Rugged EDGE AI
		
	<b>JCO-6000</b> Series Jetson Edge AI Industrial	<b>ACO-6000</b> Series Railway & In-Vehicle

## EBIO Modules for Industrial Mini Computers



Digital & Analog Digital and Analog EBIO Modules			
EBIO-DP-DIO	EBIO-HDMI	EBIO-4USB	EBIO-2COM
<ul style="list-style-type: none"><li>1x DP (4K UHD)</li><li>1x DIO (4 in / 4 out, Isolated)</li></ul>	<ul style="list-style-type: none"><li>1x HDMI Port (Full-HD)</li></ul>	<ul style="list-style-type: none"><li>4x USB 2.0, Type A Ports (with USB hub)</li></ul>	<ul style="list-style-type: none"><li>2x COM Ports (RS-232/422/485)</li></ul>



# EBIO Modules for

## Edge AI Industrial Computers

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### USB Interface Modules

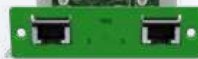


EBIO-4U3	EBIO-4U3-J	EBIO-4U3V-J
• 4x USB 3.0, Type-A Ports		
• 4x USB 3.2 Gen 1 (5 Gbps, 900mA)		
• Type-A Locking Ports		

### Connectivity & Network Modules



EBIO-4ETH	EBIO-4ETH-J	EBIO-4ETH-M12	EBIO-4ETH-M12-J
• 4x 1GbE LAN, RJ45 Port		• 4x 1GbE LAN, M12 Port X-code 8-Pin	
• Intel® Ethernet Controller I350		• Intel® Ethernet Controller I350	
• PCIe x1 Gold Fingers Interface (PCIe 3.0 x4 Performance)		• PCIe x1 Gold Fingers Interface (PCIe 3.0 x4 Performance)	
• Support Power over Ethernet by an optional PoE module		• 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-00B	EBIO-00B-J
<ul style="list-style-type: none"><li>• 2x 10 GbE LAN, RJ45 Ports</li><li>• Intel® Ethernet Controller X710-AT2</li><li>• PCIe x1 Gold Fingers Interface (PCIe 3.0 x4 Performance)</li></ul>		<ul style="list-style-type: none"><li>• RJ45 Hardware-Based Features: Out-of-Band and In-Band</li><li>• Power Control &amp; Management</li><li>• OOB Cloud Serial Console</li></ul> <p>Optional:</p> <ul style="list-style-type: none"><li>• Backup &amp; Recovery</li><li>• Temper Detection</li><li>• Thermo-Guard</li></ul>	

### Cellular, Edge AI, and Storage Modules



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

# EDGEBoost I/O Series

## Compatible Industrial Computers

MORE



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-00B	•	•	•
EBIO-M2BK	•	•	•
EBIO-2M2BK	•	•	•
EBIO-M2MK	•	•	•



Jetson AI Edge Industrial Computers



EBIO Modules	JCO-6000 Series
EBIO-4U3-J	•
EBIO-4U3V-J	•
EBIO-4ETH-J	•
EBIO-4ETH-POE-J	•
EBIO-4ETH-M12-J	•
EBIO-4ETH-POE-M12-J	•
EBIO-D10G-J	•
EBIO-00B-J	•
EBIO-M2MK-J	•

3 TYPES of High-Speed Camera Support

8x GMSL2

12x PoE/GigE

10x USB Vision





## 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

## INDUSTRIAL-GRADE SUPERCAPACITOR FOR REDUNDANT POWER

### 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



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



## 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



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

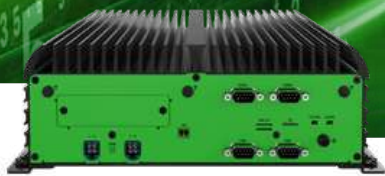
JCO-3000-ORN SERIES

- 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

JCO-3000-ORN SERIES

JCO-6000-ORN SERIES

<div><div></div><div><div>NEW</div></div><div><div>Coming Soon</div></div><div><div>NEW</div></div></div>			
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)	

<div><div></div><div><div>NEW</div></div><div><div>NEW</div></div></div>		
<div> EMC Conformity EN50155 &amp; EN50121-3-2</div>		
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)	





## 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



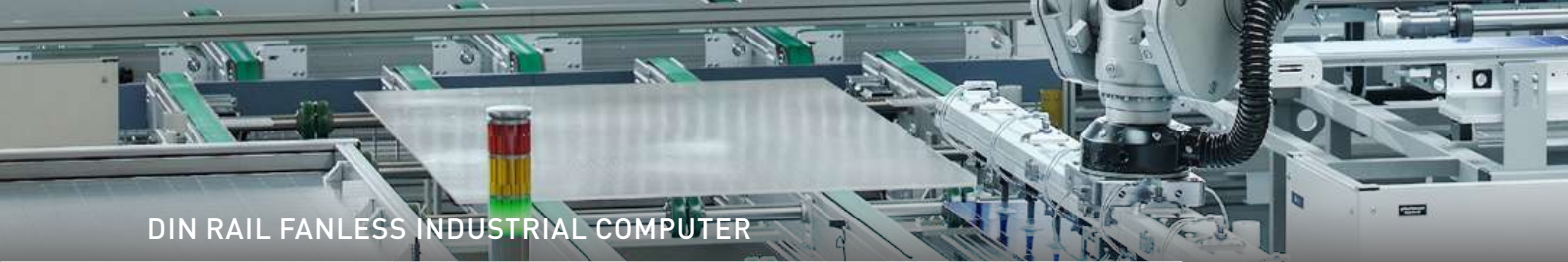
Rich I/O  
Configuration



Industrial IoT  
Solutions



Ruggedized  
Fanless Solution



DIN RAIL FANLESS INDUSTRIAL COMPUTER

## DCO-1000-ASL SERIES [MORE](#)

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



IP68/IP69K WATERPROOF COMPUTER

### 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))



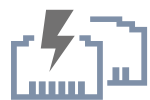


# ACO SERIES

## 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



### HIGH-PERFORMANCE RAILWAY & IN-VEHICLE FANLESS COMPUTER

## ACO-6000-RPL SERIES

intel

Raptor Lake / Alder Lake



NEW



NEW

Model	ACO-6000-RPL	ACO-6000-RPL-1E
CPU	Support 12 <sup>th</sup> /13 <sup>th</sup> /14 <sup>th</sup> Gen Intel® RPL & ADL Processor i3/i5/i7/i9 (LGA 1700, 65W/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/65W 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-1E
CPU	Support 10 <sup>th</sup> Gen Intel® CML S Processor (LGA 1200, 65W/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/65W 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)





# VCO SERIES

## MACHINE VISION INDUSTRIAL COMPUTERS

### 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-3E	VCO-6000-RPL-4E
CPU Support	12 <sup>th</sup> /13 <sup>th</sup> /14 <sup>th</sup> Gen Intel® RPL & ADL i3/i5/i7/i9 Processor (LGA 1700, 35W/65W 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) -25°C to 60°C (65W 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-6100 SERIES

[MORE](#)

intel.  
Coffee Lake R



Model	VCO-6122	VCO-6133	VCO-6144	VCO-6155
CPU Support	8 <sup>th</sup> /9 <sup>th</sup> Gen Intel® CFL-R S i3/i5/i7 Processor (LGA 1151, 35W/65W 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) -25°C to 60°C (65W CPU)			
PCI & PCI Express	With two PCI or PCIe expansion slot	With three PCI or PCIe expansion slot	With four PCI or PCIe expansion slot	With five PCI or PCIe expansion slot
	<ul style="list-style-type: none"><li>1x PCIe x16</li><li>1x PCI</li></ul>	<ul style="list-style-type: none"><li>1x PCIe x16</li><li>2x PCI</li></ul>	<ul style="list-style-type: none"><li>2x PCIe x4</li><li>1x PCIe x16 (8-lane)</li><li>1x PCI</li></ul>	<ul style="list-style-type: none"><li>2x PCIe x4</li><li>1x PCIe x16 (8-Lane)</li><li>2x PCI</li></ul>
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





HIGH-PERFORMANCE FANNED INDUSTRIAL COMPUTER

KCO SERIES

MORE

intel  
Raptor Lake / Alder Lake



NEW



NEW

Model	KCO-2000-RPL	KCO-3000-RPL
CPU	12 <sup>th</sup> /13 <sup>th</sup> /14 <sup>th</sup> 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 Slot (Gen 5), 1x PCIe x16 Slot (Gen 4, 4-lane), 1x PCIe x4 Slot (Gen 4, Open End), 1x PCIe x4 Slot (Gen 3, Open End)	
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	UL : 0 °C to 40 °C CE/FCC/IC : 0 °C to 50 °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)



Support Dual GPU



Rich M.2 and PCIe Expansions



Internal Flex Power Supply



Rackmountable Industrial Solution

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 14<sup>th</sup> 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.





## INDUSTRIAL DISPLAY SYSTEMS

# 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.



### HIO SERIES

**IP65 OPEN FRAME**  
INDUSTRIAL TOUCHSCREEN  
COMPUTERS



### AIO SERIES

**IP65 ALL-IN-ONE**  
INDUSTRIAL TOUCHSCREEN  
COMPUTERS



### VIO SERIES

**IP65 MODULAR SYSTEMS**  
HIGH-BRIGHTNESS  
DISPLAY



### SIO SERIES

**IP68/69K STAINLESS STEEL**  
INDUSTRIAL TOUCHSCREEN  
COMPUTERS

#### PC SERIES

##### VIO COMPUTER MODULES

PC MODULE  
FOR INDUSTRIAL  
VIO DISPLAY



#### MX SERIES

##### VIO MONITOR MODULES

MONITOR MODULE  
FOR INDUSTRIAL  
VIO DISPLAY



Model	SIO SERIES	VIO SERIES	AIO SERIES	HIO SERIES
Ruggedness	Super-Rugged	Rugged	Semi-Rugged	Durable
System Configuration	Touchscreen Computer	Touchscreen Computer or Monitor	Touchscreen Computer or Monitor	Touchscreen Computer
Processor	<ul style="list-style-type: none"> <li>Intel® Alder Lake N97</li> <li>Intel® Celeron® J1900</li> <li>Intel® 8th Gen i5</li> </ul>	<ul style="list-style-type: none"> <li>Intel® Core™ Ultra 5/7</li> <li>Intel® 7th Gen i3/i5</li> <li>Intel® Celeron® J6413</li> <li>Intel® Celeron® J1900</li> </ul>	<ul style="list-style-type: none"> <li>Intel® Core™ Ultra 5/7</li> <li>Intel® Alder Lake N97</li> <li>Intel Atom® X7835RE</li> <li>Rockchip RK3568J</li> </ul>	<ul style="list-style-type: none"> <li>Intel® Alder Lake N97</li> </ul>
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"	
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
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





# H10

SERIES

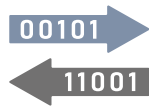
## IP65 OPEN-FRAME INDUSTRIAL TOUCHSCREEN COMPUTERS

### OEM INTEGRATION READY FOR HUMAN MACHINE INTERFACE SOLUTIONS

The H10 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.



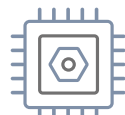
10-Points  
PCAP Touch



Diverse I/O  
Customization



Front Panel  
IP65



High Computing  
Efficiency



IP65 OPEN FRAME TOUCHSCREEN COMPUTER

## H10 SERIES

MORE

H10 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	H10-W210-ADL	H10-W215-ADL	H10-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)		



# AIO SERIES

## IP65 ALL-IN-ONE INDUSTRIAL TOUCHSCREEN COMPUTERS

### 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

ALL IN ONE TOUCH PANEL PC

### AIO SERIES MORE

#### AIO-200-ADL

#### AIO-200-ASL

intel

Amston Lake / Alder Lake



NEW



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

#### AIO-200-R0K

#### AIO Monitor



Coming Soon



NEW



NEW

Model	AIO-200-MTL-3L	AIO-200-R0K	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	RK3568J Arm Quad Cortex-A55	-
Memory	DDR5 5600MT/S, Max. 16GB	LPDDR4 2133MHz 2 / 4 GB	-
Storage	1x M.2 M Key (Default 128GB)	32GB / 64GB of eMMC for OS	-
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 4K HDMI, 2x RJ45 (GbE), 2x USB 3.0, 1x RS-232/422/485, 1x Micro SIM, 1x 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	1x M.2 E Key (2230) for Wifi/BT 1x M.2 B Key (3024) for 4G/5G	-
Operating System	Windows 10/11, Linux Ubuntu	Android 13	-
Operating Temp.	-10°C to 50°C	-20°C to 70°C	-10°C to 50°C
Power	AT/ATX Power, DC IN 12~36V	AT/ATX Power, DC IN 9~36V	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



### DISPLAY MODULE

## 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









Model	PC600-MTL	PC600-MTL-1E
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.

PC400 SERIES [MORE](#)





Model	PC400	PC410
CPU Onboard	Intel® 7 <sup>th</sup> 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



Model	PC100-EHL	PC100-EHL-1E
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)	
PCIe Express	-	1x PCIe x4 (x1 Lane, Gen 3)
I/O Expansion	1x I/O Expansion (CAN/COM)	
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 SERIES

MORE



Model	PC100	PC110
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)

MX200 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	MX200
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



IP68/IP69K WASHDOWN TOUCHSCREEN COMPUTER WITH FULL SUS316

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

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.



## 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

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.

## INDUSTRIAL BOARDS

## 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

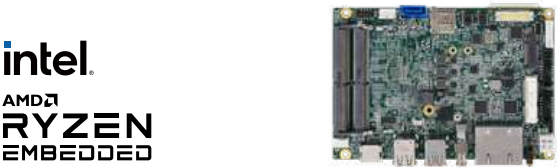


Model	CT-PBT01
CPU	Intel® Celeron Processor J1900 (2.0GHz/4 Core/10W)
Memory	1x 204-Pin DDR3L 1066/1333MHz SODIMM. Max. up to 8GB
Storage	1x SATA 3.0Gb/s 1x mSATA (shared by 1x Mini PCIe)
Display	1x HDMI (2048x1080 @60Hz) 1x LVDS
Rear I/O	1x USB 3.0, 1x USB 2.0 1x RJ45
Internal I/O	1x RS-232/422/485, 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

3.5" SBC SERIES



Model	CT-DR101	CT-DWL01
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)
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
Storage	1x SATA 7-Pin Connector	2x SATA Gen3
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
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)
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
Expansion	1x Full-size Mini PCIe (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)
Operating Systems	Windows® 10, Linux Kernel 5.x	
Power	AT/ ATX Power, DC IN 12V	AT/ ATX Power, DC IN 12V
Operating Temperature	-40°C to 75°C	-40°C to 70°C
TPM	TPM 2.0	TPM 2.0 Through Infineon
Dimension	146 x 102 (mm)	

BOARDS SERIES

3.5" SBC SERIES



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)	12 <sup>th</sup> 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

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MINI ITX SERIES



NEW

Model	CT-XSL01	CT-XCL01	CT-XRL02
CPU	Intel® 6 <sup>th</sup> Gen. Core™ i3/i5/i7 Processor (LGA 1151, 35W)	8 <sup>th</sup> /9 <sup>th</sup> Gen Intel® CFL-R S Processor (LGA 1151, 95W/65W/35W)	12 <sup>th</sup> /13 <sup>th</sup> /14 <sup>th</sup> 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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MICRO ATX SERIES



Model	CT-MCL01	CT-MRL01
CPU	8 <sup>th</sup> /9 <sup>th</sup> Gen. Intel® Core™ i3/i5/i7 CFL-R S Processor (LGA 1151, 95W/65W/35W TDP)	12 <sup>th</sup> /13 <sup>th</sup> /14 <sup>th</sup> Gen Intel® Core™ i3/i5/i7/i9 Alder lake-S, Raptor Lake-S (LGA 1700, 65W Max)
Memory	4x Pin DDR4 2133/2400/2666MHz DIMM. Max. 64 GB	4x DDR4 2133/2400/2666MHz DIMM. 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
Display	1x VGA 1x DVI-D 2x DP 1.2	4x DP++ (4K)
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)
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)
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
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)	



# COMING SOON

## PRODUCTS

### INDUSTRIAL EDGE COMPUTERS

intel.

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#### BCO-500-R0K Series

Fanless Mini PC with Rockchip RK3568J Series

- **Mini NUC** Intel® NUC Alternative
- **Android 13** Operating System
- **Industrial Grade** Shock & Vibration Resistant
- **Cost Effective** Rich I/O Ports and M.2 Expansions

#### BCO-500-MTL Series

Fanless Mini PC with Intel Meteor Lake CPU

- **4G/5G** High-Speed Wireless
- **Type-C** High-Speed I/O
- **EDGE AI** Intel® AI Boost
- **CORE ULTRA** Core Ultra 5 125U / Core Ultra 7 155U

intel.

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nvidia.



#### JCO-1000-ORN-B Series

Fanless Mini PC with NVIDIA Jetson Orin NX/Nano Super Module

- **157 TOPS** Edge AI Enabled
- **-20°C to 55°C** Wide Temperature
- **2x LAN** Rich I/O Ports and M.2 Expansions
- **Mini** 150 x 105 x 61 mm

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### INDUSTRIAL DISPLAY SYSTEMS

#### VIO-300 Display Module Series

IP65 Display Module for PC600 Series

- **High-Brightness** 1000+ NITS
- **SLIM** Thin Rugged Design
- **OPTICAL BONDING** Optional
- **IP65** Front Panel Protection



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#### SIO-300-ASL Series

Stainless Steel Industrial Panel PC with Intel Atom® X7835RE / X7433RE

- **SUS316** Corrosion Proof
- **IP68/69K** Dust & Waterproof
- **-20°C to 60°C** Wide Temperature



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#### AIO-200-MTL Series

All-in-One IP65 Industrial Panel PC with Intel Meteor Lake Processor

- **IP65** Front Panel Protection
- **EDGE AI** Intel® AI Boost
- **SLIM** 5~6.2 cm Thick
- **CORE ULTRA** Core Ultra 5/7



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### INDUSTRIAL BOARDS

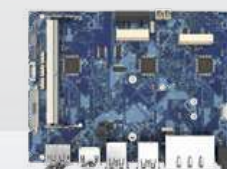


#### CT-PMG01

2.5" Series

MediaTek Geno MTK G510/G700

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#### CT-DAS01

3.5" Series

Intel Amston Lake X7835RE / X7433RE

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#### CT-XAR01

Mini-ITX Series

Intel Arrow Lake Core Ultra Series

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