



# PRODUCT

## SOLUTION GUIDE

# 2024

INDUSTRIAL COMPUTING  
SOLUTIONS FROM THE  
EDGE TO THE CLOUD



**BUILT RUGGED. BUILT READY.**

intel  
partner  
Titanium



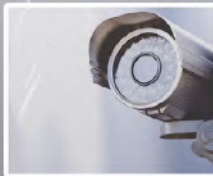
# YOUR TOP CHOICE PARTNER IN INDUSTRIAL COMPUTING FROM THE EDGE TO THE CLOUD

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.



INDUSTRIAL COMPUTERS 14

Premio'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, Premio fanless embedded systems deliver a compelling platform that is needed in today's demanding workloads and industrial needs.

2024 08  
FEATURED INDUSTRIAL SOLUTIONS

RUGGED	MACHINE VISION
RCO SERIES 16	VCO SERIES 25
WATERPROOF	IN-VEHICLE
WCO SERIES 28	ACO SERIES 30
FANLESS MINI PC	NVIDIA JETSON
BCO SERIES 32	JCO SERIES 38



MODULAR AND RUGGEDIZED EDGE COMPUTING ACCELERATION

EDGEBoost Nodes SERIES 20

EDGEBoost Nodes deliver an industrial-grade modular approach for accelerated computing performance at the rugged edge.

SCALABLE EDGEBOOST I/O MODULE TECHNOLOGY

EDGEBoost I/O SERIES 22

EDGEBoost I/O modules are a scalable and modular solution that integrates into Premio's industrial computers and provides enhanced reliability with plug-and-play expandability.



INDUSTRIAL-GRADE SUPERCAPACITOR

ECO SERIES 42



INDUSTRIAL PANEL PCS AND TOUCH MONITORS 44

Premio'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 Premio industrial panel PCs and touch monitors as human machine interfaces to achieve better productivity and operational efficiency in their enterprise projects.



MONITORS	DISPLAY MODULE	IP65 PANEL PC	OPEN FRAME PANEL PC
FIO OPEN FRAME 46	VIO SERIES 47	VIO-PC SERIES 48	HIO SERIES 55

TOUCH MODULE  
VIO-MX SERIES 51

IP66/IP69K  
SIO WASHDOWN TOUCHSCREEN COMPUTER 52

IP66  
WIO WATERPROOF 53

ALL-IN-ONE PANEL PC  
AIO SERIES 54

MOTHERBOARD SYSTEMS 56

Premio 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.



FANNED INDUSTRIAL COMPUTERS 35

Certification-Ready industrial computers are embedded computing solutions that act as sub-assembly building blocks or final OEM system configuration in key enterprise and IoT applications.





# BEYOND THE RUGGED EDGE

Work-Station Grade Industrial Computer With  
Intel® 13<sup>th</sup>/12<sup>th</sup> Gen Processor

## RCO-6000-RPL Series AI Edge Inference Computer NEW [VISIT P.19](#)

### DDR5

Up to 64GB  
5,600 MT/s

### Triple 5K Displays

Support up to 8K  
2x Display, 1x DVI-I

### 2x EDGEBoost I/O

Customizable I/O, PoE Ports  
and M.2 Modules

### EDGEBoost Nodes

Scalable PCIe Gen 4 GPU &  
NVMe Storages

## VCO-6000-RPL Series NEW [VISIT P.26](#)

Industrial Machine Vision Computer



### DDR5

Up to 64GB  
5,600 MT/s

### Triple 5K Displays

Support up to 8K  
2x Display, 1x DVI-I

### Full-Length Dual GPU

Support Dual PCIe  
Gen 4.0 GPU

### Scalable NVMe & SATA Storage

Scalable Hot-Swappable  
SSD Storages

# WORLD CLASS CERTIFICATION

UL 62368-1 | EN50155  
In-Vehicle Ready Industrial Solutions



## RCO-3000-RPL Series Coming soon [VISIT P.17](#)

Small Form Factor Fanless Computer

Intel®  
13<sup>th</sup>/12<sup>th</sup> Gen  
LGA1700

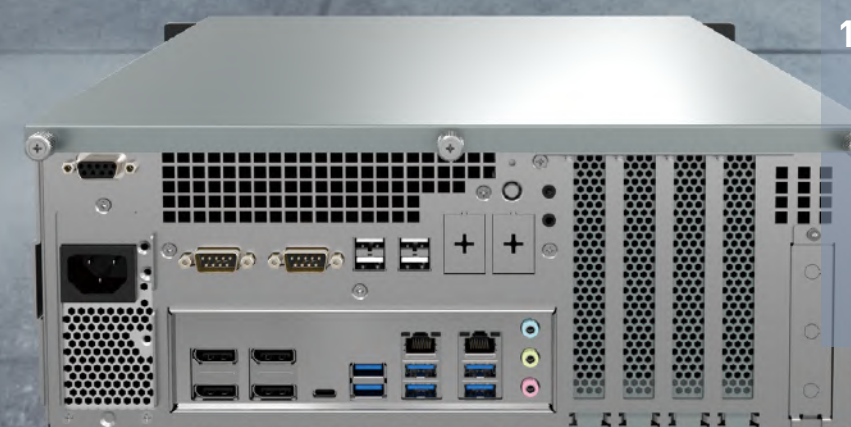
MIL-STD-810G  
Compliance  
50G Shock &  
5Grms Vibration

1x EDGEBoost I/O  
Customizable I/O, PoE, Ports  
and M.2 Modules

Quad 4K Displays  
Support 4K up to 8K  
3x DP, 1x DP/HDMI

## KCO-RPL Series Fanned Industrial Computers NEW [VISIT P.36](#)

Semi-Rugged. High-Performance. Rackmountable



Intel®  
13<sup>th</sup>/12<sup>th</sup> Gen  
LGA1700

300W  
Internal 300W  
Flex Power Supply

4x DP++  
Independent  
Displays

3U Compact  
Chassis  
with Rack Mount Options



# FANLESS INDUSTRIAL-EDGE COMPUTER

Deployment Ready at the Rugged Edge

**Alder Lake N97**  
12W TDP

**Compact Form Factor**  
192 x 67.5 x 140 mm  
(W x H x D)

**BCO-1000-ADLN** Series **NEW**  
Fanless Mini Computer  
VISIT P.33

**Dual 4K Displays**  
3x Displays  
1x DP, 1x HDMI, 1x LVDS

**2.5 GbE**  
3x 2.5 GbE Ports



**BCO-3000-RPLS** Series **NEW**  
Small Form Factor Edge Computer  
VISIT P.33

**Intel® 12<sup>th</sup>/13<sup>th</sup>**  
LGA 1700  
Alder/Raptor Lake S CPU

**10x USB**  
USB 3.0 Ports  
(10Gbps, 5Gbps)

**2.5 GbE**  
3x 2.5GbE

**Triple 4K**  
2x DP,  
1x HDMI



**BCO-6000-RPLS** Series **NEW**  
Slim AI Edge Computer  
VISIT P.33



**Slim GPU Factor**  
330 x 69 x 240  
(W x H x D)

**Expandable GPU**  
Support PCIe  
Gen 4 GPU

**Smart Fan**  
Adaptive  
Smart Fan



**JCO-3000-ORN** Series  
SFF AI Edge Computer  
VISIT P.40

Coming soon

**Jetson Orin NX**  
Up to 100 TOPS

**10-25W**  
8/16 GB RAM

**Jetson Orin Nano**  
Up to 40 TOPS

**7-15W**  
4/8 GB RAM

**Up to 4x 2.5 GbE**  
Support LAN/PoE

**LPDDR5**  
Up to 16 GB



**JCO-6000-ORN** Series **NEW**  
Robust AI Edge Computer  
VISIT P.41

**Jetson Orin AGX**  
Up to 275 TOPS

**LPDDR5**  
Up to 64GB RAM

**Up to 8x GMSL**  
8x HD Camera at 30 FPS

**4x EDGEBoost I/O**  
Customizable I/O, PoE Ports  
and M.2 Modules



**NEXT-GENERATION  
EDGE AI SOLUTION**

**NVIDIA JETSON ORIN  
INDUSTRIAL COMPUTER**



# UNLEASH THE POWER OF MODULARITY

Deliver Personalized Performance Upgrade  
Instantly with the EDGEBoost Series



## EDGEBoost Nodes SERIES

Scalable performance accelerators for Premio's AI Edge Computer.

Provide an easy and cost-effective upgrade for the rugged, fanless computer. They elevate computer performance through additional PCIe Gen 4 Expansion, GPU, NVMe, and SATA storages. EDGEBoost Nodes are more than just performance upgrade, they also equipped with hardware security features. [Compatible with RCO-6000 Series]

**NEW** VISIT P.20

## EDGEBoost I/O SERIES **NEW** VISIT P.22

Plug and play modular I/O daughterboards for customizable IoT sensor connectivity



Premio standard computing solutions can support a variety of modular add-on daughterboards and carrier boards for more wired connectivity, digital and analog I/O, and edge AI scalability. Browse through our selection of EDGEBoost I/O modules and discover how to maximize your I/O requirements with plug and play ease.

PoE | M12 | 10GbE | USB 3 | M.2 | AI | 5G | NVMe

# FANLESS COOLING TECHNOLOGY FOR INDUSTRIAL PCS

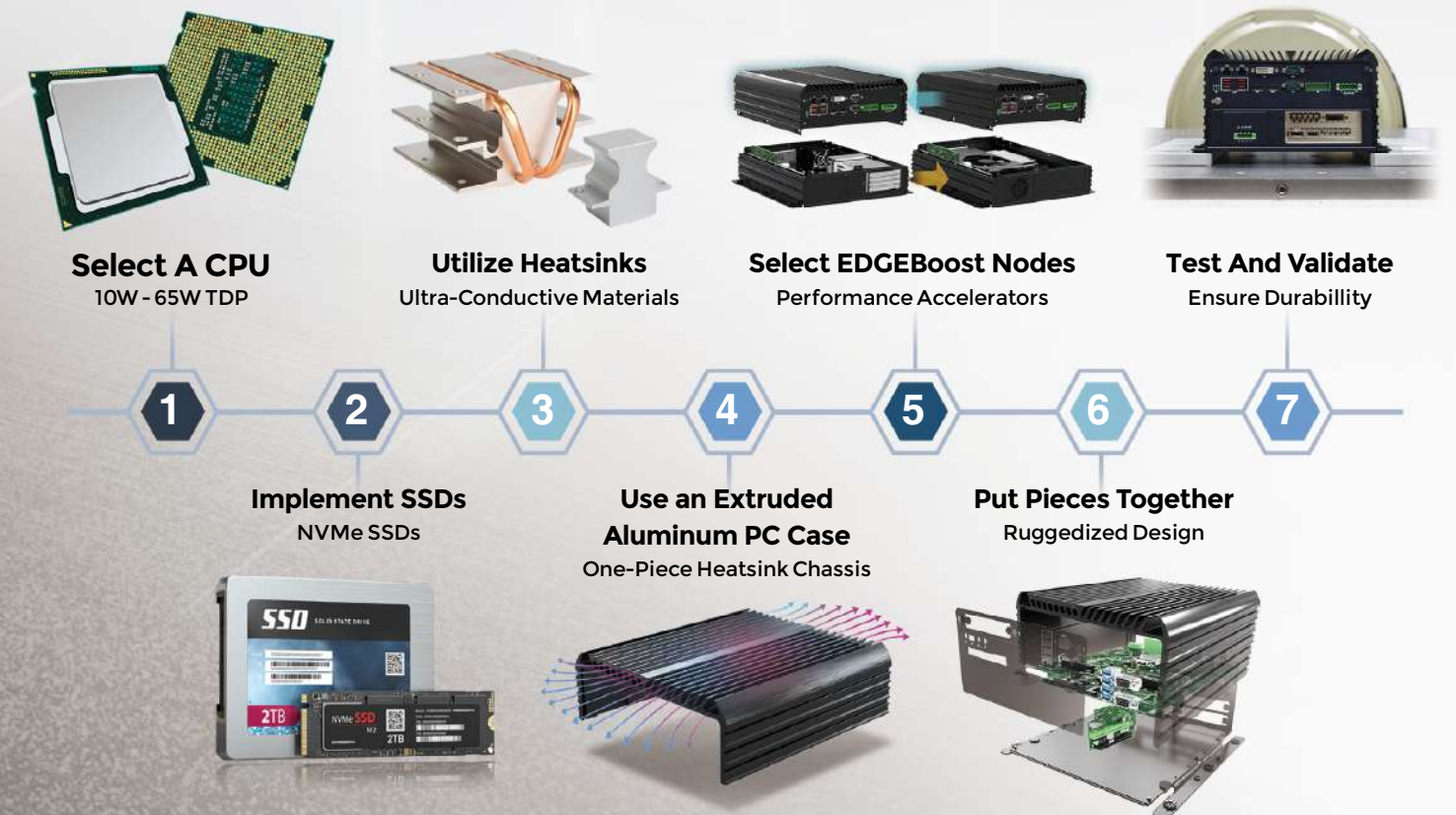
Rugged. Reliable. Tested.



## 7 Steps Of Building A Fanless PC

[Explore Fanless Technology](#)

Premio's industrial solutions follow the 7 key steps to build reliable fanless solution that are capable perform real-time processing and machine learning in the harshest edge deployments. Industrial computers help provide the mission-critical foundation to manage new edge AI workloads in key automation deployments with ultimate reliability.





# PREMIO FANLESS EMBEDDED SYSTEMS PRODUCT FAMILY



**RCO SERIES**  
CUSTOMIZABLE  
INDUSTRIAL  
EDGE COMPUTER



**VCO SERIES**  
MACHINE VISION  
COMPUTER



**ACO SERIES**  
IN-VEHICLE FANLESS  
COMPUTER



**KCO SERIES**  
FANNED INDUSTRIAL  
COMPUTER



**ECO SERIES**  
SUPERCAPACITOR UPS  
BACKUP SYSTEM



**DCO SERIES**  
DIN RAIL FANLESS  
INDUSTRIAL COMPUTER



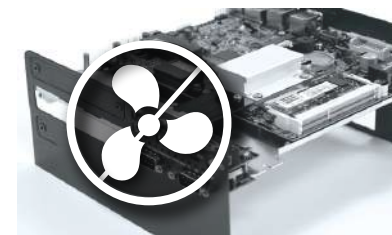
**WCO SERIES**  
IP67/IP69K WATERPROOF  
COMPUTER



**BCO SERIES**  
COMPACT INDUSTRIAL  
COMPUTER

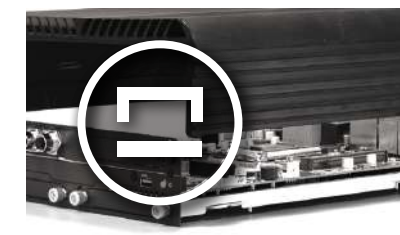


**JCO SERIES**  
EDGE AI INDUSTRIAL  
COMPUTER



## 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.

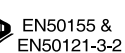
## THERMAL PERFORMANCE

Utilize ultra-conductive materials (copper and aluminum) to accomplish fast heat dissipation through integrated heat pipes and heat sinks. The unique thermal design allows the computers' CPU (up to 35W) to operate without a fan in an extended temperature range



## 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.







MINI FANLESS EMBEDDED COMPUTER

RUGGED MINI (SFF) INDUSTRIAL COMPUTER

RCO-1000-EHL SERIES

[More info](#)



Model	RCO-1000-EHL-10	RCO-1000-EHL-20	RCO-1000-EHL-30	RCO-1000-EHL-30-2P
CPU Support	Intel® Celeron® Processor J6413, Quad Core, 1.5 MB Cache, 1.8 GHz			
Memory	1x 260-Pin DDR4 2400/2667/3200MT/s SO-DIMM. Max. up to 32 GB			
Graphic Output	Dual Independent Display by 2x DisplayPort			
I/O	2x RJ45 (2.5 & 1 GbE), 3x USB 3.2 Gen 2 (10 Gbps), 1x USB 2.0 2x RS-232/422/485, 1x Mic-in, 1x Line-out			
PoE				2x GbE RJ45
Storage	1x Internal 2.5" SATA HDD Bay (support H=9.5 mm)			
Internal Expansion Slot	1x Full-size Mini PCIe			
Power	9-36 VDC, AT/ATX Select, 3-pin Terminal Block			
Operating Temperature	-40°C to 70°C (Intel Embedded Series)			-40°C to 50°C (Intel Embedded Series)
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 66 mm	150 x 105 x 83 mm	
EDGEBoost I/O Expansion	Up to 1x EDGEBoost I/O	Up to 3x EDGEBoost I/O	Up to 5x EDGEBoost I/O	Up to 3x EDGEBoost I/O

RCO-3000-CML SERIES

[More info](#)



Model	RCO-3000-CML
CPU Support	Support 10 <sup>th</sup> Gen Intel® CML-R S Processor
Memory	2x 260-Pin DDR4 2666/2933MHz SODIMM. Max. up to 64GB
Graphic Output	3x DisplayPort (1x DP Port Co-layout HDMI Connector)
LAN	2x RJ45 (2.5 & 1 GbE)
I/O	5x RS-232/422/485 (2x internal), 6x USB 3.2 Gen 2, 16x isolated digital I/O, 1x Line-out
Storage	2x 2.5" SATA HDD bay with RAID 0, 1, 5 support (1x internal; 1x removable & hot-swappable), 1x mSATA
Internal Expansion Slot	1x Full-size mini-PCIe, 1x M.2 B Key, 1x M.2 E Key
Power	9-48 VDC, AT/ATX Select, 3-pin Terminal Block
Certification	UL, CE, FCC Class A, EMC Conformity with EN50155 & EN50121-3-2
Operating Temperature	-25°C to 70°C
Dimensions (WxDxH)	192 x 197 x 60.3 mm
EDGEBoost I/O Expansion	Up to 1x EDGEBoost I/O

BCO-1000-EHL SERIES

[More info](#)



Model	BCO-1000-EHL-10	BCO-1000-EHL-20	BCO-1000-EHL-30
CPU Support	Support Intel® EHL Processor (Up to 10W TDP) Intel® Celeron® Processor J6413, Quad Core, 1.5 MB Cache, 1.8 GHz		
Memory	1x 260-Pin DDR4 2400/2667/3200MT/s SO-DIMM. Max. up to 32 GB		
Graphic Output	Dual Independent Display by 2x DisplayPort		
I/O	2x RJ45 (2.5 & 1 GbE), 3x USB 3.2 Gen 2 (10 Gbps), 1x USB 2.0, 2x RS-232/422/485, 1x Mic-in, 1x Line-out		
Storage	1x Internal 2.5" SATA HDD Bay (support H=9.5 mm)		
Internal Expansion Slot	1x Full-size Mini PCIe		
Power	9-36 VDC, AT/ATX Select, 3-pin Terminal Block		
Operating Temperature	0°C to 50°C		
Certification	UL 62368 Ed. 3, CE, FCC Class A		
Dimensions (WxDxH)	142 x 101.2 x 41.5 mm	142 x 101.2 x 58 mm	142 x 101.2 x 75 mm
EDGEBoost I/O Expansion	Up to 1x EDGEBoost I/O	Up to 2x EDGEBoost I/O	Up to 4x EDGEBoost I/O

RCO-3000-RPL SERIES



Model	RCO-3000-RPL
CPU Support	Support 13 <sup>th</sup> /12 <sup>th</sup> Gen Intel® RPL & ADL Processor
Memory	2x 260-Pin DDR4 3200 MHz SODIMM. Max. up to 64GB
Graphic Output	4x DisplayPort (1x DP Port Co-layout HDMI Connector)
LAN	2x 2.5 GbE RJ45
I/O	5x RS-232/422/485 (2x internal), 6x USB 3.2 Gen 2, 16x isolated digital I/O, 1x Line-out
Storage	2x 2.5" SATA HDD bay with RAID 0, 1, 5 support (1x internal; 1x removable & hot-swappable), 1x M.2 2242 SATA
Internal Expansion Slot	2x M.2 B Key, 1x M.2 E Key
Power	9-48 VDC, AT/ATX Select, 3-pin Terminal Block
Certification	CE, FCC Class A, EMC Conformity with EN50155 & EN50121-3-2
Operating Temperature	-25°C to 60°C
Dimensions (WxDxH)	192 x 227 x 57.6 mm
EDGEBoost I/O Expansion	Up to 1x EDGEBoost I/O





HIGH-PERFORMANCE INDUSTRIAL COMPUTER

# RCO-6000 SERIES

## AI EDGE INDUSTRIAL COMPUTER

MOST CUSTOMIZABLE  
HIGH-PERFORMANCE  
INDUSTRIAL COMPUTER



## AI EDGE INFERENCE COMPUTER

The RCO-6000 Series is a workstation-grade, fanless computers that incorporates cutting-edge technologies including DDR5, PCIe Gen 4, GPU accelerators, and NVMe storage, ensuring swift and high-performance operations. Ideal for the rigorous demands of Industry 4.0 and edge-native applications, the RCO-6000 Series features a rugged, fanless design and is backed by multiple safety certifications, guaranteeing reliable performance in edge computing environments.



EDGEBoost I/O Support



EDGEBoost Nodes Support



Scalable NVMe, SATA, and RAID Card



Scalable Robust GPU Cards

## RCO-6000-RPL SERIES

[More info](#)

intel  
Raptor Lake  
Alder Lake



NEW



NEW

Model	RCO-6000-RPL	RCO-6000-RPL-2E16
CPU Support	Support 13 <sup>th</sup> /12 <sup>th</sup> Gen Intel® RPL & ADL Processor (LGA 1700, 35W TDP)	
Memory	2x 262-Pin DDR5 4800/5600MHz SODIMM. Max. up to 64GB (ECC and Non-ECC)	
Graphic Output	1x DVI-I, 2x DisplayPort	
I/O	2x 2.5 GbE RJ45, 8x USB 3.2 Gen 2 (10 Gbps), 1x USB 3.2 Gen 1 (Internal), 2x USB 2.0 (internal), 1x Mic-in, 1x Line-out 6x RS-232/422/485 (4x internal), 16x isolated digital I/O	
Storage	2x 2.5" SATA HDD bay with RAID 0, 1 support (1x internal, 1x removable & hot-swappable)	
SIM Socket	2x External SIM socket (Mini PCIE/M.2 B Key attached)	
Power	9-48 VDC, AT/ATX Select, 5-pin Terminal Block	
Operating Temperature	-25°C to 70°C	
PCIe	RCO-6000-RPL-2E16: 1x PCIe x16 (Gen4), 1x PCIe x1 (Gen3) RCO-6000-RPL-2E8: 1x PCIe x16 (8-lane, Gen4), 1x PCIe x8 (8-lane, Gen4)	
EDGEBoost I/O Expansion	Up to 2x EDGEBoost I/O	

## RCO-6000-CML SERIES

[More info](#)

intel  
Comet Lake S



Model	RCO-6000-CML	RCO-6000-CML-2C
CPU Support	Support 10 <sup>th</sup> Gen. Intel® CML S Processor (LGA 1200, 35W TDP)	
Memory	2x 260-Pin DDR4 2666 /2933MHz SO-DIMM, up to 64GB	
Graphic Output	1x DVI-I, 2x DisplayPort	
I/O	2x GbE RJ45, 6x USB 3.2 Gen 2, 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	
Storage	3x 2.5" SATA HDD bay with RAID 0, 1, 5 support (1x internal; 2x removable & hot-swappable)	
SIM Socket	2x External SIM socket (Mini PCIE attached) [2x External SIM socket : M.2 B Key attached, 5G Module only, Optional]	
Power	9-48 VDC, AT/ATX Select, 5-pin Terminal Block	
Certification	UL 62368 Ed. 3, CE, FCC Class A	
Operating Temperature	-25°C to 70°C	
EDGEBoost I/O Expansion	Up to 2x EDGEBoost I/O	



# Mix & Match EDGEBoost Nodes Performance Accelerators Upgrade



The AI Edge Inference Computers support modular add-on nodes through a two-piece modular design that allows the EDGEBoost Nodes to easily attach to the lower portion of the RCO-6000-(CML/RPL) for more performance accelerators.

[Learn More](#)

## 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> 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 2242</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 2230</li></ul> 

## Bottom - RCO-6000-RPL EDGEBoost Nodes

PCIe Gen 4	GPU Gen 4
EBND-2-EXP-G4	EBND-2-PWR-G4
SATA Storage Series	
EBND-2-2SATA-G4, EBND-2-4SATA-G4	
NVMe Series	NVMe and GPU Series
EBND-2-2NVME-G4, EBND-8NVME-S, EBND-4NVME-S, EBND-4NVME-H	EBND-4NVME-GPU, EBND-2NVME-GPU, EBND-4NH-1E

## Bottom - RCO-6000-CML EDGEBoost Nodes

PCI/PCIe Expansion	GPU Series
EBND-2-EXP	EBND-2-PWR
SATA Storage Series	
EBND-2-2SATA, EBND-2-4SATA	
NVMe Series	NVMe and GPU Series
EBND-8NVME-S, EBND-4NVME-S, EBND-4NVME-H	EBND-4NVME-GPU, EBND-2NVME-GPU, EBND-4NH-1E



## EDGEBoost Nodes Benefits

- Scalable, Expandable, and Flexible.
- Cost Effective Solution
- Faster Time-To-Market
- Quick Upgrade
- Easy Maintenance
- Portable Design
- Future-Proof Technology



Modular



Cost Efficient



Faster Delivery














Easy Maintenance



Future-Proof

## Bottom - Modular "EDGEboost Nodes" Configurations

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



# EDGEBoost I/O SERIES





## BOOSTING FLEXIBILITY AT THE EDGE



[Learn More](#)

Premio supports rich expandability to boost wireless connectivity, streamline integration and unlock automation capabilities in harsh deployments. Leading edge and legacy technologies are easily incorporated into a powerful, intelligent IoT solution for better bandwidth and I/O flexibility. Our daughterboard modules integrate easily into Premio embedded and edge computers through standard PCIe protocols. These add-in modules include additional ethernet I/O ports in 1GbE (RJ45 & M12), 10GbE (RJ45), USB 3.2 Gen1, and 5G ready M.2 for scalable connectivity in IoT deployments at the edge.



Connectivity & Network				
EBIO-4ETH	EBIO-4ETH-M12	EBIO-4LAN	EBIO-4LAN-M12	EBIO-D10G
<ul style="list-style-type: none"><li>Intel® Ethernet Controller I350</li><li>1x PCIe x4 Gold finger (x4 Lane)</li><li>4x 1GbE LAN, RJ45 Port</li><li>Support Power over Ethernet by an optional PoE module</li></ul>	<ul style="list-style-type: none"><li>Intel® Ethernet Controller I350</li><li>1x PCIe x4 Gold finger (x4 Lane)</li><li>4x 1GbE LAN, M12 Port</li><li>Support Power over Ethernet by an optional PoE module</li></ul>	<ul style="list-style-type: none"><li>Intel® Ethernet Controller I210</li><li>1x PCIe x1 Gold finger</li><li>4x 1GbE LAN, RJ45 Port</li><li>Support Power over Ethernet by an optional PoE module</li></ul>	<ul style="list-style-type: none"><li>Intel® Ethernet Controller I210-AT</li><li>1x PCIe x1 Gold finger</li><li>4x 1GbE LAN, M12 Port</li><li>Support Power over Ethernet by an optional PoE module</li></ul>	<ul style="list-style-type: none"><li>Intel® Ethernet Controller X710-AT2</li><li>1x PCIe x1 Gold finger (x4 Lane)</li><li>2x 10GbE LAN, RJ45 Port</li></ul>
				
EBIO-4ETH-POE	EBIO-4ETH-POE-M12	EBIO-4LAN-POE	EBIO-4LAN-POE-M12	
<ul style="list-style-type: none"><li>Up to 25.2 watt per port</li><li>Complies with IEEE 802.3at</li></ul>				

## EDGEBoost I/O Boosting Flexibility at the Edge



Edge AI / Storage		
EBIO-2M2BK	EBIO-M2MK	EBIO-M2BK
<ul style="list-style-type: none"><li>2x M.2 B Key for AI/5G/NVMe module</li><li>2x M.2 B Key slot, Support 2x AI/5G Module (Support 1x 5G Only)</li><li>M.2 B Key, PCIe x2, 2242/3042/3052</li><li>1x SIM slot</li><li>Support 1x Universal Slot Only</li></ul>	<ul style="list-style-type: none"><li>1x M.2 M Key for AI/NVMe module (PCIe x4)</li><li>M.2 M Key slot, Support AI/NVMe Module</li><li>M.2 B Key, PCIe x4, 2242/2260</li><li>Support 1x Universal Slot Only</li></ul>	<ul style="list-style-type: none"><li>M.2 B Key for 5G module</li><li>2x SIM slot</li><li>1x SIM Switch</li><li>Support 1x Universal Slot Only</li></ul>



Digital & Analog I/O				
EBIO-HDMI	EBIO-DP-DIO	EBIO-2COM	EBIO-4USB	EBIO-4U3
<ul style="list-style-type: none"><li>Designed for RCO-1000 &amp; BCO-1000 models only</li><li>50-Pin High-Speed Connection</li></ul>				4x USB 3.0, Type-A Ports
1x HDMI Port (Full-HD)	1x DP (4K UHD), 1x DIO (4 in / 4 out, Isolated)	2x COM Ports	4x USB 2.0, Type A Ports (with USB hub)	

## EDGEBoost I/O SERIES | Compatible Industrial Computers



In-Vehicle Computers



Rugged, Fanless Embedded Computing



Small Form Factor Computer



Fanless Mini Computer



Fanless Mini Computer

COMPATIBLE LIST	ACO-6000 (CML / KBL)	RCO-6000 (RPL / CML / CFL)	RCO-3000 (CML / CFL)	RCO-1000 (EHL / J1900)	BCO-1000 (EHL / J1900)
EBIO-2M2BK	<ul style="list-style-type: none"><li>CML</li><li>KBL: AI/NVMe only</li></ul>	<ul style="list-style-type: none"><li></li></ul>	<ul style="list-style-type: none"><li>CML</li><li>CFL: AI/NVMe only</li></ul>		
EBIO-M2MK	<ul style="list-style-type: none"><li></li></ul>	<ul style="list-style-type: none"><li></li></ul>	<ul style="list-style-type: none"><li></li></ul>		
EBIO-M2BK	<ul style="list-style-type: none"><li>CML</li><li>KBL: AI/NVMe only</li></ul>	<ul style="list-style-type: none"><li></li></ul>			
EBIO-4U3	<ul style="list-style-type: none"><li></li></ul>	<ul style="list-style-type: none"><li></li></ul>	<ul style="list-style-type: none"><li></li></ul>		
EBIO-D10G	<ul style="list-style-type: none"><li></li></ul>	<ul style="list-style-type: none"><li></li></ul>	<ul style="list-style-type: none"><li></li></ul>		
EBIO-4ETH	<ul style="list-style-type: none"><li></li></ul>	<ul style="list-style-type: none"><li></li></ul>	<ul style="list-style-type: none"><li></li></ul>		
EBIO-4ETH-POE	<ul style="list-style-type: none"><li></li></ul>	<ul style="list-style-type: none"><li></li></ul>			
EBIO-4ETH-M12	<ul style="list-style-type: none"><li></li></ul>	<ul style="list-style-type: none"><li></li></ul>	<ul style="list-style-type: none"><li></li></ul>		
EBIO-4ETH-M12-POE	<ul style="list-style-type: none"><li></li></ul>	<ul style="list-style-type: none"><li></li></ul>			
EBIO-4LAN		<ul style="list-style-type: none"><li></li></ul>			
EBIO-4LAN-POE		<ul style="list-style-type: none"><li></li></ul>			
EBIO-4LAN-M12		<ul style="list-style-type: none"><li></li></ul>			
EBIO-4LAN-POE-M12		<ul style="list-style-type: none"><li></li></ul>			
EBIO-HDMI				<ul style="list-style-type: none"><li></li></ul>	<ul style="list-style-type: none"><li></li></ul>
EBIO-DP-DIO				<ul style="list-style-type: none"><li></li></ul>	<ul style="list-style-type: none"><li></li></ul>
EBIO-2COM				<ul style="list-style-type: none"><li></li></ul>	<ul style="list-style-type: none"><li></li></ul>
EBIO-4U3				<ul style="list-style-type: none"><li></li></ul>	<ul style="list-style-type: none"><li></li></ul>



Coming soon

# DCO-1000

SERIES

## INDUSTRIAL-GRADE DIN RAIL COMPUTER

Premio offers DIN Rail mountable computers that are available in various configurations. You can configure your DIN rail PC with the CPU, Memory, Storage, I/O Ports, and Operating System that you want. DIN rail industrial PCs can be easily and quickly mounted to a standard DIN rail.

- World Class Certifications C1D2, ATEX Zone 2, UL, FCC Class B
- Rich I/O Configurations
- Compact & Slim Form Factor



Coming Soon



Coming Soon

Model	DCO-1000-ASL	DCO-1000-ORN
CPU Support	Intel® Atom® Processor x7425E, Quad Core, 6 MB Cache, HFM 1.5 GHz, TDP 12W Intel® Atom® Processor x7211E, Dual Core, 6 MB Cache, HFM 1.0 GHz, TDP 6W	NVIDIA® Jetson Orin™ Nano 4/8GB GPU with 32 Tensor Cores
Memory	1x 262-Pin DDR5 4800MHz SODIMM. Max. up to 32 GB (ECC/Non-ECC)	
Graphic Output	Dual Independent Display by 2x DisplayPort 1.4, DP++ (4096 x 2160@60Hz)	
LAN	4x 2.5 GbE LAN	
I/O	2x RS-232/422/485, 2x USB 3.2 Gen 2 (10 Gbps), 2x USB 3.2 Gen 1 (Shared PCIe Gen 2 x1 Lane bandwidth), 4 in / 8 out (Isolated)	
Storage	1x M.2 (B Key, 3042/3052, PCIe 1 + USB 3.2 Gen2, Support 4G/5G, SATA Module)	
Power	9-36 VDC, AT/ATX, 3-pin Terminal Block	
Operating Temperature	-40°C to 70°C	
Certification	CE, FCC Class B, UL, C1D2, ATEX Zone2	
Dimensions (WxDxH)	150 x 105 x 49 mm	
Mounting	DIN-Rail Mounting, Wall Mounting (Optional)	

# VCO-6000

SERIES

## MACHINE VISION COMPUTERS

POWERFUL AI VISION AT THE  
RUGGED EDGE



## WORKSTATION-GRADE INDUSTRIAL MACHINE VISION COMPUTER

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



PCIe Gen 4  
Expansions

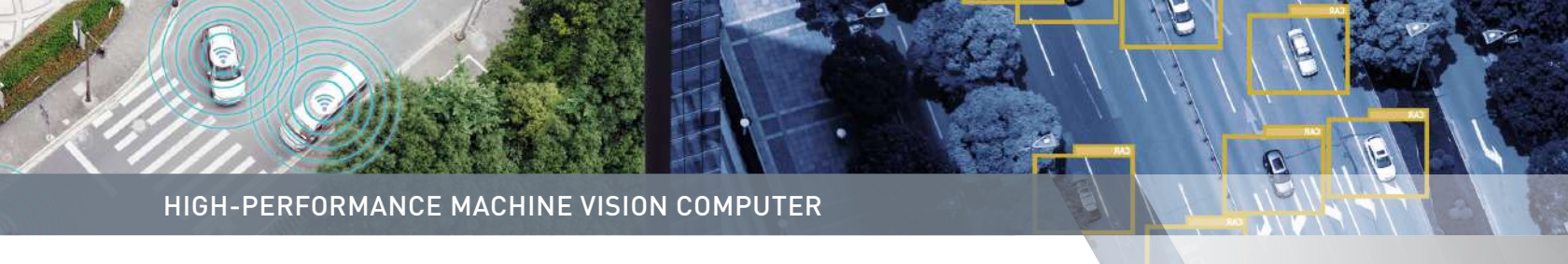


Scalable NVMe &  
SATA Storage



Shock & Vibration  
Resistance





HIGH-PERFORMANCE MACHINE VISION COMPUTER

# VCO-6000-RPL SERIES

More info



Model	VCO-6000-RPL-3E	VCO-6000-RPL-4E
	3x PCIe Expansion Slots	
CPU Support	Support 13 <sup>th</sup> /12 <sup>th</sup> Gen Intel® RPL & ADL Processor (LGA 1700, 65W/35W TDP)	
Memory	2x 262-Pin DDR5 4800/5600MHz SODIMM. Max. up to 64GB (ECC and Non-ECC)	
Graphic Output	1x DVI-I, 2x DisplayPort	
LAN	2x 2.5 GbE RJ45 (Support Wake-on-LAN and PXE)	
I/O	4x USB 3.2 Gen 2 (10 Gbps) 5x USB 3.2 Gen 1 (Internal), 1x USB 3.2 Gen 1 header (internal) 6x RS-232/422/485 (4x internal), 8x DI + 8x DO with isolation	
Storage	2x 2.5" SATA HDD bay with RAID 0, 1 support (1x Internal, 1x Removable) 1x mSATA (Shared by 1x Mini PCI Express)	
SSD/HDD	optional: <ul style="list-style-type: none"><li>4B7M: 4x Removable 2.5" SATA HDD Bay (support H=7mm, Hot-swappable, Optional) Support RAID 0, 1, 5, 10</li><li>2B15M: 2x Removable 2.5" SATA HDD Bay (support H=15mm, Hot-swappable, Optional) Support RAID 0, 1, 5, 10</li><li>2N15M: 2x Removable 2.5" U.2 NVMe Bay (support H=15mm, Hot-swappable, Optional) Support RAID 0, 1</li></ul>	
Internal Expansion Slot	1x Full-size Mini PCIe (1x shared by 1x mSATA) 1x M.2 B Key, 2242/3042/3052	
Power	AT/ATX Select 5-pin Terminal Block, 9-48 VDC 4-pin Terminal Block, 12~48VDC for GPU Card (optional)	
Audio	Line-out / Mic-in Phone Jack (internal)	
Operating Temperature	-25°C to 70°C	
Dimensions (WxDxH)	157 x 340 x 240 mm	177 x 340 x 240 mm
PCI Express	1x PCIe x16 (Gen4) 2x PCIe x1 (Gen3)	2x PCIe x16 Slot (x8 Lane, Gen 4) 1x PCIe x4 (x1 Lane, Gen 3)



HIGH-PERFORMANCE MACHINE VISION COMPUTER

# VCO-6000-CFL SERIES

More info



Model	VCO-6000-CFL-2	VCO-6000-CFL-3	VCO-6000-CFL-4	VCO-6000-CFL-5
	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
CPU Support	Support 8 <sup>th</sup> /9 <sup>th</sup> Gen. Intel® CFL-R S Processor (LGA 1151, 35W TDP) Core™ i7-9700E/9700TE/8700T, Core™ i5-9500E/9500TE/8500T, Core™ i3-9100E/9100TE/8100T, Pentium® G5400T, or Celeron® G4900T			
Memory	2x 260-pin DDR4-2400/2666MHz SO-DIMM, up to 64GB (Un-buffered and Non-ECC)			
Graphic Output	1x DVI-I, 2x DisplayPort			
LAN	2x GbE RJ45 (Support Wake-on-LAN and PXE)			
USB, Serial, & Digital I/O	4x USB 3.2 Gen 2, 6x internal USB 3.2 Gen1 (5 Gbps), 6x RS-232/422/485 (4x internal), 16x isolated digital I/O			
Storage	2x Internal 2.5" SATA HDD Bay (Support H=9mm) 2x Removable 2.5" SATA HDD Bay (Support H=7mm, Hot-swappable) Support RAID 0, 1, 5, 10 1x mSATA (shared by 1x Mini PCIe), 1x NVMe M.2 M Key			
Internal Expansion Slot	2x Full-size mini-PCIe (1 shared by 1x mSATA), 1x M.2 E Key			
Power	9-48 VDC, AT/ATX Select, 3-pin Terminal Block			
Audio	Line-out / Mic-in Phone Jack			
Operating Temperature	-25°C to 70°C			
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
Weight	8.5 Kg	9.1 Kg	9.5 kg	10.1 kg
PCI & PCI Express	<ul style="list-style-type: none"><li>VCO-6000-CFL-2E : 2x PCIe x8</li><li>VCO-6000-CFL-2I : 2x PCI</li><li>VCO-6000-CFL-2C : 1x PCIe x16 1x PCI</li></ul>	<ul style="list-style-type: none"><li>VCO-6000-CFL-3E : 2x PCIe x1 1x PCIe x16</li><li>VCO-6000-CFL-3I : 3x PCI</li><li>VCO-6000-CFL-3C : 1x PCIe x16 2x PCI</li></ul>	<ul style="list-style-type: none"><li>VCO-6000-CFL-4I : 4x PCI</li><li>VCO-6000-CFL-4C : 2x PCIe x4 1x PCIe x16 (8-lane) 1x PCI</li></ul>	<ul style="list-style-type: none"><li>VCO-6000-CFL-5C : 2x PCIe x4 1x PCIe x16 (8-Lane) 2x PCI</li></ul>



# WCO-3000 SERIES

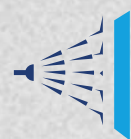
## IP67/IP69K WATERPROOF COMPUTER

DELIVER INTELLIGENCE  
WHERE IT COUNTS



### BUILT RUGGED. BUILT READY.

The WCO Series expands the limitation of hardware to environment where the normal embedded computer are not suitable to be used. The WCO computers are a great solution for food and beverage processing, outdoor digital signage, surveillance, Military & defense, and automation control where the computers are in constant threat of water splash from all directions to even water immersion.



IP67/IP69K  
Rating



Wide Range Voltage  
9-36V or 48-110V



Scalable M12  
Ports



High-Quality  
Compact Construction

IP67/IP69K WATERPROOF COMPUTER

## WCO-3000-EHL SERIES

intel  
Elkhart Lake



Model	WCO-3000-EHL
CPU Support	Intel® Celeron® Processor J6413, Quad Core, 1.5 MB Cache, 1.8 GHz, TDP 10W
Memory	1x 260-Pin DDR4 2400/2667/3200MT/s SODIMM. Max. up to 32 GB (In-Band ECC/non-ECC)
Graphic Output	1x DisplayPort 1.4, DP++ (4096 x 2160@60Hz) or 1x HDMI (Optional)
I/O	2x RJ45 by M12 X-Code, 2x USB 3.2 Gen 2 Type A (Waterproof), 1x RS-232/422/485 by M12 A-Code
Storage	1x Internal 2.5" SATA HDD Bay, 1x mSATA (shared by 1x Mini PCI Express)
Expansion	1x M.2 (B Key, 3042/3052, PCIe x 1 + USB 3.2 Gen2, Support 4G/5G/Hailo AI Module), 2x External SIM socket, 1x Full-size Mini PCIe
Power	DC IN 9~36 V, DC IN 48~110V (Optional), M12 S-code 4-pin
Certification	IP69K, CE, FCC Class A, E-Mark
Operating Temperature	-40 °C to 60 °C
Dimensions (WxDxH)	231 x 292 x 57 mm



# ACO-6000 SERIES

## IN-VEHICLE FANLESS COMPUTERS

EN50155 RAILWAY & IN-VEHICLE  
FANLESS COMPUTER



## 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  
EN50121-3-2



Wide Power Range  
9-48V and 48-110V



MIL-STD-810G  
Compliant  
Method 514 & 517

HIGH-PERFORMANCE IN-VEHICLE FANLESS COMPUTER

## ACO-6000-CML SERIES

[More info](#)

intel  
Comet Lake S



NEW



NEW

Model	ACO-6000-CML	ACO-6000-CML-1E
CPU Support	Support 10 <sup>th</sup> Gen Intel® CML S Processor (LGA 1200, 35W TDP) Xeon® W-1290TE/1270TE/1250TE, Core™ i9-10900E/10900TE, Core™ i7-10700E/10700TE, Core™ i5-10500T/10500TE, Core™ i3-10100T/10100TE	
Memory	2x 260-Pin DDR4 2666 /2933MHz SO-DIMM, up to 64GB (ECC and Non-ECC)	
Graphic Output	1x DVI-I, 2x DisplayPort	
I/O	2x GbE RJ45, 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, Line-out / Mic-in Phone Jack	
Storage	3x 2.5" SATA HDD bay with RAID 0, 1, 5 support (1x internal; 2x removable & hot-swappable)	
Internal Expansion Slot	2x Full-size mini-PCIe, 1x M.2 (E Key, PCIe x2, 2230, USB 2.0, Support CNVi)	
Power	9-48VDC, 5-pin Terminal Block. 48-110VDC (Optional), 3-pin Terminal Block. AT/ATX Select	
Operating Temperature	-25°C to 70°C	
Certification	E-Mark, EMC Conformity with EN50155 & EN50121-3-2	
Dimensions (WxDxH)	240 x 261 x 79 mm	240 x 261 x 127 mm
Universal Expansion Slot	2 (by mini PCIe interface)	4 (by mini PCIe interface)
PCI & PCI Express	ACO-6000-CML-1E: 1x PCIe x16 ACO-6000-CML-1I: 1x PCI (Optional)	
EDGEBoost I/O Expansion	Up to 2x EDGEBoost I/O	Up to 4x EDGEBoost I/O

## ACO-6000-RPL SERIES

intel  
Raptor Lake Alder Lake



Coming Soon



Coming Soon

Model	ACO-6000-RPL	ACO-6000-RPL-1E
CPU Support	Support 13 <sup>th</sup> /12 <sup>th</sup> Gen Intel® RPL & ADL Processor (LGA 1700, 65W/35W TDP)	
Memory	2x 262-Pin DDR5 4800/5600MHz SODIMM. Max. up to 64GB (ECC and Non-ECC)	
Graphic Output	1x DVI-I, 2x DisplayPort	
I/O	2x 2.5 GbE RJ45, 8x USB 3.2 Gen 2 (10 Gbps), 1x USB 3.2 Gen 1 (Internal), 2x USB 2.0 (internal), 1x Mic-in, 1x Line-out, 6x RS-232/422/485 (4x internal), 16x isolated digital I/O	
Storage	2x 2.5" SATA HDD bay with RAID 0, 1 support (1x internal, 1x removable & hot-swappable)	
Power	9-48VDC, 5-pin Terminal Block. 48-110VDC (Optional), 3-pin Terminal Block. AT/ATX Select	
Temperature	-25 °C to 70 °C	
Certification	Full EN50155 Railway Certification, CE, FCC	
PCI & PCI Express	ACO-6000-RPL-1E: 1x PCIe x16 ACO-6000-RPL-1I: 1x PCI (Optional)	
EDGEBoost I/O Expansion	Up to 2x EDGEBoost I/O	Up to 4x EDGEBoost I/O



# BCO SERIES

## COMPACT INDUSTRIAL COMPUTERS

REAL-TIME DATA  
PROCESSING FOR RUGGED  
EDGE COMPUTING



### COMPACT INDUSTRIAL COMPUTER

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 three series, the 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

### FANLESS INDUSTRIAL-EDGE COMPUTER

#### BCO-1000-ADLN

FANLESS MINI COMPUTER

#### BCO-3000-RPLS

SMALL FORM FACTOR  
EDGE COMPUTER



#### BCO-6000-RPLS

FANLESS AI EDGE COMPUTER



intel  
Raptor Lake  
Alder Lake



Model	BCO-1000-ADLN	BCO-3000-RPLS	BCO-6000-RPLS
CPU Support	12 <sup>th</sup> Gen Intel® IoTG Alder Lake-N Processor N97, QC, 12W	Intel® IOTG Raptor Lake-S or Alder Lake-S Processor Core i9/i7/i5/i3, Pentium, Celeron (35W only)	
System Chipset	Within processor	Intel® Q670E Express Chipset	
Memory	1 x DDR5 SO-DIMM slot (262-pin)	DDR4 Memory Running at 3200 MHz (Non-ECC Supported) Max. up to 64GB	
Graphic Output	1 x HDMI 1.4b 1 x DisplayPort 1.4a	1 x HDMI 1.4b 2 x Dual Mode DisplayPort 1.4a	
LAN	2 x Intel® I225-V 2.5GbE LAN	3x 2.5GbE LAN	
I/O	2x DB9 COM, 6 x USB 3.2 Gen 2 x 1 Type-A, Line-in/Line-out/Mic-in, 1 x 8 GPIO	4x DB9 COM, 8 x USB 3.2 Gen 2 x 1 Type-A , 2 x USB 2.0 Type-A, 1 x 1*2-port Audio-jack connector for Line-out/Mic-in, 8 in / 8 out (Isolated)	
Storage	1 x M.2 B Key slot (2242/ 2280/ 3042)	1 x M.2 M key Type: 2242/2280	
Internal Expansion Slot	1 x M.2 E Key slot (2230), 1 x M.2 B Key slot (2242/ 2280/ 3042)	1 x M.2 M key Type: 2242/2280, 1 x M.2 E key Type: 2230, 1 x M.2 B key Type: 3042 with Nano SIM Holder	
PCI Express			2x PCIe x8 Slot or 1x PCIe x16 Slot (New Board)
Power	AT/ATX 9~36VDC, 3-pin Terminal Block	DTB-PWR-300-936 (New Board), AT/ATX 9~36VDC, 3-pin Terminal Block	
Audio	Line-in/Line-out/Mic-in	1 x 1*2-port Audio-jack connector for Line-out/Mic-in	
Operating Temperature	-20°C to 60°C		
Certification	CE, FCC Class A, EMC Conformity with EN50155 & EN50121-3-2	CE, FCC Class A, EMC Conformity with EN50155 & EN50121-3-2, UL	
Dimensions (WxDxH)	192 x 140 x 67.5 mm	192 x 240 x 69 mm	330 x 240 x 69 mm





MINI FANLESS EMBEDDED COMPUTER

BCO-2000-WHL-U SERIES

- Support 8<sup>th</sup> Gen. Intel® Core™ i5 & Intel® Celeron® Processor
- TPM 2.0 Supported
- UL Listed

More info



intel  
Whiskey Lake



AMD  
RYZEN  
EMBEDDED



NEW

BCO-2000-RYZ SERIES

More info

- Support AMD Ryzen™ Embedded R1000/V1000 Series Processor
- TPM 2.0 Supported
- UL Listed

Model	BCO-2000-WHL-U	BCO-2000-RYZ-V1605B	BCO-2000-RYZ-R1606G
	Basic Fanless System ideal for space-constrained applications	Basic Fanless System ideal for space-constrained applications	
CPU Support	Support 8 <sup>th</sup> Gen. Intel® WL-UE Processor Intel® Core™ i5-8365UE or Intel® Celeron® 4305UE Processor	AMD Ryzen™ Embedded V1605B with Radeon™ Vega 8 Graphics, 4M Cache, 4 Cores, 8 Threads, Up to 3.6 GHz	AMD Ryzen™ Embedded R1606G with Radeon™ Vega 3 Graphics, 4M Cache, 2 Cores, 4 Threads, Up to 3.5 GHz (Optional)
Memory	1x 260-Pin DDR4 2400MHz SO-DIMM, up to 32GB	2x 260-Pin DDR4 2400 MHz SO-DIMM. Max 32 GB	
Graphic Output	1x DisplayPort, 1x HDMI (Optional)	1x DisplayPort, 1x 24-bit dual channel LVDS, 1x HDMI (Optional)	
LAN	2x RJ45 GbE (Support Wake-on-LAN and PXE)		
USB, Serial	4x USB 3.2 Gen 2, 2x USB 2.0 header (internal), 2x RS-232/422/485	2x USB 3.2 Gen 2 (10 Gbps), 4x USB 2.0 (2x internal), 2x RS-232/422/485	
Storage	1x mSATA (shared by 1x Mini PCIe), 1x Internal 2.5" SATA HDD Bay	1x M.2 B Key, 3042, Support SATA, 1x Internal 2.5" SATA HDD Bay (support H=9.5mm)	
Internal Expansion Slot	2x Full-size Mini-PCIe (1x shared with mSATA)	1x M.2 B Key (PCIe x1 & USB 3.0, 3042/3052, SATA, USIM, Support 4G/5G) 1x Full-Size Mini PCIe for expansion modules	
Power	AT/ATX 12V Select, 3-pin Terminal Block	AT, ATX 12VDC	
Audio	Line-out / Mic-in Internal		
Operating Temperature	-20°C to 60°C	-20°C to 55°C (25W CPU)	
Certification	UL 62368 Ed. 3, CE, FCC Class A		
Dimensions (WxDxH)	140 x 192 x 61 mm		
Weight	1.4 kg	1.5 kg	
Universal Expansion Slot	2		
Expansion (Option)	<div><div>• 2x LAN</div><div>• 2x COM</div><div>• 4x COM</div></div> <div><div>• 2x PoE</div><div>• 2x USB 2.0</div><div>• 2x USB 3.2 Gen1</div></div>	<div><div>• 2x COM</div><div>• 4x COM</div></div> <div><div>• 2x USB 2.0 (Support 1x Universal Slot Only)</div><div>• 2x USB 3.2 Gen1 (Support 1x Universal Slot Only)</div></div>	

KCO SERIES

FANNED INDUSTRIAL COMPUTERS

SEMI-RUGGED.  
HIGH-PERFORMANCE.  
RACKMOUNTABLE.



FANNED 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 13<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.



Support Dual FLFH GPU



Rich I/O



Internal Power Supply Unit



Rackmountable Industrial Solution



KCO-2000 SERIES [More info](#)

Certification-ready industrial computers are embedded computing solutions that serve as key building blocks for enterprise and IoT applications that require processing. The KCO Series of industrial computers is a commercial off-the-shelf (COTS) computing solution that provides reliability, regulatory safety, and embedded longevity with Premio’s extended lifecycle support. These certification-ready industrial computers are deployable in IoT applications in markets for kiosks, ATMs, security and surveillance, metrology and automation inspection, and mobile medical carts.

KCO-2000-CFL  
Coffee Lake R



KCO-2000-RPL  
Raptor Lake / Alder Lake



Model	KCO-2000-CFL	KCO-2000-RPL
	Certification-Ready Industrial Computer with LGA-1151 socket for Intel® CFL-R S Processor	Industrial Computer with 2U Certification-Ready, 12 <sup>th</sup> /13 <sup>th</sup> Gen Intel® Core® Processor
CPU Support	Support 8 <sup>th</sup> /9 <sup>th</sup> Gen Intel® CFL-R S Processor (LGA 1151, 35W TDP)	Support 12 <sup>th</sup> /13 <sup>th</sup> Gen Intel® Core™ i9/i7/i5/i3 Alder lake-S, Raptor Lake-S Processor (LGA 1700, 65W Max TDP)
Memory	4x 288-Pin DDR4 2133/2400/2666MHz DIMM. Max. up to 128GB	4x DDR4 2133/2400/2666MHz DIMM. 128 GB Max
Graphic Output	1x VGA, 1xDVI, 2x DP	4x DP++
LAN	GbE1: Intel I219LM (Support Wake-on-LAN and PXE) GbE2: Intel I210-AT (Support Wake-on-LAN and PXE)	GbE1: Intel® I219LM (Support Wake-on-LAN and PXE) GbE2: Intel® I225-V (Support Wake-on-LAN and PXE)
USB & Serial	2x RS-232/422/485 + 2x RS-232 2x RS-232 (internal header) 6x USB 3.2 Gen1 (5 Gbps) 7x USB 2.0	6x USB 3.1 Gen 2 (10 Gbps) 1x USB 3.2 Gen 2x2 (20 Gbps) Type C 6x RS-232 1x 8-bit DIO (4-in/4-out)
Storage	1x Hot-Swappable 2.5" SATA Drive Bay (support H=7mm) 1x M.2 (M Key, NVMe PCIe x4, 2280) 1x M.2 (E Key, PCIe x2, USB 2.0, 2230)	1x M.2 M / NVMe PCIe x 4 / 2242, 2260, 2280 1x M.2 M / NVMe PCIe x 4 / SATA / 2242, 2260, 2280 1x M.2 E / PCIe x2 / USB 2.0 / 2230
Internal Expansion Slot	1x PCIe x16 slot (low profile, up to 9" card length)	1x PCIe x16 Slot (Gen 5) 2x PCIe x4 Slot (Gen 4, Open End) 1x PCIe x16 Slot (Gen 3, 4-Lane)
Power	AT, ATX Internal 250W Flex Power Supply	ATX ACPI 5.0 compliant
Audio	Line-out / Mic-in Phone Jack	1x Mic-in, 1x Line-in, 1x Line-out
Operating Temperature	0°C to 35°C	0°C to 60°C
Dimensions (WxDxH)	12.73" x 10.75" x 3.45"	12.73" x 10.75" x 3.45"
Weight	11 lbs (barebone w/ chassis, mb, and PSU only)	
Certifications	CE, FCC, UL Certified	

KCO-3000 SERIES [More info](#)

KCO-3000-CFL  
Coffee Lake R



KCO-3000-RPL  
Raptor Lake / Alder Lake



Model	KCO-3000-CFL	KCO-3000-RPL
	Certification-Ready Industrial Computer with LGA-1151 socket for Intel® CFL-R S Processor	Industrial Computer with 3U Certification-Ready, 12 <sup>th</sup> /13 <sup>th</sup> Gen Intel® Core® Processor
CPU Support	Support 8 <sup>th</sup> /9 <sup>th</sup> Gen Intel® CFL-R S Processor (LGA 1151, 35W TDP)	Support 12 <sup>th</sup> /13 <sup>th</sup> Gen Intel® Core™ i9/i7/i5/i3 Alder lake-S, Raptor Lake-S Processor (LGA 1700, 65W Max TDP)
Memory	4x 288-Pin DDR4 2133/2400/2666MHz DIMM. Max. up to 128GB	4x DDR4 2133/2400/2666MHz DIMM. 128 GB Max
Graphic Output	1x VGA, 1xDVI, 2x DP	4x DP++
LAN	GbE1: Intel I219LM (Support Wake-on-LAN and PXE) GbE2: Intel I210-AT (Support Wake-on-LAN and PXE)	GbE1: Intel® I219LM (Support Wake-on-LAN and PXE) GbE2: Intel® I225-V (Support Wake-on-LAN and PXE)
USB & Serial	2x RS-232/422/485 + 2x RS-232 2x RS-232 (internal header) 6x USB 3.2 Gen1 (5 Gbps) 7x USB 2.0	6x USB 3.1 Gen 2 (10 Gbps) 1x USB 3.2 Gen 2x2 (20 Gbps) Type C 6x RS-232 1x 8-bit DIO (4-in/4-out)
Storage	1x 3.5" SATA HDD drive or 2x 2.5" SSD/HDD up to 15mm 1x M.2 (M Key, NVMe PCIe x4, 2280) 1x M.2 (E Key, PCIe x2, USB 2.0, 2230)	1x M.2 M / NVMe PCIe x 4 / 2242, 2260, 2280 1x M.2 M / NVMe PCIe x 4 / SATA / 2242, 2260, 2280 1x M.2 E / PCIe x2 / USB 2.0 / 2230
Internal Expansion Slot	1x PCIe x16 full height, up to 10" card length) 1x PCIe x4, 1x PCIe x4	1x PCIe x16 Slot (Gen 5) 2x PCIe x4 Slot (Gen 4, Open End) 1x PCIe x16 Slot (Gen 3, 4-Lane)
Power	AT, ATX Internal 300W Flex Power Supply	ATX ACPI 5.0 compliant
Audio	Line-out / Mic-in Phone Jack	1x Mic-in, 1x Line-in, 1x Line-out
Operating Temperature	0°C to 45°C	0°C to 60°C
Dimensions (WxDxH)	13.15" x 11.78" x 5.23"	13.15" x 11.78" x 5.23"
Weight	12.5 lbs (barebone w/ chassis, mb, and PSU only)	
Certifications	CE, FCC, UL Certified	



# JCO SERIES

## EDGE AI INDUSTRIAL COMPUTERS

CUSTOMIZABLE FANLESS  
COMPUTER WITH NVIDIA JETSON  
ORIN SERIES



## NEXT-GENERATION EDGE AI COMPUTING SOLUTION

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

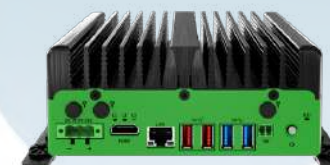


Ruggedized  
Fanless Solution

### JCO-1000

SERIES

Ultra  
Compact



### Jetson Orin Nano

Series

Jetson Orin Nano series modules deliver up to 40 TOPS of AI performance in the smallest Jetson form-factor, with power options between 7W and 15W. This gives you up to 80X the performance of NVIDIA Jetson Nano. Jetson Orin Nano is available in 8GB and 4GB versions.

### JCO-3000

SERIES

Slim  
Advanced



### Jetson Orin NX

Series

Jetson Orin NX modules deliver up to 100 TOPS of AI performance in the smallest Jetson form factor, with power configurable between 10W and 25W. This gives you up to 3X the performance of Jetson AGX Xavier and up to 5X the performance of Jetson Xavier NX. Jetson Orin NX is available in 16GB and 8GB versions.

### JCO-6000

SERIES

High  
Performance



### Jetson AGX Orin

Series

Jetson AGX Orin modules deliver up to 275 TOPS of AI performance with power configurable between 15W and 60W. This gives you up to 8X the performance of Jetson AGX Xavier in the same compact form factor. Jetson AGX Orin is available in 64GB, 32GB, and Industrial versions.





NVIDIA JETSON ORIN INDUSTRIAL COMPUTER

NVIDIA JETSON ORIN INDUSTRIAL COMPUTER



JCO NVIDIA® JETSON ORIN™ SERIES

JCO NVIDIA® JETSON ORIN™ SERIES

JCO-1000 SERIES  
MINI FANLESS AI COMPUTER

JCO-3000 SERIES  
SFF AI EDGE COMPUTER

JCO-6000 SERIES  
ROBUST AI EDGE COMPUTER

<div><div></div><div>NEW</div><div>Coming Soon</div><div>Coming Soon</div></div>				
Model	JCO-1000-ORN	JCO-3000-ORN-A		JCO-3000-ORN-B
CPU Support	NVIDIA® Jetson Orin™ Nano 4/8GB GPU with 32 Tensor Cores	NVIDIA® Jetson Orin™ NX 16G/8G & Nano 8G/4G GPU with 32 Tensor Cores		
Graphic Output	1x HDMI			
LAN	1 x GbE LAN	2 x GbE LAN	4x RJ45 (Support 4x PoE, Optional)	
I/O	2x RS-232/422/485, 4 in / 4 out (Isolated), 2x USB 3.2 Gen 2 (10 Gbps), 2x USB 2.0, 1x USB Type-C (For OS Flash)	2x RS-232 or 485 (internal, Switch by Jumper), 4x USB 3.0 ( Shared with USB 3.2 Gen 2 Hub), 4 in / 4 out (Isolated), 1x Micro USB (OTG)	2x RS-232/485 (Internal, switch by Jumper), 4x USB 3.0 ( Shared with USB 3.2 Gen 2 Hub), 8 in / 8 out (Isolated), 1x USB Type-C (For OS Flash)	
Storage	1x M.2 (M Key, 2242/2280, PCIe 4, Support NVMe)			
Expansion	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)			
Power	AT/ATX 9~36VDC, 3-pin Terminal Block	AT 12~24VDC, 3-pin Terminal Block	AT/ATX 12~24VDC, 3-pin Terminal Block	
Operating Temperature	-25°C to 70°C	-20°C to 55°C (25W, NX Module) -20°C to 60°C (15W, Nano Module)		
Certification	CE, FCC Class B, UL	CE/FCC/UL	CE/FCC/UL/EMC Conformity with EN50155 & EN50121-3-2	
Dimensions (WxDxH)	150 x 105 x 61 mm	192 x 140 x 58 mm		

<div><div></div><div>NEW</div><div>Coming Soon</div></div>		
Model	JCO-6000-ORN-A	JCO-6000-ORN-B
	NVIDIA® Jetson AGX Orin™ AI Computer with 8-core/12-core Arm® Cortex®-A78AE v8.2 64-bit CPU	
CPU Support	64G: 12-core Arm® Cortex®-A78AE v8.2 64-bit CPU (60W/275 TOPS) 32G: 8-core Arm® Cortex®-A78AE v8.2 64-bit CPU (40W/200 TOPS)	
System Memory	AGX Orin 32GB/64GB @ 3200 MHz on SOM 32GB LPDDR5 DRAM 64GB LPDDR5 DRAM	
Graphic Output	1x HDMI 2.0, 3840 x 2160 @ 60Hz	
LAN	1 x GbE LAN, 1x 10 GbE LAN	
PoE	By Optional PoE Power Module, Support up to 3x 4-port LAN Module	By Optional PoE Power Module, Support up to 3x 4-port LAN Module
I/O	2x RS-232/422/485, 2x CAN	2x RS-232/422/485 (Optional, internal), 2x CAN (Optional, internal)
	1x USB 3.2 Gen 2, 1x USB 2.0 ( Flash) 1x USB 2.0, 1x USB Type C (Console) 8 in / 8 out (Isolated)	
GMSL Camera	GMSL 2 Camera Support by 2x Quad Port Mini Fakra, supporting 8x 1280x720 @ 30 FPS (Optional)	
Universal I/O Bracket	2x Universal I/O Bracket	4x Universal I/O Bracket
Storage	1x M.2 (M Key, 2242/2260/2280, PCIe 4, Support NVMe) 1x M.2 (B Key, 3042/3052,USB 3.2 Gen2, Support 4G/5G Module)	
Power	AT/ATX 9~48VDC, 3-pin Terminal Block	
Operating Temperature	-20°C to 60°C with passive cooling (at full CPU & GPU frequency with 0.6 m/s, non-throttling, 60W TDP mode)	
Certification	CE, FCC Class A, E-Mark, EMC Conformity with EN50155 & EN50121-3-2	
Dimensions (WxDxH)	270 x 190 x 95 mm	





INDUSTRIAL-GRADE SUPERCAPACITOR FOR REDUNDANT POWER

# ECO-1000

EDGEBOOST ENERGYPACK

[More info](#)



- 8x/16x Industrial 370 Farads Supercapacitors
- Up to 200W Max. Power Output
- 1x COM, 1x USB for GUI Remote Management and Monitoring
- 2 IN / 2 OUT DIO
- -25°C to 55°C Wide Operating Temperature
- EN50155: EN50121-3-2, CE, FCC Class A, UL Certification
- 3x Smart Modes with Remote On/Off, Ignition Control, Delay Time
- 12V/24V Compatibility: Industrial PCs, Panel PCs, Displays



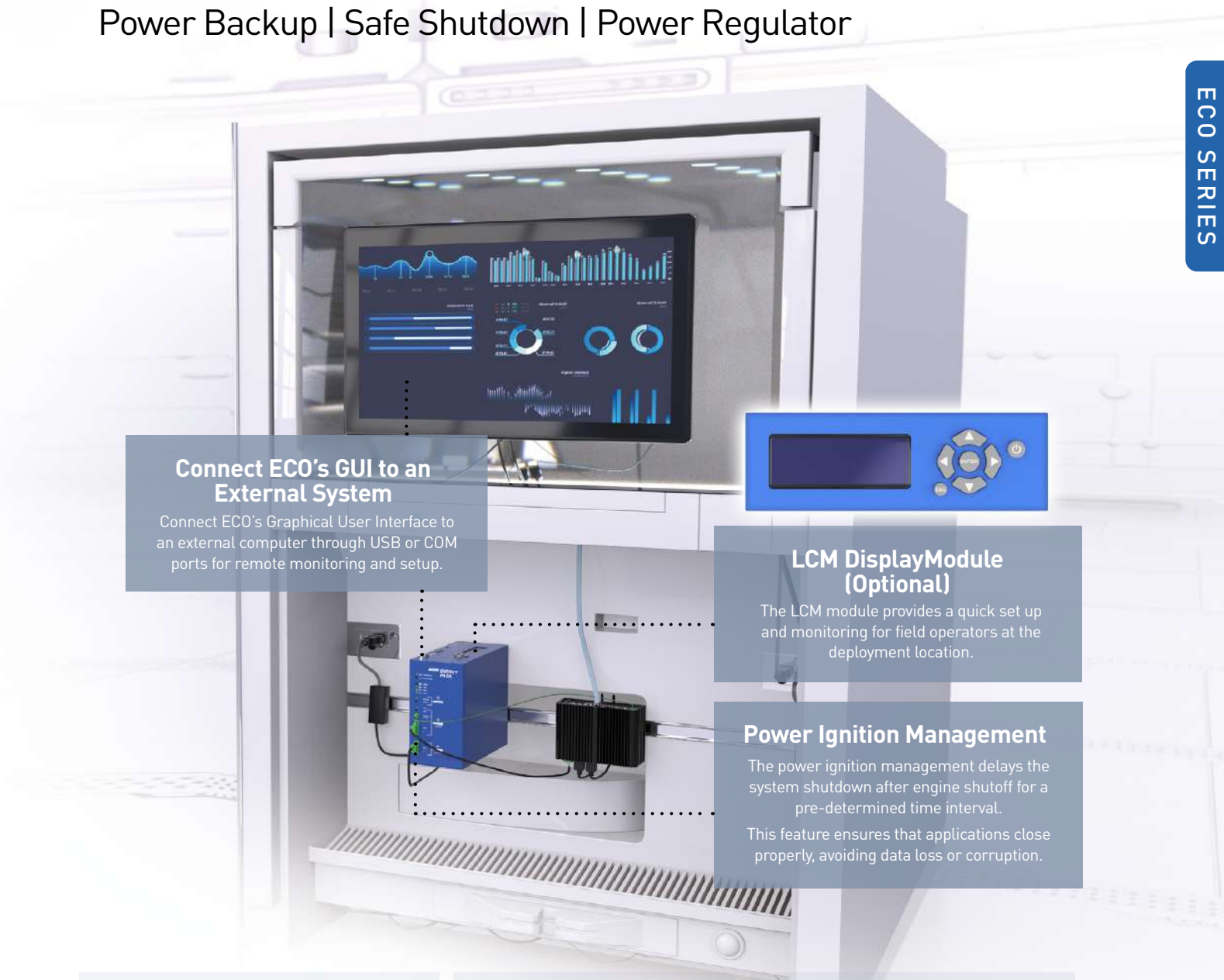
NEW

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) 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, IGN Out)
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
Power Ignition	Power Ignition Management
Operating Temp	-25°C to 55°C
Certification	CE, FCC Class A, UL 62368-1 Ed. 3 EMC Conformity with EN50155, EN50121-3-2
Dimensions (WxDxH)	100 x 192 x 187.4 mm
Weight	1.8 kg ~ 2.6 kg
Mounting Options	Wall Mounting, DIN Rail Mounting (Optional)

# Supercapacitor UPS System

## Power Redundancy at the Rugged Edge

Power Backup | Safe Shutdown | Power Regulator



### Connect ECO's GUI to an External System

Connect ECO's Graphical User Interface to an external computer through USB or COM ports for remote monitoring and setup.

### LCM DisplayModule (Optional)

The LCM module provides a quick set up and monitoring for field operators at the deployment location.

### Power Ignition Management

The power ignition management delays the system shutdown after engine shutoff for a pre-determined time interval. This feature ensures that applications close properly, avoiding data loss or corruption.

### 8/16x

Up to 16x High-Density Industrial 370 Farads/SuperCAP

### 12/24V

Regulate Voltage Fluctuation

### EN50155

Railway Certification for In-Vehicle Deployments

### 10Y

10 years longevity  
500K Lifecycle

### 200W

Robust Max Power Output

### GUI

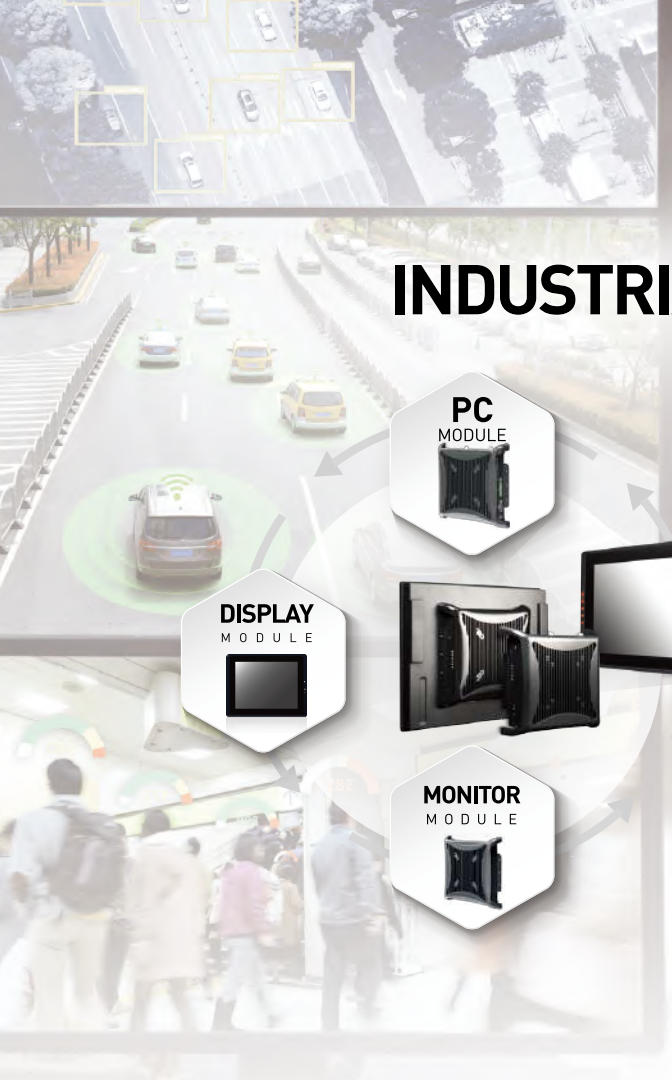
GUI software for quick, easy setup

### 3x

Support 3 smart modes for various application deployments



# INDUSTRIAL DISPLAY SYSTEMS






**VIO** SERIES  
IP65 INDUSTRIAL  
TOUCH PANEL PC AND  
MONITOR




**SIO** SERIES  
IP66/IP69K WASHDOWN  
TOUCHSCREEN  
COMPUTER



**FIO** SERIES  
INDUSTRIAL OPEN-  
FRAME TOUCHSCREEN  
MONITORS




**AIO** SERIES  
ALL IN ONE  
TOUCH PANEL PC





**HIO** SERIES  
CAPACITIVE  
OPEN FRAME  
TOUCH PANEL PC


# PREMIO INDUSTRIAL DISPLAY SYSTEMS


PRODUCT FAMILY

  
**PC/Monitor**  
Module  
  
PC600-RPL Series  
Raptor Lake PS  
  
PC100-EHL Series  
Elkhart Lake  
  
PC100-KBL-U Series  
Kabylake-U  
  
PC100-J1900 Series  
Bay Trail  
  
MX100H Series  
Monitor Module

  
**IP66/IP69K**  
Panel PC  
Stainless Steel  
  
SIO-200-J1900 Series  
Bay Trail  
  
SIO-300-N97 Series  
Alder Lake  
  
WIO-W221C-KBL-U Series  
Kabylake-U

  
**Panel PC**  
  
FIO Series  
Open Frame  
  
AIO Series  
Alder Lake-N  
Thin Frame  
  
HIO Series  
Alder Lake-N  
Open Frame  
  
VIO-200-PC600-RPL Series  
Raptor Lake PS  
Alder Lake PS  
Thin Frame  
  
VIO-200-PC100-KBL-U Series  
Kabylake-U  
Thin Frame  
  
VIO-200-PC100-EHL  
VIO-200-PC100-J1900 Series  
Elkhart Lake  
Bay Trail  
Thin Frame

  
**Display**  
Module  
  
VIO-200 Series  
Thin Frame

  
**Touch**  
Monitor  
  
VIO-200-MX100H Series  
Thin Frame







INDUSTRIAL OPEN-FRAME TOUCHSCREEN MONITORS

FIO SERIES [More info](#)

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.

NEW

NEW

NEW

NEW

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					



DISPLAY MODULE

VIO-200 SERIES [More info](#)

The Display Modules VIO-200 series are compatible with PC modules PC600-RPL, PC100-KBL-U, PC100-EHL, PC100-J1900 series and monitor modules MX100H series for different display sizes and touchscreens. These modules allow to be used for configuring, upgrading and maintaining your Panel PC or touch monitor

16:9 SERIES

NEW

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		450		
	1000 nits (Optional)				
Contrast Ratio	1000:1				
LCD Color	16.7M				
Life Cycle Time	50K Hours	30K 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	350		
	1000 nits (Optional)			
Contrast Ratio	1000:1		800:1	1000:1
LCD Color	16.2M	16.7M		
Life Cycle Time	50K 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





INDUSTRIAL PANEL PC

INDUSTRIAL PANEL PC

VIO-200-PC600-RPL SERIES

VIO-200-PC100-KBL-U SERIES [More info](#)

intel  
Raptor Lake



Model	VIO-200-PC600-RPL		VIO-200-PC600-RPL-1E
	Thin Frame Industrial Panel PC based on Intel® 12 <sup>th</sup> & 13 <sup>th</sup> Processor		Thin Frame Industrial Panel PC based on Intel® 12 <sup>th</sup> & 13 <sup>th</sup> Processor 1x PCIe x4 Gen3
CPU Onboard	Intel® 12 <sup>th</sup> /13 <sup>th</sup> Gen. (ADL-PS /RPL-PS) Processor Core™		
Memory	1x DDR5 4800 MT/s SO-DIMM Max up to 16GB		
Graphic Output	1x DisplayPort, 1x HDMI , 1x Dual Channel 24 bit LVDS		
LAN	2x 2.5GbE i226 RJ45 (Support Wake-on-LAN and PXE)		
USB, Serial, & Digital I/O	3x USB 3.2 Gen 2 (10 Gbps),1x USB C 3.2 Gen 2, Up to 4x RS-232/422/485, 16x isolated digital I/O		
Storage	1x 2.5" SATA HDD Bay with RAID 0, 1 support, 1x M.2 M-key / NVMe PCIe x4 / 2242, 2260, 2280 2x M.2 B-key /PCIe x2 /USB / 2242, 3042, 3052		
Internal Expansion Slot	1x M.2 E-Key / PCIe x1 / USB 2.0 / 2230		
PCIe			1x PCIe x4 Gen3
Power	9-48 VDC, AT/ATX Select, 3-pin Terminal Block		
Audio	Line-out / Mic-in Phone Jack		
Operating Temperature	-10 °C to 60 °C -10 °C to 50 °C (19"/21.5"/23.8" Panel PC only)		
LCD Size	4:3 12.1" / 15" / 17" / 19" 16:9 15.6" / 21.5" / 23.8"		
Touch Type	Resistive 5-wire Touch / Projected Capacitive Touch		
Universal Expansion Slot	0		2

intel  
Kabylake-U



Model	VIO-200-PC100-KBL-U	VIO-200-PC100-KBL-U-1
	Thin Frame Industrial Panel PC based on Intel® Kabylake-U processors	Thin Frame Industrial Panel PC based on Intel® Kabylake-U processors with 2x universal I/O bracket
CPU Onboard	Intel® 7 <sup>th</sup> Gen. (Kabylake-U) Processor Core™ i5-7300U, Core™ i3-7100U	
Memory	1x 260-Pin DDR4 1866/2133MHz SO-DIMM. Max. up to 16GB	
Graphic Output	1x VGA, 1x DisplayPort, 1x Dual Channel 24 bit LVDS	
LAN	2x GbE RJ45 (Support Wake-on-LAN and PXE)	
USB, Serial, & Digital I/O	4x USB 3.2 Gen1 (5 Gbps), up to 6x RS-232/422/485, 16x isolated digital I/O	
Storage	1x 2.5" SATA HDD Bay with RAID 0, 1 support, 1x mSATA (shared by 1x Mini PCIe, 1x CFast (shared by 1x mSATA)	
Internal Expansion Slot	2x Full-size Mini PCIe	
Power	9-50 VDC, AT/ATX Select, 3-pin Terminal Block	
Audio	Line-out / Mic-in Phone Jack	
Operating Temperature	-10 °C to 60 °C -10 °C to 50 °C (19"/21.5"/23.8" Panel PC only)	
LCD Size	4:3 12.1" / 15" / 17" / 19" 16:9 15.6" / 21.5" / 23.8"	
Touch Type	Resistive 5-wire Touch / Projected Capacitive Touch	
Universal Expansion Slot	0	2





INDUSTRIAL PANEL PC



INDUSTRIAL TOUCH MONITOR

# VIO-200-PC100-EHL SERIES

More info



Model	VIO-200-PC100-EHL	VIO-200-PC100-EHL-1E
	Thin Frame Industrial Panel PC based on Intel® Celeron® processors	
CPU Support	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. up to 32 GB	
Graphic Output	1x DisplayPort 1.2, 1x HDMI 2.0b (Optional)	
LAN	2x RJ45 (1 & 2.5 GbE)	
I/O	2x USB 3.2 Gen 2, 2x USB 2.0, 6x RS-232/422/485 (2x internal), 16x isolated digital I/O, 1x Mic-in, 1x Line-out	
Storage	1x Removable 2.5" SATA HDD Bay, 1x mSATA	
M.2	1x M.2 (E Key, PCIe x1, USB 2.0, 2230) 1x M.2 (B Key, PCIe x2 + USB 3.2 Gen1, 2242/3042/3052)	
Internal Expansion Slot	1x Full-size Mini PCIe (USB 2.0, SATA)	
PCIe		1x PCIe x4 (1-lanes)
Power	9-36 VDC, AT/ATX Select, 3-pin Terminal Block	
Operating Temperature	-10 °C to 60 °C,    -10 °C to 50 °C (19"/21.5"/23.8" Panel PC only)	
LCD Size	4:3    12.1" / 15" / 17" / 19"	16:9    15.6" / 21.5" / 23.8"
Touch Type	Resistive 5-wire Touch / Projected Capacitive Touch	
Universal Expansion Slot	0	1x Universal I/O Bracket (By mini PCIe interface)

# VIO-200-PC100-J1900 SERIES

More info



Model	VIO-200-PC100-J1900	VIO-200-PC100-J1900-1
	Thin Frame Industrial Panel PC based on Intel® Bay Trail processors	
CPU Onboard	Intel® Celeron® J1900	
Memory	1x 204-pin DDR3L-1066/1333 SO-DIMM, up to 8GB	
Graphic Output	1x VGA, 1x DisplayPort	
LAN	2x GbE RJ45 (Support Wake-on-LAN and PXE)	
USB, Serial, & Digital I/O	1x USB 3.2 Gen1 (5 Gbps), 3x USB 2.0, 6x RS-232/422/485 (w/ 2x internal), 16x isolated digital I/O, Line-out / Mic-in Phone Jack	
Storage	1x 2.5" SATA HDD Bay, 1x mSATA (shared by 1x Mini PCIe), 1x CFast (shared by 1x mSATA & 1x Mini PCIe)	
Internal Expansion Slot	1x Full-size Mini PCIe Socket with USIM Socket (PCIe + USB + SATA) 1x Full-size Mini PCIe Socket with USIM Socket (PCIe + USB)	
Power	9-50 VDC, AT/ATX Select, 3-pin Terminal Block	
Operating Temperature	-10 °C to 60 °C,    -10 °C to 50 °C (19"/21.5"/23.8" Panel PC only)	
Touch Type	Resistive 5-wire Touch / Projected Capacitive Touch	
Universal Expansion Slot	0	2

# VIO-200-MX100H SERIES

More info

- 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	VIO-200-MX100H
	Thin Frame Industrial Touch Monitor
Touch Type	Resistive / Capacitive Touch
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
Audio	1x Audio Input
Power	9-48 VDC, AT/ATX Select, 3-pin Terminal Block
Operating Temperature	-10 °C to 60 °C -10 °C to 50 °C (19"/21.5"/23.8" Panel PC only)
LCD Size	4:3    12.1" / 15" / 17" / 19" 16:9    15.6" / 21.5" / 23.8"





IP66/IP69K WASHDOWN TOUCHSCREEN COMPUTER WITH FULL SUS316



IP66 WATERPROOF TOUCHSCREEN COMPUTER

# SIO-200-J1900

SERIES

[More info](#)

intel  
Bay Trail    Whiskey Lake



Model	SIO-215-J1900	SIO-W215-J1900	SIO-W221-8365UE	SIO-W224-8365UE
	Resistive / Capacitive Touch Stainless Steel Panel PC, Pressure Valve SUS316 VENT			
CPU Support	Intel® Celeron® Processor J1900, Quad Core, 2MB Cache, 2.0 GHz		Intel® Core™ i5-8365UE Processor 6M Cache, up to 4.10 GHz	
Memory	1x 204-pin DDR3L SO-DIMM, Max 8GB (Default 8 GB)		1x 260-Pin DDR4 2400MHz SO-DIMM slot, Max 32GB (Default 8 GB)	
LAN	2x LAN by M12 X-Code 8-pin			
I/O	4x USB 2.0 by M12 A-code 8-pin, 2x RS-232/422/485 by M12 A-Code 8-pin			
Storage	1x mSATA (Default 128 GB)			
Internal Expansion Slot	1x Full-size Mini PCIe			
Power	AC IN 110V~240V, M12 S-code 4-pin			
Operating Temperature	-20 °C to 55 °C		-20 °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
LCD Brightness (cd/m2)	300	450	350	450
Touch Type	Resistive 5-wire Touch / Projected Capacitive Touch			
IP Level	Full System IP66/IP69K			
Dimensions (WxHxD)	385 x 310 x 49.5 mm	425 x 276 x 49.5 mm	588.5 x 380 x 52.8 mm	623 x 417 x 54 mm
Weights	5.96 kg	7.39 kg	8.6 kg	11.7 kg
Mounting Options	VESA Mounting Holes 100 x 100mm Optional Yoke Mount, Panel Mount		VESA Mounting Holes 100 x 100mm or 200 x 100mm Optional Yoke Mount, Panel Mount	

# SIO-300-ADLN

SERIES

intel  
Alder Lake



Model	SIO-315-N97	SIO-W315-N97	SIO-W321-N97	SIO-W324-N97
	Resistive / Capacitive Touch Stainless Steel Panel PC, Pressure Valve SUS316 VENT			
CPU Support	Intel® Processor N97 6M Cache, up to 3.60 GHz		Intel® Processor N97 6M Cache or Intel® Core™ i3-N305 Processor 6M Cache	
Memory	DDR5 4800MT/s SO-DIMM, Max 16GB (Default 8 GB)			
LAN	2x LAN by M12 X-Code 8-pin			
I/O	2x USB 2.0 by M12 A-code 8-pin, 2x RS-232/422/485 by M12 A-Code 8-pin			
Storage	M.2 B Key NVMe SSD (Default 128 GB)			
Power	AC IN 110V~240V, M12 S-code 4-pin			
Operating Temperature	-20 °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	450	350	450
Touch Type	Resistive 5-wire Touch / Projected Capacitive Touch			
IP Level	Full System IP66/IP69K			

# WIO

SERIES

[More info](#)

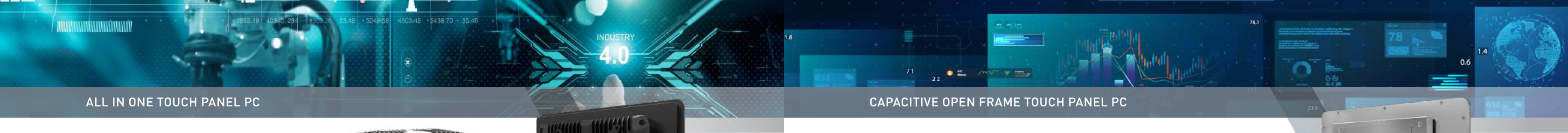
- 21.5" TFT FHD 16:9 LCD with Projected Capacitive Touch
- Support 7<sup>th</sup> Gen. Intel® Core™ i5 / i3 Processor
- 1x 260-pin DDR3L SO-DIMM. Max up to 8GB
- 1x mSATA (shared by 1x Mini PCIe), 2x internal SIM socket
- Single display supported by 1x VGA (waterproof connector)
- 2x LAN by M12 X-Code 8-pin
- 1x RS-232/422/485 by M12 D-Code 8-pin
- 2x USB 3.2 Gen1 (5 Gbps, waterproof connector)
- 9 to 50 VDC wide range power input
- -10°C to 60°C extended operating temperature
- Full system IP66 compliant
- Two 10W internal speakers built-in
- Multi-language OSD built-in

intel  
Kabylake-U



Model	WIO-W221C-KBL-U
	21.5" 16:9 Full HD Capacitive Touch All-In-One IP66 Panel PC
CPU Onboard	Intel® 7 <sup>th</sup> Gen. (Kaby Lake-U) Processor Core™ i5-7300U, Core™ i3-7100U
Memory	8GB DDR4 SO-DIMM
Graphic Output	1x Waterproof VGA
LAN	2x LAN by M12 X-Code 8-pin
USB & Serial	2x USB 3.2 Gen1 (5 Gbps, Waterproof connector), 1x RS-232/422/485 by M12 D-Code 8-pin
Storage	1x 128GB mSATA SSD
Internal Expansion Slot	1x Full-size Mini PCIe
Power	9-50 VDC, M12 A-code 4-pin
Operating Temperature	-10 °C to 60 °C
LCD Size	21.5" (16:9) Full HD
Brightness (cd/m2)	300
	1000 nits (Optional)
Touch Type	Projected Capacitive Touch, 5 Points, 7H Surface Hardness





ALL IN ONE TOUCH PANEL PC

AIO SERIES

- 10.1" ~ 21.5" All IN One Touch Panel PC
- World Class Certifications for Safety and Reliability: CE/FCC/CB/UL/UKCA/IC
- Front IP65 Rating for protection against water and dust
- Scratch Resistant 7H Glass Hardness
- Versatile Display Outputs; HDMI and DP
- 9 to 36 VDC Wide Range Power Input
- Front Panel IP65 Rating



CAPACITIVE OPEN FRAME TOUCH PANEL PC

HIO SERIES

- 10.1" ~ 21.5" Open Frame Touch Panel PC
- World Class Certifications for Safety and Reliability: CE/FCC
- Front IP65 Rating for protection against water and dust
- Scratch Resistant 7H Glass Hardness
- Versatile Display Outputs; HDMI and DP
- 9 to 36 VDC Wide Range Power Input
- Front Panel IP65 Rating



intel



Model	AIO-W210-N97	AIO-W215-N97	AIO-W221-N97
	Capacitive Open Frame Touch Panel PC with Intel® Alder lake N97 Processor		
CPU Onboard	Intel® Alder lake N97 6M Cache, up to 3.60 GHz		
Memory	Default 8GB DDR5 4800MT/s SODIMM (up to 16GB)		
Graphic Output	HDMI / DP / LVDS /eDP		
LAN	2x 2.5GbE I225 LAN		
I/O	6x USB 2.0 by internal cable, 4x USB 3.2 Gen 2 2x RS-232/422/485 by internal cable 1x Audio out		
Storage	128G M.2 B Key NVMe SSD		
Expansion	M.2 E Key Support WiFi 6e (Optional)		
Power	9-36V DC, DC Jack 5.5mm/2.5mm, 60W (12V 5A, Default)		
Operating Temperature	-10°C to 50°C		
Certification	CE, FCC, CB, UL, UKCA, IC		
LCD Size	10.1" [16:10] WXGA	15.6" [16:9] FHD	21.5" [16:9] FHD
Brightness (cd/m2)	400 nits		500 nits
Projected Capacitive	7H / IK07		
Dimensions (W) x (H) x (D)	256 x 170 x 50 mm	400 x 249 x 50 mm	538 x 329 x 62 mm

intel



Model	HIO-W210-N97	HIO-W215-N97	HIO-W221-N97
	Capacitive Open Frame Touch Panel PC with Intel® Alder lake N97 Processor		
CPU Onboard	Intel® Alder lake N97 6M Cache, up to 3.60 GHz		
Memory	Default 8GB DDR5 4800MT/s SODIMM (up to 16GB)		
Graphic Output	HDMI / DP / LVDS /eDP		
LAN	2x 2.5GbE I225 LAN		
I/O	6x USB 2.0 by internal cable, 4x USB 3.2 Gen 2 2x RS-232/422/485 by internal cable 1x Audio out		
Storage	128G M.2 B Key SSD (Default)		
Expansion	M.2 E Key Support WiFi 6e (Optional)		
Power	9-36V DC, DC Jack 5.5mm/2.5mm, 60W(12V 5A) Adapter (Optional)		
Operating Temperature	-10°C to 50°C		
Certification	CE, FCC Class A		
LCD Size	10.1" [16:10] WXGA	15.6" [16:9] FHD	21.5" [16:9] FHD
Brightness (cd/m2)	400 nits		500 nits
Projected Capacitive	7H / IK07		
Dimensions (W) x (H) x (D)	252 x 166 x 39 mm	395 x 245 x 40 mm	533 x 325 x 46 mm



# INDUSTRIAL BOARD SOLUTIONS

Premio's 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, Premio provides 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.



Industrial-Grade  
Materials



Tested and  
Validated



Long Product  
Lifecycle

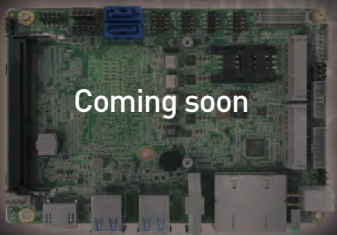


Fast  
Delivery Time

## INDUSTRIAL MOTHERBOARDS & SINGLE BOARD COMPUTERS



### 3.5" ADL-N



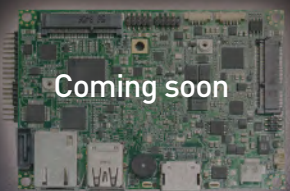
SBC with Intel®  
Alder Lake N Series

### 3.5" Meteor Lake-N



SBC with Intel®  
Alder Lake N Series

### 2.5" ADL-N



SBC with Intel®  
Alder Lake N Series

### Mini-ITX Meteor Lake PS



Industrial Motherboard with  
Intel® Meteor Lake PS



BOARDS

SERIES

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Premio 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.

1.8" FEMTO ITX



Model	CT-NR101
	AMD Ryzen™ Embedded R1606G with Radeon™ Vega 3 Graphics - Highest 2C Performance
Memory	DDR4-2400 signal channel Memory down up to 8GB, Default 4GB
BIOS	AMI SPI 64Mbit
TPM	TPM 2.0
Display Interface	2x Micro HDMI
Rear I/O	1x RJ45, 2x Micro HDMI, 1x Type C USB 3.1 Gen 2
Internal I/O	1x Front Panel, 1x 8-bit GPIO (4-in/4-out)
Power	2-pin Terminal Block
Operating Temperature	0°C to 60°C
Dimension	84 x 55 mm

2.5" PICO ITX



Model	CT-PBT01
	Intel® Celeron® Processor J1900 (2.0GHz/4C/10W)
Memory	1x 204-Pin DDR3L 1066/1333MHz SO-DIMM
BIOS	AMI 64Mbit SPI BIOS
Watchdog	Software Programmable Supports 1~255 sec. System Reset
Display Interface	1x HDMI, 1x LVDS
Rear IO	1x LVDS & 1x LVDS backlight, 1x RS-232/422/485, 1x RS-232, 2x USB 2.0
Internal I/O	1x LVDS, 1x LVDS backlight, 1x RS-232/422/485, 1x RS-232, 2x USB 2.0, 1x SATA 3.0Gb/s, 1x Front panel audio, 1x 8-bit GPIO (4-in/4-out), 1x Front panel, 1x SMBus
Power	12V DC Input, 1x 2-pin power connector
Operating Temperature	-10°C to 70°C
Dimension	100 x 72 mm

BOARDS

SERIES

[More info](#)

3.5" SBC



Model	CT-DWL01	CT-DR101	CT-DAL11
	Support 8 <sup>th</sup> Gen. Intel® WL-UE Processor (15 TDP) Intel® Core™ i7-8665UE, i5-8365UE, i3-8145UE or Intel® Celeron® Processor 4305UE	AMD Ryzen™ Embedded R1000/V1000 Series Processor	Intel® 12 <sup>th</sup> Gen Alder Lake-N N97/i3-N305 Processors
Memory	1x 260-Pin DDR4 2400MHz SO-DIMM slot. Max. up to 32GB	DDR4-2400 SO-DIMM slot, up to 32GB, supports ECC	1x 262-Pin DDR5 4800MHz SO-DIMM slot (262-pin), Max 16GB
BIOS	AMI uEFI 256MB SPI flash	AMI uEFI 256Mbit SPI flash	AMI uEFI 256MB SPI flash
Watchdog	Software Programmable Supports 1~255 sec. System Reset		Software Programmable Supports 1~256 sec. System Reset
TPM	TPM 2.0 Through Infineon® SLB9665TT2.0 or Equivalent	TPM 2.0	
Display Interface	1x DisplayPort, 1x LVDS, 1x HDMI, 1x EDP internal connector (optional)	1x DisplayPort, 1x LVDS, 1x HDMI	
Rear IO	4x USB 3.2 Gen 2, 2x RJ45 GbE LAN, 1x DisplayPort, 1x HDMI	2x RJ45 2x USB 3.2 Gen2 (10Gbps) 2x DisplayPort 1x HDMI	3x RJ45 2x USB 3.2 Gen2 (10Gbps), 2x USB 3.2 Gen 1 (5Gbps) 1x DisplayPort, 1x HDMI
Internal I/O	1x LVDS, 1x eDP1.4 (Optional), 4x RS-232/422/485, 2x USB 2.0 , 2x SATA Gen3, 1x Front panel audio, 2x 4-bit DIO	1x 24-bit dual channel LVDS, 2x RS232-/422/485, 1x SATA, 2x 6pin Audio Header, 2x 4-bit DIO, 1x 50-pin PCIe 3.0 (4-Lane) Connector for Custom I/Os	1x GPIO header, 2x RS-232-/422/485 Internal 2.0PH headers, 1x SATA, 1x Audio front panel header, 1x LVDS connector, 1x eDP connector, 6x USB 2.0 Internal 2.0 Headers
Power	AT/ ATX 12V DC Input, 4-pin CPU P4 connector	AT/ ATX 12V DC Input, 4-pin CPU P4 connector	9~36V DC Input
Operating Temperature	-40°C to 70°C	-40°C to 75°C	-10°C to 60°C
Dimension	146 x 102 mm		



BOARDS

SERIES

[More info](#)

Premio 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.

MINI ITX

SERIES



Model	CT-XCL01
	LGA 1151 Socket Support 9 <sup>th</sup> Gen. Intel® Core™ Desktop Processor, Q370 Chipset
Memory	2x SO-DIMM, DDR4, 2133/2400/2666 (depend on CPU) MT/s, Max 32 GB
BIOS	AMI® UEFI BIOS 256Mb Flash
Watchdog	Software Programmable Supports 1~255 sec. System Reset
TPM	TPM 2.0 Through Infineon® SLB9665TT2.0 or Equivalent (Optional)
Display Interface	1x DVI-D, 1x LVDS, 1x HDMI 1.4, 1x DisplayPort 1.2
Rear IO	1x RS-232, 2x RJ45, 4x USB 3.1 Gen 2, 1x USB-C (optional), 1x Line-in , Line-out, Mic-in
Internal I/O	4x RS-232 Headers, 1x 8-bit PIO, 1x USB 3.0 Headers (2 Ports), 1x USB 2.0 Headers (2 Ports), 1x Backlight Locking Type Header, 2x 4-pin PWM Smart Fan, 1x LPC Header, 1x SPI Header, 1x Cable Stype CMOS Battery
Power	ATX 12V, 24 Pin ATX Power Connector
Operating Temperature	0°C to 60°C
Dimension	170 x 170 mm

Model	CT-XSL01
	LGA 1151 socket supporting 6 <sup>th</sup> Gen Intel® Core™ i3/i5/i7 Desktop Processor, Intel® Core™ i7-6700TE / i5-6500TE / i3-6100TE
Memory	2x 260-Pin DDR4 1866/2133MHz SO-DIMM
BIOS	AMI uEFI 128MB SPI flash
Watchdog	Software Programmable Supports 1~255 sec. System Reset
TPM	TPM 2.0 supported (optional)
Display Interface	1x DVI-D, 1x 2-ch 24-bit LVDS, 1x DisplayPort
Rear IO	1x DVI-I, 1x DP, 1x HDMI, 1x RS-232/422/485, 4x USB 3.2 Gen1 (5 Gbps), 2x USB 2.0, 2x RJ45, 1x Line-out, 1x Mic-in, 1xPS/2 KB/MS
Internal I/O	1x 2-ch 24-bit LVDS, 4x RS-232, 2x USB 3.2 Gen1 (5 Gbps), 2x USB 2.0, 4 x SATA 6.0Gb/s, 1x Front panel audio, 1x 8-bit GPIO (4-in/4-out), 1x LPC, 1x Front panel, 1x CPU fan, 1x System fan
Power	ATX power, 2x12-pin and 2x2-pin power connector
Operating Temperature	0°C to 60°C
Dimension	170 x 170 mm

BOARDS

SERIES

[More info](#)

MICRO ATX

SERIES



NEW

Model	CT-MSL01	CT-MCL01	CT-MRL01
	LGA 1151 socket supporting 6 <sup>th</sup> Gen Intel® Core™ i3/i5/i7 Desktop Processor, Intel® Core™ i7-6700TE / i5-6500TE / i3-6100TE	Support 8 <sup>th</sup> /9 <sup>th</sup> Gen Intel® CFL-R S Processor (LGA 1151, 95W/35W TDP), Intel® Core™ i7-9700E / i5-9500E / i3-9100E or Intel® Pentium® G5400T, G5400	Support 12 <sup>th</sup> /13 <sup>th</sup> Gen Intel® Core™ i9/i7/i5/i3 Alder lake-S, Raptor Lake-S Processor
Memory	4x 288-Pin DDR4 1866/2133MHz DIMM	4x 288-Pin DDR4 2133/2400/2666MHz DIMM	4x DDR4 2133/2400/2666MHz DIMM. 128 GB Max
BIOS	AMI uEFI 128MB SPI flash	AMI uEFI 256MB SPI flash	
TPM	TPM 2.0 supported (optional)		TPM 2.0
Display Interface	1x VGA, 1x DVI-D, 1x DisplayPort	1x VGA, 1x DVI-D, 2x DisplayPort (DP 1.2)	Quad 4K Displays through 4x DP++
Rear IO	1x VGA, 1x DVI-D, 1x DP, 1x HDMI, 2x RS-232/422/485, 4x USB 3.2 Gen1 (5 Gbps), 2x RJ45 GbE LAN, 1x Line-in, 1x Line-out, 1x Mic-in	1x VGA, 1x DVI-D, 2x DP, 2x RS-232/422/485, 4x USB 3.2 Gen 2, 2x RJ45, 1x Line-in, 1x Line-out, 1x Mic-in	4x DP++, 6x USB 3.1 Gen 2, 2x RJ45, 1x Line-in, 1x Line-out, 1x Mic-in 1x USB 3.2 Gen 2x2 Type C
Internal I/O	4x RS-232, 2x USB 3.2 Gen1 (5 Gbps), 6x USB 2.0, 4 x SATA 6.0Gb/s, 1x Front panel audio, 1x 8-bit GPIO (4-in/4-out), 1x PS/2 KB/MS, 1x LPC, 1x Front panel, 1x CPU fan, 2x System fan	4x RS-232, 1x USB 3.2 Gen 1, 7x USB 2.0, 6 x SATA 6.0Gb/s, 1x Front panel audio, 1x 8-bit DIO (4-in/4-out), 1x SPI header, 1x LPC, 1x Front panel, 1x CPU fan, 2x System fan	6x RS-232, 2x USB 3.0 Gen 1, 4x USB 2.0, 4 x SATA Gen 3, 1x Front panel audio, 1x 8-bit DIO (4-in/4-out), 1x SPI header, 1x Front panel, 1x CPU fan, 2x System fan
Power	ATX power, 2x12-pin and 2x2-pin power connector		ATX Power 2x12-pin and 2x2-pin power connector
Operating Temperature	0°C to 60°C		
Dimension	244 x 244 mm		





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