Premio offers a full range of validated and tested industrial systems to meet the demands from Industry 4.0.
We deliver our core brand values through the way we conduct businesses. Premio’s core values of Innovation, Commitment, Collaboration, Agility, and Accountability guide our decisions to exceed expectations.

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, and HMI Displays.

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
“Our 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 businesses. 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 our customers’ 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

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.

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 startups that were eventually acquired by major fortune 500 companies.

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.

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)

Present

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.
FANLESS EMBEDDED SYSTEMS

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.

2022 FEATURED INDUSTRIAL SYSTEMS

FANLESS MINI PC

B CO SERIES 16

RUGGED

R CO SERIES 18

EDGEBOOST NODE

AI EDGE INFERENCE 24

IN-VEHICLE

A CO SERIES 28

MACHINE VISION

V CO SERIES 30

IP65/67 WATERPROOF

W CO SERIES 33

AI EDGE INFERENCE

EDGE SERIES 34

MODULE SERIES

38

Premio provides ethernet daughterboard modules that integrate easily into Premio embedded and edge computers through standard PCIe protocols. These flexible add-in modules provide additional ethernet I/O ports and scalable connectivity for IoT deployments that require ethernet connections in multiple RJ45 and M12 locking connectors.

INDUSTRIAL DISPLAY SYSTEMS

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.

MOTHERBOARD SYSTEMS

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.

CERTIFICATION-READY INDUSTRIAL COMPUTERS

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.
The RCO-6000-CML Series brings performance and reliability closer to IoT sensors by providing a ruggedized compute solution in the harshest deployments at the edge. This industrial-grade computer provides the latest from Intel® 10th Gen Processors, an increase in I/O capacity, support for faster DDR4-2933 memory, hot-swappable NVMe storage, and even 5G connectivity.

- Intel® 10th Gen CML S Processor & W480 Chipset support up to 10 Cores
- Modular EDGEBoost Nodes to support hardware acceleration
- NVMe SSDs Storage Bricks
- GPU, TPU, and M.2 accelerator support
- 5G Ready
- Flexible I/O for More I/O: LAN, USB, and 10GbE
- Power Ignition Management
- Industrial-Grade Ruggedized Design

The ACO-6000-CML Series is an in-vehicle computing solution that carries the full EN50155 certification with EMC and environmental test conformity.

- Intel® 10th Gen CML S Processor & W480 Chipset support up to 10 Cores
- EN50155 full certification with EMC and environmental test conformity
- Support DC-in 24V, 48V, 72V, 110V for railway application
- Purpose-built for intelligent railway, tram, subway, and transportation

The VCO-6000-CFL Series brings performance and reliability closer to IoT sensors by providing a ruggedized compute solution in the harshest deployments at the edge. This machine vision computer provides the latest from Intel® 10th Gen Processors, an increase in I/O capacity, support for faster DDR4-2933 memory, hot-swappable NVMe storage, and even 5G connectivity. It’s an easy and accessible PCIe magazine tray that supports up to x5 expansion slots with additional support for full-length x16 PCIe GPU cards for hardware acceleration.

- Intel® 9th Gen CFL S Processor & Q370 Chipset support up to 8 Cores
- Up to 5x PCIe/PCI Expansion Slots
- Accelerate Machine Learning with X16 PCIe GPU (Full Length)
- Industrial-Grade Ruggedized Design

The ACO-6000-CML Series is an in-vehicle computing solution that carries the full EN50155 certification with EMC and environmental test compliance for railway applications. This fanless and rugged computer enables better performance and reliability from Intel® 10th Gen Processors, an increase in I/O capacity, support for faster DDR4-2933 memory, hot-swappable NVMe storage and even 5G connectivity.
AI EDGE INFERENCe COMPUTER

The RCO-6000-CFL AI edge inference computer is engineered to deliver maximum processing performance, accessible data storage, and high-speed connectivity for the most rigorous IoT deployments today. Unlike other edge computers on the market, our hardware solution is proven to bring an entirely new approach to performance acceleration at the edge. Combined with our top-notch engineering design and environmental ruggedization, our AI Edge Inference Computers ensure enterprise reliability and deployment flexibility with a new two-piece module design – EDGEBoost Nodes.

FANLESS SMALL FORM FACTOR (SFF) COMPUTER

The RCO-3000-CFL is a small form factor computer built fanless with an industrial-grade standard for remote deployments at the rugged edge. Balancing power and versatility, the RCO-3000-CFL can provide multi-core processing for a variety of IoT devices and sensors.
24” ALL-IN-ONE INDUSTRIAL PANEL PCS
The V10 and S10 Panel PCs Series are now available in 24” size for enhanced productivity and immersive view experience. In addition, our Industrial Panel PCs come with an IP rating and corrosion-proof materials to ensure smooth operations in various kinds of industrial environments.

AMD RYZEN INDUSTRIAL MOTHERBOARDS
Premio introduces a 1.8” and 3.5” single board computer powered by AMD Ryzen R1000/V1000 Processors. The AMD CT-DR101 and CT-NR101 are industrial-grade motherboards that are small, compact, and provide power-efficient performance in a system-on-chip design (SoC). Despite their small form factor, they provide a balance between performance and cost-effectiveness for intelligent industrial applications.
**PREMIO FANLESS EMBEDDED SYSTEMS**

**PRODUCT FAMILY**

- **In-Vehicle** Fanless Computer
- **IP65 / IP67 Waterproof** Fanless Embedded System
- **Mini** Fanless Computer
- **Machine Vision** System
- **Rugged** Fanless Embedded System

**In-Vehicle Fanless Computer**
- ACO-6000-CML Series
  - Comet Lake S
- ACO-6000-KBL Series
  - Skylake & Kabylake-S

**IP65 / IP67 Waterproof Fanless Embedded System**
- VCO-6000-CML-
- VCO-6000-CFL Series
  - Comet Lake S
  - CFL-R S
- VCO-6000-KBL Series
  - Skylake & Kabylake-S

**Mini Fanless Computer**
- WCO-2000-KBL-U Series
  - Whiskey Lake
- RCO-1000-J1900 Series
  - Bay Trail

**Machine Vision System**
- RCO-3000-KBL Series
  - Skylake & Kabylake-S
- RCO-3000-KBL-U Series
  - Kabylake-U
- RCO-6000-KBL Series
  - Skylake & Kabylake-S

**Rugged Fanless Embedded System**
- RCO-3000-CFL Series
  - Coffee Lake R
- RCO-6000-KML Series
  - Comet Lake S
- VCO-6000-CML Series
  - Comet Lake S
- VCO-6000-CFL Series
  - CFL-R S
- VCO-6000-KBL Series
  - Skylake & Kabylake-S

**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

**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.

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

**EXTENDED OPERATING TEMPERATURE RANGE**
Premio fanless embedded systems support extended temperature to allow applications to function in difficult and harsh environment.

**INDUSTRIAL GRADE COMPONENT**
Strict component selection adopting industrial grade parts like capacitor, power choke, etc. Better electrical performance and more stable system performance Product longevity supported Less RMA + Longer product lifecycle= Lower TCO (total cost of ownership)

**POWER PROTECTION**
- Over voltage protection
- Over current protection
- Reverse protection

**THERMAL PERFORMANCE**
Utilize metal material (copper and aluminum) to accomplish fanless Fast heat dissipation by integrated heat pipe on heat block and heat sink Unique thermal design that allows desktop CPU (up to 35W) to operate without fan in extended temperature range
**BCO-1000-J1900 Series**

- Intel® Celeron® J1900 Processor (Quad Core, 2.0GHz)
- Dual Independent Display
- Rich I/O Features with up to 6x RS-232/422/485
- 9 to 30 VDC Wide Range Power Input Supporting AT/ATX Mode
- Ultra Compact Size Design
- Fanless & Cable-less in Design
- TPM 2.0 Supported (Optional)

**Model**

<table>
<thead>
<tr>
<th></th>
<th>BCO-1000-J1900</th>
<th>BCO-1000-J1900-10</th>
<th>BCO-1000-J1900-20</th>
<th>BCO-1000-J1900-30</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU Onboard</td>
<td>Intel® Celeron® J1900</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Memory</td>
<td>1x 204-pin DDR3L-1066/1333MHz SODIMM, up to 8GB</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graphic Output</td>
<td>1x DVI-I (optional Display Port: BCO-1000-J1900-10A, BCO-1000-J1900-20C &amp; BCO-1000-J1900-30)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>LAN</td>
<td>2x 0be RJ45 (Support Wake-on-LAN and PXE)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Storage</td>
<td>1x mSATA (shared by 1x Mini PCIe) &amp; 1x Internal 2.5&quot; SATA HDD Bay</td>
<td>1x mSATA (shared by 1x Mini PCIe) &amp; 1x Internal 2.5&quot; SATA HDD Bay</td>
<td></td>
<td></td>
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<tr>
<td>Internal Expansion Slot</td>
<td>2x Full-size mini-PCIe (1x shared with mSATA)</td>
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<td></td>
<td></td>
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<tr>
<td>Power</td>
<td>9-30 VDC, AT/ATX Select, 5-pin Terminal Block</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio</td>
<td>Line-out / Mic-in Phone Jack</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-20°C to 50°C</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Dimensions (WxDxH)</td>
<td>142 x 101 x 30 mm</td>
<td>142 x 101 x 61.5 mm</td>
<td>142 x 101 x 58 mm</td>
<td>142 x 101 x 75 mm</td>
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<td>Weight</td>
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<td>Universal Expansion Slot</td>
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<td>D</td>
<td>1 (front)</td>
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<tr>
<td>DP, 8-bit Isolated DIO (rear)</td>
<td>BCO-1000-J1900-10A</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2x COM (rear)</td>
<td>BCO-1000-J1900-10B</td>
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</tr>
<tr>
<td>4x USB (Front)</td>
<td>BCO-1000-J1900-10U</td>
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<tr>
<td>DP, 8-bit Isolated DIO, &amp; 2x COM (rear)</td>
<td>BCO-1000-J1900-20C</td>
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</tr>
<tr>
<td>4x USB (Front)</td>
<td>BCO-1000-J1900-20D</td>
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<td>DP, 8-bit Isolated DIO, &amp; 4x COM (Front)</td>
<td>BCO-1000-J1900-30</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**BCO-2000-WHL-U Series**

- Support 8th Gen. Intel® Core™ i5 & Intel® Celeron® Processor
- 1x 260-pin DDR4 2400 S0-DIMM. Max. up to 32GB
- 2x Intel® 0be (Support Wake-on-LAN and PXE)
- Dual display by 1x HDMI and 1x DisplayPort support
- 2x Mini PCIe (Gen3) with 1x SIM slot support
- 4x USB 3.2 Gen 2 (200bps), 4x RS-232/422/485 (1/2 Internal)
- 1x Internal 2.5" SATA HDD Bay and 1x mSATA
- Support 8th Gen. Intel® Core™ i5 & Intel® Celeron® Processor
- 1x 260-pin DDR4 2400 S0-DIMM. Max. up to 32GB
- 2x Intel® 0be (Support Wake-on-LAN and PXE)
- Dual display by 1x HDMI and 1x DisplayPort support
- 2x Mini PCIe (Gen3) with 1x SIM slot support
- 4x USB 3.2 Gen 2 (200bps), 4x RS-232/422/485 (1/2 Internal)
- 1x Internal 2.5" SATA HDD Bay and 1x mSATA
- TPM 2.0 Supported

**Model**

<table>
<thead>
<tr>
<th></th>
<th>BCO-2000-WHL-U</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU Onboard</td>
<td>Support 8th Gen. Intel® KHL-UE Processor (15W TDP) Intel Core™ i5-8500U Processor 6M Cache, up to 4.10 GHz Intel® Celeron® Processor 3955U 2M Cache, 2.00 GHz</td>
</tr>
<tr>
<td>Memory</td>
<td>1x 260-pin DDR4 2666MHz S0-DIMM, up to 32GB</td>
</tr>
<tr>
<td>Graphic Output</td>
<td>1x DisplayPort, 1x HDMI (Optional)</td>
</tr>
<tr>
<td>LAN</td>
<td>2x RJ45 0be (Support Wake-on-LAN and PXE)</td>
</tr>
<tr>
<td>Storage</td>
<td>1x mSATA (shared by 1x Mini PCIe) &amp; 1x Internal 2.5&quot; SATA HDD Bay</td>
</tr>
<tr>
<td>Internal Expansion Slot</td>
<td>2x Full-size Mini-PCIe (1x shared with mSATA)</td>
</tr>
<tr>
<td>Power</td>
<td>AT/ATX 12V Select, 3-pin Terminal Block</td>
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<tr>
<td>Audio</td>
<td>Line-out / Mic-in Phone Jack</td>
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<tr>
<td>Operating Temperature</td>
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<td>Dimensions (WxDxH)</td>
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<td>Weight</td>
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<td>Expansion (Option)</td>
<td>2x LAN 2x COM 2x PoE (Support 1x Universal Slot Only) 2x USB 2.0 (Support 1x Universal Slot Only) 2x USB 3.2 Gen 1 (Support 1x Universal Slot Only)</td>
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</tbody>
</table>

**Model**

<table>
<thead>
<tr>
<th></th>
<th>BCO-1000-J1900-10A</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU Onboard</td>
<td>Intel® Celeron® J1900</td>
</tr>
<tr>
<td>Memory</td>
<td>1x 204-pin DDR3L-1066/1333MHz SODIMM, up to 8GB</td>
</tr>
<tr>
<td>Graphic Output</td>
<td>1x DVI-I (optional Display Port: BCO-1000-J1900-10A)</td>
</tr>
<tr>
<td>LAN</td>
<td>2x 0be RJ45 (Support Wake-on-LAN and PXE)</td>
</tr>
<tr>
<td>Storage</td>
<td>1x mSATA (shared by 1x Mini PCIe) &amp; 1x Internal 2.5&quot; SATA HDD Bay</td>
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<tr>
<td>Internal Expansion Slot</td>
<td>2x Full-size mini-PCIe (1x shared with mSATA)</td>
</tr>
<tr>
<td>Power</td>
<td>9-30 VDC, AT/ATX Select, 5-pin Terminal Block</td>
</tr>
<tr>
<td>Audio</td>
<td>Line-out / Mic-in Phone Jack</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-20°C to 50°C</td>
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<tr>
<td>Dimensions (WxDxH)</td>
<td>142 x 101 x 30 mm</td>
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<td>Weight</td>
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<td>Universal Expansion Slot</td>
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<td>DP, 8-bit Isolated DIO (rear)</td>
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<tr>
<td>2x COM (rear)</td>
<td>BCO-1000-J1900-10B</td>
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<tr>
<td>4x USB (Front)</td>
<td>BCO-1000-J1900-10U</td>
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<td>DP, 8-bit Isolated DIO, &amp; 2x COM (rear)</td>
<td>BCO-1000-J1900-20C</td>
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<tr>
<td>4x USB (Front)</td>
<td>BCO-1000-J1900-20D</td>
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<tr>
<td>DP, 8-bit Isolated DIO, &amp; 4x COM (Front)</td>
<td>BCO-1000-J1900-30</td>
</tr>
</tbody>
</table>
RCO-1000-J1900 SERIES
MINI INDUSTRIAL EMBEDDED COMPUTER
• Intel® Atom® processor E3845, 1.91GHz or Intel® Celeron® J1900, 2.0GHz
• Dual Independent Display
• Rich I/O Features with up to 6x RS-232/422/485
• 2x Full-size Mini-PCIe Slot for Communication or Expansion Modules
• 9 to 68 VDC Wide Range Power Input Supporting AT/ATX Mode
• Ultra Compact Size Design
• Fanless & Cable-less in Design

RCO-3000-KBL-U SERIES
HIGH-PERFORMANCE RUGGED EDGE COMPUTER
• Support 7th Gen. Intel® Core™ i5 / i3 Processor
• Triple Independent Display
• Support up to 6x LAN or 4x PoE by Unique Modular Design
• Multiple Expansion Capability including PCIe, PCI, and Mini PCIe
• Wide Operating Temperature (-40°C to 70°C)
• 9 to 50 VDC Wide Range Power Input Supporting AT/ATX Mode
• Fanless & Cable-less in Design
• TPM 2.0 Supported

Model | RCO-1000-J1900 | RCO-1000-J1900-10 | RCO-1000-J1900-20 | RCO-1000-J1900-30
--- | --- | --- | --- | ---
CPU Onboard | Intel® Atom® E3845, or Celeron® J1900 | Intel® Atom® E3845, or Celeron® J1900 | Intel® Atom® E3845, or Celeron® J1900 | Intel® Atom® E3845, or Celeron® J1900
Memory | 1x 204-pin DDR3L-1066/1333MHz SO-DIMM, up to 8GB | 1x 204-pin DDR3L-1066/1333MHz SO-DIMM, up to 8GB | 1x 204-pin DDR3L-1066/1333MHz SO-DIMM, up to 8GB | 1x 204-pin DDR3L-1066/1333MHz SO-DIMM, up to 8GB
LAN | 2x 10/100/1000BASE-T (RJ45) | 2x 10/100/1000BASE-T (RJ45) | 2x 10/100/1000BASE-T (RJ45) | 2x 10/100/1000BASE-T (RJ45)
Storage | 1x mSATA [shared by 1x Mini PCIe] | 1x mSATA [shared by 1x Mini PCIe] | 1x mSATA [shared by 1x Mini PCIe] | 1x mSATA [shared by 1x Mini PCIe]
Internal Expansion Slot | 2x Full-size mini-PCIe | 2x Full-size mini-PCIe | 2x Full-size mini-PCIe | 2x Full-size mini-PCIe
Power | 9-68 VDC, AT/ATX Select, 3-pin Terminal Block | 9-68 VDC, AT/ATX Select, 3-pin Terminal Block | 9-68 VDC, AT/ATX Select, 3-pin Terminal Block | 9-68 VDC, AT/ATX Select, 3-pin Terminal Block
Audio | Line-out / Mic-in Phone Jack | Line-out / Mic-in Phone Jack | Line-out / Mic-in Phone Jack | Line-out / Mic-in Phone Jack
Operating Temperature | 0°C to 70°C | 0°C to 70°C | 0°C to 70°C | 0°C to 70°C
Dimensions (WxDxH) | 150 x 105 x 37 mm | 150 x 105 x 49 mm | 150 x 105 x 65 mm | 150 x 105 x 85 mm
Weight | 0.69 kg | 0.85 - 0.88 kg | 0.97 - 0.98 kg | 1.11 kg
Universal Expansion Slot | 0 | 1 [rear] | 1 [front] | 2 [front]
DP: 8-bit Isolated DIO (rear) | RCO-1000-J1900-10A | RCO-1000-J1900-10B | RCO-1000-J1900-20C | RCO-1000-J1900-30
2x COM (rear) | RCO-1000-J1900-10B | RCO-1000-J1900-10B | RCO-1000-J1900-20D | RCO-1000-J1900-30
Power Management (rear) | RCO-1000-J1900-10B | RCO-1000-J1900-10B | RCO-1000-J1900-20D | RCO-1000-J1900-30

Model | RCO-3000-KBL-U | RCO-3000-KBL-U-1 | RCO-3000-KBL-U-2
--- | --- | --- | ---
CPU Onboard | Intel® 7th Gen. (Kabylake-U) Processor Core™ i5-7300U, Core™ i3-7100U | Intel® 7th Gen. (Kabylake-U) Processor Core™ i5-7300U, Core™ i3-7100U | Intel® 7th Gen. (Kabylake-U) Processor Core™ i5-7300U, Core™ i3-7100U
Memory | 1x 260-pin DDR4 1866/2133MHz SO-DIMM, up to 16GB | 1x 260-pin DDR4 1866/2133MHz SO-DIMM, up to 16GB | 1x 260-pin DDR4 1866/2133MHz SO-DIMM, up to 16GB
Graphic Output | 1x VGA, 2x DisplayPort | 1x VGA, 2x DisplayPort | 1x VGA, 2x DisplayPort
LAN | 2x 10/100/1000BASE-T (RJ45) (Support Wake-on-LAN and PXE) | 2x 10/100/1000BASE-T (RJ45) (Support Wake-on-LAN and PXE) | 2x 10/100/1000BASE-T (RJ45) (Support Wake-on-LAN and PXE)
USB, Serial, & Digital I/O | 4x USB 3.2 Gen1 (5 Gbps), 2x USB 2.0 | 4x USB 3.2 Gen1 (5 Gbps), 2x USB 2.0 | 4x USB 3.2 Gen1 (5 Gbps), 2x USB 2.0
| 5x RS-232/422/485 (w/ 3x internal), 16 isolated digital I/O | 5x RS-232/422/485 (w/ 3x internal), 16 isolated digital I/O | 5x RS-232/422/485 (w/ 3x internal), 16 isolated digital I/O
Storage | 2x 2.5" SATA HDD Bay (1x internal, 1x removable) with RAID 0, 1, 5, 10 support, 1x mSATA [shared by 1x Mini PCIe], and 1x CFast [shared by 1x mSATA] | 2x 2.5" SATA HDD Bay (1x internal, 1x removable) with RAID 0, 1, 5, 10 support, 1x mSATA [shared by 1x Mini PCIe], and 1x CFast [shared by 1x mSATA] | 2x 2.5" SATA HDD Bay (1x internal, 1x removable) with RAID 0, 1, 5, 10 support, 1x mSATA [shared by 1x Mini PCIe], and 1x CFast [shared by 1x mSATA]
Internal Expansion Slot | 2x Full-size mini-PCIe | 2x Full-size mini-PCIe | 2x Full-size mini-PCIe
Power | 9-50 VDC, AT/ATX Select, 3-pin Terminal Block | 9-50 VDC, AT/ATX Select, 3-pin Terminal Block | 9-50 VDC, AT/ATX Select, 3-pin Terminal Block
Audio | Line-out / Mic-in Phone Jack | Line-out / Mic-in Phone Jack | Line-out / Mic-in Phone Jack
Operating Temperature | -40°C to 70°C | -40°C to 70°C | -40°C to 70°C
Dimensions (WxDxH) | 185 x 197 x 57.4 mm | 185 x 197 x 85 mm | 185 x 197 x 105 mm
Weight | 2.17 - 2.66 kg | 2.73 - 3.1 kg | 2.95 - 3.32 kg
1x PCIe slot | RCO-3000-KBL-U-1E | RCO-3000-KBL-U-11 | RCO-3000-KBL-U-2E
1x PCI | RCO-3000-KBL-U-11 | RCO-3000-KBL-U-11 | RCO-3000-KBL-U-21
2x PCIe slot | RCO-3000-KBL-U-2E | RCO-3000-KBL-U-21 | RCO-3000-KBL-U-21
2x PCI | RCO-3000-KBL-U-21 | RCO-3000-KBL-U-21 | RCO-3000-KBL-U-21
Proprietary Module Expansion | Up to 1x Module | Up to 1x Module | Up to 1x Module
| OPT-LAN | OPT-LAN-M12 | OPT-LAN-M12
| OPT-LAN-PWR | OPT-LAN-PWR | OPT-LAN-PWR-M12
| OPT-LAN-PWR-M12 | OPT-LAN-PWR-M12 | OPT-LAN-PWR-M12
• Support 6th/7th Gen Intel® Core™/Pentium®/Celeron® Desktop Processor
• Intel® Q170 chipset
• 2x DDR4 1866/2133MHz SODIMM, Max. up to 32GB
• Intel® HD Graphics 530 / 630
• Triple Independent Display
• 2x internal 2.5" SATA HDD bay with RAID 0, 1, 5, 10 support, 2x mSATA (shared by 2x Mini PCIe), 1x CFast
• 2x full-size Mini PCIe (shared by 2x mSATA) for communication or expansion modules, 2x external SIM socket
• 4x RS-232/422/485 (w/ 2x internal), 4x USB 3.2 Gen1, 2x USB 2.0
• 9 to 50 VDC Wide Range Power Input
• Supporting AT/ATX Mode
• TPM 2.0 Supported

Model | RCO-3000-KBL |
--- | --- |
**Advanced Fanless System based on Intel® Skylake & Kaby Lake-U processors**

**CPU Support**
Support 6th & 7th Gen Intel® Core™/Pentium®/Celeron® Desktop Processor (LGA 1151)
7th Gen Intel® Core™ i7-7700T / i5-7500T / i3-7100TE,
6th Gen Intel® Core™ i7-6700TE / i5-6500TE / i3-6100TE,
Intel® Pentium® G4400TE / Celeron® G3900TE

**Memory**
2x DDR4 1866/2133MHz SODIMM, Max. up to 32GB

**Graphic Output**
Intel® HD Graphics S30 / 630
1x DisplayPort, and 1x HDMI (optional)

**LAN**
2x GbE RJ-45 (Support Wake-on-LAN and PXE)

**USB, Serial, & Digital I/O**
6x USB 3.2 Gen1 (5 Gbps), 2x USB 2.0 (2x internal),
4x RS-232/422/485 (4x internal), 1x isolated digital I/O

**Storage**
2x internal 2.5" SATA HDD Bay with RAID 0, 1, 5, 10 support,
2x mSATA (shared by 2x Mini PCIe), and 1x CFast

**Internal Expansion Slot**
2x Full-size mini-PCIe

**Power**
9-50 VDC, AT/ATX Select, 3-pin Terminal Block

**Audio**
Speaker-out / Mic-in Phone Jack

**Operating Temperature**
-25 °C to 60 °C

**Dimensions (WxDxH)**
185 x 197 x 57.4 mm

**Weight**
2.28 kg

---

**Model | RCO-3000-CFL**

**Advanced Fanless Embedded System with LGA 1151 for Intel 8th/9th Gen CPU & Q370 PCH**

**CPU Support**
Support 8th & 9th Gen Intel® Core™-R S Processor (LGA 1151, 65W/35W TDP)
(Core™ i7-9700E/9700TE/8700, Core™ i5-9500E/9500TE/8500, Core™ i3-9100E/9100TE/8100TE, Pentium® G5400T, or Celeron® G4900T)

**Memory**
2x 260-Pin DDR4 2400/2666MHz SODIMM. Max. up to 64GB (Un-buffered and Non-ECC)

**Graphic Output**
1x DVI-I, 2x DisplayPort

**LAN**
2x GbE RJ-45 (Support Wake-on-LAN and PXE)

**USB, Serial, & Digital I/O**
4x USB 3.2 Gen 2 (10 Gbps), 4x USB 2.0 (2x internal),
5x RS-232/422/485 (2x internal), 16x isolated digital I/O

**Storage**
2x 2.5" SATA HDD bay with RAID 0, 1, 5 support,
1x isolated digital I/O

**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**
Speaker-out

**Operating Temperature**
-25°C to 50°C (35W CPU)

**Dimensions (WxDxH)**
192 x 197 x 60.3 mm

**Weight**
3.10 kg

**PCI Express**
0

**Proprietary Module Expansion**
Up to 1x Module

---

**Model | RCO-3000-CFL-2E**

**Superior Fanless Embedded System with LGA 1151 for Intel 8th/9th Gen CPU & Q370 PCH, 2x PCIe x 16**

**CPU Support**
Support 8th & 9th Gen Intel® Core™-R S Processor (LGA 1151, 65W/35W TDP)
(Core™ i7-9700E/9700TE/8700, Core™ i5-9500E/9500TE/8500, Core™ i3-9100E/9100TE/8100TE, Pentium® G5400T, or Celeron® G4900T)

**Memory**
2x 260-Pin DDR4 2400/2666MHz SODIMM. Max. up to 64GB (Un-buffered and Non-ECC)

**Graphic Output**
1x DVI-I, 2x DisplayPort

**LAN**
2x GbE RJ-45 (Support Wake-on-LAN and PXE)

**USB, Serial, & Digital I/O**
4x USB 3.2 Gen 2 (10 Gbps), 4x USB 2.0 (2x internal),
5x RS-232/422/485 (2x internal), 16x isolated digital I/O

**Storage**
2x 2.5" SATA HDD bay with RAID 0, 1, 5 support,
1x isolated digital I/O

**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**
Speaker-out

**Operating Temperature**
-25°C to 60°C (35W CPU)

**Dimensions (WxDxH)**
192 x 197 x 107.8 mm

**Weight**
3.10 kg

**PCI Express**
2x PCIe x 16 (8-Lane)
**RCO-6000-KBL** Series

- **CPU Support**: Intel® 6th/7th Gen. Intel® Core™ i7/i5/i3 or Pentium® / Celeron® Desktop Processor
- **Triple Independent Display**
- **Support up to 10x LAN or 8x PoE by Unique Modular Design**
- **Multiple Expansion Capability including PCIe, PCI, and Mini PCIe**
- **Wide Operating Temperature (-25°C to 70°C)**
- **9 to 48 VDC Wide Range Power Input Supporting AT/ATX Mode**
- **Fanless & Cable-less in Design**
- **TPM 2.0 Supported**

**Model**

<table>
<thead>
<tr>
<th>Model</th>
<th>RCO-6000-KBL</th>
<th>RCO-6000-KBL-1</th>
<th>RCO-6000-KBL-2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CPU Support</strong></td>
<td>Intel® 6th/7th Gen. Intel® Kabylake &amp; Skylake-S Desktop Processor (Core™ i7/7700T/7700TE, Core™ i5/7500T/7500TE, Core™ i3/7100T/7100TE, Pentium® G4400TE, or Celeron® G3900TE)</td>
<td>Intel® 8th Gen. Intel® Core™ i5-8400, i3-8300, or Celeron® G4900T</td>
<td>Intel® 8th Gen. Intel® Core™ i7-8700, i5-8500, or Celeron® G4900T</td>
</tr>
<tr>
<td><strong>Memory</strong></td>
<td>2x 260-pin DDR4-1866/2133MHz SO-DIMM, up to 128GB (Un-buffered and Non-ECC)</td>
<td>1x DDR4-2400/2666MHz SO-DIMM</td>
<td>1x DDR4-2400/2666MHz SO-DIMM</td>
</tr>
<tr>
<td><strong>Graphic Output</strong></td>
<td>1x DVI-I, 2x DisplayPort</td>
<td>1x DVI-I, 2x DisplayPort</td>
<td>1x DVI-I, 2x DisplayPort</td>
</tr>
<tr>
<td><strong>LAN</strong></td>
<td>2x GbE RJ45 (Support Wake-on-LAN and PXE)</td>
<td>2x GbE RJ45</td>
<td>2x GbE RJ45</td>
</tr>
<tr>
<td><strong>USB, Serial, &amp; Digital I/O</strong></td>
<td>2x USB 3.0, 2x USB 2.0, 2x RS-232/422/485 (2x internal), 1x isolated digital I/O</td>
<td>4x USB 3.2 Gen 2 (1x internal), 2x USB 2.0, 2x USB 1.1, 2x RS-232/422/485 (2x internal), 1x isolated digital I/O</td>
<td>4x USB 3.2 Gen 2 (1x internal), 2x USB 2.0, 2x USB 1.1, 2x RS-232/422/485 (2x internal), 1x isolated digital I/O</td>
</tr>
<tr>
<td><strong>Storage</strong></td>
<td>4x 2.5&quot; SATA HDD Bays with RAID 0, 1, 5, 10 support (2x internal), 2x removable, 2x mSATA (shared by 2x Mini PCIe)</td>
<td>4x 2.5&quot; SATA HDD Bays with RAID 0, 1, 5, 10 support (2x internal), 2x removable, 2x mSATA (shared by 2x Mini PCIe)</td>
<td>4x 2.5&quot; SATA HDD Bays with RAID 0, 1, 5, 10 support (2x internal), 2x removable, 2x mSATA (shared by 2x Mini PCIe)</td>
</tr>
<tr>
<td><strong>Power</strong></td>
<td>9-48 VDC, 1x PCI Express 3.0 x16, 1x PCIe Express 3.0 x8, 1x PCIe Express 3.0 x4, 1x PCIe Express 3.0 x2, 1x PCIe Express 3.0 x1</td>
<td>9-48 VDC, 1x PCI Express 3.0 x16, 1x PCIe Express 3.0 x8, 1x PCIe Express 3.0 x4, 1x PCIe Express 3.0 x2, 1x PCIe Express 3.0 x1</td>
<td>9-48 VDC, 1x PCI Express 3.0 x16, 1x PCIe Express 3.0 x8, 1x PCIe Express 3.0 x4, 1x PCIe Express 3.0 x2, 1x PCIe Express 3.0 x1</td>
</tr>
<tr>
<td><strong>Audio</strong></td>
<td>Speaker-out / Mic-in Phone Jack</td>
<td>Speaker-out / Mic-in Phone Jack</td>
<td>Speaker-out / Mic-in Phone Jack</td>
</tr>
<tr>
<td><strong>Operating Temperature</strong></td>
<td>-25°C to 70°C</td>
<td>-25°C to 70°C</td>
<td>-25°C to 70°C</td>
</tr>
<tr>
<td><strong>Dimensions (WxDxH)</strong></td>
<td>240 x 261 x 79 mm</td>
<td>260 x 261 x 107 mm</td>
<td>260 x 261 x 127 mm</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>4.37 ~ 5.21 kg</td>
<td>4.87 ~ 6.67 kg</td>
<td>5.94 ~ 6.44 kg</td>
</tr>
<tr>
<td><strong>Universal Expansion Slot (front)</strong></td>
<td>2x PCIe x16</td>
<td>2x PCIe x16</td>
<td>2x PCIe x16</td>
</tr>
<tr>
<td><strong>Universal Expansion Slot (rear)</strong></td>
<td>2x PCIe x8</td>
<td>2x PCIe x8</td>
<td>2x PCIe x8</td>
</tr>
<tr>
<td><strong>Proprietary Module Expansion</strong></td>
<td>Up to 2x Module</td>
<td>Up to 2x Module</td>
<td>Up to 2x Module</td>
</tr>
</tbody>
</table>

**RCO-6000-CFL** Series

- **CPU Support**: Intel® 8th/9th Gen. Intel® CFL-R S Processor (LGA 1151, 65W/35W TDP)
- **Intel® Q370 chipset**
- **2x DDR4 2666MHz SO-DIMM, up to 64GB**
- **Triple Independent Display by 1x DVI-I and 2x DisplayPort**
- **4x USB 3.2 Gen 2, 6x USB 3.2 Gen 1 (1x internal), 6x RS-232/422/485 (2x internal)**
- **4x 2.5" SATA HDD Bay and 1x mSATA. Support RAID 0, 1, 5, 10**
- **1x NVMe M.2 SSD, 1x M.2 E Key for WiFi**
- **Wide Operating Temperature (-25°C to 70°C)**
- **9 to 48 VDC Wide Range Power Input Supporting AT/ATX Mode**
- **Fanless & Cable-less in Design**
- **TPM 2.0 Supported**

**Model**

<table>
<thead>
<tr>
<th>Model</th>
<th>RCO-6000-CFL</th>
<th>RCO-6000-CFL-2C</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Memory</strong></td>
<td>2x 260-pin DDR4-2666MHz SO-DIMM, up to 64GB (Un-buffered and Non-ECC)</td>
<td>2x 260-pin DDR4-2666MHz SO-DIMM, up to 64GB (Un-buffered and Non-ECC)</td>
</tr>
<tr>
<td><strong>Graphic Output</strong></td>
<td>1x DVI-I, 2x DisplayPort</td>
<td>1x DVI-I, 2x DisplayPort</td>
</tr>
<tr>
<td><strong>LAN</strong></td>
<td>2x GbE RJ45 (Support Wake-on-LAN and PXE)</td>
<td>2x GbE RJ45 (Support Wake-on-LAN and PXE)</td>
</tr>
<tr>
<td><strong>USB, Serial, &amp; Digital I/O</strong></td>
<td>4x USB 3.2 Gen 2 (1x internal), 4x USB 3.2 Gen 1 (1x internal), 6x RS-232/422/485 (2x internal), 1x isolated digital I/O</td>
<td>4x USB 3.2 Gen 2 (1x internal), 4x USB 3.2 Gen 1 (1x internal), 6x RS-232/422/485 (2x internal), 1x isolated digital I/O</td>
</tr>
<tr>
<td><strong>Storage</strong></td>
<td>4x 2.5&quot; SATA HDD Bay with RAID 0, 1, 5, 10 support (2x internal), 2x removable, 1x mSATA (shared by 1x Mini PCIe), 1x NVMe M.2 Key</td>
<td>4x 2.5&quot; SATA HDD Bay with RAID 0, 1, 5, 10 support (2x internal), 2x removable, 1x mSATA (shared by 1x Mini PCIe), 1x NVMe M.2 Key</td>
</tr>
<tr>
<td><strong>Power</strong></td>
<td>9-48 VDC, 1x PCI Express 3.0 x16, 1x PCIe Express 3.0 x8, 1x PCIe Express 3.0 x4, 1x PCIe Express 3.0 x2, 1x PCIe Express 3.0 x1</td>
<td>9-48 VDC, 1x PCI Express 3.0 x16, 1x PCIe Express 3.0 x8, 1x PCIe Express 3.0 x4, 1x PCIe Express 3.0 x2, 1x PCIe Express 3.0 x1</td>
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<tr>
<td><strong>Audio</strong></td>
<td>Line-out / Mic-in Phone Jack</td>
<td>Line-out / Mic-in Phone Jack</td>
</tr>
<tr>
<td><strong>Operating Temperature</strong></td>
<td>-25°C to 70°C (35W CPU)</td>
<td>-25°C to 70°C (35W CPU)</td>
</tr>
<tr>
<td><strong>Dimensions (WxDxH)</strong></td>
<td>260 x 261 x 79 mm</td>
<td>260 x 261 x 127.3 (H) mm</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>5.97 kg</td>
<td>7.37 kg</td>
</tr>
<tr>
<td><strong>Universal Expansion Slot (front)</strong></td>
<td>1 (by mini PCIe interface)</td>
<td>3 (by mini PCIe interface)</td>
</tr>
<tr>
<td><strong>PCI &amp; PCI Express</strong></td>
<td>1x PCI, 1x PCIe x16</td>
<td>1x PCI, 1x PCIe x16</td>
</tr>
<tr>
<td><strong>Proprietary Module Expansion</strong></td>
<td>Up to 1x Module</td>
<td>Up to 1x Module</td>
</tr>
</tbody>
</table>

**MORE INFO**
PERFORMANCE AND STORAGE AT THE RUGGED EDGE

Premio Edge Inference Computers are specifically engineered with the latest technologies that offer real-time data inference analysis and boosted storage for machine-learning purposes in the most rigorous IoT deployments. Our industrial computers push further the capabilities of AI and machine learning for industrial automation, vehicle telematics, smart city, and metrology.

### EDGEBOOST NODE

**AI EDGE INFERENCE COMPUTERS**

#### PERFORMANCE AND STORAGE AT THE RUGGED EDGE

Premio Edge Inference Computers are specifically engineered with the latest technologies that offer real-time data inference analysis and boosted storage for machine-learning purposes in the most rigorous IoT deployments. Our industrial computers push further the capabilities of AI and machine learning for industrial automation, vehicle telematics, smart city, and metrology.

#### CPU

- **Coffee Lake R**

#### Memory

- **Support Intel® 8th Gen. Core™ i7, Core™ i5, Core™ i3, Pentium® G5400T, or Celeron®® G4900T**

#### Storage

- **4x 2.5" SATA HDD bay with RAID 0, 1, 5, 10 support**
- **2x removable & hot-swappable**
- **1x mSATA (shared by 1x Mini PCIe)**
- ***Patented NVMe drives trays**

#### Expansion

- **Universal Expansion Slot 1** (by mini PCIe interface)
- **Internal Expansion Slot 2x Full-size mini-PCIe (1 shared by 1x mPCIeA)**
- **1x M.2 E Key**

#### Graphics

- **1x NVMe M.2 M Key**
- **1x NVMe M.2 M Key**
- **1x NVMe M.2 M Key**

#### Audio

- **Line-out / Mic-in Phone Jack**

#### Operating Temperature

- **-25°C to 60°C (35W / 65W CPU)**

#### Dimensions (Min/Max)

- **261 x 240 x 168 mm**
- **157 x 240 x 260 mm**

#### Weight

- **11.1 kg / 7.83 kg**

#### Universal Expansion Slot

- **1 (by mini PCIe interface)**

#### PCI Express

- **1x PCIe x4 (x1 Lane)**

#### Proprietary Module Expansion

- **Up to 1x Module**
  - **DTB-D100**
  - **DTB-M28K**
  - **DTB-4ETH**
  - **DTB-4ETH-PWR**
  - **DTB-4ETH-M12**

### NEW

- **Support Intel® 8th Gen. Core™ i7, Core™ i5, Core™ i3, Pentium® G5400T, or Celeron®® G4900T**

#### Memory

- **2x 260-pin DDR4 (2400/2666 MHz DDR4-SDIMM, up to 64GB) (Un-buffered and Non-ECC)**

#### Graphics

- **1x NVMe M.2 M Key**
- **1x NVMe M.2 M Key**
- **1x NVMe M.2 M Key**

#### Audio

- **Line-out / Mic-in Phone Jack**

#### Operating Temperature

- **-25°C to 60°C (35W / 65W CPU)**

#### Dimensions (Min/Max)

- **261 x 240 x 168 mm**
- **157 x 240 x 260 mm**

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#### PCI Express

- **1x PCIe x4 (x1 Lane)**

#### Proprietary Module Expansion

- **Up to 1x Module**
  - **DTB-D100**
  - **DTB-M28K**
  - **DTB-4ETH**
  - **DTB-4ETH-PWR**
  - **DTB-4ETH-M12**
## RCO-6000-CML SERIES

**High-Performance Industrial Computer**

- Support 10th Gen. Intel® CML S Processor (LGA 1200, 65W/35W TDP)
- Intel® W480E chipset
- 2x DDR4 2666/2933MHz SODIMM. Max. up to 64GB
- Triple Independent Display by 1x DVI-I and 2x DisplayPort
- 8x RS-232/422/485 (6x internal), 6x USB 3.2 Gen 2, 3x USB 3.2 Gen 1 (1x internal)
- Wide Operating Temperature -25°C to 70°C
- Wide Range Power Input Supporting AT/ATX Mode
- TPM 2.0 Supported

### Model Features

<table>
<thead>
<tr>
<th>Model</th>
<th>CPU Support</th>
<th>Memory</th>
<th>Graphic Output</th>
<th>LAN</th>
<th>USB, Serial, &amp; Digital I/O</th>
<th>Storage</th>
<th>SIM Socket</th>
<th>Power</th>
<th>Audio</th>
<th>Operating Temperature</th>
<th>Dimensions (WxDxH)</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCO-6000-CML</td>
<td>Support 10th Gen. Intel® CML S Processor (LGA 1200, 65W/35W TDP)</td>
<td>2x 260-Pin DDR4 2666/2933MHz SODIMM, up to 64GB</td>
<td>1x DVI-I, 2x DisplayPort</td>
<td>2x 6G RJ45 (Support Wake-on-LAN and PXE)</td>
<td>6x 3.2 Gen 2, 2x USB 3.2 Gen 1 (1x internal), 2x USB 2.0 header (internal), 8x RS-232/422/485 (6x internal), 1x isolated digital I/O</td>
<td>3x 2.5” SATA HDD bay with RAID 0, 1, 5 support (1x internal), 2x removable &amp; hot-swappable</td>
<td>2x External SIM socket (Mini PCIe attached)</td>
<td>9-48 VDC, AT/ATX Select, 5-pin Terminal Block</td>
<td>-25°C to 70°C (35W/65W CPU)</td>
<td>260 x 261 x 79 mm</td>
<td>3.1 - 3.5 kg</td>
<td></td>
</tr>
<tr>
<td>RCO-6000-CML-2C</td>
<td>Support 10th Gen. Intel® CML S Processor (LGA 1200, 65W/35W TDP)</td>
<td>2x 260-Pin DDR4 2666/2933MHz SODIMM, up to 64GB</td>
<td>1x DVI-I, 2x DisplayPort</td>
<td>2x 6G RJ45 (Support Wake-on-LAN and PXE)</td>
<td>6x 3.2 Gen 2, 2x USB 3.2 Gen 1 (1x internal), 2x USB 2.0 header (internal), 8x RS-232/422/485 (6x internal), 1x isolated digital I/O</td>
<td>3x 2.5” SATA HDD bay with RAID 0, 1, 5 support (1x internal), 2x removable &amp; hot-swappable</td>
<td>2x External SIM socket (Mini PCIe attached)</td>
<td>9-48 VDC, AT/ATX Select, 5-pin Terminal Block</td>
<td>-25°C to 70°C (35W/65W CPU)</td>
<td>240 x 261 x 127 mm</td>
<td>5.4 kg</td>
<td></td>
</tr>
<tr>
<td>RCO-6000-CML-2C-4B7M</td>
<td>Support 10th Gen. Intel® CML S Processor (LGA 1200, 65W/35W TDP)</td>
<td>2x 260-Pin DDR4 2666/2933MHz SODIMM, up to 64GB</td>
<td>1x DVI-I, 2x DisplayPort</td>
<td>2x 6G RJ45 (Support Wake-on-LAN and PXE)</td>
<td>6x 3.2 Gen 2, 2x USB 3.2 Gen 1 (1x internal), 2x USB 2.0 header (internal), 8x RS-232/422/485 (6x internal), 1x isolated digital I/O</td>
<td>3x 2.5” SATA HDD bay with RAID 0, 1, 5 support (1x internal), 2x removable &amp; hot-swappable</td>
<td>2x External SIM socket (Mini PCIe attached)</td>
<td>9-48 VDC, AT/ATX Select, 5-pin Terminal Block</td>
<td>-25°C to 70°C (35W/65W CPU)</td>
<td>260 x 261 x 127 mm</td>
<td>5.4 kg</td>
<td></td>
</tr>
</tbody>
</table>

### Model RCO-6000-CML-2C:

- Support 10th Gen. Intel® CML S Processor (LGA 1200, 65W/35W TDP)
- Intel® W480E chipset
- 2x DDR4 2666/2933MHz SODIMM. Max. up to 64GB
- Triple Independent Display by 1x DVI-I and 2x DisplayPort
- 8x RS-232/422/485 (6x internal), 6x USB 3.2 Gen 2, 3x USB 3.2 Gen 1 (1x internal)
- Wide Operating Temperature -25°C to 60°C
- Wide Range Power Input Supporting AT/ATX Mode
- TPM 2.0 Supported

### Model RCO-6000-CML-2060S:

- Support 10th Gen. Intel® CML S Processor (LGA 1200, 65W/35W TDP)
- Intel® W480E chipset
- 2x DDR4 2666/2933MHz SODIMM, up to 64GB
- 1x DVI-I, 1x DVI-D, 1x HDMI, 3x DisplayPort
- 2x 6G RJ45 (Support Wake-on-LAN and PXE)
- 6x 3.2 Gen 2, 2x USB 3.2 Gen 1 (1x internal), 2x USB 2.0 header (internal), 8x RS-232/422/485 (6x internal), 1x isolated digital I/O
- 3x 2.5” SATA HDD bay with RAID 0, 1, 5 support (1x internal), 2x removable & hot-swappable
- 2x External SIM socket (Mini PCIe attached)
- 9-48 VDC, AT/ATX Select, 5-pin Terminal Block
- -25°C to 60°C (35W/65W CPU)
- 240 x 261 x 127 mm
- 5.6 kg

### Proprietary Module Expansion

- Up to 2x Module
- DTB-M2BK (Support 1x Universal Slot Only)
- DTB-D100
- DTB-D100
- DTB-D4ETH
- DTB-D4ETH-M12
- DTB-D4ETH-PWR

### New Features

- Comet Lake S
- RCO-6000-CML-2C: 1x PCI, 1x PCIe x16
- RCO-6000-CML-2C: 2x PCI (Optional)
- RCO-6000-CML-2C: 2x PCIe x16 (8-lane) (Optional)

### New Features (2060S)

- Comet Lake S
- RCO-6000-CML-2C: 1x PCI, 1x PCIe x16
- RCO-6000-CML-2C: 2x PCI (Optional)
- RCO-6000-CML-2C: 2x PCIe x16 (8-lane) (Optional)

### New Features (Proprietary Module Expansion)

- DTB-M2BK (Support 1x Universal Slot Only)
- DTB-D100
- DTB-D4ETH
- DTB-D4ETH-M12
- DTB-D4ETH-PWR
**ACO-6000-KBL SERIES**

- Support 6th/7th Gen. Intel® Core™ i3/i5 or Pentium® / Celeron® Desktop Processor
- Triple Independent Display
- Support up to 16x LAN or 16x PoE by Unique Modular Design
- Multiple Expansion Capability including PCIe, PCI, and Mini PCIe
- Wide Operating Temperature (-25°C to 70°C)
- 9 to 68 VDC Wide Range Power Input Supporting AT/ATX Mode

**ACO-6000-CML SERIES**

- LGA 1200 socket for 10th Gen. Intel® CML 5 Processor (65W/35W TDP)
- Intel® W480E chipset
- 2x DDR4 2666/2933MHz SO-DIMM. Max. up to 64GB
- Triple Independent Display by 1x DisplayPort and 2x DisplayPort
- 2x Intel® GbE supporting Wake-on-LAN and PXE
- 2x Full-size Mini PCIe for communication or expansion modules, 2x SIM socket
- 3x 2.5” SATA HDD Bay (1x internal) with RAID 0, 1, 5 support
- 1x M.2 (E Key, PCIe x1, USB 2.0, 2230), Support CNVi
- 8x RS-232/422/485 (6x internal), 6x USB 3.2 Gen 2, 3x USB 3.2 Gen 1 (1x internal)
- 8x DI + 8x DO with isolation

**ACO-6000-KBL**

- Surveillance Applied Fanless System with LGA-1151 socket for Intel® Skylake® & Kaby Lake processors
- With 16 GbE in R2-45 or M12 connectors with PoE option
- With one PCI or PCIe x16 expansion slot

**ACO-6000-KBL-16X**

- Surveillance Applied Fanless System with LGA-1151 socket for Intel® Skylake® & Kaby Lake processors
- With 16 GbE in RJ-45 or M12 connectors with PoE option
- With one PCI or PCIe x16 expansion slot

**ACO-6000-KBL-1**

- Surveillance Applied Fanless System with LGA-1151 socket for Intel® Skylake® & Kaby Lake processors
- With 16 GbE in RJ-45 or M12 connectors with PoE option
- With one PCI or PCIe x16 expansion slot

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**ACO-6000-CML**

- Surveillance Applied Fanless System with LGA-1200 for Intel® 10th Gen CPU & W480E PCH, 1x PCIe x8 or PCIe expansion slot
- Support 10th Gen Intel® CML 5 Processor (65W/35W TDP)
- (Xeon® W-1290TE/1270TE/1250TE)
- Core™ i9-10900E/10900TE, Core™ i7-10700E/10700TE, Core™ i5-10500T/10500TE, Core™ i3-10100T/10100TE,

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**Intel® Comet Lake S**

- CPU Support: Support 10th Gen Intel® CML 5 Processor (LGA 1200, 65W/35W TDP)
- Memory: 2x DDR4 2666/2933MHz SO-DIMM, up to 64GB
- Graphic Output: 1x DisplayPort
- LAN: 2x GbE RJ45 (Support Wake-on-LAN and PXE)
- USB, Serial, & Digital I/O: 6x USB 3.2 Gen 1 (5 Gbps), 2x USB 2.0 (Internal), 5x RS-232/422/485 (6x internal), 16x isolated digital I/O
- Storage: 4x 2.5” SATA HDD Bays with RAID 0, 1, 5, 10 support
- Internal Expansion Slot: 2x Full-size mini-PCIe, 1x M.2 (E Key, PCIe x2, 2230), USB 2.0, Support CNVi
- Power: 9-68VDC, AT/ATX Select, 5-pin Terminal Block
- Audio: Speaker-out / Mic-in Phone Jack
- Operating Temperature: -25°C to 70°C
- Dimensions (WxDxH): 240 x 261 x 79 mm
- Weight: 4.4 ~ 4.7 kg
- Universal Expansion Slot (x16): 2
- Universal Expansion Slot (x4): 2

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**Intel® Skylake® Kaby Lake**

- CPU Support: Intel® 6th/7th Gen. (Kabylake & Skylake-S) processors
- Memory: 2x 260-Pin DDR4 2666 /2933MHz SODIMM, up to 64GB (ECC 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: 8x USB 3.2 Gen 1 (5 Gbps), 2x USB 2.0 header (internal), 8x RS-232/422/485 (6x internal), 6x DI + 8x DO with isolation
- Storage: 8x RS-232/422/485 (6x internal), 8x DI + 8x DO with isolation
- Internal Expansion Slot: 2x Full-size mini-PCIe, 2x M.2 (E Key, PCIe x4, 2280), Support CNVi
- Power: 9-68VDC or 68-110VDC (Optional), AT/ATX Select, 5-pin Terminal Block
- Audio: Line-out / Mic-in Phone Jack
- Operating Temperature: -25°C to 70°C
- Dimensions (WxDxH): 240 x 261 x 79 mm
- Weight: 4.4 ~ 4.7 kg
- Universal Expansion Slot (x16): 2
- Universal Expansion Slot (x4): 2

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**Proprietary Module Expansion**

- Up to 4x Module
  - DTB-D100
  - DTB-4U3
  - DTB-4ETH
  - DTB-4ETH-PWR
  - DTB-4ETH-M12
  - DTB-4ETH-M12-PWR

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**Proprietary Module Expansion**

- Up to 2x Module
  - DTB-M2BK (Support 1x Universal Slot Only)
  - DTB-D100
  - DTB-4U3
  - DTB-4ETH
  - DTB-4ETH-PWR
  - DTB-4ETH-M12
  - DTB-4ETH-M12-PWR

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**Proprietary Module Expansion**

- Up to 2x Module
  - DTB-D100
  - DTB-4U3
  - DTB-4ETH
  - DTB-4ETH-PWR
  - DTB-4ETH-M12
  - DTB-4ETH-M12-PWR

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**Proprietary Module Expansion**

- Up to 2x Module
  - DTB-M2BK (Support 1x Universal Slot Only)
  - DTB-D100
  - DTB-4U3
  - DTB-4ETH
  - DTB-4ETH-PWR
  - DTB-4ETH-M12
  - DTB-4ETH-M12-PWR

---

**Proprietary Module Expansion**

- Up to 2x Module
  - DTB-M2BK (Support 1x Universal Slot Only)
  - DTB-D100
  - DTB-4U3
  - DTB-4ETH
  - DTB-4ETH-PWR
  - DTB-4ETH-M12
  - DTB-4ETH-M12-PWR
VCO-6000-KBL SERIES

- Support 8th/9th Gen. Intel® Core™ i3/i5/i7 or Pentium® / Celeron® Desktop Processor
- TPM 2.0 Supported
- Triple Independent Display
- Fanless Design Structure and Support Additional Fan Module
- Multiple Expansion Capability including up to 3x PCIe or 4x PCI
- Wide Operating Temperature (-25°C to 70°C)
- 9 to 50 VDC Wide Range Power Input Supporting AT/ATX Mode

Model | VCO-6000-KBL | VCO-6000-KBL-1 | VCO-6000-KBL-2 | VCO-6000-KBL-3 | VCO-6000-KBL-4 | VCO-6000-KBL-5
--- | --- | --- | --- | --- | --- | ---
Machine Vision System based on Intel® Kaby Lake & Skylake-S processors
CPU Support | Intel® 6th/7th Gen. (Kaby Lake & Skylake-S) Desktop Processor: Core™ i7-7700/7700K, Core™ i5-7600/7600K, Core™ i3-7100/7100K
| Intel® Kaby Lake-S (i5-7500/7500K, i3-7300/7300K, Pentium® G4400T, Celeron® G4900T)
GPU Support | Support 8th/9th Gen. Intel® Core™ i3/i5/i7 or Pentium® / Celeron® Desktop Processor
| Support 8th/9th Gen. Intel® Core™ i3/i5/i7 Desktop Processor (LGA 1151, 65W/35W TDP)
Memory | 2x DDR4 2400/2666MHz SO-DIMM, up to 64GB (Un-buffered and Non-ECC)
| 2x DDR4 2400/2666MHz SO-DIMM, up to 64GB (Un-buffered and Non-ECC)

table

<table>
<thead>
<tr>
<th>Model</th>
<th>VCO-6000-KBL</th>
<th>VCO-6000-KBL-1</th>
<th>VCO-6000-KBL-2</th>
<th>VCO-6000-KBL-3</th>
<th>VCO-6000-KBL-4</th>
<th>VCO-6000-KBL-5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine Vision System based on Intel® Kaby Lake &amp; Skylake-S processors</td>
<td>With one PCI or PCIe expansion slot</td>
<td>With two PCI or PCIe expansion slots</td>
<td>With three PCI or PCIe expansion slots</td>
<td>With four PCI or PCIe expansion slots</td>
<td>With five PCI or PCIe expansion slots</td>
<td></td>
</tr>
</tbody>
</table>
| CPU Support | Intel® 6th/7th Gen. (Kaby Lake & Skylake-S) Desktop Processor: Core™ i7-7700/7700K, Core™ i5-7600/7600K, Core™ i3-7100/7100K
| Intel® Kaby Lake-S (i5-7500/7500K, i3-7300/7300K, Pentium® G4400T, Celeron® G4900T)
| Memory | 2x DDR4 2400/2666MHz SO-DIMM, up to 32GB |
| Graphic Output | 1x DVI, 2x DisplayPort |
| LAN | 2x GBE RJ45 (Support Wake-on-LAN and PXE)
| USB, Serial, & Digital I/O | 4x USB 3.2 Gen 1, 1x USB2.0, 1x Micro USB, 1x Mini USB, 2x COM, 1x Isolated Digital I/O
| Storage | 2x 2.5" SATA HDD Bay with RAID 0, 1, 10, support, 1x 3.5" HDD Bay (Support H=7mm, Hot-swappable) Support RAID 0, 1, 10
| Internal Expansion Slot | 3x Full-size Mini-PCIe (Share by 2x mSATA) |
| Power | 9-50 VDC, AT/ATX Select, 3-pin Terminal Block |
| Audio | Internal | External |
| Operating Temperature | Operating Temperature | Operating Temperature |
| Dimensions (WxDxH) | 137 x 256 x 240 mm |
| Weight | 8.5 kg |

VCO-6000-CFL SERIES

- Support 8th/9th Gen. Intel® Core™ i3/i5/i7 Desktop Processor
- Intel® Q370 chipset
- 2x DDR4 2666/2400MHz SO-DIMM. Max. up to 64GB (Un-buffered and Non-ECC)
- Triple Independent Display by 1x DVI-I and 2x DisplayPort
- 2x External 2.5" SATA HDD bay with RAID 0, 1 support, 1x mSATA (shared by 1x Mini PCIe), 2x M.2
- Wide Operating Temperature (-25°C to 70°C)
- 9 to 50 VDC Wide Range Power Input Supporting AT/ATX Mode
- Unique Expansion Module Design to Support 1 to 5 Expansion Cards
- TPM 2.0 Supported

Model | VCO-6000-CFL-2 | VCO-6000-CFL-3 | VCO-6000-CFL-4 | VCO-6000-CFL-5
--- | --- | --- | --- | ---
Machine Vision System based on Intel® Coffee Lake R processor: Core™ i7-8700/8700K, Core™ i5-8500/8500K, Core™ i3-8300/8300K, Pentium® G5400T, Celeron® G5900T
CPU Support | Support 8th/9th Gen. Intel® Core™ i3/i5/i7 Desktop Processor
| Support 8th/9th Gen. Intel® Core™ i3/i5/i7 Desktop Processor (LGA 1151, 65W/35W TDP)
| Memory | 2x 260-pin DDR4-2666/2400MHz 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, 2x external USB 3.2 Gen 1, 4x RS-232/422/485 (6x internal), 16x isolated digital I/O
| Storage | 2x 2.5" SATA HDD Bay (Support H=7mm, Hot-swappable) Support RAID 0, 1, 10, 1x mSATA (shared by 2x Mini PCIe), 1x NVMe M.2 Key
| Internal Expansion Slot | 2x Full-size PCI Express 3.0, 1x PCIe x16 (8-Lane), 1x PCIe x8 (4-Lane) |
| Power | 9-48 VDC, AT/ATX Select, 3-pin Terminal Block |
| Audio | Line-out / Mic-in Phone Jack |
| Operating Temperature | Operating Temperature |
| Dimensions (WxDxH) | 137 x 340 x 240 mm |
| Weight | 9.1 kg |

PCI & PCIe Express

- VCO-6000-CFL-2E: 2x PCIe x16 (8-Lane)
- VCO-6000-CFL-2I: 2x PCIe x1, 1x PCIe x16 (8-Lane)
- VCO-6000-CFL-3E: 3x PCIe x16 (8-Lane)
- VCO-6000-CFL-3I: 3x PCIe x1, 1x PCIe x16 (8-Lane)
- VCO-6000-CFL-4E: 4x PCIe x16 (8-Lane), 2x PCIe x8 (4-Lane)
- VCO-6000-CFL-4I: 4x PCIe x8 (4-Lane), 1x PCIe x16 (8-Lane)
- VCO-6000-CFL-5E: 5x PCIe x16 (8-Lane), 3x PCIe x8 (4-Lane)
- VCO-6000-CFL-5I: 5x PCIe x8 (4-Lane), 2x PCIe x16 (8-Lane)
## VCO-6000-CML-4M2 Series

**High-Performance Machine Vision Computer**

- Support 10th Gen. Intel® CML S Processor (LGA 1200, 65W/35W TDP)
- Intel® W480E chipset
- Triple Independent Display by 1x DVI-I and 2x DisplayPort
- 4x USB 3.2 Gen 2 (10 Gbps, 2x internal), 3x USB 3.2 Gen 1 (5 Gbps, internal), 2x USB 2.0 header (internal), 8x RS-232/422/485 (w/ 4x internal)
- 3x 2.5 SATA HDD Bay (2x Internal) with RAID 0, 1, 5 support
- 4x M.2 PCIe x2, 2280 [hot-swappable]
- Power Ignition Management

### Model: VCO-6000-CML-4M2

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU Support</td>
<td>Support 10th Gen Intel® CML S Processor (LGA 1200, 65W/35W TDP)</td>
</tr>
<tr>
<td>Memory</td>
<td>2x 260-Pin DDR4 2666 (2933MHz SODIMM, up to 64GB (ECC and Non-ECC)</td>
</tr>
<tr>
<td>Graphic Output</td>
<td>Intel® UHD Graphics 630 1x DVI-I and 2x DisplayPort</td>
</tr>
<tr>
<td>LAN</td>
<td>2x GbE RJ45 (Support Wake-on-LAN and PXE)</td>
</tr>
<tr>
<td>USB, Serial, &amp; Digital I/O</td>
<td>6x USB 3.2 Gen 2 (10 Gbps, 2x internal), 3x internal USB 3.2 Gen 1 (5 Gbps), 2x USB 2.0 header (internal), 8x RS-232/422/485 (6x internal), 16x isolated digital I/O</td>
</tr>
<tr>
<td>Storage</td>
<td>3x 2.5 SATA HDD Bay (2x Internal) with RAID 0, 1, 5 support, (2x internal; 1x removable &amp; hot-swappable)</td>
</tr>
<tr>
<td>PCI Express</td>
<td>1x PCIe x (1-lane) 1x PCIe x (8-lane) for GPU card expansion</td>
</tr>
<tr>
<td>NVMe Storage</td>
<td>4x M.2 PCIe x2, 2280 (hot-swappable)</td>
</tr>
<tr>
<td>Internal Expansion Slot</td>
<td>2x Full-size mini-PCIe 1x M.2 E Key, PCIe x2, 2230, USB 2.0, Support CNVI</td>
</tr>
<tr>
<td>Power</td>
<td>450W: 110 ~ 240 VAC, ATX/ATX Select</td>
</tr>
<tr>
<td>Power Ignition Sensing</td>
<td>Power Ignition Management</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-25°C to 60°C (25W/65W CPU)</td>
</tr>
</tbody>
</table>

## WCO-3000-KBL-U Series

**IP65/IP67 Waterproof Computer**

- Intel® 7th Gen. Intel® Core™ i3 Processor
- Full system IP65/IP67 level dustproof & waterproof
- Wide Operating Temperature (up to -40°C to 70°C)
- 9 to 50 VDC Wide Range Power Input
- Lockable M12 I/O Connectors
- Fanless Design

### Model: WCO-3000-KBL-U

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU Support</td>
<td>Intel® 7th Gen. (Kaby Lake-U) Processor Core™ i5-7300U, Core™ i3-7100U</td>
</tr>
<tr>
<td>Memory</td>
<td>1x DDR4-1866/2133MHz S0-DIMM, up to 16GB</td>
</tr>
<tr>
<td>Graphic Output</td>
<td>1x VGA (Waterproof connector)</td>
</tr>
<tr>
<td>LAN</td>
<td>2x GbE RJ45 (Support Wake-on-LAN and PXE) by M12 X-Code 8-pin</td>
</tr>
<tr>
<td>USB</td>
<td>1x USB 3.2 Gen 1 (5 Gbps, Waterproof connector), 2x USB 2.0 by M12 D-Code 8-pin</td>
</tr>
<tr>
<td>Serial</td>
<td>1x RS-232/422/485 by M12 D-Code 8-pin</td>
</tr>
<tr>
<td>Storage</td>
<td>1x internal 2.5&quot; SATA HDD Bay with RAID 0, 1 support, 1x mSATA (shared by 1x Mini PCI Express)</td>
</tr>
<tr>
<td>Internal Expansion Slot</td>
<td>2x Full-size mini-PCIe</td>
</tr>
<tr>
<td>Power</td>
<td>9-50 VDC, M12 A-code 4-pin</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-40 °C to 70 °C</td>
</tr>
<tr>
<td>Dimensions (Width)</td>
<td>233 x 292 x 56.5 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>4.18 Kg</td>
</tr>
<tr>
<td>IP65</td>
<td>WCO-3000-KBL-U</td>
</tr>
<tr>
<td>IP67</td>
<td>WCO-3000-KBL-U-IP67</td>
</tr>
</tbody>
</table>

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Premio Industrial GPU Computing Solutions deliver supreme processing and graphic performance. Our GPU Series has the capability to run complex and data-intensive applications to drive automation, mission-critical and high-performing operations, such as product line inspection, intelligent security surveillance, biomedical imaging, and vision-guided robotics/vehicles.

**Model**
- **RCO-6000-KBL-1050TI**
- **VCO-6000-KBL-1050TI**
- **VCO-6000-KBL-2PWR**

**Premio Industrial GPU Series**
- Computer With 6th/7th Gen Intel® Core™ Processor And Q170 PCH, GTX 1050 TI Integrated

**CPU Support**
- Intel® 6th/7th Gen [KabyLake & Skylake-S] Desktop Processor
- (Core™ i7-7700T/i7-7700KE/i7-7700, Core™ i5-7500T/i5-7500, Core™ i3-7101TE/i3-7100TE, Core™ G4400TE, or Celeron® G3900TE)

**Memory**
- 2x DDR4-1866/2133MHz SO-DIMM, up to 32GB

**GPU**
- GTX 1050 TI

**Graphics Output**
- 2x DVI-I, 3x DisplayPort, 1x HDMI

**LAN**
- 2x GbE RJ45 (Support Wake-on-LAN and PXE)

**USB**
- 6x USB 3.2 Gen1 (5 Gbps)

**Serial & Digital I/O**
- 4x RS-232/422/485 (2x internal), 14x isolated digital I/O

**Storage**
- 4x 2.5” SATA HDD Bay with RAID 0, 1, 5, 10 support (2x internal, 2x removable, 2x mSATA (shared by 2x Mini PCIe), 1x Clear)

**Internal Expansion Slot**
- 2x Full-size mini-PCIe (shared with 2x mSATA)

**Power**
- 9-48 VDC, AT/ATX Select, 3-pin Terminal Block

**Operating Temperature**
- -25 °C to 60 °C

**Certification**
- E-Mark, EMC Conformity with EN 50155, EN 50121-3-2

**Dimensions (mm)**
- 240 x 261 x 127 mm

**Weight**
- 7.76 kg

**Universal Expansion Slot (Front)**
- 2

**PCIe x8 (1-lane)**
- 1

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**Model**
- **RCO-6000-CFL-2060S**
- **VCO-6000-CFL-3-2PWR**

**AI Edge Inference Computer With 9th Gen Intel Core Processor And Q370 PCH, RTX 2060 Super Integrated**

**CPU Support**
- 8th/9th Gen. Intel® CFL-R S Processor (LGA 1151, 65W/35W TDP)
- (Core™ i7-9700E/i7-9700KE/i7-9700, Core™ i5-9500E/i5-9500KE/i5-9500, Core™ i3-9100E/i3-9100KE/i3-9100, Pentium® G5400T, or Celeron® G4900T)

**Memory**
- 2x DDR4-2400/2666MHz SO-DIMM, up to 64GB (Un-buffered and Non-MCC)

**GPU**
- RTX 2060S

**Graphics Output**
- 1x DVI-I, 1x DVI-D, 1x HDMI, 3x DisplayPort

**LAN**
- 2x GbE RJ45 (Support Wake-on-LAN and PXE)

**USB**
- 4x USB 3.2 Gen 2 (10 Gbps)
- 4x USB 3.2 Gen 2 (10 Gbps, 1x internal)

**Serial & Digital I/O**
- 6x RS-232/422/485 (2x internal), 14x isolated digital I/O

**Storage**
- 4x 2.5” SATA HDD Bay with RAID 0, 1, 5, 10 support (2x internal, 2x removable, 2x mSATA (shared by 1x Mini PCIe), 1x Clear)

**Internal Expansion Slot**
- 2x Full-size mini-PCIe (1 shared by 1x mSATA)

**Power**
- 9-48 VDC, 3-pin Terminal Block, AT/ATX Select, 4-pin Terminal Block for GPU expansion

**Audio**
- Line-out / Mic-in Phone Jack

**Operating Temperature**
- -25 °C to 60 °C

**Certification**
- E-Mark, EMC Conformity with EN 50155, EN 50121-3-2

**Dimensions (mm)**
- 260 x 261 x 79.2 mm

**Weight**
- 8.1 kg

**Universal Expansion Slot (Front)**
- 2 (by mini PCIe interface)

**PCIe x16**
- 1 PCIe x16 for GPU Card

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**More info**

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**More info**
The ECO Series is a power backup module that ensures power-reserve management in mission-critical applications. This standalone module leverages high-density, industrial-grade supercapacitors for stable backup power during unforeseen power outages. The ECO Series uses supercapacitor technology that enables power management for extended operations in harsh environments, providing wider operating temperatures and longer operating life. This makes the ECO series incredibly durable and reliable for your embedded computing systems that require zero downtime.

- Extended Energy System for various Box/Panel PCs
- Maximum 16x High-Density Industrial Supercapacitor
- Maximum 150W output power
- 12 to 35 VDC wide range power input
- 12 or 24 VDC power output
- 4x DI + 4x DO with isolation
- -25°C to 70°C extended operating temperature
- Power ignition management

**ECO-1000 SERIES**

**PORTABLE SMART HIGH-DENSITY INDUSTRIAL SUPERCAPACITOR**

**Model** | **ECO-1000-RS** | **ECO-1000-16S (optional)**
---|---|---
Capacity | 8x 370 Farads | 16x 370 Farads
Input Voltage | 12 – 35 VDC | 12 – 35 VDC
Input Connector | 3-pin Terminal Block (V+, GND, IGN IN) | 3-pin Terminal Block (V+, GND, IGN IN)
Output Voltage | DC IN Voltage bypass (DC OUT = DC IN) | DC IN Voltage bypass (DC OUT = DC IN)
Charge mode: | Discharge mode: | Discharge mode:
Output Power | Maximum 80W output | Maximum 150W output
Output Connector | 3-pin Terminal Block (V+, GND, IGN Out) | 3-pin Terminal Block (V+, GND, IGN Out)
I/O | 1x RS-232, 1x USB, 2x DI + 2x DO with isolation | 1x RS-232, 1x USB, 2x DI + 2x DO with isolation
Others | 1x Remote Power On/Off, 1x switch for 12V/24V, 1x PC/CAR Mode Switch, 1x Delay Time Switch | 1x Remote Power On/Off, 1x switch for 12V/24V, 1x PC/CAR Mode Switch, 1x Delay Time Switch
Power Ignition Sensing | Power Ignition Management | Power Ignition Management
Operating Temp | -20°C to 70°C | -20°C to 70°C
Certification | CE, FCC Class A, EMC Conformity with EN50155, EN50121-3-2 | CE, FCC Class A, EMC Conformity with EN50155, EN50121-3-2
Dimensions (WxH) | 100 x 192 x 187.4 mm | 100 x 192 x 187.4 mm
Weight | 1.8 kg | 2.8 kg
Mounting | Wall Mounting, DIN Rail Mounting (Optional) | Wall Mounting, DIN Rail Mounting (Optional)

**DUAL-SIM READY MODULE**

The Dual-SIM 5G cellular network module enables Premio’s industrial computers to reap the benefits of 5G wireless connectivity. 5G networks provide blazing-fast wireless connectivity for industrial computers with speeds up to 100x faster than 4G LTE.

**COMPATIBLE LIST**

<table>
<thead>
<tr>
<th>DTB-M2BK (5G Module)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCD-4000-CML</td>
</tr>
<tr>
<td>AC0-4000-CML</td>
</tr>
<tr>
<td>RCD-4000-CFL</td>
</tr>
</tbody>
</table>

**KEY BENEFITS OF 5G NETWORKS**

Rugged edge computing provides a convergence of the latest technologies in compute, storage, and connectivity in hardened competing platforms. For the first time ever, new wireless technologies like 5G provide new advancements in connectivity for industrial edge computers with enhanced mobile broadband, low-latency connections, and massive machine-to-machine communications.

- Global 5G Coverage for the Rugged Edge
- Dual SIM Network Redundancy and GNSS Positioning
- Expandable Modular Designs – Just Plug and Play
- True Industrial-grade Design
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 10Gbe RJ45 & M12, 100Gbe RJ45, USB 3.2 Gen1, and 5G ready M.2 for scalable connectivity in IoT deployments at the edge.

### MODULE SERIES

**PROPRIETARY MODULE**

- **DTB-4ETH**
  - Intel® Ethernet Controller I350
  - 1x PCIe x4 Gold finger (x4 Lane)
  - 4x 10Gbe LAN, RJ45 Port
  - Support Power over Ethernet by an optional PoE module

- **DTB-4ETH-PWR**
  - Intel® Ethernet Controller I350
  - 1x PCIe x4 Gold finger (x4 Lane)
  - 4x 10Gbe LAN, M12 Port
  - Support Power over Ethernet by an optional PoE module

- **DTB-4ETH-M12**
  - Intel® Ethernet Controller I350
  - 1x PCIe x4 Gold finger (x4 Lane)
  - 4x 10Gbe LAN, RJ45 Port
  - Support Power over Ethernet by an optional PoE module

- **DTB-4ETH-PWR-M12**
  - Intel® Ethernet Controller I350
  - 1x PCIe x4 Gold finger (x4 Lane)
  - 4x 10Gbe LAN, M12 Port
  - Support Power over Ethernet by an optional PoE module

- **DTB-4LAN**
  - Intel® Ethernet Controller I210
  - 1x PCIe x1 Gold finger
  - 4x 1GbE LAN, RJ45 Port
  - Support Power over Ethernet by an optional PoE module

- **DTB-4LAN-PWR**
  - Intel® Ethernet Controller I210
  - 1x PCIe x1 Gold finger
  - 4x 1GbE LAN, M12 Port
  - Support Power over Ethernet by an optional PoE module

- **DTB-4LAN-M12**
  - Intel® Ethernet Controller I210
  - 1x PCIe x1 Gold finger
  - 4x 1GbE LAN, RJ45 Port
  - Support Power over Ethernet by an optional PoE module

- **DTB-4LAN-PWR-M12**
  - Intel® Ethernet Controller I210
  - 1x PCIe x1 Gold finger
  - 4x 1GbE LAN, M12 Port
  - Support Power over Ethernet by an optional PoE module

- **DTB-D10G**
  - Intel® Ethernet Controller X710-AT2
  - 1x PCIe x1 Gold finger (x4 Lane)
  - 2x 10GbE LAN, RJ45 Port
  - M.2 B Key for 5G module
  - 2x SIM slot
  - 1x SIM Switch
  - Support 1x Universal Slot Only

- **DTB-M2BK**
  - Supports 4x USB 3.2 Gen1 ports (share PCIe Gen2 x1 bandwidth)
  - Independent 1.5A over-current protection (OCP) for each port
  - Compliant with xHCI 1.0, USB 3.2 Gen1 Rev 1.0

### COMPATIBLE LIST

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<thead>
<tr>
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<tr>
<td>RCO-4000-CML</td>
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<td>ACO-4000-CML</td>
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<td>RCO-6000-CFL</td>
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<tr>
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<tr>
<td>RCO-6000-KBL-U</td>
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<td>RCO-3000-CFL</td>
<td>DTB-4ETH only</td>
<td>DTB-4ETH-M12 only</td>
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</tr>
</tbody>
</table>

NEW
**INDUSTRIAL DISPLAY SYSTEMS**

Patented modular design (MDM) provides mix-and-match flexibility for HMI automation, information and communication applications for industrial deployments. Easily scalable and upgradable for both an industrial panel PC and rugged touch monitor.

Scalability in Panel Sizes

- 10.4” / 12.1” / 15” / 15.6”
- 17” / 19” / 21.5”
- 4:3 / 16:9

Different Frame Options

- Standard Frame
- Thin Frame

Flexibility in Touch Screen

- Resistive Touch
- Capacitive Touch

Diverse Platform Options

- Intel® Bay Trail
- Intel® Broadwell-U
- Intel® Kaby Lake-U

Easy Installation & Maintenance

MDM offers user-friendly mechanical design. Just three steps, a system ready for multiapplications.

**PC MODULE**

**DISPLAY MODULE**

**MONITOR MODULE**

**MDM MULTI-MODE DISPLAY MODULE**

**PREMIO INDUSTRIAL DISPLAY SYSTEMS**

PRODUCT FAMILY

Panel PC

- VIO-200-PC100-KBL-U Series
  - Kaby Lake-U
  - Thin Frame

- VIO-200-PC100-BRD-U Series
  - Broadwell-U
  - Thin Frame

- VIO-200-PC100-J1900 Series
  - Bay Trail

- VIO-200-PC100-KBL-U Series
  - Kaby Lake-U

- VIO-200-PC100-BRD-U Series
  - Broadwell-U

- VIO-200-PC100-J1900 Series
  - Bay Trail

- VIO-200 Series
  - Thin Frame

Panel PC

- VIO-200 Series
  - Thin Frame

Display Monitor

- VIO-200 Series
  - Thin Frame

Touch Monitor

- VIO-200 Series
  - Thin Frame
### VIO-200-PC100-J1900 SERIES

**INDUSTRIAL PANEL PC**

- Intel® Celeron® J1900 Processor (Quad Core, 2.0GHz)
- 12.1” ~ 21.5” Thin Frame Multi-functional All-in-One Panel PCs
- Projected Capacitive and 5-wire Resistive Touchscreen Available
- Dual Independent Display support by VGA and DisplayPort
- Rich I/O Features with up to 6x RS-232/422/485
- 2x Full-size Mini PCIe Slot for Communication or Expansion Modules
- 9 to 50 VDC Wide Range Power Input Supporting AT/ATX Mode

<table>
<thead>
<tr>
<th>Model</th>
<th>VIO-200-PC100-J1900</th>
<th>VIO-200-PC100-J1900-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU Onboard</td>
<td>Intel® Celeron® J1900</td>
<td></td>
</tr>
<tr>
<td>Memory</td>
<td>1x 204-pin DDR3L-1066/1333 S0-DIMM, up to 8GB</td>
<td></td>
</tr>
<tr>
<td>Graphic Output</td>
<td>1x VGA, 1x DisplayPort</td>
<td></td>
</tr>
<tr>
<td>LAN</td>
<td>2x 0B/E RJ45 (Support Wake-on-LAN and PXE)</td>
<td></td>
</tr>
<tr>
<td>USB, Serial, &amp; Digital I/O</td>
<td>1x USB 3.2 Gen1 (5 Gbps), 1x USB 2.0, 4x RS-232/422/485 (w/ 2x internal), 1x isolated digital I/O</td>
<td></td>
</tr>
<tr>
<td>Storage</td>
<td>1x 2.5” SATA HDD Bay, 1x mSATA (shared by 1x Mini PCIe), and 1x CF Card (shared by 1x mSATA &amp; 1 Mini PCIe)</td>
<td></td>
</tr>
<tr>
<td>Internal Expansion Slot</td>
<td>1x Full-size Mini PCIe Socket with USIM Socket (PCIe + USB + SATA)</td>
<td></td>
</tr>
<tr>
<td>Power</td>
<td>9-50 VDC, AT/ATX Select, 3-pin Terminal Block</td>
<td></td>
</tr>
<tr>
<td>Audio</td>
<td>Line-out / Mic-in Phone Jack</td>
<td></td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-10 °C to 60 °C</td>
<td></td>
</tr>
<tr>
<td>LCD Size</td>
<td>4:3 12.1” / 15” / 17” / 19”</td>
<td></td>
</tr>
<tr>
<td>Touch Type</td>
<td>Resistive 5-wire Touch / Projected Capacitive Touch</td>
<td></td>
</tr>
<tr>
<td>Universal Expansion Slot</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

### VIO-200-PC100-BRD-U SERIES

**INDUSTRIAL PANEL PC**

- 5th Generation Intel® Core i5-5350U/Celeron Processor onboard (Broadwell-U)
- 12.1” ~ 21.5” Thin Frame Multi-functional All-in-One Panel PCs
- Projected Capacitive and 5-wire Resistive Touchscreen Available
- Triple Independent Display
- Rich I/O Features including the Support 4x RS-232/422/485, 3x USB 3.2 Gen1, 1x USB 2.0, 2x Full-size Mini PCIe, 2x LAN, 4x DI & 4x DO
- 2x Full-size Mini PCIe Slot for Communication or Expansion Modules
- 9 to 48 VDC Wide Range Power Input Supporting AT/ATX Mode
- Aluminum Die-casting Front Frame
- Front Panel IP65 Rating

<table>
<thead>
<tr>
<th>Model</th>
<th>VIO-200-PC100-BRD-U</th>
<th>VIO-200-PC100-BRD-U-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU Onboard</td>
<td>Intel® Core™ i5-5350U, i3-5010U, Celeron® 3765U</td>
<td></td>
</tr>
<tr>
<td>Memory</td>
<td>1x 204-pin DDR3L-1333/1600 S0-DIMM, up to 8GB</td>
<td></td>
</tr>
<tr>
<td>Graphic Output</td>
<td>1x VGA, 1x DisplayPort, 1x Dual Channel 24 bit LVDS</td>
<td></td>
</tr>
<tr>
<td>LAN</td>
<td>2x 0B/E RJ45 (Support Wake-on-LAN and PXE)</td>
<td></td>
</tr>
<tr>
<td>USB, Serial, &amp; Digital I/O</td>
<td>3x USB 3.2 Gen1 (5 Gbps), 1x USB 2.0, 4x RS-232/422/485 (w/ 2 internal), 8x isolated digital I/O</td>
<td></td>
</tr>
<tr>
<td>Storage</td>
<td>1x 2.5” SATA HDD Bay with RAID 0, 1, 5 support and 2x mSATA (shared by 2x Mini PCIe)</td>
<td></td>
</tr>
<tr>
<td>Internal Expansion Slot</td>
<td>2x Full-size mini-PCie</td>
<td></td>
</tr>
<tr>
<td>Power</td>
<td>9-48 VDC, AT/ATX Select, 3-pin Terminal Block</td>
<td></td>
</tr>
<tr>
<td>Audio</td>
<td>Speaker-out / Mic-in Phone Jack</td>
<td></td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-10 °C to 60 °C</td>
<td></td>
</tr>
<tr>
<td>LCD Size</td>
<td>4:3 12.1” / 15” / 17” / 19”</td>
<td></td>
</tr>
<tr>
<td>Touch Type</td>
<td>Resistive 5-wire Touch / Projected Capacitive Touch</td>
<td></td>
</tr>
<tr>
<td>Universal Expansion Slot</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

More info
### VIO-200-PC100-KBL-U SERIES

- **Model**: VIO-200-PC100-KBL-U
- **Description**: Thin Frame Industrial Panel PC based on Intel® Kabylake-U processors
- **CPU Onboard**: Intel® 7th Gen. (Kabylake-U) Processor Core™ i5-i7-7000U, Core™ i3-7100U
- **Memory**: 1x 260-Pin DDR4 1866/2133MHz SODIMM. 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, and 1x Cfast (shared by 1x M2ATA)
- **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
- **LCD Size**: 4:3 12.1" / 15" / 17" / 19"
- **Touch Type**: Resistive 5-wire Touch / Projected Capacitive Touch
- **Universal Expansion Slot**: 0

### VIO-200-MX100H SERIES

- **Model**: VIO-200-MX100H
- **Description**: Thin Frame Industrial Touch Monitor
- **Touch Type**: Resistive / Capacitive Touch
- **VGA**: 1x VGA 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
- **LCD Size**: 4:3 12.1" / 15" / 17" / 19"
PC100-J1900 SERIES

PC MODULE

- Intel® Celeron® J1900 Processor (Quad Core, 2.0GHz)
- Dual Independent Display support by VGA and DisplayPort
- Rich I/O Features including the Support up to 6x RS-232/422/485, 1x USB 3.2 Gen1, 3x USB 2.0, 2x Full-size
- Mini PCIe, 2x LAN, 8x DI & 8x DO
- Power Ignition Management Built-in
- Wide Operating Temperature (-40°C to 70°C)
- 9 to 50 VDC Wide Range Power Input supporting AT/ATX Mode

### Model | PC100-J1900 | PC100-J1900-1
--- | --- | ---
CPU Onboard | Intel® Celeron® J1900 | Intel® Celeron® J1900
Memory | 1x 204-pin DDR3L-1066/1333 SODIMM, up to 8GB | 1x 204-pin DDR3L-1066/1333 SODIMM, up to 8GB
Graphic Output | 1x VGA, 1x DisplayPort | 1x VGA, 1x DisplayPort
LAN | 2x 0.6E RJ45 (Support Wake-on-LAN and PXE) | 1x VGA, 1x DisplayPort, 1x Dual Channel 24-bit LVDS
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 | 1x USB 3.2 Gen1 (5 Gbps), 3x USB 2.0, 6x RS-232/422/485 (w/ 2x internal), 16x isolated digital I/O
Storage | 1x 2.5” SATA HDD Bay, 1x mSATA (shared by 1x Mini PCIe), and 1x CFast (shared by 1x mSATA & 1x Mini PCIe) | 1x 2.5” SATA HDD Bay with RAID 0, 1, 5 support and 2x mSATA (shared by 2x Mini PCIe)
Internal Expansion Slot | 1x Full-size Mini PCIe Socket with USIM Socket (PCIe + USB + SATA) | 2x Full-size mini-PCIe
Power | 9-50 VDC, AT/ATX Select, 3-pin Terminal Block | 9-48 VDC, AT/ATX Select, 3-pin Terminal Block
Audio | Line-out / Mic-in Phone Jack | Speaker-out / Mic-in Phone Jack
Operating Temperature | -40 °C to 70 °C | -40 °C to 60 °C
Universal Expansion Slot | 0 | 2

PC100-BRD-U SERIES

PC MODULE

- 5th Generation Intel® Core® i5/i3/Celeron Processor onboard (Broadwell-U)
- Triple Independent Display support by VGA, DisplayPort, and LVDS
- Rich I/O Features including the Support 4x RS-232/422/485, 3x USB 3.2 Gen1, 1x USB 2.0, 2x Full-size Mini PCIe, 2x LAN, 4x DI & 4x DO
- Multiple Expansion Capability including PCIe, PCI, Mini PCIe
- Wide Operating Temperature (-40°C to 60°C)
- Power Ignition Management

### Model | PC100-BRD-U | PC100-BRD-U-1
--- | --- | ---
CPU Onboard | Intel® Core™ i5-5250U, i3-5010U, Celeron® 3765U | Intel® Core™ i5-5250U, i3-5010U, Celeron® 3765U
Memory | 1x 204-pin DDR3L-1333/1600 SODIMM, up to 8GB | 1x 204-pin DDR3L-1333/1600 SODIMM, up to 8GB
Graphic Output | 1x VGA, 1x DisplayPort, 1x Dual Channel 24-bit LVDS | 1x VGA, 1x DisplayPort, 1x Dual Channel 24-bit LVDS
LAN | 2x 0.6E RJ45 (Support Wake-on-LAN and PXE) | 1x VGA, 1x DisplayPort, 1x Dual Channel 24-bit LVDS
USB, Serial, & Digital I/O | 3x USB 3.2 Gen1 (5 Gbps), 3x USB 2.0, 4x RS-232/422/485 (w/ 2x internal), 8x isolated digital I/O | 3x USB 3.2 Gen1 (5 Gbps), 3x USB 2.0, 4x RS-232/422/485 (w/ 2x internal), 8x isolated digital I/O
Storage | 1x 2.5” SATA HDD Bay with RAID 0, 1, 5 support and 2x mSATA (shared by 2x Mini PCIe) | 1x 2.5” SATA HDD Bay with RAID 0, 1, 5 support and 2x mSATA (shared by 2x Mini PCIe)
Internal Expansion Slot | 2x Full-size mini-PCIe | 2x Full-size mini-PCIe
Power | 9-48 VDC, AT/ATX Select, 3-pin Terminal Block | 9-48 VDC, AT/ATX Select, 3-pin Terminal Block
Audio | Speaker-out / Mic-in Phone Jack | Speaker-out / Mic-in Phone Jack
Operating Temperature | -40 °C to 60 °C | -40 °C to 60 °C
Universal Expansion Slot | 0 | 1
- 1x PCIe x4 | PC100-BRD-U-1E
- 1x PCIe | PC100-BRD-U-1I

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**PC100-KBL-U SERIES**

**PC MODULE**

- 7th Generation Intel® Core™ i5/3 Processor onboard (Kabylake-U)
- Triple Independent Display support by VGA, DisplayPort, and LVDS
- Rich in I/O Features with up to 6x RS-232/422/485, 6x USB 3.2 Gen1, 2x Full-size Mini PCIe, 2x LAN, 8x DI & 8x DO, CFast
- Wide Operating Temperature (-40°C to 70°C)
- Compatible with All Premio VIO Series Display Module
- Aluminum Die-casting Front Frame
- Front Panel IP65 Rating

<table>
<thead>
<tr>
<th>Model</th>
<th>PC100-KBL-U</th>
<th>PC100-KBL-U-1</th>
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</thead>
<tbody>
<tr>
<td>CPU Onboard</td>
<td>Intel® 7th Gen. (Kabylake-U) Processor Core™ i5-7300U, Core™ i3-7100U</td>
<td>PC Module based on Intel® Kabylake-U processors with two universal I/O bracket</td>
</tr>
<tr>
<td>Memory</td>
<td>1x 260-Pin DDR4 1866/2133MHz SODIMM, Max. up to 16GB</td>
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<tr>
<td>Graphic Output</td>
<td>1x VGA, 1x DisplayPort, 1x Dual Channel 24 bit LVDS</td>
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</tr>
<tr>
<td>LAN</td>
<td>2x GbE RJ45 (Support Wake-on-LAN and PXE)</td>
<td></td>
</tr>
<tr>
<td>USB, Serial, &amp; Digital I/O</td>
<td>4x USB 3.2 Gen1 (5 Gbps), up to 6x RS-232/422/485, 16 isolated digital I/O</td>
<td></td>
</tr>
<tr>
<td>Storage</td>
<td>1x 2.5&quot; SATA HDD Bay with RAID 0, 1 support, 1x mSATA (shared by 1x Mini PCIe, and 1x CFast (shared by 1x mSATA)</td>
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<tr>
<td>Internal Expansion Slot</td>
<td>2x Full-size Mini PCIe</td>
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<tr>
<td>Power</td>
<td>9-50 VDC, AT/ATX Select, 3-pin Terminal Block</td>
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<tr>
<td>Audio</td>
<td>Line-out / Mic-in Phone Jack</td>
<td></td>
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<tr>
<td>Operating Temperature</td>
<td>-40 °C to 70 °C</td>
<td></td>
</tr>
<tr>
<td>Universal Expansion Slot</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

**Kabylake-U**

- 7th Generation Intel® Core™ i5/i3 Processor onboard (Kabylake-U)
- Triple Independent Display support by VGA, DisplayPort, and LVDS
- Rich in I/O Features with up to 6x RS-232/422/485, 6x USB 3.2 Gen1, 2x Full-size Mini PCIe, 2x LAN, 8x DI & 8x DO, CFast
- Wide Operating Temperature (-40°C to 70°C)
- Compatible with All Premio VIO Series Display Module
- Aluminum Die-casting Front Frame
- Front Panel IP65 Rating

**MX100H SERIES**

**MONITOR MODULE**

- Configure System by Demand
- 9 to 48 VDC Wide Range Power Input
- Aluminum Die-casting Front Frame
- Front Panel IP65 Rating

<table>
<thead>
<tr>
<th>Model</th>
<th>MX100H</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor Module</td>
<td></td>
</tr>
<tr>
<td>VGA</td>
<td>1x VGA Input</td>
</tr>
<tr>
<td>HDMI</td>
<td>1x HDMI Input</td>
</tr>
<tr>
<td>DisplayPort</td>
<td>1x DisplayPort Input</td>
</tr>
<tr>
<td>USB</td>
<td>1x USB 2.0 Input</td>
</tr>
<tr>
<td>COM Port</td>
<td>1x COM Port Input (Resistive Touch Only)</td>
</tr>
<tr>
<td>Audio</td>
<td>1x Audio Input</td>
</tr>
<tr>
<td>Power</td>
<td>9-48 VDC, AT/ATX Select, 3-pin Terminal Block</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-10 °C to 60 °C</td>
</tr>
</tbody>
</table>

- 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 9-48 VDC, AT/ATX Select, 3-pin Terminal Block
- Operating Temperature -10 °C to 60 °C
### VIO-200 SERIES

Display Modules VIO-200 series are compatible with PC modules PC100-KBL-U, PC100-BRD-U, and 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.

#### Thin Frame

<table>
<thead>
<tr>
<th>Model</th>
<th>VID-212</th>
<th>VID-215</th>
<th>VID-217</th>
<th>VID-219</th>
</tr>
</thead>
<tbody>
<tr>
<td>LCD Size</td>
<td>12.1” (4:3)</td>
<td>15” (4:3)</td>
<td>17” (4:3)</td>
<td>19” (4:3)</td>
</tr>
</tbody>
</table>
| Max.
Resolution | 1024 x 768 (XGA) | 1280 x 1024 (SXGA) |
| Brightness (cd/m²) | 500 | 350 |
| Contrast Ratio | 700:1 | 800:1 | 1000:1 |
| LCD Color | 16.2M | 16.2M |
| Pixel Pitch (mm) | 0.24 (H) x 0.24 (V) | 0.297 (H) x 0.297 (V) | 0.264 (H) x 0.264 (V) | 0.294 (H) x 0.294 (V) |
| Viewing Angle (H-V) | 160 / 160 | 170 / 160 | 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 60°C | -10°C to 50°C |

#### VIO-200 SERIES

Widescreen Display Module

<table>
<thead>
<tr>
<th>Model</th>
<th>VID-W215</th>
<th>VID-W221</th>
<th>VID-W224</th>
</tr>
</thead>
<tbody>
<tr>
<td>LCD Size</td>
<td>15.6&quot; (16:9)</td>
<td>21.5&quot; (16:9)</td>
<td>23.8&quot; (16:9)</td>
</tr>
</tbody>
</table>
| Max.
Resolution | 1920 x 1080 (Full HD) |
| Brightness (cd/m²) | 400 | 300 | 350 |
| Contrast Ratio | 700:1 | 5000:1 | 1000:1 |
| LCD Color | 16.7M | 16.7M |
| Pixel Pitch (mm) | 0.17925 (H) x 0.17925 (V) | 0.248 (H) x 0.248 (V) | 0.274 (H) x 0.274 (V) |
| Viewing Angle (H-V) | 160 / 160 | 178 / 178 |
| Internal Speaker | AMP 10W + 10W |
| Touch Type | Resistive 5-wire Touch / Projected Capacitive Touch |
| Operating Temperature | -10°C to 70°C | -10°C to 60°C | -10°C to 50°C |
**WIO-W221C-KBL-U SERIES**

- **21.5” TFT FHD 16:9 LCD with Projected Capacitive Touch**
- **Support 7th Gen. Intel® Core™ i5 / i3 Processor**
- **1x 240-pin DDR3L SODIMM, 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**

**Model**

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

**SIO-172-J1900 SERIES**

- **12”, 15”, 15.6”, 23.8” TFT FHD 16:9 LCD with resistive 5-wire / projected capacitive touch**
- **Intel® Celeron® processor J1900, 2.0 GHz**
- **1x 6GB DDR3L SODIMM, 1x 64GB mSATA**
- **1x M12 LAN, 2x USB 2.0 by M12 8-pin, 1x M12 COM**
- **1x Full-size Mini PCIe for expansion**
- **Support 110V to 240V AC power input by M12 Power Connector**
- **-20°C to 55°C operating temperature**

**Model**

<table>
<thead>
<tr>
<th>Model</th>
<th>SIO-172-J1900</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU Onboard</td>
<td>Intel® Celeron® Processor J1900, Quad Core, 2MB Cache, 2.0 GHz</td>
</tr>
<tr>
<td>Memory</td>
<td>4GB DDR3L SODIMM</td>
</tr>
<tr>
<td>LAN</td>
<td>1x LAN by M12 X-Code 8-pin</td>
</tr>
<tr>
<td>USB &amp; Serial</td>
<td>2x USB 2.0 by M12 A-code 8-pin, 1x RS-232/422/485 by M12 D-Code 8-pin, 1x LAN by M12 X-Code 8-pin</td>
</tr>
<tr>
<td>Storage</td>
<td>1x 64GB mSATA SSD</td>
</tr>
<tr>
<td>Internal Expansion Slot</td>
<td>1x Full-size Mini PCIe</td>
</tr>
<tr>
<td>Power</td>
<td>AC IN 110V~240V 60Hz, M12 A-code 4-pin</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-20°C to 55°C</td>
</tr>
<tr>
<td>LCD Size</td>
<td>13.3” (4:3) XGA</td>
</tr>
<tr>
<td>Brightness (cd/m2)</td>
<td>600</td>
</tr>
<tr>
<td>Touch Type</td>
<td>Resistive 5-wire Touch / Projected Capacitive Touch / 7H Surface Hardness</td>
</tr>
</tbody>
</table>
BOARDS
INDUSTRIAL BOARDS

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-ITX.

Motherboards

1.8” FEMTO ITX SERIES

Model | CT-NR101
--- | ---
Model | AMD Ryzen™ Embedded R1606G with Radeon™ Vega 3 Graphics
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 ~ 105°C
Dimension | 86 x 55 mm

Motherboards

2.5” PICO ITX SERIES

Model | CT-PBT01
--- | ---
Model | Intel® Celeron® Processor J1900 (2.0GHz/4C/10W)
Memory | 1x 204-Pin DDR3L 1066/1333MHz SODIMM
BIOS | AMI SPI 64Mbit
Watchdog | Software Programmable Supports 1~255 sec. System Reset
Display Interface | 1x HDMI, 1x LVDS
Rear I/O | 1x LVDS, 1x LVDS backlight, 1x RS-232/22/485, 2x USB 2.0
Internal I/O | 1x Front Panel, 1x 8-bit GPIO (4-in/4-out)
Power | 12V DC Input 1x 2-pin power connector
Operating Temperature | -10°C ~ 70°C
Dimension | 100 x 72 mm

Motherboards

3.5” SBC SERIES

Model | CT-DWL01
--- | ---
Model | Support 8th Gen. Intel® Core™ i7-8665UE, i5-8365UE, i3-8145UE or Intel® Celeron® Processor 4305UE
Memory | 1x 260-Pin DDR4 2666MHz SODIMM slot, Max. up to 32GB
BIOS | AMI uEFI 256MB SPI flash
Watchdog | Software Programmable Supports 1~255 sec. System Reset
Display Interface | 1x DisplayPort, 1x LVDS, 1x HDMI, 1x EDP internal connector (optional)
Rear I/O | 4x USB 3.2 Gen 2, 2x RJ45 10Gbps LAN, 1x DP, 1x HDMI
Internal I/O | 1x LVDS, 1x LVDS backlight, 1x Sata 3.0Gbps, 1x Front Panel audio, 1x 8-bit GPIO (4-in/4-out), 1x Front Panel, 1x 5Mbus
Power | 12V DC Input 1x 2-pin power connector
Operating Temperature | -10°C ~ 70°C
Dimension | 146 x 102 mm

Model | CT-DBT02
--- | ---
Model | Intel® Atom™ Processor, Celeron® Processor J1900
Memory | 1x 204-pin DDR3L SODIMM sockets Non-ECC/unbuffered Data transfer rates up to 1333MT/s Memory size up to 4GB
BIOS | AMI SPI 64Mbit
Watchdog | Software Programmable Supports 1~255 sec. System Reset
Display Interface | 1x HDMI, 1x VGA, 1x LVDS
Rear I/O | 4x USB 3.2 Gen 2, 2x RJ45 GbE LAN, 1x HDMI, 1x RS232/422/485 COM, 1x USB2.0, 1x USB3.2 Gen1
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
Power | 12V DC Input 1x 24-bit dual channel LVDS, 2x RS32/22/485, 2x USB3.0, 1x SATA, 2x 3pin Audio Header, 2x 4-bit DIO
Operating Temperature | -20°C ~ 70°C
Dimension | 146 x 102 mm

Model | CT-DR101
--- | ---
Model | AMD Ryzen™ Embedded R1000/V1000 Series Processor
Memory | 1x 260-Pin DDR4 2666MHz SODIMM slot, Max. up to 32GB
BIOS | AMI uEFI 256MB SPI flash
Watchdog | Software Programmable Supports 1~255 sec. System Reset
TPM | TPM 2.0 Through InfiniWin™ SLB965TT2.0 or Equivalent
Display Interface | 1x DisplayPort, 1x LVDS, 1x HDMI, 1x LVDS
Rear I/O | 2x RJ45 GbE LAN, 1x HDMI, 1x VGA, 1x RS232/422/485 COM, 1x USB2.0, 1x USB3.2 Gen1
Internal I/O | 1x LVDS, 1x LVDS backlight, 1x Sata 3.0Gbps, 1x Front Panel audio, 1x 8-bit GPIO, 1x PS/2 keyboard mouse, 1x microSD card socket, 1x SIM card socket, 1x FAN connector
Power | 12V DC Input 1x 24-bit dual channel LVDS, 2x RS32/22/485, 2x USB3.0, 1x SATA, 2x 3pin Audio Header, 2x 4-bit DIO
Operating Temperature | -20°C ~ 105°C
Dimension | 146 x 102 mm

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.

### Motherboards

**MINI ITX SERIES**

<table>
<thead>
<tr>
<th>Model</th>
<th>CT-XSL01</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memory</td>
<td>2x 260-Pin DDR4 1866/2133MHz 5000 DIMM</td>
</tr>
<tr>
<td>BIOS</td>
<td>AMI uEFI 128MB SPI flash</td>
</tr>
<tr>
<td>Display Interface</td>
<td>1x DVI-D, 1x DisplayPort</td>
</tr>
<tr>
<td>Rear IO</td>
<td>1x RS-232/422/485, 4x USB 3.2 Gen1 (5 Gbps), 2x RJ45, 1x Line-out, 1x Mic-in, 1x PS/2 KB/MS</td>
</tr>
<tr>
<td>Internal I/O</td>
<td>1x RS-232, 2x USB 2.0, 6 x SATA 6.0 Gbps, 1x Front panel audio, 1x 8-bit GPIO (4-in/4-out), 1x LPC, 1x Front panel, 1x CPU fan, 1x System fan</td>
</tr>
<tr>
<td>Power</td>
<td>ATX power, 2x12-pin and 2x2-pin power connector</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>0℃ ~ 60℃</td>
</tr>
<tr>
<td>Dimension</td>
<td>170 x 170mm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model</th>
<th>CT-ML01</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memory</td>
<td>4x 288-Pin DDR4 2133/2666MHz DIMM</td>
</tr>
<tr>
<td>BIOS</td>
<td>AMI uEFI 128MB SPI flash</td>
</tr>
<tr>
<td>Display Interface</td>
<td>1x VGA, 1x DisplayPort</td>
</tr>
<tr>
<td>Rear IO</td>
<td>1x RS-232/422/485, 4x USB 3.2 Gen1, 2x RJ45, 1x Line-in, 1x Mic-in</td>
</tr>
<tr>
<td>Internal I/O</td>
<td>4x RS-232, 2x USB 3.2 Gen1 (5 Gbps), 4x SATA 6.0 Gbps, 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, 1x System fan</td>
</tr>
<tr>
<td>Power</td>
<td>ATX power, 2x12-pin and 2x2-pin power connector</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>0℃ ~ 60℃</td>
</tr>
<tr>
<td>Dimension</td>
<td>244 x 244mm</td>
</tr>
</tbody>
</table>

**MICRO ATX SERIES**

<table>
<thead>
<tr>
<th>Model</th>
<th>CT-ML01</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memory</td>
<td>4x 288-Pin DDR4 2133/2666MHz DIMM</td>
</tr>
<tr>
<td>BIOS</td>
<td>AMI uEFI 256MB SPI flash</td>
</tr>
<tr>
<td>Display Interface</td>
<td>1x VGA, 1x DisplayPort</td>
</tr>
<tr>
<td>Rear IO</td>
<td>1x RS-232/422/485, 4x USB 3.2 Gen1, 2x RJ45, 1x Line-in, 1x Mic-in</td>
</tr>
<tr>
<td>Internal I/O</td>
<td>4x RS-232, 1x USB 3.2 Gen 1, 6 x SATA 6.0 Gbps, 1x Front panel audio, 1x 8-bit GPIO (4-in/4-out), 1x SPI header, 1x LPC, 1x Front panel, 1x CPU fan, 1x System fan</td>
</tr>
<tr>
<td>Power</td>
<td>ATX power, 2x12-pin and 2x2-pin power connector</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>0℃ ~ 60℃</td>
</tr>
<tr>
<td>Dimension</td>
<td>244 x 244mm</td>
</tr>
</tbody>
</table>
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.

- **Model** KCO-2000-CFL
  - Certification-Ready Industrial Computer with LGA-1151 socket for Intel® CFL-R S Processor
  - CPU Support: Support 8th/9th Gen Intel® CFL-R S Processor (LGA 1151, 65W/35W TDP)
  - Memory: 4x 288-Pin DDR4 2133/2400/2666MHz DIMM. Max. up to 128GB
  - Graphic Output: 1x VGA, 1x DVI, 2x DP
  - USB & Serial: 2x RS-232/422/485, 2x RS-232 (internal header) 6x USB 3.2 Gen1, 7x USB 2.0
  - Storage: 1x Hot-swappable 2.5" SATA Drive Bay (Support H=7mm)
  - Power: ATX, Internal 250W Flex Power Supply
  - Audio: Line-out / Mic-in Phone Jack
  - Operating Temperature: 0°C to 35°C
  - Dimensions (WxDxH): 12.73" x 10.75" x 3.45"
  - Weight: 11 lbs (barebone w/ chassis, mb, and PSU only)
  - Certifications: CE, FCC, UL Certified

- **Model** KCO-3000-CFL
  - Certification-Ready Industrial Computer with LGA-1151 socket for Intel® CFL-R S Processor
  - CPU Support: Support 8th/9th Gen Intel® CFL-R S Processor (LGA 1151, 65W/35W TDP)
  - Memory: 4x 288-Pin DDR4 2133/2400/2666MHz DIMM. Max. up to 128GB
  - Graphic Output: 1x VGA, 1x DVI, 2x DP
  - USB & Serial: 2x RS-232/422/485, 2x RS-232 (internal header) 6x USB 3.2 Gen1, 7x USB 2.0
  - Storage: 1x Hot-swappable 2.5" SATA Drive Bay (Support H=7mm)
  - Power: ATX, Internal 300W Flex Power Supply
  - Audio: Line-out / Mic-in Phone Jack
  - Operating Temperature: 0°C to 45°C
  - Dimensions (WxDxH): 13.15" x 11.78" x 5.23"
  - Weight: 12.5 lbs (barebone w/ chassis, mb, and PSU only)
  - Certifications: CE, FCC, UL Certified