



2021
PRODUCT SOLUTION GUIDE



**YOUR TOP CHOICE PARTNER FOR
INDUSTRIAL COMPUTING SOLUTIONS**

C&T's Offers a Full Range of Validated and Tested Industrial Systems to meet the demands from Industry 4.0



Your Top Choice Partner for

INDUSTRIAL COMPUTING SOLUTIONS

Founded in 2011, C&T Solution Inc. is becoming one of the fastest growing companies in the Industrial Computing Systems field. With its powerful R&D capability and excellent technological expertise, C&T has become one of leading enterprises in providing top-of-the-line industrial embedded system, industrial panel PC, touch monitor and board level.

The company is headquartered in Taipei, Taiwan. Currently, it has 70 employees that work strongly and closely with its customers to provide them with high quality and high value creation in embedded PC products. C&T has an extensive customer base through global network and distribution partners from offices located worldwide.

C&T continues to establish strong and stable relationships with its partners and customers

by committing to ensure that all quality goals are reach and that quality improvements are continually applied into every manufacturing process.

Our core values at C&T are focusing to deliver the best Industrial PC solutions. Our products are carefully designed and manufactured in detail. Manufactured products are tested and validated to ensure we produced premium technologies for our loyal customers from all around the world. C&T technologies are contributing to escalating advancement in a various array of industries including

- AI Edge Inference
- Internet of Things (IoT)
- Factory Automation
- Machine Vision
- Vehicle Fleet Telematics
- Kiosk & Retail
- Security & Surveillance
- Medical Inference Analysis

OUR VISION

C&T aims to maintain lifetime and profitable partnership with its customers by delivering high standard design, solution, integration and validation. Through our research and staff expertise, we will continue to provide high quality products and application-ready hardware to fulfill a variety of market demands.

OUR BRAND POSITION

Apart from our application-ready hardware, C&T is also dedicated to provide a more customer-oriented approach in our product design, development, and marketing strategy. Our research team is focused in analyzing customer expectations and embracing idea changes to its entire operation to fit our customers' needs.

OUR MISSION

C&T is dedicated to offer more diversified and innovative industrial embedded solutions with unsurpassed designs and highest quality to meet world-class standards and manufacturing demands in the coming years.

OUR CORE VALUES

C&T is committed to assure the interests of its customers by offering the following:

- INNOVATION** • C&T provides customers with cutting-edge and friendly-price products with unmatched flexibility and longevity to achieve mutual win-win situation.
- COMMITMENT** • To assure the highest level of quality control in systems assembly and testing, C&T has designed a comprehensive quality control program that addresses the entire process from component inspection to final testing.
- COLLABORATION** • C&T has strong relationships with its suppliers, sales team and product managers, which benefit the customer by having up to date information, better support programs and product compatibilities
- ACCOUNTABILITY** • C&T is driven to step forward by accepting change and moving ahead with speed and accuracy. We continue to increase our decision-making efficiency and speed of execution to attain the best possible solution for our customers' needs.
- AGILITY** • C&T keeps its promises by providing customers high quality products, competitive price and excellent before-after sales services.

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

FANLESS MINI PC

BCO
SERIES **08**

IN-VEHICLE

ACO
SERIES **17**

IP65 / IP67 WATERPROOF

WCO
SERIES **21**

RUGGED

RCO
SERIES **10**

MACHINE VISION

VCO
SERIES **19**

GPU COMPUTING SYSTEM

GPU
SERIES **22**

RUGGED EDGE

AI EDGE
INFERENCE **24**



ETHERNET MODULE SERIES

C&T provides ethernet daughterboard modules that integrate easily into C&T 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.

ETHERNET MODULE

PROPRIETARY
MODULE **26**

INDUSTRIAL DISPLAY SYSTEMS 28

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



C&T industrial display systems are patented, reliable, industrial-grade that is customized to provide solutions for automation, information and communication applications. The innovative modular design makes the display systems more flexible and versatile. With its rugged and well-designed features, it can easily withstand any kind of environments and conditions.

IP66/IP69K-rated sealing provides uncompromising water protection, withstanding high-pressure, high-temperature washdowns essential to sanitary assurance.

PANEL PC

VIO
PC
SERIES **30**

SYSTEM MODULE

PC
SERIES
MX
SERIES **34**

IP66 WATERPROOF

WIO
SERIES **38**

TOUCH MODULE

VIO
MX
SERIES **33**

DISPLAY MODULE

VIO
SERIES **36**

IP66/IP69 WASHDOWN

SIO
SERIES **39**

MOTHERBOARD SYSTEMS 40

C&T industrial boards offers a wide range form factor from Mini-ITX, Micro ATX, 3.5" SBC, COM Express-Mini Size Module, COM Express-Compact Size Module, COM Express-Basic Size Module, and COM Express-Carrier Boards.



C&T FANLESS EMBEDDED SYSTEMS PRODUCT FAMILY

In-Vehicle

Fanless
Computer

ACO-3000 Series

Broadwell-U

ACO-6000 Series

Skylake &
KabyLake-S

IP65 / IP67 Waterproof

Fanless
Embedded
System

WCO-3400 Series

KabyLake-U

Mini

Fanless
Computer

BCO-1000 Series

Bay Trail

BCO-2000 Series

Whiskey Lake

Machine Vision System

VCO-6000 Series

Skylake &
KabyLake-S

VCO-6100 Series

CFL-R S

Rugged

Fanless
Embedded
System

RCO-1000 Series

Bay Trail

RCO-3000 Series

Broadwell-U

RCO-3400 Series

KabyLake-U

RCO-3600 Series

Skylake &
KabyLake-S

RCO-6000 Series

Skylake &
KabyLake-S

RCO-6100 Series

CFL-R 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



POWER PROTECTION

- Over voltage protection
- Over current protection
- Reverse protection



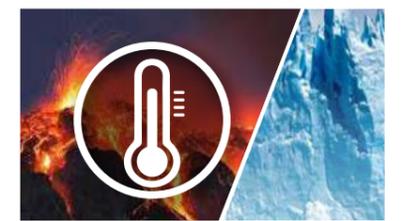
SHOCK & VIBRATION

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



EXPANDABLE & MODULARIZATION

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



EXTENDED OPERATING TEMPERATURE RANGE

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

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



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)



BCO-1000 SERIES

- Intel® Celeron® J1900 Processor (Quad Core, 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 30 VDC Wide Range Power Input Supporting AT/ATX Mode
- Ultra Compact Size Design
- Fanless & Cable-less in Design
- TPM 2.0 Supported (Optional)



	Basic Fanless System ideal for space-constrained applications	With one Universal Expansion Slot	With two Universal Expansion Slots	With 8-bit Digital I/O, DVI-I/DP dual display output, and 6x COM ports
Model	BCO-1000	BCO-1010	BCO-1020	BCO-1030
CPU Onboard	Intel® Celeron® J1900			
Memory	1x 204-pin DDR3L-1066/1333MHz SO-DIMM, up to 8GB			
Graphic Output	1x DVI-I (optional Display Port: BCO-1010A, BCO-1020C & BCO-1030)			
LAN	2x GbE RJ45 (Support Wake-on-LAN and PXE)			
Storage	1x mSATA (shared by 1x Mini PCIe)	1x mSATA (shared by 1x Mini PCIe) & 1x Internal 2.5" SATA HDD Bay		
Internal Expansion Slot	2x Full-size mini-PCIe (1x shared with mSATA)			
Power	9-30 VDC, AT/ATX Select, 3-pin Terminal Block			
Audio	Line-out / Mic-in Phone Jack			
Operating Temperature	-20°C to 50°C			
Dimensions (WxDxH)	142 x 101 x 30 mm	142 x 101 x 41.5 mm	142 x 101 x 58 mm	142 x 101 x 75 mm
Weight	0.10 kg	0.19 ~ 0.21 kg	0.26 ~ 0.28 kg	0.34 kg
Universal Expansion Slot (front)	0 (BCO-1000)	0	0	1
Universal Expansion Slot (rear)	0	1 (BCO-1010)	0	0
DP, 8-bit Isolated DIO (rear)		BCO-1010A		
2x COM (rear)		BCO-1010B		
4x USB (rear)		BCO-1010U		
DP, 8-bit Isolated DIO, & 2x COM (rear)			BCO-1020C	
4x COM (rear)			BCO-1020D	
DP, 8-bit Isolated DIO, & 4x COM (rear)				BCO-1030



BCO-2000 SERIES

- Support 8th Gen. Intel® Core™ i5 & Intel® Celeron® Processor
- 1x 260-pin DDR4 2400 SO-DIMM. Max. up to 32GB
- 2x Intel® GbE (Support Wake-on-LAN and PXE)
- Dual Independent Display, 1x DP, 1x HDMI (optional)
- 2x Mini PCIe Gen3 with 1x SIM Slot
- 4x USB 3.2 Gen 2 (10Gbps), 4x RS-232/422/485 (w/ 2x internal)
- 1x Internal 2.5" SATA HDD Bay and 1x mSATA
- Watchdog timer, software programmable supports 1-225 sec. system reset
- TPM 2.0 Supported



	Basic Fanless System ideal for space-constrained applications					
Model	BCO-2000					
CPU Onboard	Support 8 th Gen. Intel® WL-UE Processor (15W TDP) Intel® Core™ i5-8365UE Processor 6M Cache, up to 4.10 GHz Intel® Celeron® Processor 4305UE 2M Cache, 2.00 GHz					
Memory	1x 260-Pin DDR4 2400MHz SO-DIMM, up to 32GB					
Graphic Output	1x DisplayPort, 1x HDMI (Optional)					
LAN	2x RJ45 GbE (Support Wake-on-LAN and PXE)					
Storage	1x mSATA (shared by 1x Mini PCIe) & 1x Internal 2.5" SATA HDD Bay					
Internal Expansion Slot	2x Full-size Mini-PCIe (1x shared with mSATA)					
Power	AT/ATX 12V Select, 3-pin Terminal Block					
Audio	Line-out / Mic-in Phone Jack					
Operating Temperature	-20°C to 60°C					
Dimensions (WxDxH)	140 x 192 x 61 mm					
Weight	1.4 kg					
Universal Expansion Slot	2					
Expansion (Option)	2x LAN	2x PoE (Support 1x Universal Slot Only)	2x COM	4x COM	2x USB 2.0 (Support 1x Universal Slot Only)	2x USB 3.0 (Support 1x Universal Slot Only)



COMPACT FANLESS EMBEDDED SYSTEM

[MORE INFO](#)

RCO-1000 SERIES

- 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 48 VDC Wide Range Power Input Supporting AT/ATX Mode
- Ultra Compact Size Design
- Fanless & Cable-less in Design



	Ultra compact Fanless System ideal for space-constrained applications	With one Universal Expansion Slot	With three Universal Expansion Slots	With 8-bit Digital I/O, DVI-I/DP dual display output, and 6x COM ports
Model	RCO-1000	RCO-1010	RCO-1020	RCO-1030
CPU Onboard	Intel® Atom® E3845, or Celeron® J1900			
Memory	1x 204-pin DDR3L-1066/1333MHz SO-DIMM, up to 8GB			
Graphic Output	1x DVI-I (optional DisplayPort: RCO-1010A, RCO-1020C & RCO-1030)			
LAN	2x GbE RJ45 (Support Wake-on-LAN and PXE)			
Storage	1x mSATA (shared by 1x Mini PCIe)	1x mSATA (shared by 1x Mini PCIe) & 1x Internal 2.5" SATA HDD Bay		
Internal Expansion Slot	2x Full-size mini-PCIe			
Power	9-48 VDC, AT/ATX Select, 3-pin Terminal Block			
Audio	Line-out / Mic-in Phone Jack			
Operating Temperature	-40 °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 (front)	0 (RCO-1000)	0	1	2
Universal Expansion Slot (rear)	0	1 (RCO-1010)	0	0
DP, 8-bit Isolated DIO (rear)		RCO-1010A		
2x COM (rear)		RCO-1010B		
Power Ignition Management (internal)		RCO-1010G		
DP, 8-bit Isolated DIO, & 2x COM (rear)			RCO-1020C	
4x COM (rear)			RCO-1020D	
DP, 8-bit Isolated DIO, & 4x COM (rear)				RCO-1030



ADVANCED FANLESS EMBEDDED SYSTEM

[MORE INFO](#)

RCO-3000 SERIES

- Intel® 5th Gen. Core™ processor i5-5350U, up to 2.9GHz / i3-5010U, 2.1GHz or Celeron® 3765U, 1.9GHz
- 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 48 VDC Wide Range Power Input Supporting AT/ATX Mode
- Fanless & Cable-less in Design



	Advanced Fanless System based on Intel® Broadwell-U processors	With two PCI or PCIe x4 expansion slot
Model	RCO-3000	RCO-3022xx
CPU Onboard	Intel® 5 th Gen. Core™ i5-5350U, i3-5010U, Celeron® 3765U	
Memory	1x 204-pin DDR3L-1333/1600MHz SO-DIMM, up to 8GB	
Graphic Output	1x DVI-I, 1x DisplayPort	
LAN	2x GbE RJ45 (Support Wake-on-LAN and PXE)	
USB, Serial, & Digital I/O	2x USB 3.0, 6x USB 2.0, 4x RS-232/422/485, 8x isolated digital I/O	
Storage	2x 2.5" SATA HDD Bay (1x internal, 1x removable) with RAID 0, 1, 5, 10 support, and 2x mSATA	
Internal Expansion Slot	2x Full-size Mini-PCIe	
Power	9-48 VDC, AT/ATX Select, 3-pin Terminal Block	
Audio	Speaker-out / Mic-in Phone Jack	
Operating Temperature	-40 °C to 70 °C	
Dimensions (WxDxH)	185 x 197 x 57.4 mm	185 x 197 x 105 mm
Weight	2.16 ~ 2.54 kg	2.87 ~ 3.33 kg
Universal Expansion Slot (front)	1 (RCO-3000)	2
Universal Expansion Slot (rear)	0	0
2x PCIe x4		RCO-3022EE
2x PCI		RCO-3022PP
Proprietary Module Expansion	Up to 1x Module • DTB-4LAN • DTB-4LAN-PWR • DTB-4LAN-M12 • DTB-4LAN-PWR-M12	



RCO-3400 SERIES

- 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



	Advanced Fanless System based on Intel® KabyLake-U processors	With one PCI or PCIe x4 expansion slot	With two PCI or PCIe x4 expansion slot
Model	RCO-3400	RCO-3411x	RCO-3422xx
CPU Onboard	Intel® 7 th Gen. (KabyLake-U) Processor Core™ i5-7300U, Core™ i3-7100U		
Memory	1x 260-pin DDR4 1866/2133MHz SO-DIMM, up to 16GB		
Graphic Output	1x VGA, 2x DisplayPort		
LAN	2x GbE RJ45 (Support Wake-on-LAN and PXE)		
USB, Serial, & Digital I/O	4x USB 3.0, 2x USB 2.0, 5x RS-232/422/485 (w/ 3x internal), 16x 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)		
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	-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 x4		RCO-3411E	
1x PCI		RCO-3411P	
2x PCIe x4			RCO-3422EE
2x PCI			RCO-3422PP
Proprietary Module Expansion	Up to 1x Module • DTB-4LAN • DTB-4LAN-PWR • DTB-4LAN-M12 • DTB-4LAN-PWR-M12		



RCO-3600 SERIES

- Support 6th/7th Gen. Intel® Core™ i7/i5/i3 or 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), 6x USB 3.0, 2x USB 2.0
- 9 to 50 VDC Wide Range Power Input Supporting AT/ATX Mode
- TPM 2.0 Supported



	Advanced Fanless System based on Intel® Skylake & Kaby Lake-S processors
Model	RCO-3600
CPU Support	Support 6 th & 7 th Gen Intel® Core™ i7 / i5 / i3 / Pentium® / Celeron® Desktop Processor (LGA 1151) - 7 th Gen Intel® Core™ i7-7700T / i5-7500T / i3-7101TE - 6 th 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 530 / 630 1x VGA (by optional split cable), 1x DisplayPort, and 1x HDMI (optional)
LAN	2x GbE RJ45 (Support Wake-on-LAN and PXE)
USB, Serial, & Digital I/O	6x USB 3.0, 2x USB 2.0 (internal), 4x RS-232/422/485 (2x internal), 16x 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
PCIe x 16 (8-Lane)	0
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	185 x 197 x 57.4 mm
Weight	2.28 kg

RCO-3700 SERIES

- I Support 8th/9th Gen Intel® CFL-R S Processor (LGA 1151, 65W/35W TDP)
- Intel® Q370 Chipset
- Triple Independent Display by 1x DVI-I and 2x DisplayPort
- 2x Intel® GbE supporting Wake-on-LAN and PXE
- 2x Full-size Mini PCIe (shared by 1x mSATA), and 2x SIM socket
- 2x 2.5" SATA HDD Bay with RAID 0, 1, 5, 10 support,
- 1x mSATA (Shared by 1x Mini PCIe)
- 1x M.2 (E Key, PCIe x1, USB 2.0, 2230)
- 4x USB 3.2 Gen 2 (10 Gbps), 4x USB 2.0 (2x internal), 5x RS-232/422/485 (2x internal)
- 8x DI + 8x DO with isolation
- 9 to 48VDC Wide Range Power Input Supporting AT/ATX Mode
- TPM 2.0 Supported



	Superior Fanless Embedded System with LGA 1151 for Intel 8 th /9 th Gen CPU & Q370 PCH	Superior Fanless Embedded System with LGA 1151 for Intel 8 th /9 th Gen CPU & Q370 PCH, 2x PCIe x 16
Model	RCO-3700	RCO-3722
CPU Support	Support 8 th & 9 th Gen Intel® CFL-R S Processor (LGA 1151, 65W/35W TDP) (Core™ i7-9700E/9700TE/8700T, Core™ i5-9500E/9500TE/8500T, Core™ i3-9100E/9100TE/8100T, Pentium® G5400T, or Celeron® G4900T)	
Memory	2x 260-Pin DDR4 2400/2666MHz SODIMM. Max. 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 (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, 10 support (1x internal; 1x removable & hot-swappable), 1x mSATA (shared by 1x Mini PCIe)	
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) ; -25°C to 50°C (65W CPU)	
Dimensions	192 (W) x 197 (D) x 60.3 (H) mm	192 (W) x 197 (D) x 107.8 (H) mm
Weight	2.28 kg	3.10 kg
2x PCIe x 16 (8-Lane)		RCO-3722EE
PCIe x 16		RCO-3721E
Proprietary Module Expansion	Up to 1x Module <ul style="list-style-type: none"> • DTB-D10G • DTB-4ETH • DTB-4ETH-PWR • DTB-4ETH-M12 • DTB-4ETH-PWR-M12 	

RCO-6000 SERIES

- Support 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



	Superior Fanless System with LGA-1151 socket for Intel® KabyLake & Skylake-S processors	With one PCI or PCIe x16 expansion slot	With two PCI or PCIe x8/x16 expansion slot
Model	RCO-6000	RCO-6011x	RCO-6022xx
CPU Support	Intel® 6 th /7 th Gen. (KabyLake & Skylake-S) Desktop Processor (Core™ i7-7700T/6700TE, Core™ i5-7500T/6500TE, Core™ i3-7101TE/6100TE, Pentium® G4400TE, or Celeron® G3900TE)		
Memory	2x 260-pin DDR4-1866/2133MHz SO-DIMM, up to 32GB		
Graphic Output	1x DVI-I, 2x DisplayPort		
LAN	2x GbE RJ45 (Support Wake-on-LAN and PXE)		
USB, Serial, & Digital I/O	6x USB 3.0, 2x USB 2.0, 4x RS-232/422/485 (w/ 2x internal), 16x isolated digital I/O		
Storage	4x 2.5" SATA HDD Bays with RAID 0, 1, 5, 10 support (2x internal, 2x removable), 2x mSATA (shared by 2x Mini PCIe)		
Internal Expansion Slot	4x Full-size mini-PCIe		
Power	9-48 VDC, AT/ATX Select, 3-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	240 x 261 x 107 mm	240 x 261 x 127 mm
Weight	4.37 ~ 5.21 kg	4.67 ~ 6.40 kg	5.54 ~ 6.64 kg
Universal Expansion Slot (front)	2 (RCO-6000)	2	2
Universal Expansion Slot (rear)	0	1	2
1x PCIe x16		RCO-6011E	
1x PCI		RCO-6011P	
2x PCIe x8			RCO-6022EE
2x PCI			RCO-6022PP
1x PCIe x16 & 1x PCI			RCO-6022PE
Proprietary Module Expansion	Up to 2x Module <ul style="list-style-type: none"> • DTB-4LAN • DTB-4LAN-PWR • DTB-4LAN-M12 • DTB-4LAN-PWR-M12 		



SUPERIOR FANLESS EMBEDDED SYSTEM

[MORE INFO](#)

RCO-6100 SERIES

- Support 8th / 9th Gen. Intel® CFL-R S Processor (LGA 1151, 65W/35W TDP)
- Intel® Q370 chipset
- 2x DDR4 2400/2666Hz SODIMM. Max. up to 64GB
- Triple Independent Display by 1x DVI-I and 2x DisplayPort
- 4x USB 3.2 Gen 2, 5x USB 3.2 Gen 1, 6x RS-232/422/485 (w/ 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



Superior Fanless System with LGA-1151 socket for Intel® CFL-R S Processor		
Model	RCO-6100	RCO-6122PE
CPU Support	8 th / 9 th Gen. Intel® CFL-R S Processor (LGA 1151, 65W/35W TDP) (Core™ i7-9700E/9700TE/8700T, Core™ i5-9500E/9500TE/8500T, Core™ i3-9100E/9100TE/8100T, Pentium® G5400T, or Celeron® G4900T)	
Memory	2x 260-pin DDR4-2400/2666MHz SO-DIMM, up to 64GB (Un-buffered and Non-ECC)	
Graphic Output	1x DVI-I, 2x DisplayPort	
LAN	2x GbE RJ45 (Support Wake-on-LAN and PXE)	
USB, Serial, & Digital I/O	4x USB 3.2 Gen 2 (10 Gbps), 5x USB 3.2 Gen 1 (5 Gbps), 2x USB2.0 header (internal), 6x RS-232/422/485 (2x internal), 16x isolated digital I/O	
Storage	4x 2.5" SATA HDD bay with RAID 0, 1, 5, 10 support (2x internal; 2x removable & hot-swappable), 1x mSATA (shared by 1x Mini PCIe), 1x NVMe M.2 M Key	
Internal Expansion Slot	2x Full-size mini-PCIe (1 shared by 1x mSATA), 1x M.2 E Key	
Power	9-48 VDC, AT/ATX Select, 3-pin Terminal Block	
Audio	Line-out / Mic-in Phone Jack	
Operating Temperature	-25°C to 70°C (35W CPU) ; -25°C to 60°C (65W CPU)	
Certification	E-Mark, EN 50155, EN 50121-1, EN 50121-3-2	
Dimensions (WxDxH)	240 (W) x 261 (D) x 79 (H) mm	240 (W) x 261 (D) x 127.3 (H) mm
Weight	5.97 kg	7.73 kg
Universal Expansion Slot	1 (by mini PCIe interface)	3 (by mini PCIe interface)
PCI & PCI Express	1x PCI, 1x PCIe x16 2x PCIe x8 (Optional) 2x PCI (Optional)	
Proprietary Module Expansion	Up to 1x Module • DTB-D10G • DTB-M2BK • DTB-4ETH • DTB-4ETH-PWR • DTB-4ETH-M12 • DTB-4ETH-PWR-M12	



VEHICLE APPLIED FANLESS SYSTEM

[MORE INFO](#)

ACO-3000 SERIES

- Intel® 5th Gen. Core™ processor i5-5350U, up to 2.9GHz / i3-5010U, 2.1GHz or Celeron® 3765U, 1.9GHz
- 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 48 VDC Wide Range Power Input Supporting AT/ATX Mode
- Power Ignition Management



Vehicle Applied Fanless System based on Intel® Broadwell-U processors		
Model	ACO-3000	ACO-3022xx
CPU Onboard	Intel® 5 th Gen. Core™ i5-5350U, i3-5010U, Celeron® 3765U	
Memory	1x 204-pin DDR3L-1333/1600MHz SO-DIMM, up to 8GB	
Graphic Output	1x DVI-I, 1x DisplayPort	
LAN	2x GbE RJ45 (Support Wake-on-LAN and PXE)	
USB, Serial, & Digital I/O	4x RS-232/422/485, 2x USB 3.0, 2x USB 2.0, 8x isolated digital I/O	
Storage	2x 2.5" SATA HDD Bay (1x internal, 1x removable) with RAID 0, 1, 5, 10 support, and 2x mSATA (shared by 2x Mini PCIe)	
Internal Expansion Slot	2x Full-size mini-PCIe (shared with mSATA)	
Power	9-48 VDC, AT/ATX Select, 3-pin Terminal Block	
Ignition Management	Delay On/Off, Battery Level Monitoring	
Audio	Speaker-out / Mic-in Phone Jack	
Operating Temperature	-40 °C to 70 °C	
Certification	E-Mark, EMC Conformity with EN50155 & EN50121-3-2	
Dimensions (WxDxH)	185 x 197 x 57.4 mm	185 x 197 x 105 mm
Weight	2.16 - 2.54 kg	3.56 ~ 4.18 kg
Universal Expansion Slot (front)	1 (ACO-3000)	2
Universal Expansion Slot (rear)	0	0
2x PCIe x4	ACO-3022EE	
2x PCI	ACO-3022PP	
Proprietary Module Expansion	Up to 1x Module • DTB-4LAN • DTB-4LAN-PWR • DTB-4LAN-M12 • DTB-4LAN-PWR-M12	

[MORE INFO](#)



ACO-6000 SERIES

- Support 6th/7th Gen. Intel® Core™ i7/i5/i3 or Pentium® / Celeron® Desktop Processor
- Triple Independent Display
- Support up to 18x 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 48 VDC Wide Range Power Input Supporting AT/ATX Mode
- TPM 2.0 Supported
- Power Ignition Management



	Surveillance Applied Fanless System with LGA-1151 socket for Intel® KabyLake & Skylake-S processors	With 16 GbE in RJ-45 or M12 connectors with PoE option.	With one PCI or PCIe x16 expansion slot
Model	ACO-6000	ACO-6010	ACO-6011x
CPU Support	Intel® 6 th /7 th Gen. (KabyLake & Skylake-S) Desktop Processor (Core™ i7-7700T/6700TE, Core™ i5-7500T/6500TE, Core™ i3-7101TE/6100TE, Pentium® G4400TE, or Celeron® G3900TE)		
Memory	2x 260-pin DDR4-1866/2133MHz SO-DIMM, up to 32GB		
Graphic Output	1x DVI-I, 2x DisplayPort		
LAN	2x GbE RJ45 (Support Wake-on-LAN and PXE)		
USB, Serial, & Digital I/O	6x USB 3.0, 2x USB 2.0 (Internal), 5x RS-232/422/485 (w/ 3x internal), 16x isolated digital I/O		
Storage	4x 2.5" SATA HDD Bays with RAID 0, 1, 5, 10 support (2x internal, 2x removable), 2x mSATA (shared by 2x Mini PCIe)		
Internal Expansion Slot	3x Full-size mini-PCIe (shared with mSATA)		
Power	9-48 VDC, AT/ATX Select, 3-pin Terminal Block		
Audio	Speaker-out / Mic-in Phone Jack		
Operating Temperature	-25 °C to 70 °C		
Certification	E-Mark, EMC Conformity with EN50155 & EN50121-3-2		
Dimensions (WxDxH)	240 x 261 x 79 mm	240 x 261 x 100 mm	240 x 261 x 107 mm
Weight	3.94 ~ 4.98 kg	5.34 ~ 6.82 kg	5.14 ~ 6.21 kg
Universal Expansion Slot (front)	2 (ACO-6000)	2	2
Universal Expansion Slot (rear)	0	2	1
1x PCIe x16			ACO-6011E
1x PCI			ACO-6011P
Proprietary Module Expansion	Up to 2x Module • DTB-D10G • DTB-4ETH • DTB-4ETH-PWR • DTB-4ETH-M12 • DTB-4ETH-PWR-M12	Up to 4x Module • DTB-4ETH • DTB-4ETH-PWR • DTB-4ETH-M12 • DTB-4ETH-PWR-M12	Up to 2x Module • DTB-D10G • DTB-4ETH • DTB-4ETH-PWR • DTB-4ETH-M12 • DTB-4ETH-PWR-M12

[MORE INFO](#)



VCO-6000 SERIES

- Support 6th/7th Gen. Intel® Core™ i7/i5/i3 or Pentium® / Celeron® Desktop Processor
- Triple Independent Display
- Multiple Expansion Capability including up to 3x PCIe or 4x PCI
- Fanless Design Structure and Support Additional Fan Module
- Wide Operating Temperature (-25°C to 70°C)
- 9 to 50 VDC Wide Range Power Input Supporting AT/ATX Mode
- TPM 2.0 Supported



	Machine Vision System based on Intel® Kaby Lake & Skylake-S	With one PCI or PCIe expansion slot	With two PCI or PCIe expansion slot	With three PCI or PCIe expansion slot	With four PCI or PCIe expansion slot	With five PCI or PCIe expansion slot
Model	VCO-6000	VCO-6011x	VCO-6022x	VCO-6033x	VCO-6044x	VCO-6055C
CPU Support	Intel® 6 th /7 th Gen. (Kaby Lake & Skylake-S) Desktop Processor (Core™ i7-7700T/6700TE, Core™ i5-7500T/6500TE, Core™ i3-7101TE/6100TE, Pentium® G4400TE, or Celeron® G3900TE)					
Memory	2x DDR4-1866/2133MHz SO-DIMM, up to 32GB					
Graphic Output	1x DVI-I, 2x DisplayPort					
LAN	2x GbE RJ45 (Support Wake-on-LAN and PXE)					
USB, Serial, & Digital I/O	4x USB 3.0, 4x RS-232/422/485 (w/ 2x internal), 16x isolated digital I/O					
Storage	2x Removable 2.5" SATA HDD Bay with RAID 0, 1, 5, 10 support, 2x mSATA (shared by 2x Mini PCIe), 1x CFast					
Internal Expansion Slot	3x Full-size Mini-PCIe (Share by 2x mSATA)					
Power	9-50 VDC, AT/ATX Select, 3-pin Terminal Block					
Audio	Speaker-out / Mic-in Phone Jack					
Operating Temperature	-25 °C to 70 °C					
Dimensions (WxDxH)	77 x 256 x 240 mm	117 x 256 x 240 mm	137 x 256 x 240 mm	157 x 256 x 240 mm	177 x 256 x 240 mm	197 x 256 x 240 mm
Weight	3.83 kg	5.29 kg	5.34 ~ 5.39 kg	5.42 ~ 5.86 kg	5.94 ~ 6.02 kg	6.21 kg
1x PCIe x16		VCO-6011E				
1x PCI		VCO-6011P				
2x PCIe x8			VCO-6022E			
2x PCI			VCO-6022P			
1x PCIe x16 & 1x PCI			VCO-6022C			
2x PCIe x1 & 1x PCIe x16				VCO-6033E		
1x PCIe x16 & 2x PCI				VCO-6033C		
3x PCI				VCO-6033P		
2x PCIe x4 & 1x PCIe x8 & 1x PCI					VCO-6044C	
4x PCI					VCO-6044P	
2x PCIe x4 & 1x PCIe x8 & 2x PCI						VCO-6055C

[MORE INFO](#)

VCO-6100 SERIES

- Support 8th / 9th Gen. Intel® CFL-R S Processor (LGA 1151, 65W/35W TDP)
- Intel® Q370 chipset
- 2x DDR4 2400/2666Hz SODIMM. 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 48 VDC Wide Range Power Input Supporting AT/ATX Mode
- Unique Expansion Module Design to Support 1 to 5 Expansion Cards
- TPM 2.0 Supported



	With two PCI or PCIe expansion slot	With three PCI or PCIe expansion slot
Model	VCO-6122x	VCO-6133x
CPU Support	Support 8 th / 9 th Gen. Intel® CFL-R S Processor (LGA 1151, 65W/35W TDP) [Core™ i7-9700E/9700TE/8700T, Core™ i5-9500E/9500TE/8500T, Core™ i3-9100E/9100TE/8100T, Pentium® G5400T, or Celeron® G4900T]	
Memory	2x 260-pin DDR4-2400/2666MHz SO-DIMM, up to 64GB (Un-buffered and Non-ECC)	
Graphic Output	1x DVI-I, 2x DisplayPort	
LAN	2x GbE RJ45 (Support Wake-on-LAN and PXE)	
USB, Serial, & Digital I/O	4x USB 3.2 Gen 2, 4x USB 3.2 Gen 1 (internal), 6x RS-232/422/485 (4x internal), 16x isolated digital I/O	
Storage	2x 2.5" SATA HDD bay with RAID 0, 1 support (2x removable & hot-swappable), 1x mSATA (shared by 1x Mini PCIe), 1x NVMe M.2 M Key	
Internal Expansion Slot	2x Full-size mini-PCIe (1 shared by 1x mSATA), 1x M.2 E Key	
Power	9-48 VDC, AT/ATX Select, 3-pin Terminal Block	
Audio	Line-out / Mic-in Phone Jack	
Operating Temperature	-25°C to 70°C (35W CPU); -25°C to 60°C (65W CPU)	
Dimensions (WxDxH)	137 x 340 x 240 mm	157 x 340 x 240 mm
Weight	4.21 Kg	4.26 Kg
2x PCIe x8	VCO-6122E	
2x PCI	VCO-6122P	
1x PCIe x16 & 1x PCI	VCO-6122C	
2x PCIe x1 & 1x PCIe x16		VCO-6133E
1x PCIe x16 & 2x PCI		VCO-6133C
3x PCI		VCO-6133P

[MORE INFO](#)

WCO SERIES

- Intel® 7th Gen. Intel® Core™ i5 / 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



	IP65/IP67 Waterproof System with Intel® Kaby Lake-U processor
Model	WCO-3400
CPU Support	Intel® 7 th Gen. (Kaby Lake-U) Processor Core™ i5-7300U, Core™ i3-7100U
Memory	1x DDR4-1866/2133MHz SO-DIMM, up to 16GB
Graphic Output	1x VGA (Waterproof connector)
LAN	2x GbE RJ45 (Support Wake-on-LAN and PXE) by M12 X-Code 8-pin
USB	1x USB 3.0 (Waterproof connector), 2x USB 2.0 by M12 D-Code 8-pin
Serial	1x RS-232/422/485 by M12 D-Code 8-pin
Storage	1x internal 2.5" SATA HDD Bay with RAID 0, 1 support, 1x mSATA (shared by 1x Mini PCI Express)
Internal Expansion Slot	2x Full-size mini-PCIe
Power	9-50 VDC, M12 A-code 4-pin
Operating Temperature	-40 °C to 70 °C
Dimensions (WxDxH)	231 x 292 x 56.5 mm
Weight	4.18KG
IP65	WCO-3400
IP67	WCO-3400-IP67

GPU SERIES

C&T's Industrial GPU Computing System is the ideal solution for Machine Vision, Edge Computing, Traffic Vision, Telemedicine, Intelligent Control, Deep Learning, Artificial Intelligence, Voice Recognition and any application workloads requiring intensive processing parallelism and performance driven analytics for Industry 4.0/IIoT applications.



	GPU Computing System with LGA-1151 socket for Intel® Kabylake & Skylake-S processors and Q170 PCH, GTX 1050Ti Integrated	GPU Computing System with LGA-1151 socket for Intel® Kabylake & Skylake-S processors and Q170 PCH, GTX 1050Ti Integrated
Model	RCO-6020-1050TI	VCO-6020-1050TI
CPU Support	Intel® 6 th /7 th Gen. (Kabylake & Skylake-S) Desktop Processor (Core™ i7-7700T/6700TE, Core™ i5-7500T/6500TE, Core™ i3-7101TE/6100TE, Pentium® G4400TE, or Celeron® G3900TE)	
Memory	2x DDR4-1866/2133MHz SO-DIMM, up to 32GB	
GPU	GTX 1050TI	
Graphic Output	2x DVI-I, 3x DisplayPort, 1x HDMI	
LAN	2x GbE RJ45 (Support Wake-on-LAN and PXE)	
USB	6x USB 3.0, 2x USB 2.0	4x USB 3.0
Serial & Digital I/O	4x RS-232/422/485 (2x internal), 16x 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)	2x Removable 2.5" SATA HDD Bay with RAID 0, 1, 5, 10 support, 2x mSATA (shared by 2x Mini PCIe), 1x CFast
Internal Expansion Slot	4x Full-size mini-PCIe (shared with 2x mSATA)	3x Full-size mini-PCIe (shared with mSATA)
Power	9-48 VDC, AT/ATX Select, 3-pin Terminal Block	9-50 VDC, AT/ATX Select, 3-pin Terminal Block
Audio	Speaker-out / Mic-in Phone Jack	Speaker-out / Mic-in Phone Jack
Operating Temperature	-25 °C to 60 °C	
Dimensions (WxDxH)	240 x 261 x 127 mm	137 x 256 x 240 mm
Weight	7.76 kg	7.71 kg
Universal Expansion Slot (front)	2	



	GPU Computing System with LGA-1151 socket for Intel® Kabylake & Skylake-S processors and Q170 PCH, 24V Power for GPU	GPU Computing System with LGA 1151 for Intel 8 th /9 th Gen Processor and Q370 PCH, RTX 2060 Super integrated	GPU Computing System with LGA 1151 for Intel 8 th /9 th Gen CPU & Q370 PCH, 1x PCIe x16, 24V Power for GPU
Model	VCO-6022C-2PWR	RCO-6120-2060S	VCO-6122C-2PWR
CPU Support	Intel® 6 th /7 th Gen. (Kabylake & Skylake-S) Desktop Processor (Core™ i7-7700T/6700TE, Core™ i5-7500T/6500TE, Core™ i3-7101TE/6100TE, Pentium® G4400TE, or Celeron® G3900TE)	8 th / 9 th Gen. Intel® CFL-R S Processor (LGA 1151, 65W/35W TDP) (Core™ i7-9700E/9700TE/8700T, Core™ i5-9500E/9500TE/8500T, Core™ i3-9100E/9100TE/8100T, Pentium® G5400T, or Celeron® G4900T)	
Memory	2x DDR4-1866/2133MHz SO-DIMM, up to 32GB	2x DDR4-2400/2666MHz SO-DIMM, up to 64GB (Un-buffered and Non-ECC)	
GPU	1x PCIe x16 for GPU	RTX 2060S	1x PCIe x16 for GPU
Graphic Output	1x DVI-I, 2x DisplayPort	1x DVI-I, 1x DVI-D, 1x HDMI, 3x DisplayPort	1x DVI-I, 2x DisplayPort
LAN	2x GbE RJ45 (Support Wake-on-LAN and PXE)	2x GbE RJ45 (Support Wake-on-LAN and PXE)	
USB	4x USB 3.0	4x USB 3.2 Gen 2 (10 Gbps) ; 5x USB 3.2 Gen 1 (5 Gbps) 2x USB 2.0 header (internal)	4x USB 3.2 Gen 2 (10 Gbps) 4x USB 3.2 Gen 1 (5 Gbps, internal)
Serial & Digital I/O	4x RS-232/422/485 (2x internal), 16x isolated digital I/O	4x RS-232/422/485 (2x internal), 16x isolated digital I/O	6x RS-232/422/485 (4x internal), 16x isolated digital I/O
Storage	2x Removable 2.5" SATA HDD Bay with RAID 0, 1, 5, 10 support, 2x mSATA (shared by 2x Mini PCIe), 1x CFast	4x 2.5" SATA HDD bay with RAID 0, 1, 5, 10 support (2x internal; 2x removable & hot-swappable), 1x mSATA (shared by 1x Mini PCIe), 2x M.2	
Internal Expansion Slot	3x Full-size mini-PCIe (shared with mSATA)	2x Full-size mini-PCIe (1 shared by 1x mSATA)	
Power	System: 9-50 VDC, GPU: 24 VDC, AT/ATX Select	9-48 VDC, GPU 18-34VDC, AT/ATX Select 3-pin Terminal Block ; 4-pin Terminal Block	
Audio	Speaker-out / Mic-in Phone Jack	Line-out / Mic-in Phone Jack	
Operating Temperature	-25 °C to 70 °C	-25 °C to 60 °C	
Certification		E-Mark, EN 50155, EN 50121-1, EN 50121-3-2	
Dimensions (WxDxH)	137 x 256 x 240 mm	240 x 261 x 79.2 mm	137 x 340 x 240 mm
Weight	7.83 kg	8.1 kg	7.83 kg
Universal Expansion Slot (front)		1 (by mini PCIe interface)	2 (by mini PCIe interface)

Performance and Storage at the Rugged Edge

AI Edge Inference Computer is among a new generation of edge computers. Featured with the latest technologies, it offers new benchmark performance for mission-critical data. The next generation of edge computers push capabilities of AI and machine learning for real-time intelligence for applications taking advantage of computer visions for industrial automation, surveillance, vehicle telematics, and metrology.



	Support 8 th / 9 th Gen. Intel® CFL-R S Processor (LGA 1151, 65W/35W TDP) (Core™ i7-9700E/9700TE/8700T, Core™ i5-9500E/9500TE/8500T, Core™ i3-9100E/9100TE/8100T, Pentium® G5400T, or Celeron® G4900T)	
Model	RCO-6131E-2U2-2060S	RCO-6141E-4U2C-2060S
Memory	2x 260-pin DDR4-2400/2666MHz SO-DIMM, up to 64GB (Un-buffered and Non-ECC)	
GPU	RTX 2060S	
Graphic Output	1x DVI-I, 1x DVI-D, 1x HDMI, 3x DisplayPort	
LAN	2x GbE RJ45 (Support Wake-on-LAN and PXE)	
USB, Serial, & Digital I/O	4x USB 3.2 Gen 2 (10 Gbps), 5x USB 3.2 Gen 1 (5 Gbps), 2x USB2.0 header (internal), 6x RS-232/422/485 (2x internal), 16x isolated digital I/O	
SATA Storage	4x 2.5" SATA HDD bay with RAID 0, 1, 5, 10 support (2x internal; 2x removable & hot-swappable), 1x mSATA (shared by 1x Mini PCIe)	4x 2.5" SATA HDD bay with RAID 0, 1, 5, 10 support (2x internal; 2x removable & hot-swappable), 1x mSATA (shared by 1x Mini PCIe)
NVMe Storage	1x NVMe M.2 M Key 2x Bay Hot-swappable U.2 NVMe SSD (15mm) *Patented NVMe drives trays are toolless and hot-swappable	1x NVMe M.2 M Key 1x Removable Cannister Module with 2.5" 4 Bay U.2 NVMe SSD (7mm) *Patented NVMe drives trays are toolless and hot-swappable
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 and 4-pin Terminal Block	
Audio	Line-out / Mic-in Phone Jack	
Operating Temperature	-25°C to 70°C (35W CPU) ; -25°C to 60°C (65W CPU)	
Certification	E-Mark, EN 50155, EN 50121-1, EN 50121-3-2	
Dimensions (WxDxH)	261 x 240 x 148 mm	261 x 240 x 168 mm
Weight	7.5 kg	9.9 kg
Universal expansion slot	1 (by mini PCIe interface)	
PCI Express	1x PCIe x4 (x1 Lane)	
Proprietary Module Expansion	Up to 1x Module • DTB-D10G • DTB-M2BK • DTB-4ETH • DTB-4ETH-PWR • DTB-4ETH-M12 • DTB-4ETH-PWR-M12	



	Support 8 th / 9 th Gen. Intel® CFL-R S Processor (LGA 1151, 65W/35W TDP) (Core™ i7-9700E/9700TE/8700T, Core™ i5-9500E/9500TE/8500T, Core™ i3-9100E/9100TE/8100T, Pentium® G5400T, or Celeron® G4900T)		
Model	RCO-6141E-8U2C-SWR	RCO-6140-8U2C-HWR	VCO-6131E-4M2
Memory	2x 260-pin DDR4-2400/2666MHz SO-DIMM, up to 64GB (Un-buffered and Non-ECC)		
GPU	0	0	RTX 2060S
Graphic Output	1x DVI-I, 2x DisplayPort		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 (10 Gbps), 5x USB 3.2 Gen 1 (5 Gbps), 2x USB2.0 header (internal), 6x RS-232/422/485 (2x internal), 16x isolated digital I/O	4x USB 3.2 Gen 2 (10 Gbps) ; 5x USB 3.2 Gen 1 (5 Gbps) ; 2x USB 2.0 header (internal), 4x RS-232/422/485 (2x internal), 16x isolated digital I/O	
SATA Storage	4x 2.5" SATA HDD bay with RAID 0, 1, 5, 10 support (2x internal; 2x removable & hot-swappable), 1x mSATA (shared by 1x Mini PCIe)		4x 2.5" SATA HDD bay with RAID 0, 1, 5, 10 support (2x internal; 2x removable & hot-swappable), 1x mSATA (shared by 1x Mini PCIe)
NVMe Storage	1x NVMe M.2 M Key 2x Removable Cannister Modules with 2.5" 4 Bay U.2 NVMe SSD (8x -7mm U.2) *Patented NVMe drives trays are toolless and hot-swappable *Software RAID Available	1x NVMe M.2 M Key 2x Removable Cannister Modules with 2.5" 4 Bay U.2 NVMe SSD (8x -7mm U.2) *Patented NVMe drives trays are toolless and hot-swappable *Hardware RAID Available	1x NVMe M.2 M Key 4x Bay Hotswappable M.2 NVMe Drive trays (M Key, NVMe PCIe x4=, 2280) *Patented NVMe drives trays are toolless and hot-swappable
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 and 4-pin Terminal Block	9-48 VDC, GPU: 18-34 VDC, AT/ATX Select, 3-pin Terminal Block	
Audio	Line-out / Mic-in Phone Jack		
Operating Temperature	-25°C to 70°C (35W CPU) ; -25°C to 60°C (65W CPU)		-25°C to 60°C (65W / 35W CPU)
Certification	E-Mark, EN 50155, EN 50121-1, EN 50121-3-2		
Dimensions	261 x 240 x 168 mm	261 x 240 x 168 mm	157 x 340 x 240 mm
Weight	9.9 kg		9.5 kg
Universal expansion slot	1 (by mini PCIe interface)		
PCI Express	1x PCIe x4 (1-lane)	1x PCIe x16 (x8 lane)	1x PCIe x4 (1-lane), 1x PCIe x16 (8-lane) for GPU card & 4x M.2 PCIe x2
Proprietary Module Expansion	Up to 1x Module • DTB-D10G • DTB-M2BK • DTB-4ETH • DTB-4ETH-PWR • DTB-4ETH-M12 • DTB-4ETH-PWR-M12		

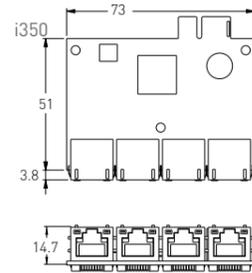


ETHERNET MODULE SERIES

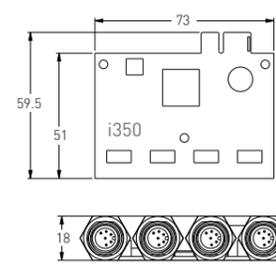
C&T provides ethernet daughterboard modules that integrate easily into C&T embedded and edge computers through standard PCIe protocols. These flexible add-in modules provide additional ethernet I/O ports and scalable connectivity for IoT deployments that require ethernet connections in multiple RJ45 and M12 locking connectors. Both RJ45 and M12 locking connector modules can also provide PoE+ (IEEE 802.3at) for data and power through single cable. These add-in daughterboard modules complement our fanless design architecture in order to provide mission-critical reliability and connectivity for a variety of IoT applications. Popular IoT workloads that leverage these add-in ethernet modules include: security and surveillance, kiosks, railway, vehicle telematics, and industrial automation. Please consult our embedded experts to help select the best module for your IoT demands.



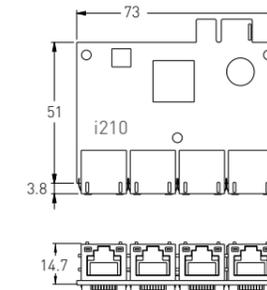
DTB-4ETH
<ul style="list-style-type: none"> • Intel® Ethernet Controller I350 • 1x PCIe x4 Gold finger (x4 Lane) • 4x 1GbE LAN, RJ45 Port • Support Power over Ethernet by an optional PoE module



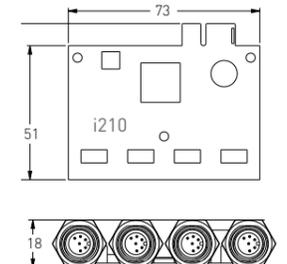
DTB-4ETH-M12
<ul style="list-style-type: none"> • Intel® Ethernet Controller I350 • 1x PCIe x4 Gold finger (x4 Lane) • 4x 1GbE LAN, M12 Port • Support Power over Ethernet by an optional PoE module



DTB-4LAN
<ul style="list-style-type: none"> • 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-M12
<ul style="list-style-type: none"> • Intel® Ethernet Controller I210-AT • 1x PCIe x1 Gold finger • 4x 1GbE LAN, M12 Port • Support Power over Ethernet by an optional PoE module



DTB-D10G	DTB-M2BK	DTB-4ETH-PWR
<ul style="list-style-type: none"> • Intel® Ethernet Controller X710-AT2 • 1x PCIe x1 Gold finger (x4 Lane) • 2x 10GbE LAN, RJ45 Port 	<ul style="list-style-type: none"> • 1x PCIe x1 Gold finger (x4 Lane) • 2x SIM slot • 1x SIM switch • Support 5G Module by M.2 B Key (3042, 3052) 	<ul style="list-style-type: none"> • up to 25.2 watt per port • Complies with IEEE 802.3at

DTB-4ETH-PWR-M12	DTB-4LAN-PWR	DTB-4LAN-PWR-M12
<ul style="list-style-type: none"> • up to 25.2 watt per port • Complies with IEEE 802.3at 	<ul style="list-style-type: none"> • up to 25.2 watt per port • Complies with IEEE 802.3at 	<ul style="list-style-type: none"> • up to 25.2 watt per port • Complies with IEEE 802.3at

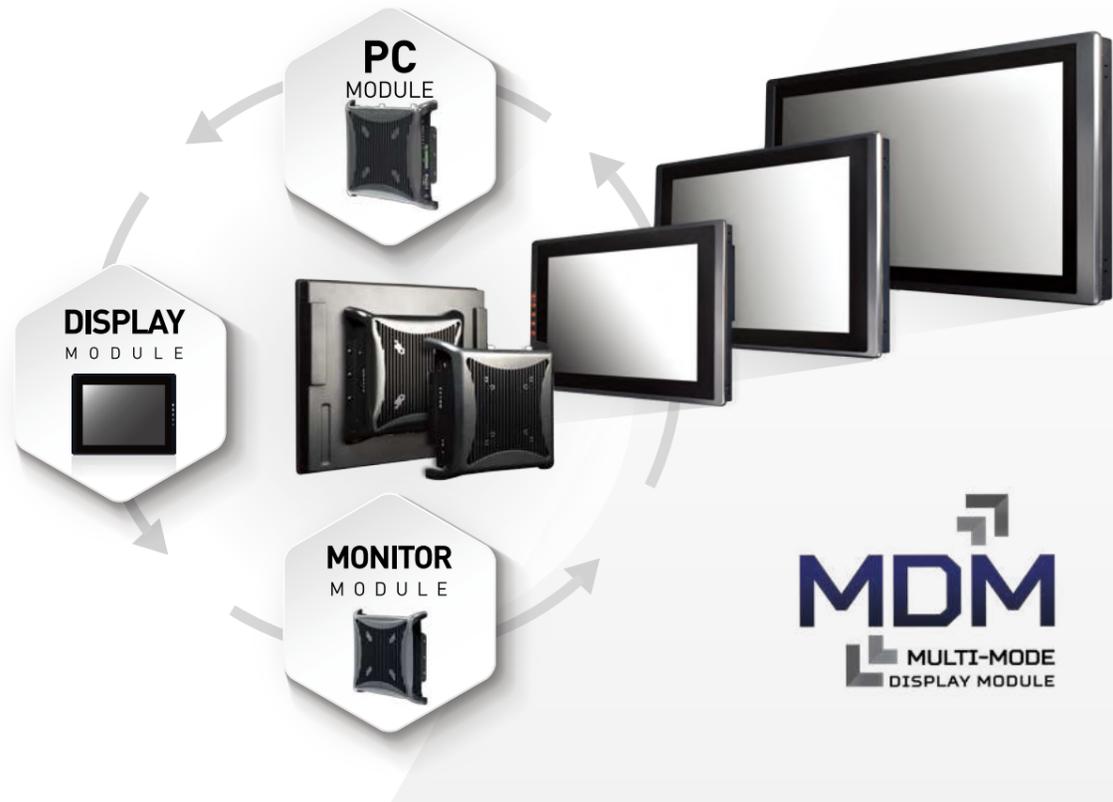
COMPATIBLE LIST	DTB-D10G	DTB-M2BK	DTB-4ETH DTB-4ETH-PWR
RCO-3000			
RCO-3400			
RCO-3700	V		V
ACO-3000			
RCO-6000			
ACO-6000	V		V
RCO-6100	V	V	V

COMPATIBLE LIST	DTB-4ETH-M12 DTB-4ETH-PWR-M12	DTB-4LAN DTB-4LAN-PWR	DTB-4LAN-M12 DTB-4LAN-PWR-M12
RCO-3000		V	V
RCO-3400		V	V
RCO-3700	V		
ACO-3000		V	V
RCO-6000		V	V
ACO-6000	V		
RCO-6100	V		

INDUSTRIAL DISPLAY SYSTEMS

C&T OWN PATENT FOR INDUSTRIAL DISPLAY SYSTEM

C&T's Industrial display system is based on modularized design concept which offers widely configuration. More flexible and scalable.



C&T INDUSTRIAL DISPLAY SYSTEMS

PRODUCT FAMILY

The product family overview shows four main categories of industrial display systems:

- System Module**: Includes PC400 Series (Kabylake-U), PC300 Series (Broadwell-U), PC100 Series (Bay Trail), MX200 Series, and MX100 Series.
- Panel PC**: Includes VIO-200/PC400 Series (Kabylake-U Thin Frame), VIO-200/PC300 Series (Broadwell-U Thin Frame), SIO-200 (Bay Trail), and WIO-W221C (Kabylake-U).
- Display Module**: Includes VIO-200 Series (Thin Frame) and VIO-200/PC100 Series (Bay Trail Thin Frame).
- Touch Monitor**: Includes VIO-200/MX100 Series (Thin Frame).



Key features and benefits of the industrial display system:

- Scalability in Panel Sizes**: 10.4" / 12.1" / 15" / 15.6" / 17" / 19" / 21.5" / 4:3 / 16:9
- Flexibility in Touch Screen**: Resistive Touch, Capacitive Touch
- Different Frame Options**: Standard Frame, Thin Frame
- Different System Options**: PC Modules, Monitor Modules
- 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.

VIO-200/PC100 SERIES

- 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 in 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
- Aluminum Die-casting Front Frame
- Front Panel IP65 Rating

VIO-200/PC300 SERIES

- 5th Generation Intel® Core i5/i3/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 3.0, 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



	Thin Frame Industrial Panel PC based on Intel® Bay Trail processors	Thin Frame Industrial Panel PC based on Intel® Bay Trail processors and with two universal I/O bracket				
Model	VIO-200/PC100	VIO-200/PC110				
CPU Onboard	Intel® Celeron® J1900					
Memory	1x 204-pin DDR3L-1066/1333 SO-DIMM, up to 8GB					
Graphic Output	1x VGA, 1x DisplayPort					
LAN	2x GbE RJ45 (Support Wake-on-LAN and PXE)					
USB, Serial, & Digital I/O	1x USB 3.0, 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)					
Internal Expansion Slot	1x Full-size Mini PCIe Socket with USIM Socket (PCIe + USB + SATA) 1x Full-size Mini PCIe Socket with USIM Socket (PCIe + USB)					
Power	9-50 VDC, AT/ATX Select, 3-pin Terminal Block					
Audio	Line-out / Mic-in Phone Jack					
Operating Temperature	-10 °C to 60 °C -10 °C to 50 °C (19" Panel PC only)					
LCD Size	<table border="1"> <tr> <td>4:3</td> <td>12.1" / 15" / 17" / 19"</td> </tr> <tr> <td>16:9</td> <td>15.6" / 21.5"</td> </tr> </table>		4:3	12.1" / 15" / 17" / 19"	16:9	15.6" / 21.5"
4:3	12.1" / 15" / 17" / 19"					
16:9	15.6" / 21.5"					
Touch Type	Resistive 5-wire Touch / Projected Capacitive Touch					
Universal Expansion Slot	0	2				



	Thin Frame Industrial Panel PC based on Intel® Broadwell-U processors	Thin Frame Industrial Panel PC based on Intel® Broadwell-U processors with one PCI or PCIe x4 expansion slot				
Model	VIO-200/PC300	VIO-200/PC311x				
CPU Onboard	Intel® Core™ i5-5350U, i3-5010U, Celeron® 3765U					
Memory	1x 204-pin DDR3L-1333/1600 SO-DIMM, up to 8GB					
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	3x USB 3.0, 1x 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)					
Internal Expansion Slot	2x Full-size mini-PCIe					
Power	9-48 VDC, AT/ATX Select, 3-pin Terminal Block					
Audio	Speaker-out / Mic-in Phone Jack					
Operating Temperature	-10 °C to 60 °C -10 °C to 50 °C (19" Panel PC only)					
LCD Size	<table border="1"> <tr> <td>4:3</td> <td>12.1" / 15" / 17" / 19"</td> </tr> <tr> <td>16:9</td> <td>15.6" / 21.5"</td> </tr> </table>		4:3	12.1" / 15" / 17" / 19"	16:9	15.6" / 21.5"
4:3	12.1" / 15" / 17" / 19"					
16:9	15.6" / 21.5"					
Touch Type	Resistive 5-wire Touch / Projected Capacitive Touch					
Universal Expansion Slot	0 (VIO-200/PC300)	1				
1x PCIe x4		VIO-200/PC311E				
1x PCI		VIO-200/PC311P				

VIO-200/PC400 SERIES

- 7th Generation Intel® Core i5/i3 Processor onboard (KabyLake-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 support by VGA, DisplayPort, and LVDS
- Rich in I/O Features with up to 6x RS-232/422/485, 4x USB 3.0, 2x Full-size Mini PCIe, 2x LAN, 8x DI & 8x DO, CFast
- Compatible with All C&T VIO Series Display Module
- Aluminum Die-casting Front Frame
- Front Panel IP65 Rating



	Thin Frame Industrial Panel PC based on Intel® KabyLake-U processors	Thin Frame Industrial Panel PC based on Intel® KabyLake-U processors with 2x universal I/O bracket				
Model	VIO-200/PC400	VIO-200/PC410				
CPU Onboard	Intel® 7 th Gen. (KabyLake-U) Processor Core™ i5-7300U, 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 3.0, 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 mSATA)					
Internal Expansion Slot	2x Full-size Mini PCIe					
Power	9-50 VDC, AT/ATX Select, 3-pin Terminal Block					
Audio	Line-out / Mic-in Phone Jack					
Operating Temperature	-10 °C to 60 °C -10 °C to 50 °C (19" Panel PC only)					
LCD Size	<table border="1"> <tr> <td>4:3</td> <td>12.1" / 15" / 17" / 19"</td> </tr> <tr> <td>16:9</td> <td>15.6" / 21.5"</td> </tr> </table>		4:3	12.1" / 15" / 17" / 19"	16:9	15.6" / 21.5"
4:3	12.1" / 15" / 17" / 19"					
16:9	15.6" / 21.5"					
Touch Type	Resistive 5-wire Touch / Projected Capacitive Touch					
Universal Expansion Slot	0	2				

VIO-200/MX100 or MX200 SERIES

- 12.1" ~ 21.5" Thin Frame Full Range Touch Monitors
- Projected Capacitive and 5-wire Resistive Touchscreen Available
- 9 to 48 VDC Wide Range Power Input
- Aluminum Die-casting Front Frame
- Front Panel IP65 Rating



	Thin Frame Industrial Touch Monitor					
Model	VIO-200/MX100	VIO-200/MX200 New				
Touch Type	Resistive / Capacitive Touch					
VGA Input	1x VGA Input					
DVI-D / HDMI	1x DVI-D Input	1x HDMI Input (optional)				
DisplayPort Input	1x DisplayPort Input					
USB 2.0 Input	1x USB 2.0 Input					
COM Port Input	1x COM Port Input / Resistive					
Audio Input	1x Audio Input					
Power	9-48 VDC, AT/ATX Select, 3-pin Terminal Block					
Operating Temperature	-10 °C to 60 °C -10 °C to 50 °C (19" Touch Monitor only)					
LCD Size	<table border="1"> <tr> <td>4:3</td> <td>10.4" / 12.1" / 15" / 17" / 19"</td> </tr> <tr> <td>16:9</td> <td>15.6" / 21.5"</td> </tr> </table>		4:3	10.4" / 12.1" / 15" / 17" / 19"	16:9	15.6" / 21.5"
4:3	10.4" / 12.1" / 15" / 17" / 19"					
16:9	15.6" / 21.5"					

PC100 SERIES

- 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 3.0, 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
- Compatible with All C&T VIO Series Display Module
- Aluminum Die-casting Front Frame
- Front Panel IP65 Rating

PC300 SERIES

- 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 3.0, 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
- Compatible with All C&T VIO Series Display Module
- Aluminum Die-casting Front Frame
- Front Panel IP65 Rating



	PC Module based on Intel® Bay Trail processors	PC Module based on Intel® Bay Trail processors and with two universal I/O bracket	PC Module based on Intel® Broadwell-U processors	PC Module based on Intel® Broadwell-U processors with one PCI or PCIe x4 expansion slot
Model	PC100	PC110	PC300	PC311x
CPU Onboard	Intel® Celeron® J1900		Intel® Core™ i5-5350U, i3-5010U, Celeron® 3765U	
Memory	1x 204-pin DDR3L-1066/1333 SO-DIMM, up to 8GB		1x 204-pin DDR3L-1333/1600 SO-DIMM, up to 8GB	
Graphic Output	1x VGA, 1x DisplayPort		1x VGA, 1x DisplayPort, 1x Dual Channel 24 bit LVDS	
LAN	2x GbE RJ45 (Support Wake-on-LAN and PXE)		2x GbE RJ45 (Support Wake-on-LAN and PXE)	
USB, Serial, & Digital I/O	1x USB 3.0, 3x USB 2.0, 6x RS-232/422/485 (w/ 2x internal), 16x isolated digital I/O		3x USB 3.0, 1x USB 2.0, 4x RS-232/422/485 (w/ 2x internal), 8x 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) 1x Full-size Mini PCIe Socket with USIM Socket (PCIe + USB)		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	0 (VIO-100/PC300)	1
1x PCIe x4				VIO-100/PC311E
1x PCI				VIO-100/PC311P

PC400 SERIES

- 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, 4x USB 3.0, 2x Full-size Mini PCIe, 2x LAN, 8x DI & 8x DO, CFast
- Wide Operating Temperature [-40°C to 70°C]
- Compatible with All C&T VIO Series Display Module
- Aluminum Die-casting Front Frame
- Front Panel IP65 Rating



	PC Module based on Intel® KabyLake-U processors	PC Module based on Intel® KabyLake-U processors with two universal I/O bracket
Model	PC400	PC410
CPU Onboard	Intel® 7 th Gen. (KabyLake-U) Processor Core™ i5-7300U, 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 3.0, 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 mSATA)	
Internal Expansion Slot	2x Full-size Mini PCIe	
Power	9-50 VDC, AT/ATX Select, 3-pin Terminal Block	
Audio	Line-out / Mic-in Phone Jack	
Operating Temperature	-40°C to 70°C	
Universal Expansion Slot	0	2



MONITOR MODULE

MX100 SERIES

MX200 SERIES

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



Monitor Module		
Model	MX100	MX200 Coming soon
VGA Input	1x VGA Input	
DVI-D / HDMI	1x DVI-D Input	1x HDMI Input (optional)
Display Port Input	1x DisplayPort Input	
USB 2.0 Input	1x USB 2.0 Input	
COM Port Input	1x COM Port Input (Resistive Touch Only)	
Audio Input	1x Audio Input	
Power	9-48 VDC, AT/ATX Select, 3-pin Terminal Block	
Operating Temperature	-10 °C to 60 °C	



VIO-100 SERIES



Model	VIO-110
LCD Size	10.4" (4:3)
Max. Resolution	800 x 600 (SVGA)
Brightness (cd/m2)	400
Contrast Ratio	700:1
LCD Color	16.2M
Pixel Pitch (mm)	0.264 (H) x 0.264 (V)
Viewing Angle (H-V)	160 / 130
Internal Speaker	AMP 5W + 5W
Touch Type	Resistive 5-wire Touch / Projected Capacitive Touch
Operating Temperature	-10°C to 60°C

VIO-200 SERIES

The Display Modules VIO-100 and VIO-200 series are compatible with PC modules PC300, PC200, and PC100 series and monitor modules MX100 series for different display sizes and touchscreens. These modules allow to be used for configuring, upgrading and maintaining your Panel PC or touch monitor.



Model	VIO-212 (H)	VIO-215 (H)	VIO-W215 (H)	VIO-217 (H)	VIO-219 (H)	VIO-W221 (H)
LCD Size	12.1" (4:3)	15" (4:3)	15.6" (16:9)	17" (4:3)	19" (4:3)	21.5" (16:9)
Max. Resolution	1024 x 768 (XGA)	1024 x 768 (XGA)	1920 x 1080 (Full HD)	1280 x 1024 (SXGA)		1920 x 1080 (Full HD)
Brightness (cd/m2)	500	350	400	350	350	300
	1000 nits (Optional)					
Contrast Ratio	700:1			800:1	1000:1	5000:1
LCD Color	16.2M		16.7M	16.7M		
Pixel Pitch (mm)	0.24 (H) x 0.24 (V)	0.297 (H) x 0.297 (V)	0.17925 (H) x 0.17925 (V)	0.264 (H) x 0.264 (V)	0.294 (H) x 0.294 (V)	0.248 (H) x 0.248 (V)
Viewing Angle (H-V)	160 / 160	170 / 160	160 / 140	170 / 160		178 / 178
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 70°C	-10°C to 60°C	-10°C to 50°C	-10°C to 60°C	



WIO-W221C SERIES

- 21.5" TFT FHD 16:9 LCD with Projected Capacitive Touch
- Support 7th Gen. Intel® Core™ i5 / i3 Processor
- 1x 260-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 3.0 (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



	21.5" 16:9 Full HD Capacitive Touch All-In-One IP66 Panel PC
Model	WIO-W221C
CPU Onboard	Intel® 7 th Gen. (Kaby Lake-U) Processor Core™ i5-7300U, Core™ i3-7100U
Memory	8GB DDR4 SODIMM
Graphic Output	1x Waterproof VGA
LAN	2x LAN by M12 X-Code 8-pin
USB & Serial	2x USB 3.0 (Waterproof connector), 1x RS-232/422/485 by M12 D-Code 8-pin
Storage	1x 128GB mSATA SSD
Internal Expansion Slot	1x Full-size Mini PCIe
Power	9-50 VDC, M12 A-code 4-pin
Operating Temperature	-10 °C to 60 °C
LCD Size	21.5" (16:9) Full HD
Brightness (cd/m2)	300 / 1000 (Optional)
Touch Type	Projected Capacitive Touch, 5 Points, 7H Surface Hardness

SIO-200 SERIES

- 12", 15", 15.6", 21.5" TFT FHD 16:9 LCD with resistive 5-wire / projected capacitive touch
- Intel® Celeron® processor J1900, 2.0 GHz
- 1x 4GB 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
- Full system IP66/IP69K with Stainless Steel SUS316 construction
- Touch Function ON/OFF Switch



	12.1" (4:3), Resistive / Capacitive Touch Stainless Steel Panel PC	15" (4:3), Resistive / Capacitive Touch Stainless Steel Panel PC	15.6" (16:9), Resistive / Capacitive Touch Stainless Steel Panel PC	21.5" (16:9), Resistive / Capacitive Touch Stainless Steel Panel PC
Model	SIO-212-J1900	SIO-215-J1900	SIO-W215-J1900	SIO-W221-J1900 SIO-W221-8365UE New
CPU Onboard	Intel® Celeron® Processor J1900, Quad Core, 2MB Cache, 2.0 GHz			
	Intel® Core™ i5-8365UE Processor 6M Cache, up to 4.10 GHz			
Memory	4GB DDR3L SODIMM			
LAN	1x LAN by M12 X-Code 8-pin			
USB & Serial	2x USB 2.0 by M12 A-code 8-pin, 1x RS-232/422/485 by M12 A-Code 8-pin, 1x LAN by M12 X-Code 8-pin			
Storage	1x 64GB mSATA SSD			
Internal Expansion Slot	1x Full-size Mini PCIe			
Power	AC iN 110V~240V 60Hz, M12 A-code 4-pin			
Operating Temperature	-20 °C to 60 °C			
LCD Size	12.1" (4:3) XGA	15" (4:3) XGA	15.6" (16:9) Full HD	21.5" (16:9) Full HD
LCD Brightness	600 nits	300 nits	450 nits	300 nits
	1000 nits (Optional)			
Touch Type	Resistive 5-wire Touch / Projected Capacitive Touch / 7H Surface Hardness			

INDUSTRIAL BOARDS

C&T industrial boards offers a wide range form factor from Mini-ITX, Micro ATX, 3.5" SBC, COM Express-Mini Size Module, COM Express-Compact Size Module, COM Express-Basic Size Module, and COM Express-Carrier Boards.

MOTHERBOARDS

PICO ITX SERIES



	Intel® Celeron® Processor J1900 (2.0GHz/4C/10W)
Model	CT-PBT01
Memory	1x 204-Pin DDR3L 1066/1333MHz SODIMM
BIOS	AMI 64Mbit SPI BIOS
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-232/422/485, 1x RS-232, 2x USB 2.0
Internal I/O	1x LVDS, 1x LVDS backlight, 1x RS-232/422/485, 1x RS-232, 2x USB 2.0, 1x SATA 3.0Gb/s, 1x Front panel audio, 1x 8-bit GPIO (4-in/4-out), 1x Front panel, 1x SMBus
Power	12V DC Input 1x 2-pin power connector
Operating Temperature	-10°C ~ 70°C
Dimension	100mm x 72mm

MOTHERBOARDS

3.5" SBC SERIES



	Support 8 th Gen. Intel® WL-UE Processor (15 TDP) Intel® Core™ i7-8665UE, i5-8365UE, i3-8145UE or Intel® Celeron® Processor 4305UE	Intel® Atom™ Processor E3845, Celeron® Processor J1900
Model	CT-DWL01	CT-DBT02
Memory	1x 260-Pin DDR4 2400MHz SODIMM slot. Max. up to 32GB	1 x 204-pin DDR3L SODIMM Msockets Non-ECC/unbuffered Data transfer rates up to 1333MT/s Memory size up to 4GB
BIOS	AMI uEFI 256MB SPI flash	AMI uEFI 8MB SPI Flash
Watchdog	Software Programmable Supports 1~255 sec. System Reset	H/W Reset, 0 – 255 steps Step = 1 sec. or 1 min
TPM	TPM 2.0 Through Infineon® SLB9665TT2.0 or Equivalent	TPM 1.2 supported (Optional)
Display Interface	1x DisplayPort, 1x LVDS & 1x HDMI & 1x EDP internal connector [optional]	1 x HDMI, 1 x VGA, 1 x LVDS
Rear I/O	4x USB 3.2 Gen 2, 2x RJ45 GbE LAN, 1x DP, 1x HDMI	2x RJ45 GbE LAN, 1x HDMI, 1x VGA, 1x RS232/422/485 COM, 1x USB2.0, 1x USB3.0
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	1 x 2-ch 24bit LVDS, 1 x SATA 2.0, 3 x RS-232/422/485, 4 x USB 2.0, 1 x Line-In, Line Out & Mic-In 1 x 8-bit GPIO, 1 x PS/2 keyboard mouse, 1 x microSD card socket, 1 x SIM card socket, 1 x FAN connector
Power	AT/ ATX 12V DC Input, 4-pin CPU P4 connector	DC +12V input,
Operating Temperature	-40°C ~ 70°C	-20°C ~ 70°C
Dimension	146mm x 102mm	

MOTHERBOARDS

MINI-ITX SERIES



	LGA 1151 socket supporting 6 th Gen Intel® Core™ i3/i5/i7 Desktop Processor, Intel® Core™ i7-6700TE / i5-6500TE / i3-6100TE
Model	CT-XSL01
Memory	2x 260-Pin DDR4 1866/2133MHz SODIMM
BIOS	AMI uEFI 128MB SPI flash
Watchdog	Software Programmable Supports 1~255 sec. System Reset
TPM	TPM 2.0 supported (optional)
Display Interface	1x DVI-D, 1x 2-ch 24-bit LVDS, 1x DisplayPort
Rear I/O	1x DVI-I, 1x DP, 1x HDMI, 1x RS-232/422/485, 4x USB 3.0, 2x USB 2.0, 2x RJ45, 1x Line-out, 1x Mic-in, 1xPS/2 KB/MS
Internal I/O	1x 2-ch 24-bit LVDS, 4x RS-232, 2x USB 3.0, 2x USB 2.0, 4 x SATA 6.0Gb/s, 1x Front panel audio, 1x 8-bit GPIO (4-in/4-out), 1x LPC 1x Front panel, 1x CPU fan 1x System fan
Power	ATX power, 2x12-pin and 2x2-pin power connector
Operating Temperature	0°C ~ 60°C
Dimension	170 mm x 170mm

MOTHERBOARDS

MICRO ATX SERIES



	LGA 1151 socket supporting 6 th Gen Intel® Core™ i3/i5/i7 Desktop Processor, Intel® Core™ i7-6700TE / i5-6500TE / i3-6100TE	Support 8 th /9 th Gen Intel® CFL-R S Processor (LGA 1151, 95W/65W/35W TDP), Intel® Core™ i7-9700E / i5-9500E / i3-9100E or Intel® Pentium® G5400T, G5400
Model	CT-MSL01	CT-MCL01
Memory	4x 288-Pin DDR4 1866/2133MHz DIMM	4x 288-Pin DDR4 2133/2400/2666MHz DIMM
BIOS	AMI uEFI 128MB SPI flash	AMI uEFI 256MB SPI flash
Watchdog	Software Programmable Supports 1~255 sec. System Reset	Software Programmable Supports 1~255 sec. System Reset
TPM	TPM 2.0 supported (optional)	TPM 2.0 supported (optional)
Display Interface	1x VGA, 1x DVI-D, 1x DisplayPort	1x VGA, 1x DVI-D, 2x DisplayPort (DP 1.2)
Rear I/O	1x VGA, 1x DVI-D, 1x DP, 1x HDMI, 2x RS-232/422/485, 4x USB 3.0, 2x RJ45 GbE LAN, 1x Line-in, 1x Line-out, 1x Mic-in	1x VGA, 1x DVI-D, 2x DP, 2x RS-232/422/485, 4x USB 3.2 Gen 2, 2x RJ45, 1x Line-in, 1x Line-out, 1x Mic-in
Internal I/O	4x RS-232, 2x USB 3.0, 6x USB 2.0, 4 x SATA 6.0Gb/s, 1x Front panel audio, 1x 8-bit GPIO (4-in/4-out), 1x PS/2 KB/MS 1x LPC, 1x Front panel 1x CPU fan, 2x System fan	4x RS-232, 1x USB 3.2 Gen 1, 7x USB 2.0, 6 x SATA 6.0Gb/s, 1x Front panel audio, 1x 8-bit DIO (4-in/4-out), 1x SPI header, 1x LPC, 1x Front panel, 1x CPU fan, 2x System fan
Power	ATX power, 2x12-pin and 2x2-pin power connector	
Operating Temperature	0°C ~ 60°C	0°C ~ 60°C
Dimension	244mm x 244mm	244mm x 244mm



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