

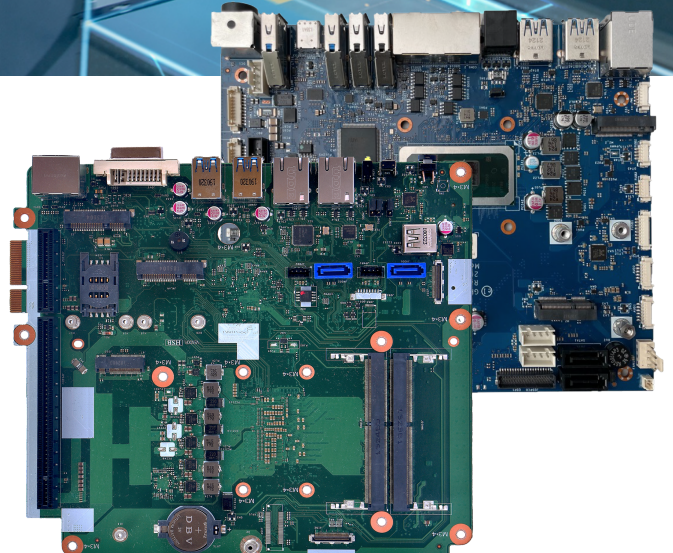


COMPAL GROUP IPC
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2022

INDUSTRIAL MOTHERBOARD SOLUTIONS

Product
Selection
Guide



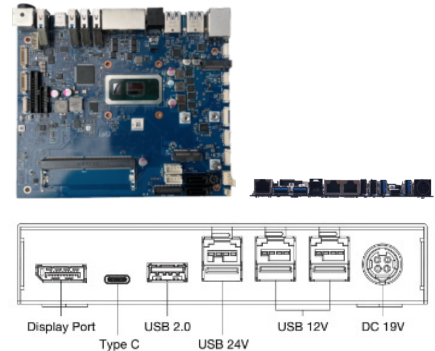
INDUSTRIAL MOTHERBOARD

Motherboard – Whiskey Lake

Fan-less

Rich I/O

Support USB-C



ITEM	SPECIFICATION
CPU	Intel® Whiskey Lake • Intel® Core™ i7-8665UE Processor (8M Cache, up to 4.40 GHz) • Intel® Core™ i5-8365UE Processor (6M Cache, up to 4.10 GHz) • Intel® Core™ i3-8145UE Processor (4M Cache, 3.90 GHz) • Intel® Celeron® Processor 4305UE (2M Cache, 2.00 GHz)
Support Screen Size	14~21"eDP
PCBA Dimension	149x169.5mm
System	Windows10 IOT
RAM	DDR4 2400, SO-DIMM, up to 16G
Storage	M.2, PCIe3.0 x4 and SATA3.0 for storage, up to 512GB
Connectivity	M.2, PCIe3.0 for WIFI or LTE module
Power	RTC Battery, CR2032 cable types
I/O & Expansion	1x Mini Din 4P for 19V DC Input 1x Type C for USB3.1, support PD and DP 1x RJ45 for LAN 1x RJ11 for DIO, Cash drawer 2x RJ48(10pin) for COM 2x USB 2.0 4x USB 3.1 2x Internal SATA Conn, SATAIII 6Gb/s, RAID 0, 1
Development Status	Ready to ship

(*All information contained in this document is subject to change without prior notice.)

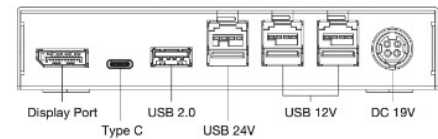
INDUSTRIAL MOTHERBOARD

Motherboard – Elkhart Lake

Fan-less

Rich I/O

Support USB-C



ITEM	SPECIFICATION
CPU	Intel® Elkhart Lake Celeron® Processor J6412 @ 2.0GHz, 1.5M Cache, up to 2.60 GHz
Support Screen Size	14~21"eDP
PCBA Dimension	169.5 x 130 mm
System	Windows10 IOT / Win 11 (64 bit)
RAM	DDR4 3200 SO-DIMM, up to 32GB
Storage	M.2 M key Socket (PCIe3.0 x2) and 1x SATAIII for storage
Connectivity	M.2 E key Socket (PCIe3.0 x1) for WIFI module
Power	RTC Battery, CR2032 cable types
Edge I/O	1x Mini Din 4P connector for 19V DC Input 1x Type C connector for USB3.1 Gen. 1, support PD and DP 1x RJ45 for LAN 1x RJ11 for DIO, Cash drawer 2x RJ48(10pin) connector for COM (Support DC+0/5/12v by BIOS setting) 3x USB 2.0 3x USB 3.1
I/O & Expansion	1x VGA pin header 1x COM3 & 1x COM 4 pin header 1x LPT pin header 1x PS2 pin header USB 2.0 pin header (5 ports) 1x M.2 E key for WiFi 1x M.2 M key for PCIe SSD 1 x SATA port
Development Status	Ready to ship in Q3/2022

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INDUSTRIAL MOTHERBOARD

Motherboard – Apollo Lake

Fan-less

Rich I/O

Mini PCIe

Low Power Consumption

Wide Voltage: 12-24V DC-in



ITEM	SPECIFICATION
CPU	Intel® Apollo Lake Celeron J3455 Quad Core CPU 1.50 GHz
Support Screen Size	1 x 10" MIPI ; 1 x 15" eDP ; 1 x 21" LVDS by BOM option
PCBA Dimension	140x140mm
System	2019 Windows 10(64 bit)
RAM	1 x 260-pin DDR3L 1866 4GB RAM SO-DIMM (up to 8GB per socket)
Storage	32GB eMMC on board ; 1 x M.2 Type B 3042
Connectivity	1 x M.2 Key E 2230 support WiFi module (AW-CB375NF)
Power	1 x DC Jack lockable AT/ATX ; 1 x 4 pin, pitch wafer 2.50mm connector ; 1 x CR2032
External I/O	1 x DC jack 1 x Power button 1 x LAN 2 x USB3.0 1 x HDMI 1 x Headphone Jack
Internal I/O	1 x Micro USB 1 x USB2.0 1 x DMIC ; 2 x I2C 1 x M.2 B-Key(3042) 1 x M.2 E-Key(2230) 1 x GPIO 1 x AMIC 1 x Speaker 2 x RS232/RS485 1 x Micro SIM 1 x Micro SD slot
Development Status	Ready to ship

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INDUSTRIAL MOTHERBOARD

Motherboard – RK3568

Fan-less

Rich I/O

Mini PCIe

Support 2K4K

Wide Voltage: 12-24V DC-in



ITEM	SPECIFICATION
CPU	RK3568 ARM quad-core Cortex-A55 2.0 GHz
Support Screen Size	1 x 7" MIPI ; 1 x 10" MIPI ; 1 x 21" LVDS by BOM option
PCBA Dimension	140x100mm
System	Android 11
RAM	Onboard 2/4GB DDR4
Storage	16/32GB eMMC on board ; 1 x M.2 Type B 3042
Connectivity	1 x M.2 1216 onboard WiFi (AW-CM276NF)
Power	1 x DC Jack lockable AT ; 1 x 4 pin, pitch wafer 2.00mm connector ; 1 x CR2032
External I/O	1 x DC jack 1 x Reset button 1 x LAN 2 x USB3.0 1 x HDMI 2.0 1 x Headphone Jack
Internal I/O	1 x USB2.0 1 x DMIC 2 x I2C 1 x M.2 B-Key(3042) 1 x GPIO 1 x AMIC 1 x Speaker 2 x RS232/RS485 1 x Micro SD slot 1 x Backlight 1 x USB Touch
Development Status	Ready to ship in Q2/2022

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INDUSTRIAL MOTHERBOARD

Motherboard – Kaby Lake

Fan-less

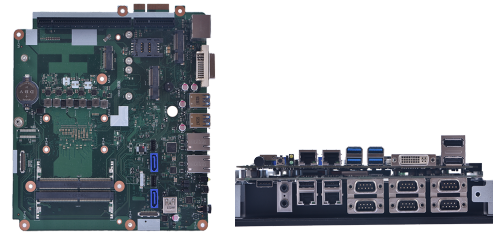
Support 2K4K

Wide Voltage: 9 -32V DC-in

Rich I/O

Wide temp 0-50°C

Support Multiple Displays



ITEM	SPECIFICATION
CPU	Intel® Kaby Lake Core SoC i7/i5/i3 BGA Processor
Support Screen Size	- 2 x DP++ 1.4 : 4096 x 2304@60 Hz - 1 x DVI: 4096 x 2304@60 Hz
PCBA Dimension	208.6 x 194.4 mm
System	Windows10 IOT, Linux
RAM	2 x DDR4 2400 SO-DIMM, up to 32GB per socket
Storage	1 x M.2 Type 2280 ; 2 x SATAIII
Power	1 x four-pin connector, 9-32VDC
External I/O	4 x LAN 4 x USB 3.0 3 x USB 2.0 1 x Line out 1 x Mic in 2 x DP , 1 x DVI 6 x COM(2 x RS232, 4 x RS232/422/485)
Internal I/O	1 x USB 2.0 2 x SATA Power 2 x SATA 1 x M.2 Type 2280 1 x PCIE expansion , 1 x PCI expansion
Development Status	Ready to ship

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INDUSTRIAL MOTHERBOARD

Motherboard – Comet Lake

Fan-less

Rich I/O

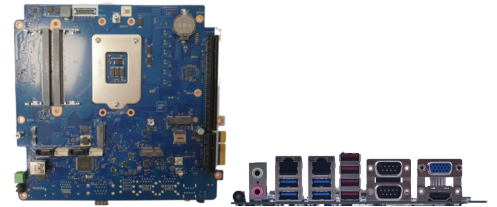
Mini PCIe

Wide Voltage: 9 -32V DC-in

Support 2K4K

Wide temp -10-60°C

Support Multiple Displays



ITEM	SPECIFICATION
CPU	Intel® Comet Lake Core SoC i9/i7/i5/i3 Processor
Support Screen Size	- 1 x DP++ 1.4 : 4096 x 2304@60 Hz - 1 x HDMI: 4096 x 2160@30 Hz - 1 x VGA
PCBA Dimension	208.6 x 194.4 mm
System	Windows10 IOT, Linux
RAM	2 x DDR4 3200 SO-DIMM, up to 32GB per socket
Storage	1 x M.2 Type 2280 ; 2 x SATAIII
Power	1 x four-pin connector, 9-32VDC
External I/O	2 x LAN 8 x USB 3.0 1 x Line out 1 x Mic in 1 x DP 1 x HDMI 1 x VGA 6 x COM(4 x RS232, 2 x RS232/422/485)
Internal I/O	1 x USB 2.0 2 x SATA Power 2 x SATA 1 x M.2 Type 2280 1 x PCIE expansion 1 x PCI expansion
Development Status	Ready to ship in Q3/2022

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