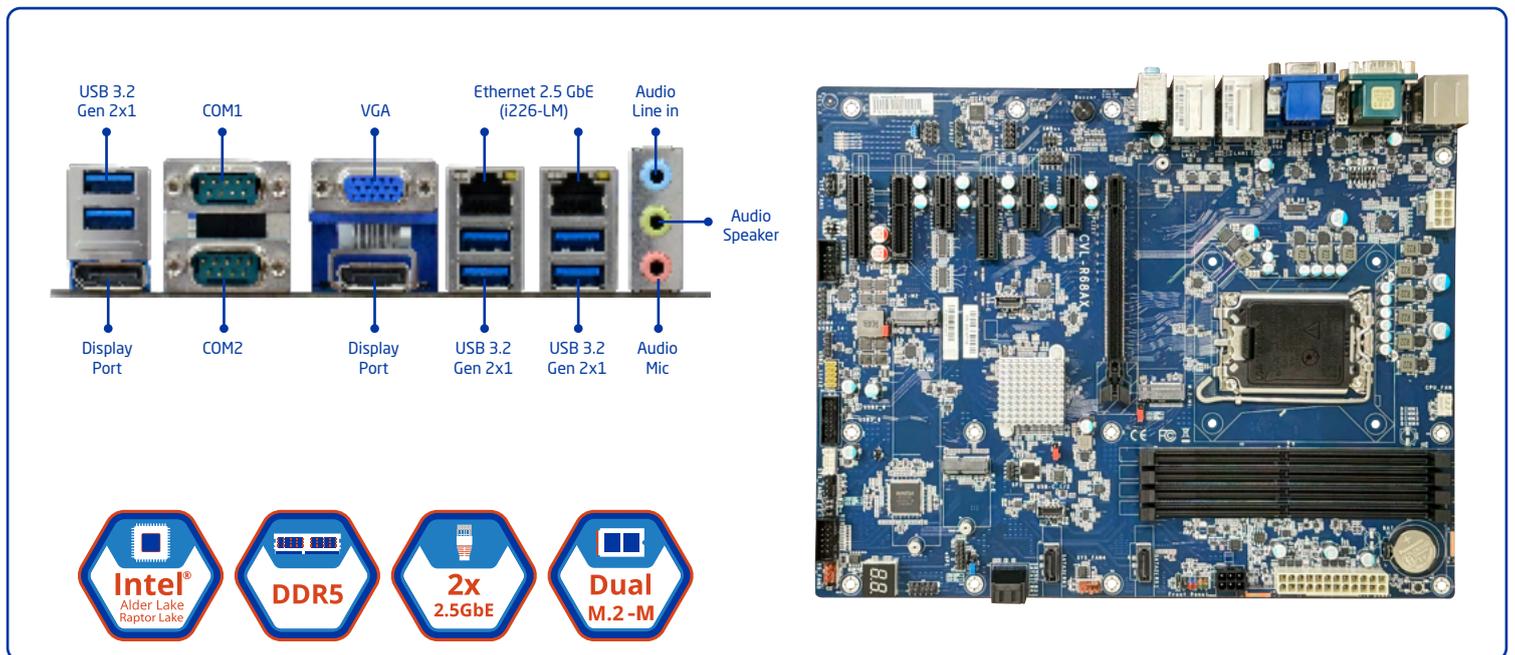


# INDUSTRIAL MOTHERBOARDS R68AX

## PRODUCT FEATURES

- ✓ Intel® R680E Chipset
- ✓ Intel® 12th, 13th, 14th Gen Core & Bartlett Lake (Series 2)
- ✓ DDR5 ECC or non-ECC memory up to 192GB
- ✓ Supports PCIe 5.0
- ✓ VGA and dual DP++ video support
- ✓ Two 2.5GbE i226 Ethernet
- ✓ Three M.2 connectors, twelve USB ports including one USB 3.2 Gen 2x2
- ✓ 24pin + 8pin ATX 12V power connectors
- ✓ TPM 2.0



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DS-R68AX-05 03/11/2026

# INDUSTRIAL MOTHERBOARD R68AX

The R68AX is based on the Intel R680E chipset. This industrial motherboard supports DDR5 ECC or non-ECC memory, 12 USB ports, PCIe 5.0. This long-life motherboard is ideal for manufacturing, oil and gas, and other industrial environments. All Corvalent products are built with longevity and performance in mind.

## TECHNICAL SPECIFICATIONS

<b>Form Factor</b>	ATX	12" x 9.6" (305mm x 244mm)
<b>Chipset/Processor</b>	Chipset	Intel® R680E
	CPU	Intel® 12th, 13th, 14th & Bartlett Lake (Series), up to 125W
	Speed	N/A
	TDP	N/A
	Core/Threads	N/A
<b>BIOS</b>	BIOS	AMI® UEFI BIOS
<b>Expansion Slots</b>	PCIe	1 x PCIe16 (5.0) (with bifurcation support)
		2 x PCIe4 (4.0)
		1 x PCIe4 (3.0)
		3 x PCIe1 (4.0)
<b>Memory</b>	DIMM	Dual Channel DDR5 up to 4400MHz, ECC or non-ECC U-DIMMS, up to 192GB
<b>Graphics</b>	VGA	1
	LVDS	N/A
	DP++	2
<b>Internal Connectors</b>	USB	1 x 3.2 Gen 2x1 (with 100W PD and RGB)
		1 x 3.2 Gen 2x2
		1 x 3.2 Gen 1x1 (Supports 1x USB-A port)
		3 x 2.0
	Audio	1 x front audio
	SATA	4 x (RAID Support, 2x powered)
	M.2	3 x (2 x M.2-M 22110, 1 x M.2-E 2230) one shared with PCIe4
	Serial Ports	2 x (1 x RS-232/422/485, 1 x TTL-level)
	GPIO	1
	Power	1 x 24-pin ATX, 1 x 8-pin ATX 12V
Other	1 x POST, 1 x LPC, 5 x PWM fan support, 1 x Chassis Intrusion	
<b>Rear I/O</b>	USB	6 x 3.2 Gen2x1 (USB-A)
	Ethernet	2 x 2.5GbE (i226-V / i226-LM)
	Serial Ports	2 x (RS-232/422/485)
	Audio	1 x microphone jack
		1 x speaker out jack
		1 x line-in jack
Power	N/A	
<b>Security</b>	TPM	NPCT760A or PTT
<b>Watchdog</b>	Programmable	1-255 seconds
<b>Environmental</b>	Operating Temp.	0~60°C (32~140°F)
	Non Operating Temp	-40~75°C
	Operating Humidity	0%-90% relative humidity, non-condensing
<b>Compliance</b>	Certifications	FCC, CE, RoHS, LVD, REACH (Design to comply)
<b>Ordering</b>	Part Number	R68AX



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