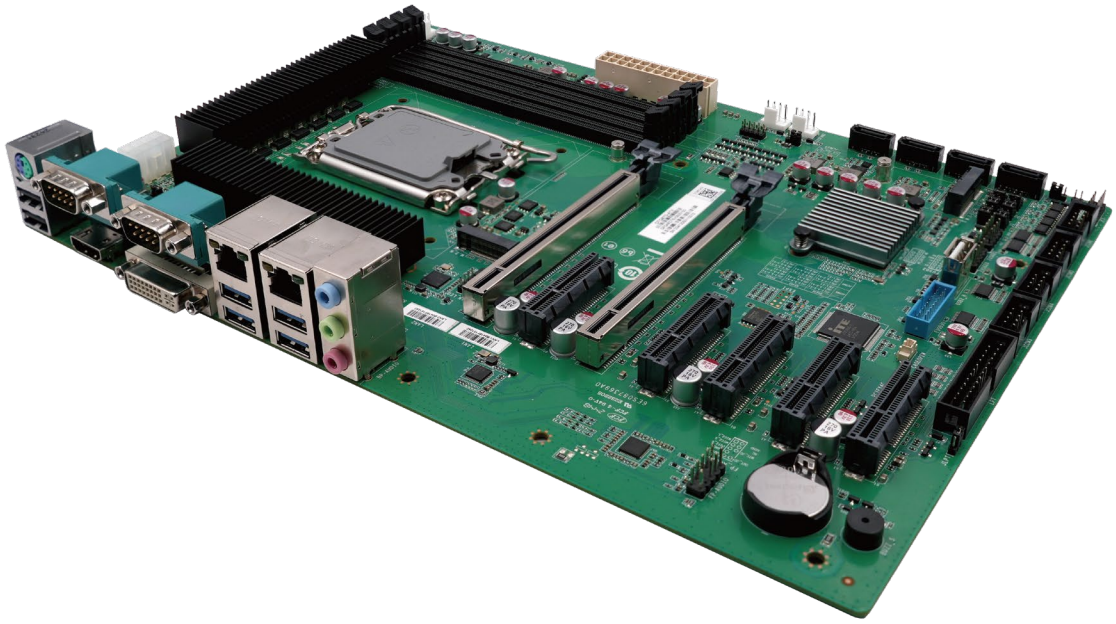
PRODUCT DATASHEET
HW Rev.: V0.5

ARD-75

Intel® Arrow Lake Desktop Series Core™ Ultra Processor with Z890 Chipset based ATX Motherboard



Features

- CPU: Intel® Arrow Lake Desktop Series Processor
- NPU: Intel® AI Boost
- Memory: 4x UDIMM DDR5 Up to 192GB
- Display: Integrated Graphics display via HDMI+DVI-I(VGA)
- Ethernet Controllers: 1xIntel i219+1xIntel i210
- Storage: 1xM.2 for NVMe/SATA SSD, 4xSATA
- Expansion: M.2 for Wi-Fi, 1*PCIe1X, 2*PCIe8X, 4*PCIe4X
- Power: ATX_24PIN + 2*8PIN

intel prestige partner Builder

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MAXIMIZING YOUR COMPUTING PRODUCTIVITY

Introduction

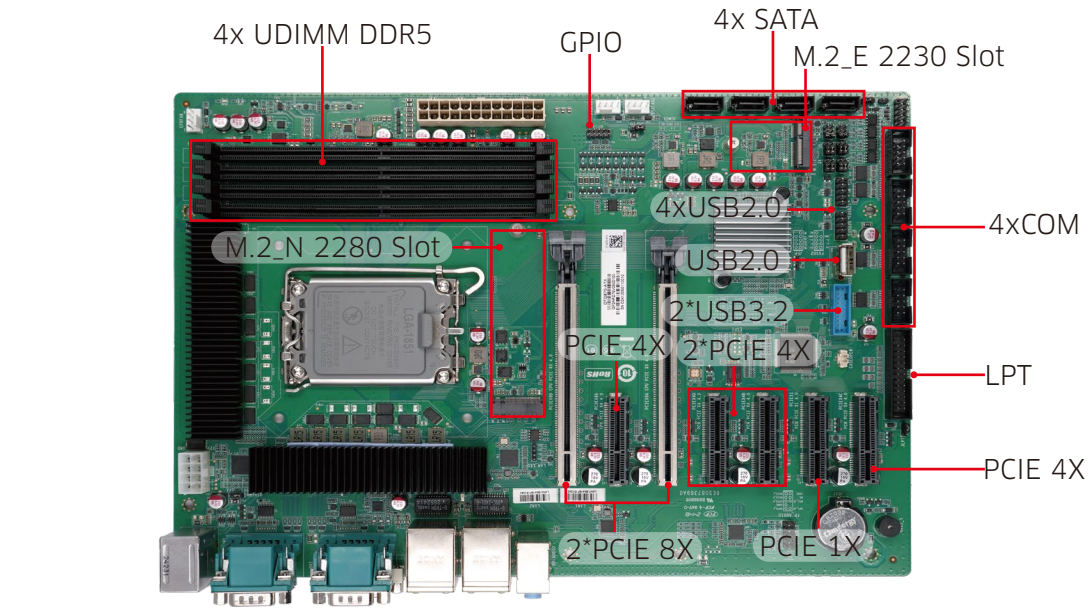
The ARD-75 ATX motherboard, powered by the Intel Arrow Lake Desktop Series Core Ultra processor with Z890 chipset and Intel AI boost NPU, offers a robust and high-performance solution. It supports dual displays, up to 192GB of DDR5 UDIMM memory across four slots, and features two 10/100/1000Mbps Ethernet controllers for reliable high-speed communication. With storage options that include four SATA ports and one M.2 slot, as well as a rich I/O interface comprising 6 COM ports, 7 USB 2.0 ports, 6 USB 3.2 ports, and up to seven PCIe slots, this motherboard provides exceptional versatility and expandability.

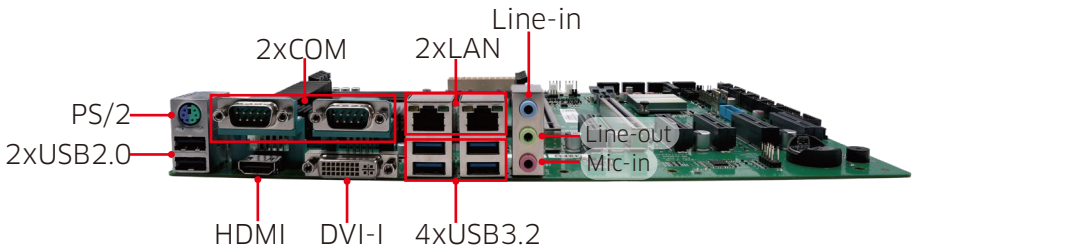
Designed to withstand extreme conditions, the ARD-75 is an ideal solution for industrial applications. Its robust construction ensures reliable performance in demanding environments, while its flexible features cater to various use cases. With the ARD-75, we are committed to delivering a dependable, high-quality product that enhances the customer experience and meets the needs of modern industrial requirements.

Linux
ubuntu
Windows

H/W Monitor
Watchdog
GPIO
Brightness

I/O Interfaces



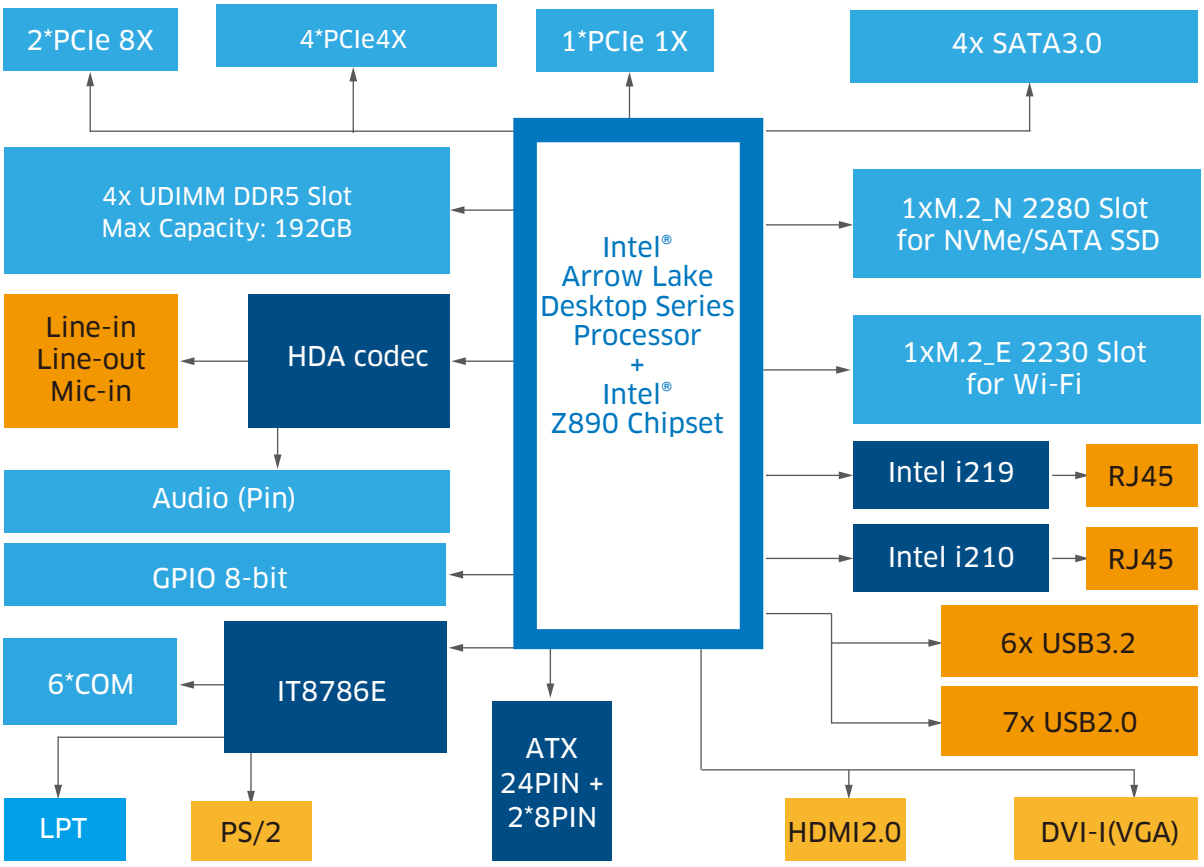


Technical Specifications

Processor	CPU	Intel® Core™ Ultra Processor
	Code Name	Arrow Lake Desktop Series
	Socket	FCLGA1851
	Chipset	Z890
	NPU Name	Intel® AI Boost
Memory	Type	4x UDIMM DDR5
	Max Capacity	Up to 192GB
Display	GPU	Intel Integrated Graphics based on CPU
	Port	1x HDMI +1x DVI-I(VGA)
Ethernet	Controller	1x Intel i210,Date Rate Per Port:1.0GbE
		1x Intel i219, Date Rate Per Port:1.0GbE
	Interface	2x RJ45
Audio	Audio Codec	Realtek HD
	Interface	1xLine-in+1xLine-out+1xMic-in,
Hardware		CPU and system temperature, on-board voltage, watchdog
Storage	SATA	4x SATA3.0
	M.2	1x M.2_2280 for NVMe(PCIe4.0)/SATA SSD
Expansion	M.2	1x M.2_2230 for WiFi
	PCIE 1X	1*PCIE 1X(PCIE4.0)
	PCIE 4X	4*PCIE 4X(PCIE4.0)
	PCIE 8X	2*PCIE 8X(PCIE5.0)
I/O Interface	COM	6xCOM: 6*RS232 default
		The COM5, COM6 can be set as RS485/RS422 by jumper
	USB2.0	7xUSB2.0: 2*Ports+ 4*Header+1*USB2.0 Dongle
	USB3.2	6xUSB3.2: 4*Ports+ 2*Header
	HDMI2.0	1
	DVI-I	1
	PS/2	1 (for PS/2 keyboard and mouse)
	GPIO	8-bit
	LPT	1
	TPM2.0	Optional
Dimension	Size	304.8mm x 218.44mm
	Board Type	ATX
Power	Standard Port	ATX_24PIN + 2*8PIN
	Peripheral Input	For Fan and SATA
Temperature	Operating Temp.	0 ~ 60° C, depends on CPU clock speed and cooling systems
	Storage Temp.	-40 ~ 85° C
Operating System		Windows 10/11, Linux

* All specifications and photos are subject to change without notice.

Functional Block Diagram



Order Information

Model Name	Description
DTZ890-ATX	DT Intel Z890 ARD75 ATX 2LAN(I219+I210) 6*COM HDMI+DVI-I 1*PCIE1X+2*PCIE8X+4*PCIE4X

*For customized options, please consult regional sales. And please confirm the model name and description before purchasing. *The model name and description might vary due to inventory changes.

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HIGH-DEFINITION MULTIMEDIA INTERFACE

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