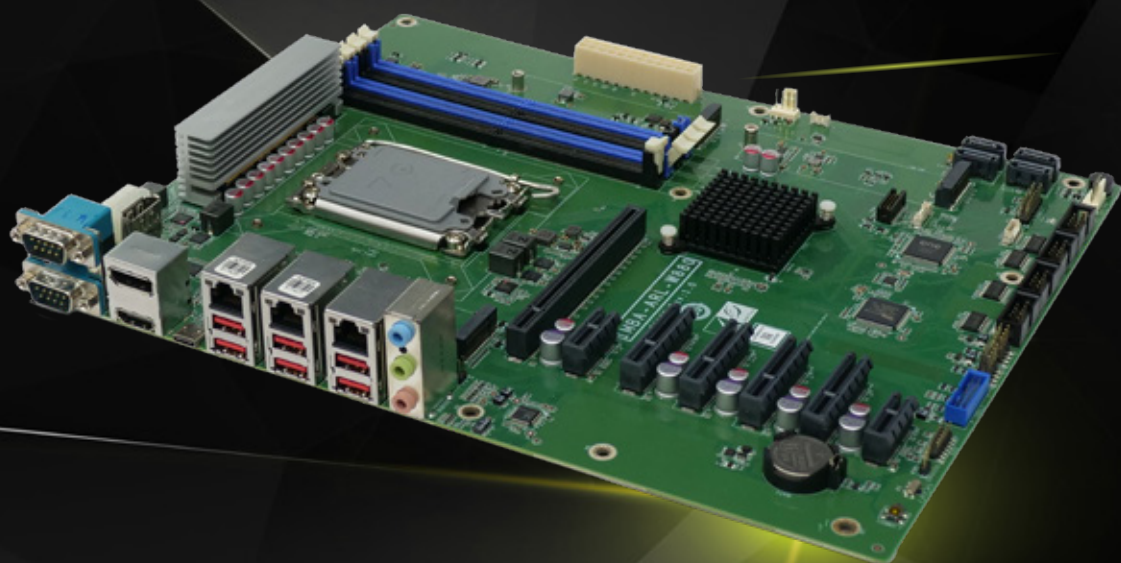


# IMBA-ARL-W880

ATX motherboard supports LGA1851  
Intel® 15th Generation Ultra™ processor

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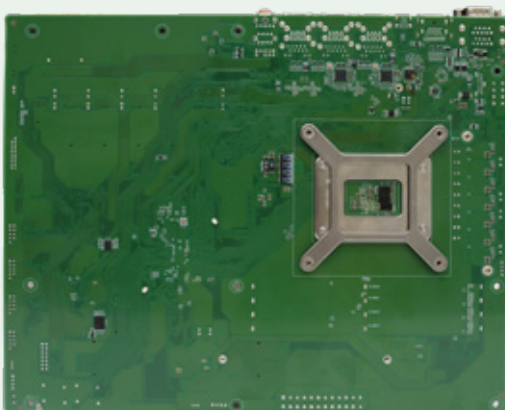
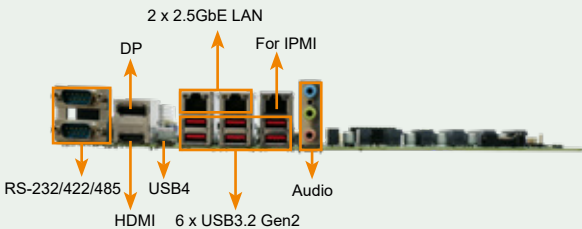
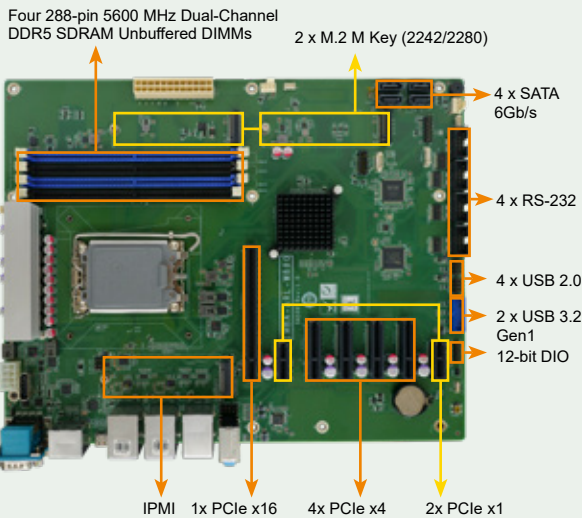
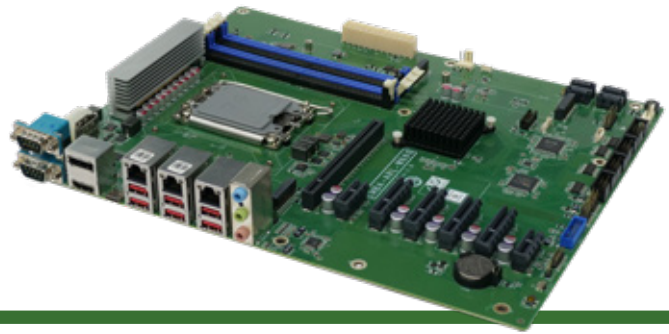
- LGA1851 Intel® 15th Generation Ultra processor
- Dual-channel DDR5 5600MHz
- Support 2 x DisplayPort, 1 x HDMI and 1 x USB4
- Support two M.2 M key for storage
- Support one PCIe x16, four PCIe x4 and two PCIe x1 expansion



[www.ieiworld.com](http://www.ieiworld.com)

# IMBA-ARL-W880

ATX motherboard supports LGA1851 Intel® 15th Generation Ultra™ processor, DDR5, Quadruple independent displays, dual 2.5GbE LAN, M.2, USB 3.2, SATA 6Gb/s, HD Audio and RoHS



## Support 15th Gen Intel® Core™ Ultra CPU

LGA1851 socket supports 15th generation Arrow Lake-S Intel® Ultra Processor (up to 125W TDP CPU)



## Support Dual-Channel DDR5 SDRAM Unbuffered DIMMs

IEI design the IMBA-ARL-W880 support 4 x 288-pin 5600 MHz Dual-Channel DDR5 SDRAM Unbuffered DIMMs supported up to 192GB (ECC&non-ECC support)



## Support Intel® 2.5GbE Network Controller

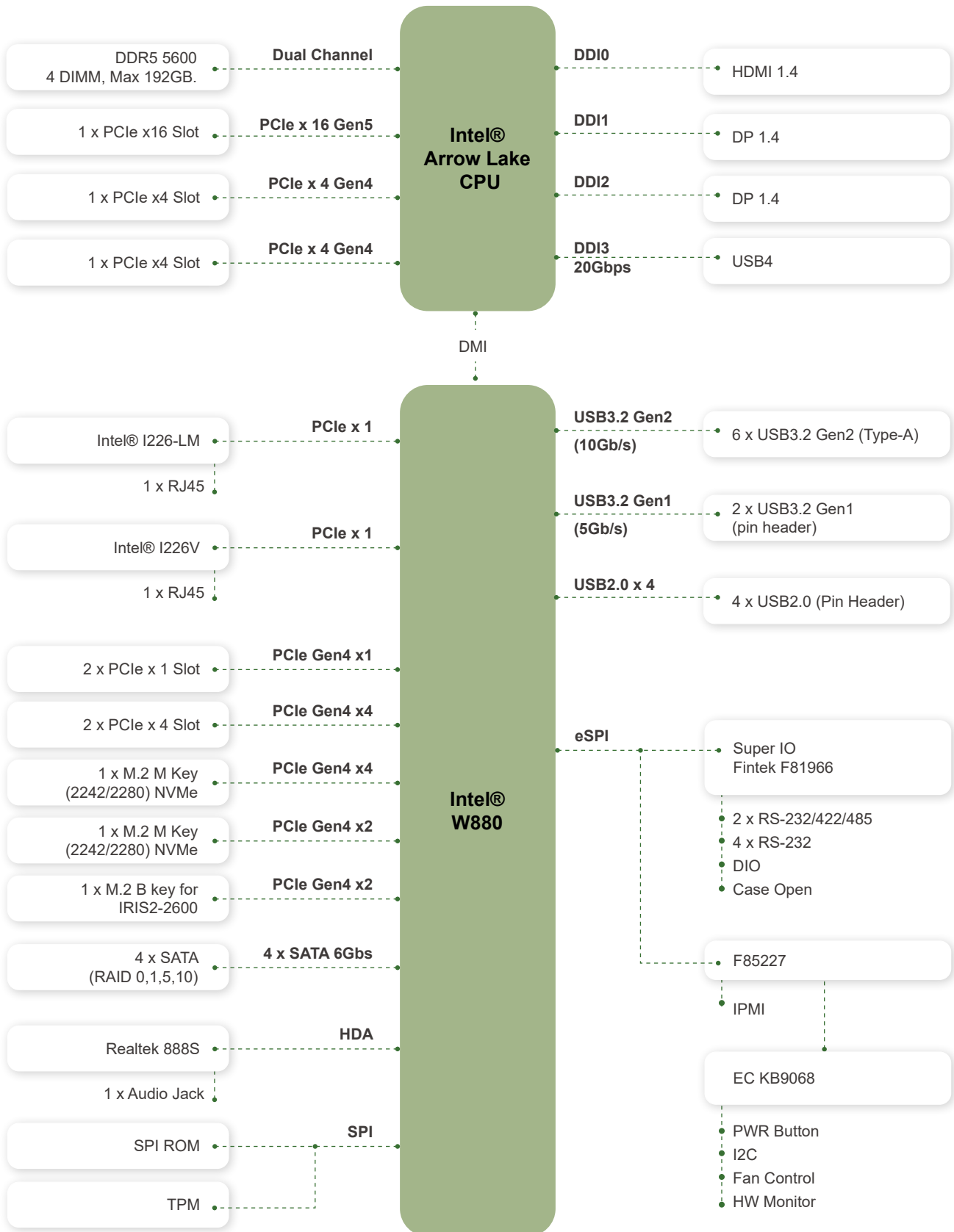
Two RJ45 network ports are provided via Intel® I226-LM and I226-V 2.5GbE network controller to achieve up to 2.5GbE network transmission rate



## Abundant Expansion Slots

The IMBA-ARL-W880 supports 1 x PCIe Gen5 x16 slot, 4 x PCIe Gen4 x 4 and 2 x PCIe Gen4 x 1 slot for more PCI express card to install, and M.2 M key for NVME storage

# Block Diagram



## Dimensions

## Optional Accessories



19800-003100-100-RS



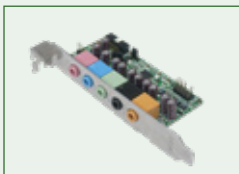
19800-010500-200-RS



32205-000702-200-RS



iRIS2-2600-R10



AC-KIT-888S-R10

## Specifications

Model	IMBA-ARL-W880
CPU	LGA1851 socket supports 15th generation Arrow Lake-S Intel® Ultra Processor (up to 125W TDP CPU)
Chipset	Intel® W880
BIOS	AMI UEFI BIOS
Memory	Four 288-pin 5600 MHz Dual-Channel DDR5 SDRAM Unbuffered DIMMs supported up to 192GB (ECC&non-ECC support)
Graphics Engine	New Intel® Xe Graphics architecture with SRIOV, Genlock
Display Output	Quad independent display 1 x DP1.4 (up to 4K@60Hz) 1 x HDMI1.4 (up to 4K@30Hz) 1 x USB4 (up to 4K@60Hz) 1 x DP1.4 (up to 4K@60Hz) internal
Ethernet	LAN1: Intel® I226-LM 2.5GbE controller LAN2: Intel® I226V 2.5GbE controller
Super I/O	Fintek F81966
Embedded Controller	ENE KB9068
External I/O Interface	2 x RS-232/422/485 (RS-485 support AFC) 6 x USB 3.2 Gen2 (Type-A) (10Gb/s)
Internal I/O Interface	4 x SATA 6Gb/s (RAID 0/1/5/10 supported) 4 x USB 2.0 (2x4 pin, P=2.54) 2 x USB 3.2 Gen1 (2 X 10PIN P=2.00 pin wafer ) (5Gb/s) 4 x RS-232 (2x5 pin, P=2.54)
SMBus	1 x SMBus (1x4 pin)
I2C	1 x I2C (1x4 pin)
Audio	Realtek ALC888S HD codec 3 x Audio Jack (Line-in, Line-out, Mic-in) on rear IO 1 x Analog audio (2x5 pin)
Front Panel	1 x Front Panel (2 x 7 pin, Power LED, HDD LED, Speaker, Power Button, Reset Button)
LAN LED	2 x LAN LED (1x2 pin)
Expansion	1 x PCIe x16 with Signal Gen5 2 x PCIe x4 open-end Gen4 2 x PCIe x4 open-end Gen4 2 x PCIe x1 Gen4 1 x M.2 M Key (2280, PCIe x4 ) NVMe support 1 x M.2 M Key (2280, PCIe x2 ) NVMe support 1 x M.2 B key for IRIS2-2600
Digital I/O	1 x 12-bit digital I/O (2x7 pin)
TPM	1 x TPM 2 x10 pin ,support Intel PTT
FAN connector	1 x CPU fan connector (1x4 pin) 2 x System fan connector (1x4 pin)
Chassis Open	1 x Chassis intrusion (1x2 pin)
Power supply	ATX/AT power supply Support AT/ATX mode ErP/EuP Compliant
Watchdog Timer	Software Programmable support 1~255 sec. System reset
Power Consumption	TBD
Operating Temperature	-10°C~60°C
Storage Temperature	-30°C ~ 70°C
Operating Humidity	5% ~95%, non-condensing
Dimension	244mm x 305mm
Weight	TBD
Certification	CE/FCC compliant

## Packing List

1 x IMBA-ARL-W880 single board computer	2 x SATA cable
1 x I/O Shielding	1 x QIG

## Ordering Informaiton

IMBA-ARL-R680-R10	ATX motherboard supports LGA1851 Intel® 15th Generation Ultra™ processor, DDR5, Quadruple independent displays, dual 2.5GbE LAN, M.2, USB 3.2, SATA 6Gb/s, HD Audio and RoHS
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## Optional Accessories

19800-003100-100-RS	Dual port USB cable with bracket, 30mm, P=2.54
19800-010500-200-RS	Dual port USB 3.0 cable 457mm with bracket, P=2.00
32205-000702-100-RS	RS-232 cable, 230mm, P=2.54
iRIS2-2600-R10	IPMI 2.0 adapter card with AST2600 BMC chip for iEi iRIS2 Connector IPMI 2.0 module
AC-KIT-888S-R10	Realtek ALC888S 7.1 Channel HD Audio peripheral board, RoHS