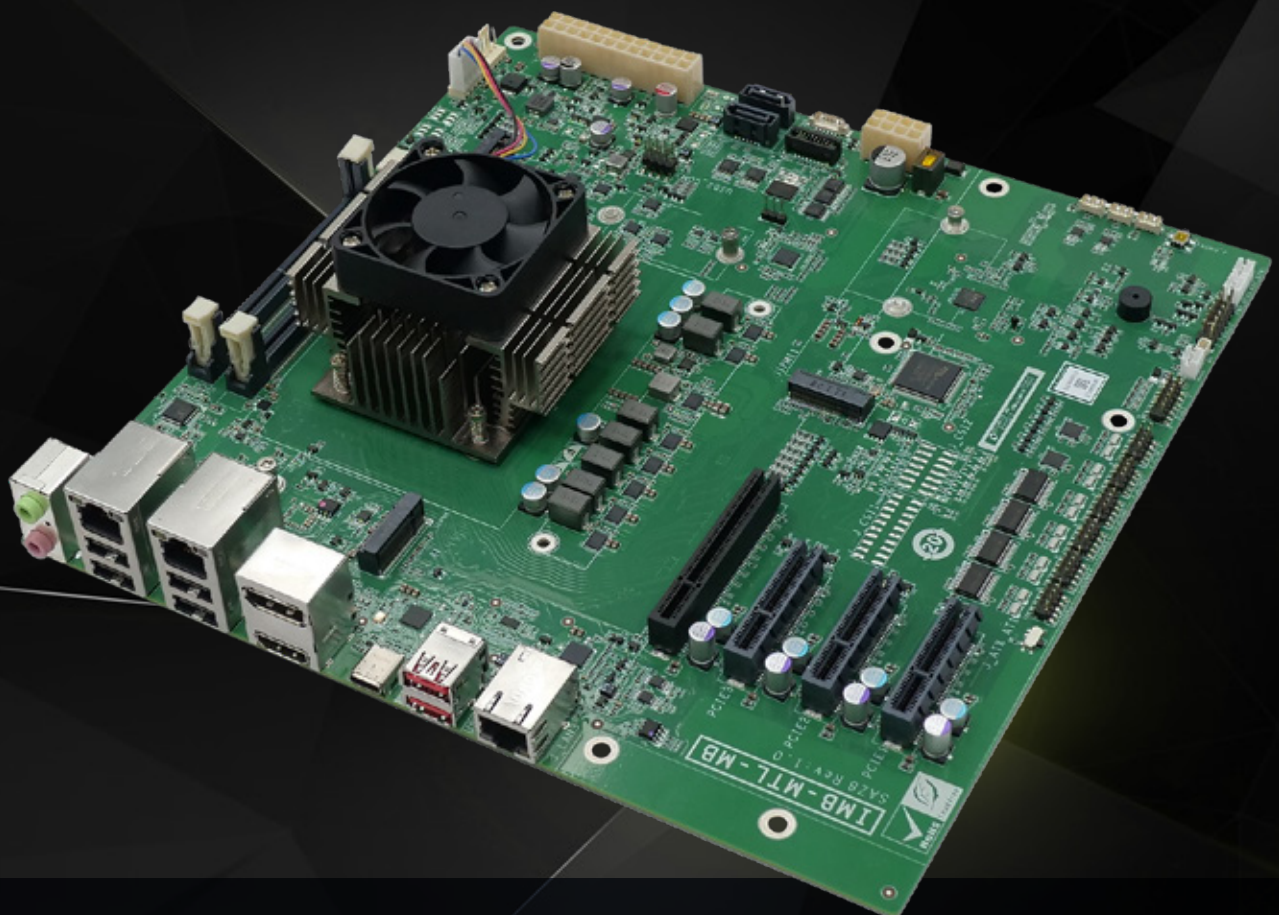


IMB-MTL IMB-ARL-U/H

micro-ATX motherboard supports 14th Gen. Intel® mobile Meteor Lake-H / 15th Gen. Intel® mobile Arrow Lake-U/H on-board processor

- Support 4800MHz DDR5 SO-DIMM
- Quad independent displays with iDPM, USB4, HDMI and DP
- High speed I/O interface for USB 3.2 Gen 2, SATA 6Gb/s
- Support 1 x PCIe Gen5 x8, 3 x PCIe Gen4 x4, 1 x M.2 B key and 1 x M.2 M key slot



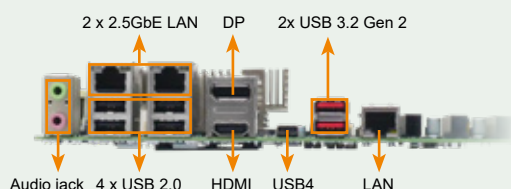
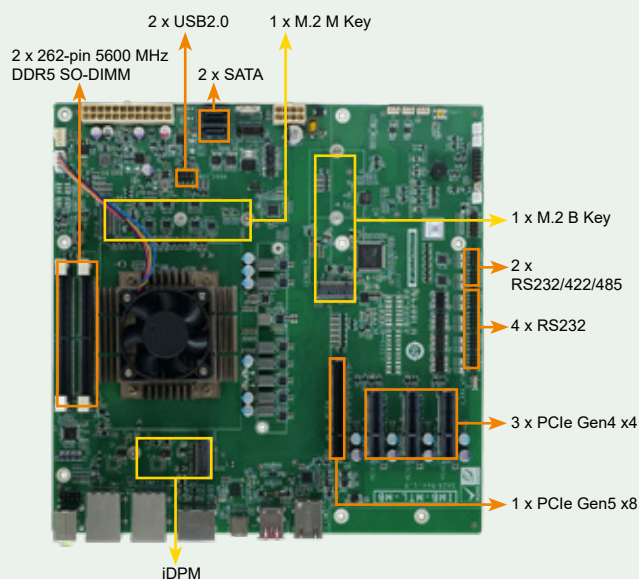
www.ieiworld.com

IMB-MTL IMB-ARL-U/H

micro-ATX motherboard supports 14th Gen. Intel® mobile Meteor Lake-U/H on-board processor, DDR5, 2.5GbE LAN, M.2, USB 3.2, SATA 6Gb/s, HD Audio and RoHS



intel



Support Intel® 14th/15th mobile SOC processor

Equipped with 14th Gen. Intel® mobile Meteor Lake-H and 15th Gen. Intel® mobile Arrow Lake-U/H mobile on-board processor



Support Intel® I226-V and Intel® I226-LM 2.5GbE Network Controller

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



Abundant Expansion Slots

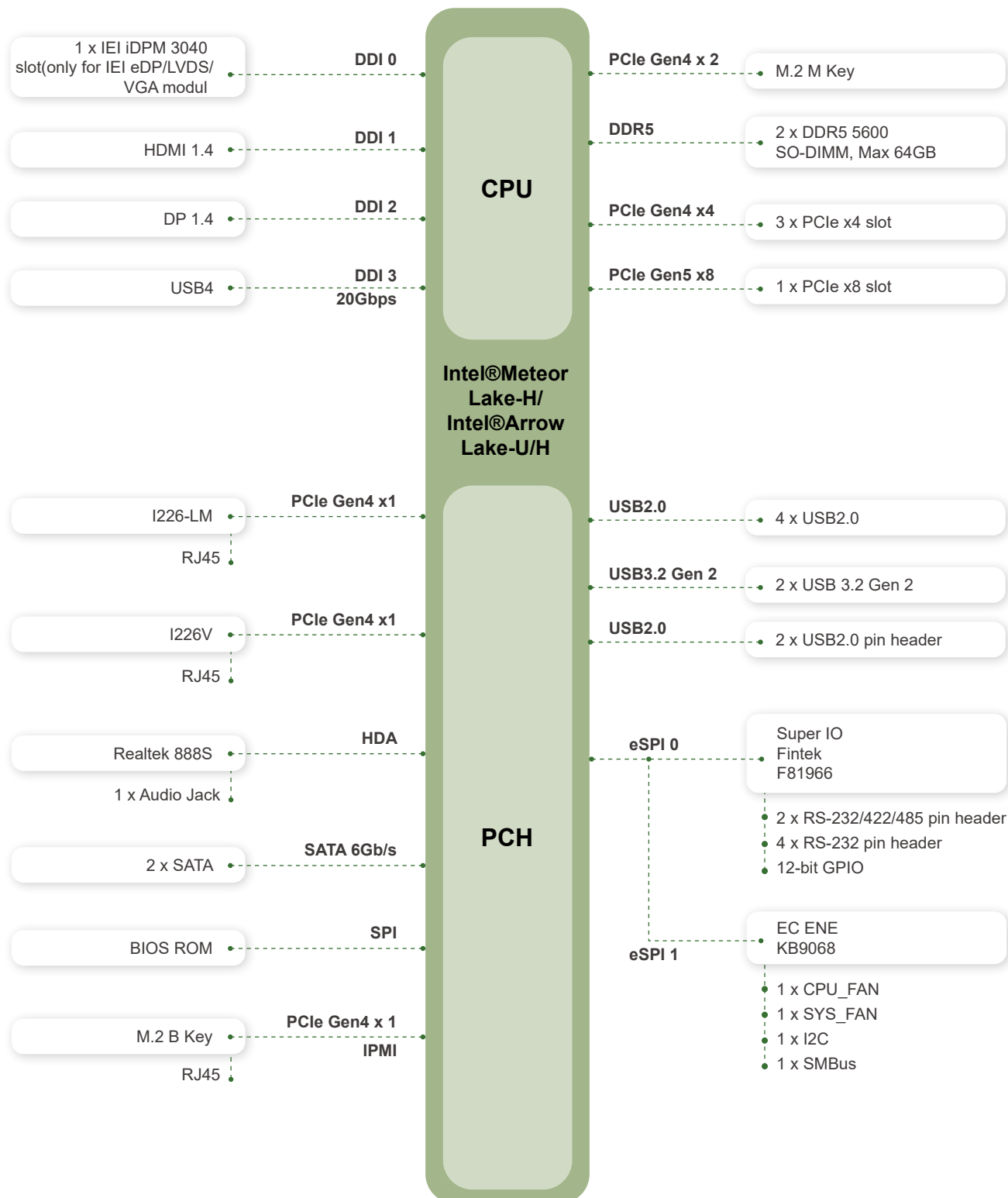
One PCIe Gen5 x8 slot and three PCIe Gen4 x4 slots can connect PCIe expansion cards. M.2 B key for IRIS2-2600, and M.2 M key for NVME storage.



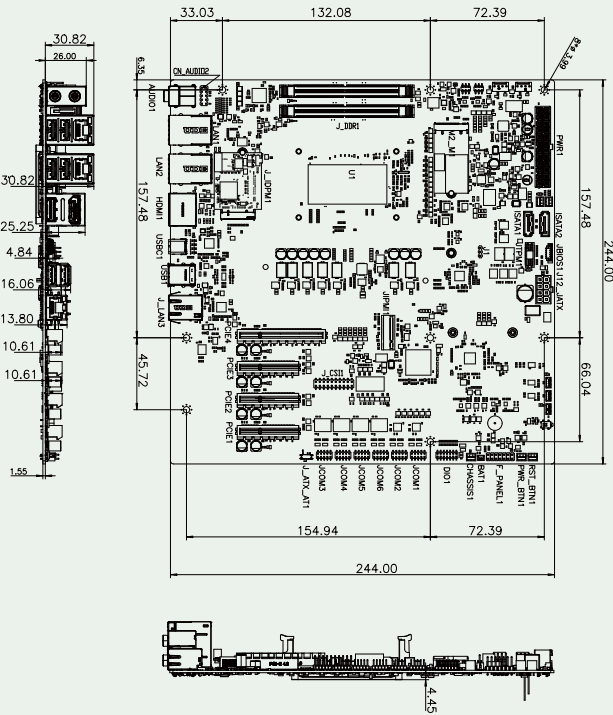
Quad independent displays

Quad independent displays with 1x HDMI 1.4, 1x DP1.4, 1x USB4 and 1x IEI iDPM 3040 slot which enabling users to add LVDS/eDP/VGA/DP display interface upon requirement.

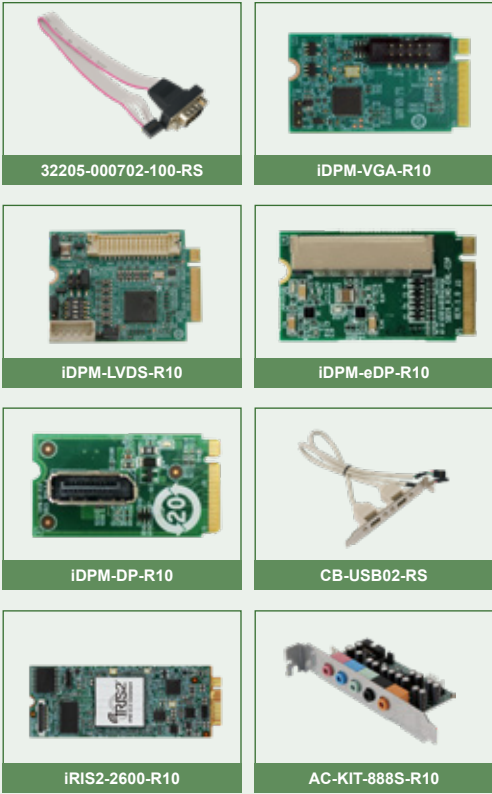
Block Diagram



Dimensions



Optional Accessories



Specifications

Model	IMB-MTL / IMB-ARL-U/H
CPU	14th Gen. Intel® mobile Meteor Lake-H / 15th Gen. Intel® mobile Arrow Lake-U/H on-board processor
BIOS	AMI UEFI BIOS
Memory	2 x 262-pin 5600 MHz DDR5 SO-DIMM, system up to 96G
Graphics Engine	Intel® New Xe LPG Graphics
Display Output	Quad independent display 1 x HDMI 1.4 (up to 4K @30Hz) 1 x DP1.4 (up to 4K @60Hz) 1 x USB4 (up to 4096 x 2160 @60Hz) 1 x IEI iDPM 3040 slot
Ethernet	LAN1: Intel® I226LM 2.5GbE controller LAN2: Intel® I226V 2.5GbE controller LAN3: For IPMI
External I/O Interface	2x USB 3.2 Gen 2 (10Gb/s) 4 x USB 2.0
Internal I/O Interface	2 x SATA 6Gb/s 2 x USB 2.0 (2x4 pin, P=2.54) 4 x RS-232 (2x5 pin, P=2.0) 2 x RS-232/422/485 (2x5 pin, P=2.0)
SMBus	1 x SMBus (1x4 pin)
I2C	1 x I ² C (1x4 pin)
Audio	Realtek ALC888S HD Audio codec 1 x Audio Jack (Line-out, Mic-in) 1 x Analog audio (2x5 pin)
Front Panel	1 x Front Panel (2x7 pin, Power LED, HDD LED, Speaker, Power Button, Reset Button)
Expansion	1 x PCIe Gen5 x8 Slot 3 x PCIe Gen4 x4 1 x M.2 B key 3080 (for IRIS2-2600) 1 x M.2 M key 2280 (PCIe Gen4 x2)
Digital I/O	1 x 12-bit digital I/O (2x7 pin)
Chassis Open	1 x Chassis intrusion (1x2 pin)
TPM	1 x TPM2.0 (2 x 10pin)
Fan connector	1 x CPU fan connector (1x4 pin) 1 x System fan connector (1x4 pin)
Power Supply	ATX
Watchdog Timer	Software Programmable support 1~255 sec. System reset
Power Consumption	3.3V@1.19A, 5V@4.76A, 12V@5.76A, 5VSB@0.03A (Intel® Ultra 7 165H CPU with 32 GB 4800 MHz DDR5 memory)
Operating Temperature	-10°C ~ 60°C
Storage Temperature	-30°C ~ 70°C
Operating Humidity	5% ~95%, non-condensing
Dimensions	244 mm x 244 mm
Weight	GW:1200g / NW:700g
Certification	CE/FCC Compliant

Packing List

1 x IMB-MTL/IMB-ARLH single board computer	2 x SATA cable
1 x I/O Shielding (45014-0112C0-00-HF)	1 x QIG

Ordering Informaiton

IMB-MTL-U5E-R10	Micro-ATX motherboard supports 14th Gen. Intel® Meteor Lake-H 125H on-board processor, DDR5, dual 2.5GbE LAN, M.2, USB 3.2, SATA 6Gb/s, HD Audio and RoHS
IMB-MTL-U7E-R10	Micro-ATX motherboard supports 14th Gen. Intel® Meteor Lake-H 155H on-board processor, DDR5, dual 2.5GbE LAN, M.2, USB 3.2, SATA 6Gb/s, HD Audio and RoHS
IMB-ARL-UH-U5E-R10	Micro-ATX motherboard supports 15th Gen. Intel® ArrowLake-H 225H on-board processor, DDR5, dual 2.5GbE LAN, M.2, USB 3.2, SATA 6Gb/s, HD Audio and RoHS
IMB-ARL-UH-U7E-R10	Micro-ATX motherboard supports 15th Gen. Intel® ArrowLake-H 255H on-board processor, DDR5, dual 2.5GbE LAN, M.2, USB 3.2, SATA 6Gb/s, HD Audio and RoHS
IMB-ARL-U/H-U7A-R10	Micro-ATX motherboard supports 15th Gen. Intel® ArrowLake-U 255U on-board processor, DDR5, dual 2.5GbE LAN, M.2, USB 3.2, SATA 6Gb/s, HD Audio and RoHS

Optional Accessories

32205-000702-100-RS	RS-232 cable, 200 mm, p=2.0 mm
iDPM-eDP-R10	eDP to eDP DisplayPort converter board (for IEI iDPM connector)
iDPM-LVDS-R10	eDP to LVDS DisplayPort converter board (for IEI iDPM connector)
iDPM-VGA-R10	eDP to VGA Connetor converter board (For IEI Display Module)
iDPM-DP-R10	eDP to DP Connetor converter board (For IEI Display Module)
CB-USB02-RS	Dual port USB cable with bracket, 300mm, P=2.54
iRIS2-2600-R10	IPMI 2.0 adapter card with AST2600 BMC chip with KVM function for iEi iRIS2 Connector IPMI 2.0 module
AC-KIT-888S-R10	Realtek ALC888S 7.1 Channel HD Audio peripheral board,RoHS