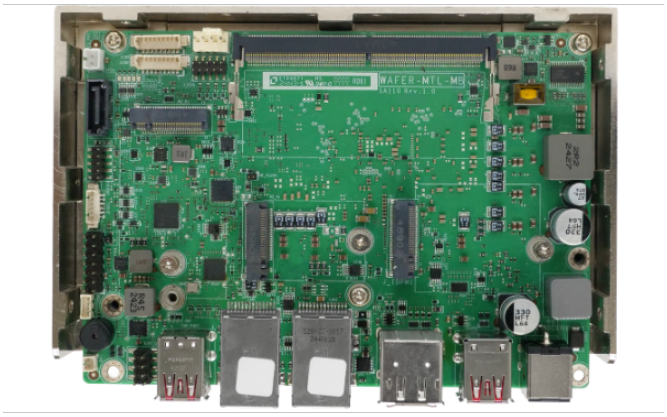
WAFER-MTL

Intel® Core™ Ultra processor (Series 1) (Meteor Lake-U platform) on-board processor



Features

» 3.5” SBC supports Intel® Core™ Ultra processor (Series 1) (Meteor Lake-U platform) on-board processor

» Support 5600MHz DDR5 SO-DIMM, up to 48G

» Quadruple independent displays DP, HDMI, iDPM and USB4

» High speed I/O interface for USB4, USB 3.2 Gen 2, SATA 6Gb/s

» Support M.2 B key and M.2 E key for expansion

Specifications

System	
CPU	Intel® Core™ Ultra processor (Series 1) (Meteor Lake-U platform)
	Intel® Core™ Ultra 155U (up to 4.8GHz, 14-core, 15W TDP)
	Intel® Core™ Ultra 125U (up to 4.3GHz, 14-core, 15W TDP)
Memory	1 x DDR5-5600 SO-DIMM
Memory Max.	48GB
Cooling method / System Fan	1 x System Fan Connect (1x4 pin)
Physical Characteristics	
Dimensions (LxWxH) (mm)	146mm x 102mm
Net Weight	GW:850g / NW:350g
Storage	
Storage	1 x SATA : 6Gb/s
I/O Interface	
Display Output	1 x HDMI™ : 1.4 (up to 4K @30Hz)
	1 x Display Port : 1.4 (up to 4K @60Hz)
	1 x iDPM : 3040 slot (only for IEI display module)
	1 x USB4 : DP+USB 3.2 Gen2 x 2
Ethernet	2 x LAN -
	LAN1: Intel® I226V 2.5GbE controller (Colay with I226-LM)
	LAN2: Intel® I226V 2.5GbE controller
Audio	HD Audio : 1 x iAUDIO, support IEI AC-KIT-888S Audio Module (2x5 pin)
I/O Interface	2 x Internal RS-232/422/485 : 1x9 pin
	2 x Internal USB 2.0 : 2x4 pin, P=2.0
	3 x External USB 3.2 Gen2x1 : 10Gb/s
	1 x I²C : 1x4 pin
Expansion	2 x M.2(NGFF) -
	1 x M.2 E Key for WIFI & BT 2230 (PCIe Gen4 x 1 & USB 2.0)
	1 x M.2 B Key 2242/3052 (PCIe Gen4 x1 & USB 3.2 Gen1)
	1 x Micro/Nano SIM : for M.2 B Key

Power	
Power Consumption	12V@2.78A (Intel® Core™ Ultra 7 165U with DDR5 32G Memory)
Power Supply	12V-28V DC power supply
	Support AT/ATX mode
Environment	
Operating Temperature	-10°C ~ 60°C
Storage Temperature	-30°C ~ 70°C
Humidity	5% ~ 95%,non-condensing

Ordering Information

WAFER-MTL-U7A-R10	3.5" SBC with Intel® Meteor Lake-U Core™ Ultra 7 Processor 155U with Quad Displays,DDR5,Double Intel®I226V 2.5 GbE,USB3.2,M.2,SATA,COM,RoHS
WAFER-MTL-U5A-R10	3.5" SBC with Intel® Meteor Lake-U Core™ Ultra 5 Processor 125U with Quad Displays,DDR5,Double Intel®I226V 2.5 GbE,USB3.2,M.2,SATA,COM,RoHS

Packing List

1 x WAFER-MTL single board computer	1 x SATA with power cable kit (PN: 32801-000201-200-RS)
1 x QIG	