

IMT32

x86 Embedded motherboard with Intel® Core Ultra



KEY FEATURES

- 3.5" Form Factor (146mm x 102mm), x86 Embedded motherboard
- Intel® Core Ultra Processors (Code Name: Meteor Lake-U/H)
- Support EdgeBMC for OOB(Out-of-Band) remote control
- Integrated Dual Gigabit Ethernet
- 1 x M.2 Key M Slot for M.2 2280 NVME SSD
- 12 V Single Voltage Power Input

INTRODUCTION

The IMT32 is a compact 3.5" x86 embedded motherboard powered by Intel® Core™ Ultra Processors (Meteor Lake-U/H), delivering exceptional computing performance for advanced edge applications. It features EdgeBMC support for Out-of-Band (OOB) remote management, ensuring high system availability and effortless maintenance. Additionally, with integrated dual Gigabit Ethernet, an M.2 Key M slot for fast NVMe SSD storage, and a streamlined 12V single voltage power input, the IMT32 offers robust connectivity and reliable operation in space-constrained deployments.

SPECIFICATIONS

System Specification			
WLAN	Support (Optional)	BT	Support (Optional)
Processor	Intel® Core™ Ultra 5 Processor 125U 12M Cache, up to 4.30 GHz	Memory	8GB(Default) (Default) 16GB (Optional) 32GB (Optional) 48GB (Optional)
Storage	256GB SSD(Default) (Default) 512GB SSD (Optional) 1TB (Optional) 2TB (Optional) 4TB (Optional)	Ethernet controller	2 x Intel® Ethernet Controller
Security	TPM 2.0	Operating System	Windows 11 IoT Enterprise (64 bit) (Optional) Windows 11 Pro 64 bit (Optional) Linux Ubuntu 24.04(Do not support Wake on Touch) (Optional)
IO Ports			
Power Input	1 x 12V DC, 2.5Φ DC jack	USB Port	2 x USB3.2 Gen2x1 (Type-A)
Serial Port	1 x RS232/422/485 (Default RS232)	Video	1 x HDMI 2.1, Max resolution up to 4096x2160@60Hz (Optional)
Expansion Port	1 x M.2 2230 E-Key Slot (for Wi-Fi module) 1 x M.2 2230 A+E-Key Slot (for AI Acceleration Card)	LAN	1 x 2.5 Giga LAN RJ45 Connector 1 x Giga LAN RJ45 Connector.Support EdgeBMC Out-of-Band remote control
Internal IO Ports			
Power input	1 x 6pin(1x6) for 12V DC in	Power output	1 x 2pin(1x2) blue wafer for 3.3V DC out 1 x 2pin(1x2) red wafer for 5V DC out 1 x 2pin(1x2) yellow wafer for 12V DC out
USB	2 x 8pin(2x4) for 4 x USB 2.0	Serial port	3 x 10pin(2x5) for RS232

Display	1 x 40pin DF13 connector for LVDS (Default) 1 x 30pin DF13 connector for eDP 1.4b , Max resolution up to 4096x2304@60Hz(1 lane) (Optional)	Backlight	1 x 7pin(1x7) for panel backlight
SATA	1 x SATA III 1 x 8pin(2x4) for SATA power	DIDO	1 x 14pin(2x7) for Digital input/output
VR	1 x 3pin(1x3) for Digital panel backlight brightness control 1 x 3pin(1x3) VR/Software brightness switch jumper 1 x 3pin(1x3) PWM/DC brightness switch jumper 1 x 3pin(1x3) 3.3V/5V PWM Level switch jumper	Fan	1 x 3pin(1x3) for CPU Fan
OSD	1 x 10pin(2x5) for OSD control	Speaker	2 x 2pin(1x2) for Speaker
Backup battery	1 x 2pin(1x2) for RTC battery	Audio	1 x 12pin(2x6) for Line in/Line out/ Mic in

Certification

Certification	CE, FCC
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Mechanical

Dimension	146 x 102 mm
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Environment

Operating Humidity	10% to 95% RH, Non-Condensing	Operating Temperature	0°C to 60°C
Storage Temperature	-40°C to 70°C		

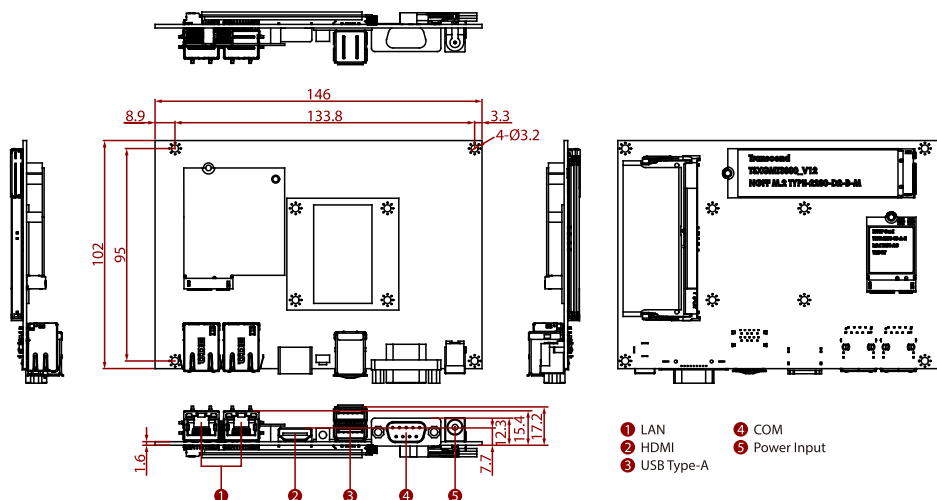
Accessory

Accessory	1 x Installation Guide	Optional Accessory	1 x SATA cable (94H007Z070K0) (Optional) 1 x SATA Power cable (94HE08Z150E0) (Optional) 1 x COM cable (94G309E100E1) (Optional) 1 x 2-Port USB 2.0 Type A cable (94E808E080K0) (Optional) 1 x 12V 120W Adapter (922D120W12V5) (Optional) 1 x Power cord (Varies by country) (Optional) 1 x CPU Heatspreader (98K000A000N3) (Optional) 1 x Membrane (98K000A000N1) (Optional) 2 x Speaker (612620000007) (Optional)
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Power

Power Rating	12V DC
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DIMENSIONS UNIT:MM



NOTE

1. This is a simplified drawing, and some components are not marked in detail.
2. Please contact our sales representative if you need further product information.
3. All specifications are subject to change without prior notice.
4. The product shown in this datasheet is a standard model. For diagrams that contain customized or optional I/O, please contact the Winmate Sales Team for more information.