

IT32

Intel® Core™ i5 x86 Embedded Motherboard



KEY FEATURES

- 3.5" Form Factor (146mm x 102mm), x86 Embedded motherboard
- Intel® 11th Generation Core™ i5 processor
- Support UHD 4 lanes eDP Panel
- 1 x SO-DIMM, DDR4 3200 MHz (Max. 32GB)
- Integrated Dual Gigabit Ethernet
- 1 x M.2 Key M Slot for M.2 2242 SATA III SSD Optional M.2 2280 NVME SSD
- 12 V Single Voltage Power Input

INTRODUCTION

Winmate x86 Embedded Board Series combines compact design with powerful performance, featuring multiple advanced processor options. Designed with industrial-grade components, advanced and versatile customization capabilities, this Embedded Board ensures reliable operation in harsh environments with a wide power input range of 9-36V and extended temperature tolerance (-40 to +85°C). Ideal for space-constrained industrial applications, they deliver seamless integration and optimized performance.

SPECIFICATIONS

System Specification

WLAN	Support (Optional)	BT	Support (Optional)
Processor	Intel Core i5-1135G7 2.4GHz (up to 4.2GHz)	Memory	4GB(Default) (Default) 8GB (Optional) 16GB (Optional) 32GB (Optional)
Storage	128GB SSD(Default) (Default) 256GB SSD (Optional) 512GB SSD (Optional) 1TB (Optional) 2TB (Optional) 4TB 1 x SATA III for 2.5" SSD/HDD up to 2TB (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 22.04(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 2.0 (Optional)
Expansion Port	1 x M.2 2280 M-Key Slot (for NVME SSD) 1 x M.2 2230 E-Key Slot (for Wi-Fi module)	LAN	2 x 2.5 Giga LAN RJ45 Connector

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
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USB	2 x 8pin(2x4) for 4 x USB 2.0	Serial port	1 x 2pin(1x2) yellow wafer for 12V DC out
Display	1 x 40pin DF13 connector for LVDS (Default) 1 x 30pin DF13 connector for eDP (Optional)	Backlight	3 x 10pin(2x5) for RS232
SATA	1 x SATA III 1 x 8pin(2x4) for SATA power	DIDO	1 x 7pin(1x7) for panel backlight
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 14pin(2x7) for Digital input/output
OSD	1 x 10pin(2x5) for OSD control	Speaker	1 x 3pin(1x3) for CPU Fan
Backup battery	1 x 2pin(1x2) for RTC battery	Audio	2 x 2pin(1x2) for Speaker 1 x 12pin(2x6) for Line in/Line out/ Mic in

Certification

Certification CE, FCC

Mechanical

Dimension 146 x 102 mm

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

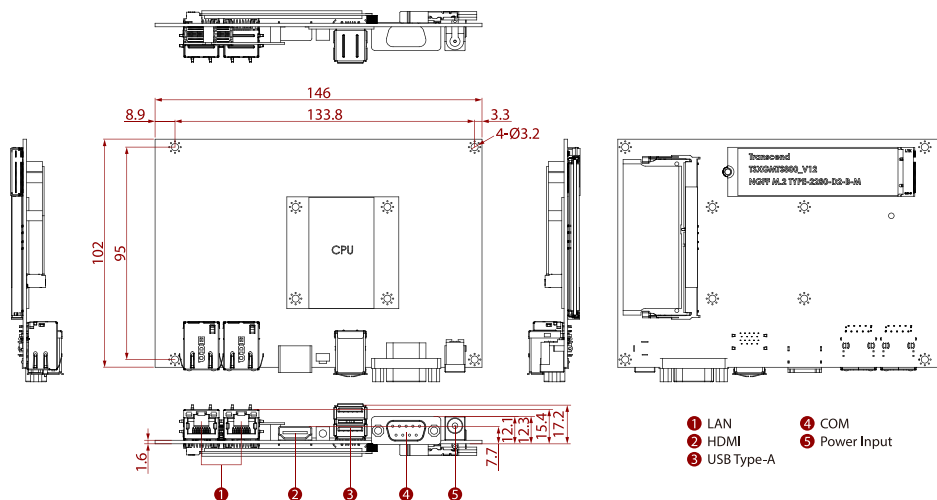
Optional Accessory

- 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 (61262000007) (Optional)

Power

Power Rating 12V DC in

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.