



Features

- Intel® Processor Twin Lake Series Processor
- Intel® UHD Graphics
- 1 x Memory Socket (Capacity Max. Up to 16GB DDR5 4800 MT/s)
- 1 x COM1 (RS-232/422/485), 1-COM2 (RS-232)
- 2 x Intel® Ethernet Controller
- 2 x Display (HDMI 2.0b, DP1.4a)
- 2 x Audio Jack (Mic-In, Line-Out)
- 2 x Storage (2.5" Drive Bay, Key-B)
- 2 x Expanslot Slot (M.2 Key-E, Key-B)



HDMI+DP
4K@60Hz



Ruggedized
Design



Fanless
0 ~ 60°C



+12V/24Vdc



Compact Size
177x126x57mm

Specifications

System Information

Processor	Intel® Twin Lake Processors Intel® Processors N150 (Default) Intel® Processors N250 (Optional) Intel® Core™ 3 N355 (Optional)
System Memory	1 x 262-pin DDR5 4800MHz SO-DIMM socket, Max. up to 16GB
I/O Chipset	EC ITE: IT5782VG
Watchdog Timer	H/W Reset, 1sec. ~ 65535min. and 1sec. or 1min./step
TPM	On Board TPM 2.0
SBC	ECM-TWL

Expansion

M.2	1 x M.2 Key-B, (3042/3052/2242 (PCIe x1, USB 3.2 GEN1, USB 2.0) 1 x M.2 Key-E, (2230, 1 x PCI-e x1, USB 2.0 Signal)
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Storage

M.2	1 x M.2 Key-B 2242 SSD (PCIe x1)
2.5 Drive Bay	1 x Internal 2.5" Drive Bay (7mm)

Front I/O

USB	2 x USB2.0
Power Button	1 x Power Button w/LED
Reset Button	1 x Reset Button
LED Indicator	1 x Power on/off LED
Audio	1 x Mic-in 1 x Line-out

Rear I/O

USB	3 x USB 3.2 Gen2 1 x USB 2.0
COM Port	2 x RS232
LAN Port	2 x RJ-45 (2.5GbE)
DP	1 x DP 1.4a
HDMI	1 x HDMI 2.0b
Antenna	2 x Antenna Mounting with Dust Protection Cover
AC/DC Input	1 x Lockable DC Jack

Right I/O

Antenna	1 x Antenna w/cover
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Left I/O

Antenna	1 x Antenna w/cover
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Display

Graphic Chipset	Intel® UHD Graphics
Resolution	1 x HDMI 2.0b Max resolution 4096 x 2160@60Hz 1 x DP 1.4a Max resolution 4096 x 2160@60Hz

Audio

Audio Codec	RealTek ALC888S-VD2-GR
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Ethernet

LAN Chipset	2 x LAN: Intel® I226V 2.5 Gigabit Ethernet Controller
Data Rate Per Port	10/100/1000/2.5G Base-Tx GbE compatible

Power Requirement

Voltage Input Spec.	Typical +12V/24V
Voltage Input Connector	Lockable DC Jack
ACPI	Single power ATX Support S0, S3, S4, S5, ACPI 5.0 compliant
Power Mode	AT/ATX (ATX is Default Setting)
Adapter	AC to DC Adapter, 12V/10A 120W

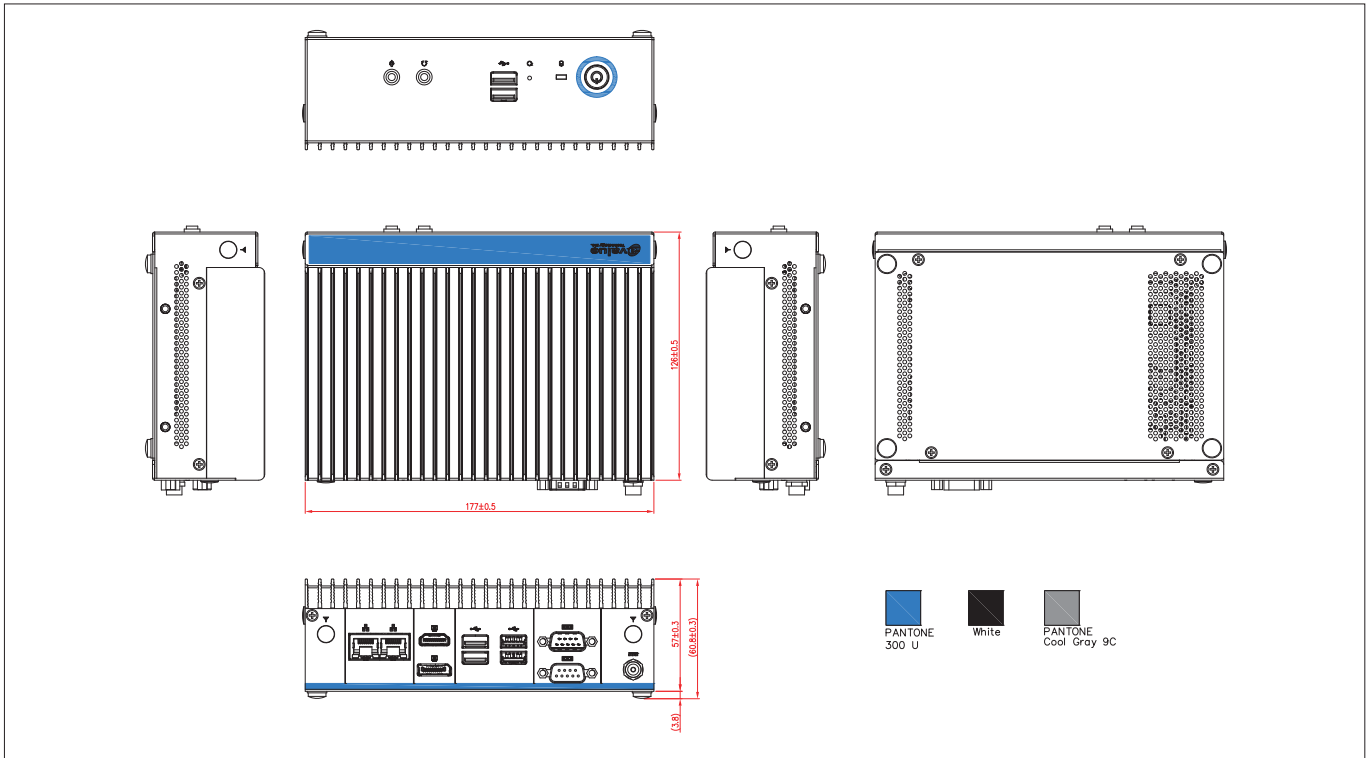
Software Support

OS	Win11, Linux
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Mechanical & Environmental

Operating Temp.	0°C ~ 60°C (32°F ~ 122°F) with 0.5m/s air flow
Storage Temp.	-30 ~ 70°C (-22°F ~ 158°F)
Operating Humidity	40°C @ 95% Relative Humidity, Non-condensing
Dimension (W x L x H)	177 x 127 x 57mm (6.97" x 4.96 x 2.24")
Weight	1.3 kg
Vibration Test	With SSD: 1.5Grms, IEC 60068-2-64, Random, 10 ~ 500Hz, 30min/Axis, 3 Axis
Shock Test	With SSD: 10G, IEC 60068-2-27, Half Sine, 11ms, Z Axis
Drop Test	ISTA 2A, IEC-60068-2-32 Test : Ed, 1 Corner, 3 Edges, 6 Faces
Mounting Kit	Stand/Wall mount (default), VESA/Din Rail (Optional)

Mechanical Drawing



Ordering Information

P/N	Processor	Memory	Adapter	Mounting Kit	I/O Ports (COM/USB/LAN)	Display Output	Power Input	Working Temp.	OS Support
EPC-TWL-N150-A1-1R	Intel® Processor N150	8GB DDR5	12V/5A Adapter	Wallmount	2/4/2	HDMI/DP	+12V DC in	0°C ~ 60°C	Windows 10/11 Linux

Packing List

Item	Quantity
EPC-TWL System	1
AC/DC Adapter 12V/5A	1
Wall Mount Kit	1
M.2 2252 to 2242 Bracket	1
Screw Kit for Peripherals	1

Optional Items

Item	P/N
AC/DC adapter 12V/10A	ACC-ADP-120N-07R
Power Cord 3P (F) - 3P (M) 183cm, USA Type	E1702031833R
Power Cord SL-6+SL-3 183cm ,EU Type	E1702031000R
Power Cord 3P (F) - 3P (M) 183cm, Japan w/PSE Type	E1702031834R
Power Cord 0P-026+SL-3 183cm, UK Type	E170P060380R
Power Cord 3P (F) - 3P (M) 183cm, Australia Type	E1702031831R

I/O Overview

