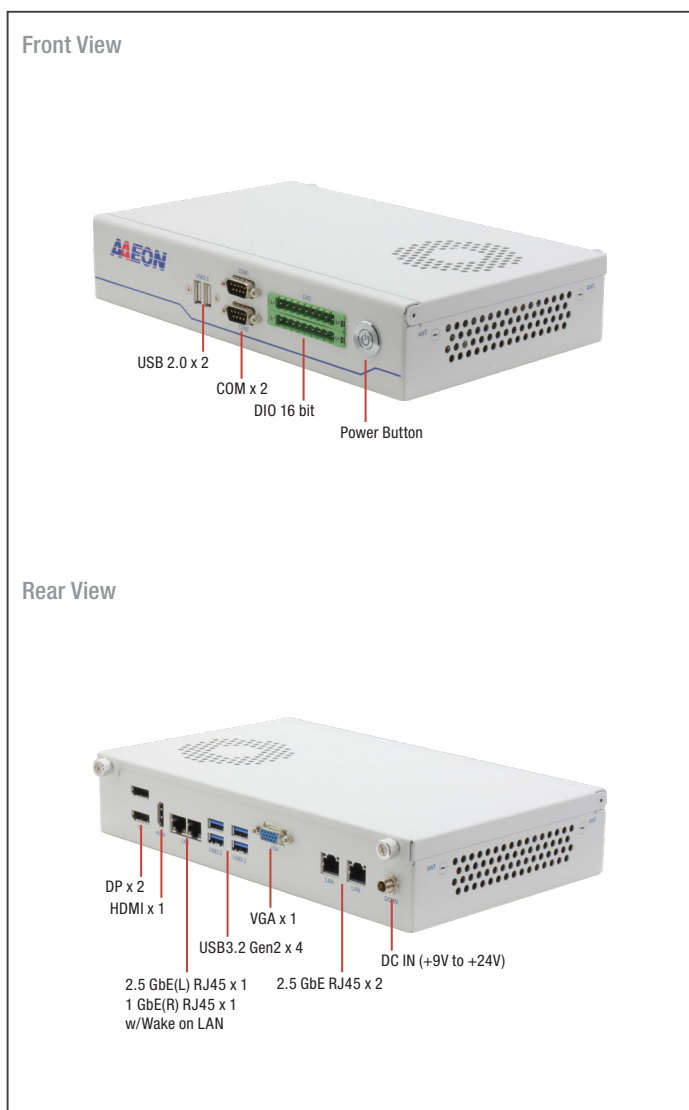


# EPIC-TGH7-PUC

EPIC System with 11th Generation Intel® Core™/Intel® Xeon® W Series Processors



## Specifications

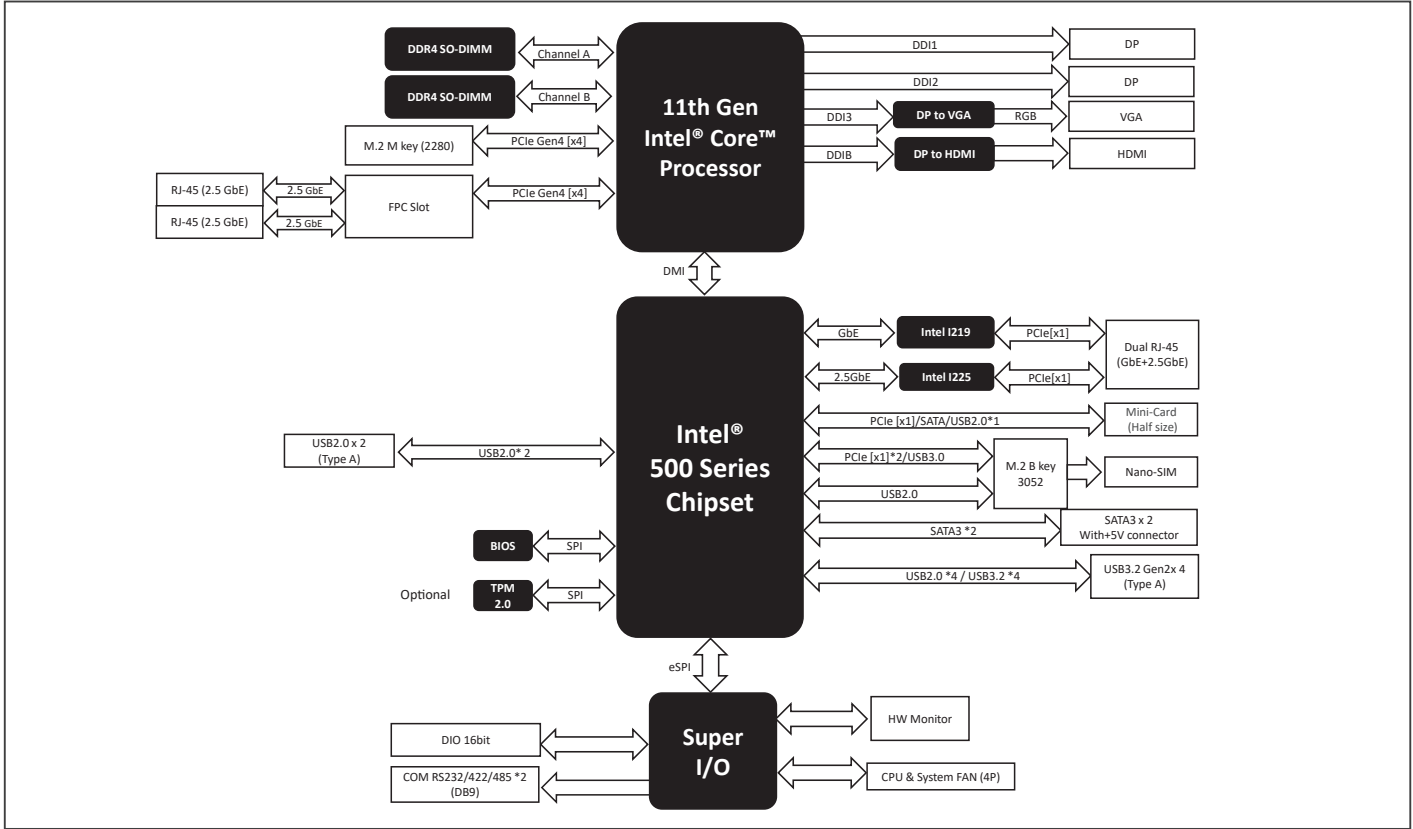
System	
Form Factor	EPIC System
CPU	11th Generation Intel® Core™ Processor: Intel® Core™ i7-11850HE (8C/16T, 2.60GHz, 45W) Intel® Xeon® W Processor Series: Intel® Xeon® W-11865MRE (8C/16T, 2.60GHz, 45W)
Chipset	Intel® 500 Series Mobile Chipsets (RM590E/HM570E)
Memory Type	DDR4 3200MHz, Dual-Channel SODIMM x 2, Max 64GB (ECC supported by Intel® Xeon® only)
BIOS	UEFI
Wake On Lan	Yes
Watchdog Timer	255 Levels
Security	TPM 2.0 (Optional)
RTC Battery	Lithium Battery 3V/240mAh
Dimension	10.2" x 6.3" x 1.9" (260mm x 160mm x 50mm)
OS Support	Windows 10 (64bit) Ubuntu20.04.5 / Kernel 5.15.0-46-generic x86_64
Power	
Power Requirement	+9V to +24V
Power Supply Type	AT/ATX
Connector	DC Jack Connector
Power Consumption	Intel® Xeon® W-11865MRE, DDR4 32GB x 2, 8.32A @12V, 99.84W (Typical) Intel® Xeon® W-11865MRE, DDR4 32GB x 2, 12.52A @12V, 150.24W (Max)

## Features

- Onboard 11th Gen Intel® Core™/Intel® Xeon® W Series Processors
- Intel® 500 Series Chipset (RM590E/HM570E)
- DDR4 3200MHz SODIMM x 2, up to 64GB
- HDMI 2.0b x 1, DP++ 1.2a x 2, VGA x 1
- SATA III x 2
- RJ-45 2.5GbE x 1, RJ-45 GbE x 3
- USB 3.2 Gen 2 x 4, USB 2.0 x 2
- M.2 3052 B-Key x 1, M.2 2280 M-Key x 1, Mini Card x 1
- COM Port x 2, DIO 16-bit x 1
- +9V ~ +24V Wide Voltage Input Support

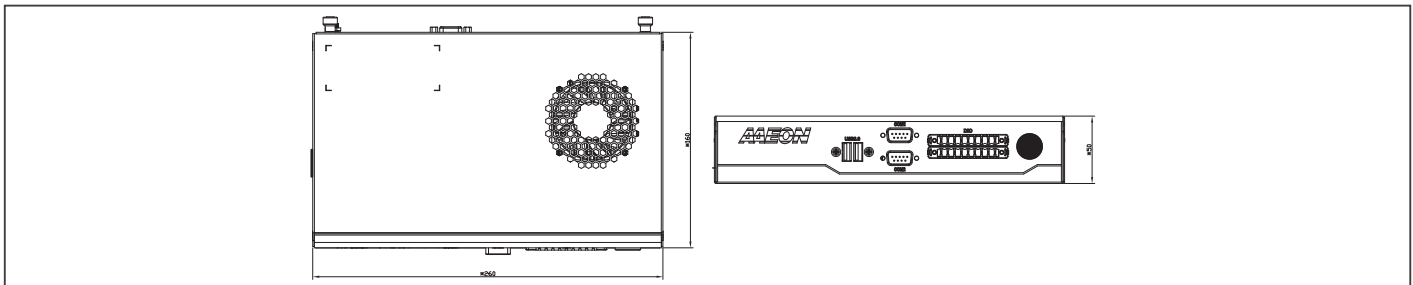
Display	
Controller	Intel® UHD Graphics for 11th Gen Intel® Processors
LVDS/eDP	—
Display Interface	VGA x 1, up to 1920 x 1080 DP++ 1.2 x 2, up to 3840 x 2160 @60Hz HDMI 2.0 x 1, up to 3840 x 2160 @60Hz
Multiple Display	Up to 4 Simultaneous Displays
Audio	
CODEC	—
Audio Interface	—
Speaker	—
External I/O	
Ethernet	Intel® I226, 2.5GbE RJ-45 x 2 Intel® I225, 2.5GbE RJ-45 x 1 Intel® I219, GbE RJ-45 x 1 (Wake on LAN support for Intel® I219 x 1 + Intel® I225 x 1)
USB	USB 3.2 Gen 2 x 4 USB 2.0 x 2
Serial Port	COM 1 ~ COM 2 (RS-232/422/485, RI as default, 5V/12V selected by BOM change)
Video	VGA x 1, up to 1920 x 1080 DP++ 1.2a x 2, up to 3840 x 2160 @60Hz HDMI 2.0b x 1, up to 3840 x 2160 @60Hz
Internal I/O	
USB	—
Serial Port	—
Video	—
SATA	SATA III x 2 +5V SATA Power Connector x 1 (Total up to 5V @2A, up to 5V @1A, shared with 2.5"SSD x 2 as limitation with 170X000592)
Audio	—
DIO/GPIO	GPIO 16-bit
SMBus/I2C	—
Touch	—
Fan	4 Pin Smart Fan
SIM	Nano SIM x 1
Front Panel	Power Button, Power LED
Others	—
Expansion	
Mini PCI-E/mSATA	Half Size mSATA/mPCIe x 1 (Default: mPCIe, selected by BIOS)
M.2	M.2 2280 M-Key x 1 (PCIe 4.0 [x4] x 1) M.2 3052 B-Key x 1 (PCIe 3.0 [x2] + USB 3.2 + USB 2.0)
Others	—
Environment	
Operating Temperature	32°F ~ 122°F (0°C ~ 50°C) with 0.5m/sec air flow
Storage Temperature	-40°F ~ 176°F (-40°C ~ 80°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
MTBF (Hours)	250,817
EMC	CE/FCC Class A

## Block Diagram



## Dimension

Unit: mm



## Ordering Information

Part Number	CPU	Memory	Display	Storage	LAN	USB	COM Port	Expansion	Power	Operating Temperature	Others
EPIC-TGH7-PUC-A10-0001	Intel® Xeon® W-11865MRE (with RM590E)	DDR4 SODIMM x 2	DP x 2 HDMI x 1 VGA x 1	SATA 6.0 Gbps x 2	2.5GbE x 3 GbE x 1	USB 3.2 Gen 2 x 4 USB 2.0 x 2	RS232/422/485 x 2	M.2 3052 B-key x 1 M.2 2280 M-key x 1 MiniCard (Half Size) x 1	+9V to +24V DC Jack Connector	0°C ~ 50°C	GPIO 16 bits Nano SIM x 1
EPIC-TGH7-PUC-A10-0002	Intel® Core™ i7-11850HE (with HM570E)	DDR4 SODIMM x 2	DP x 2 HDMI x 1 VGA x 1	SATA 6.0 Gbps x 2	2.5GbE x 3 GbE x 1	USB 3.2 Gen 2 x 4 USB 2.0 x 2	RS232/422/485 x 2	M.2 3052 B-key x 1 M.2 2280 M-key x 1 MiniCard (Half Size) x 1	+9V to +24V DC Jack Connector	0°C ~ 50°C	GPIO 16 bits Nano SIM x 1

## Packing List

- EPIC-TGH7-PUC x 1
- SATA Cable x 2
- Dual SATA Power Cable x 1
- Screw , thermal pads and accessories kit x 1

## Optional Accessories

Part Number	Description
1255X00063	AC/DC Adapter.150W.12V/12.5A.DC JACK W/Lock , Delta DPS-150AB-15 J
1702031803	Power cord for EU
1702031802	Power cord for US
170203180J	Power cord for UK
170203180E	Power cord for Japan
170203180B	Power cord for China
1702031811	Power cord for Taiwan
1702150155	2 Pin SATA Power Cable, 15cm