

# The4thware Industrial Board (MATX)

10<sup>th</sup>/11<sup>th</sup> Generation Intel Xeon W, Core Series Platform

## T4WARR-W480-MATX1



## PRODUCT SPECIFICATION

Physical Status	
Form Factor	micro-ATX
Dimensions	9.6"x 9.6" (244mm x 244mm)
Processor System	
CPU	Intel® Xeon® W-1200 / W-1300, 10th / 11th Gen Intel® Core™ Series Processors
Socket	LGA 1200
Chipset	Intel® W480
System Memory	
Supported DIMM Quantity	4 x 288-pin DDR4 DIMM slots (2 DIMMs per channel)
Supported Type	DDR4 288-pin ECC*/ non-ECC UDIMM * ECC Memory (ECC mode) supported by Intel® Xeon® W-1200 processors
Max. Capacity per DIMM	32GB, 16GB, 8GB, 4GB
Max. DIMM Frequency	2933*/2666/2400 MHz *2933 MHz supported by Intel® Xeon® W-1290/W-1270 series processors, and 10th Gen Intel® Core™ i9/i7 processors
Voltage	1.2V
PCIe Expansion Slots (SLOT7 close to CPU)	
PCIe x 16	SLOT6: Latch PCIe3.0 x16, auto switch to x8 when SLOT4 is occupied
PCIe x 8	SLOT4: PCIe3.0 x8
PCIe x 4	SLOT7: PCIe3.0 x4
M.2	2 M-key (PCIe3.0 x4); supports 2280/2242 form factor
SATA/SAS Storage	
PCH Built-in Storage	Intel® W480 (6Gb/s; RAID 0/1/5/10): 7 SATA 7-pin 1 SATA 7+2 pin for SATA DOM
Ethernet	
Additional GbE Controller	2 RJ45 (1GbE) by Intel® i210
Graphics	
Controller	CPU integrated Intel® UHD Graphics: 1 HDMI, 1 DP, 1 DB15*, 1 (15-pin) header* * DB15 and VGA header are supported by Intel® Xeon® W-1200 Series and 10th Gen Intel® Core™ Series Processors only.
Audio	
Audio	ALC892

## PRODUCT SPECIFICATION

Rear I/O	
UID Button/LED	1
VGA Port	1 DB15 (VGA)*, 1 HDMI, 1 DisplayPort
Serial Port	1 DB9 (COM port)
USB 3.2 Gen1 Port	2 Type A
USB 3.2 Gen2 Port	2 Type A
RJ45	2 RJ45 (1GbE)
Audio	3 jack
Internal Connector/Headers	
Power Connector	24-pin (ATX), 8-pin (12V), 4pin (12V)
Auxiliary Panel Header	1 (18-pin): chassis intrusion, system fault LED, LAN1/LAN2 activity LED, locate, SMBus
System Panel	1 (9-pin): power switch, reset switch, system power LED, HDD activity LED
VGA header	1*
Speaker Header	1
Buzzer	1
Fan Header	7 (4-pin)
Thermal Sensor Header	1
TPM Header	1 (17-pin, LPC)*, 1 (13-pin, SPI) *support LPC interface TPM module by default. Please contact ASRock Rack sales for SPI interface TPM module support.
SGPIO Header	1
Clear CMOS	1 (contact pads)
ME/SPS Recovery	1
USB 3.2 (Gen1) Header	1 (supports 2 USB3.2 Gen1 ports)
USB 2.0 Header	1 ( supports 2 USB2.0 ports)
LED Indicators	
Standby PWR LED 5vsb	1
80 Debug Port LED	1
System BIOS	
BIOS Type	AMI UEFI BIOS; 256 Mb (32MB) SPI Flash ROM
BIOS Features	Plug and Play, ACPI 3.0 compliance wake up events, SMBIOS 3.2, ASRock Rack Instant Flash

## PRODUCT SPECIFICATION

Hardware Monitor	
Temperature	CPU,MB,Card Side sensing
Fan	Fan Tachometer CPU Quiet Fan (Allow Chassis Fan Speed Auto-Adjust by CPU Temperature) Multi-Speed Control
Voltage	+12V, +5V, +3.3V, CPU Vcore, DRAM, V1.0M,+BAT, 3VSB, 5VSB
Environment	
Temperature	Operation temperature: 10°C ~ 35°C / Non operation temperature: -40°C ~ 70°C
Humidity	- Non operation humidity: 20% ~ 90% ( Non condensing)