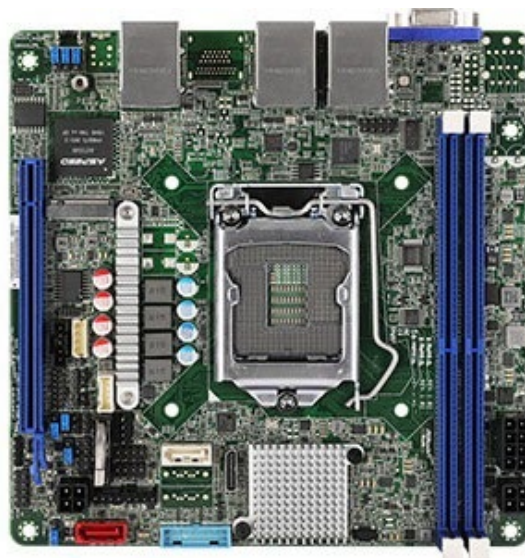


The4thware Industrial Board (MITX)

10th Generation Intel Xeon E Series Platform

T4WARR-C242-MITX



PRODUCT SPECIFICATION

Physical Status	
Form Factor	mini-ITX
Dimensions	6.7" x 6.7" (17.02 cm x17.02 cm)
Processor System	
CPU	Supports Intel® Xeon® E-2100/E-2200 Series Processors
Socket	Single Socket LGA 1151
Thermal Design Power	Max. 95W
Chipset	Intel® C242
System Memory	
Supported DIMM Quantity	2 DIMM slots
Supported Type	Dual Channel memory technology DDR4 288-pin ECC/non-ECC UDIMM
Max. Capacity per DIMM	32GB
Max. DIMM Frequency	ECC/Non-ECC UDIMM: 2666/2400/2133 MHz
Voltage	1.2V
PCIe Expansion Slots (SLOT7 close to CPU)	
PCIe x 16	- SLOT7: PCIe3.0 x16
Other PCIe Expansion Connectors	
M.2 slot	- 1 x M.2 (NGFF 2242, PCI-E Gen3 x4 link or SATA signal)* *SATA 1 will be disable when M.2 is SATA signal
OCuLink	- 1
SATA/SAS Storage	
PCH Built-in Storage	- 1x OCULINK (SATA_0,1,2,3), 2 x SATA3 6Gb/s (SATA_4,5), 1 x SATA DOM included
Ethernet	
Interface	- 1000 /100 /10 Mbps
Additional GbE Controller	- 2 x RJ45 GLAN by Intel® i210+Intel® i219LM - Supports Wake-On-LAN - Supports Energy Efficient Ethernet 802.3az - Supports PXE
Server Management	
BMC Controller	- ASPEED AST2500
Features	- Watch Dog - NMI

PRODUCT SPECIFICATION

Graphics	
Controller	- ASPEED AST2500
VRAM	- DDR4 16MB
Rear I/O	
UID Button/LED	- 1
VGA Port	- 1 x D-Sub
USB 2.0 Port	- 2 Type-A (USB2.0)
USB 3.2 Gen2 Port	- 4 Type-A (USB3.2 Gen2)
RJ45	- RJ45: 1(Management LAN Port)+ 2x GLAN(by Intel® i210+ Intel® i219LM) - LAN Ports with LED (ACT/LINK LED and SPEED LED)
Internal Connector/Headers	
Power Connector	- 1x (4-pin)
Other Power Connectors	- 1 (4-pin, SATA3 Power)
Auxiliary Panel Header	- 1 (includes chassis intrusion, front LAN LED)
System Panel	- 1
COM Header	- 1
Speaker Header	- 1(4pin)
Fan Header	- 3(1CPU/1Front/1Rear)
Thermal Sensor Header	- 1
TPM Header	- 1
SGPIO Header	- 2
PMBus header	- 1
IPMB Header	- 1
Clear CMOS	- 1(short pad)
USB 3.2 (Gen1) Header	- 1 (19-pin, 2 USB3.2 Gen1)
LED Indicators	
80 Debug Port LED	- N/A
System BIOS	
BIOS Type	- 128Mb AMI UEFI Legal BIOS
BIOS Features	- Plug and Play (PnP) - ACPI 2.0 Compliance Wake Up Events - SMBIOS 2.8.0 Support - ASRock Rack Instant Flash

PRODUCT SPECIFICATION

Hardware Monitor	
Temperature	<ul style="list-style-type: none"> - CPU/PCH/DDR/LAN/Storage Temperature Sensing - MB/Card side/TR1 Temperature Sensing
Fan	<ul style="list-style-type: none"> - CPU/Rear/Front Fan Tachometer - CPU Quiet Fan (Allow Chassis Fan Speed Auto-Adjust by CPU Temperature) - CPU/Rear/Front Fan Multi-Speed Control
Voltage	<ul style="list-style-type: none"> - Voltage Monitoring: +12V, +5V, +3.3V, CPU Vcore, DRAM, 1.05V_PCH, +BAT, 3VSB, 5VSB
Supported OS	
OS	<p>Microsoft® Windows®</p> <ul style="list-style-type: none"> - Server 2016 (64 bit) - Server 2019 (64 bit) <p>Linux</p> <ul style="list-style-type: none"> - RedHat Enterprise Linux Server 6.10 (64 bit) / 7.5 (64 bit) - SUSE Enterprise Linux Server 11 SP4 (64 bit) / 12 SP3 (64 bit) - Ubuntu 16.04 (64 bit)/ 18.04 (64 bit) <p>Virtual</p> <ul style="list-style-type: none"> - VMWare® ESXi 6.5 u1 - Win hyper-V Server 2016
Environment	
Temperature	Operation temperature: 10°C ~ 35°C / Non operation temperature: -40°C ~ 70°C
Humidity	- Non operation humidity: 20% ~ 90% (Non condensing)