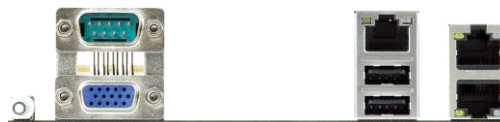


The4thware Industrial Board (MATX)

3th Generation Intel Atom C3000 Series Platform

T4WARR-C3758-MATX



PRODUCT SPECIFICATION

Physical Status	
Form Factor	- Micro-ATX
Dimensions	- 9.6" x 9.6" (244 mm x244 mm)
Processor System	
CPU	- Intel® Atom C3758 Series Processor: 8core,25W
Socket	- SOC
System Memory	
Supported DIMM Quantity	- 4 x 288-pin DDR4 DIMM slots - Support up to 128GB DDR4 ECC UDIMM(32 GB w/8Gb DRAM) - Support up to 64GB DDR4 ECC/non-ECCUDIMM (16 GB w/8Gb DRAM)
Supported Type	- Dual Channel DDR4 memory technology - Supports DDR4 ECC/non-ECC UDIMM, and ECC RDIMM
Max. Capacity per DIMM	- Non-ECC UDIMM: 4GB, 8GB, 16GB - ECC UDIMM: 4GB, 8GB, 16GB - RDIMM: 4GB, 8GB, 16GB, 32GB
Max. DIMM Frequency	- Non-ECC UDIMM: 1600/1866/2133/2400MHz - ECC UDIMM: 1600/1866/2133/2400MHz - RDIMM: 1600/1866/2133/2400MHz *Only C3758D4U-2TP supports DDR4 up to 2400.
Voltage	- 1.2V
PCIe Expansion Slots (SLOT7 close to CPU)	
PCIe x 8	- SLOT6: PCIe3.0 x8 (option with LSI 3008)
PCIe x 4	- SLOT7: PCIe3.0 x4
Other PCIe Expansion Connectors	
M.2 slot	1 (PCIe3.0 x1 or SATA 6Gb/s), supports 2230/2242/2260/2280/22110 form factor
SATA/SAS Storage	
PCH Built-in Storage	- 4 x SATA3 6.0 Gb/s (PORT SATA_3 switch with M.2)
Additional SATA Controller	- Marvell 9172 x2 for 4 port SATA3 6.0 Gb/s
Ethernet	
Interface	- Gigabit LAN 1000/10000 Mbps
Additional GbE Controller	C3758D4U-2TP: - 2 x RJ45 10 GLAN by Intel® X557 - Supports Wake-On-LAN - Supports Energy Efficient Ethernet 802.3az - Supports Dual LAN with Teaming function - Supports PXE - LAN1 supports NCSI

PRODUCT SPECIFICATION

Server Management	
BMC Controller	- ASPEED AST2500 : IPMI (Intelligent Platform Management Interface) 2.0 with ikvm and vMedia support
IPMI Dedicated GLAN	- 1 x Realtek RTL8211E for dedicated management LAN
Features	- Watch Dog - NMI
Graphics	
Controller	- ASPEED AST2500
VRAM	- DDR4 4Gb
Output	- Supports D-Sub with max. resolution up to 1920x1200 @ 60Hz
Rear I/O	
UID Button/LED	- 1
VGA Port	- 1 DB15
Serial Port	- 1
USB 2.0 Port	- 2 Type-A (USB2.0)
RJ45	- 2 x RJ45 Gigabit Ethernet LAN ports - 1 x RJ45 Dedicated IPMI LAN port - LAN Ports with LED (ACT/LINK LED and SPEED LED)
Dedicate LAN	- RT8211E
Internal Connector/Headers	
Power Connector	1 (24-pin, ATX main power), 1 (8-pin, ATX 12V) support 12V DC-in
Other Power Connectors	1 (4-pin, SATA DOM power)
Auxiliary Panel Header	1 (include chassis intrusion, location button & LED, front LAN LED, event log LED)
System Panel	1
COM Header	1
Buzzer	1
Fan Header	4 (4-pin)
TPM Header	1
SGPIO Header	1
SMBus header	1
PMBus header	1
IPMB Header	1
Clear CMOS	1 (Short pin)
ME/SPS Recovery	1
USB 2.0 Header	1 (9-pin, 2 USB2.0)
NMI Header	1

PRODUCT SPECIFICATION

LED Indicators	
Fan Fail LED	- 4(only Fan Fail LED)
System BIOS	
BIOS Type	- 128Mb AMI UEFI Legal BIOS
BIOS Features	- Plug and Play (PnP) - ACPI 1.1 Compliance Wake Up Events - SMBIOS 2.3.1 Support - ASRock Instant Flash
Hardware Monitor	
Temperature	- CPU/PCH/DDR/LAN/Storage Temperature Sensing - MB/Card side/TR1 Temperature Sensing
Fan	- 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	- Voltage Monitoring: +12V, +5V_AUX +3.3V_AUX, CPU Vcore, DRAM, +1.05V,+1.8V, +BAT,
Supported OS	
OS	<p>Microsoft® Windows®</p> <ul style="list-style-type: none"> - Server 2016 (64 bit) - Server 2012 (64 bit) - Server 2012 R2 (64 bit) <p>Linux</p> <ul style="list-style-type: none"> RedHat Enterprise Linux Server 7.4 (64 bit) CentOS 7.3 (64 bit) SUSE Enterprise Linux Server 12 SP3 (64 bit) Fedora core 24 (64 bit) Ubuntu 16.10/17.04 (64 bit) <p>* Please refer to our website for the latest OS support list.</p>
Environment	
Temperature	<p>Operation temperature: 10°C ~ 35°C / Non operation temperature: -40°C ~ 70°C</p> <p>*Install a CPU Fan when the airflow through the heatsink is below 2CFM.</p>
Humidity	- Non operation humidity: 20% ~ 90% (Non condensing)