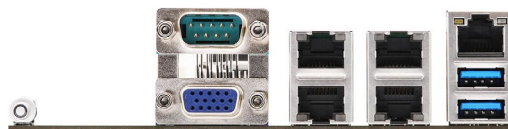


The4thware Industrial Board (MITX)

3th Generation Intel Atom C3000 Series Platform

T4WARR-C3758-MITX



PRODUCT SPECIFICATION

Physical Status	
Form Factor	- Mini ITX
Dimensions	- 6.7" x 6.7" (170.2 mm x170.2 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 256GB DDR4 RDIMM (32 GB w/8Gb DRAM) - Support up to 64GB DDR4 UDIMM (16 GB w/8Gb DRAM)
Supported Type	- Dual Channel DDR4 memory technology - Non-ECC, ECC UDIMM: 4GB, 8GB, 16GB - RDIMM: 4GB, 8GB, 16GB, 32GB
Max. Capacity per DIMM	- Dual Channel DDR4 memory technology - Non-ECC, ECC UDIMM: 4GB, 8GB, 16GB - LR/RDIMM: 4GB, 8GB, 16GB, 32GB, 64GB
Max. DIMM Frequency	- Non-ECC UDIMM: 1600/1866/2133/2400MHz - ECC UDIMM: 1600/1866/2133/2400MHz - LR/RDIMM: 1600/1866/2133/2400MHz *Only C3758D4I-4L supports DDR4 up to 2400.
Voltage	- 1.2V
PCIe Expansion Slots (SLOT7 close to CPU)	
PCIe x 8	- SLOT7: PCIe3.0 x8 (MAX x8 by BIOS setup)
SATA/SAS Storage	
PCH Built-in Storage	- 13 x SATA3 6.0 Gb/s: 5 x SATA3 ports (SATA_0, SATA_1, SATA_2, SATA_3 and SATA_12) and 8 x SATA ports from 2 mini SAS HD connectors (SATA_4_7 and SATA_8_11)
Ethernet	
Interface	- Gigabit LAN 10/100/1000 Mb/s
Additional GbE Controller	- Marvell 88E1543(4L) - Supports Wake-On-LAN - Supports Energy Efficient Ethernet 802.3az - Supports Dual LAN with Teaming function - Supports PXE - LAN1 Supports NCSI
Server Management	
BMC Controller	- ASPEED AST2500 : IPMI (Intelligent Platform Management Interface) 2.0 with IChv and vMedia support
IPMI Dedicated GLAN	- 1 x Realtek RTL8211E for dedicated management LAN
Features	- Watch Dog - NMI

PRODUCT SPECIFICATION

Graphics	
Controller	- ASPEED AST2500
VRAM	- DDR4 64MB
Output	- Supports D-Sub with max. resolution up to 1920x1200 @ 60Hz
Rear I/O	
UID Button/LED	- 1
VGA Port	- 1 x D-sub
Serial Port	- 1
USB 3.2 Gen1 Port	- 2 Type-A (USB3.2 Gen1)
RJ45	- 4 x RJ45 Gigabit Ethernet LAN ports - 1 x RJ45 Dedicated IPMI LAN port - LAN Ports with LED (ACT/LINK LED and SPEED LED)
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 (includes chassis intrusion, location button & LED, front LAN LED, and event log LED)
System Panel	1
Fan Header	4 (4-pin)
TPM Header	1
IPMB Header	1
USB 2.0 Header	1 (support 1 USB port or 2 USB ports on header. The port number controlled by USB_SEL1 and USB_SEL2 jumper)
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 - DRAM Voltage Multi-adjustment - 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 CPU Fan Speed Auto-Adjust by CPU Temperature) - CPU/Rear/Front Fan Multi-Speed Control
Voltage	- Voltage Monitoring: +12V, +5V, +3.3V, CPU Vcore, DRAM, +BAT, 3VSB, 5VSB

PRODUCT SPECIFICATION

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 6.8 (32 / 64 bit) / 7.2 (64 bit) - CentOS 6.8 (32 / 64 bit) / 7.2 (64 bit) - SUSE Enterprise Linux Server 11 SP4 (32 / 64 bit) / 12 SP1 (64 bit) - Fedora core 24 (64 bit) - Ubuntu 16.04 (64 bit) / 15.10 (64 bit) (AHCI mode) <p>Virtual</p> <ul style="list-style-type: none"> - VMWare® ESXi 6.0 <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	<p>- Non operation humidity: 20% ~ 90% (Non condensing)</p>