



## E3C256D4I-2T

- mini-ITX (6.7" x 6.7")
- Supports Intel® Xeon® E-2300 and 10th Gen Intel® Pentium® series processors
- 4 DIMM slots (2DPC), supports DDR4 ECC/non-ECC SODIMM
- 1 PCIe4.0 x16
- 2 OCuLink (PCIe3.0 x4 or 4 SATA 6Gb/s)
- Supports 1 M.2 (PCIe4.0 x4)
- 8 SATA 6Gb/s
- 2 RJ45 (10GbE) by Intel® X550
- Supports ATX PSU or 12V DC-in
- Remote Management (IPMI)

## Specifications

Physical Status	
Form Factor	mini-ITX
Dimensions	6.7" x 6.7" (170mm x 170mm)
Processor System	
CPU	Supports Intel® Xeon® E-2300 and 10th Gen Intel® Pentium® Series Processors
Socket	Single Socket H5 (LGA1200)
Chipset	Intel® C256
System Memory	
Supported DIMM Quantity	4 DIMM slots (2DPC)
Supported Type	Supports DDR4 260-pin ECC/non-ECC SODIMM
Max. Capacity per DIMM	ECC/non-ECC SODIMM: up to 32GB
Max. DIMM Frequency	ECC/non-ECC SODIMM: max. 2933MHz (1DPC) / max. 2133MHz (2DPC) [TBD]
Voltage	1.2V
PCIe Expansion Slots (SLOT7 close to CPU)	
PCIe x 16	SLOT7: PCIe4.0* x16 [CPU] *SLOT7 supports PCIe3.0 only when installing 10th Gen Intel® Pentium® Series Processors
Other PCIe Expansion Connectors	
M.2 slot	1 M-key* (PCIe4.0x4); support 2280 form factor [CPU] *M.2 will not function when installing 10th Gen Intel® Pentium® Series Processors
OCuLink	2 OCuLink (PCIe3.0 x4 or 4 SATA 6Gb/s) [PCH]
SATA/SAS Storage	
PCH Built-in Storage	Intel® C256 (8 SATA 6Gb/s; RAID 0/1/5/10): 2 OCuLink
Ethernet	
Additional GbE Controller	Intel® X550: 2 RJ45 (10GbE)
Server Management	
BMC Controller	ASPEED AST2500
IPMI Dedicated GLAN	1 x Realtek RTL8211E for dedicated management GLAN
Graphics	
Controller	ASPEED AST2500
VRAM	DDR4 256MB
Rear I/O	

UID Button/LED	1 button w/ LED
VGA Port	1 DB15
USB 3.2 Gen1 Port	2 Type-A (USB3.2 Gen1)
RJ45	2 RJ45 (10GbE)
<b>Internal Connector/Headers</b>	
Power Connector	1 (4-pin, ATX PSU signal) w/ ATX 24-pin adapter cable, 1 (8-pin, ATX 12V) support 12V DC-in
Other Power Connectors	1 (4-pin) for HDD power when using 12V DC-in power source
Auxiliary Panel Header	1 (9-pin): chassis intrusion, system fault LED, LAN1/LAN2 activity LED, locate
System Panel	1 (9-pin): power switch, reset switch, system power LED, HDD activity LED
COM Header	1
Fan Header	3 (4-pin)
Thermal Sensor Header	1
TPM Header	1 (13-pin, SPI)
SGPIO Header	2
SMBus header	1
PMBus header	1
IPMB Header	1
Clear CMOS	1 (contact pads)
USB 3.2 (Gen1) Header	1 (19-pin, 2 USB3.2 Gen1)
NC-SI	1 (9-pin)
<b>LED Indicators</b>	
Standby PWR LED 5vsb	1
Fan Fail LED	3
BMC heartbeat LED	1
<b>System BIOS</b>	
BIOS Type	AMI UEFI BIOS; 256 Mb (32MB) SPI Flash ROM
BIOS Features	Plug and Play, ACPI 6.2 compliance wake up events, SMBIOS 3.3, ASRock Rack instant flash
<b>Hardware Monitor</b>	
Temperature	CPU,MB,TR1 sensing
Fan	Fan Tachomete, CPU Quiet Fan (Allow Chassis Fan Speed Auto-Adjust by CPU Temperature), Multi-Speed Control
Voltage	VCORE,VCCSA,VCCM,VCCST_SFR, 3.3V, 5V, 12V, +1.05V_PCH_AUX,+BAT, 3VSB, 5VSB,VCCIO,+2.5V_VPP
<b>Supported OS</b>	
OS	<p>Microsoft® Windows® :</p> <p>Server 2019 (64 bit)</p> <p>Server 2022 (64 bit)</p> <p>Linux :</p> <p>RedHat Enterprise Linux Server 8.4 (64 bit) / Server 8.2 (64 bit)</p> <p>CentOS 8.5 ( 64 bit) / 8.2 ( 64 bit)</p> <p>Ubuntu 20.10 (64 bit) / Ubuntu 21.04 (64 bit)</p> <p>Hypervisor :</p> <p>VMWare® ESXi 7.0U2a/ vSphere 7.0U2b</p> <p>VMWare® ESXi 7.0U3/ vSphere 7.0U3</p> <p>* Supports UEFI BOOT only.</p>
<b>Environment</b>	
Temperature	Operation temperature: 10°C ~ 35°C / Non operation temperature: -40°C ~ 70°C
Humidity	Non operation humidity: 20% ~ 90% ( Non condensing)

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