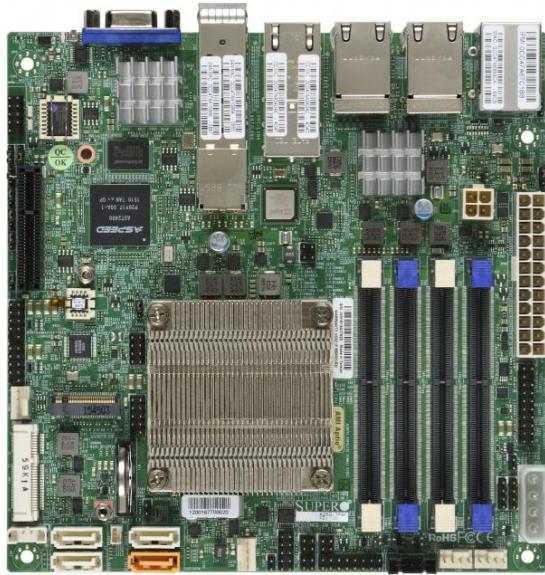


A2SDi-TP8F



Key Features

1. Intel® Atom® Processor C3858.
Single Socket FCBGA-1310 supported, CPU TDP support Up to 25W TDP
2. System on Chip
3. Up to 64GB Unbuffered ECC/non-ECC SO-DIMM, DDR4-2400MHz, in 4 DIMM slots
4. 1 PCI-E 3.0 x4
1 miniPCI-E with mSATA supports (half card only)
M.2 Interface: PCI-E 3.0 x4 and SATA
M.2 Form Factor: 2242, 2280
M.2 Key: M-Key
5. 1 VGA port
6. SoC controller for 4 SATA3 (6 Gbps) ports;
7. Quad LAN with Intel® C3000 SoC
2 10GbBaseT, 2 10Gb SFP+
Quad LAN with Intel® Ethernet Controller I350-AM4
1GbE

Links & Resources

[Tested Memory List](#)

[Tested HDD / SSD List](#)

[Tested AOC List](#)

[Motherboard Manual](#)

[Quick Reference Guide](#)

[Update Your BIOS](#)

[BMC/IPMI Firmware](#)

[Download the Latest Drivers and Utilities](#)

[Download Driver CD](#)

[OS Compatibility](#)

[Tested M.2 List](#)

[Optimization](#)

Specifications

Product SKUs

MBD-A2SDi-TP8F	■ A2SDi-TP8F
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Physical Stats

Form Factor	■ Mini-ITX
Dimensions	■ 6.7" x 6.7" (17.02cm x 17.02cm)

Processor/Cache

CPU	■ Intel® Atom® Processor C3858. ■ Single Socket FCBGA-1310 supported, CPU TDP support Up to 25W TDP
Cores / Cache	■ 12 cores, 12 threads / 12MB cache

System Memory

Memory Capacity	■ Up to 64GB Unbuffered ECC/non-ECC SO-DIMM, DDR4-2400MHz, in 4 DIMM slots
Memory Type	■ 2400/2133/1866/1600MHz
DIMM Sizes	■ 4GB, 8GB, 16GB
Memory Voltage	■ 1.2V
Error Detection	■ Corrects single-bit errors

On-Board Devices

Chipset	■ System on Chip
SATA	■ SoC controller for 4 SATA3 (6 Gbps) ports;
IPMI	■ ASPEED AST2400 BMC
Network Controllers	■ Quad LAN w ith Intel® C3000 SoC 2 10GBaseT, 2 10Gb SFP+ ■ Quad LAN w ith Intel® Ethernet Controller I350-AM4 1GbE
Graphics	■ Aspeed AST2400 BMC

Input / Output

SATA	■ 4 SATA3 (6Gbps) port
LAN	■ 4 RJ45 Gigabit Ethernet LAN ports ■ 2 10G SFP+ LAN ports ■ 2 RJ45 10GBase-T ports
USB	■ 4 USB 2.0 ports (4 headers, Type A)) ■ 2 USB 3.0 ports (2 rear)
Video Output	■ 1 VGA port
Serial Port / Header	■ 1 COM Port (1 header)
TPM	■ TPM Header

Expansion Slots

PCI-E	■ 1 PCI-E 3.0 x4 ■ 1 miniPCI-E w ith mSATA supports (half card only)
M.2	■ M.2 Interface: PCI-E 3.0 x4 and SATA ■ Form Factor: 2242, 2280 ■ Key: M-Key

System BIOS

BIOS Type	■ AMI UEFI
BIOS Features	■ UEFI 2.4 ■ SMBIOS 2.7.1

Management

Software	■ IPMI2.0, KVM w ith dedicated LAN, NMI, SUM, SuperDoctor® 5, Watchdog
Power Configurations	■ ATX Pow er connector ■ +12V DC Pow er Input ■ CPU thermal trip support for processor protection ■ Pow er-on mode for AC pow er recovery

PC Health Monitoring

Voltage	■ +1.8V, +12V, +5V, 1.05 (PCH), 1.2V (VDIMM), 4 -fan status, 4 fans w ith tachometer monitoring, Chassis intrusion header, Monitors CPU voltages, Supports system management utility, System level control, System temperature, VBAT, VCGI
FAN	■ 4x 4-pin fan headers (up to 4 fans), 4 fans w ith tachometer monitoring, Dual Cooling Zone, Fan speed control, Overheat LED indication, Pulse Width Modulated (PWM) fan connectors, Status monitoring for speed control, Support 3-pin fans (w/o speed control), System level control, Thermal control tachometer fan connectors
Temperature	■ CPU thermal trip support
LED	■ UID/Remote UID
Other Features	■ 12V DC or ATX Pow er Source, 4-pin 12v DC pow er connector, ATX Pow er connector, Chassis intrusion detection, Chassis intrusion header, Control of pow er-on for recovery from AC pow er loss, CPU thermal trip support for processor protection, Innovation Engine, RoHS, SDDC, System level control, UID, WOL

Operating Environment

Operating Temperature Range	■ 0°C ~ 60°C (32°F ~ 140°F)
Non-Operating Temperature Range	■ -40°C - 85°C (-40°F - 185°F)
Operating Relative Humidity Range	■ 10% ~ 85% (non-condensing)
Non-Operating Relative Humidity Range	■ 10% ~ 95% (non-condensing)

Parts List

Parts List (Bulk Package)			
Name	Part Number	Qty	Description
Motherboard	MBD-A2SDi-TP8F	1	A2SDi-TP8F Motherboard
SATA Cables	CBL-0044L	2	57.5CM SATA FLAT S-S PBF
I/O Shield	MCP-260-00098-0N	1	Standard I/O Shield for A2SDi-TP8F

Parts List (Retail Package)			
Name	Part Number	Qty	Description
Motherboard	MBD-A2SDi-TP8F	1	A2SDi-TP8F Motherboard
QRG		1	Motherboard Quick Reference Guide
SATA Cables	CBL-0044L	4	57.5CM SATA FLAT S-S PBF
SATA Cables	CBL-SAST-0616	2	MINI SAS HD-4 SATA, INT, 50CM, 50CM SB, 30AWG
I/O Shield	MCP-260-00098-0N	1	Standard I/O Shield for A2SDi-TP8F

Optional Parts List			
Name	Part Number	Qty	Description
1U I/O Shield	MCP-260-00100-0B	--	1U I/O Shield for A2SDi-TP8F in SC505/504 Chassis
1U I/O Shield	MCP-260-00099-0N	--	1U I/O Shield for A2SDi-TP8F in SC813/512 Chassis

Chassis (Optimized for A2SDi-TP8F)

Embedded Compact	1U	2U	3U	Mid/Mini-Tower	4U/Tower
	SCE300 SC504-203B SC505-203B				

 = Most optimized Chassis for SuperServer Configuration
Blue color = Compatible
Green color = Global SKU & Compatible
Red dot & green color = Optimized + Global SKU

Server (Optimized for A2SDi-TP8F)

Server Name
SYS-E300-9A