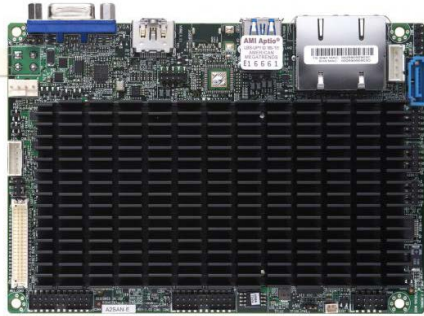




A2SAN-E



Low Power Embedded

Key Features

1. Up to 8GB 1866MHz DDR3L Non-ECC SO-DIMM in 1 socket
2. Intel® Atom processor E3940 (9.5W, 4C)
3. Intel® Goldmont microarchitecture 14nm System-on-Chip
4. Dual LAN with Intel® Ethernet Controller I210-IT
5. 1 M.2 B-Key 2280, 1 Full size Mini-PCI-E, 1 SATA 3.0
6. 1 HDMI, 1 VGA, 1 48-bit LVDS, Intel® HD Graphic 3 independent displays
7. 2 USB 3.0 ports, 4 USB 2.0 ports, 4 COM ports, 1 SATA 3.0, 8-bit GPIO, SMBus
8. Supports 12V DC power input
9. Wide temperature support from -30°C to 75°C
10. Supports on board TPM 2.0

Links & Resources

- ▶ [Tested Memory List](#)
- ▶ [Tested HDD / SSD List](#)
- ▶ [Motherboard Manual](#)
- ▶ [Quick Reference Guide](#)
- ▶ [Update Your BIOS](#)
- ▶ [Download the Latest Drivers and Utilities](#)
- ▶ [Download Driver CD](#)
- ▶ [OS Compatibility](#)
- ▶ [Tested M.2 List](#)

Specifications

Product SKUs

MBD-A2SAN-E	• A2SAN-E
--------------------	-----------

Physical Stats

Form Factor	• 3.5" SBC
Dimensions	• 5.7" x 4.0" (14.6cm x 10.16cm)

Processor/Cache

CPU	<ul style="list-style-type: none"> • Intel® Atom® Processor E3940. • Single Socket FCBGA1296 supported, CPU TDP support 9.5W
Cores / Cache	• 4 cores, 4 threads

System Memory

Memory Capacity	• Up to 8GB Unbuffered non-ECC SO-DIMM, DDR3-1866MHz, in 1 DIMM slot
Memory Type	• DDR3L up to 1866Mhz 8GB
DIMM Sizes	• 2GB, 4GB, 8GB

Expansion Slots

PCI-E	<ul style="list-style-type: none"> • 1 Full size Mini-PCI-E (USB2.0 x 1, PCI-E Gen2 x 1) • 1 M.2 2280 B-Key (PCI-E Gen2 x 1, SATA x 1)
M.2	<ul style="list-style-type: none"> • M.2 Interface: SATA and PCI-E 2.0 x1 and USB 2.0 • Form Factor: 2280 • Key: B-Key

System BIOS

BIOS Type	• AMI UEFI
------------------	------------

Management

Software	• SuperDoctor® 5, Watchdog
-----------------	----------------------------

Power Configurations	<ul style="list-style-type: none"> • +12V DC Power Input • ACPI Power Management • Control of power-on for recovery from AC power loss • Force Power On by Jumper
-----------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

PC Health Monitoring

- +1.35V, +12V, +3.3V, +5V, 3.3V standby,

Memory Voltage	<ul style="list-style-type: none"> 1.35V
On-Board Devices	
Chipset	<ul style="list-style-type: none"> System on Chip
SATA	<ul style="list-style-type: none"> SoC controller for 1 SATA3 (6 Gbps) ports;
Network Controllers	<ul style="list-style-type: none"> Dual LAN with Intel® Ethernet Controller I210IT
Audio	<ul style="list-style-type: none"> ALC 888S HD Audio
Graphics	<ul style="list-style-type: none"> Intel® HD Graphics
Input / Output	
SATA	<ul style="list-style-type: none"> 1 SATA3 (6Gbps) port
LAN	<ul style="list-style-type: none"> 2 RJ45 Gigabit Ethernet LAN ports
USB	<ul style="list-style-type: none"> 4 USB 2.0 ports (4 headers), 2 USB 3.0 ports (2 rear)
Video Output	<ul style="list-style-type: none"> 1 VGA port, 1 LVDS port, 1 HDMI port
Serial Port / Header	<ul style="list-style-type: none"> 4 COM Ports (4 headers), (2 x RS232, 2 RS232/422/485, RS-485 supports Auto flow control)
TPM	<ul style="list-style-type: none"> 1 TPM Chip
Others	<ul style="list-style-type: none"> 1 8-bit GPIO header 1 HD Audio header Mic-in/Headphone-out(Audio only support at 0~60C) 1 SMBus header 1 Panel backlight power header 1 System Fan

Voltage	System level control, System temperature, VBAT, VCGI
FAN	<ul style="list-style-type: none"> 1x 4-pin fan header (up to 1 fan), Fan speed control, Low noise fan speed control, PWM fan speed control, System level control, Thermal control tachometer fan connectors
Temperature	<ul style="list-style-type: none"> CPU thermal trip support
LED	<ul style="list-style-type: none"> Standby alert LED
Other Features	<ul style="list-style-type: none"> 4-pin 12v DC power connector, ACPI power management, Control of power-on for recovery from AC power loss, CPU thermal trip support for processor protection, M.2 NGFF connector, RoHS, System level control, WOL
Operating Environment	
Operating Temperature Range	<ul style="list-style-type: none"> -30°C ~ 75°C (-22°F ~ 167°F)
Non-Operating Temperature Range	<ul style="list-style-type: none"> -40°C - 85°C (-40°F - 185°F)
Operating Relative Humidity Range	<ul style="list-style-type: none"> 8% - 90% (non-condensing)
Non-Operating Relative Humidity Range	<ul style="list-style-type: none"> 10% ~ 95% (non-condensing)

Note: For optimized or compatible chassis, additional parts may be required, please check with Supermicro sales rep

Parts List

Parts List (Bulk Package)			
Name	Part Number	Qty	Description
Motherboard	MBD-A2SAN-E	1	A2SAN-E Motherboard
SATA Power Cable	CBL-PWEX-0982	1	SATA Power Cable 25cm
SATA cable	CBL-SAST-0538	1	SATA Data cable 29CM
A2SAN-E Heatsink	SNK-C0107L	1	A2SAN-E Heatsink Height 29mm

Parts List (Retail Package)			
Name	Part Number	Qty	Description
Motherboard	MBD-A2SAN-E	1	A2SAN-E Motherboard
COM Cable	CBL-CUSB-0984	1	COM Cable 20cm
SATA Power Cable	CBL-PWEX-0982	1	SATA Power Cable 25cm
USB Cable	CBL-CUSB-0983	1	USB2.0 cable 20cm
SATA cable	CBL-SAST-0538	1	SATA Data cable 29CM
QRG	MNL-1935-QRG	1	Motherboard Quick Reference Guide
Audio Cable	CBL-OTHR-0986	1	Audio Cable 20cm
A2SAN-E Heatsink	SNK-C0107L	1	A2SAN-E Heatsink Height 29mm

Optional Parts List			
Name	Part Number	Qty	Description

Mini PCIe extended bracket	MCP-110-00097-0N	1	Mini PCIe extended bracket to extend half size to full size
----------------------------	------------------	---	-------------------------------------------------------------
