

SuperServer 5029AP-TN2



Integrated Board



A2SAV

Key Features

- ❑ **Embedded, Compact Mini Tower**
- ❑ **2 Independent Displays, M.2 slot**
- ❑ **7 Years product life cycle**

1. Intel® Atom processor E3940, SoC, FCBGA 1296

2. 4 Hot-swap 3.5" SATA3 HDD,
2 internal 2.5" fixed HDD

3. 1 PCI-E 2.0 x2 (in x8) slot,
1 M.2 PCIe 2.0 x2, M Key 2242/80
1 Mini-PCIe with mSATA support

4. Up to 8GB Unbuffered non-ECC DDR3-
1866MHz SO-DIMM in 1 DIMM slot

5. Dual GbE LAN ports via Intel I210-AT

6. 1 DP (Display Port), 1 HDMI, 1 VGA,
1 Intel® HD Graphics,
2 Independent Displays

7. 2 USB 3.0 (rear), 4 USB 2.0
(2 rear, 2 front), 1 USB 2.0 Type A

8. 250W Flex ATX Multi-output Bronze
Power Supply

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Note: Image above may show a varied configuration of optional parts. Please refer to parts list for standard parts included.

Specifications

Product SKUs

- SYS-5029AP-TN2** ■ SuperServer 5029AP-TN2 (**Black**)

Motherboard

Super A2SAV

Processor/Cache

- CPU** ■ Intel® Atom™ Processor E3940
 - FCBGA 1296
 - System-on-Chip

System Memory

- Memory Capacity** ■ 1x 204-pin DDR3 SO-DIMM socket
- Memory Type** ■ 1866/1600/1333MHz Unbuffered non-ECC SO-DIMM DDR3, 204-pin gold-plated DIMMs
- DIMM Sizes** ■ 8GB, 4GB, 2GB
- Memory Voltage** ■ 1.5 V, 1.35 V

On-Board Devices

- SATA** ■ SoC controller for 2 SATA3 (6Gbps) ports
 - Marvel 88SE9230 controller for 4 SATA3 (6Gbps) ports; RAID 0, 1, 5, 10
- Network Controllers** ■ Dual GbE LAN with Intel i210-AT controller
 - Virtual Machine Device Queues reduce I/O overhead
 - Supports 10BASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output
- Video** ■ Intel HD Graphics

Input / Output

- SATA** ■ 6 SATA3 (6Gbps) ports
- LAN** ■ 2 RJ45 Gigabit Ethernet LAN ports
- USB** ■ 2 USB 3.0 (2 rear)
 - 4 USB 2.0 (2 rear, 2 front)
 - 1 USB 2.0 (Type A)
- COM Port** ■ 2 serial ports
- DOM** ■ 1 SATA DOM (Disk on Module) power connector
- Video** ■ 1 VGA, 1 DP (Display Port), 1 HDMI, 1 eDP (Embedded Display Port), 1 Intel HD Graphics
- TPM** ■ 1 TPM 1.2 onboard Header

Management

- Software** ■ SuperDoctor® 5
 - Watch Dog
- Power Configurations** ■ ACPI Power Management
 - ATX Power connector
 - Control of power-on for recovery from AC power loss
 - CPU thermal trip support for processor protection

Chassis

- Form Factor** ■ Mini Tower

- Model** ■ **CSE-721TQ-250B**

Dimensions and Weight

- Height** ■ 9.45" (240mm) / 13.78" (350mm) pkg.
- Width** ■ 8.27" (210mm) / 12.4" (315mm) pkg.
- Depth** ■ 11" (279mm) / 16.14" (410mm) pkg.
- Weight** ■ Net Weight: 15 lbs (6.8 kg)
- Available Colors** ■ Black

Front Panel

- Buttons** ■ Power On/Off button
 - System Reset button
- LEDs** ■ Power LED
 - Hard drive activity LED
 - Network activity LEDs
 - System Information LED

Expansion Slots

- PCI-E** ■ 1 PCI-E 2.0 x2 (in x8) slot
 - 1 M.2 PCIe 2.0 x2, M Key 2242/80
 - 1 Mini-PCIe with mSATA

Drive Bays

- HDD** ■ 4 Hot-swappable 3.5" drive bays
 - 2 Internal 2.5" fixed drive bays
- Peripheral** ■ 1 slim DVD-ROM drive bay (shared with 1 internal 2.5" fixed drive bay)

Power Supply

250W Flex ATX Multi-output Bronze Power Supply

- AC Voltage** ■ 100 - 240V, 50 - 60Hz
- +5V** ■ Max:14 Amp; Min:0.5 Amp
- +12V** ■ Max:18 Amp; Min:1 Amp @100V-240V
- 12V** ■ Max: 0.3 Amp
- +3.3V** ■ Max: 12 Amp Min: 0.3Amp
- 5VSB** ■ Max: 2.5 Amp

Certification



Bronze Certified

System BIOS

- BIOS Type** ■ 64Mb SPI Flash EEPROM with AMI UEFI BIOS
- BIOS Features** ■ Plug and Play (PnP)
 - DMI 2.3
 - ACPI 5.0
 - USB Keyboard support
 - SMBIOS 2.7.1
 - UEFI

Operating Environment / Compliance

RoHS	■ RoHS Compliant
Environmental Spec.	■ Operating Temperature: 10°C to 35°C (50°F to 95°F) ■ Non-operating Temperature: -40°C to 70°C (-40°F to 158°F) ■ Operating Relative Humidity: 8% to 90% (non-condensing) ■ Non-operating Relative Humidity: 5% to 95% (non-condensing)

Parts List

Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-A2SAV	1	Super A2SAV Motherboard
	CSE-721TQ-250B	1	Mini Tower Chassis
Backplane	CSE-SAS-733TQ	1	4x3.5" SAS2/SATA3 backplane w /SES-II
Cable 1	CBL-0483L	1	SATA,INT,ROUND,ST-ST,29CM,30AWG
Cable 2	CBL-0473L	5	SATA,INT,ROUND,ST-ST,21CM,30AWG
Parts	MCP-260-00058-0N	1	Standard I/O Shield for X9SCAA/-L with EMI Gasket
Power Supply	PWS-251-1H	1	1U 250W Flex ATX Multi-output Bronze Power Supply

Optional Parts List

	Part Number	Qty	Description
DVD-RW	DVM-TEAC-DVDRW-SBT3	-	BLACK TEAC SLIM DVD-RW SATA DRIVE,HF,RoHS/REACH,PBF
DVD Kit	MCP-220-81502-0N	-	Slim SATA DVD kit
CPU Heatsink Fan	SNK-P0046A4	-	2U ACTIVE CPU HS FOR INTEL LGA1156
Power Cable	CBL-PWEX-0645	-	Big 4 pin male to big 4 pin female, power extension 15cm, 20AWG,RoHS/REACH