



Embedded
24-Core Snow Ridge
Intel QAT
8x 1GbE LAN
2x 25G SFP28, PMI 2.0

Key Features

- System on Chip
- Intel Atom Processor P5362,
- Single Socket FCBGA-2106 supported,
- CPU TDP support 83 W
- Intel Quick Assist Technology
- Up to 256GB ECC RDIMM DDR4-2933MHz, in 4 DIMM slots
- 2x 25G SFP28 ports and 8 GbE RJ45 LAN ports
- Supports 12V DC power input
- 2 USB 3.0 (Type-A on rear)
- 2 USB 2.0 (via headers)
- M.2 Interface:**
- 1x M.2 B-Key 2242/3042/2280 w/PCIe 2.0 x2/SATA 2.0/USB 3.0
- 1x M.2 M-Key 2242/2280/22110 w/PCIe 2.0 x4/SATA 2.0/USB 2.0
- 1x M.2 E-Key 2230 w/PCIe 2.0 x1/USB 2.0
- Expansion slots:
- 1 PCIe 3.0 x8
- 1 PCIe 3.0 x4
- Up to 6 SATA 2.0 ports
- I/O: 1 VGA, 2 COM, TPM 2.0 onboard and header both

Optimized Servers

[SYS-110A-24C-RN10SP / \(en/products/system/iot/1u/sys-110a-24c-rn10sp\)](#)

Specifications

Product SKUs MBD-A3SSV-24C-SPLN10F
Physical Stats Form Factor Flex-ATX Dimension 8" x 7.25" (22.86cm x 18.42cm)
Processor CPU Intel® Atom® Processor P5362 Single Socket FCBGA-2106 supported, CPU TDP supports Up to 83W TDP Core Up to 24 cores / 27MB Cache Note
System Memory Memory Capacity 4 DIMM slots Up to 256GB ECC RDIMM, DDR4-2933MHz Memory Type 2933/2666/2400 MT/s ECC DDR4 RDIMM DIMM Sizes 8GB, 16GB, 32GB, 64GB Memory Voltage 1.2V Error Detection Connects single-bit errors Detects double-bit errors (using ECC memory)
On-Board Devices Chipset System on Chip SATA SoC controller for 6 SATA2 (3 Gbps) ports IPMI ASPEED AST2500 Graphics 1 ASPEED AST2500 BMC port(s) Network Controllers Quad LAN with Marvell® Alaska® 88E1543 Quad LAN with Intel® I350 Gigabit Ethernet Controller Dual LAN with SoC
Input / Output LAN 2 SFP28 25 Gigabit Ethernet LAN ports 1 RJ45 Dedicated IPMI LAN port 8 RJ45 Gigabit Ethernet LAN ports USB 2 USB 2.0 port(s) (2 via header) 2 USB 3.1 Gen1 port(s) (2 rear type A) Video Output 1 VGA D-Sub Connector port(s) Serial Port 2 COM Port(s) (2 header) DOM 1 SuperDOM (SATA/DOM), (Disk on Module) power connector TPM 1 TPM Header & Chip both

Expansion Slots PCIe 1 PCIe 3.0 x8, 1 PCIe 3.0 x4 M.2 M.2 Interface: 1 PCIe 2.0 x2/SATA 2.0/USB 3.0; 1 PCIe 2.0 x1/USB 2.0; 1 PCIe 2.0 x4/SATA 2.0/USB 2.0 Form Factor: 2242/3042/2280, 2230, 2242/2280/22110 Key: B-Key, E-Key, M-Key
System BIOS BIOS Type 32MB AMI UEFI BIOS Features UEFI 2.7 SMBIOS 3.0 or later ACPI 6.0 or later
Management Software Redfish API /manuals/other/RedfishRedGuide.pdf , Supermicro Server Manager (SSM) (/solutions/SMS_SSM.cfm) , Supermicro Update Manager (SUM) (/solutions/SMS_SUM.cfm) , SuperDoctor™ 5 (/en/solutions/management-software/superdoctor) , SuperDiagnostics Offline (/en/solutions/management-software/super-diagnostics-offline) , KVM with dedicated LAN (/manuals/other/BMC_IPMI_X13_H13.pdf#page=112) , IPMI 2.0 (/solutions/IPMI.cfm)
System Management Software IPMI (Intelligent Platform Management Interface) v1.5 / 2.0 with KVM support Power Configurations Power-on mode for AC power recovery, ATX Power connector, +12V DC Power Input, CPU thermal trip support for processor protection
Security Hardware Trusted Platform Module (TPM) 2.0 Features Cryptographically Signed Firmware Secure Boot Secure Firmware Updates System Lockdown
PC Health Monitoring Voltage VBAT, System level control, Supports system management utility, Monitors CPU voltages, Memory temperature, Chassis intrusion header, 5-Fan status, 3.3V standby, 1.2V (VDIMM), 1.05 (PCH), +5V standby, +5V +3.3V, +12V LED UID/Remote UID Temperature Thermal Control for 5 Fan Connectors CPU thermal trip support FAN 5x 4-pin fan headers (up to 5 fans) Fan speed control, Dual Cooling Zone, 5 fans with tachometer status monitoring, Status monitoring for speed control, Pulse Width Modulated (PWM) fan connectors, Support 3-pin fans (w/o speed control)
Other Features UID, RoHS, Node Manager Support, M.2 NGFF connector, Dual Cooling Zones, Chassis intrusion header, ATX Power connector, ACPI power management, 8-pin 12V DC power connector, 12V DC or ATX Power Source, Intel® QuickAssist Technology
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

Standard Parts (Bulk Package)

I/O Shield	
Part Number	MCP-260-00133-0N
Qty	1
Description	STANDARD I/O SHIELD FOR A2SDV-LN10PF
<hr/>	
SATA cable	
Part Number	CBL-0044L - eStore (https://store.supermicro.com/supermicro-sata-flat-straight-straight-57-5cm-cable-cbl-0044l.html)
Qty	2
Description	57.5CM SATA FLAT S-S PBF

Standard Parts (Retail Package)

I/O Shield	
Part Number	MCP-260-00133-0N
Qty	1
Description	STANDARD I/O SHIELD FOR A2SDV-LN10PF
<hr/>	
Quick Installation Guide	
Part Number	MNL-2258-QRG
Qty	1
Description	A3SSV-8C/16C/24C-SPLN10F QUICK REFERENCE GUIDE
<hr/>	
SATA cable	
Part Number	CBL-0044L - eStore (https://store.supermicro.com/supermicro-sata-flat-straight-straight-57-5cm-cable-cbl-0044l.html)
Qty	6
Description	57.5CM SATA FLAT S-S PBF