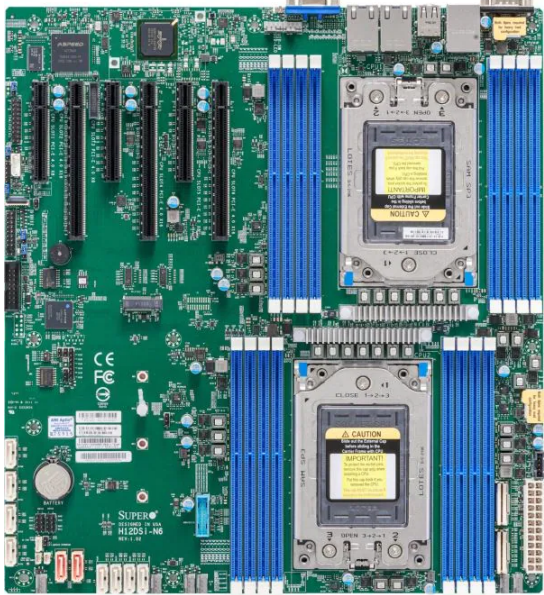# H12DSi-N6

Key Features

1. Dual AMD EPYC™ 7003/7002 Series Processors
   (The latest AMD EPYC™ 7003 Series Processor with AMD 3D V-Cache™ Technology requires BIOS version 2.3 or newer)

2. 4TB Registered ECC DDR4 3200MHz SDRAM in 16 DIMMs

3. Expansion slots:
   3 PCI-E 4.0 x16 slots, 3 PCI-E 4.0 x8 slots
   M.2 Interface: 1 PCI-E 4.0 x4
   M.2 Form Factor: 2280, 22110
   M.2 Key: M-key

4. 10 SATA3, 2 SATADOM, 4 NVMe

5. Dual Gigabit LAN ports,
   1 dedicated IPMI LAN Port

6. ASPEED AST2600 BMC graphics

7. 2 USB 2.0 ports (rear),
   4 USB 3.0 ports (2 rear, 2 headers)

8. 8x 4-pin PWM Fans & Speed control

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

Links & Resources

▸ Tested Memory List

▸ Tested HDD List

▸ Tested M.2 List

▸ Tested AOC List

▸ Motherboard Manual

▸ Update Your BIOS

▸ IPMI Firmware

▸ Download the Latest Drivers and Utilities

▸ Download Driver CD

▸ OS Compatibility

Specifications

Product SKUs

MBD-H12DSi-N6	H12DSi-N6

Physical Stats

Form Factor	EATX
Dimensions	12" x 13.05" (30.5cm x 33.1cm)

Processor/Chipset

CPU	Dual AMD EPYC™ 7003/7002 Series Processors (The latest AMD EPYC™ 7003 Series Processor with AMD 3D V-Cache™ Technology requires BIOS version 2.3 or newer) · Socket SP3
Cores	Up to 64 Cores
Chipset	System on Chip

System Memory

Memory Capacity	16 DIMM slots · Supports up to 4TB Registered ECC DDR4 3200MHz SDRAM · 8-channel memory bus · For Dual CPUs: Recommended that memory be populated equally in adjacent memory banks
Memory Type	DDR4 3200 MHz Registered ECC, 288-pin gold-plated DIMMs
DIMM Sizes	8GB, 16GB, 32GB, 64GB, 128GB, 256GB
Memory Voltage	1.2V
Error Detection	Corrects single-bit errors · Detects double-bit errors (using ECC memory)

On-Board Devices

SATA	SATA3 (6 Gbps)
IPMI	Support for Intelligent Platform Management Interface v. 2.0 · IPMI 2.0 with virtual media over LAN and KVM-over-LAN support · ASPEED AST2600 BMC
Network Controllers	Dual LAN via Broadcom BCM5720L Gigabit Ethernet Controller
VGA	ASPEED AST2600 BMC

Input / Output

SATA	10 SATA3 (6 Gbps) ports
LAN	2x 1GbE LAN ports · 1 RJ45 Dedicated IPMI LAN port
USB	2 USB 2.0 ports (rear) · 4 USB 3.0 ports (2 rear, 2 headers)
VGA	1 VGA port
Others	1 COM port (rear) · 2 SATA DOM power connectors · 4 PCI-E 4.0 NVMe x4 internal ports · TPM 2.0 header

Chassis (Optimized for H12DSi-N6)

2U	SCLA25TQC-R609LP SCLA26AC12-R920LP1
3U	SC835TQC-R1K03B

Server(s) (with H12DSi-N6)

Model(s)	AS -2024S-TR

System BIOS

BIOS Type	AMI 256Mb SPI Flash EEPROM
BIOS Features	Plug and Play (PnP) · DMI 2.3 · PCI 2.2 · ACPI 6.2 · USB Keyboard Support · SMBIOS 3.1.1

Management

Software	Super● Doctor 5 · Watch Dog · NMI · SUM · IPMI 2.0, KVM with dedicated LAN
Power Configurations	ACPI Power Management · Power-on mode control for AC power loss recovery

PC Health Monitoring

CPU	Monitors CPU Core Voltages, +1.5V, +1.8V, +12V, +5V, +5V standby · CPU switching voltage regulator · VBAT
FAN	Up to 8 fan status tachometer monitoring · Up to 8x 4-pin fan headers · Status monitor for speed control · Pulse Width Modulated (PWM) fan connectors
Temperature	Monitoring for CPU and chassis environment · CPU Thermal Trip Support · Thermal control for 8x Fan connectors · I²C Temperature Sensing Logic
LED	CPU / System Overheat LED
Other Features	Chassis Intrusion Detection · Chassis Intrusion Header

Operating Environment / Compliance

Environmental Specifications	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)

Expansion Slots

PCI-Express	▪ 3 PCI-E 4.0 x16 slots ▪ 3 PCI-E 4.0 x8 slots
M.2	▪ Interface: 1 PCI-E 4.0 x4 ▪ Form Factor: 2280, 22110 ▪ Key: M-key

Parts List

Bulk Pack List

	Part Number	Qty	Description
Motherboard	MBD-H12DSi-N6-B	1	H12DSi-N6 Motherboard
I/O Shield	MCP-260-00042-0N	1	STD I/O SHIELD
I/O Cables	CBL-0044L	2	57.5CM SATA FLAT S-S PBF

Retail Pack List

	Part Number	Qty	Description
Motherboard	MBD-H12DSi-N6-O	1	H12DSi-N6 Motherboard
I/O Shield	MCP-260-00042-0N	1	STD I/O SHIELD
I/O Cables	CBL-0044L	4	57.5CM SATA FLAT S-S PBF

Optional Parts List

	Part Number	Qty	Description
TPM security module	AOM-TPM-9655V	-	TPM 1.2 module with Infineon 9655, RoHS/REACH,PBF;
	AOM-TPM-9665V	-	TPM 2.0 module with Infineon 9665, RoHS/REACH,PBF;