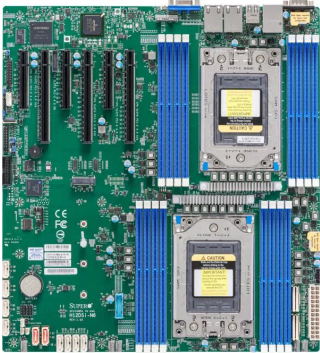# H12DSi-N6

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

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

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

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

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

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)