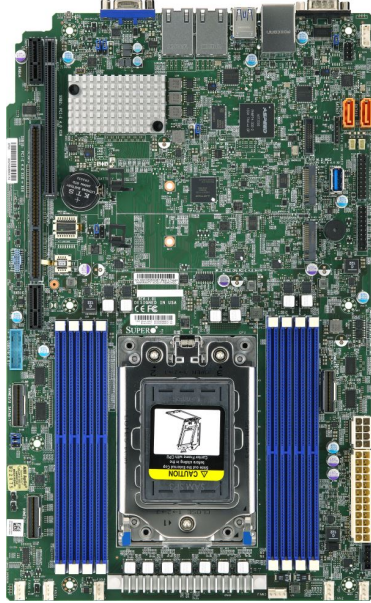


H12SSW-iN



Key Features

1. Single AMD EPYC™ 7003/7002 Series Processor
(The latest AMD EPYC™ 7003 Series Processor with AMD 3D V-Cache™ Technology requires BIOS version 2.3 or newer)
2. 2TB Registered ECC DDR4 3200MHz SDRAM in 8 DIMMs
3. Expansion slots:
1 PCI-E 4.0 x32 Left Riser Slot
1 PCI-E 4.0 x16 Right Riser Slot
M.2 Interface: 2 SATA/PCI-E 3.0 x2
M.2 Form Factor: 2280, 22110
M.2 Key: M-key
4. 16 SATA3, 2 M.2, 2 SuperDOM
5. 2 NVMe via SlimSAS,
4 NVMe or 16 SATA3 via SlimSAS,
2 M.2,
2 SATA3
6. 1 Realtek RTL8211E PHY (dedicated IPMI)
7. ASPEED AST2500 BMC graphics
8. Up to 7 USB 3.0 ports
9. 6x 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-H12SSW-iN ■ H12SSW-iN

Physical Stats

Form Factor ■ Proprietary WIO

Dimensions ■ 8.15" x 13.05"

Processor/Chipset

CPU ■ Single AMD EPYC™ 7003/7002 Series Processor
(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 ■ 8 DIMM slots
■ Supports up to 2TB Registered ECC DDR4 3200MHz SDRAM in 8 DIMMs
■ 8-channel memory bus

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 AST2500 BMC

Network Controllers ■ 2x 1GbE LAN Ports via Broadcom BCM5720L
■ 1 Realtek RTL8211E PHY (dedicated IPMI)

VGA ■ ASPEED AST2500 BMC

Input / Output

SATA ■ 2 SATA3 (6 Gbps) ports

SATA/NVMe Hybrid ■ 16 SATA3 / 4 NVMe (PCI-E Gen3)

NVMe ■ 2 NVMe (PCI-E Gen4)

LAN ■ 2 RJ45 Gigabit Ethernet LAN ports
■ 1 RJ45 Dedicated IPMI LAN port

USB ■ 7 USB 3.0 ports (4 rear, 2 via header, 1 Type A)

VGA ■ 1 VGA port

Chassis (Optimized for H12SSW-iN)

1U ■ [SC116AC10-R706WB3](#)
■ [SC815TQC-R504WB2](#)
■ [SCLA15TQC-563W](#)
■ [SCLB16AC2-R504W](#)

2U ■ [SC213AC8-R1K23WB](#)
■ [SC825TQC-R802WB](#)

System BIOS

BIOS Type ■ AMI 256Mb SPI Flash EEPROM

BIOS Features ■ Plug and Play (PnP)
■ DMI 2.3
■ PCI 2.2
■ ACPI 5.1
■ 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

FAN ■ Up to 6 fan status tachometer monitoring
■ Up to 6 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 6x 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)

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- | | |
|---------------|---|
| Others | <ul style="list-style-type: none">■ 1 COM port■ 2 SuperDOM power connectors■ 1 TPM 1.2/2.0 header |
|---------------|---|
-

Expansion Slots

- | | |
|--------------------|--|
| PCI-Express | <ul style="list-style-type: none">■ 1 PCI-E 4.0 x32 Left Riser Slot■ 1 PCI-E 4.0 x16 Right Riser Slot |
|--------------------|--|
-

- | | |
|------------|--|
| M.2 | <ul style="list-style-type: none">■ Interface: 2 SATA/PCI-E 3.0 x2■ Form Factor: 2280, 22110■ Key: M-key |
|------------|--|
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Parts List

Retail Pack List

	Part Number	Qty	Description
H12SSW-iN	MBD-H12SSW-iN -O	1	H12SSW-iN Motherboard

Optional Parts List

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