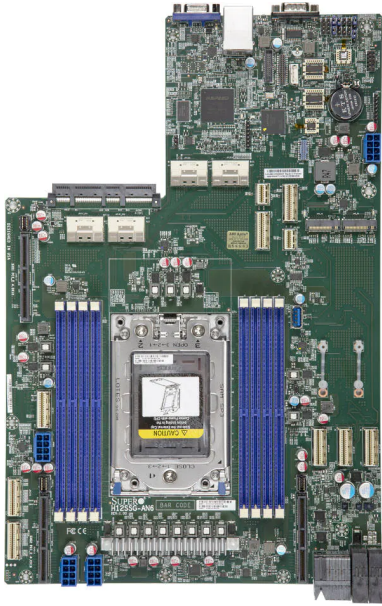


H12SSG-AN6 (For A+ Server Only)



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:
 3 PCI-E 4.0 x16 Riser Slots,
 9 PCI-E 4.0 x8 SlimSAS,
 2 PCI-E 4.0 x4 SlimSAS,
 1 PCI-E 4.0 x16 AIOM networking slot
M.2 Interface: 2 PCI-E 4.0 x4
M.2 Form Factor: 2242, 2260, 2280, 22110
M.2 Key: M-key
4. 2 NVMe via SlimSAS,
2 M.2
5. Dedicated IPMI 2.0 LAN
6. ASPEED AST2600 BMC graphics
7. 2 USB 3.0 ports (rear)

Links & Resources

- ▶ [Tested Memory List](#)
- ▶ [Tested M.2 List](#)
- ▶ [Tested AOC List](#)
- ▶ [Motherboard Manual](#)
- ▶ [Update Your BIOS](#)
- ▶ [IPMI Firmware](#)
- ▶ [Download the Latest Drivers and Utilities](#)
- ▶ [Download Driver CD](#)



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

Specifications

Product SKUs

MBD-H12SSG-AN6	<ul style="list-style-type: none"> H12SSG-AN6 (for server SKUs only)
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Physical Stats

Form Factor	<ul style="list-style-type: none"> Proprietary
Dimensions	<ul style="list-style-type: none"> 9.6" x 14.5"

Processor/Chipset

CPU	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Up to 64 Cores
Chipset	<ul style="list-style-type: none"> System on Chip

System Memory

Memory Capacity	<ul style="list-style-type: none"> 8 DIMM slots Supports up to 2TB Registered ECC DDR4 3200MHz SDRAM in 8 DIMMs 8-channel memory bus
Memory Type	<ul style="list-style-type: none"> DDR4 3200 MHz Registered ECC, 288-pin gold-plated DIMMs
DIMM Sizes	<ul style="list-style-type: none"> 8GB, 16GB, 32GB, 64GB, 128GB, 256GB
Memory Voltage	<ul style="list-style-type: none"> 1.2V
Error Detection	<ul style="list-style-type: none"> Corrects single-bit errors Detects double-bit errors (using ECC memory)

On-Board Devices

IPMI	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> LAN Networking provided via AIOM Dedicated IPMI via Realtek RTL8211F PHY
VGA	<ul style="list-style-type: none"> ASPEED AST2600 BMC

Input / Output

NVMe	<ul style="list-style-type: none"> 2 NVMe via SlimSAS
LAN	<ul style="list-style-type: none"> Provided via AIOM 1 RJ45 Dedicated IPMI LAN port
USB	<ul style="list-style-type: none"> 2 USB 3.0 ports (rear)
VGA	<ul style="list-style-type: none"> 1 VGA port (rear)
Others	<ul style="list-style-type: none"> 1 COM port (header) 1 TPM 1.2/2.0 header

Expansion Slots

Chassis (Optimized for H12SSG-AN6)

2U	<ul style="list-style-type: none"> SC227GTS-R2K63P
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Server(s) (with H12SSG-AN6)

Model(s)	<ul style="list-style-type: none"> AS -2114GT-DNR
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System BIOS

BIOS Type	<ul style="list-style-type: none"> AMI 256Mb SPI Flash EEPROM
BIOS Features	<ul style="list-style-type: none"> Plug and Play (PnP) DMI 2.3 PCI 2.2 ACPI 6.2 USB Keyboard Support SMBIOS 3.1.1

Management

Software	<ul style="list-style-type: none"> Super Doctor 5 Watch Dog NMI SUM IPMI 2.0, KVM with dedicated LAN
Power Configurations	<ul style="list-style-type: none"> ACPI Power Management Power-on mode control for AC power loss recovery

PC Health Monitoring

CPU	<ul style="list-style-type: none"> Monitors CPU Core Voltages, +1.8V, 3.3V, +5V, +12V, +3.3V Standby, +5V Standby, VBAT, HT, Memory CPU switching voltage regulator
FAN	<ul style="list-style-type: none"> Fan status tachometer monitoring Fan header Status monitor for speed control Pulse Width Modulated (PWM) fan connectors
Temperature	<ul style="list-style-type: none"> Monitoring for CPU and chassis environment CPU Thermal Trip Support Thermal control for Fan connectors I²C Temperature Sensing Logic
LED	<ul style="list-style-type: none"> CPU / System Overheat LED
Other Features	<ul style="list-style-type: none"> Chassis Intrusion Detection Chassis Intrusion Header

Operating Environment / Compliance

Environmental Specifications	<ul style="list-style-type: none"> 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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PCI-Express

- 3 PCI-E 4.0 x16 Riser Slots
 - 9 PCI-E 4.0 x8 SlimSAS
 - 2 PCI-E 4.0 x4 SlimSAS
 - 1 PCI-E 4.0 x16 AIOM LAN Networking Slot
-

M.2

- Interface: 2 PCI-E 4.0 x4
 - Form Factor: 2242, 2260, 2280, 22110
 - Key: M-key
-

Parts List

Retail Pack List

	Part Number	Qty	Description
H12SSG-AN6	MBD-H12SSG-AN6 -O	1	H12SSG-AN6 Motherboard

Optional Parts List

	Part Number	Qty	Description
TPM security module	AOM-TPM-9671V	-	TPM 1.2 module (Vertical) with Infineon 9671
	AOM-TPM-9670V	-	TPM 2.0 module (Vertical) with Infineon 9670