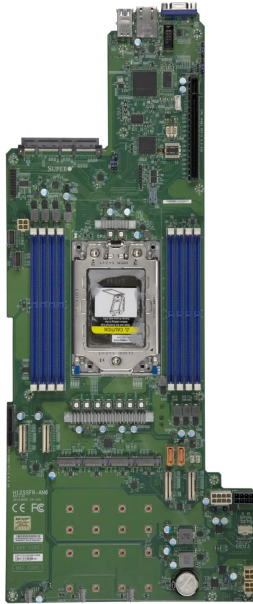


H12SSFR-AN6 (For A+ Server Only)



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:
 1 PCI-E 4.0 x16 Right Riser Slot
 1 PCI-E 4.0 x8 Left Riser Slot
 1 PCI-E 4.0 x16 AIOM LAN Networking Slot
M.2 Interface: 4 SATA/PCI-E 4.0 x4
M.2 Form Factor: 2280, 22110
M.2 Key: M-key
4. 8 SATA3 or 2 NVMe via SlimSAS,
 2 SATA3,
 4 M.2,
 2 SuperDOM
5. Dedicated IPMI 2.0 LAN
6. ASPEED AST2600 BMC graphics
7. 2 USB 3.0 ports (rear)
8. 3x 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](#)



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

Specifications

Product SKUs

MBD-H12SSFR-AN6	<ul style="list-style-type: none"> H12SSFR-AN6 (for server SKUs only)
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Physical Stats

Form Factor	<ul style="list-style-type: none"> Proprietary FatTwin™
Dimensions	<ul style="list-style-type: none"> 8.53" x 20.19"

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

SATA	<ul style="list-style-type: none"> SATA3 (6 Gbps)
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"> 1 PCI-E 4.0 x16 AIOM LAN Networking Slot ATEN IPMI (Dedicated) from ASPEED AST2600 BMC
VGA	<ul style="list-style-type: none"> ASPEED AST2600 BMC

Input / Output

SATA	<ul style="list-style-type: none"> 2 SATA3 (6 Gbps) ports
SATA/NVMe Hybrid	<ul style="list-style-type: none"> 8 SATA3 or 2 NVMe via SlimSAS
NVMe	<ul style="list-style-type: none"> 4 internal NVMe ports
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)

Chassis (Optimized for H12SSFR-AN6)

4U	<ul style="list-style-type: none"> SCF418BC3-R2K20BP SCF424AS3-R2K20BP
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Server(s) (with H12SSFR-AN6)

Model(s)	<ul style="list-style-type: none"> AS -F1114S-RNTR AS -F2014S-RNTR
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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 5.1 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, +1.5V, +1.8V, +12V, +5V, +5V standby CPU switching voltage regulator
FAN	<ul style="list-style-type: none"> Up to 3 fan status tachometer monitoring Up to 3x 4-pin fan headers 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 3x Fan connectors I°C 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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- Others**
- 1 COM port (header)
 - 2 SuperDOM power connectors
 - 1 TPM 1.2/2.0 header
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Expansion Slots

- PCI-Express**
- 1 PCI-E 4.0 x16 Right Riser Slot
 - 1 PCI-E 4.0 x8 Left Riser Slot
 - 1 PCI-E 4.0 x16 AIOM LAN Networking Slot
-

- M.2**
- Interface: 4 SATA/PCI-E 4.0 x4
 - Form Factor: 2280, 22110
 - Key: M-key
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Parts List

Retail Pack List

	Part Number	Qty	Description
H12SSFR-AN6	MBD-H12SSFR-AN6 -O	1	H12SSFR-AN6 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;