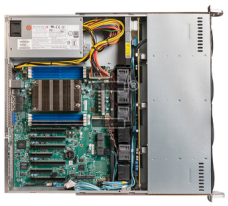
Datasheet

1U AMD single-CPU RA1104-SMEPH

[Ver. 1.0]

Highlights at a glance:

- Incl. 1x AMD EPYC 7252, can be equipped with a CPU (AMD EPYC 7002/7003 (Rome/Milan)) up to 64 cores
- Incl. 16 GB RAM, upgradable to 1TB RAM, (8 DIMMs)
- 4x 3.5" / 2.5" (Hot-swap) up to 88 TB, SSDs: 30.72 TB
- Expandable with 1 FP/LP/ HL additional card(s)
- Energy-efficient power supply 80 PLUS Platinum (>94%) red. NT (opt.)
- 503 mm (D) installation depth saves space
- Integrated IPMI (dedicated NIC)



Mainboards

Manufacturer	Supermicro	Supermicro	Supermicro
Mainboards	H12SSL-i	H12SSL-NT	H12SSL-CT
Chipset	AMD System on Chip	AMD System on Chip	AMD System on Chip
Socket	AMD SP3	AMD SP3	AMD SP3
Processor	AMD EPYC 7002/7003 (Rome/Milan)	AMD EPYC 7002/7003 (Rome/Milan)	AMD EPYC 7002/7003 (Rome/Milan)
Main Memory	8 DIMMs 1 TB DDR4 3200 RDIMM/SDRAM	8 DIMMs 1 TB DDR4 3200 RDIMM/SDRAM	8 DIMMs 1 TB DDR4 3200 RDIMM/SDRAM
LAN Onboard	2 x 1 GBit/s LAN (RJ-45)	2x 10 Gbit/s LAN (RJ-45)	2x 10 Gbit/s LAN (RJ-45)
LAN chipset	Broadcom BCM5720	Broadcom BCM57416	Broadcom BCM57416
LAN Onboard (dedicated IPMI)	1	1	1
Onboard graphic	1x VGA Aspeed AST2500 BMC	1x VGA Aspeed AST2500 BMC	1x VGA Aspeed AST2500 BMC
Onboard Input/Output	USB (no PS2 ports!) 1x TPM 2.0 header 1x COM port (rear)	USB (no PS2 ports!) 1x TPM 2.0 header 1x COM port (rear)	USB (no PS2 ports!) 1x TPM 2.0 header 1x COM port (rear)
USB ports	4x USB (rear) (USB 3.0) 0x USB on board (type A)	4x USB (rear) (USB 3.0) 0x USB on board (type A)	4x USB (rear) (USB 3.0) 0x USB on board (type A)

Extension-slots for additional cards

PCI slots (mainboard)	5x PCIe 4.0 x16 2x PCIe 4.0 x8	5x PCIe 4.0 x16 2x PCIe 4.0 x8	5x PCIe 4.0 x16 2x PCIe 4.0 x8
Available slots in the chassis	1x Full profile/Half Length	1x Full profile/Half Length	1x Full profile/Half Length
Possible Riser cards	1x PCI-E (x16) riser card	1x PCI-E (x16) riser card	1x PCI-E (x16) riser card

Onboard ports

SATA-3 (6 Gb/s)	16x SATA-3 (6 Gbit/s) AMD SoC No integrated RAID function	16x SATA-3 (6 Gbit/s) AMD SoC No integrated RAID function	8x SATA-3 (6 Gbit/s) AMD SoC RAID 0, 1, 10
M.2	2 x M.2 PCIe 3.0 x4	2 x M.2 PCIe 3.0 x4	2 x M.2 PCIe 3.0 x4
M.2 form factor	2280, 22110	2280, 22110	2280, 22110
SAS-3 (12Gb/s)	0x SAS-3 (12 Gb/s)	0x SAS-3 (12 Gb/s)	8x SAS-3 (12 Gb/s) Raid 0, 1, 10
NVMe	2x NVMe onboard	4x NVMe onboard	0x NVMe onboard

Drives / storage capacity

Drive slots (total)	4x 3.5" / 2.5" (Hot-swap)
Backplane	SATA / SAS-3 (12 Gb/s)
Max. capacity HDD (SAS)	88 TB
Max. capacity HDD (SATA)	88 TB
Max. capacity SSD (SATA)	30.72 TB
Max. capacity SSD (SATA)	30.72 TB

Server management

Management software	Supermicro SuperDoctor 5
Remote management	Integrated IPMI (dedicated NIC)
Features	Managementsoftware IPMI View IPMI with KVM Over LAN Serial Over LAN (SOL) Virtual Media Over LAN (Virtual USB Floppy/CD and Drive Redirection) LAN Alert-SNMP Trap Event Log OS Independent Hardware Health Monitor Remote Power Control Support RMCP & RMCP + Protocols Fan Speed Control Dedicated 3. network interface card Temperature Monitoring and Recovery Email Alerting
IPMI-sensors	CPU-temperature (OK / warning) system-temperature (Celsius degree) Electronic voltage (volt) Cooler speed (RPM) Additional model-dependent sensors (www.thomas-krenn.com/ipmi-sensoren)

Chassis

Unit	1U
Dimensions	43 mm (H), 437 mm (W), 503 mm (D),
drives (in scope of delivery)	not contained, optional available
Drives (optional)	1x Slim CD/DVD/DVD-R External USB-drives
Fan (center)	4x 40x40x28mm non-hot-swap (17500rpm, 57.5dBA)
Silent blowerkit option	no

Power supply

Power supply unit	1x 350 Watt Netzteil (80plus Platinum)
energy efficiency	92.51%
PMBus support	PSU single: no, redundant PSU: Yes, Ver.1.2

Rack Assembly

Assembly rails	contained in the scope of supply
rail length	660 - 845 mm
Total length server front to end of assembly rail	705 mm
Max. extraction length	710 mm
Recommended maneuvering space	75 mm (minimum)

environment-requirements

Recommended ambient temperature	20 - 22 degree
Recommended humidity	max. 40%
Recommended deployment location	To ensure the optimal cooling of the system, we recommend running the server in an air conditioned server room and as part of a rack installation. The server is not ideal for use in an office environment due to its high noise levels.