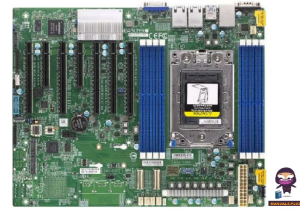




Computer  
H12SSL-NT  
Motherboard



# Super Micro Computer H12SSL-NT Motherboard User Guide

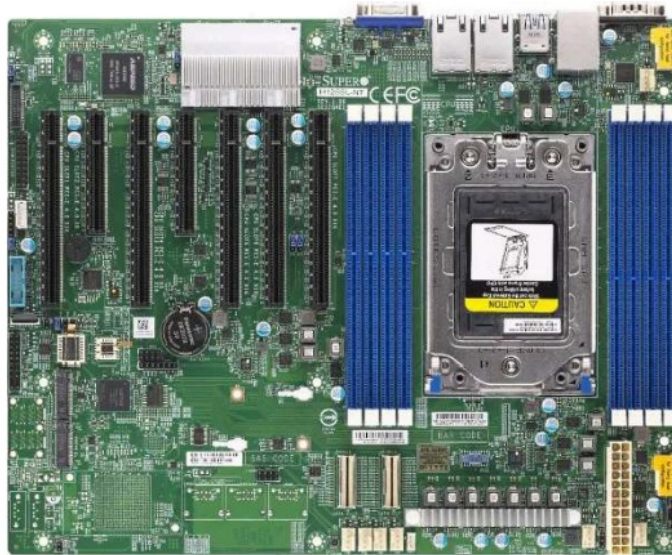
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**Super Micro Computer H12SSL-NT Motherboard**



## Key Features

1. Single AMD EPYC™ 7003/7002 Series Processor  
(The latest AMD EPYC™ 7003 Series Processor with AMD 3D VCache™ Technology requires BIOS version 2.3 or newer)
2. 2TB Registered ECC DDR4 3200MHz SDRAM in 8 DIMMs
3. Expansion slots:
  - 5 PCI-E 4.0 x16
  - 2 PCI-E 4.0 x8
  - M.2 Interface: 2 PCI-E 4.0 x4
  - M.2 Form Factor: 2280, 22110
  - M.2 Key: M-key
4. 2 M.2,
  - 2 SlimSAS x8 (each: 8 SATA3 or 2 NVMe)
5. Dual 10GBase-T LAN via Broadcom BCM57416
6. ASPEED AST2500 BMC graphics
7. Up to 6 USB 3.0 ports  
(4 rear + 2 via header)
8. 7 PWM 4-pin Fans with tachometer status monitoring

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

## Links & Resources

- [Tested Memory List](#)
- [Tested HDD List](#)
- [Tested M.2 List \(en/support/resources/m2ssd?ProductID=87233&ProductName=H12SSL-NT\)](#)
- [Tested AOC List](#)
- [Motherboard Manual](#)
- [Update Your BIOS](#)

- IPMI Firmware
  - Download the Latest Drivers and Utilities
  - Download Driver CD
  - OS Compatibility
- (Aplus/support/resources/OS/OS Comp H12 EPYC7002 7003-UP-1.cfm)

## **Specifications**

### **Product SKUs**

- MBD-HI2SSL-NT
- HI2SSL-NT
- MBD-HI2SSL-NT-O
- HI2SSL-NT (Retail Pack)

### **Physical Stats**

- Form Factor
- ATX
- Dimensions 12" x 9.6" (30.5cm x 24.4cm)

### **Processor/Chipset**

#### **• CPU**

Single AMD EPYC™ 7003/7002 Series Processor (The latest AMD EPYC™ 7003 Series Processor with AMD 3D VCache™ 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 3200M Hz SDRAM
- 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**

- Dual IOGBase-T LAN via Broadcom BCM57416
- 1 Realtek RTL8211F PHY (dedicated IPMI)

#### **VGA**

- ASPEED AST2500 BMC

### **Input/ Output**

#### **SATA/NVMe Hybrid**

- 2 SlimSAS x8 (each: 8 SATA3 or 2 NVMe)

#### **LAN**

- Dual IOGBase-T LAN ports
- 1 RJ45 Dedicated IPMI LAN port

#### **USB**

- 6 USB 3.0 ports
- (4 rear + 2 via header)

## VGA

- 1 VGA port

## Others

- 1 COM port (rear)
- 1 TPM 2.0 header

## Expansion Slots

### Chassis ( Optimized for H12SSL-NT)

- **IU**
  - SC813M FTQC-350CB2 (LproductsfchassisL!U/813/SC813MFTQC-350CB2)
  - SC813M FTQC-R407CB (Lproducts/chassisf1U/813/SC813MFTQC-R407CB)
- **2U**
  - SC213BAC8-R1K23LPB.(LproductsLchassisL2UL213/SC213BAC8-RIK23LPB).
  - SC216BE1C4-R1K23LPB.(Lproducts/chassisf2Uf216/SC216BE1C4-R1K23LPB).
  - SC825 M BTQC-R802LP B.(Lproducts/chassisf2U/825/SC825MBTQC-R802LPB).
  - SC825TQC-R802LPB.(Lproducts/chassisf2UL825/SC825TQC-R802LPB).
  - SC826BE1C4-R1K23LPB.(Lproducts/chassisf2U/826/SC826BE1C4-R1K23LPB).
  - SCLA26AC12-R920LP1.(Lproductsfchassisf2U/LA26/SCLA26AC12-R920LP1}.
- **3U**
  - SC835TQC-R802 B.(Lproducts/chassisf3U/835/SC835TQC-R802B).
  - SC836BE1C-R1K23B(Lproducts/chassisL3U/836/SC836BE1C-RIK23B)

## Mid-Tower

- SC732i-903B

## Tower/4U

- SC745BAC-R1K23B (Lprod ucts/chassisL 4U/7 45/SC7 45BAC-R1K23B)
- SC846BE1C-R1K23B (Lproducts/chassis/4U/846/SC846BE1C-R1K23B)

## 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
- SM BIOS 3.1.1

## **Management**

### **• Software**

- Supere Doctor 5 (Lproducts/nfo/SMS SDS.cfm).
- Watch Dog
- NMI
- SUM (Lproducts/nfoLSMS SUM.cfm).
- IPMI 2.0 (Lproducts/nfoLSMS IPMI.cfm)., KVM with dedicated LAN

### **• Power Configurations**

- ACPI Power Management
- Power-an mode control for AC power loss recovery

### **• PCI-Express**

- S PCI-E 4.0 x16
- 2 PCI-E 4.0 x8

### **• M.2**

- Interface: 2 PCI-E 4.0 x4
- Form factor: 2280, 22110
- Key: M-key

### **• CPU**

- Monitors CPU Core Voltages, +3.3V, +5V, +5V standby, +3.3V standby
- CPU switching voltage regulator
- Supports system management utility
- VBAT

### **• FAN**

- Up to 7-fan status tachometer monitoring
- Up to 7 4-pin fan headers
- Dual Cooling Zone
- 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 7x Fan connectors
- I2C Temperature Sensing Logic

### **• LED**

- CPU/ System Overheat LED

### **• Other Features**

- Chassis Intrusion Detection
- Chassis Intrusion Header


- UID

## Operating Environment/ Compliance

### Environmental Specifications

- Operating Temperature: 10° c to 3s0 c (so° F to 9S° F)
- Non-operating Temperature: -40°C to 10° c (-40° F to 1ss° F)
- Operating Relative Humidity: 8% to 90% (non-condensing)
- Non-operating Relative Humidity: So/o to 9S% (non-condensing)

### Documents / Resources

	<p><a href="#">Super Micro Computer H12SSL-NT Motherboard</a> [pdf] User Guide H12SSL-NT Motherboard, H12SSL-NT, Motherboard</p>
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### References

- [User Manual](#)

#### [Manuals+](#), [Privacy Policy](#)

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