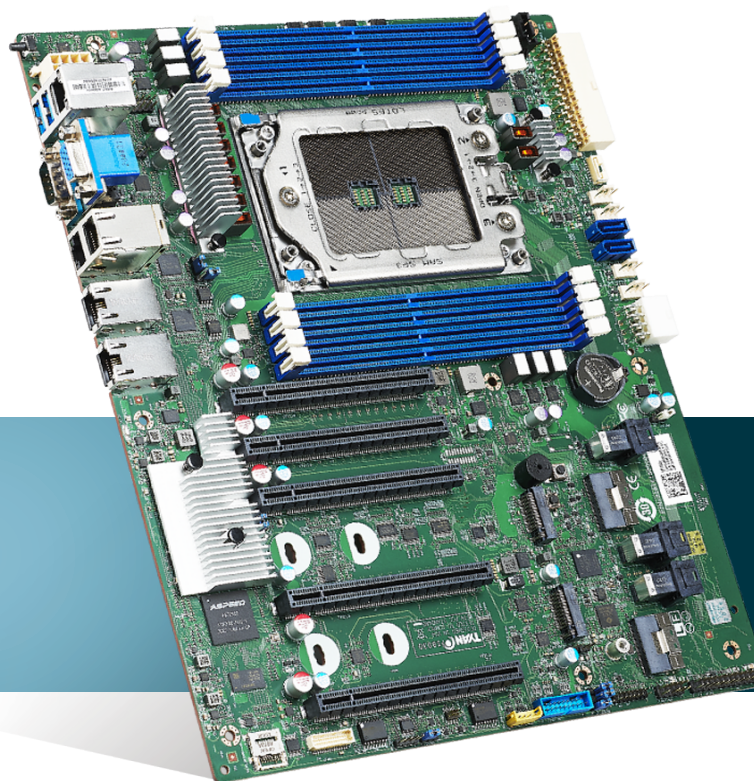


# AMD EPYC 7002/7003 SERVER MOTHERBOARD



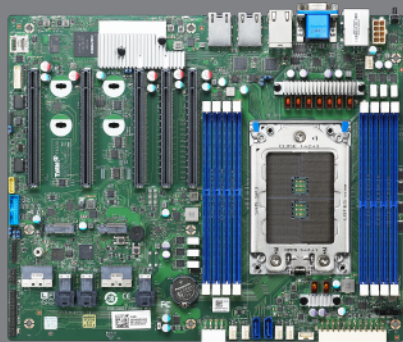
## Tomcat SX S8030 (Version MOA)

S8030GM2NE, S8030GM4NE-2T

AMD  
EPYC



nvm  
EXPRESS



■ AMD EPYC™ 7002/7003 Series Processors

### Single-socket Compact Motherboard Designed for General Server

- Single SP3 Socket, supporting (1) AMD EPYC™ 7002/7003 Series Processors
- (8) R/LRDIMM DDR4 3200, Up to 512GB RDIMM or 1,024GB LRDIMM
- (5) PCI-E Gen4 x16 slots
- ATX 12" x 9.9"

#### ■ Summary Table

| SKU           | Storage                        | Networking                     |
|---------------|--------------------------------|--------------------------------|
| S8030GM2NE    | (14) SATA + (4) NVMe + (2) M.2 | (2) GbE + (1) IPMI             |
| S8030GM4NE-2T | (14) SATA + (4) NVMe + (2) M.2 | (2) 10GbE + (2) GbE + (1) IPMI |



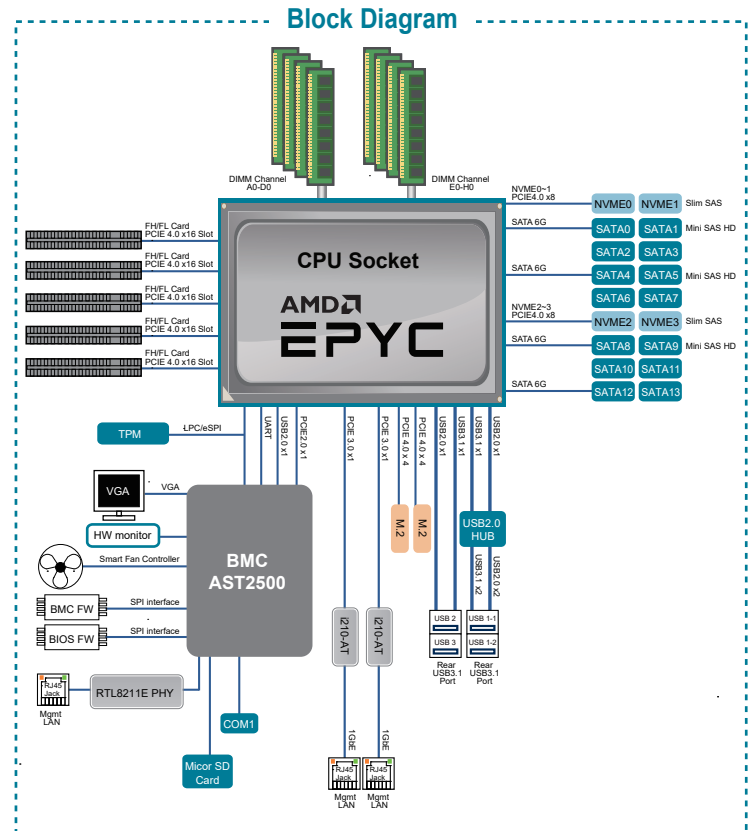
# Tomcat SX S8030

S8030GM2NE

# TYAN

## Specifications

|                   |   |   |   |
|-------------------|---|---|---|
| Processor         | <b>Q'ty / Socket Type</b>                               | (1) AMD Socket SP3  |   |
|                   | <b>Supported CPU Series</b>                             | (1) AMD® EPYC™ 7002/7003 Series Processor   |   |
|                   | <b>Configurable Thermal Design Power (cTDP) Wattage</b> | Max up to 280W  |   |
| Memory            | <b>Supported DIMM Q'ty</b>                              | (8) DIMM slots  |   |
|                   | <b>DIMM Type / Speed</b>                                | DDR4 ECC RDIMM/RDIMM 3DS/LRDIMM/LRDIMM 3DS 3200   |   |
|                   | <b>Capacity</b>   | Up to 512GB RDIMM/ 1,024GB LRDIMM/ 2,048GB LRDIMM 3DS<br>*Follow latest AMD DDR4 Memory POR   |   |
|                   | <b>Memory channel</b>                                   | 8 Channels  |   |
|                   | <b>Memory voltage</b>                                   | 1.2V  |   |
| Expansion Slots   | <b>PCI-E</b>  | (5) PCI-E Gen4 x16 slots  |   |
| LAN               | <b>Port Q'ty</b>  | (2) GbE + (1) dedicated GbE for IPMI  |   |
|                   | <b>Controller</b>                                       | Intel® I210   |   |
| Storage           | <b>PHY</b>  | Realtek® RTL8211E   |   |
|                   | SATA  | <b>Connector</b>  | (2) SATA<br>(3) SFF-8643 connectors for up to (12) SATA ports |
|                   |   | <b>Controller</b>   | Direct from AMD EPYC CPU                                      |
|                   |   | <b>Speed</b>  | 6Gb/s   |
|                   |   | <b>RAID</b>   | N/A   |
|                   | NVMe  | <b>Connector (U.2)</b>  | (2) SFF-8654 connectors for up to (4) NVMe ports              |
|                   |   | <b>Connector (M.2)</b>  | (2) 22110/2280 (by PCI-E Gen3 interface)                      |
| Graphic           | <b>Connector type</b>                                   | D-Sub 15-pin  |   |
|                   | <b>Resolution</b>                                       | Up to 1920x1200   |   |
|                   | <b>Chipset</b>  | Aspeed AST2500  |   |
| Input /Output     | <b>USB</b>  | (2) USB3.1 Gen1 ports (@ rear)  |   |
|                   | <b>COM</b>  | (1) header  |   |
|                   | <b>VGA</b>  | (1) D-Sub 15-pin VGA port (@ rear)  |   |
|                   | <b>Power</b>  | ATX 24-pin + (2) 8-pin power connectors   |   |
|                   | <b>RJ-45</b>  | (2) GbE ports, (1) GbE dedicated for IPMI   |   |
|                   | <b>Front Panel</b>                                      | (1) 2x12-pin SSI front panel header   |   |
|                   | <b>SATA</b>   | (2) SATA-III connectors<br>(12) SATA ports from (3) Mini SAS HD connectors  |   |
| TPM (Optional)    | <b>TPM Support</b>                                      | Please refer to our TPM supported list.   |   |
| System Monitoring | <b>Chipset</b>  | Aspeed AST2500  |   |
|                   | <b>Fan</b>  | Total (5) 4-pin headers (MOA version)   |   |
|                   | <b>Voltage</b>  | Monitors voltage for CPU, memory, chipset & power supply  |   |
|                   | <b>Temperature</b>                                      | Monitors temperature for CPU & memory & system environment  |   |
|                   | <b>LED</b>  | Fan fail LED indicator, Over temperature warning indicator, Fan & PSU fail LED indicator  |   |
| Server Management | <b>Others</b>   | Watchdog timer support  |   |
|                   | <b>AST2500 iKVM Feature</b>                             | 24-bit high quality video compression / Supports storage over IP and remote platform-flash / USB 2.0 virtual hub  |   |
|                   | <b>AST2500 IPMI Feature</b>                             | IPMI 2.0 compliant baseboard management controller (BMC) / 10/100/1000 Mb/s MAC interface   |   |
| BIOS              | <b>Brand / ROM size</b>                                 | AMI / 32MB  |   |
|                   | <b>Feature</b>  | Hardware Monitor, Boot from USB device/PXE via LAN/Storage, User Configurable FAN PWM Duty Cycle, Console Redirection, ACPI sleeping states S0, S5, ACPI 6.2 & SMBIOS 3.2/PnP/Wake on LAN |   |



|                       |                                  |  |
|-----------------------|----------------------------------|--|
| Physical Dimension    | <b>Form Factor</b>               | ATX  |
|                       | <b>Board Dimension</b>           | 12" x 9.9" (305 x 250.8mm)   |
| Operating System      | <b>OS supported list</b>         | Please refer to our AVL support lists.   |
|                       | <b>FCC (SDoC)</b>                | Class A  |
| Regulation            | <b>CE (DoC)</b>                  | Class A  |
|                       | <b>Operating Temp.</b>           | 10° C ~ 35° C (50° F ~ 95° F)  |
| Operating Environment | <b>Non-operating Temp.</b>       | - 40° C ~ 70° C (-40° F ~ 158° F)  |
|                       | <b>In/Non-operating Humidity</b> | 90%, non-condensing at 35° C<br>Non-operating Relative Humidity: 10% to 95% (non-condensing) |
|                       | <b>RoHS</b>                      | <b>RoHS 6/6 Compliant</b> Yes  |

(Specifications are subject to change without notice. Items pictured may only be representative.)

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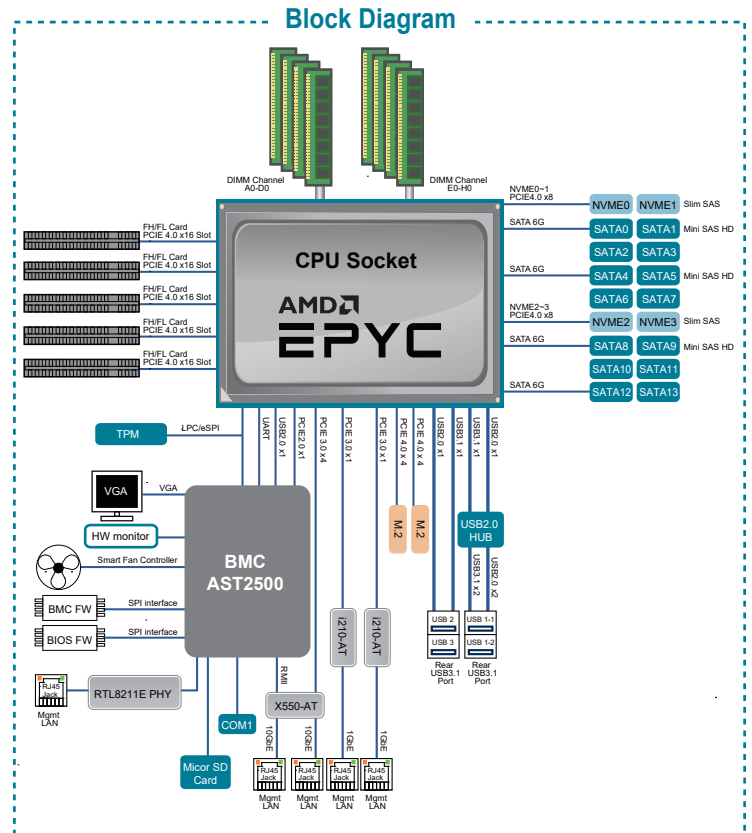
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# Tomcat SX S8030

S8030GM4NE-2T

# TYAN Specifications

|                   |  |   |   |
|-------------------|--|---|---|
| Processor         | Q'ty / Socket Type                               | (1) AMD Socket SP3  |   |
|                   | Supported CPU Series                             | (1) AMD® EPYC™ 7002/7003 Series Processor   |   |
|                   | Configurable Thermal Design Power (cTDP) Wattage | Max up to 280W  |   |
| Memory            | Supported DIMM Q'ty                              | (8) DIMM slots  |   |
|                   | DIMM Type / Speed                                | DDR4 ECC RDIMM/RDIMM 3DS/LRDIMM/LRDIMM 3DS 3200   |   |
|                   | Capacity   | Up to 512GB RDIMM/ 1,024GB LRDIMM/ 2,048GB LRDIMM 3DS<br>*Follow latest AMD DDR4 Memory POR   |   |
|                   | Memory channel                                   | 8 Channels  |   |
|                   | Memory voltage                                   | 1.2V  |   |
| Expansion Slots   | PCI-E  | (5) PCI-E Gen4 x16 slots  |   |
|                   | Port Q'ty  | (2) 10GbE ports + (2) GbE ports + (1) GbE dedicated for IPMI  |   |
| LAN               | Controller                                       | Intel® I210-AT<br>Intel® X550-BT2   |   |
|                   | PHY  | Realtek® RTL8211E   |   |
|                   | PHY  | Realtek® RTL8211E   |   |
| Storage           | SATA   | Connector   | (2) SATA<br>(3) SFF-8643 connectors for up to (12) SATA ports |
|                   |  | Controller  | Direct from AMD EPYC CPU                                      |
|                   | NVMe   | Speed   | 6Gb/s   |
| RAID              |  | N/A   |   |
| Storage           | NVMe   | Connector (U.2)   | (2) SFF-8654 connectors for up to (4) NVMe ports              |
|                   |  | Connector (M.2)   | (2) 22110/2280 (by PCI-E Gen3 interface)                      |
| Graphic           | Connector type                                   | D-Sub 15-pin  |   |
|                   | Resolution                                       | Up to 1920x1200   |   |
|                   | Chipset  | Aspeed AST2500  |   |
| Input / Output    | USB  | (2) USB3.1 Gen1 ports (@ rear)  |   |
|                   | COM  | (1) header  |   |
|                   | VGA  | (1) D-Sub 15-pin VGA port (@ rear)  |   |
|                   | Power  | ATX 24-pin + (2) 8-pin power connectors   |   |
|                   | RJ-45  | (2) 10GbE ports + (2) GbE ports + (1) GbE dedicated for IPMI  |   |
|                   | Front Panel                                      | (1) 2x12-pin SSI front panel header + (2) 1x2 header  |   |
|                   | SATA   | (2) SATA-III connectors<br>(12) SATA ports from (3) Mini SAS HD connectors  |   |
| TPM (Optional)    | TPM Support                                      | Please refer to our TPM supported list.   |   |
| System Monitoring | Chipset  | Aspeed AST2500  |   |
|                   | Fan  | Total (5) 4-pin headers (MOA v version)   |   |
|                   | Voltage  | Monitors voltage for CPU, memory, chipset & power supply  |   |
|                   | Temperature                                      | Monitors temperature for CPU & memory & system environment  |   |
|                   | LED  | Fan fail LED indicator, Over temperature warning indicator, Fan & PSU fail LED indicator  |   |
| Server Management | Others   | Watchdog timer support  |   |
|                   | AST2500 iKVM Feature                             | 24-bit high quality video compression / Supports storage over IP and remote platform-flash / USB 2.0 virtual hub  |   |
| BIOS              | AST2500 IPMI Feature                             | IPMI 2.0 compliant baseboard management controller (BMC) / 10/100/1000 Mb/s MAC interface   |   |
|                   | Brand / ROM size                                 | AMI / 32MB  |   |
| BIOS              | Feature  | Hardware Monitor, Boot from USB device/PXE via LAN/Storage, User Configurable FAN PWM Duty Cycle, Console Redirection, ACPI sleeping states S0, S5, ACPI 6.2 & SMBIOS 3.2/PnP/Wake on LAN |   |



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|-----------------------|---------------------------|--|
| Physical Dimension    | Form Factor               | ATX  |
|                       | Board Dimension           | 12" x 9.9" (305 x 250.8mm)   |
| Operating System      | OS supported list         | Please refer to our AVL support lists.   |
|                       | FCC (SDoC)                | Class A  |
| Regulation            | CE (DoC)                  | Class A  |
|                       | Operating Temp.           | 10° C ~ 35° C (50° F ~ 95° F)  |
| Operating Environment | Non-operating Temp.       | -40° C ~ 70° C (-40° F ~ 158° F)   |
|                       | In/Non-operating Humidity | 90%, non-condensing at 35° C<br>Non-operating Relative Humidity: 10% to 95% (non-condensing) |
| RoHS                  | RoHS 6/6 Compliant        | Yes  |

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