# TN200-B7108 Quick Installation Guide

Document # D2422-100/ Revision 1.0

## 1 General Information

### Read Me First

1. The Barebone User's Manual is available for download from our Web site at http://www.tyan.com. Make sure to read all precautions and instructions before you start installing the server system.
2. Refer all servicing to qualified personnel to avoid the risk of damage to the server system.
3. Exercise normal ESD (Electrostatic Discharge) procedures during system integration. TYAN/MiTAC recommends wearing gloves and an anti-static wrist strap to avoid possible damage to the equipment.
4. Current processor socket design places the pins on the motherboard instead of the processor itself. Exercise caution when installing the processors as the manufacturer's warranty does not cover damage inflicted upon the motherboard, including damage to the CPU sockets.

### Box Content

(1) 2U chassis,(24) hot swap HDD bays (for TN200-B7108-X4S SKU)

(1) 2U chassis,(12) hot swap HDD bays (for TN200-B7108-X4L SKU)

(4) TYAN® S7108GMR (pre-installed)

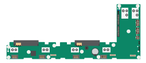
(1) M7108-PDB-U (pre-installed)

(1) M7108-PDB-L (pre-installed)

(2) M7108-CB (pre-installed)

(4) M7108-HSBB/ M7108-HSBB-X4L (pre-installed)

(1) M7108-HDBP-E24/ M7108-HDBP-U12 (pre-installed)


(1) M7108-FB (pre-installed)

(2) M7108-HDBB (pre-installed)

(4) M7108T200-L16-1L (pre-installed)

(4) M7108T200-R8-1L (pre-installed)

(2) M7108-HSCB/ M7108-HSCB-X4L (pre-installed)

(2) M7108T200-FPB (pre-installed)

(2) Power Supply, SBU,2200 W, DELTA,DPS-2200AB-2 D (pre-installed)

(4) FAN, 80*80*56mm (pre-installed)

### Accessories

(4) CPU heatsink (P/N: 343T56900005) for CPU0

(4) CPU heatsink (P/N: 343T56900006) for CPU1

(8) CPU Clip for Narrow Non-Fabric CPU Carrier

(2) US Power Cord

(2) EU Power Cord

(1) External Dongle Cable, 1*VGA+2*USB

(2) Screw Kit (for –X4S SKU)

(3) Screw Kit (for –X4L SKU)

(1) Rail kit

(1) TYAN Quick Installation Guide

### Required Hardware Components

**Minimum Hardware Requirements**

To avoid integration difficulties and possible board damage, your system must meet the following minimum requirements:

- Processor: Intel® Xeon® Scalable Processer Family (Skylake-SP) series processors with TDP up to 125W (2U4N system)
- Memory Type: (8+8) DDR4-based DIMM sockets including:
  - RDIMM/LRDIMM 2666 w/ ECC (1.2V) when 1DPC/2DPC
  - RDIMM/LRDIMM 3DS 2666 w/ ECC (1.2V) when 1DPC/2DPC
- Hard Disk Drives: (24) 2.5" hot-swap SATA 6G SSD/NVMe U.2 HDDs (2.5" SSD/NVMe SKU: TN200-B7108-X4S)
  (12) 3.5" hot-swap SATA 6G/SA512G HDDs (3.5" HDD SKU: TN200-B7108-X4L)
- Rack Mount Kit (Industry 19" rack-mountable)

NOTE: The updated hardware requirements of the system please refer to the barebones user's manual on our website at www.tyan.com

### Tools Required

Phillips Screwdriver

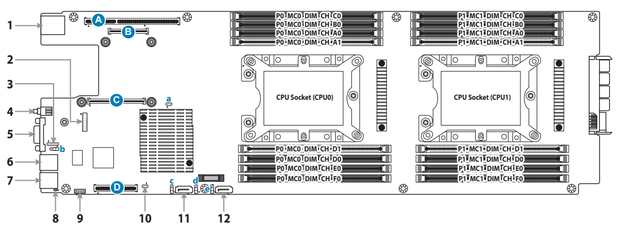
Flat-head Screwdriver

T30 Security Torx Screwdriver

Anti-Static Wrist Strap

## 2 Motherboard Placement

### Motherboard Placement




**CONNECTORS**

1. IPMI_LAN Connector (J6)
2. TPM and Port 80 Header (J9)
3. BMC Debug Port(J2)
4. ID LED and Button (SW1)
5. Serial Port (COM Port) (J1)
6. USB3.0 Connector (J4)
7. USB3.0 Connector (J3)
8. BMC Heartbeat LED (LED1)
9. RAID KEY Header (J58)
10. Intrusion Header (J16)
11. SATA3.0 (SATA_DOM0)(FOR SATA DOM) (J23)
12. SATA3.0 (SATA_DOM1)(FOR SATA DOM) (J30)

**SLOTS**

- A Mini PCIe 200 (for Riser PCIe x16) (J15)
- B OCP connector B (J14)
- C OCP connector A (J12)
- D Mini PCIe 80 (for Riser PCIe x8) (J11)

**JUMPER**

- a ME Recovery Mode Jumper (J21)
- b LPC AND eSPI MODE SET Header (J5)
- c SATA AND SATA DOM SET Jumper (J22)
- d Clear CMOS Jumper (J24)
- e SATA AND SATA DOM SET Jumper (J29)

**NOTE:** There is risk when setting the jumper by yourself.

## 3 System Installation

**TN200-B7108-X4S**

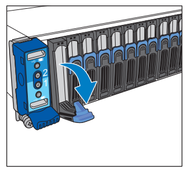
**TN200-B7108-X4L**

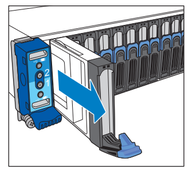
**Preparing the Chassis**

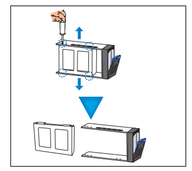
Read normal ESD (Electrostatic Discharge) procedures.

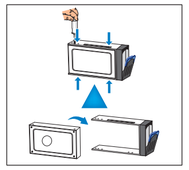
Place your TYAN® Server Chassis on a flat anti-static surface to perform the following integration procedures. Read ESD procedures before reaching inside to install components.

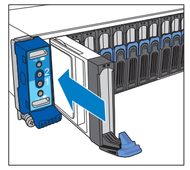
### Install the Front Hard Disk Drives (2.5")

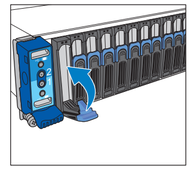

1 Press the locking lever latch and pull the locking lever downwards to its OPEN position.


2 Pull the locking lever to remove the HDD tray from its bay.

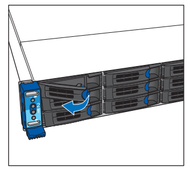

3 Remove the screws securing the HDD tray bracket. Then remove the HDD tray bracket.

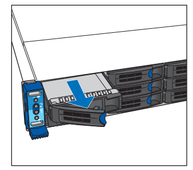

4 Install a 2.5" hard disk drive into the HDD tray, and then secure it with 4 screws.

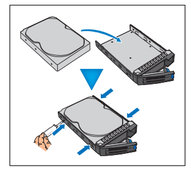

5 Install the HDD tray into its bay and press firmly until it is fully seated.

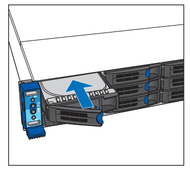

6 Close the locking lever and press the latch firmly to secure the tray in place.
Repeat the same procedures to install other HDD trays.

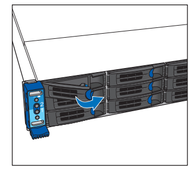
### Install the Rear Hard Disk Drives (3.5")


1 Press the locking lever latch and pull the locking lever to the left to its OPEN position.

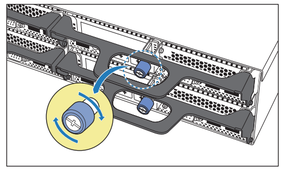

2 Pull the locking lever to remove the HDD tray from its bay.

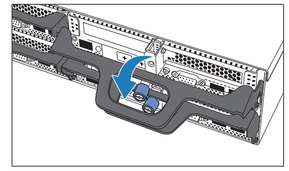

3 Install a 3.5" hard disk drive into the HDD tray, and then secure it with 4 screws.

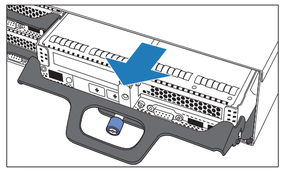

4 Install the HDD tray into its bay and press firmly until it is fully seated.


5 Close the locking lever and press the latch firmly to secure the tray in place.
Repeat the same procedures to install other HDD trays.

### Remove the Compute Blade

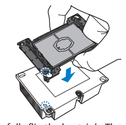

1 Loosen the thumb screw securing the locking lever.


2 Push the locking lever downwards to eject the compute blade slightly.

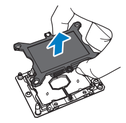

3 Pull the locking lever to remove the compute blade from the chassis.
Repeat the same procedures to remove other compute blades.

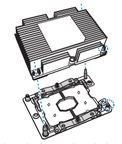
### Install the Processor

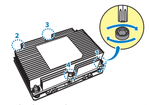
1 Align and install the processor on the carrier.


2 Carefully flip the heatsink. Then install the carrier assembly on the bottom of the heatsink and make sure the gold arrow is located in the correct direction.

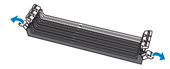
**NOTE: A new heatsink comes with pre-applied thermal grease.**
Once the heatsink has been removed from the processor,you need to clean the processor and heatsink using an alcohol solvent.Then apply new thermal grease before reinstalling the heatsink.

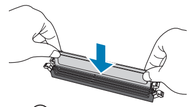

3 Remove the CPU cover.
**NOTE:** Save and replace the CPU cover if the processor is removed from its socket.

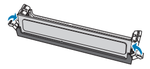

4 Align the heatsink with the CPU socket by the guide pins and make sure the gold arrow is located in the correct direction.Then place the heatsink onto the top of the CPU socket.


5 To secure the heatsink, use a T30 Security Torx to tighten the screws in a sequential order (1⇨2⇨3⇨4).
**NOTE:** When disassembling the heatsink, loosen the screws in reverse order (4⇨3⇨2⇨1).

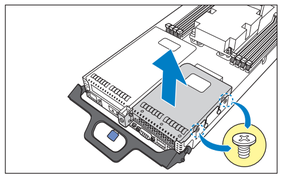
### Install the Memory

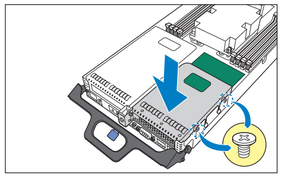

1 Unlock the clips.

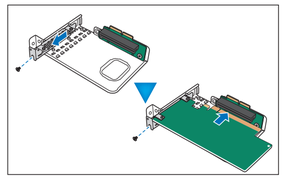

2 Insert the memory module.


3 Lock the clips.

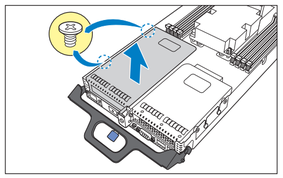
### Replace the Add-On Card (Optional)

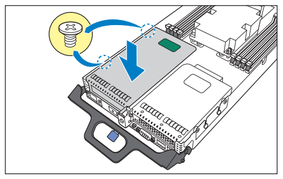

1 Remove the screws securing the riser bracket, and then remove the riser bracket from the compute blade.

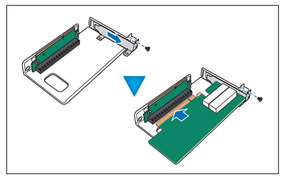

3 Carefully flip the riser bracket and install the riser bracket into its slot on the compute blade. Then secure it with 2 screws.


2 Remove the screw securing the PCI dummy bracket, and then remove the PCI dummy bracket.
Align the add-on card with the riser connector and slide in place. Then secure it with a screw.

### Replace the Add-On Card (Optional)

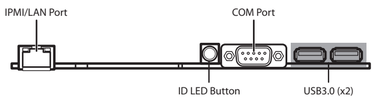

1 Remove the screws securing the riser bracket, and then remove the riser bracket from the compute blade.


3 Carefully flip the riser bracket and install the riser bracket into its slot on the compute blade. Then secure it with 2 screws.

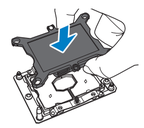

2 Remove the screw securing the PCI dummy bracket, and then remove the PCI dummy bracket.
Align the add-on card with the riser connector and slide in place. Then secure it with a screw.

## 4 I/O Ports

### Locate the External I/O Port




## 5 Caution

### CPU Cover for DOA/RMA

**NOTE:** Please save and replace the CPU cover when returning the server board for service.