FT65T-B8050 Quick Installation Guide

Document # D2578-100/ Revision 1.0

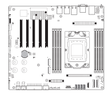
1 General Information

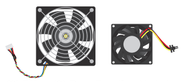
Read Me First

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.

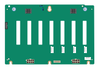
Box Content


(1) Chassis

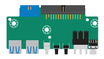

(1) TYAN® S8050GM4NE-2T Mother Board (pre-installed)


(3) Fan + (2) Rear Fan (for -N sku)
(3) Fan (for -G sku)
(pre-installed)


(1) Power Supply FSP2000-52AGPBI


(1) HDD BP M1309F65T-BP12-8 (pre-installed)


(1) HDD BP M1318T65-BP12E-2 (pre-installed)


(1) M1713F65T-FPB (pre-installed)

Accessories


(1) CPU Heatsink


(2) US Power Cord


(2) EU Power Cord


(3) Screw Pack


(3) GPU Holder BKT


(1) M.2 Latch

(1) 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: AMD Zen(Rome) series processor
  Support AMD Genoa Processor w/ TDP up to 300W
- Memory Type: (8) DDR5 DIMM slots (8x memory channels)
  (L)RDDR5 5200 w/ ECC (1.2V)
- Hard Disk Drives: (1) 8-port 3.5" HDD Backplane (HDD backplane M1309 supports 8x SAS 12Gb/s and SATA 6G)
  (1) 2-port 2.5" HDD Backplane (HDD backplane M1318 supports SATA 6Gb/s and NVME)
- Rack Mount Kit: Standard 19" equipment rack

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

Tools Required


Phillips Screwdriver


T20 Torx Screwdriver


Anti-Static Wrist Strap

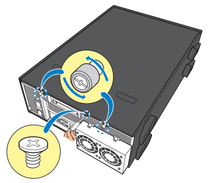
2 System Installation

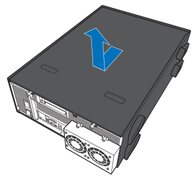
Open the Chassis

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.

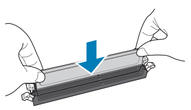

① Remove the screw and loosen the thumb screws on the rear of the chassis.

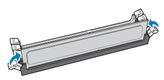

② Slide the top cover and remove.

NOTE: Please refer to the user's manual for the power cord connection method.

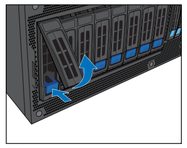
Install the Memory

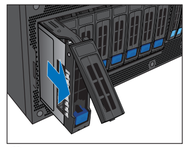

① Unlock the clips.

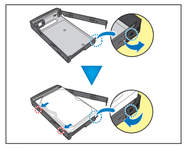

② Insert the memory module.

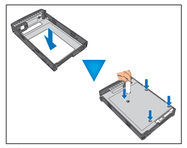

③ Lock the clips.

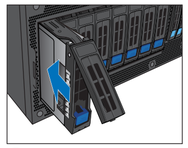
Install the Front Hard Disk Drives (3.5" or 2.5")

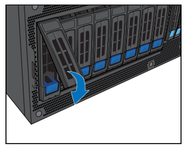

① Press on the locking lever latch. The locking lever opens automatically.


② Slide the HDD tray out.

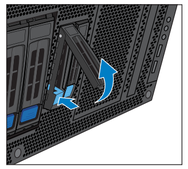

3a Unlock and open the tray locking lever. Place the 3.5" HDD into the tray. Close the locking lever to secure the HDD to the tray.

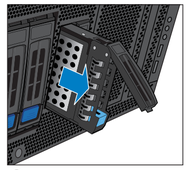

3b Place a 2.5" HDD into the tray. Use 4 screws to secure the HDD to the tray.

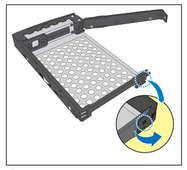

④ Reinsert the HDD tray into the chassis.

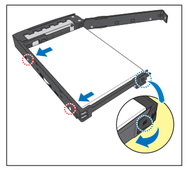

⑤ Press the locking lever to secure the HDD tray. Repeat the same procedures to install other HDD trays.

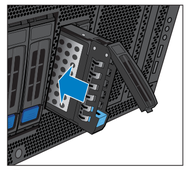
Install the Front Hard Disk Drives (2.5")

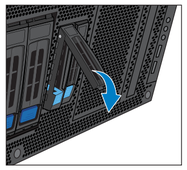

① Press on the locking lever latch. The locking lever opens automatically.


② Slide the HDD tray out.

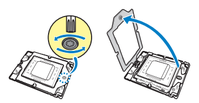

③ Unlock and open the tray locking lever.

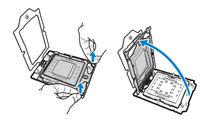

④ By aligning with the guide pins, install the 2.5" HDD into the tray. Close the locking lever to secure the HDD to the tray.


⑤ Reinsert the HDD tray into the chassis.


⑥ Press the locking lever to secure the HDD tray.
Repeat the same procedures to install another HDD tray.

Install the Processor


① Use a T20 Torx screwdriver to loosen the screw securing the force frame.
NOTE: The force frame will automatically eject after the captive screws are being released.


② By placing your both index fingers on the sides on the metal handle, pull to release the rail frame. Then lift the rail frame to its fully open position.


③ Remove the external cap from the rail frame.

④ Align and install the carrier frame with package into the slot on the rail frame.


NOTE: During installation, observe the following:
⇨ make sure to push the carrier frame with package towards the end of the rail frame until it clicks into place.
⇨ do not drop the carrier frame or touch the package pad to avoid component damage.

⑤ Using your thumb and forefinger, remove the PnP cap by lifting it up vertically.

⑥ Carefully close the rail frame with the installed package. Then push both edges of the rail frame firmly until it locks in place.

⑦ Close the force frame. Then use a T20 Torx screwdriver to tighten the screw to secure the force frame.

Install the CPU Heatsink

① Align and install the CPU heatsink onto the top of the CPU socket.

② Use a T20 Torx screwdriver to tighten the heatsink screws.

③ Connect the heatsink power cable to the mainboard connector.

Installing the Add-On card (Optional)

① Remove the screw and slide to remove the PCIe dummy bracket. Repeat the same procedures to remove another PCIe dummy bracket.

② Align and install the GPU holder bracket to the GPU card. Then secure the holder bracket to the GPU card with three screws.

③ Connect the GPU card into the PCIe slot on the motherboard. Secure the GPU card assembly to the chassis with four screws.

④ Connect one end of the power cable to the power connector on the GPU card and the other end of the power cable to the dedicated connector on the power supply unit (PSU).

3 Motherboard Placement

Motherboard Placement

CONNECTORS

1 IPMB Connector (IPMB1)
2 Front Fan Header (FAN_HD1)
3 COM2 Port Header (COM2)
4 TYAN Module Header (J62)
5 TYPE A USB3.2 Gen1 Header (TYPEA_USB1)
6 NMI Button (SW5)
7 USB3.2 Gen1 Header (USB3_FPIO1)
8 COLD RST Button (SW2)
9 SGPIO0 Header (SGPIO0)
10 PWR Button (SW1)
11 HDT Header (J1)
12 WARM_RST Button (SW12)
13 I210 LAN LED Header (J29)
14 Front Panel Header (FPIO_2)
15 HDD BP Smbus Header (HDR_2)
16 HDD BP Smbus Header (HDR_1)
17 Intrusion Header (J66)
18 CPLD JTAG Header (J12)
19 M.2 Connector (CN3) PCIE Only
20 Mini SAS Connector (J26)
21 Mini SAS Connector (J25)
22 Power Connector (PW1)
23 CPU and Memory Power Connector (PW2)
24 4-pin Fan Connector (SYS_FAN_4)
25 4-pin Fan Connector (SYS_FAN_3)
26 4-pin Fan Connector (SYS_FAN_2)
27 M.2 Connector (CN1) PCIE only
28 MCIO x4 SATA/NVME (CN10)
29 4-pin Fan Connector (SYS_FAN_1)
30 7p SATA Connector (J15)
31 7p SATA Connector (J16)
32 7p SATA Connector (J18)
33 7p SATA Connector (J19)
34 MCIO x4 SATA/NVME (CN11)
35 MCIO x8 NVME (CN6)
36 MCIO x8 NVME (CN5)
37 PSMI Header (PSMI_HD1)
38 SVI Header (J17)
39 4-pin Fan Connector (CPU0_FAN)
40 4-pin Fan Connector (SYS_FAN_5)
41 VGA Header (VGA1)
42 ID Button (ID_BTN)
43 CPU and Memory Power Connector (PW3)
44 IPMI LAN USB3.0 Connector (LAN5)
45 VGA and COM1 Port Header (VGA_COM1)
46 RJ45 LAN Port (LAN3/LAN4)
47 RJ45 LAN Port (LAN1)
48 RJ45 LAN Port (LAN2)
49 BIOS Debug (BIOS_DBG1)
50 SPI TPM Connector (J56)

LEDs

i PROCHOT LED
ii BMC Heartbeat LED
iii CPU RESET LED
iv SATA & M.2 LED
v PWR_GOOD LED
vi PWROK LED
vii BMC ALERT LED
viii SYS_PWROK LED
ix PSU_ALERT LED

JUMPERS

a COM2 Switch Jumper (J6)
b COM2 Switch Jumper (J7)
c RESET Switch Jumper (J33)
d NCSI SWITCH (J4)
e CMOS CLEAR (J75)
f BMC Header (J2)
g CPLD PowerOn Jumper (J3)
h VRM SMBUS SEL Jumper (3PHD1)
i COM1 Switch Jumper (J9)
j COM1 Switch Jumper (J8)

SLOTS

A PCIE#3 x16 (PESLOT3)
B PCIE#5 x16 (PESLOT5)
C PCIE#4 x16 (PESLOT4)
D PCIE#2 x16 (PESLOT2)
E PCIE#1 x16 (PESLOT1)

4 I/O Ports

Locate the External I/O Port

5 Caution

DOA/ RMA Reminder

NOTE: Please save and replace the PnP Cap when returning the server board for service.