

1 General Information

Read Me First

- The Barebone User's Manual is available for download from our Website at <https://www.mitaccomputing.com/>. Make sure to read all precautions and instructions before you start installing the server system.
- Refer all servicing to qualified personnel to avoid the risk of damage to the server system.
- Exercise normal ESD (Electrostatic Discharge) procedures during system integration. MITAC recommends wearing gloves and an anti-static wrist strap to avoid possible damage to the equipment.
- 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

- 2U Barebone, (8) Hot-Swap SSDs
 - 2U Barebone, (24) 2.5" Hot-Swap SSDs
 - (1) MITAC® R520G6 System Board (pre-installed)
 - (6) System Fans (pre-installed)
 - (2) 1300W Power Supply Unit (pre-installed in R2520G6U2BC)
 - (2) 2000W Power Supply Unit (pre-installed in R2520G6U2XD)
- For the latest information, please contact a MITAC representative if your server system varies from the images provided.

Accessories

- (2) CPU Heatsink
- (2) E2B CPU Carrier
- (2) E2A CPU Carrier
- (1) Slide Rail
- (1) Quick Installation Guide

Required Hardware Components

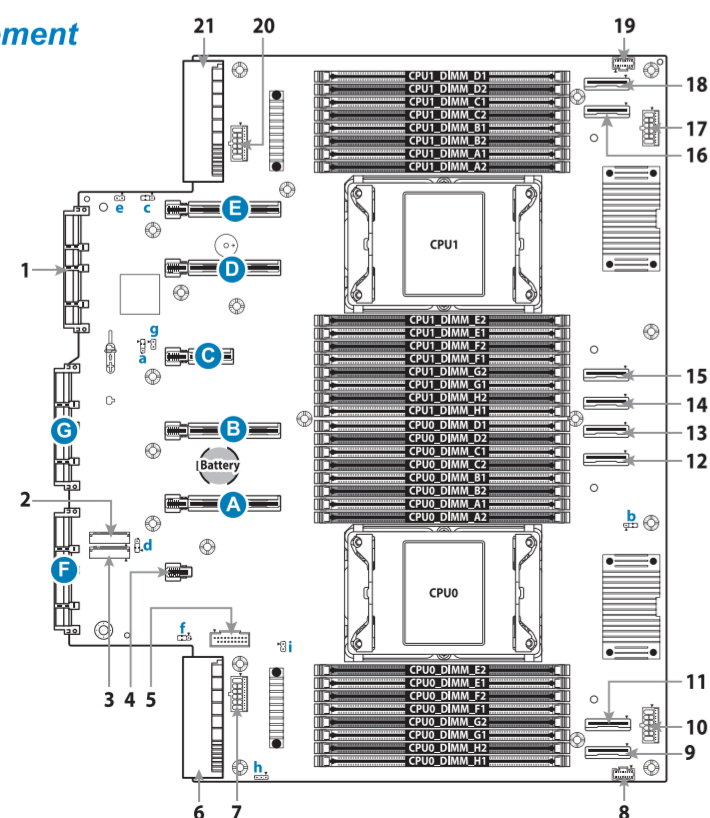
- Minimum Hardware Requirements**
- To avoid integration difficulties and possible board damage, your system must meet the following minimum requirements:
- Processor: (2) Intel® Xeon® 6 Processor
 - Memory Type: (16)+(16) DIMM slots
8 channels per CPU
Support up to 8192GB RDIMM / MCR DIMM DDR5 memory
 - Solid State Drives: (8) 2.5" Hot-Swap SSDs (R2520G6U2BC)
(24) 2.5" Hot-Swap SSDs (R2520G6U2XD)
 - Expansion Slots:
 - (1) PCIe Gen 5 x16 slot (w/ x8 link in HH/HL) / (2) PCIe Gen 5 x16 slots (FH/HL) / (2) PCIe Gen 5 x16 slots (FH/FL) (R2520G6U2BC)
 - (1) PCIe Gen 5 x16 slot (w/ x8 link in HH/HL) / (2) PCIe Gen 5 x16 slots (FH/HL) / (2) PCIe Gen 5 x16 slots for (2) Retimer Cards (R2520G6U2XD)
 - Rack Mount Kit: Value Rail Kit
- NOTE:** The updated hardware requirements of the system please refer to the barebones user's manual on our website at <https://www.mitaccomputing.com/>

Tools Required

- Phillips Screwdriver
- T30 Security Torx Screwdriver
- Anti-Static Wrist Strap

3 Motherboard Placement

Motherboard Placement



2 System Installation



Open the Chassis

Preparing the Chassis

Read normal ESD (Electrostatic Discharge) procedures.

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

- Remove the screws from the sides of the top front cover.
- Push the latches firmly and slide the top front cover forward to disengage it from the chassis.
- Remove the screws from the sides of the top rear cover.
- Push the latches firmly and slide the top rear cover backward to disengage it from the chassis.
- Release the air duct from the guide pins and remove it from the chassis.

Install the Solid State Drives (2.5")

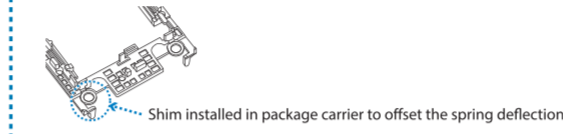
- Press on the locking lever latch. The locking lever opens automatically.
- Slide the drive tray out.
- Slightly bend the tray to release one side of the dummy bracket. Then release the other side of the bracket from the pins on the tray and remove the bracket.
- Insert the screw holes on one side of the 2.5" SSD into the pins on the other side of the SSD to secure the SSD to the tray.
- Reinsert the drive tray into the chassis.
- Press the locking lever to secure the tray. Repeat the same procedures to install other drive trays.

Install the Processor

Shim Concept



E2B carrier



- Align the triangle edge of the carrier with the triangle notch on the edge of the heatsink. Then install the carrier on the bottom of the heatsink and make sure the latches are snapped under the edge of the heatsink.
- Align and install the processor on the carrier. Make sure the gold arrow is located in the correct direction.
- Remove the CPU cover.
- Carefully flip the heatsink assembly. Align the heatsink with the CPU socket by the guide pins. Make also sure that the triangle edge of the carrier is aligned correctly with the triangle mark on the CPU socket. Then place the heatsink assembly onto the top of the CPU socket.
- Press down on the retention clips to fix the heatsink assembly to the CPU socket.
- To secure the heatsink assembly, use a T30 Security Torx to tighten the screws.

Install the Air Duct

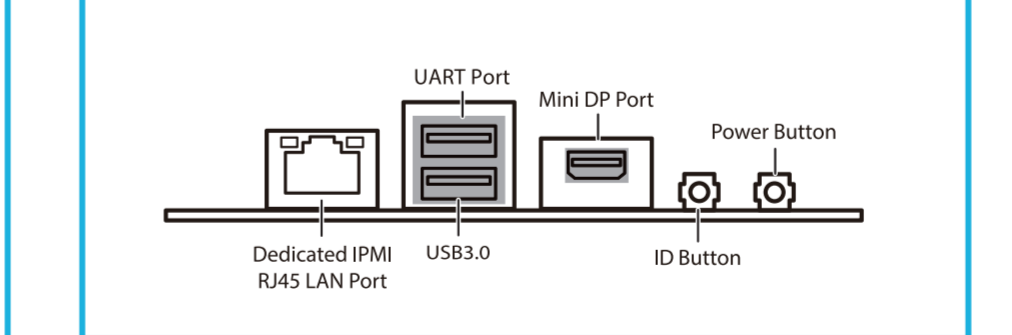
- By aligning with the guide pins, place the air duct on top of the CPU heatsink.
- NOTE:** A new heatsink comes with pre-applied thermal grease. Once the heatsink has been removed from the processor, you need to clean the processor and heatsink using an alcohol solvent. Then apply new thermal grease before reinstalling the heatsink.

Install the Memory

- Unlock the clips.
- Insert the memory module.
- Lock the clips.

4 I/O Ports

Locate the External I/O Port



5 Caution

DOA/ RMA Reminder

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

Visual Indicators

Shim	NO	YES
Carrier code	E2A	E2B
TE	2405570-1	2405570-2
LOTES	AZFA09A-P000201C	AZFA100-P000201CS

Install the Add-On Card into Riser 2 (optional)

- Release the spring-loaded captive screw from the side of the riser bracket and remove the 2 screws from the rear of the chassis. Flip the riser bracket, DO NOT remove yet.
- Disconnect the cable from the mainboard connector and remove the riser bracket from the chassis.
- Remove the 4 screws from the dummy filler, then remove it from the chassis. Remove the screw from the PCI dummy bracket, then remove it from the chassis.
- Insert the add-on card to the riser bracket. Re-install the dummy filler and secure it in place with the 4 screws.
- Align the riser bracket with its slot on the chassis. Then connect the cable to the mainboard connector.
- Flip the riser bracket. Secure it in place by tightening the spring-loaded captive screw on the side of the bracket and installing the 2 screws to the rear of the chassis.

Install the Retimer Card into Riser 1 (optional)

- NOTE:** Before installing the add-on card into riser #1, remove the riser #2 bracket first.
- Disconnect the cable from the riser board connector.
 - Release the spring-loaded captive screw from the side of the riser bracket and remove the 2 screws from the rear of the chassis. Remove the riser bracket.
 - Remove the screw from the PCI dummy bracket, then remove the PCI dummy bracket.
 - Insert the add-on card to the riser bracket and secure it in place with the spring-loaded captive screw on the side of the bracket and installing the 2 screws to the rear of the chassis.
 - Install and secure the riser bracket in place by tightening the spring-loaded captive screw on the side of the bracket and installing the 2 screws to the rear of the chassis.
 - Connect the cable to the riser board connector.

Install the Retimer Card into Riser 3 (optional)

- Release the spring-loaded captive screw from the side of the riser bracket and remove the 2 screws from the rear of the chassis. Remove the riser bracket.
- Remove the screw from the PCI dummy bracket, then remove the PCI dummy bracket.
- Insert the retimer card to the riser bracket and secure it in place by tightening the spring-loaded captive screw on the side of the bracket and installing the 2 screws to the rear of the chassis.
- Install and secure the riser bracket in place by tightening the spring-loaded captive screw on the side of the bracket and installing the 2 screws to the rear of the chassis.

Install the Add-On Card into Riser 4 & 5 (optional)

- NOTE:** Before installing the add-on card into riser #4, remove the riser #1, #2, and #3 brackets first.
- Release the spring-loaded captive screw from the side of the riser bracket and remove the 2 screws from the rear of the chassis. Remove the riser bracket.
 - Remove the screw from the PCI dummy bracket, then remove the PCI dummy bracket.
 - Insert the add-on card to the riser bracket and secure it in place with the screw.
 - Install and secure the riser bracket in place by tightening the spring-loaded captive screw on the side of the assembly and installing the 2 screws to the rear of the chassis.

