Congratulations on your purchase of the Premio DSS224S-UN Storage Server System!

1. Check the Content of the box. Please confirm that your package contains the following:
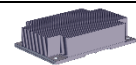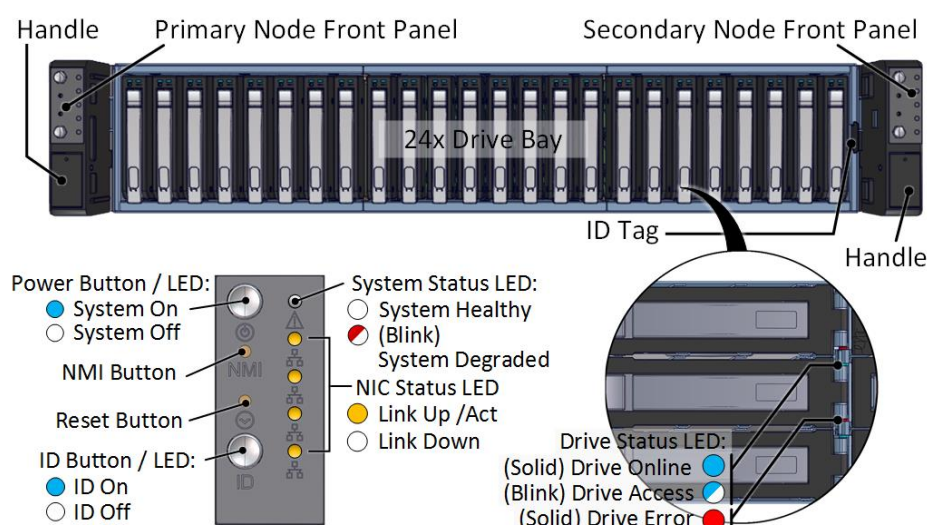
#	Description	Image / Description	Qty
1	DSS224S-UN Enclosure		1
2	Motherboard	Tyan UP motherboard	2
3	CPU and memory	AMD EPYC and DDR4	Opt.
4	IO Cards		Opt.
5	Heatsink		2
6	Slide Rail Kit + Screws		1 set
7	Power Cable*		2
8	Serial Cable*		1

* Inside the accessories box. Box may consist of screw sets for rail kit or drives. If any items are missing, please contact your reseller or sales rep.
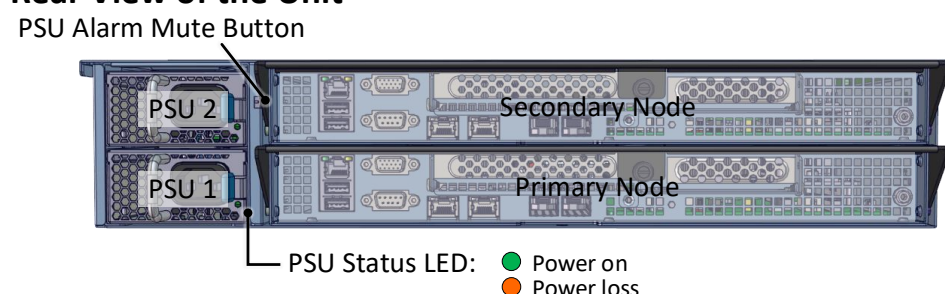
2. Get Familiar with the Unit.

DSS224S-UN is a redundant server supporting single AMD EPYC processor with a front 24x 2.5" HDD storage in a 2U space. Two Tyan S8026 motherboards, and internal cabling are preinstalled. Other motherboard model, IO cards, CPU, and memory can be preinstalled upon request.
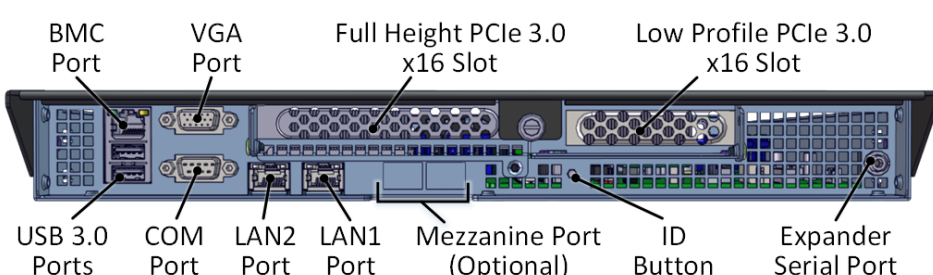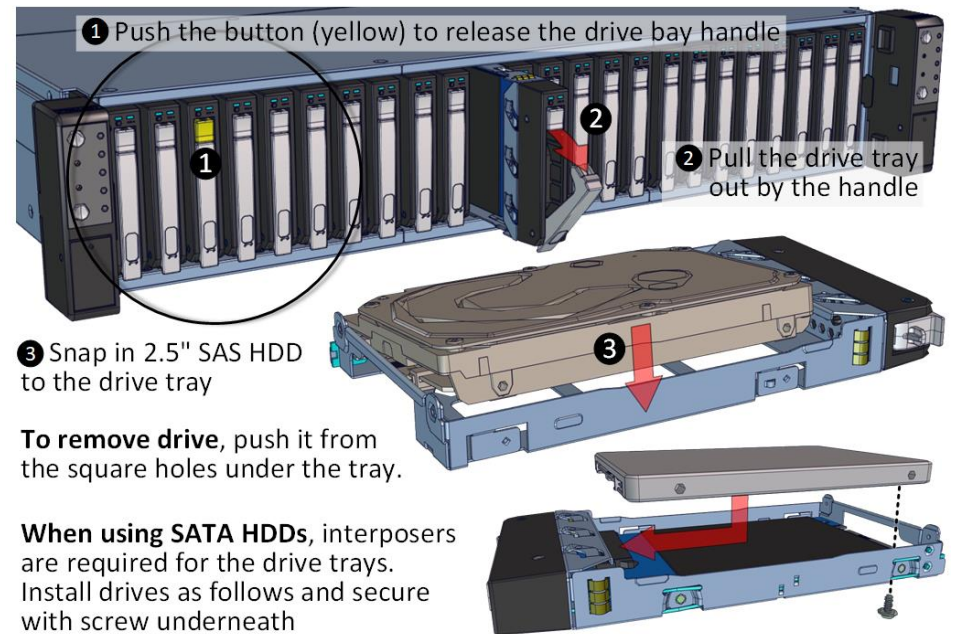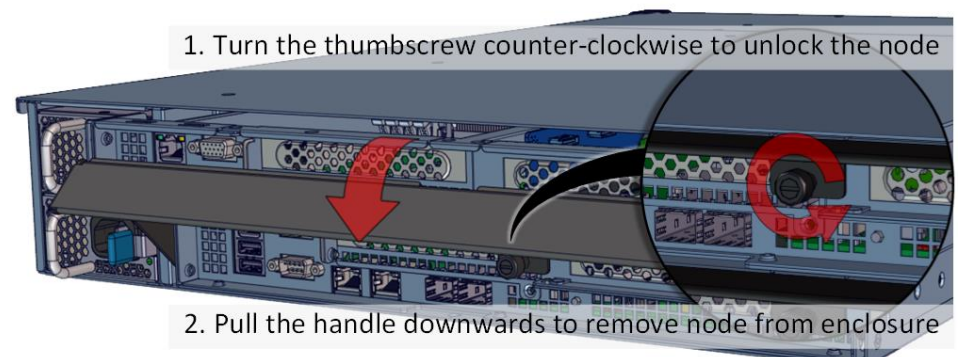
Front View of the Unit

Handle   Primary Node Front Panel   Secondary Node Front Panel

24x Drive Bay

ID Tag   Handle

Power Button / LED:
- System On
- System Off

NMI Button
Reset Button

ID Button / LED:
- ID On
- ID Off

System Status LED:
- System Healthy
- (Blink) System Degraded

NIC Status LED
- Link Up /Act
- Link Down

Drive Status LED:
- (Solid) Drive Online
- (Blink) Drive Access
- (Solid) Drive Error

Rear View of the Unit

PSU Alarm Mute Button

PSU 2   Secondary Node
PSU 1   Primary Node

PSU Status LED:
- Power on
- Power loss

Controller Node

BMC Port   VGA Port   Full Height PCIe 3.0 x16 Slot   Low Profile PCIe 3.0 x16 Slot

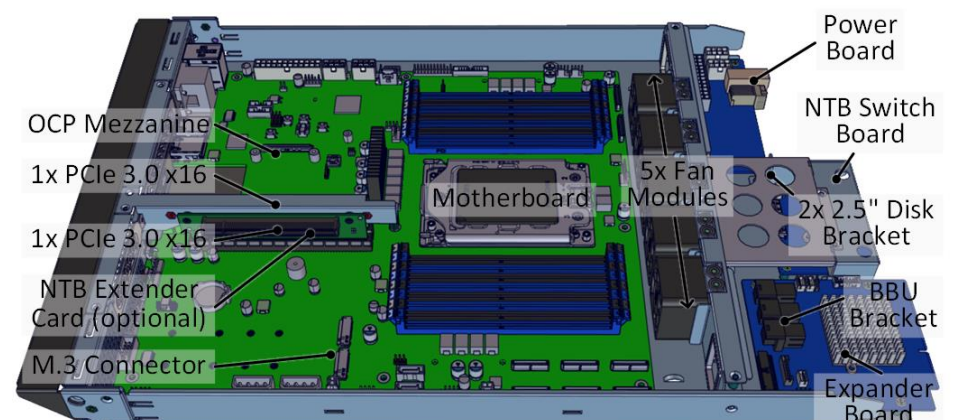USB 3.0 Ports   COM Port   LAN2 Port   LAN1 Port   Mezzanine Port (Optional)   ID Button   Expander Serial Port

3. Install 2.5" Drives to the unit as illustrated. It is suggested to install HDDs after the unit is mounted to the rack.

❶ Push the button (yellow) to release the drive bay handle

❷ Pull the drive tray out by the handle

❸ Snap in 2.5" SAS HDD to the drive tray

To remove drive, push it from the square holes under the tray.

When using SATA HDDs, interposers are required for the drive trays. Install drives as follows and secure with screw underneath

4. Remove the Controller Node to install any components required (IO cards, mezzanine, CPU, memory).

1. Turn the thumbscrew counter-clockwise to unlock the node

2. Pull the handle downwards to remove node from enclosure

5. Inspect the Controller Node. The components comprise of a Tyan motherboard, an expander board, an optional NTB switch board, power board, 5x internal fan modules (all connected to the motherboard).
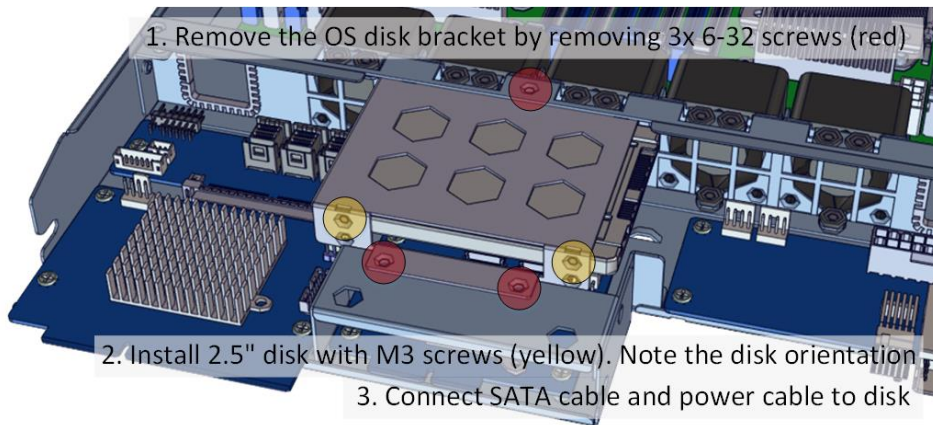
OCP Mezzanine
1x PCIe 3.0 x16
1x PCIe 3.0 x16
NTB Extender Card (optional)
M.3 Connector
Motherboard
5x Fan Modules
Power Board
NTB Switch Board
2x 2.5" Disk Bracket
BBU Bracket
Expander Board

6. Install OS disk(s) if required as follows:

Installation and service of this product should be conducted by a trained personnel to avoid bodily injury from electric shock or heavy object

Observe ESD (Electrostatic Discharge) practices during integration to avoid possible damage to the board and / or other components

1. Remove the OS disk bracket by removing 3x 6-32 screws (red)

2. Install 2.5" disk with M3 screws (yellow). Note the disk orientation
3. Connect SATA cable and power cable to disk

7. Install Motherboard Components (CPU, heatsink, memory) using the guidelines below. For further details, refer to the motherboard TPS.

- Support for AMD 14nm Naples x86 processor
- One AMD Socket SP3
- Max up to 180W ACP
- 8+8 DIMM slots
- DDR4 ECC RDIMM/LRDIMM/ NVDIMM 2667
- Up to 1TB RDIMM, LRDIMM
- 8 Channels, 1.2V
- Populate from farthest slot first: D1-H1, C1-G1, B1-F1, A1-E1, then A0-A1 to E0-E1 for 10 DIMMs and so on
- PCIE1 is Gen3 x16
- PCIE2 is Gen3 x24
- OCP2.0 is Gen3 x8

8. Install IO card as guided below:

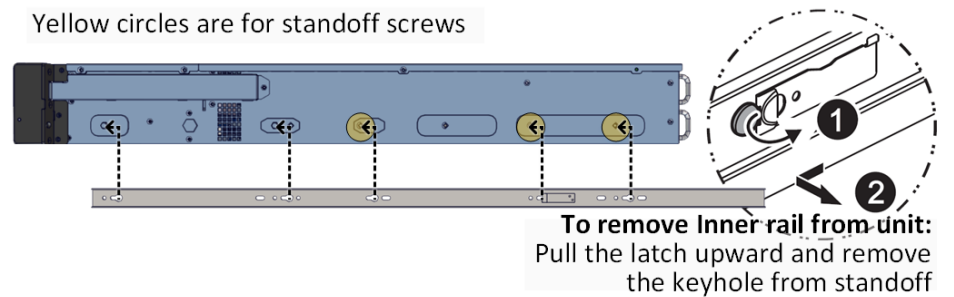1. Remove the riser card assembly by removing 3 screws (red circles)

2. Insert IO card to the riser card and secure with screw
3. Place riser card assembly back to enclosure

9. Remove the Inner Rail from the slide rail.

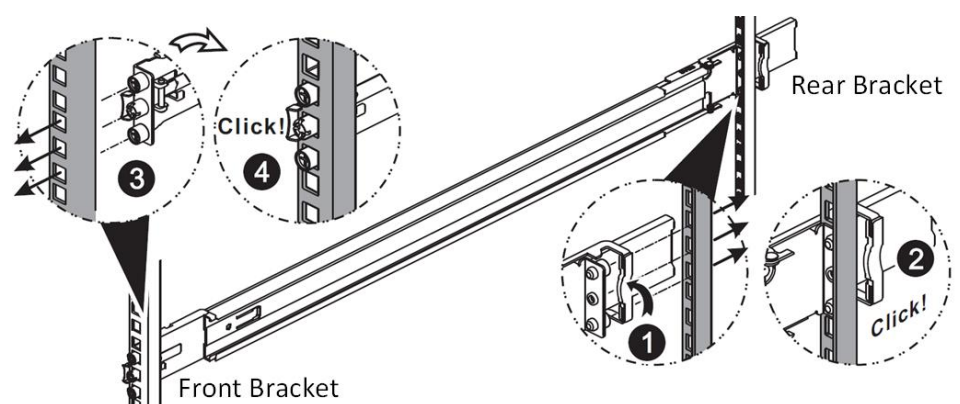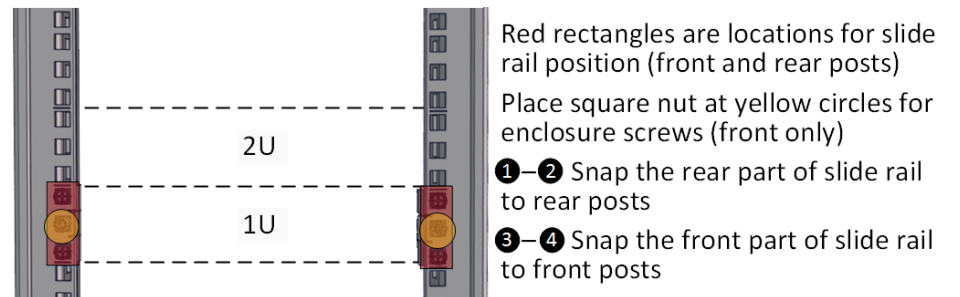❶–❷ Pull the inner rails out. Pull the blue release tab when it hits a stop.
❸–❹ Keep extending inner rail and pull the white detach tab when it hits the second stop

❺–❻ Unretract the mid rail by pulling the latch on the mid rail
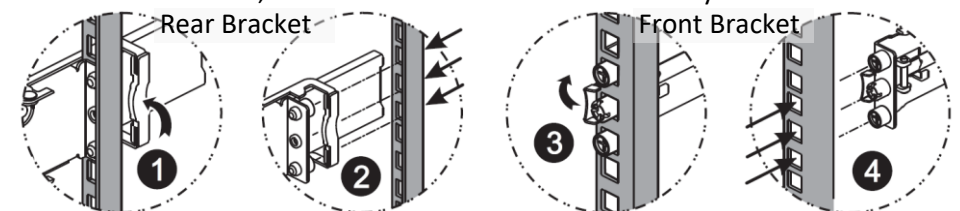
10. Install Inner Rails to the enclosure.
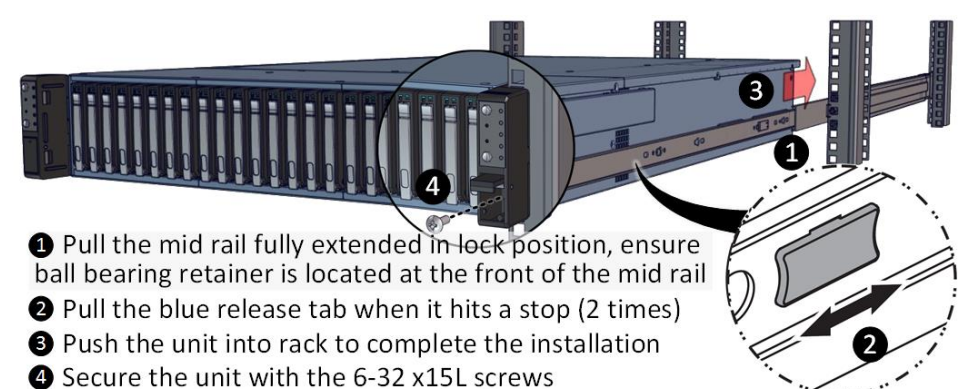

Yellow circles are for standoff screws

To remove Inner rail from unit:
Pull the latch upward and remove the keyhole from standoff

11. Install the Outer Rails to the Rack as follows:

Red rectangles are locations for slide rail position (front and rear posts)

Place square nut at yellow circles for enclosure screws (front only)

❶–❷ Snap the rear part of slide rail to rear posts

❸–❹ Snap the front part of slide rail to front posts

To remove slide rails, use the latches to undo the assembly as follows:

12. Install the Unit to the Rack as follows:

❶ Pull the mid rail fully extended in lock position, ensure ball bearing retainer is located at the front of the mid rail
❷ Pull the blue release tab when it hits a stop (2 times)
❸ Push the unit into rack to complete the installation
❹ Secure the unit with the 6-32 x15L screws

For a complete instruction on how to install unit to the rack, please follow the Slide Rail Installation Guide.
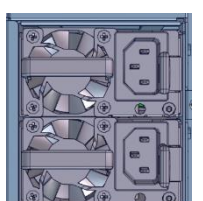
 At least two people are recommended for mounting process. Insert HDDs after unit is mounted.

13. Drive Mapping of DSS224S-UN is as follows:

14. Plug in the Power Cords to the AC receptacles on the back of the unit.

15. **Press the Power Button** on the front of the unit and for the system to boot up. Left panel for primary node, right panel for secondary node.

16. **Access the Serial Console** (when necessary) by connecting RS-232 serial cable to the one of the console ports. Use a terminal console with baud set 115200, 8, N, 1, N. Refer to User's Manual for further detail and how to set up Ethernet Management Port.