Thank you for your purchase of FlacheSAN2V-UN, a 2U 48-Bay EPYC Storage Server!

1. **Check the content** of the box. Please confirm that your package contains the following:

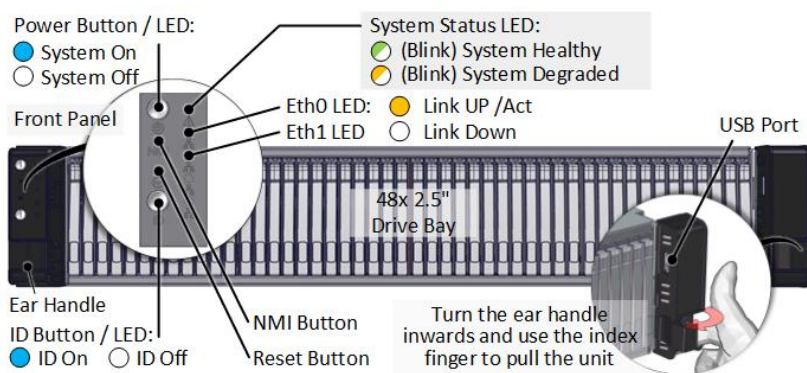| #	Description	Image / Description	Qty
1	2U 48-Bay Enclosure		1
2	2.5" Drive Trays		48
3	Storage SSD (opt.)		48
4	Power Cable*		2
5	Rail Kit (optional)		1
6	Bezel (optional)		1
7	Gigabyte MZ31-AR0 motherboard		1
8	Expander modules (optional)		
9	6#32 IH#1 Screw Set for MB / Riser*		1 set
10	IO Cards (optional)		1 set
11	SFF 8087-8643 cable (preinstalled)	Used for IO cards, optionally installed by order	12
12	CPU, ,memory, heat sink		1 set
13	OS Disk (optional)		1-2
14	This quick guide		1
15	Packaging		1 set

* Inside the accessories box. If any items are missing, please contact your authorized reseller or sales representative
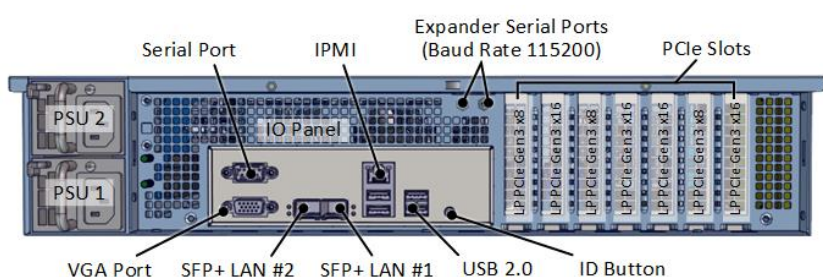
2. Get familiar with the unit.

FlacheSAN2V-UN is a value 48x 2.5" 7mm SSD storage server in a 2U space, supporting single AMD EPYC processor powered by Gigabyte MZ31-AR0 motherboard, 4x rear low profile Gen3 x16 and 3x Gen3 x8 PCIe slots, and an optional 2-Bay 2.5" canister. FlacheSAN2V-UN offers expander and non-expander versions.

Front view of the unit
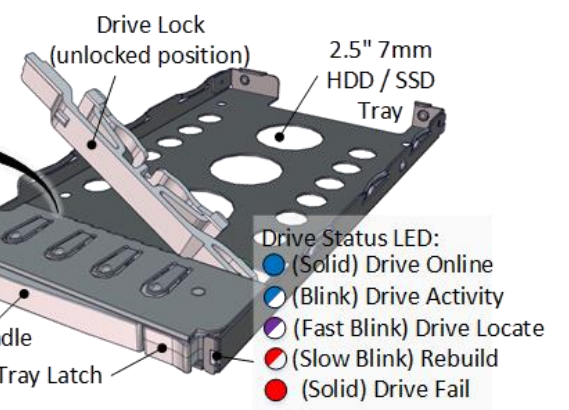

Rear view of the unit

Drive Tray

Drive Status LED:
- (Solid) Drive Online
- (Blink) Drive Activity
- (Fast Blink) Drive Locate
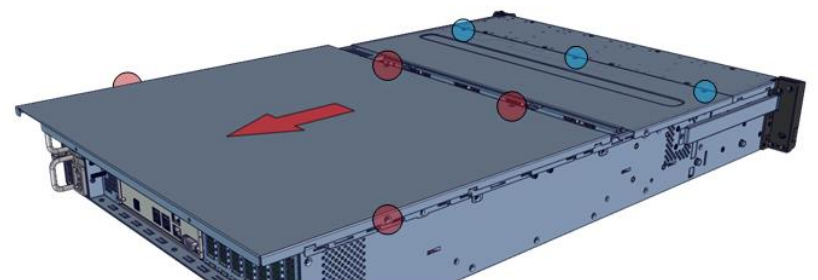- (Slow Blink) Rebuild
- (Solid) Drive Fail

Tool-less drive tray is best used for SSDs.
It is recommended to apply M3 screws when installing HDDs

3. **Remove the top cover** by removing 4 screws on the cover. Remove mid cover (blue circles) to access system fans. Slide the covers towards the back of the unit.

4. **Inspect the internal** of the chassis. FlacheSAN2V-UN consists of a Gigabyte EPYC motherboard, fan modules, backplanes, IO cards (optional) or expanders (for expander version) for 48x SSDs with internal mini-SAS HD cables.
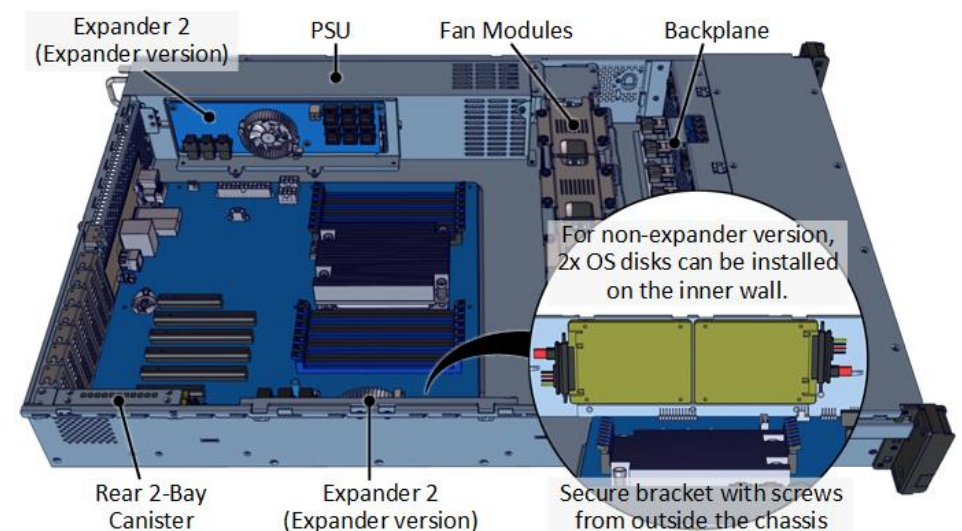
Using expanders, 12x SAS cables from backplane connect to 2x expanders, then from expander to SAS card (red path).
For non-expander version, two 24-port SAS cards is required.
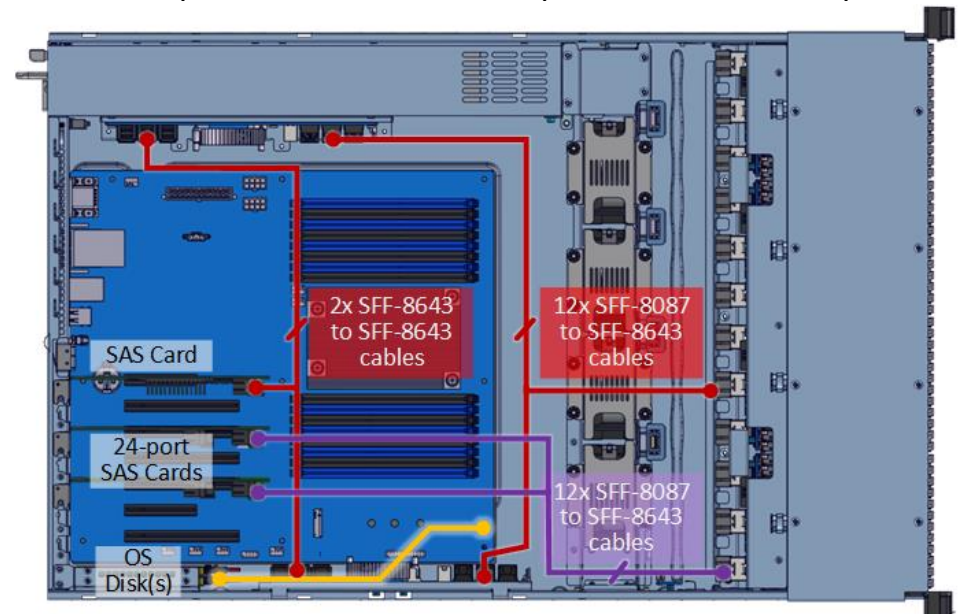
5. Install CPUs, memory (not included) and heat sinks to their respective slots. Please be aware of each component's installation requirements. For details, refer to Gigabyte MZ31-AR0 motherboard user's guide.

- Support Intel Xeon Skylake Processor Family
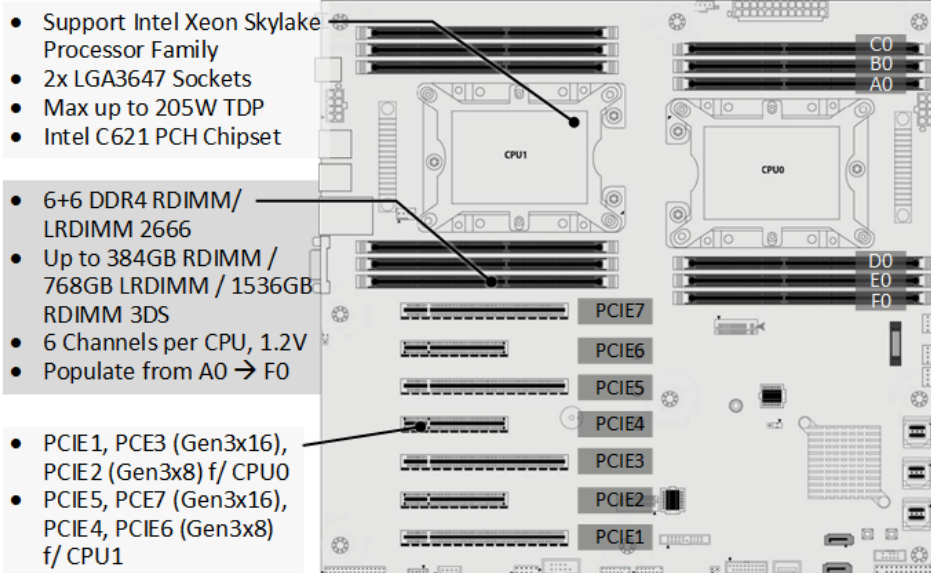- 2x LGA3647 Sockets
- Max up to 205W TDP
- Intel C621 PCH Chipset

- 6+6 DDR4 RDIMM/ LRDIMM 2666
- Up to 384GB RDIMM / 768GB LRDIMM / 1536GB RDIMM 3DS
- 6 Channels per CPU, 1.2V
- Populate from A0 → F0

- PCIE1, PCIE3 (Gen3x16), PCIE2 (Gen3x8) f/ CPU0
- PCIE5, PCIE7 (Gen3x16), PCIE4, PCIE6 (Gen3x8) f/ CPU1

6. Install IO cards (optional) into PCI-e riser cards.

Install low profile IO card to PCIe slot and secure with screw
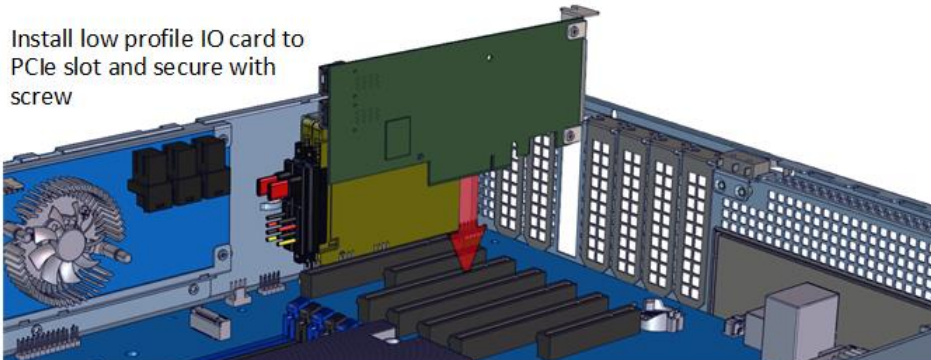
7. Install OS disk(s). There are two choices for OS disk installation. One with canister (if expanders are used), and one without. See below for installation for each.

A. Place one or two disks to the inner wall and close with bracket. Secure bracket from outside (red)
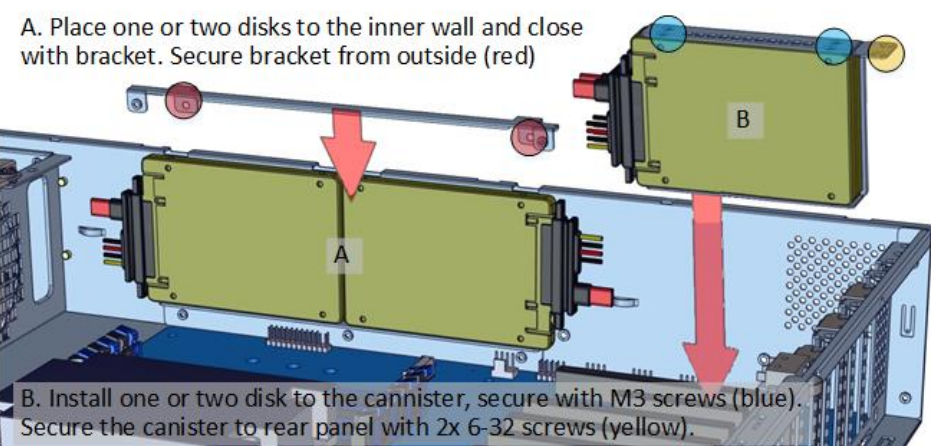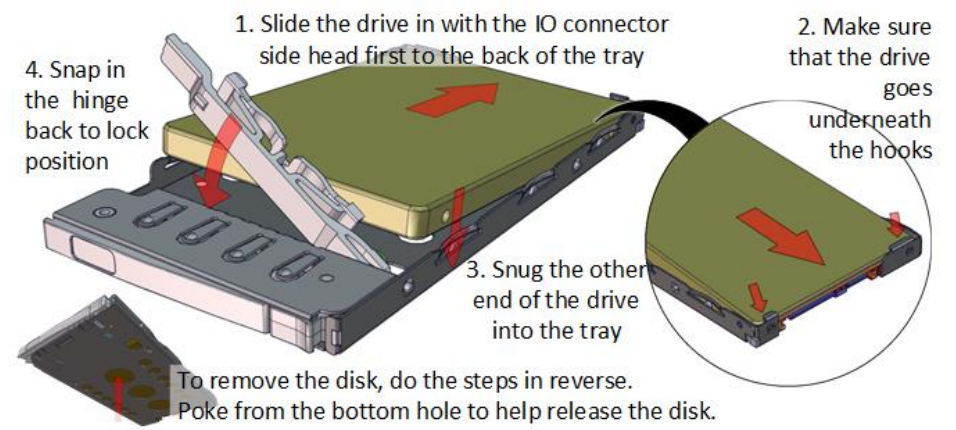
B. Install one or two disk to the cannister, secure with M3 screws (blue). Secure the canister to rear panel with 2x 6-32 screws (yellow).

8. Put the top cover. Once we are finished with the internals of the system, close the top of the chassis.

9. Install drives into trays. Follow the diagram closely. SSDs can be provided and installed by request.

1. Slide the drive in with the IO connector side head first to the back of the tray

2. Make sure that the drive goes underneath the hooks

4. Snap in the hinge back to lock position

3. Snug the other end of the drive into the tray

To remove the disk, do the steps in reverse. Poke from the bottom hole to help release the disk.

10. Place the unit to the rack. Prepare square nuts for screws securing the enclosure to the posts as follow:

Front		Rear	
2U		2U	
1U		1U	
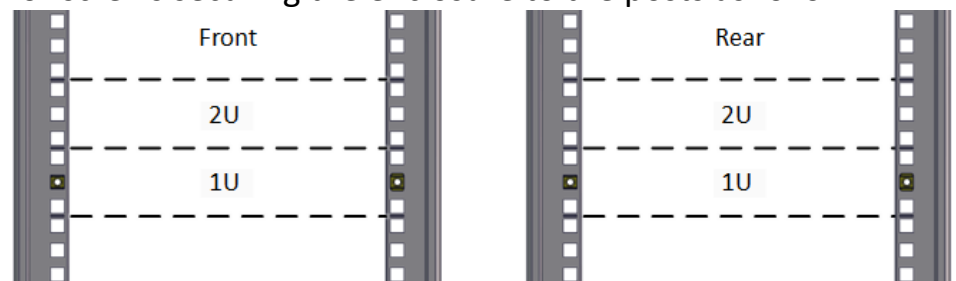
Install inner rails using pins (red), secure with screw (blue).

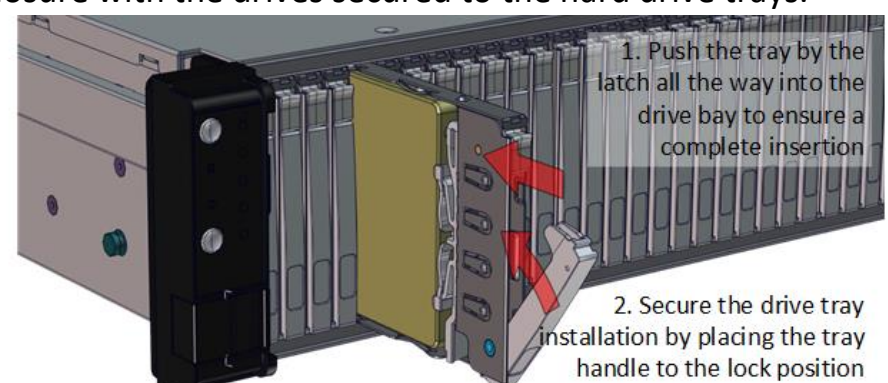Install outer rail to posts then mount the unit to the rack.
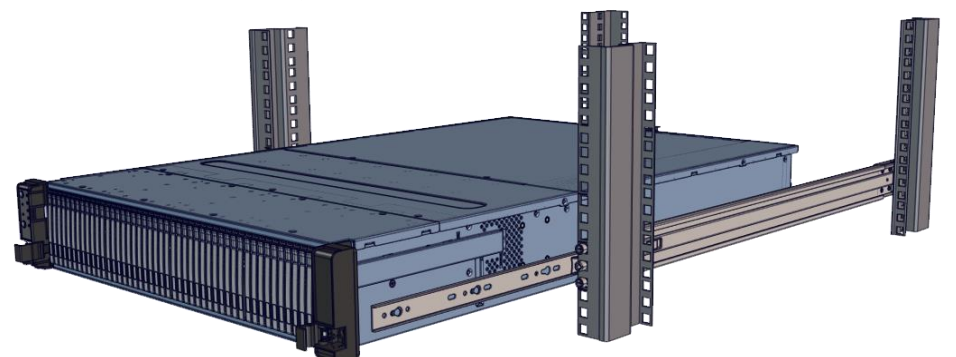
Refer to Rail Kit Installation Guide on complete detail on how to mount the unit. **Caution:** At least two people are required to lift a fully populated chassis

11. Install the populated drive trays into the enclosure with the drives secured to the hard drive trays.

1. Push the tray by the latch all the way into the drive bay to ensure a complete insertion

2. Secure the drive tray installation by placing the tray handle to the lock position

12. **Drive mapping** incrementally goes from left to right depending on the connection to the IO cards.

13. **Plug in the power cords** to the AC receptacles on the back of the unit and secure it with the cable tie.
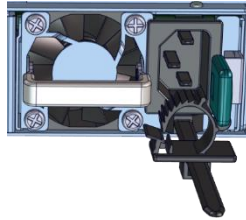
14. **Press the power button** on the front of the unit after connecting a monitor and input devices, and get ready for software installation.