SUGER



CX4712

25" DEEP 4U CHASSIS
2 × 5.25" BAYS
10 × 3.5" HOT-SWAP BAYS

ENGLISH

In this guide

This guide covers chassis access, component installation, and reassembly.

Choose your cooling configuration and check component clearances before starting assembly. Supported components may compete for the same space.

Before installation: Follow the installation instructions supplied with your motherboard, power supply, graphics card, and cooler.

Maintenance: Before opening a chassis that already has components installed, switch the system off and unplug it.

Fasteners: Tighten chassis fasteners by hand. Do not force a screw that does not thread correctly.

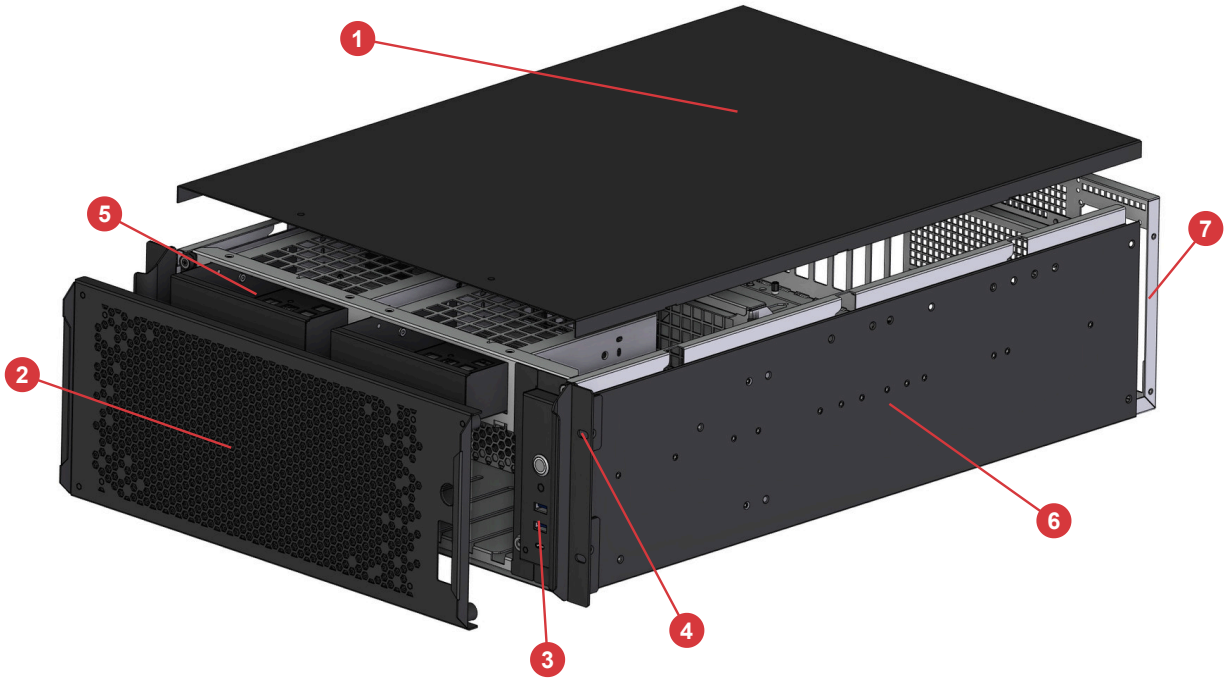
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Exploded assembly & part key

Assembly part key

No.	Part	Related procedure
1	Lid	Remove the lid (page 9)
2	Faceplate and dust filter	Remove the faceplate & filter (page 10)
3	Front I/O assembly	Front ports & connections (page 8)
4	Rack ear	Install rack ears & handles (page 12)
5	5.25-inch bay fillers	Fit 5.25-inch devices or filler blanks (page 26)
6	Chassis wrap	Main chassis body
7	Motherboard tray	Remove the motherboard tray (page 11)

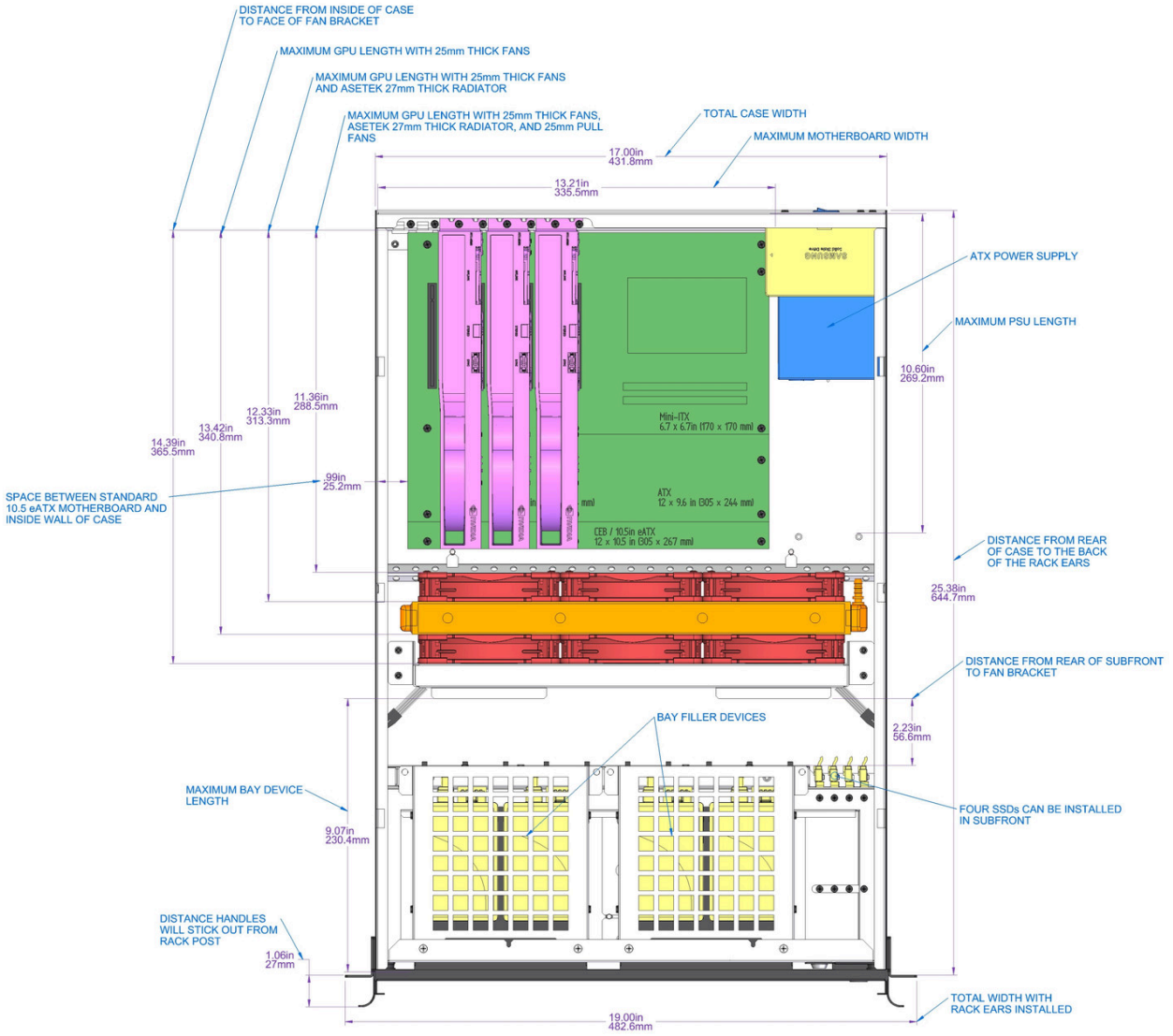
See the hardware-kit page for the screw bag and rack hardware.



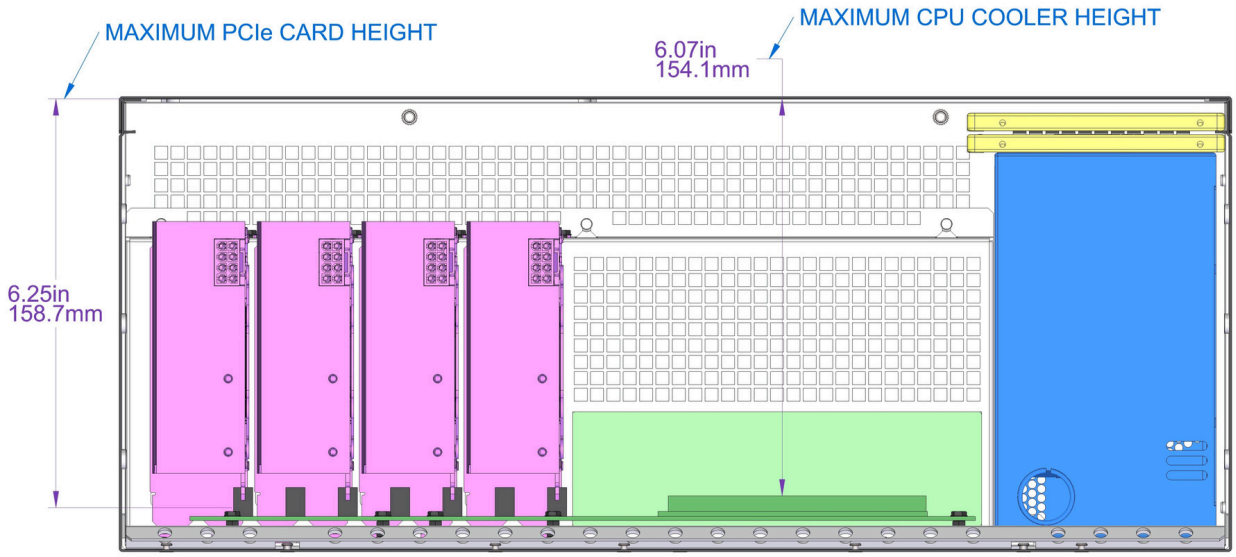
Clearance drawing — top view

The top-view drawing shows the motherboard, PSU, mid-chassis cooling, hot-swap drive bays and 5.25-inch bays, and the GPU length available with each cooling arrangement.

ⓘ Drawing dimensions are nominal. For compatibility, use the limits on the compatibility page.



Front-view component clearances



The front-view drawing illustrates expansion-card height, CPU-cooler height, and the SSD mounting location above the power supply.

ⓘ Drawing dimensions are nominal. For compatibility, use the limits on the compatibility page.

Dimensions & compatibility

Component	Specification
Outer dimensions, D × W × H	635 × 431.8 × 176.78 mm (25 × 17 × 6.96 inches)
Rack size	4U · 19-inch rack
Power supply	ATX up to 268 mm long including connectors; supported CRPS options require the appropriate mounting arrangement
Motherboard	Mini-ITX, MicroATX, ATX; EATX and SSI-CEB up to 12 × 10.5 inches
CPU air cooler	Up to 153 mm tall
Cooling	Three 120 mm fans on the mid-chassis fan bracket; five with a 240 mm or six with a 360 mm push-pull radiator assembly
Liquid cooling	One 360 mm, one 240 mm, or two 120 mm radiators
Rear cooling	Optional 120 mm rear and PCIe-area fan brackets
Expansion	Eight full-height PCIe slots; cards up to 158 mm tall including power connectors
Front bays	Ten hot-swap 3.5-inch SAS/SATA bays behind the magnetic faceplate; two 5.25-inch bays with removable filler blanks
Storage	14 × 2.5-inch and 12 × 3.5-inch mounting locations: ten 3.5-inch hot-swap bays, four 2.5-inch behind the front I/O, two 2.5-inch on the motherboard tray (7 mm, or one 15 mm), and four 2.5-inch, or one 3.5-inch plus two 2.5-inch, on each bay filler blank. Not all locations can be used at once

GPU length by cooling configuration

Configuration	Maximum length
No fans or radiator	362 mm
Three 25 mm fans	337 mm
Asetek 360 mm AIO with three 25 mm fans	309 mm
Asetek 360 mm AIO with six 25 mm fans (Push-Pull)	285 mm

ⓘ Radiator thickness, fan thickness and GPU length together must be less than 362 mm. The tray SSD positions are unavailable with the rear fan bracket.

Hardware kit

Match the **letter and color** here to the references beside the installation illustrations and in each procedure. All rackmount chassis use screwbag **SBAG-HWKIT** (items A–F).

A 6-32 × 0.25-inch hex screws — 45 ×

Yellow-marked · Motherboard, PSU, HDDs, and PCIe accessories.



B M3 × 0.5 screws, 5 mm long — 10 ×

Red-marked · 2.5-inch SSDs and some 3.5-inch accessories.



C 6-32 hex standoffs — 20 ×

Teal in drawings; black, unpatched hardware · 0.125-inch and 0.25-inch lengths. Install in the motherboard tray.



D M3 screws (5 mm thread) — 16 ×

Blue-marked · 2.5-inch SSDs and some 3.5-inch accessories.



E 6-32 × 0.25-inch flat-head screws — 10 ×

Green-marked · Motherboard tray, subfront, internal brackets, and front I/O bracket.



F M4 × 7 mm screws — 7 ×

Pink-marked · Rack ears and pull handles.



G Slot covers — 8 ×

Cover unused PCIe slots.



H Rack ears — 1 pair

Secure the chassis to the rack.



I Pull handles — 1 pair

Optional handles make pulling the chassis from the rack easier.



ⓘ Items G–I are separate chassis/accessory items. Illustrations are not to scale. Fan and radiator fasteners are supplied with the cooling components.

NAS hardware kit

Hot-swap drive hardware is supplied in a separate kit, **CX-NAS-HWKIT** (items J–N), in addition to the chassis hardware kit (items A–I). Ten SAS/SATA adapters come preinstalled in the drive bays; SATA data cables are not included.

J HDD shoulder screws (217-735)

45 ×

Four per 3.5-inch HDD; they guide the drive into its hot-swap bay.



K Thumb screws (217-737)

2 ×

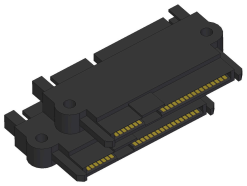
Secure the drive retention tray.



L SAS/SATA adapters

2 ×

Spare SFF-8482 to SATA adapters; ten are preinstalled in the drive bays.



M 5-way SATA power splitters

2 ×

One SATA power input to five drive connectors.



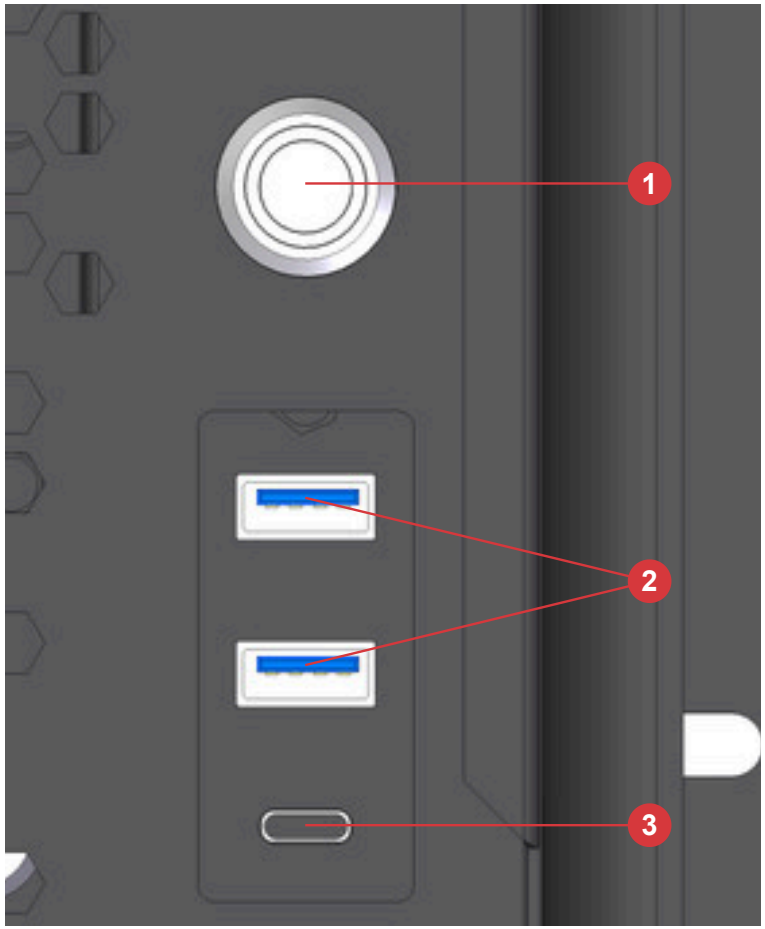
N Key pair

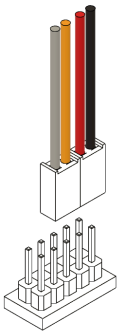
1 pair

Locks and unlocks the drive retention tray.

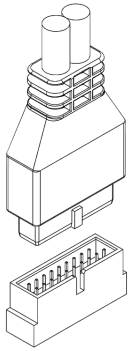


Front ports & connections

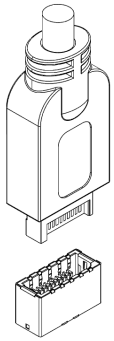




Power switch & status light



USB Type-A ports



USB Type-C port

No.	Port / connection
1	**Power switch & status light** 16 mm momentary switch with status light. Connect switch and LED leads to the front-panel header; observe the motherboard's LED polarity markings.
2	**USB Type-A ports** Two USB 3.0 Type-A ports, connected through the keyed internal USB cable shown.
3	**USB Type-C port** One USB 3.2 Type-C 10 Gbps port, connected through the internal Type-E cable shown. Requires a matching motherboard header.

ⓘ Use your motherboard manual to identify matching headers and pin assignments. The numbered front-panel locations correspond to the connector drawings and legend.

Remove the lid

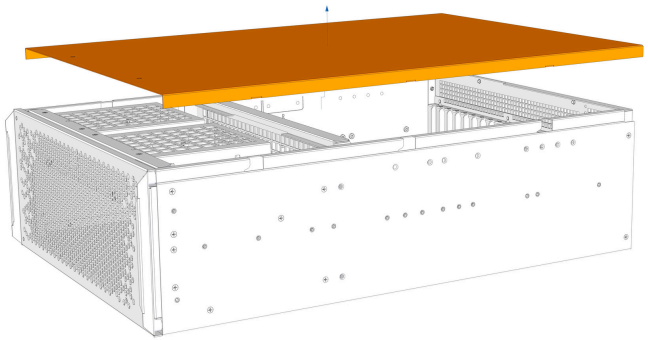
1



2



3



A Yellow

1. Remove the screws

Remove the two yellow-patched 6-32 screws **(A)** along the upper rear edge that secure the lid to the motherboard tray.

2. Slide the lid back

Push the lid toward the rear of the chassis.

3. Lift the lid away

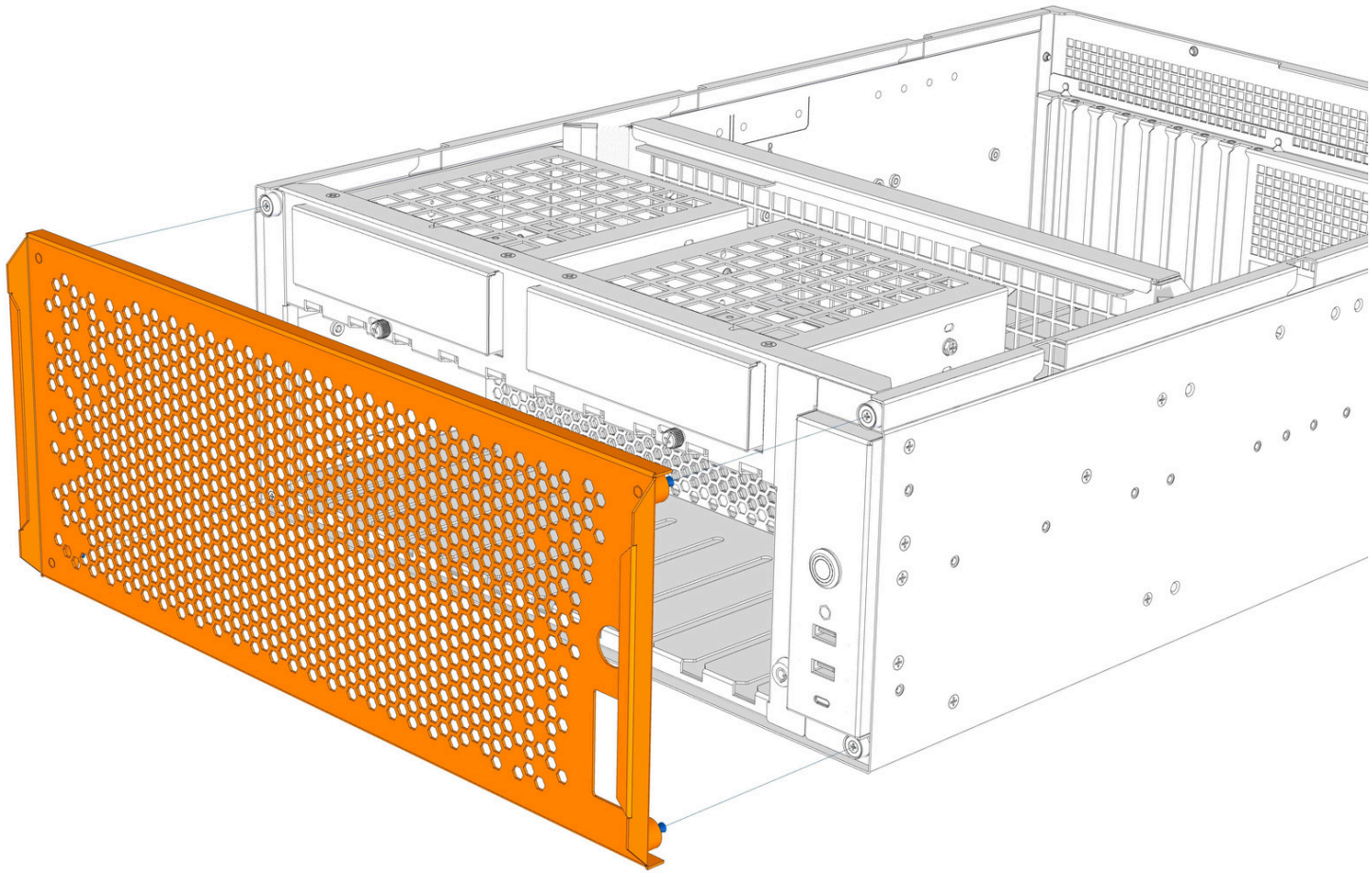
Check that the lid flanges have cleared the chassis slots. Lift the lid up and away.

Remove the faceplate

1. Remove the faceplate

The faceplate is held magnetically. Pull it straight off the front of the chassis to reach the hot-swap drive bays and dust filter.

Keep the faceplate aside while installing drives, fans or a radiator.



Remove the motherboard tray

ⓘ Removing the tray is optional, but can make component installation easier.

1. Remove the tray screws

Remove the four green-patched 6-32 screws (E) securing the tray's rear panel to the chassis, two on each side.

2. Slide the tray back

Move the tray toward the rear until all six round metal tabs disengage from the tray.

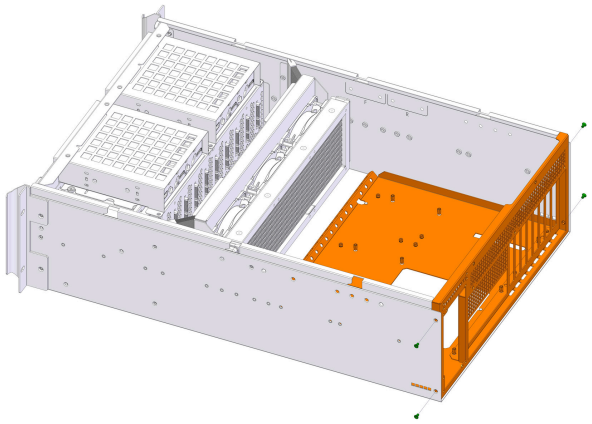
3. Lift the tray out

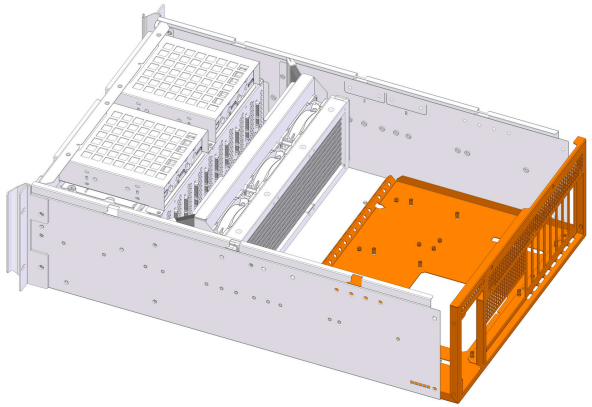
Lift only after the tray has cleared the tabs. Do not force it upward while it remains engaged.

1

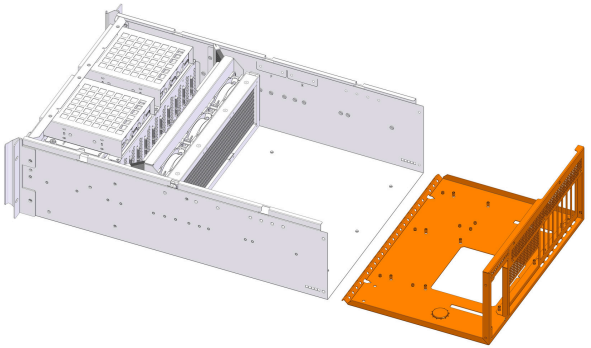
E Green

2



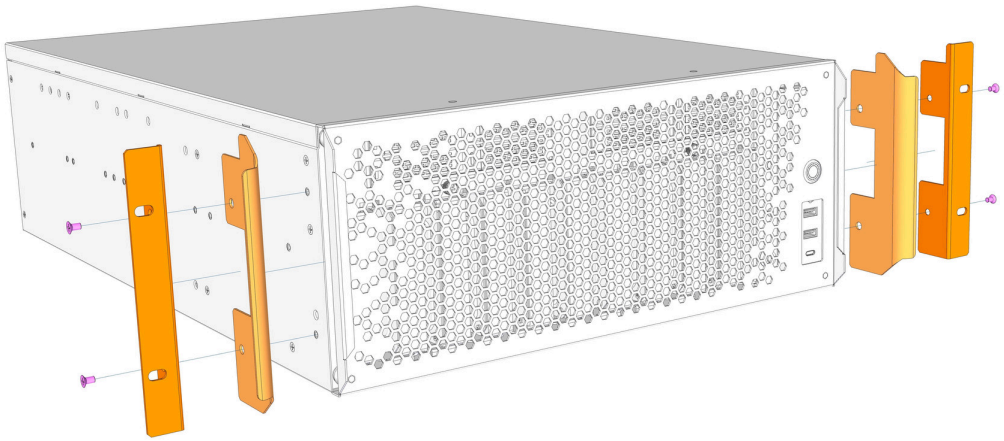


3



Install rack ears & handles

F Pink | H | I



1. Align the hardware

If using pull handles, stack the rack ears (H) over the pull handles (I) with the handle facing away from the faceplate.

Rack ears can also be installed without handles.

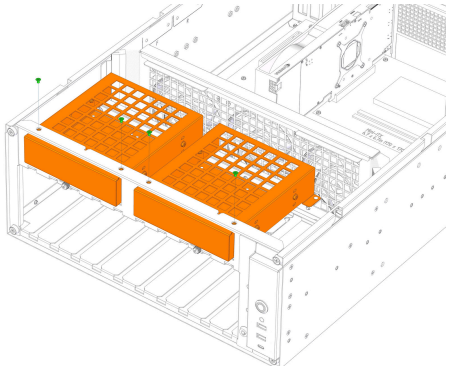
2. Secure both sides

Install 4 pink-marked M4 × 7 mm screws (F) in total, 2 on each side, through the rack ears and handles into the chassis. Tighten by hand.

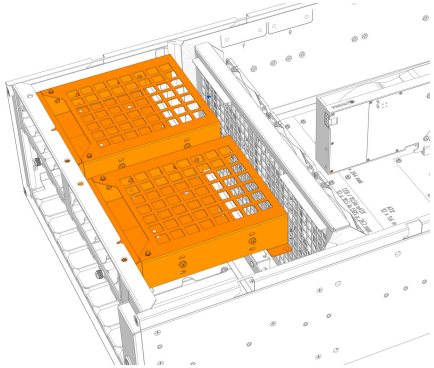
ⓘ Rack-slide installation depends on the rail kit. Follow the instructions supplied with the selected kit.

Remove the 5.25-inch bay bracket

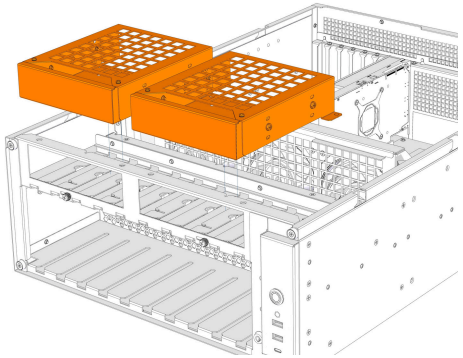
1



2



3



E Green

Removing the 5.25-inch bay bracket gives access to its filler blanks and makes motherboard installation easier.

1. Remove the bracket screws

Remove the green-patched 6-32 screws (E) that secure the bay bracket to the chassis.

2. Slide the bracket back

Slide the bracket toward the rear of the chassis until it clears the front panel.

3. Lift the bracket out

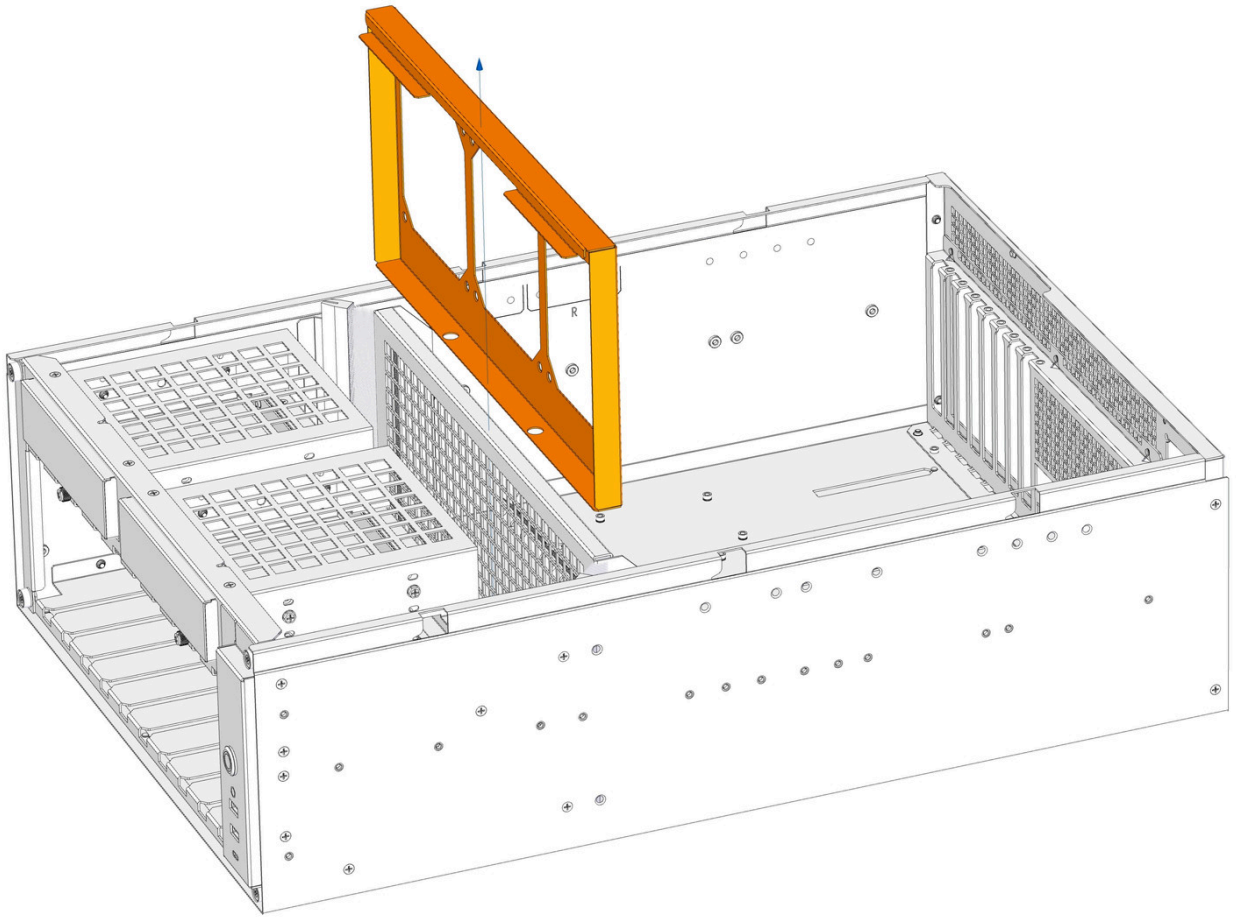
Lift the bracket up and out of the chassis. Disconnect drive cables first if drives are already installed.

Remove the fan bracket

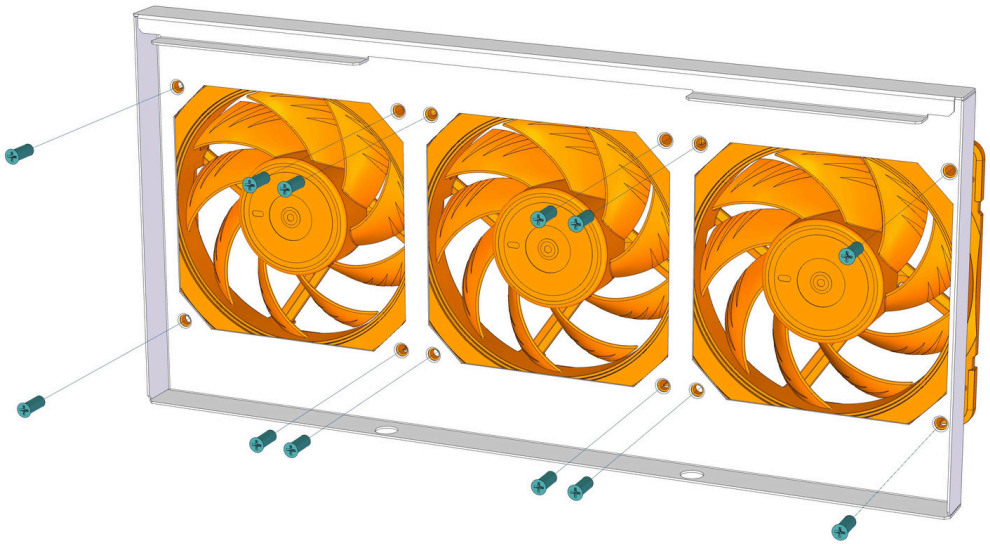
The mid-chassis fans mount on a removable bracket. Remove it to install fans or a radiator.

1. Lift the bracket out

Lift the fan bracket straight up and out of the chassis. No screws hold it in place.



Install fans



1. Align the fans

Align three 120 mm fans with the fan bracket. Each fan uses four mounting points, twelve in total.

2. Secure the fans

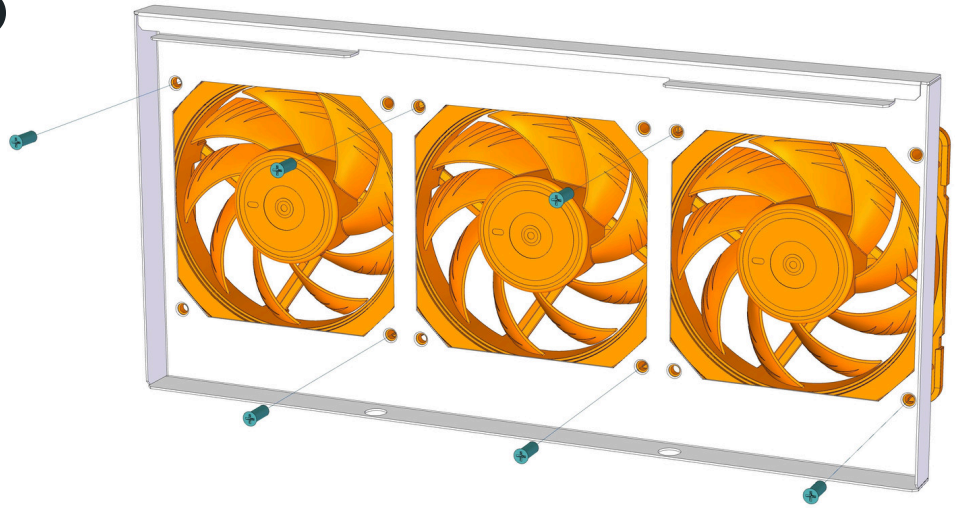
Use the self-tapping fan screws supplied with your fans. Pass them through the bracket and into the fan frames.

Check GPU clearance

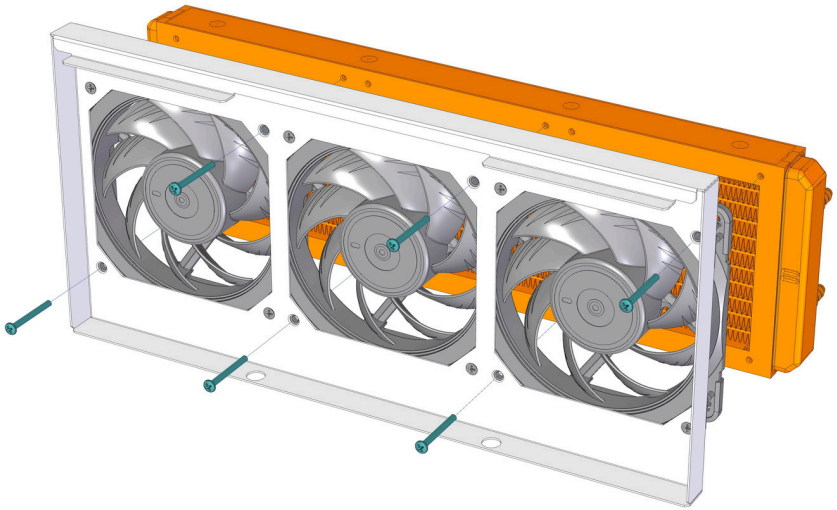
With three 25 mm fans, maximum GPU length is **337 mm**. Thicker fans reduce available space.

Install an AIO radiator

1



2



1. Position the fans

Place three 120 mm fans between the fan bracket and the 360 mm radiator. Remove any fan screws occupying the radiator mounting positions.

2. Align and secure the assembly

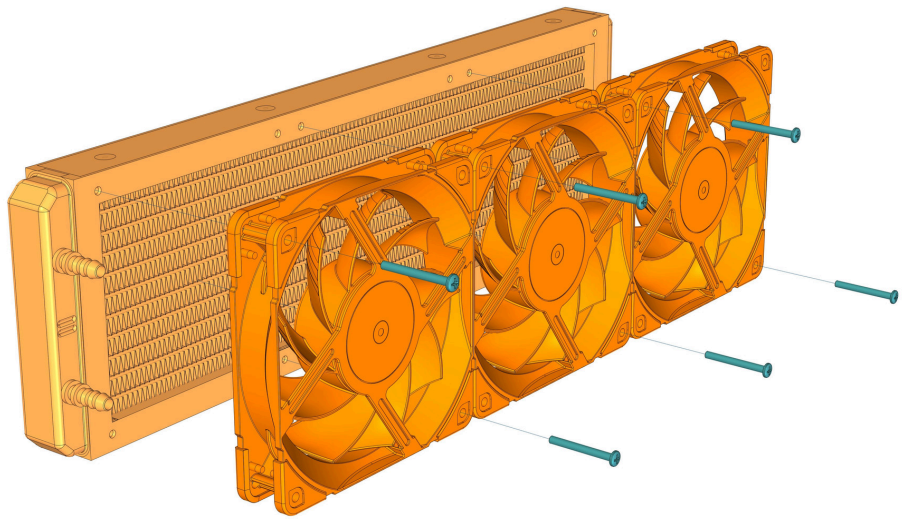
Align all twelve mounting points in the bracket, fans and radiator. Use the cooler manufacturer's specified radiator screws through the bracket and fan frames into the radiator.

Check component clearance

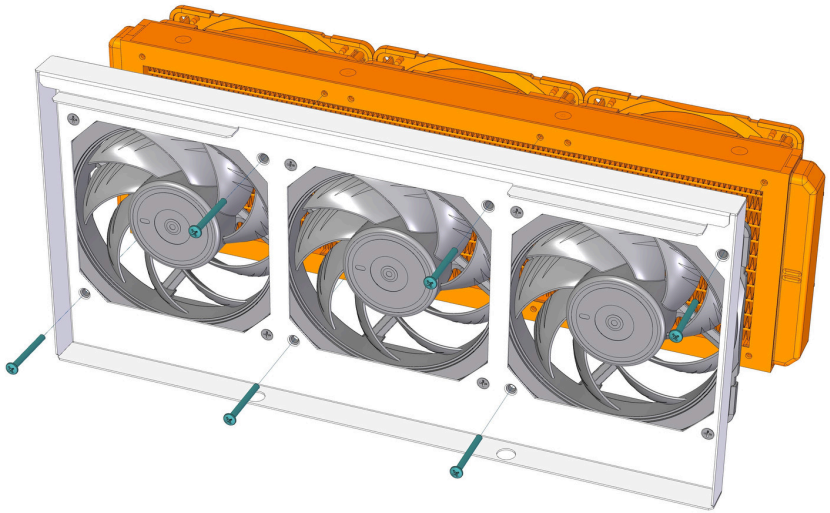
With the specified Asetek 360 mm AIO and three 25 mm fans, maximum GPU length is **309 mm**. A 240 mm radiator or two 120 mm radiators mount in the same positions.

Install push-pull cooling

1



2



1. Attach the second fan bank

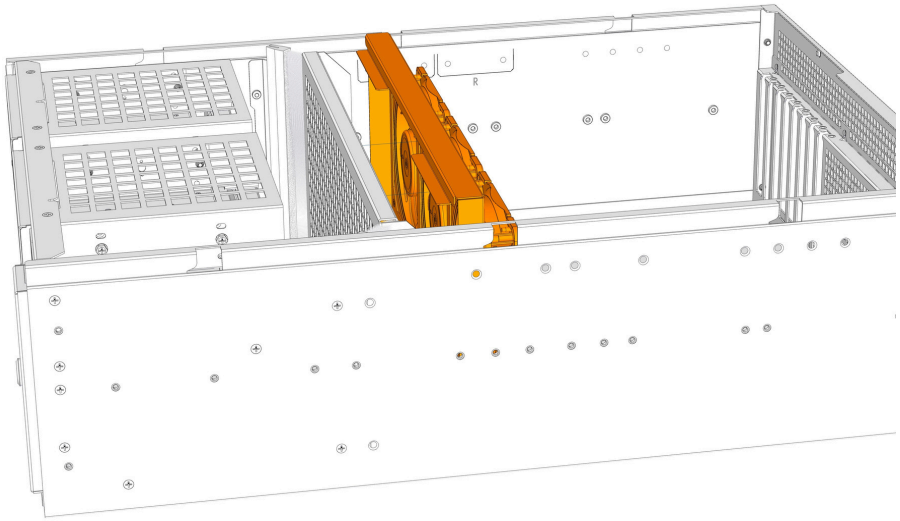
A 360 mm radiator may use three 120 mm fans on each side; a 240 mm radiator may use five fans in total. Align the additional fans with the radiator and secure them using the radiator manufacturer's specified screws.

2. Check clearance

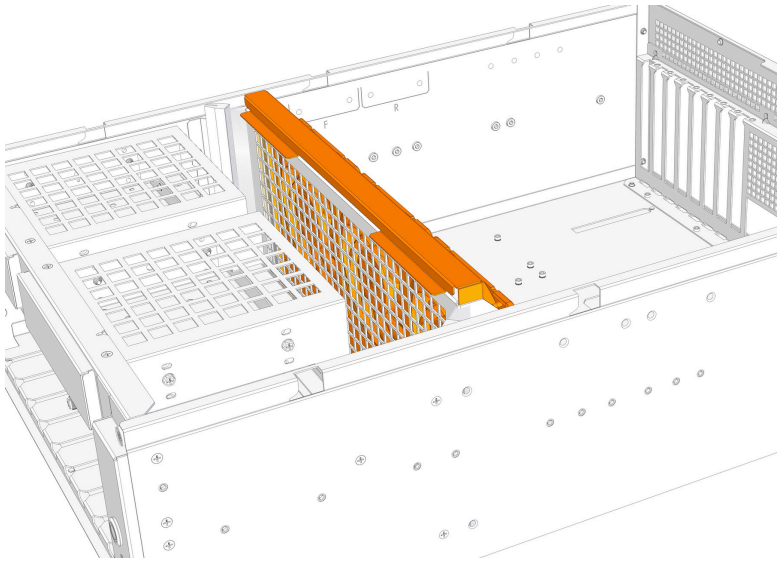
The assembly must clear the motherboard, drive bays and all installed components. With the specified Asetek radiator and six 25 mm fans, maximum GPU length is **285 mm**.

Reinstall the fan bracket

1



2

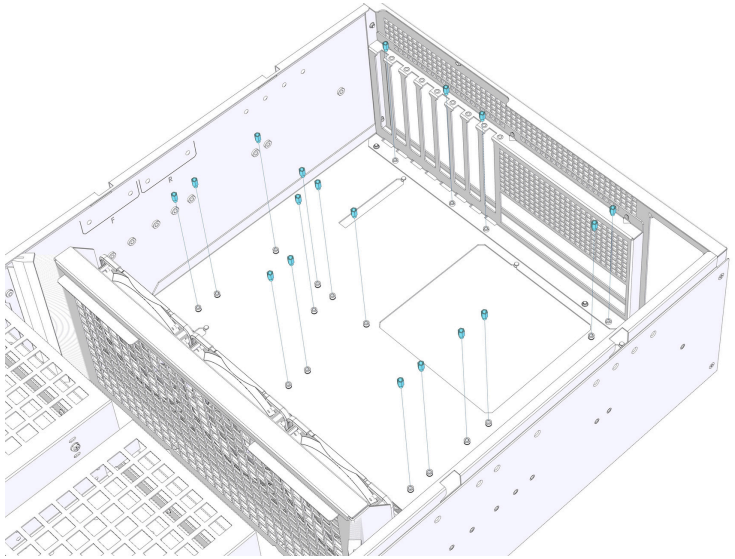


1. Lower the bracket

Lower the fan bracket, with its fans or radiator assembly, into its mid-chassis position. Route fan and pump cables toward the motherboard.

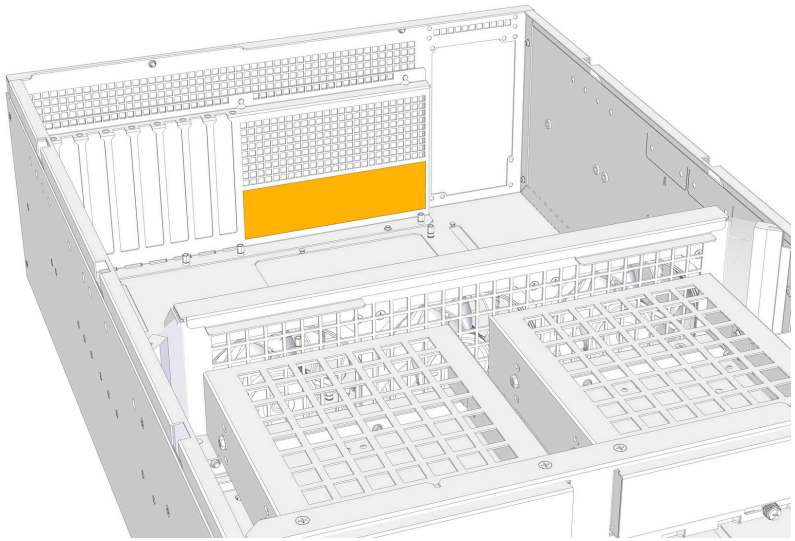
Prepare the motherboard tray

1



C Teal

2



1. Install the standoffs

Match standoff positions to the mounting holes on your motherboard. Install the black hex standoffs **(C)** into the corresponding threaded locations on the tray.

Do not leave an extra standoff beneath a part of the board without a mounting hole.

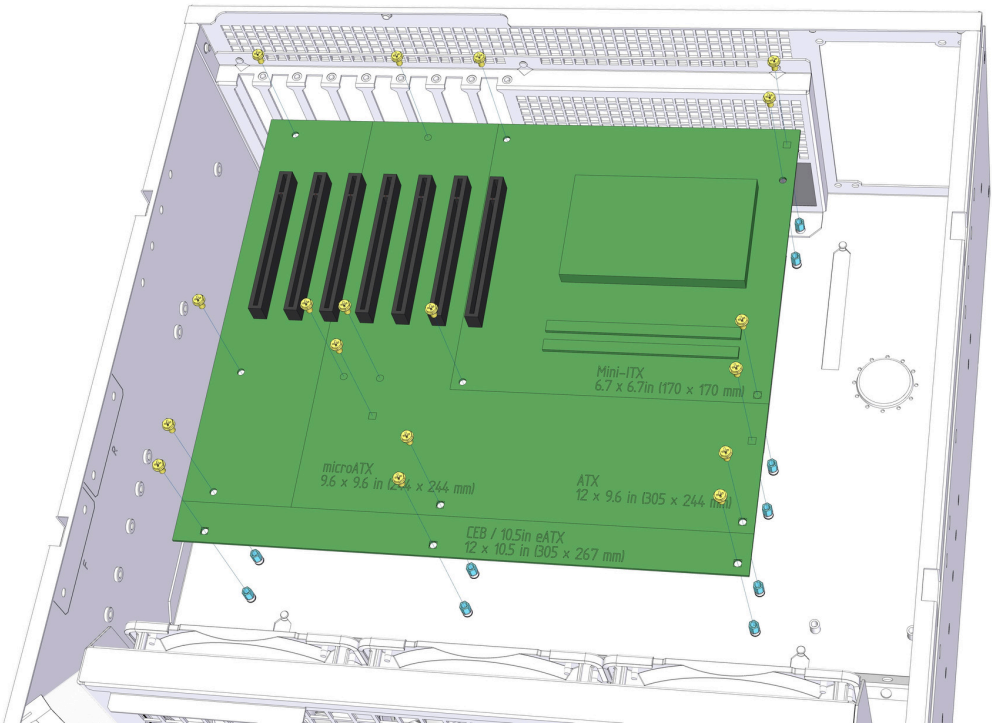
2. Install the I/O shield

If your motherboard has a separate I/O shield, orient it to match the motherboard ports and press it into the rectangular opening in the tray's rear panel.

ⓘ Skip this step if the I/O shield is integrated into the motherboard.

Install the motherboard

A Yellow C Teal



1. Lower the motherboard

Place the motherboard onto the black hex standoffs **(C)**. Align its rear ports with the I/O opening and its mounting holes with the standoffs.

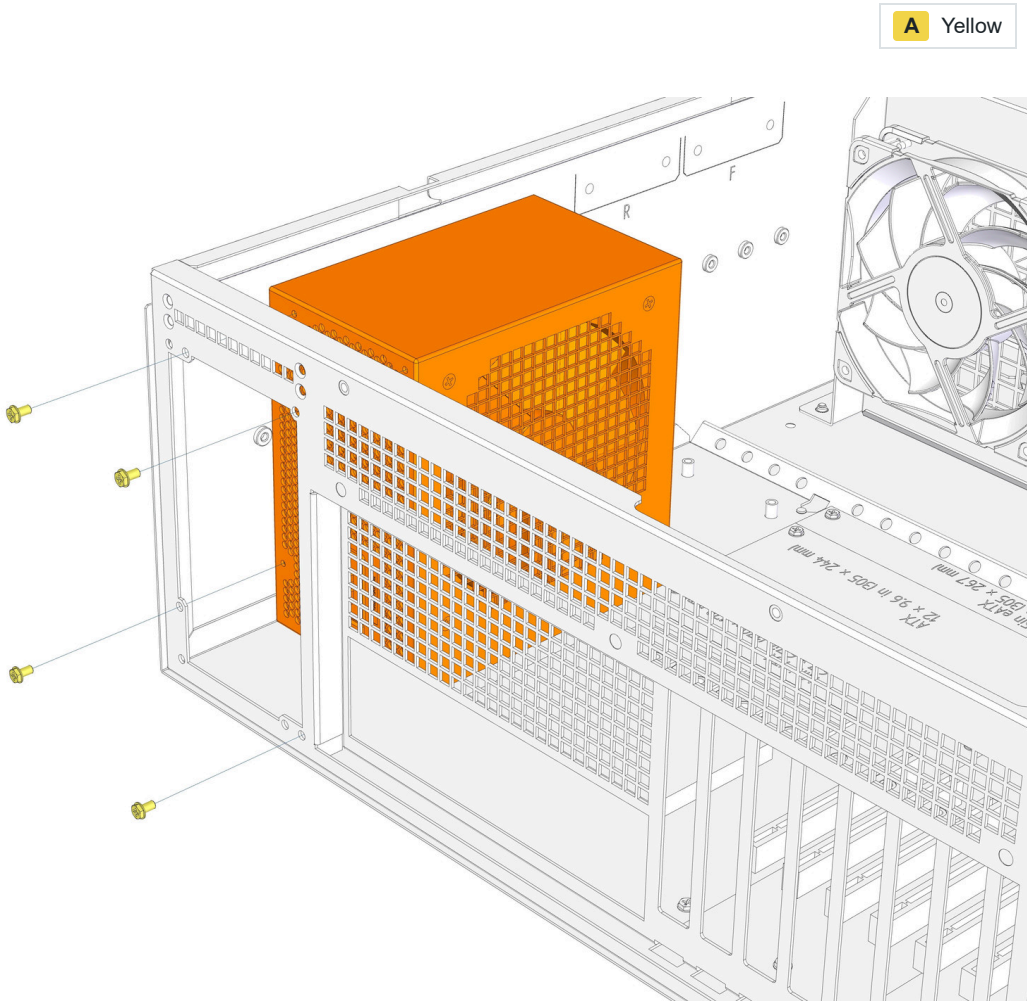
2. Secure the board

Install yellow-patched 6-32 screws **(A)** through the board and into the standoffs.

Tighten by hand to avoid damaging the board or loosening the standoffs during future removal.

Follow your motherboard's instructions for CPU, memory, M.2 drives, and cable connections.

Install the power supply



1. Position the ATX power supply

Place the ATX PSU into the mounting location shown on the motherboard tray. Align its rear mounting holes and keep the fan intake clear.

2. Secure the PSU

Install yellow-patched 6-32 screws **(A)** through the tray into the PSU. Tighten by hand and route cables clear of tray engagement points.

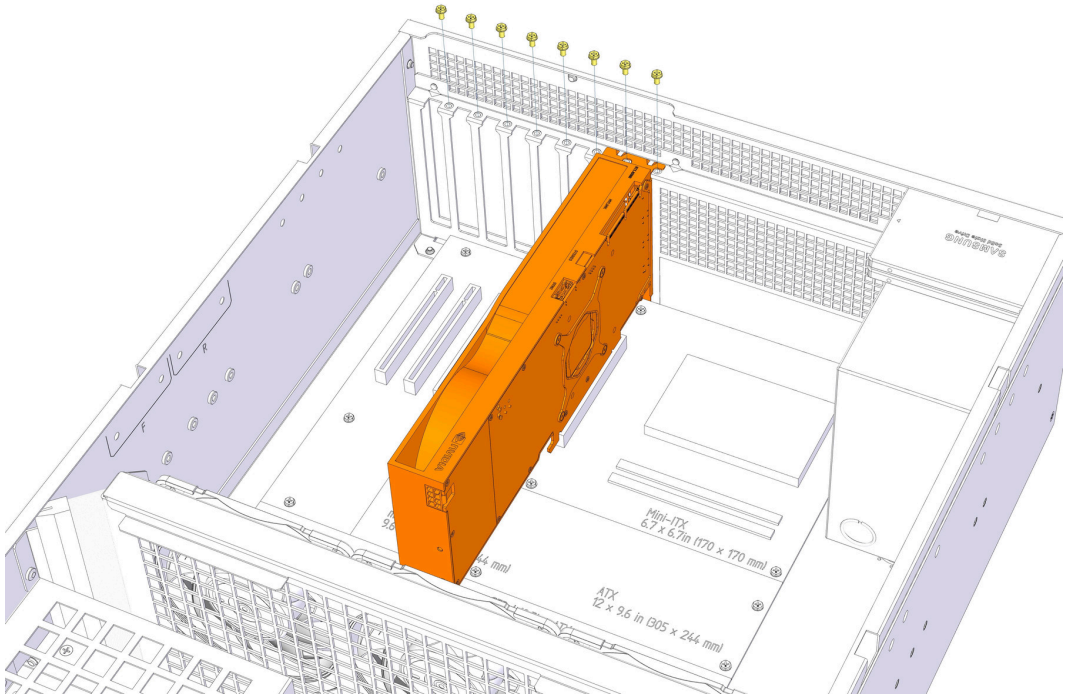
Check length and cable clearance

Maximum PSU length is **268 mm including connectors**. Allow room for cables above the PSU if SSDs are installed on the tray; see the front-view drawing (page 4).

ⓘ **CRPS options:** CRPS mounting depends on the PSU format and adapter. This page illustrates ATX installation only; obtain instructions for the exact CRPS adapter before installation.

Install a GPU or PCIe card

A Yellow G



1. Prepare the slot

Select the PCIe slot specified by your motherboard manual. Remove the corresponding chassis slot covers and open the motherboard slot latch, if present.

2. Seat the card

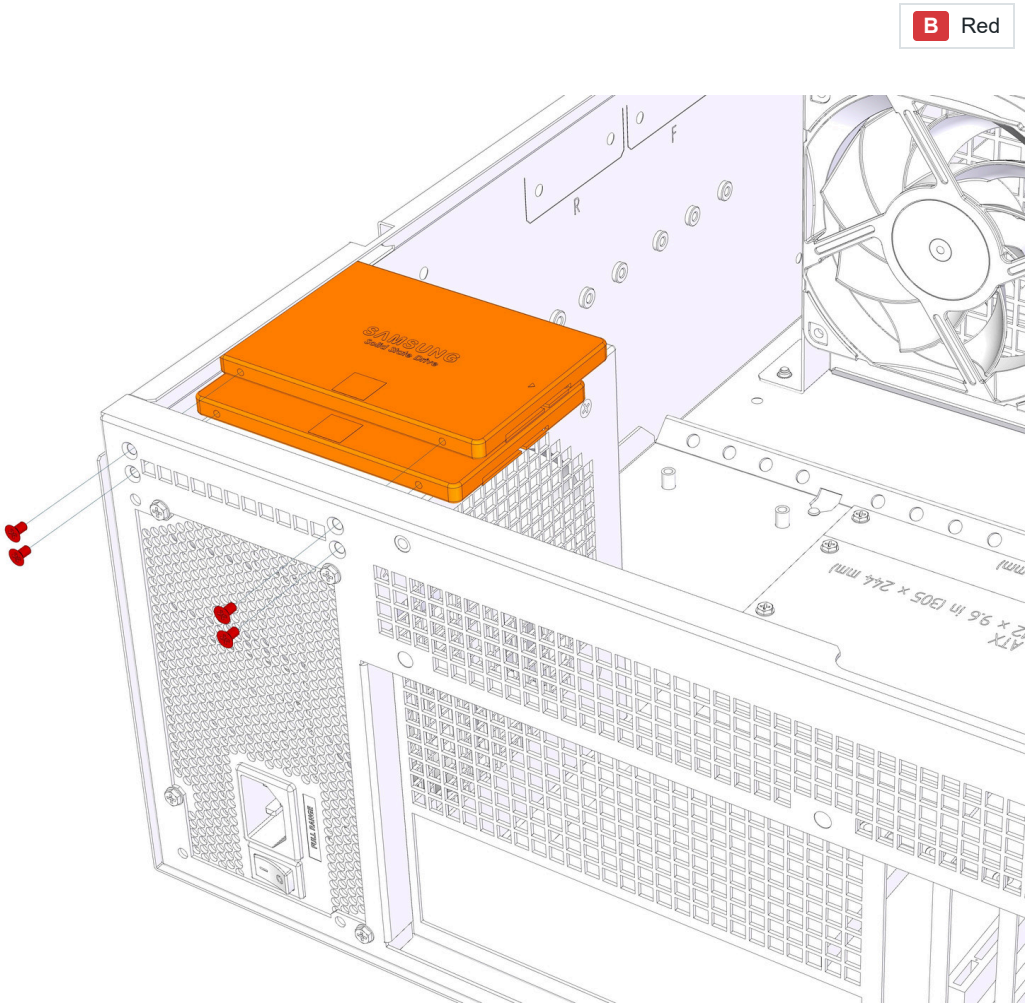
Align the card with the motherboard slot and rear bracket opening. Lower it carefully and apply gentle, even pressure until fully seated.

3. Secure the bracket

Fasten the card's mounting bracket to the tray with yellow-patched 6-32 screws **(A)**. Fit slot covers **(G)** over unused openings and secure them with yellow-patched 6-32 screws **(A)**.

ⓘ Card height, including power connectors, must remain within **158 mm**. Check the cooling-dependent length limits before installation.

Install a 2.5-inch SSD



Rear fan bracket clearance: If the optional rear fan bracket is installed, neither SSD mounting position on the tray can be used. This restriction applies to all 4U chassis.

1. Position the SSD

The rear of the motherboard tray has two pairs of 2.5-inch mounting holes. Install either two SSDs up to 7 mm thick, or one SSD up to 15 mm thick. Align the drive with the mounting holes shown. Keep its connectors accessible and check clearance to the PSU and motherboard.

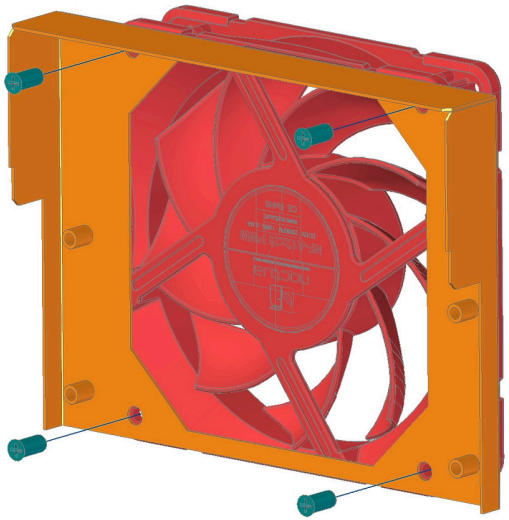
2. Secure the drives

Secure each drive with two red-patched M3 × 0.5 screws, 5 mm long (B) through the tray. Two 7 mm drives use four screws in total. Tighten by hand without forcing the threads.

ⓘ For M.2 storage, follow the motherboard's installation instructions.

Install the rear fan bracket

1



2



An optional rear fan bracket holds one 120 mm fan behind the rear vent of the chassis. It is available separately as KIT-4U-REARFAN-B (bracket) or KIT-4U-REARFAN-NF25 (bracket with a Noctua NF-A12x25 fan). Every 4U chassis uses the same bracket and steps.

1. Mount the fan on the bracket

Secure a 120 mm fan to the bracket with the four fan screws supplied with the kit, or with the screws supplied with the fan. Orient the fan to exhaust air out of the chassis.

2. Fit the bracket

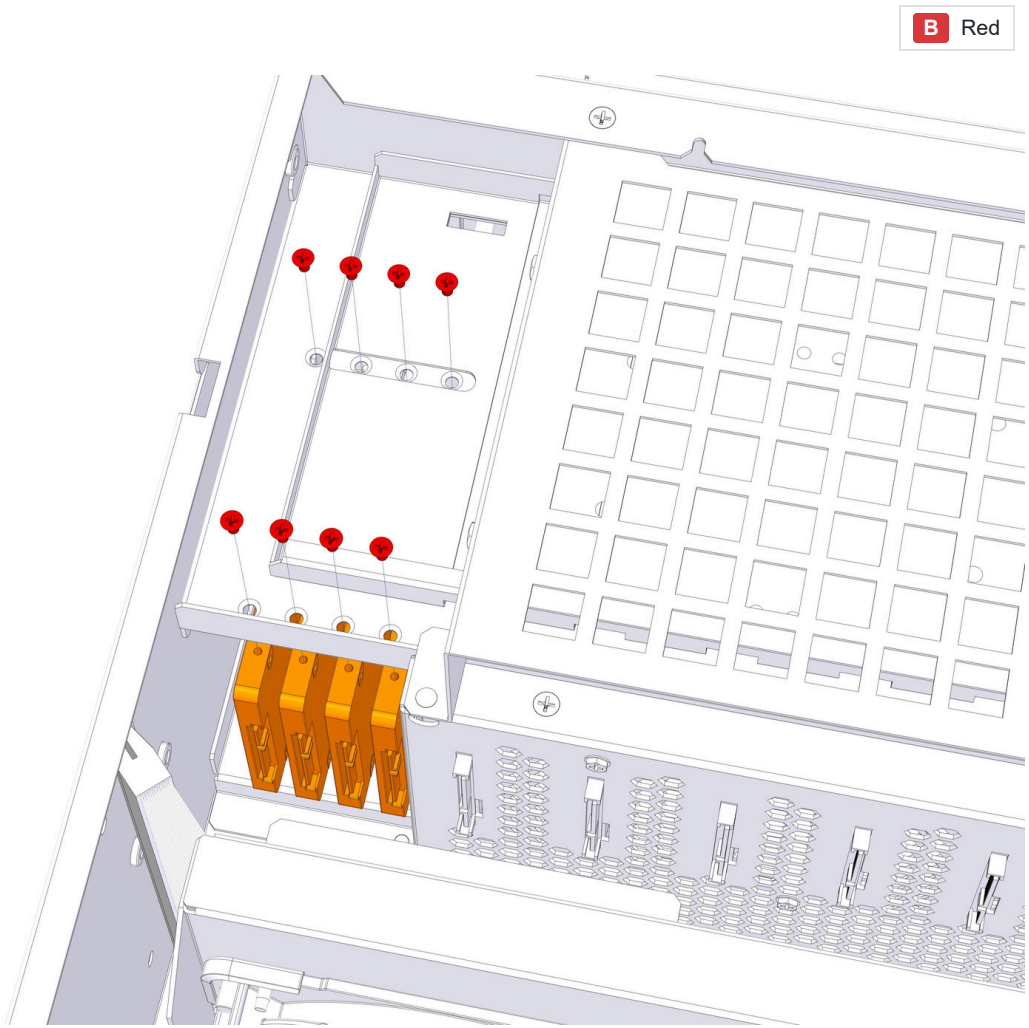
Hold the bracket against the inside of the rear panel, behind the vent. From outside the chassis, secure it through the rear panel with the four screws supplied with the kit.

3. Connect the fan

Connect the fan to a motherboard fan header and route the cable clear of the CPU cooler and fan blades.

ⓘ The rear 2.5-inch SSD positions on the motherboard tray cannot be used while the rear fan bracket is fitted.

Install SSDs behind the front I/O



Four 2.5-inch SSD mounting points are located behind the power button and front USB area.

1. Position the SSDs

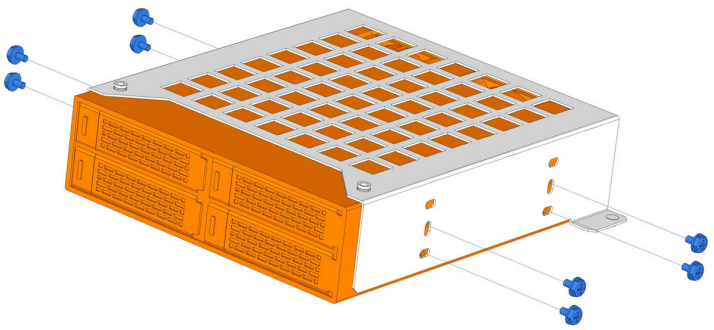
Align each 2.5-inch SSD with its mounting points behind the front I/O.

2. Secure the drives

Secure each drive with two red-patched M3 × 0.5 screws, 5 mm long (B). Route cables clear of the fan bracket.

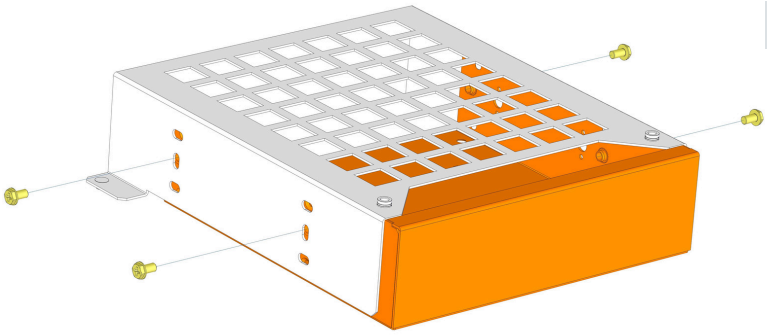
Fit 5.25-inch devices or filler blanks

1



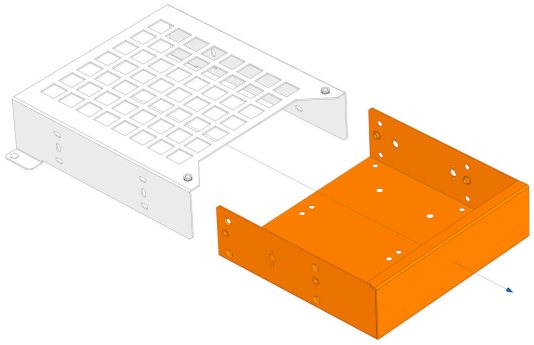
D Blue

2



A Yellow

3



Each bay holds either a filler blank or a 5.25-inch device. Each filler blank holds four 2.5-inch SSDs, or one 3.5-inch HDD and up to two 2.5-inch SSDs.

1. Install a 5.25-inch device

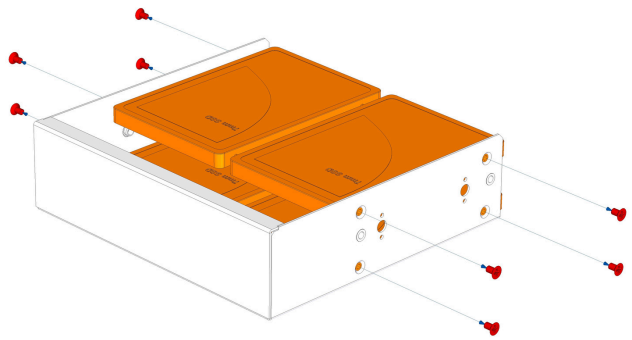
Slide the device into the bracket. Align its mounting holes with the bracket and secure it with blue-patched M3 screws **(D)** on both sides. A 5.25-inch to 3.5-inch device adapter is available separately.

2. Or keep a filler blank

Secure the filler blank to the bracket with yellow-patched 6-32 screws **(A)**. To remove a blank, remove its screws and slide it out. To mount drives on a blank, see Mount drives on a filler blank (page 27).

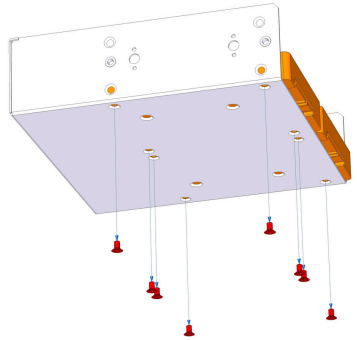
Mount drives on a filler blank

1



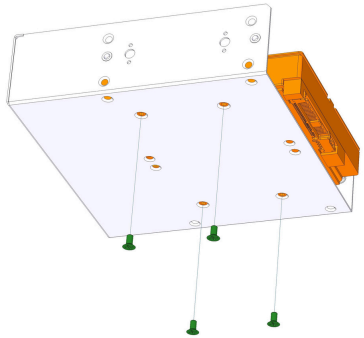
B Red

2



B Red

3



E Green

Each 5.25-inch bay filler blank holds either four 2.5-inch SSDs, or one 3.5-inch HDD and up to two 2.5-inch SSDs.

1. Mount 2.5-inch SSDs

Place the SSDs on the blank, align their mounting holes with the holes in the blank, and secure each drive with red-patched M3 × 0.5 screws, 5 mm long (B).

2. Or mount two 15 mm SSDs

Two SSDs up to 15 mm thick mount through the bottom holes of the blank, each secured with red-patched M3 × 0.5 screws, 5 mm long (B).

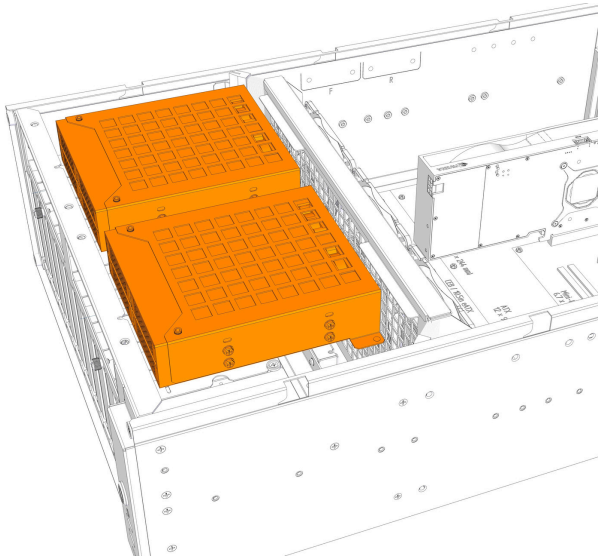
3. Or mount a 3.5-inch HDD

Align the HDD's bottom mounting holes with the holes in the blank and install four green-patched 6-32 screws (E) through the blank into the drive. Two 2.5-inch SSDs can still be mounted alongside the HDD.

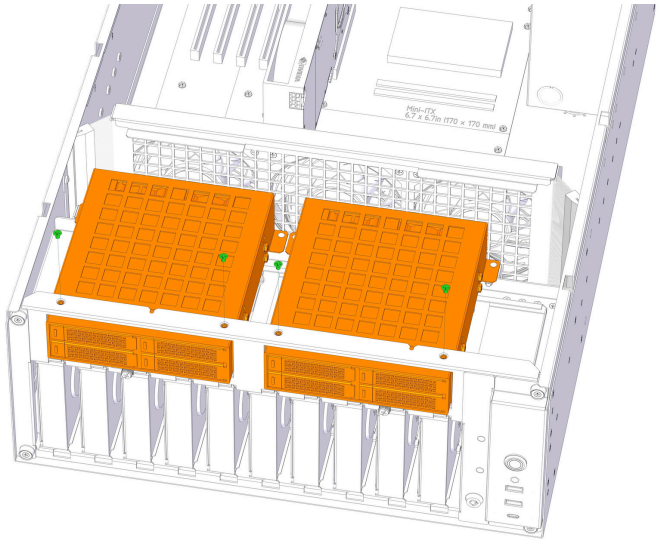
ⓘ Mount drives on the blank before fitting the blank in the bay bracket, and route their cables clear of the front cooling assembly.

Reinstall the 5.25-inch bay bracket

1



2



E Green

1. Place the bracket

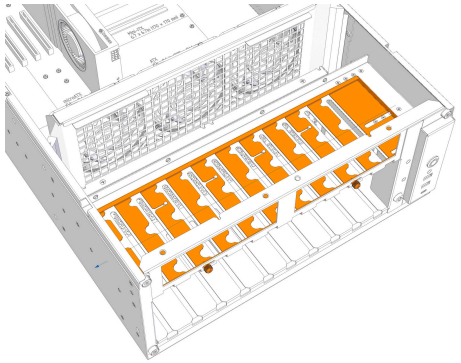
Lower the bay bracket into the chassis behind the front panel. Align the bay openings with the front panel.

2. Secure the bracket

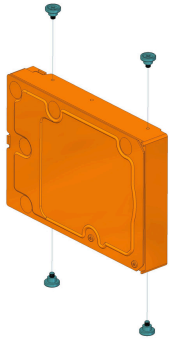
Install the yellow-patched 6-32 screws (A) at the front and the green-patched 6-32 screws (E) at the side of the chassis. Connect power and data cables to the installed drives.

Install hot-swap hard drives

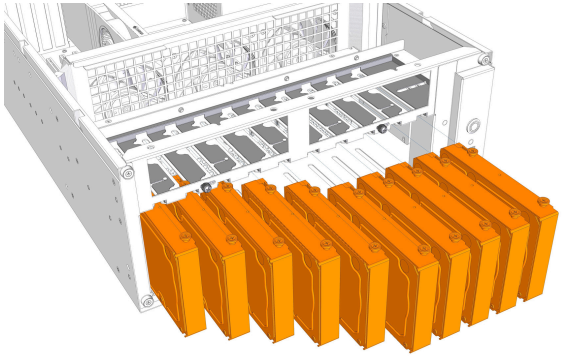
1



2



3



N

The ten 3.5-inch hot-swap bays are behind the magnetic faceplate. Each bay connects through a preinstalled SFF-8482 SAS/SATA to SATA adapter.

1. Open the drive bays

Unlock the drive retention tray with the key (N) and slide the tray back.

J

2. Fit the shoulder screws

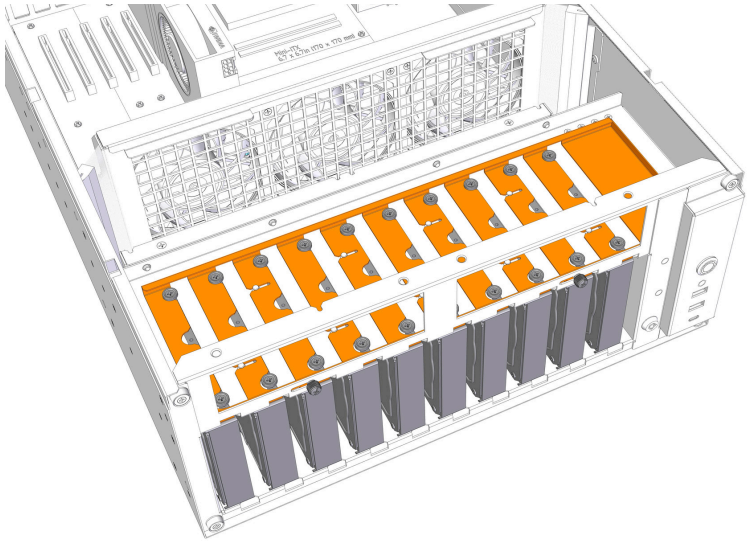
Install four shoulder screws (J) in the side mounting holes of each 3.5-inch HDD.

3. Insert the drives

Slide each drive into a bay, guiding the shoulder screws through the slots, until it seats in the adapter.

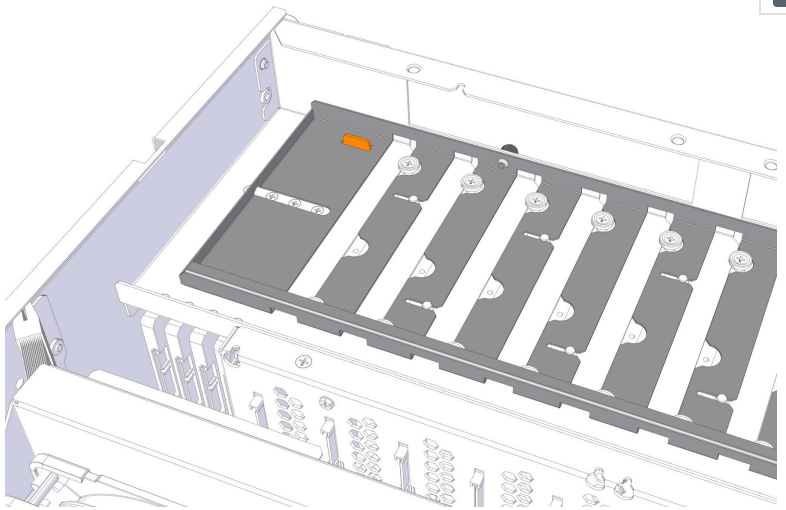
Lock and connect the hard drives

1



2

K N



1. Close the retention tray

Slide the drive retention tray forward over the installed drives.

2. Lock the tray

Secure the tray with the thumb screws **(K)** and lock it with the key **(N)**.

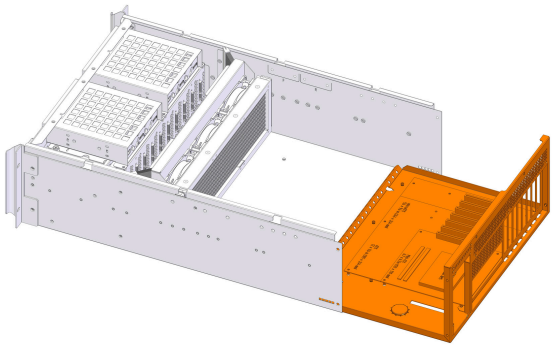
Connect the drives

Connect SATA data cables (not included) to the adapters inside the chassis, and power them with the SATA power splitters **(M)**.

ⓘ Hot-swap support depends on the HBA or RAID card, motherboard and operating system. A SAS controller can run SATA drives; a SATA controller cannot run SAS drives.

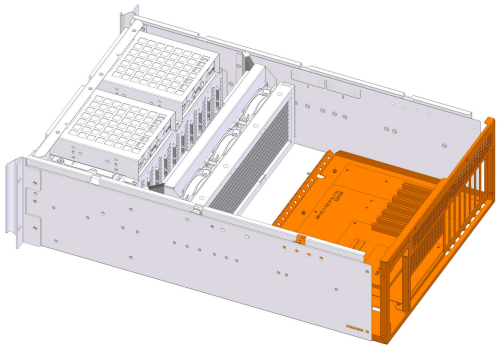
Reinstall the motherboard tray

1

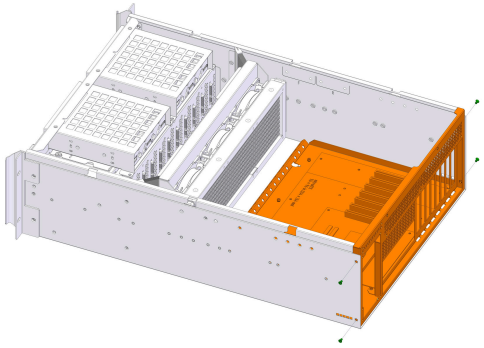


E Green

2



3



E Green

1. Place and slide the tray

Lower the assembled tray into the chassis and slide it forward. Lift gently as needed to prevent its front edge catching on the chassis tabs.

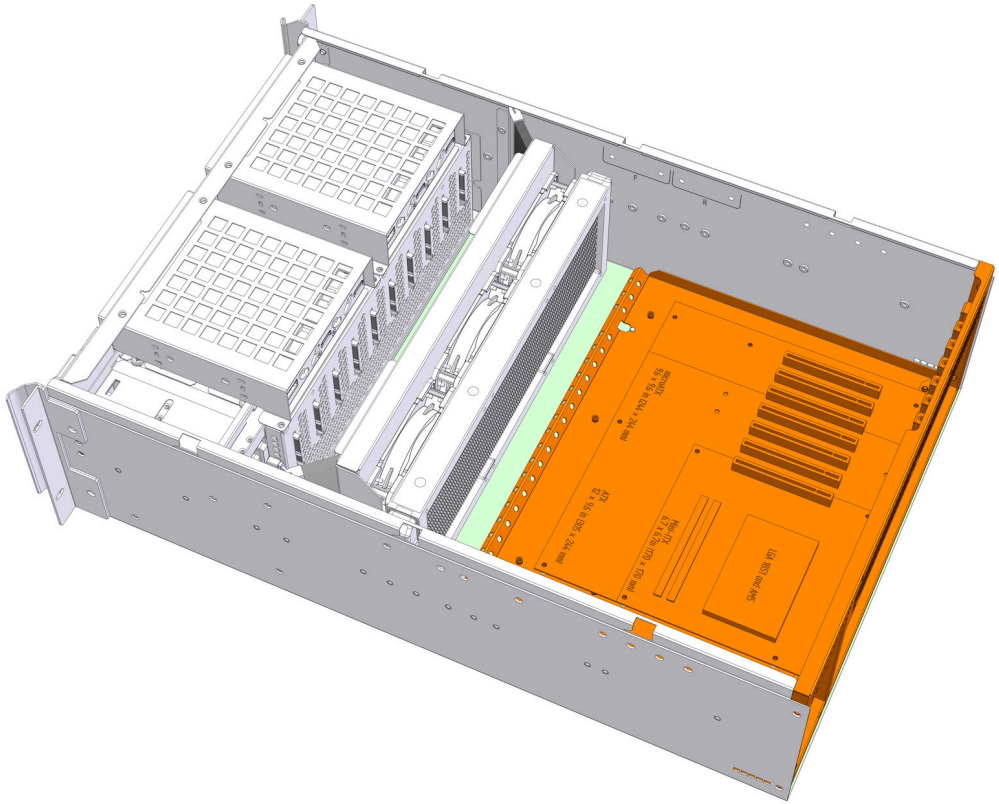
2. Engage all six tabs

Continue forward until all six tabs are seated in the tray and its rear panel sits flush against the chassis rear.

3. Secure the tray

Install four green-patched 6-32 screws (E), two on each side, through the chassis into the tray. Tighten by hand.

Route cables & close the chassis



1. Route and secure cables

Run drive, front-panel, PCIe, power and fan cables along the front edge of the motherboard tray's cable-management bar, highlighted in green. Keep them clear of the fan bracket and fan blades.

Bundle excess slack behind the PSU and secure it with ties. Release any ties that anchor cables to the fixed chassis before removing the tray again.

2. Close the chassis

Refit the magnetic faceplate. Align the lid flanges with the chassis slots, lower the lid, and slide it forward. Secure the lid with its two yellow-patched 6-32 screws **(A)**.

Warranty & support

WARRANTY POLICY

Sliger Designs LLC ("Sliger") warrants its Products, if properly used and installed, against defects in material and workmanship for the period stated on the product specifications. Under normal use and service, every hardware portion of the products will be free from physical defects in material and workmanship during the warranty period (excludes normal wear and tear), or the product will be repaired or replaced as determined solely by Sliger.

For full warranty and RMA policy visit :
https://www.sliger.com/support/warranty_and_rma/

SUPPORT AND SERVICE

If you have any questions or problems with the Sliger product you purchased, please don't hesitate to contact us via email or phone. Please include a detailed explanation of your problem and your order number.

For comments and suggestions, you can e-mail our design team, orders@sliger.com.

Lastly we would like to thank you for your support by purchasing this product.

For more information about Sliger Designs, please visit us online.

Website: sliger.com
Support Email: orders@sliger.com
Phone Number: 1 775 356 5595
Hours of Operation: 8a - 4:30p MST

Regulations

To the best of our knowledge, all computer chassis manufactured by Sliger Designs, LLC adhere to ROHS, REACH, and Conflict Minerals regulations. All Sliger products are produced in the United States of America and primarily utilize materials sourced domestically.

ROHS STATEMENT

This product is compliant to implemented RoHS (Restriction of Hazardous Substances) type regulations worldwide, including but not limited to China, India, Japan, Korea and European Union.

REACH STATEMENT

REACH (Registration, Evaluation, Authorization and Restriction of Chemicals, EC 1907/2006) is the European Union's (EU) chemical substances regulatory framework. REACH requires Sliger Designs, LLC to provide customers with sufficient information on Substances of Very High Concern (SVHC) contained in products in concentration above 0.1% weight by weight (w/w) to allow safe use of the product.

Certificates of Compliance are available upon request.

Manual revision history

Version	Date	Changes
v1.0	2026-11-18	Initial release