SUGER



# CX3150a

15" DEEP 3U CHASSIS

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.


Exploded assembly & part key 2
Clearance drawing — top view 3
Front-view component clearances 4
Dimensions & compatibility 5
Hardware kit 6
Front ports & connections 7
Remove the lid 8
Remove the faceplate & filter 9
Remove the motherboard tray 10
Install rack ears & handles 11
Install front fans 12
Install a front AIO radiator 13
Prepare the motherboard tray 14
Install the motherboard 15
Install the power supply 16
Install a GPU or PCIe card 17
Install 2.5-inch SSDs 18
Reinstall the motherboard tray 19
Route cables & close the chassis 20
Warranty & support 21
Regulations 22
Manual revision history 23

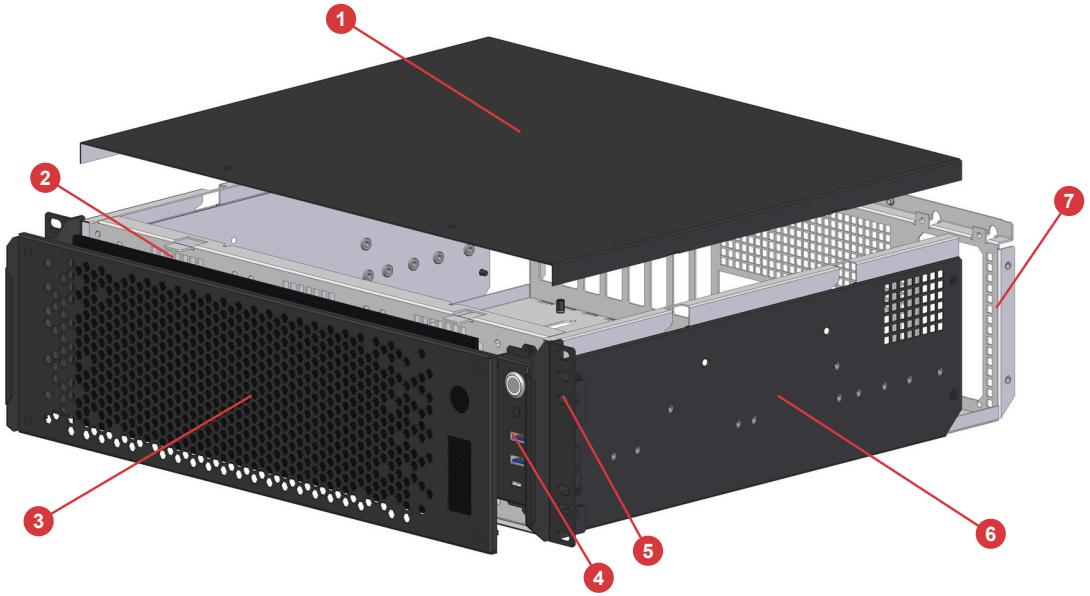
# Exploded assembly & part key



## Assembly part key

| No. | Part | Related procedure |
|---|---|---|
| 1 | Lid | Remove the lid (page 8) |
| 2 | Filter foam | Remove the faceplate & filter (page 9) |
| 3 | Faceplate | Remove the faceplate & filter (page 9) |
| 4 | Front I/O assembly | Front ports & connections (page 7) |
| 5 | Rack ear & pull handle | Install rack ears & handles (page 11) |
| 6 | Chassis wrap | Main chassis body |
| 7 | Motherboard tray | Remove the motherboard tray (page 10) |

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

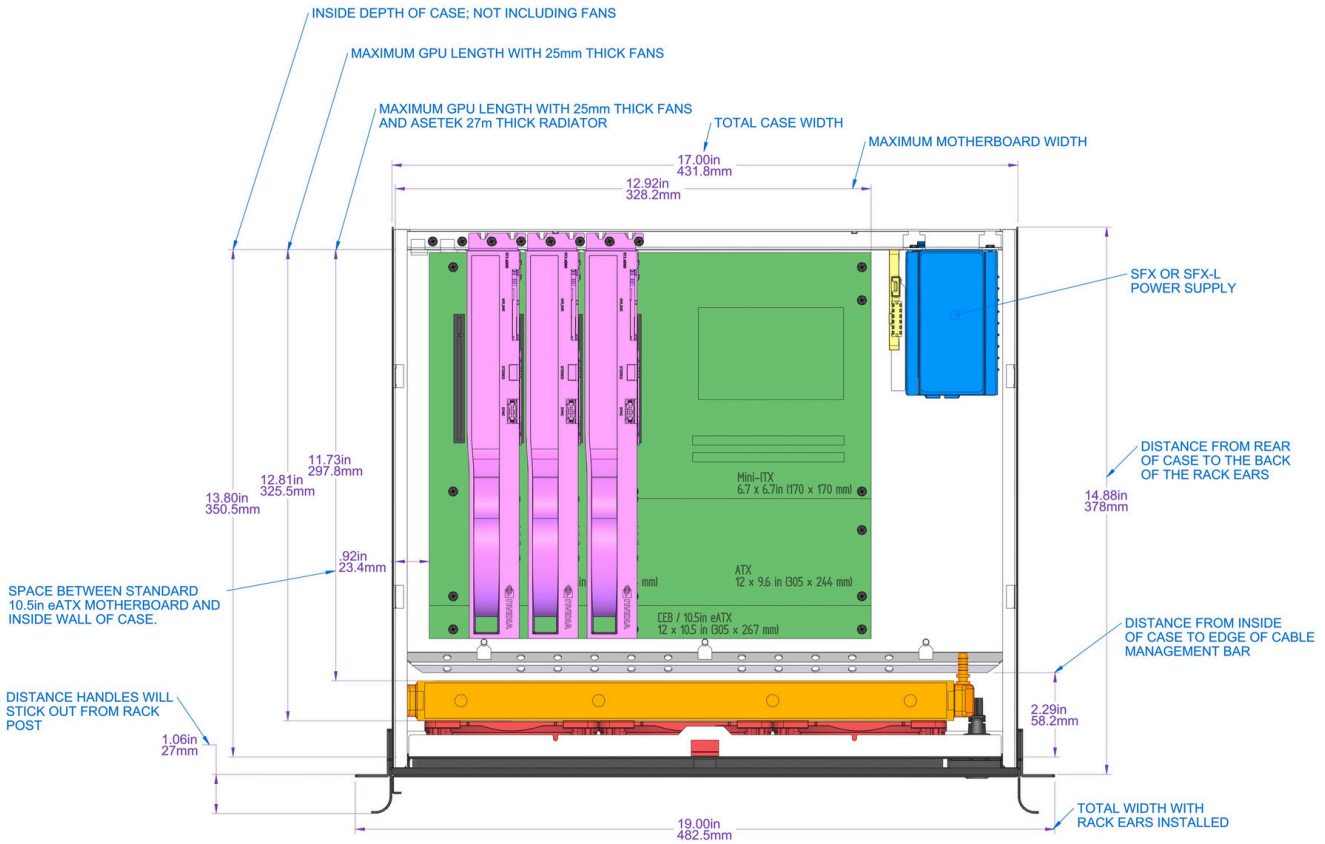


# Clearance drawing — top view



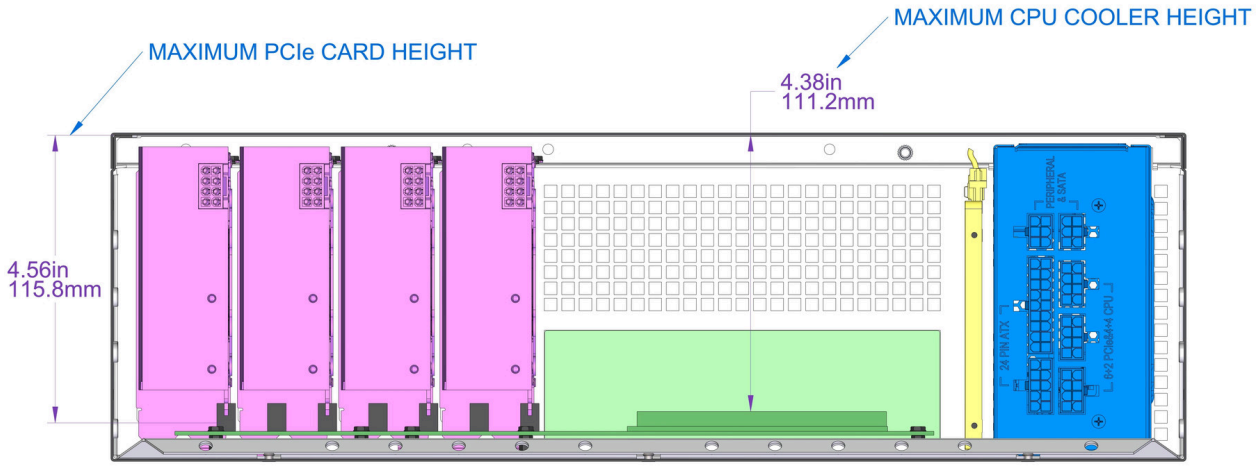
The top-view drawing shows the motherboard, PSU and front cooling layout, the cable-management bar, and the GPU length available with each front cooling arrangement.

ⓘ 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 power supply position.

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

# Dimensions & compatibility



| Component | Specification |
|---|---|
| Outer dimensions, D × W × H | 381 × 431.8 × 132.59 mm |
| Rack size | 3U · 19-inch rack |
| Power supply | SFX or SFX-L |
| Motherboard | Mini-ITX, MicroATX, ATX; SSI-CEB and EATX up to 12 × 10.5 inches |
| CPU air cooler | Up to 110 mm tall |
| Front cooling | Three 120 mm fans; up to 38 mm thick |
| Liquid cooling | One 360 mm, one 240 mm, or two 120 mm radiators |
| Rear cooling | Optional PCIe fan adapters |
| Front bays | None |
| Front I/O | Two USB 3.0 Type-A; one USB 3.2 Type-C 10 Gbps; 16 mm power switch with status light |
| Expansion | Eight full-height PCIe slots |
| GPU/card height | Up to 115 mm, including power connectors |
| Storage | 2 × 2.5-inch mounting locations on the motherboard tray: two SSDs up to 7 mm thick, or one up to 15 mm |

## GPU length by cooling configuration

| Configuration | Maximum length |
|---|---|
| No front fans or radiator | 349 mm |
| Three 25 mm front fans | 324 mm |
| Asetek 360 mm AIO with three 25 mm front fans | 296 mm |

ⓘ Radiator thickness, fan thickness and GPU length together must be less than 349 mm. Six-fan push-pull is not officially supported; other radiator and fan combinations require a clearance check. Not every mounting location can be used at the same time.

# 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

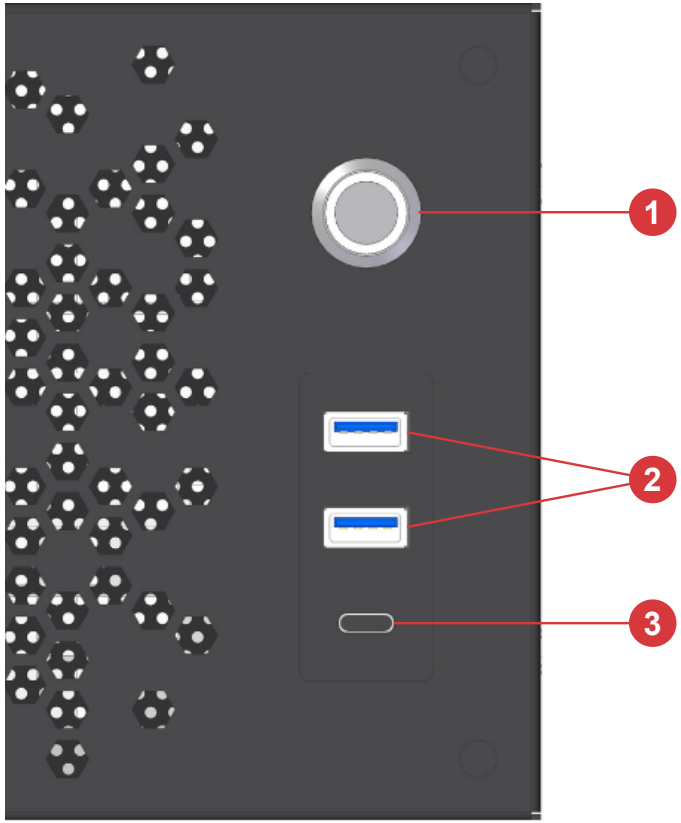
Optional handles make pulling the chassis from the rack easier.

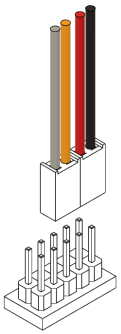


ⓘ Items G–I are separate chassis/accessory items. Illustrations are not to scale. Fan and radiator fasteners are supplied with the cooling components.

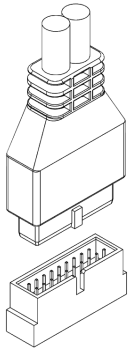
# Front ports & connections



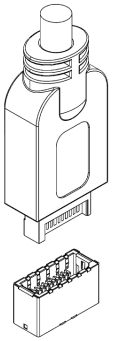


Power switch & status light



USB Type-A ports



USB Type-C port

| No. | Port / connection |
|---|---|
| 1 | **Power switch & status light**<br>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**<br>Two USB 3.0 Type-A ports, connected through the keyed internal USB cable shown. |
| 3 | **USB Type-C port**<br>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.

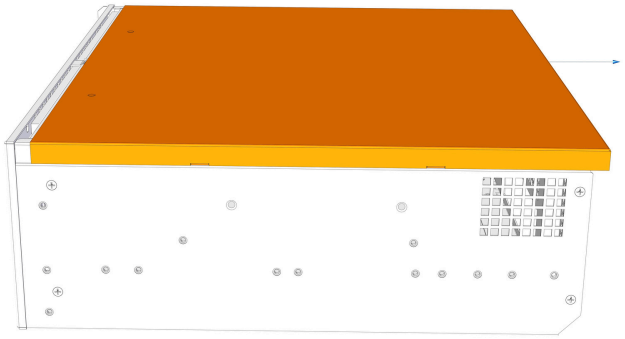
# Remove the lid



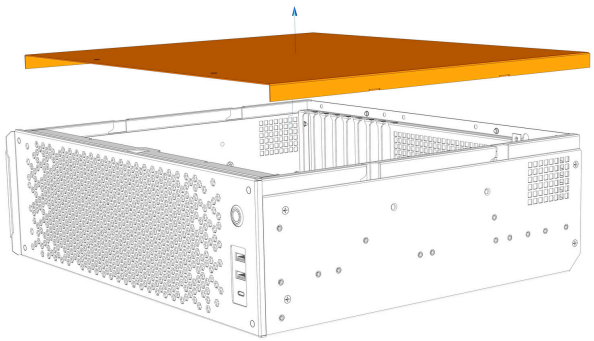
1



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

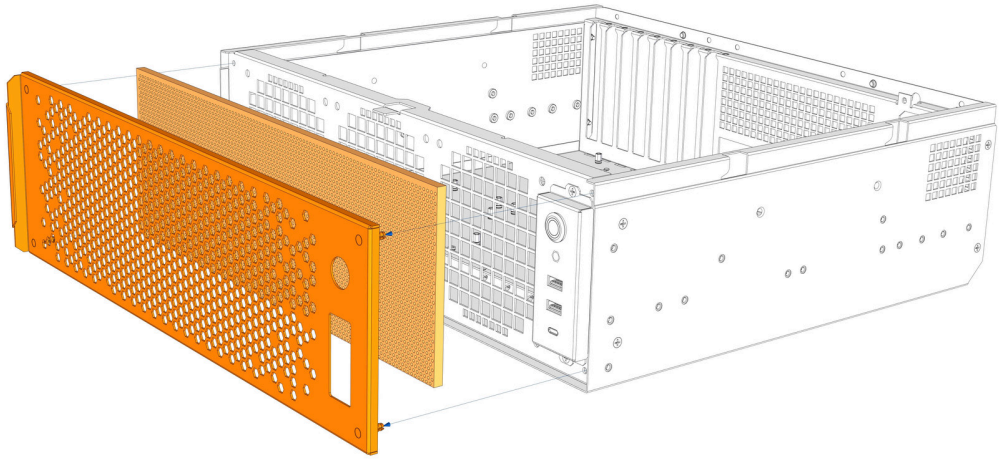
Push the lid toward the rear of the chassis.

### 3. Lift the lid away

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

# Remove the faceplate & filter





### 1. Release the left side

Pull on the left-side handle of the faceplate until its locating pins disengage, approximately ½ inch.

### 2. Release the right side

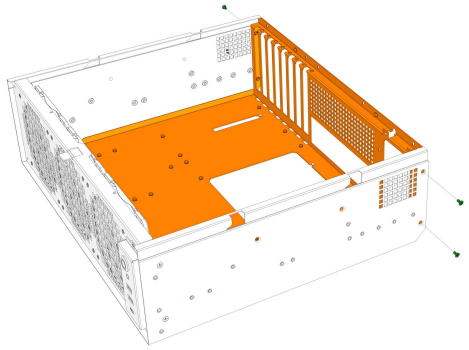
Gently pull the right side outward to remove the faceplate and dust filter.

Keep the faceplate and filter aside while installing front fans or a radiator.

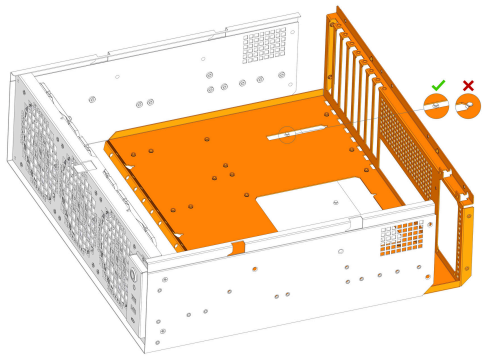
# Remove the motherboard tray



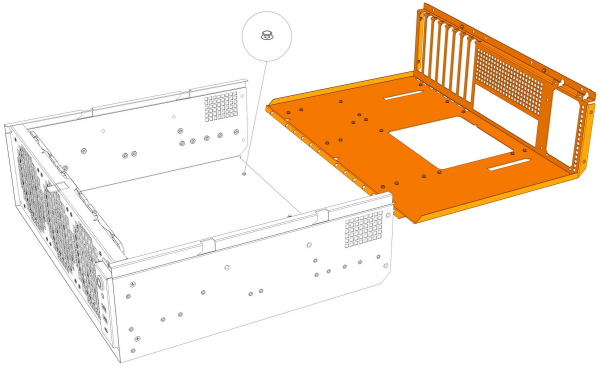
1



2



3



E Green

ⓘ 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

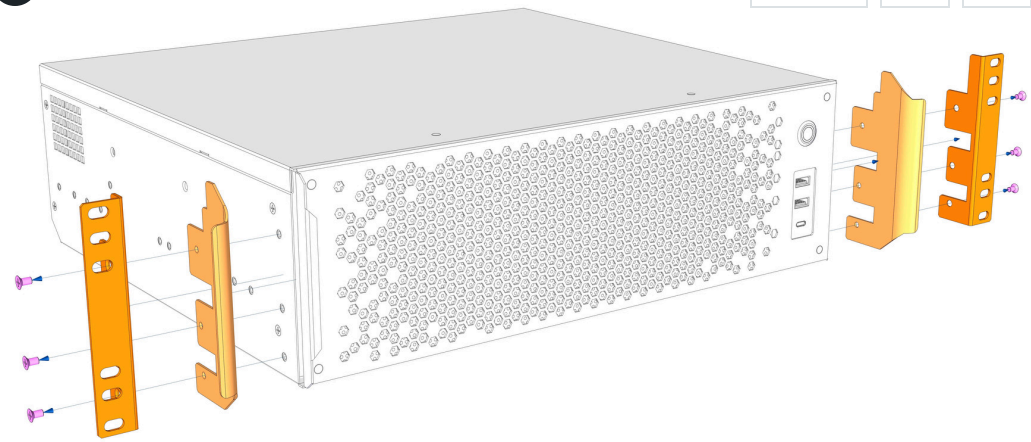
Lift only after the tray has cleared the tabs. Do not force it upward while it remains engaged.

# Install rack ears & handles



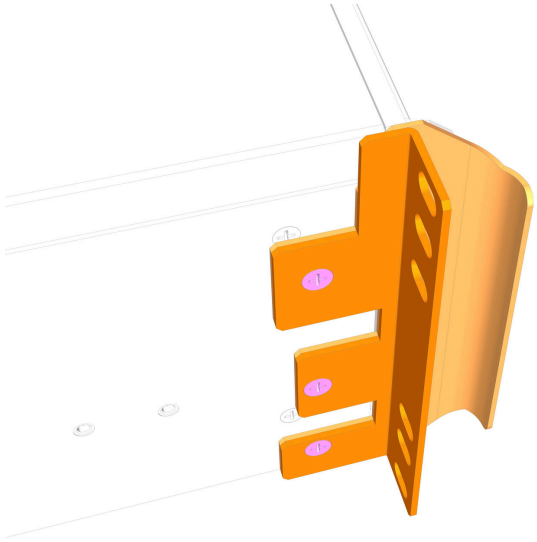
1

F Pink H I



2

F Pink



### 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.

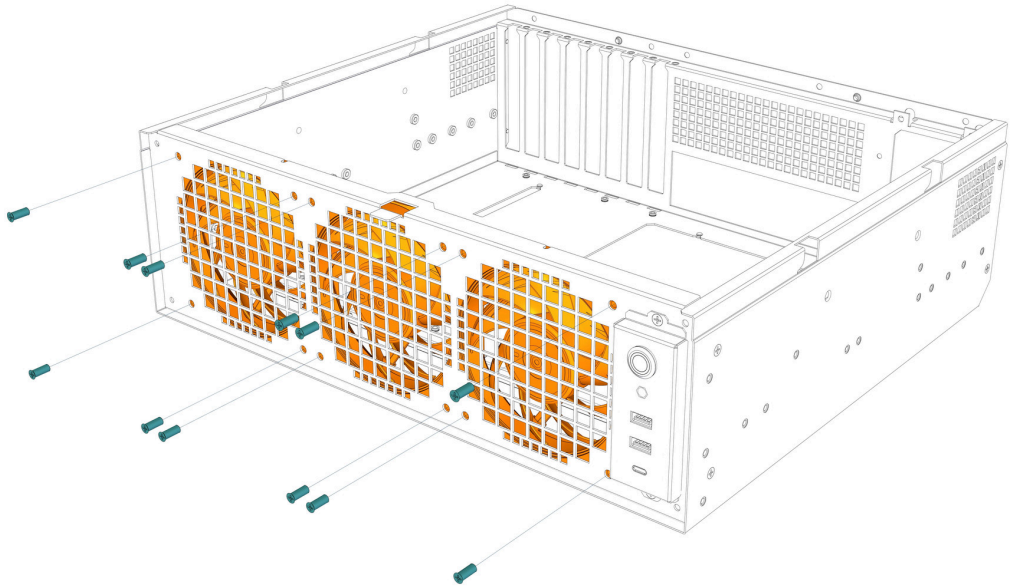
### 2. Secure both sides

Install 6 pink-marked M4 × 7 mm screws **(F)** in total, 3 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.

# Install front fans





### 1. Align the fans

Align three 120 mm fans with the front mounting panel. 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 mounting panel and into the fan frames.

Tighten sufficiently to prevent movement and vibration.

### Check GPU clearance

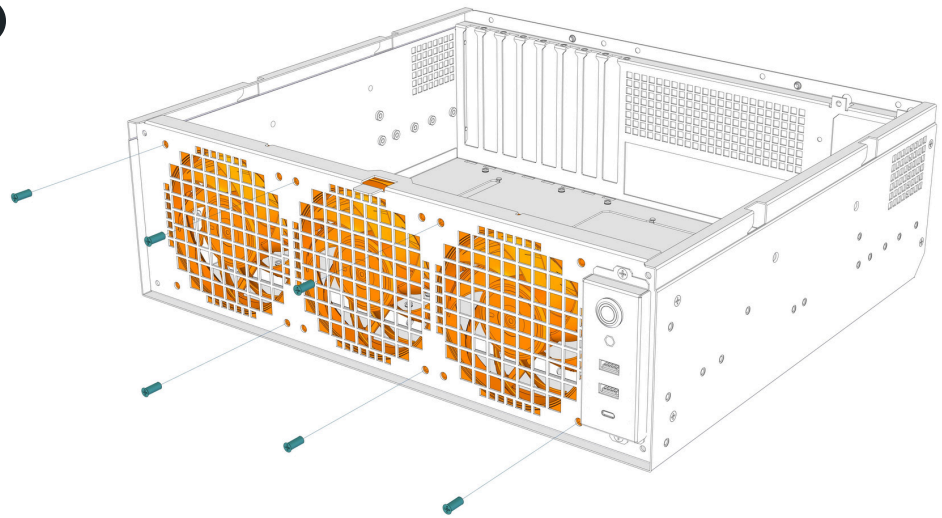
With three 25 mm front fans, maximum GPU length is **324 mm**. Thicker fans reduce available space.

For an AIO configuration, continue to the next section before selecting mounting screws.

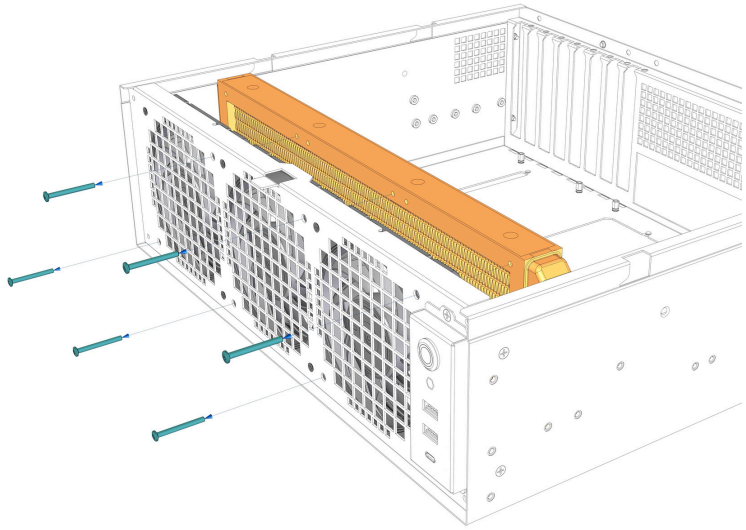
# Install a front AIO radiator



1



2



### 1. Position the fans

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

### 2. Align the radiator

Align all twelve mounting points in the panel, fans, and radiator before fastening.

### 3. Install radiator screws

Use screws specified by the cooler manufacturer. Pass them through the panel and fans into the radiator. Incorrect screw length can damage the radiator.

### Check GPU clearance

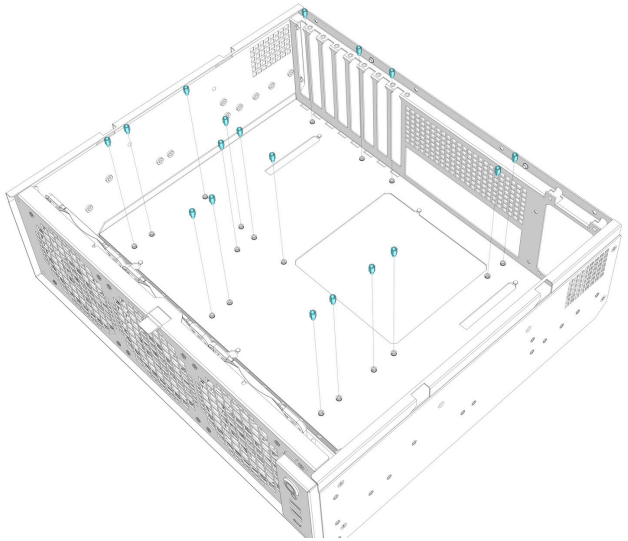
An Asetek 360 mm AIO with three 25 mm front fans permits a GPU up to **296 mm** long.

ⓘ Six-fan push-pull is not officially supported.

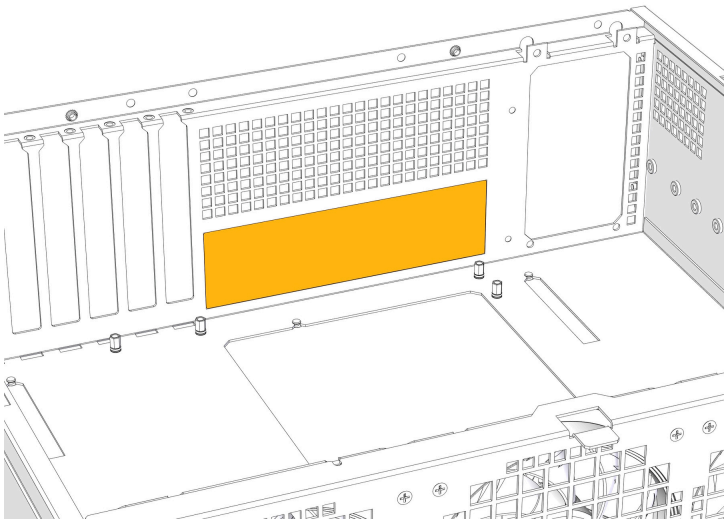
# Prepare the motherboard tray



1



2



C Teal

### 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.

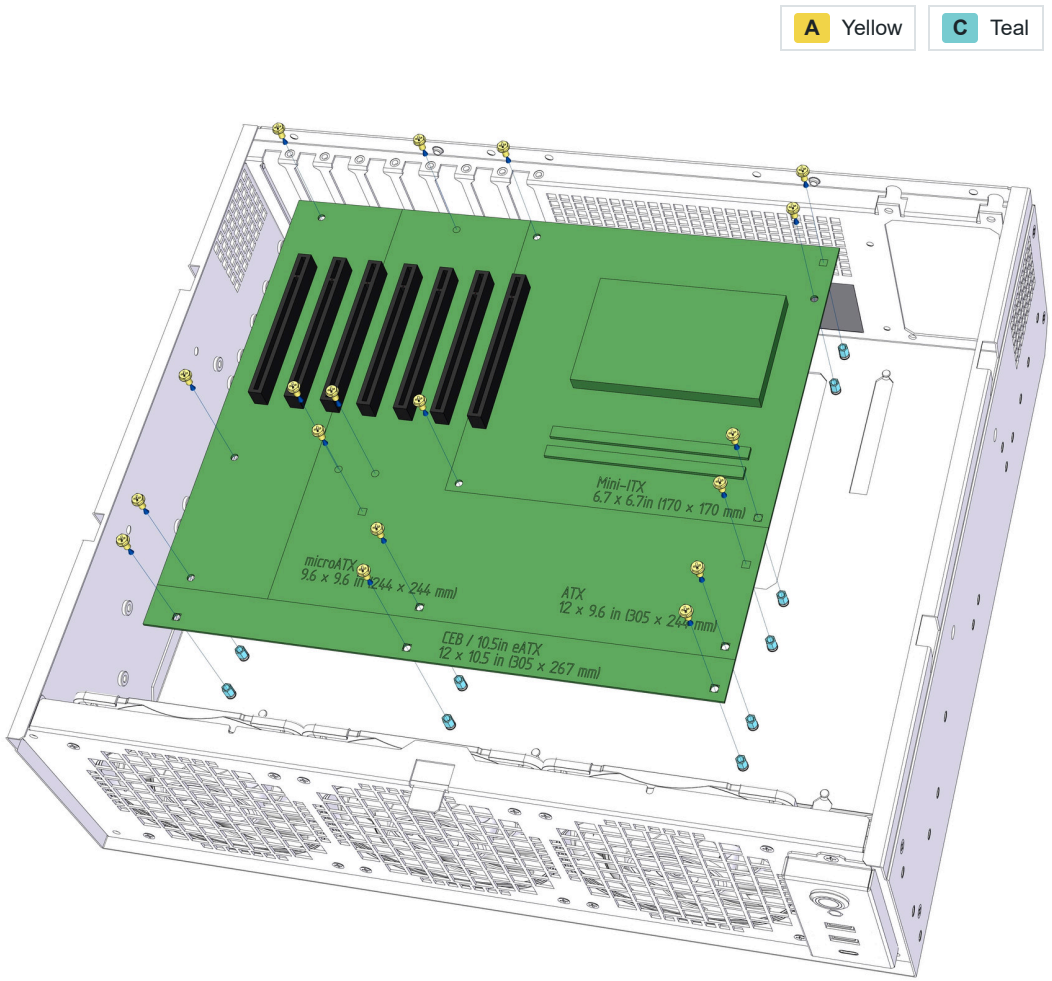
### 2. Install the I/O shield

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






### 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

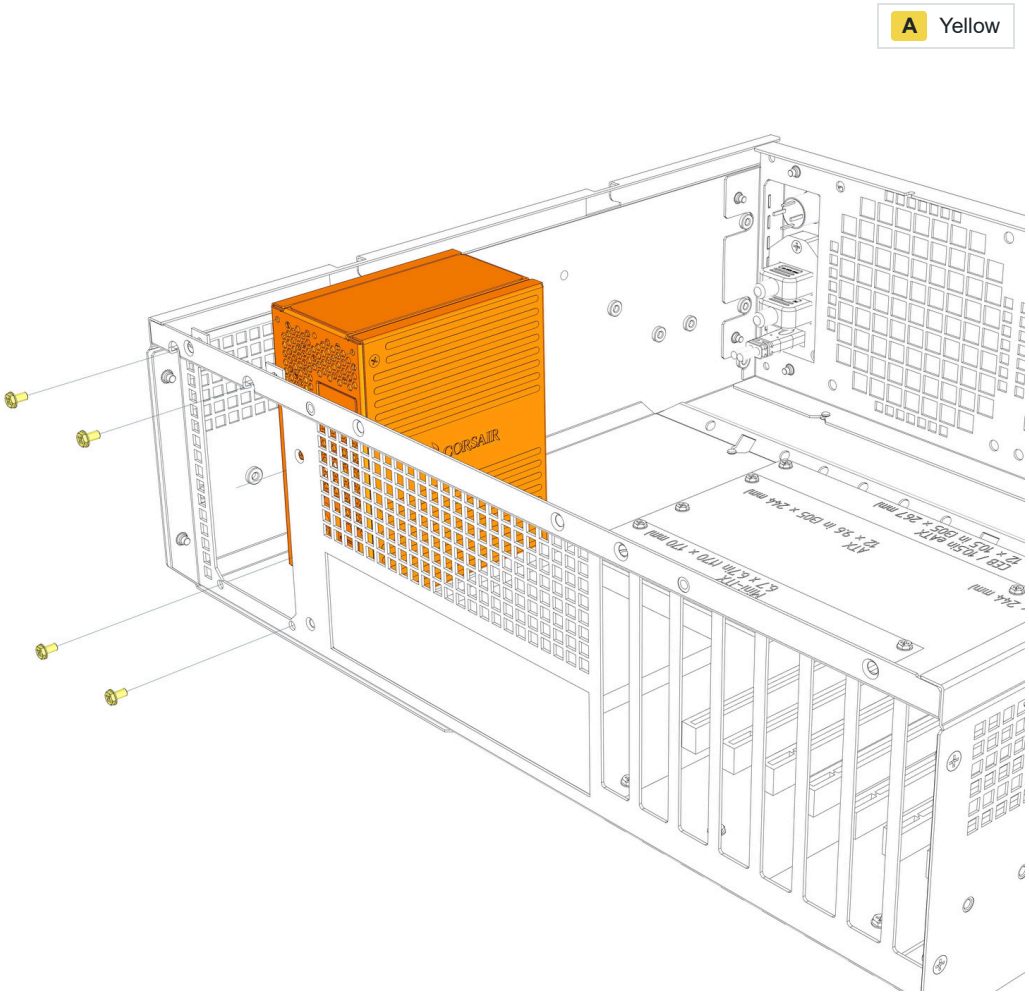
Install yellow-patched 6-32 screws **(A)** through the board and into the standoffs.

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 PSU

Place your SFX or SFX-L power supply into its mounting location on the tray.

Most PSUs mount with the fan toward the chassis wall. The fan may instead face the motherboard depending on the PSU model. Check the PSU manufacturer's instructions and the available intake clearance.

### 2. Secure the PSU

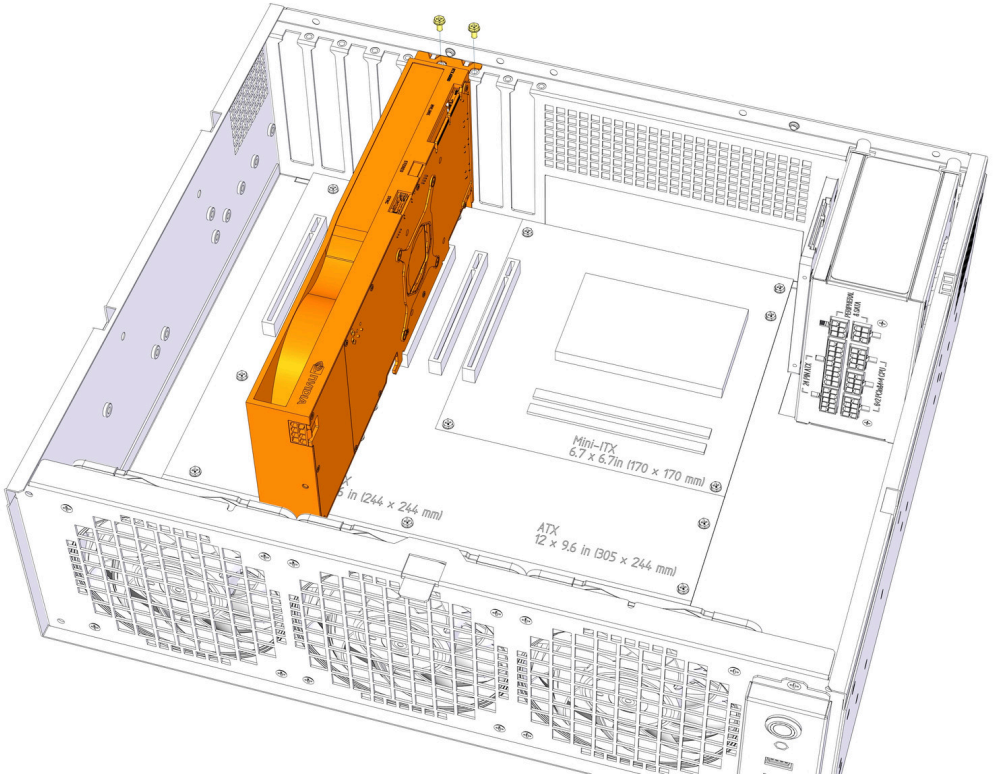
Install yellow-patched 6-32 screws **(A)** through the tray's rear panel into the power supply. Tighten by hand.

Route the PSU cables so they do not obstruct the tray's engagement points.

# 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.

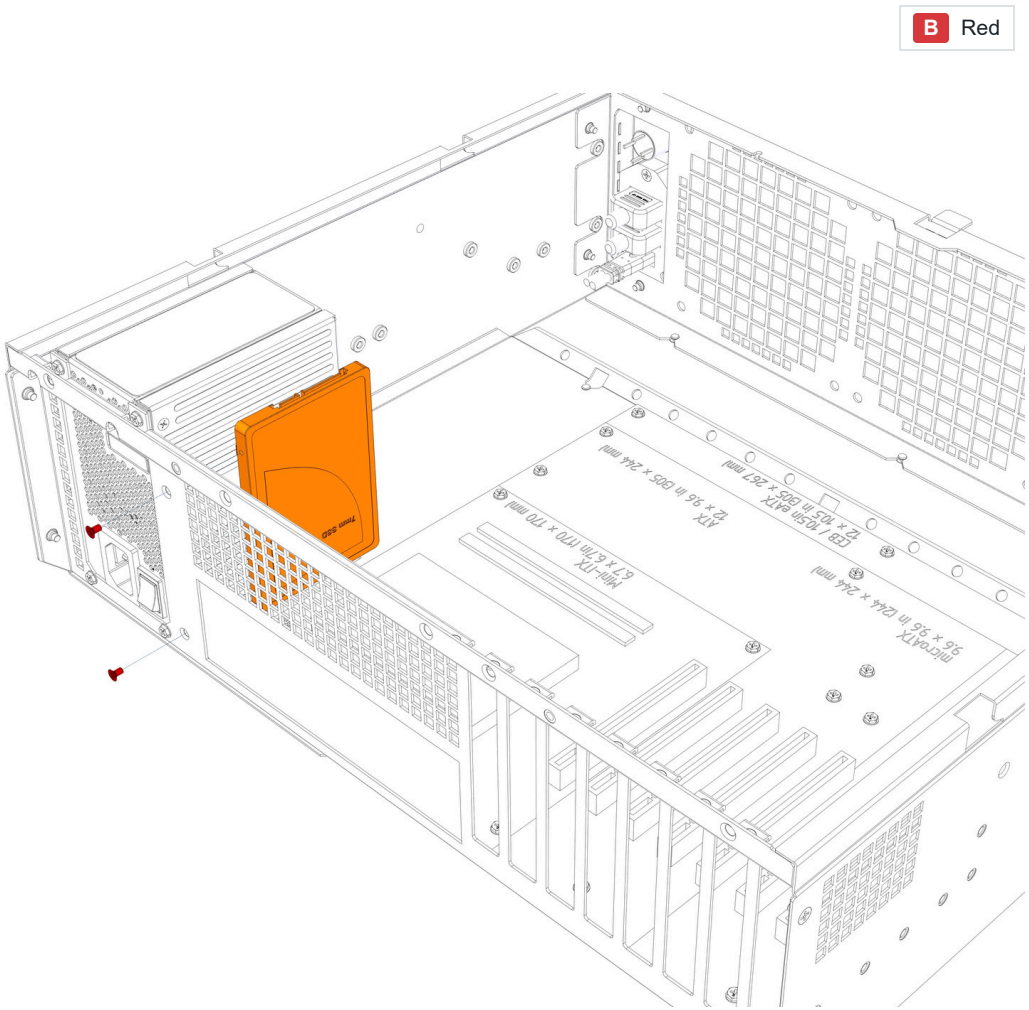
### 3. Secure the bracket

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 **115 mm**. Check the cooling-dependent length limits before installation.

# Install 2.5-inch SSDs






### 1. Position the SSD

The motherboard tray has two pairs of 2.5-inch mounting holes between the power supply and the motherboard I/O shield. Install either two SSDs up to 7 mm thick, or one SSD up to 15 mm thick.

Position each drive with its connectors facing upward and its underside facing the power supply.

### 2. Secure the drives

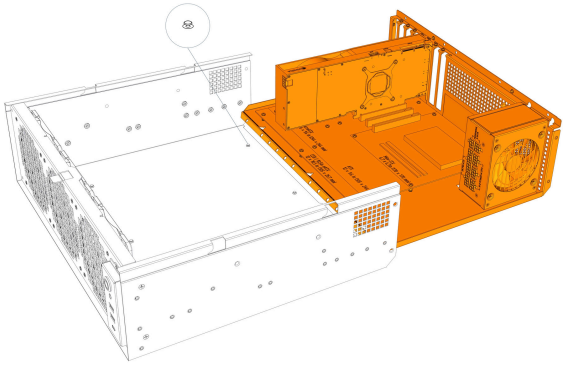
Secure each drive with two red-patched M3 × 0.5 screws, 5 mm long (B) through the tray. Two 7 mm drives use four screws in total. Tighten by hand without forcing the threads.

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

# Reinstall the motherboard tray



1

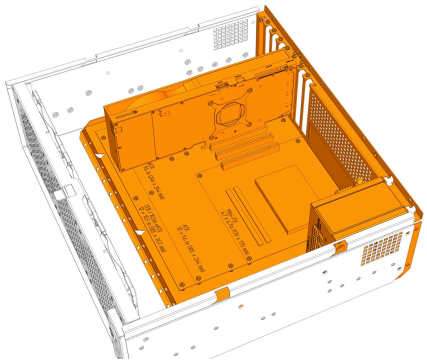


E Green

### 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



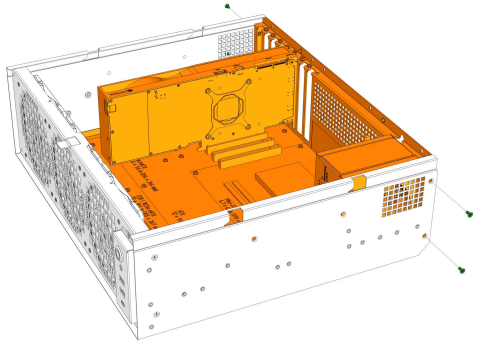
### 2. Engage all six tabs

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.

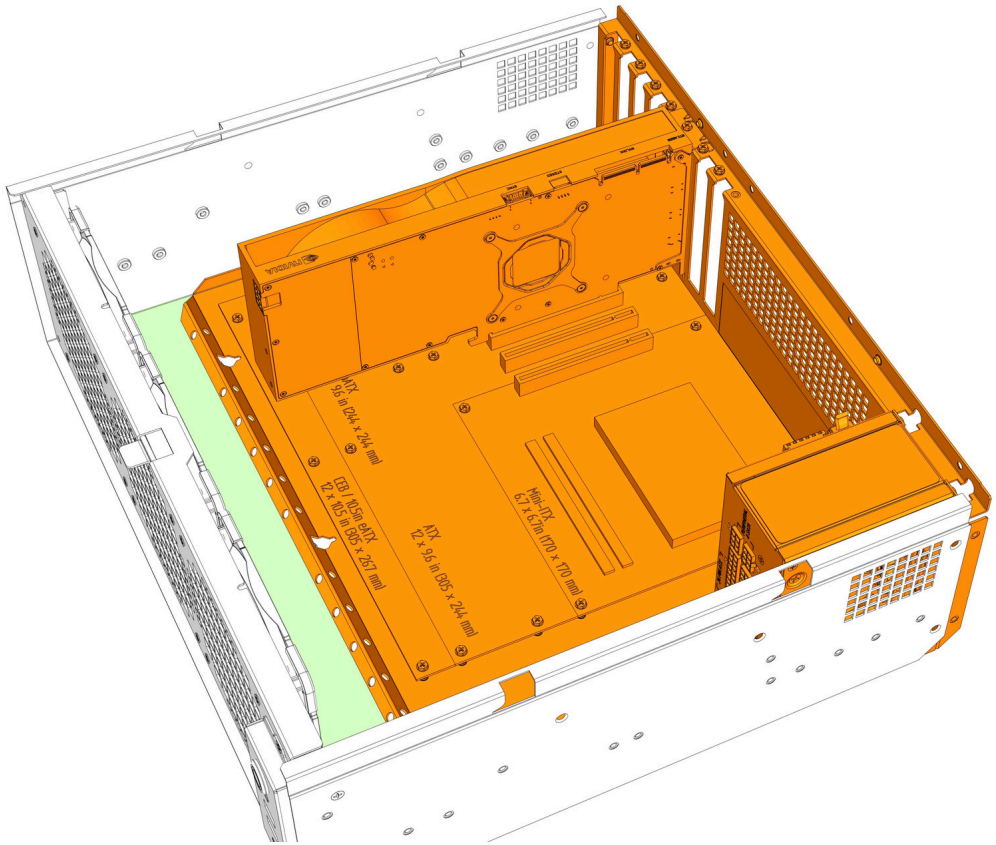
3



E Green

# Route cables & close the chassis






### 1. Route and secure cables

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

Secure cables with ties and bundle excess cable behind the PSU. Keep cables clear of fan blades and tray engagement points.

Release any ties that anchor cables to the fixed chassis before removing the tray again.

### 2. Refit the filter and faceplate

Position the filter and align the faceplate's locating pins. Press gently to seat both sides.

### 3. Refit the lid

Align the lid flanges with the chassis slots, lower the lid, and slide it forward. Reinstall its two rear 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 | 2025-04-01 | Initial release |
| v1.1 | 2026-11-10 | Revised guide: updated specifications, illustrations and procedures |
| v1.2 | 2026-11-11 | Exploded assembly: new render matching the other 3U views, and the rack ear callout now covers the rack ear and pull handle. |