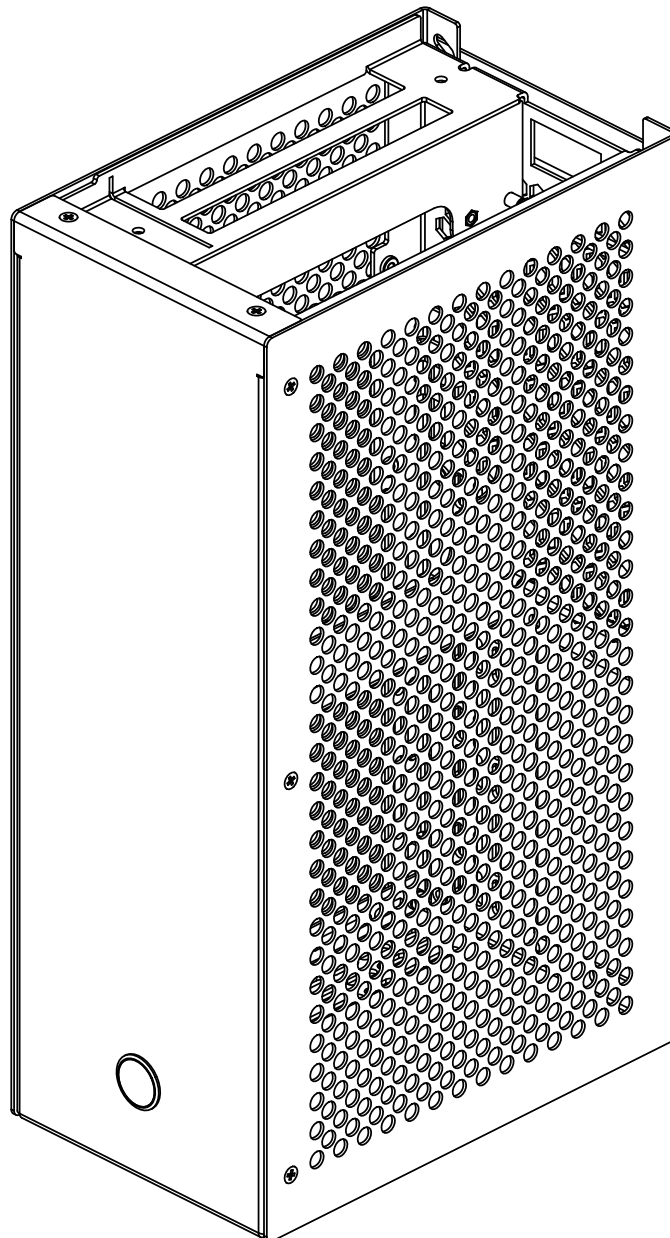


# VELKA 5



# Table of Contents

- Specifications..... 3
- Included Mounting Hardware..... 5
- System Assembly..... 6**
  - Overview..... 6
  - Required Tools..... 7
  - Component Test Outside of Case ..... 8
  - Motherboard Tray Subassembly..... 9
  - PCIE Riser Installation..... 10
  - Graphics Card Installation..... 11
  - Connecting Motherboard Tray to Back Panel ..... 14
  - Power Supply Installation ..... 15
  - Rear USB and Audio..... 16
  - Front Panel Storage Installation..... 17
  - Bottom Graphics Card Support, Additional Storage Installation ..... 18
  - Connect Front Panel to Back Panel ..... 21
  - Side Panel Installation ..... 24
  - Rear Cover Installation..... 25

## Specifications

### Case Specifications

Dimensions (L x W x H)	174 x 109 x 303 mm excluding protrusions 178 x 109 x 315 mm including protrusions		
Volume (liters)	5.7 L external, 5.5 L internal		
Desk footprint (excluding protrusions and cables)	190 cm <sup>2</sup>		
Weight	1.0 kg (2.2 lb)		
Form Factor	Small form factor		
Materials	Front panel	1.5 mm anodized brushed aluminum	
	Side panels	1.2 mm anodized sandblasted aluminum	
	Back panel	1.5 mm powder-coated aluminum	
	Rear cover	1.2 mm powder-coated aluminum	
	Motherboard tray	1.0 mm powder-coated steel	
	Flat bracket	1.5 mm powder-coated aluminum	
	Angled bracket	1.5 mm powder-coated aluminum	
	Power button	anodized aluminum	

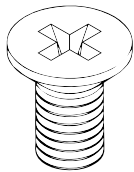
## Hardware Compatibility

Motherboard	Mini ITX 170 x 170 mm
Power supply	SFX: 125 x 63.5 x 100 mm SFX-L: 125 x 63.5 x 130 mm
CPU cooler	48 mm
Expansion card (L x W x H)	296 x 43 x 142 mm Note: 142 mm includes space available for cables. 16 mm are typically required for cables.
Memory	56 mm
2.5" drives	0 – 4. See “Hardware configurations” below
3.5" drives	0 - 1. See “Hardware configurations” below
Case fans	None
PCIE riser	LiHeat 300 mm D type
Power Button	16 mm panel cutout diameter. 18 x 18 x 20 mm

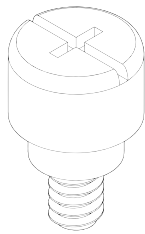
## Hardware Configurations

PSU	Expansion card length (mm)	2.5" mounts	3.5" mounts
SFX	296	1	0
SFX	227	2	0
SFX	193	1	1
SFX-L	296	0	0
SFX-L	227	1	0
SFX-L	193	0	1

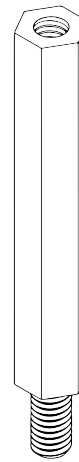
## Included Mounting Hardware



20x screws  
M3x0.5 (#4-40)  
For most parts



4x 6-32 screw  
M3.5x0.6 (#6-32)  
For power supply



3x 55mm standoffs

# System Assembly

## Overview

Case must be disassembled prior to installing hardware.

Some users may experience difficulties when building in a Velka case for the first time. To prevent back-tracking during the build process, please briefly review the following build order before following the guide step-by-step.

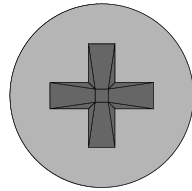
The following guide includes steps for assembly of the most complicated setup with an ITX length graphics card, SFX power supply, one 2.5” drive, and additional drives in the drive bay. Some sections may be skipped depending on your hardware configuration. For instance, the drive bay storage installation section may be skipped if using a full-length graphics card.

The following drawings do not show cables.

1. Prepare motherboard, CPU, CPU cooler, M.2 storage
2. Install motherboard onto tray, install standoff stack
3. Install PCIE riser
4. Install graphics card
5. Install IO shield into back panel and connect motherboard tray
6. Connect main 24 pin and CPU 4+4 pin connectors, then insert and screw in power supply, connect PCIE 6+2 pin connectors
7. Install 2.5” drive into side of front panel
8. Use the angled bracket to support graphics card from underneath. Install additional storage if using short graphics card
9. Connect front panel to back panel, plug in power button. Mount drive bay bars if using additional storage
10. Install side panels and rear cover

## Required Tools

- #2 Phillips head screwdriver required (magnetic tip recommended)

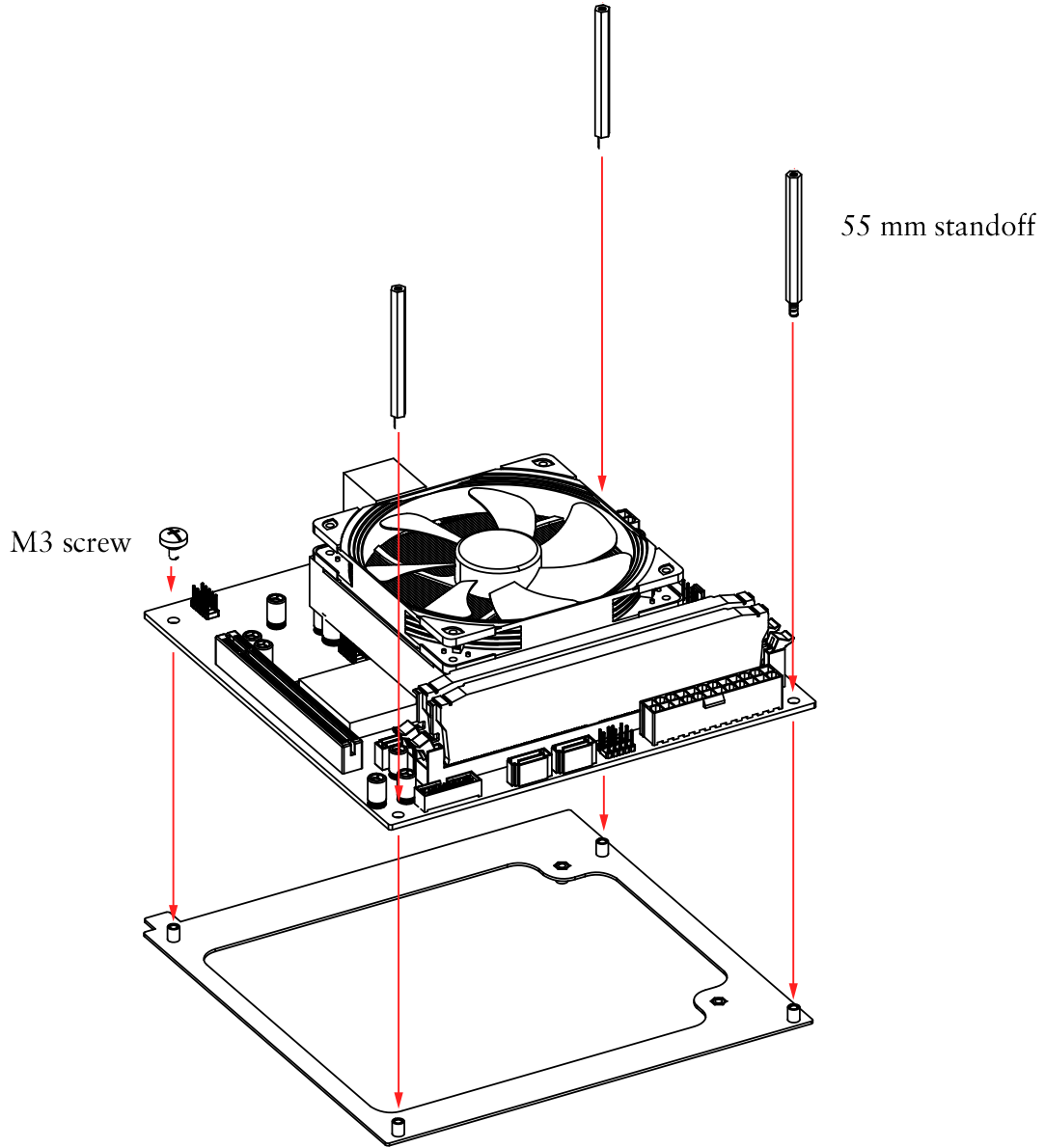


## Component Test Outside of Case

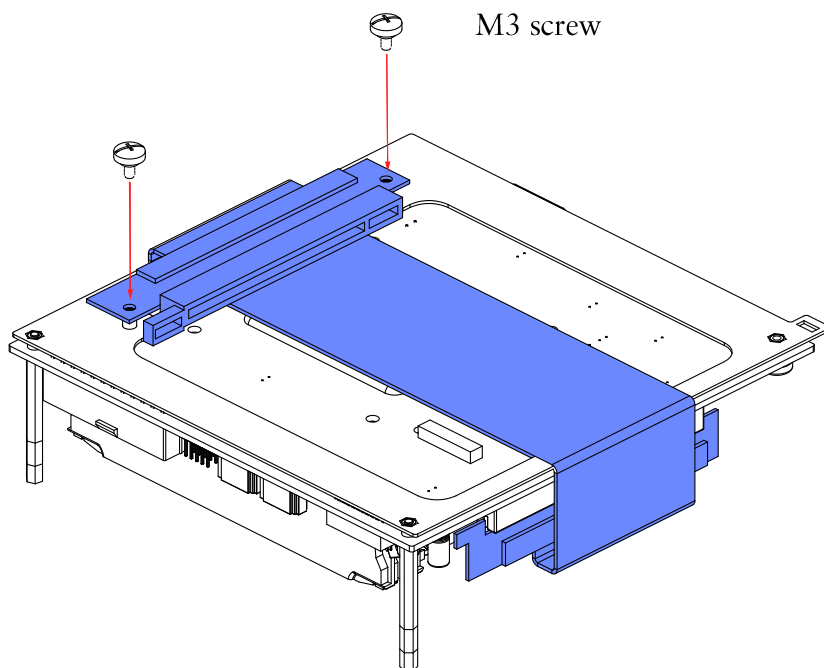
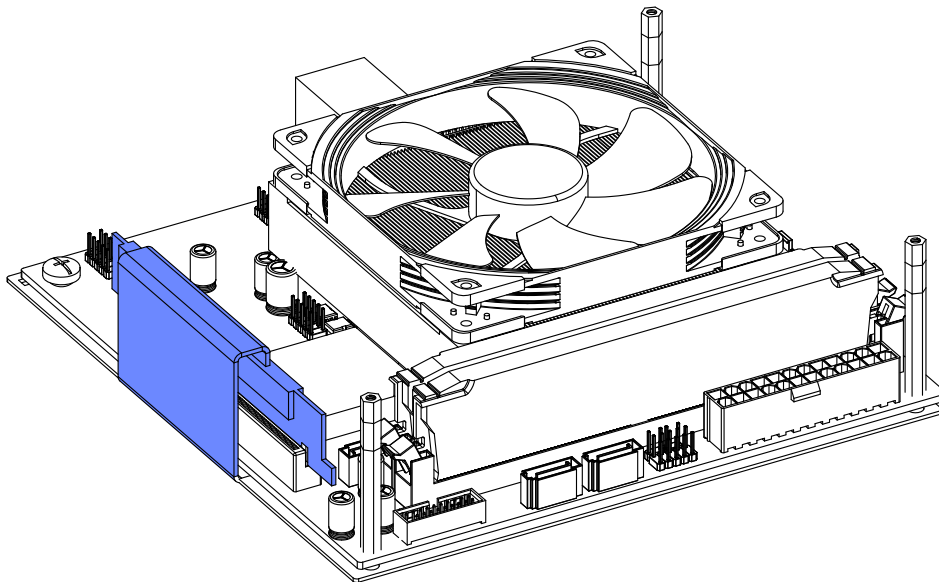
- Please inspect internal components for defects and ensure that all are functional prior to building in the case
- Test PCIE riser



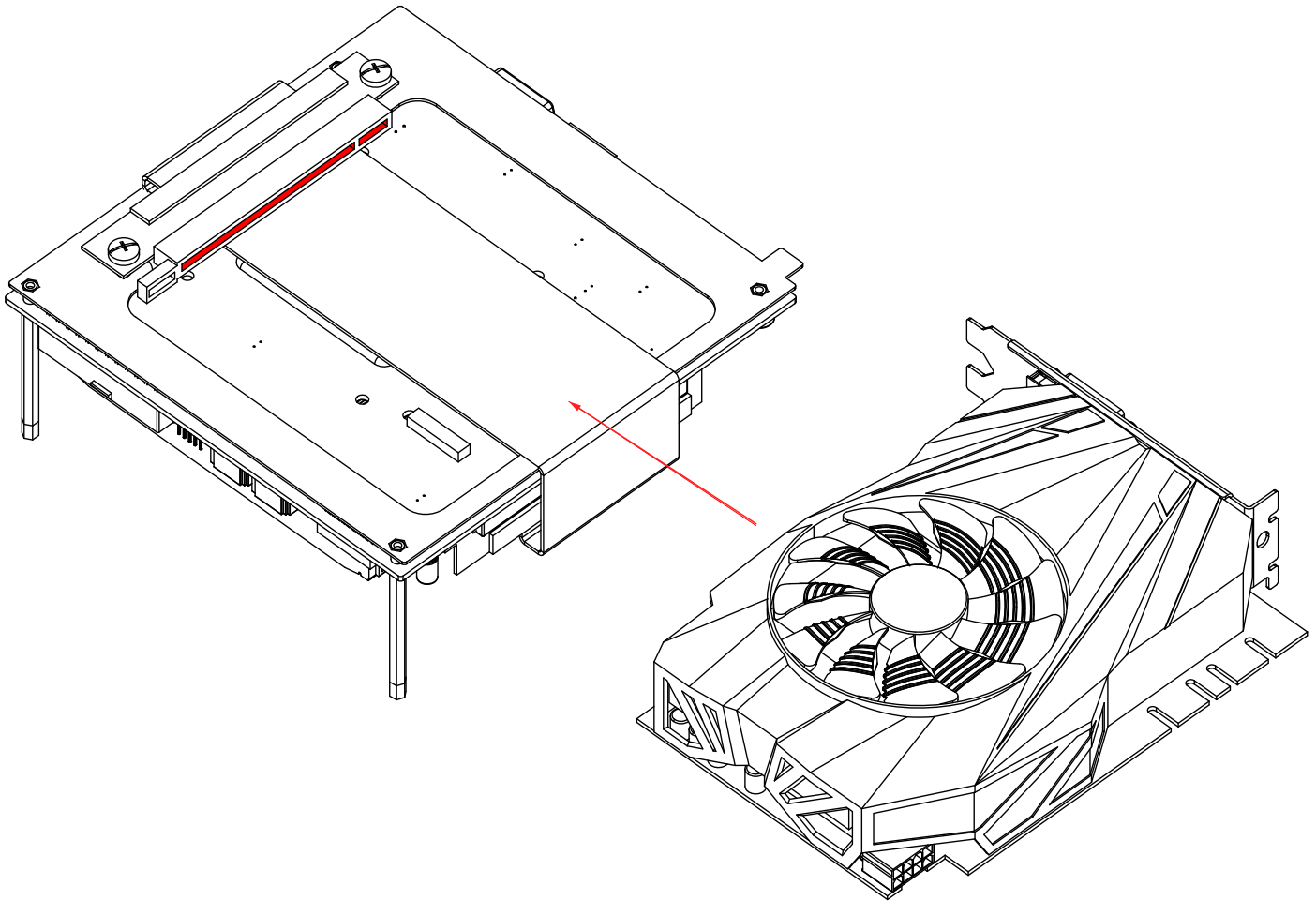
# Motherboard Tray Subassembly

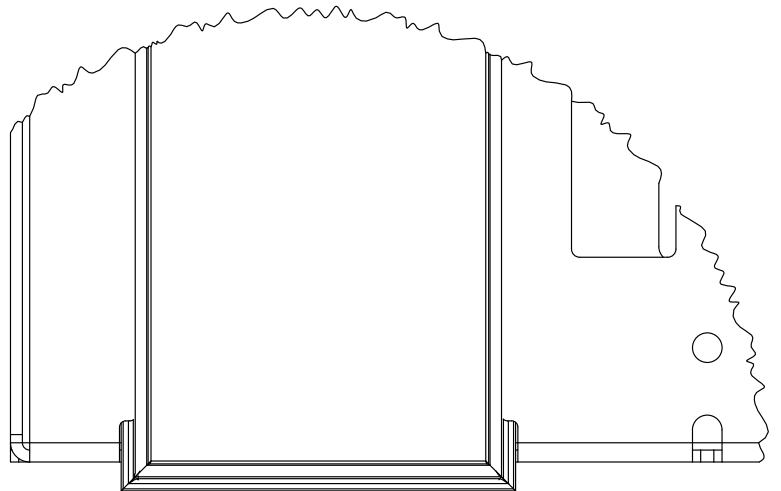
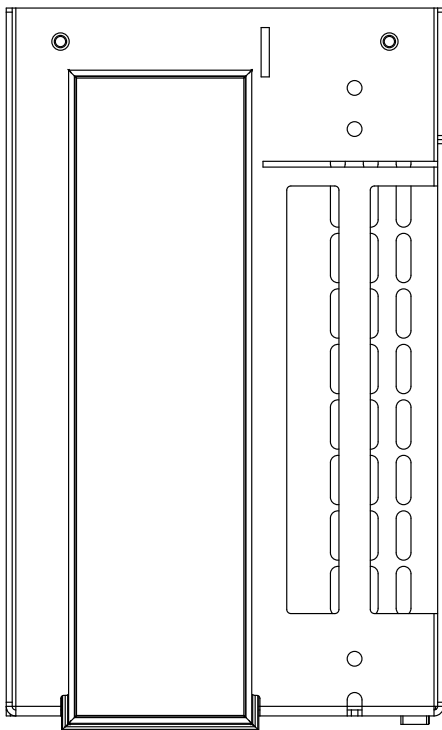
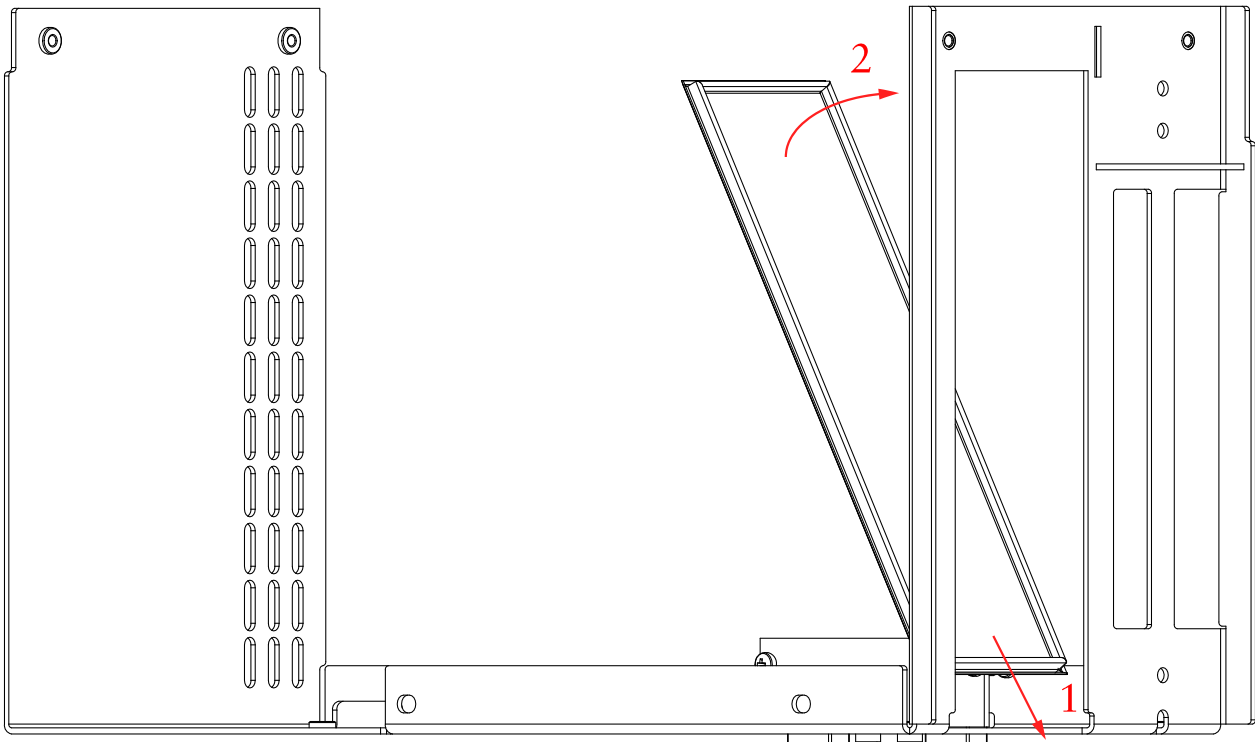


# PCIE Riser Installation

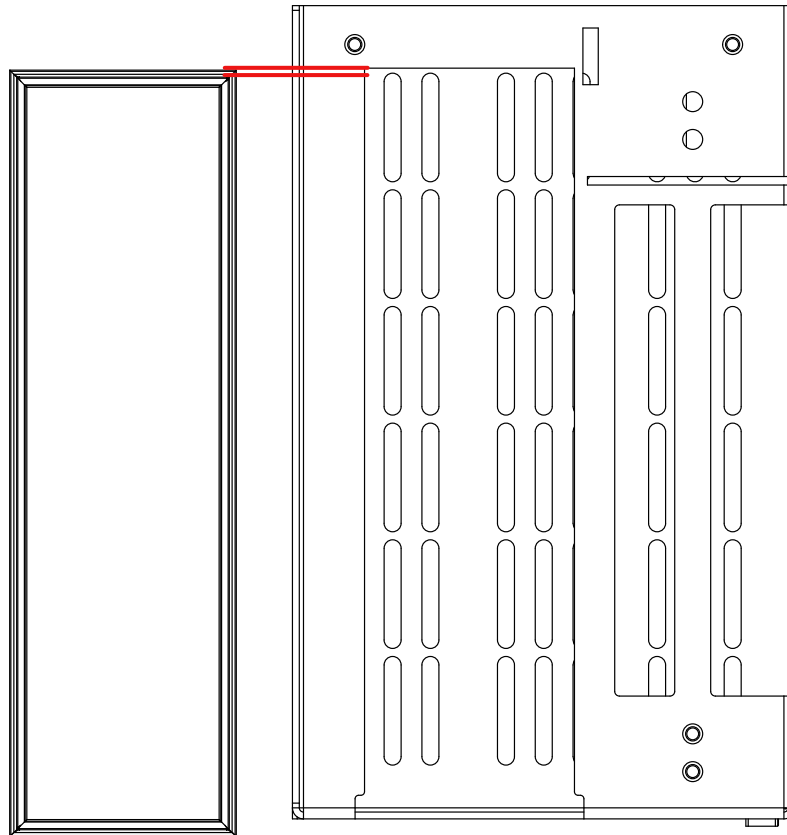


# Graphics Card Installation





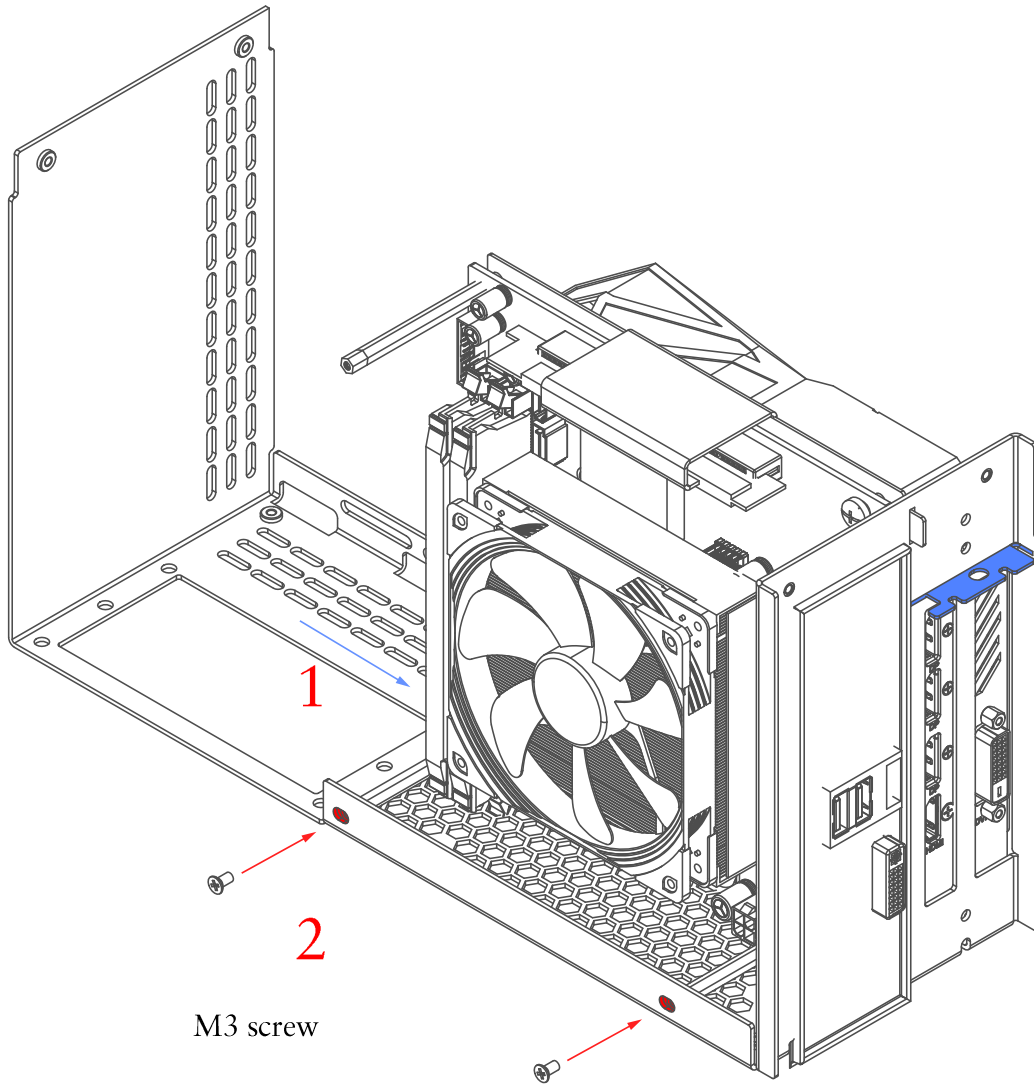
Caution: IO shield edge is sharp and will extend past the side of the case. Approach with care until the rear cover is installed on [page 26](#).



Rev. 1.1 and above:

The outer-most edge of the IO shield must be aligned with the opening edge, leaving a 1.5 mm space between the clip and the opening edge.

# Connecting Motherboard Tray to Back Panel

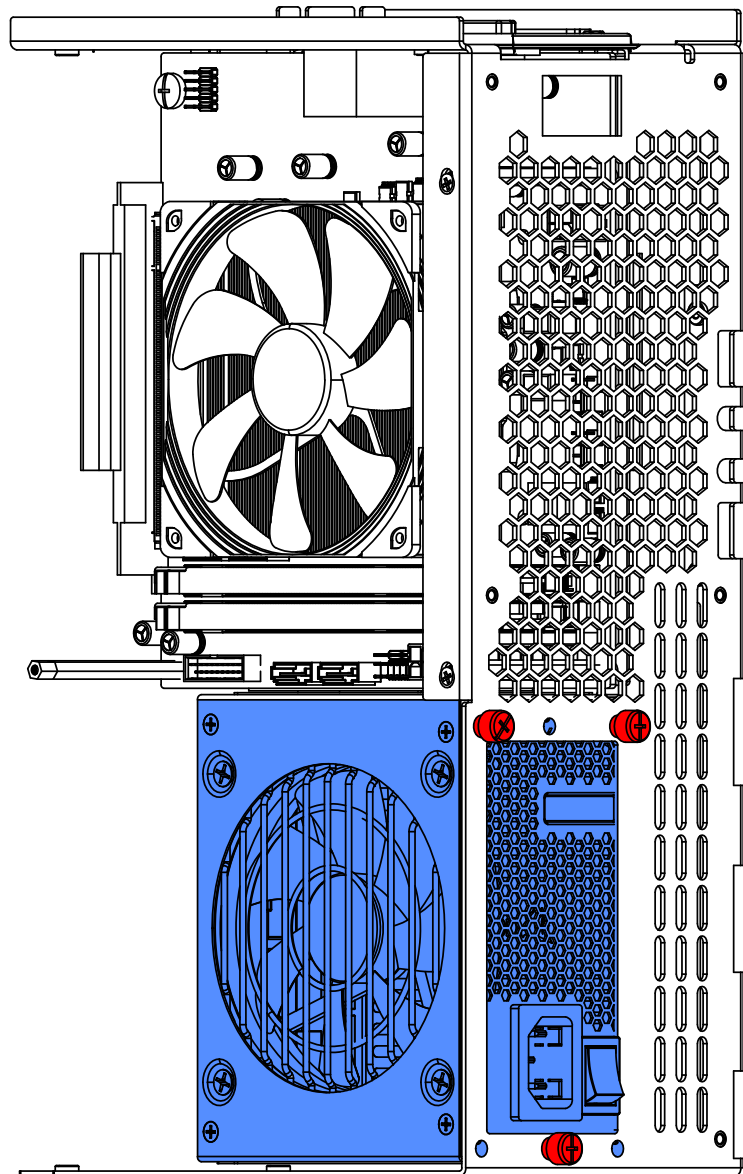


## Power Supply Installation

Connect the following cables **before** installing power supply:

main 24 pin, CPU 4+4 pin

1. Connect 24 and 4+4 pin power cables
2. Install power supply
3. Connector PCIE 6+2 pin power cables



- USB ports, audio ports, and cables not drawn
- 24 pin power cable must be plugged into motherboard prior to power supply installation

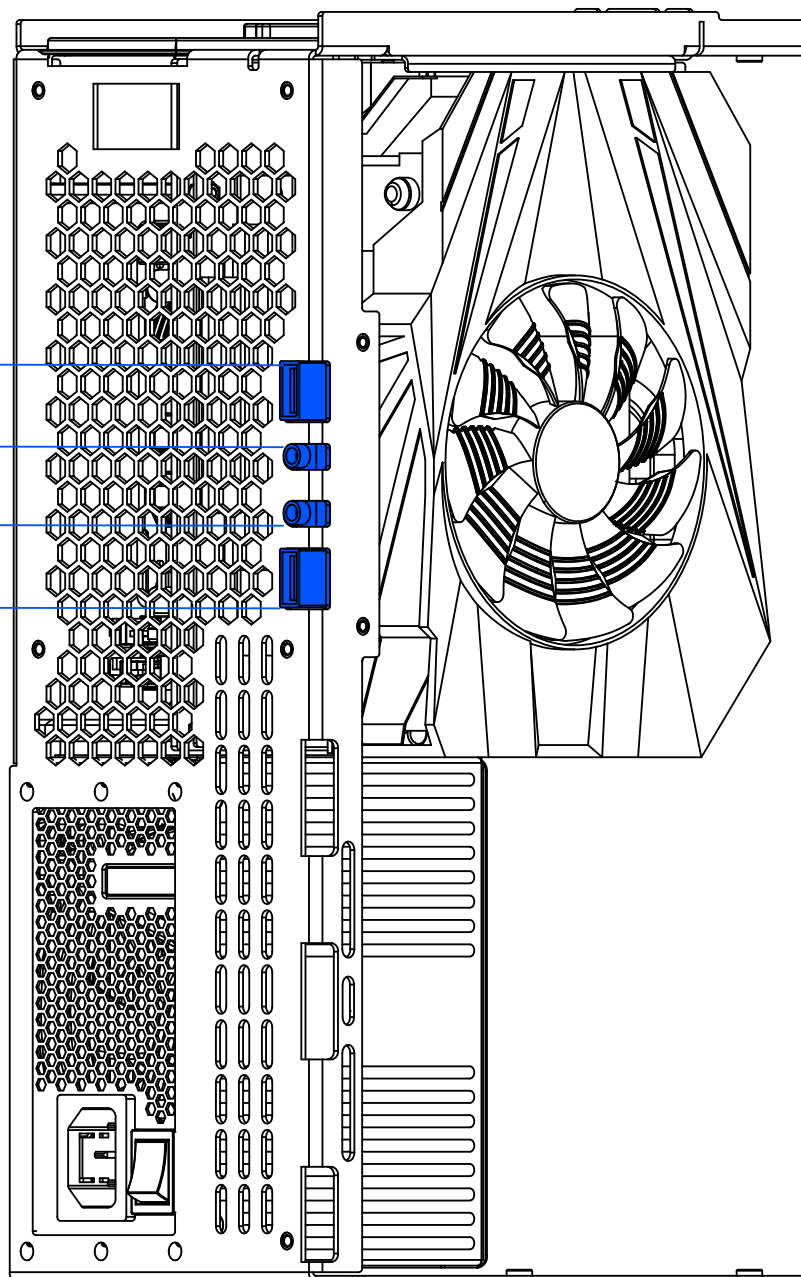
## Rear USB and Audio

USB 3.1 gen 1 (USB 3.0)

3.5 mm audio input

3.5 mm audio output

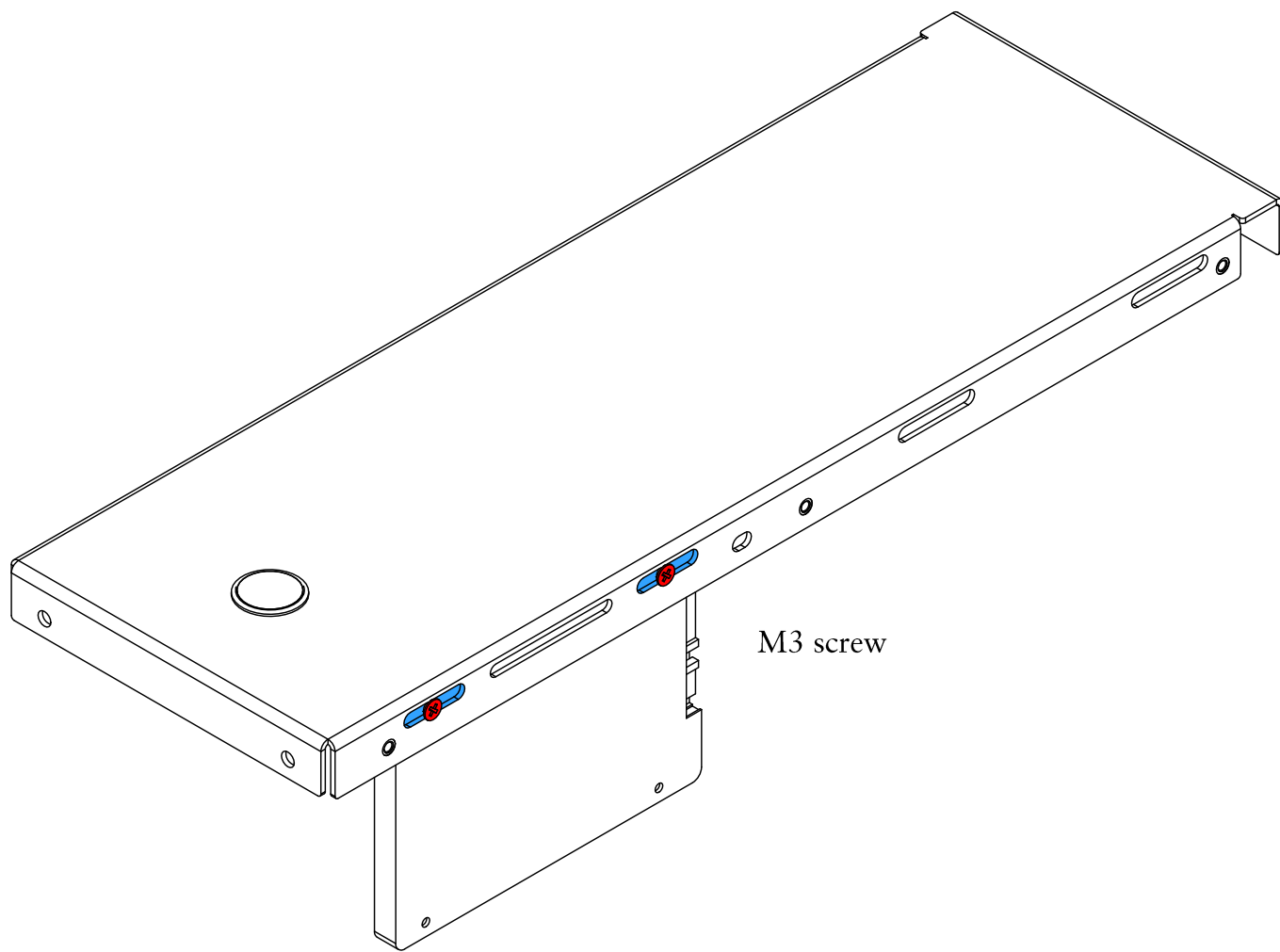
USB 3.1 gen 1 (USB 3.0)



Plug internal USB and audio connectors into motherboard



# Front Panel Storage Installation

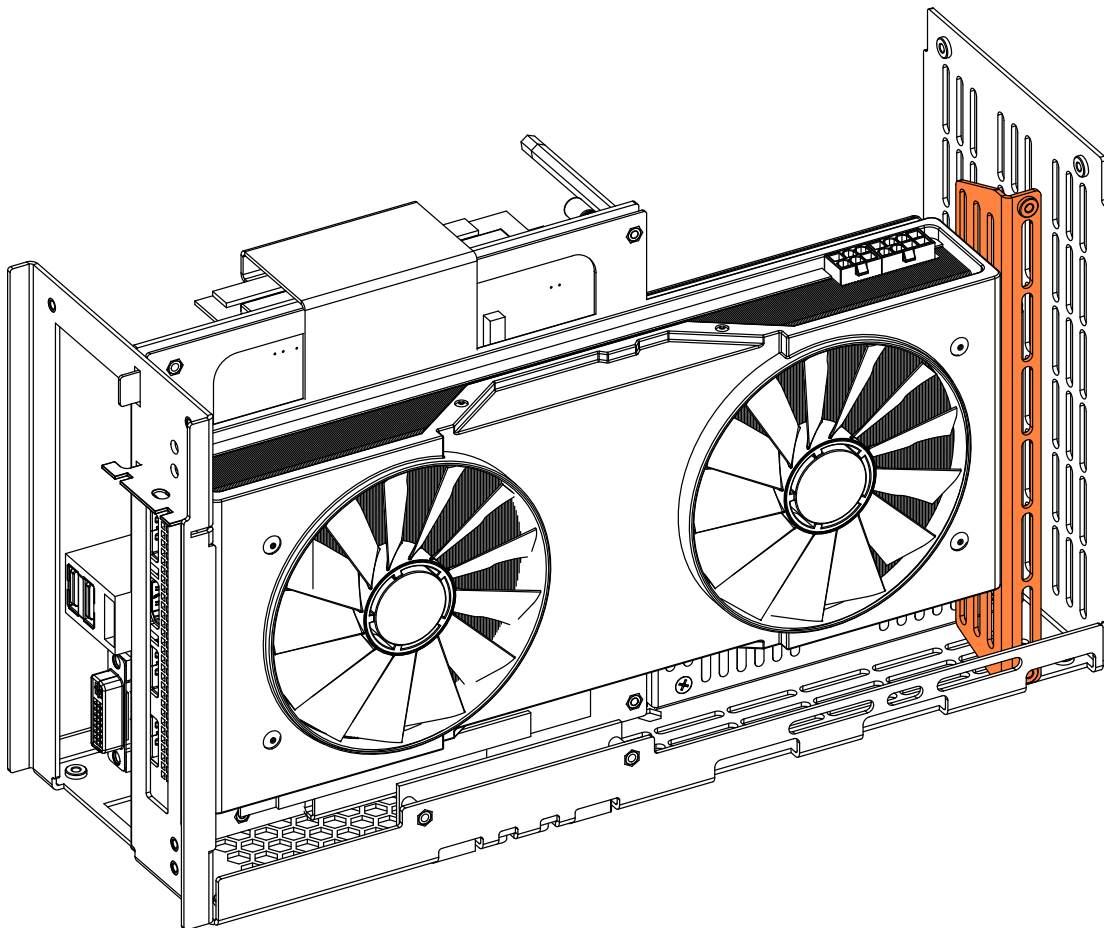


M3 screw

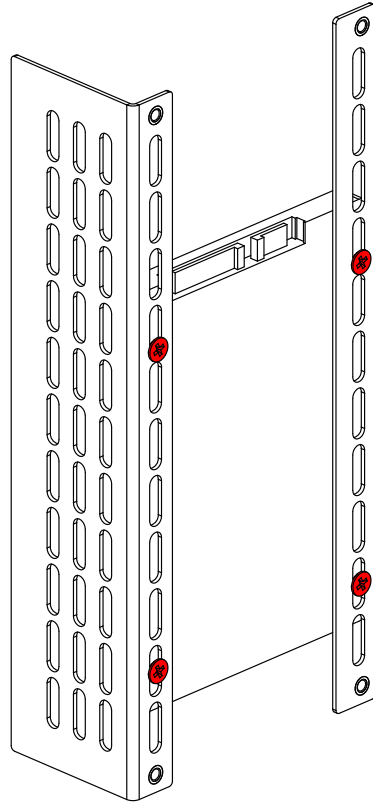
## Bottom Graphics Card Support, Additional Storage Installation

The angled bracket can be used to support the graphics card and a storage drive if the graphics card is short enough.

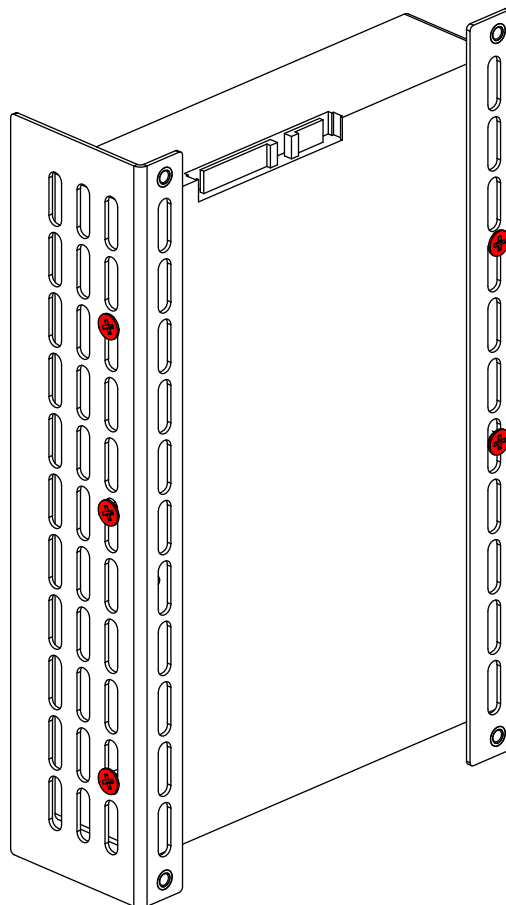
Please refer to “Hardware Configurations” on [page 5](#) to see all possible graphics card length and storage options



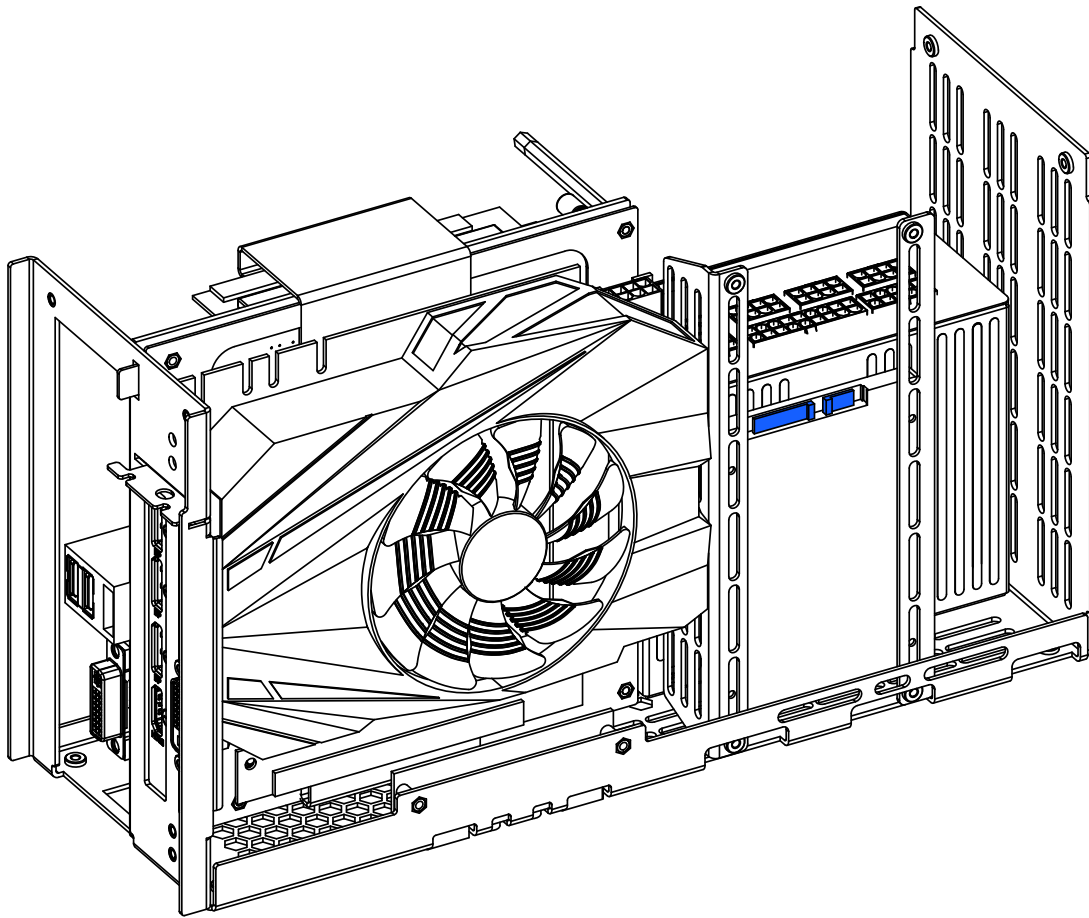
Installing hard drive / graphics card support brackets will create a 0.4 mm space between the left side panel and front panel. Avoid overtightening screws.



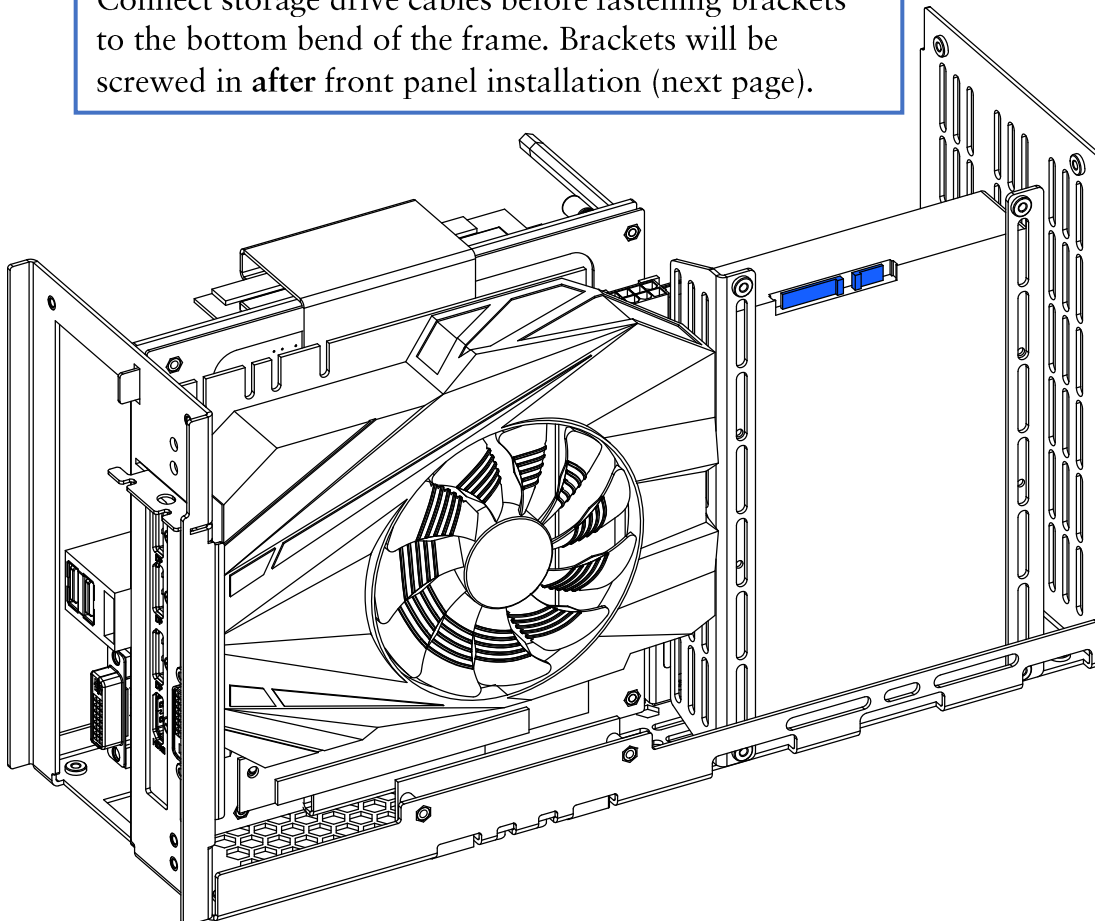
M3 screw



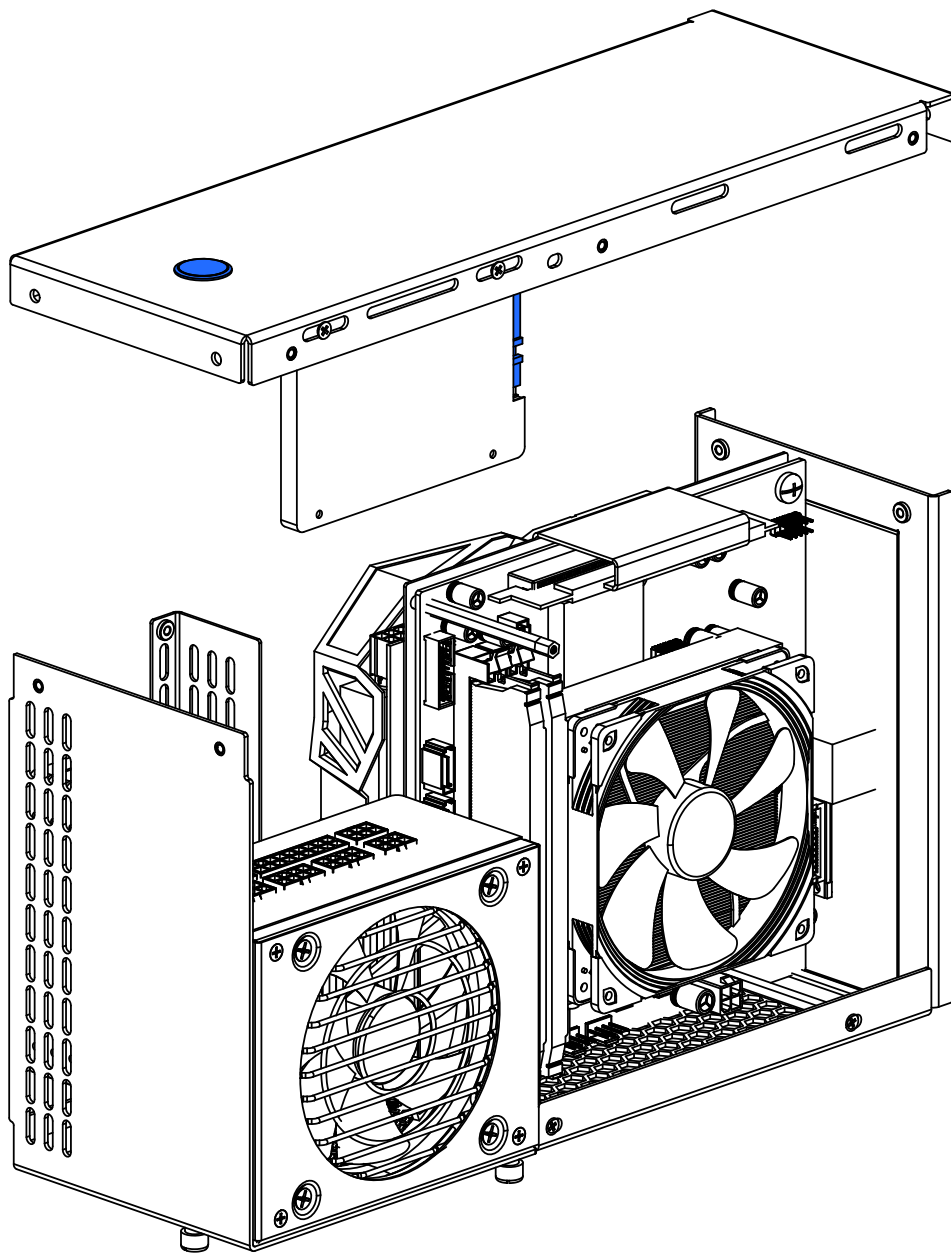
M3 screw



Connect storage drive cables before fastening brackets to the bottom bend of the frame. Brackets will be screwed in after front panel installation (next page).



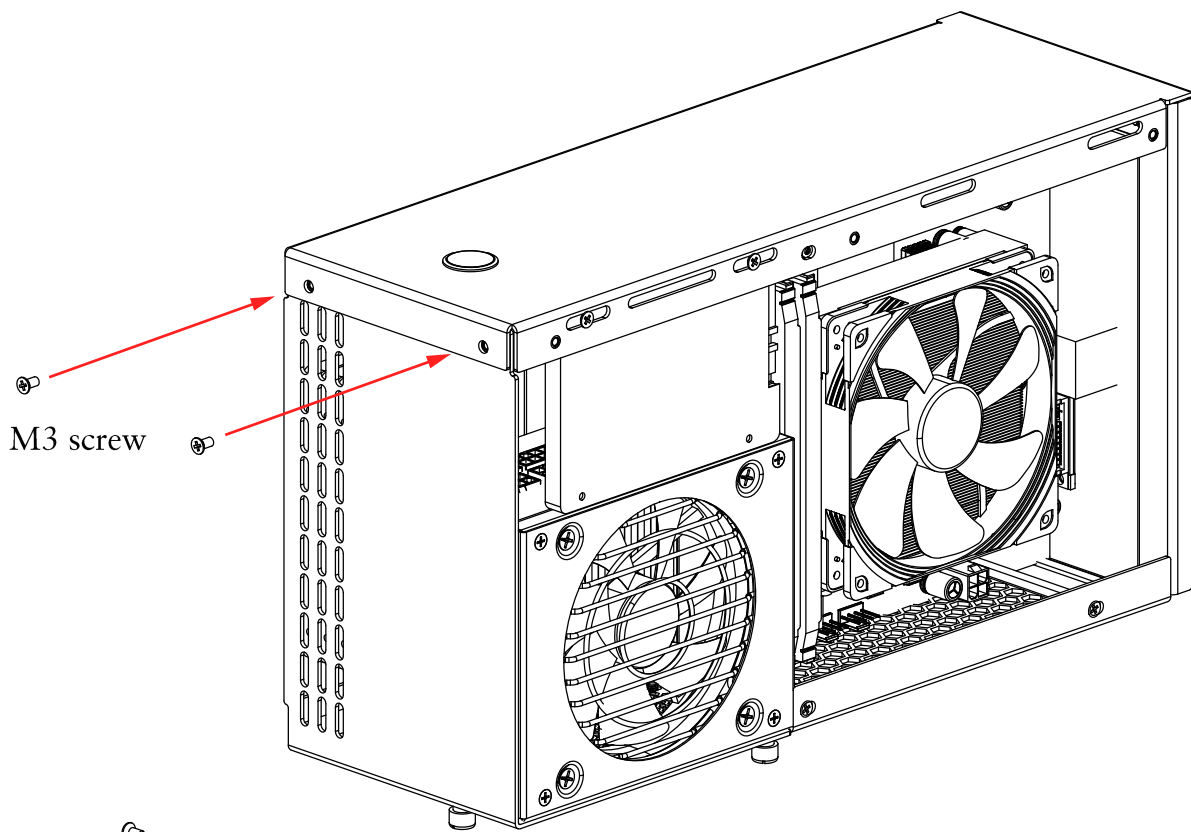
## Connect Front Panel to Back Panel



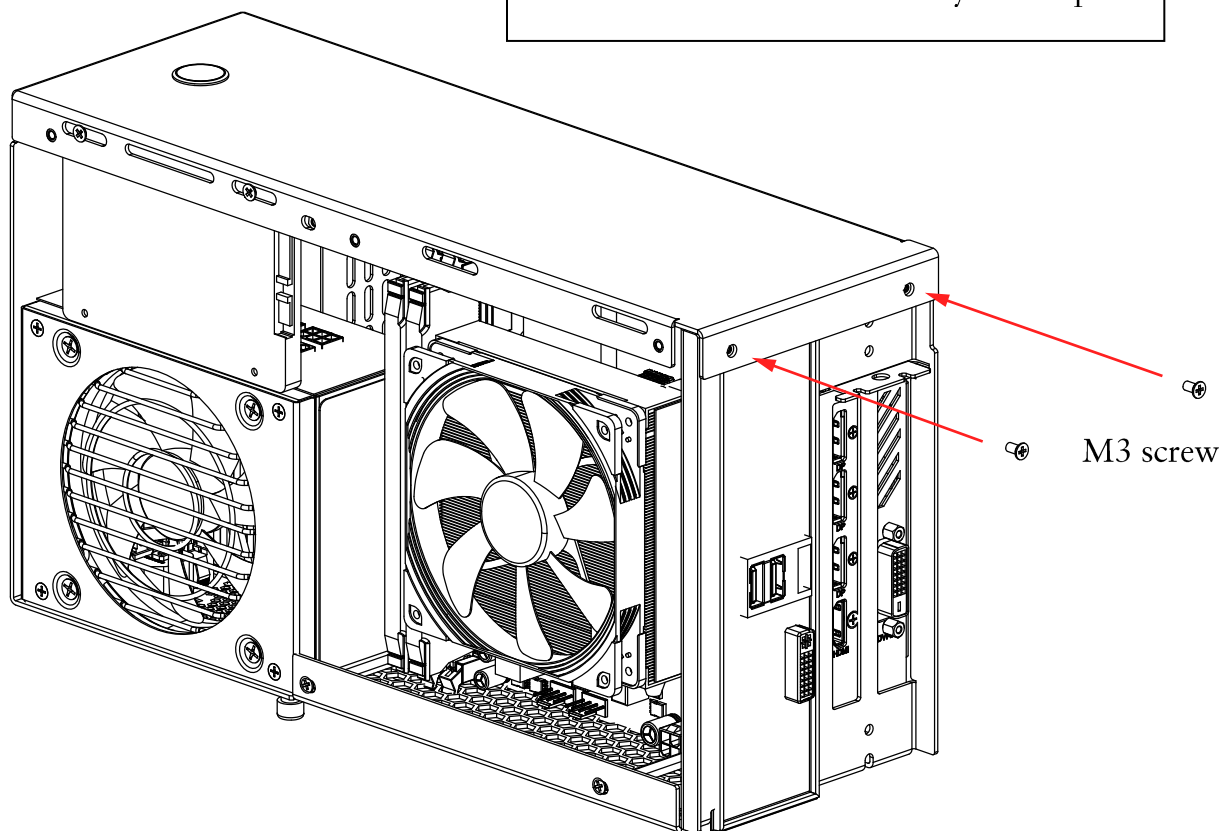
Connect:

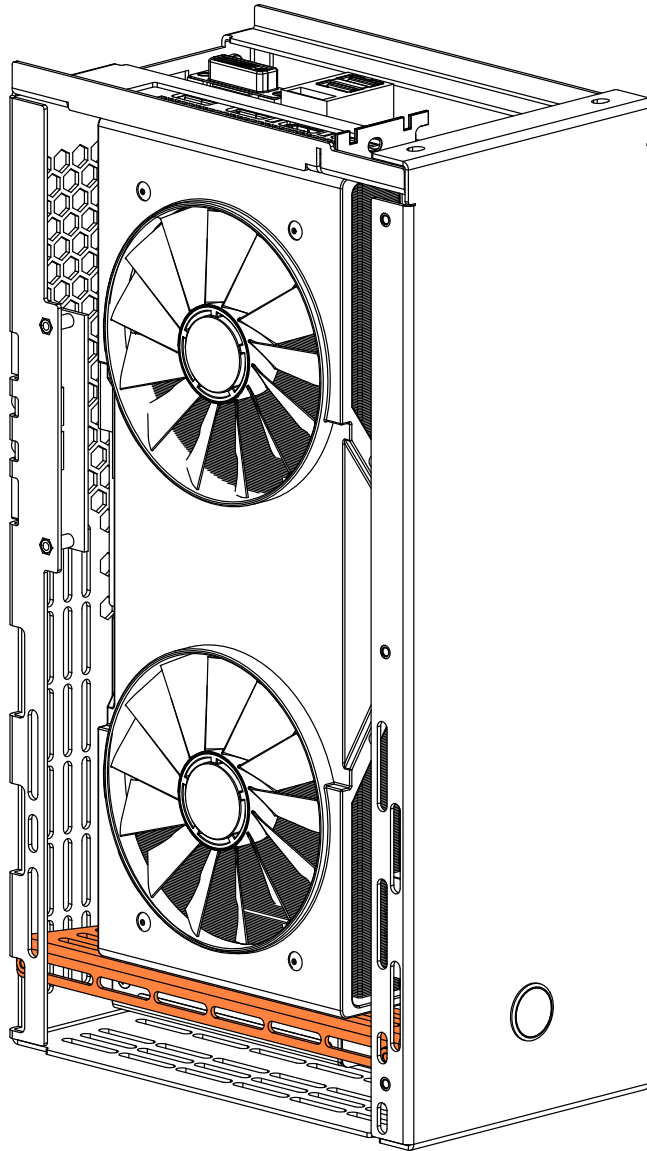
- Power button
- SATA power, data

Please consult motherboard manual to connect power button



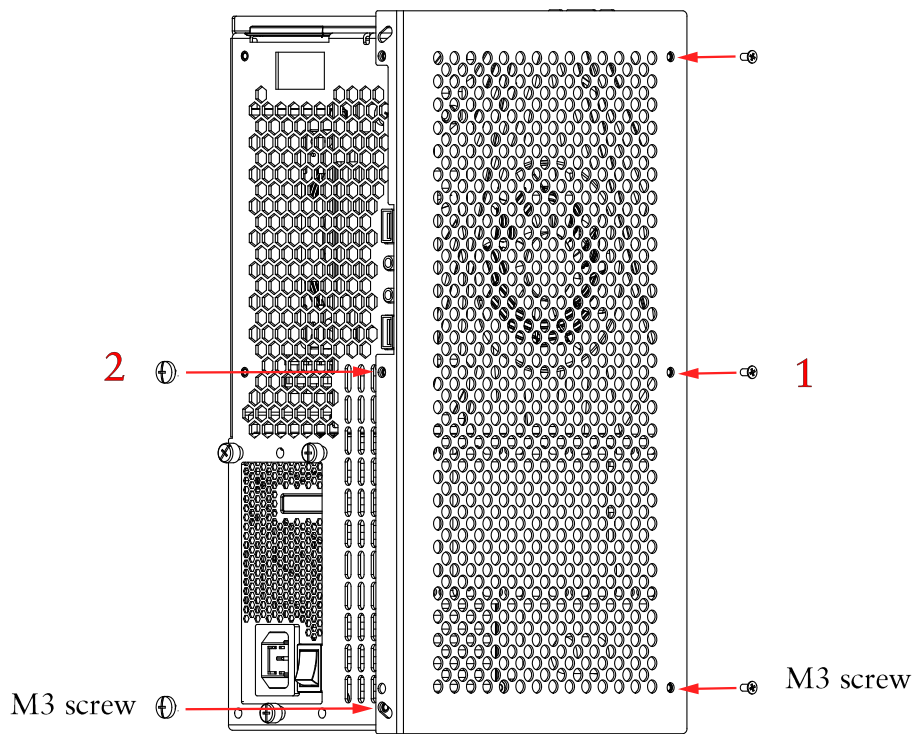
All cables must be connected by this step



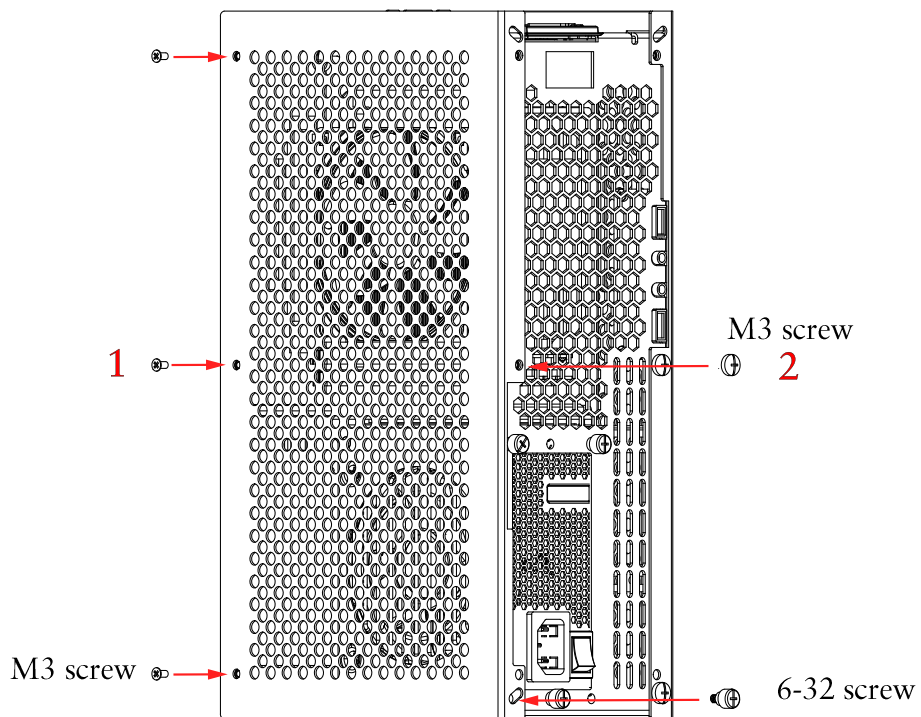


Example of graphics card support installed with full-length graphics card

# Side Panel Installation



Note: to ensure that side panels sit flat, do not overtighten screws





# Rear Cover Installation

