

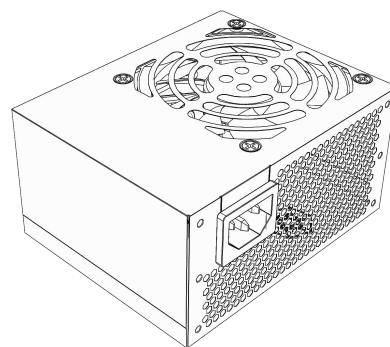


# VF-1 User Manual

## COMPONENTS SUPPORTED

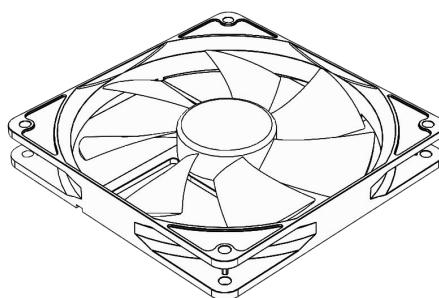
### PSU

SFX, SFX-L



### FAN

4 x standard 140mm fans

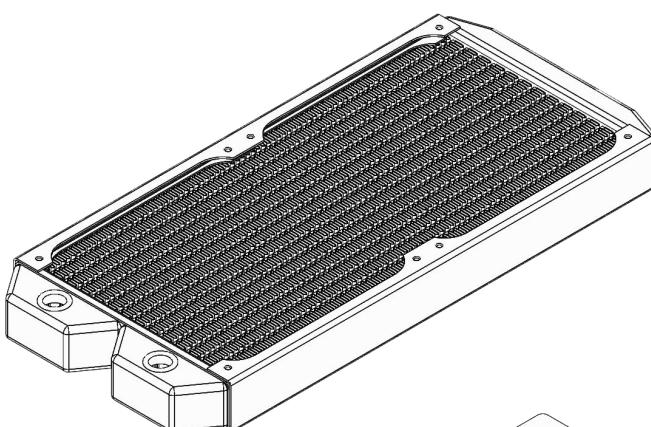


### MOTHERBOARD

Mini-ITX, Mini-DTX

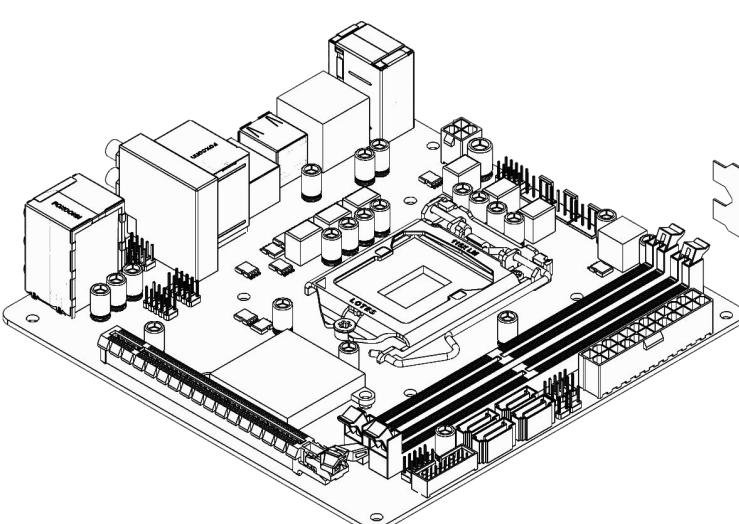
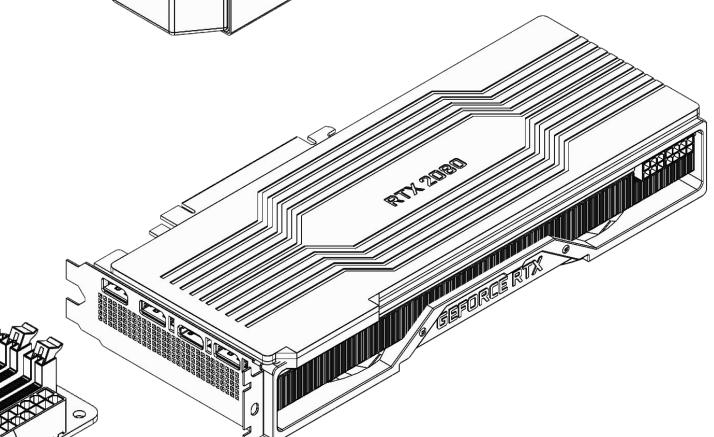
### RADIATOR

280 type, up to 320mm length, 30mm height



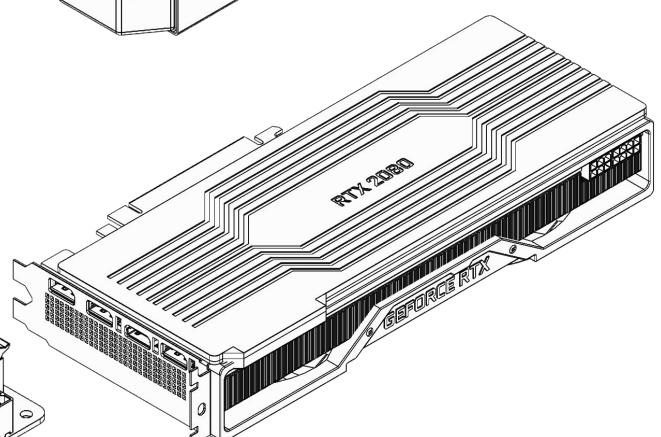
### GRAPHICS CARD

2-slot, up to 300mm supported



### HARD DISK DRIVES

M.2, Full front and rear access  
2 x 2.5" SSD (OPTIONAL BRACKET)



## Read before assembly

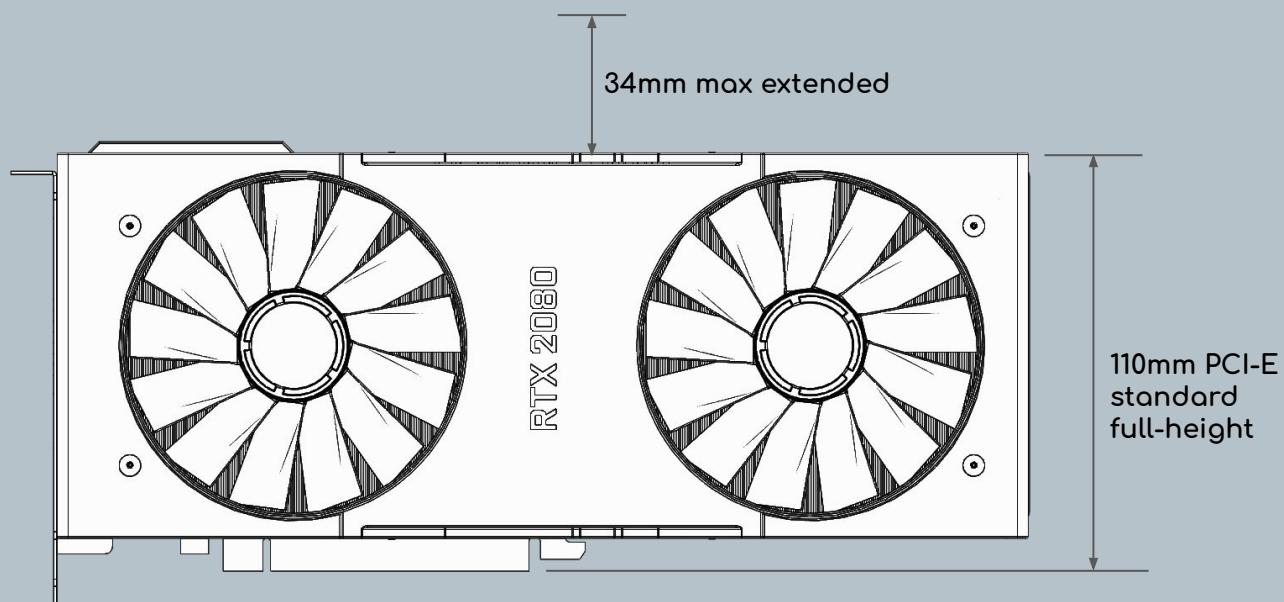
- ★ Study the instructions thoroughly before assembly.
- ★ There are many small screws, nuts and similar parts. Assembly them carefully referring to the drawings.
- ★ It is advised to assemble each step exactly as shown.
- ★ This product is designed to be easy to assemble. But this is not a toy and should be kept out of children's reach.
- ★ It is important to **NOT** over-tighten screws.

## 3D printed parts

- ★ This product contains 3D printed parts.
- ★ 3D printed parts included are printed at the highest quality settings. But due to the nature of such parts, small surface blemishes are unavoidable and do not affect performance.

## Graphics card selection

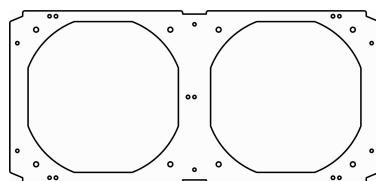
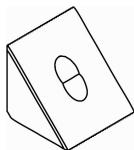
- ★ To ensure your graphics card is usable in the case, please adhere to the following dimensional requirements.
- ★ Note that full cover waterblocks typically has an extended height area for tubing fittings. This can be very much taller for some GPU manufacturers.



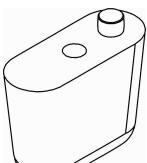
## Specifications

Width: 170mm	Length: 376mm
Height: 325mm (with feet)	Internal volume: 17.5L

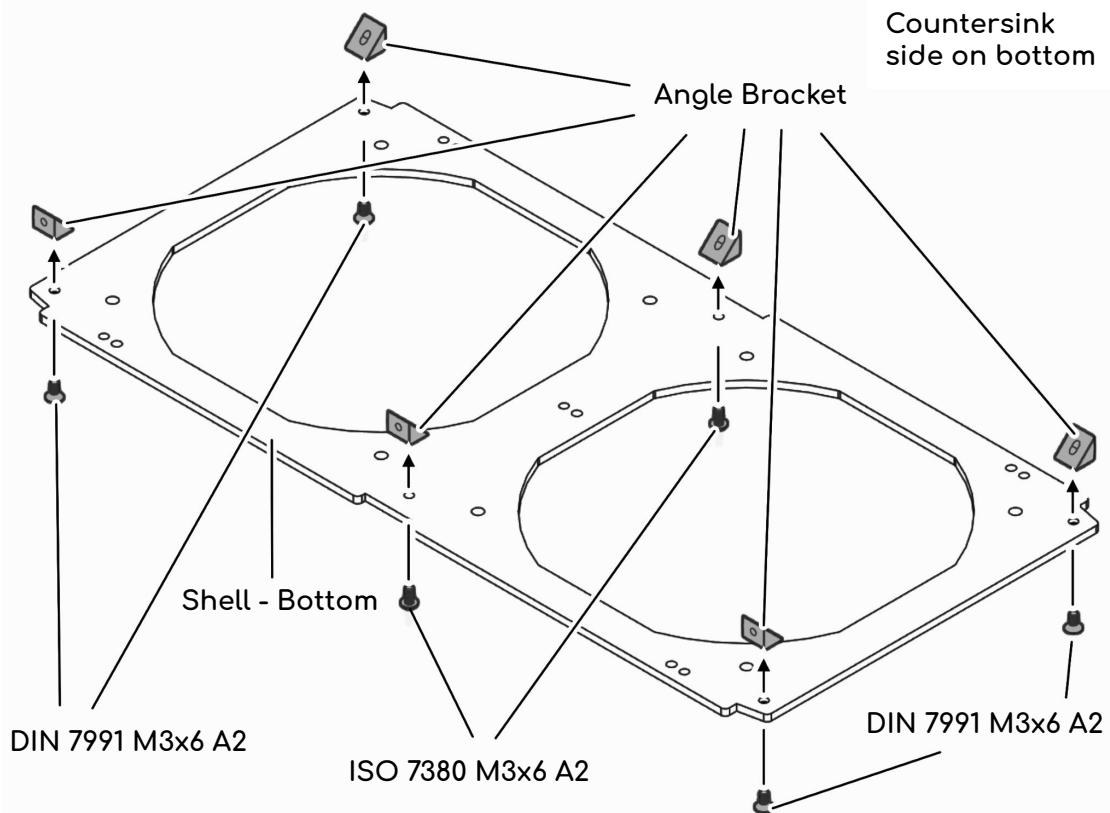
1

**Shell - Bottom****Angle Bracket x 6****DIN 7991 M3x6 A2 x 4****ISO 7380 M3x6 A2 x 2**

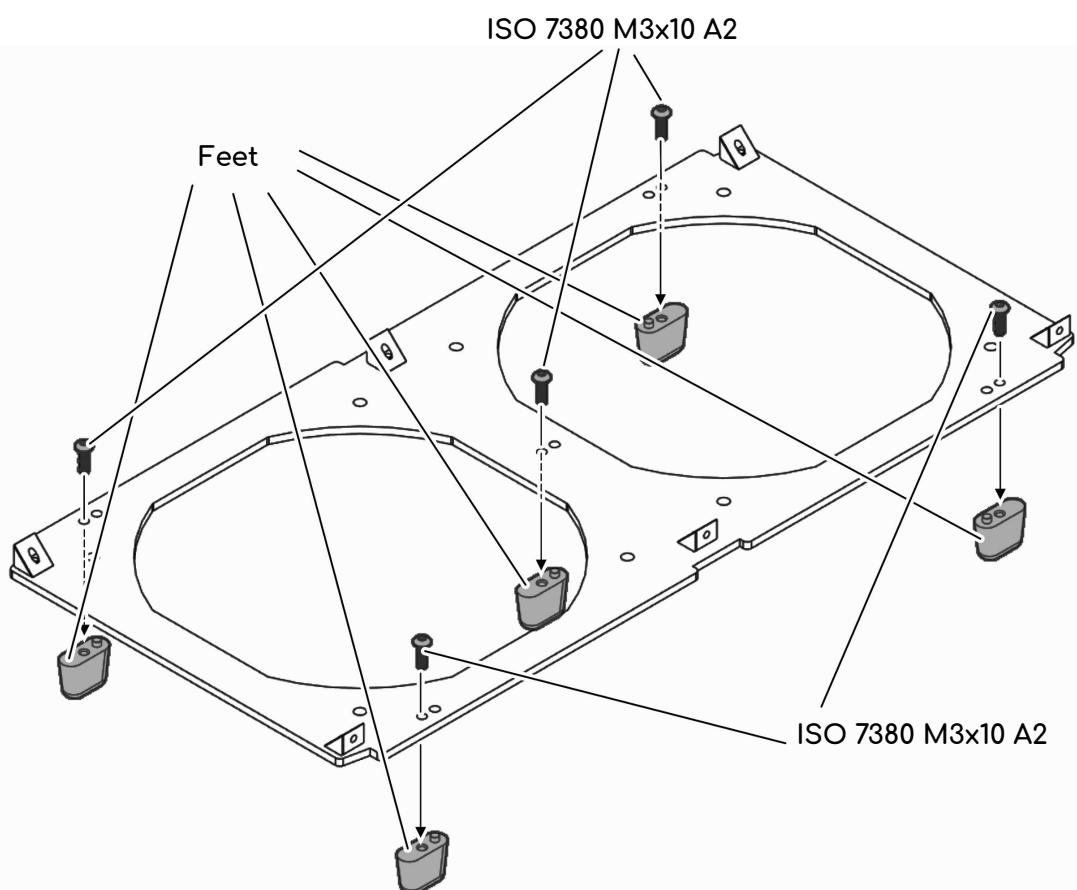
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**Feet x 5****ISO 7380 M3x10 A2 x 5**

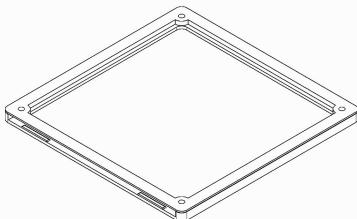
1

**Base cross-member support assembly**Countersink  
side on bottom

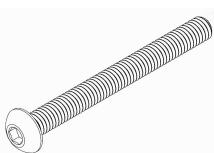
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**Attaching the feet**

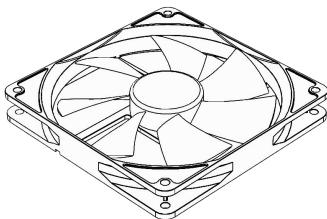
3



**Filter Frame x 2**



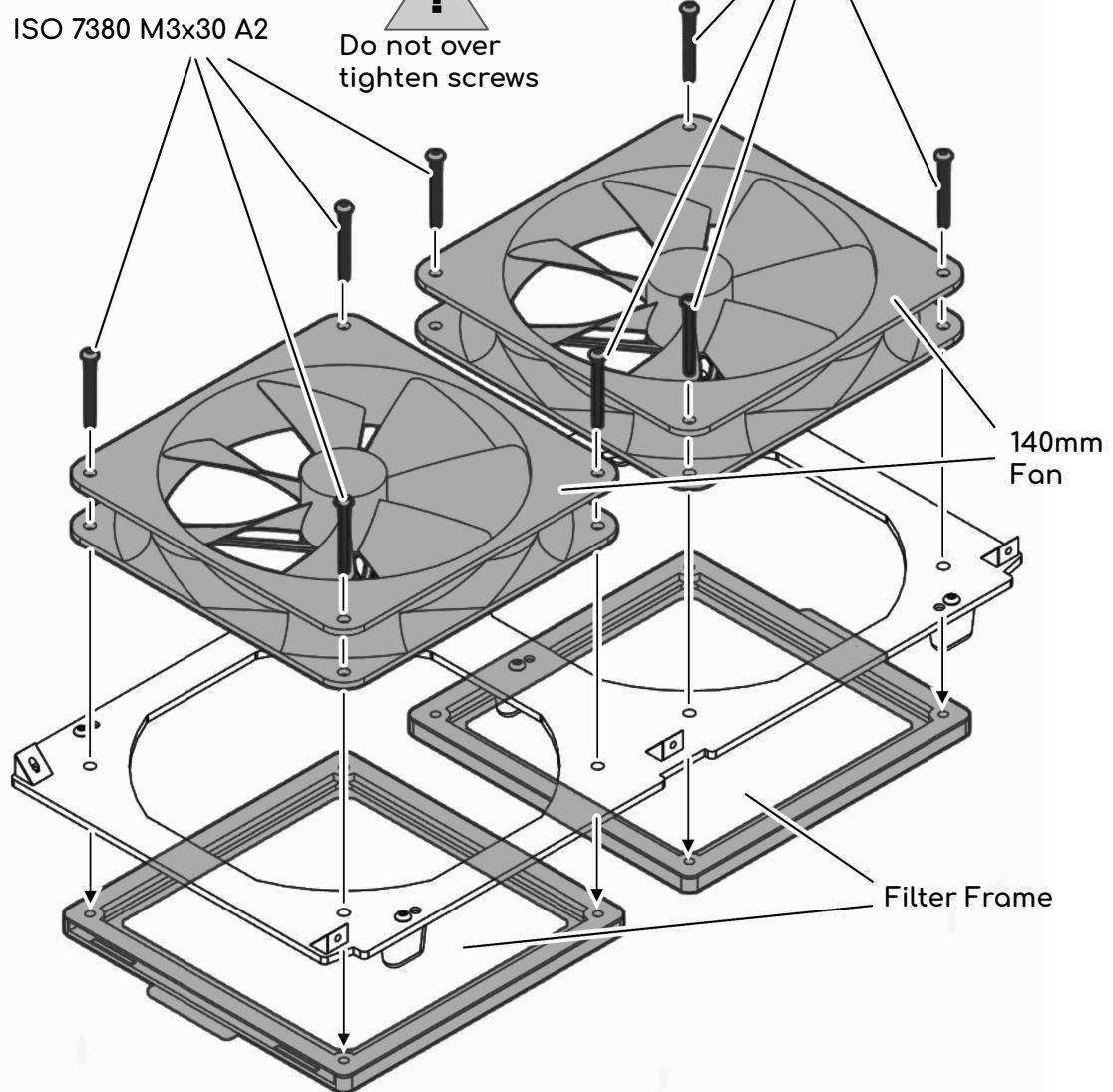
**ISO 7380 M3x30 A2 x 8**



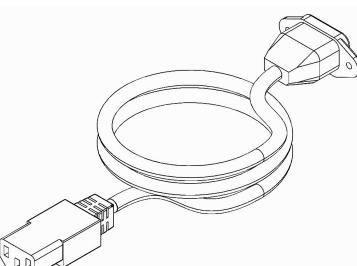
**140mm Fan x 2**  
(User supplied)

3

### Fan and filter assembly



4



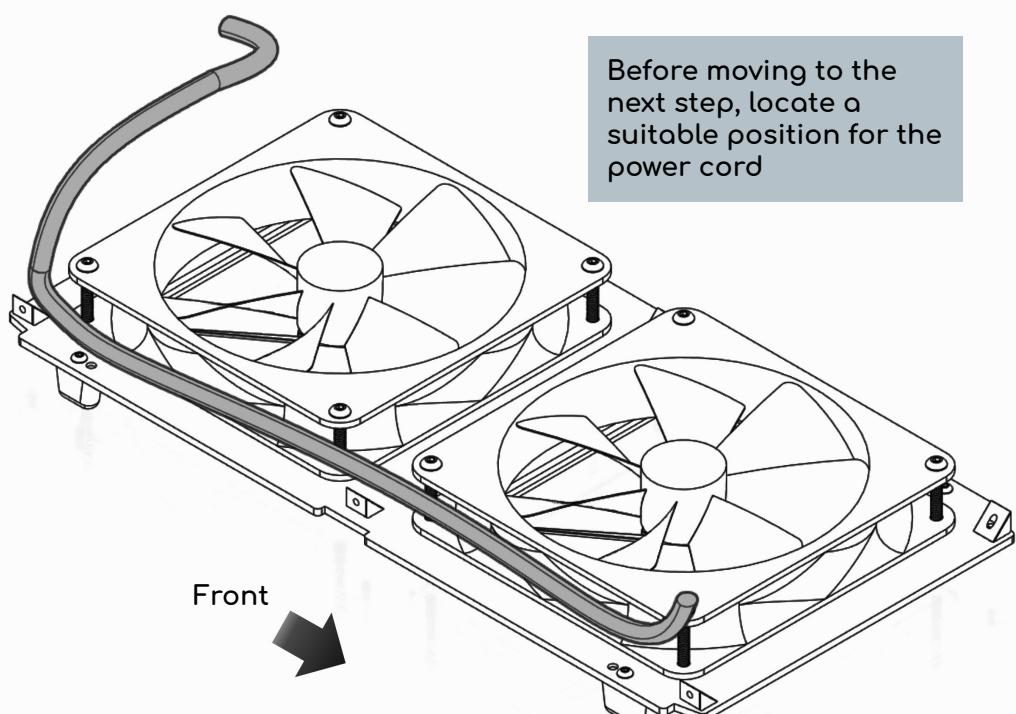
**IEC320 C14 to C13**

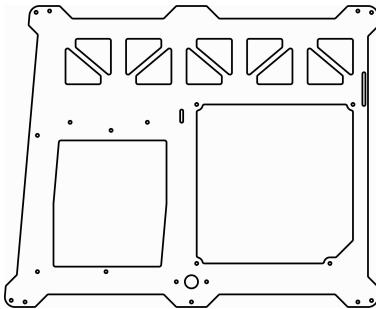
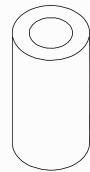
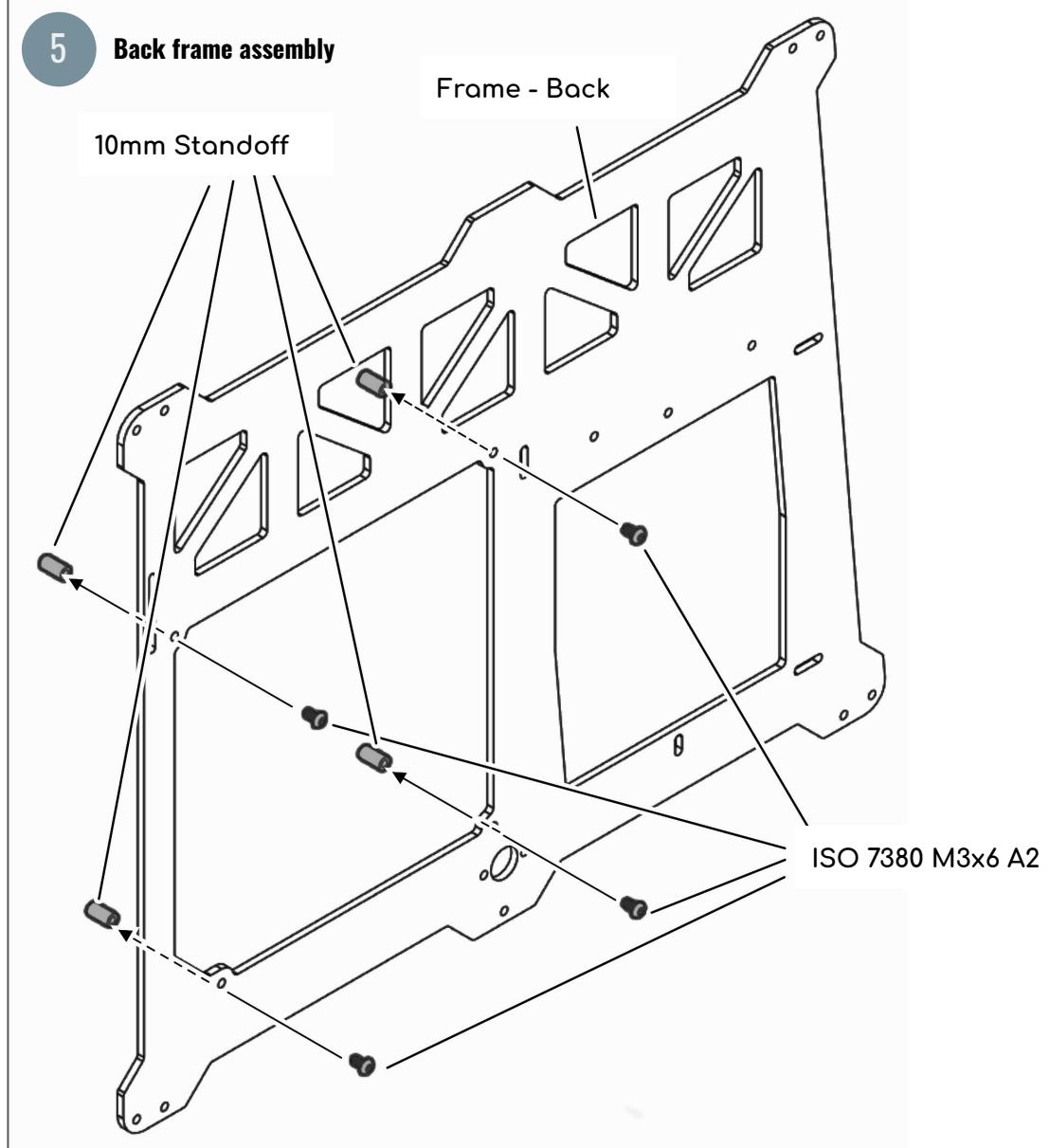
### Extension Cord

(Note that orientation of female plug may differ)

4

### Power cord placement

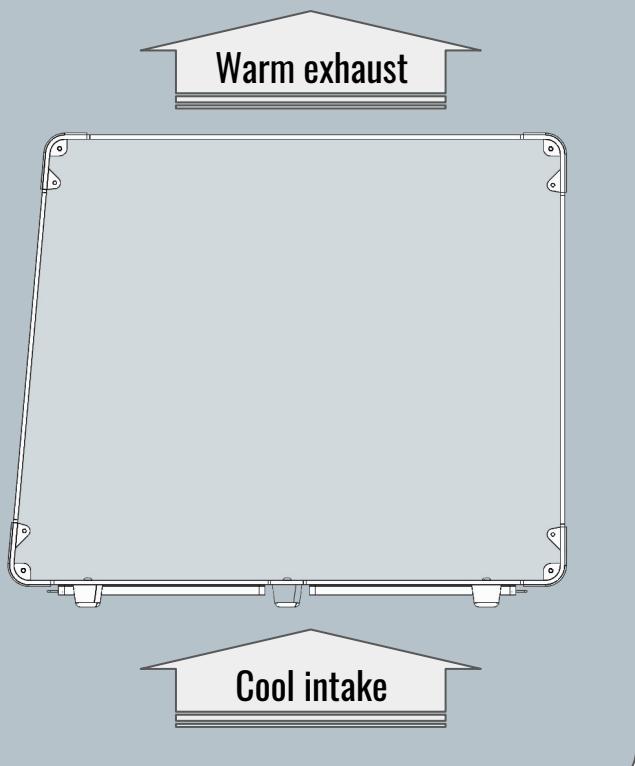


**Back frame assembly****Frame - Back****10mm Standoff x 4****ISO 7380 M3x6 A2 x 4****Design philosophy**

Seasoned PC builders will tell you that more than often, a complete clean out of accumulated dust can restore a PC to healthy operation.

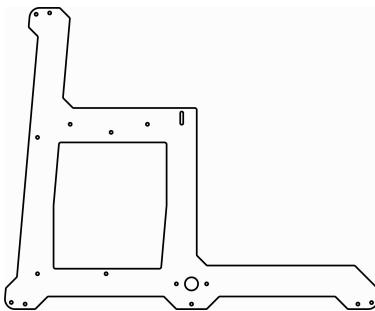
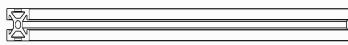
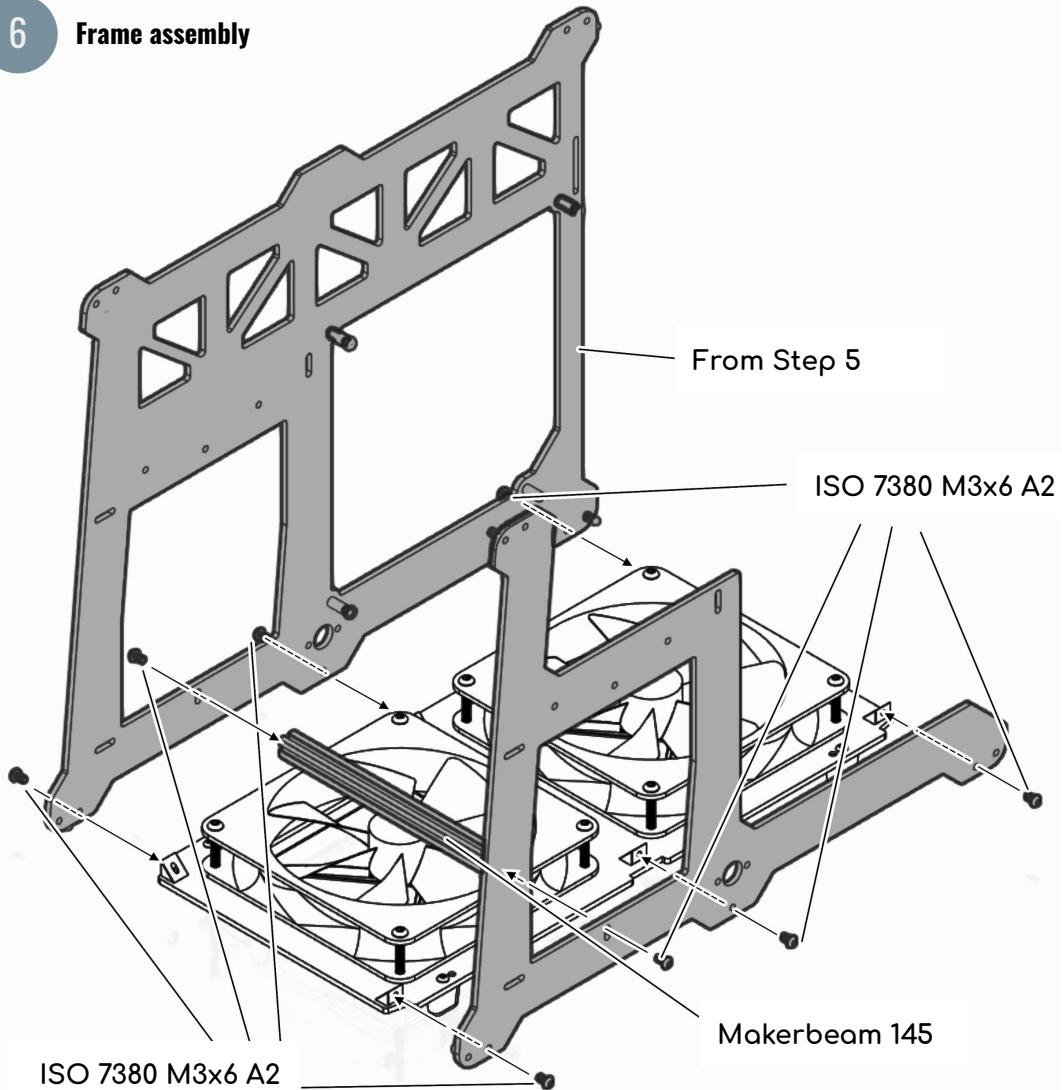
With a neutral or **positive air pressure design**, cool air can only enter the case **fully filtered** from the bottom.

Inverted layout allows showcasing the graphics card and lets airflow cleanly exhaust from the top as hot air rises.



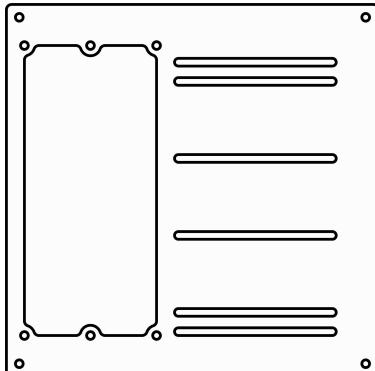
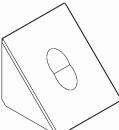
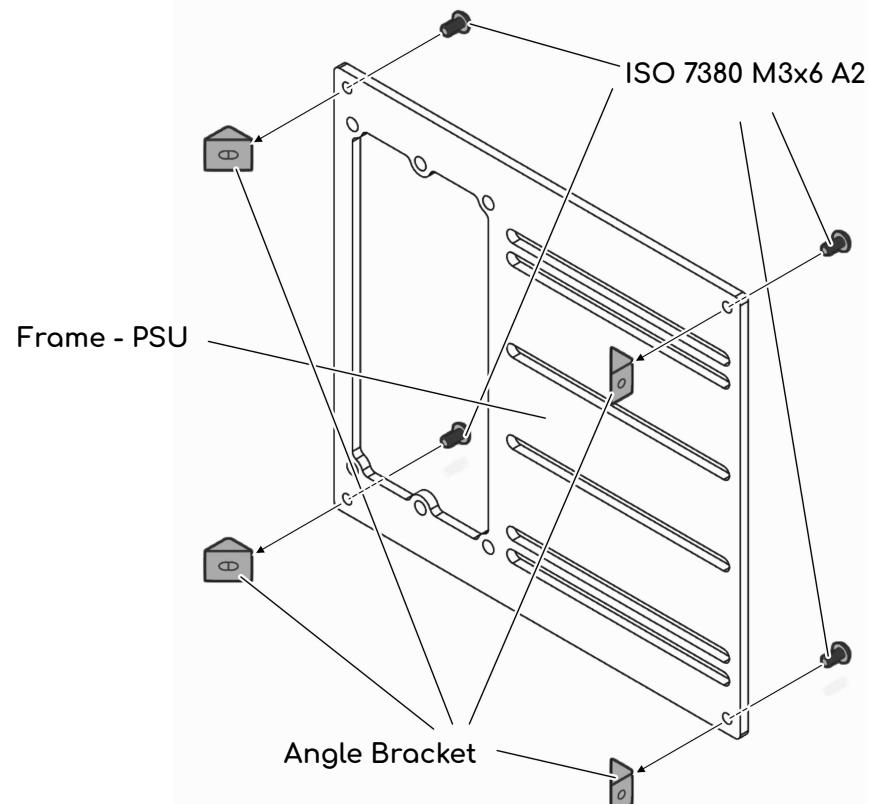
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6

**Frame assembly****Frame - Front****Makerbeam 145 x 1****ISO 7380 M3x6 A2 x 8**

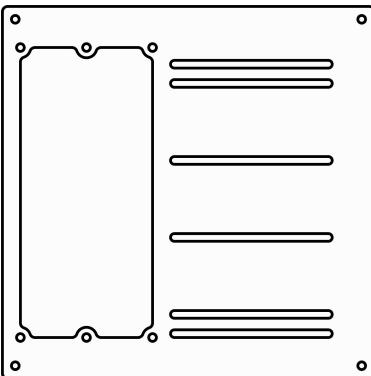
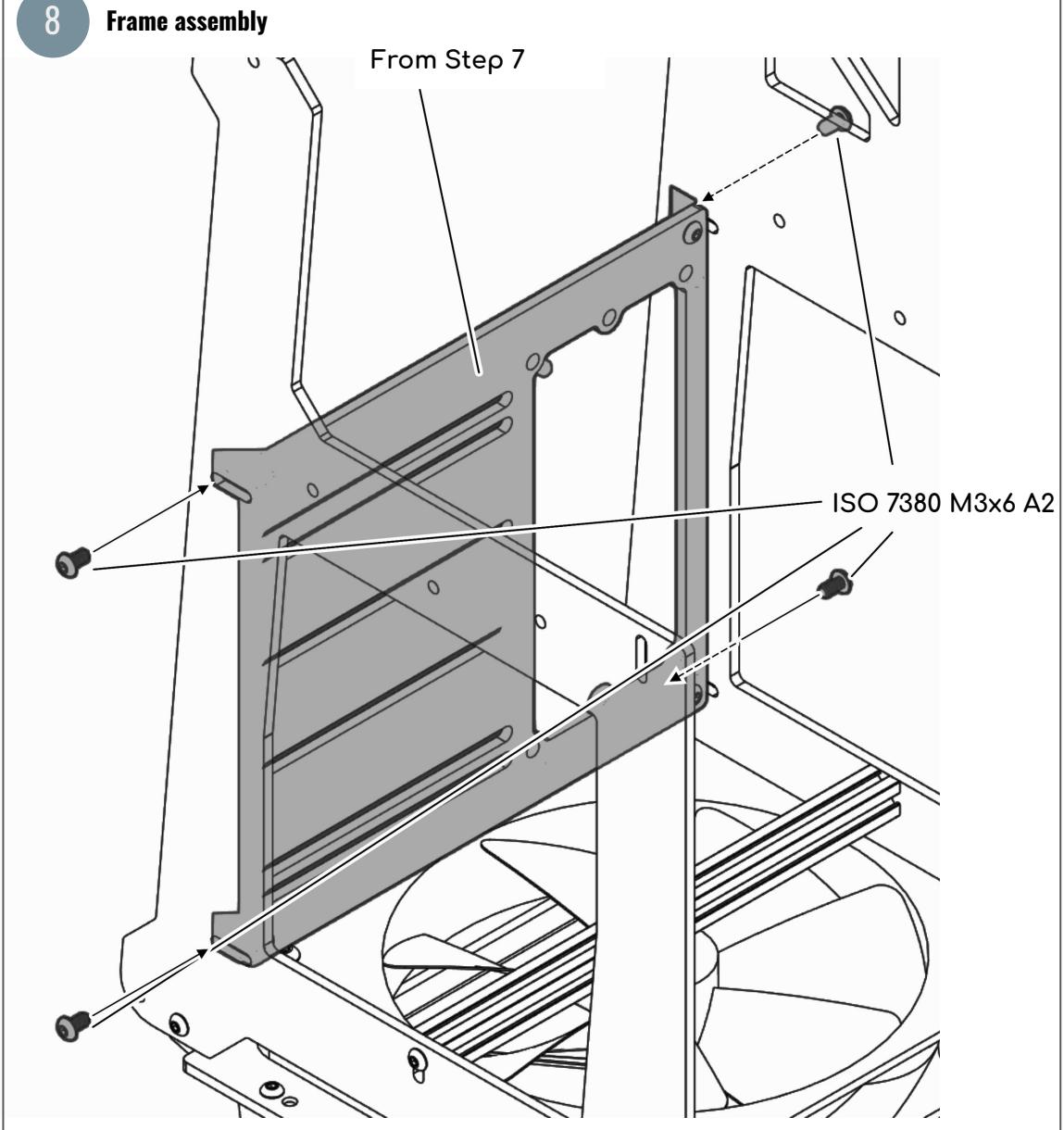
7

7

**PSU support assembly****Frame - PSU****Angle Bracket x 4****ISO 7380 M3x6 A2 x 4**

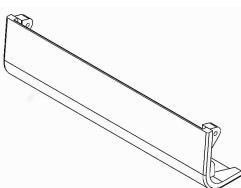
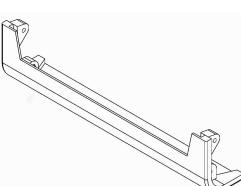
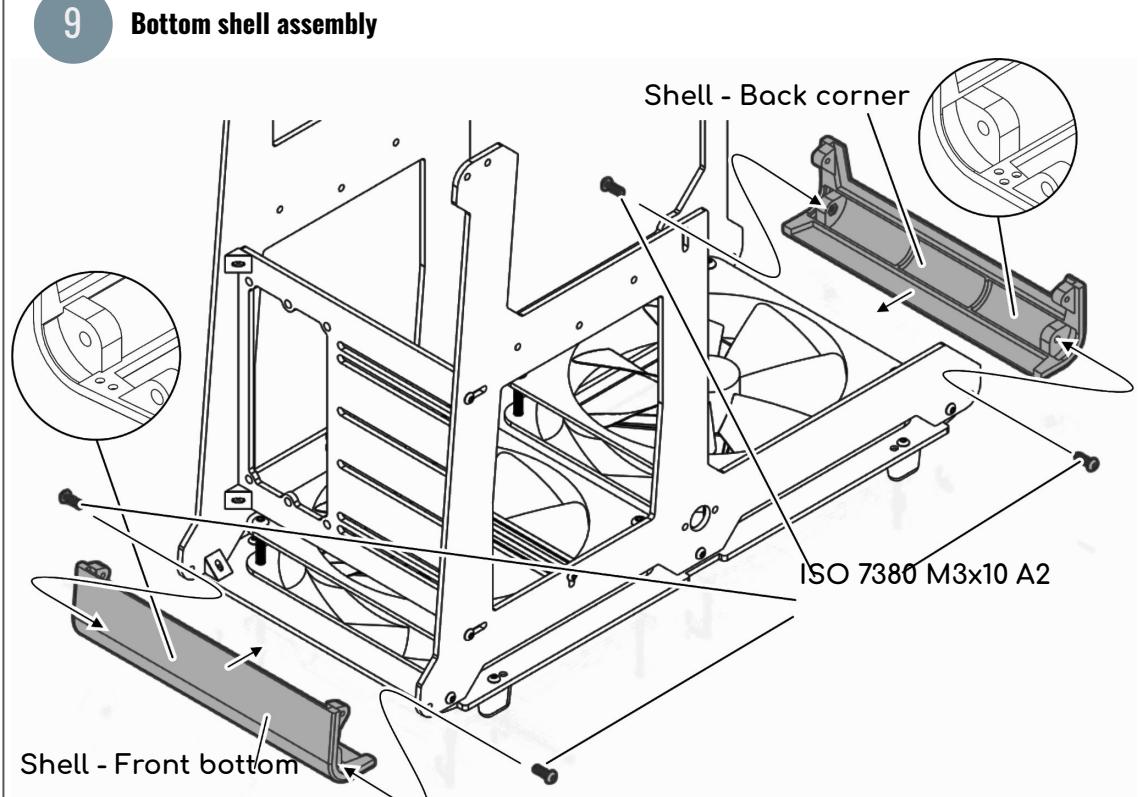
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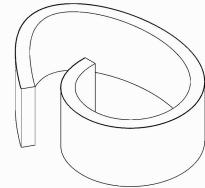
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**Frame assembly****Frame - PSU****ISO 7380 M3x6 A2 x 4**

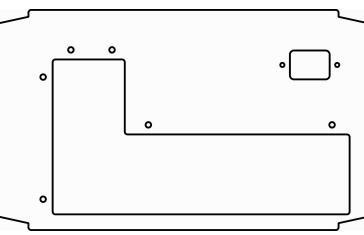
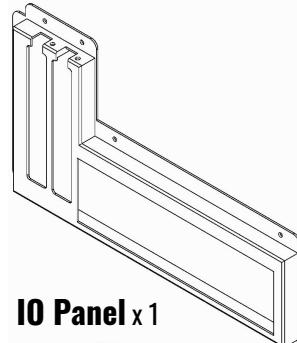
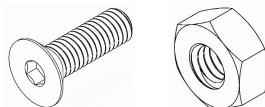
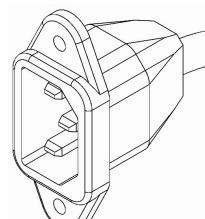
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9

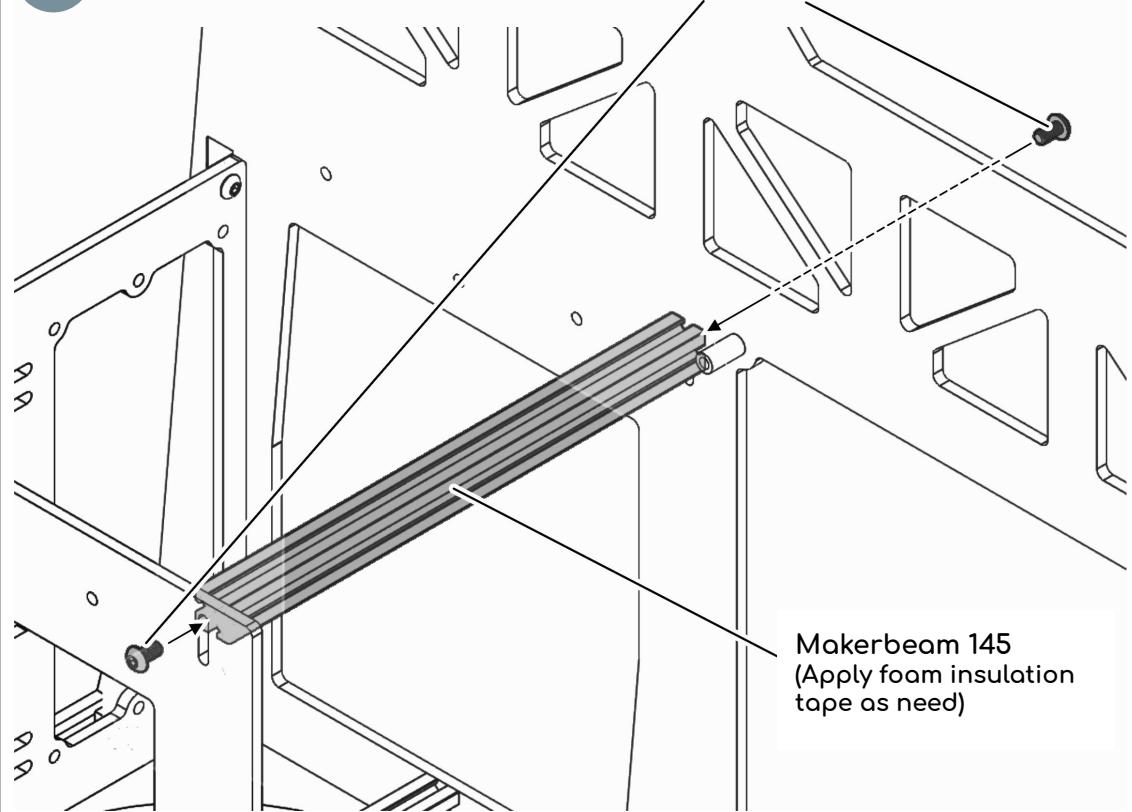
**Bottom shell assembly****Shell - Front bottom****Shell - Back corner****ISO 7380 M3x10 A2 x 4**

**Makerbeam 145 x 1****ISO 7380 M3x6 A2 x 2****EVA foam tape**

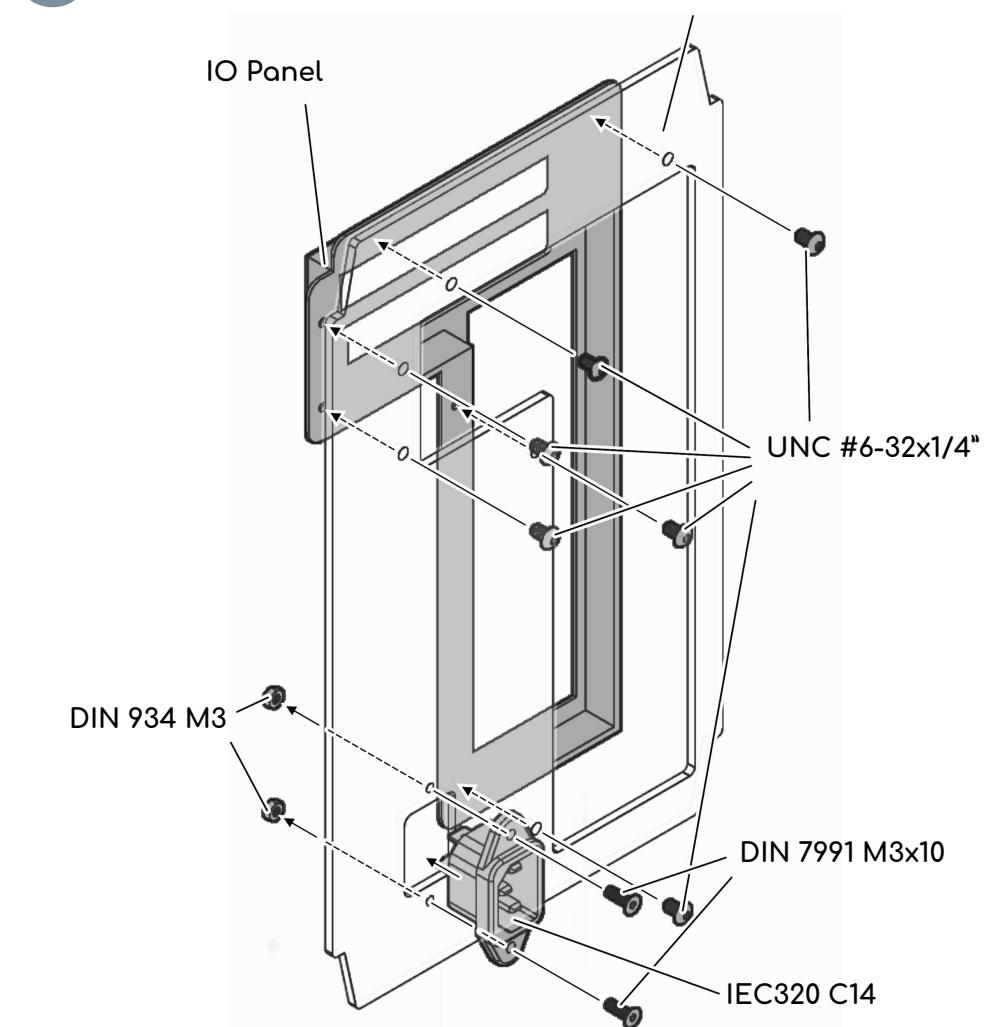
Adjust position and apply EVA foam insulation tape as suitable for your graphics card

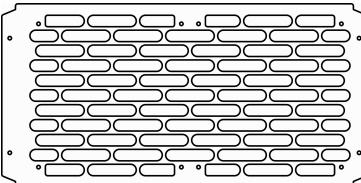
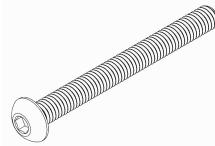
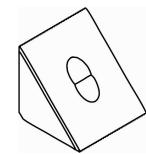
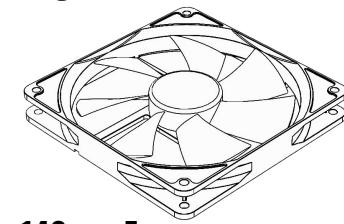
**Shell - Back****IO Panel x 1****UNC #6-32x1/4" x 6****DIN 7991 M3x10, 934 M3 x 2****IEC320 C14 x 1****Graphics card support**

ISO 7380 M3x6 A2

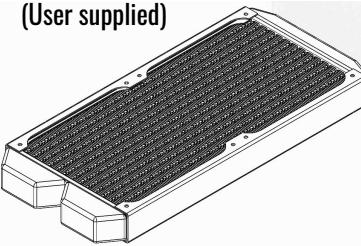
**Back panel assembly**

Shell - Back

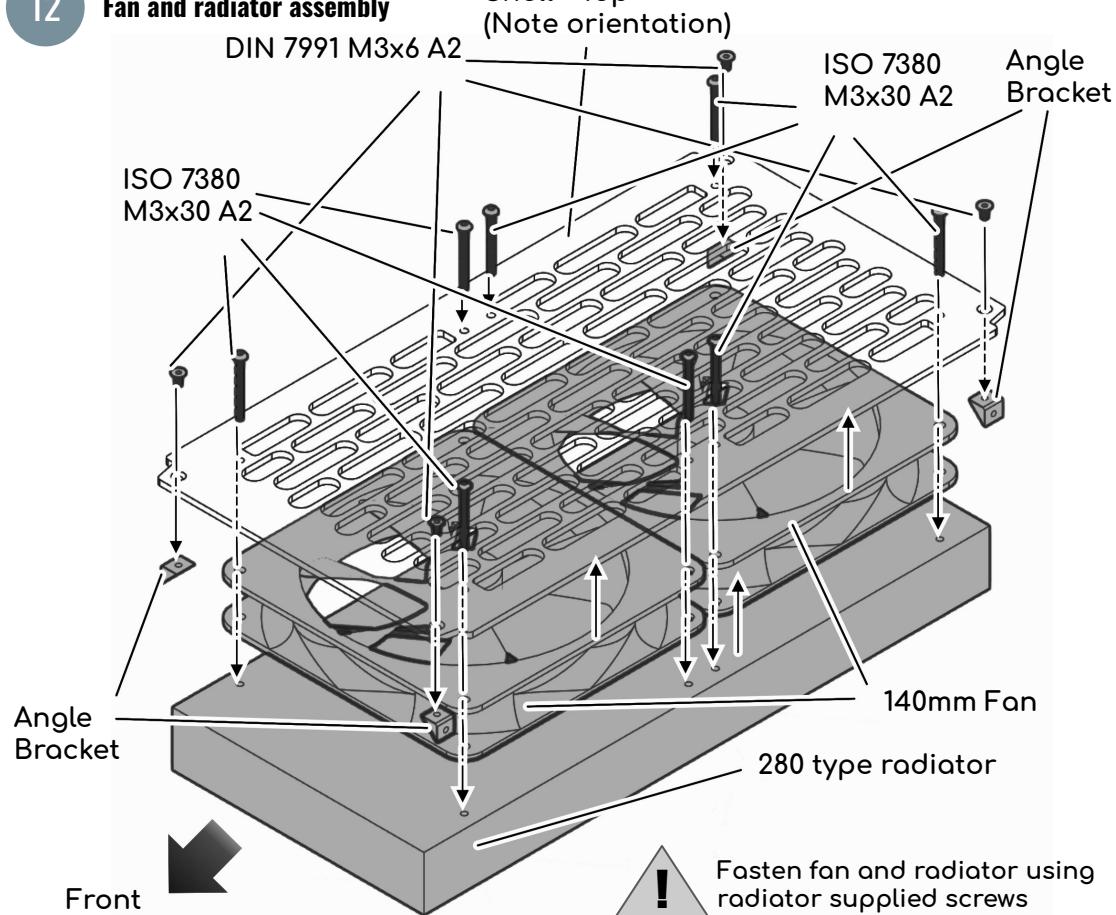
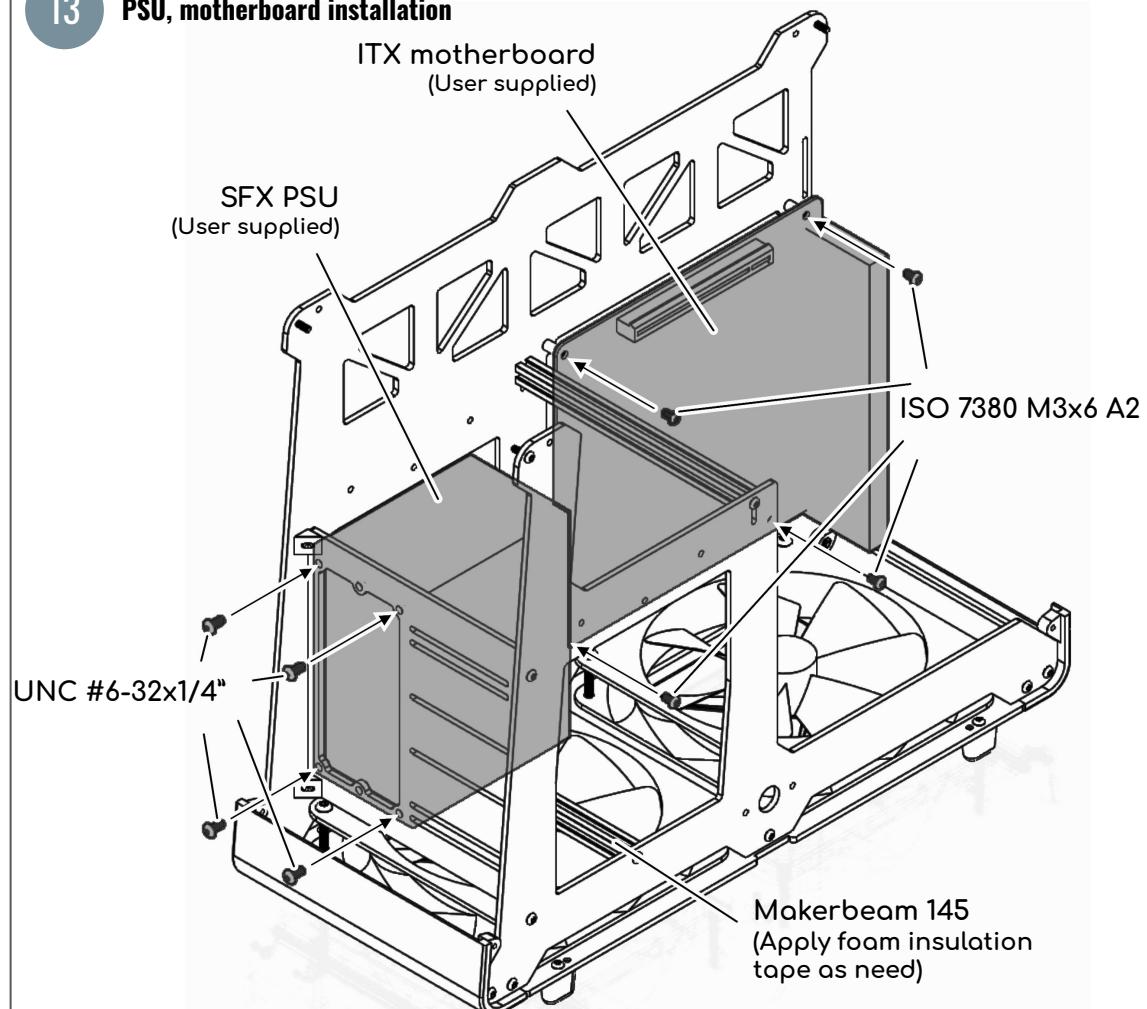
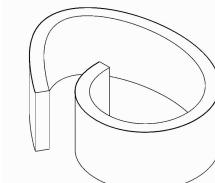


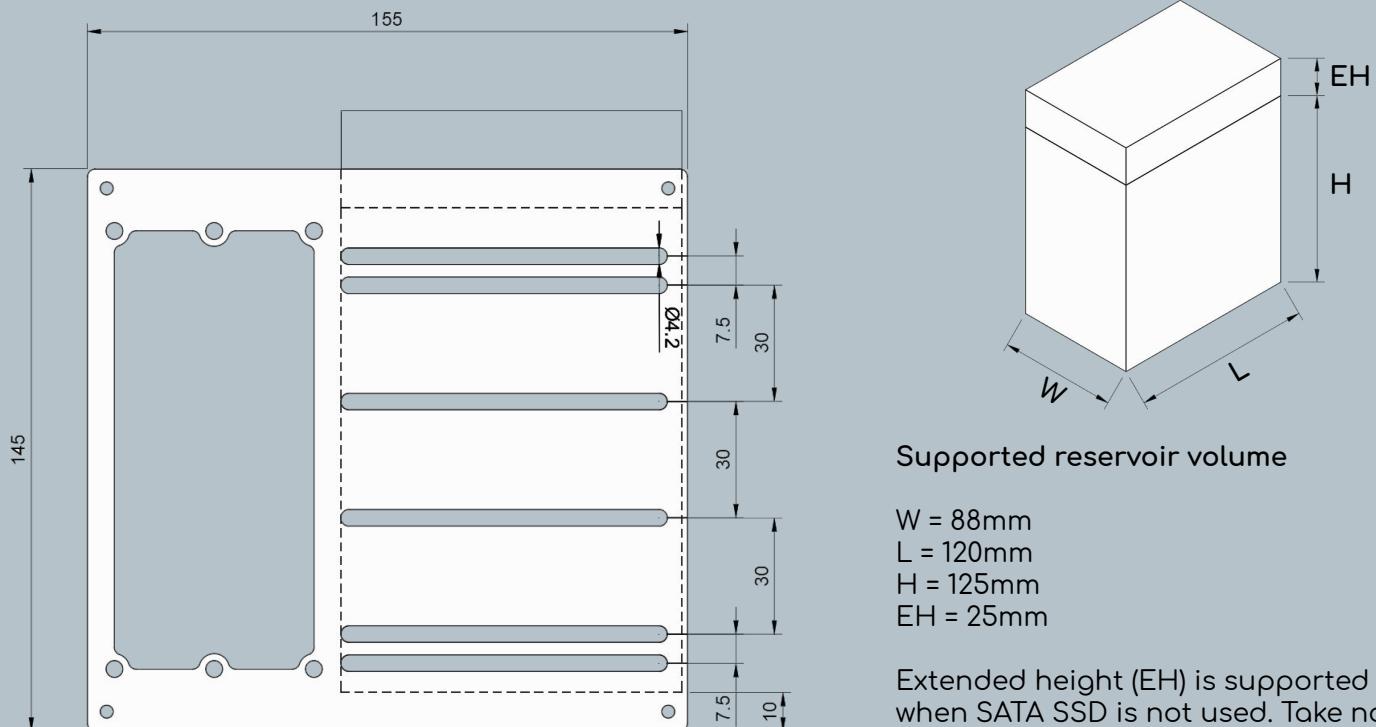
**Shell - Top****ISO 7380 M3x30 A2 x 8****DIN 7991 M3x6 A2 x 4****Angle Bracket x 4****140mm Fan x 2**

(User supplied)

**280 type radiator**

(User supplied)

**Fan and radiator assembly****PSU, motherboard installation****ISO 7380 M3x6 A2 x 4****UNC #6-32x1/4" x 4****EVA foam tape**

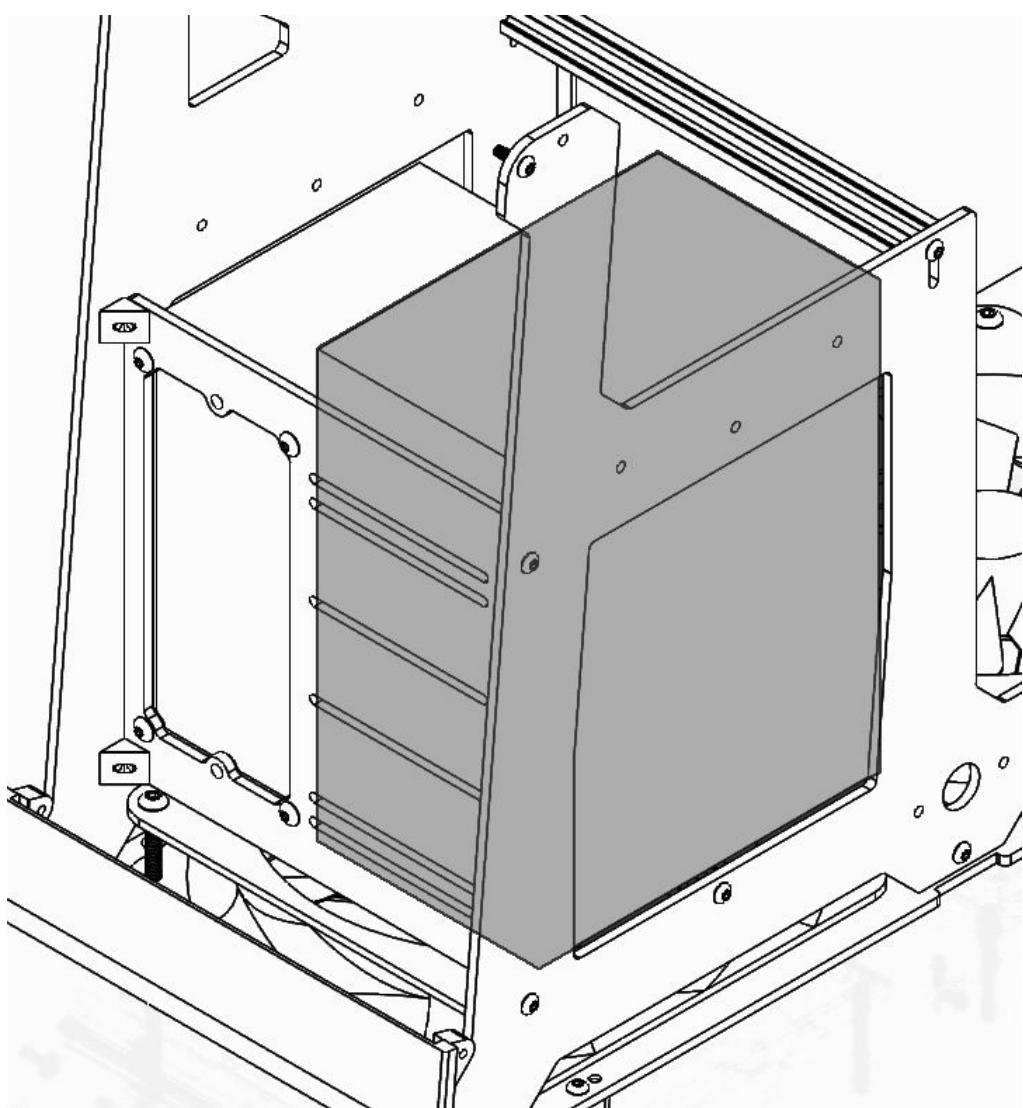


14

Reservoir should be mounted on PSU frame as appropriate using custom or supplied bracket and is designed to rest on the Makerbeam underneath the PSU.

14

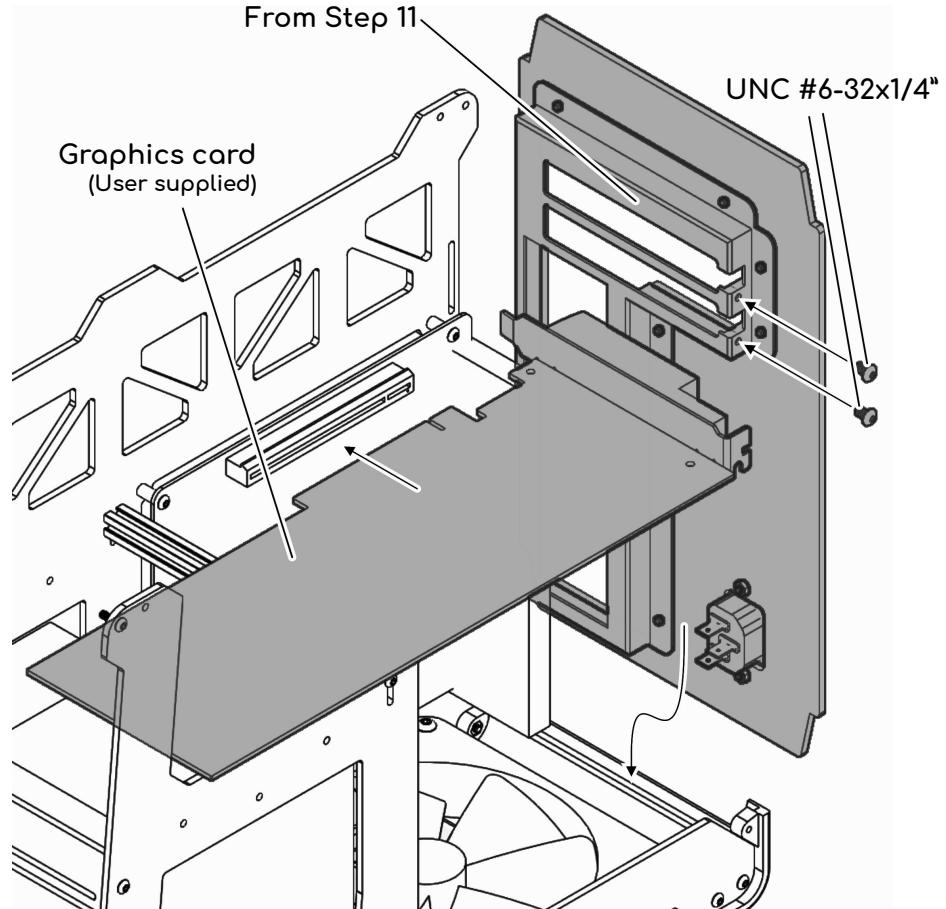
### Reservoir installation



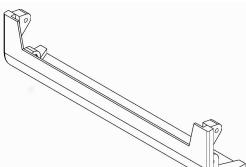
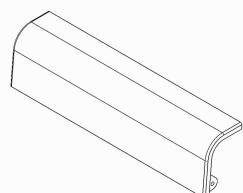
15

**UNC #6-32x1/4" x 2**

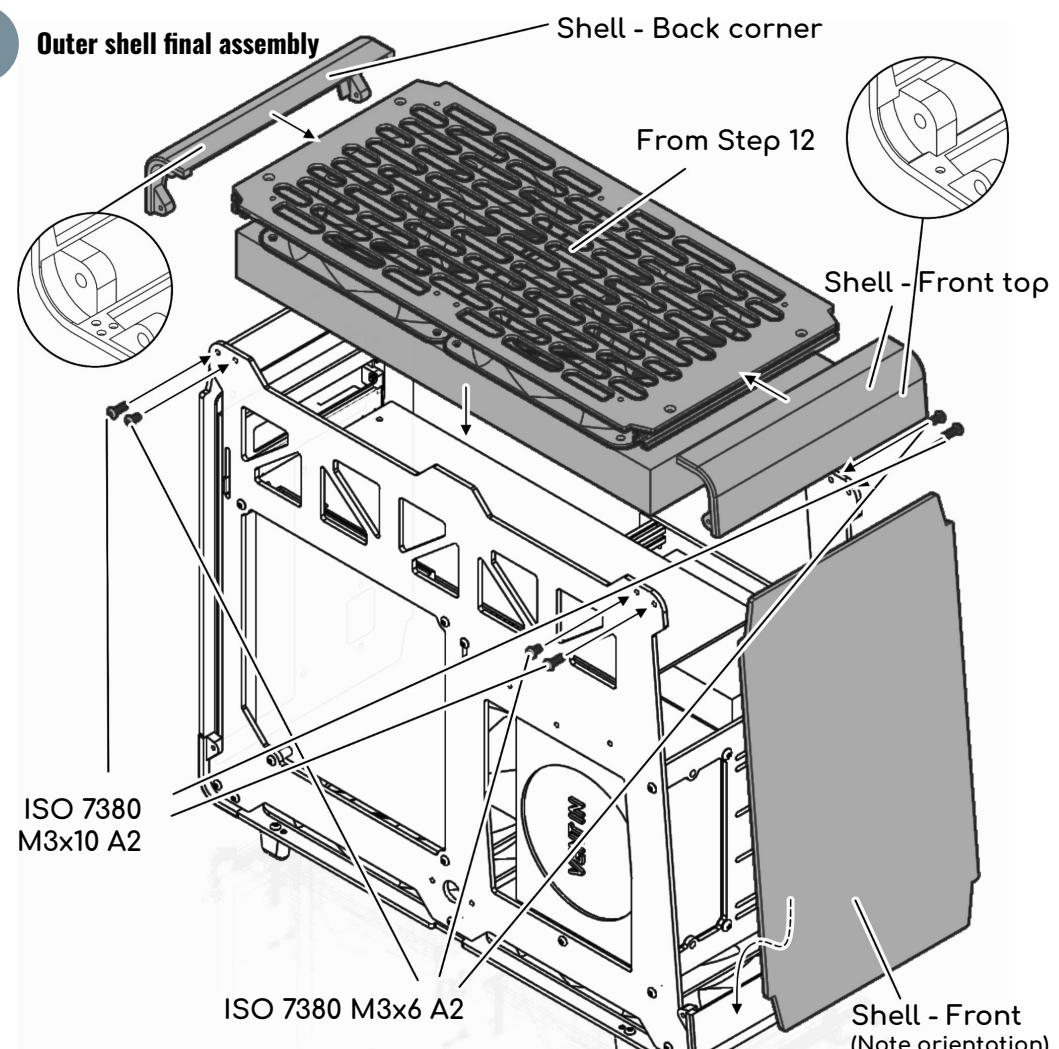
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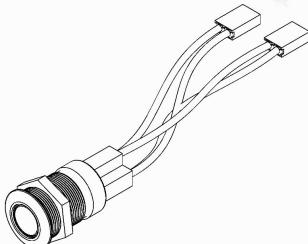
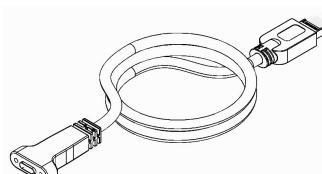
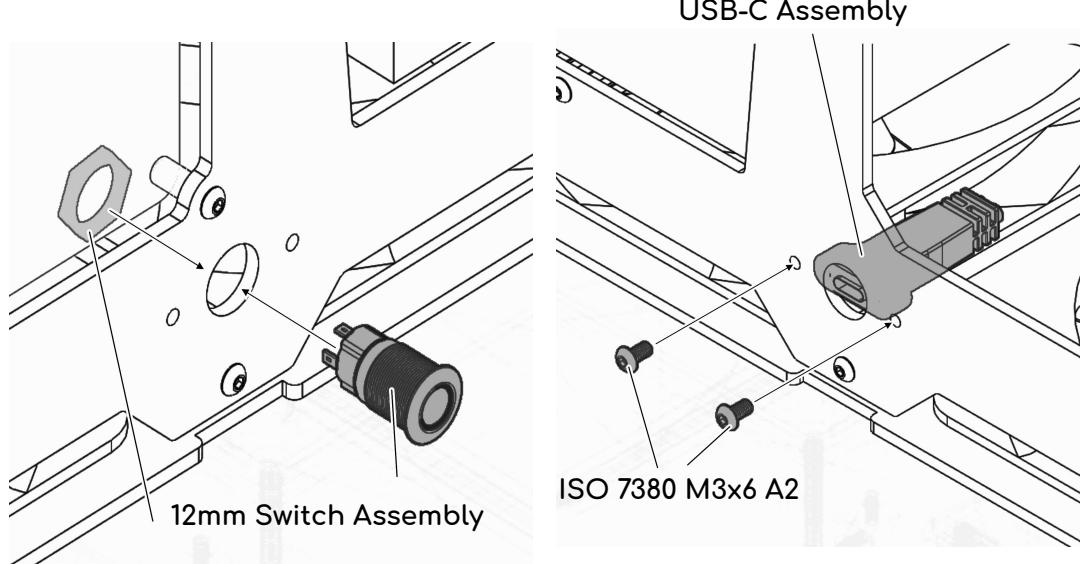
**Graphics card and IO Panel assembly**

16

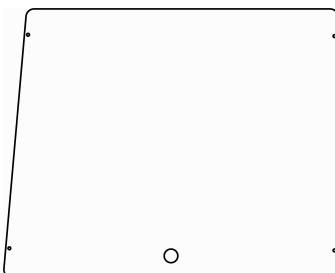
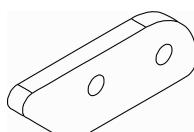
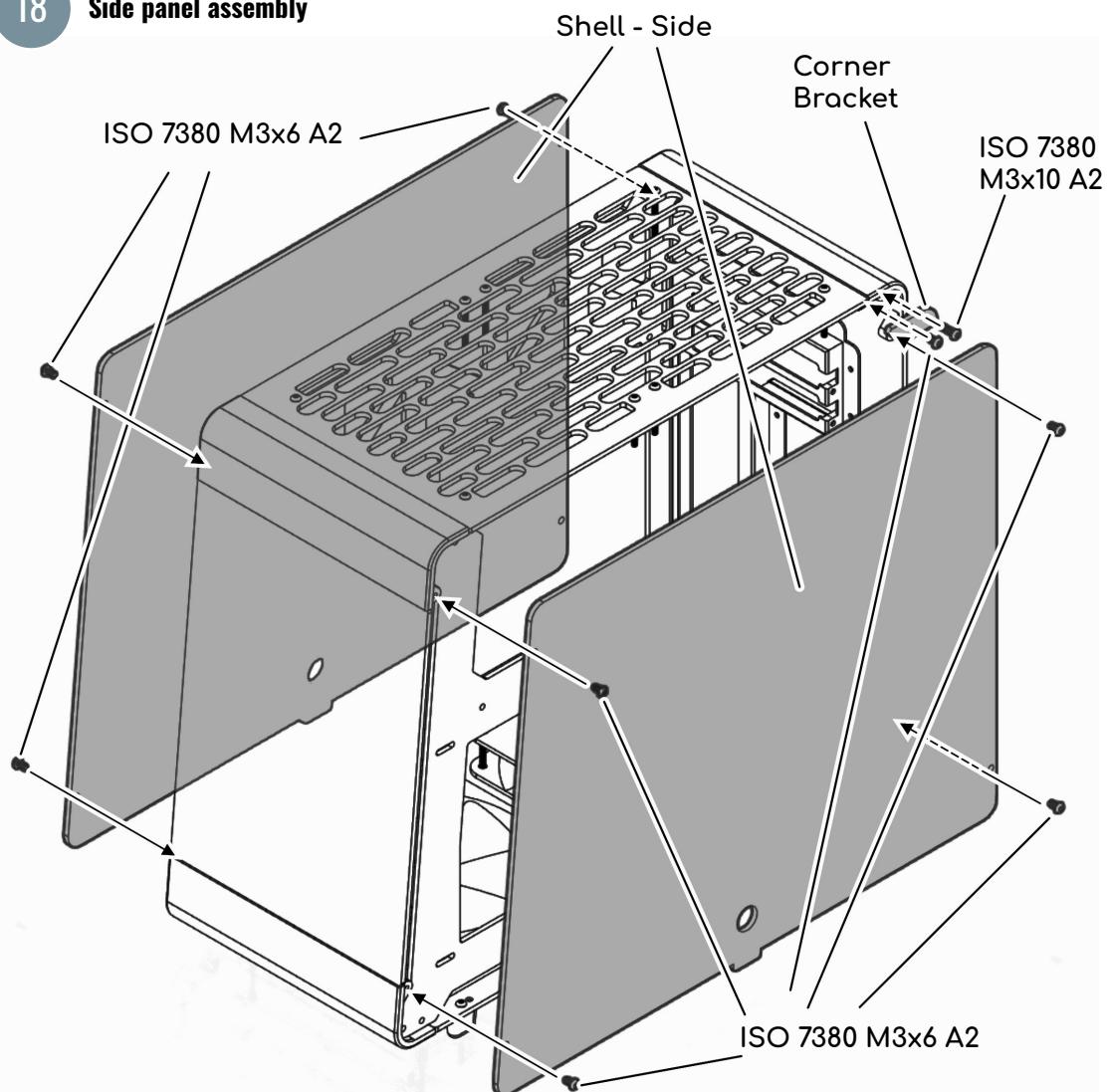
**Shell - Front****Shell - Back corner****Shell - Front bottom****ISO 7380 M3x6 A2 x 2****ISO 7380 M3x10 A2 x 3**

16

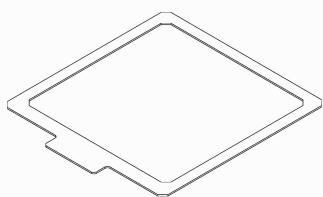
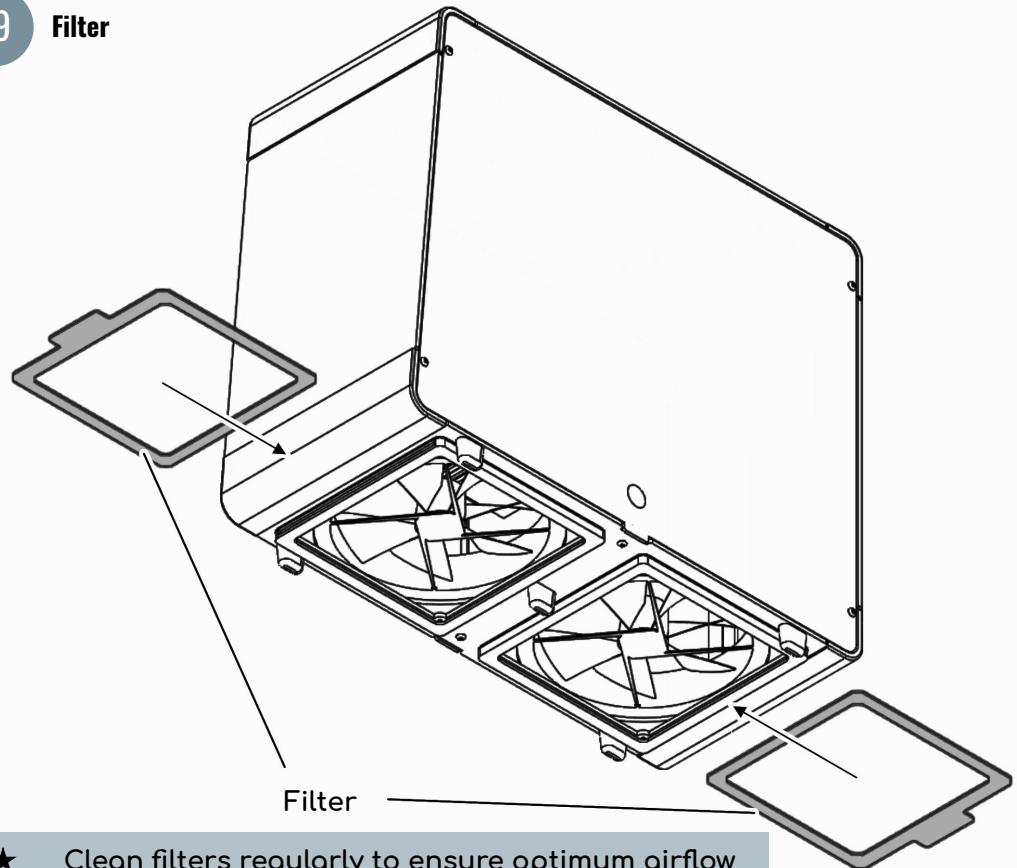
**Outer shell final assembly**

**Switch and USB port assembly****12mm Switch Assembly****USB-C Assembly****ISO 7380 M3x6 A2 x 2**

- ★ Install switch and USB port on either side of the frame to your preference. The mounting points are symmetrical.
- ★ You should also at this point also complete installation of all watercooling loops and tubing.

**Side panel assembly****Shell - Side x 2****Corner Bracket****ISO 7380 M3x6 A2 x 9****ISO 7380 M3x10 A2 x 1**

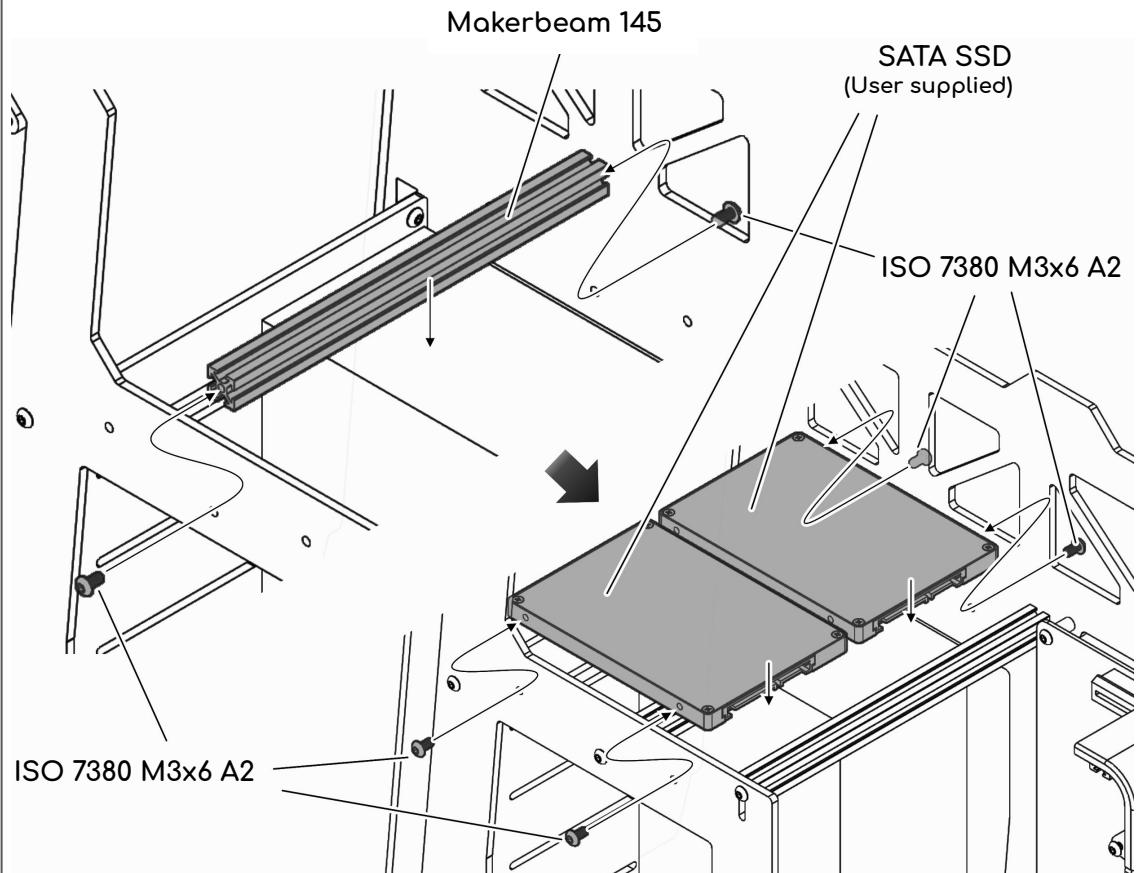
19

**Filter****Filter x 2**

★ Clean filters regularly to ensure optimum airflow

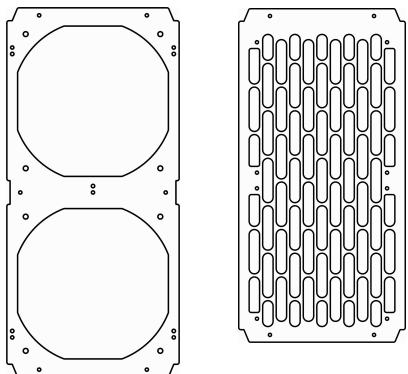
**OPTIONAL****Makerbeam 145 x 1****ISO 7380 M3x6 A2 x 6**

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**Optional: SATA SSD mount**

# Parts List

## SHELL



Bottom

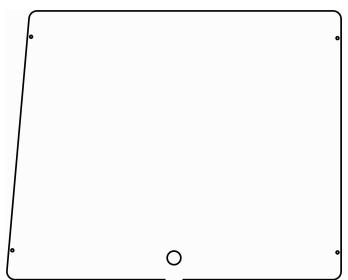
Top

Front

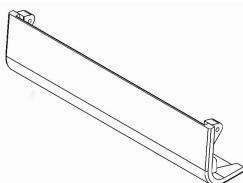
Back

3mm sheet/plate

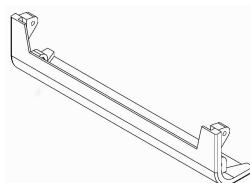
These can be made from a variety of materials. E.g. Stainless steel, aluminium, acrylic, pizza boxes...



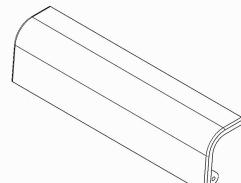
Side x 2



Front bottom

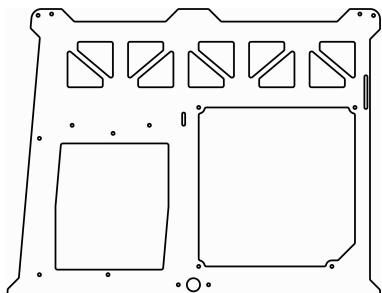


Back corner x 2

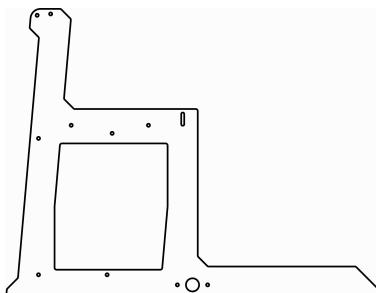


Front top

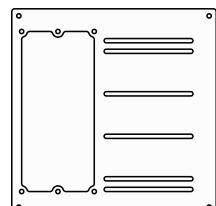
## FRAME



Back



Front



PSU

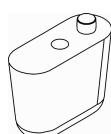
3mm sheet/plate

These load bearing parts should be metal

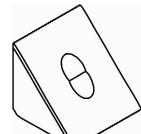
## COMPONENTS



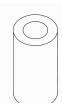
Makerbeam 145 x 2



Feet x 5



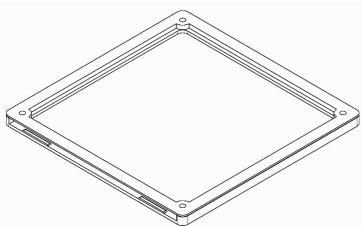
Angle Bracket x 14



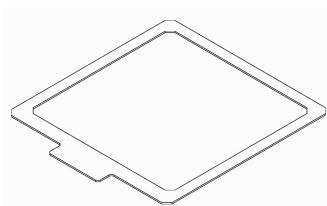
10mm Standoff x 4

# Parts List

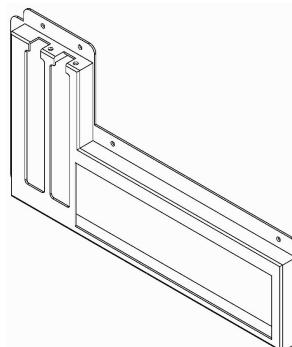
## COMPONENTS



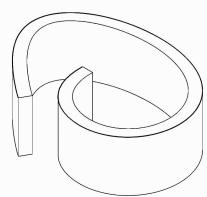
Filer Frame x 2



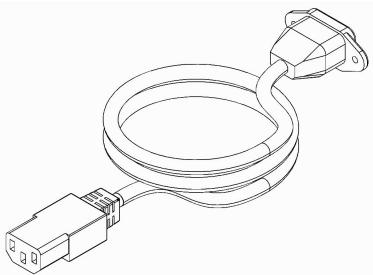
Filer x 2



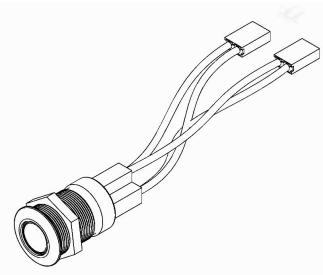
IO Panel



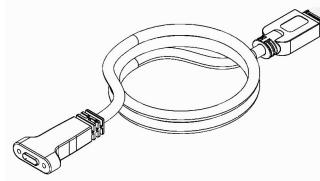
EVA Foam Tape



IEC320 C14 to C13  
Extension Cord



12mm Switch  
Assembly



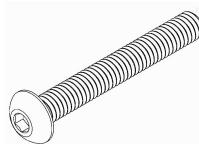
USB-C Assembly



ISO 7380  
M3x6 A2 x 46



DIN 7991  
M3x6 A2 x 7



ISO 7380  
M4x30 A2 x 8



ISO 7380  
M3x10 A2 x 7



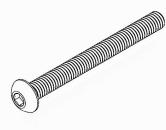
UNC #6-32x1/4"  
x 12



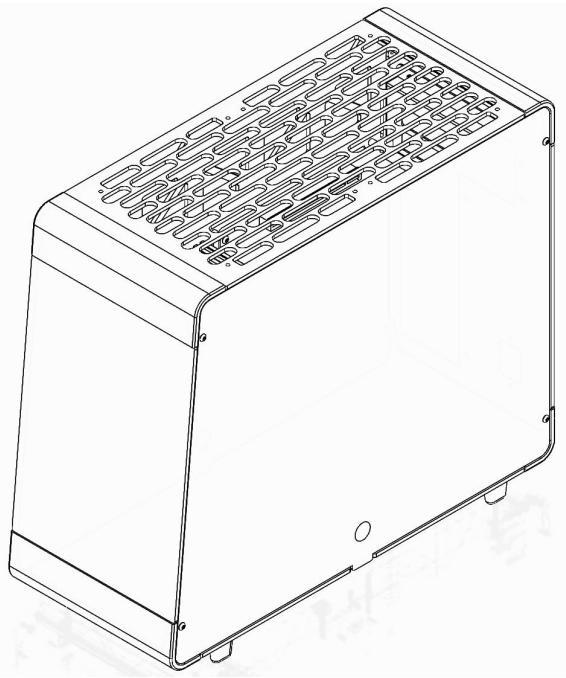
DIN 7991  
M3x10 x 2



934 M3 x 2



ISO 7380  
M3x30 A2 x 8



Date

## Motherboard

GPU

CPU

## Memory

SSD

PSU

## Cooling

## Notes



