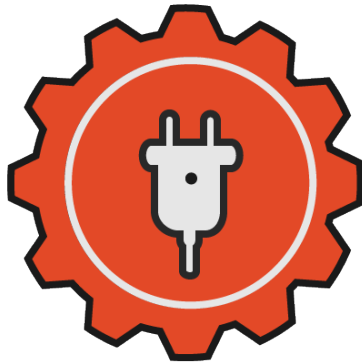


HackDock



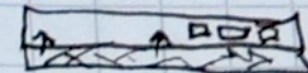
Cable clutter,
Multiple plugs



1. Simplicity
2. Hack-ishness
3. Flexibility
4. Low Price

Design Process:
Target UX

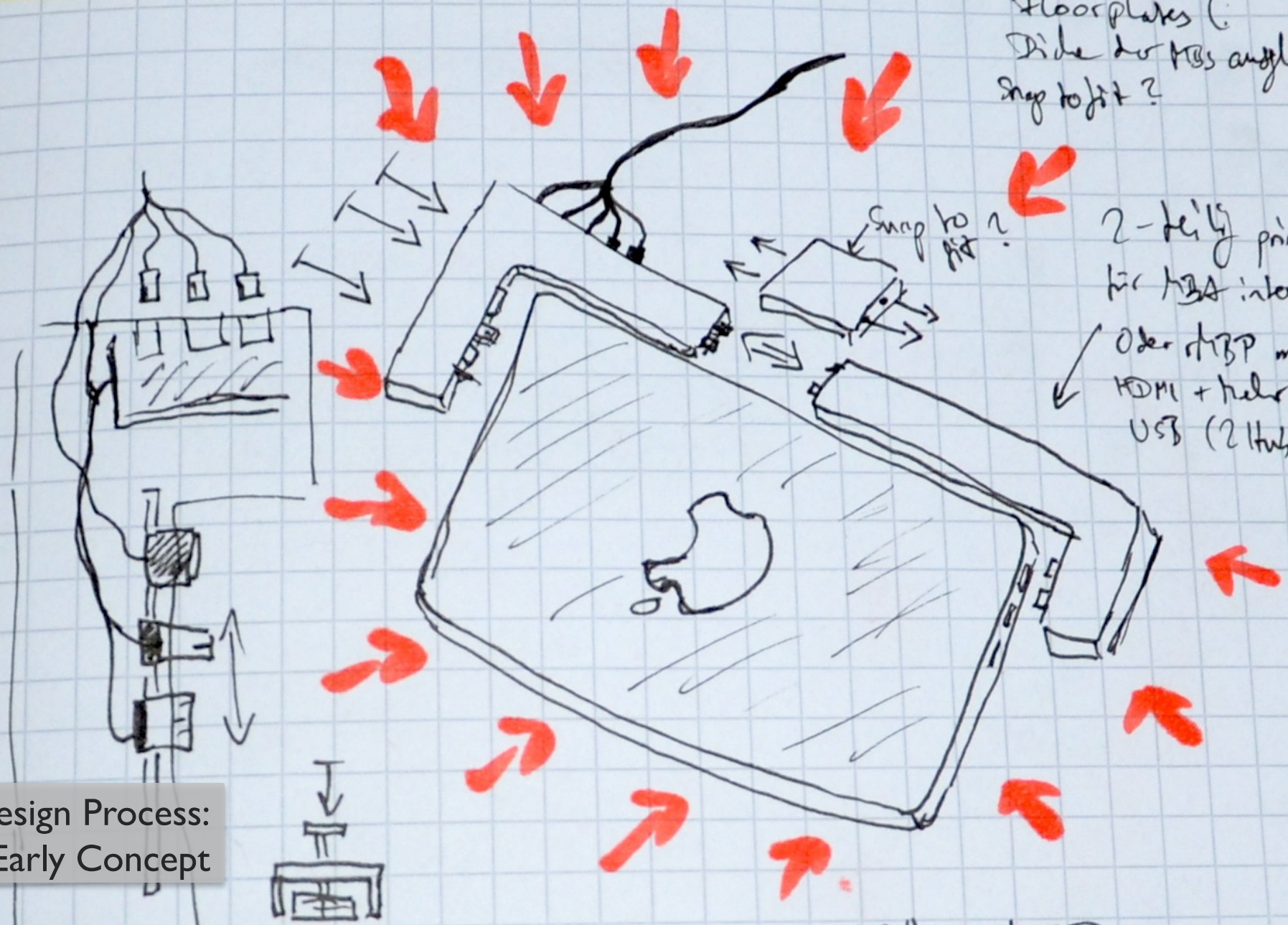
MAC Dock



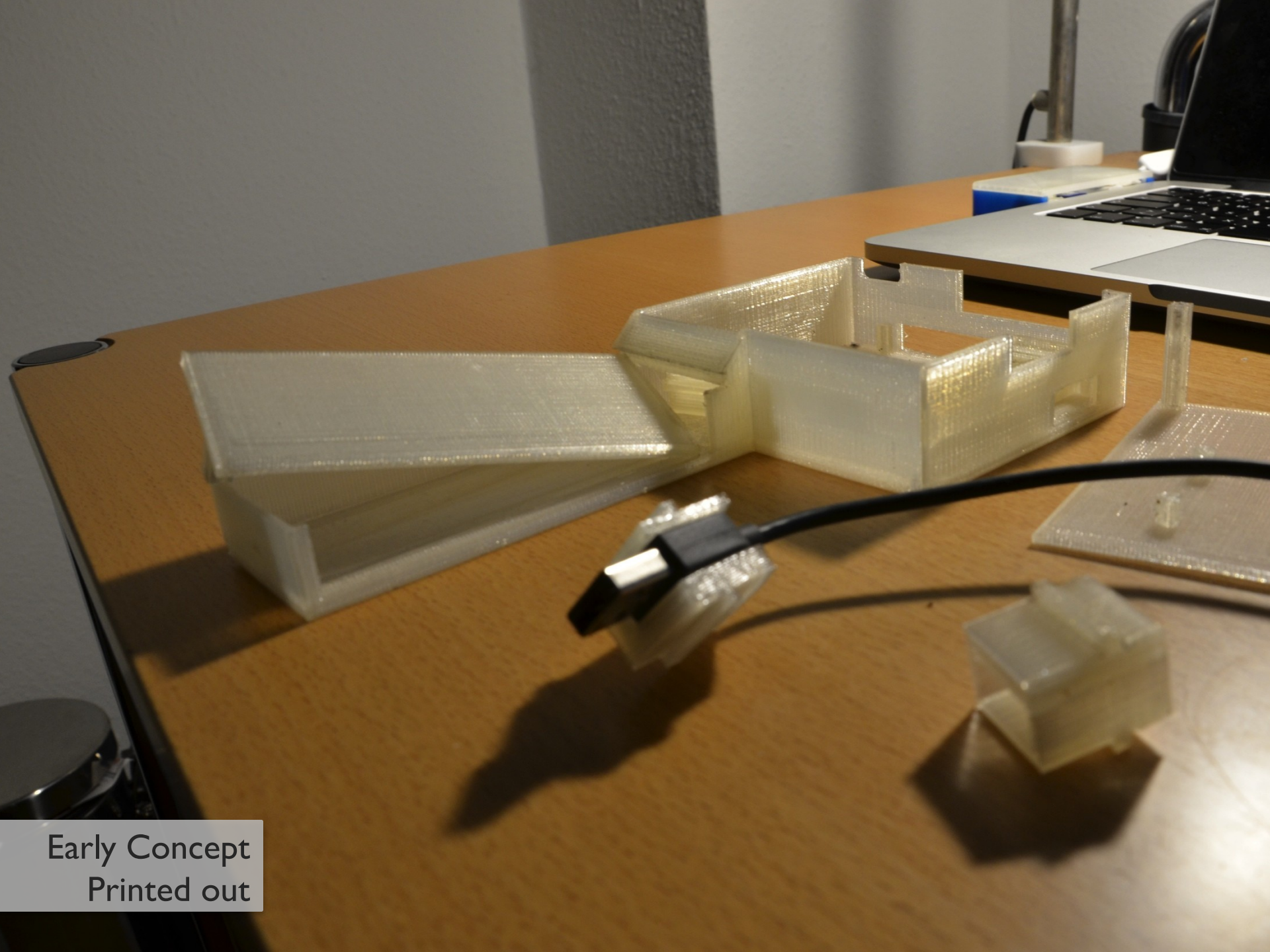
Floorplates (
Dicke der PCBs angibt)
Snap to fit?

Snap to fit?

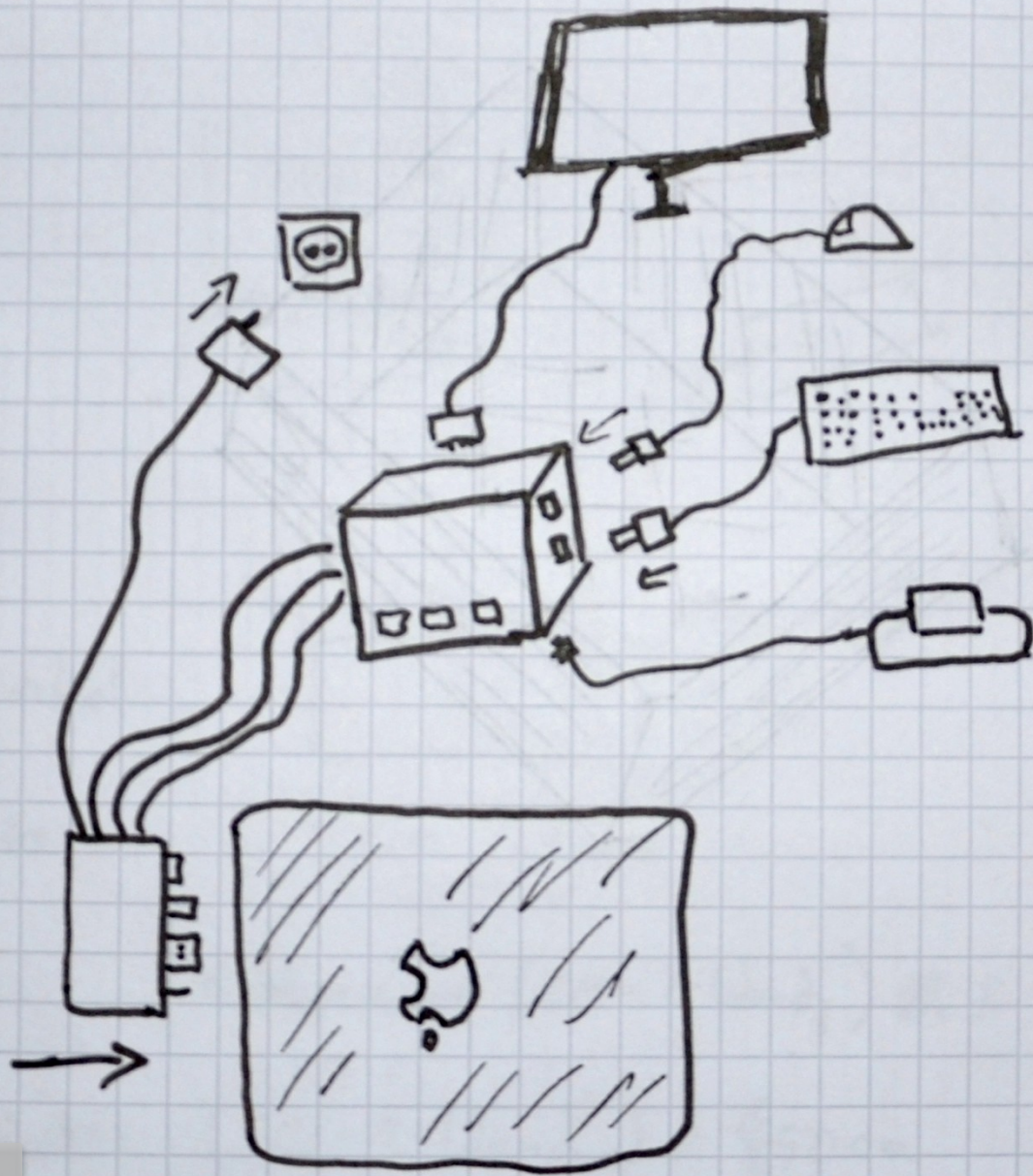
2-teilig primär
für HBA-Interf.
Oder dHBP mit
HDMI + mehr
USB (2 Hubs)



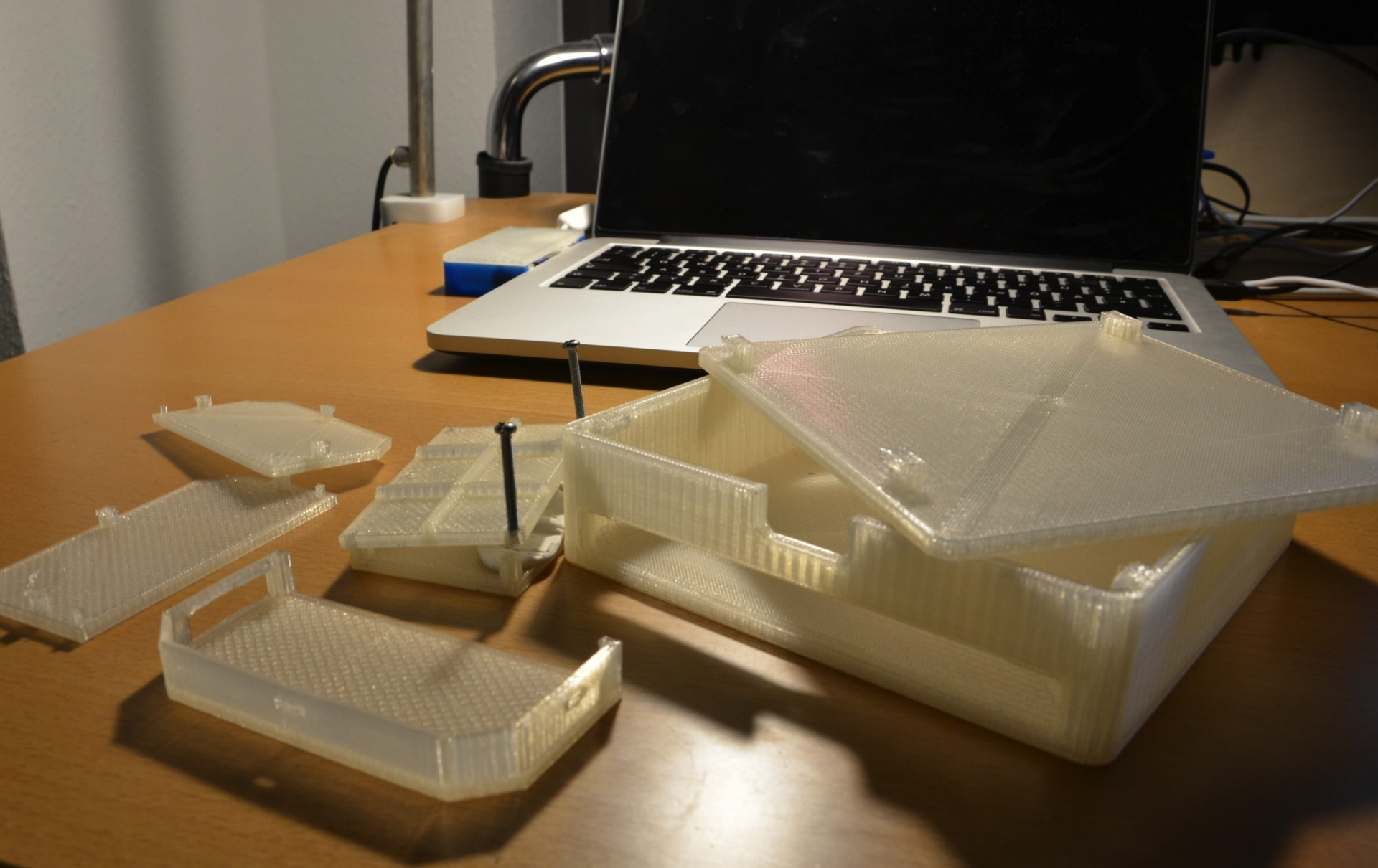
Design Process:
Early Concept




Early Concept
Printed out



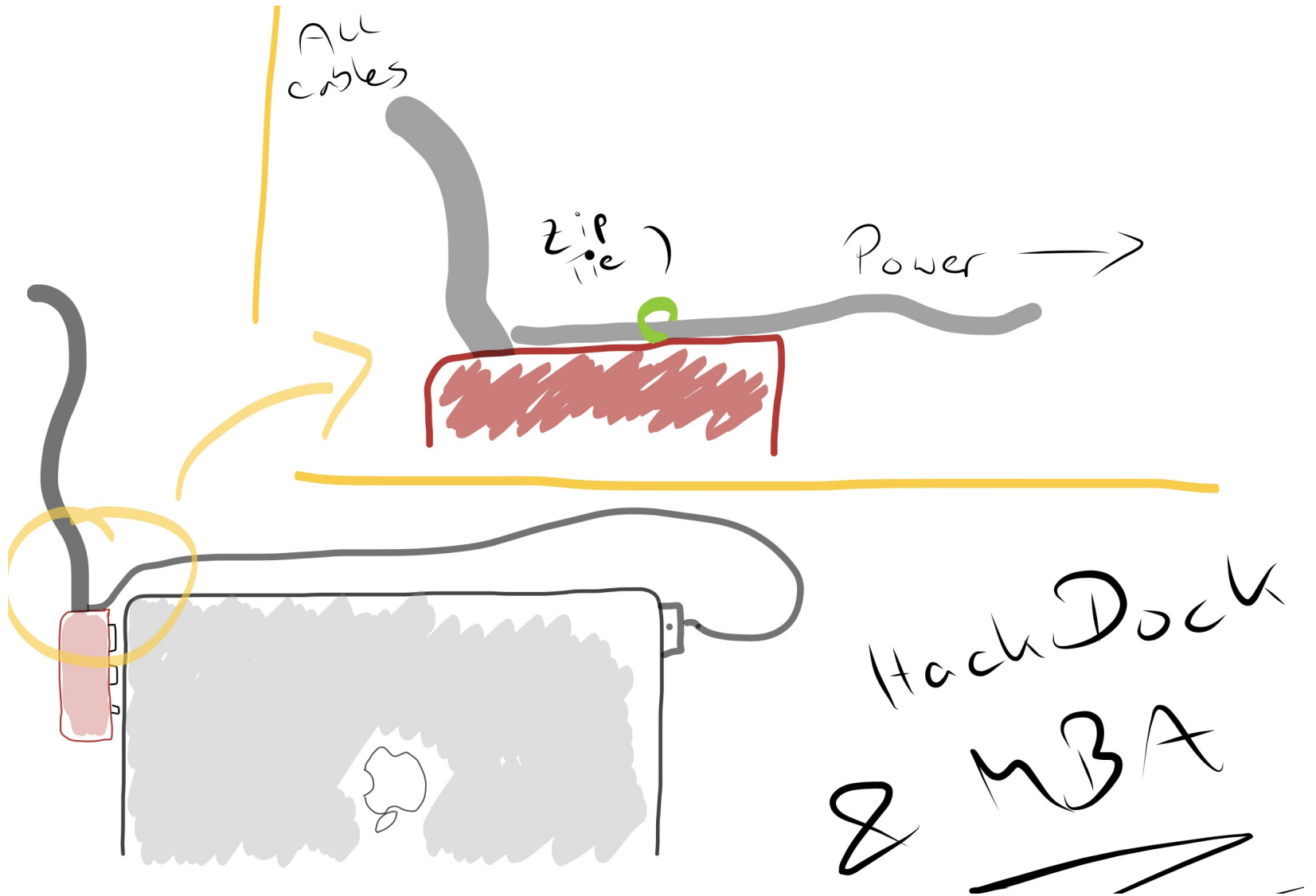
Back to the
drawing board



Hardware Sketching /
Prototyping

A photograph showing a close-up of a silver laptop keyboard on a wooden desk. To the left of the keyboard is a small white plastic box containing a tangle of black and blue wires, secured with white foam packing peanuts. The laptop screen is partially visible at the top. The text 'Hardware Sketching / Prototyping' is overlaid in the bottom left corner.

Hardware Sketching /
Prototyping



Works with
different Notebooks



The HackDock:
Base Unit



The HackDock: Base Unit



The HackDock:
Connector



The HackDock:
Connector

Customizer by MakerBot

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Customizable Sign



by MakerBot

Parameters

Sign Size

Makerbot Replicator 2

Manual Length sets the length of the sign if the Sign Size is set to "manual" 100

Manual Width sets the width of the sign if the Sign Size is set to "manual" 100

Message One

The HackDock

Font One Size 60

Message Two

is customizable



<http://www.thingiverse.com/app>

Copy

[View Source](#)

[Create Thing](#)

i.e. completely
Customizable!


```
nd add 1-2mm to leave space for the Sugru.  
height = 15;
```

```
/* [Hidden] */
```

```
//Wall thickness  
wall = 2;
```

```
// This is the measurement for sliding elements  
slide = wall+0.15;
```

```
// Basic shape of the connector, up until now solid  
module basicshape() {
```

```
    translate ( [width/2,length/2,height/2] )  
    roundedBox([width, length, height], 5, true);
```

```
    translate ( [5,0,0] )  
    cube ( [width-5, length, height] );  
}
```

```
//Smaller (by the Wall thickness) but otherwise same shape: The inner cavity of the connector  
module innercavity() {
```

```
    translate ( [ (width/2)+wall, (length/2), (height/2)+wall] )  
    roundedBox([width, length-2*wall, height], 5, true);
```

```
    translate ( [5,wall,wall] )  
    cube ([width, length-2*wall, height]);  
}
```

```
//Opening for cables  
module cableopening() {
```

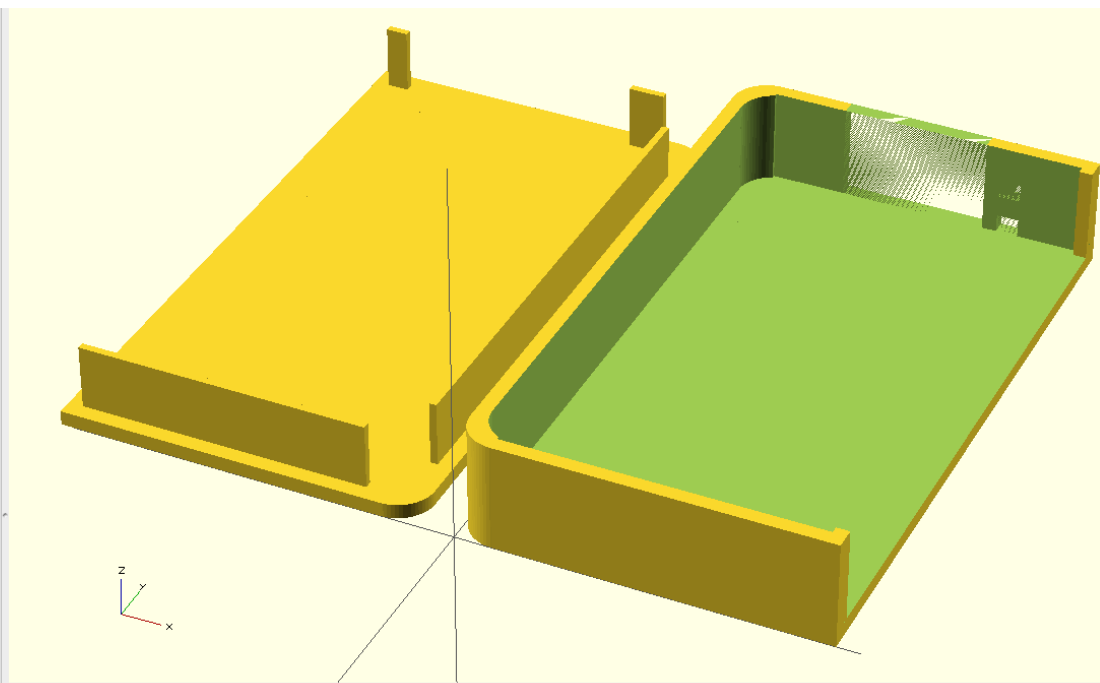
```
    translate ( [ (width-20)/2, length-wall, wall] )  
    cube ( [20, wall+1, height-wall] );  
}
```

```
//Openings for ziptie
```

```
module ziptieopenings() {
```

```
    translate ( [ width/2+12, length-wall, wall] )  
    cube ( [3, 4, 2.5] );
```

```
    translate ( [ width/2+12, length-wall, wall+5.5] )  
    cube ( [3, 4, 2.5] );
```



```
Module cache size: 0 modules  
Compiling design (CSG Tree generation)...  
Compiling design (CSG Products generation)...  
PolySets in cache: 18  
PolySet cache size in bytes: 42256  
CGAL Polyhedrons in cache: 0  
CGAL cache size in bytes: 0  
Compiling design (CSG Products normalization)...  
Normalized CSG tree has 63 elements  
CSG generation finished.  
Total rendering time: 0 hours, 0 minutes, 0 seconds
```

Completely
parametrized

Oliver Stickel

[About](#) [The HackDock](#) [Archive](#)

The HackDock



HackDock

If you are like me and use your notebook as your main computer¹, you may be as annoyed as I was with having cables lying all over your desk as well as with having to plug in or unplug all those cables every time you want to take your notebook with you. I know I was, which is why I decided to build the HackDock. It is a cheap, flexible, simple, yet still a bit hacky, 3d-printable docking solution for modern notebooks with a focus on MacBooks and Ultrabooks².



Accompanying
Blog



Genius	✓ Things To Do In Denver When You're Dead	Warren Zevon	Genius
PLAYLISTS	✓ Searching For A Heart	Warren Zevon	Genius
✓ Make Listening Great	✓ Raspberry Beret	Warren Zevon	Genius
✓ Make Top 25	✓ Supernatural Reaction	Warren Zevon	Genius
✓ Zuleika Hingst	✓ Boom Boom Boom	Warren Zevon	Genius
✓ Zuleika Hingst	✓ Recoverer Me	Warren Zevon	Genius
✓ Zuleika Hingst	✓ Detox Maroon	Warren Zevon	Genius
✓ 1	✓ Looking For The Next Best Thing	Warren Zevon	Genius
✓ Audiodrop Builder	✓ A Certain Girl	Warren Zevon	Genius
✓ Weckergabelliste	✓ Interlude No. 1 Play It All Night Long	Warren Zevon	Genius
✓ Weckergabelliste 2	✓ Lawyers, Guns And Money	Warren Zevon	Genius
	✓ Excitable Boy	Warren Zevon	Genius
	✓ Rolling The Headless Thompson Gunner	Warren Zevon	Genius
	✓ Weewolves Of London	Warren Zevon	Genius
	✓ Hasten Down The Wind	Warren Zevon	Genius
	✓ Carmina	Warren Zevon	Genius
	✓ The French Inhaler	Warren Zevon	Genius
	✓ Poor Poor Pitiful Me	Warren Zevon	Genius
	✓ Power Notes (Strings Version)	Warren Zevon	Excitable Boy (Phonorecord)
	✓ Tunes Blues (Solo Piano Version)	Warren Zevon	Excitable Boy (Phonorecord)
	✓ Weewolves Of London (Alternate Version)	Warren Zevon	Excitable Boy (Phonorecord)
	✓ I Need A Truck (Outtake)	Warren Zevon	Excitable Boy (Phonorecord)
	✓ Lawyers, Guns And Money	Warren Zevon	Excitable Boy (Phonorecord)
	✓ Tenderness On The Block	Warren Zevon	Excitable Boy (Phonorecord)
	✓ World	Warren Zevon	Excitable Boy (Phonorecord)
	✓ Nighttime In The Switching Yard	Warren Zevon	Excitable Boy (Phonorecord)
	✓ Accidentally Like A Martyr	Warren Zevon	Excitable Boy (Phonorecord)
	✓ Weewolves Of London	Warren Zevon	Excitable Boy (Phonorecord)
	✓ Excitable Boy	Warren Zevon	Excitable Boy (Phonorecord)

Mission
accomplished