Cost Calculation

SetCurrencyUnits $(BaseCurrency)$

$1\ \text{EUR} = 1.0000\ \text{EUR}$

Constant

Filament cost per kg

$C_{fil} := 29.99\ \dfrac{\text{EUR}}{\text{kg}}$

Printer power rating

$P := 80\ \dfrac{\text{W}}{\text{hr}}$

Electricity Price

$C_{el} := 0.23545\ \dfrac{\text{EUR}}{\text{kW}}$

Formula

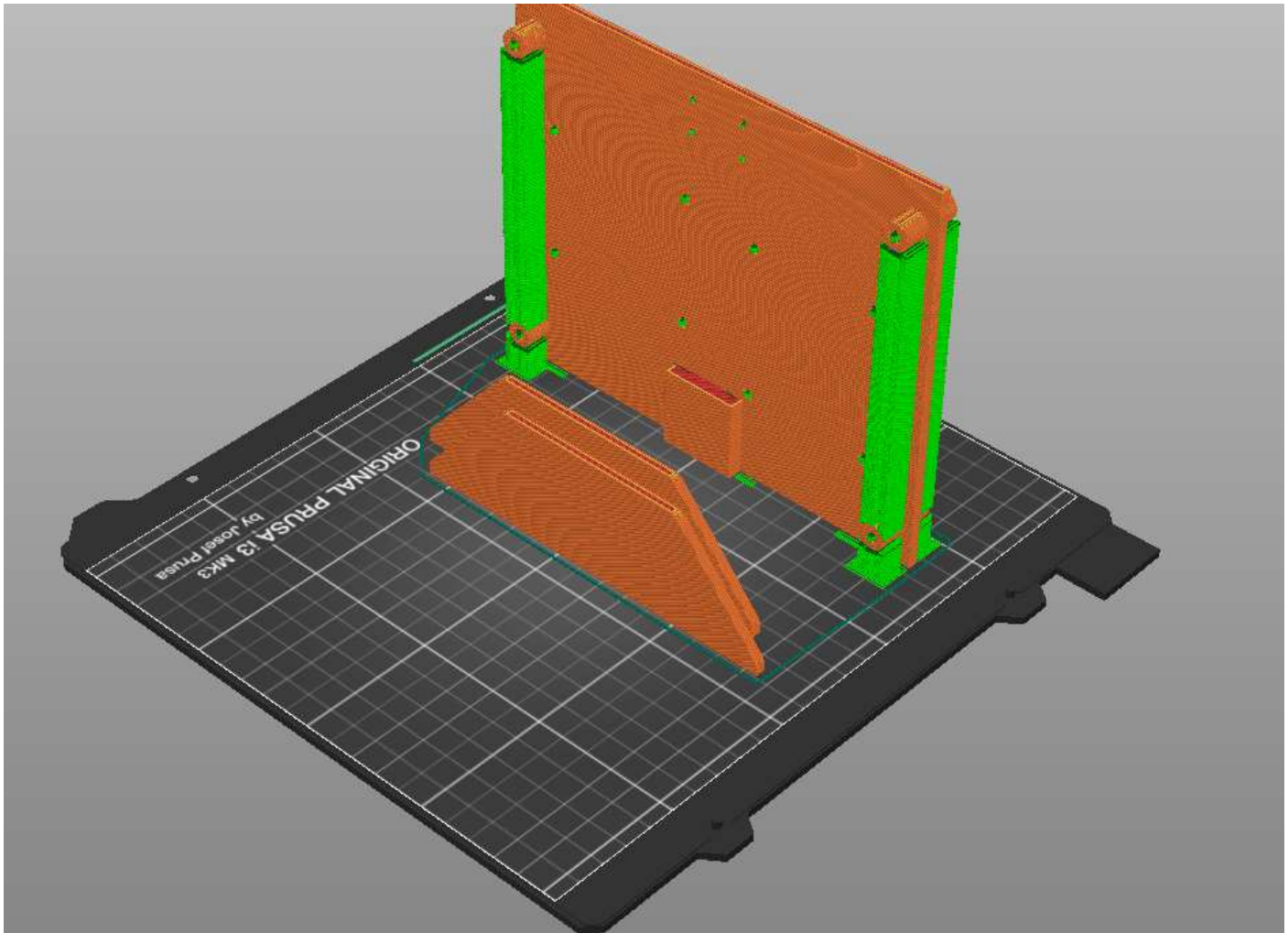Material Cost

$C_m := m_{fil} \cdot C_{fil}$

Electric Cost

$C_e := t_p \cdot C_{el} \cdot P$

Printing Cost

$C_{print} := C_m + C_e$

Variant 2

Base

$$m_{fil} := 175.07 \text{ g}$$

$$t_p := 6 \text{ hr} + 8 \text{ min}$$
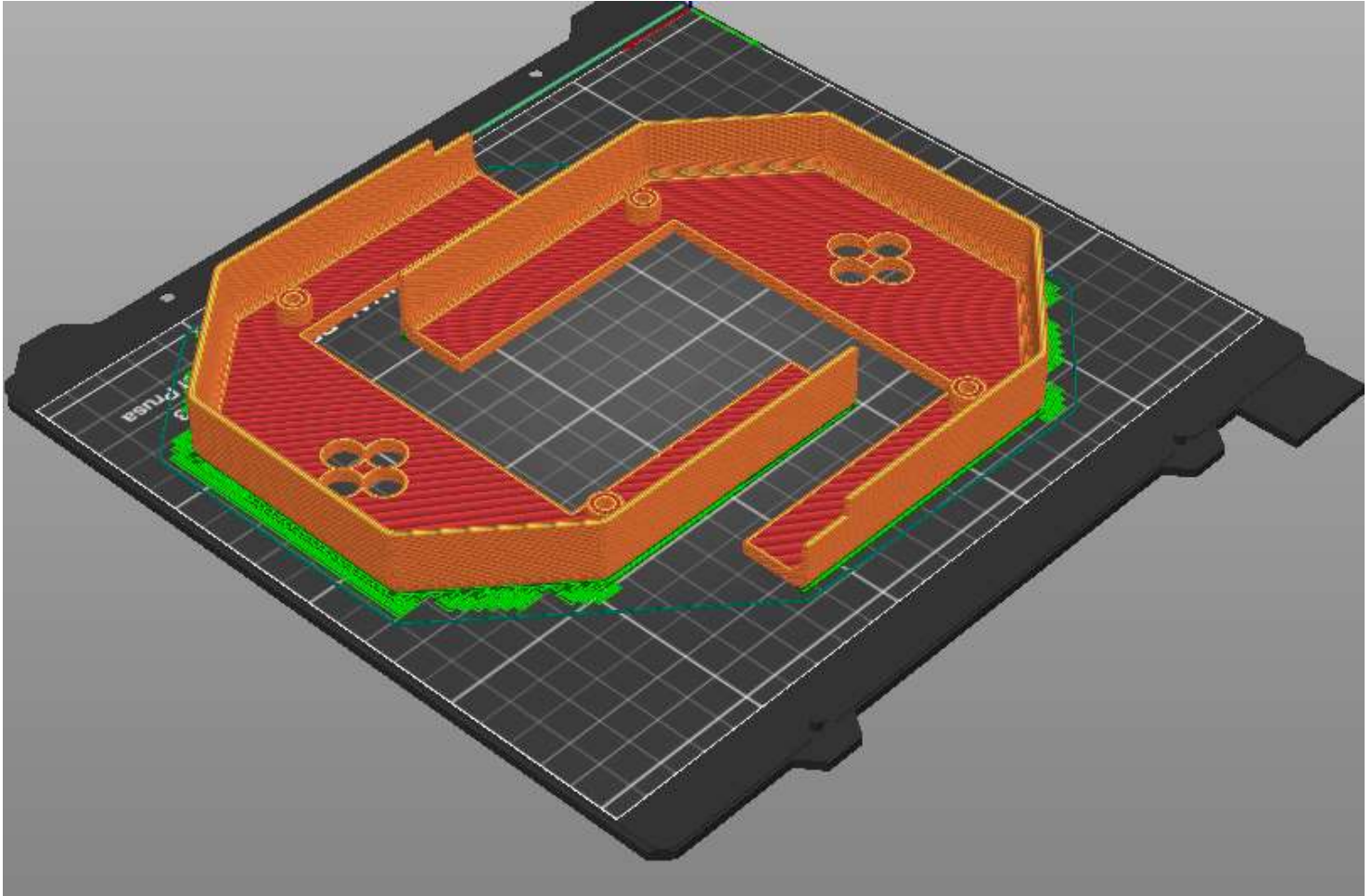
$$C_m = 5.2503 \text{ EUR}$$

$$C_e = 0.1155 \text{ EUR}$$

$$C_{print} = 5.3659 \text{ EUR}$$

Sliced Info

Used Filament (g)	175.07
Used Filament (m)	58.70
Used Filament (mm³)	141185.08
Cost	4.45

Estimated printing time:
- normal mode   6h8m
- stealth mode   6h17m

Top Cover

Sliced Info

Used Filament (g)	105.85
Used Filament (m)	35.49
Used Filament (mm³)	85360.45
Cost	2.69
Estimated printing time:	
- normal mode	3h19m
- stealth mode	3h22m

$m_{fil} := 105.85 \ \text{g}$

$t_p := 3 \ \text{hr} + 19 \ \text{min}$

$C_m = 3.1744 \ \text{EUR}$

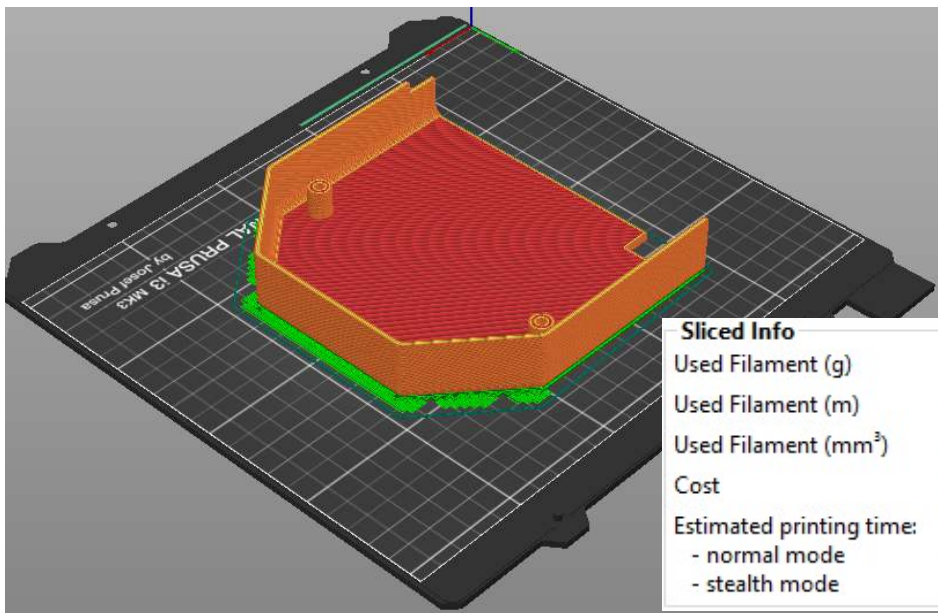$C_e = 0.0625 \ \text{EUR}$

$C_{print} = 3.2369 \ \text{EUR}$

Back Cover
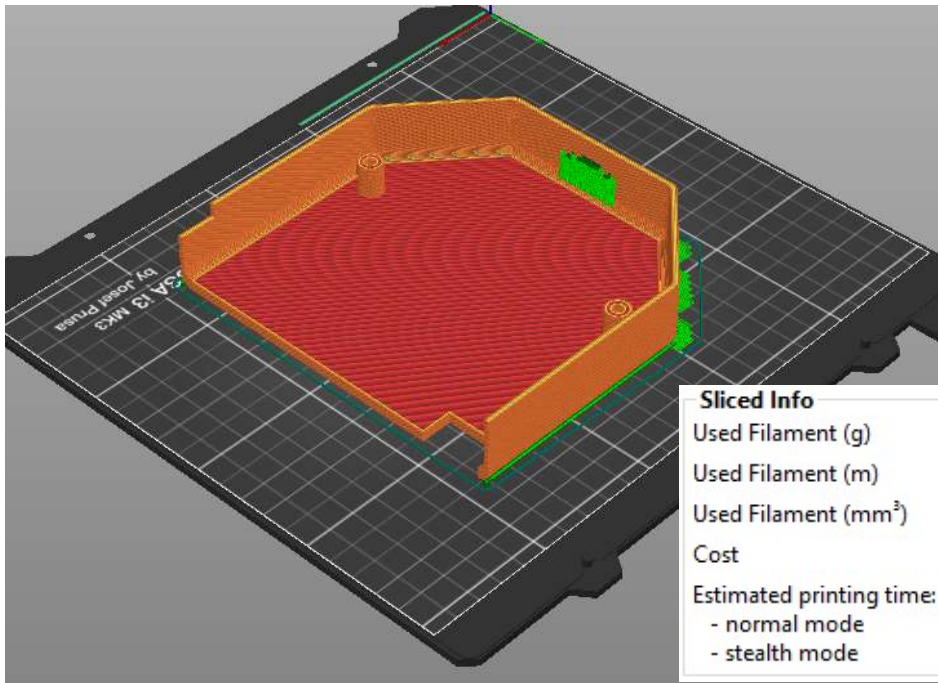
Sliced Info

Used Filament (g)	86.73
Used Filament (m)	29.08
Used Filament (mm³)	69943.39
Cost	2.20
Estimated printing time:	
- normal mode	2h34m
- stealth mode	2h36m

Sliced Info

Used Filament (g)	86.60
Used Filament (m)	29.04
Used Filament (mm³)	69841.82
Cost	2.20
Estimated printing time:	
- normal mode	2h32m
- stealth mode	2h33m

$m_{fil} := (86.73 + 86.6) \ \text{g}$

$t_p := 2 \ \text{hr} + 34 \ \text{min} + 2 \ \text{hr} + 32 \ \text{min}$
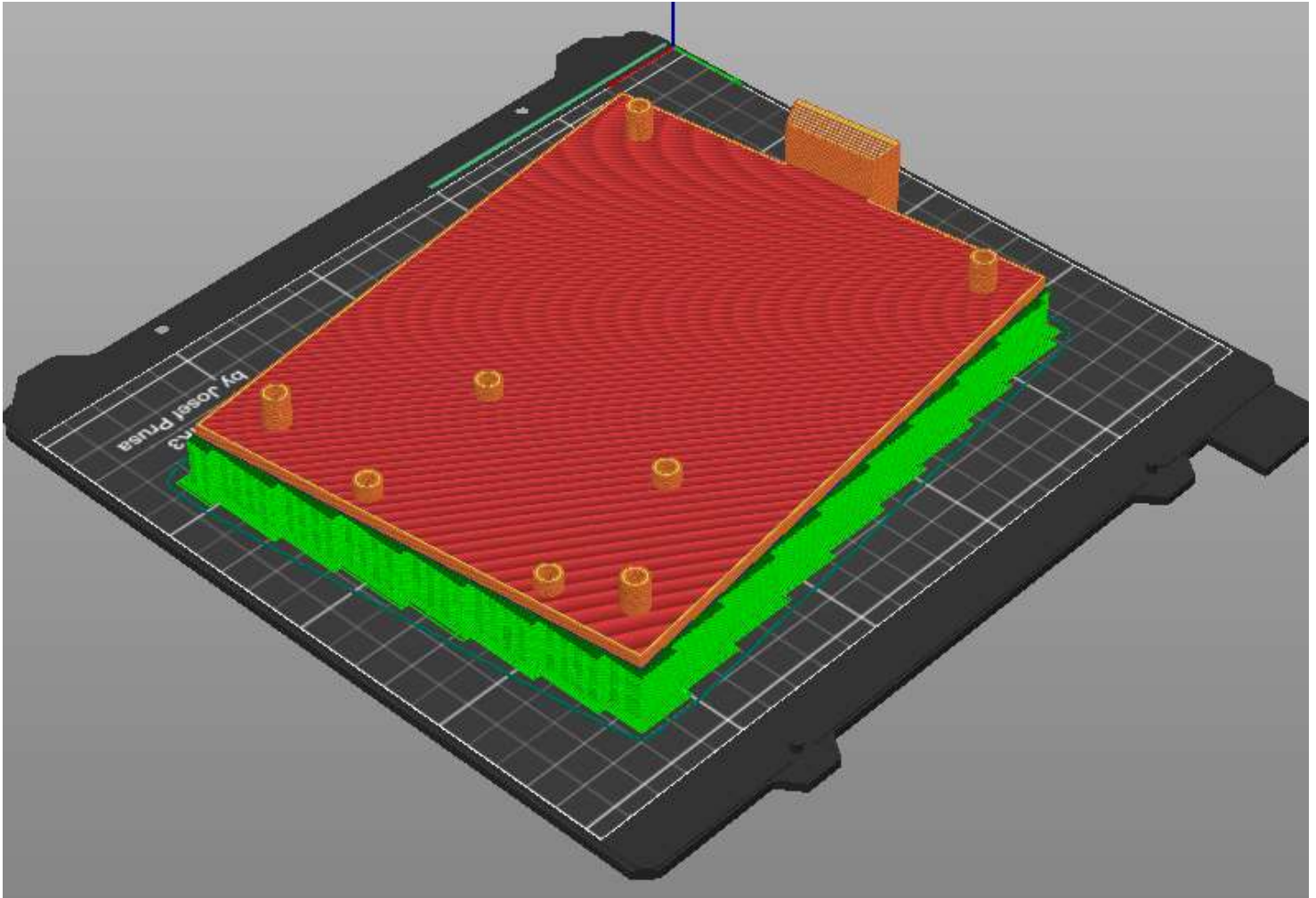
$C_m = 5.1982 \ \text{EUR}$

$C_e = 0.0961 \ \text{EUR}$

$C_{print} = 5.2942 \ \text{EUR}$

Variant 3

Base

$m_{fil} := 222.96 \text{ g}$

$t_p := 6 \text{ hr} + 40 \text{ min}$

Sliced Info

Used Filament (g)	222.96
Used Filament (m)	74.76
Used Filament (mm³)	179809.70
Cost	5.66

Estimated printing time:
- normal mode   6h40m
- stealth mode   6h44m

$C_m = 6.6866 \text{ EUR}$

$C_e = 0.1256 \text{ EUR}$

$C_{print} = 6.8121 \text{ EUR}$

Top Cover
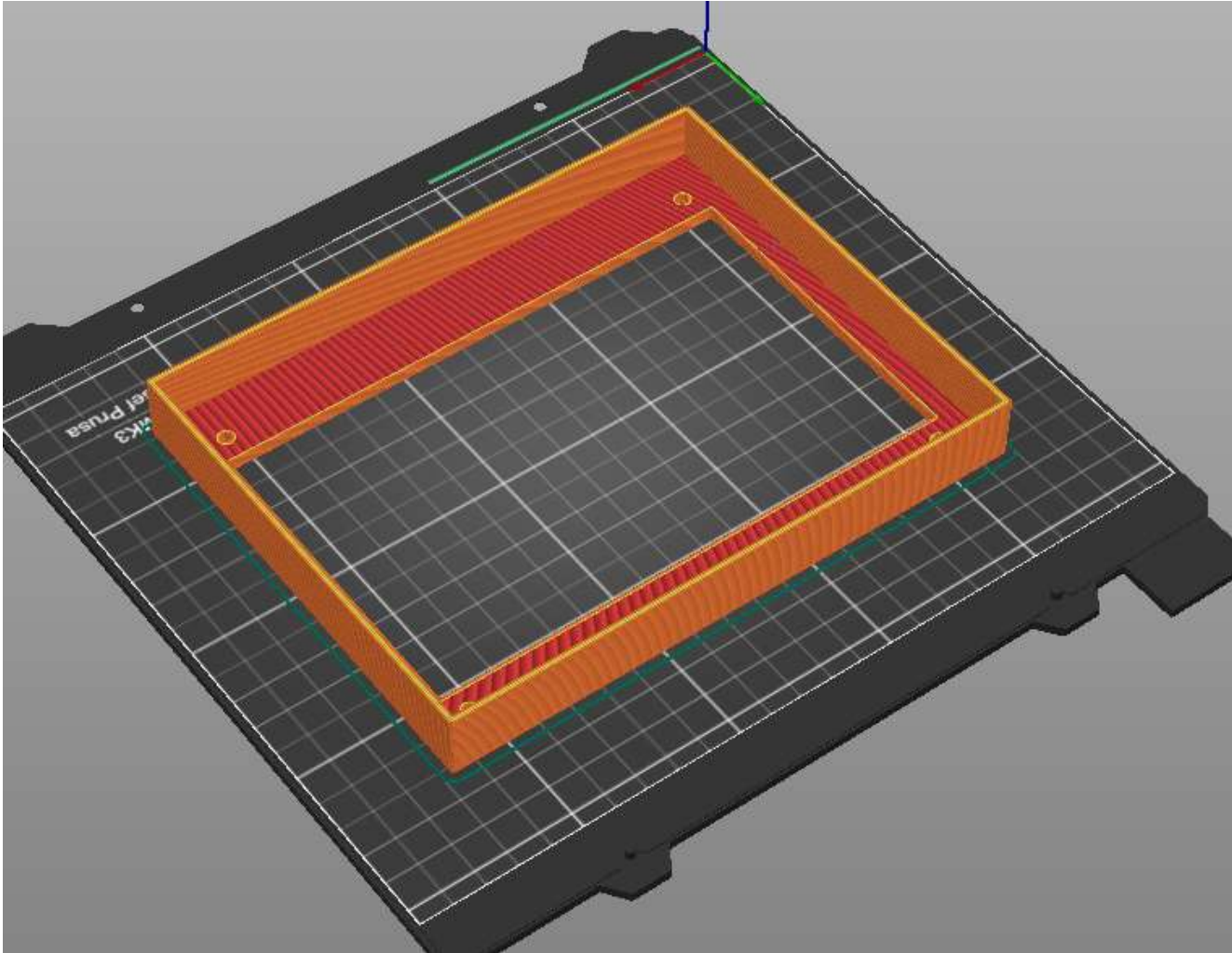
$m_{fil} := 71.02 \text{ g}$

$t_p := 2 \text{ hr} + 5 \text{ min}$

$C_m = 2.1299 \text{ EUR}$

$C_e = 0.0392 \text{ EUR}$

$C_{print} = 2.1691 \text{ EUR}$

Sliced Info

Used Filament (g)	71.02
Used Filament (m)	23.81
Used Filament (mm³)	57270.69
Cost	1.80

Estimated printing time:
- normal mode	2h5m
- stealth mode	2h6m

Back Cover
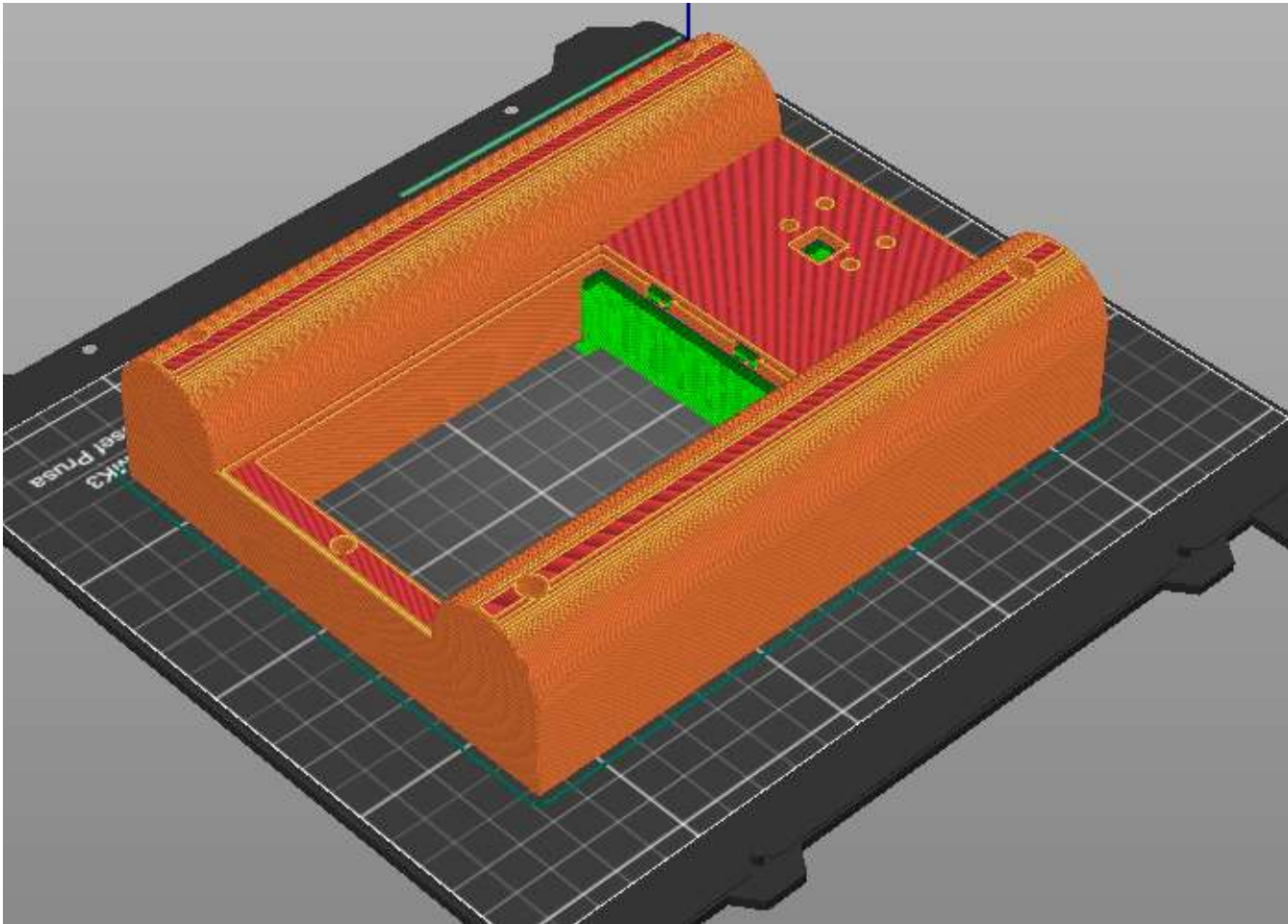
$m_{fil} := 303.02 \ \mathrm{g}$

$t_p := 9 \ \mathrm{hr} + 22 \ \mathrm{min}$

$C_m = 9.0876 \ \mathrm{EUR}$

$C_e = 0.1764 \ \mathrm{EUR}$

$C_{print} = 9.264 \ \mathrm{EUR}$

Sliced Info

Used Filament (g)	303.02
Used Filament (m)	101.60
Used Filament (mm³)	244371.20
Cost	7.70

Estimated printing time:
- normal mode	9h22m
- stealth mode	9h31m

Battery Cover
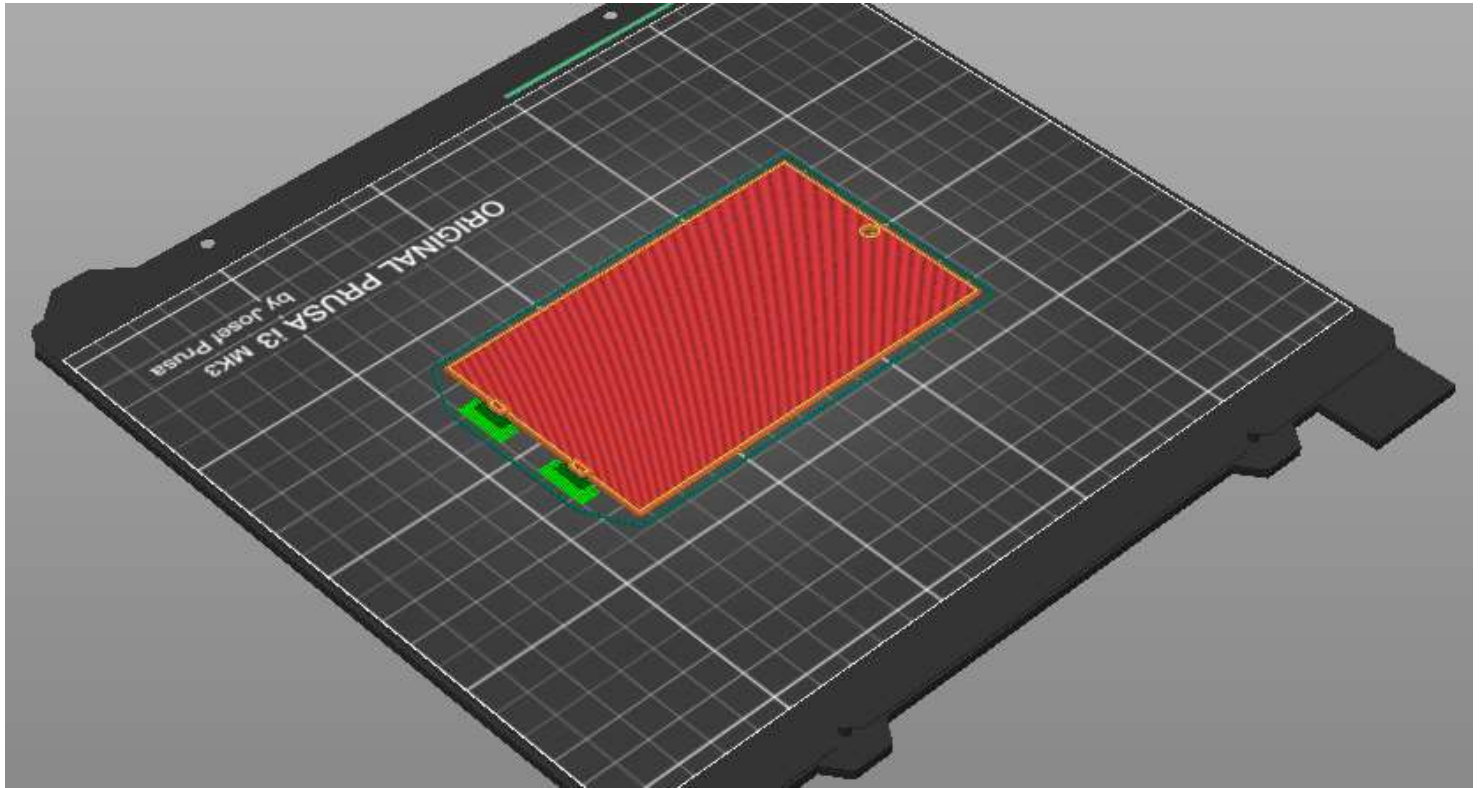
$m_{fil} := 17.43 \text{ g}$

$t_p := 0 \text{ hr} + 32 \text{ min}$

$C_m = 0.5227 \text{ EUR}$
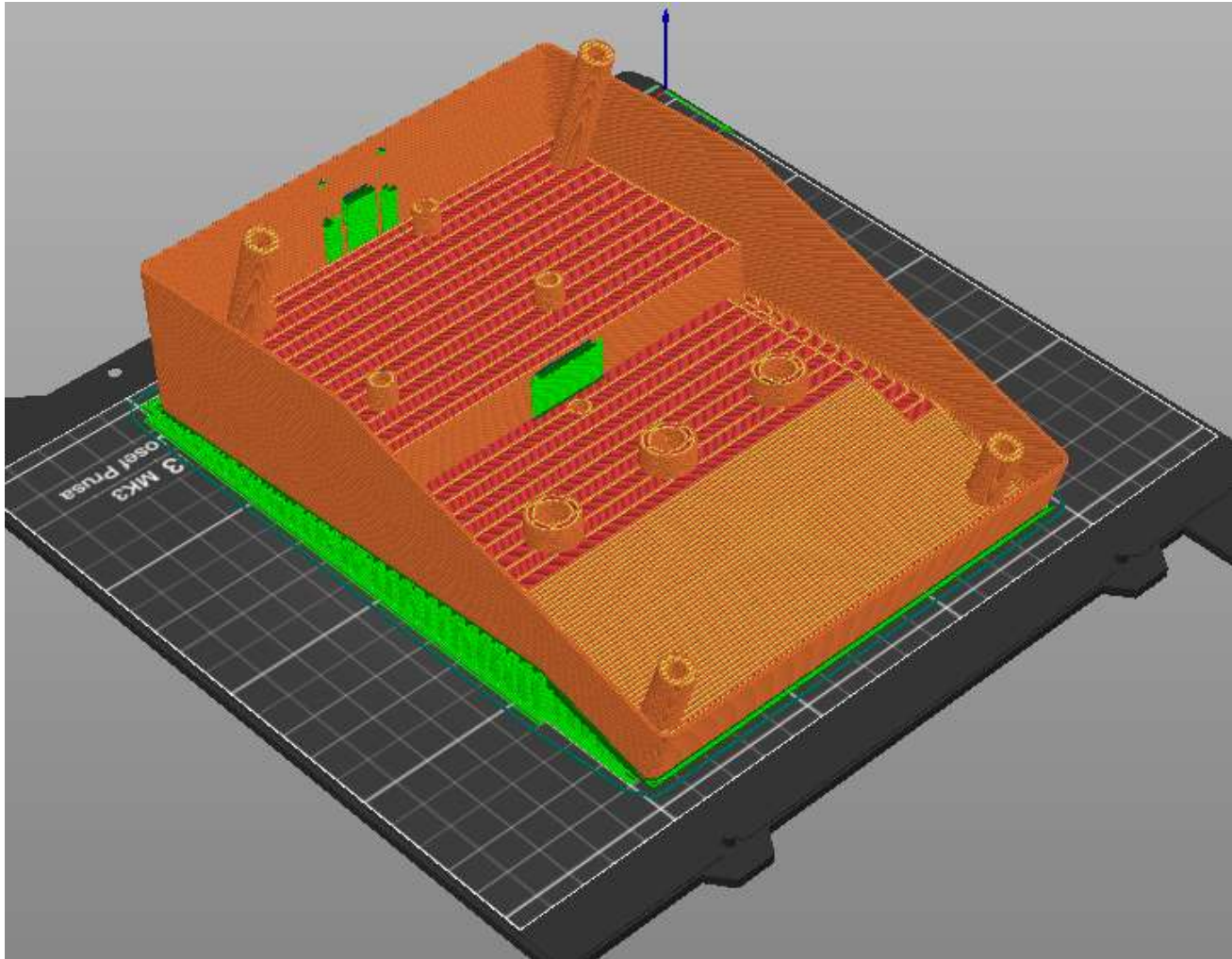
$C_e = 0.01 \text{ EUR}$

$C_{print} = 0.5328 \text{ EUR}$

Sliced Info

Used Filament (g)	17.43
Used Filament (m)	5.84
Used Filament (mm³)	14056.38
Cost	0.44
Estimated printing time:	
- normal mode	32m
- stealth mode	32m

Variant 6

Main Body

$m_{fil} := 240.3 \ \text{g}$

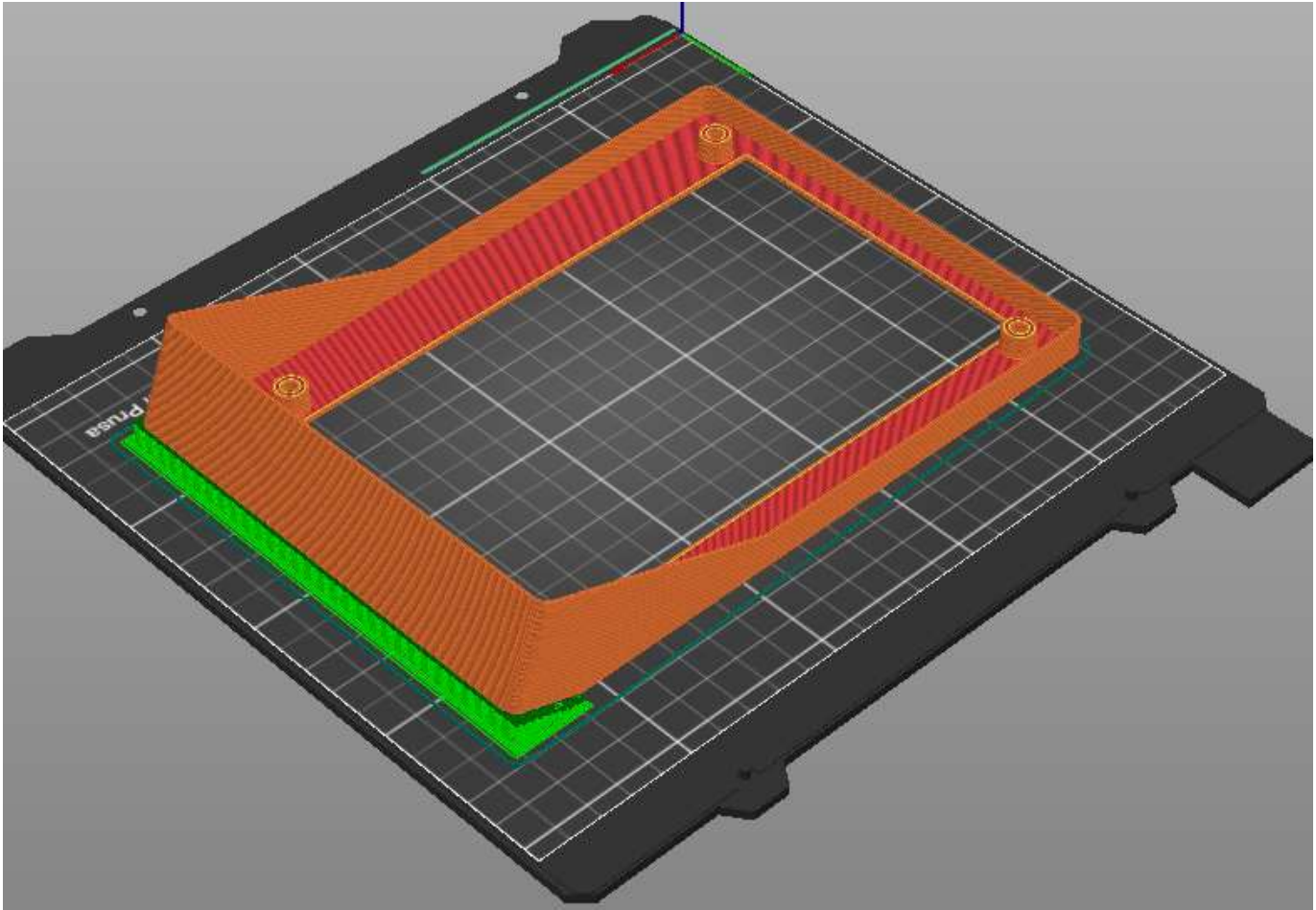$t_p := 8 \ \text{hr} + 53 \ \text{min}$

$C_m = 7.2066 \ \text{EUR}$

$C_e = 0.1673 \ \text{EUR}$

$C_{print} = 7.3739 \ \text{EUR}$

Sliced Info

Used Filament (g)	240.30
Used Filament (m)	80.57
Used Filament (mm³)	193788.10
Cost	6.10

Estimated printing time:
- normal mode	8h53m
- stealth mode	9h3m

Top Cover

$m_{fil} := 55.32 \text{ g}$

$t_p := 1 \text{ hr} + 52 \text{ min}$

$C_m = 1.659 \text{ EUR}$

$C_e = 0.0352 \text{ EUR}$

$C_{print} = 1.6942 \text{ EUR}$

Sliced Info

Used Filament (g)	55.35
Used Filament (m)	18.56
Used Filament (mm³)	44638.88
Cost	1.41

Estimated printing time:

- normal mode	1h52m
- stealth mode	1h54m

Pistol Handle

$m_{fil} := 57.30 \ \text{g}$

$t_p := 1 \ \text{hr} + 44 \ \text{min}$

Sliced Info

Used Filament (g)	57.30
Used Filament (m)	19.21
Used Filament (mm³)	46212.83
Cost	1.46
Estimated printing time:	
- normal mode	1h44m
- stealth mode	1h45m
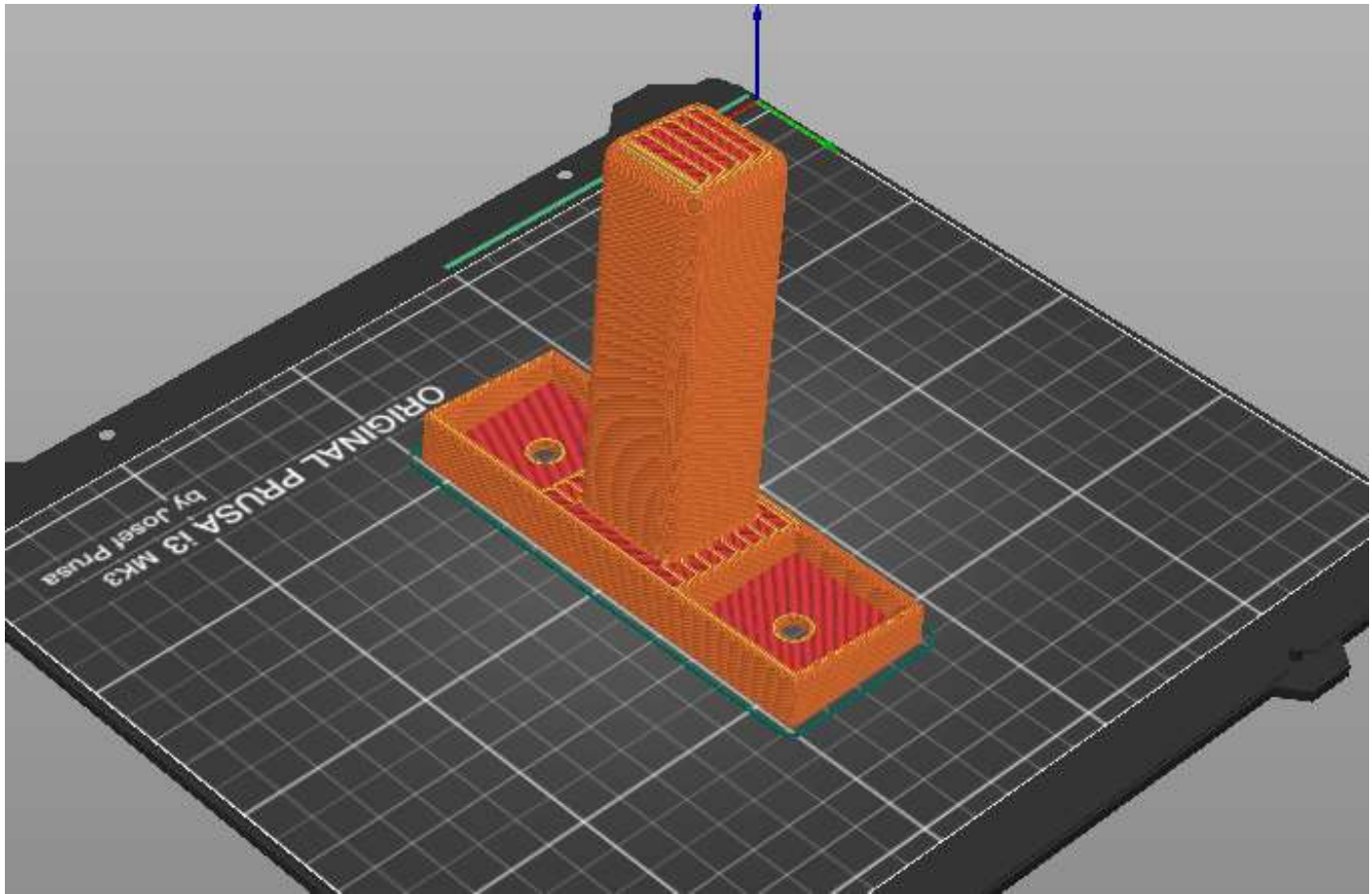
$C_m = 1.7184 \ \text{EUR}$

$C_e = 0.0326 \ \text{EUR}$

$C_{print} = 1.7511 \ \text{EUR}$

Battery Cover

Sliced Info

Used Filament (g)	22.21
Used Filament (m)	7.45
Used Filament (mm³)	17910.60
Cost	0.56

Estimated printing time:
- normal mode	40m
- stealth mode	40m

$m_{fil} := 22.21 \text{ g}$

$t_p := 0 \text{ hr} + 40 \text{ min}$

$C_m = 0.6661 \text{ EUR}$

$C_e = 0.0126 \text{ EUR}$

$C_{print} = 0.6786 \text{ EUR}$
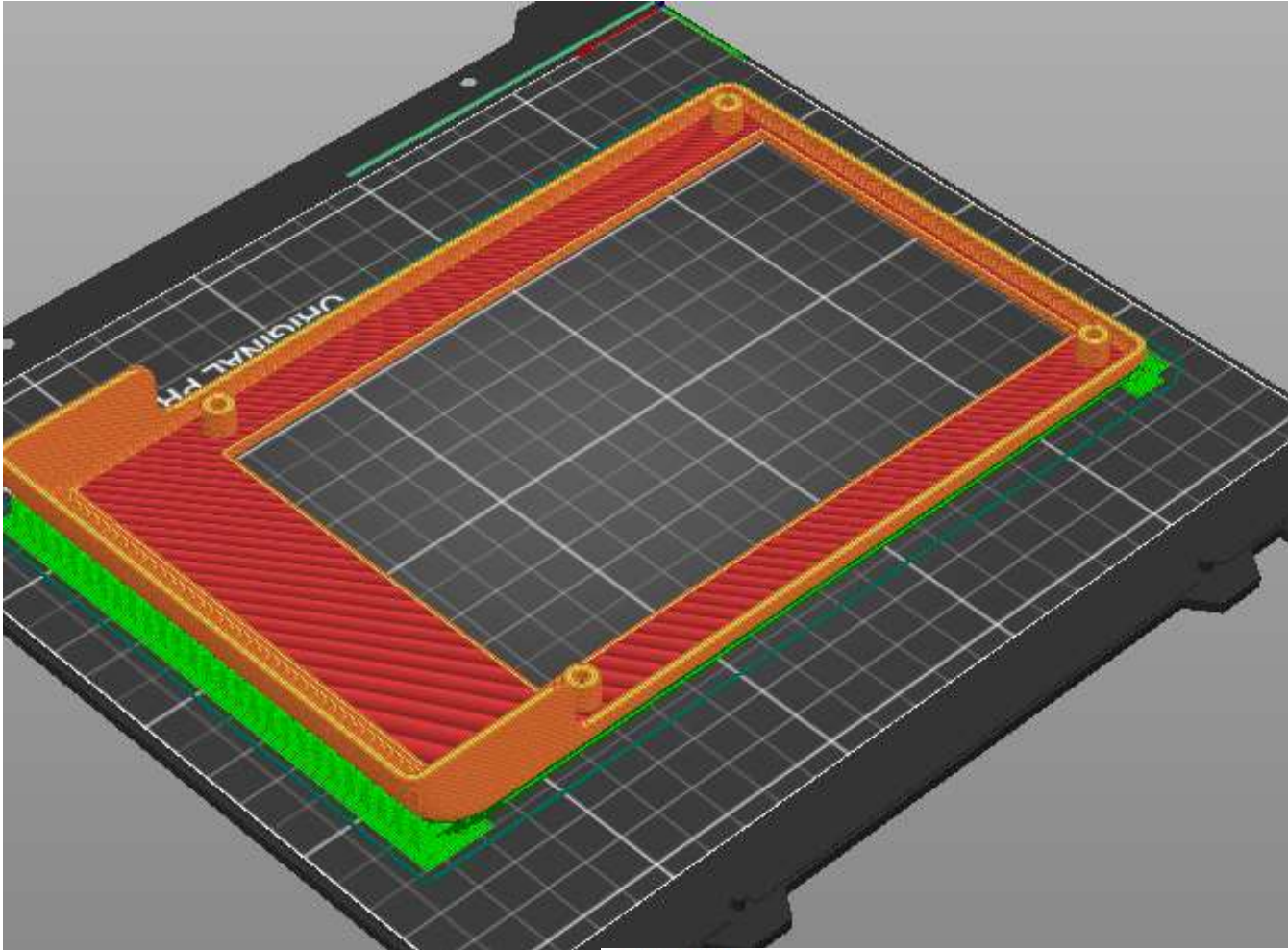
Variant 7

Top Cover

$m_{fil} := 61.5 \text{ g}$

$t_p := 2 \text{ hr} + 5 \text{ min}$

Sliced Info

Used Filament (g)	61.50
Used Filament (m)	20.62
Used Filament (mm³)	49593.24
Cost	1.56
Estimated printing time:	
- normal mode	2h5m
- stealth mode	2h7m

$C_m = 1.8444 \text{ EUR}$

$C_e = 0.0392 \text{ EUR}$

$C_{print} = 1.8836 \text{ EUR}$

Back Cover
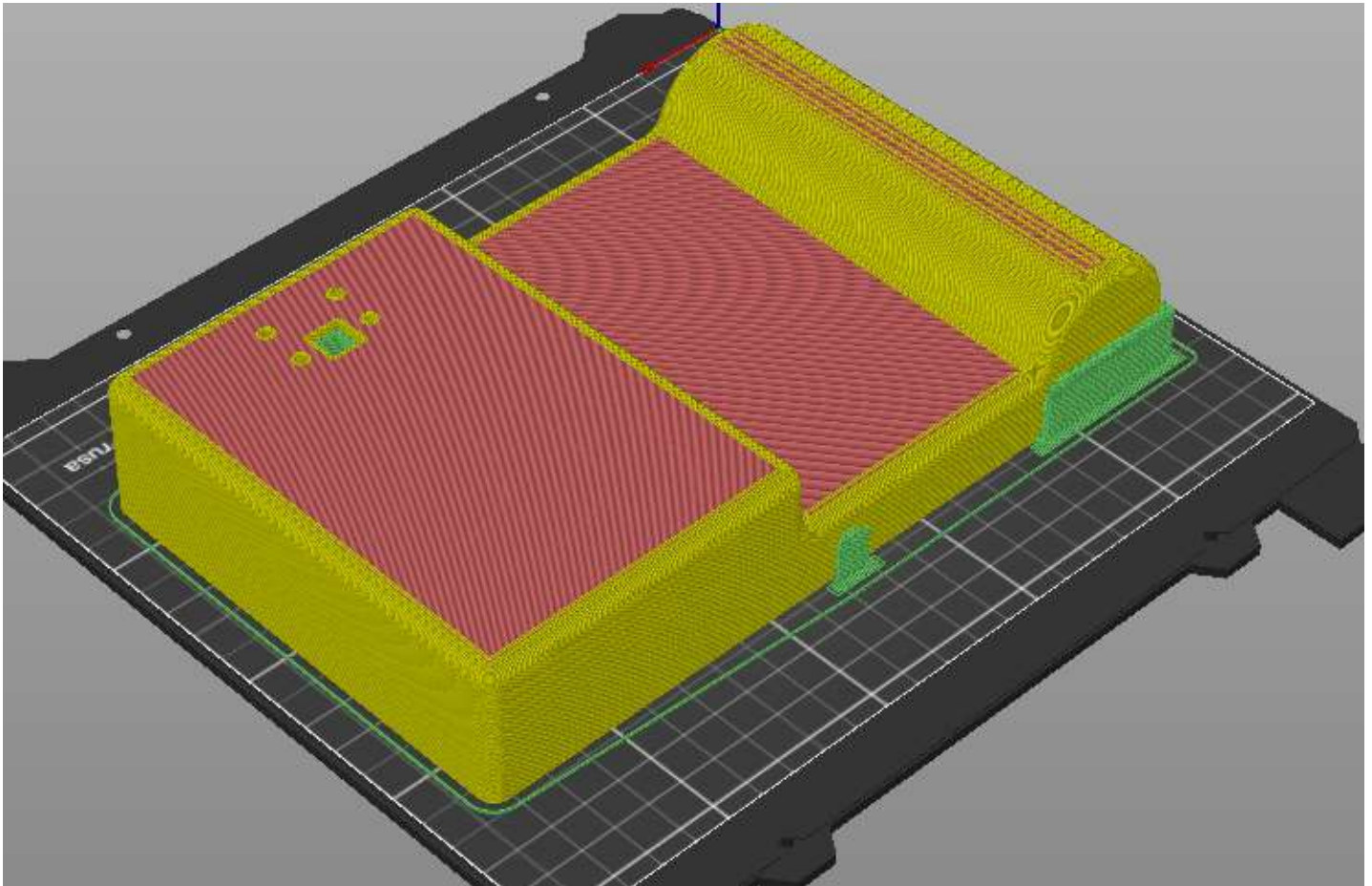
$m_{fil} := 380.69 \text{ g}$

$t_p := 11 \text{ hr} + 49 \text{ min}$
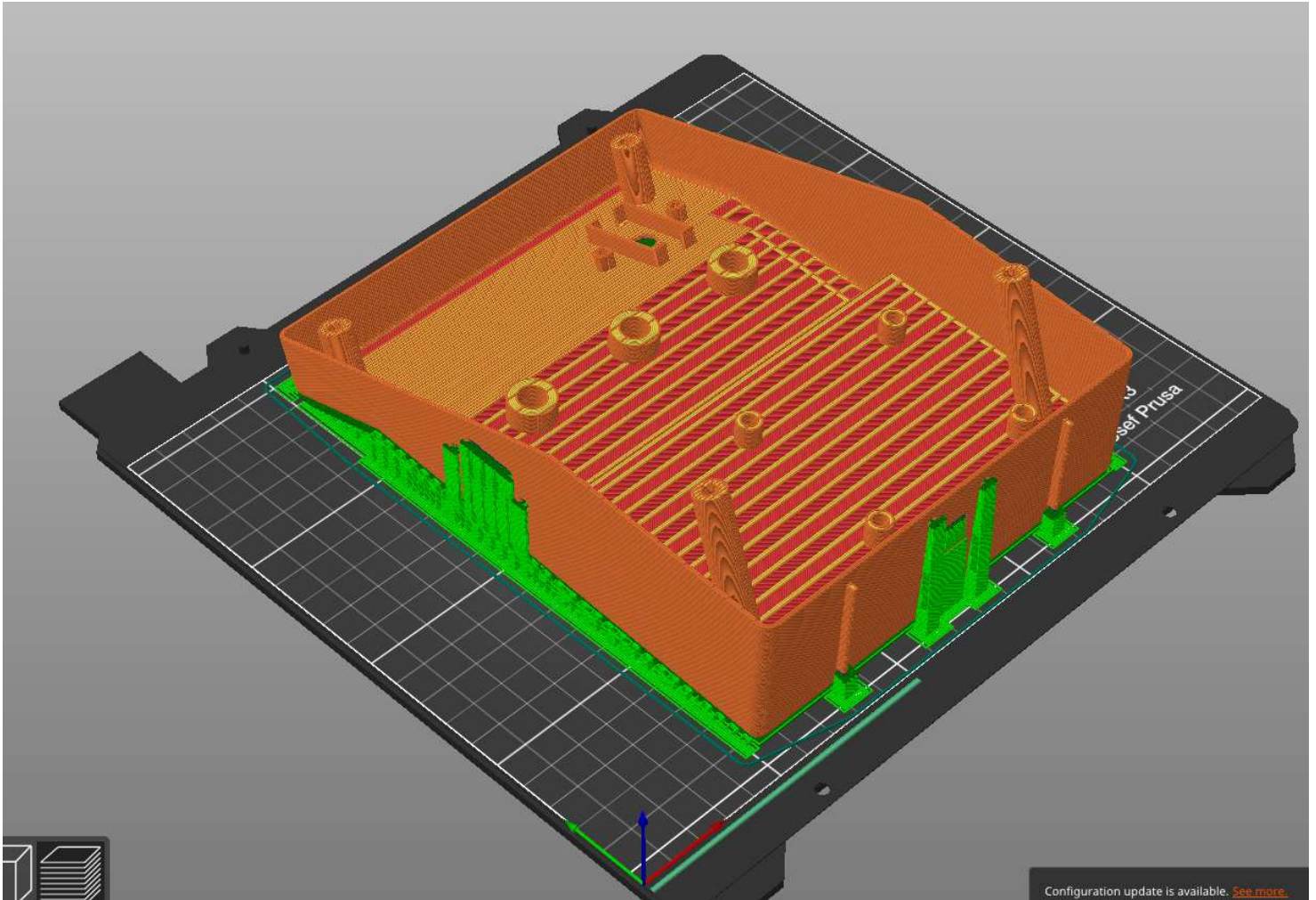
$C_m = 11.4169 \text{ EUR}$

$C_e = 0.2226 \text{ EUR}$

$C_{print} = 11.6395 \text{ EUR}$

Sliced Info	
Used Filament (g)	380.69
Used Filament (m)	127.64
Used Filament (mm³)	307011.60
Cost	9.67
Estimated printing time:	
- normal mode	11h49m
- stealth mode	11h57m

Variant 6 Final

Main Body

$m_{fil} := 245.14 \text{ g}$

$t_p := 9 \text{ hr} + 15 \text{ min}$

$C_m = 7.3517 \text{ EUR}$

$C_e = 0.1742 \text{ EUR}$

$C_{print} = 7.526 \text{ EUR}$

Sliced Info

Used Filament (g)	245.14
Used Filament (m)	82.19
Used Filament (mm³)	197695.71
Cost	6.23

Estimated printing time:
- normal mode	9h15m
- stealth mode	9h25m

Top Cover

Sliced Info

Used Filament (g)	57.71
Used Filament (m)	19.35
Used Filament (mm³)	46541.58
Cost	1.47

Estimated printing time:
- normal mode   2h0m
- stealth mode   2h2m
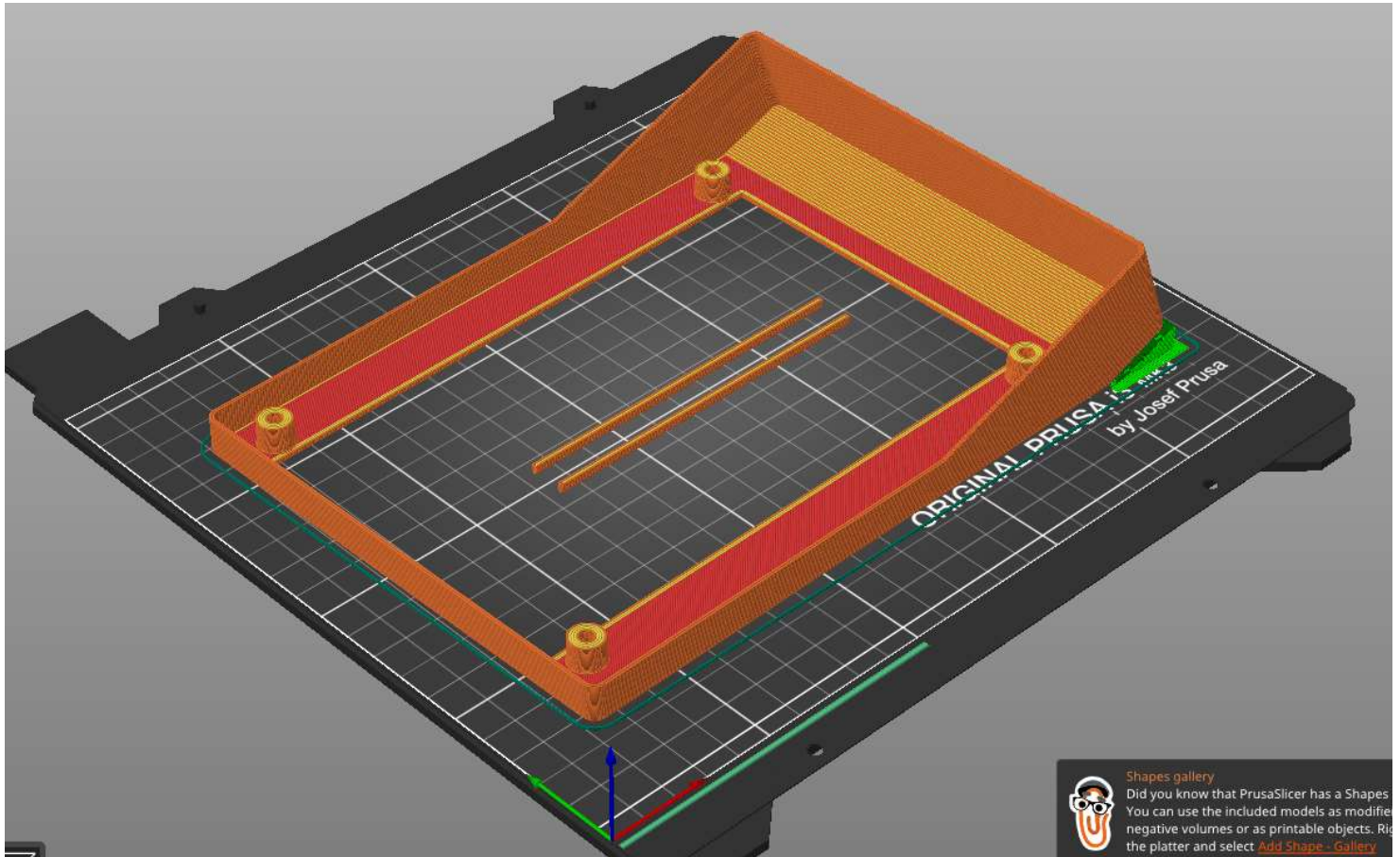
$m_{fil} := 57.71 \text{ g}$

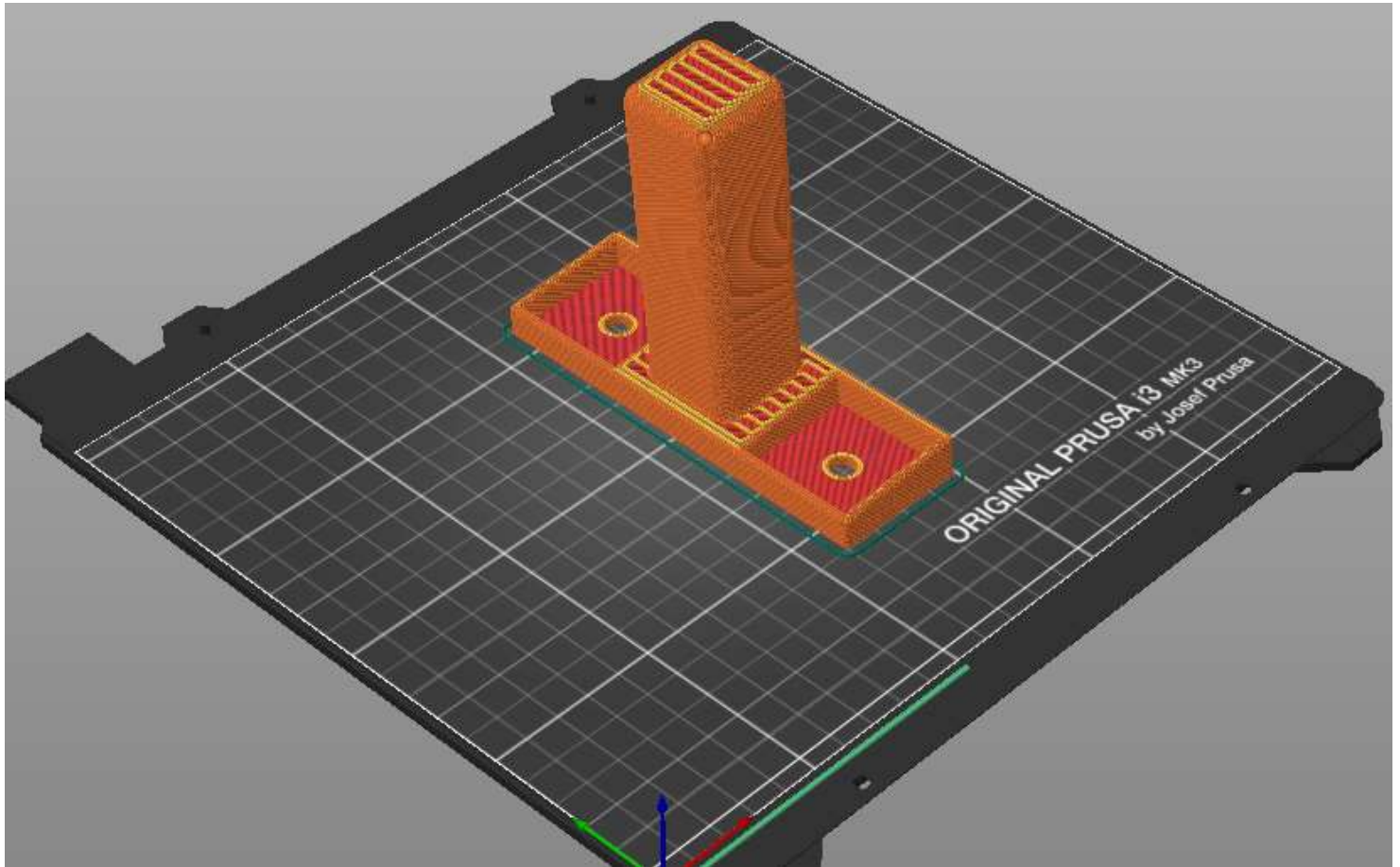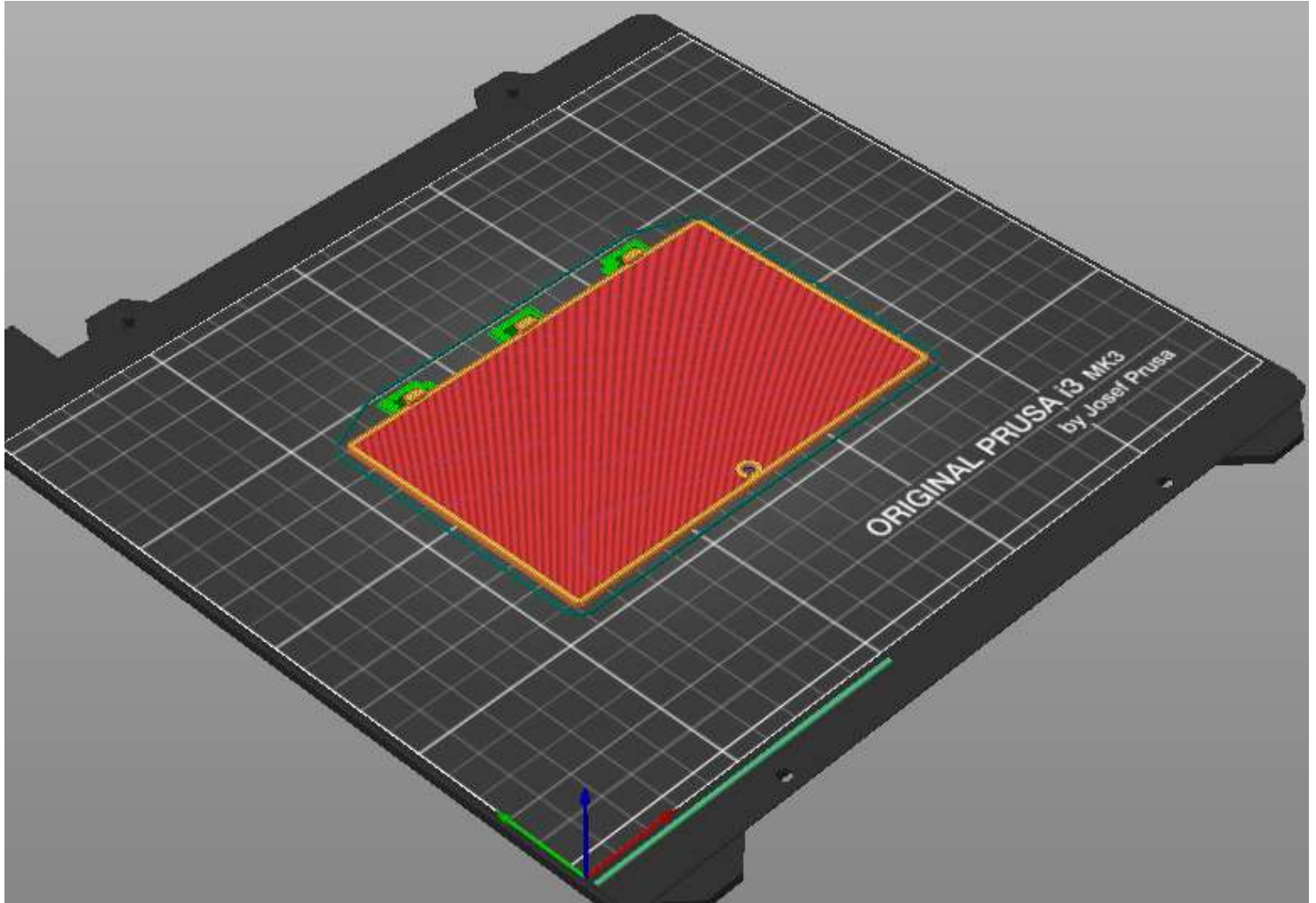$t_p := 2 \text{ hr} + 0 \text{ min}$

$C_m = 1.7307 \text{ EUR}$

$C_e = 0.0377 \text{ EUR}$

$C_{print} = 1.7684 \text{ EUR}$

Pistol Handle

$m_{fil} := 64.63 \text{ g}$

$t_p := 1 \text{ hr} + 59 \text{ min}$

Sliced Info	
Used Filament (g)	64.63
Used Filament (m)	21.67
Used Filament (mm³)	52121.02
Cost	1.64
Estimated printing time:	
- normal mode	1h59m
- stealth mode	2h1m

$C_m = 1.9383 \text{ EUR}$

$C_e = 0.0374 \text{ EUR}$

$C_{print} = 1.9756 \text{ EUR}$

Battery Cover

$m_{fil} := 22.21 \ g$

$t_p := 0 \ hr + 40 \ min$

$C_m = 0.6661 \ EUR$

$C_e = 0.0126 \ EUR$

$C_{print} = 0.6786 \ EUR$

Sliced Info

Used Filament (g)	22.21
Used Filament (m)	7.45
Used Filament (mm³)	17910.60
Cost	0.56

Estimated printing time:
- normal mode	40m
- stealth mode	40m

Switch Cover

Sliced Info

Used Filament (g)	1.31
Used Filament (m)	0.44
Used Filament (mm³)	1057.58
Cost	0.03

Estimated printing time:
- normal mode	3m
- stealth mode	4m
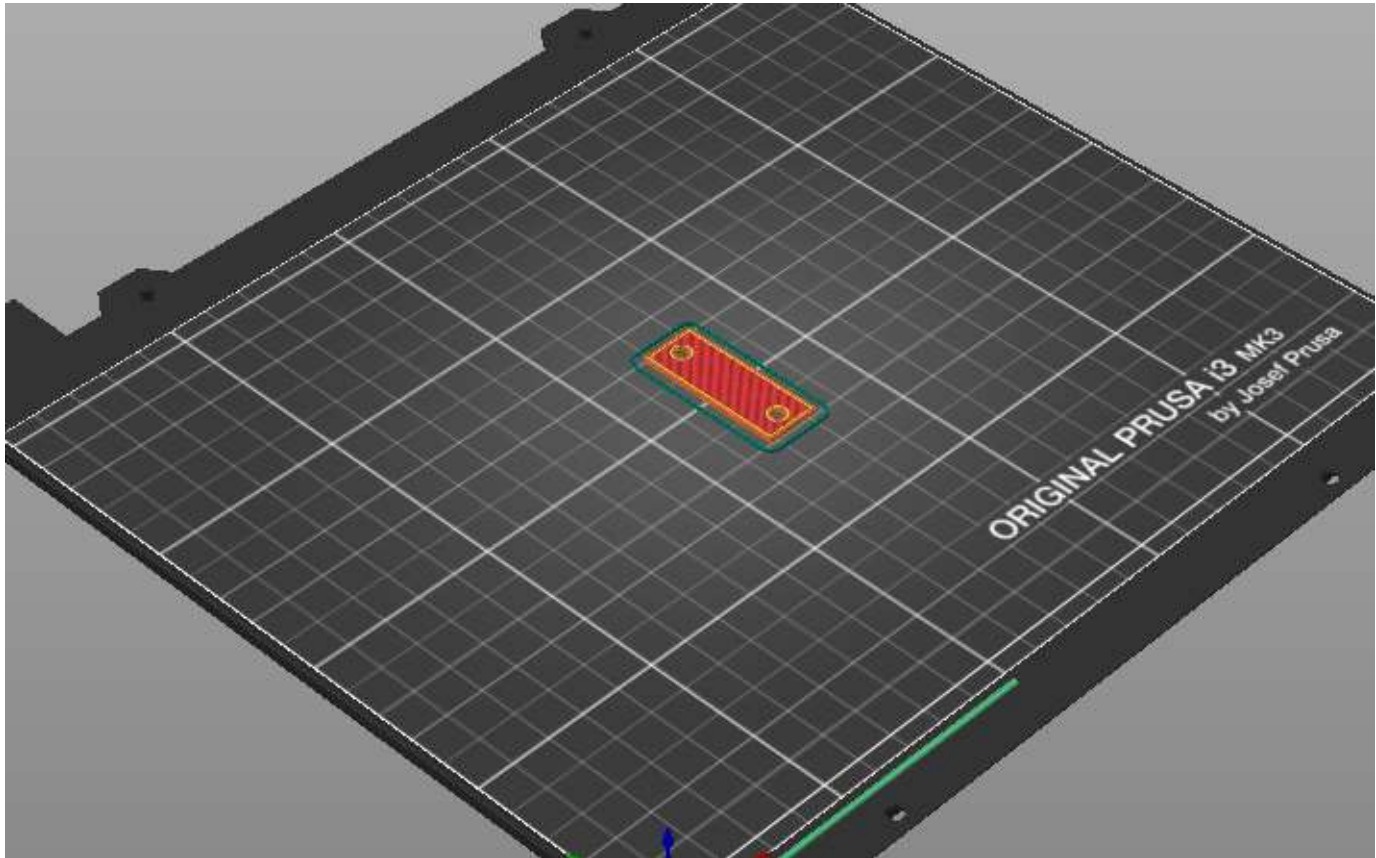
$m_{fil} := 1.31 \text{ g}$

$t_p := 0 \text{ hr} + 3 \text{ min}$

$C_m = 0.0393 \text{ EUR}$

$C_e = 0.0009 \text{ EUR}$

$C_{print} = 0.0402 \text{ EUR}$