



EVA Backplate Cartesian for Pabst EBM Fan



Andi3D

[VIEW IN BROWSER](#)

updated 5. 4. 2022 | published 10. 2. 2022

Summary

Remix of EVA backplate cartesian and Pabst EBM fan RLF 35-8/14 N

[3D Printers](#) > [3D Printers - Upgrades](#)

Tags: [cartesian](#) [eva](#) [ratrig](#) [vminion](#)

This is my remix of the original [EVA 2.4.x cartesian backplate](#).

Sometimes you need more cooling than a single 5015 fan. So another user "Pinky" found an interesting fan. The **Pabst EBM RLF 35-8/14 N**. He was very happy on the performance and the sound (quiet) of the fan and he replaced two 5015 fans on his coreXY, where i helped him on the design. Here you can find it: <https://www.prusaprinters.org/de/prints/130167-eva-corexy-backplate-papst-ebm-rlf-35-814-n>

I will test this backplate on my RatRig vMinion, when i get it.
But i can say, it is printable and looks fine so far.

There are two versions of the backplate.

One version for M3 nuts and another version for brass heat inserts. The **size** of the **heat inserts** should be **M3xD4,6XL4** or **M3xD5xL4**.

I print it in PETG (you can also use ABS, ASA, etc.), 4 walls, 30% gyroid infill and 0.2/0,1mm layer height. So the first 22,60mm are in 0,2mm layer height and then in 0,1mm (see the picture).

It is for use of the original EVA Fan ducts you can find here https://main.eva-3d.page/addons/layer_cooling/ or for brass inserts here <https://contrib.eva-3d.page/mounts-with-brass-inserts/Mounts-brass-inserts/>

Here you can find the **5mm higher and stronger cable mount**.

Hope you enjoyed my work!!!

Have fun!

Update 22.03.2022: Some people have problems, because the fan is a little wider than the mount, but trust me, it will fit on your printer. Many people use this mod. BE CAREFULL, that you tune the position of the X endstop correct!!!! See the last two pictures on X=0mm and X=180mm. When you use the LGX-lite extruder, check position before you mount it.

Be careful, if you use sensorless homing! I don't have tested it...

Model files



eva-back_cartesian_nuts_andi3d.stl



eva-back_cartesian_brassinsert_andi3d.stl

[Find source .stl files on Thingiverse.com](https://www.thingiverse.com/thing/4511111)

License ©

This work is licensed under a
Creative Commons (4.0 International License)



Attribution—Noncommercial—Share Alike

- ✗ | Sharing without ATTRIBUTION
- ✓ | Remix Culture allowed
- ✗ | Commercial Use
- ✗ | Free Cultural Works
- ✗ | Meets Open Definition