



Fast-Printing Modular Drawer System (Vase Mode)

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Summary

This modular drawer system has been designed to be printed in vase mode for very fast and economical printing.

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Hi Everyone:

I originally posted this design for a fast-printing modular drawer system on Thingiverse last month, but quite a few people have requested that I also post it on PrusaPrinters (I can see why..... this site runs so much smoother). So, here it is, I hope you like it.

There is now also a newer version available over on Cults3D which can be found here: <https://cults3d.com/en/3d-model/home/fast-print-modular-storage-system>

Although there are many excellent modular drawer designs already available, I was unable to find anything that met my exact requirements and most take longer to print than I would like, so I have designed this fast printing and economical modular drawer system for storing lightweight parts and components etc.

Main features:

- Fast to print: To minimise print times, all components are designed to print using vase / spiralize mode and without supports. Each frame also holds 4 drawers to reduce the overall number of frames required. An 80mm drawer can easily be printed in around 25 minutes.
- Economical: The design uses only a small amount of filament due to printing in vase mode and requiring no supports.
- Multiple drawer/frame options: There are two drawer widths, each with an optional removeable divider insert.
- Easy to stack/connect: The frames can be securely connected vertically by sliding them together using the integrated top/bottom profiles. To join frames horizontally, the joiner strips should be used. One joiner strip is often enough, but you can use up to three for added strength and a cleaner look (no empty holes between frames). Full length and 'mini' joiner strips are available.

Looser-fit versions of the frames and joiners have been provided for additional tolerance where needed. Tolerance test models have also been provided to allow for testing which version will work best and fine-tuning settings without the need to print full-size frames.

My print settings:

These models are designed to be printed in vase / spiralize mode, so will appear solid if printed using default slicer settings. They can also be printed in non-vase mode in some slicers if setting infill and top layers to zero, but this will be much slower.

I use a 0.8mm line width for higher strength (a 0.6mm line width should also give good results, but will be less strong), 0.32 layer height, and 25-30mm/s wall speed.

a 0.4mm nozzle works best as this produces the sharpest corner details in the connecting profiles.

No supports required for any parts.

For personal use only please.

Happy printing :-)

P.S. If you find my design useful, please consider leaving a tip or checking out my other design on Cults3D (see below). Many thanks.

If you like this design, please check out the newer version on Cults3D (link at the top of the description).

The new design features stronger frames and drawers, 12 different frame options, 8 different drawer sizes, and removeable dividers for the 6 largest drawers. It also includes optional drawer stops and stabilising feet.

As lots of people have already printed the original version, I designed the new version to be as backwards-compatible as I could. The new frames can be joined horizontally or underneath the original version (not above due to a change in profile shape), and the new 78mm and 158mm drawers will still fit in the original frames.

I'm also working on a new design which is something a little bit different, and I think many of you might like, so please keep checking back for updates as I plan to release this quite soon.

Model files



frame80mm.stl



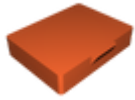
frame160mm.stl



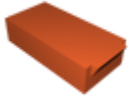
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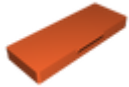
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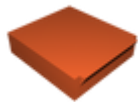
drawer78mm.stl



dividerfor78mmdrawer.stl



drawer158mm.stl



dividerfor158mmdrawer.stl



joiner.stl



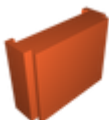
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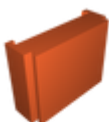
minijoiner.stl



minijoiner_looserfit.stl

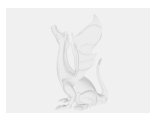


tolerancetester_standardframe_stl.stl



tolerancetester_looserfitframe_stl.stl

Other files



update_info.txt

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