

Parametric hinged small parts box

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VIEW IN BROWSER

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Summary

In browser customizable parametric box with lid, built in Replicad

Hobby & Makers > Organizers

Tags: parametric box customizable customizablebox parametricdesign boxwithlid parametriccontainer replicad

This is a latching/hinged parametric box, built in Replicad.

Supports width, height, depth, dividers, outside radius and embossed text on the inside of the lid, engraved text on the outside, or inlayed text for MMU printing (or manual m600 swapping), two hinge and latch style and count, and a basic SVG path for the lid.

Customizer Instructions

1. Download parametric-box-configurator.zip and extract it
2. Open parametric-box-configurator.html in the extracted folder
3. Change dimension parameters as desired
4. Click the download STL (or STEP) file button

You can add an SVG to outside of the lid using the “Outside SVG" button in the parameter panel.

SVG notes!

If you want to add an SVG to the lid, prepare your SVG first, making sure to:

- Outline your strokes (stroke widths and caps are not supported)
- Outline your text (fonts are not supported)
- Combine and cut paths as necessary (overlapping paths are not supported)

I've been printing these at 0.3mm layer height, and have not fully dialed in the hole sizes. For me it's too dependent on the filament I'm using, and the filament I'm using for the hinges. You can adjust the hole size with the hole size variables.

Updates

Date	Description
2025-10-13	• Increase maximum height
2025-05-25	• Add font size, family, and position options for outside labels • Add font size, family options for inside labels • Fix error when using detent style latches • Change extra lid height precision to 0.1
2025-05-09	• Rebuild project in replicad for better browser compatibility and features • Added SVG support to the lid • Add visible labels for dimensions • Fixed hinge geometry for some parameters
2023-12-31	• Added new option “Extra lid space”. Allows empty space between the top of box dividers and the inside of the lid. This is mostly for large parts in each bin, so that they protrude above the top of the dividers (so you can grab them) while still allowing the lid to close. • Fixed small geometry issues related to chamfers on lid

2021-10-22	• Added detent-style latch and hinge, so that box can snap together • Updated for new OpenCascade features: Added text boxes for inside/outside labels, drop down for hinge styles • Added left-handed option which reverses the orientation of the center detent latch (if there's a center latch)

For a customizable box with a sliding lid, see: https://www.printables.com/model/425966-parametric-sliding-lid-box

For a slide-down lid: https://www.printables.com/model/702716-parametric-box-with-lid

Model files



4x2.stl



4x3.stl

Other files

parametric-box-configurator.zip

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