TF & SD Card Holder/ Wallet

artsef

VIEW IN BROWSER

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Summary

OK, so this one was originally inspired by the "MicroSD Card Wallet" by aerobatflyer, i.e. thing:4686863. I thought it...

16.93 hrs	14 pcs	0.20 mm	0.40 mm	PLA PET	155 g	Prusa MK3/S/S+

Hobby & Makers > Tools

Tags: holder   card   organiser   video   storage   photography   media   thingiverse   organisation   memory

OK, so this one was originally inspired by the "MicroSD Card Wallet" by aerobatflyer, i.e. thing:4686863.

I thought it was quite a good concept, although somewhat limited in variety of capability. I found the play of the tray in the original holder either had a little too wide a gap around it making it a little too loose and the overall resolution somewhat low with the edges also seeming a little 'sharp' to the touch.
My inclination is always to fillet the edges in CAD to give the result a smoother or rounder and more ergonimic feel.

So I tried taking the idea a bit further and added more options, such as provision for TF to SD adapters/ WiFi SD cards (e.g. Toshiba's offering). Seeing as there isn't much room for many TF cards when there's already one or two SD cards in one tray, it was time to add more capacity.

Cue the double and triple tray holders, along with the second and third tray configurations, providing a wider choice of configurations and enabling many more options. The TF wells in the trays are actually deep enough to hold two TF cards each...!

Further options can include different colour coded trays etc. - Very handy for photographers/ those with a plethora of media cards to keep track of them.

If the trays feel somewhat loose or tend to fall out easily, a couple of solutions are to rub a little bar of soap (also lubricates) onto the side edges, undersides of the trays, or even to run a very thin line of CA/ superglue along the side edges (- and let it cure properly before inserting!), just enough to widen the tray(s) to add some more grip.

Yet another method to give the tray(s) a little more grip, but which may need some trial & error, is to increase th Z-height in your slicer program ~very~ slightly by perhaps +1 to 10% and see what happens.

The method I use if the holder doesn't have an 'upside' indicated on it, is to face the trays towards each other when they're inserted (one at a time!), so that the cards don't all fall out on the floor when the trays are later removed.

Many thanks and congrats to aerobatflyer for the original concept!

UPDATE 02 August 2021: **PETG .gcode files added**, thanks to a prompt from Deirdre on the Prusa website, having printed a tray and holder using PETG instead and found it to fit more snugly than by using PLA.

Print Settings

Printer Brand:

Prusa

Printer:

i3 MK3

Rafts:

No

Supports:

No

Resolution:

0.2mm

Infill:

15%

Filament:
Generic PLA or PETG, Colour to suit.

Notes:

I'd suggest using Dimafix or a similar glue to keep the tray holder(s) on the heatbed while printing. (I originally used brims but found it worked without them, but still used the glue!) It makes for an easier cleanup of the prints when done

The trays likewise don't need brims, but still use the glue as a precaution. The trays don't lift at the corners, as the holes within help to keep the 'pull' of shrinkage to a minimum, again so long as some sort of bed adhesion is used.

If the prints turn out very loose, experiment by printing the tray(s) in PET and the exterior shell/ tray holder in PLA. Since PLA shrinkage rate is a little more than that of PET, doing this might help, but remember that the shrinkage ratios between the different types and brands can produce a wide variety of results. Try different combinations.

This would have the effect of reducing the overall size of the exterior (PLA) and thus 'shrink' or reduce the gaps between the tray(s) and the holder.

Category: Organization

This remix is based on

TF & SD Card Holder/ Wallet
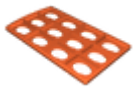by artsef

Model files

 tfsd_cholder_double.stl

 tfsd_cholder_triple.stl

 holder_trays_1-3.stl

 holder_tray_1_2xsd__2xtf.stl

 holder_tray_3_12xtf.stl

 tfsd_cholder_single.stl

 holder_tray_2_1xsd__8xtf.stl

Print files

 holder_tray_1_02mm_pla_mk3_26m.gcode

⚙ PLA   ⬇ 0.40 mm   ≡ 0.20 mm   ⏱ 0.43 hrs   ⚖ 4 g   🖶 Prusa MK3/S/S+

holder_tray_2_02mm_pla_mk3_27m.gcode

⚙ PLA   ⬇ 0.40 mm   ≡ 0.20 mm   ⏱ 0.44 hrs   ⚖ 3 g   🖶 Prusa MK3/S/S+

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holder_tray_3_02mm_pla_mk3_29m.gcode

⚙ PLA   ⬇ 0.40 mm   ≡ 0.20 mm   ⏱ 0.49 hrs   ⚖ 4 g   🖶 Prusa MK3/S/S+

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holder_trays_1-3_02mm_pla_mk3_1h21m.gcode

⚙ PLA   ⬇ 0.40 mm   ≡ 0.20 mm   ⏱ 1.35 hrs   ⚖ 12 g   🖶 Prusa MK3/S/S+

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tfsd_cholder_single_02mm_pla_mk3_1h41m.gcode

⚙ PLA   ⬇ 0.40 mm   ≡ 0.20 mm   ⏱ 1.68 hrs   ⚖ 15 g   🖶 Prusa MK3/S/S+

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tfsd_cholder_double_02mm_pla_mk3_2h8m.gcode

⚙ PLA   ⬇ 0.40 mm   ≡ 0.20 mm   ⏱ 2.14 hrs   ⚖ 19 g   🖶 Prusa MK3/S/S+

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tfsd_cholder_triple_02mm_pla_mk3_2h38m.gcode

⚙ PLA   ⬇ 0.40 mm   ≡ 0.20 mm   ⏱ 2.63 hrs   ⚖ 24 g   🖶 Prusa MK3/S/S+

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holder-tray-2-1xsd-8xtf_02mm_petg_mk3_27m.gcode

⚙ PET   ⬇ 0.40 mm   ≡ 0.20 mm   ⏱ 0.45 hrs   ⚖ 4 g   🖶 Prusa MK3/S/S+

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holder-tray-1-2xsd-2xtf_02mm_petg_mk3_26m.gcode

⚙ PET   ⬇ 0.40 mm   ≡ 0.20 mm   ⏱ 0.44 hrs   ⚖ 4 g   🖶 Prusa MK3/S/S+

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holder-tray-3-12xtf_02mm_petg_mk3_30m.gcode

⚙ PET   ⬇ 0.40 mm   ≡ 0.20 mm   ⏱ 0.49 hrs   ⚖ 4 g   🖶 Prusa MK3/S/S+

holder-trays-1-3_02mm_petg_mk3_1h22m.gcode

⊛ PET   🌡 0.40 mm   ≡ 0.20 mm   🕐 1.36 hrs   ⚖ 12 g   🗒 Prusa MK3/S/S+

tfsd-cholder-single_02mm_petg_mk3_1h35m.gcode

⊛ PET   🌡 0.40 mm   ≡ 0.20 mm   🕐 1.59 hrs   ⚖ 15 g   🗒 Prusa MK3/S/S+

tfsd-cholder-triple_02mm_petg_mk3_2h39m.gcode

⊛ PET   🌡 0.40 mm   ≡ 0.20 mm   🕐 2.65 hrs   ⚖ 25 g   🗒 Prusa MK3/S/S+

tfsd-cholder-double_02mm_petg_mk3_2h9m.gcode

⊛ PET   🌡 0.40 mm   ≡ 0.20 mm   🕐 2.15 hrs   ⚖ 20 g   🗒 Prusa MK3/S/S+

Find source .stl files on Thingiverse.com

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