

Item	Component name	Quantity	Price	Optional?	Fitmets / Fasten Method	Use Description	File Name Or Purchase Link
1	10mm x 3mm Neodymium Magnets	6	17.49 (set of 30)	Objectively Yes - but no?	(3) glued to Chassis, (3) glued to Right Panel	Magnets serve to allow for strong closure of panel while still allowing ease of continued and repeated access.	<a href="https://smile.amazon.com/dp/B09DFS2XDL">https://smile.amazon.com/dp/B09DFS2XDL</a>
2	12mm Momentary Switch w/LED	1	9.89 (set of 2)	YES	Inlcuded 12mm thin nut	Switch is used to indicate power is present to Pi system, and can be used as a power on/off button, or a safe shutdown burton depending on Pi configuration and settings. GPIO header: Red wire goes to Voltage + (3.3 VDC for dimmer, 5VDC for brighter), Black Wire and 1 blue wire (either one) goes to ground, the remaining blue wire goes to whichever pin you have programmed. defaults to pin 5 for power on function only.	<a href="https://smile.amazon.com/dp/B091CNVZ8">https://smile.amazon.com/dp/B091CNVZ8</a>
3	12mm spacer	1		YES	Switch Nut on interior of Chassis	Spacer on front of unit provides additional room inside the chassis, and adds aesthetic appeal with an accent of color. Scale to desired thickness.	12mm Inner Dia spacer.stl
4	28mm 2x USB 2.0 Extender	1	\$11.50	YES	Included 28mm thin nut	USB 2.0 Extender is useful for improving ease of access to USB connections. Although the Chassis does have slots which can accommodate USB connections directly to the Pi board, the Extender Offers an option that does not include opening the removable Right Panel. Comes with an excessive 3' of cable however, and fitti9ng it all in cleanly is near impossible. not recommended for builds with cooling issues, a lot of GPIO connections, or other space constraint concerns.	<a href="https://smile.amazon.com/dp/B01MY1WDIU">https://smile.amazon.com/dp/B01MY1WDIU</a>
5	28mm spacer	1 - 2		YES	Port Nut on interior of Chassis	Spacer(2) at rear of unit provides additional room inside the chassis, and adds aesthetic appeal with an accent of color. Scale to desired thickness. <b>this item not shown in plans.</b>	28mm Inner Dia spacer.stl
6	28mm USB /HDMI Extender	1	\$10.90	YES	Included 28mm thin nut	USB / HMDI Extender causes issues due to length of cable included (3'). Not recommended unless you need portability. The HDMI plug must be routed out of the topmost 28mm rear port hole, around the Extender's rear connection face, then back around into the same port hole, tangent to the Pi HDMI connector. UGLY!	<a href="https://smile.amazon.com/dp/B06XJT45T3">https://smile.amazon.com/dp/B06XJT45T3</a>
7	3mm o-ring	7		Objectively Yes - but no?	Glued to M3 Nuts	Orings are to be glued atop the M3 nuts in the Left Panel. You want the screw to pass through the nut, but the Pi board to sit on the orings, for cushioning. <b>The screws may be too long if the orings are not used.</b>	
8	Chassis	1		NO	M3 Nut	Chassis serves as the mounting point for: The left panel, via (3) screws, the base via (1) M3 screw, and the Right Panel via (3) magnets (glue required), in addition to providing (2) 28mm rear port holes, and (1) 12mm front switch through-hole.	MID CHASSIS.stl
9	Chassis Base	1		Objectively Yes - but no?	M3	Base adds signifiant stability / tipping resistance. Base contains (1) M3 nut, glue not required.	CHASSIS BASE.stl
10	Left Side Panel (front view)	1		NO	Glued M3 Nuts	The Left Panel serves as the mounting point (4) for the Raspberry Pi. This panel has a peg, or foot, at the rear, which is intended to be inserted into the like hole on the rear of the unit, between the (2) 28mm ports. Left Panel Requires (7) M3 nuts to be glued into the like nut traps. I suggest you also glue a small oring to the top of the nut, to cushion the Pi board when tightened down.	LEFT PANEL.stl
11	M3 lock washer	7		Objectively Yes - but no?	M3 Screw	(4) washers are between the Pi Board and the M3 screw heads. <b>The screws maybe too long if the locking washers are not used.</b> (3) washers are between the Chassis and the M3 Screw heads, these are not required. You may substitute normal flat washers, but ensure they do not short anything on your Pi Board!	
12	M3 x 0.5 8mm Sockethead Cap Screw (SHCS)	8		NO	M3 Nut	(4) SHCS are used to fasten the Raspberry Pi to the Left panel. (3) are used to fasten the Left Panel to the Chassis. (1) is used to fasten the Base to the Chassis	Here is a link to a 1,280 Peice M2, M3, M4, M5 Stainless Steelhardware kit, selling for \$26.99, should you need a source for some M3 hardware but can't figure it out: <a href="https://smile.amazon.com/HELIFOUNER-Pieces-Washers-Assortment-Stainless/dp/B081DS3QVT">https://smile.amazon.com/HELIFOUNER-Pieces-Washers-Assortment-Stainless/dp/B081DS3QVT</a>
13	M3 x 0.5 Standard Nut	8		NO	(7) Glued, (1) no glue, in Base	(4) are glued into the LEFT panel to retain the Pi Board. (3) are glued into the Left Panel to fasten the LEFT Panel to the Chassis. (1) holds the Base to the Chassis.	
14	Raspberry Pi	1	\$119.99 !	Objectively Yes - but no?	(4) M3 Screws (minimum of 1)	The Pi kinda turns this from a wierdos desk wish into a project that actually makes sense. you probably want one for it... Linked is a Pi 4 2Gb with cooling and power supply with switch.	<a href="https://smile.amazon.com/Vilros-Raspberry-Fan-Cooled-Heatsinks-Quickstart/dp/B07TKFFCF1">https://smile.amazon.com/Vilros-Raspberry-Fan-Cooled-Heatsinks-Quickstart/dp/B07TKFFCF1</a>
15	Right Side Panel (front view) <b>Removeable</b>	1		Objectively Yes - but no?	Glued 10mm magnets	Right Panel serves as interior chamber access point. Holds (3) 10mm magnets which require glue	RIGHT PANEL.stl
16				NO			
17				NO			
18				NO			
19				NO			
20				NO			