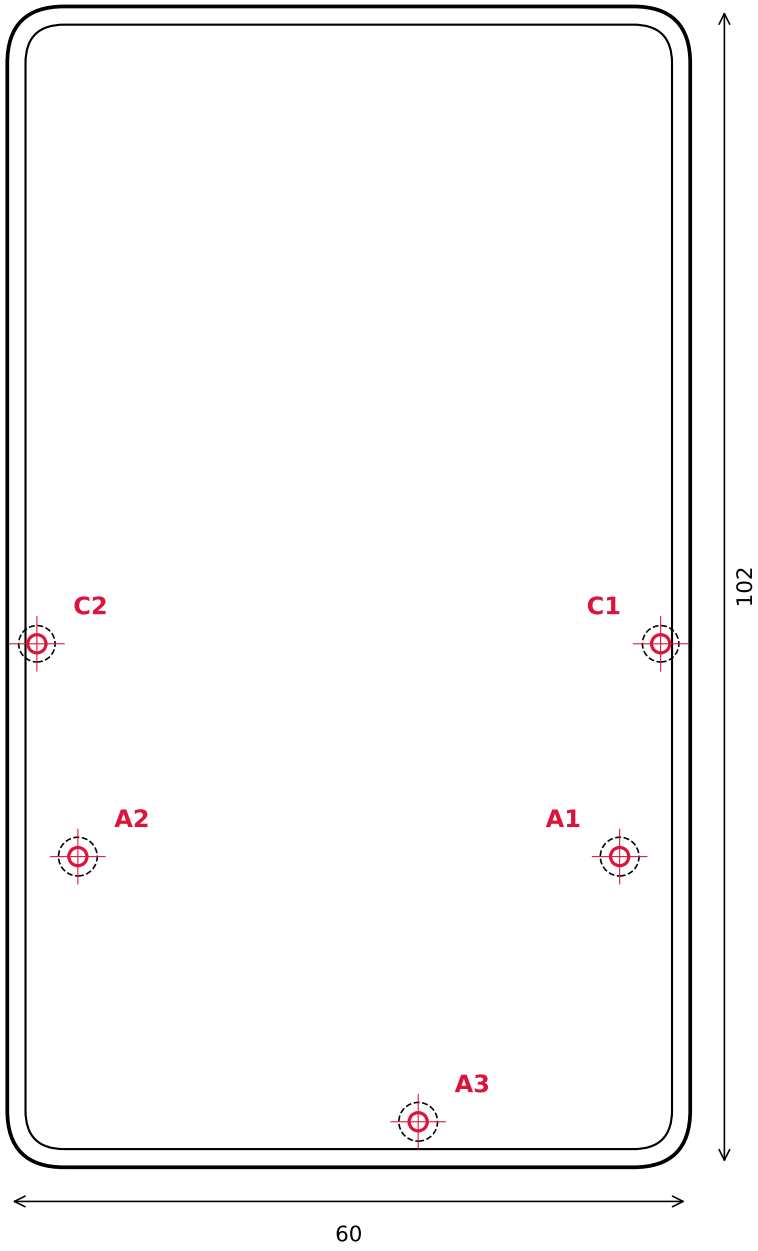
heypcb_cnc_shell.step - view into the open (back) side

top edge (plain); USB-C opening and grille in the bottom edge



TAPPED HOLES (5 total, all M1.6 x 0.35, coarse)

Tap drill D1.25 x 4.5 deep (blind); thread 3.5 deep.

Id	X from centre (this view)	Y from centre (this view)	thread depth	from face
A1	+23.80	-23.70	3.5 mm	standoff tip
A2	-23.80	-23.70	3.5 mm	standoff tip
A3	+6.10	-47.00	3.5 mm	standoff tip
C1	+27.40	-5.00	3.5 mm	back rim (z = 0)
C2	-27.40	-5.00	3.5 mm	back rim (z = 0)

A1-A3: standoffs on the inside of the front, 7.1 mm tall; the board and the back plate are screwed to them from the back.
C1-C2: tapped bosses at the back rim, for the back plate.

NOTES
1. Material 6061-T6. Bead blast + anodise, matte. Colour as ordered.
2. Tap after anodising, or chase the threads afterwards: M1.6 is too fine to take the anodic layer.
3. The front face carries a raised logo, 0.25 mm. Cosmetic surface: no clamp marks, ejector or tool witness marks on the front or sides.
4. Small holes: LED light pipe = D2.0 bore from the inside, then a D1.0 pinhole through the 1.0 mm front skin (bottom-right); 12 x D1.0 in the bottom edge, 6 each side of the USB-C, on its centre line; 1 x D2.2 in the right edge (button). Keep them burr-free. Six of the bottom holes open into the two mic chambers.
5. Internal corners as modelled: R2 in the main cavity, R1.5 in the mic chambers (walls 0.6 mm), R1 in the button groove. Narrow gaps are filled.
6. General tolerance ISO 2768-m.