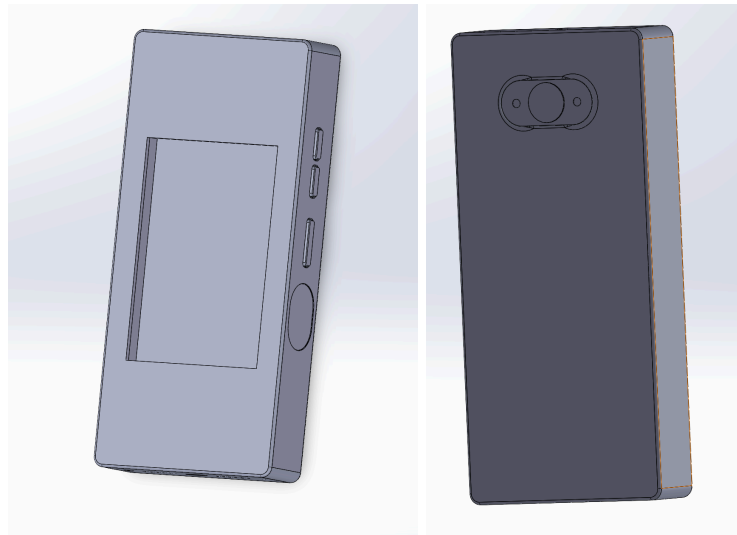


Phone Enclosure Design 1



Outside Dimensions:

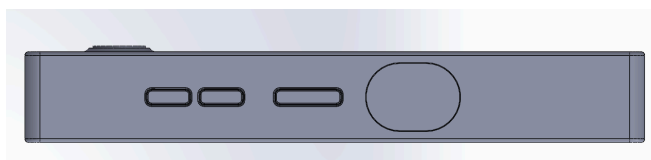
164.09mmx75.68mmx24mm

I modeled the dimensions and aspect ratio of the phone to be loosely related to the S25 Ultra while also having enough room to fit our internal components and screen. I started from the width of the 4-inch screen and added 10mm bezels on either side. The length was calculated from the width to have a ratio of about 19.5:9.

Bezels:

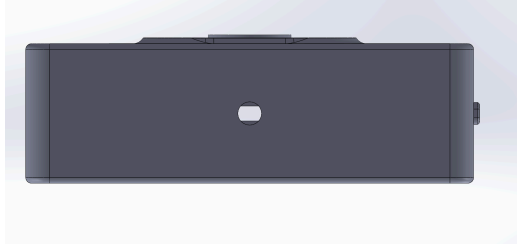
Meant to match align with the 4-inch screen plus large bezels for more components.

Fingerprint sensor and buttons:



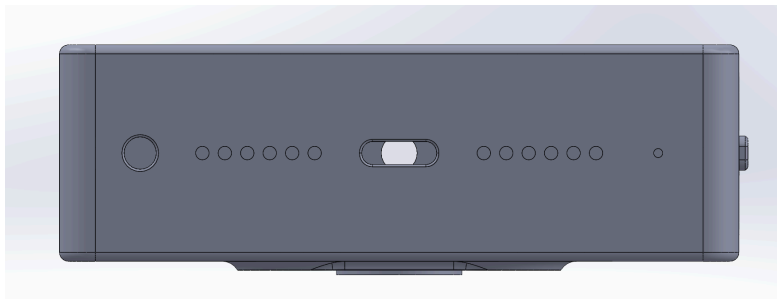
I believe our fingerprint sensor is not the most compact and since it is capacitive it would struggle to work through the display so I decided a side fingerprint sensor could be a good idea. The volume and power buttons are based on the S25 layout but with bigger buttons and more clearance.

Temperature Sensor:



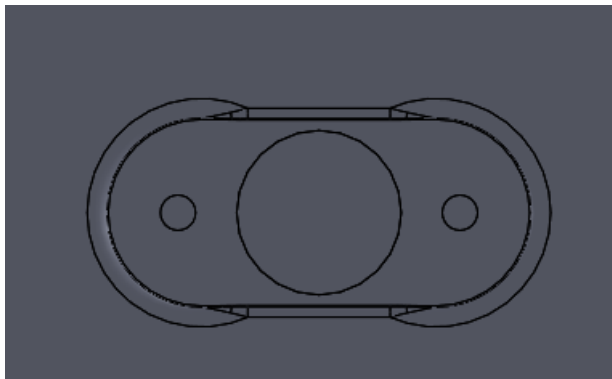
I made a small cutout at the top of the phone for a temperature sensor that would make it easy to take the temperature of a person or object. Could be moved to the back of the phone.

Ports and Speakers



Although our main board has HDMI and other connectors, for now I decided that a headphone jack and usb C would be good as a concept. I also included a microphone hole to the right and dual speakers although our prototype would probably only have one set of speaker holes.

Camera Bump



I based the camera bump around the size of the camera sensor in Notion which had a lens diameter of about 14mm. I also made rough holes for the flashlight and possibly another sensor like a time of flight sensor.