



ESP32 Speaker Box



Dis

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Summary

A speaker box to hold a small ESP32 and audio amp. It is made to go with the ESPhome Speaker lid, but anything will work

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Tags: [speaker](#) [esp32](#) [homeassistant](#) [smarthome](#) [esphome](#)

The original boxes are adorable, but I ended up settling on a different ESP32 chip for most of my projects.

I created this in Fusion360 to hold [these chips](#) and the [standard audio amp](#). It uses [this speaker](#) and requires the lid from the [other design](#).

It is a little shallower as well, which may affect you. If you want the original 2cm height, let me know and I'll upload a variation.

BoM:

ESP32 Chips: S2 Mini. (Those are Amazon but I also have some from Ali that are the same size.)

Audio amp: Ordinary MAX98357. The pins probably line up with any similar-looking board. (12.6mm center to center for the pins.)

Speaker: You can improvise here as long as it fits the amp and the case. I use these because they are easy to get and sound decent.

Printing:

Really, it doesn't matter much. This is a simple box.

No supports, no brim, no nothing, just print it.

Assembly:

Once you solder everything up, just push it all through the lid and drop the chips over their pins. Use a warm soldering iron to push the pegs down into little mushroom-shaped rivets. (The temperature depends on the material and your iron tip, but 200C is a reasonable place to start. It should squish but not liquify and never smoke.)

I use a piece of filament as a pin to hold the speaker to the lid, and then superglue (CYA) to glue the lid to the box.

With this box, the lid can be attached in either orientation to put the cable on the top or the bottom.

If the speaker seems likely to shift, a thin ring of superglue on the outside face helps hold it in place.



This remix is based on



ESPhome Speaker

by Kevin

Model files

esp-speaker-v09.step

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