MYSTIC AMULET BUILD GUIDE

Version 28.10.2025

INTRODUCTION:
Overview to build the mystic amulet.

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INTRODUCTION

PART PRINTING GUIDELINES
We recommend you follow these Guidelines.

3D PRINTING PROCESS:
Fused Deposition Modeling (FDM) or Stereolithography (SLA)

MATERIAL:
PLA / Resin

LAYER HEIGHT:
Recommended: 0.1mm

EXTRUSION WIDTH:
Recommended: Forced 0.4mm

INFILL TYPE:
Linear

INFILL PERCENTAGE:
Recommended: 100%

WALL COUNT:
Recommended: 4

SOLID TOP/BOTTOM LAYERS:
Recommended: 5

SUPPORT:
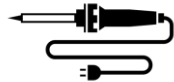Support above Print Bed

OVERVIEW OF TOOLS

You will need the following tools. You should also be familiar with them and know how to use them.
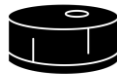
SOLDERING IRON

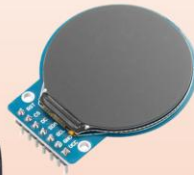SCREWDRIVER

SOLDERING TIN

SCALPEL

STRING CUTTER

HOT-GLUE

PARTS LIST

You can source your parts from Amazon, AliExpress, eBay or from your local parts store.

Bill of Material (BOM):

(1x) ESP32-S3-Zero (4MB PSRAM)

(1x) Display GC9A01

(9x) 5cm 0.14 mm^2 Wire

(1x) Push Button 6x6mm

(3x) Heat Set Inserts M2x4mm
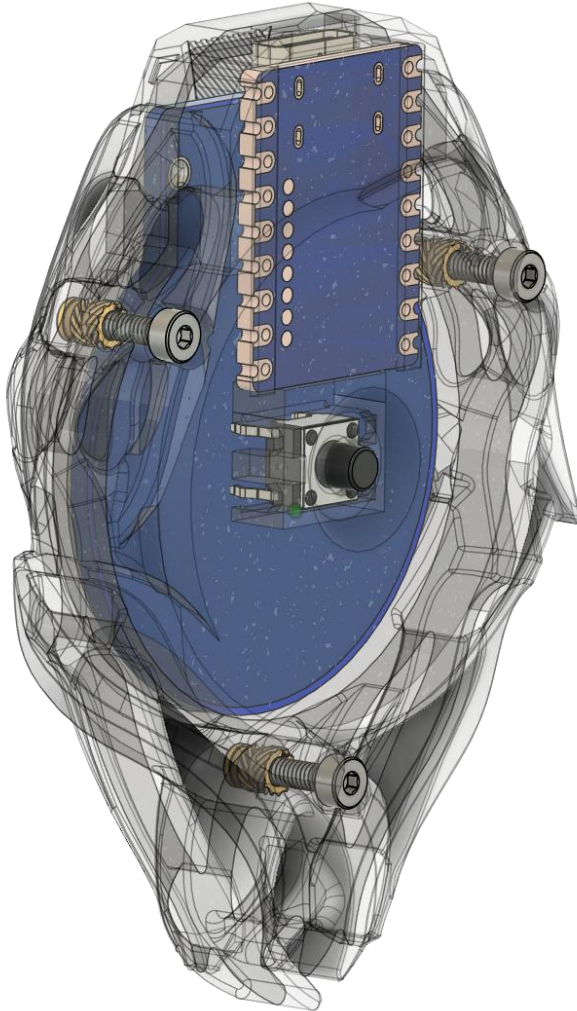
(3x) Screws M2x8mm

Optional (USB-C necklace):

(2x) 30cm 1.50mm^2 Silicone Wire black

(1x) USB-C socket + plug
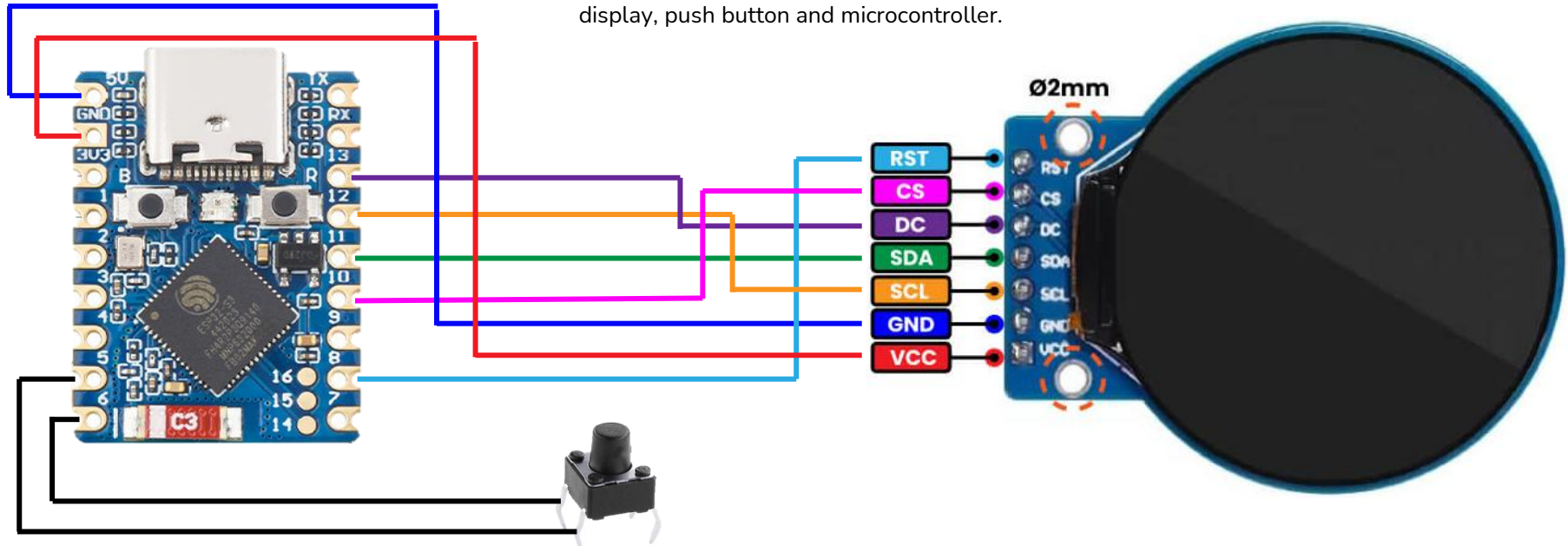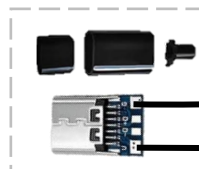   with housing each

ELECTRONICS

ELECTRONICS

WIRE:
Use 0.14-0.25mm² wire to connect
display, push button and microcontroller.

Ø2mm

RST
CS
DC
SDA
SCL
GND
VCC

NECKLACE WIRE:
Use 1,5mm² silicon wire to connect the USB-C jack with the plug. This
cable functions as a necklace for wearing the amulet. To do this, you put
your head through the two individual strands and connect the power bank
behind your back. You can then carry it comfortably in your trouser pocket.
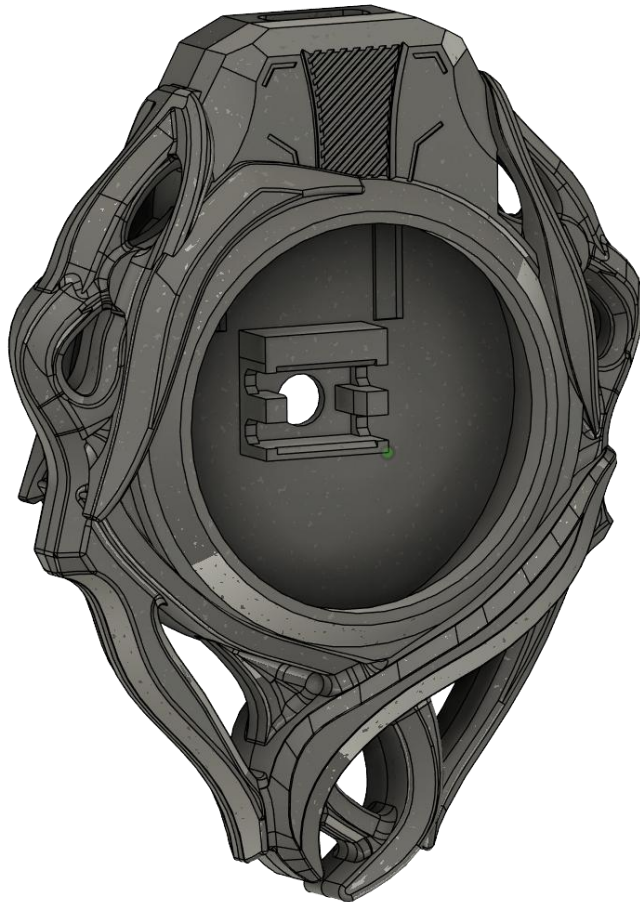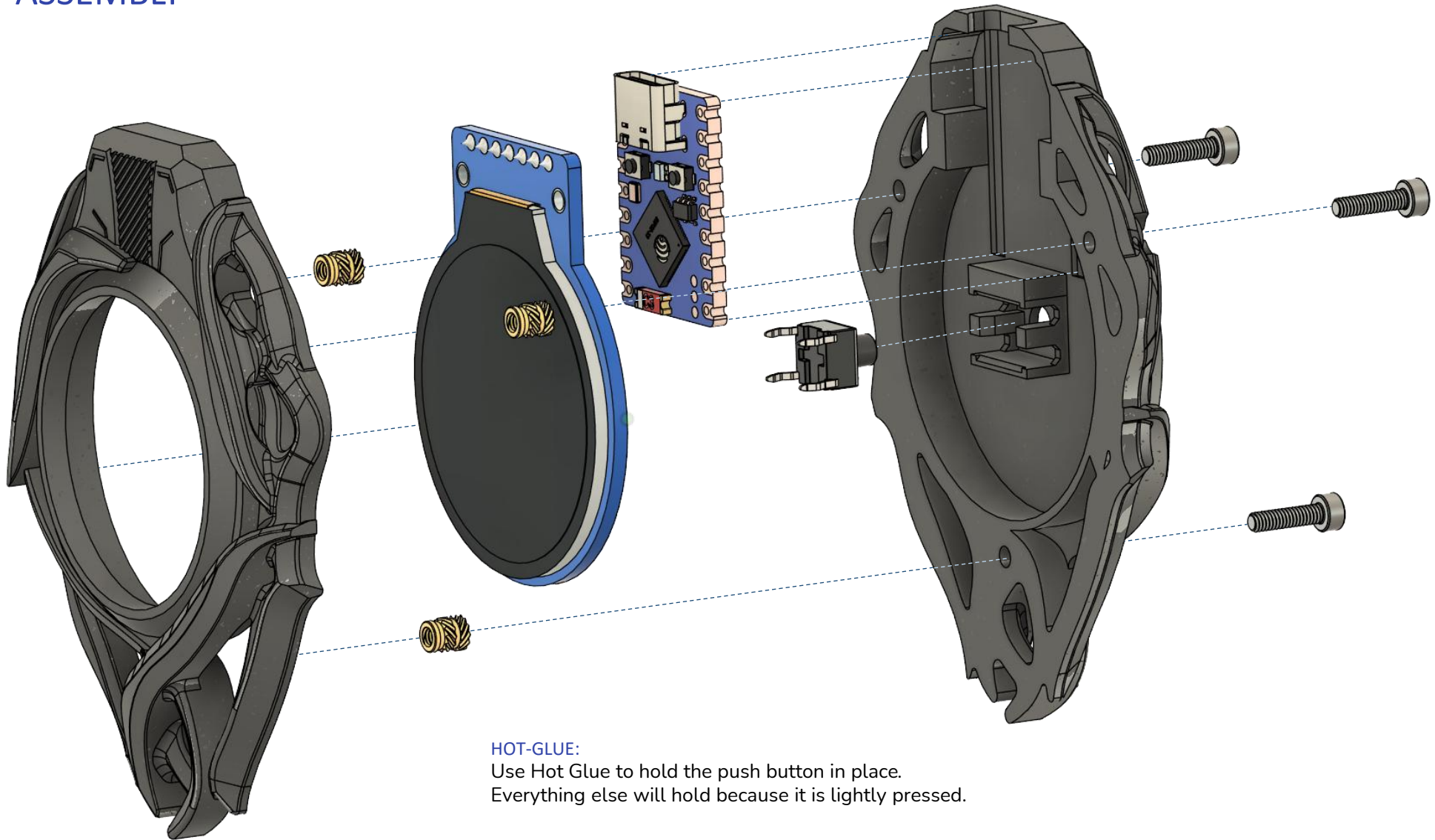
USB-C Socket

USB-C Plug

30 cm

ASSEMBLY

ASSEMBLY

HOT-GLUE:
Use Hot Glue to hold the push button in place.
Everything else will hold because it is lightly pressed.

FIRMWARE UPDATE

FIRMWARE

This manual is designed to be a reference manual for the build process. Next step is to upload the firmware to PCB and start testing for its function.

You can find the firmware here:

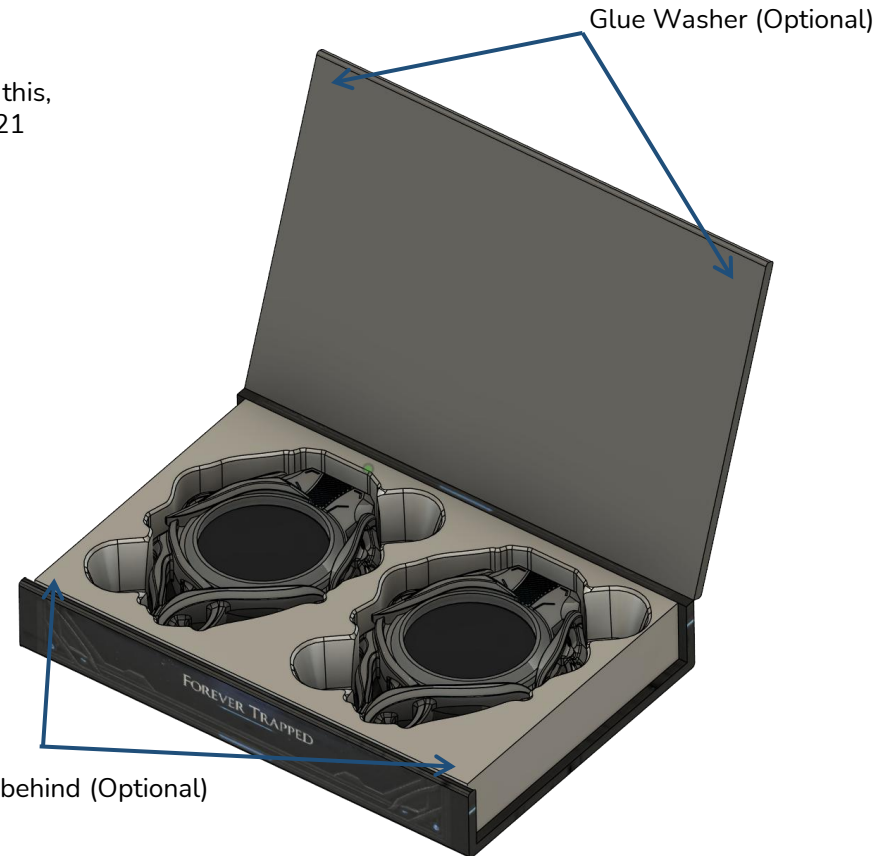https://github.com/flo199213/MysticAmulet

STORAGE BOX

STORAGE BOX

Glue Washer (Optional)

COMBINE CARDBOARD AND 3D PRINT:
Feel free to build a storage box using the 'MysticAmulet_Inlay' 3D file. To do this, use the supplied 'Cover.pdf' and a piece of cardboard measuring 13.5 cm by 21 cm. Stick the inlay into the cardboard box using double-sided adhesive tape.

Insert Magnet from behind (Optional)

TIP:
You can use Magnets to hold the lid closed.

Enjoy your Mystic Amulet.