
How to make and assemble a shroud for the STEVAL-USBPD45C

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Main components	
STEVAL-USBPD45C	45 W USB Type-C™ Power Delivery adapter reference design based on STCH03, STM32F051 and STUSB1602A

Purpose and benefits

The STEVAL-USBPD45C is designed to for the development of USB PD Type-C wall adapters. Use the list of requirements and the sequence of images below as guidance to help you build and assemble a plastic shroud to facilitate safe operation with the board.

Note: This document contains an attached CAD file in DXF format for the shroud sections. If you cannot see the attachment, please open this document in an appropriate pdf reader to access it.

Description

What is needed:

- STEVAL-USBPD45C_Box.dxf file;
- 25cmX25cm plexiglass sheet (3mm thick);
- Plexiglass cutter tool (Cut Width 0.15mm);
- 4 M2 screws (16mm \pm 2mm);
- 4 M2 nuts;
- 4 spacers (6mm \pm 2mm);
- IEC Connector - Bulgin BZH01/Z0000/02
- 2A 5x20mm fuse

Figure 1: STEVAL-USBPD45C_Box.dxf

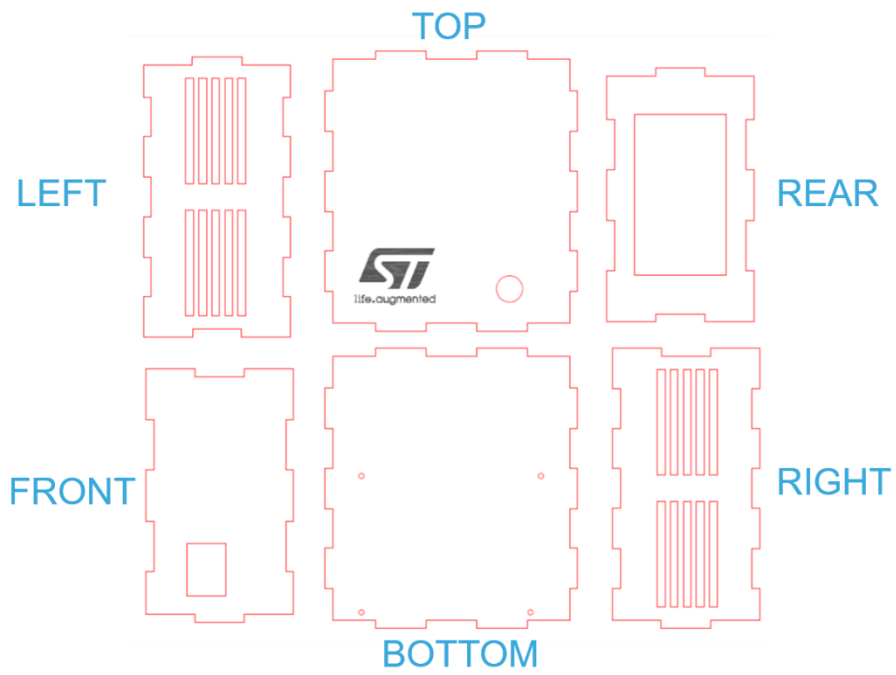


Figure 2: Shroud assembly

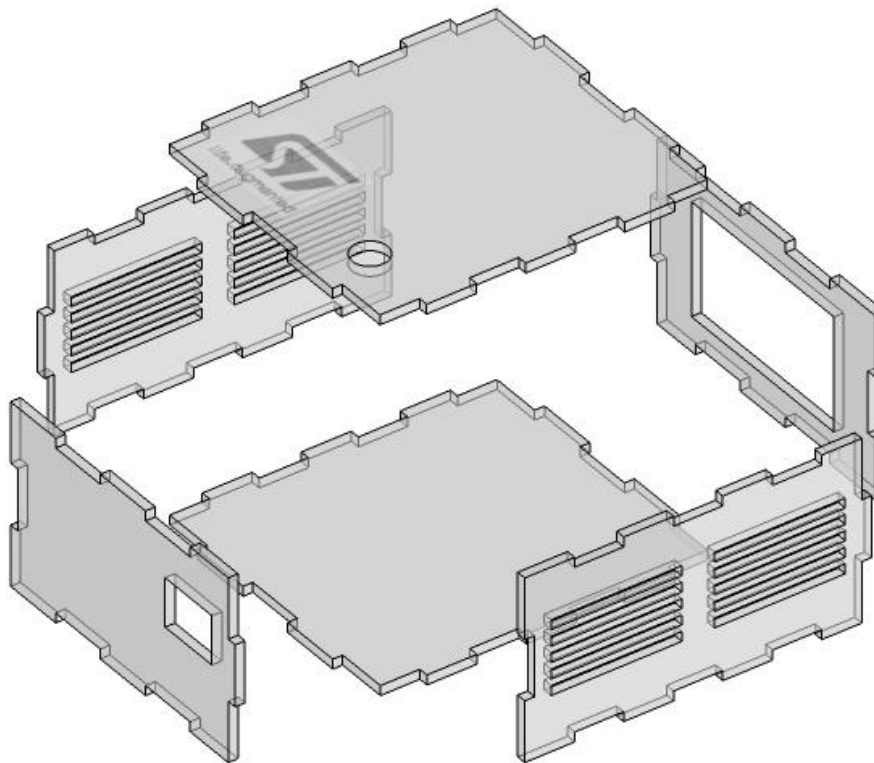


Figure 3: IEC connector mounting - front

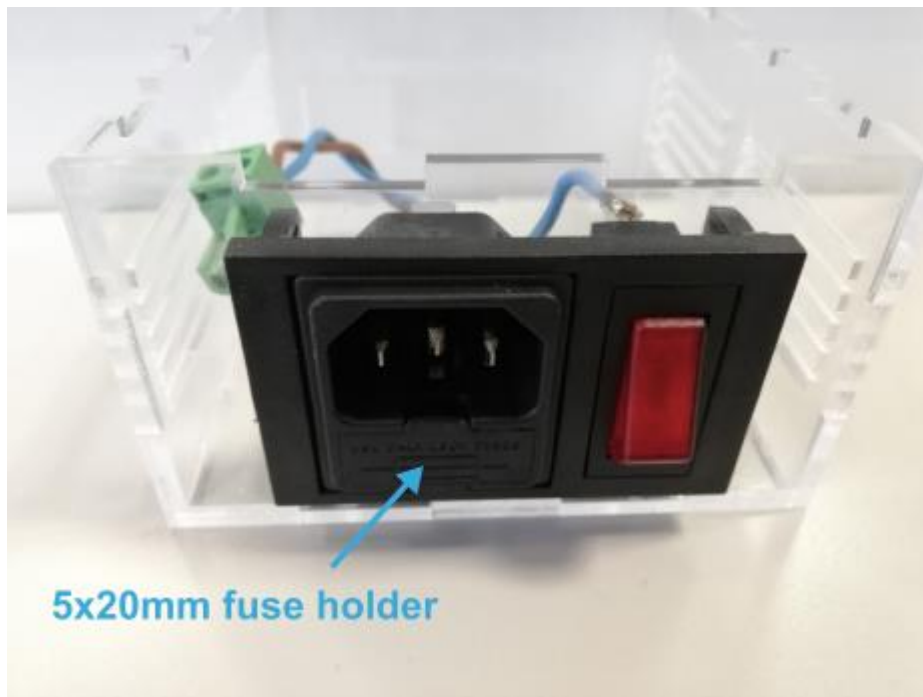


Figure 4: IEC connector mounting - back

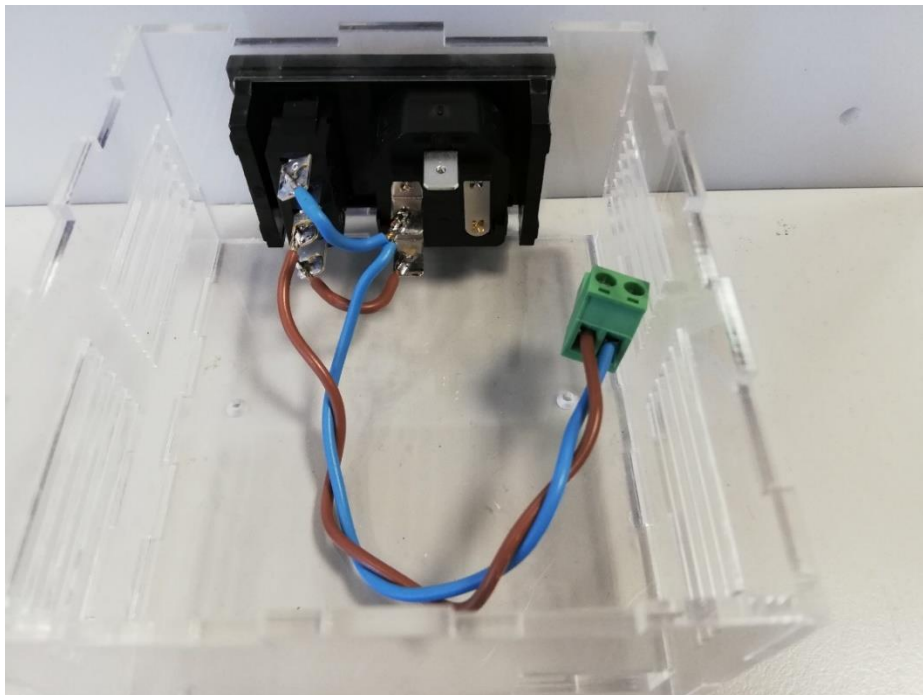


Figure 5: Mounting the STEVAL-USBPD45C board – screws and spacers

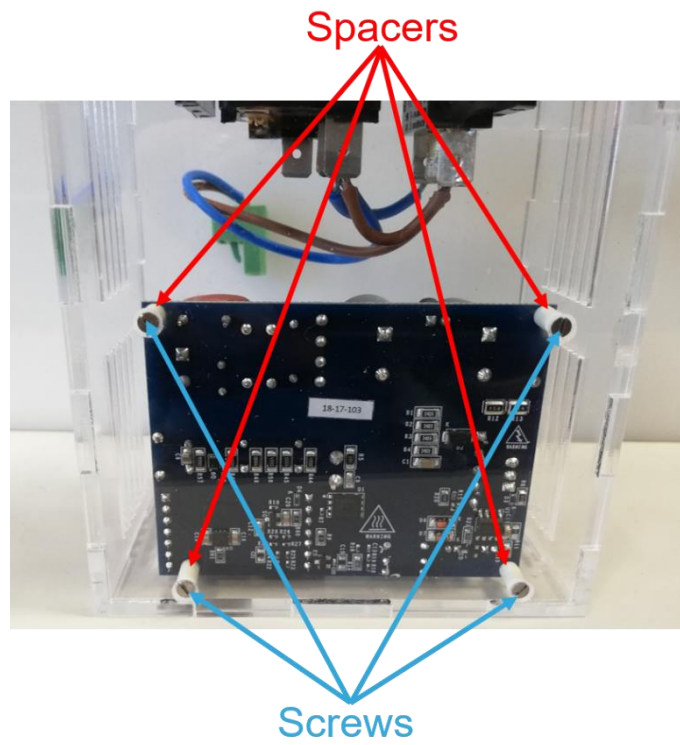


Figure 6: Mounting the STEVAL-USBPD45C board – nuts

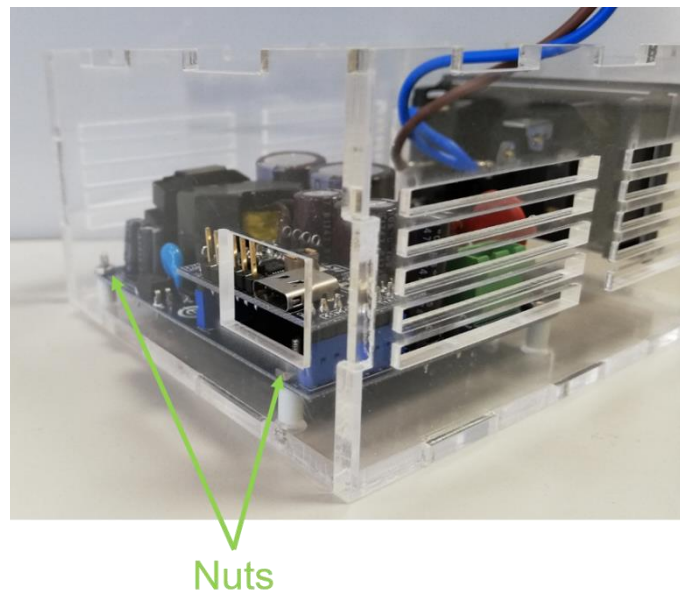
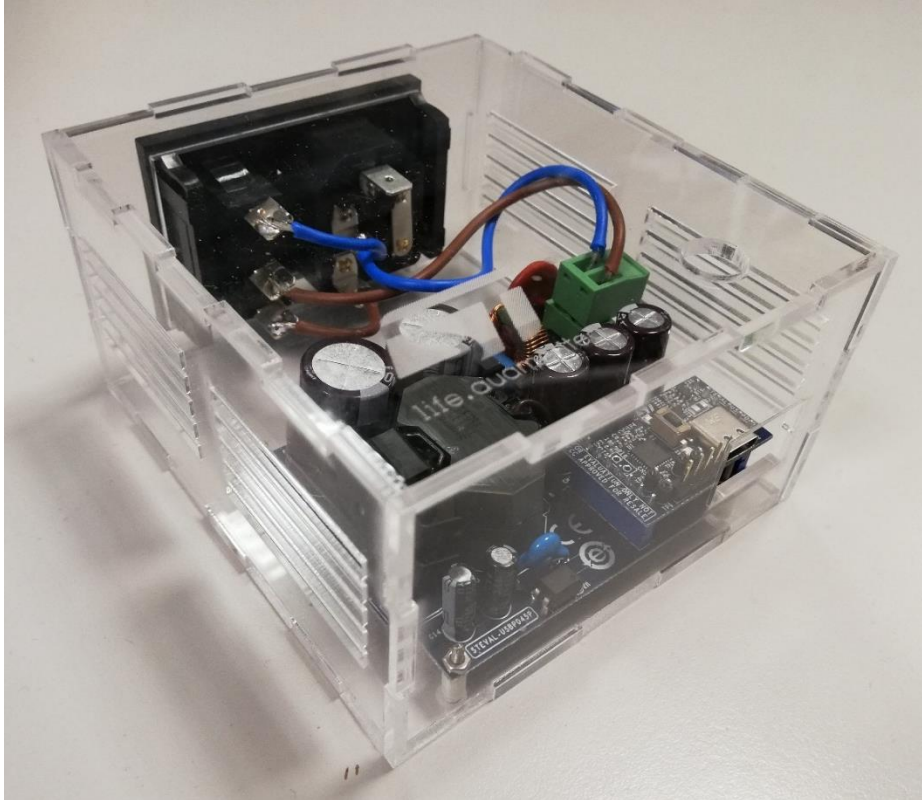


Figure 7: Final assembly



Support material

Related design support material
Product Evaluation board – STEVAL-USBPD45C
Gerber files PCB layout, bill of materials and schematics files – STEVAL-USBPD45C
Documentation
Data brief DB3575 : 45 W USB Type-C™ Power Delivery adapter reference design based on STCH03, STM32F051 and STUSB1602A
Application note AN5164 : STEVAL-USBPD45C 45 W USB Type-C™ Power Delivery adapter
Technical article TA0357 : Overview of USB Type-C™ and Power Delivery technologies
Technical note TN1273 : STEVAL-USBPD45C USB PD compliance reports

Revision history

Date	Version	Changes
19-Oct-2018	1	Initial release

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