

Soldering Guide

CHARM

Martin Michalski

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1 Buck Converter

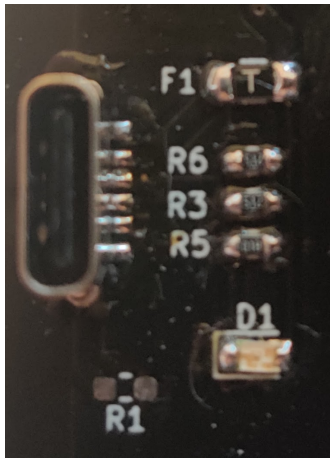
1.1 Materials

Begin by retrieving the components in TODO.

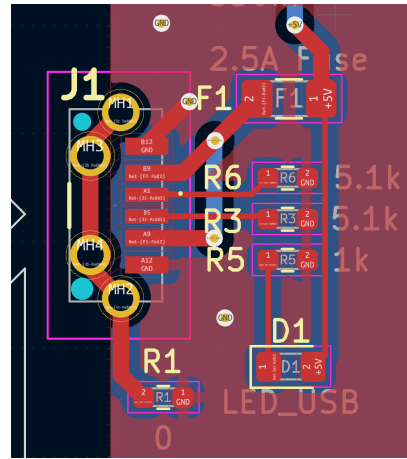
Part No.	Description	Silkscreen No(s).	Quantity
USB4140-GF-0070-C	USB-C Port	J1	1

Figure 1: Required Components for USB-C Subsystem

1.2 Layout



(a) Soldered Example



(b) PCB Layout

Figure 2: TODO Subsystem Layout Reference

Polarity Notes

Pay special attention to the orientation of the following components

- D1: USB LED

1.3 Soldering

Solder the components.

Recommended Order

1. X1: X1 Description

1.4 Quality Assurance

2 Omega 2S+

2.1 Materials

Begin by retrieving the components in TODO.

Part No.	Description	Silkscreen No(s).	Quantity
USB4140-GF-0070-C	USB-C Port	J1	1

Figure 3: Required Components for USB-C Subsystem

2.2 Layout

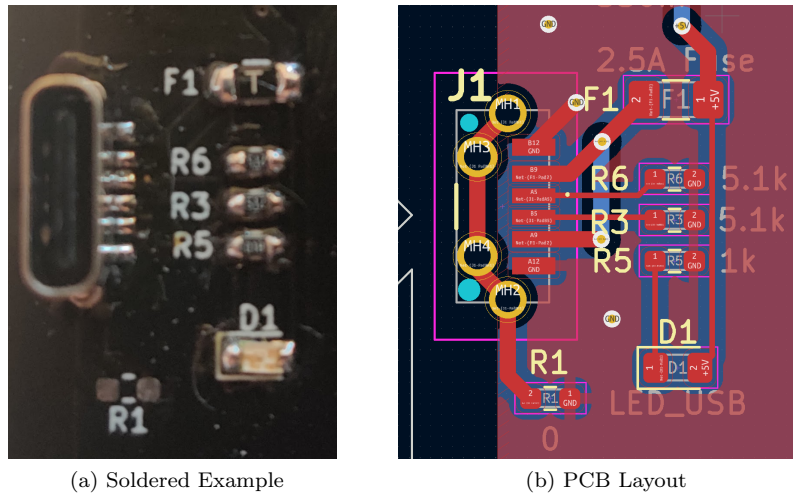


Figure 4: TODO Subsystem Layout Reference

Polarity Notes

Pay special attention to the orientation of the following components

- D1: USB LED

2.3 Soldering

Solder the components.

Recommended Order

1. X1: X1 Description

2.4 Quality Assurance

3 GPS Module

3.1 Materials

Begin by retrieving the components in TODO.

Part No.	Description	Silkscreen No(s).	Quantity
USB4140-GF-0070-C	USB-C Port	J1	1

Figure 5: Required Components for USB-C Subsystem

3.2 Layout

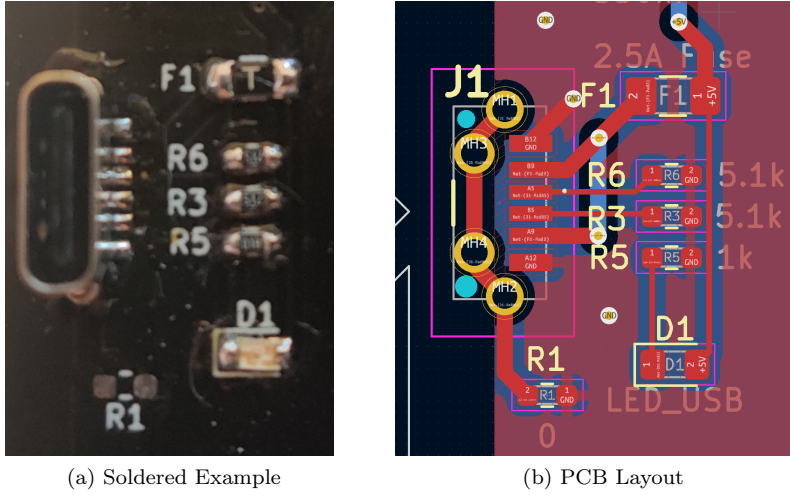


Figure 6: TODO Subsystem Layout Reference

Polarity Notes

Pay special attention to the orientation of the following components

- D1: USB LED

3.3 Soldering

Solder the components.

Recommended Order

1. X1: X1 Description

3.4 Quality Assurance

4 Battery Monitor

4.1 Materials

Begin by retrieving the components in TODO.

Part No.	Description	Silkscreen No(s).	Quantity
USB4140-GF-0070-C	USB-C Port	J1	1

Figure 7: Required Components for USB-C Subsystem

4.2 Layout

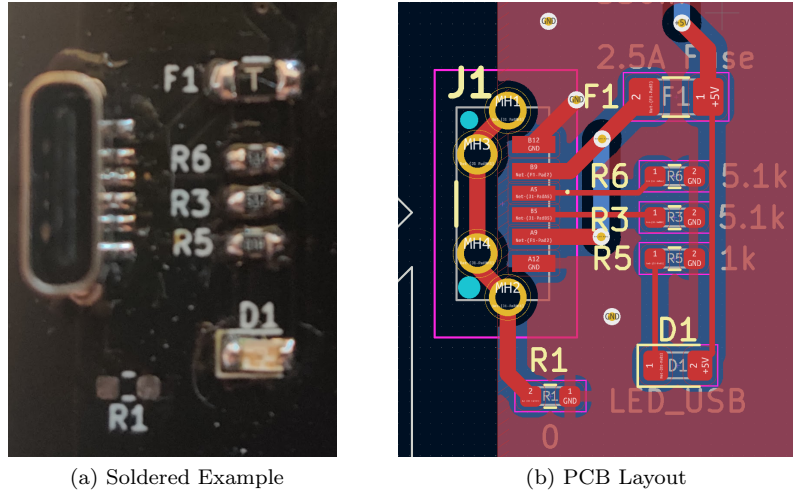


Figure 8: TODO Subsystem Layout Reference

Polarity Notes

Pay special attention to the orientation of the following components

- D1: USB LED

4.3 Soldering

Solder the components.

Recommended Order

1. X1: X1 Description

4.4 Quality Assurance