

# OBJEX Link RISCv

SB/uC

Microcontroller

File: ESP32-C3FH4.sch

IO

File: IO.sch

USB-C

USB-C

File: USB-C\_Type2.0.sch

POWER

LDO

File: RT9080-33GJ5.sch

Battery Manager

File: MCP73833T-AMI\_MF.sch

Copyright CERN 2020.

This source describes Open Hardware and is licensed under the CERN-OHLW v2

You may redistribute and modify this documentation and make products using it under the terms of the CERN-OHL-W v2 (<https://cern.ch/cern-ohl>).

This documentation is distributed WITHOUT ANY EXPRESS OR IMPLIED WARRANTY, INCLUDING OF MERCHANTABILITY, SATISFACTORY QUALITY AND FITNESS FOR A PARTICULAR PURPOSE. Please see the CERN-OHL-W v2 for applicable conditions.

Source location: <https://www.ohwr.org/project/wr-switch-hw>

As per CERN-OHL-W v2 section 4.1, should You produce hardware based on these sources, You must maintain the Source Location visible on the external case of the White Rabbit switch or other product you make using this documentation.

visit: [docs.objex.link](https://docs.objex.link)

Designer: Salvatore Raccardi

**OBJEX**

Sheet: /

File: OBJEX\_LINK-Rev1.7\_RISCv.sch

**Title: OBJEX Link RISCv**

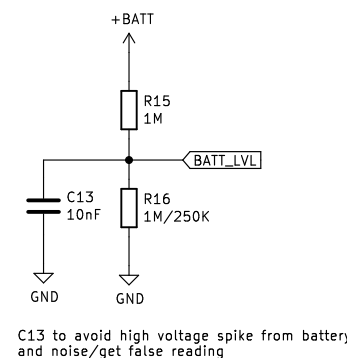
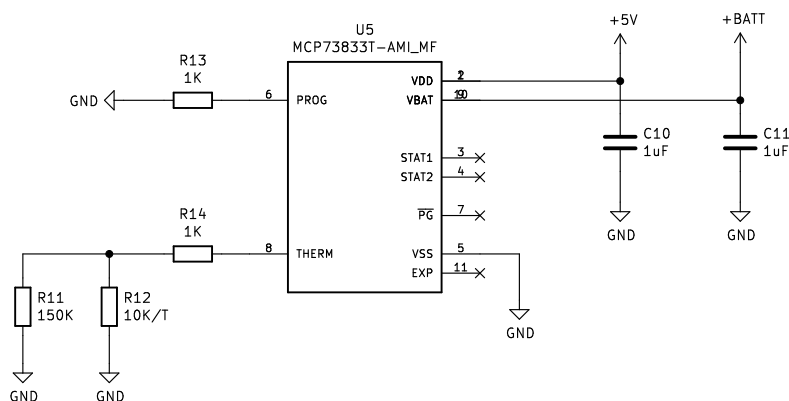
Size: A4 Date: 2021-11-22

KiCad E.D.A. kicad (6.0.0)

**Rev: 1.7-C3**

Id: 1/6

# BATTERY CHG



Copyright CERN 2020.

This source describes Open Hardware and is licensed under the CERN-OHLW v2. You may redistribute and modify this documentation and make products using it under the terms of the CERN-OHL-W v2 (<https://cern.ch/cern-ohl>). This documentation is distributed WITHOUT ANY EXPRESS OR IMPLIED WARRANTY, INCLUDING OF MERCHANTABILITY, SATISFACTORY QUALITY AND FITNESS FOR A PARTICULAR PURPOSE. Please see the CERN-OHL-W v2 for applicable conditions.

Source location: <https://www.ohwr.org/project/wr-switch-hw>

As per CERN-OHL-W v2 section 4.1, should You produce hardware based on these sources, You must maintain the Source Location visible on the external case of the White Rabbit switch or other product you make using this documentation.

visit: [docs.objex.link](https://docs.objex.link)

Designer: Salvatore Raccardi

**OBJEX**

Sheet: /Battery Manager/

File: MCP73833T-AML\_MF.sch

**Title: OBJEX Link RISCv**

Size: A4 Date: 2021-11-22

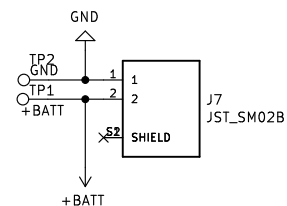
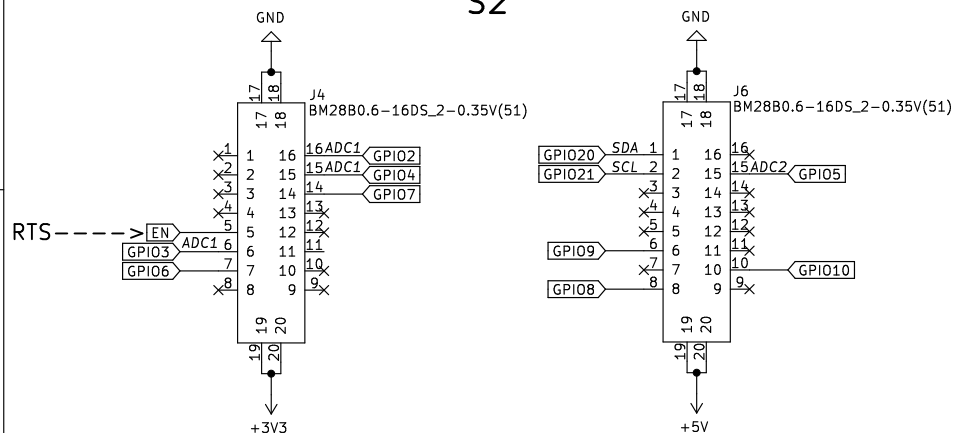
KiCad E.D.A. kicad (6.0.0)

**Rev: 1.7-C3**

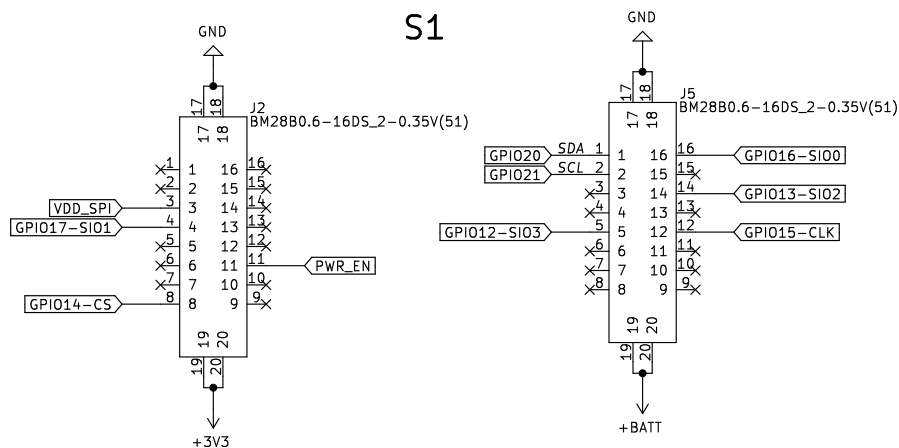
Id: 2/6

\0

S2



S1



Copyright CERN 2020.

This source describes Open Hardware and is licensed under the CERN-OHLW v2. You may redistribute and modify this documentation and make products using it under the terms of the CERN-OHL-W v2 (<https://cern.ch/cern-ohl>). This documentation is distributed WITHOUT ANY EXPRESS OR IMPLIED WARRANTY, INCLUDING OF MERCHANTABILITY, SATISFACTORY QUALITY AND FITNESS FOR A PARTICULAR PURPOSE. Please see the CERN-OHL-W v2 for applicable conditions.

Source location: <https://www.ohwr.org/project/wr-switch-hw>

As per CERN-OHL-W v2 section 4.1, should You produce hardware based on these sources, You must maintain the Source Location visible on the external case of the White Rabbit switch or other product you make using this documentation.

visit: [docs.objex.link](https://docs.objex.link)  
Designer: Salvatore Raccardi

**OBJEX**

Sheet: / \0 /  
File: IO.sch

**Title: OBJEX Link RISCv**

Size: A4 Date: 2021-11-22  
KiCad E.D.A. kicad (6.0.0)

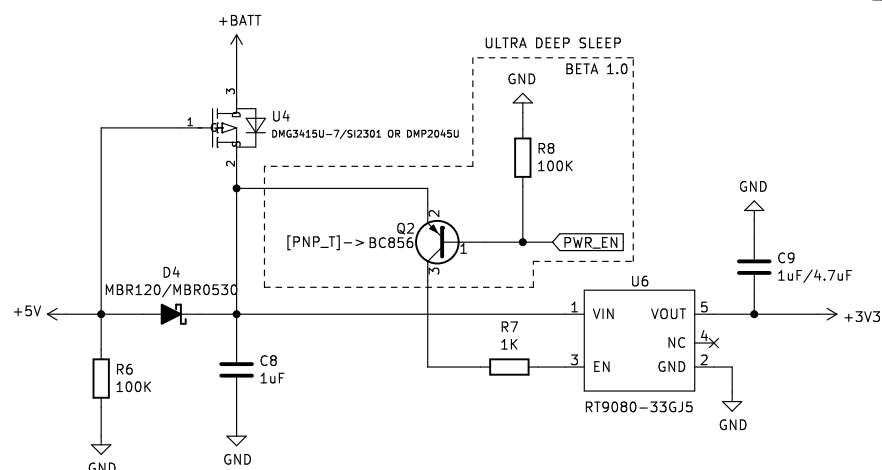
**Rev: 1.7-C3**  
Id: 3/6

# LDO

## [PNP\_T]

1. Test to be completed, to choose the most suitable component.  
 /-[]Component to be changed

NOTE: Currently working correctly - but (off\_status: 40uA value too high)  
 /-NOTE: EN\_RT9080: OFF --> 3.2uA (MAX: 4.32uA)



Copyright CERN 2020.

This source describes Open Hardware and is licensed under the CERN-OHLW v2  
 You may redistribute and modify this documentation and make products  
 using it under the terms of the CERN-OHL-W v2 (<https://cern.ch/cern-ohl>).  
 This documentation is distributed WITHOUT ANY EXPRESS OR IMPLIED  
 WARRANTY, INCLUDING OF MERCHANTABILITY, SATISFACTORY QUALITY  
 AND FITNESS FOR A PARTICULAR PURPOSE. Please see the CERN-OHL-W v2  
 for applicable conditions.

Source location: <https://www.ohwr.org/project/wr-switch-hw>

As per CERN-OHL-W v2 section 4.1, should You produce hardware based on  
 these sources, You must maintain the Source Location visible on the  
 external case of the White Rabbit switch or other product you make using  
 this documentation.

visit: [docs.objex.link](https://docs.objex.link)

Designer: Salvatore Raccardi

**OBJEX**

Sheet: /LDO/

File: RT9080-33GJ5.sch

**Title: OBJEX Link RISCv**

Size: A4 Date: 2021-11-22

KiCad E.D.A. kicad (6.0.0)

**Rev: 1.7-C3**

Id: 4/6

**ESP32-C3H4**  
RISC-V - WiFi + BLE 5.0

Copyright CERN 2020.  
This source describes Open Hardware and is licensed under the CERN-OHLW v2  
You may redistribute and modify this documentation and make products  
using it under the terms of the CERN-OHL-W v2 (<https://cern.ch/cern-ohl>).  
This documentation is distributed WITHOUT ANY EXPRESS OR IMPLIED  
WARRANTY, INCLUDING OF MERCHANTABILITY, SATISFACTORY QUALITY  
AND FITNESS FOR A PARTICULAR PURPOSE. Please see the CERN-OHL-W v2  
for applicable conditions.  
Source location: <https://www.ohwr.org/project/wr-switch-hw>  
As per CERN-OHL-W v2 section 4.1, should You produce hardware based on  
these sources, You must maintain the Source Location visible on the  
external case of the White Rabbit switch or other product you make using  
this documentation.

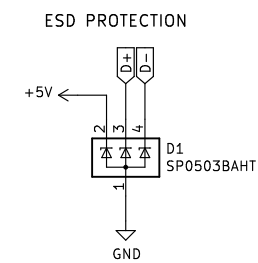
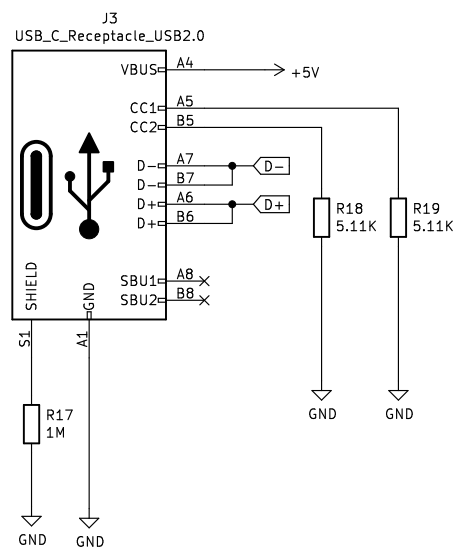
visit: docs.objex.link		Designer: Salvatore Raccardi	
<b>OBJEX</b>			
Sheet: /Microcontroller/			
File: ESP32-C3FH4.sch			
<b>Title: OBJEX Link RISC-V</b>			
Size: A4	Date: 2021-11-22	Rev: 1.7-C3	
KiCad E.D.A. kicad (6.0.0)			Id: 5/6

This source describes Open Hardware and is licensed under the CERN-OHLW v2. You may redistribute and modify this documentation and make products using it under the terms of the CERN-OHL-W v2 (<https://cern.ch/cern-ohl>). This documentation is distributed WITHOUT ANY EXPRESS OR IMPLIED WARRANTY, INCLUDING OF MERCHANTABILITY, SATISFACTORY QUALITY AND FITNESS FOR A PARTICULAR PURPOSE. Please see the CERN-OHL-W v2 for applicable conditions.

As per CERN-OHL-W v2 section 4.1, should You produce hardware based on these sources, You must maintain the Source Location visible on the external case of the White Rabbit switch or other product you make using this documentation.

Id: 5/6

# USB-C TYPE 2.0



visit: [docs.objex.link](https://docs.objex.link)  
Designer: Salvatore Raccardi  
**OBJEX**

Sheet: /USB-C/  
File: USB-C\_Type2.0.sch

**Title: OBJEX Link RISCv**

Size: A4 Date: 2021-11-22

KiCad E.D.A. kicad (6.0.0)

**Rev: 1.7-C3**

Id: 6/6