

SuperCap UPS Rasp Pi

Variant: [No Variations]

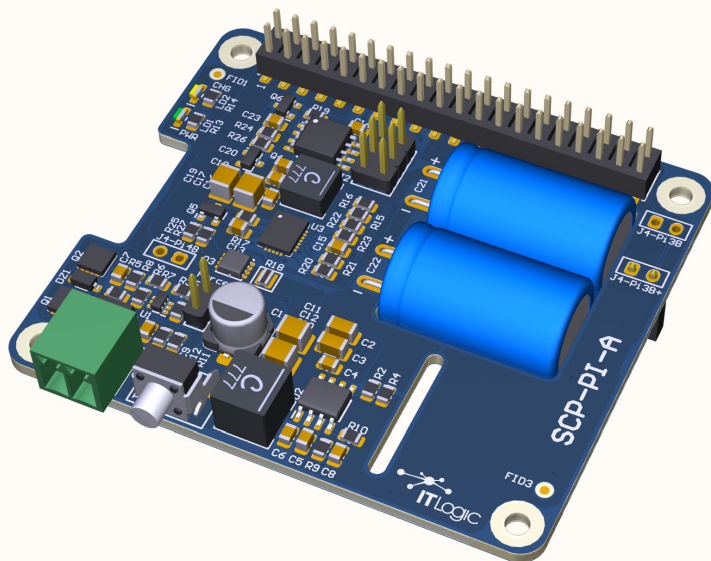
Revision: **A**

RELEASED Nov-02-2019

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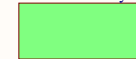
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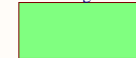


DESIGN CONSIDERATIONS

RevisionHistory



BlockDiagram



DESIGN NOTE:
Example text for informational
design notes.

DESIGN NOTE:
Example text for critical
design notes.

DESIGN NOTE:
Example text for cautionary
design notes.

LAYOUT NOTE:
Example text for critical
layout guidelines.

Project: **SuperCap UPS Rasp Pi**

Revision: **A**

Title: **Cover Page**

Sheet: 1 of 5

Author: [acortellini](#)

Date: Nov-02-2019

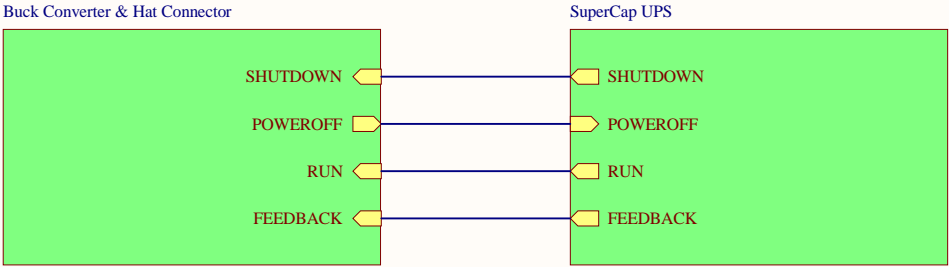
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REVISION HISTORY

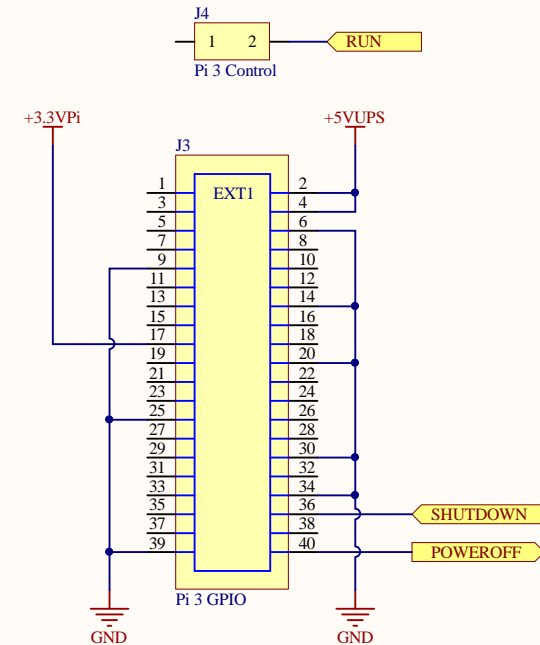
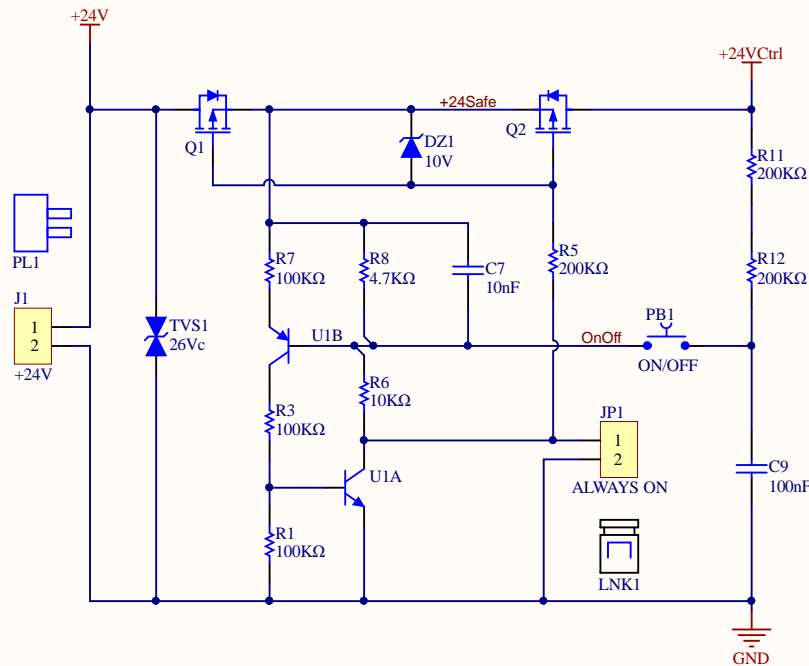
<i>DATE</i>	<i>PAGES</i>	<i>REVISION</i>
Oct-08-2019	N/A	Design forked from SCP-PI-RS485-D
Oct-12-2019	4	Added latched power control with tactile switch button, P MOS and two complementary BJT
Oct-12-2019	4	Added power supply minimum input voltage enable. Moved electrolytic to power control area.
Oct-12-2019	4	Removed 7V power supply and RS485 Interface
Aug-11-2019	N/A	Release A

BLOCK DIAGRAM

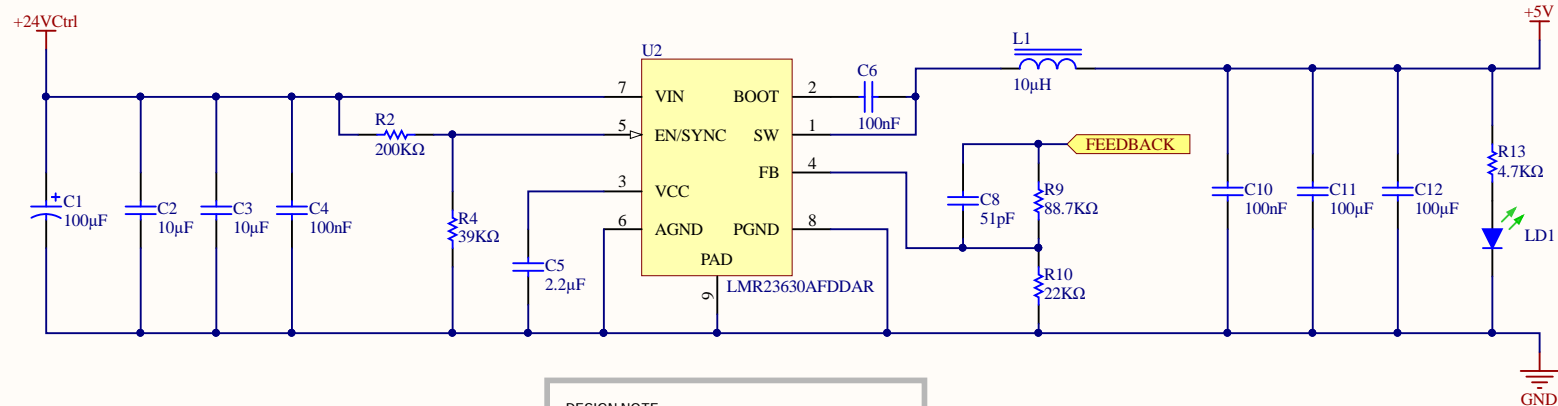


Local Fiducials

FID1 FID2 FID3



DESIGN NOTE:
To enable the self power-off add the following instruction at the end of the file /boot/config.sys:
dtoverlay=gpio-poweroff,gpiopin=21
dtoverlay=gpio-shutdown,gpio_pin=16,active_low=0



DESIGN NOTE:
Minimum Voltage Enable: 9.5V
Minimum Voltage Disable: 7.0V

Project: **SuperCap UPS Rasp Pi**

Revision: **A**

Title: **Buck Converter**

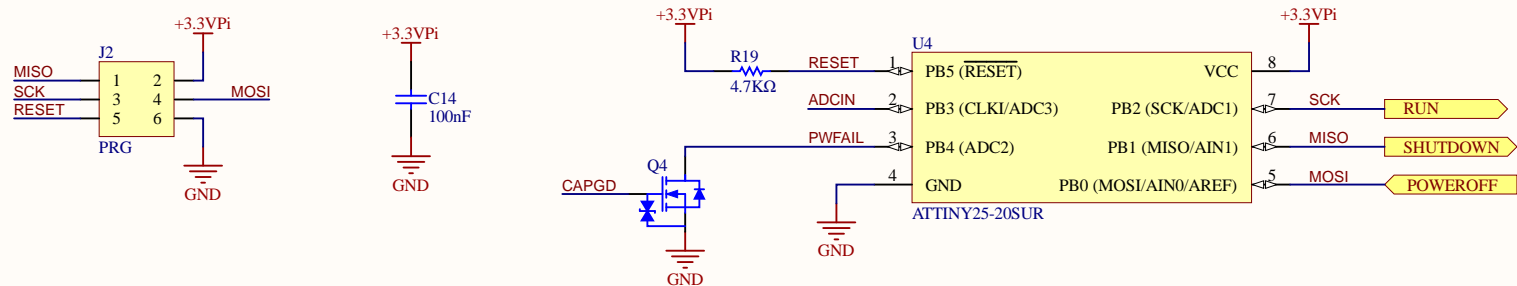
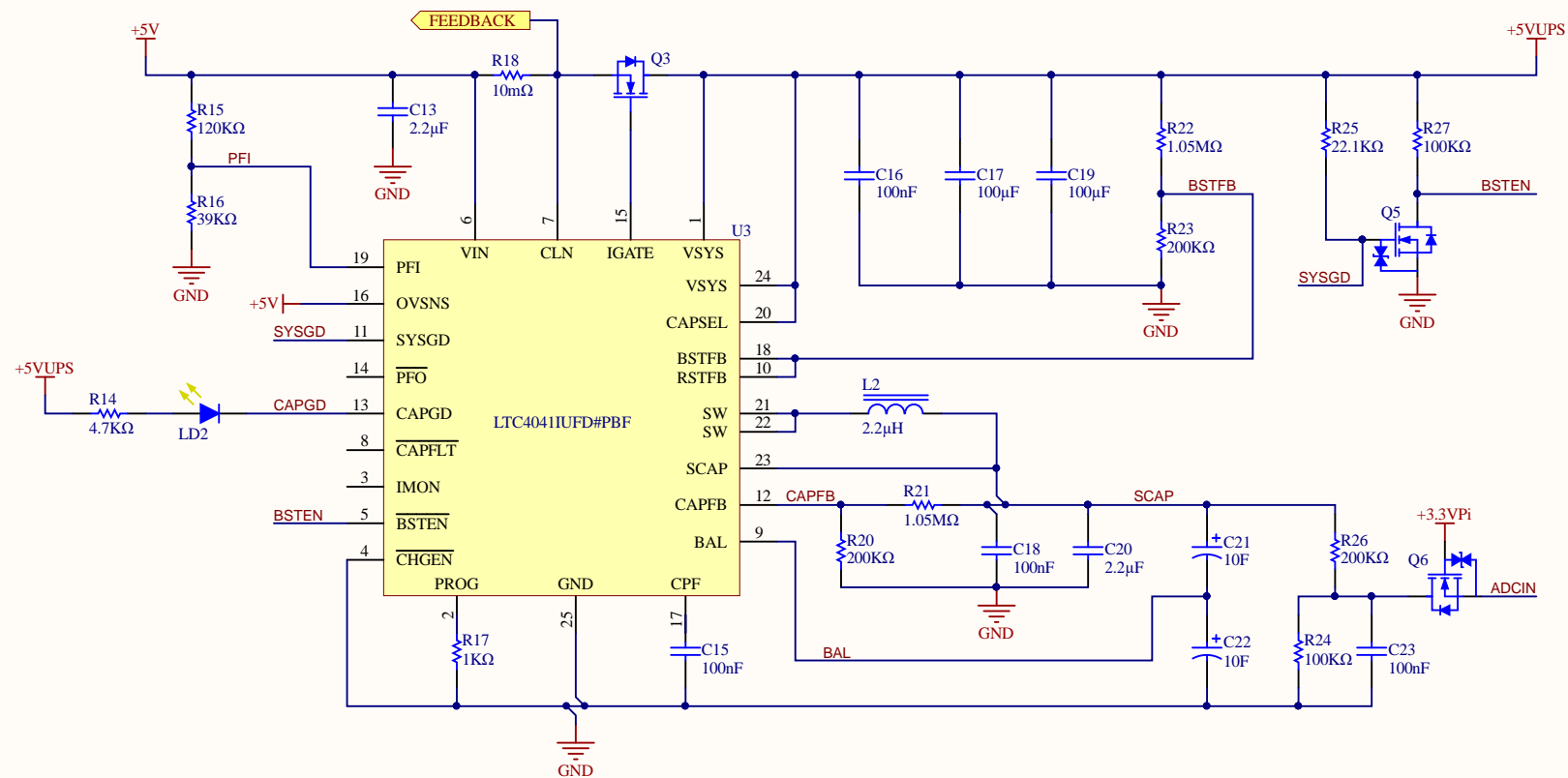
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Author: acortellini

Date: Nov-02-2019

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DESIGN NOTE:
Maximum Capacitor Charge Current: 2 A
Capacitor Charge Voltage: 4.8 V
Minimum Backup Time: 220 ms
Power Failure Threshold: 4.85 V
SYSGD Threshold: 4.6 V

DESIGN NOTE:
Do not program the ATtiny25 with the Raspberry Pi connected.
Most Programmers have a supply voltage of +5V which will damage the GPIO pins.

Project: *SuperCap UPS Rasp Pi*Revision: **A**Title: **SuperCap UPS**

Sheet: 5 of 5

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