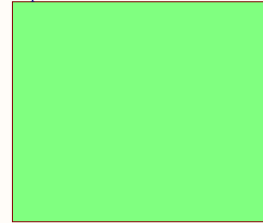


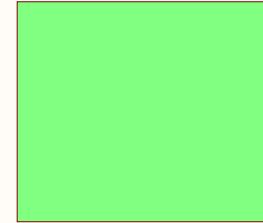
TABLE OF CONTENTS	
PAGE	DESCRIPTION
1	TITLE PAGE
2	CONNECTORS
3	SKYWIRE
4	POWER
5	ECO LIST

TITLE PAGE

TOP
Top.SchDoc



ECO
ECO LIST.SchDoc



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IMPORTANT NOTES ABOUT THIS SCHEMATIC

DESIGN NOTE: Example text for the design note to show the note inside the colored box.

1) DESIGN NOTES in grey are information notes.

DESIGN NOTE: Example text for the design note to show the note inside the colored box.


2) DESIGN NOTES in red are critical, and must be understood and followed.

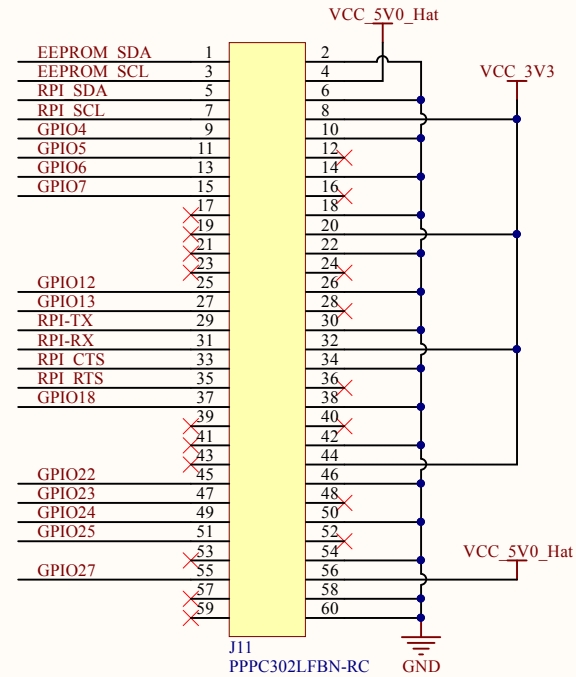
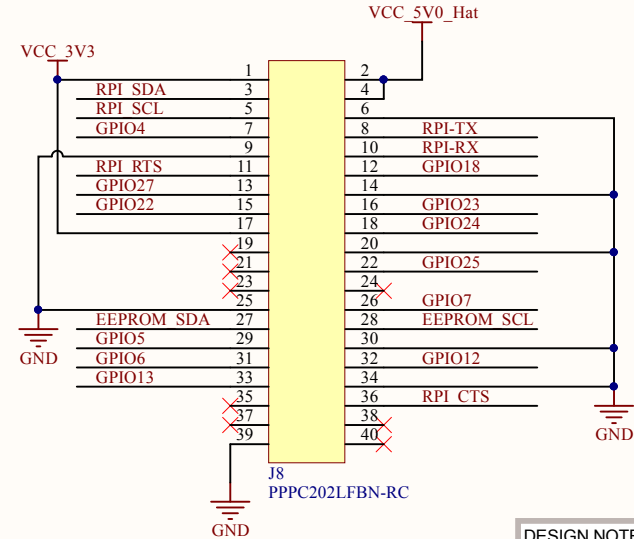
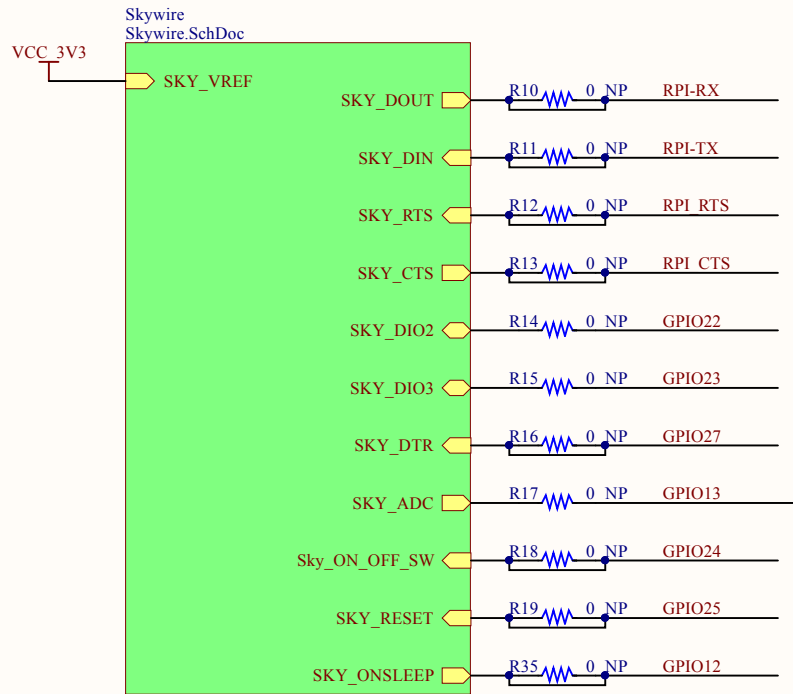
✘ 3) A red X indicates suppression of error checking on a pin/net. Commonly suppressed errors include: single-pin net, no driving source, etc.

4) All unique components in this schematic should have a manufacturer's part number displayed; exceptions to this rule are commodity passives such as resistors and capacitors.

5) Finally, population vs. non-population intent is indicated by adding "NP" next to the part. All parts with "NP" next to the part are intended to be unplaced during assembly.

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		www.nimbelink.com MINNEAPOLIS	
Title: TITLE			
Project: Skywire RPI Hat	Size: B	Sheet 1	of 5
Number: 1001430	Rev: A	Modified: 5/22/2017	10:45:38 AM
Prepared for: Nimbelink			

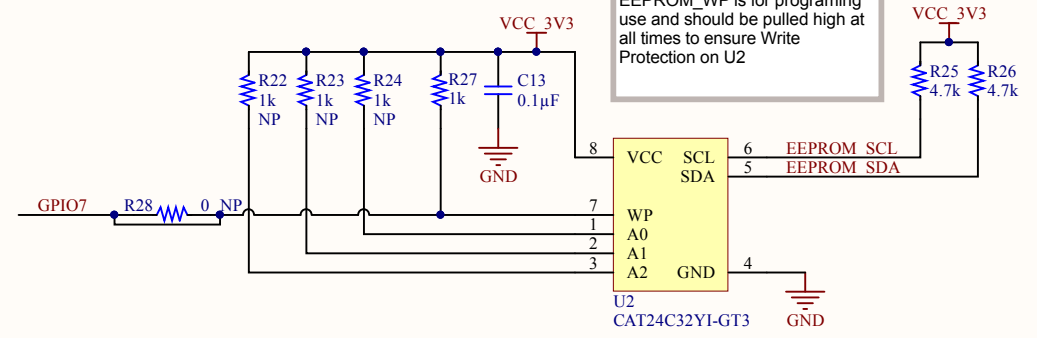
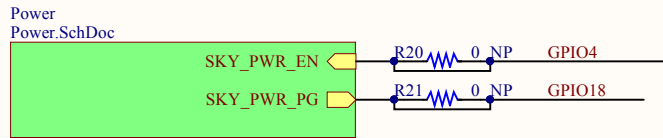


DESIGN NOTE:
J8 allows the adapter to be used with the Raspberry Pi 3.

J11 Allows for the adapter to be used with the Raspberry Pi Compute Module I/O board. Connect J11 to J5 on the Compute Module I/O Board.

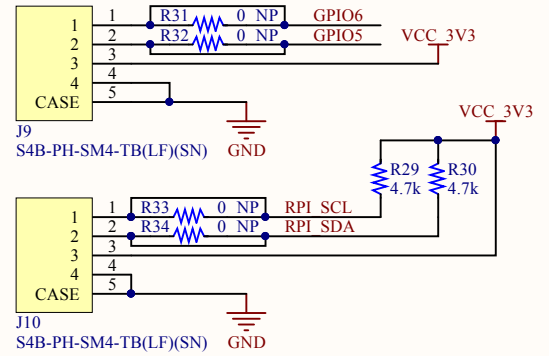
DESIGN NOTE: R14, R15, and R17 are included, but not populated, to allow support for additional features on future skywire modems.

DESIGN NOTE: 0 ohm resistors R10, R11, R12, R13, R16, R18, R19, R20, R21, R28, and R31-R34 have a short through them to allow the 0 ohm resistors not to be placed. If users need to reroute a signal cut the trace inbetween the resistor pads, this will allow for the signal to be easily reconnected if needed.



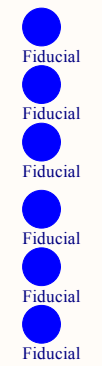
DESIGN NOTE: EEPROM address is: 0x54

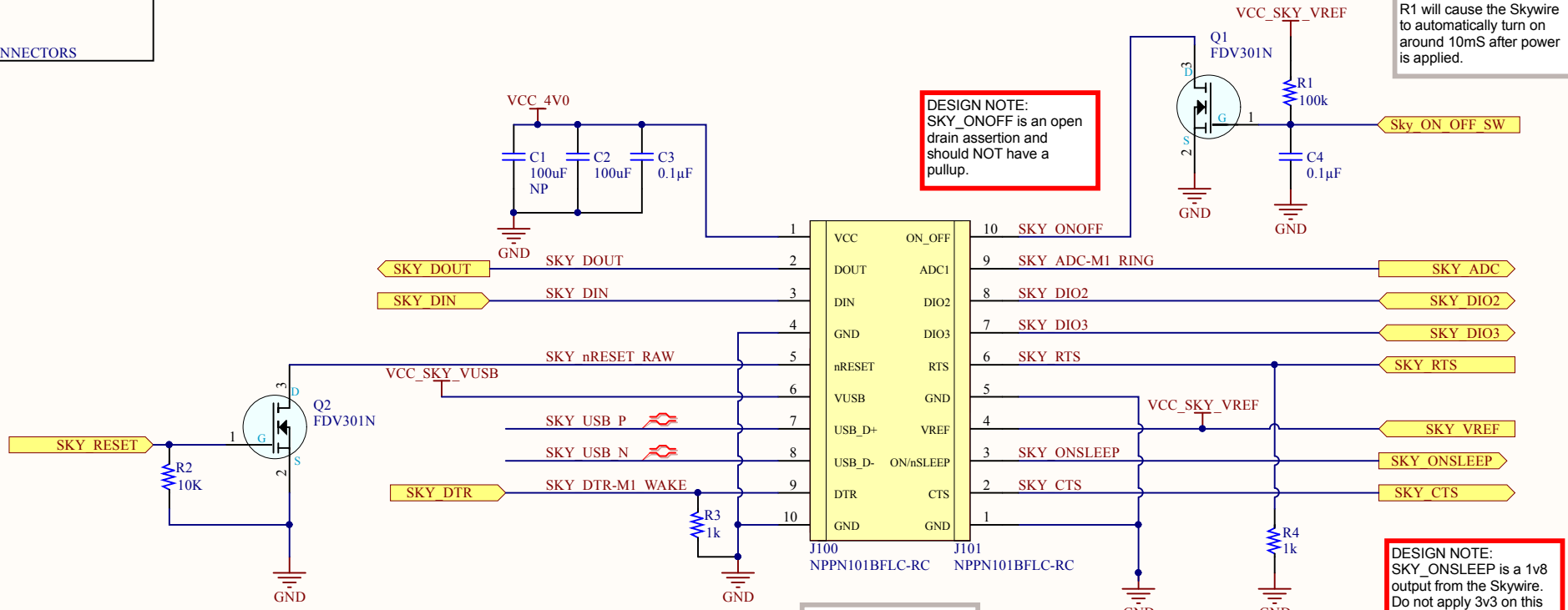
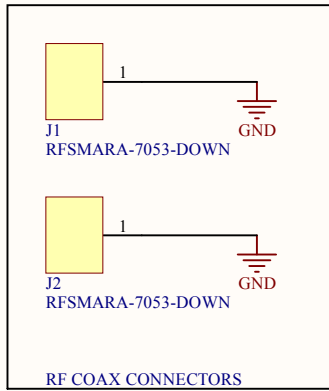
EEPROM_WP is for programing use and should be pulled high at all times to ensure Write Protection on U2



PCB
1001431

Memory Image
1001433





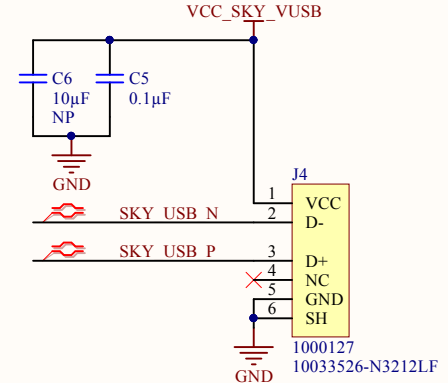
DESIGN NOTE:
SKY_ONOFF is an open drain assertion and should NOT have a pullup.

DESIGN NOTE:
R1 will cause the Skywire to automatically turn on around 10mS after power is applied.

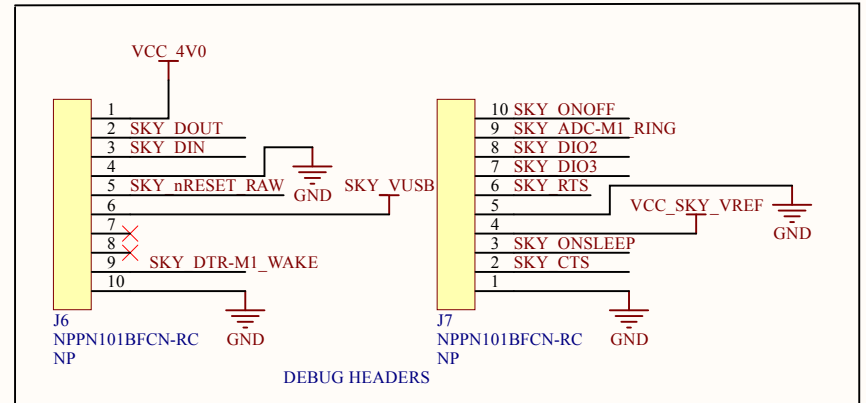
DESIGN NOTE:
Skywire socket is two 2mm pitch 1x10 sockets

DESIGN NOTE:
SKY_ONSLEEP is a 1v8 output from the Skywire. Do not apply 3v3 on this line.

DESIGN NOTE:
The Skywire USB Port will not power the Raspberry Pi or the Skywire.



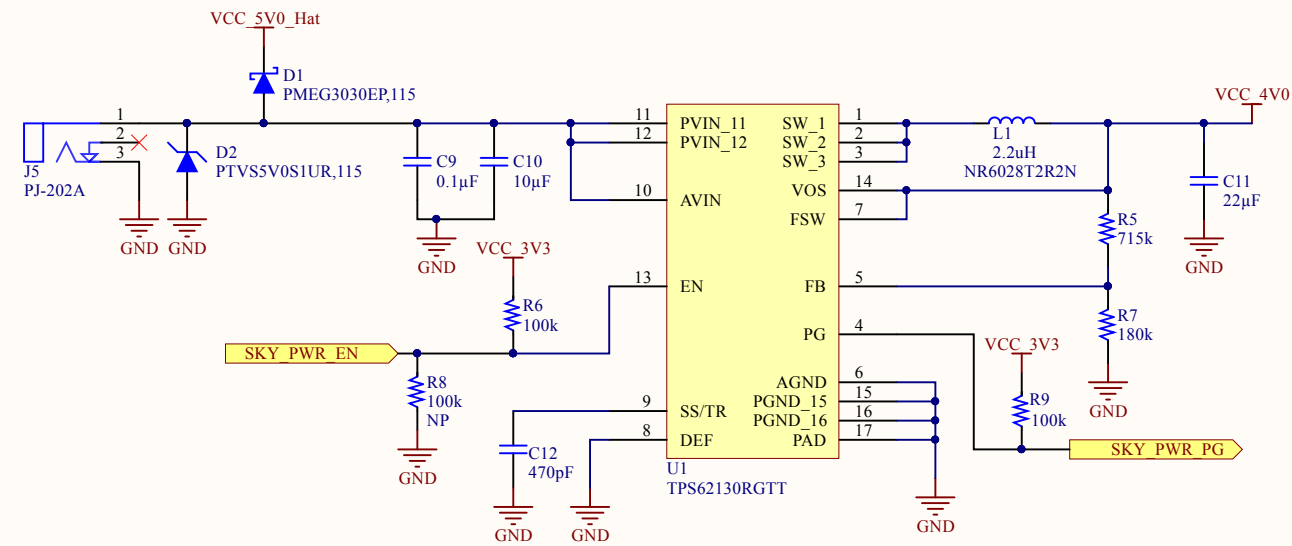
DESIGN NOTE:
Sky USB DM and DP are not connected to the debug headers.



POWER

DESIGN NOTE:
5V Must be applied for
Skywire to be powered.

DESIGN NOTE: Hat is
designed for 5V input
only.



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www.nimbelink.com		MINNEAPOLIS	
Title: POWER			
Project: Skywire RPI Hat	Size: B	Sheet 4	of 5
Number: 1001430	Rev: A	Modified: 5/22/2017	10:45:38 AM
Prepared for: Nimbelink	CONFIDENTIAL		

ECO LIST

Revision Control			
Assy Part Number	Rev	Description of Change	Date
1001386	A	Alpha Release	2017-03-16
1001386	B	SCH Changes: -NP R22	2017-05-15
1001430	A	SCH Changes: -Moved Skywire RTS connection from J11-33 to J11-35. -Moved Skywire CTS connection from J11-23 to J11-33 -Connected Skywire pin 13 (J101-3) to RPI headers GPIO12 -Added R35 (NP) -Updated Memory Image PN -Updated PCB PN PCB Changes -Added 5V Silkscreen indicator near J5 -Implemented SCH changes	2017-05-19

Revision Control			
Assy Part Number	Rev	Description of Change	Date