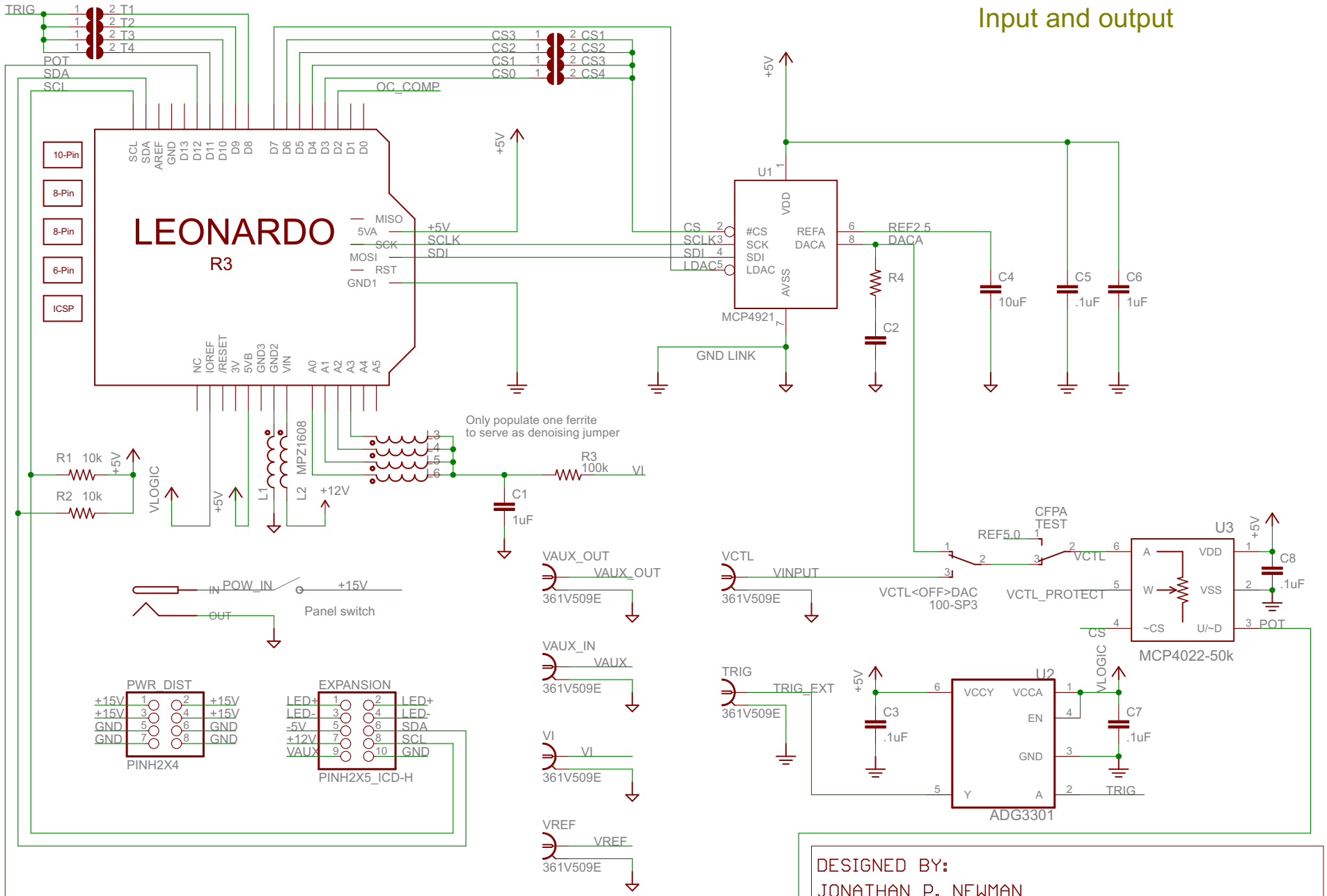
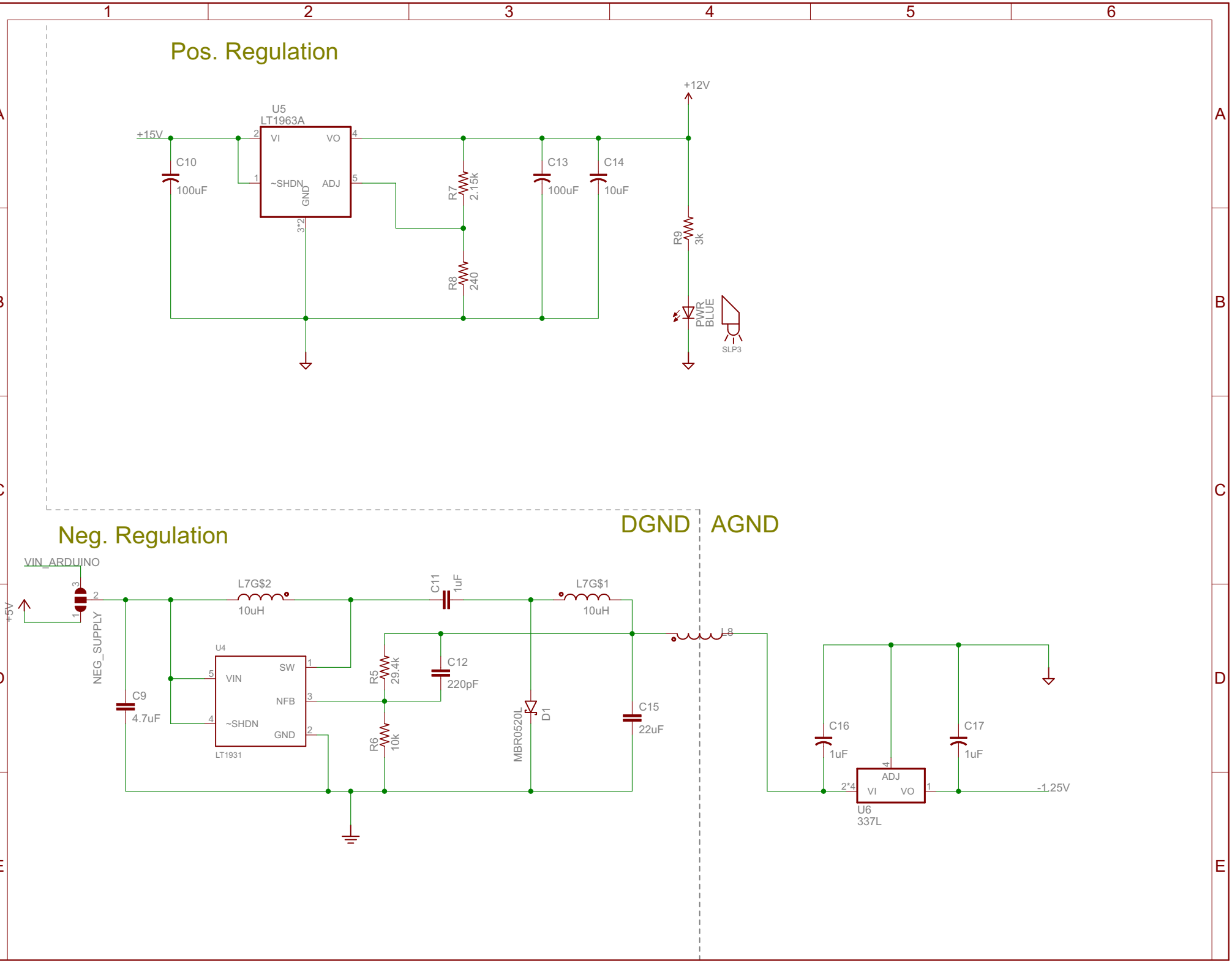
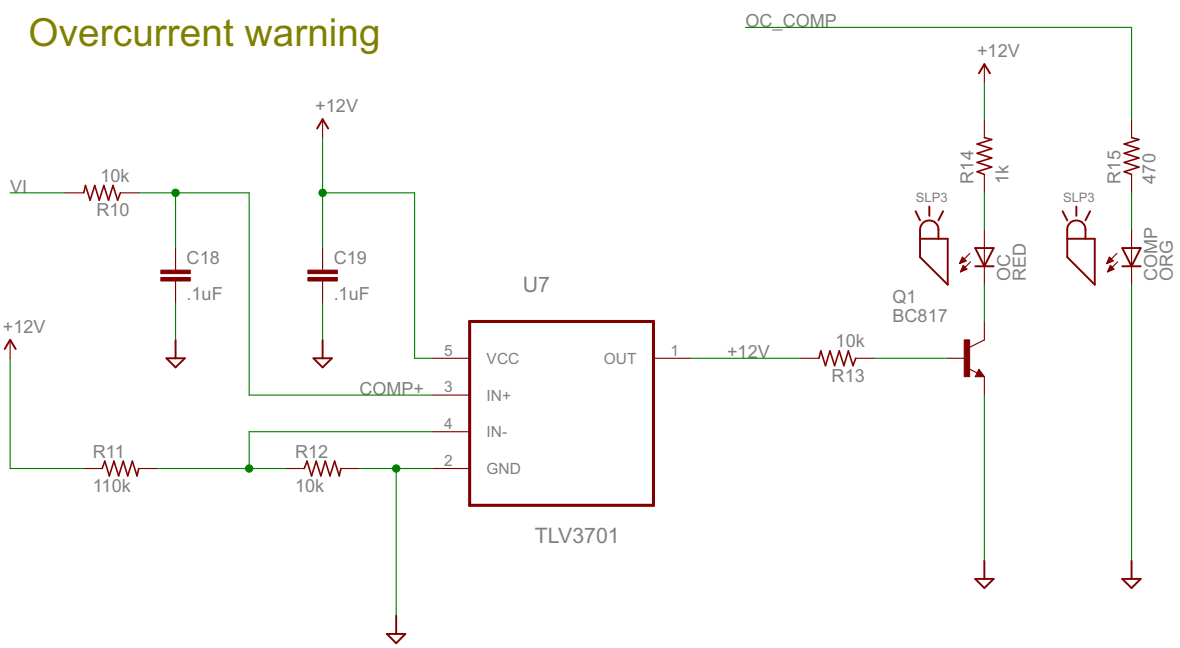
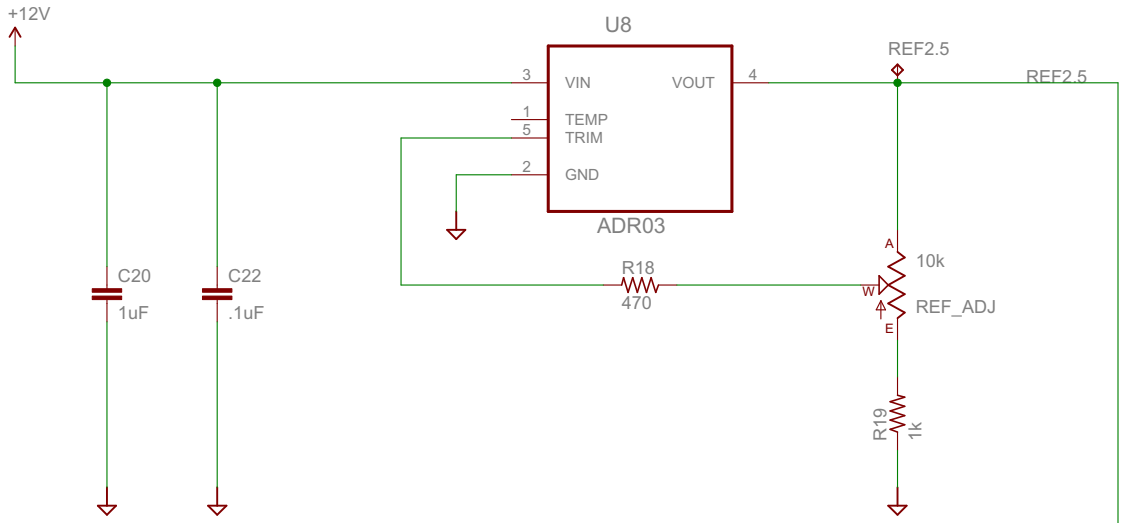

Input and output
LEONARDO
R3
MCP4921
MCP4022-50k
ADG3301
MPZ1608
Only populate one ferrite
to serve as denoising jumper
Panel switch
PWR_DIST
PINH2X4
EXPANSION
PINH2X5_ICD-H
361V509E
VCTL<OFF>DAC
100-SP3
DESIGNED BY:
JONATHAN P. NEWMAN
TITLE: cyclops_r3
Document Number:
N/A
REV:
3.5
Date: 12/29/2014 7:04:22 PM
Sheet: 1/5


Pos. Regulation
U5
LT1963A
+15V
VI
VO
~SHDN
ADJ
GND
C10
100uF
C13
100uF
C14
10uF
R7
2.15k
R8
240
R9
3k
+12V
PWR
BLUE
SLP3
Neg. Regulation
DGND
AGND
VIN_ARDUINO
+5V
NEG_SUPPLY
L7G$2
10uH
C11
1uF
L7G$1
10uH
L8
U4
VIN
SW
NFB
~SHDN
GND
LT1931
C9
4.7uF
R5
29.4k
C12
220pF
R6
10k
MBR0520L
D1
C15
22uF
C16
1uF
C17
1uF
ADJ
VI
VO
U6
337L
-1.25V

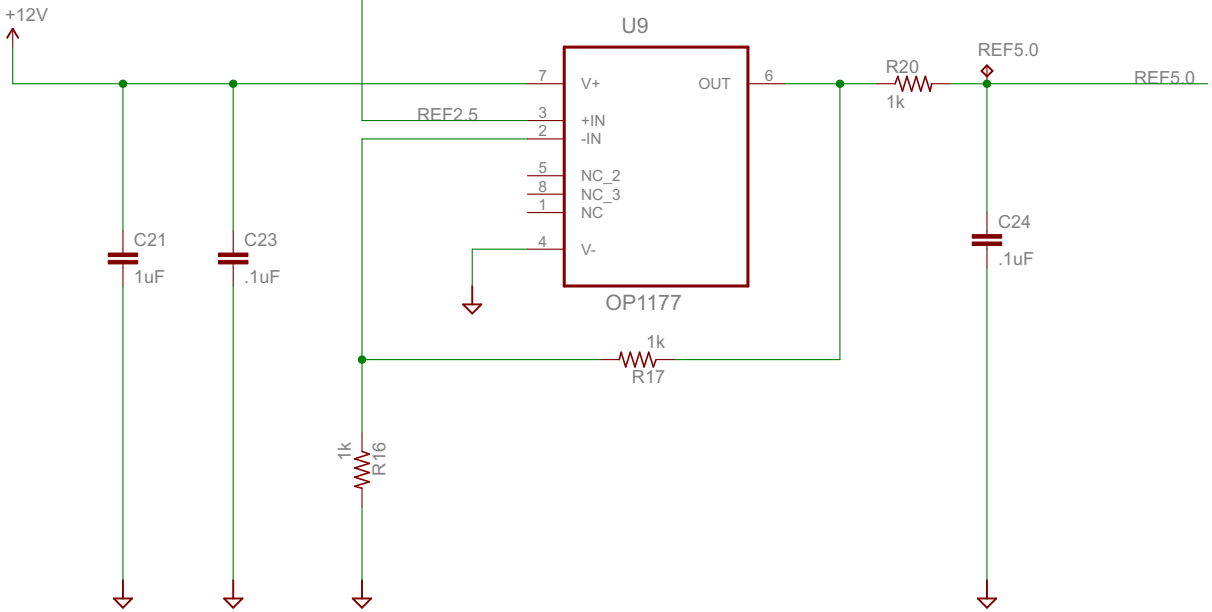


DESIGNED BY: JONATHAN P. NEWMAN	
TITLE: cyclops_r3	
Document Number: N/A	REV: 3.5
Date: 12/29/2014 7:04:22 PM	Sheet: 3/5

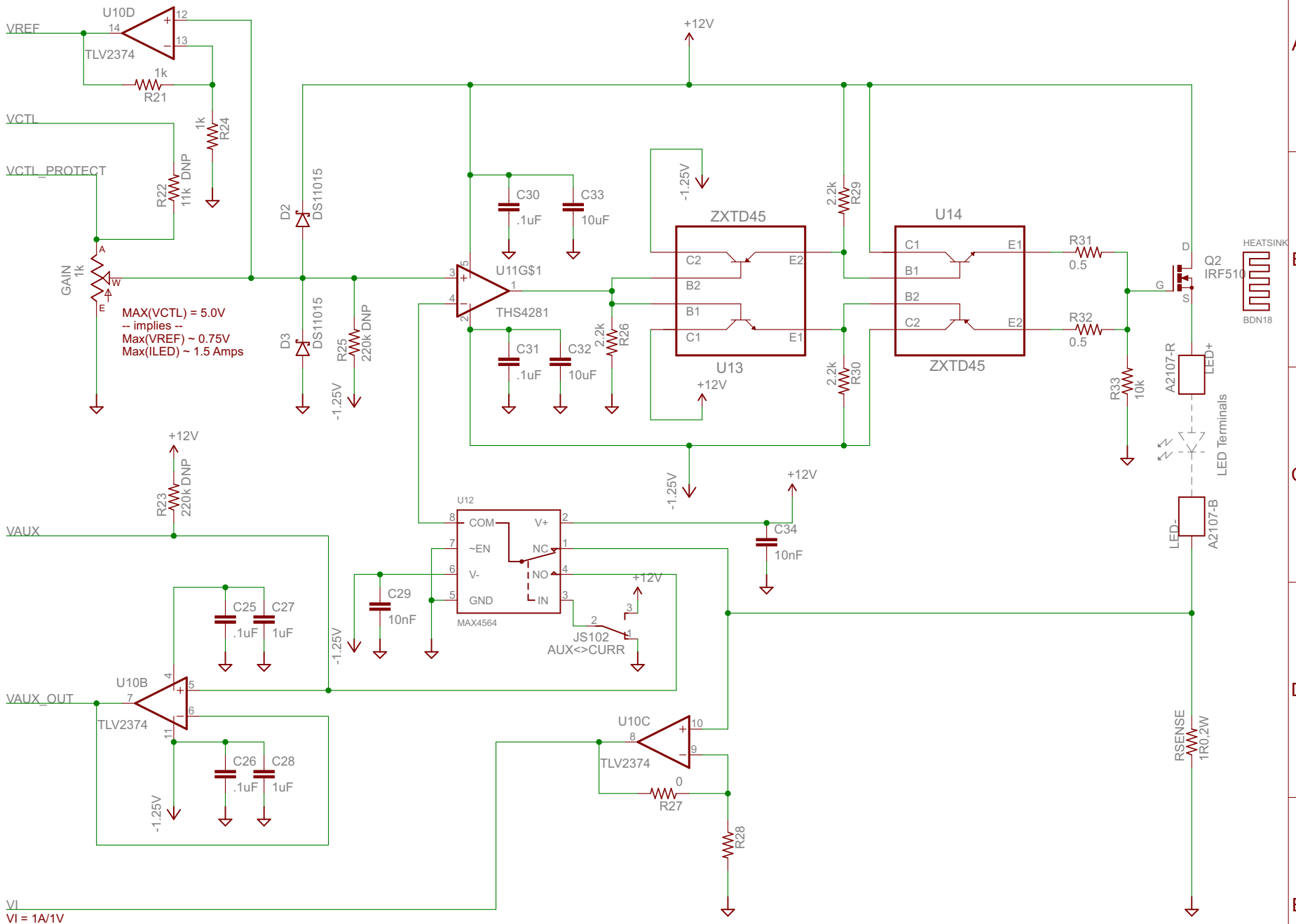
2.5 Volt Reference



5 Volt Reference



Drivetrain


U10D
VREF
TLV2374
1k
R21
VCTL
VCTL_PROTECT
R22
11k DNP
1k
R24
GAIN
1k
MAX(VCTL) = 5.0V
-- implies --
Max(VREF) ~ 0.75V
Max(ILED) ~ 1.5 Amps
D2
DS11015
D3
DS11015
R25
220k DNP
-1.25V
+12V
C30
.1uF
C33
10uF
U11G$1
THS4281
C31
.1uF
C32
10uF
2.2k
R26
ZXTD45
U13
2.2k
R29
2.2k
R30
U14
ZXTD45
R31
0.5
R32
0.5
R33
10k
Q2
IRF510
HEATSINK
BDN18
A2107-R
LED+
LED Terminals
A2107-B
LED-
RSENSE
1R0,2W
R23
220k DNP
VAUX
U12
COM
~EN
V-
GND
V+
NC
NO
IN
MAX4564
C29
10nF
C34
10nF
JS102
AUX<>CURR
C25
.1uF
C27
1uF
U10B
VAUX_OUT
TLV2374
C26
.1uF
C28
1uF
U10C
TLV2374
0
R27
R28
VI
VI = 1A/1V