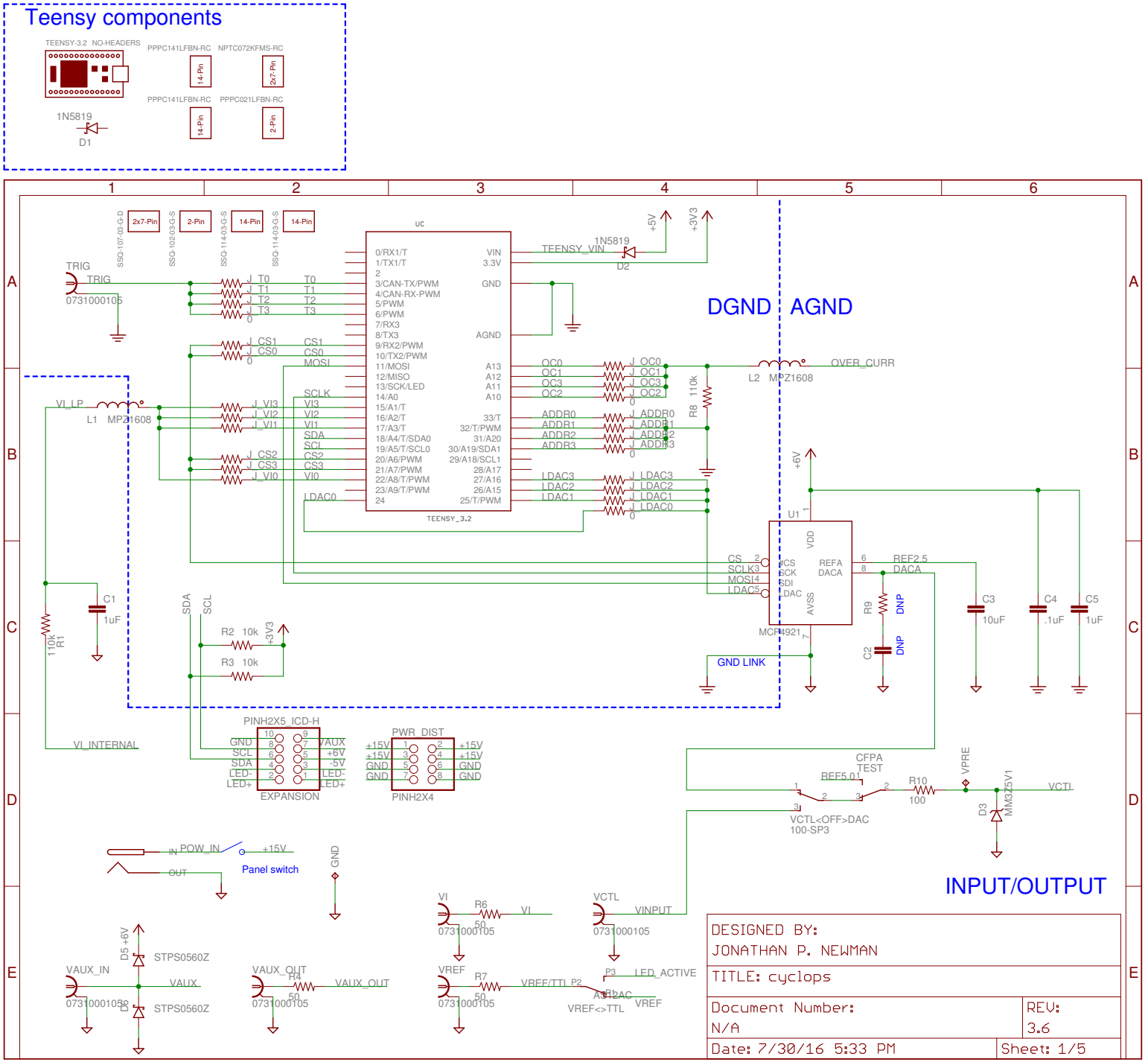
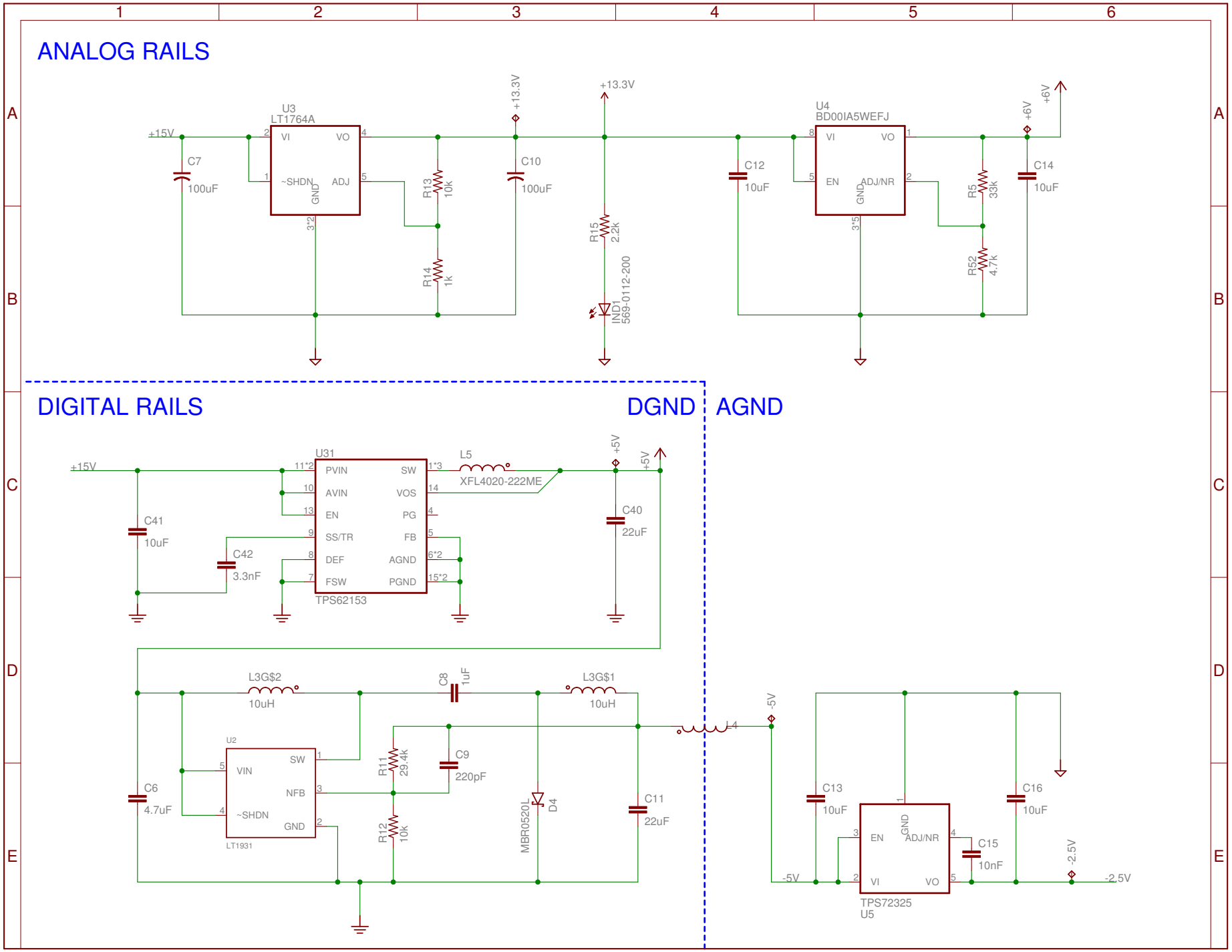
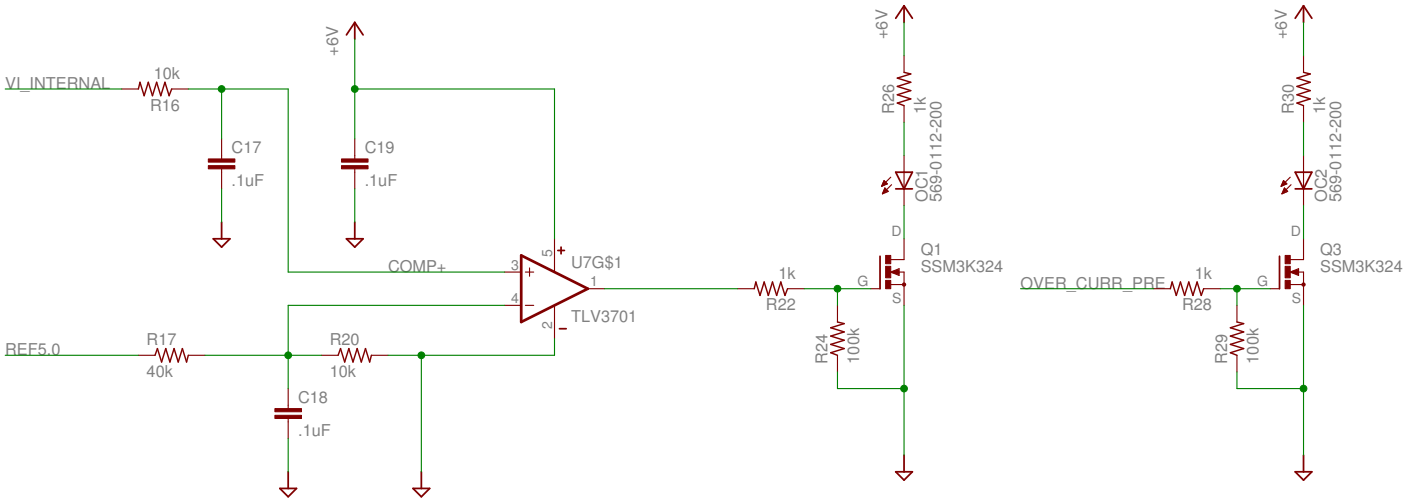
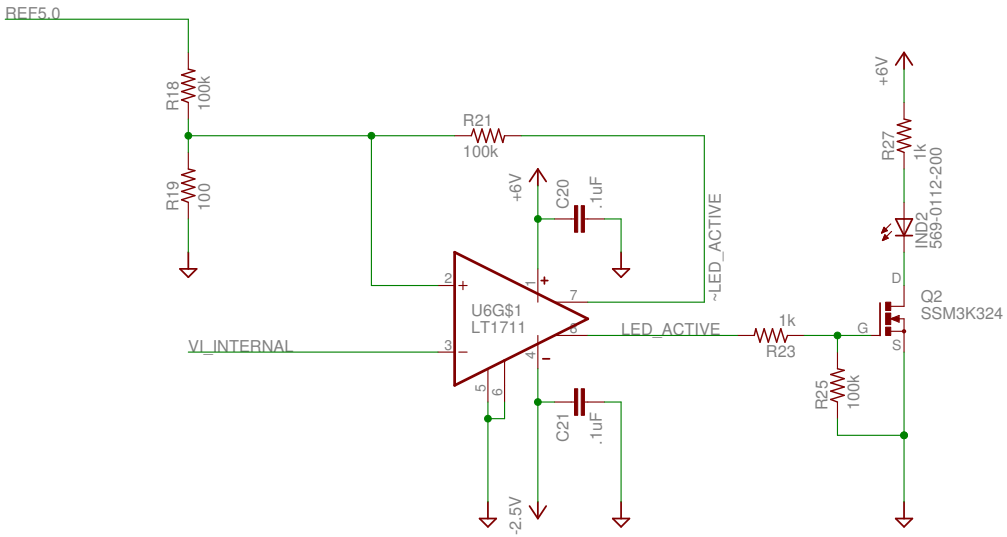

Teensy components
TEENSY-3.2 NO-HEADERS
PPPC141LFBN-RC
NPTC072KFMS-RC
PPPC141LFBN-RC
PPPC021LFBN-RC
1N5819
D1
DGND AGND
TEENSY_3.2
MCP4921
OVER_CURR
L2 MPZ1608
L1 MPZ1608
GND LINK
PINH2X5_ICD-H
EXPANSION
PWR_DIST
PINH2X4
CFPA TEST
REF5.01
VCTL<OFF>DAC
100-SP3
Panel switch
STPS0560Z
INPUT/OUTPUT
DESIGNED BY:
JONATHAN P. NEWMAN
TITLE: cyclops
Document Number:
N/A
REV:
3.6
Date: 7/30/16 5:33 PM
Sheet: 1/5


ANALOG RAILS
U3
LT1764A
±15V
C7
100uF
VI
VO
~SHDN
ADJ
GND
R13
10k
R14
1k
+13.3V
C10
100uF
R15
2.2k
IND1
569-0112-200
U4
BD00IA5WEFJ
C12
10uF
EN
ADJ/NR
R5
33k
R52
4.7k
+6V
C14
10uF
DIGITAL RAILS
DGND
AGND
U31
TPS62153
PVIN
SW
AVIN
VOS
EN
PG
SS/TR
FB
DEF
AGND
FSW
PGND
L5
XFL4020-222ME
C41
10uF
C42
3.3nF
+5V
C40
22uF
L3G$2
10uH
C8
1uF
L3G$1
10uH
U2
LT1931
VIN
SW
NFB
~SHDN
GND
C6
4.7uF
R11
29.4k
R12
10k
C9
220pF
MBR0520L
D4
C11
22uF
L4
-5V
C13
10uF
C16
10uF
C15
10nF
-2.5V
TPS72325
U5

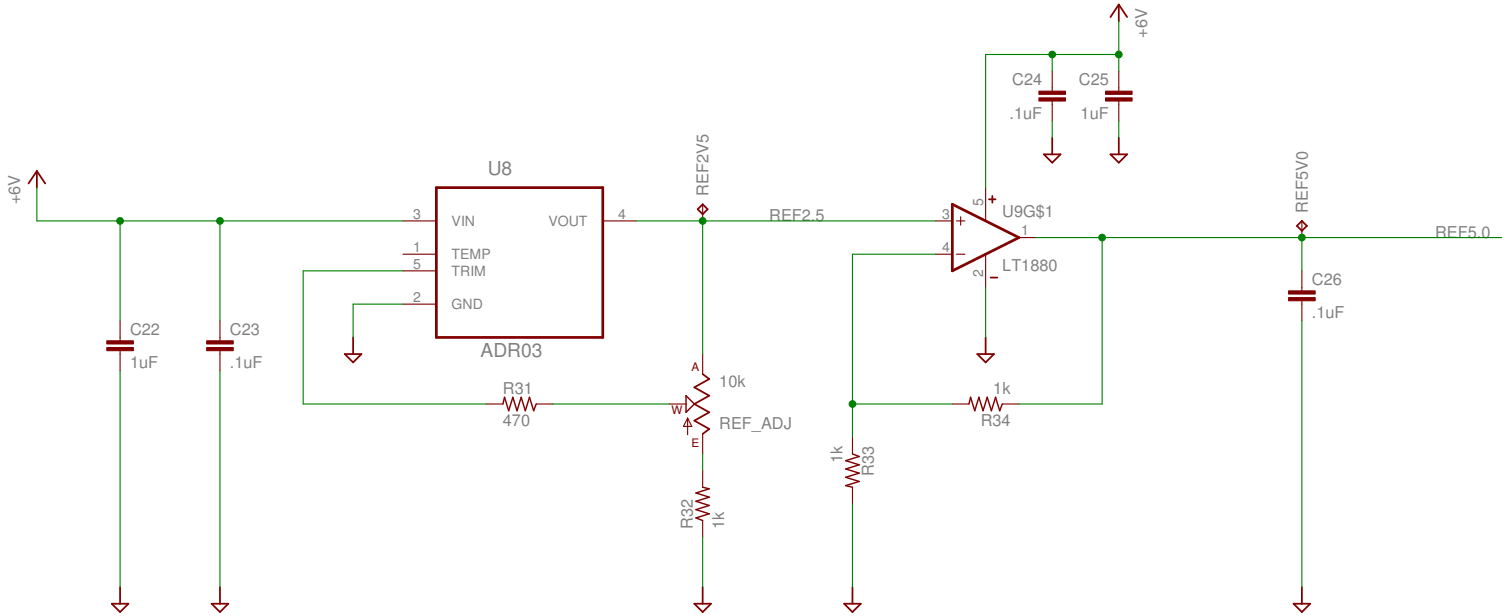
OVERCURRENT

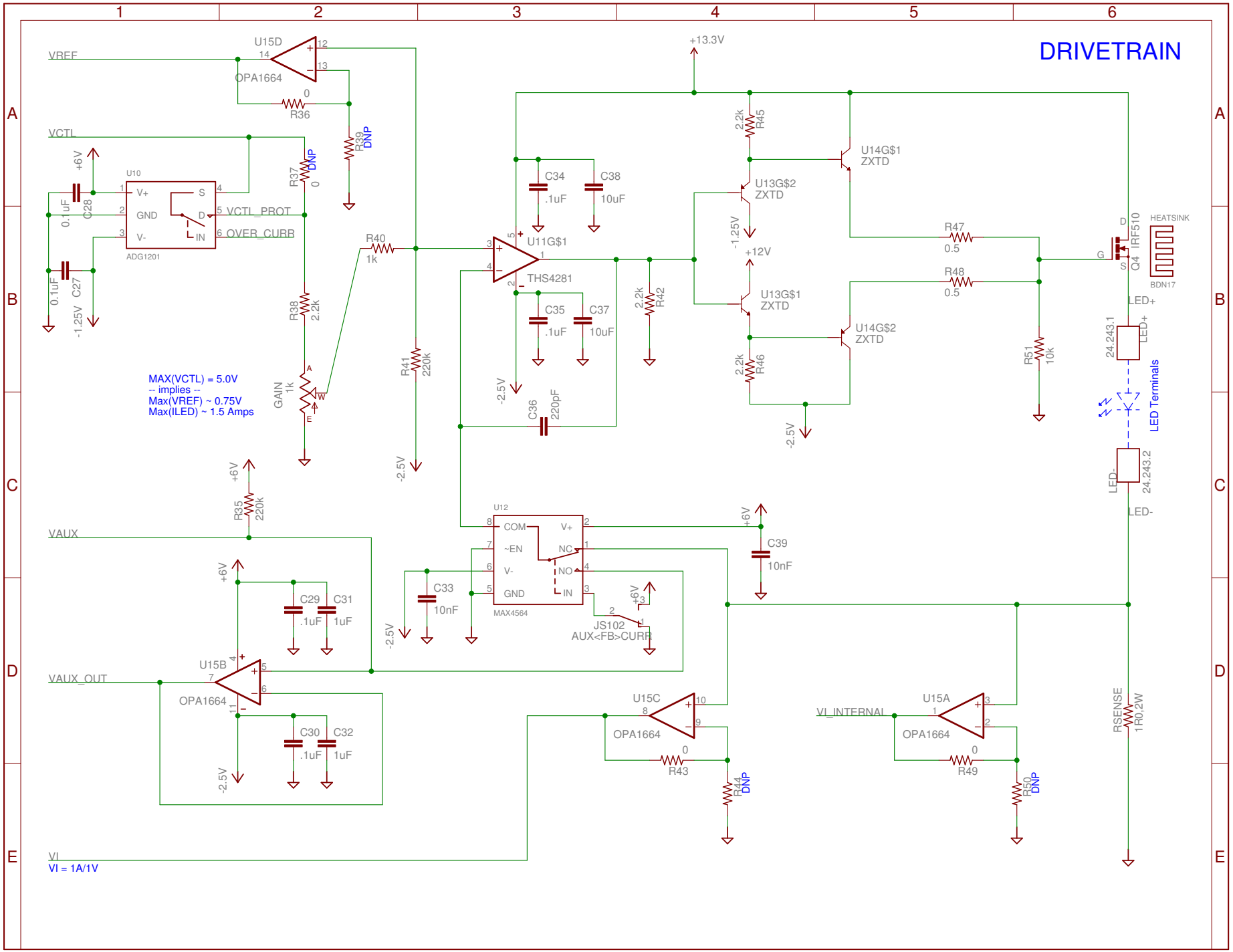


LED ACTIVE (I_LED >10 mA)



VOLTAGE REFERENCES




DRIVETRAIN
VREF
U15D
OPA1664
R36
VCTL
U10
ADG1201
VCTL_PROT
OVER_CURR
R37
R39
DNP
C28
C27
R38
2.2k
R40
1k
GAIN
R41
220k
U11G$1
THS4281
C34
C38
C35
C37
C36
220pF
R42
2.2k
+13.3V
R45
2.2k
U14G$1
ZXTD
U13G$2
ZXTD
U13G$1
ZXTD
U14G$2
ZXTD
R46
2.2k
+12V
-1.25V
-2.5V
R47
0.5
R48
0.5
R51
10k
Q4 IRF510
HEATSINK
BDN17
LED+
LED-
24.243.1
24.243.2
LED Terminals
MAX(VCTL) = 5.0V
-- implies --
Max(VREF) ~ 0.75V
Max(ILED) ~ 1.5 Amps
R35
220k
VAUX
U12
MAX4564
C33
10nF
C39
10nF
JS102
AUX<FB>CURR
C29
C31
C30
C32
.1uF
1uF
U15B
OPA1664
VAUX_OUT
U15C
OPA1664
R43
R44
DNP
U15A
OPA1664
VI_INTERNAL
R49
R50
DNP
RSENSE
1R0,2W
VI
VI = 1A/1V