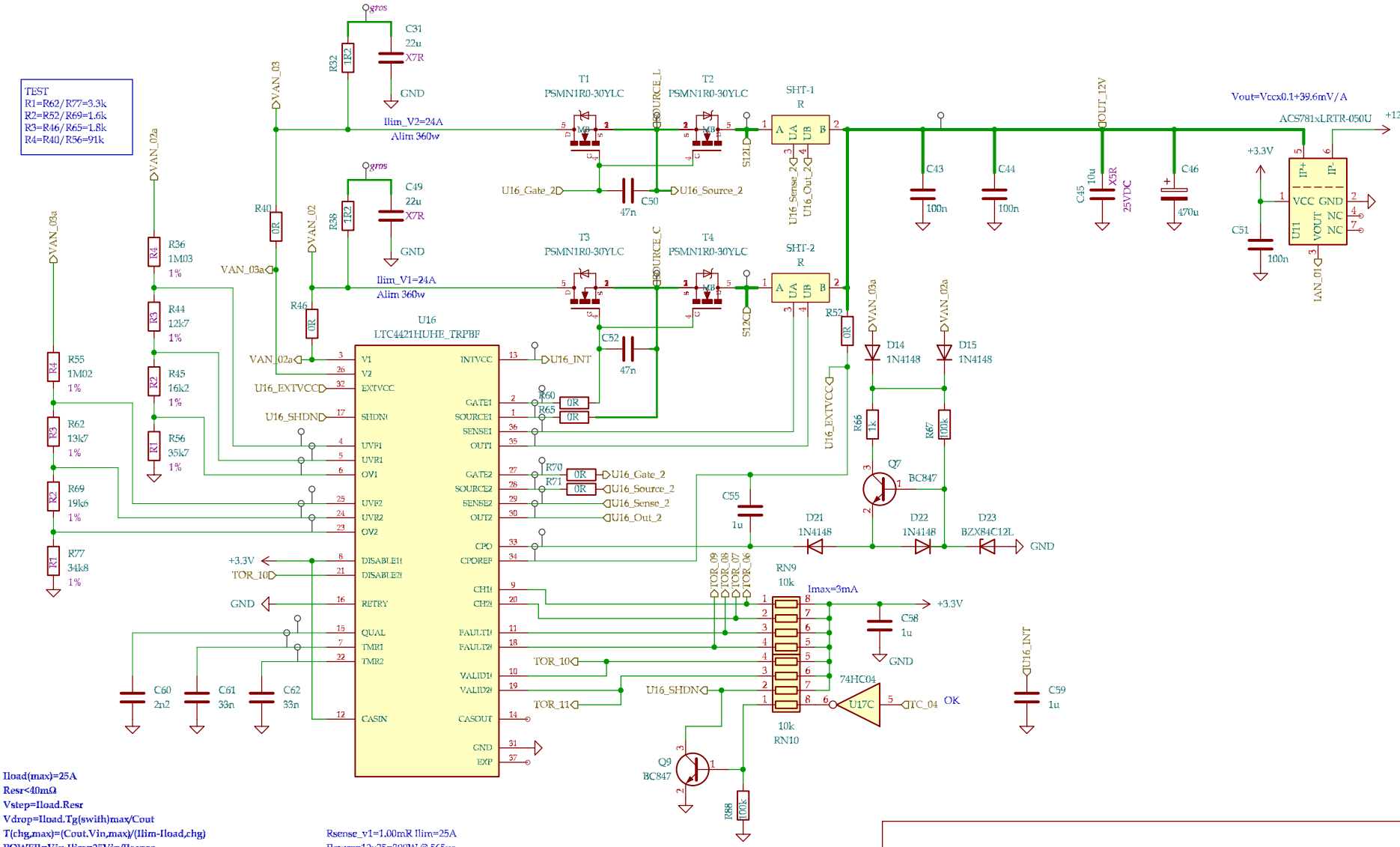
TEST
R1=R62/R77=3.3k
R2=R52/R69=1.6k
R3=R46/R65=1.8k
R4=R40/R56=91k
T1 PSMN1R0-30YLC
T2 PSMN1R0-30YLC
T3 PSMN1R0-30YLC
T4 PSMN1R0-30YLC
SHT-1 R
SHT-2 R
U16 LTC4421HUHE_TRPBF
Ilim_V2=24A Alim 360w
Ilim_V1=24A Alim 360w
U16_Gate_2
U16_Source_2
U16_Sense_2
U16_Out_2
U16_INT
U16_EXTVCC
U16_SHDN
VAN_03
VAN_02
VAN_03a
VAN_02a
Vout=Vccx0.1+39.6mV/A
ACS781xLRTR-050U
+12V
+3.3V
GND
TOR_10
TOR_11
Imax=3mA
74HC04
OK
Iload(max)=25A
Resr<40mΩ
Vstep=Iload.Resr
Vdrop=Iload.Tg(swith)max/Cout
T(chg,max)=(Cout.Vin,max)/(Ilim-Iload,chg)
POWER=Vin.Ilim=25Vin/Rsense
SOA(Ta)=SOA(25°).(Tjmax-Ta)/(Tjmax-25°)
Ttmr,flt=Ctrm.83[us/nF]
Vdrop<0,1Vout
Ilim=25mv/Rsense
Rt=R1+R2+R3+R4
R1=(0.5Rt)/Vovrise
R2=(Vovrise/Vuvrise-1)R1
R3=(Vuvrise/Vufall-1)(Vovrise/Vurise)R1
R4=R1(Vovrise/0.5-1)-R3-R2
Rsense_v1=1.00mR Ilim=25A
Power=12x25=300W @ 565us
1PSMN1R0-30YLC
30V-100A-272W
RDSon=1.15mR Vgs=10V
Power @12v/10ms=12*600=7200W
SOA(85°)=7200Wx(175-85)/(175-25)=4320W @ 10ms
4.1 Modification Capteur Courant ACS781
4.0 en Test
ECOPHOT - Astrophot
Sheet: /Filtre EMI/Alim 12V/By-Pass/
File: by_pass.kicad_sch
Title: Inverseur Statique 2 voies et mesure Courant
Size: A4
Date: 2025-05-11
Rev: 4.1
KiCad E.D.A. 9.0.6
Id: 6/7