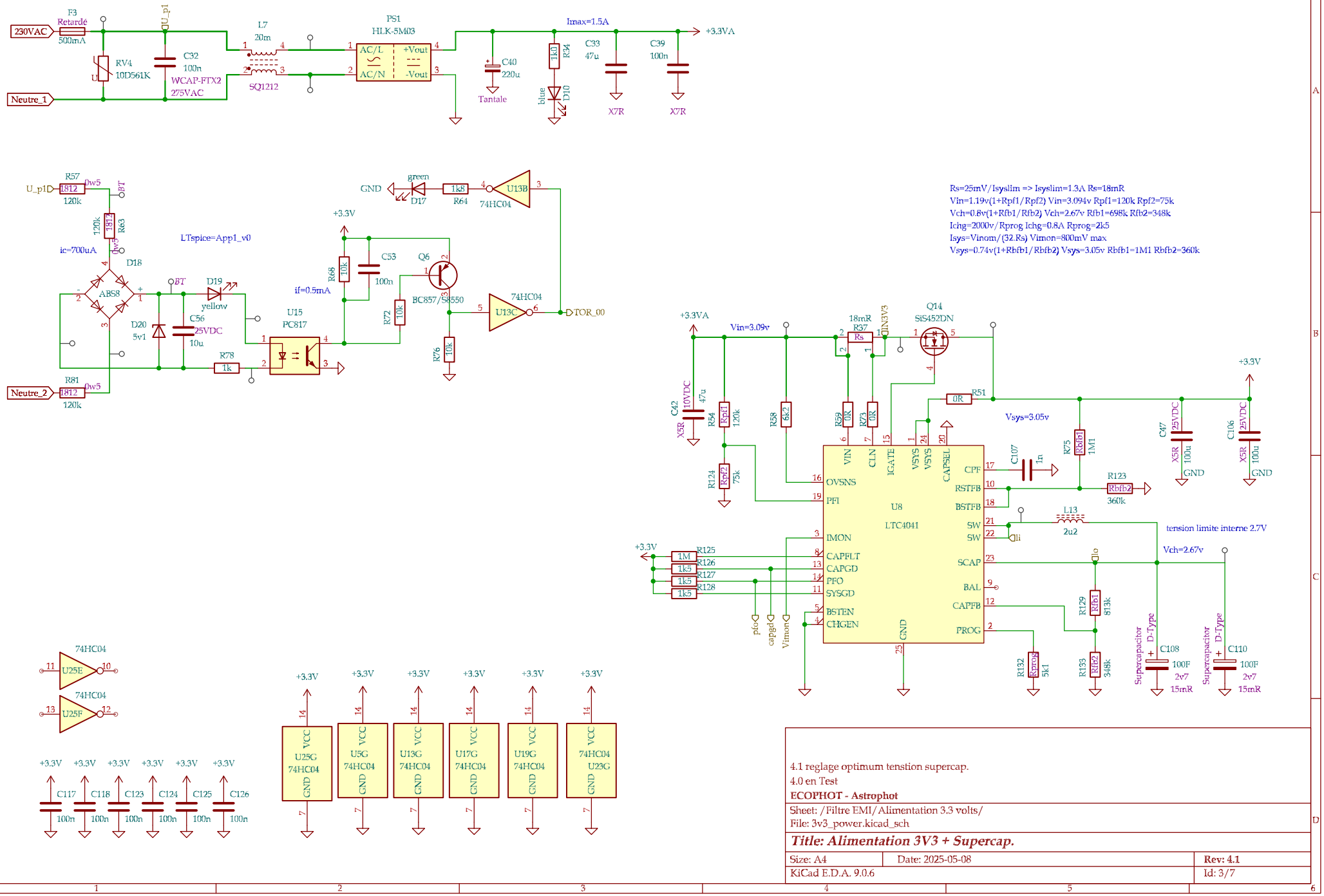
F3
Retardé
500mA
230VAC
U_p1
RV4
10D561K
C32
100n
WCAP-FTX2
275VAC
L7
20m
SQ1212
PS1
HLK-5M03
AC/L
AC/N
+Vout
-Vout
Imax=1.5A
+3.3VA
C40
220u
Tantale
1k0
R34
blue
D10
C33
47u
X7R
C39
100n
X7R
Neutre_1
R57
0w5
1812
120k
BT
120k
1812
R63
0w5
ic=700uA
LTspice=App1_v0
D18
ABS8
BT
D19
yellow
D20
5v1
C56
25VDC
10u
R78
1k
R81
0w5
1812
120k
Neutre_2
U15
PC817
if=0.5mA
R68
10k
C53
100n
Q6
BC857/S8550
R72
10k
R76
10k
+3.3V
GND
green
D17
1k8
R64
U13B
74HC04
74HC04
U13C
TOR_00
Rs=25mV/Isyslim => Isyslim=1.3A Rs=18mR
Vin=1.19v(1+Rpf1/Rpf2) Vin=3.094v Rpf1=120k Rpf2=75k
Vch=0.8v(1+Rfb1/Rfb2) Vch=2.67v Rfb1=698k Rfb2=348k
Ichg=2000v/Rprog Ichg=0.8A Rprog=2k5
Isys=Vinom/(32.Rs) Vimon=800mV max
Vsys=0.74v(1+Rbfb1/Rbfb2) Vsys=3.05v Rbfb1=1M1 Rbfb2=360k
+3.3VA
Vin=3.09v
18mR
R37
Rs
DN3V3
Q14
SiS452DN
C42
10VDC
47u
X5R
R54
Rpf1
120k
R58
6k2
R59
0R
R73
0R
R51
0R
Vsys=3.05v
+3.3V
C107
1n
R75
Rbfb1
1M1
C47
25VDC
100u
X5R
GND
C106
25VDC
100u
X5R
GND
R124
Rpf2
75k
R123
Rbfb2
360k
U8
LTC4041
VIN
CLN
IGATE
VSYS
VSYS
CAPSEL
OVSNS
PFI
IMON
CAPFLT
CAPGD
PFO
SYSGD
BSTEN
CHGEN
GND
CPF
RSTFB
BSTFB
SW
SW
SCAP
BAL
CAPFB
PROG
L13
2u2
li
lo
tension limite interne 2.7V
Vch=2.67v
+3.3V
R125
1M
R126
1k5
R127
1k5
R128
1k5
pfo
capgd
Vimon
R129
Rfb1
913k
R132
Rprog
5k1
R133
Rfb2
348k
Supercapacitor
D-Type
C108
100F
2v7
15mR
Supercapacitor
D-Type
C110
100F
2v7
15mR
74HC04
U25E
74HC04
U25F
+3.3V
C117
100n
C118
100n
C123
100n
C124
100n
C125
100n
C126
100n
U25G
74HC04
U5G
74HC04
U13G
74HC04
U17G
74HC04
U19G
74HC04
74HC04
U23G
4.1 reglage optimum tenstion supercap.
4.0 en Test
ECOPHOT - Astrophot
Sheet: /Filtre EMI/Alimentation 3.3 volts/
File: 3v3_power.kicad_sch
Title: Alimentation 3V3 + Supercap.
Size: A4
Date: 2025-05-08
Rev: 4.1
KiCad E.D.A. 9.0.6
Id: 3/7