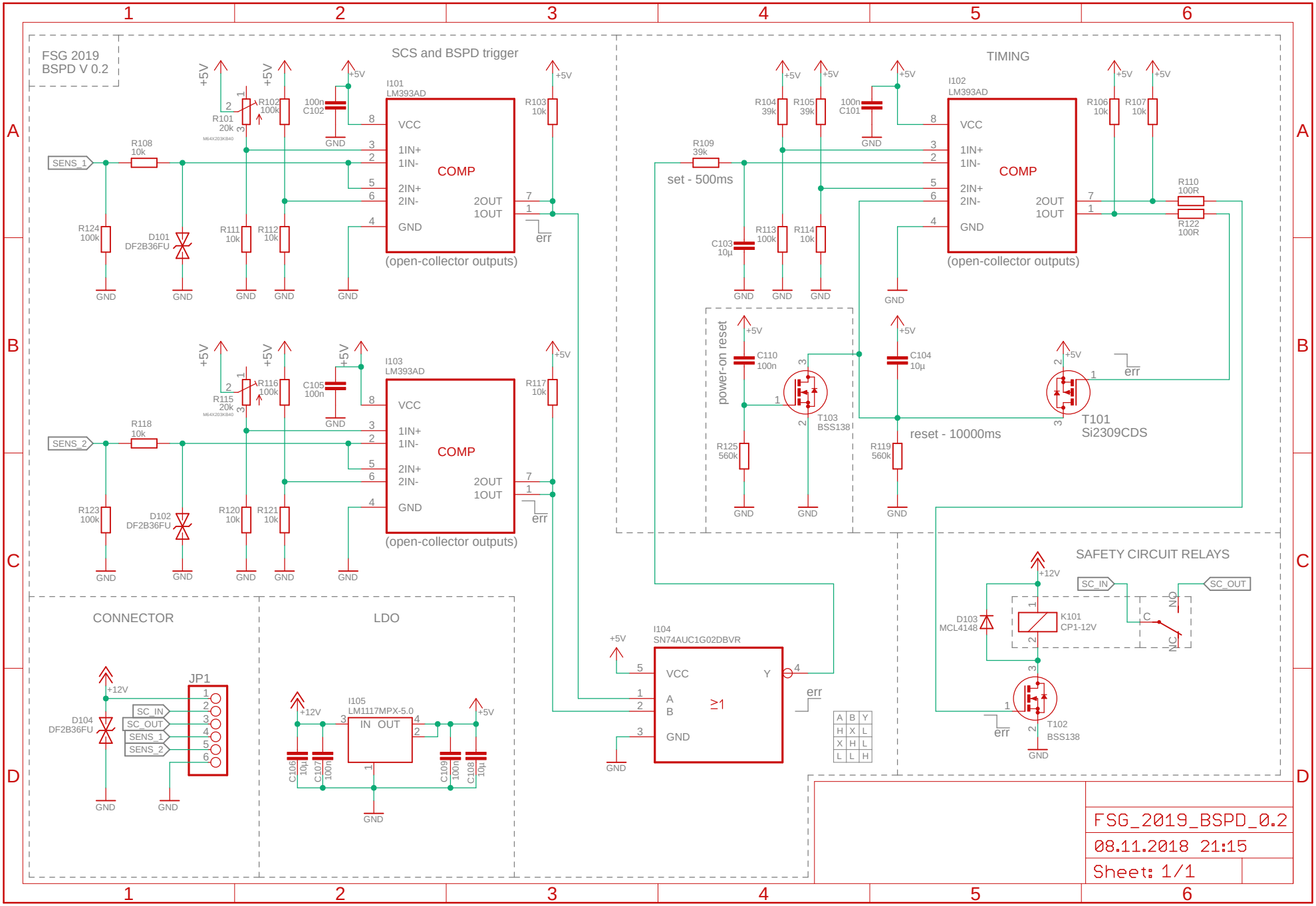
FSG 2019
BSPD V 0.2
SCS and BSPD trigger
I101
LM393AD
COMP
VCC
1IN+
1IN-
2IN+
2IN-
GND
2OUT
1OUT
(open-collector outputs)
SENS_1
SENS_2
R101 20k
R102 100k
R103 10k
R108 10k
R111 10k
R112 10k
R124 100k
D101 DF2B36FU
C102 100n
I103
LM393AD
R115 20k
R116 100k
R117 10k
R118 10k
R120 10k
R121 10k
R123 100k
D102 DF2B36FU
C105 100n
TIMING
I102
LM393AD
R104 39k
R105 39k
R106 10k
R107 10k
R109 39k
R110 100R
R122 100R
R113 100k
R114 10k
C103 10µ
C101 100n
set - 500ms
power-on reset
C110 100n
T103 BSS138
R125 560k
C104 10µ
R119 560k
reset - 10000ms
T101 Si2309CDS
SAFETY CIRCUIT RELAYS
SC_IN
SC_OUT
D103 MCL4148
K101 CP1-12V
NO
NC
C
T102 BSS138
CONNECTOR
JP1
D104 DF2B36FU
LDO
I105
LM1117MPX-5.0
IN OUT
C106 10µ
C107 100n
C109 100n
C108 10µ
I104
SN74AUC1G02DBVR
VCC
A
B
Y
≥1
GND
+5V
+12V
err
A B Y
H X L
X H L
L L H
FSG_2019_BSPD_0.2
08.11.2018 21:15
Sheet: 1/1