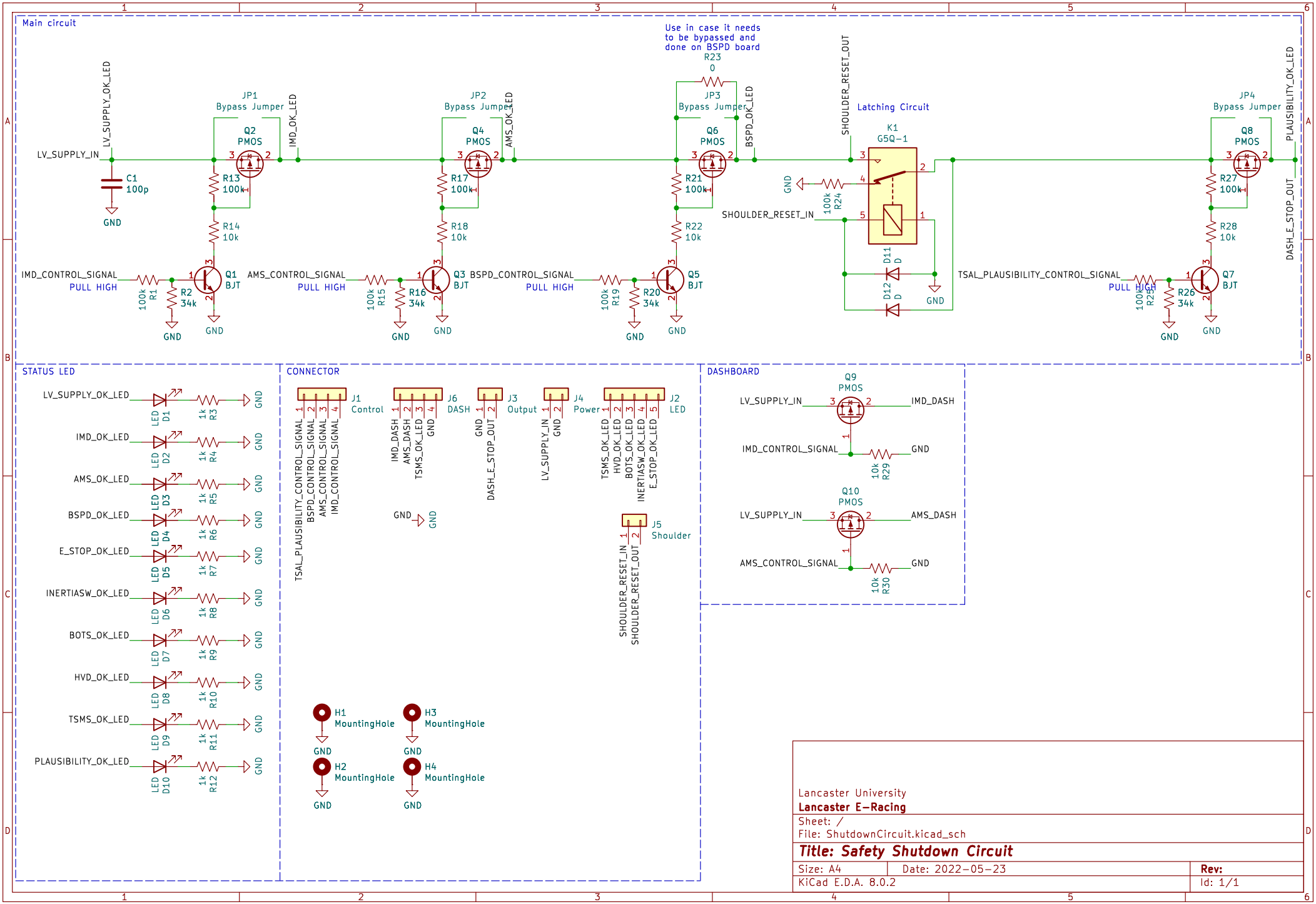
Main circuit
LV_SUPPLY_OK_LED
JP1
Bypass Jumper
IMD_OK_LED
JP2
Bypass Jumper
AMS_OK_LED
Use in case it needs
to be bypassed and
done on BSPD board
R23
0
JP3
Bypass Jumper
BSPD_OK_LED
SHOULDER_RESET_OUT
Latching Circuit
JP4
Bypass Jumper
PLAUSIBILITY_OK_LED
LV_SUPPLY_IN
C1
100p
GND
Q2
PMOS
R13
100k
R14
10k
Q4
PMOS
R17
100k
R18
10k
Q6
PMOS
R21
100k
R22
10k
K1
G5Q-1
GND
R24
100k
SHOULDER_RESET_IN
D11
D
D12
D
Q8
PMOS
R27
100k
R28
10k
DASH_E_STOP_OUT
IMD_CONTROL_SIGNAL
PULL HIGH
R1
100k
R2
34k
Q1
BJT
AMS_CONTROL_SIGNAL
PULL HIGH
R15
100k
R16
34k
Q3
BJT
BSPD_CONTROL_SIGNAL
PULL HIGH
R19
100k
R20
34k
Q5
BJT
TSAL_PLAUSIBILITY_CONTROL_SIGNAL
PULL HIGH
R25
100k
R26
34k
Q7
BJT
STATUS LED
LV_SUPPLY_OK_LED
IMD_OK_LED
AMS_OK_LED
BSPD_OK_LED
E_STOP_OK_LED
INERTIASW_OK_LED
BOTS_OK_LED
HVD_OK_LED
TSMS_OK_LED
PLAUSIBILITY_OK_LED
LED D1
LED D2
LED D3
LED D4
LED D5
LED D6
LED D7
LED D8
LED D9
LED D10
1k R3
1k R4
1k R5
1k R6
1k R7
1k R8
1k R9
1k R10
1k R11
1k R12
GND
CONNECTOR
J1 Control
TSAL_PLAUSIBILITY_CONTROL_SIGNAL
BSPD_CONTROL_SIGNAL
AMS_CONTROL_SIGNAL
IMD_CONTROL_SIGNAL
J6 DASH
IMD_DASH
AMS_DASH
TSMS_OK_LED
GND
J3 Output
GND
DASH_E_STOP_OUT
J4 Power
LV_SUPPLY_IN
GND
J2 LED
TSMS_OK_LED
HVD_OK_LED
BOTS_OK_LED
INERTIASW_OK_LED
E_STOP_OK_LED
J5 Shoulder
SHOULDER_RESET_IN
SHOULDER_RESET_OUT
H1 MountingHole
H2 MountingHole
H3 MountingHole
H4 MountingHole
DASHBOARD
Q9
PMOS
LV_SUPPLY_IN
IMD_DASH
IMD_CONTROL_SIGNAL
GND
10k R29
Q10
PMOS
LV_SUPPLY_IN
AMS_DASH
AMS_CONTROL_SIGNAL
GND
10k R30
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Sheet: /
File: ShutdownCircuit.kicad_sch
Title: Safety Shutdown Circuit
Size: A4
Date: 2022-05-23
Rev:
KiCad E.D.A. 8.0.2
Id: 1/1