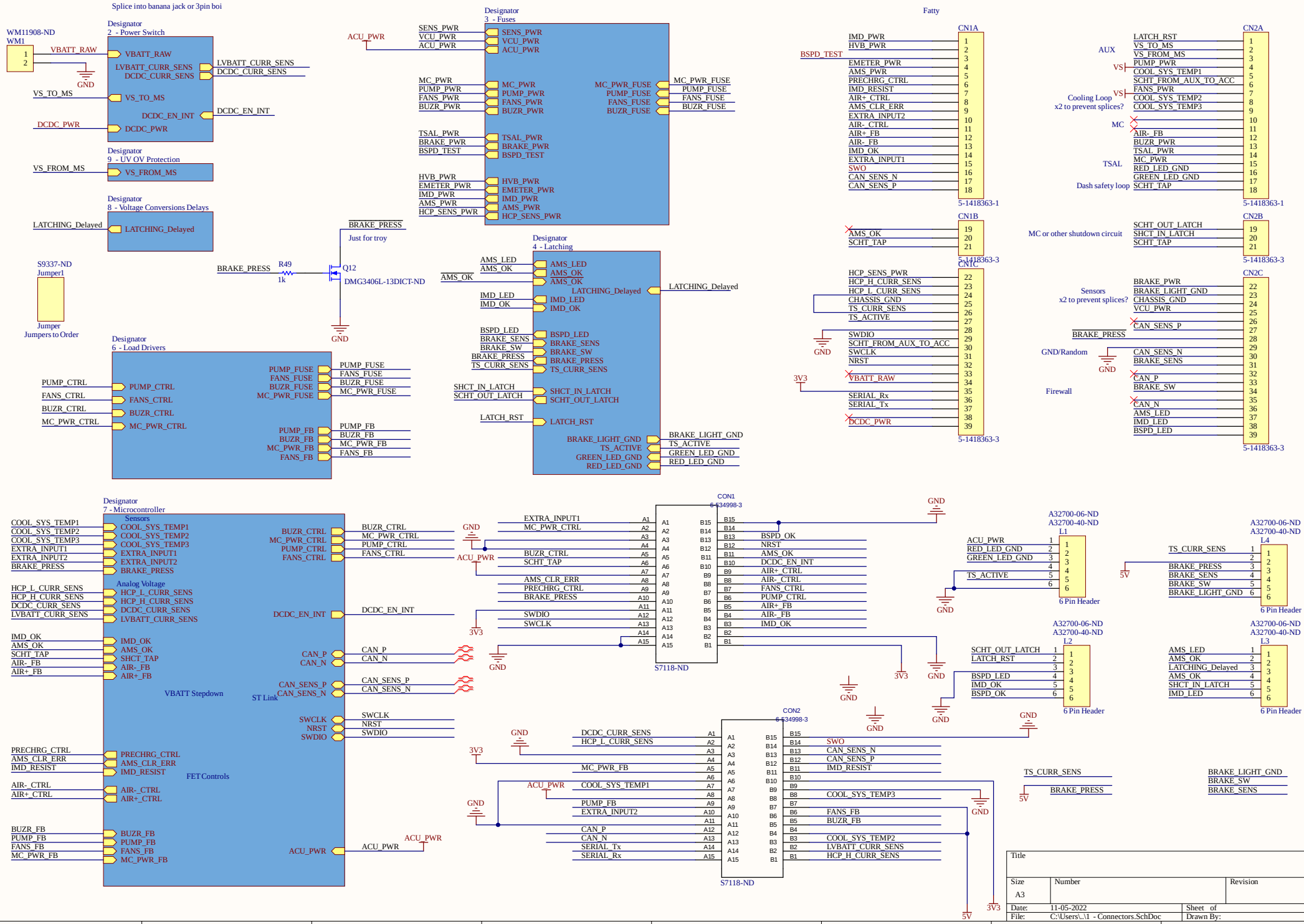

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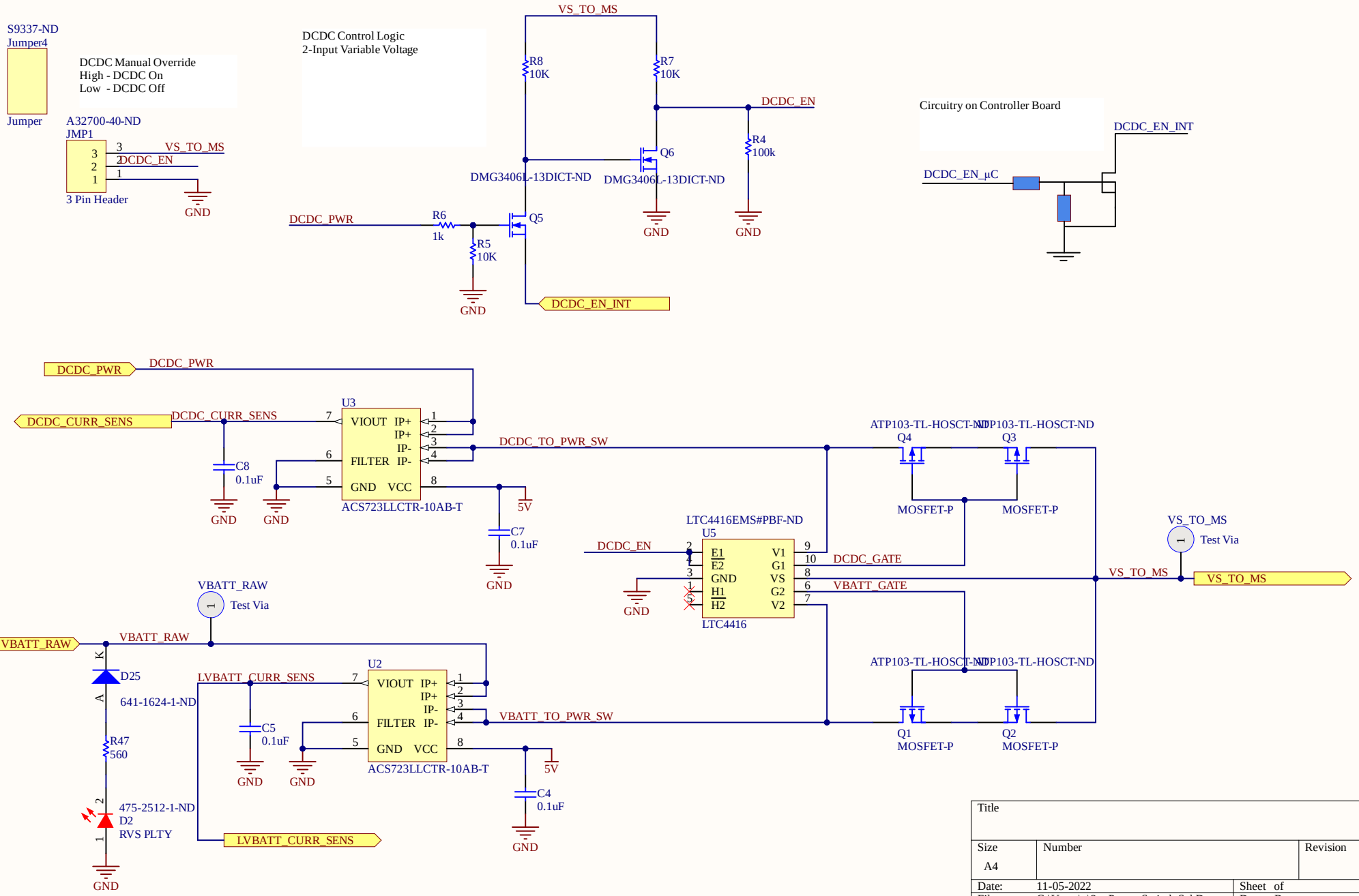
Size: A3	Number	Revision
Date: 11-05-2022		Sheet of
File: C:\Users\..\1 - Connectors.SchDoc		Drawn By:


S9337-ND
Jumper4
Jumper
DCDC Manual Override
High - DCDC On
Low - DCDC Off
A32700-40-ND
JMP1
3 Pin Header
VS_TO_MS
DCDC_EN
GND
DCDC Control Logic
2-Input Variable Voltage
R8
10K
R7
10K
DCDC_EN
R4
100k
Q6
DMG3406L-13DICT-ND
DMG3406L-13DICT-ND
DCDC_PWR
R6
1k
Q5
R5
10K
DCDC_EN_INT
Circuitry on Controller Board
DCDC_EN_µC
DCDC_EN_INT
DCDC_PWR
DCDC_CURR_SENS
U3
VIOUT
IP+
IP-
FILTER
GND
VCC
ACS723LLCTR-10AB-T
C8
0.1uF
C7
0.1uF
5V
DCDC_TO_PWR_SW
ATP103-TL-HOSCT-ND
Q4
Q3
MOSFET-P
LTC4416EMS#PBF-ND
U5
LTC4416
E1
E2
H1
H2
V1
G1
VS
G2
V2
DCDC_GATE
VBATT_GATE
VS_TO_MS
Test Via
VBATT_RAW
D25
641-1624-1-ND
R47
560
475-2512-1-ND
D2
RVS PLTY
LVBATT_CURR_SENS
U2
C5
0.1uF
C4
0.1uF
VBATT_TO_PWR_SW
Q1
Q2
Title
Size
A4
Number
Revision
Date:
11-05-2022
Sheet of
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C:\Users\..\2 - Power Switch.SchDoc
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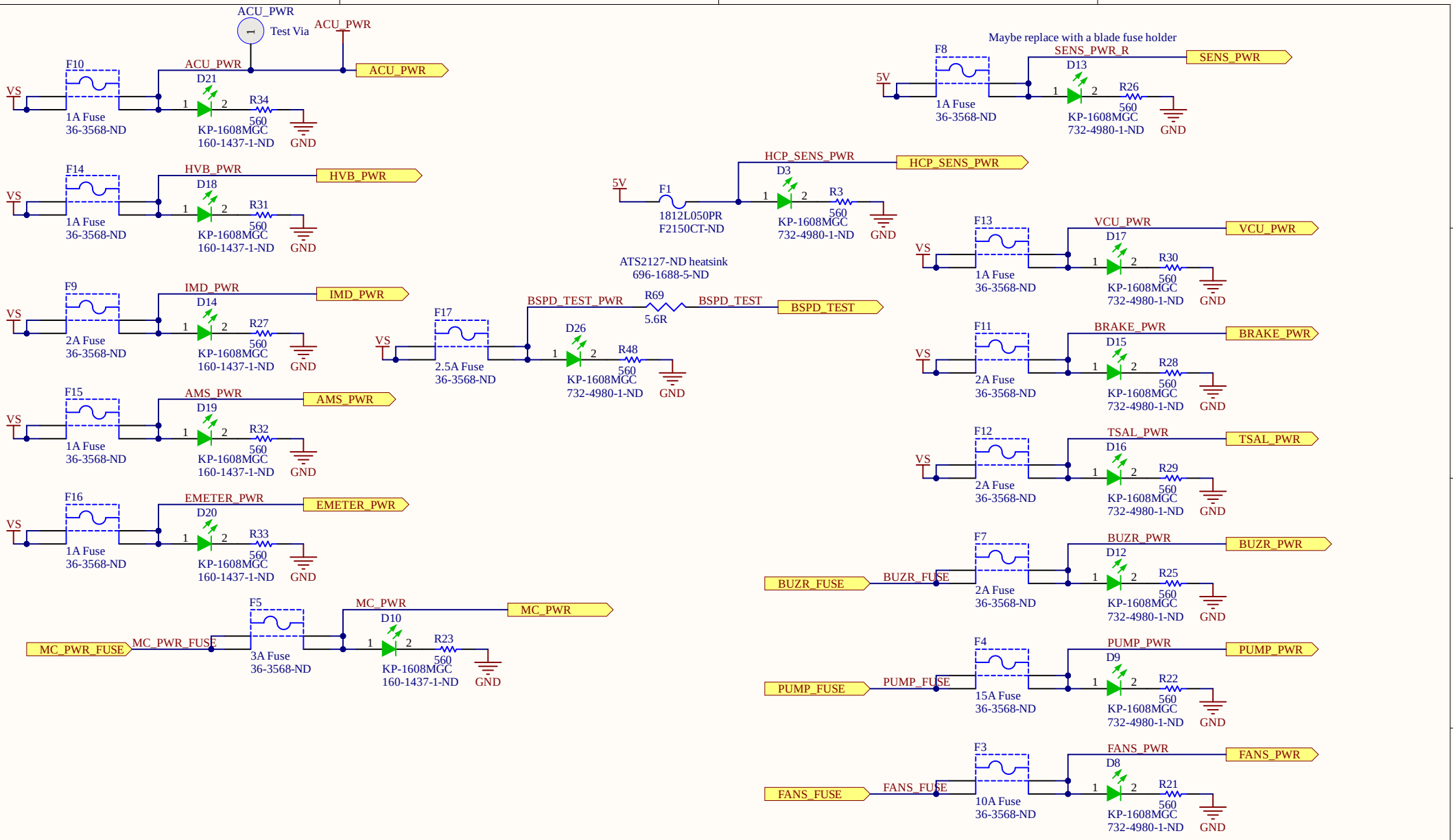
ACU_PWR
Test Via
ACU_PWR
F10
ACU_PWR
ACU_PWR
VS
D21
1A Fuse
36-3568-ND
R34
560
KP-1608MGC
160-1437-1-ND
GND
F14
HVB_PWR
HVB_PWR
VS
D18
1A Fuse
36-3568-ND
R31
560
KP-1608MGC
160-1437-1-ND
GND
F9
IMD_PWR
IMD_PWR
VS
D14
2A Fuse
36-3568-ND
R27
560
KP-1608MGC
160-1437-1-ND
GND
F15
AMS_PWR
AMS_PWR
VS
D19
1A Fuse
36-3568-ND
R32
560
KP-1608MGC
160-1437-1-ND
GND
F16
EMETER_PWR
EMETER_PWR
VS
D20
1A Fuse
36-3568-ND
R33
560
KP-1608MGC
160-1437-1-ND
GND
F5
MC_PWR
MC_PWR
MC_PWR_FUSE
MC_PWR_FUSE
D10
3A Fuse
36-3568-ND
R23
560
KP-1608MGC
160-1437-1-ND
GND
Maybe replace with a blade fuse holder
F8
SENS_PWR_R
SENS_PWR
5V
D13
1A Fuse
36-3568-ND
R26
560
KP-1608MGC
732-4980-1-ND
GND
HCP_SENS_PWR
HCP_SENS_PWR
5V
D3
F1
1812L050PR
F2150CT-ND
R3
560
KP-1608MGC
732-4980-1-ND
GND
ATS2127-ND heatsink
696-1688-5-ND
BSPD_TEST_PWR
R69
5.6R
BSPD_TEST
BSPD_TEST
F17
VS
D26
2.5A Fuse
36-3568-ND
R48
560
KP-1608MGC
732-4980-1-ND
GND
F13
VCU_PWR
VCU_PWR
VS
D17
1A Fuse
36-3568-ND
R30
560
KP-1608MGC
732-4980-1-ND
GND
F11
BRAKE_PWR
BRAKE_PWR
VS
D15
2A Fuse
36-3568-ND
R28
560
KP-1608MGC
732-4980-1-ND
GND
F12
TSAL_PWR
TSAL_PWR
VS
D16
2A Fuse
36-3568-ND
R29
560
KP-1608MGC
732-4980-1-ND
GND
F7
BUZR_PWR
BUZR_PWR
BUZR_FUSE
BUZR_FUSE
D12
2A Fuse
36-3568-ND
R25
560
KP-1608MGC
732-4980-1-ND
GND
F4
PUMP_PWR
PUMP_PWR
PUMP_FUSE
PUMP_FUSE
D9
15A Fuse
36-3568-ND
R22
560
KP-1608MGC
732-4980-1-ND
GND
F3
FANS_PWR
FANS_PWR
FANS_FUSE
FANS_FUSE
D8
10A Fuse
36-3568-ND
R21
560
KP-1608MGC
732-4980-1-ND
GND
Title
Size
A4
Number
Revision
Date:
11-05-2022
Sheet of
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C:\Users\..\3 - Fuses.SchDoc
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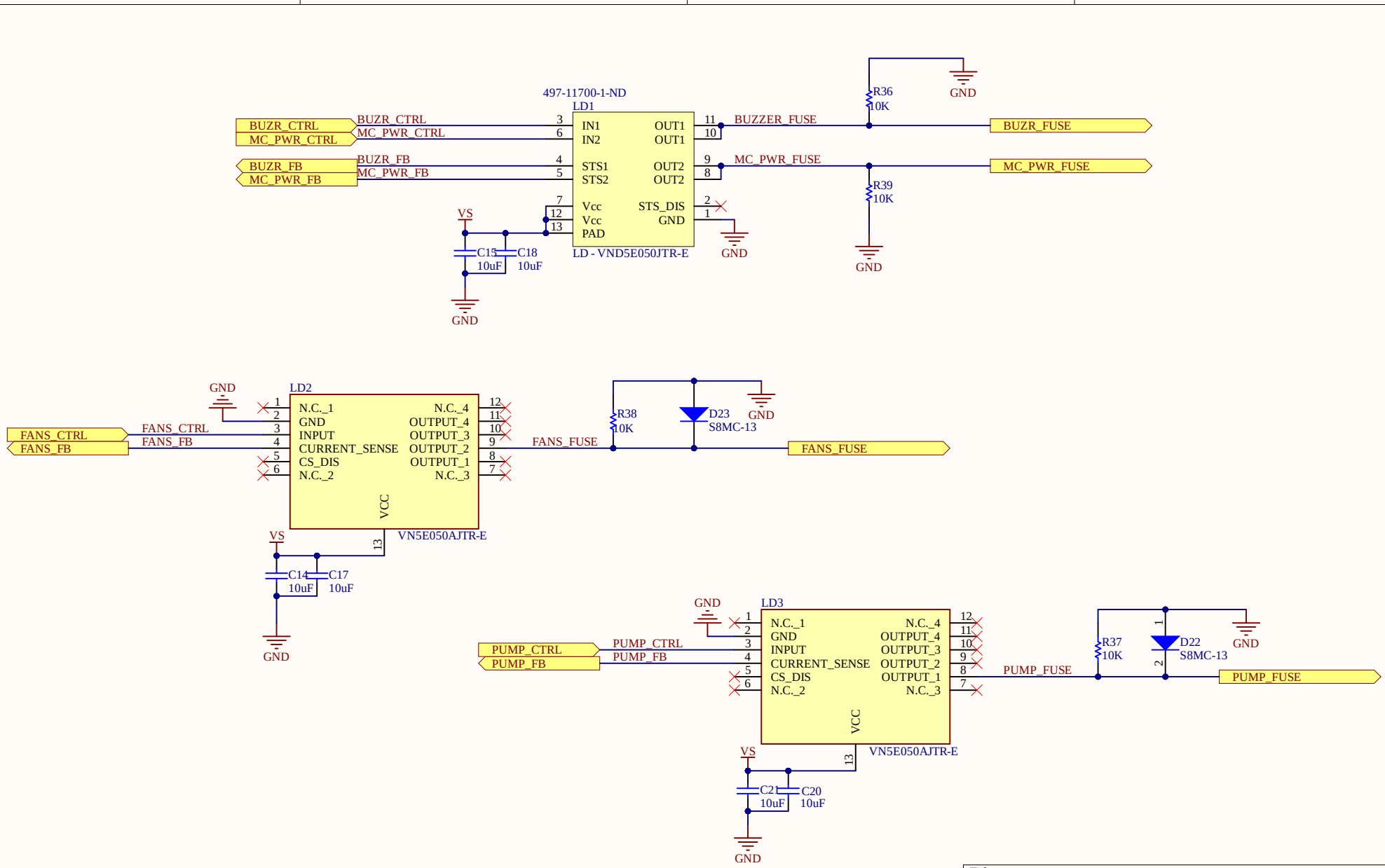

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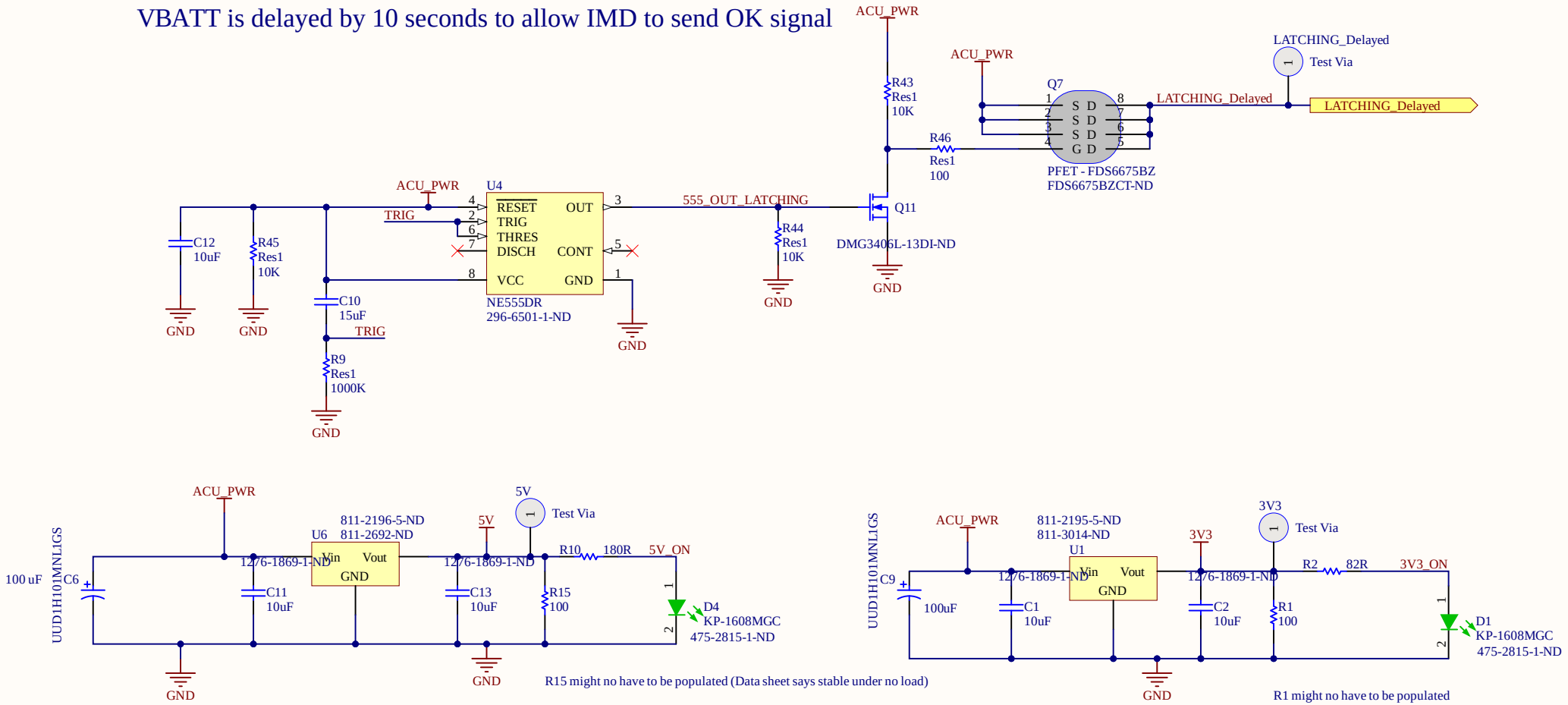
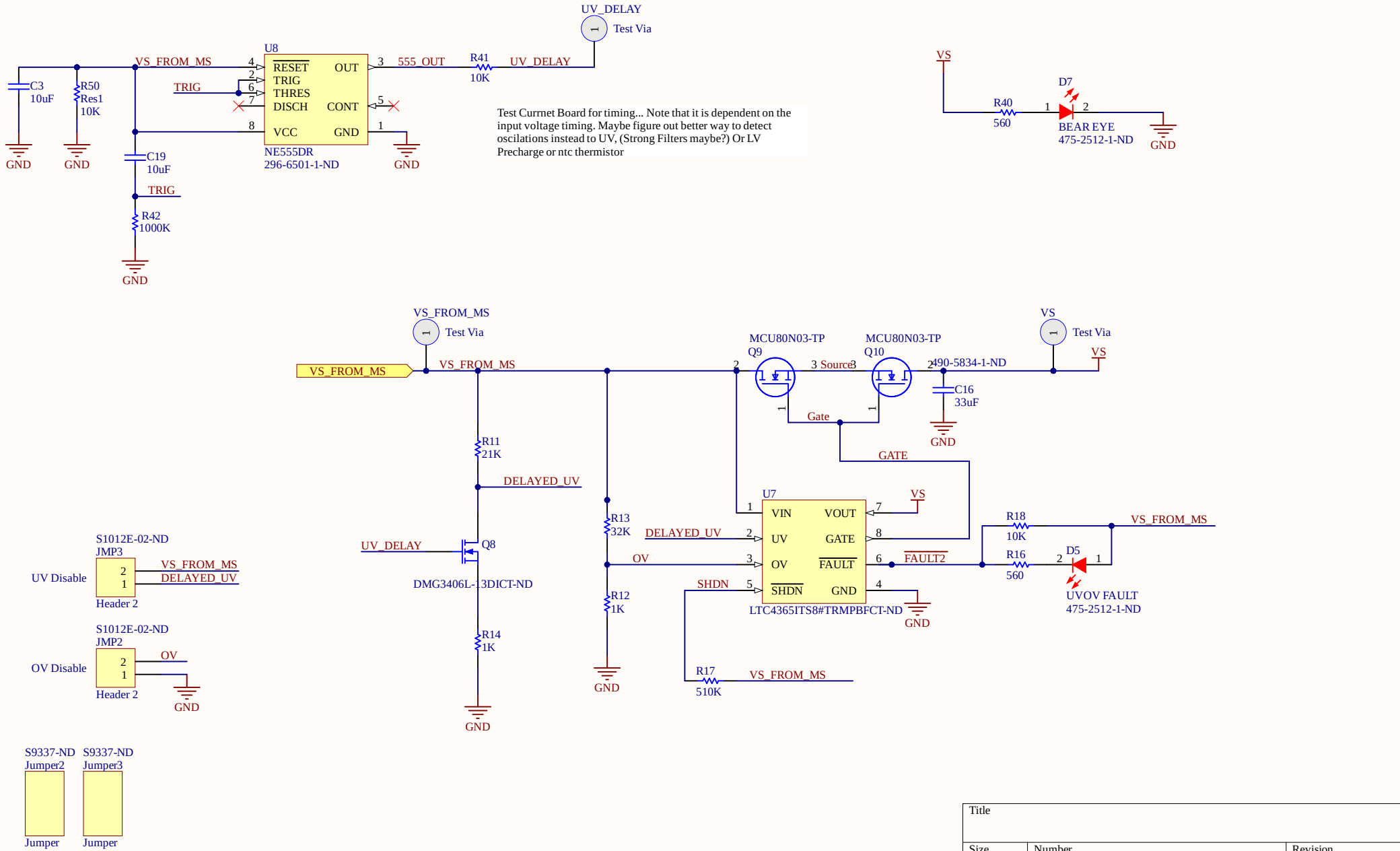
Size A4	Number	Revision
Date: 11-05-2022		Sheet of
File: C:\Users\..\6 - Load Drivers.SchDoc		Drawn By:


VBATT is delayed by 10 seconds to allow IMD to send OK signal
ACU_PWR
U4
RESET
TRIG
THRES
DISCH
VCC
OUT
CONT
GND
NE555DR
296-6501-1-ND
555_OUT_LATCHING
Q11
DMG3406L-13DI-ND
R43
Res1
10K
R46
Res1
100
R44
Res1
10K
R45
Res1
10K
C12
10uF
C10
15uF
R9
Res1
1000K
Q7
PFET - FDS6675BZ
FDS6675BZCT-ND
LATCHING_Delayed
Test Via
U6
811-2196-5-ND
811-2692-ND
1276-1869-1-ND
Vin
Vout
5V
5V_ON
R10
180R
C11
10uF
C13
10uF
R15
100
D4
KP-1608MGC
475-2815-1-ND
100 uF
C6
UUD1H101MNL1GS
R15 might no have to be populated (Data sheet says stable under no load)
U1
811-2195-5-ND
811-3014-ND
3V3
3V3_ON
R2
82R
C9
100uF
C1
10uF
C2
10uF
R1
100
D1
KP-1608MGC
475-2815-1-ND
R1 might no have to be populated
Title
Size
A4
Number
Revision
Date:
11-05-2022
Sheet of
File:
C:\Users\..\8 - Voltage Conversions Delays.SchDoc
Drawn By:



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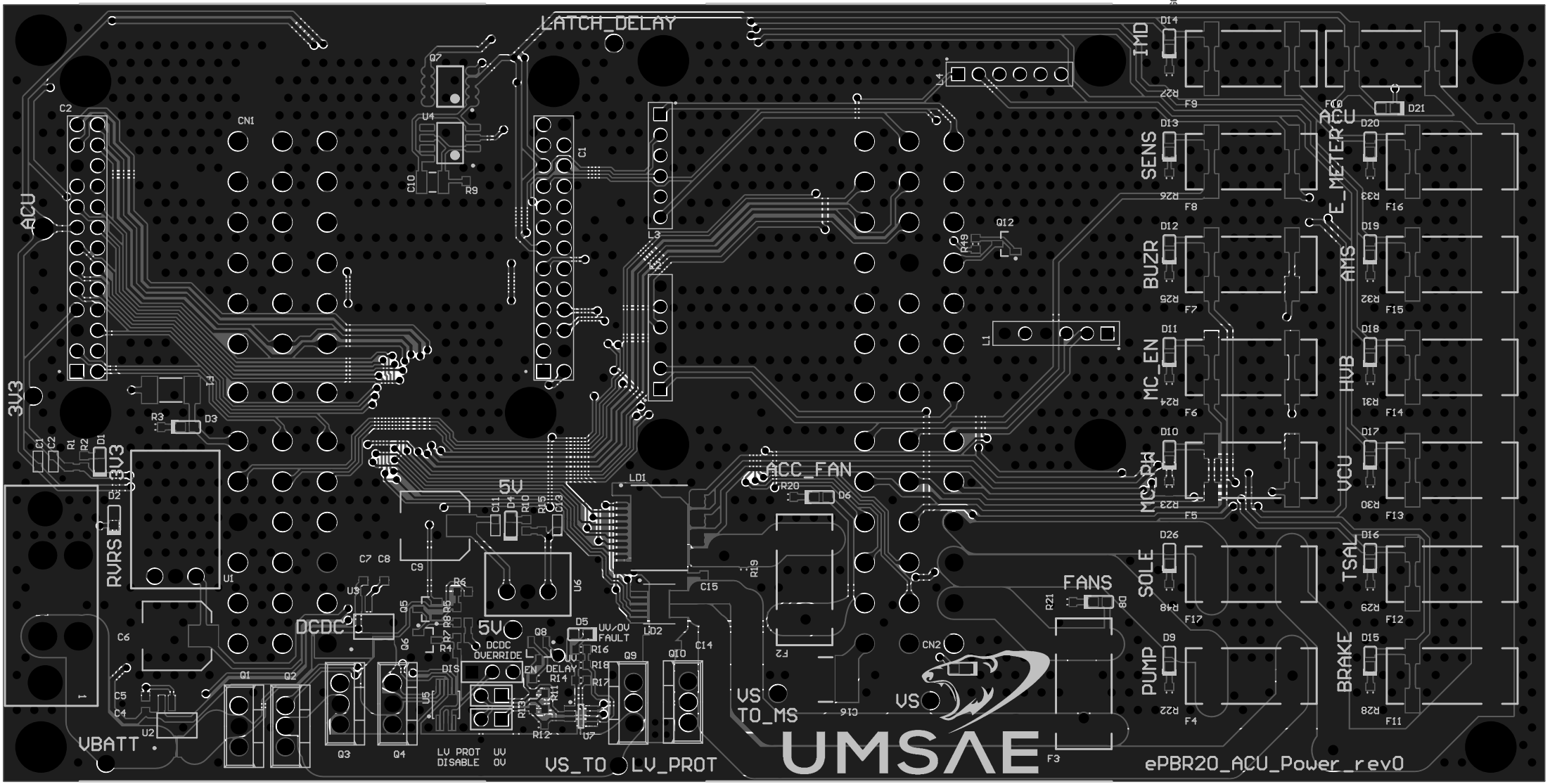
Size A4	Number	Revision
Date: 11-05-2022		Sheet of
File: C:\Users\..\9 - UV OV Protection.SchDoc		Drawn By:


LATCH_DELAY
ACU
3V3
RVRS
VBATT
DCDC
5V
ACC_FAN
FANS
VS_TO_MS
VS_TO_LV_PROT
LV PROT DISABLE
UV OV
DCDC OVERRIDE
UV/OV FAULT
UV DELAY
IMD
SENS
BUZR
MC_EN
MC_PW
SOLE
PUMP
E_METER
AMS
HVB
VCU
TSAL
BRAKE
UMSAE
ePBR20_ACU_Power_rev0