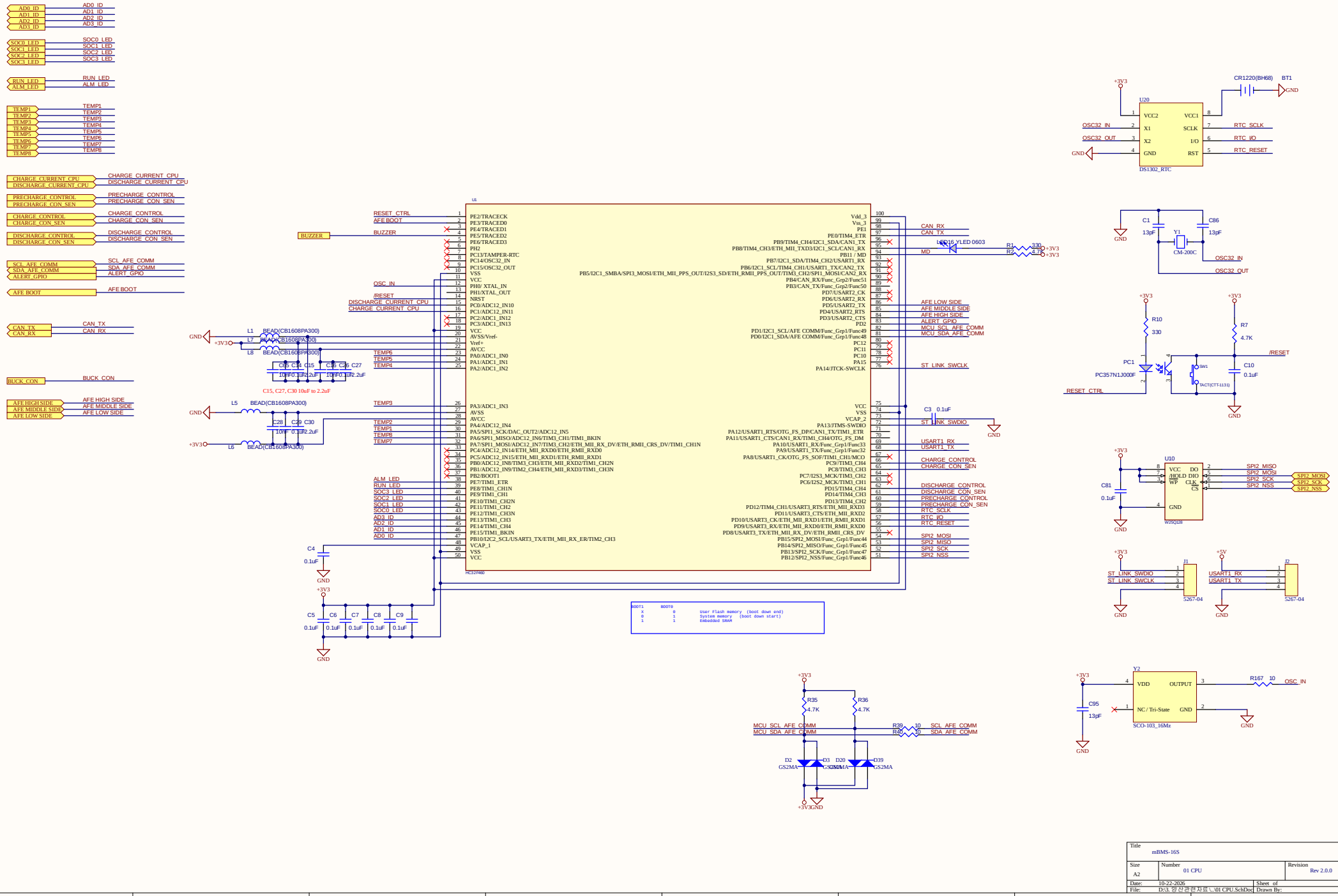
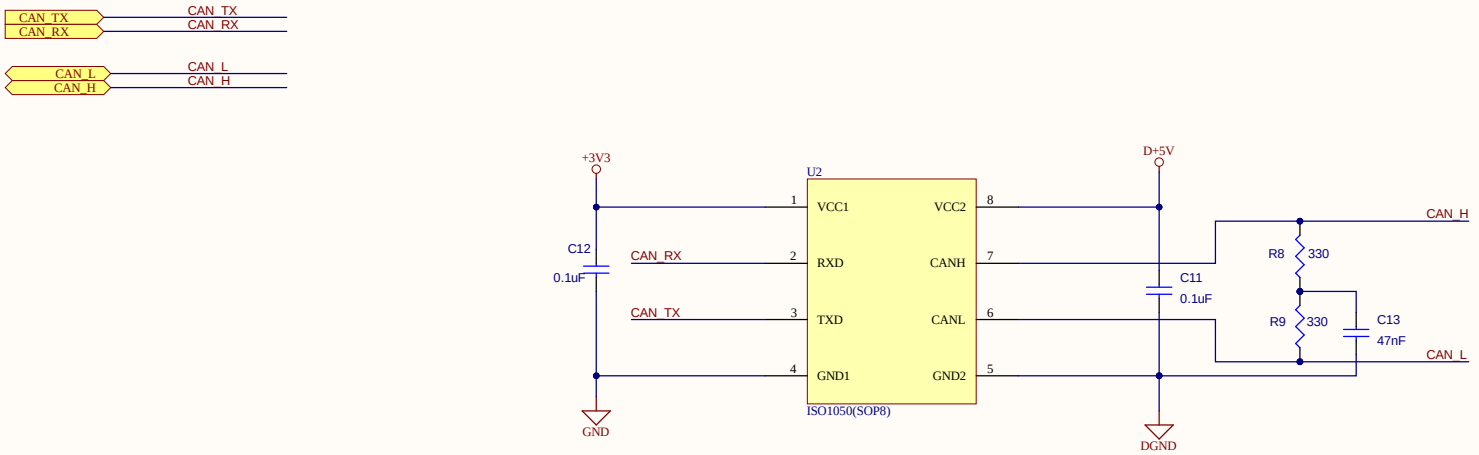
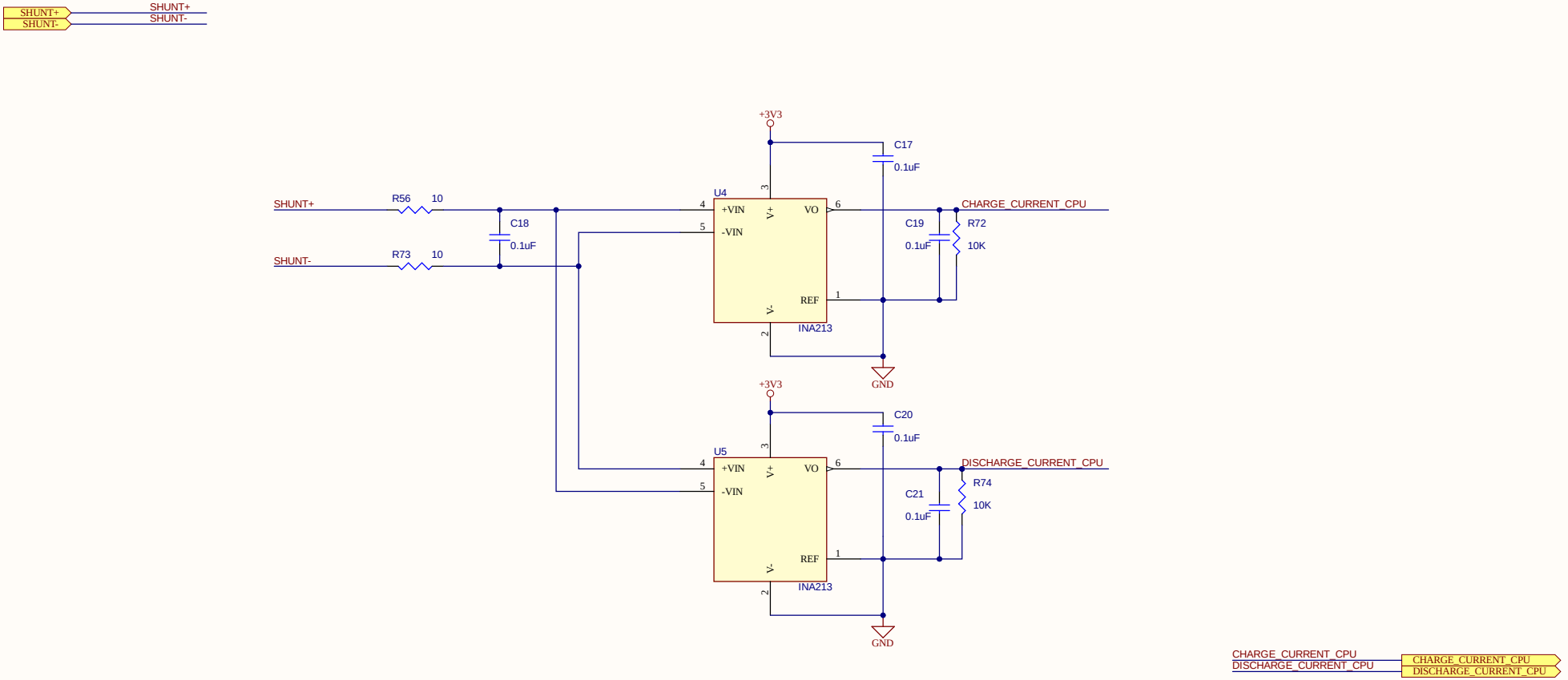


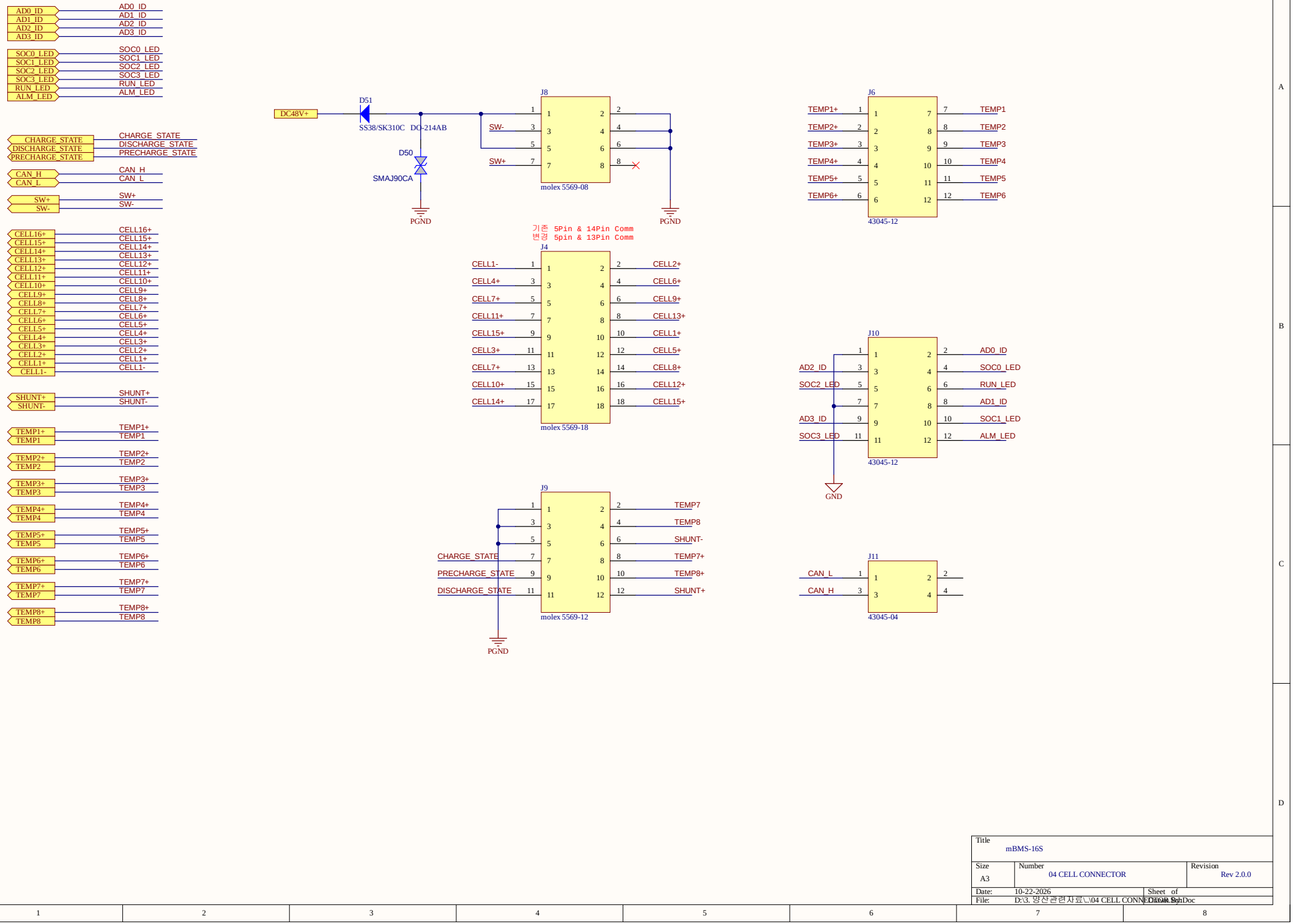
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A2			
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Title: mBMS-16S		
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Title	mBMS-16S	
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Date: 10-22-2026	Sheet of	
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AD0_ID
AD1_ID
AD2_ID
AD3_ID
SOC0_LED
SOC1_LED
SOC2_LED
SOC3_LED
RUN_LED
ALM_LED
CHARGE_STATE
DISCHARGE_STATE
PRECHARGE_STATE
CAN_H
CAN_L
SW+
SW-
CELL16+
CELL15+
CELL14+
CELL13+
CELL12+
CELL11+
CELL10+
CELL9+
CELL8+
CELL7+
CELL6+
CELL5+
CELL4+
CELL3+
CELL2+
CELL1+
CELL1-
SHUNT+
SHUNT-
TEMP1+
TEMP1
TEMP2+
TEMP2
TEMP3+
TEMP3
TEMP4+
TEMP4
TEMP5+
TEMP5
TEMP6+
TEMP6
TEMP7+
TEMP7
TEMP8+
TEMP8
DC48V+
D51
SS38/SK310C DO-214AB
D50
SMAJ90CA
PGND
J8
molex 5569-08
기존 5Pin & 14Pin Comm
변경 5pin & 13Pin Comm
J4
molex 5569-18
J9
molex 5569-12
J6
43045-12
J10
43045-12
GND
J11
43045-04
Title
mBMS-16S
Size
A3
Number
04 CELL CONNECTOR
Revision
Rev 2.0.0
Date:
10-22-2026
Sheet of
File:
D:\3. 양산 관련 자료\..\04 CELL CONNECTOR.SchDoc
Drawn By:

CHARGE_CONTROL
CHARGE_CON_SEN
DISCHARGE_CONTROL
DISCHARGE_CON_SEN
PRECHARGE_CONTROL
PRECHARGE_CON_SEN
PRECHARGE_STATE
DISCHARGE_STATE
CHARGE_STATE

CHG_RLY_CTRL

+3V3 D+12V Q201 FQB34P10 R203 0(2012) CHARGE_STATE
BZT52C18 (18V) D201 C201 0.1uF R202 12K
R201 330
PC201 PC357N1J000F
CHARGE_CONTROL
R204 12K
PGND

MCU 방향
CHARGE_CON_SEN
+3V3 R213 4.7K R214 2K CHARGE_STATE
PC2 PC357N1J000F
GND PGND

DCHG_RLY_CTRL

+3V3 D+12V Q202 FQB34P10 R208 0(2012) DISCHARGE_STATE
BZT52C18 (18V) D202 C202 0.1uF R206 12K
R205 330
PC202 PC357N1J000F
DISCHARGE_CONTROL
R207 12K
PGND

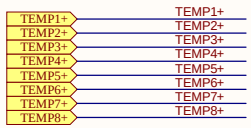
MCU 방향
DISCHARGE_CON_SEN
+3V3 R215 4.7K R216 2K DISCHARGE_STATE
PC4 PC357N1J000F
GND PGND

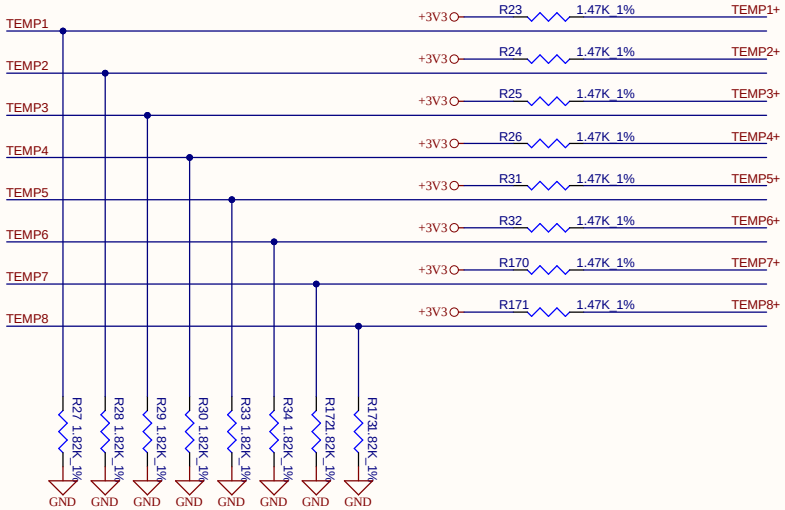
PRECHG_RLY_CTRL

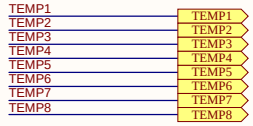
+3V3 D+12V Q203 FQB34P10 R212 0(2012) PRECHARGE_STATE
BZT52C18 (18V) D203 C203 0.1uF R210 12K
R209 330
PC203 PC357N1J000F
PRECHARGE_CONTROL
R211 12K
PGND

MCU 방향
PRECHARGE_CON_SEN
+3V3 R217 4.7K R218 2K PRECHARGE_STATE
PC6 PC357N1J000F
GND PGND

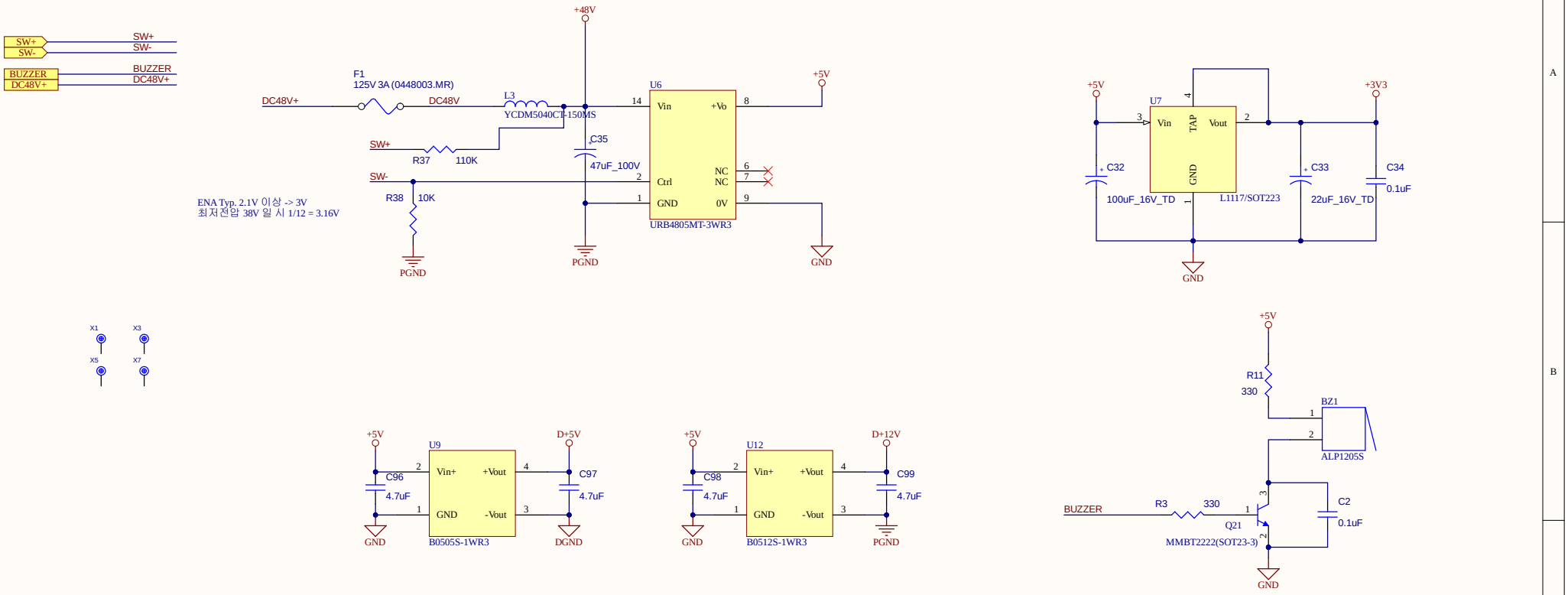
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Date: 10-22-2026	Sheet of	
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Size: A3	Number: 06 TEMP	Revision: Rev 2.0.0
Date: 10-22-2026		Sheet of
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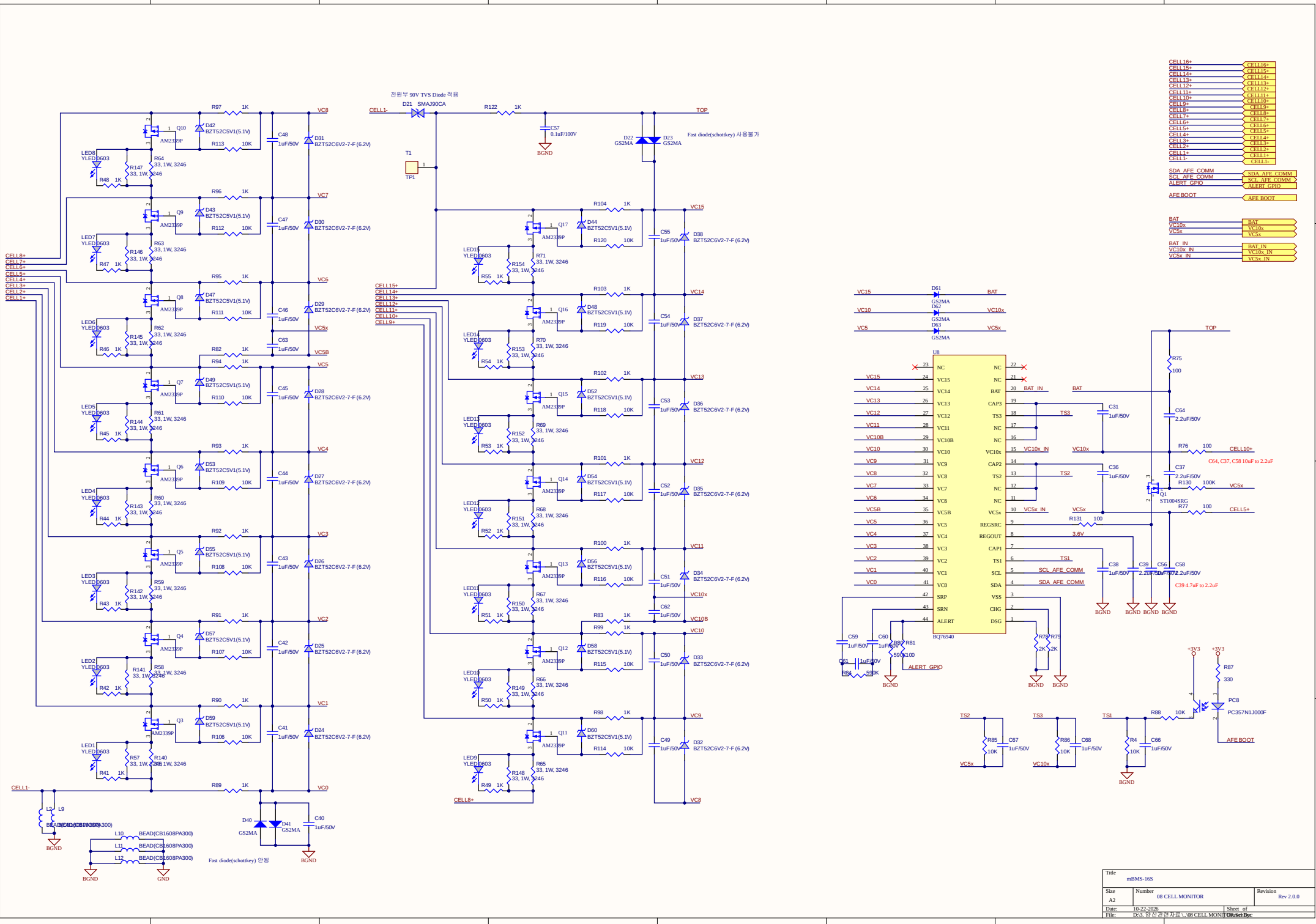


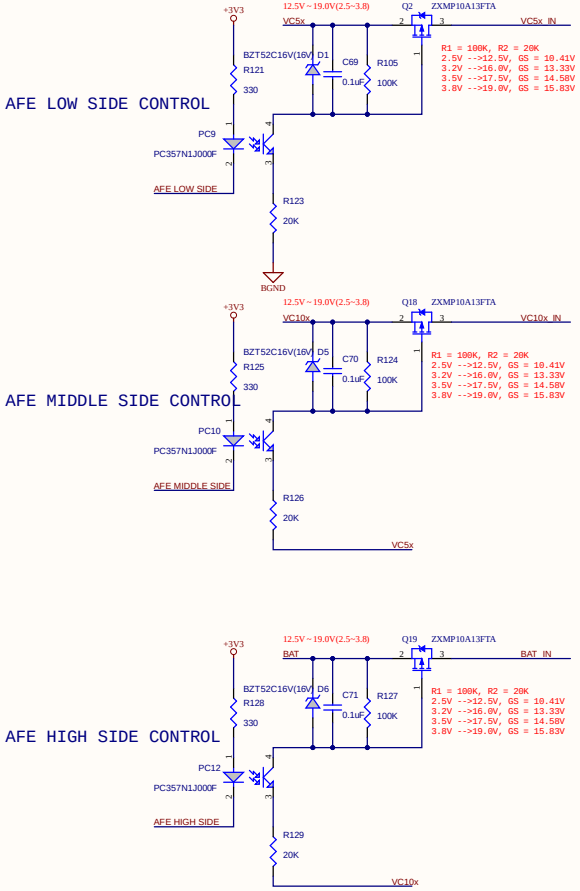
PGND -> B GND

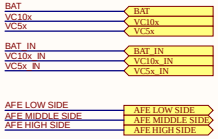
D+12V_GND -> P- GND

변경 예정

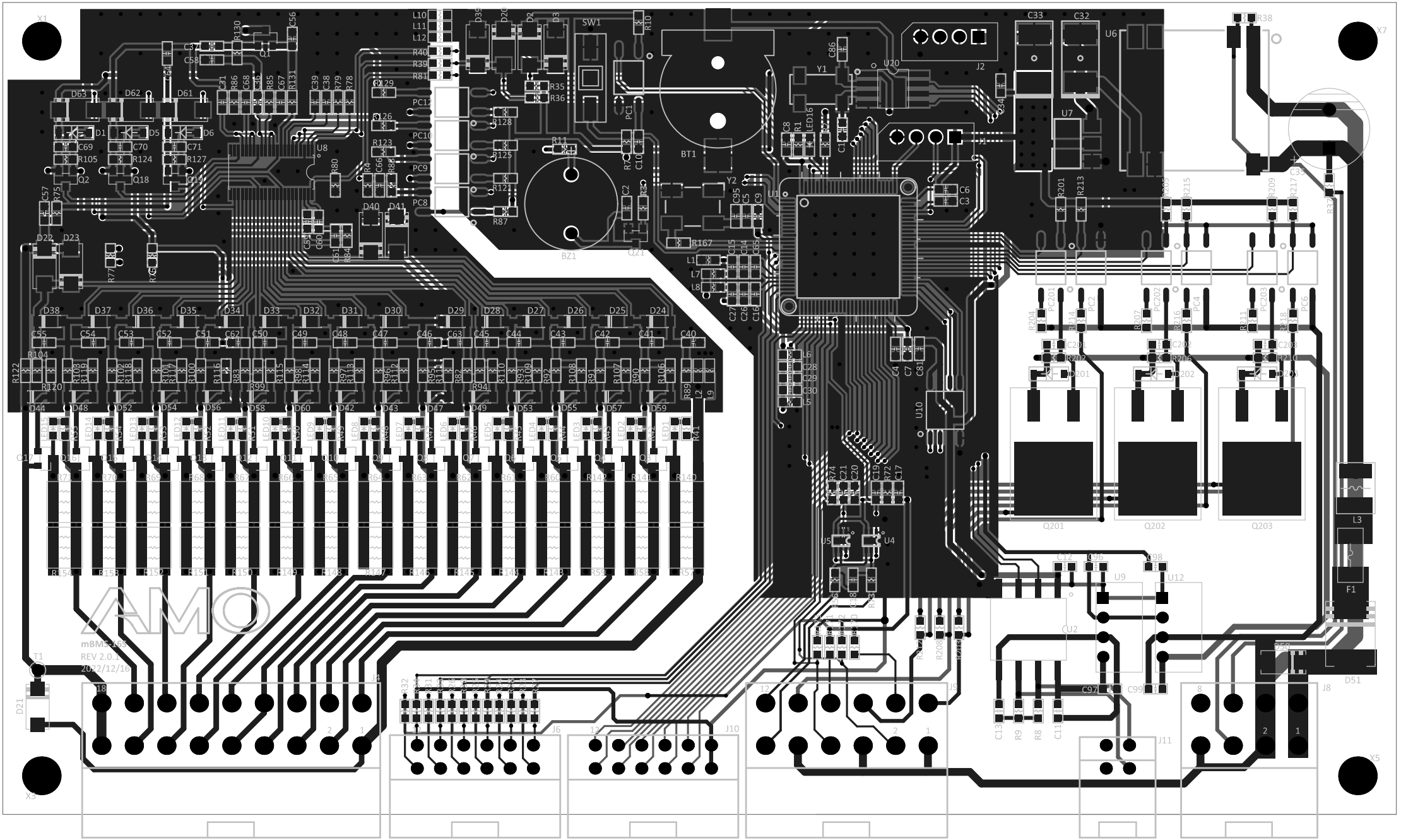
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Date: 10-22-2026		Sheet of
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전원부 90V TVS Diode 적용
CELL1-
D21 SMAJ90CA
R122 1K
TOP
C57 0.1uF/100V
BGND
D22 GS2MA
D23 GS2MA
Fast diode(schottkey) 사용불가
T1
TP1
CELL16+
CELL15+
CELL14+
CELL13+
CELL12+
CELL11+
CELL10+
CELL9+
CELL8+
CELL7+
CELL6+
CELL5+
CELL4+
CELL3+
CELL2+
CELL1+
SDA_AFE_COMM
SCL_AFE_COMM
ALERT_GPIO
AFE BOOT
BAT
VC10x
VC5x
BAT_IN
VC10x_IN
VC5x_IN
VC8
VC7
VC6
VC5x
VC5B
VC5
VC4
VC3
VC2
VC1
VC0
VC15
VC14
VC13
VC12
VC11
VC10x
VC10B
VC10
VC9
U8
BQ76940
TS1
TS2
TS3
REGSRC
REGOUT
CAP1
CAP2
CAP3
CHG
DSG
SRP
SRN
3.6V
ST1004SRG
PC357N1J000F
PC8
AFE BOOT
C64, C37, C58 10uF to 2.2uF
C39 4.7uF to 2.2uF
Title
mBMS-16S
Size
A2
Number
08 CELL MONITOR
Revision
Rev 2.0.0
Date:
10-22-2026
Sheet of
File:
D:\3. 양산관련자료 \..\08 CELL MONITOR.SchDoc
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Title: mBMS-16S		
Size: A2	Number: 09 AFE CTR FET	Revision: Rev 2.0.0
Date: 10-22-2026	Sheet of	
File: D:\3. 장 산 관련 자료 \...\09 AFE CTR FET.SchDoc	Drawn By:	


mBMS-16S
REV 2.0.1
2022/12/16