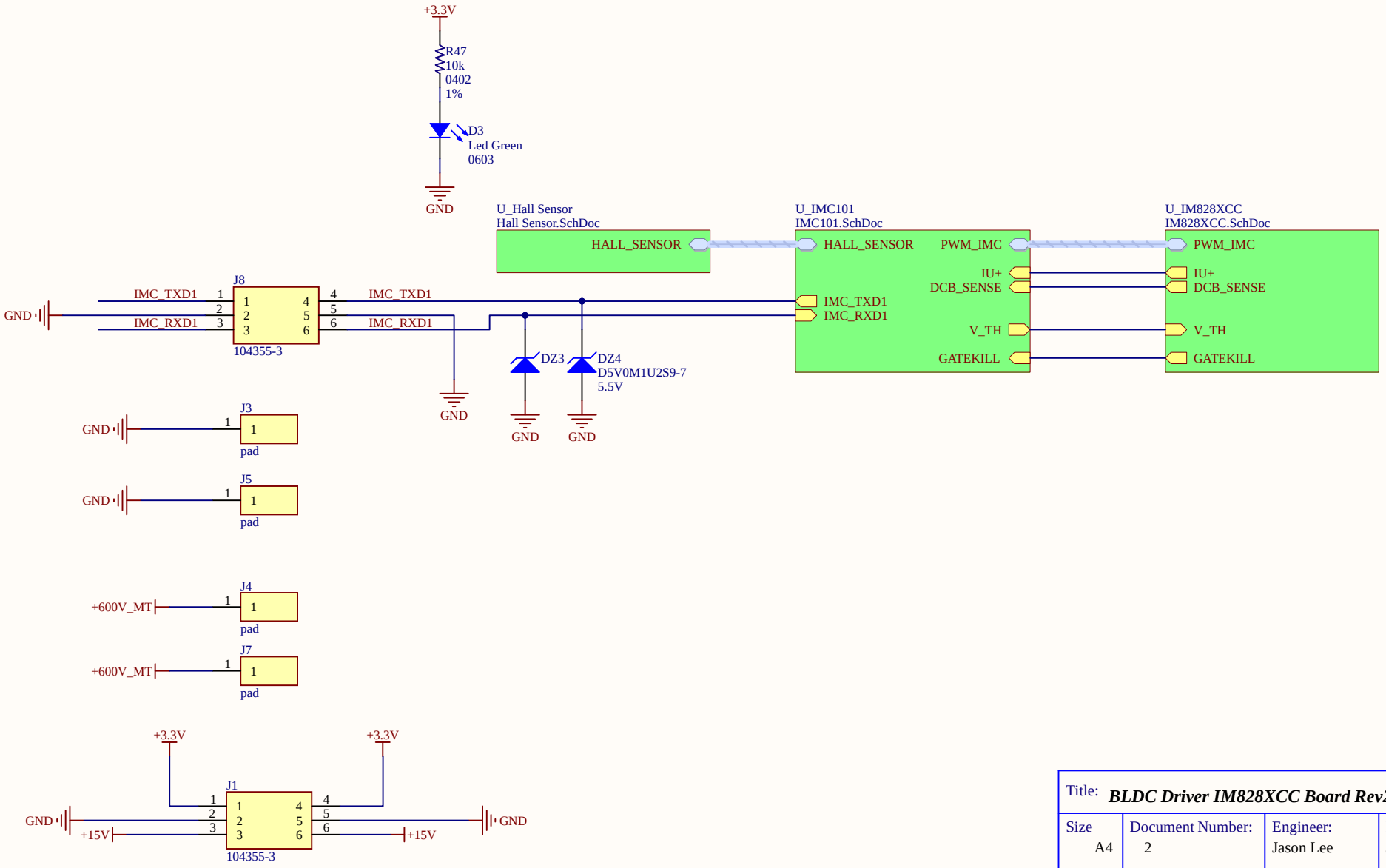
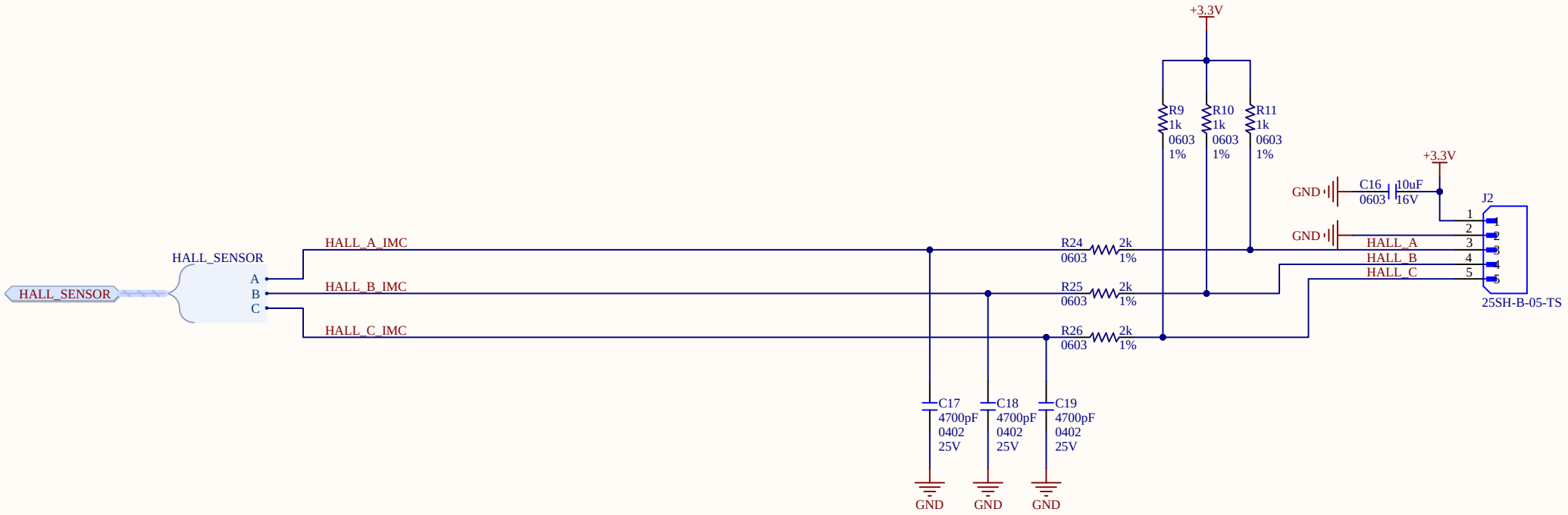
목록



Title:	***BLDC Driver IM828XCC Board Rev2.1 Top Level***			
Size A4	Document Number: 2	Engineer: Jason Lee	Drawn By: Jason Lee	Rev: 2.1
Date: 2023-03-31		Sheet 1 of 4		

HALL SENSOR FILTER CIRCUIT



Title: ***BLDC Driver IM828XCC Board Rev2.1 Hall Sensor***				
Size A4	Document Number: 3	Engineer: Jason Lee	Drawn By: Jason Lee	Rev: 2.1
Date: 2023-03-31		Sheet 2 of 4		

Using internal x3 gain (without external Op-amp):
R10= 10.0K, R13 = 2.00K, R12 = 100R
Effective gain = 3 * 5 / 6 = 2.5 (due to R6 pull up)

#NAME? EVAL M1 IM828 only use IU+ to sense the current (one leg sense type), so we don't care about IV+ and IW+

#NAME? This is single shunt type so IU-, IV-, IW- are connected to Ground in IPM side

U1
IMC101TF064XUMA1

IMC102 SUPPORT PFC BUT WE WILL NOT USE THAT, SO NO NEED TO SETUP PFC HERE

Current feedback Setup

Threshole voltage for Temp Sense

DC bus voltage sensing setup

Duty Frequency input filter

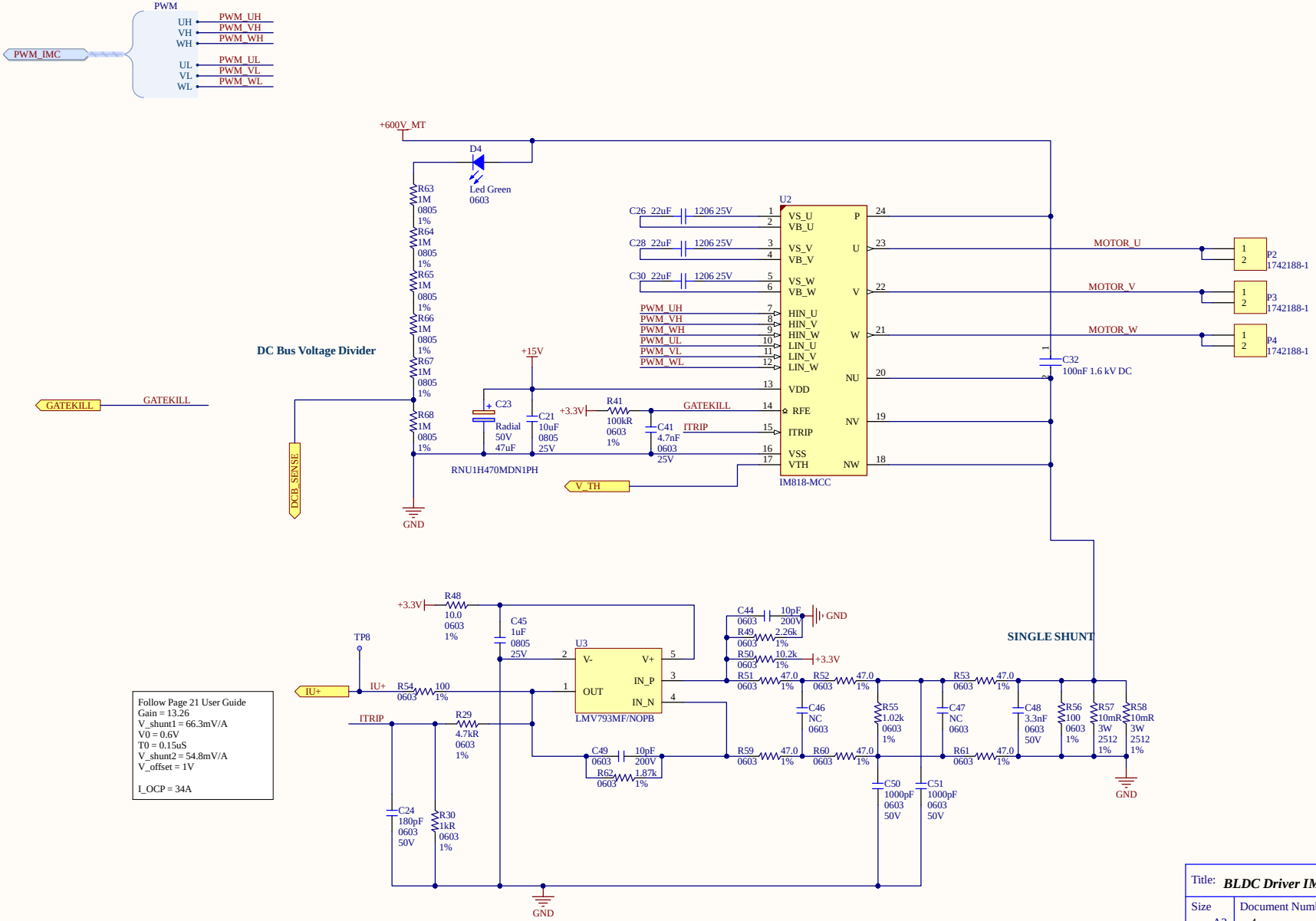
VSP CONNECTOR

DEBUG CONNECTOR

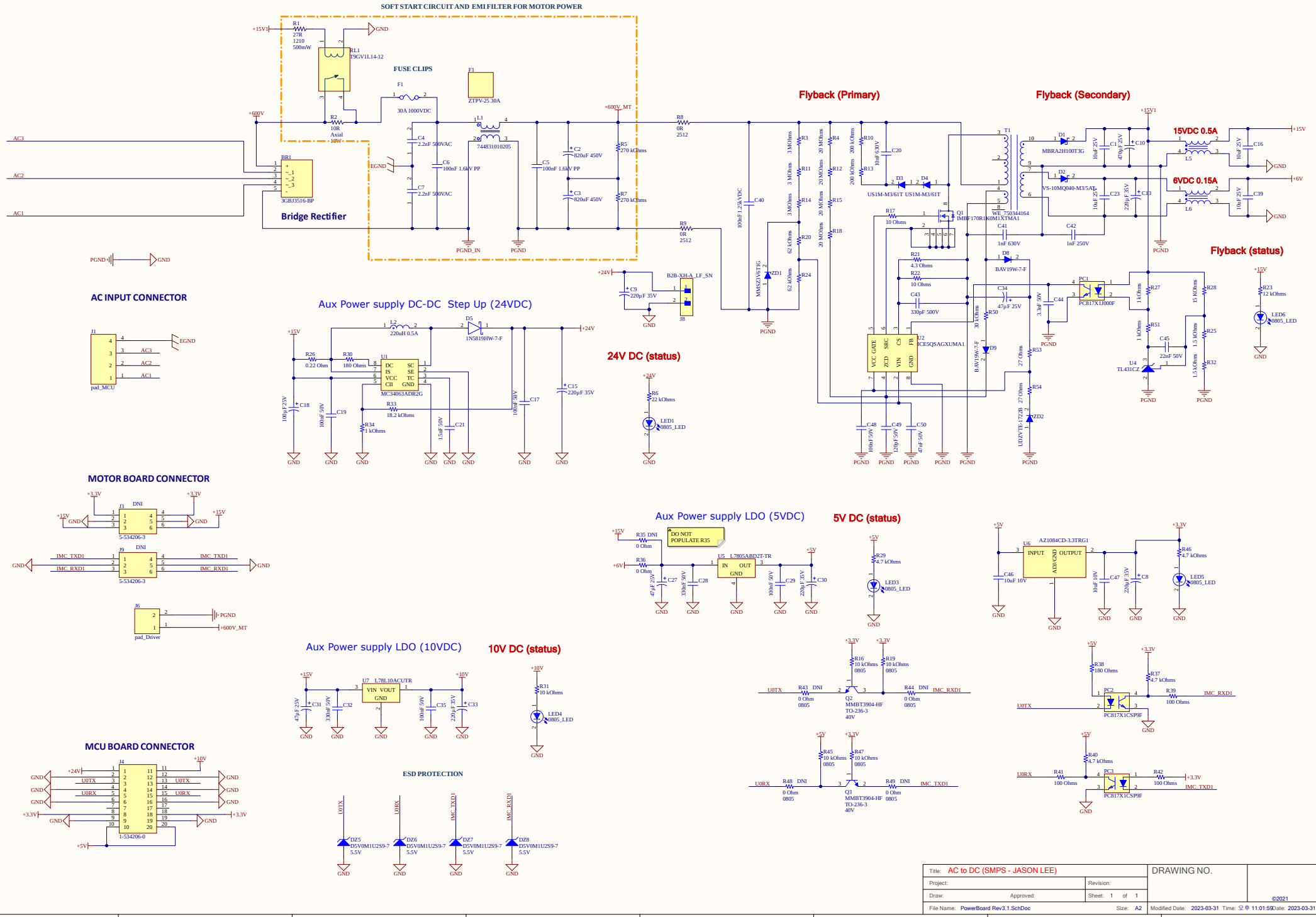
HALL_SENSOR

PWM

Title:	*BLDC Driver IM828XCC Board Rev2.1 IMC102*			
Size: A3	Document Number: 1	Engineer: Jason Lee	Drawn By: Jason Lee	Rev: 2.1
Date: 2023-03-31		Sheet 3 of 4		



Title:	***BLDC Driver IM828XCC Board Rev2.1 SPM2***			
Size A3	Document Number: 4	Engineer: Jason Lee	Drawn By: Jason Lee	Rev: 2.1
Date: 2023-03-31		Sheet 4 of 4		


SOFT START CIRCUIT AND EMI FILTER FOR MOTOR POWER
FUSE CLIPS
Bridge Rectifier
Flyback (Primary)
Flyback (Secondary)
Flyback (status)
15VDC 0.5A
6VDC 0.15A
AC INPUT CONNECTOR
Aux Power supply DC-DC Step Up (24VDC)
24V DC (status)
MOTOR BOARD CONNECTOR
Aux Power supply LDO (5VDC)
5V DC (status)
Aux Power supply LDO (10VDC)
10V DC (status)
MCU BOARD CONNECTOR
ESD PROTECTION
Title: AC to DC (SMPS - JASON LEE)
DRAWING NO.
Project:
Revision:
Draw:
Approved:
Sheet: 1 of 1
File Name: PowerBoard Rev3.1.SchDoc
Size: A2
Modified Date: 2023-03-31 Time: 오후 11:01:59 Date: 2023-03-31
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