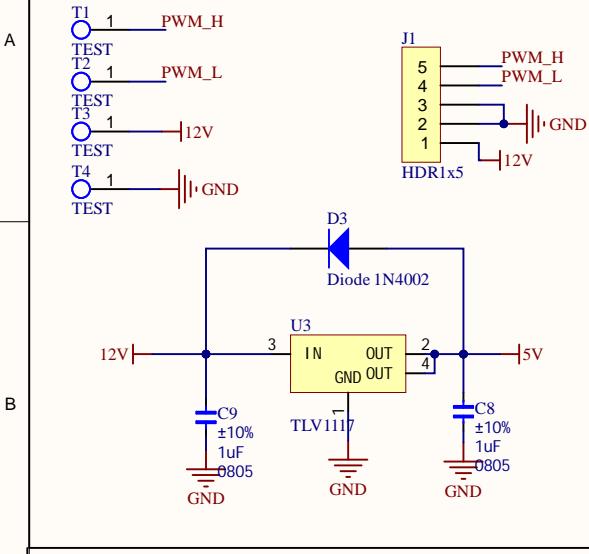


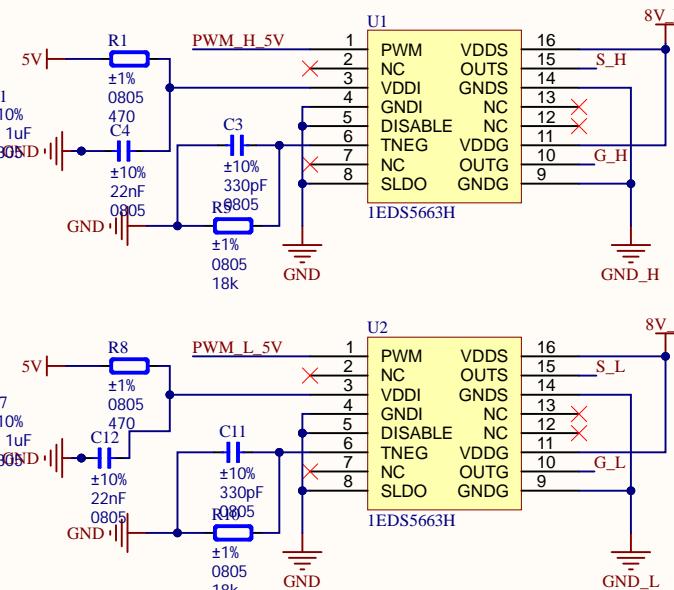
1

Power_Support



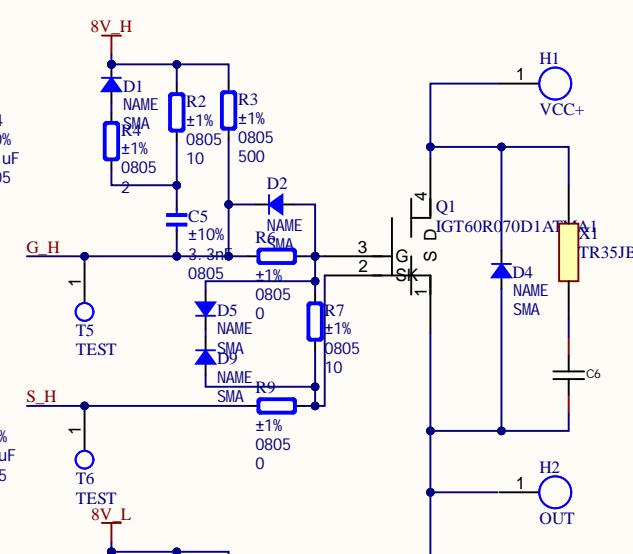
2

Gate_Drive_Circuit



3

Main_Power_Bridge



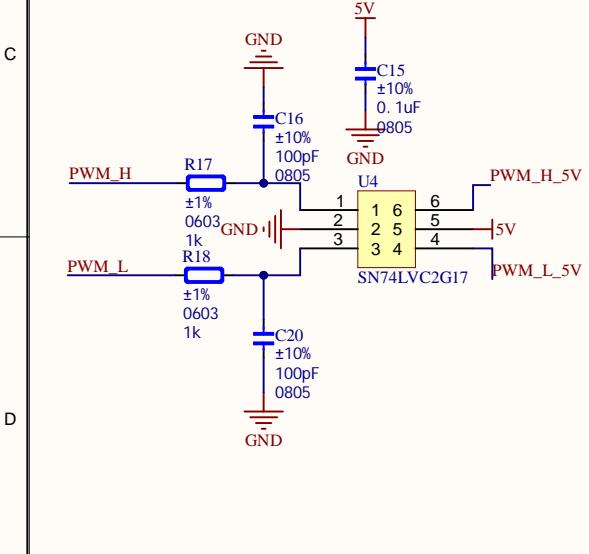
A

B

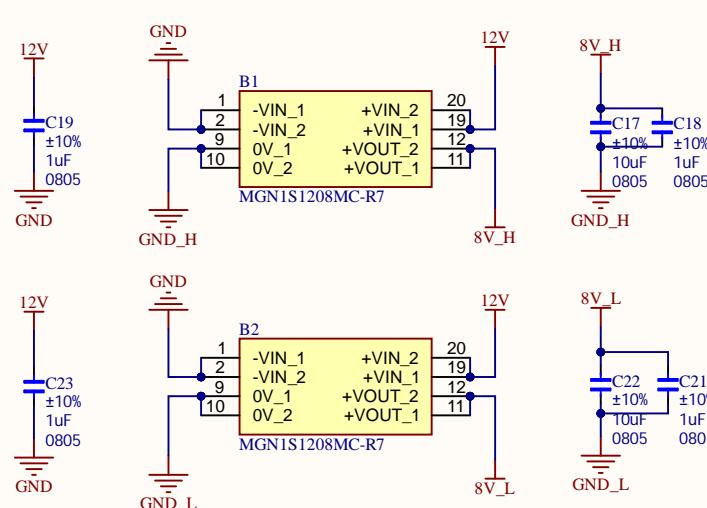
C

D

Snubber_Circuit



Isolated_Voltage_Circuit



3

Title: GaN_Single_Bridge

Date: 2025.10.15

Author: Jisaye

Revision: V1.0

ShenZhen University

Organization: S213A

GaN_Single_Bridge.SchDot

1

2

4

4

Comment	Description	Designator	Footprint	LibRef	Quantity
MGN1S1208MC-R7	Isolated Module DC DC Converter 1 Output 8V 125mA 10.8V - 13.2V Input	B1, B2	MGN1S1208MCR7	MGN1S1208MC-R7	2
C0805	Capacitor	C1, C2, C3, C4, C5, C7, C8, C9, C10, C11, C12, C13, C15, C16, C17, C18, C19, C20, C21, C22, C23, C24, C25	CAP_0805	Cap_0805	23
GR442QR73D102KW 01L		C6, C14	1808	1808	2
NAME	Diode	D1, D2, D4, D5, D6, D7, D8, D9, D10, D11	DO-214AC	Diode_SMA	10
Diode 1N4002	1 Amp General Purpose Rectifier	D3	DO-41	Diode 1N4002	1
VCC+		H1	HOLE	HOLE	1
OUT		H2	OUT	HOLE	1
VCC-		H3	HOLE	HOLE	1
HDR1x5	Connector	J1	PIN-5-2.54-1.0	HDR1x5	1
IGT60R070D1ATMA1		Q1, Q2	IGT60R070D1ATMA1	IGT60R070D1ATMA1	2
R0805	Resistor, Resistor_uncertain	R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16	RES_0805	Res_0805	16
R0603	Resistor	R17, R18	RES_0603	Res_0603	2
TEST		T1, T2, T3, T4, T5, T6, T7, T8	TESTPOINT	TEST	8
1EDS5663H		U1, U2	1EDS5663H	1EDS5663H	2
TLV1117	Power	U3	SOT223-3	TLV1117	1
SN74LVC2G17		U4	SOT-23-6	SOT-23-6	1
TR35JBX50L0	RES, TO-220, 0.05 ohm, 5%, 35W	X1, X2	TR35JBX50L0	TR35JBX50L0	2