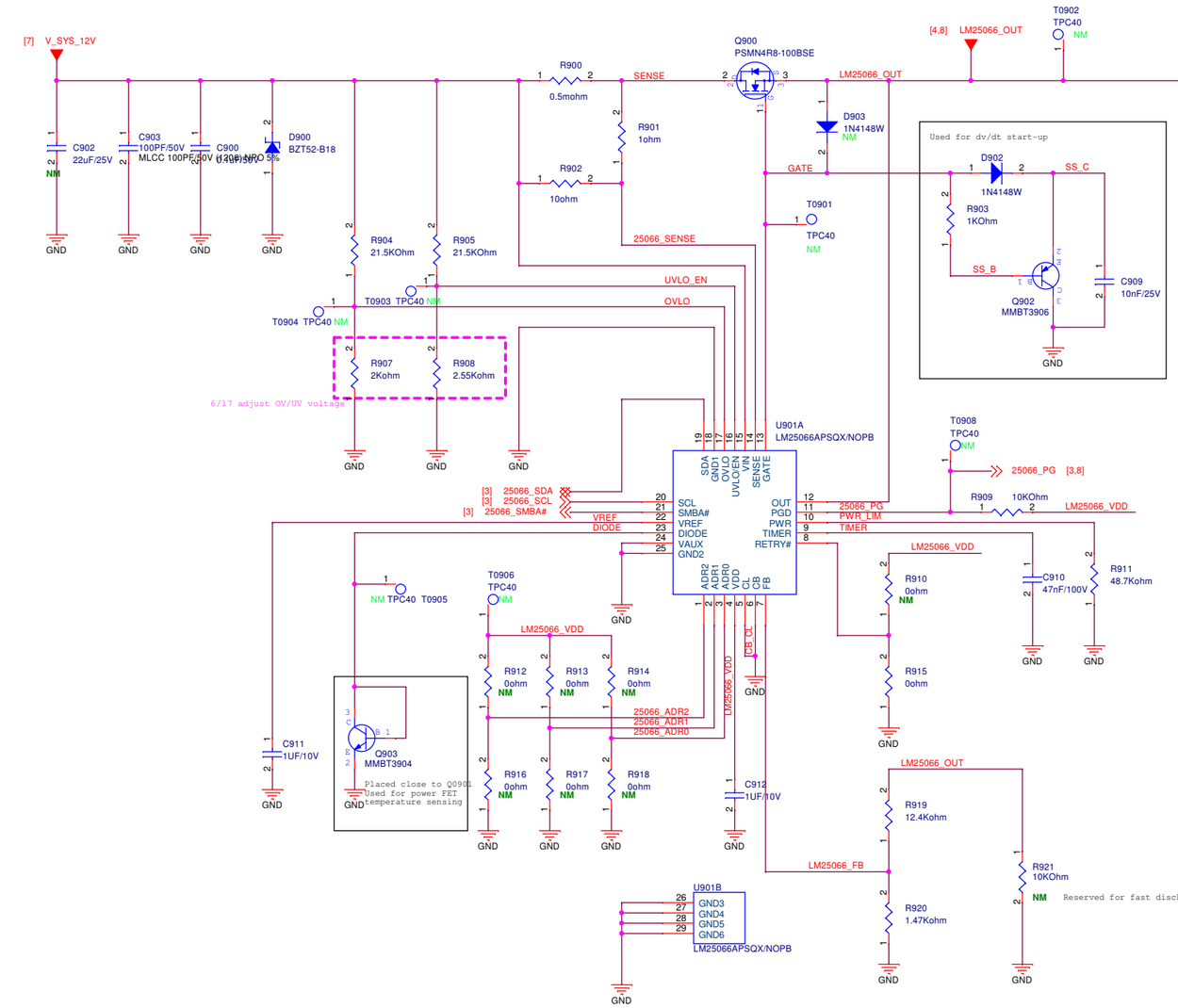
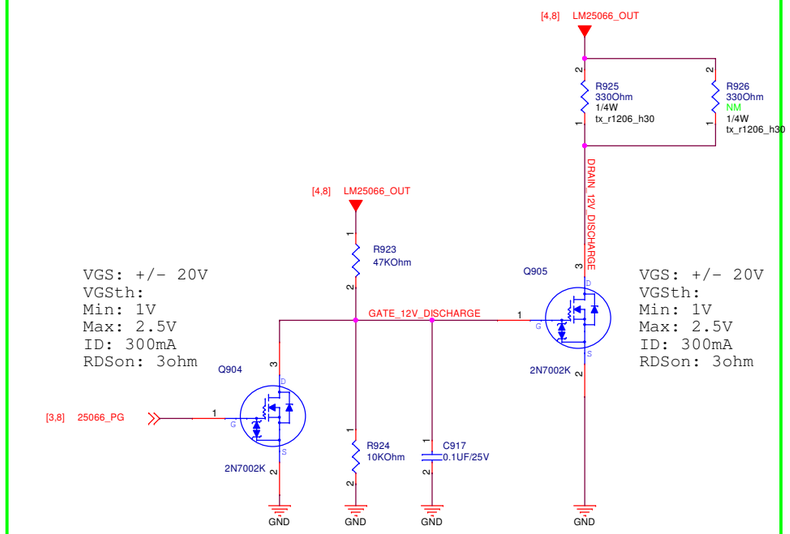
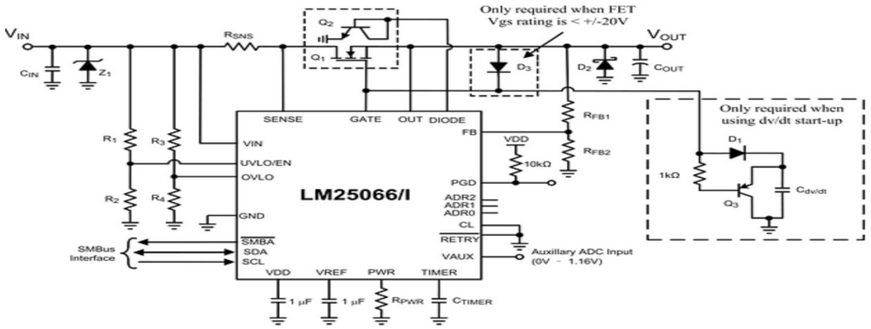


Discharge Circuit



Design Summary



R_S =	0.5	mΩ
R_{CL1} =	10	Ω
R_{CL2} =	1	Ω
R_{PWR} =	48.7	kΩ
C_T =	47.00	nF
R1 =	21.5	kΩ
R2 =	2.87	kΩ
R3 =	21.5	kΩ
R4 =	1.87	kΩ
R_{FB1} =	12.4	kΩ
R_{FB2} =	1.5	kΩ
R_{PG} =	10	kΩ
C_{IN} =	0.01	µF
C_{VDD} =	1	µF
C_{VREF} =	1	µF
D1, D3 =	1N4148W-7-F	
D2 =	SK153-TP	
$C_{dv/dt}$ =	10	nF
Connect CL Pin to	GND	µF
Connect CB Pin to	GND	µF
Connect /Retry to	GND	µF
Q1 =	PSMN4R8-100BSE	
#FETs required in parallel	4	
Q2 =	MMBT3904	
Q3 =	MMBT3906	
Z1 =	5.0SMDJXXX	

Design Results

	Typical	Units
Current limit	55.0	A
Power Limit	617	W
Circuit Breaker Current	99.0	A
Startup Time	6.36	ms
Insertion Delay	14.5	ms
Fault Timeout	0.888	ms
Restart Time During Fault	108.309	ms
Upper UVLO Threshold	10.344	V
Lower UVLO Threshold	9.850	V
Upper OVLO Threshold	14.497	V
Lower OVLO Threshold	14.002	V
PGD Threshold	11.01108163	V
PGD Hystersis	297.6	mV

PEGATRON Title : Manage & ORing
Engineer: Jack Lo
Size | Project Name: Endeavor_PDB | Rev 2.0
Date: Thursday, May 15, 2025 Sheet 8 of 10