

WIRE LEGEND AND NOTES

CONTROL WIRE GAUGE:
(ALL WIRE MUST BE UL AND VW-1 RATING)

SYMBOL – WIRE GAUGE, VOLTAGE, TYPE

- A- #24 AWG, 300V, 105C, 7/32 STRANDING, UL1569
- B- #22 AWG, 300V, 105C, 7/30 STRANDING, UL1569
- C- #20 AWG, 600V, 105C, 10/30 STRANDING, UL1015
- D- #14 AWG 600V, 105C, 41/30 STRANDING, UL1015
- E- #10 AWG 600V, 105C, 105/30 STRANDING, UL1015
- F- #24 AWG, 300V 80C, 4 CONDUCTOR CABLE, UL2464, 7x32 STRANDING, BLK/WHT/RED/GRN
- G- #24 AWG, 600V, 105C, TWISTED PAIR, RED/WHT, 105C, UL1015
- H- #16 AWG, 300V, 105C, 26/30 STRANDING, UL1569
- I- #14 AWG, 300V, 105C, 41/30 STRANDING, 0.110 NOM ID, UL1569
- J- #20 AWG, 300V, 105C, 10/30 STRANDING, UL1569

WIRE REFERENCE NUMBER PREFIX

- N - CONTROL/SIGNAL WIRE
- H - 10 AWG WIRE
- F - FIBER CABLE
- C - MULTI-CONDUCTOR CABLE
- R - RIBBON CABLE
- P - POWER WIRE (#2 AND UP)
- FB – FLEXIBUS
- HB – HARD BUS

WIRE COLORS, CONTROL WIRE:

- 1.BRN 2.RED 3.ORN 4.YEL
- 5.GRN 6.BLU 7.VIO 8.GRY
- 9.WHT 10.BLK

WIRE COLORS POWER - ALL VOLTAGES

- A-BRN B-ORN C- YEL

MTA PLUG COLORS

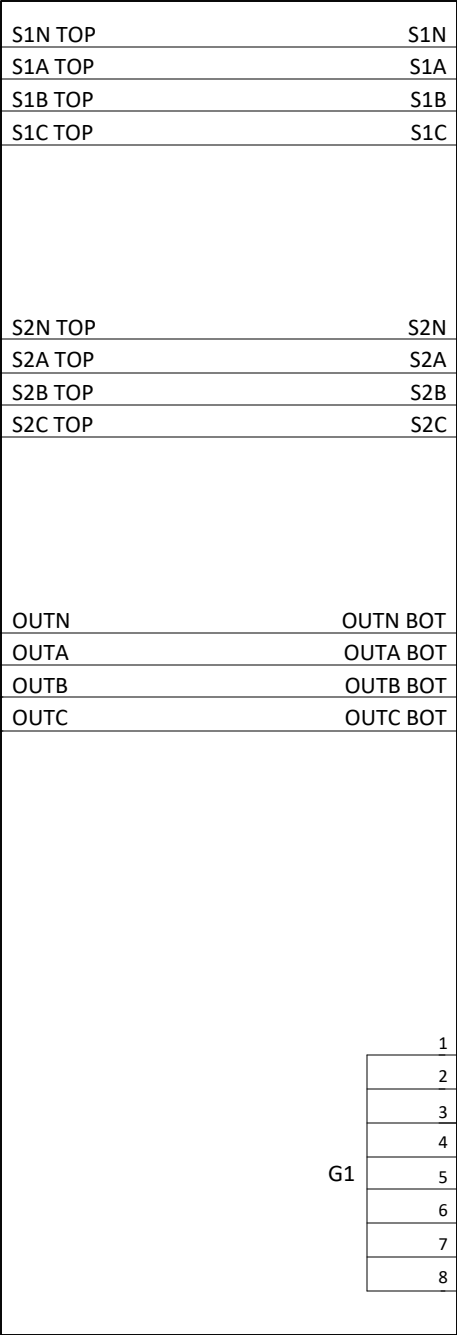
- WHITE FOR A WIRE
- RED FOR B WIRE
- YELLOW FOR J WIRE



PAGE DESCRIPTION
SCHEMATIC, Series 70 eSTS

JOB LZ-11137	DRAWN	DATE 8/9/2023	DWG NO 94-ES-11137-2	REV A
	CHK	DATE		
	APPR	DATE	SHEET 1 OF 33	

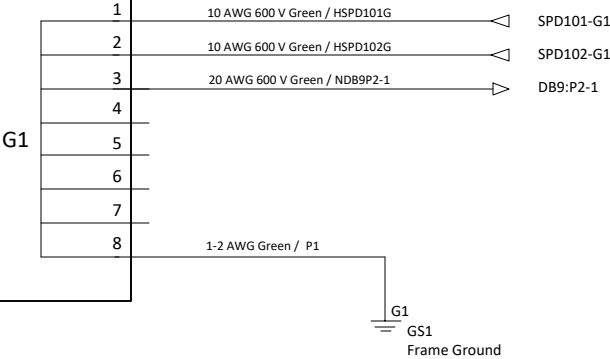
STS1



CB301:T4, CB302:T4
CB301:T1, CB302:T1
CB301:T2, CB302:T2
CB301:T3, CB302:T3

CB101:L4, CB201:L4
CB101:L1, CB201:L1
CB101:L2, CB201:L2
CB101:L3, CB201:L3

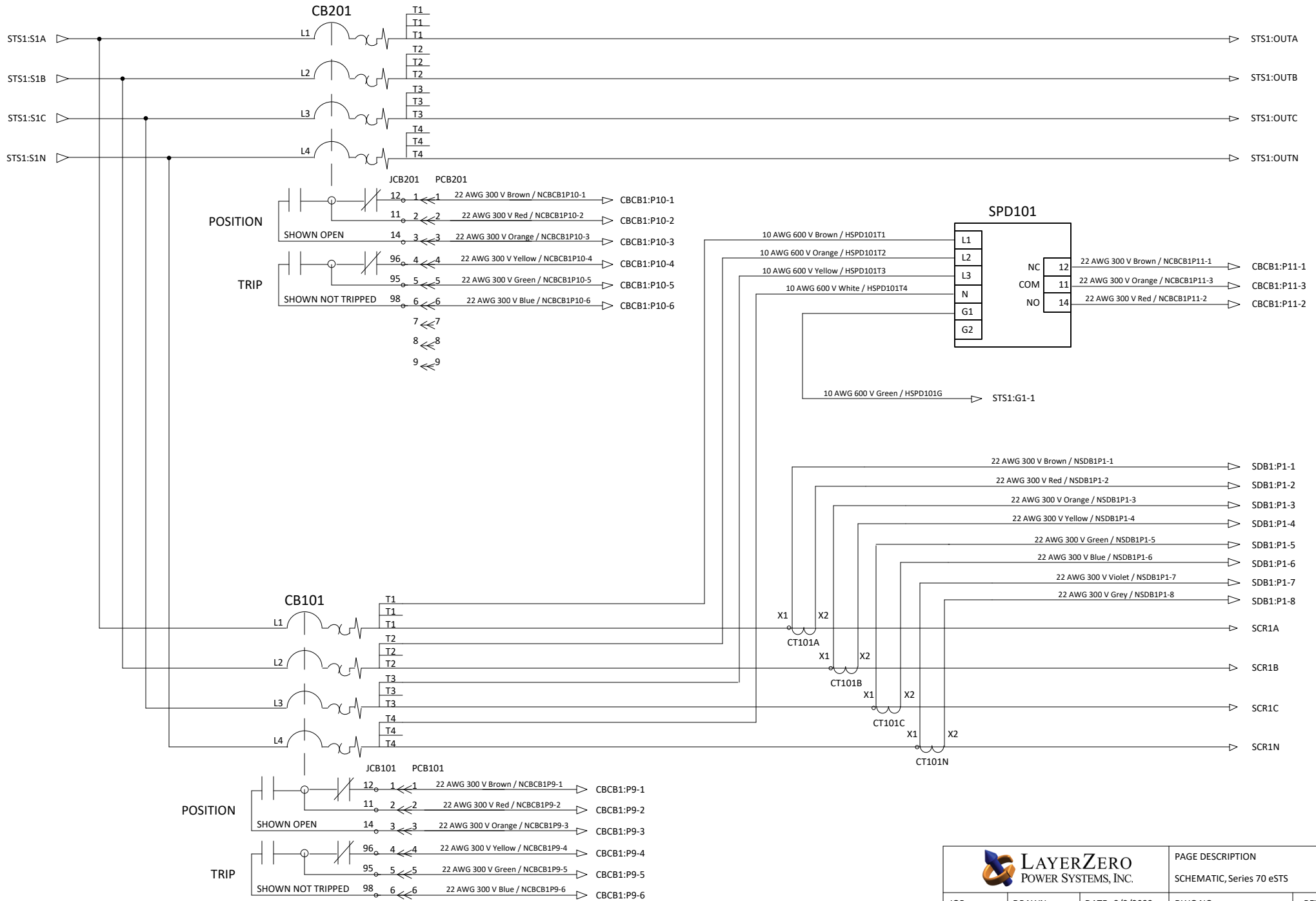
CB102:L4, CB202:L4
CB102:L1, CB202:L1
CB102:L2, CB202:L2
CB102:L3, CB202:L3



INPUT VOLTAGE	120/208V
CURRENT	400A
REDUNDANCY	SMR
NUMBER OF POLES	4-pole
NUMBER OF WIRES	4-wire

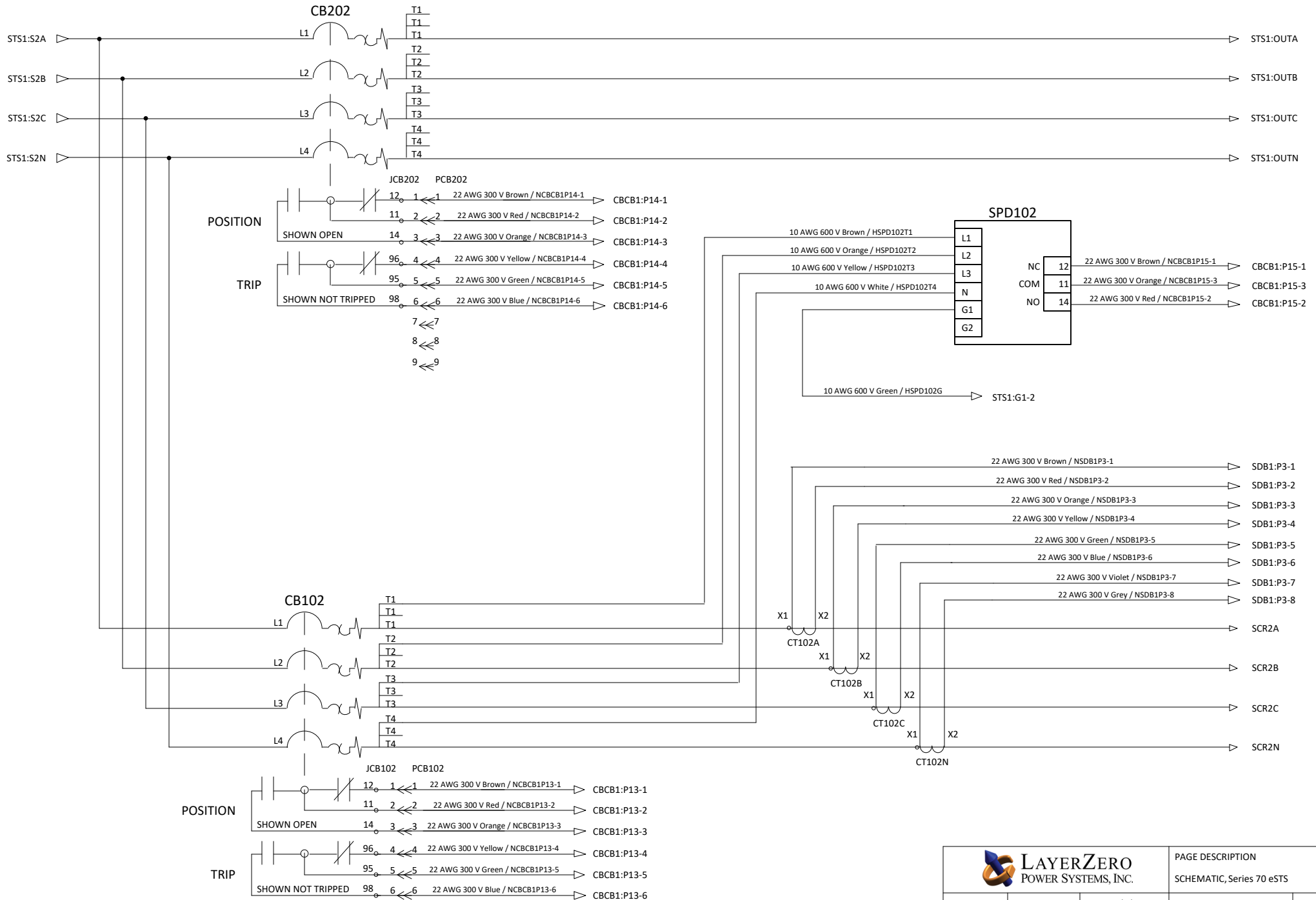
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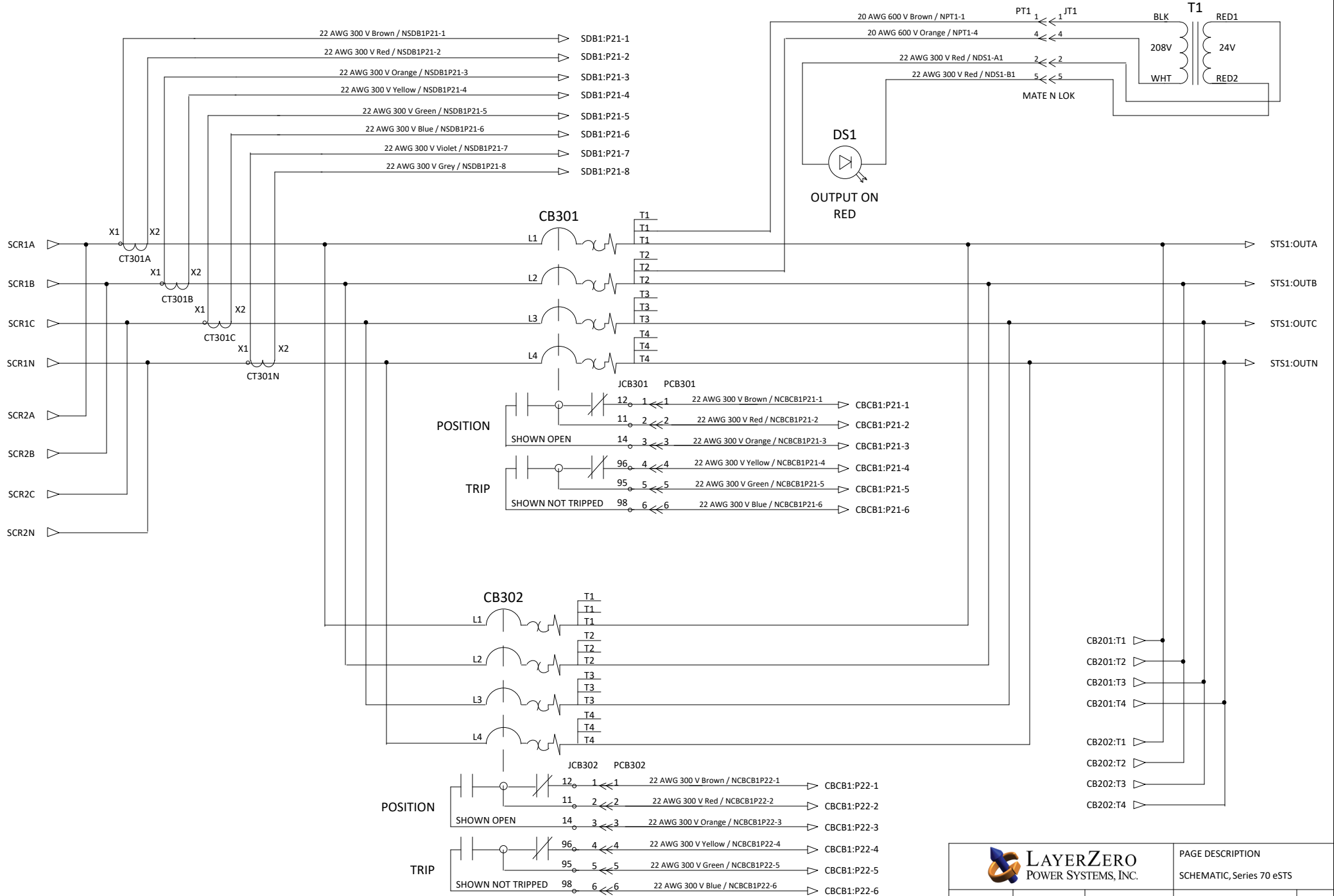


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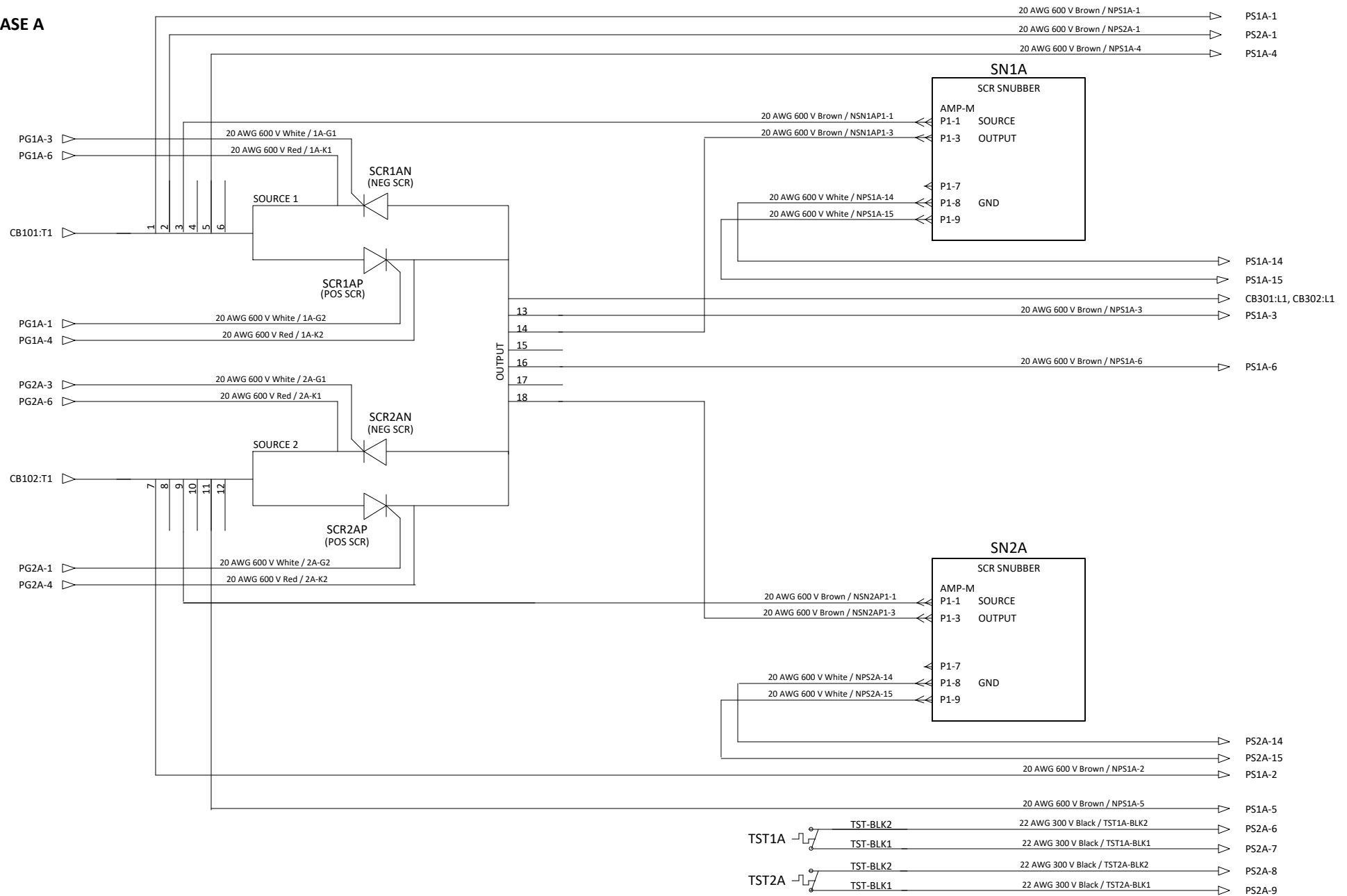


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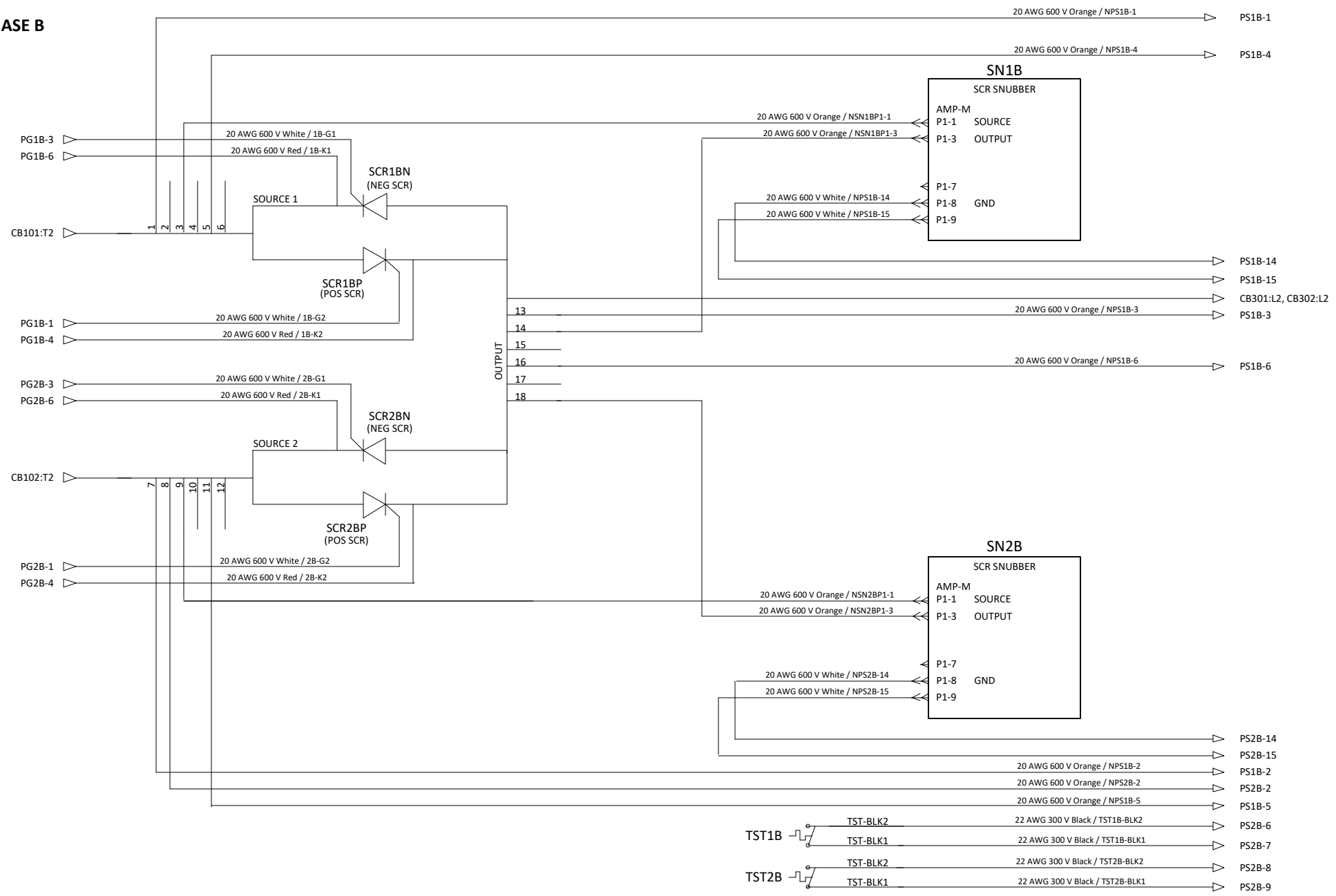


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PHASE A

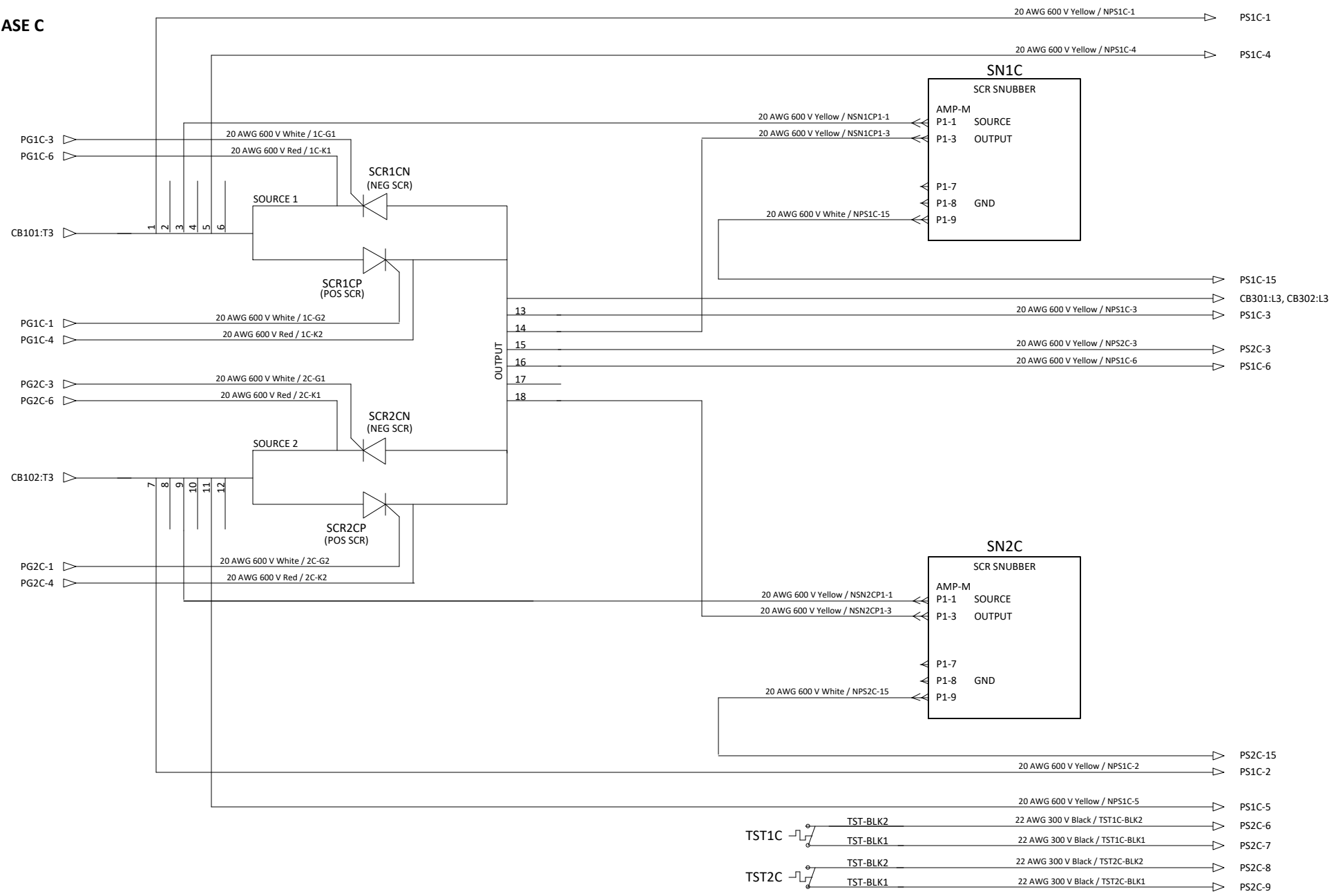


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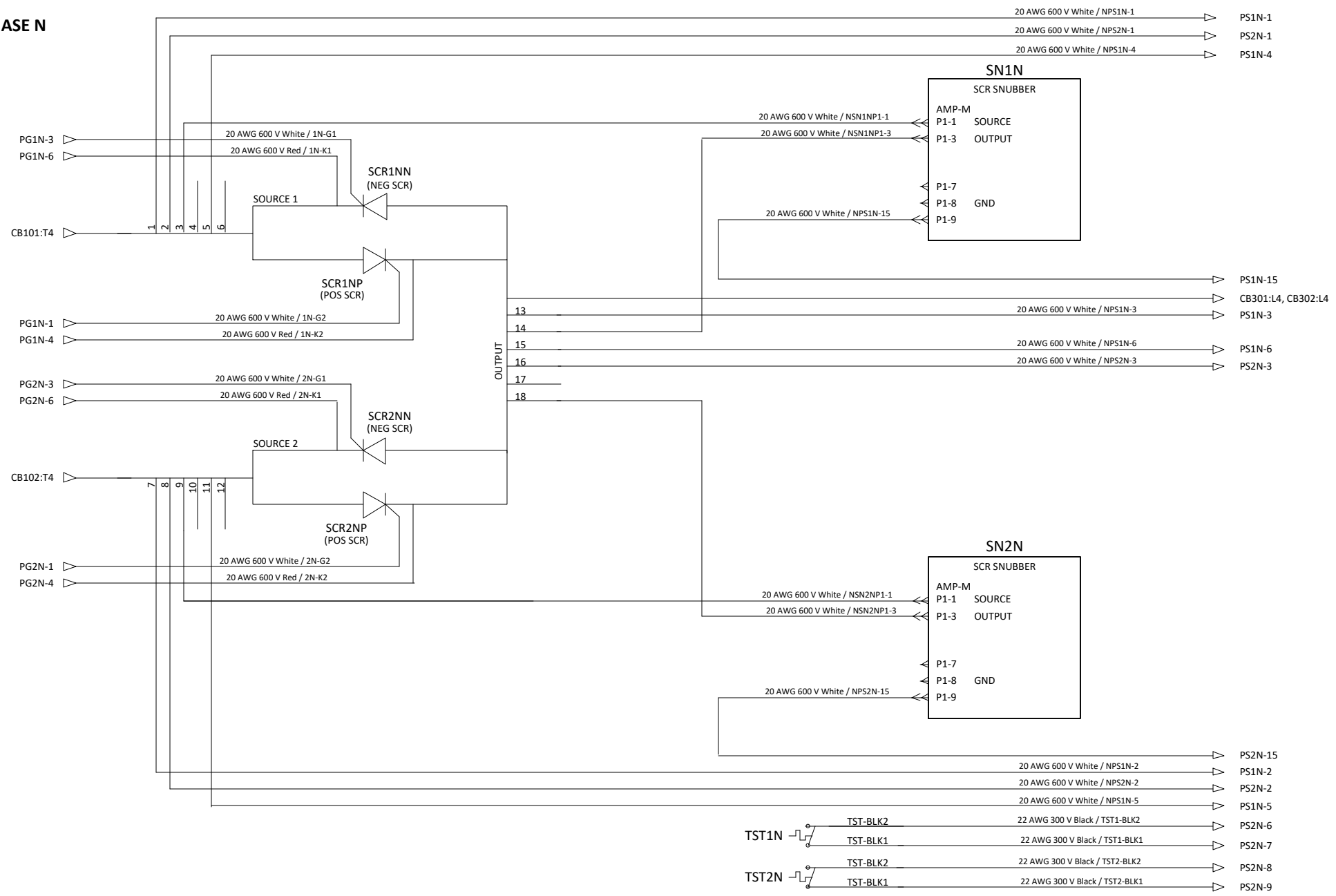
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PHASE C

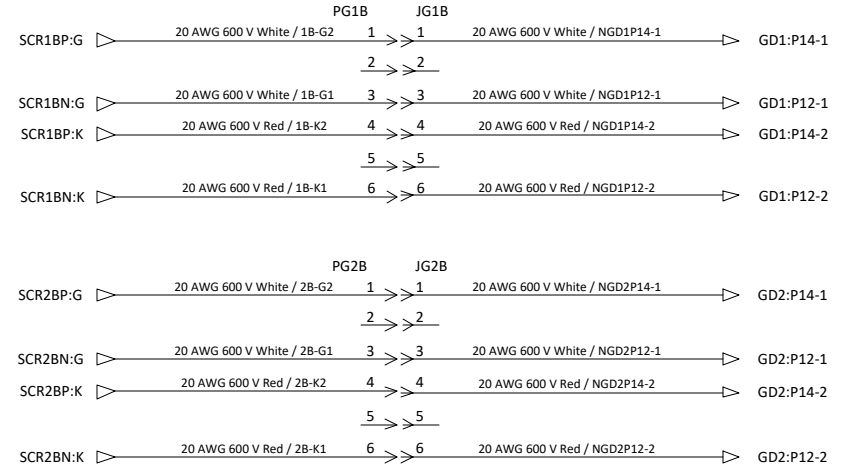


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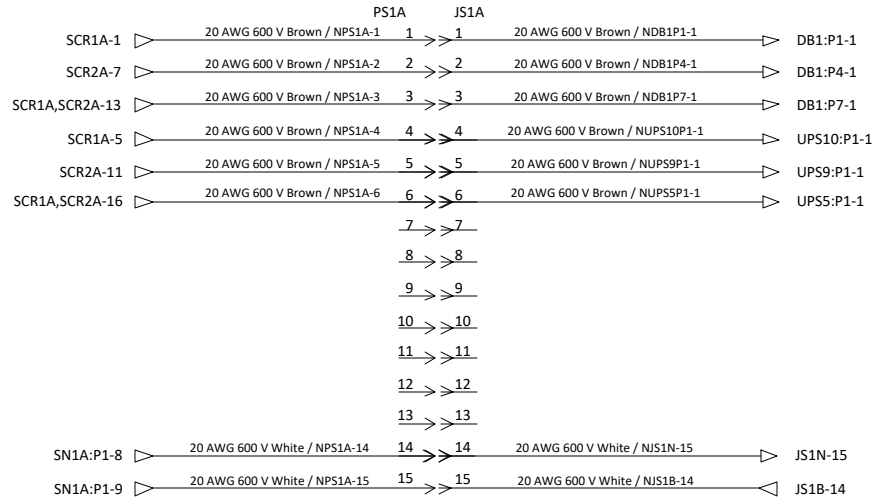
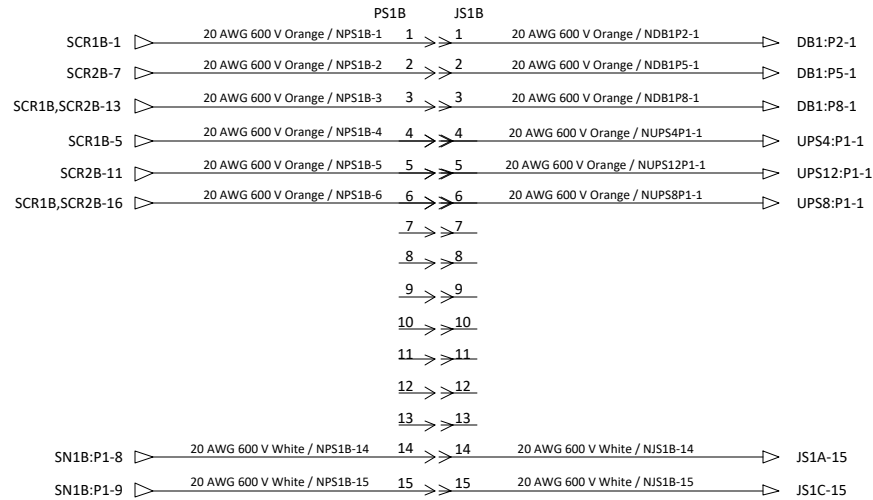
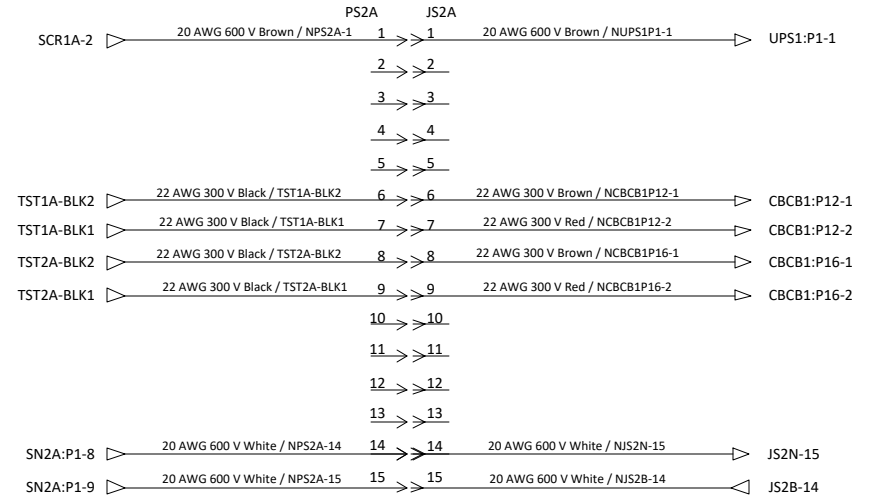
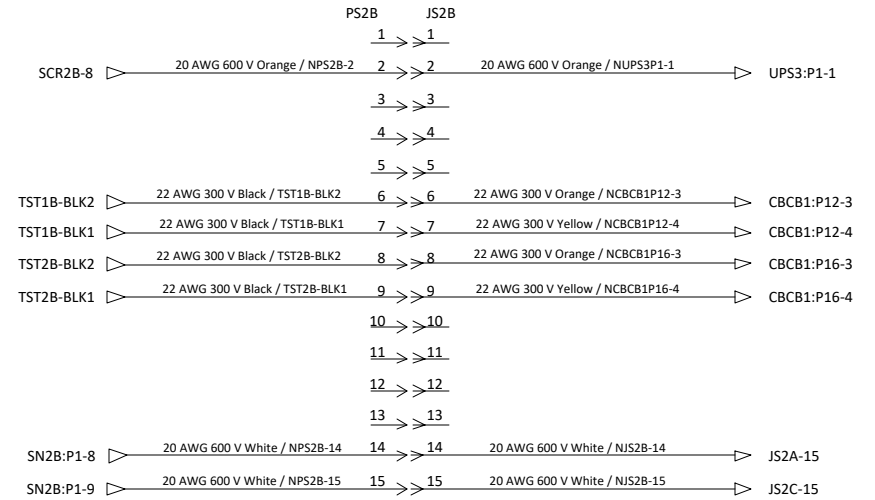
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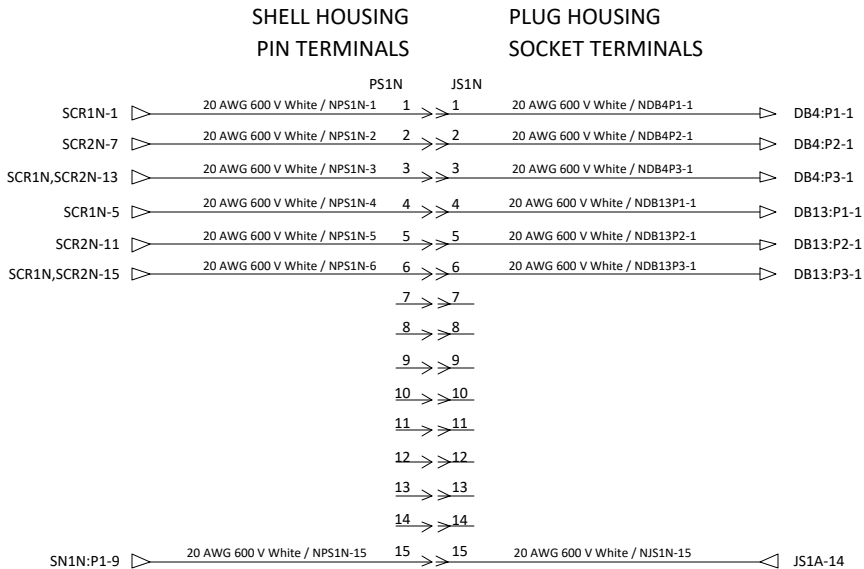
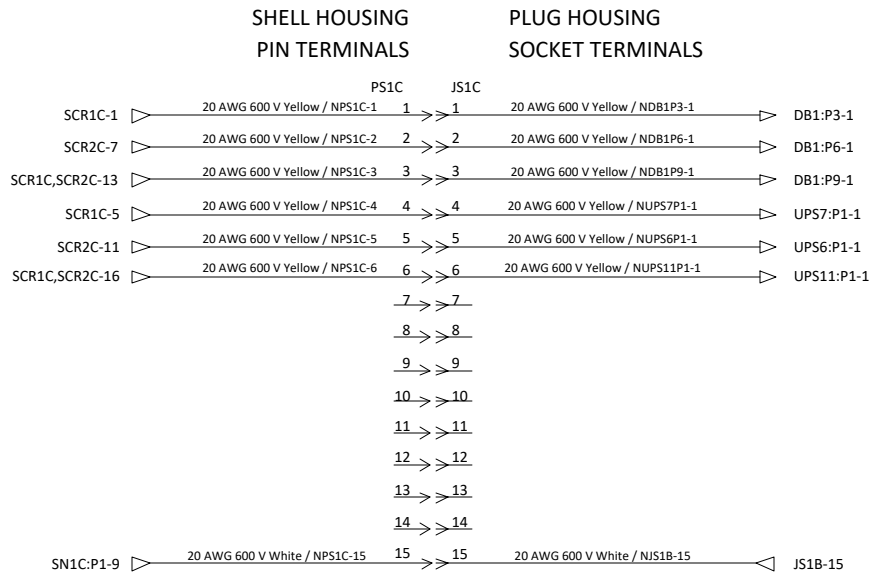
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SHELL HOUSING
PIN TERMINALSPLUG HOUSING
SOCKET TERMINALSSHELL HOUSING
PIN TERMINALSPLUG HOUSING
SOCKET TERMINALSSHELL HOUSING
PIN TERMINALSPLUG HOUSING
SOCKET TERMINALSSHELL HOUSING
PIN TERMINALSPLUG HOUSING
SOCKET TERMINALSPAGE DESCRIPTION
SCHEMATIC, Series 70 eSTS

JOB LZ-11137	DRAWN	DATE 8/9/2023	DWG NO 94-ES-11137-2	REV A
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SHELL HOUSING
PIN TERMINALSPLUG HOUSING
SOCKET TERMINALSSHELL HOUSING
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SOCKET TERMINALSPAGE DESCRIPTION
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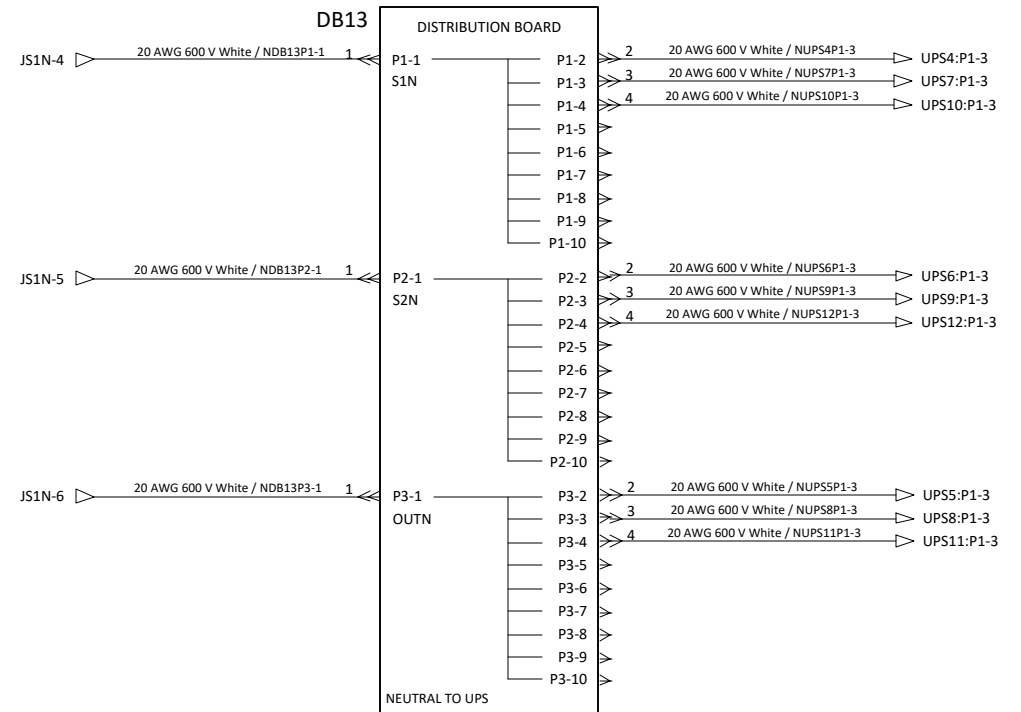
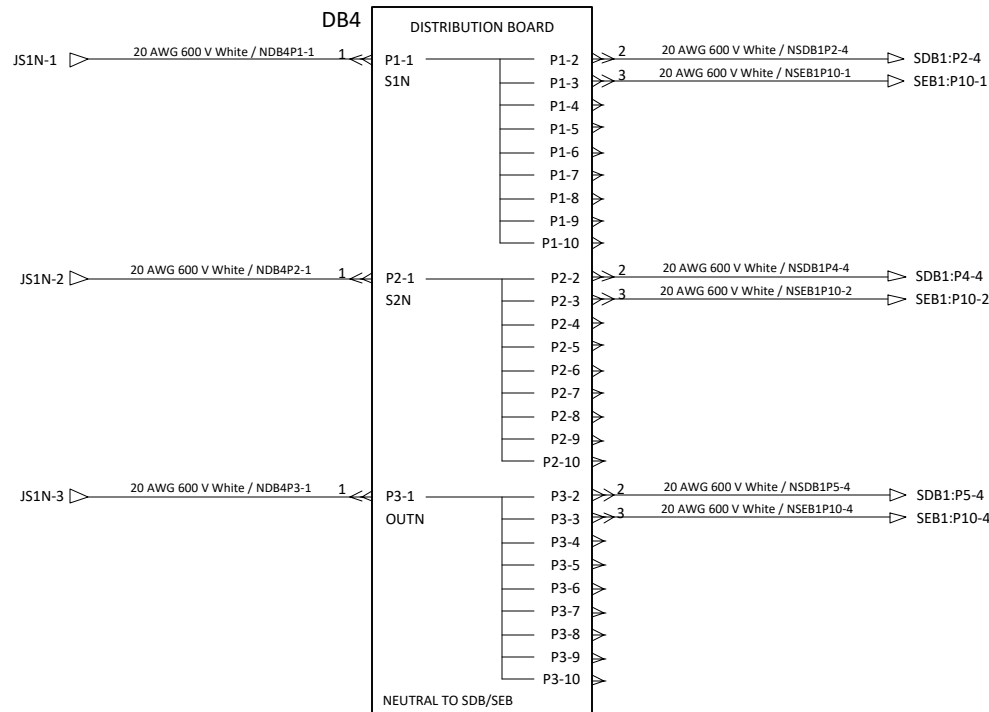
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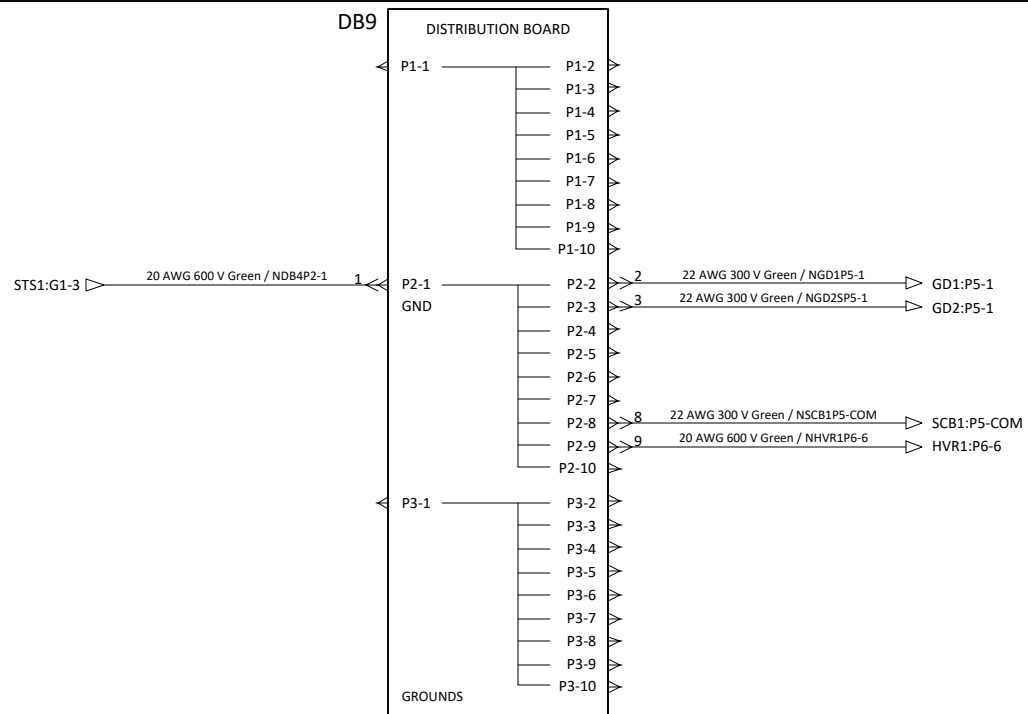
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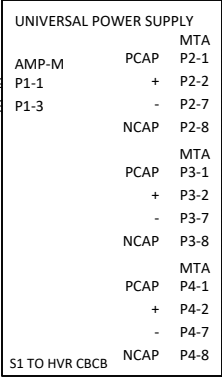
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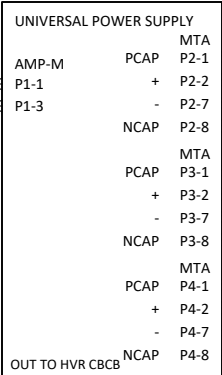
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UPS1



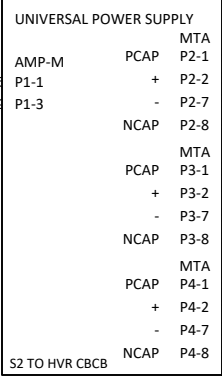
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JS2N-1 20 AWG 600 V White / NUPS1P1-3 3

UPS2



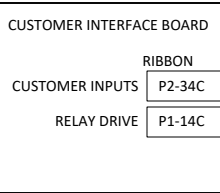
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JS2N-3 20 AWG 600 V White / NUPS2P1-3 3

UPS3

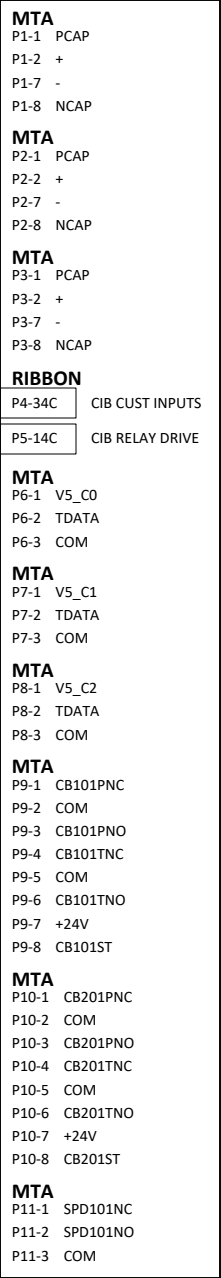


JS2B-2 20 AWG 600 V Orange / NUPS3P1-1 1
JS2N-2 20 AWG 600 V White / NUPS3P1-3 3

CIB1



CBCB1A



CB101-12 22 AWG 300 V Brown / NCBCB1P9-1
CB101-11 22 AWG 300 V Red / NCBCB1P9-2
CB101-14 22 AWG 300 V Orange / NCBCB1P9-3
CB101-96 22 AWG 300 V Yellow / NCBCB1P9-4
CB101-95 22 AWG 300 V Green / NCBCB1P9-5
CB101-98 22 AWG 300 V Blue / NCBCB1P9-6

CB201-12 22 AWG 300 V Brown / NCBCB1P10-1
CB201-11 22 AWG 300 V Red / NCBCB1P10-2
CB201-14 22 AWG 300 V Orange / NCBCB1P10-3
CB201-96 22 AWG 300 V Yellow / NCBCB1P9-4
CB201-95 22 AWG 300 V Green / NCBCB1P10-5
CB201-98 22 AWG 300 V Blue / NCBCB1P10-6

SPD101-NC 22 AWG 300 V Brown / NCBCB1P11-1
SPD101-NO 22 AWG 300 V Red / NCBCB1P11-2
SPD101-COM 22 AWG 300 V Orange / NCBCB1P11-3



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CBCB1B

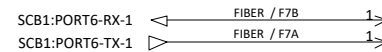
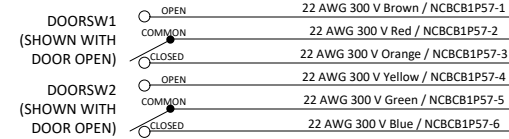
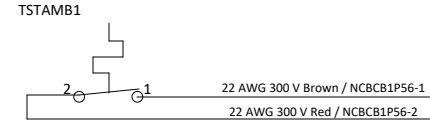
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JS2A-7	22 AWG 300 V Red / NCBCB1P12-2	P12-2	COM
JS2B-6	22 AWG 300 V Orange / NCBCB1P12-3	P12-3	TST101B
JS2B-7	22 AWG 300 V Yellow / NCBCB1P12-4	P12-4	COM
JS2C-6	22 AWG 300 V Green / NCBCB1P12-5	P12-5	TST101C
JS2C-7	22 AWG 300 V Blue / NCBCB1P12-6	P12-6	COM
JS2N-6	22 AWG 300 V Violet / NCBCB1P12-7	P12-7	TST101N
JS2N-7	22 AWG 300 V Grey / NCBCB1P12-8	P12-8	COM
CB102-12	22 AWG 300 V Brown / NCBCB1P13-1	MTA P13-1	CB102PNC
CB102-11	22 AWG 300 V Red / NCBCB1P13-2	P13-2	COM
CB102-14	22 AWG 300 V Orange / NCBCB1P13-3	P13-3	CB102PNO
CB102-96	22 AWG 300 V Yellow / NCBCB1P13-4	P13-4	CB102TNC
CB102-95	22 AWG 300 V Green / NCBCB1P13-5	P13-5	COM
CB102-98	22 AWG 300 V Blue / NCBCB1P13-6	P13-6	CB102TNO
		P13-7	+24V
		P13-8	CB102ST
CB202-12	22 AWG 300 V Brown / NCBCB1P14-1	MTA P14-1	CB202PNC
CB202-11	22 AWG 300 V Red / NCBCB1P14-2	P14-2	COM
CB202-14	22 AWG 300 V Orange / NCBCB1P14-3	P14-3	CB202PNO
CB202-96	22 AWG 300 V Yellow / NCBCB1P14-4	P14-4	CB202TNC
CB202-95	22 AWG 300 V Green / NCBCB1P14-5	P14-5	COM
CB202-98	22 AWG 300 V Blue / NCBCB1P14-6	P14-6	CB202TNO
		P14-7	+24V
		P14-8	CB202ST
SPD102-NC	22 AWG 300 V Brown / NCBCB1P15-1	MTA P15-1	SPD102NC
SPD102-NO	22 AWG 300 V Red / NCBCB1P15-2	P15-2	SPD102NO
SPD102-COM	22 AWG 300 V Orange / NCBCB1P15-3	P15-3	COM
JS2A-8	22 AWG 300 V Brown / NCBCB1P16-1	MTA P16-1	TST102A
JS2A-9	22 AWG 300 V Red / NCBCB1P16-2	P16-2	COM
JS2B-8	22 AWG 300 V Orange / NCBCB1P16-3	P16-3	TST102B
JS2B-9	22 AWG 300 V Yellow / NCBCB1P16-4	P16-4	COM
JS2C-8	22 AWG 300 V Green / NCBCB1P16-5	P16-5	TST102C
JS2C-9	22 AWG 300 V Blue / NCBCB1P16-6	P16-6	COM
JS2N-8	22 AWG 300 V Violet / NCBCB1P16-7	P16-7	TST102N
JS2N-9	22 AWG 300 V Grey / NCBCB1P16-8	P16-8	COM
CB103PNC		MTA P17-1	CB103PNC
COM		P17-2	COM
CB103PNO		P17-3	CB103PNO
CB103TNC		P17-4	CB103TNC
COM		P17-5	COM
CB103TNO		P17-6	CB103TNO
+24V		P17-7	+24V
CB103ST		P17-8	CB103ST
CB203PNC		MTA P18-1	CB203PNC
COM		P18-2	COM
CB203PNO		P18-3	CB203PNO
CB203TNC		P18-4	CB203TNC
COM		P18-5	COM
CB203TNO		P18-6	CB203TNO
+24V		P18-7	+24V
CB203ST		P18-8	CB203ST
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SPD103NO		P19-2	SPD103NO
COM		P19-3	COM

CBCB1C

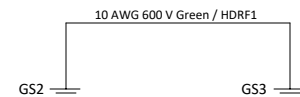
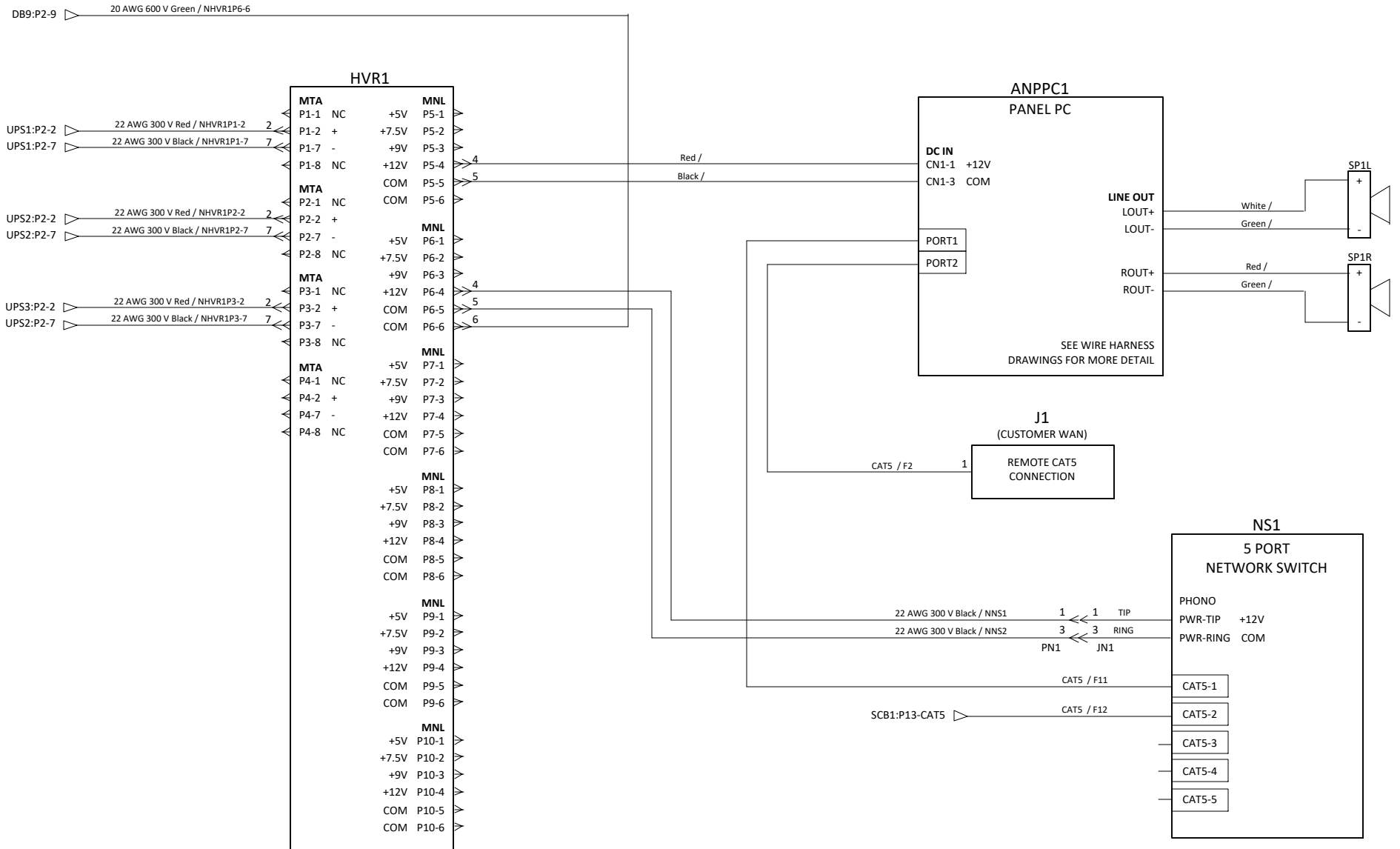
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CB301-14	22 AWG 300 V Orange / NCBCB1P21-3	P21-3	CB301PNO
CB301-96	22 AWG 300 V Yellow / NCBCB1P21-4	P21-4	CB301TNC
CB301-95	22 AWG 300 V Green / NCBCB1P21-5	P21-5	COM
CB301-98	22 AWG 300 V Blue / NCBCB1P21-6	P21-6	CB301TNO
CB302-12	22 AWG 300 V Brown / NCBCB1P22-1	MTA P22-1	CB302PNC
CB302-11	22 AWG 300 V Red / NCBCB1P22-2	P22-2	COM
CB302-14	22 AWG 300 V Orange / NCBCB1P22-3	P22-3	CB302PNO
CB302-96	22 AWG 300 V Yellow / NCBCB1P22-4	P22-4	CB302TNC
CB302-95	22 AWG 300 V Green / NCBCB1P22-5	P22-5	COM
CB302-98	22 AWG 300 V Blue / NCBCB1P22-6	P22-6	CB302TNO
CBSP1PNC		MTA P23-1	CBSP1PNC
COM		P23-2	COM
CBSP1PNO		P23-3	CBSP1PNO
CBSP1TNC		P23-4	CBSP1TNC
COM		P23-5	COM
CBSP1TNO		P23-6	CBSP1TNO
+24V		P23-7	+24V
CBSP1ST		P23-8	CBSP1ST
CBSP2PNC		MTA P24-1	CBSP2PNC
COM		P24-2	COM
CBSP2PNO		P24-3	CBSP2PNO
CBSP2TNC		P24-4	CBSP2TNC
COM		P24-5	COM
CBSP2TNO		P24-6	CBSP2TNO
+24V		P24-7	+24V
CBSP2ST		P24-8	CBSP2ST
+12V		MTA P48-1	+12V
COM		P48-2	COM
FSS1-NO		MTA P49-1	FSS1-NO
COM		P49-2	COM
FSS1-NC		P49-3	FSS1-NC
COM		P49-4	COM
+12V		MTA P50-1	+12V
COM		P50-2	COM
FSS2-NO		MTA P51-1	FSS2-NO
COM		P51-2	COM
FSS2-NC		P51-3	FSS2-NC
COM		P51-4	COM
+12V		MTA P52-1	+12V
COM		P52-2	COM
FSS3-NO		MTA P53-1	FSS3-NO
COM		P53-2	COM
FSS3-NC		P53-3	FSS3-NC
COM		P53-4	COM

CBCB1D

P54-1	+12V	MTA
P54-2	COM	
FSS4NO		MTA
COM		P55-1
FSS4NC		P55-2
COM		P55-3
COM		P55-4
TSTAMB1		MTA
COM		P56-1
COM		P56-2
TSTAMB2		P56-3
COM		P56-4
CABSW1NC		MTA
COM		P57-1
CABSW1NO		P57-2
CABSW2NC		P57-3
COM		P57-4
CABSW2NO		P57-5
CABSW3NC		P57-6
COM		P57-7
CABSW3NO		P57-8
CABSW4NC		P57-9
COM		P57-10
CABSW4NO		P57-11
SPARE1NC		MTA
COM		P58-1
SPARE1NO		P58-2
SPARE2NC		P58-3
COM		P58-4
SPARE2NO		P58-5
SPARE3NC		MTA
COM		P59-1
SPARE3NO		P59-2
SPARE4NC		P59-3
COM		P59-4
SPARE4NO		P59-5
PORT0-TX		MTA
PORT0-RX		P59-6
PORT1-TX		FIBER
PORT1-RX		GRY
PORT2-TX		BLU
PORT2-RX		GRY
		BLU



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SEB1

SYSTEM EXPANSION BOARD

MTA

- P1-1 IS3AP
- P1-2 IS3AN
- P1-3 IS3BP
- P1-4 IS3BN
- P1-5 IS3CP
- P1-6 IS3CN
- P1-7 IS3NP
- P1-8 IS3NN
- P1-9 IS3GP
- P1-10 IS3GN

BLOCKMASTER

- P2-1 VS3A
- P2-2 VS3B
- P2-3 VS3C
- P2-4 VS3N

BLOCKMASTER

- P10-1 VS1
- P10-2 VS2
- P10-3 VS3
- P10-4 VSOUT

FIBER

- GD1:PORT16-RX-1 FIBER / F8A 1 → GRY PORT12-TX
- GD1:PORT15-TX-1 FIBER / F8B 1 → BLU PORT12-RX
- GD2:PORT16-RX-1 FIBER / F9A 1 → GRY PORT13-TX
- GD2:PORT15-TX-1 FIBER / F9B 1 → BLU PORT13-RX
- GRY PORT14-TX
- BLU PORT14-RX
- GRY PORT15-TX
- BLU PORT15-RX

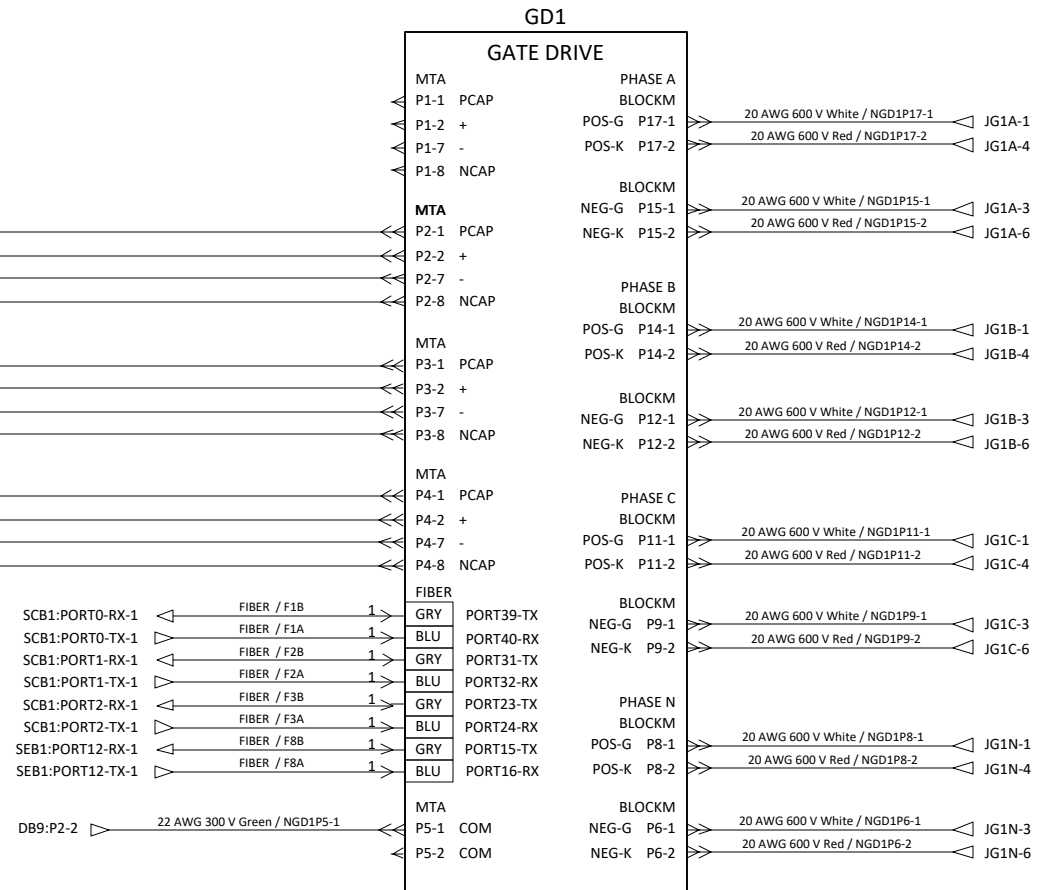
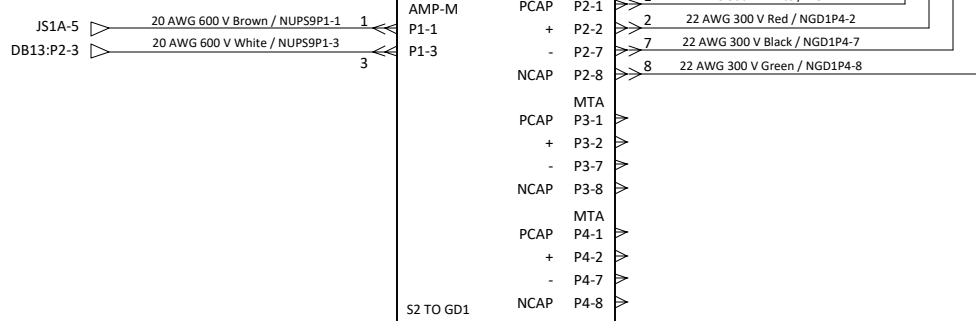
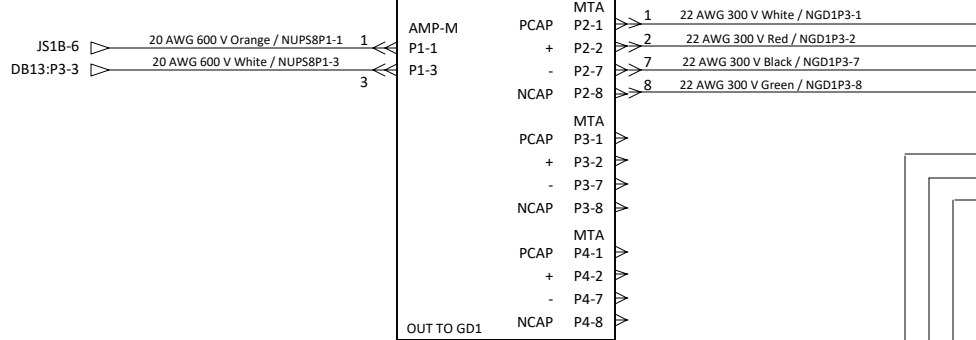
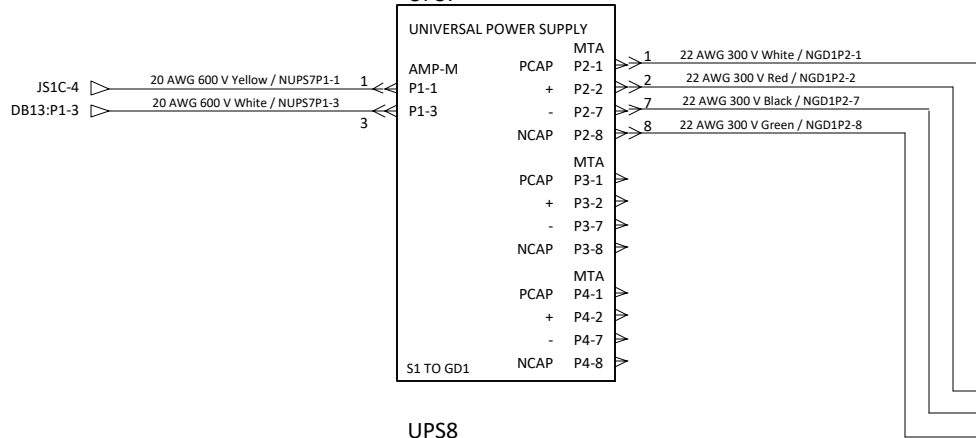
SDB1:P23 ← / SDB1P23-SEB1P8 P8-STACKING CONN

NEUT SCR STATUS

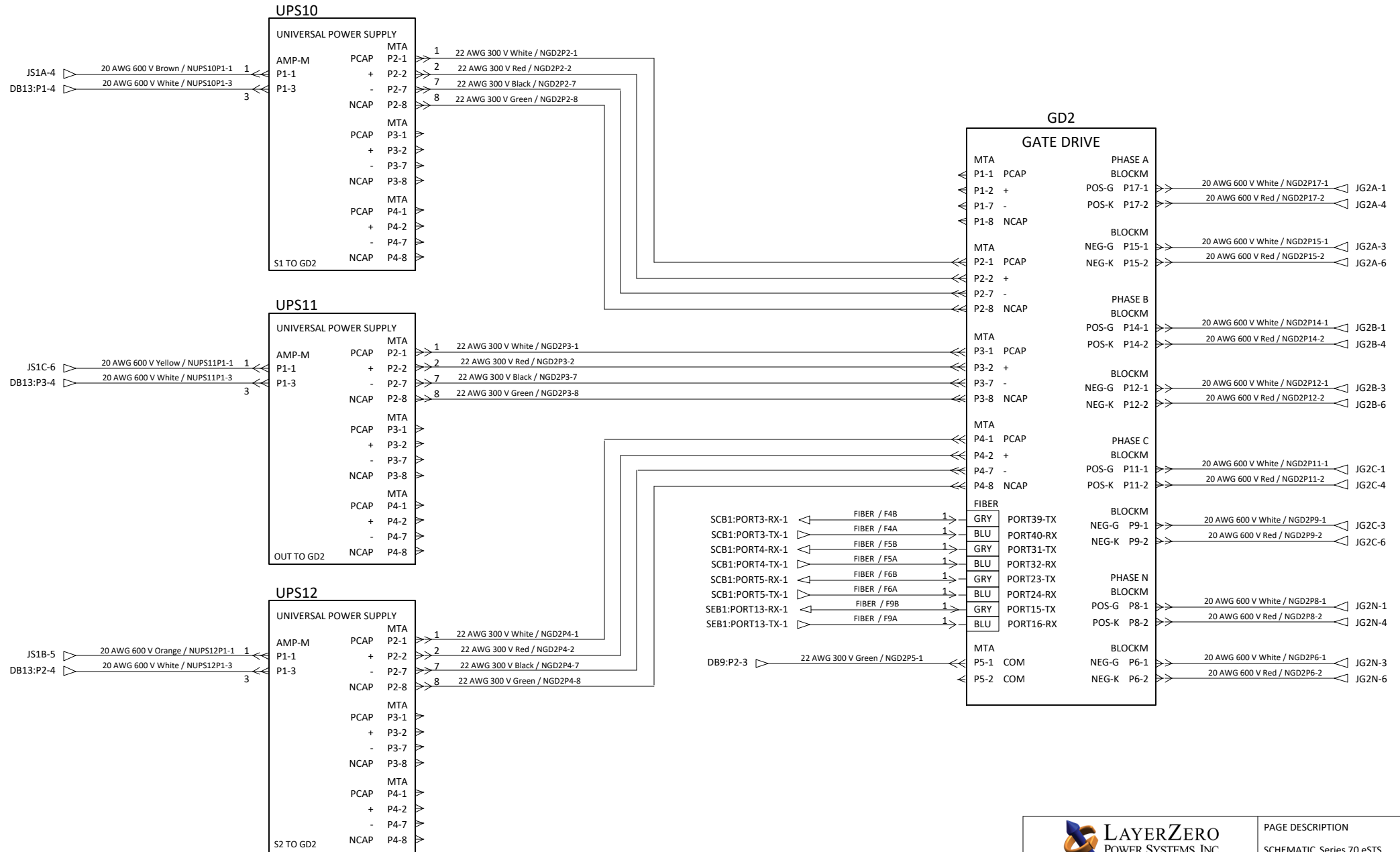


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