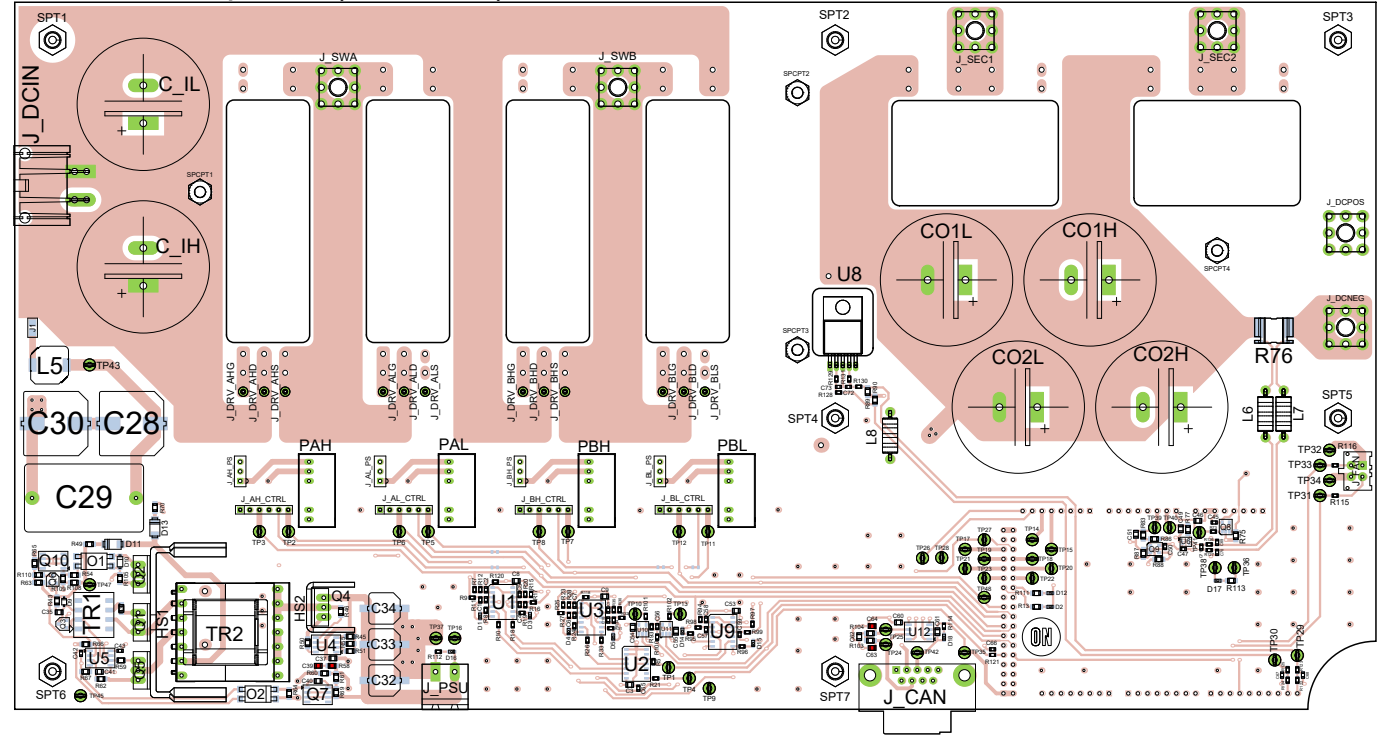


Bill Of Materials - Top side components 1/2

Designator	Comment	Quantity
C1, C2, C4, C5, C6, C7, C10, C11	680 pF	8
C3, C8, C9, C53, C54, C55	100 nF	6
C28, C30	15 µF	2
C29	1µ	1
C32, C33, C34	330 µF	3
C35	68 pF	1
C37	100 nF	1
C40	6n8	1
C41	220 pF	1
C42	180 pF	1
C43	33 nF	1
C45, C47, C50	100 nF	3
C46	10 nF	1
C49	2n2	1
C51	1 µF	1
C60	100 nF	1
C56, C65	220 pF	2
C57, C58, C59	680 pF	3
C61	10 µF	1
C62	4n7	1
C66	3n3	1
C67, C68, C72, C73	270 pF	4
C69, C70	10 nF	2
C71	470 nF	1
C IH, C_IL, CO1H, CO1L, CO2H, CO2L	470 µF	6
D1, D3, D4, D5	RED	4
D2	SUPER RED	1
D9	BAS16H	1
D10	MMSZ12	1
D11, D13	MURA120	2
D12, D16, D17, D18	GREEN	4
D14, D15	BLUE	2
HS1	modified MC33278 for OBC LLC	1
HS2	577202 heatsink for TO220	1
J_AH_CTRL, J_AL_CTRL, J_BH_CTRL, J_BL_CTRL	TSW-106-14-G-S	4
J_AH_PS, J_AL_PS, J_BH_PS, J_BL_PS	613 003 111 21	4
J_CAN	618 009 211 721	1
J_DCIN	46007-3102	1
J_DCNEG, J_DCPOS, J_SEC1, J_SEC2, J_SWA, J_SWB	746 550 95	6
J_DRV_AHD, J_DRV_AHG, J_DRV_AHS, J_DRV_ALD, J_DRV_ALG, J_DRV_ALS, J_DRV_BHD, J_DRV_BHG, J_DRV_BHS, J_DRV_BLD, J_DRV_BLS	13.14.449	12
J_FAN	43045-0427	1
J_PSU	691 313 510 002	1
L5	100 µH	1
L6, L7	2m2	2
L8	1 mH	1
O1, O2	SFH615A-3	2
PAH, PAL, PBH, PBL	QA01C	4
Q1, Q2, Q5	FQPF5N90	3
Q3	BSS138L	1
Q4	FDPF2710T	1
Q6	MMBT589LT1G	1
Q7, Q10	TL431ACDG	2
Q8, Q9	NCS333	2
R5, R11, R12, R19, R20, R27, R28, R34, R35, R93, R94	100k	11

View from Top side (Scale 1:2) 1/2



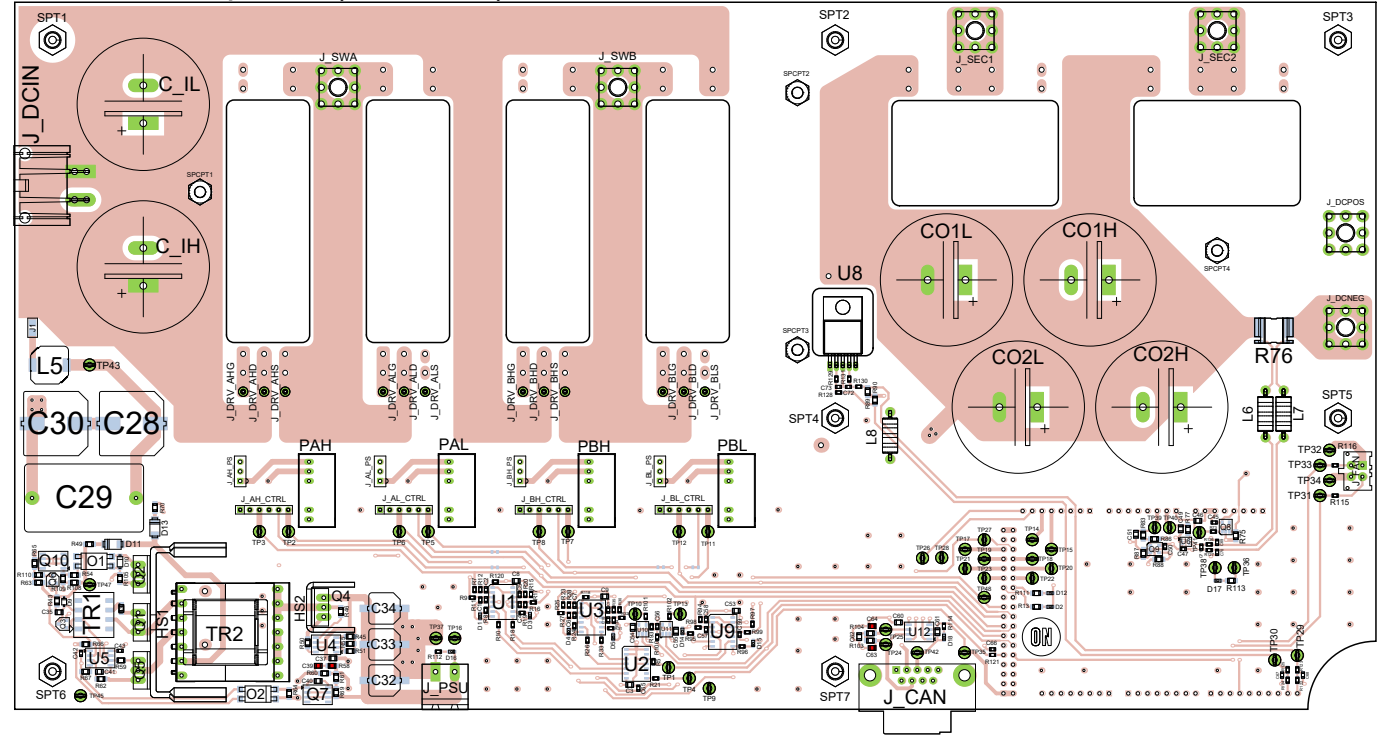
- ① Only components present in this assembly variant are listed in BoM table on the left
- ② Components not present in this assembly variant are crossed out by red line

OBC LLC switch board		Revision: 0.2	State: released
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Bill Of Materials - Top side components 2/2

Designator	Comment	Quantity
R118, R120	10k	2
R7, R15, R23, R30, R98, R99, R123, R125, R128, R130	82R	10
R8, R16, R24, R31, R73, R95, R96	2k2	7
R9, R17, R25, R32, R97	820R	5
R10, R18, R21, R26, R33, R101, R102	10R	7
R13, R55, R83	2k2	3
R37	0R	1
R43, R46	220R	2
R45, R54, R77	10k	3
R49, R62	22R	2
R50	10R	1
R51	56k	1
R59	8R2	1
R60	330R	1
R61	12k7	1
R63	78k7	1
R64, R89, R90	1k	3
R65	15k	1
R66, R108	6k8	2
R67	47k	1
R69	2k49	1
R70	56R	1
R75	16k2	1
R76	300µ	1
R88	680R	1
R86	18k	1
R87	12R	1
R100, R115, R116	33R	3
R103, R104	60R4	2
R105	1k2	1
R109	68k	1
R110	120k	1
R111, R113	7k5	2
R112	91k	1
R114	20k	1
R121	220R	1
R122, R124, R129, R131	22R	4
R126, R127	11R	2
SPCPT1, SPCPT2, SPCPT3, SPCPT4	plastic spacer M/F M3x10	4
SPT1, SPT2, SPT3, SPT4, SPT5, SPT6, SPT7	Spacer M4 F/F 60mm	7
TP1, TP10, TP13, TP19, TP27	GREEN	5
TP2, TP7, TP20, TP23, TP24, TP41	ORANGE	6
TP3, TP4, TP8, TP32, TP35, TP36, TP37, TP43	RED	8
TP5, TP11, TP21, TP26, TP31, TP48	BROWN	6
TP6, TP12, TP17, TP18, TP25, TP39	BLUE	6
TP9, TP16, TP34, TP38, TP42, TP45	BLACK	6
TP14, TP15, TP33	WHITE	3
TP22, TP28, TP40	YELLOW	3
TP29	GRAY	1
TP30, TP47	PURPLE	2
TR1	760 301 302	1
TR2	750 315 046	1
U1, U3, U9	MC74ACT74	3
U2	MC74HC30A	1
U4	NCP4304A	1
U5	NCP1252D	1
U6	NCS210RSQ	1
U8	TC74A5-3.3VAT	1
U10, U11	MC74VHC1G32	2
U12	NCV7342D13R2G	1

View from Top side (Scale 1:2) 2/2



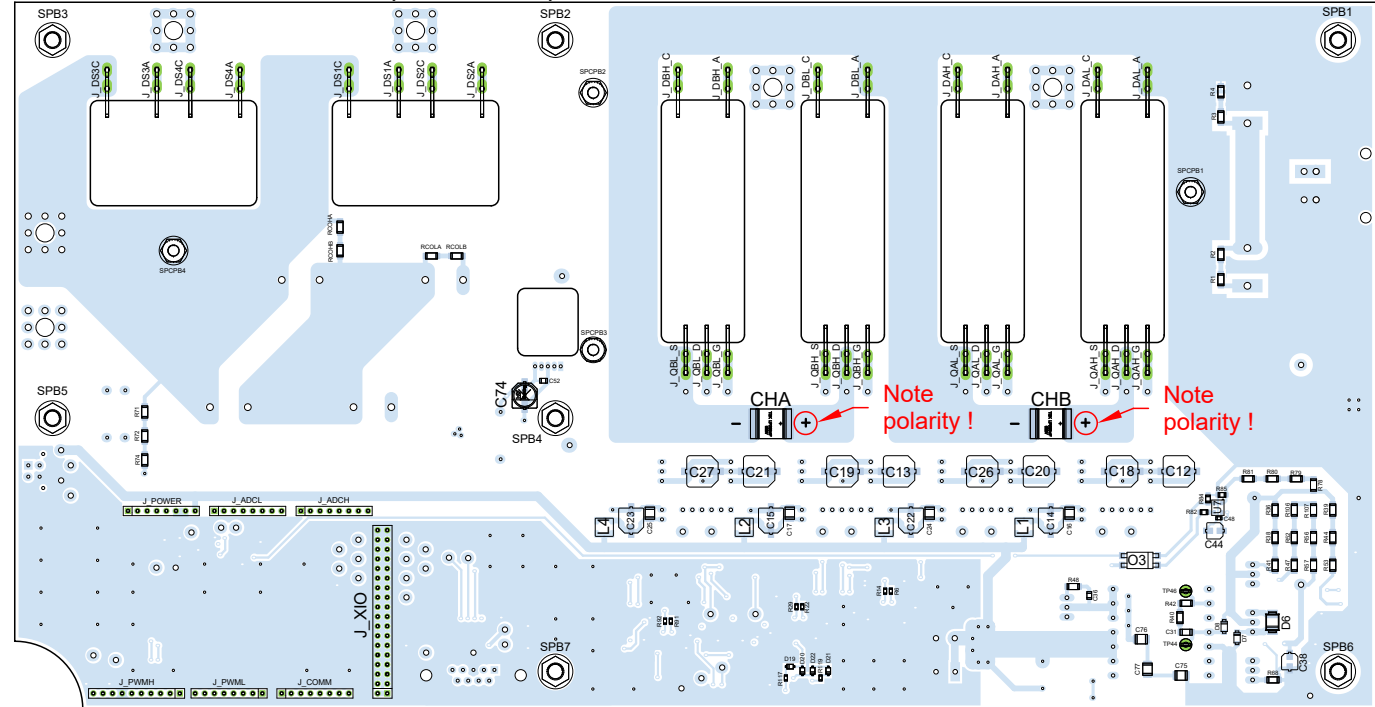
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Bill Of Materials - Bottom side components

Designator	Comment	Quantity
C12, C13, C18, C19, C20, C21, C26, C27	100 µF	8
C14, C15, C22, C23, C74	68 µF	5
C16, C17, C24, C25	4µ7	4
C31	27 pF	1
C36	100 pF	1
C38, C44	10 µF	2
C48	100 nF	1
C52	100 nF	1
C75, C76, C77	10 nF	3
CHA, CHB	250 nF	2
D6	SMBJ15CA	1
D7, D8	US1MFA	2
D19, D20, D21, D22	NSR0340H	4
J_ADCH, J_ADCL, J_COMM, J_POWER, J_PWML	613 008 111 21	5
J_DAH_A, J_DAH_C, J_DAL_A, J_DAL_C, J_DBH_A, J_DBH_C, J_DBL_A, J_DBL_C, J_DS1A, J_DS1C, J_DS2A, J_DS2C, J_DS3A, J_DS3C, J_DS4A, J_DS4C, J_QAH_D, J_QAH_G, J_QAH_S, J_QAL_D, J_QAL_G, J_QAL_S, J_QBH_D, J_QBH_G, J_QBH_S, J_QBL_D, J_QBL_G, J_QBL_S	19.28.177	28
J_PWMH	613 010 111 21	1
J_XIO	613 036 211 21	1
L1, L2, L3, L4	22 µH	4
O3	SFH615A-3	1
R1, R2, R3, R4, RCOHA, RCOHB, RCOLA, RCOLB	82k	8
R6, R14, R22, R29, R91, R92	10k	6
R36, R38, R39, R41, R44, R53, R71, R72, R74, R78, R79, R80, R81	820k	13
R40, R42	47R	2
R47, R52, R56, R57, R106, R107	3k3	6
R48	100R	1
R82	330R	1
R85	15k	1
R68	1R3	1
R84	680R	1
R117, R119	33R	2
SPB1, SPB2, SPB3, SPB4, SPB5, SPB6, SPB7	Spacer M4 M/F 30mm	7
SPCPB1, SPCPB2, SPCPB3, SPCPB4	plastic spacer M/F M3x10	4
TP44	ORANGE	1
TP46	BROWN	1
U7	LM321	1

View from Bottom side (Scale 1:2)



- ⑤ CHA & CHB have to be properly oriented according their polarity !
- ⑥ Only components present in this assembly variant are listed in BoM table on the left
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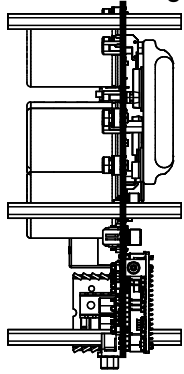
A

A

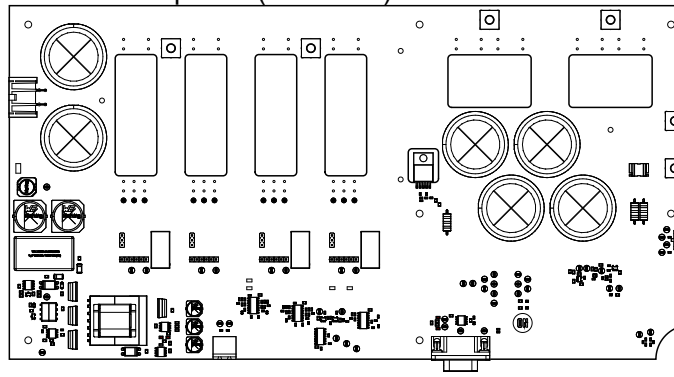
View from Front side (Scale 1:4)



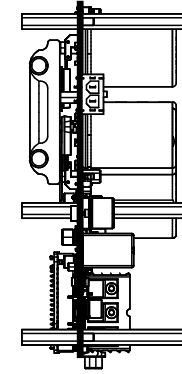
View from Right side (Scale 1:4)



View from Top side (Scale 1:4)



View from Left side (Scale 1:4)



B

B

C

C

View from Back side (Scale 1:4)



D

D

OBC LLC switch board

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Assembly
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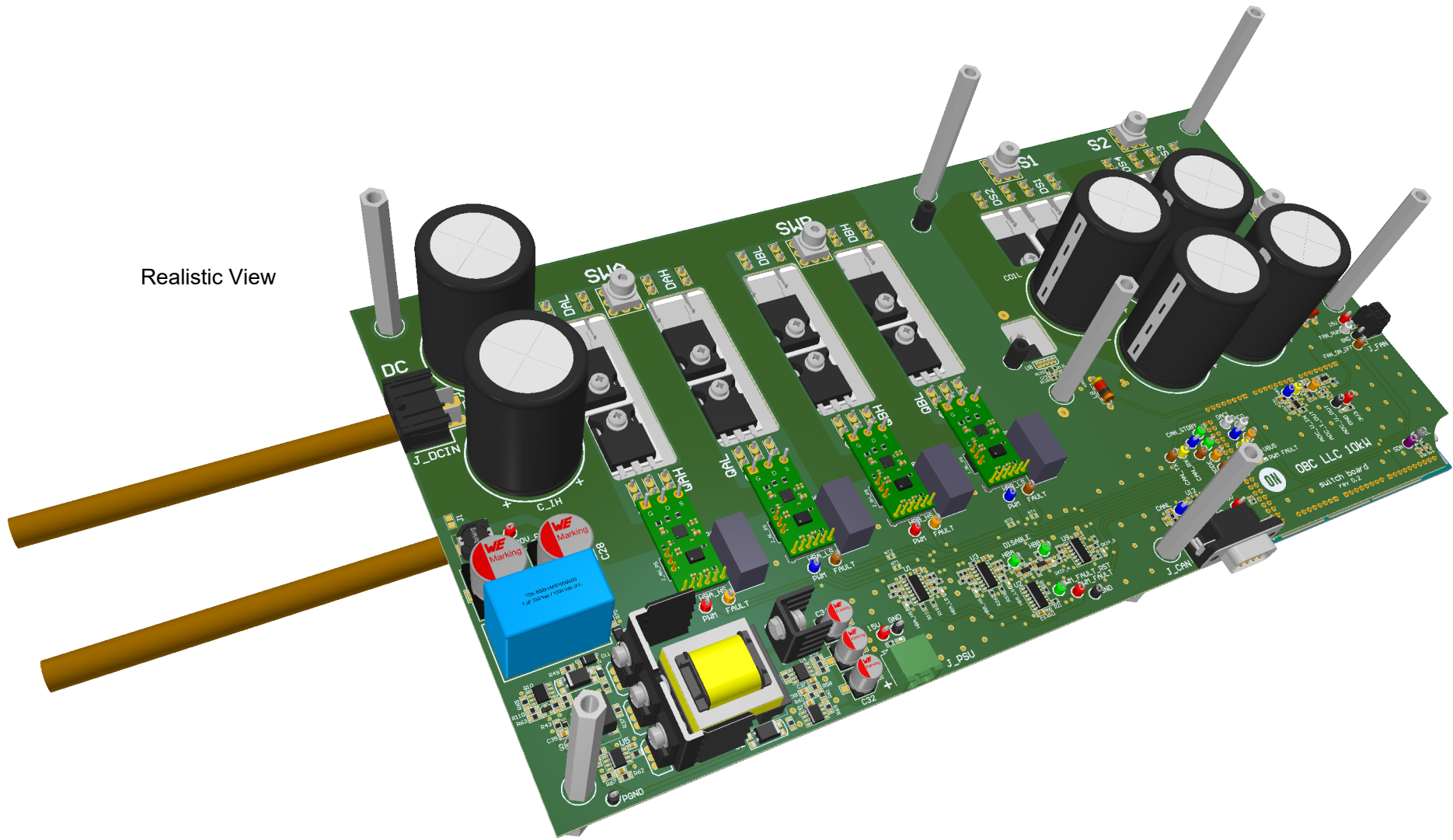
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Realistic View



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