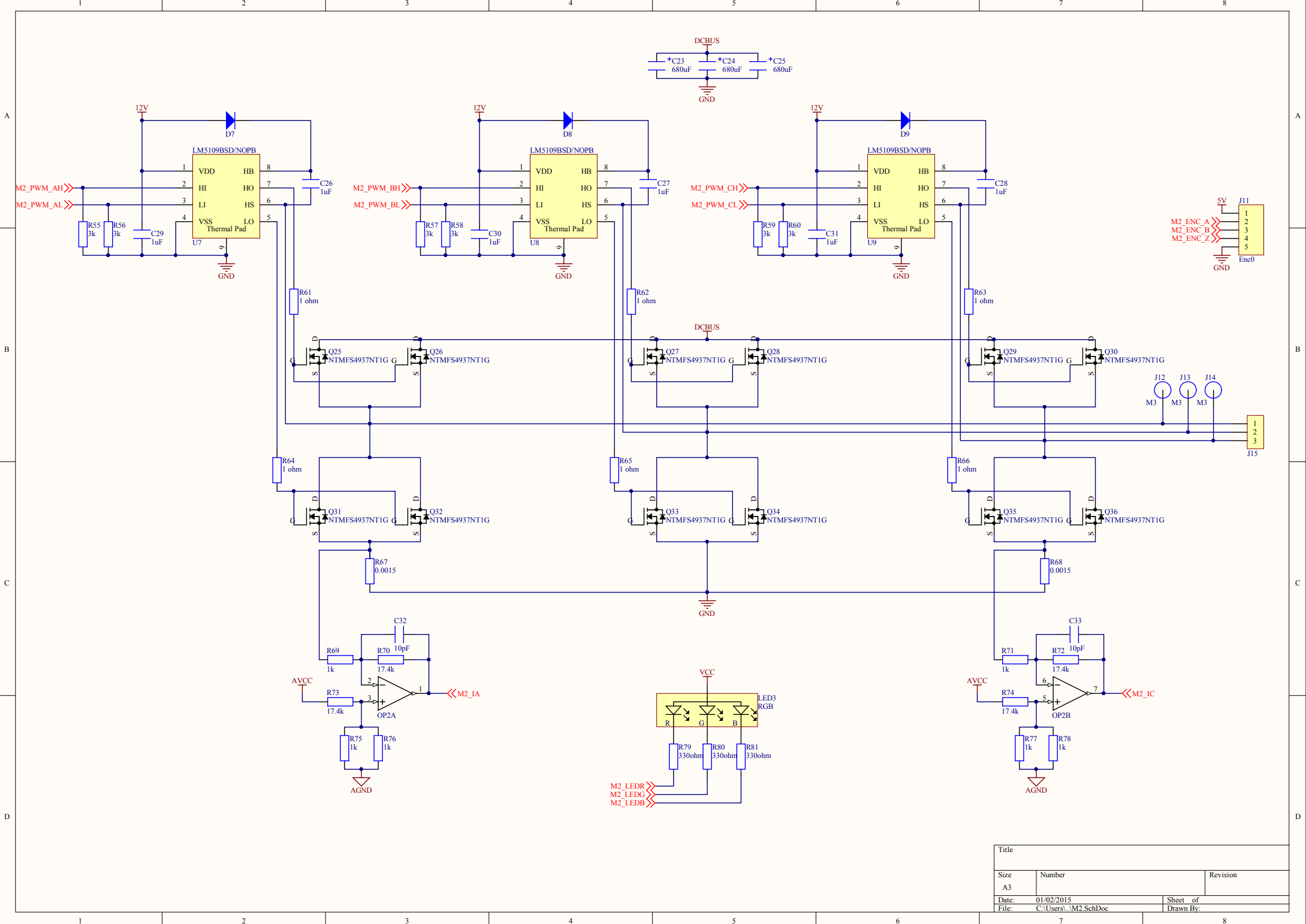
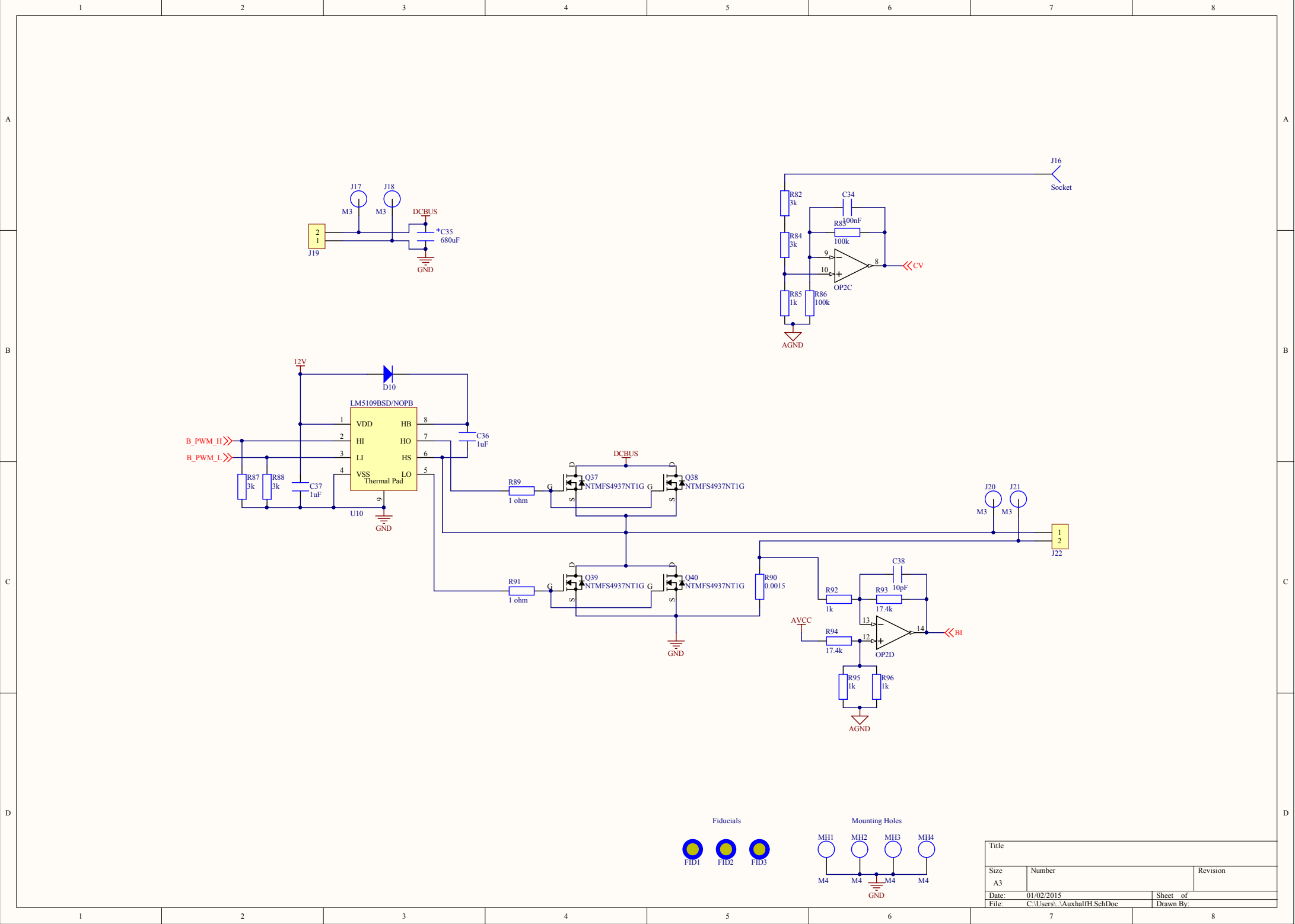


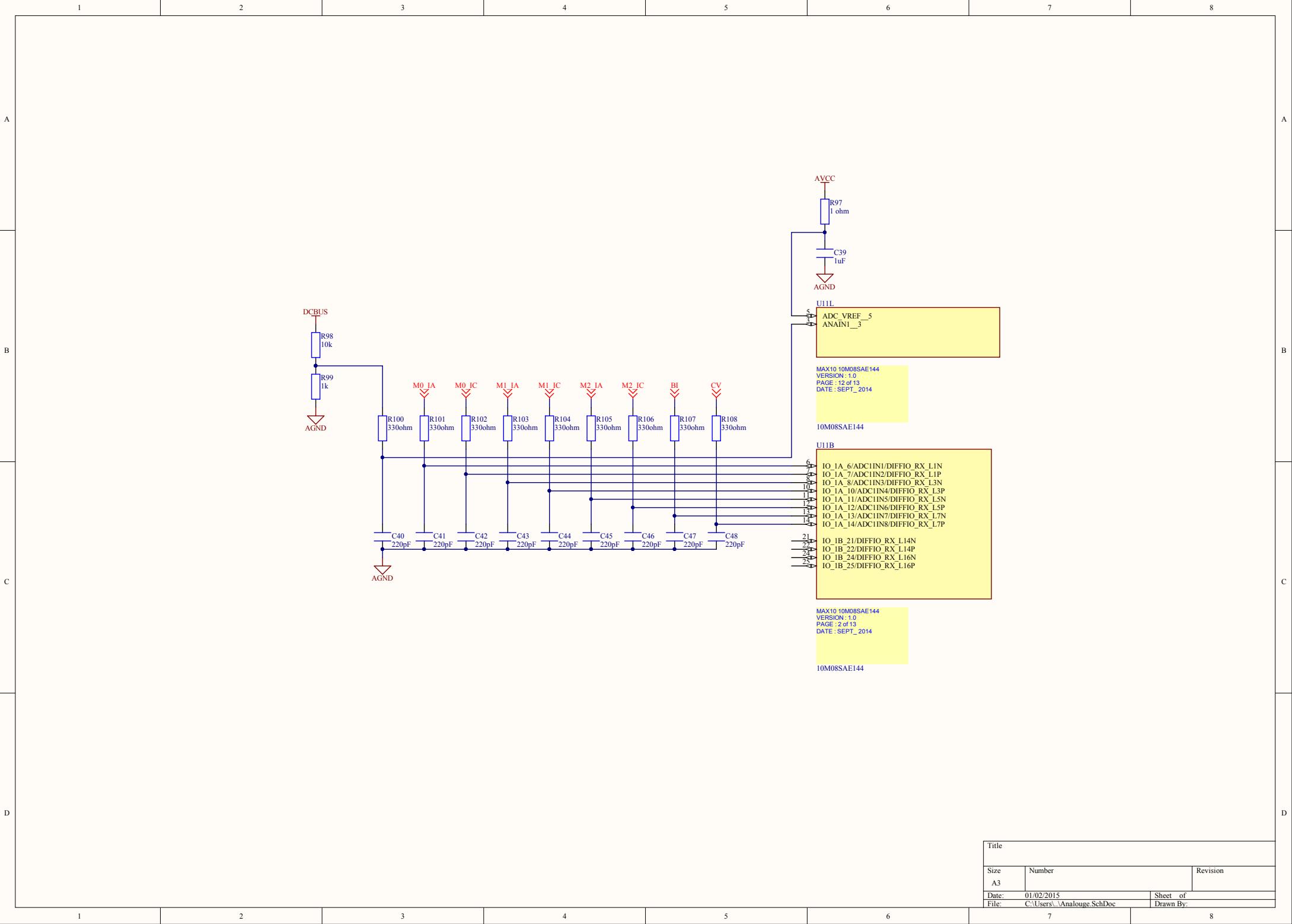
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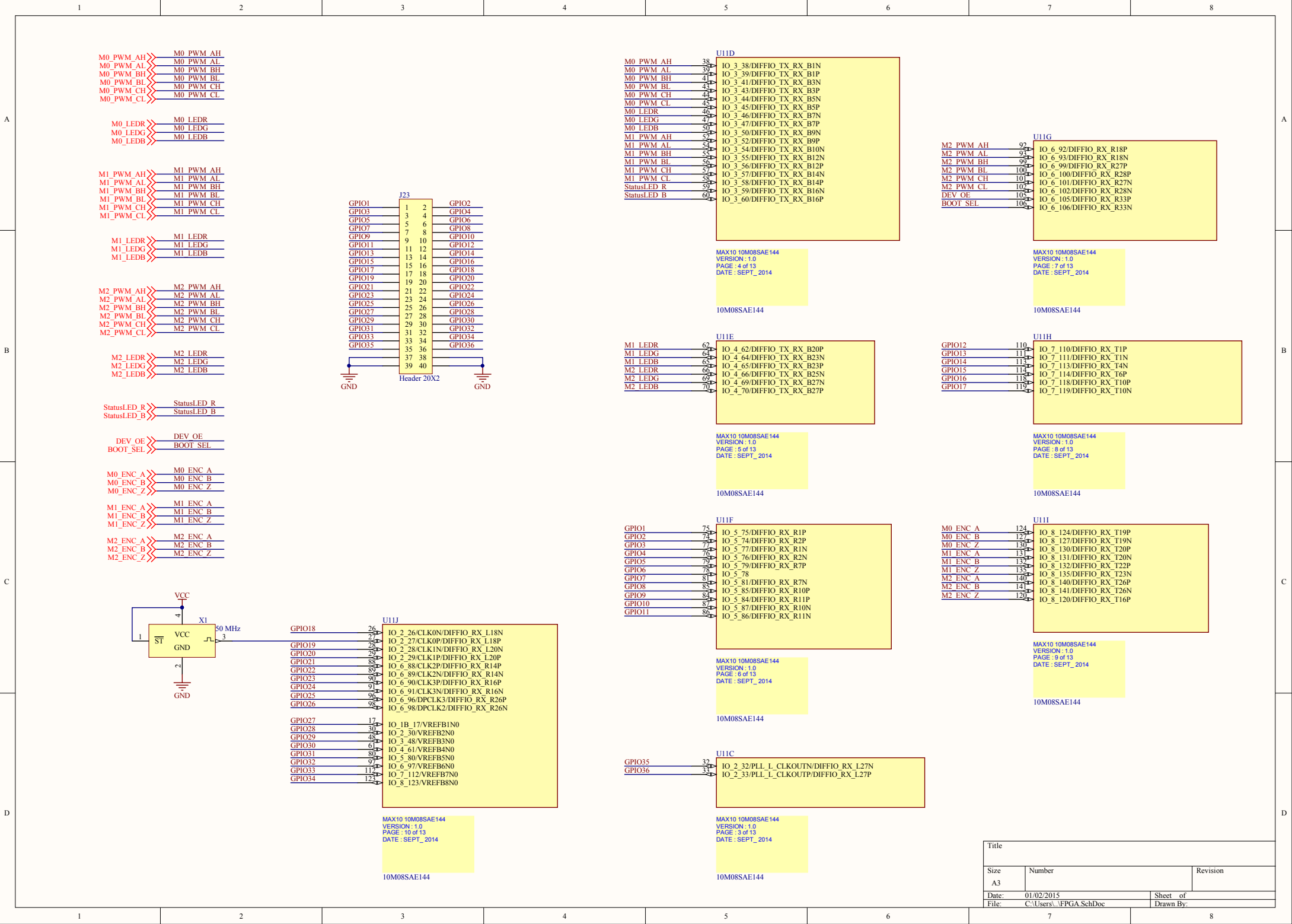
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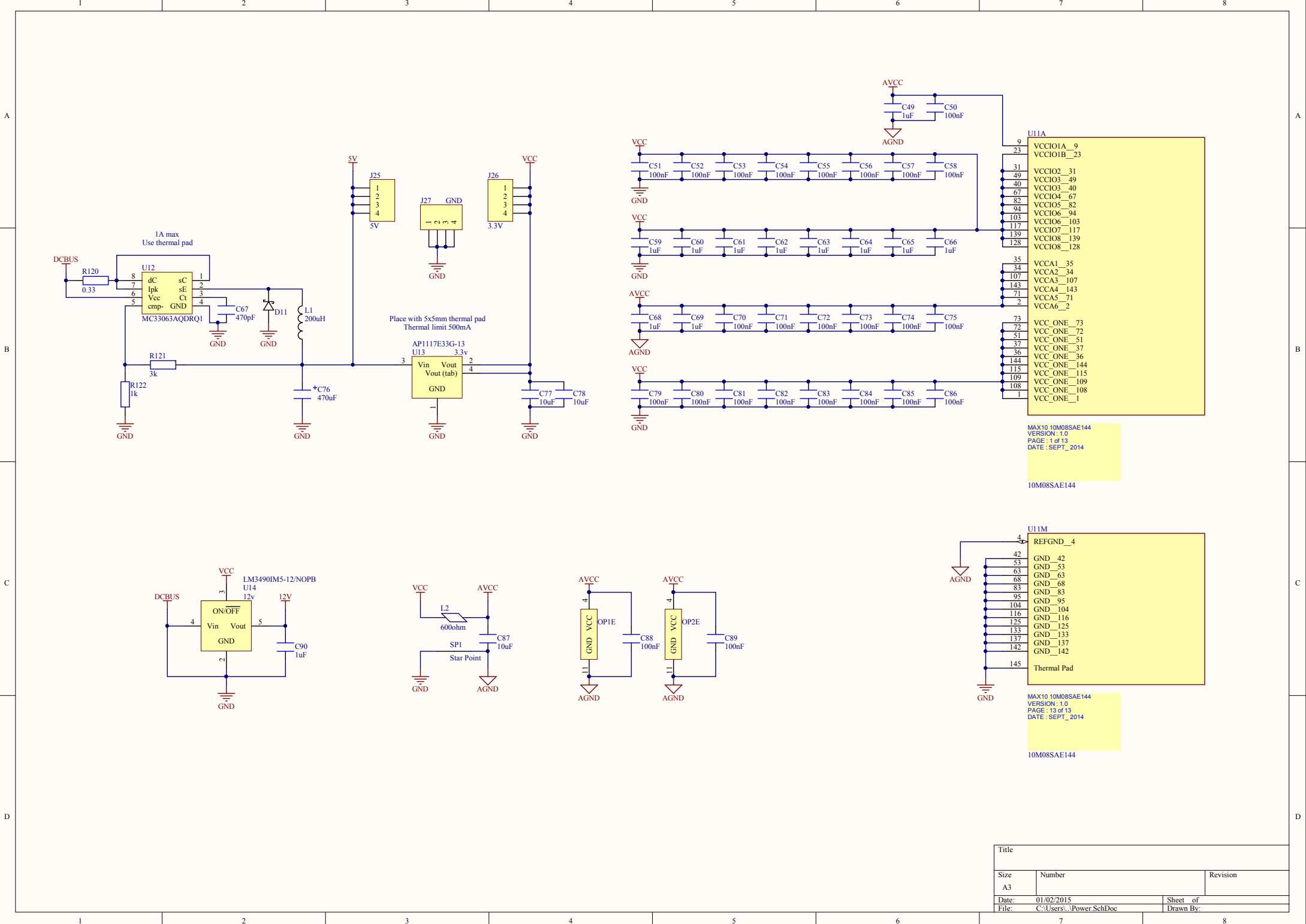
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Item #	mn Name Error:Manufa	#Column Name Error:Manufacturer No	Quantity	#Column Name Error:Note	Designator	Description	Footprint	Comment	LibRef
1			10		C1, C2, C3, C12, C13, C14, C23, C24, C25, C35	CAP, ALU ELEC, 680UF, 35V, RAD	CAPE10.0MM_Rad_10x14mm	35ZLH680MEFC10X23	35ZLH680MEFC10X23
2			33		C4, C5, C6, C7, C8, C9, C15, C16, C17, C18, C19, C20, C26, C27, C28, C29, C30, C31, C36, C37, C39, C49, C59, C60, C61, C62, C63, C64, C65, C66, C68, C69, C90	CAP, MLCC, X5R, 1UF, 16V, 0603	1608[0603]	MC0603X105K160	MC0603X105K160
3			7		C10, C11, C21, C22, C32, C33, C38	CAP, MLCC, C0G/NP0, 10PF, 50V, 0603	1608[0603]	MC0603N100D500CT	MC0603N100D500CT
4			26		C34, C50, C51, C52, C53, C54, C55, C56, C57, C58, C70, C71, C72, C73, C74, C75, C79, C80, C81, C82, C83, C84, C85, C86, C88, C89	CAP, MLCC, X7R, 100NF, 16V, 0603	1608[0603]	MC0603B104K160CT	MC0603B104K160CT
5			9		C40, C41, C42, C43, C44, C45, C46, C47, C48	CAP, MLCC, C0G/NP0, 220PF, 50V, 0603	1608[0603]	MC0603N221J500CT	MC0603N221J500CT
6			1		C67	CAP, MLCC, X7R, 470PF, 50V, 0603	1608[0603]	MC0603B471K500CT	MC0603B471K500CT
7			1		C76	CAP, ALU ELEC, 470UF, 16V, SMD	CAP_ELEC_SIZE_G	EEE1CA471P	EEE1CA471P
8			3		C77, C78, C87	CAP, MLCC, Y5V, 10UF, 0805	CAPC2012X135N	MC0805F106Z100CT	MC0805F106Z100CT
9			10		D1, D2, D3, D4, D5, D6, D7, D8, D9, D10	DIODE, SCHOTTKY, 200MA, 30V	SO523F	RB521S30T1G	RB521S30T1G
10			1		D11	DIODE, SCHOTTK, RECTIF, 1A, 30V, SMB	DO-214AA	SS13B	SS13B
11			3		FID1, FID2, FID3	1mm Fiducial with 2mm soldermask, 3mm keepout	FIDUCIAL	FIDUCIAL	FIDUCIAL
12			3		J1, J6, J11	Header, 5-Pin	HDR1X5	Enc0	Header 5
13			13		J2, J3, J4, J7, J8, J9, J12, J13, J14, J17, J18, J20, J21	M3 Spade Terminal	NT	M3	M3 Spade Terminal
14			3		J5, J10, J15	TERMINAL BLOCK, WIRE TO BRD, 3POS, 10AWG	MC000051	MC000051	MC000051
15			1		J16	Socket	PIN1	Socket	Socket
16			2		J19, J22	TERMINAL BLOCK, WIRE TO BRD, 2POS, 6AWG	MC000232	MC000232	MC000232
17			1		J23	Header, 20-Pin, Dual row	HDR2X20	Header 20X2	Header 20X2
18			1		J24	Header THD 10 POS Double-row 2.54mm pitch	10P_PCB_HEADER_BRD_MNT	shrouded box header	CONN_HEADER_2x5P_0.10in_Male
19			1		J25	Header, 4-Pin	HDR1X4	5V	Header 4
20			1		J26	Header, 4-Pin	HDR1X4	3.3V	Header 4
21			1		J27	Header, 4-Pin	HDR1X4	GND	Header 4
22			1		L1	INDUCTOR, 220uH, 20%, 2PINS	Inductor 12x12mm	MCSDRH125B-221MHF	MCSDRH125B-221MHF
23			1		L2	FERRITE BEAD, 0.1OHM, 2A, 0805	FBC2012N	2508056017Y2	2508056017Y2
24			4		LED1, LED2, LED3, LED4	LED, HB, RGB, 0.09W, PLCC-4	ASMB-MTB1	RGB	ASMB-MTB1-0A3A2
25			4		MH1, MH2, MH3, MH4	M4 Mounting Hole	MH_M4	M4	MH_M4
26			2		OP1, OP2	OP-AMP, 1.2MHZ 0.5V/US	SOIC_14	TL_LM324D	TL_LM324D
27			40		Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10, Q11, Q12, Q13, Q14, Q15, Q16, Q17, Q18, Q19, Q20, Q21, Q22, Q23, Q24, Q25, Q26, Q27, Q28, Q29, Q30, Q31, Q32, Q33, Q34, Q35, Q36, Q37, Q38, Q39, Q40	MOSFET, N CH, 30V, 70A, SO-8 FL	SO8FL	NTMF54937NT1G	NTMF54937NT1G
28			23		R1, R2, R3, R4, R5, R6, R28, R29, R30, R31, R32, R33, R55, R56, R57, R58, R59, R60, R82, R84, R87, R88, R121	RESISTOR, 0603, 3K, 1%, ANTI SULFUR	RESC1608X55N	MCMR06X3001FTL	MCMR06X3001FTL
29			21		R7, R8, R9, R10, R11, R12, R34, R35, R36, R37, R38, R39, R61, R62, R63, R64, R65, R66, R89, R91, R97	RES, THICK FILM, 10OHM, 1%, 0.1W	RESC1608X55N	MCWR06W1R00FTL	MCWR06W1R00FTL
30			7		R13, R14, R40, R41, R67, R68, R90	Shunt Resistor R0015	RESC6332X70N	TLR3A30DR0015FTDG	TLR3A30DR0015FTDG
31			27		R15, R17, R21, R22, R23, R24, R42, R44, R48, R49, R50, R51, R69, R71, R75, R76, R77, R78, R85, R92, R95, R96, R99, R115, R116, R119, R122	RESISTOR, CERAMIC, 1K, 0.1W, 1%	RESC1608X55N	MCMR06X1001FTL	MCMR06X1001FTL
32			14		R16, R18, R19, R20, R43, R45, R46, R47, R70, R72, R73, R74, R93, R94	RESISTOR, 0603, 17K4 1%, 0.1W	RESC1608X55N	ERJ3EKF1742V	ERJ3EKF1742V
33			21		R25, R26, R27, R52, R53, R54, R79, R80, R81, R100, R101, R102, R103, R104, R105, R106, R107, R108, R109, R110, R111	RES, THICK FILM, 330 OHM, 1%, 0.1W	RESC1608X55N	MCWR06X3300FTL	MCWR06X3300FTL
34			2		R83, R86	RES, THICK FILM, 100KOHM, 1%, 0.1W	RESC1608X55N	MCWR06X1003FTL	MCWR06X1003FTL
35			6		R98, R112, R113, R114, R117, R118	Resistor, 10k, 0603	RESC1608X55N	MCMR06X1002FTL	MCMR06X1002FTL
36			1		R120	RESISTOR, 0603, 0.1W, 1%, 0R33	RESC1608X55N	ERJ3RQFR33V	ERJ3RQFR33V
37			2		SW1, SW2	SWITCH, SPNO, 0.05A	FSM4JH	FSM4JH	FSM4JH
38			10		U1, U2, U3, U4, U5, U6, U7, U8, U9, U10	DRIVER, MOSFET, HALF BRIDGE, WSON-8, 1A	SON80P400X80_HS-9N	LM5109BSD/NOPB	LM5109BSD/NOPB
39			1		U11		SQFP50P2200X2200X165_H S-145N	10M08SAE144	10M08SAE144
40			1		U12	DC-DC CONV, BOOST/BUCK/INVERTING, SOIC-8	SO8_N	MC33063AQDRQ1	MC33063AQDRQ1
41			1		U13	IC, LDO, REG, 3.3V, SOT223	SOT223	AP1117E33G-13	AP1117E33G-13
42			1		U14	LDO, FIXED, 12V, 0.1A, SOT-23-5	SOT23-5	LM3490IM5-12/NOPB	LM3490IM5-12/NOPB
43			1		X1	OSCILLATOR, SPXO, SG-2105TF, 50 MHZ, SMD	SPXD SG-2105TF	XTG0041710047	XTG0041710047