



EN: This Datasheet is presented by the manufacturer.

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Radxa ROCK 5B+ schematic

V1.2

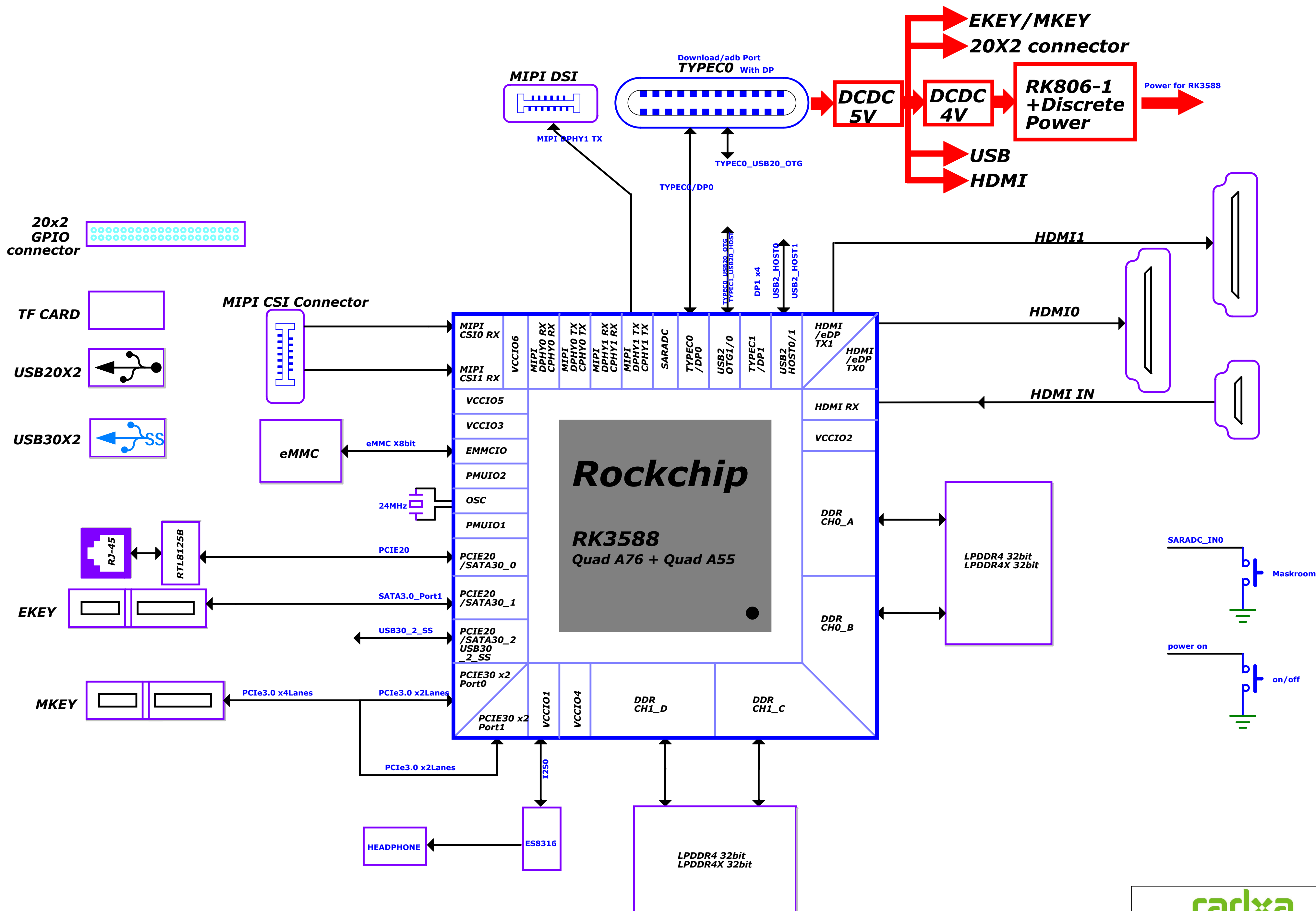


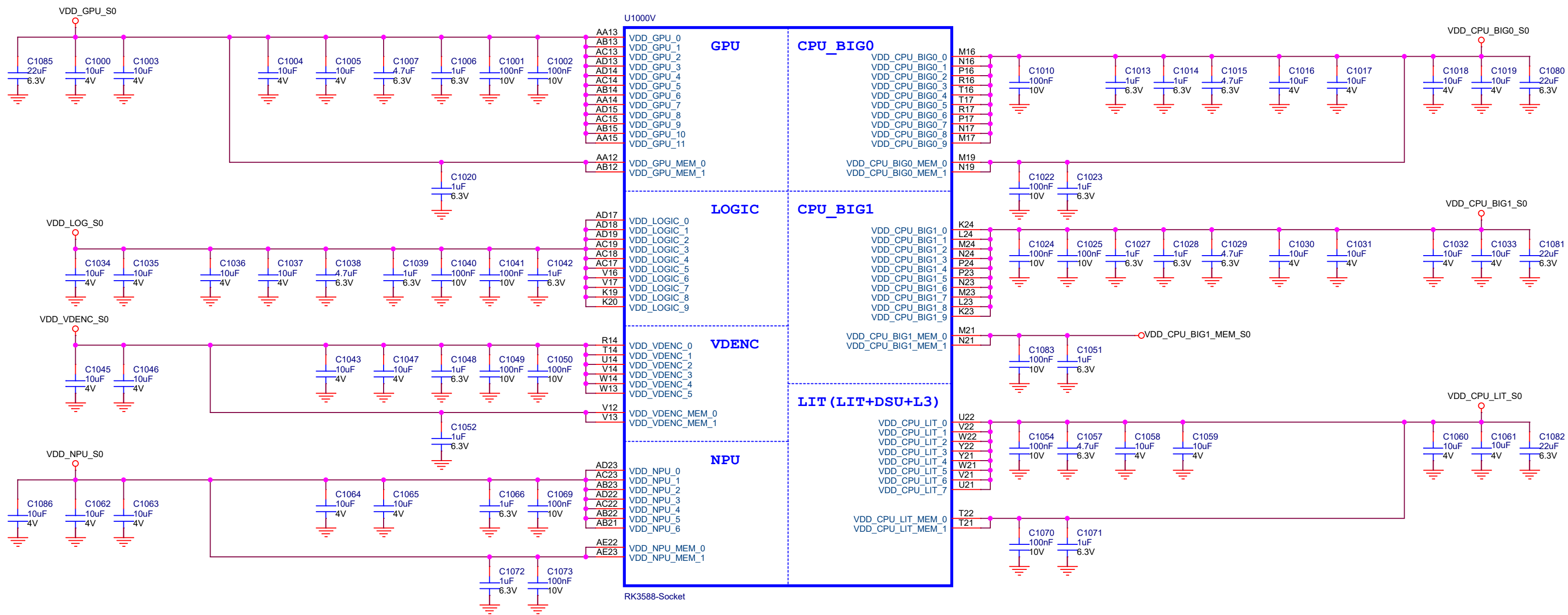
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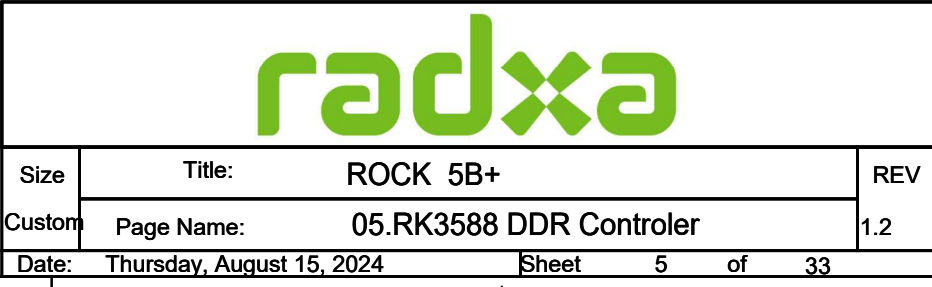


U1000Z			
H28	AVSS_1	AVSS_52	AH12
H31	AVSS_2	AVSS_53	AH15
J27	AVSS_3	AVSS_54	AH21
J28	AVSS_4	AVSS_55	AH23
J29	AVSS_5	AVSS_56	AJ3
J32	AVSS_6	AVSS_57	AJ7
K26	AVSS_7	AVSS_58	AJ8
K31	AVSS_8	AVSS_59	AJ9
K32	AVSS_9	AVSS_60	AJ11
L26	AVSS_10	AVSS_61	AJ12
L31	AVSS_11	AVSS_62	AJ15
M26	AVSS_12	AVSS_63	AJ18
M32	AVSS_13	AVSS_64	AJ18
N32	AVSS_14	AVSS_65	AJ21
AA8	AVSS_15	AVSS_66	AJ22
AA10	AVSS_16	AVSS_67	AJ23
AB6	AVSS_17	AVSS_68	AK4
AB7	AVSS_18	AVSS_69	AK5
AB8	AVSS_19	AVSS_70	AK7
AB10	AVSS_20	AVSS_71	AK10
AC5	AVSS_21	AVSS_72	AK11
AC8	AVSS_22	AVSS_73	AK12
AC10	AVSS_23	AVSS_74	AK13
AD5	AVSS_24	AVSS_75	AK14
AD8	AVSS_25	AVSS_76	AK23
AD10	AVSS_26	AVSS_77	AL3
AE6	AVSS_27	AVSS_78	AL3
AE7	AVSS_28	AVSS_79	AL4
AE9	AVSS_29	AVSS_80	AL5
AF4	AVSS_30	AVSS_81	AL11
AF7	AVSS_31	AVSS_82	AL13
AF8	AVSS_32	AVSS_83	AL23
AF11	AVSS_33	AVSS_84	AM4
AF12	AVSS_34	AVSS_85	AM9
AF13	AVSS_35	AVSS_86	AM18
AF14	AVSS_36	AVSS_87	AM20
AF15	AVSS_37	AVSS_88	AM22
AF16	AVSS_38	AVSS_89	AM23
AG3	AVSS_39	AVSS_90	AM24
AG6	AVSS_40	AVSS_91	AM26
AG7	AVSS_41	AVSS_92	AM28
AG10	AVSS_42	AVSS_93	AN1
AG12	AVSS_43	AVSS_94	AN12
AG15	AVSS_44	AVSS_95	AN23
AG18	AVSS_45	AVSS_96	AN31
AG21	AVSS_46	AVSS_97	AP1
AG22	AVSS_47	AVSS_98	AP17
AH4	AVSS_48	AVSS_99	AP23
AH8	AVSS_49	AVSS_100	AP34
AH11	AVSS_50	AVSS_101	
	AVSS_51		

U1000X			
L3	VSS_107	VSS_180	R19
L6	VSS_108	VSS_181	R20
L9	VSS_109	VSS_182	R21
L19	VSS_110	VSS_183	R22
L20	VSS_111	VSS_184	R23
L21	VSS_112	VSS_185	R24
L22	VSS_113	VSS_186	R25
L25	VSS_114	VSS_187	R26
L33	VSS_115	VSS_188	R28
M6	VSS_116	VSS_189	R33
M9	VSS_117	VSS_190	R3
M14	VSS_118	VSS_191	R16
M15	VSS_119	VSS_192	R17
M18	VSS_120	VSS_193	R18
M20	VSS_121	VSS_194	R19
M22	VSS_122	VSS_195	R20
M25	VSS_123	VSS_196	R21
N3	VSS_124	VSS_197	R22
N6	VSS_125	VSS_198	R23
N9	VSS_126	VSS_199	R24
N11	VSS_127	VSS_200	R25
N14	VSS_128	VSS_201	R26
N15	VSS_129	VSS_202	R27
N18	VSS_130	VSS_203	R28
N20	VSS_131	VSS_204	R29
N22	VSS_132	VSS_205	R30
N25	VSS_133	VSS_206	R31
N26	VSS_134	VSS_207	R32
N29	VSS_135	VSS_208	R33
P1	VSS_136	VSS_209	R34
P3	VSS_137	VSS_210	R35
P6	VSS_138	VSS_211	R36
P8	VSS_139	VSS_212	R37
P9	VSS_140		
P11	VSS_141		
P14	VSS_142		
P15	VSS_143		
P18	VSS_144		
P19	VSS_145		
P20	VSS_146		
P21	VSS_147		
P22	VSS_148		
P25	VSS_149		
P26	VSS_150		
P34	VSS_151		
R3	VSS_152		
R5	VSS_153		
R8	VSS_154		
R9	VSS_155		
R11	VSS_156		
R13	VSS_157		
R15	VSS_158		
R18	VSS_159		

U1000W			
A1	VSS_1	VSS_54	F15
A14	VSS_2	VSS_55	F16
A34	VSS_3	VSS_56	F19
B6	VSS_4	VSS_57	F20
B9	VSS_5	VSS_58	F21
B24	VSS_6	VSS_59	F22
B27	VSS_7	VSS_60	F23
B33	VSS_8	VSS_61	F31
C3	VSS_9	VSS_62	G6
C4	VSS_10	VSS_63	G10
C5	VSS_11	VSS_64	G15
C7	VSS_12	VSS_65	G19
C8	VSS_13	VSS_66	G21
C9	VSS_14	VSS_67	G22
C10	VSS_15	VSS_68	G25
C11	VSS_16	VSS_69	G32
C12	VSS_17	VSS_70	H3
C13	VSS_18	VSS_71	H6
C14	VSS_19	VSS_72	H10
C15	VSS_20	VSS_73	H12
C16	VSS_21	VSS_74	H14
C17	VSS_22	VSS_75	H19
C18	VSS_23	VSS_76	H22
C20	VSS_24	VSS_77	H25
C21	VSS_25	VSS_78	H26
C22	VSS_26	VSS_79	J3
C23	VSS_27	VSS_80	J4
C26	VSS_28	VSS_81	J5
C28	VSS_29	VSS_82	J6
C30	VSS_30	VSS_83	J10
C32	VSS_31	VSS_84	J11
D3	VSS_32	VSS_85	J12
D24	VSS_33	VSS_86	J13
D31	VSS_34	VSS_87	J14
D34	VSS_35	VSS_88	J15
E3	VSS_36	VSS_89	J16
E6	VSS_37	VSS_90	J18
E8	VSS_38	VSS_91	J19
E12	VSS_39	VSS_92	J20
E18	VSS_40	VSS_93	J21
E20	VSS_41	VSS_94	J22
E22	VSS_42	VSS_95	J23
E23	VSS_43	VSS_96	J24
E32	VSS_44	VSS_97	J25
F3	VSS_45	VSS_98	K3
F7	VSS_46	VSS_99	K6
F9	VSS_47	VSS_100	K8
F10	VSS_48	VSS_101	K18
F11	VSS_49	VSS_102	K21
F13	VSS_50	VSS_103	K22
F14	VSS_51	VSS_104	L1
	VSS_52	VSS_105	
	VSS_53	VSS_106	

U1000Y			
W3	VSS_213	VSS_266	AB18
W6	VSS_214	VSS_267	AB19
W7	VSS_215	VSS_268	AB20
W9	VSS_216	VSS_269	AB24
W10	VSS_217	VSS_270	AB27
W11	VSS_218	VSS_271	AB29
W12	VSS_219	VSS_272	AB32
W15	VSS_220	VSS_273	AC3
W16	VSS_221	VSS_274	AC4
W17	VSS_222	VSS_275	AC11
W18	VSS_223	VSS_276	AC12
W19	VSS_224	VSS_277	AC16
W20	VSS_225	VSS_278	AC20
W23	VSS_226	VSS_279	AC21
W24	VSS_227	VSS_280	AC24
W27	VSS_228	VSS_281	AC27
Y3	VSS_229	VSS_282	AD11
Y5	VSS_230	VSS_283	AD12
Y6	VSS_231	VSS_284	AD16
Y8	VSS_232	VSS_285	AD20
Y9	VSS_233	VSS_286	AD21
Y10	VSS_234	VSS_287	AD24
Y11	VSS_235	VSS_288	AD25
Y12	VSS_236	VSS_289	AD26
Y13	VSS_237	VSS_290	AE3
Y14	VSS_238	VSS_291	AE11
Y15	VSS_239	VSS_292	AE12
Y16	VSS_240	VSS_293	AE13
Y17	VSS_241	VSS_294	AE14
Y18	VSS_242	VSS_295	AE16
Y20	VSS_243	VSS_296	AE18
Y23	VSS_244	VSS_297	AE19
Y24	VSS_245	VSS_298	AE20
Y28	VSS_246	VSS_299	AE21
Y29	VSS_247	VSS_300	AE24
Y30	VSS_248	VSS_301	AE26
Y31	VSS_249	VSS_302	AF22
Y32	VSS_250	VSS_303	AF24
Y33	VSS_251	VSS_304	AF25
Y34	VSS_252	VSS_305	AF27
Y35	VSS_253	VSS_306	AF28
Y36	VSS_254	VSS_307	AF29
Y37	VSS_255	VSS_308	AF30
Y38	VSS_256	VSS_309	AF31
Y39	VSS_257	VSS_310	AF32
Y40	VSS_258	VSS_311	AG30
Y41	VSS_259	VSS_312	AJ30
Y42	VSS_260	VSS_313	AK29
Y43	VSS_261	VSS_314	AK29
Y44	VSS_262	VSS_315	AL25
Y45	VSS_263	VSS_316	AM30
Y46	VSS_264	VSS_317	
Y47	VSS_265		



U1000M

USB3.0 OTG/DP1.4 Alt
of TYPEC0

USB:U3/Gen1----Controller0
DP:RBR/HBR/HBR2/HBR3

TYPEC0_SBU1/DP0_AUXP
TYPEC0_SBU2/DP0_AUXN

TYPEC0_SSRX1P/DP0_TX0P
TYPEC0_SSRX1N/DP0_TX0N

TYPEC0_SSTX1P/DP0_TX1P
TYPEC0_SSTX1N/DP0_TX1N

TYPEC0_SSRX2P/DP0_TX2P
TYPEC0_SSRX2N/DP0_TX2N

TYPEC0_SSTX2P/DP0_TX3P
TYPEC0_SSTX2N/DP0_TX3N

TYPEC0_DP0_REXT

TYPEC0_DP0_VDD_0V85
TYPEC0_DP0_VDDA_0V85

TYPEC0_DP0_VDDH_1V8

USB3.0 OTG/DP1.4 Alt
of TYPEC1

USB:U3/Gen1----Controller1
DP:RBR/HBR/HBR2/HBR3

TYPEC1_SBU1/DP1_AUXP
TYPEC1_SBU2/DP1_AUXN

TYPEC1_SSRX1P/DP1_TX0P
TYPEC1_SSRX1N/DP1_TX0N

TYPEC1_SSTX1P/DP1_TX1P
TYPEC1_SSTX1N/DP1_TX1N

TYPEC1_SSRX2P/DP1_TX2P
TYPEC1_SSRX2N/DP1_TX2N

TYPEC1_SSTX2P/DP1_TX3P
TYPEC1_SSTX2N/DP1_TX3N

TYPEC1_DP1_REXT

TYPEC1_DP1_VDD_0V85
TYPEC1_DP1_VDDA_0V85

TYPEC1_DP1_VDDH_1V8

RK3588-Socket

AL15
AM15
AN13
AP13
AP14
AN14
AN15
AP15
AP16
AN16

TYPEC0_SBU1
TYPEC0_SBU2
TYPEC0_SSRX1P
TYPEC0_SSRX1N
TYPEC0_SSTX1P
TYPEC0_SSTX1N
TYPEC0_SSRX2P
TYPEC0_SSRX2N
TYPEC0_SSTX2P
TYPEC0_SSTX2N

TYPEC0_REXT

VDDA_0V85_S0

VCCA_1V8_S0

AL10
AM10
AN8
AP8
AP9
AN9
AN10
AP10
AP11
AN11

TYPEC1_SSRX1P
TYPEC1_SSRX1N
TYPEC1_SSTX1P
TYPEC1_SSTX1N

TYPEC1_REXT

VDDA_0V85_S0

VCCA_1V8_S0

U1000L

USB2.0 of TYPEC0
(OTG/HOST/DEVICE)
HS/FS/LS

Download Port

TYPEC0_USB20_OTG_DP
TYPEC0_USB20_OTG_DM

TYPEC0_USB20_OTG_ID

TYPEC0_USB20_VBUSDET

TYPEC0_USB20_OTG0_REXT

USB2.0 of TYPEC1
(OTG/HOST/DEVICE)
HS/FS/LS

TYPEC1_USB20_OTG_DP
TYPEC1_USB20_OTG_DM

TYPEC1_USB20_OTG_ID

TYPEC1_USB20_VBUSDET

TYPEC1_USB20_OTG1_REXT

USB2.0 HOST0
HS/FS/LS

USB20_HOST0_DP
USB20_HOST0_DM

USB20_HOST0_REXT

USB2.0 HOST1
HS/FS/LS

USB20_HOST1_DP
USB20_HOST1_DM

USB20_HOST1_REXT

USB2.0 POWER

USB20_DVDD_0V75

USB20_AVDD_1V8

USB20_AVDD_3V3

RK3588-Socket

AL12
AM12
AL14
AM14
AP12 OTG0_REXT R1405 200R

AK9
AL9
AK8
AL8
AP7 OTG1_REXT R1406 200R

AK6
AL6
AG9 HOST0_REXT R1400 200R

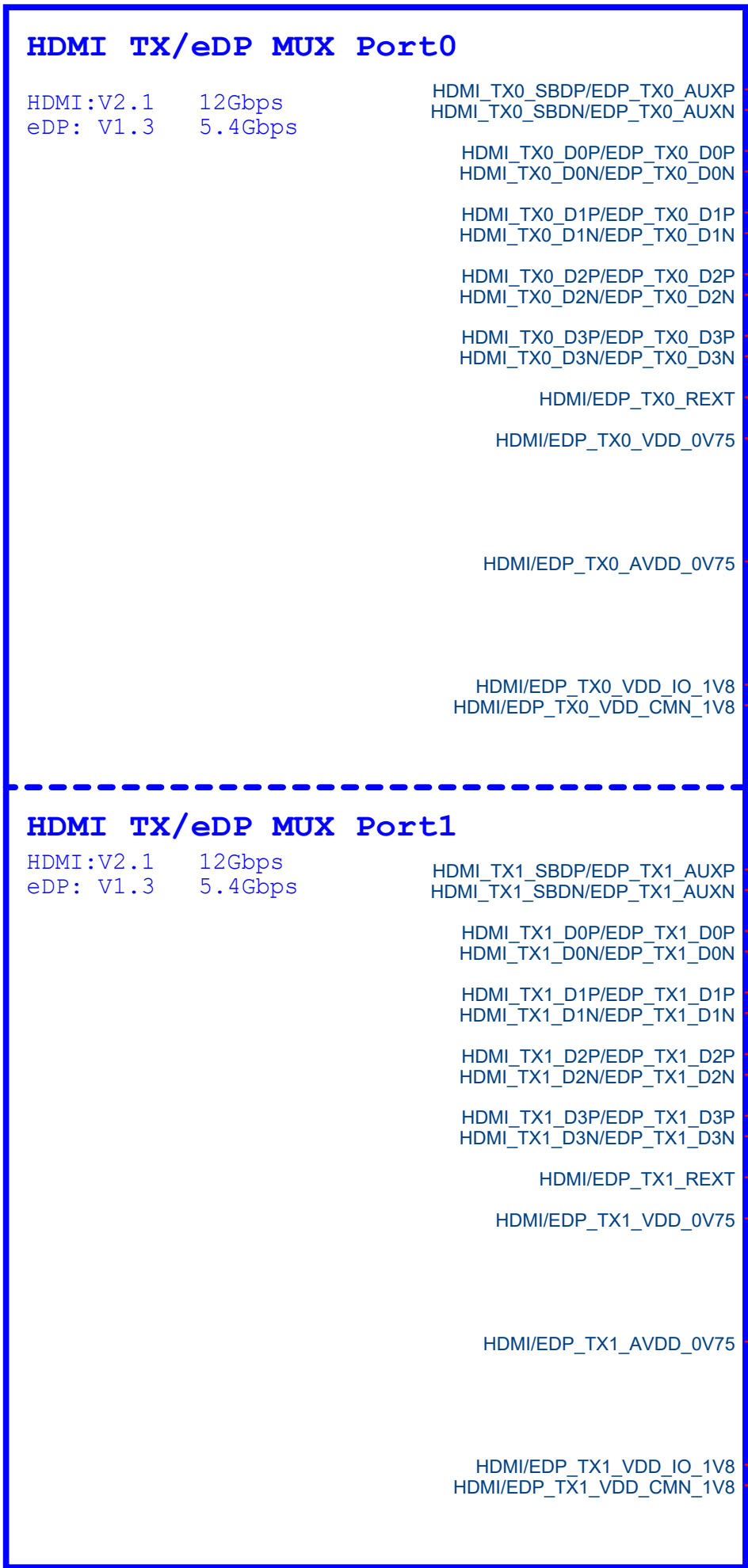
AL7
AM7
AH9 HOST1_REXT R1401 200R

AH10
AG11
AJ10
VDDA_0V75_S0
VCCA_1V8_S0
VCCA_3V3_S0

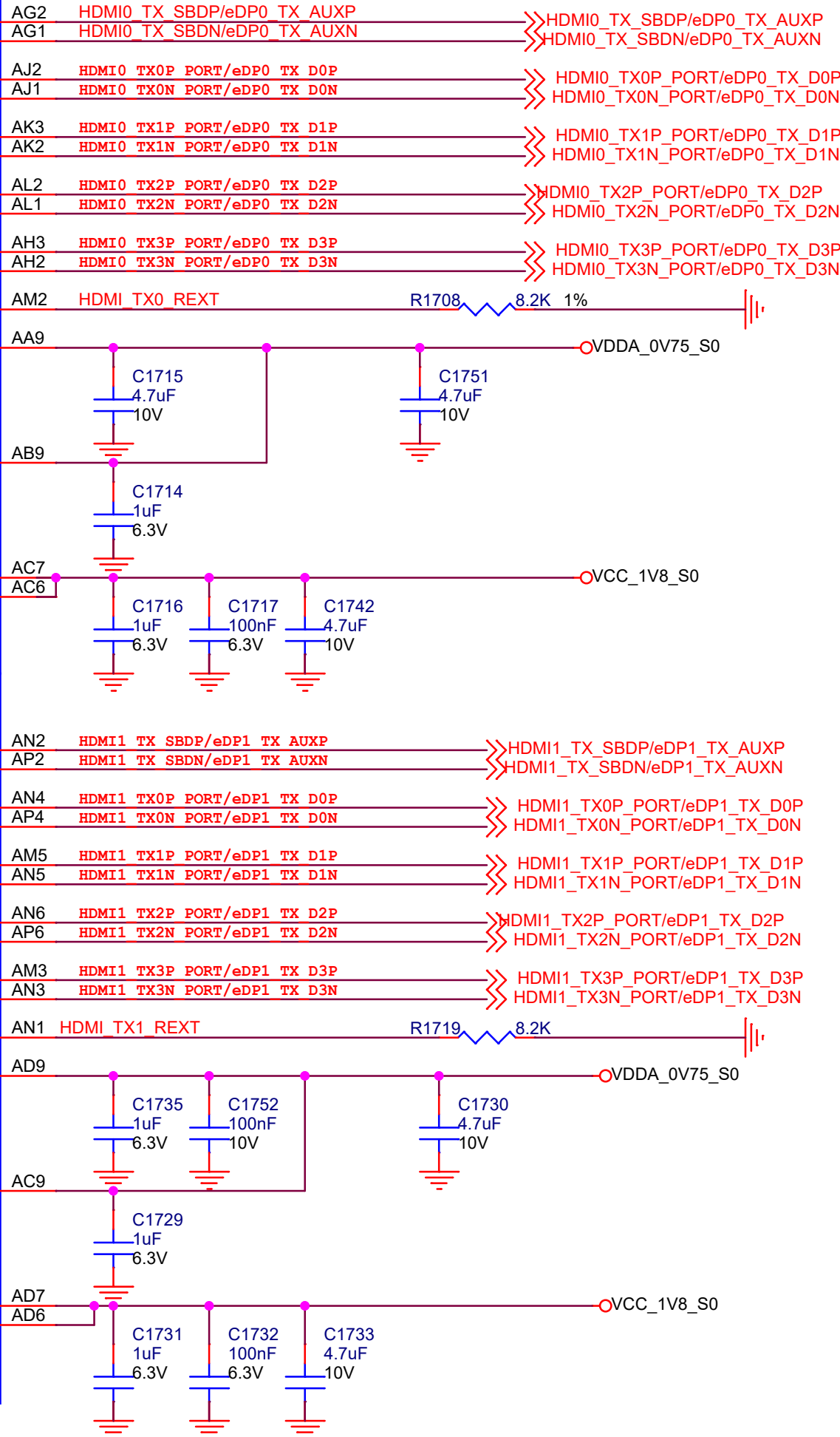
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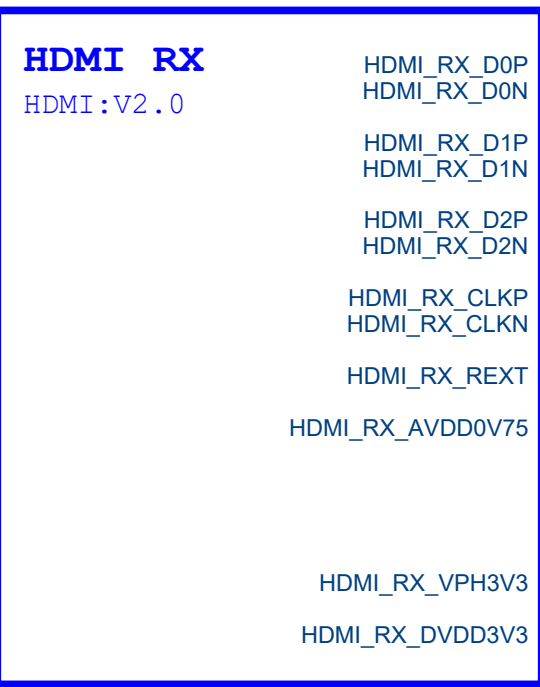
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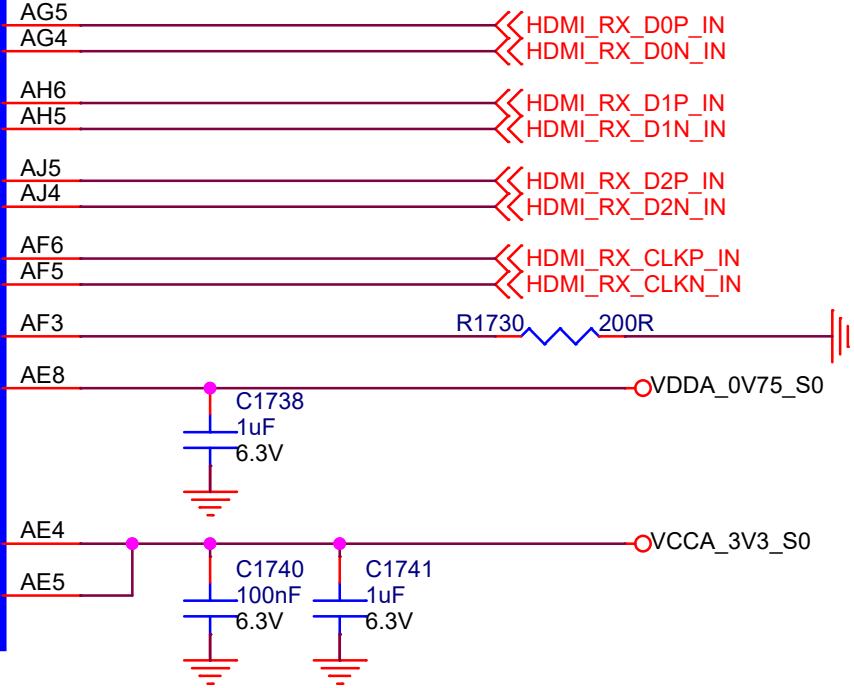
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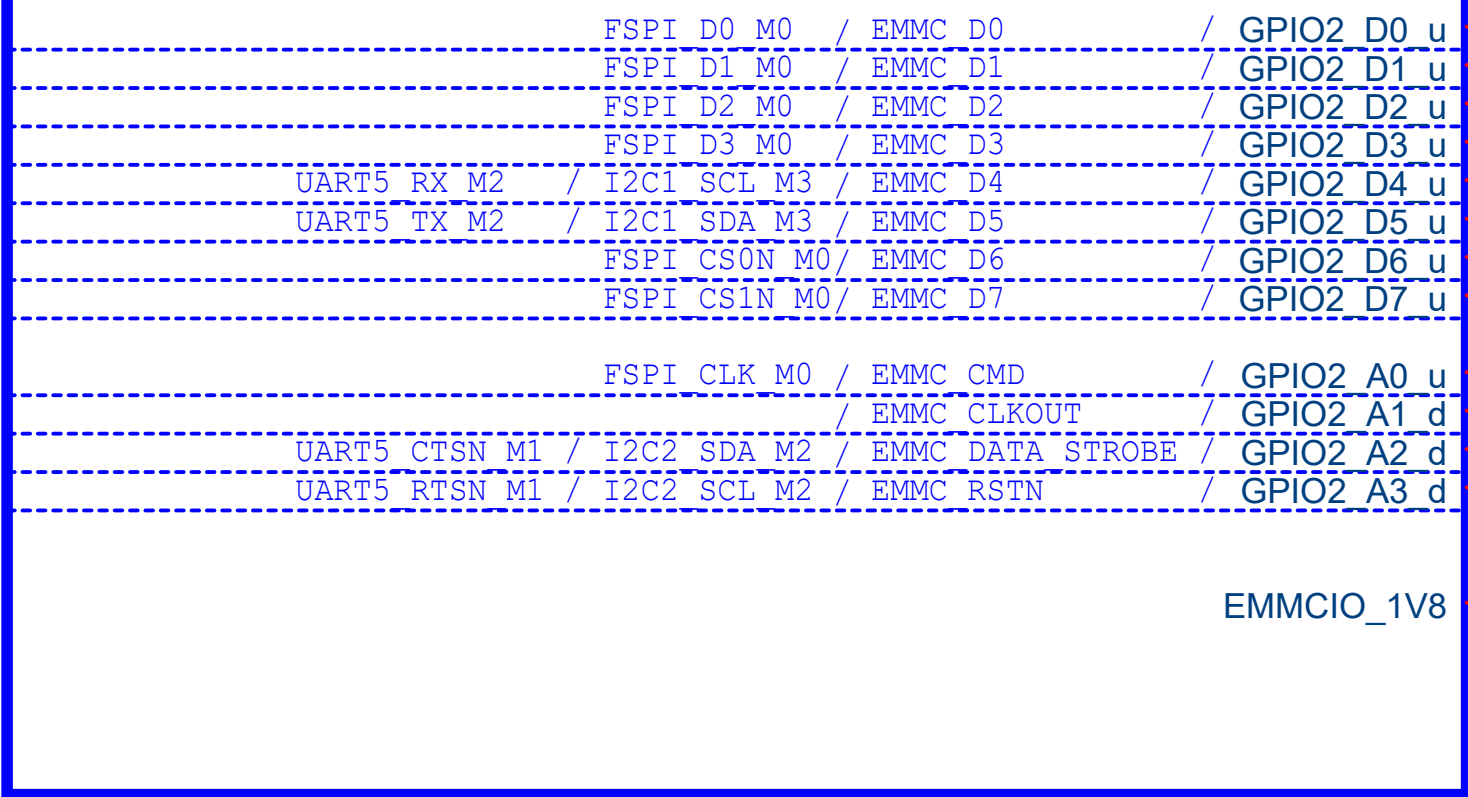
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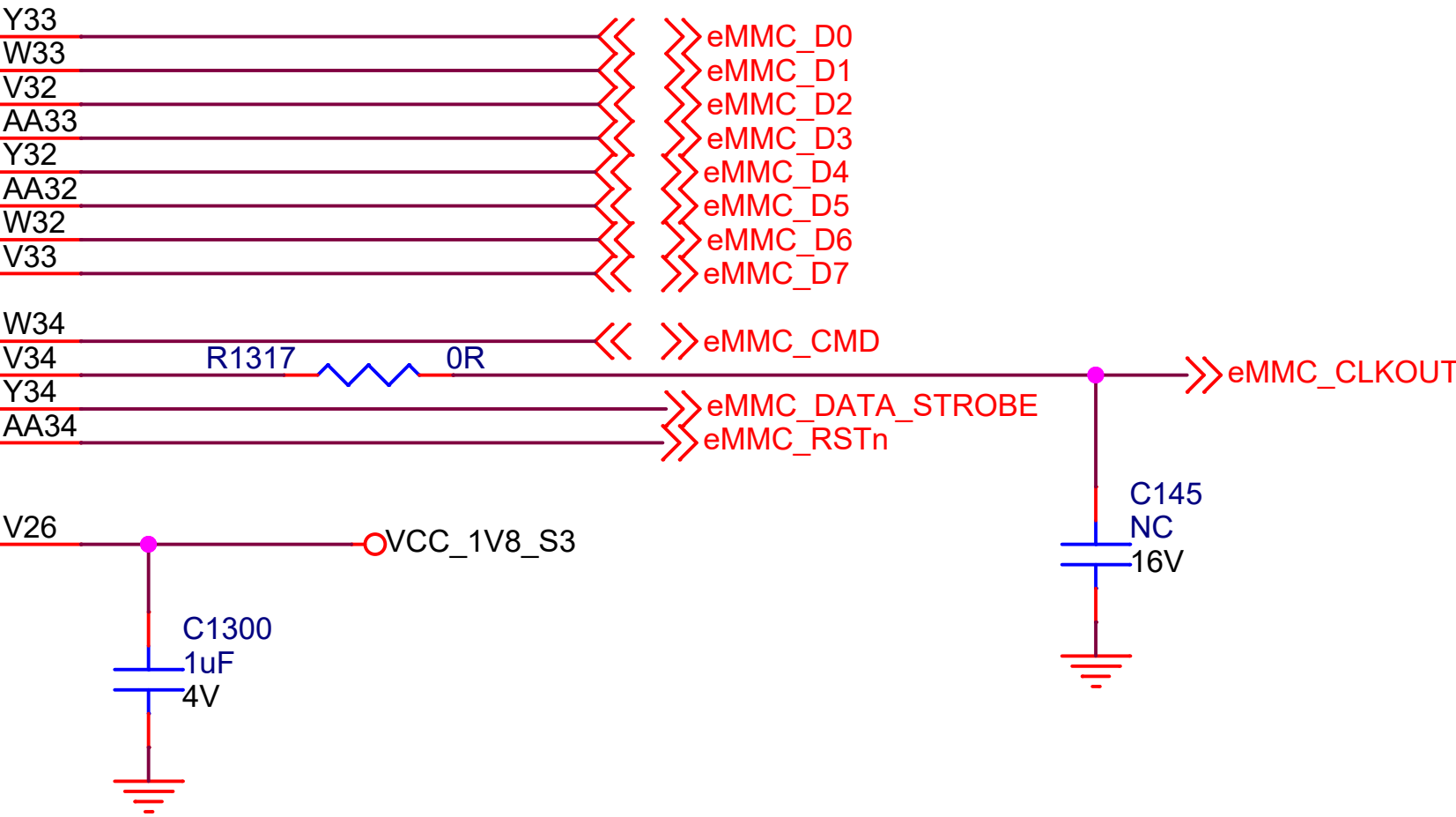
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EMMCIO Domain

Operating Voltage=1.8V



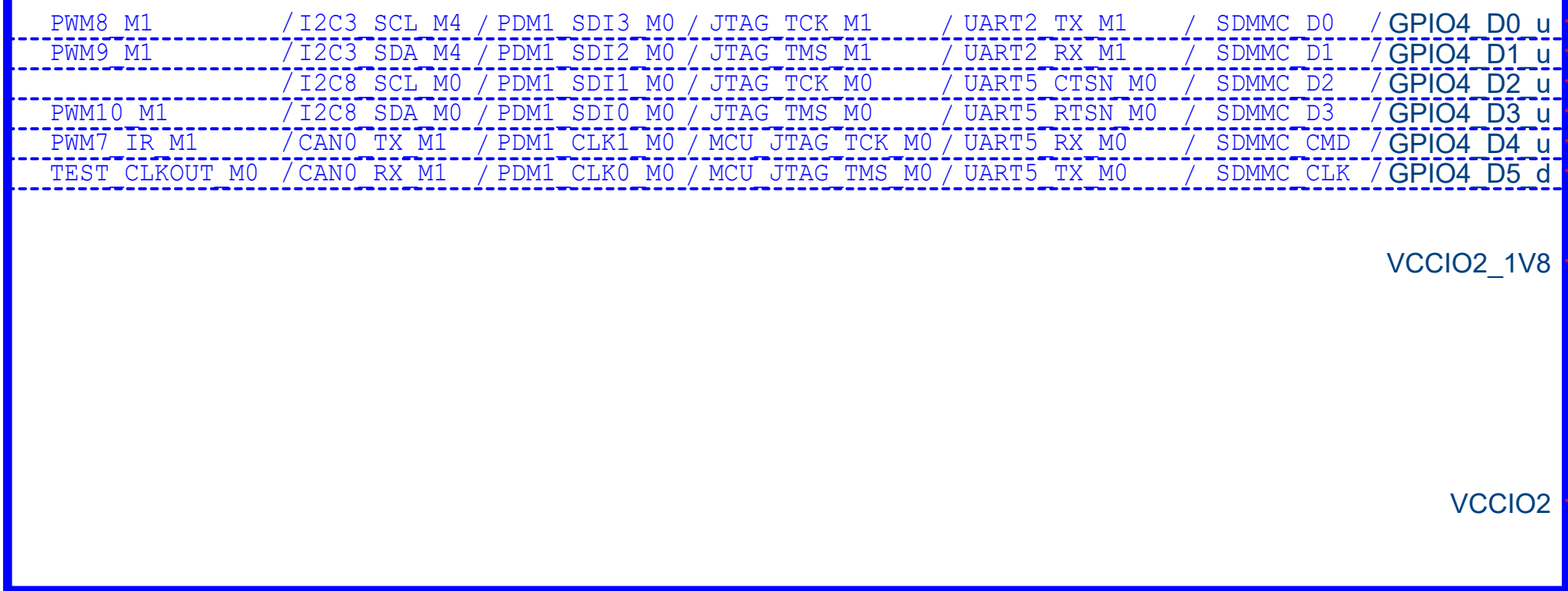
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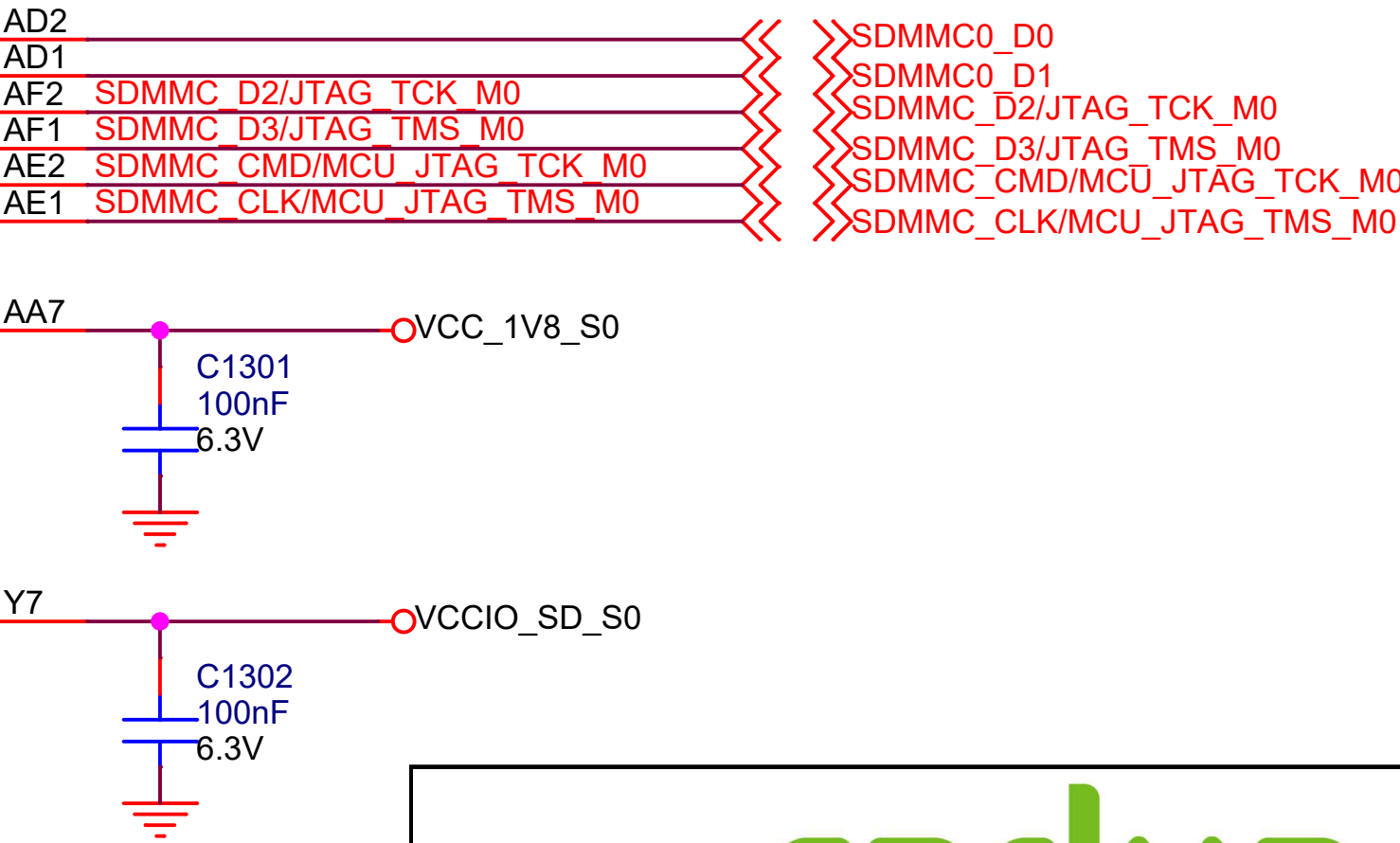
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VCCIO2 Domain

Operating Voltage=1.8V/3.3V

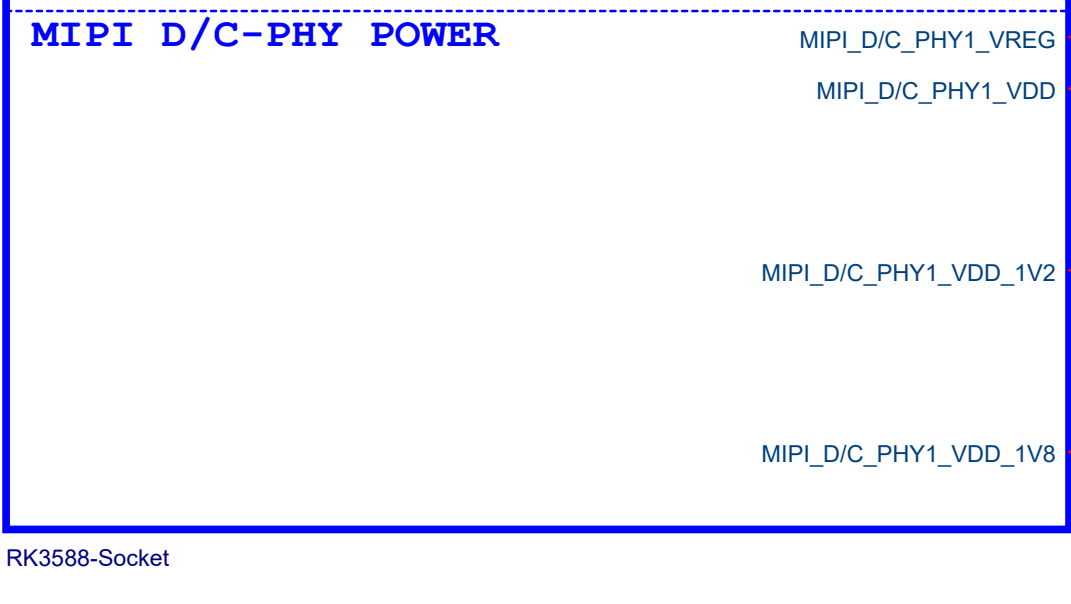
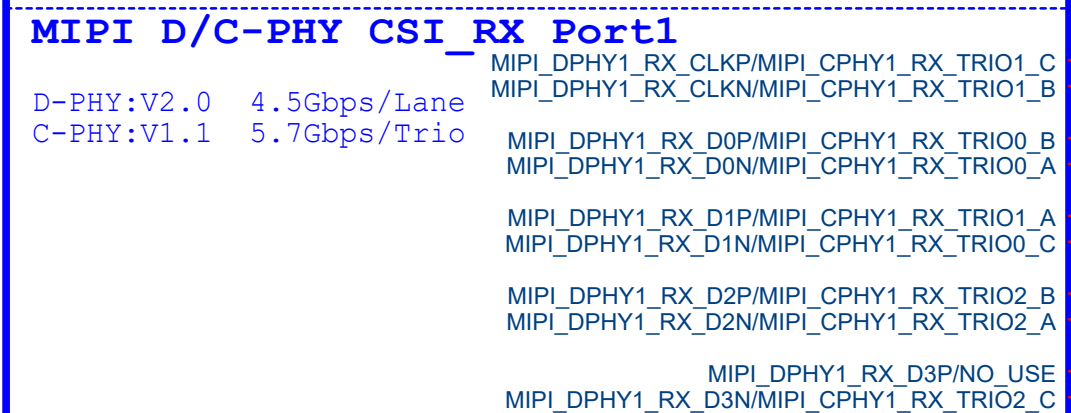
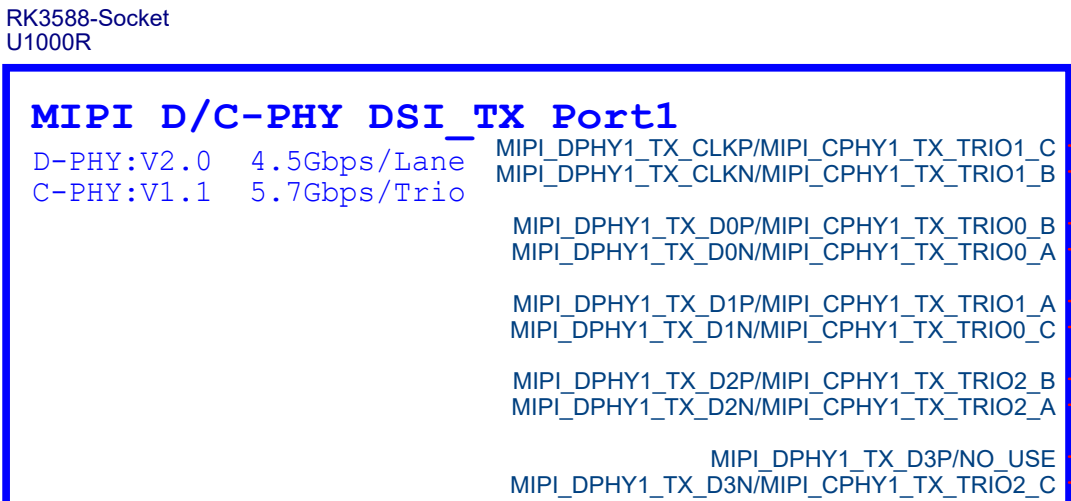
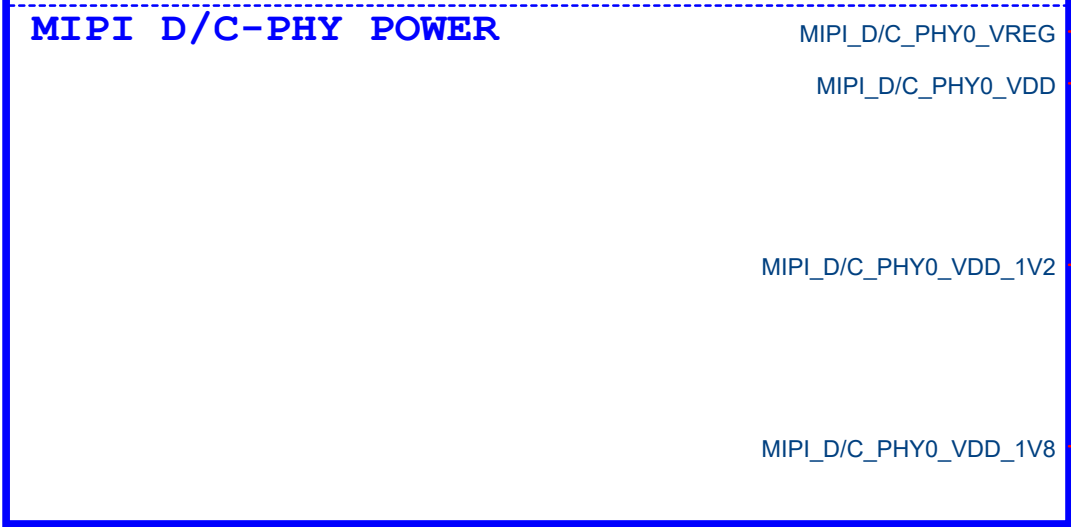
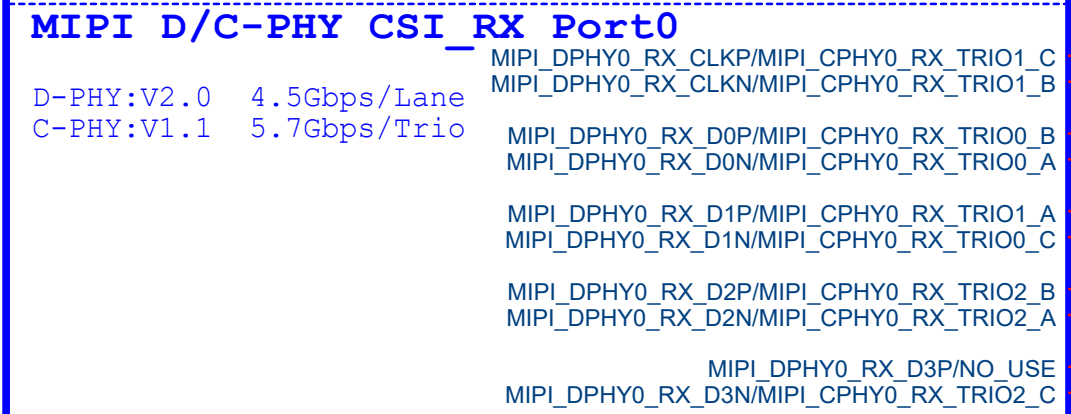
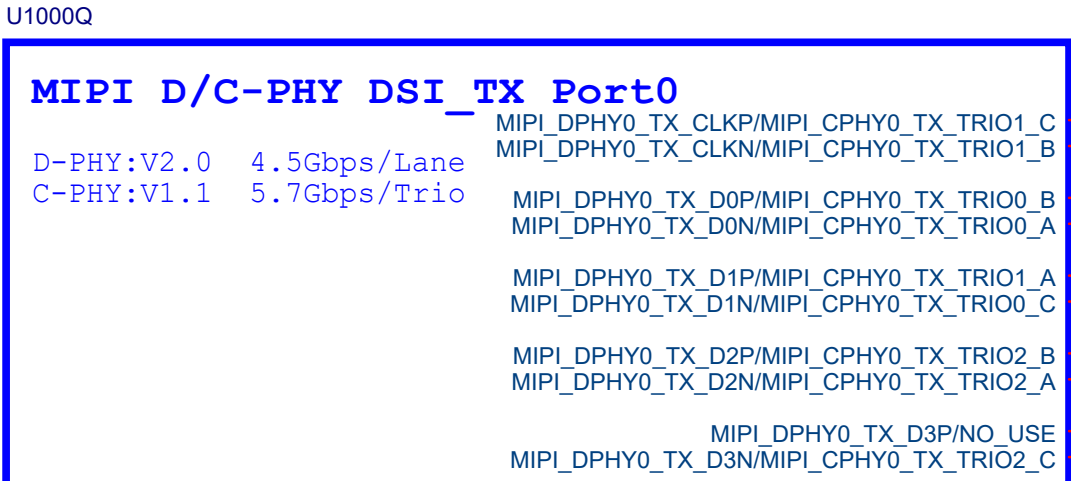


RK3588-Socket

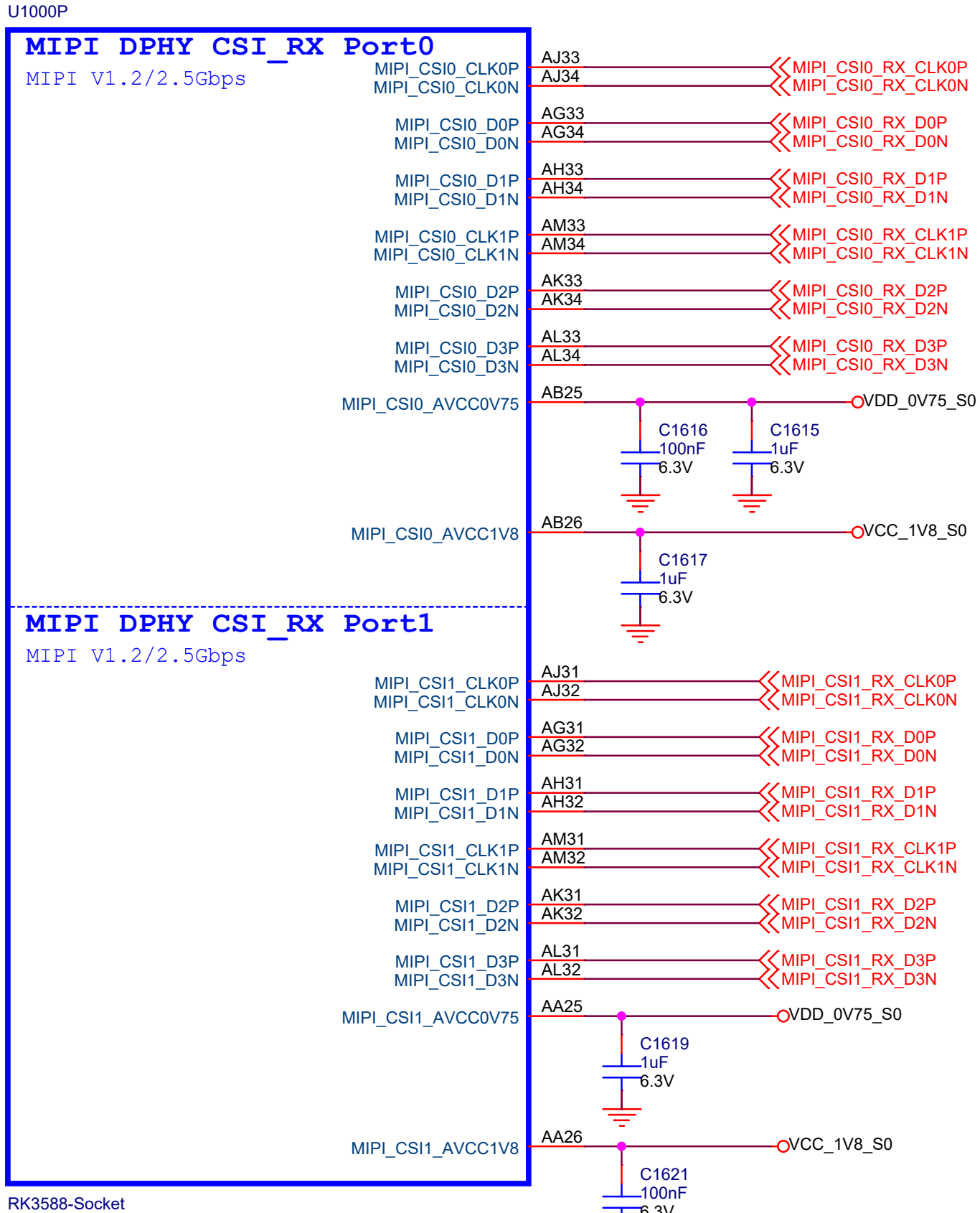


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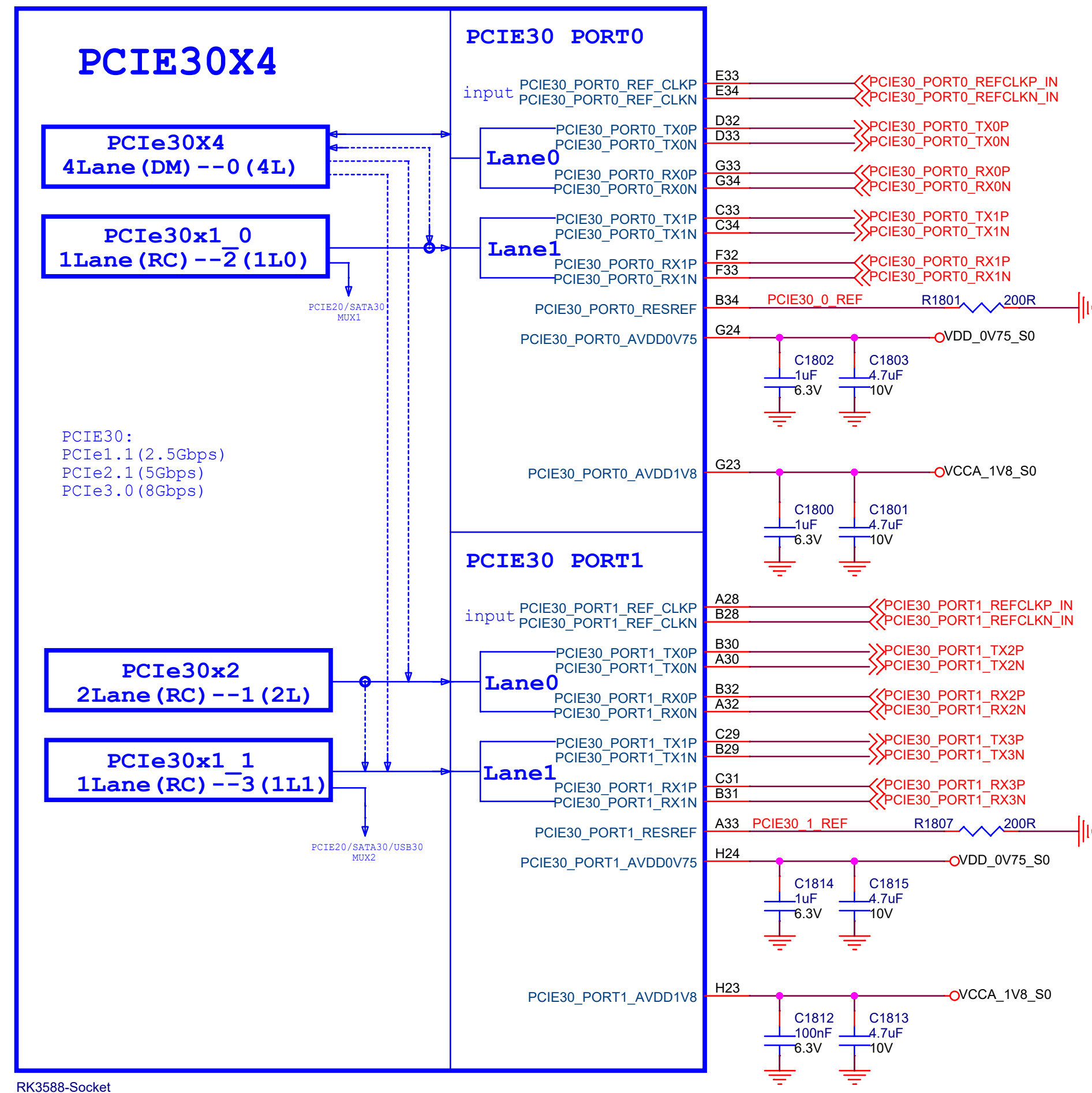
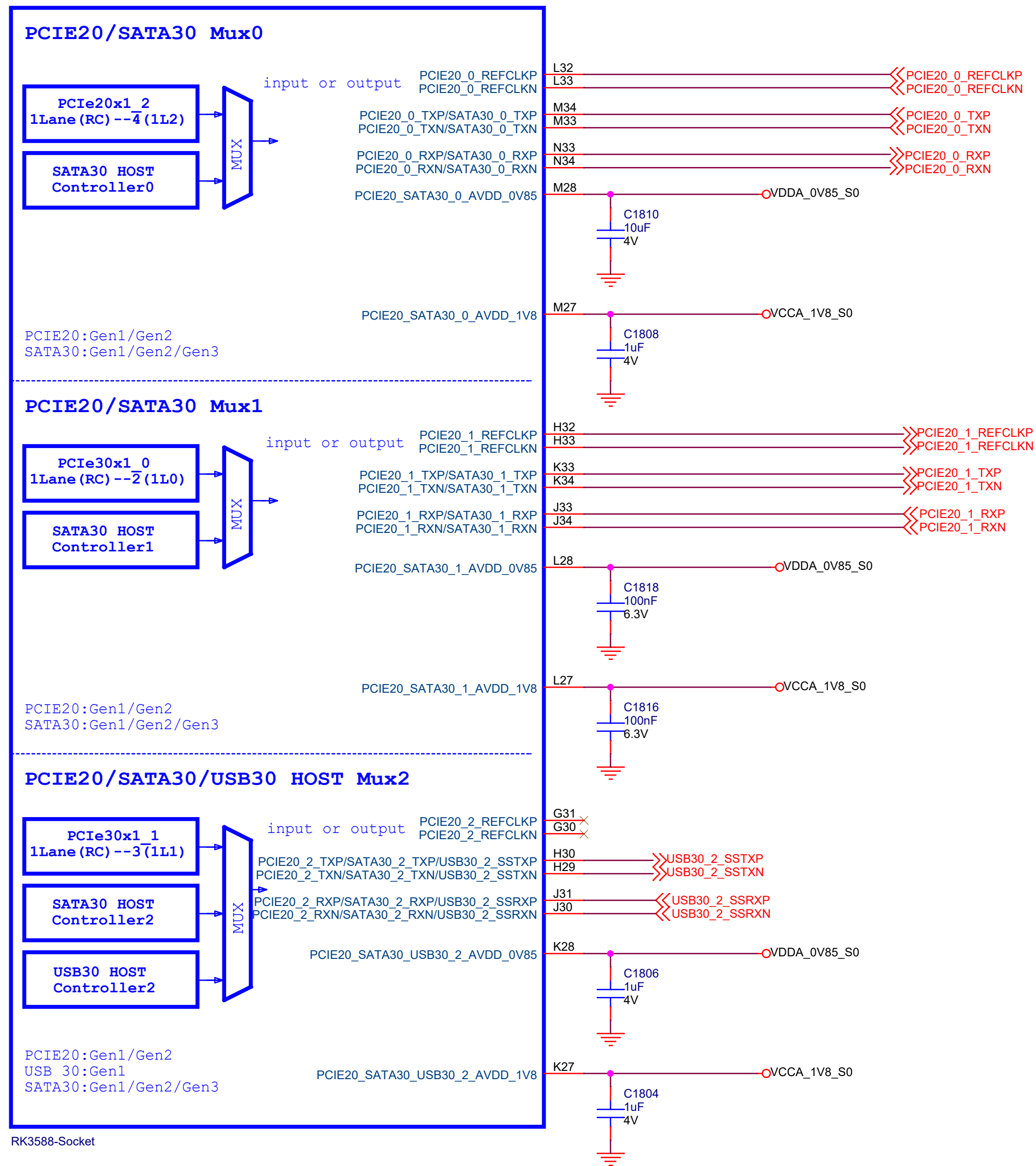


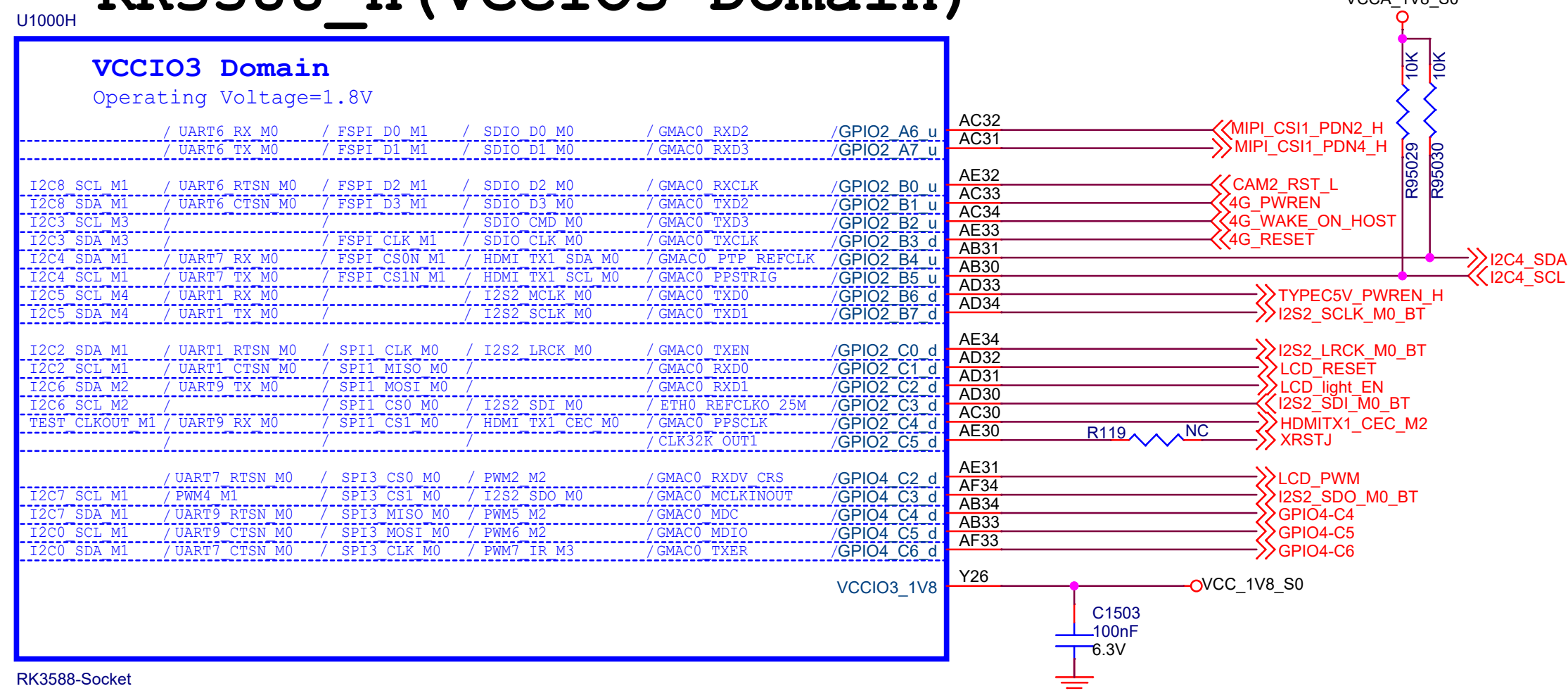
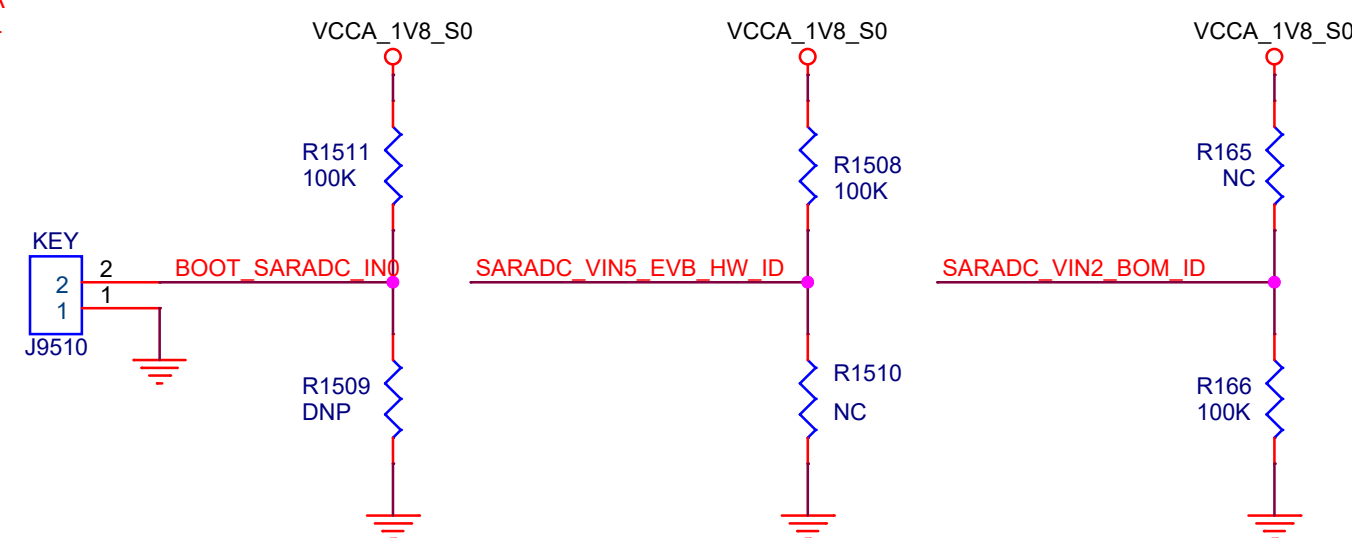
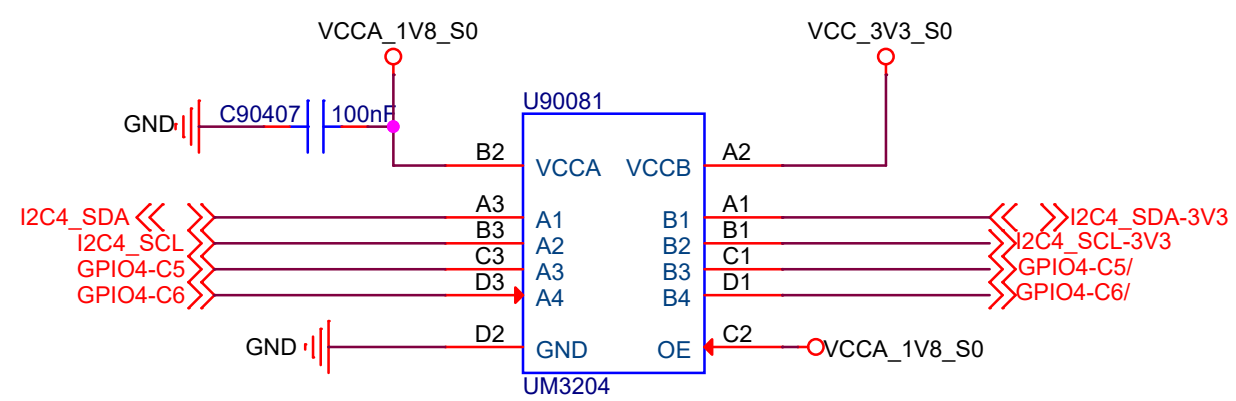
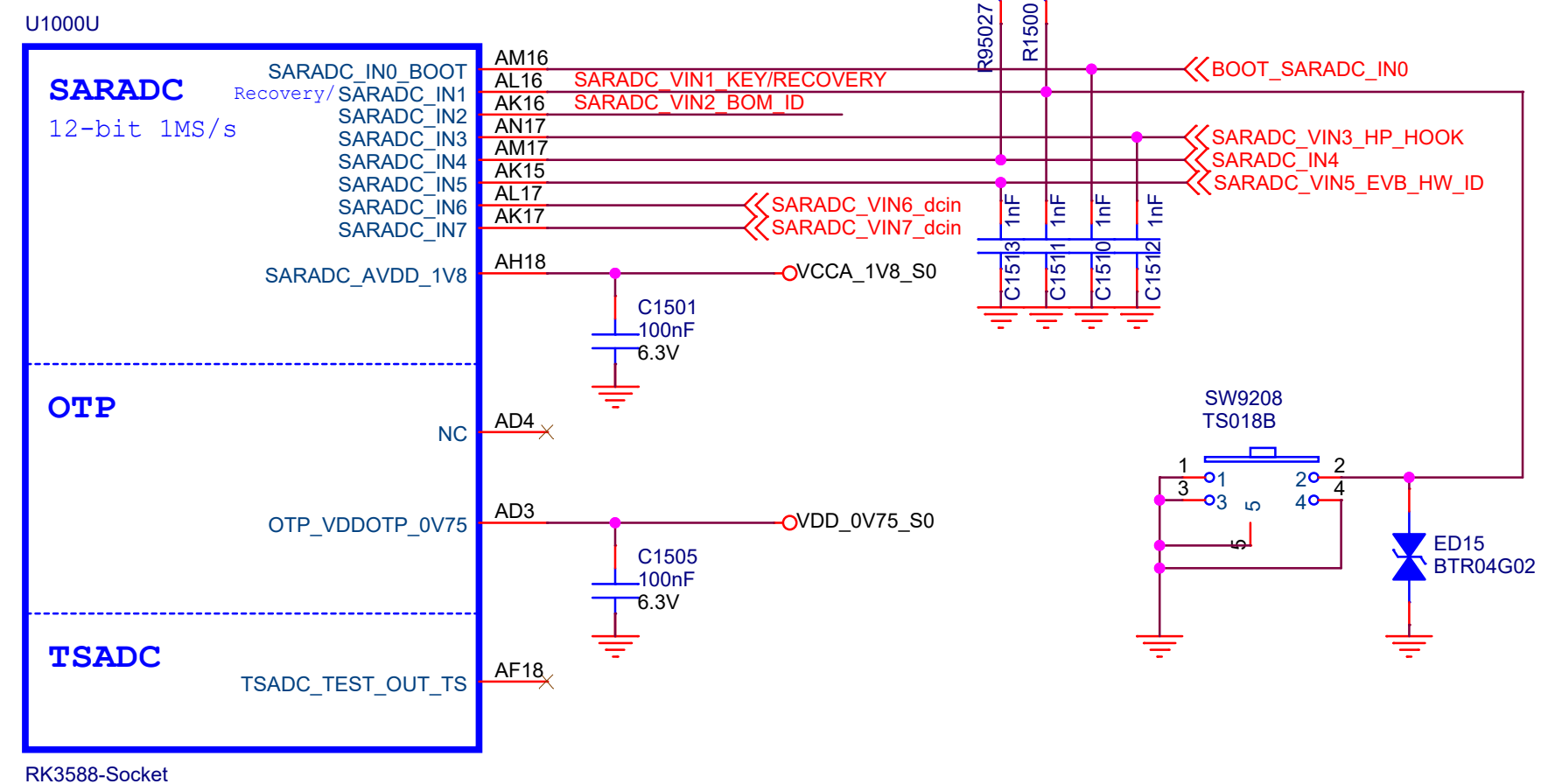
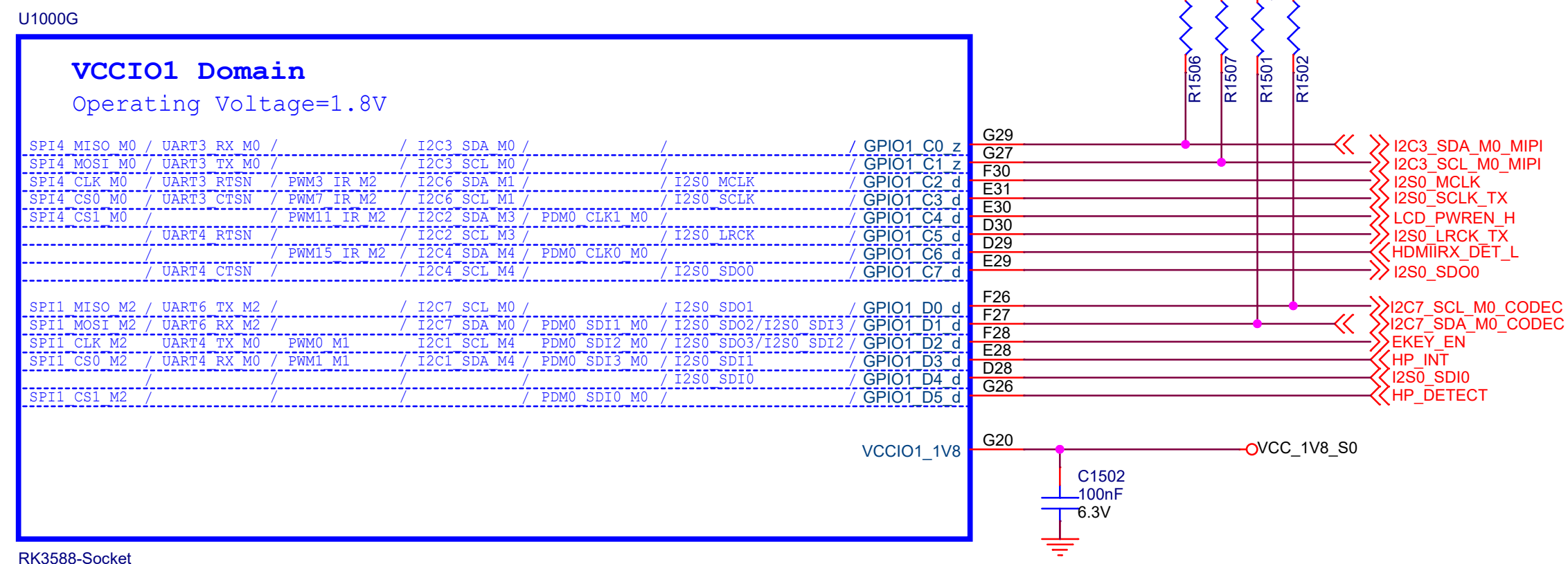
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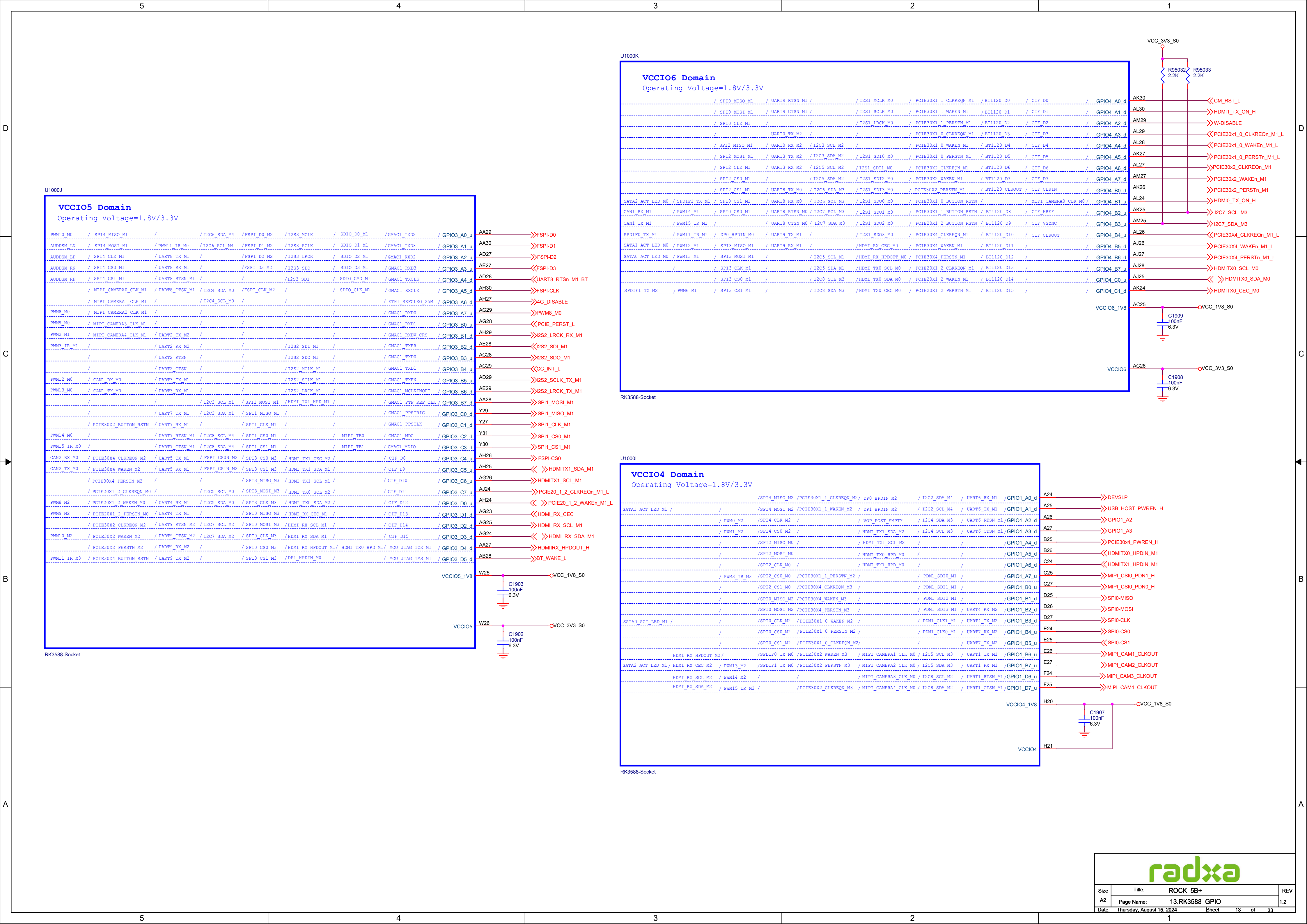


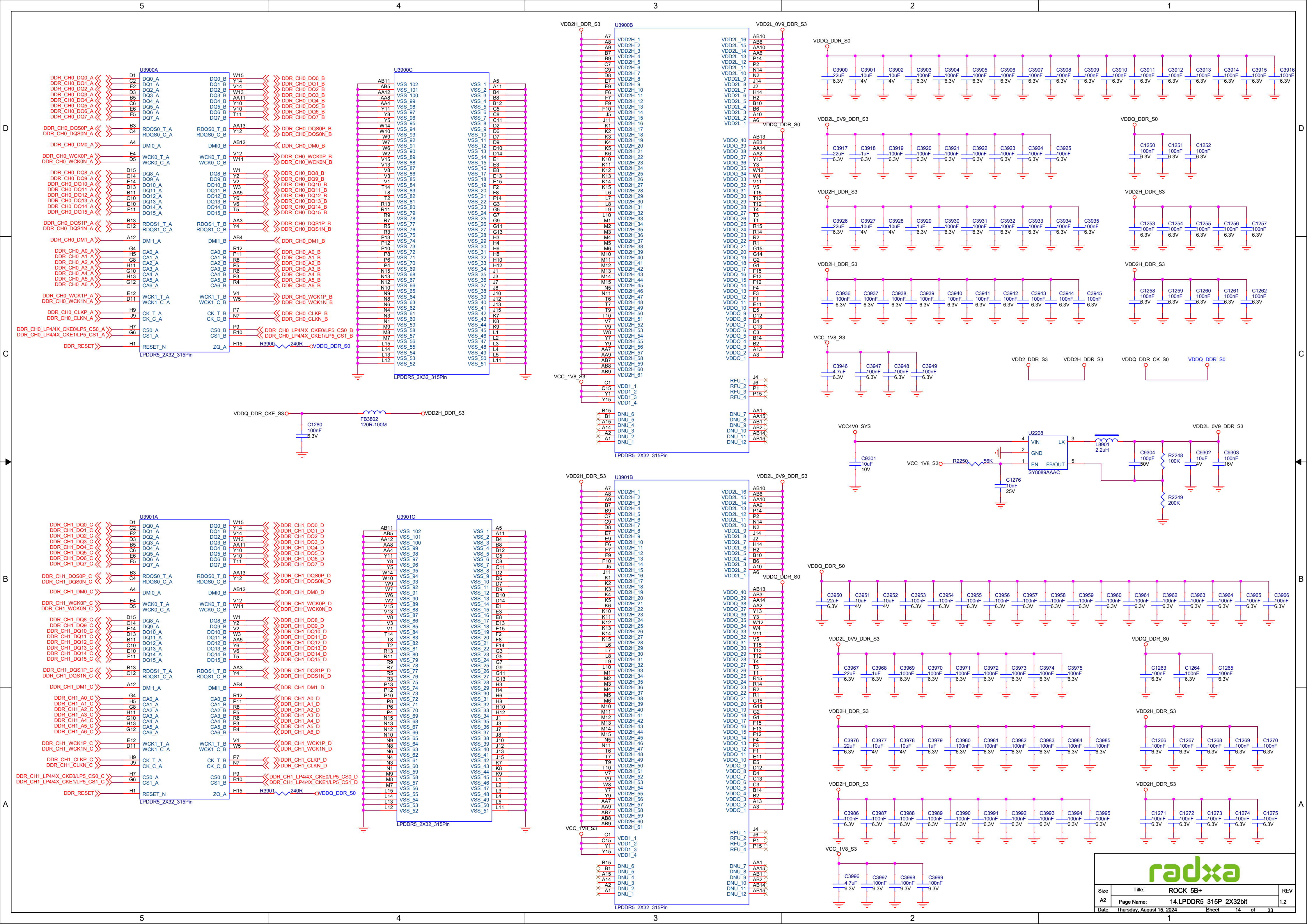
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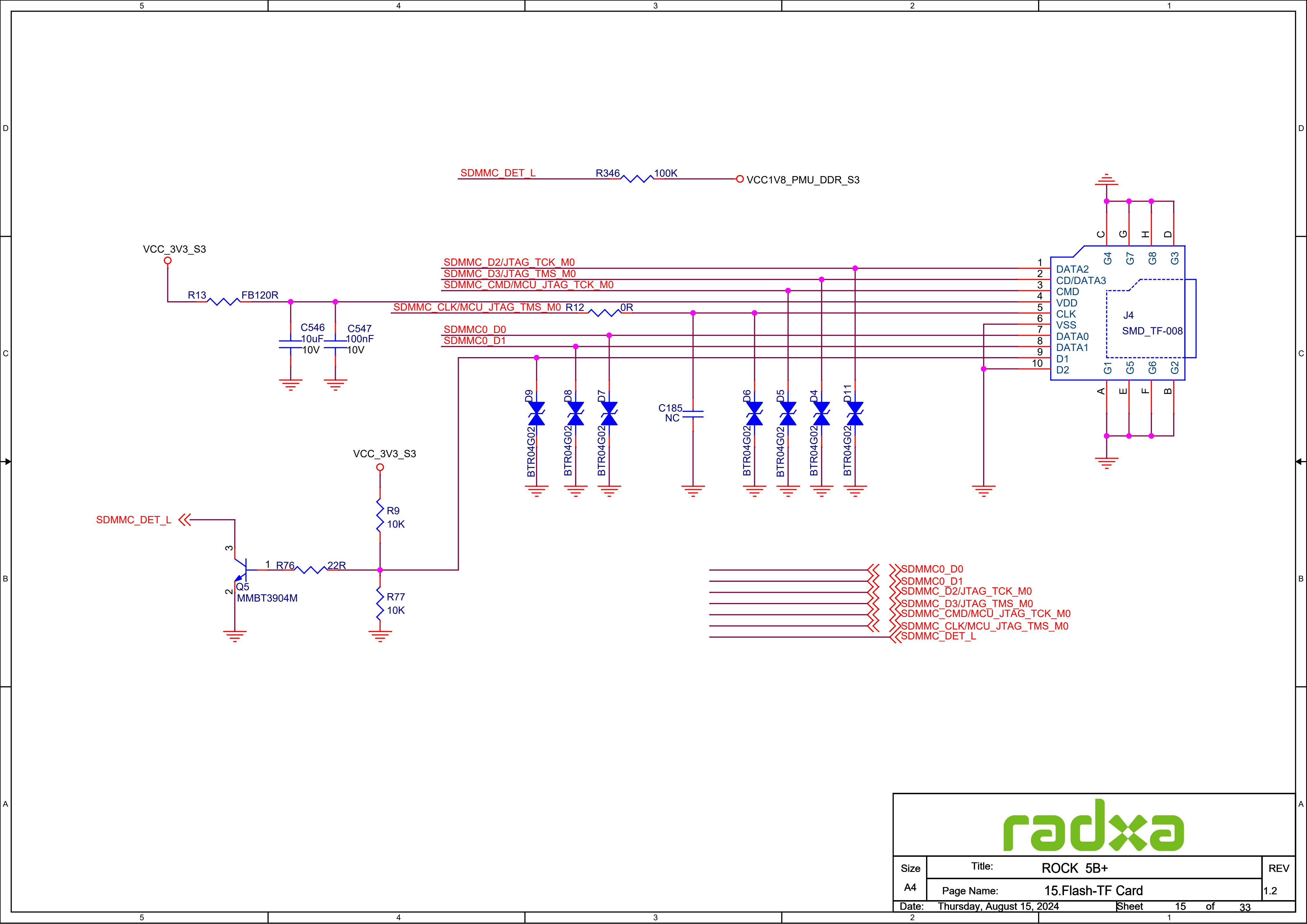


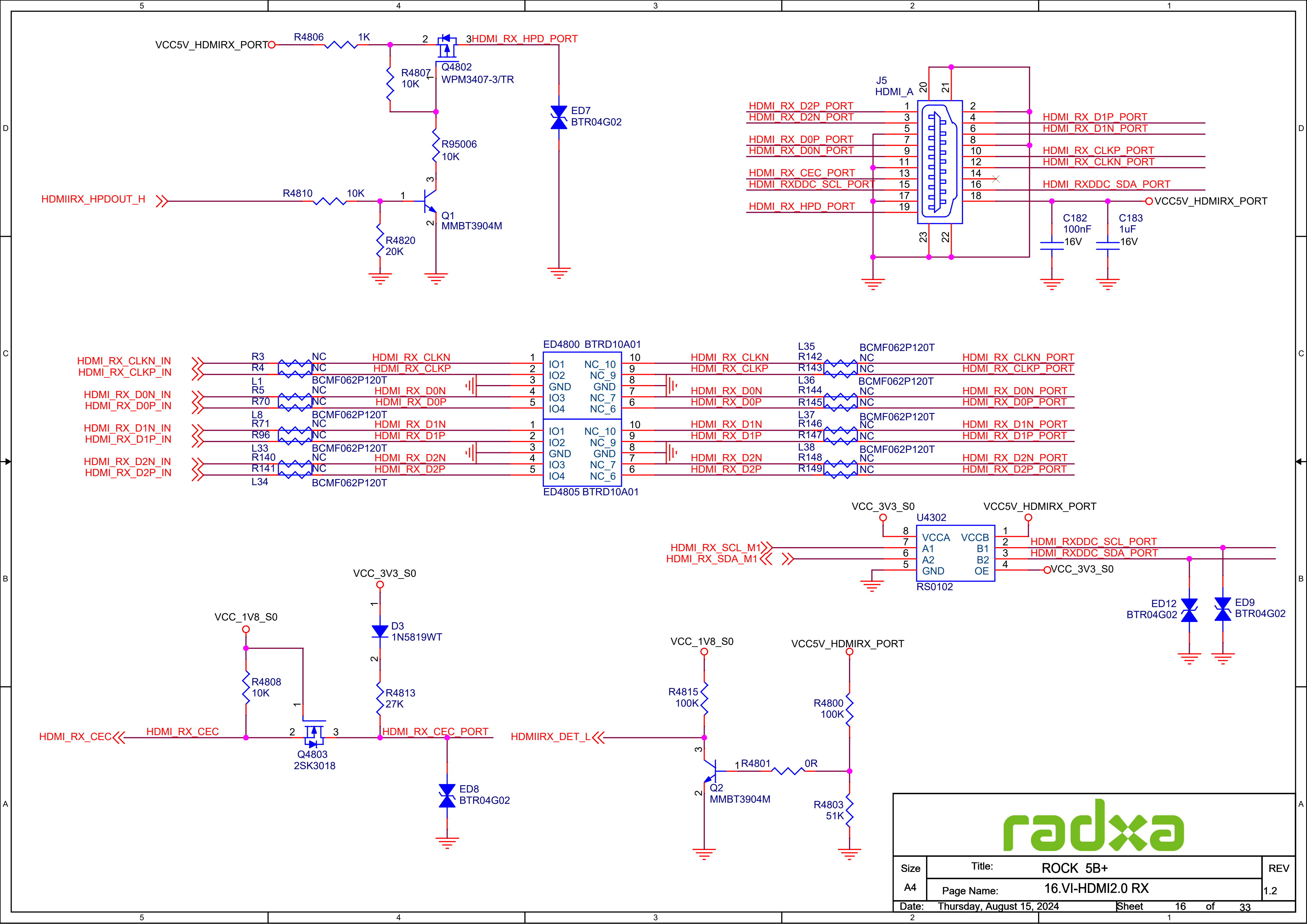


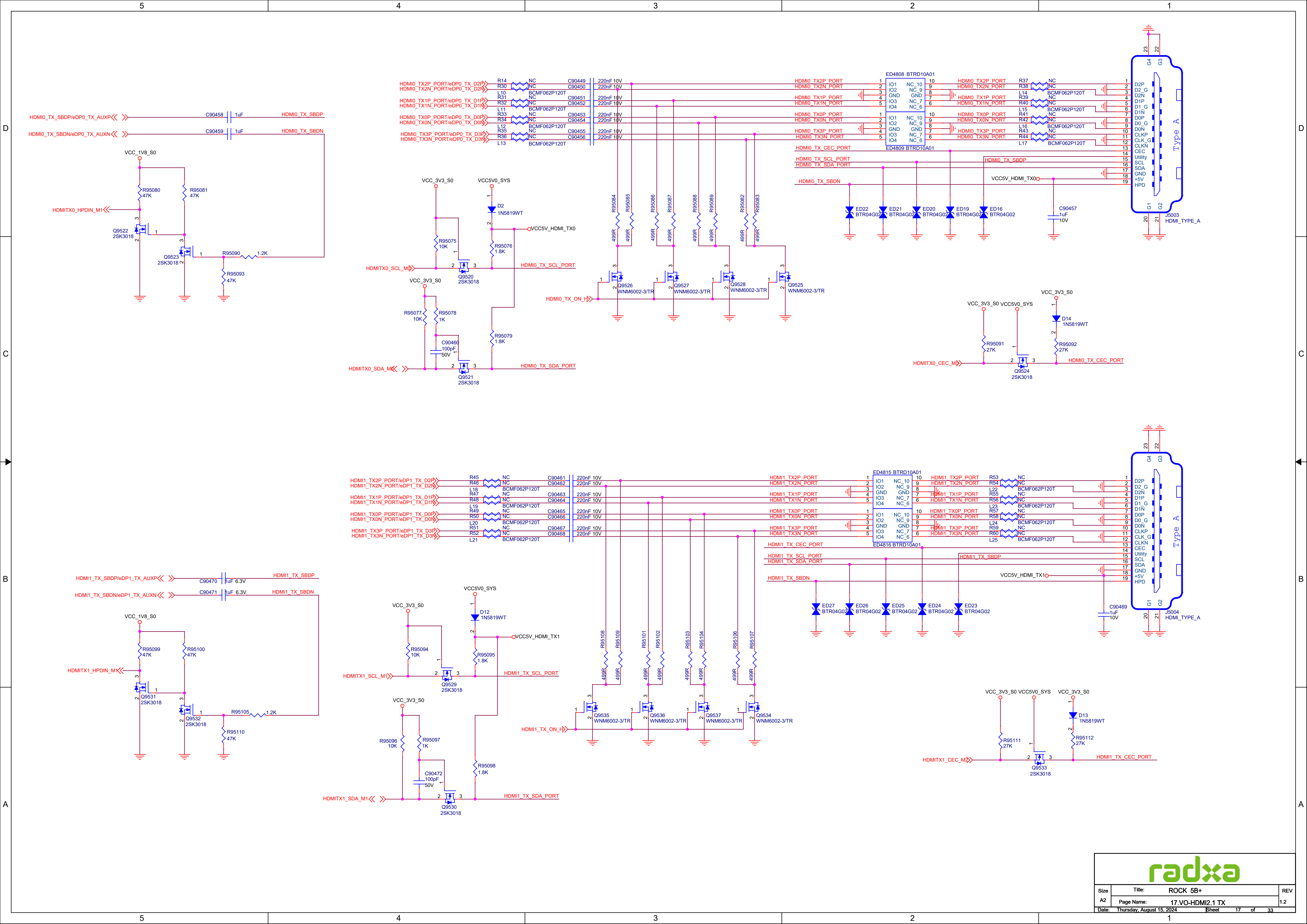


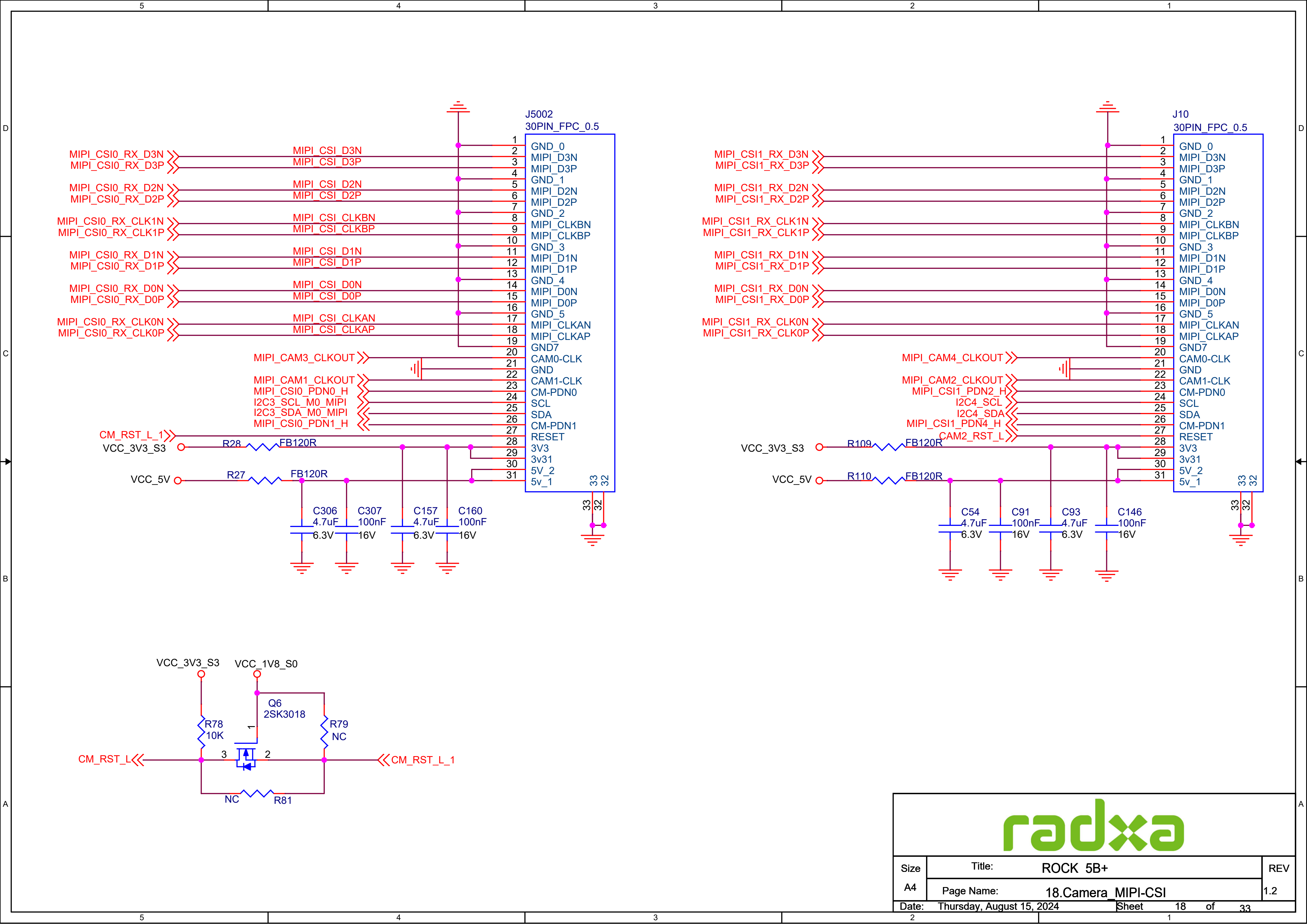


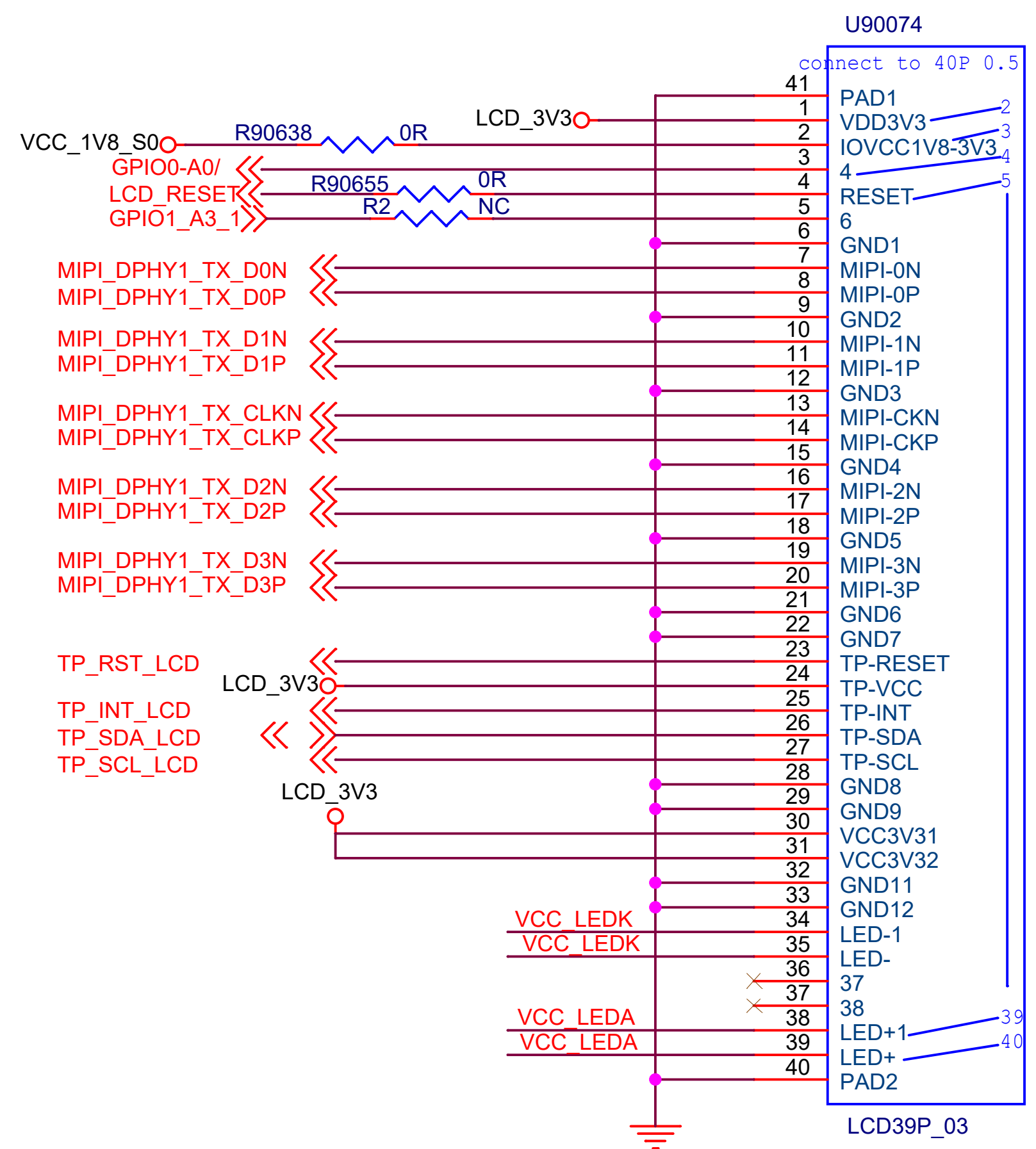
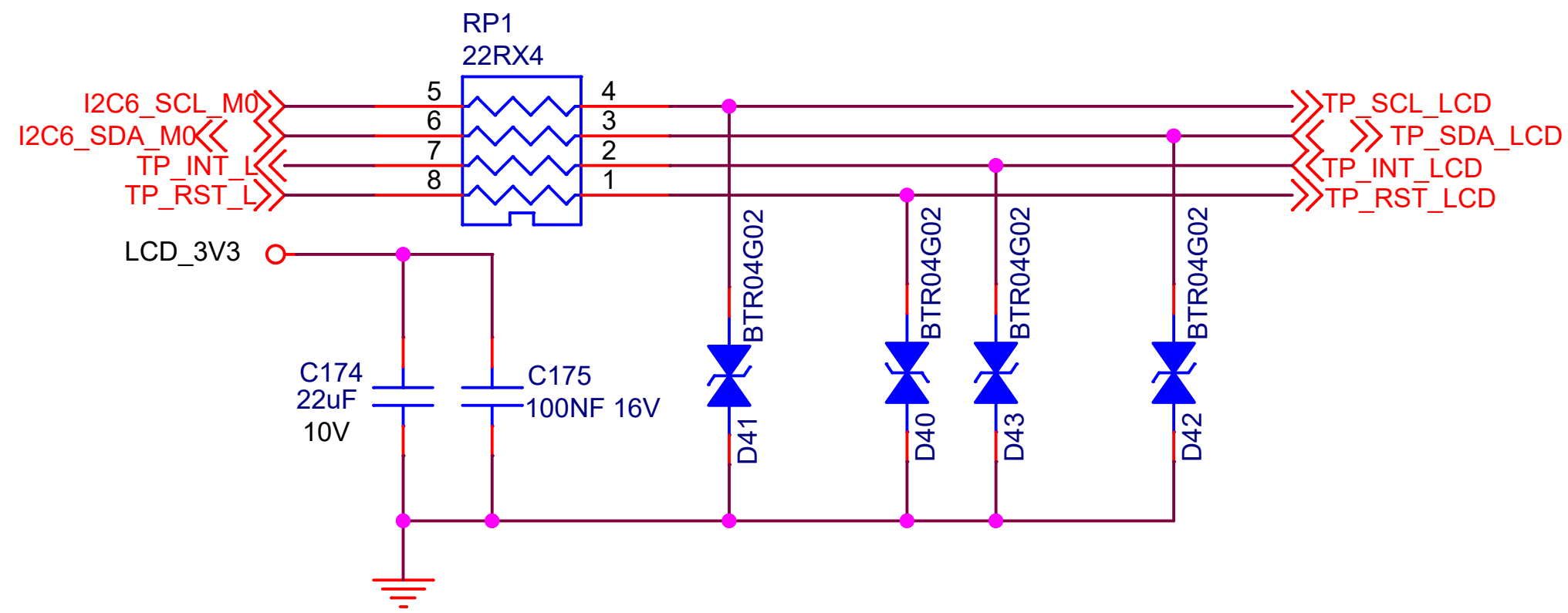
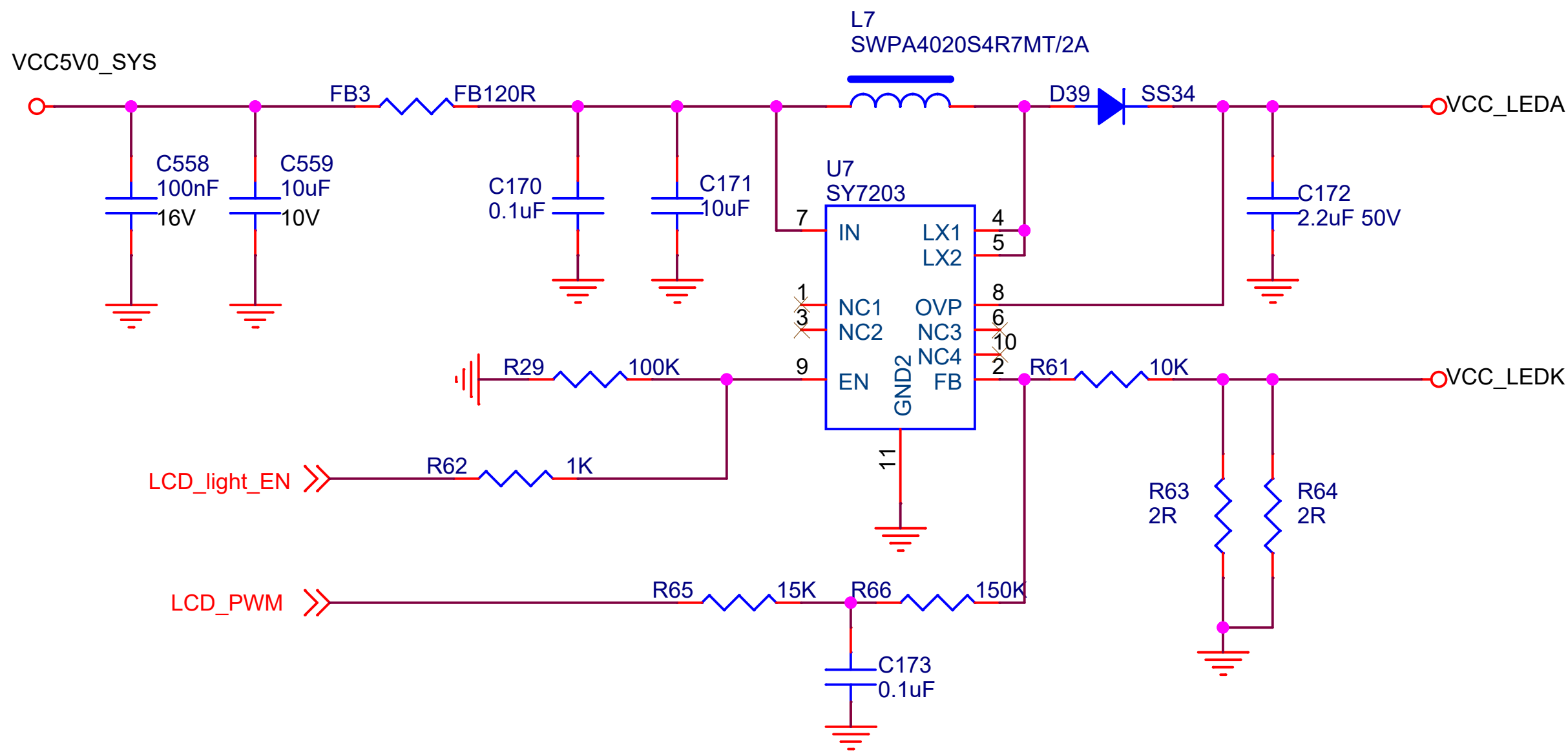




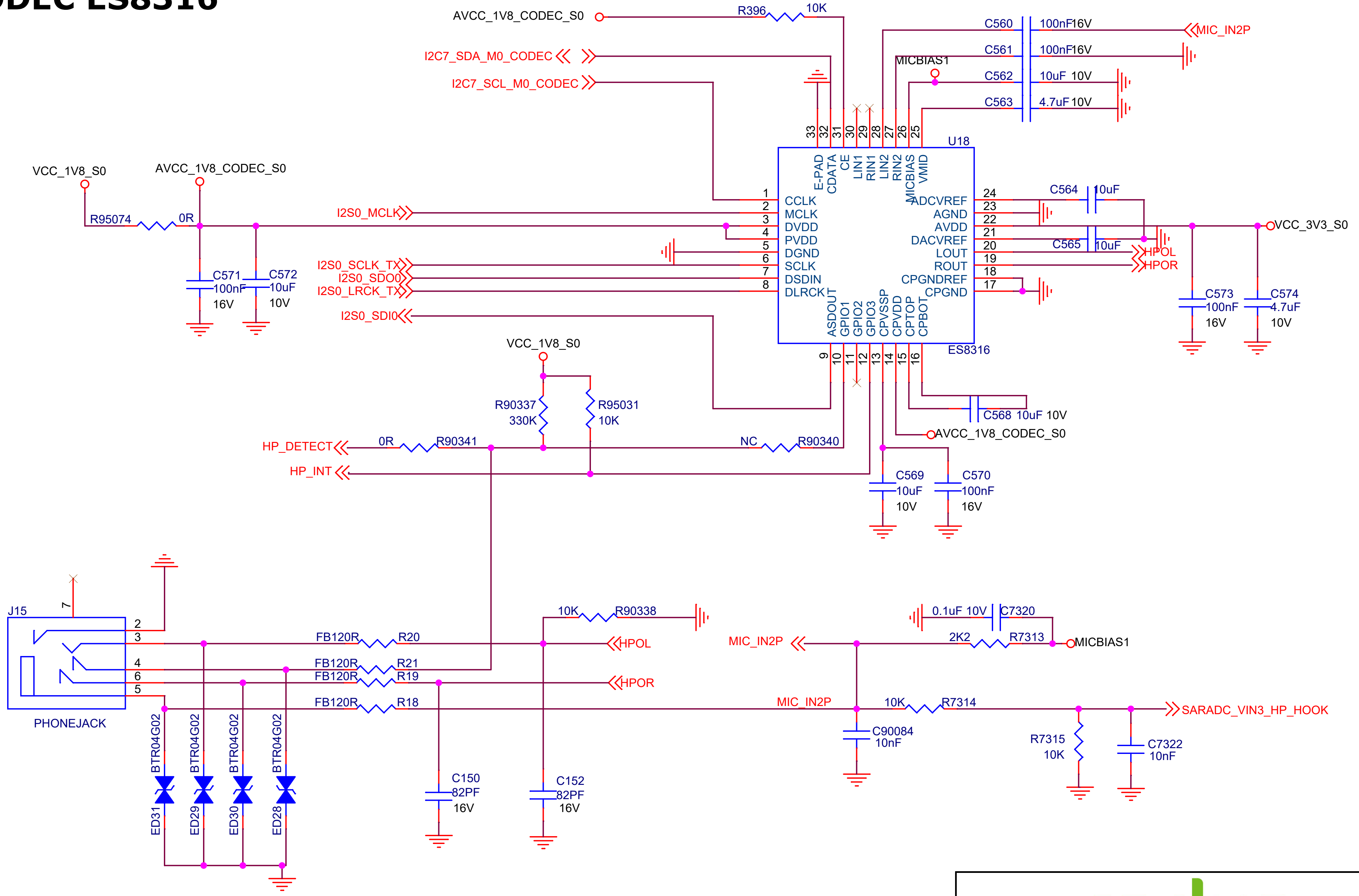


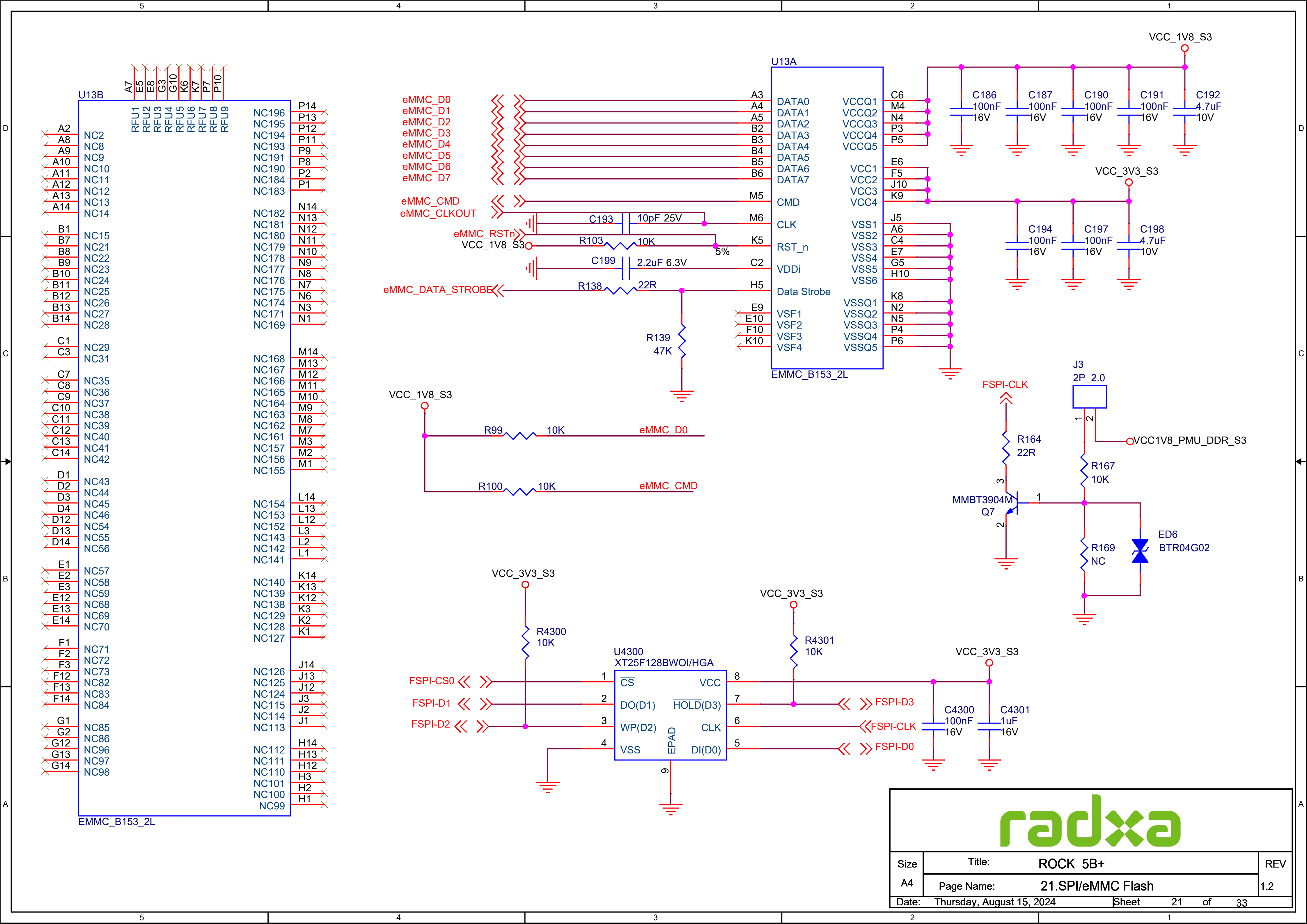




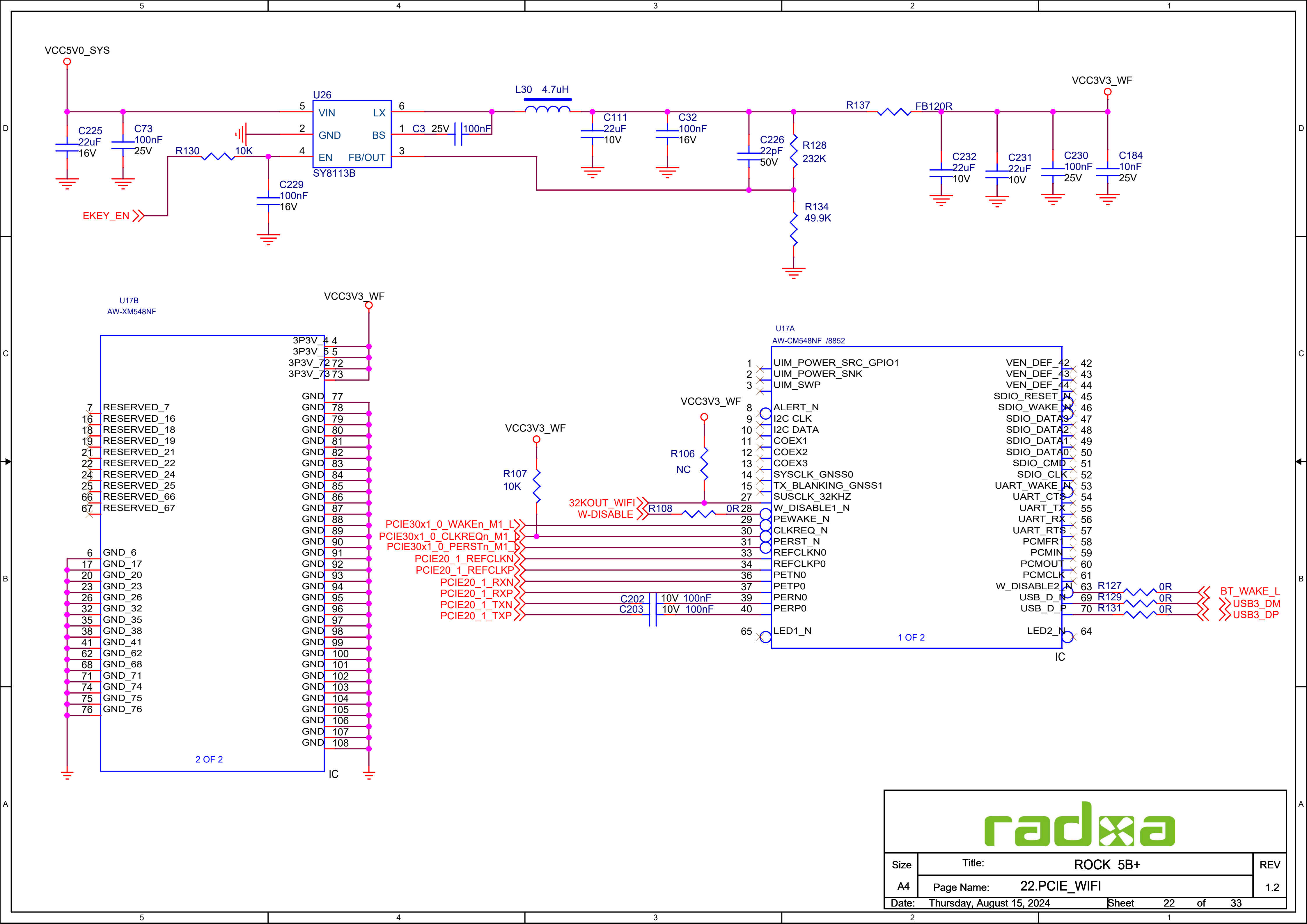


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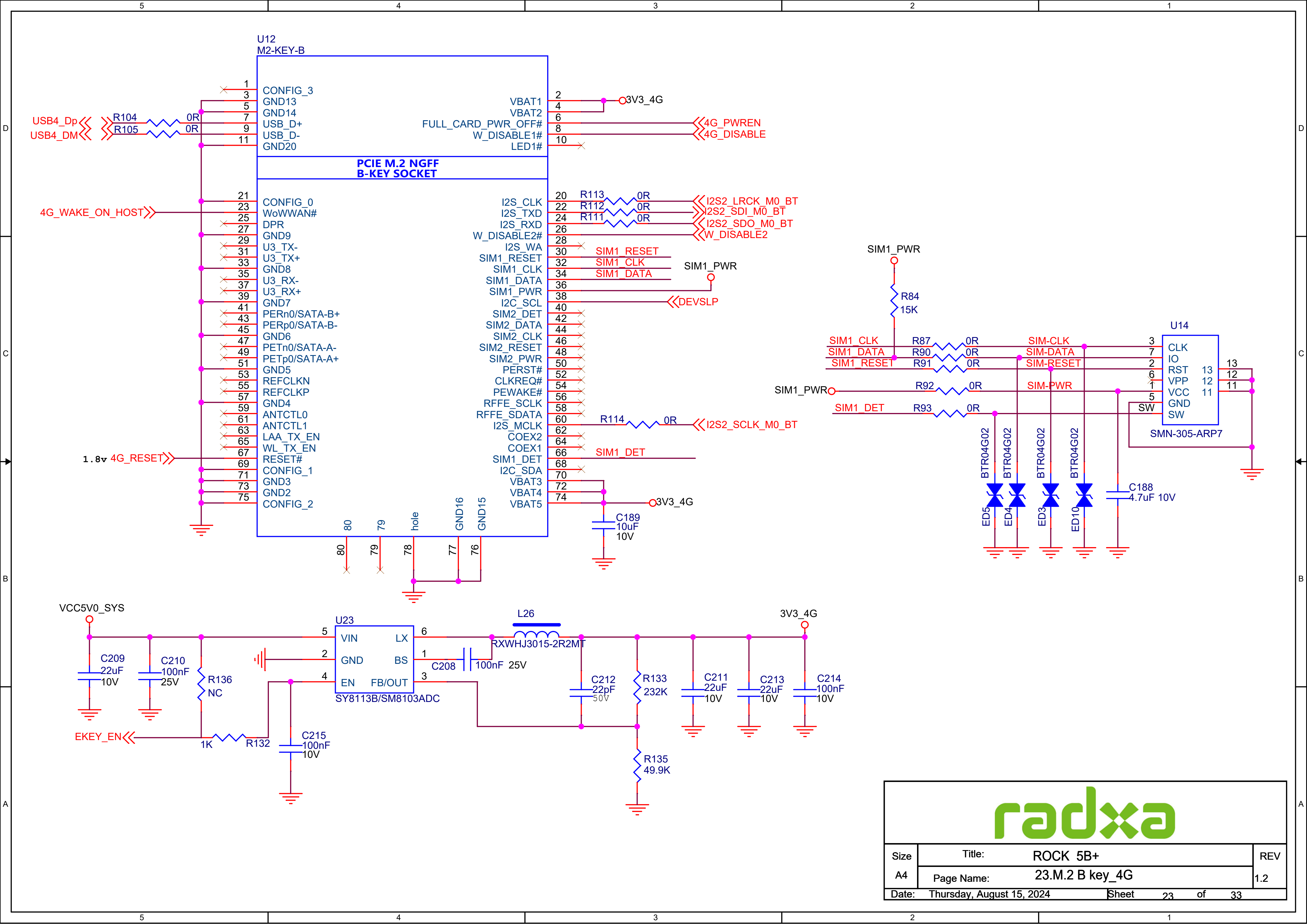




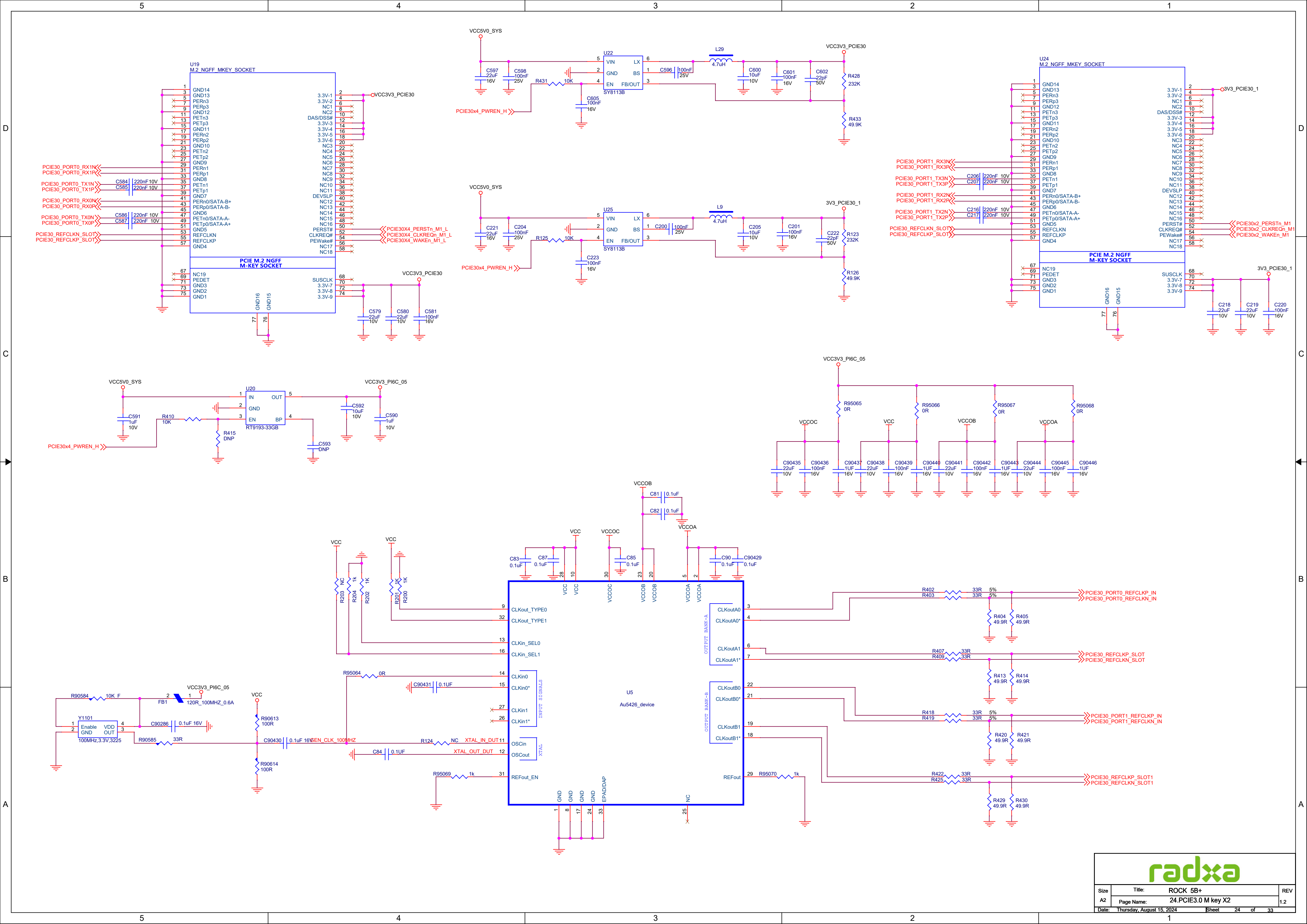
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	Page Name: 21.SPI/eMMC Flash	
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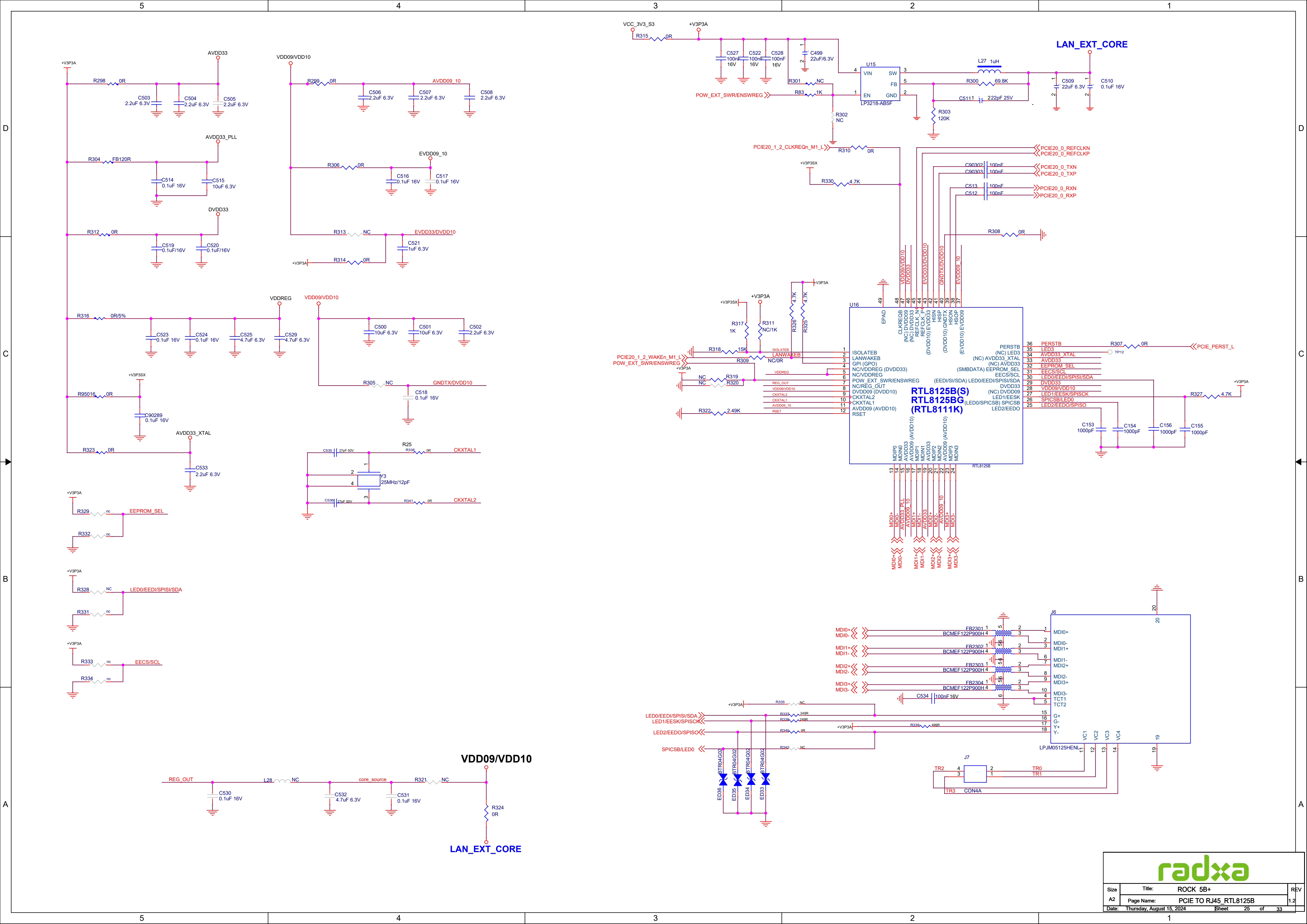


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Date:	Thursday, August 15, 2024		Sheet 22 of 33	

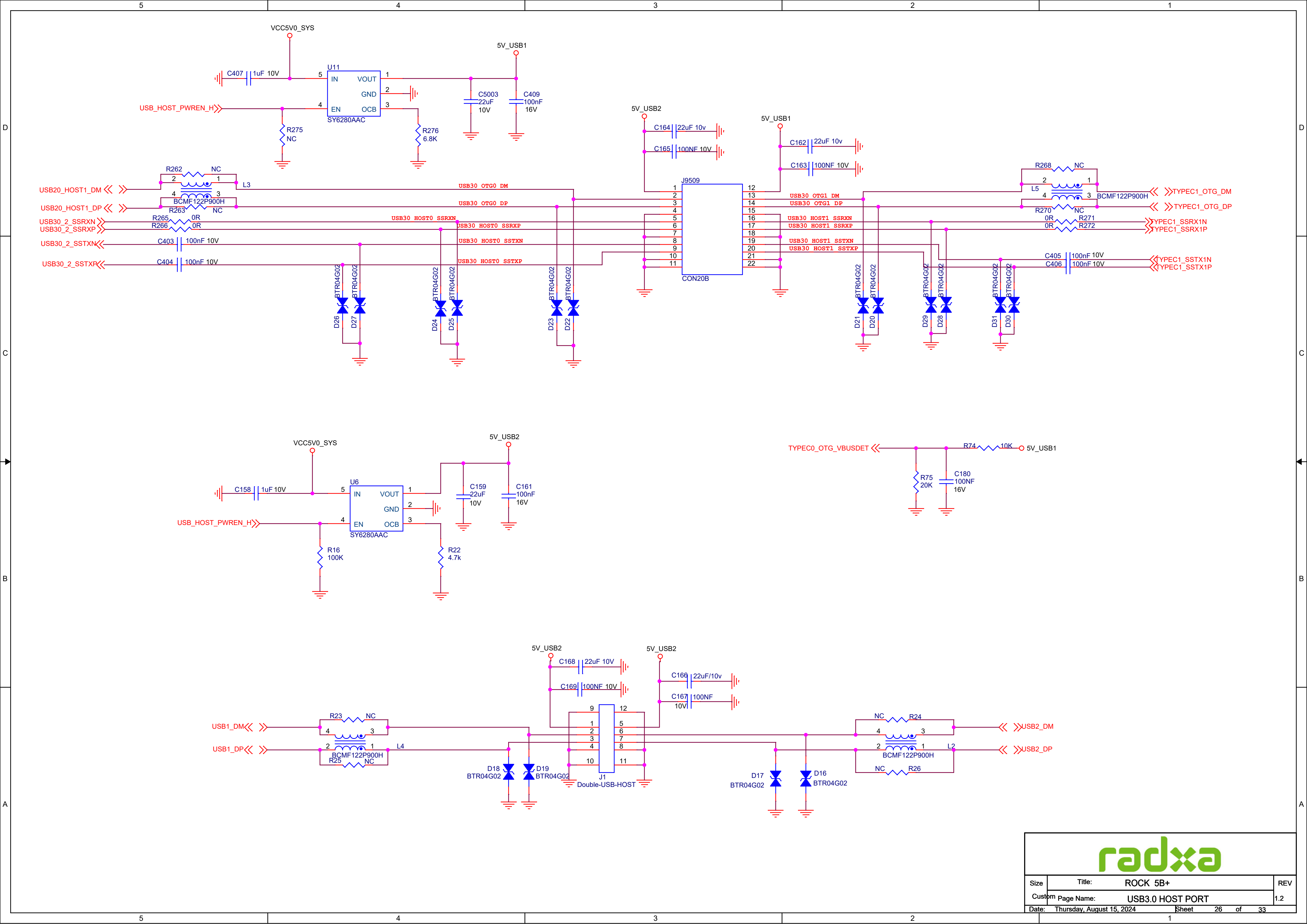


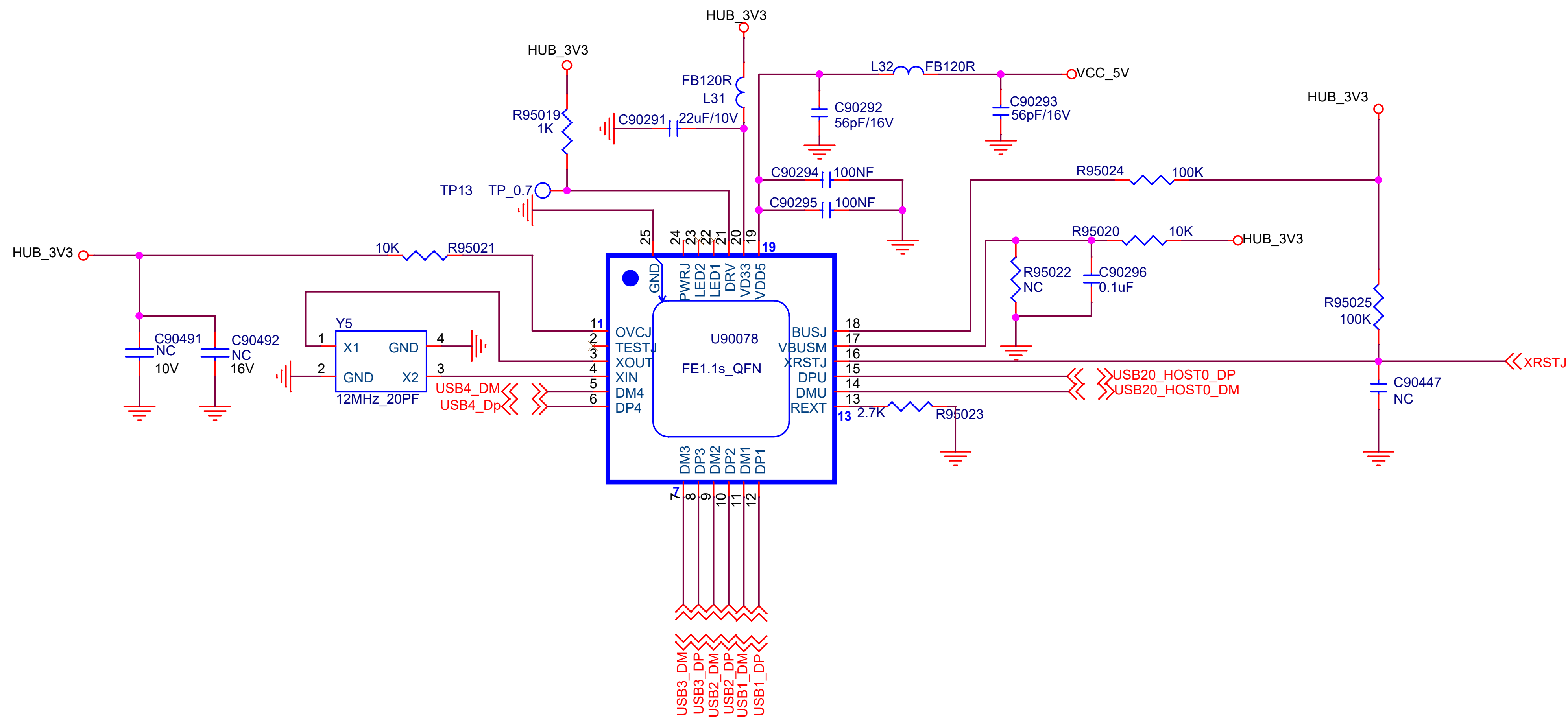
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A4	Page Name: 23.M.2 B key_4G		1.2
Date:	Thursday, August 15, 2024	Sheet	23 of 33



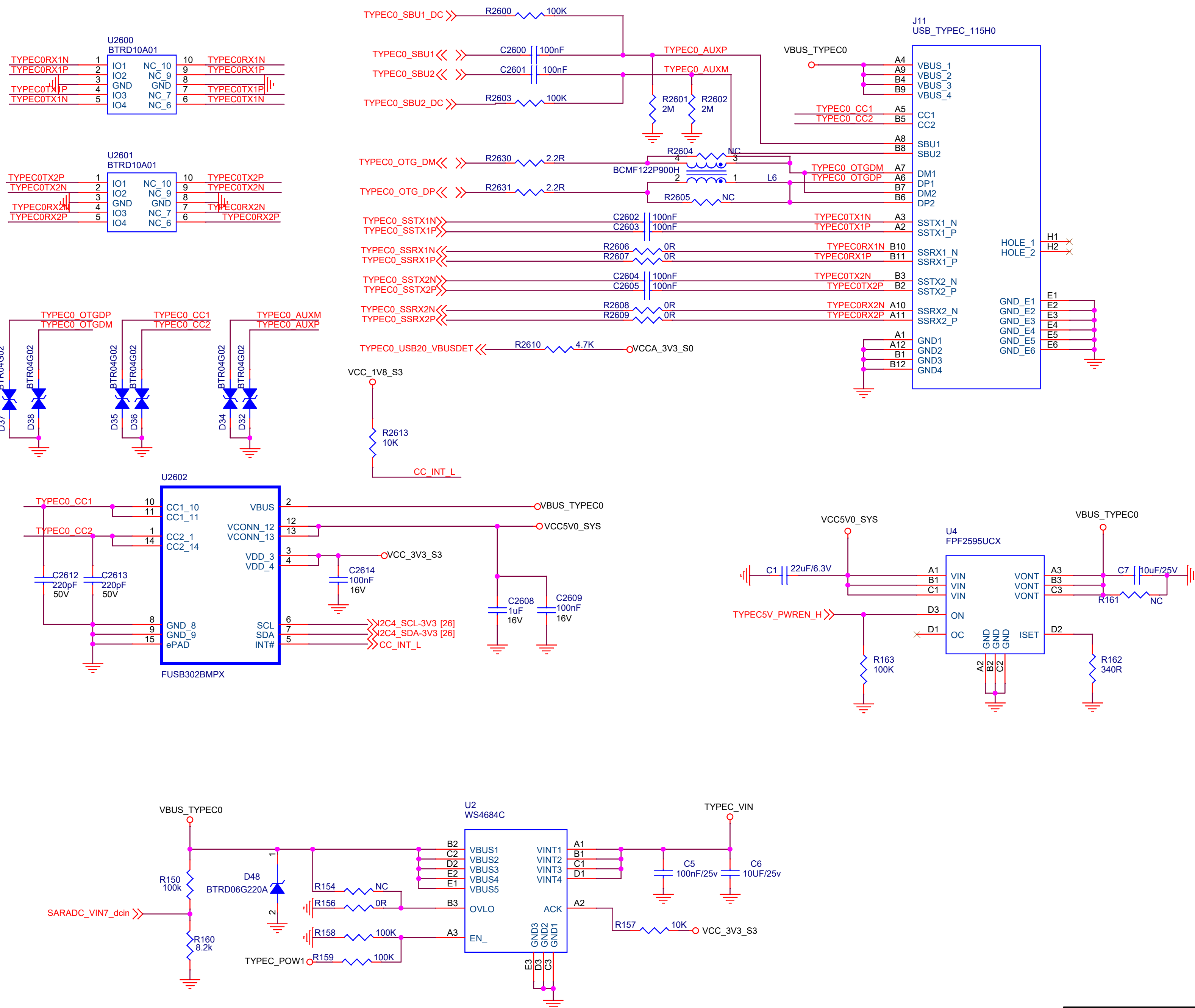


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Date: Thursday, August 15, 2024	Sheet: 25 of 33	

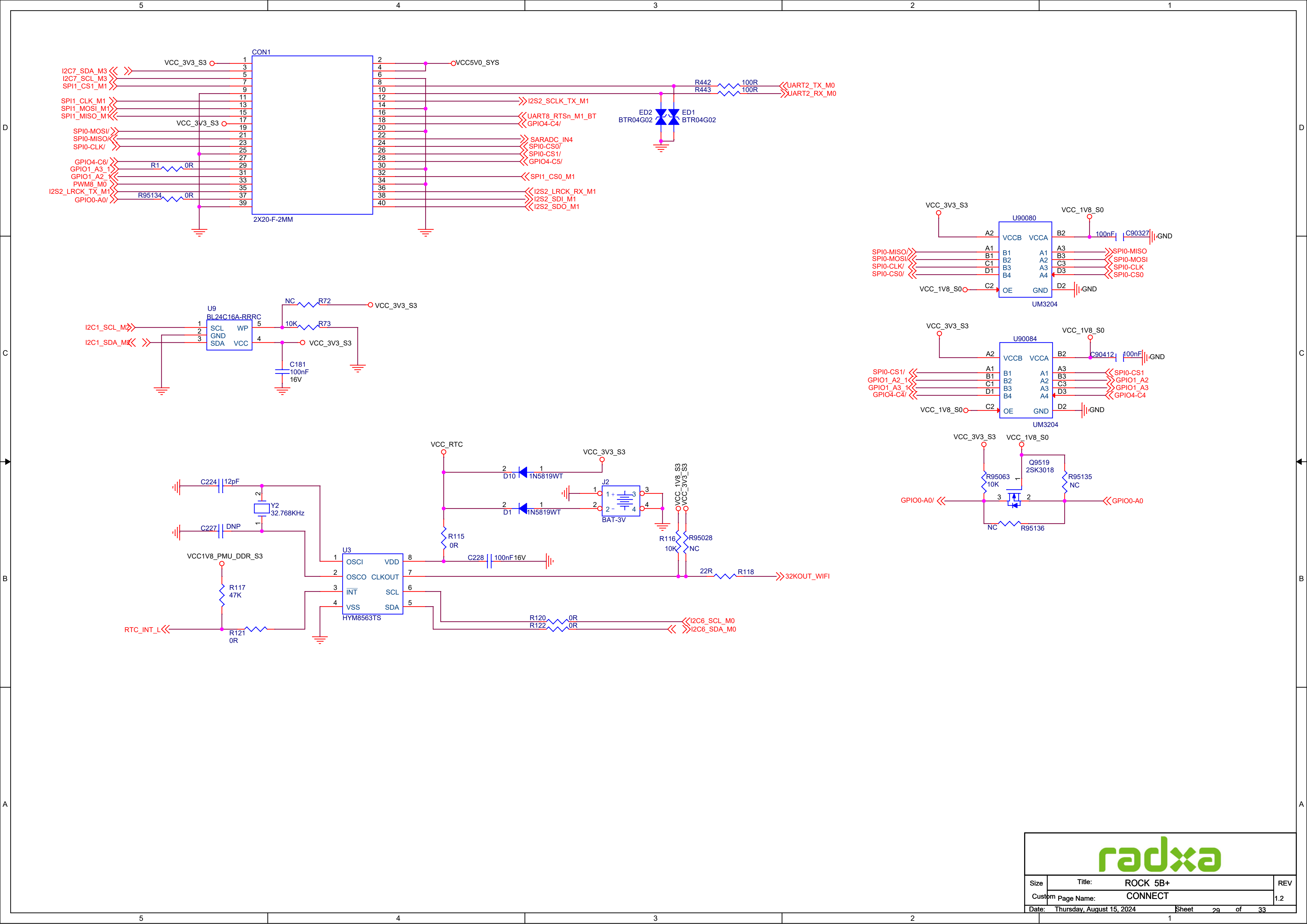


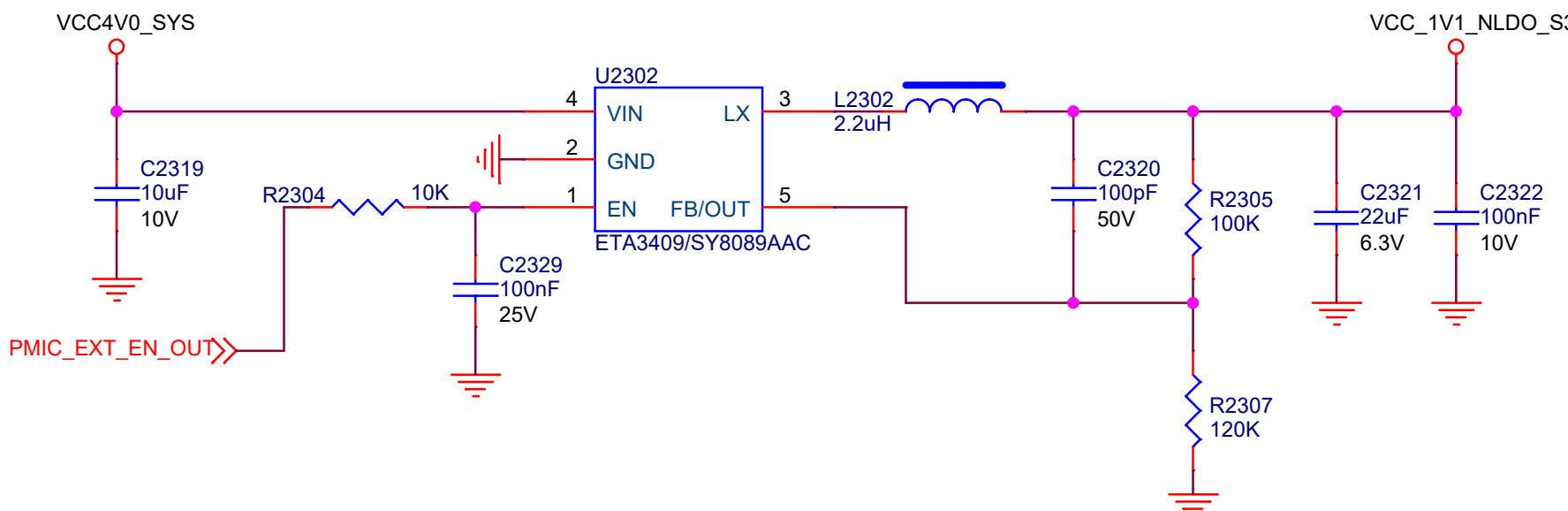
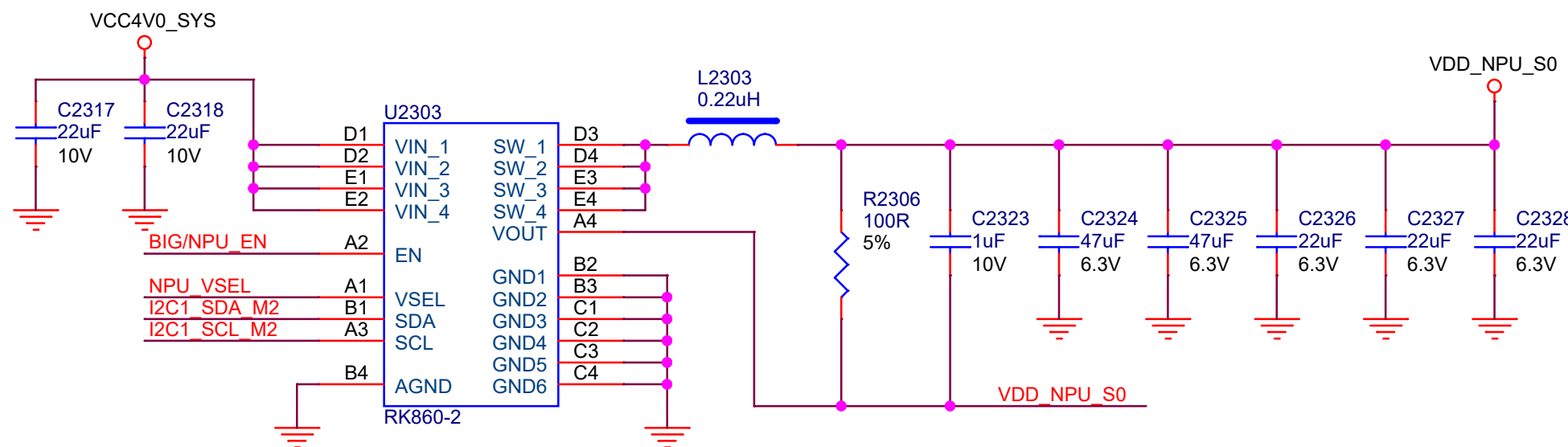
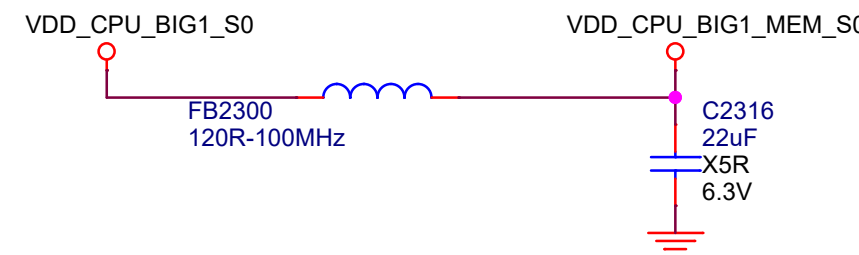
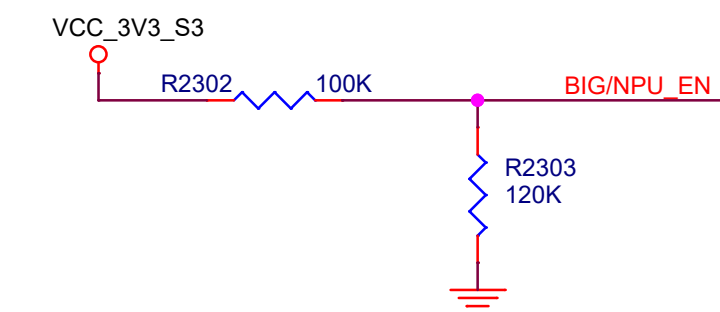
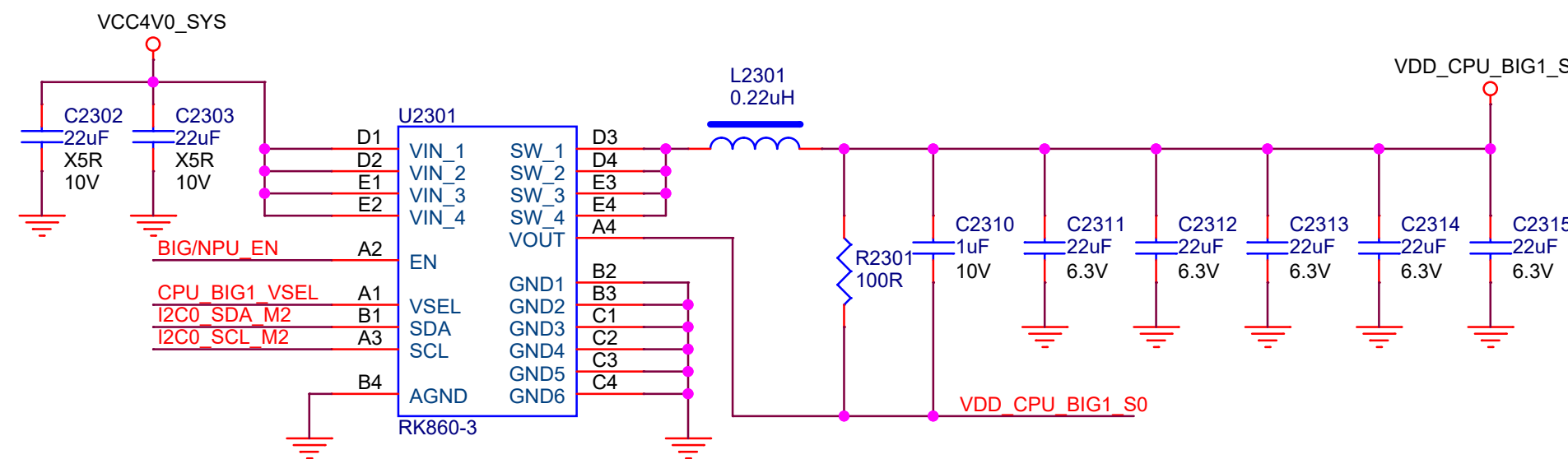
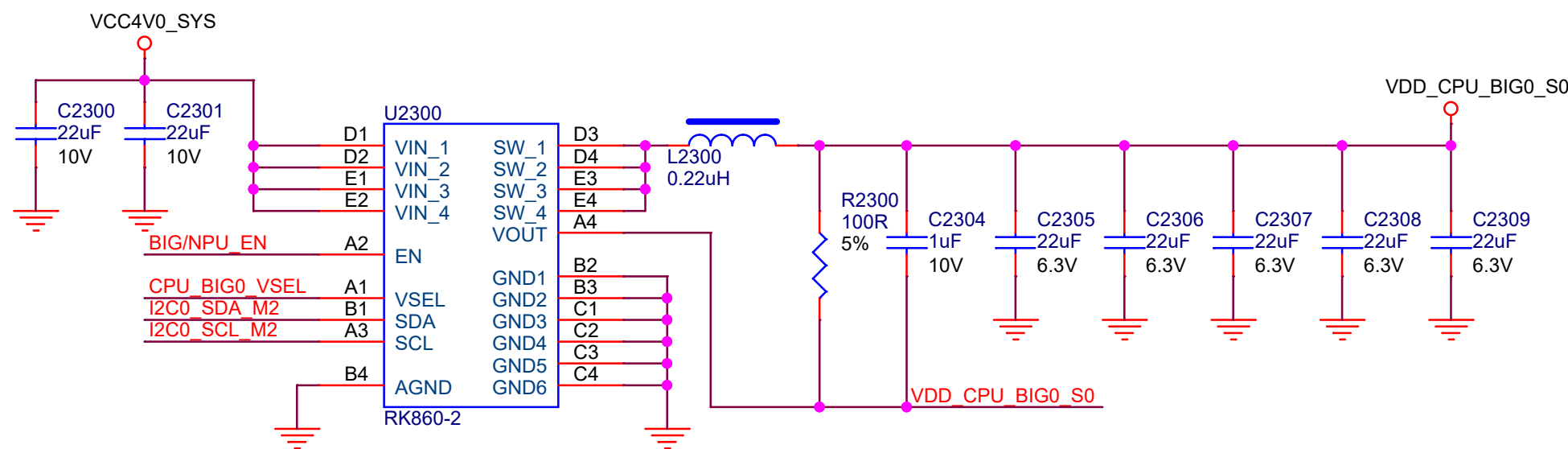


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A4	Page Name: USB2HUB	1.2
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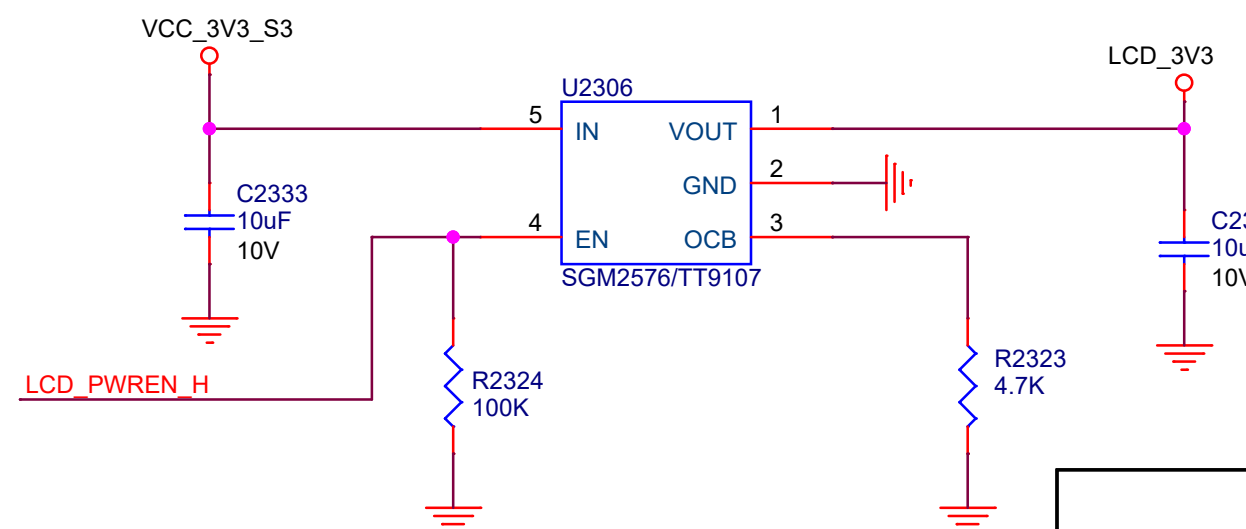
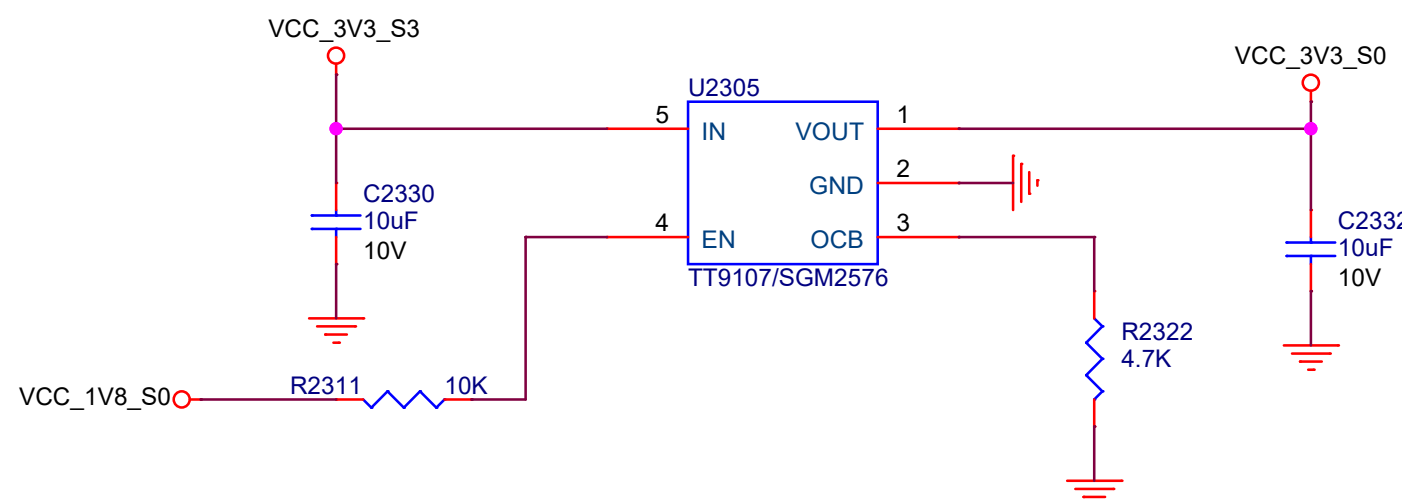
radxa





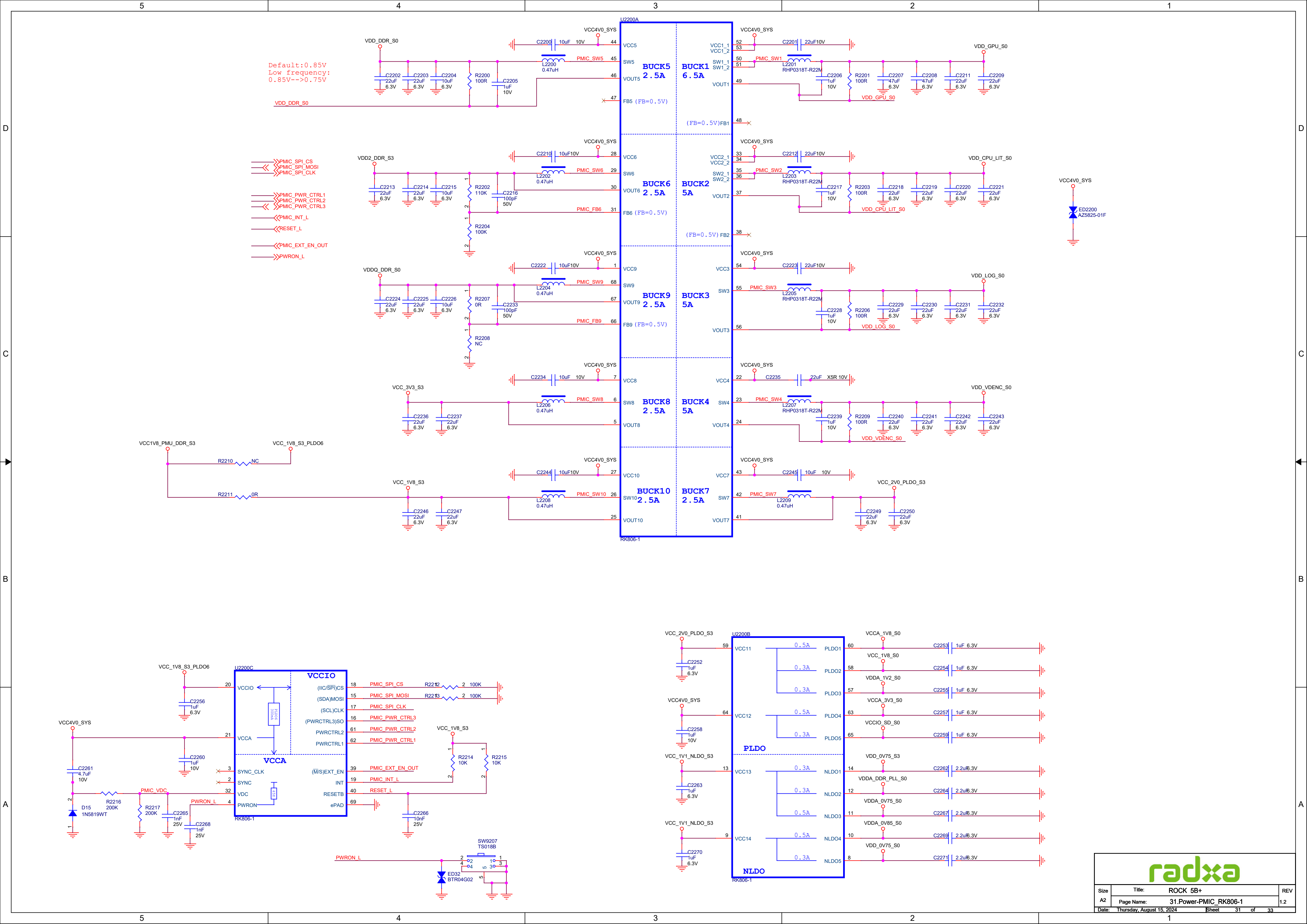
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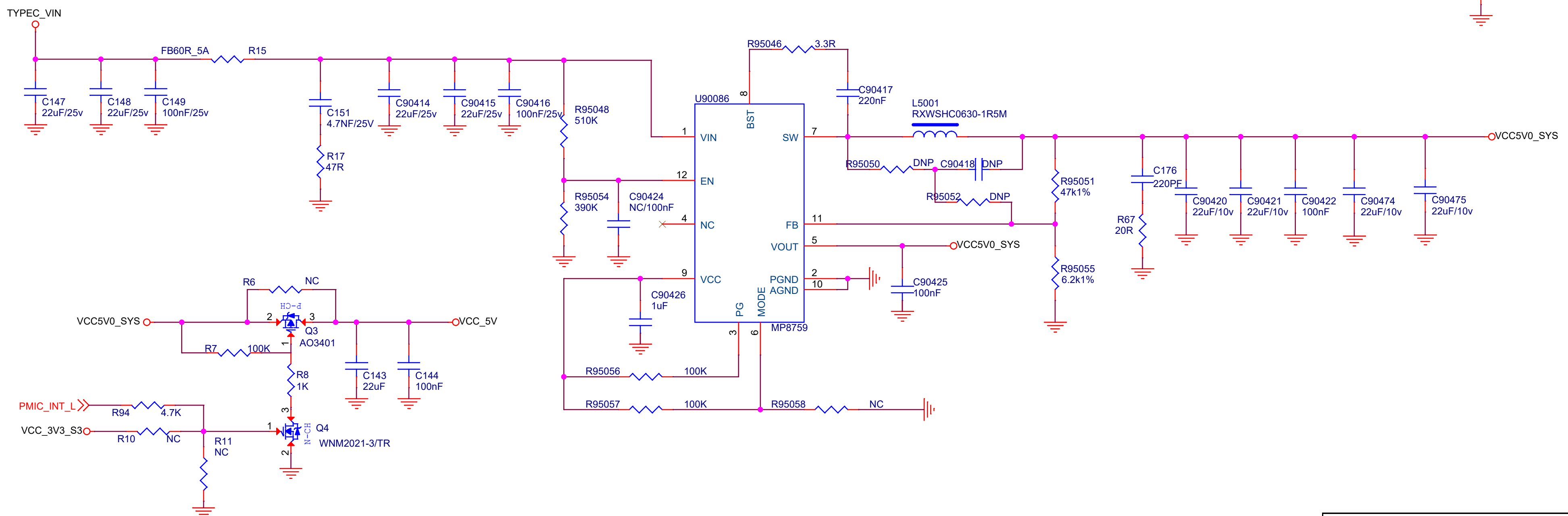
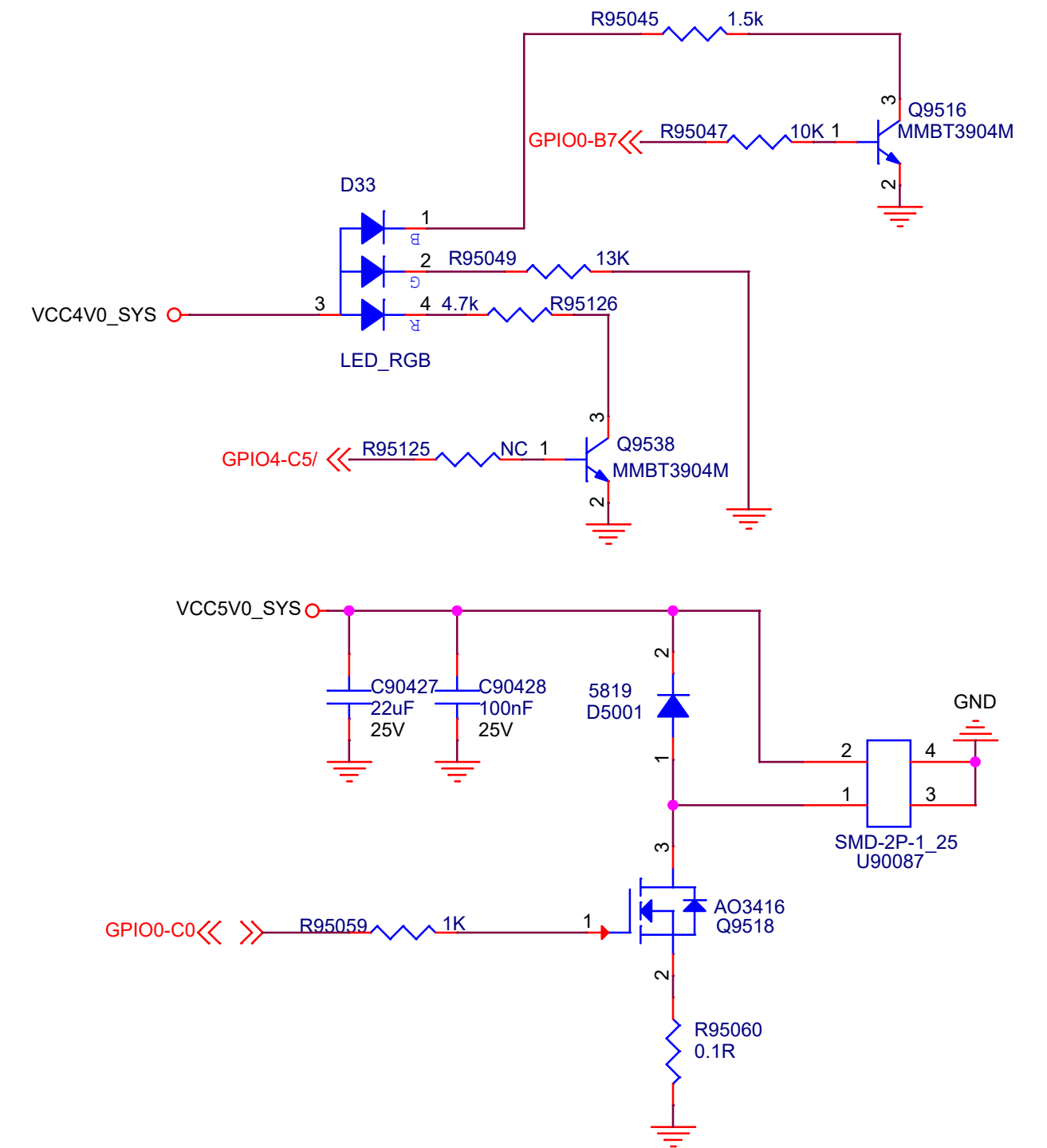
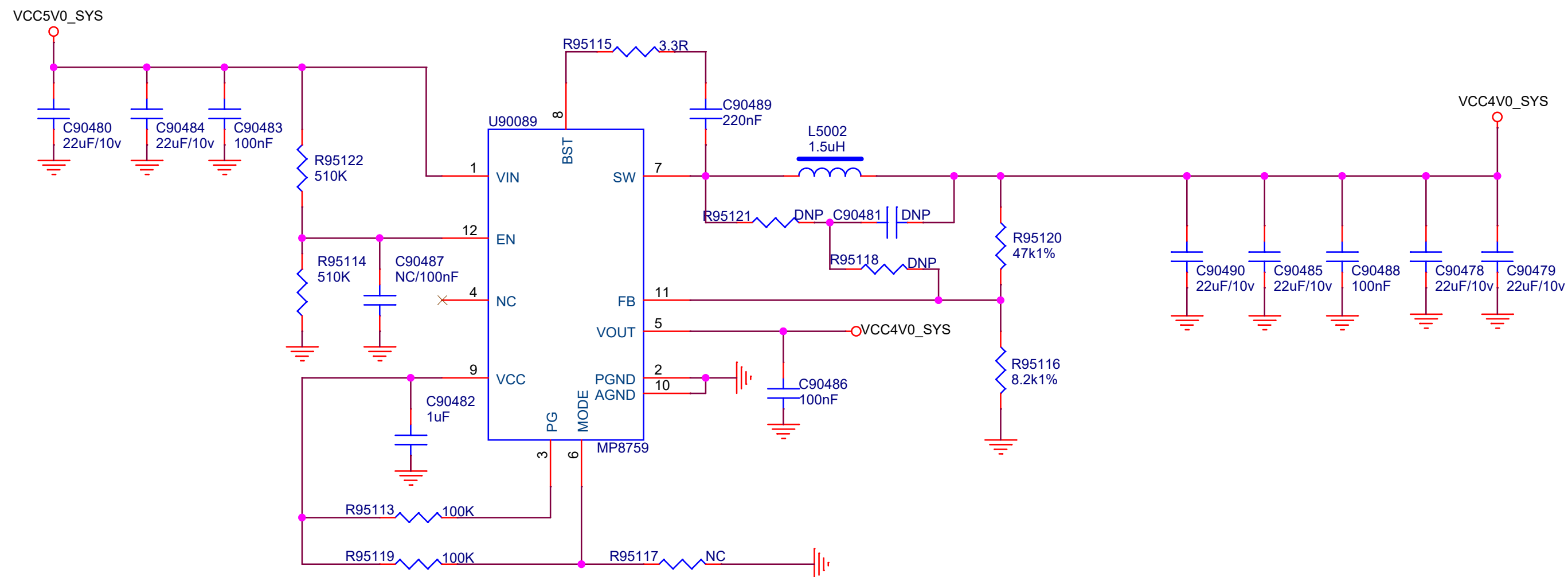
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>>>NPU_VSEL
>>>LCD_PWREN_H



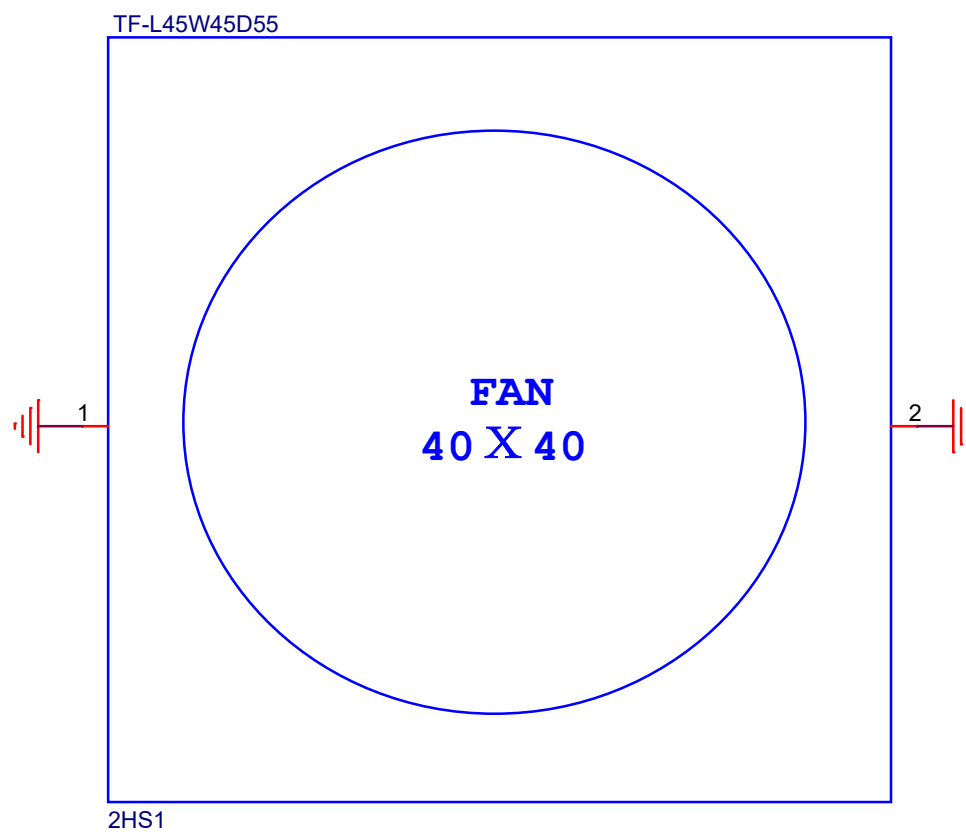
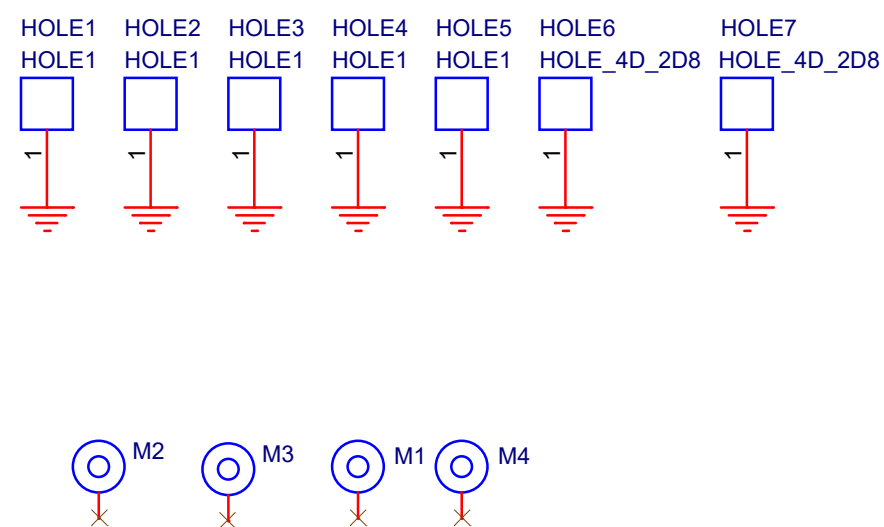
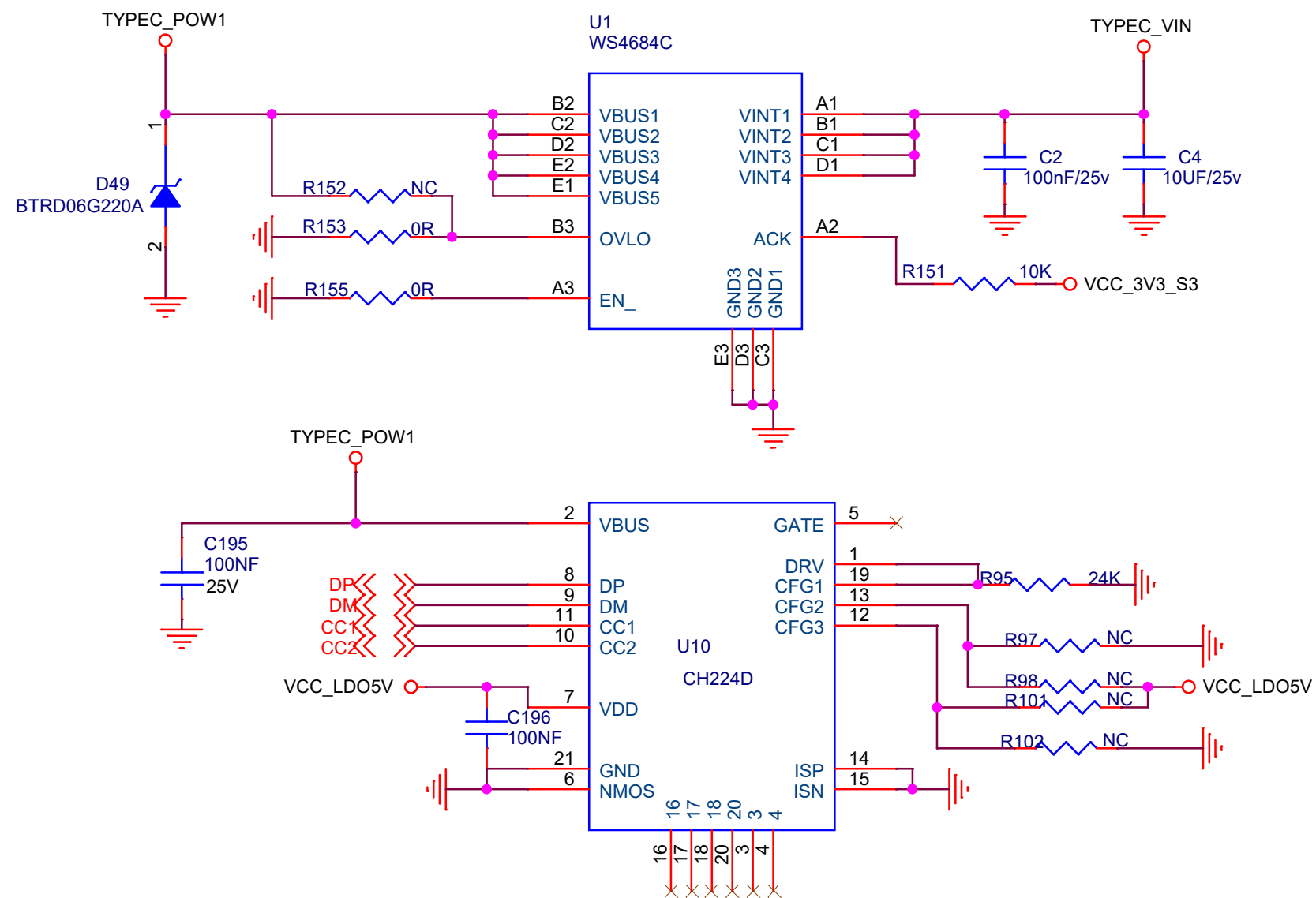
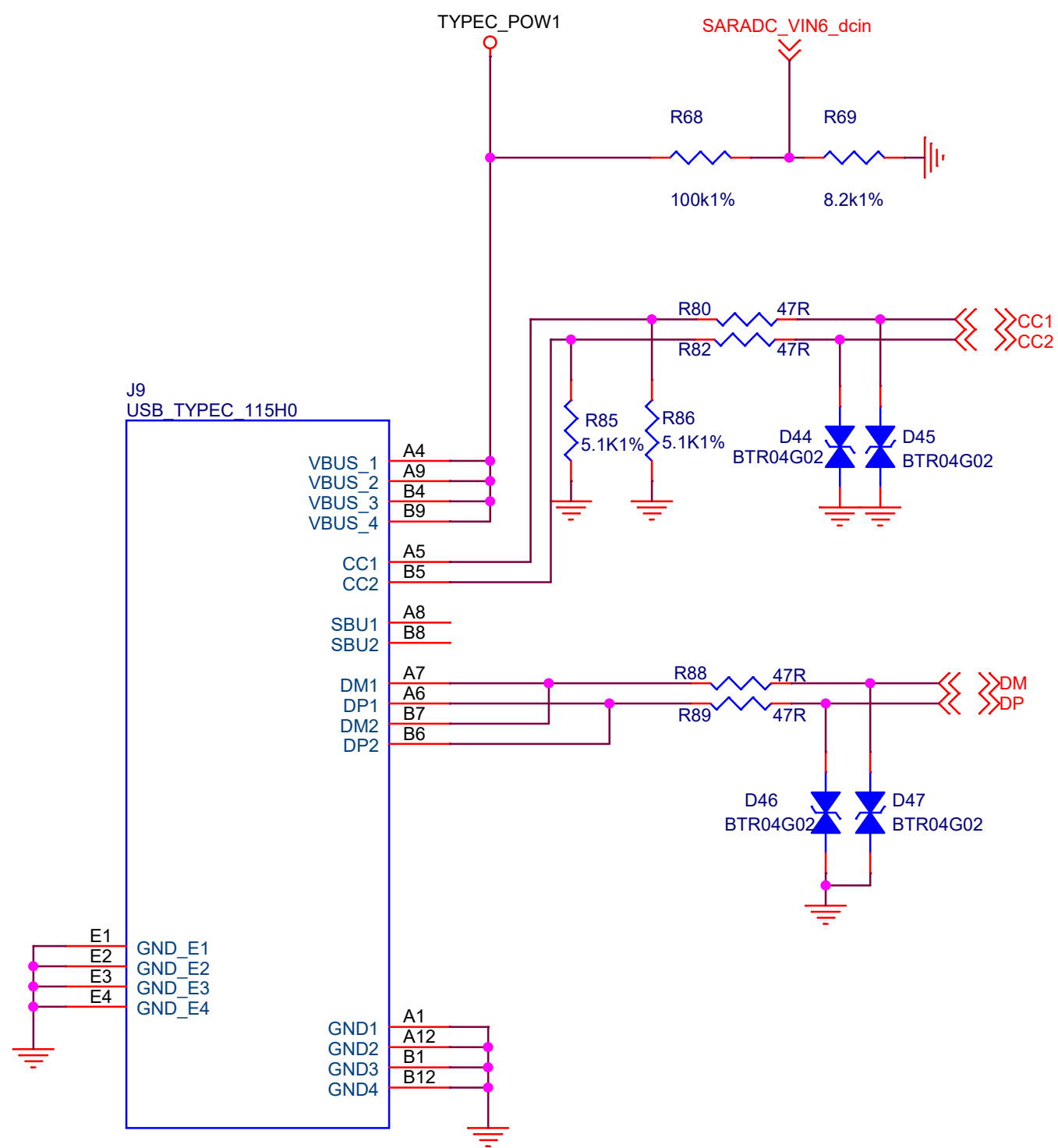
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	Page Name: 32.Power_DC 5V	
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Size	Title: ROCK 5B+	REV
CustomPage Name:	33.Power TYPEC IN	1.2
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