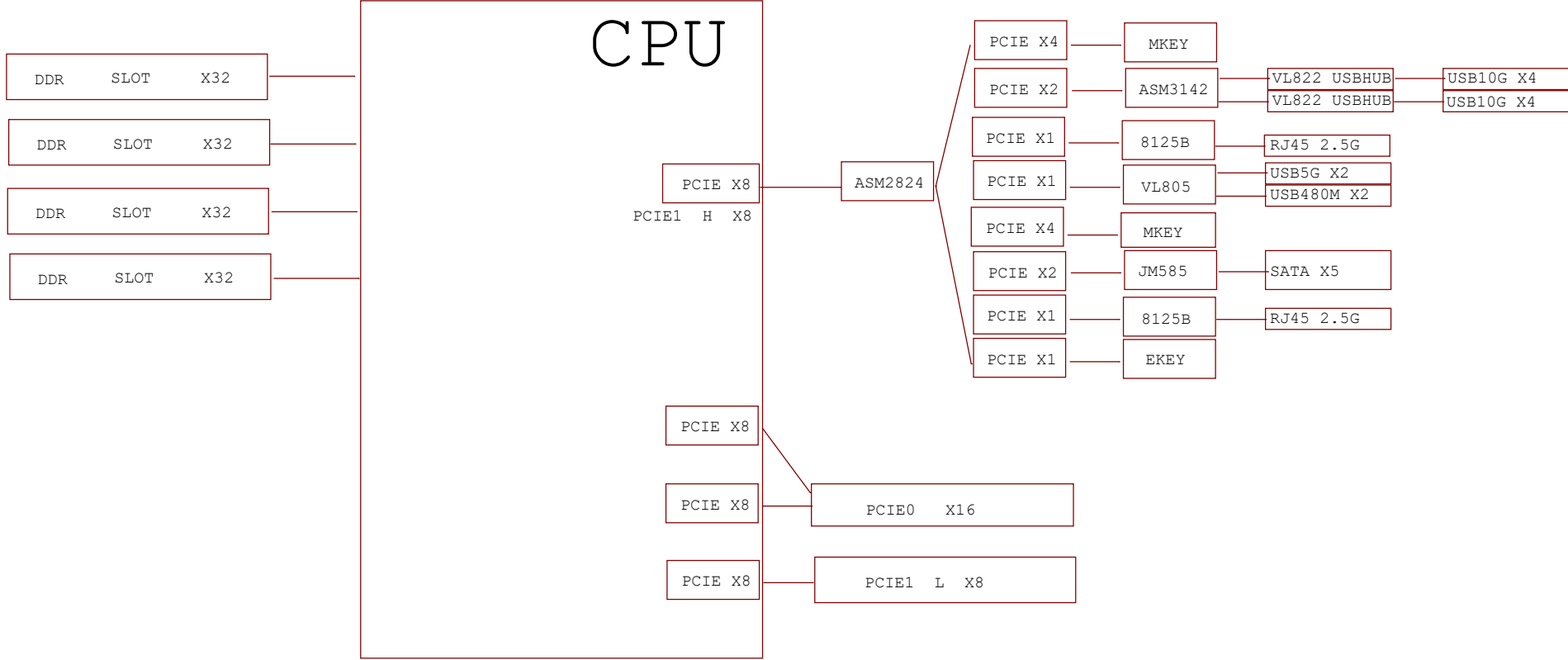


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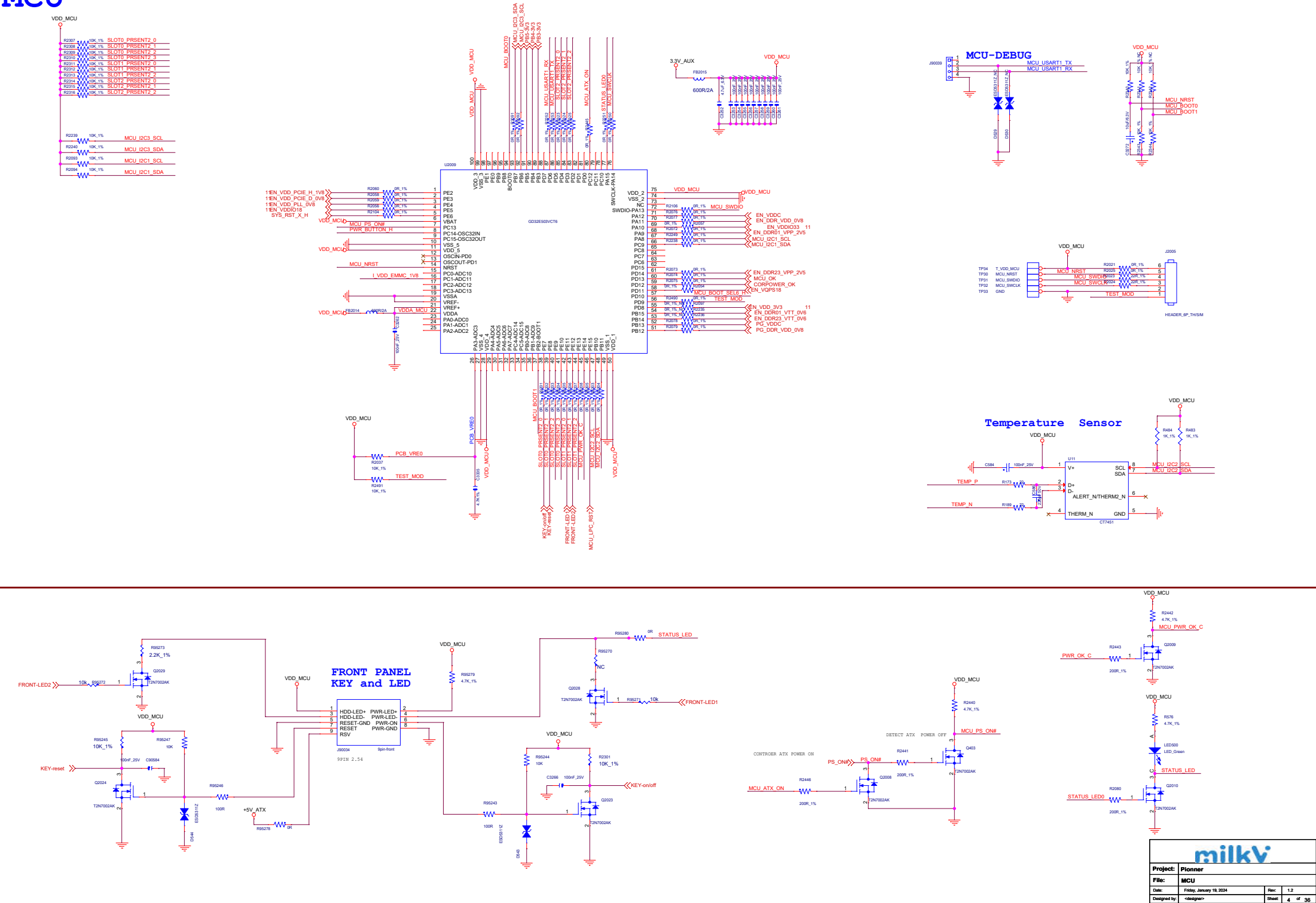
- 1.Cover
- 2.content
- 3.Block Diagram
- 4.MCU
- 5.SG2042 DDR CH0-update
- 6.SG2042 DDR CH1-update
- 7.SG2042 DDR CH2-update
- 8.SG2042 DDR CH3-update
- 9.SG2042 DDR Power
- 10.SG2042 PCIE
- 11.SG2042 EMMC
- 12.SG2042 RGMII
- 13.SG2042 MISC
- 14.SG2042 VDDC
- 15.SG2042 VSS
- 16.SG2042 PCIE POWER
- 17.Pcie CLK Buffer
- 18.POWER_MISC
- 19.POWER_VDDC
- 20.POWER_VTT/VPP
- 21.POWER_VDDQ
- 22.PCIE_X1-EKEY
- 23.ASM2824 POWER/GND
- 24.ASM2824- POWER
- 25.ASM2824 PCIE
- 26.ASM2824_config
- 27.PCIE_X4-MKEY2
- 28.PCIE_X4 -MKEY1
- 29.PCIE_X2 -ASM3142
- 30.PCIE_X2 JMB585
- 31.PCIE_X1_RTL8125B_1
- 32.PCIE_X1_RTL8125B_2
- 33.PCIE_X1-VL805
- 34.VL822_10G-USBx4_B
- 35.VL822_10G-USBx4_A
- 36.MACH

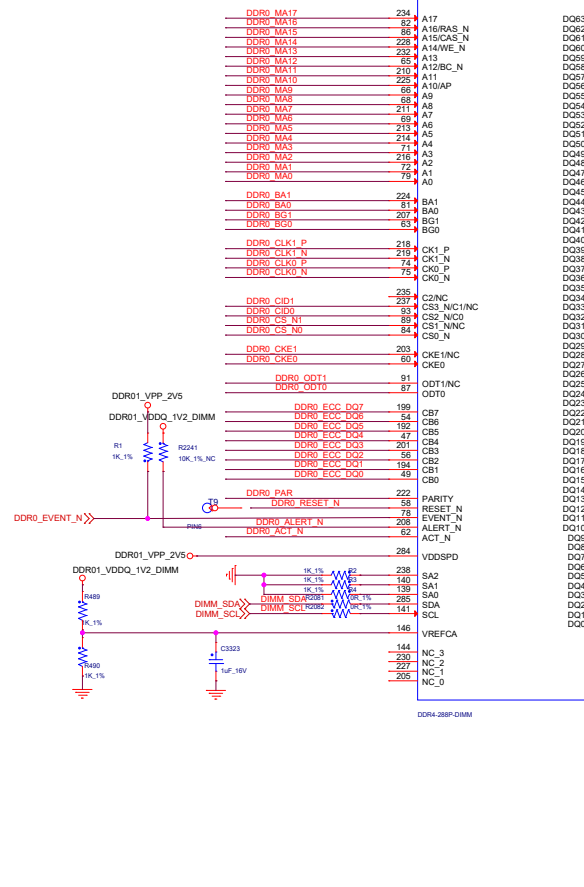
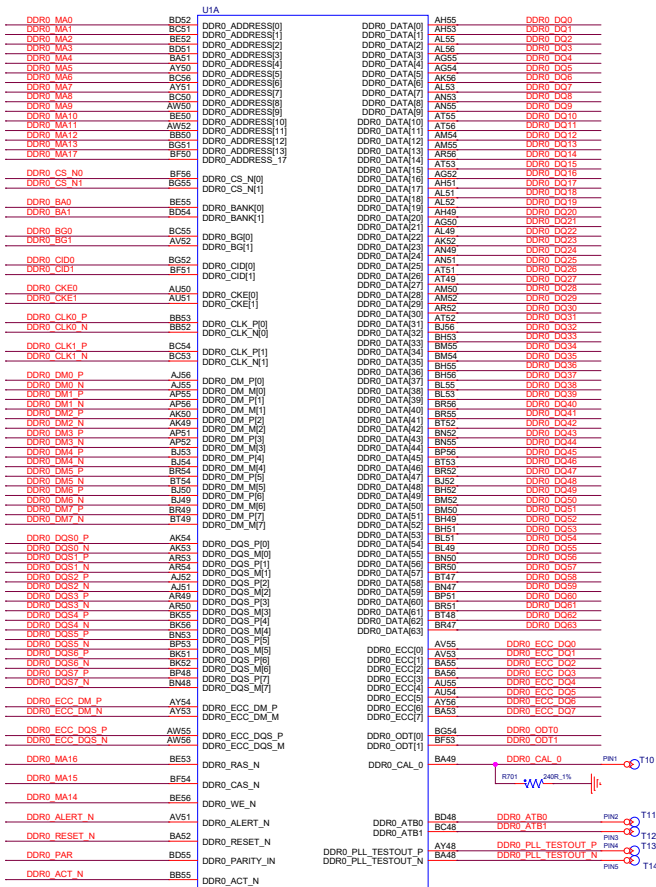


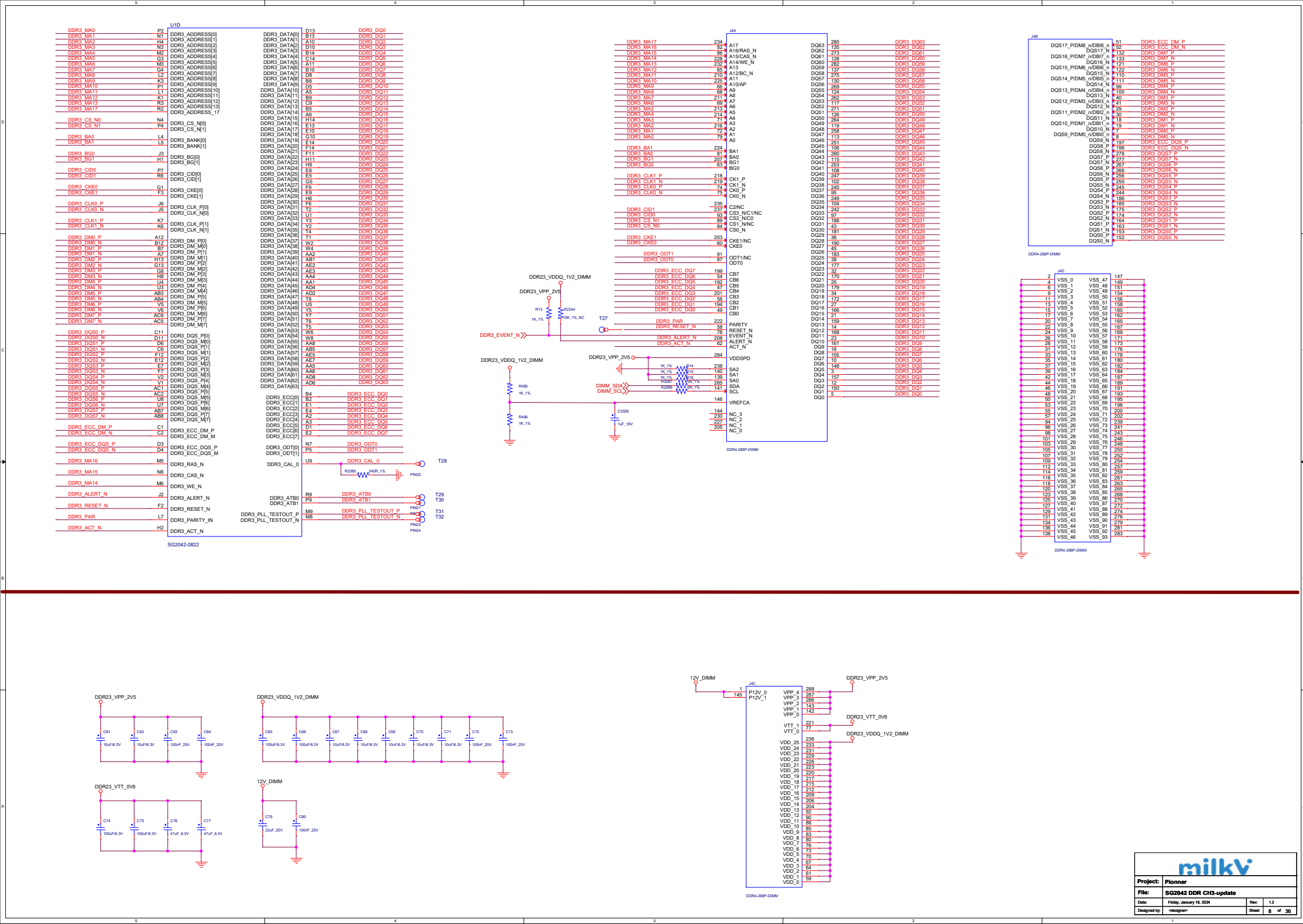
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File:	content		
Date:	Friday, January 19, 2024	Rev:	1.2
Designed by:	<designer>	Sheet:	2 of 36

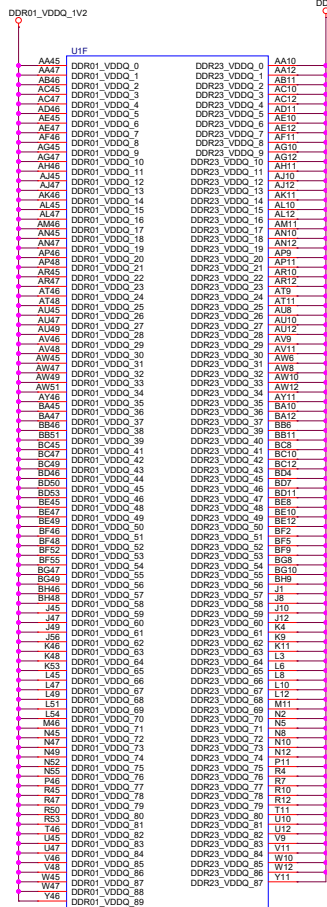


MCU

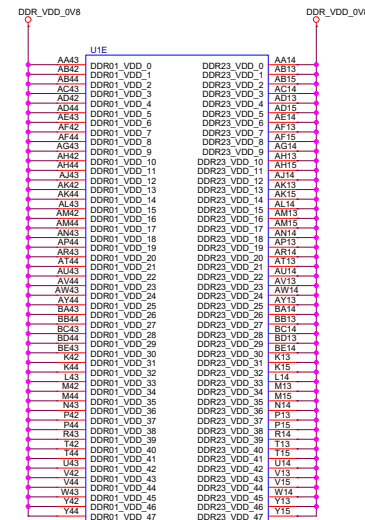




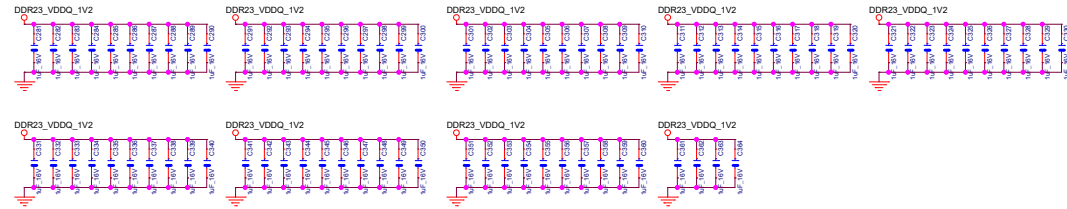
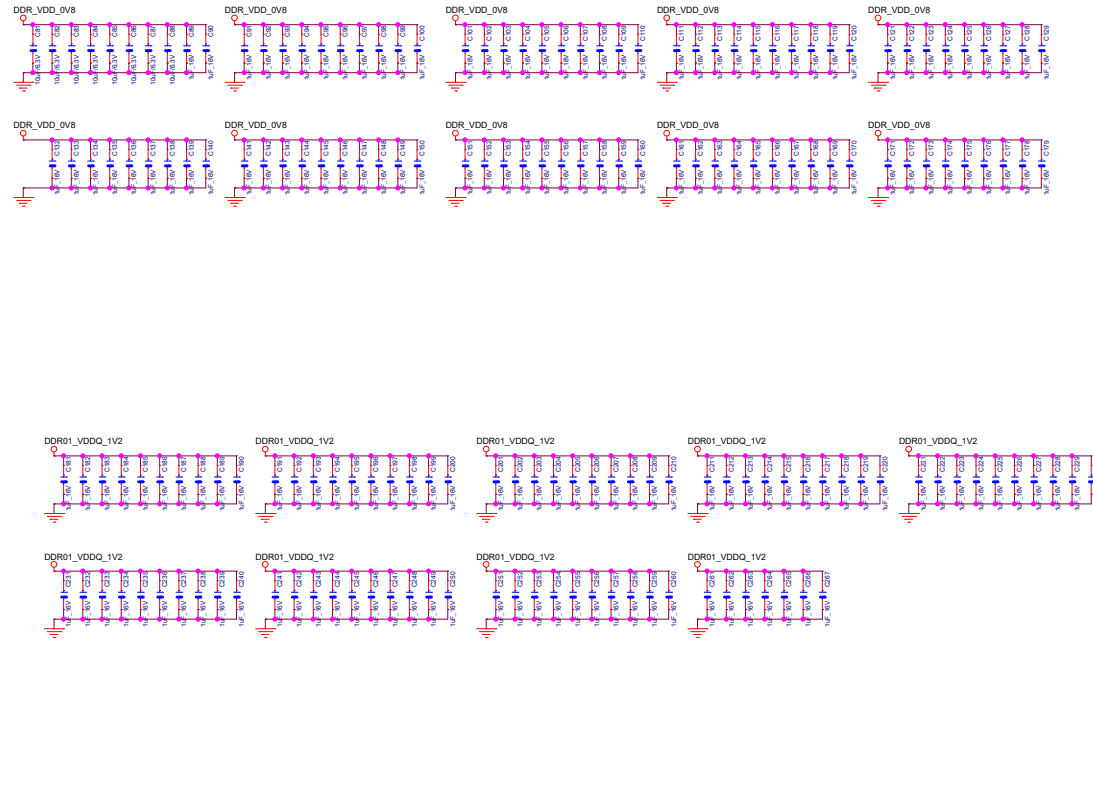


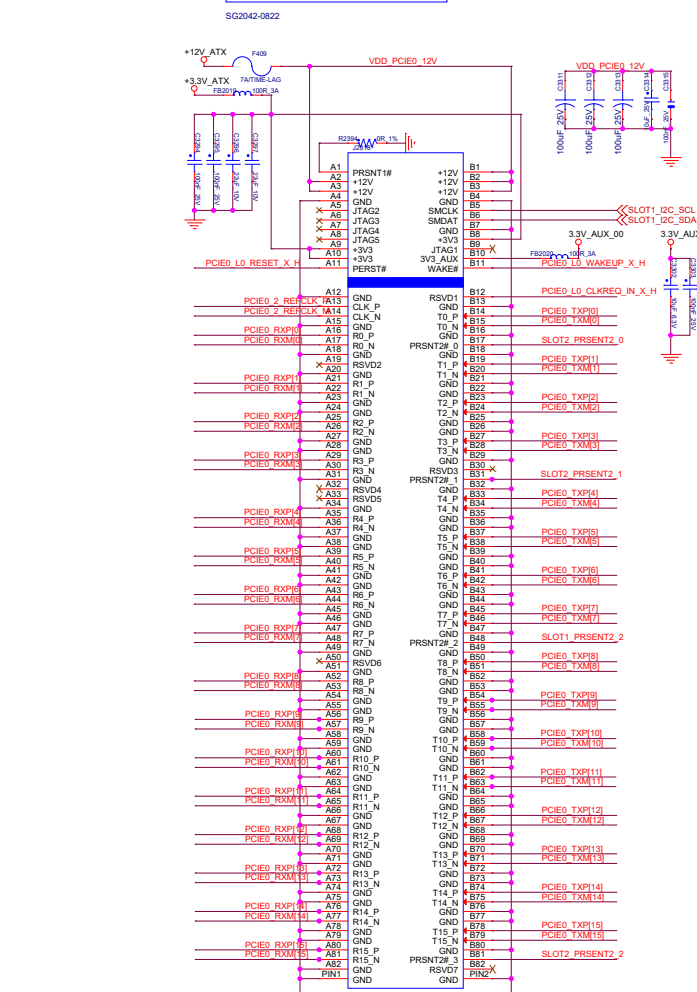
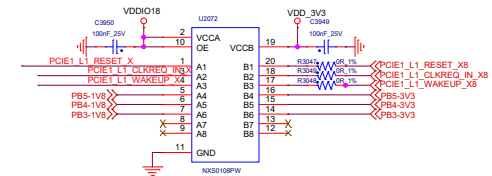
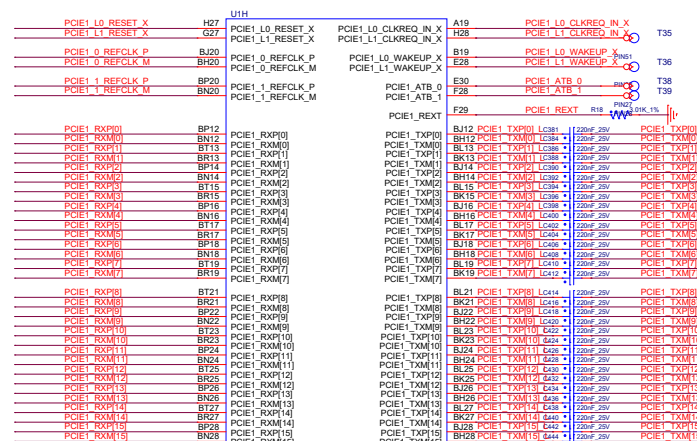


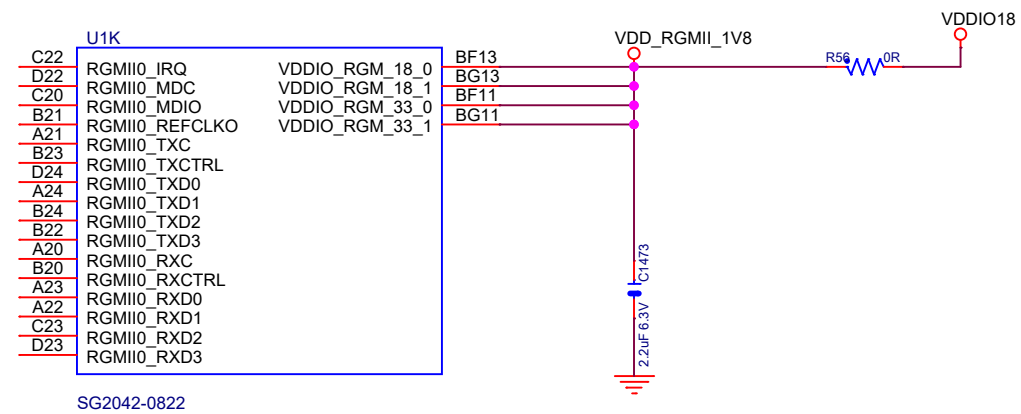
SG2042-0822



SG2042-0822







Project: Pionner			
File: SG2042 RGMII			
Date:	Friday, January 19, 2024	Rev:	1.2
Designed by:	<designer>	Sheet:	12 of 36

BOOT-SELECT:1010 0000

MODE-SEL:100

JTAG1

JTAG2

TYPEC

USB TO UART1

FAN2 Control

CPU FAN

RTC

I2C Address:68h (1101 000b)

Temperature Sensor

UART

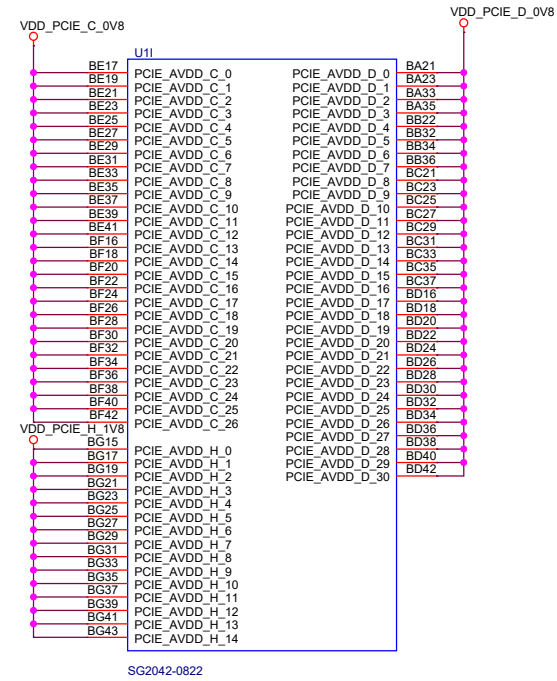
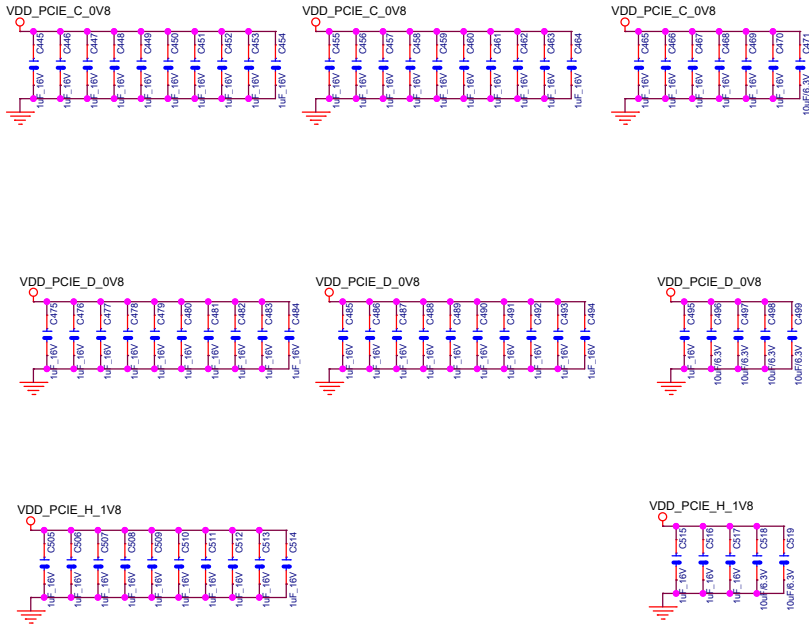
PCIE-I2C

I2C

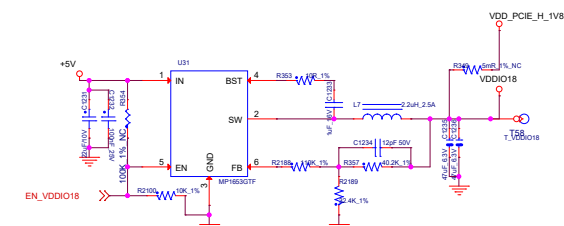
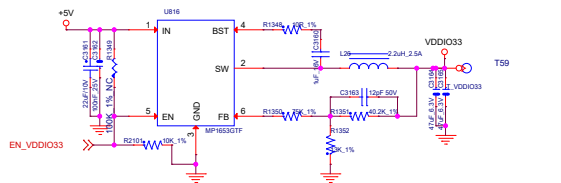
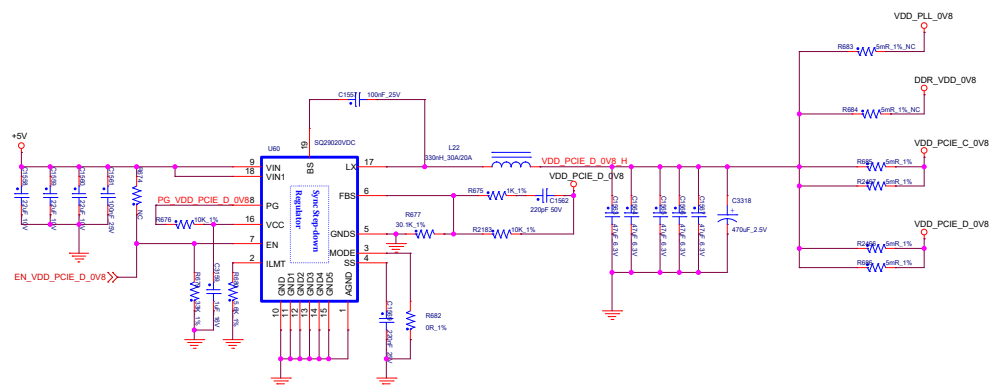
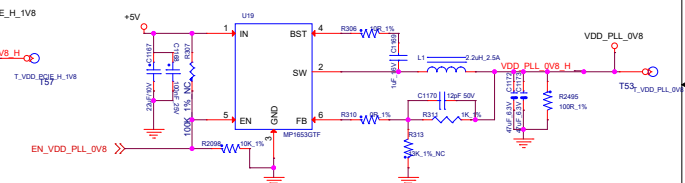
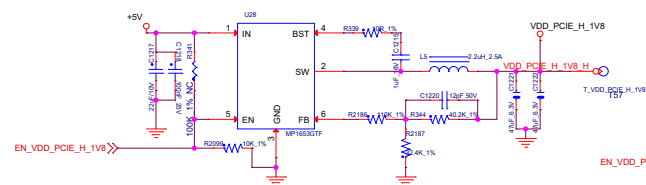
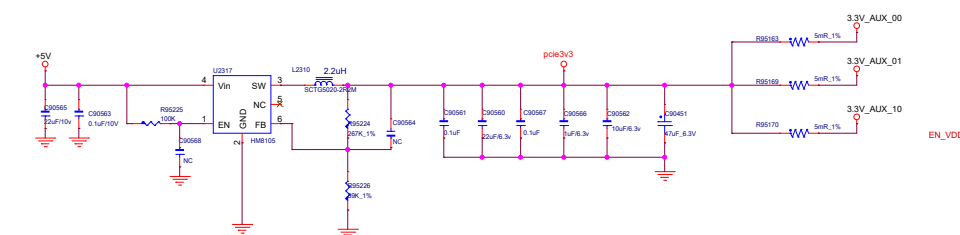
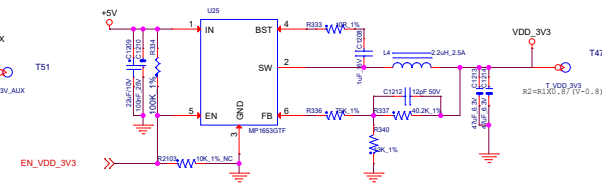
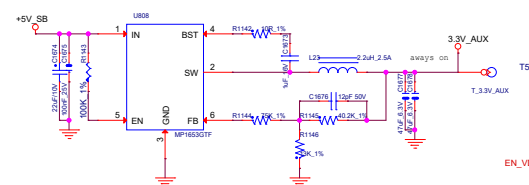
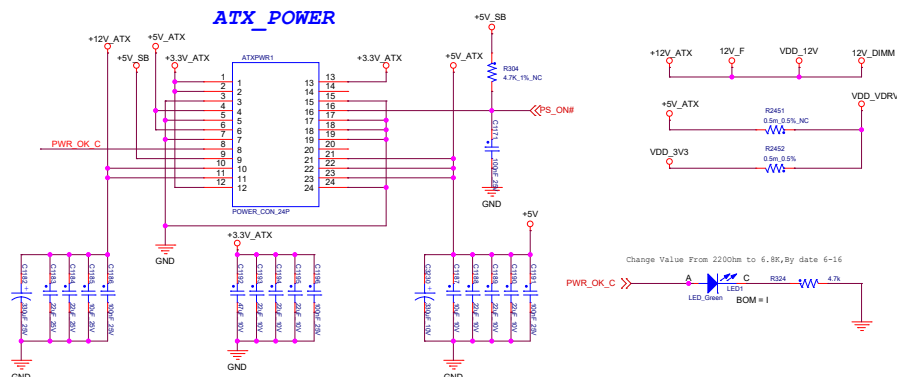
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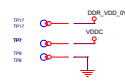
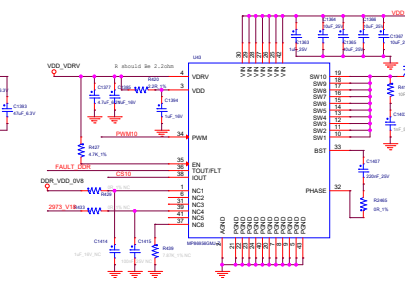
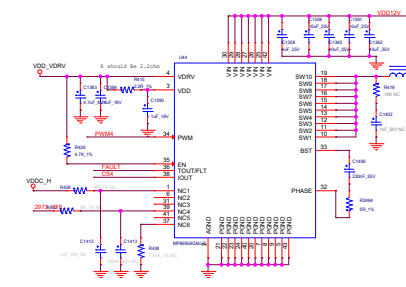
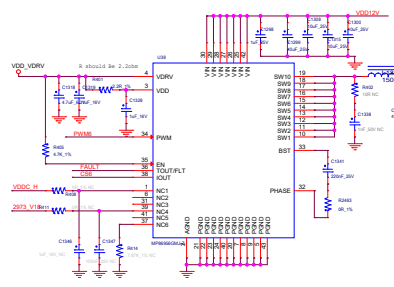
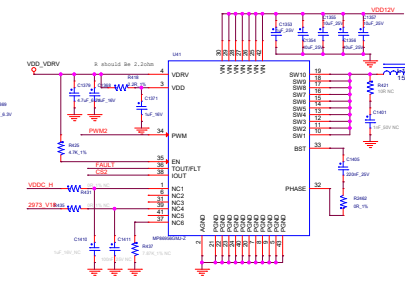
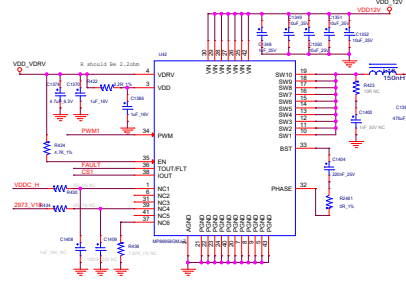
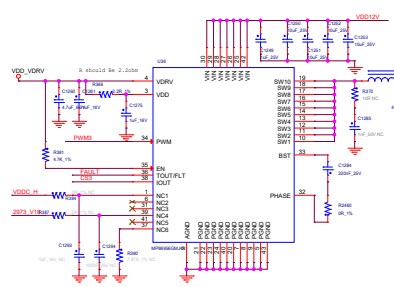
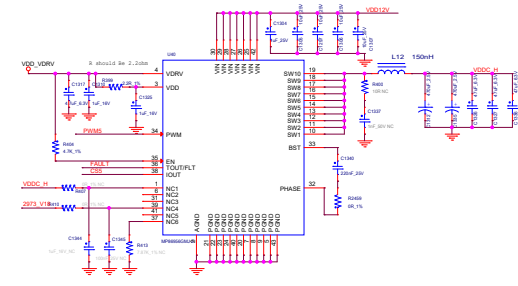
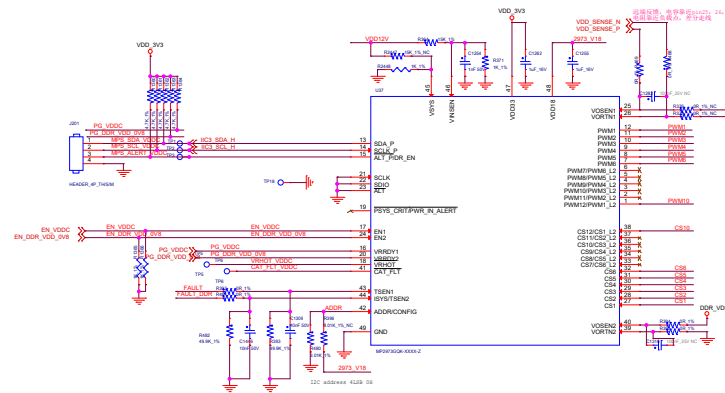
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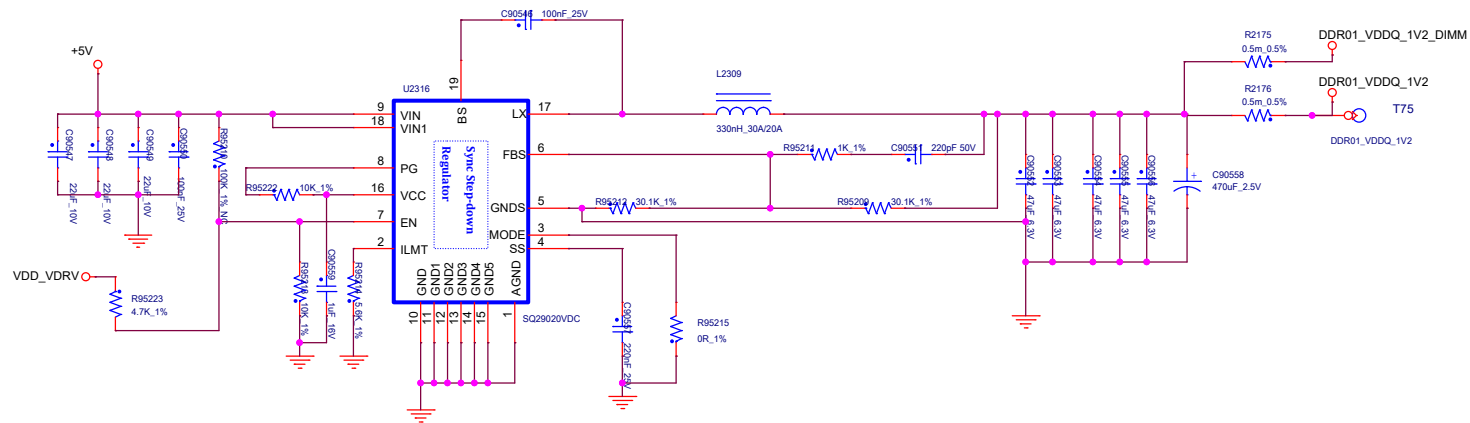
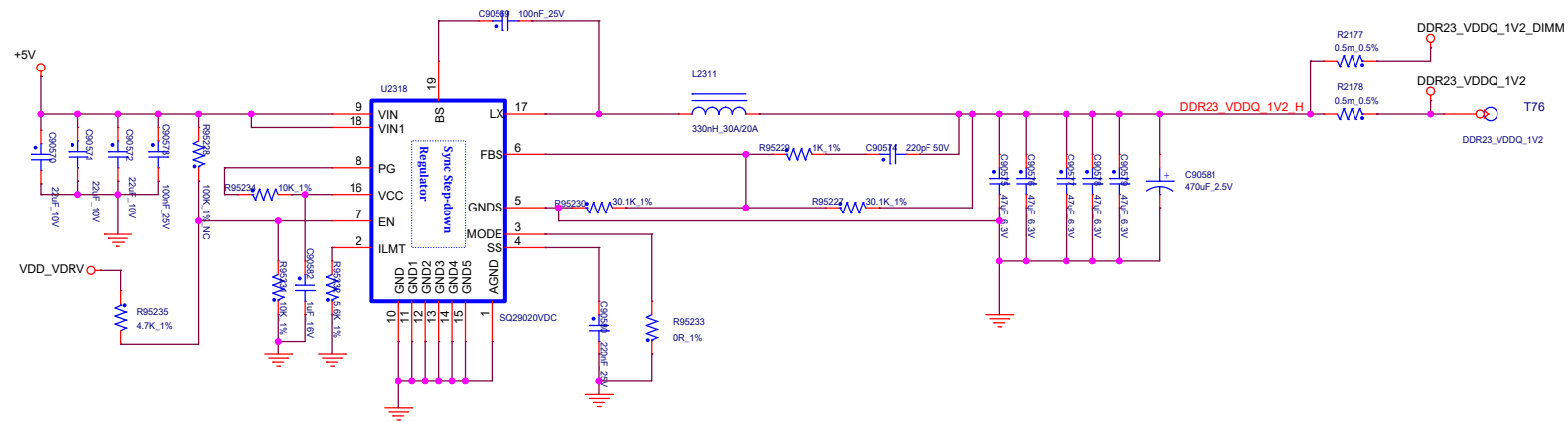
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A2	VSS_1	VSS_113	AE1	AN13	VSS_332	VSS_338	AN24	BB44	VSS_556	VSS_561	BB37	BL18	VSS_780	VSS_785	BL28	BP41	VSS_897	VSS_1009	E42	L32	VSS_121	VSS_1235	T22
A3	VSS_2	VSS_114	AE2	AN15	VSS_333	VSS_339	AN26	BB55	VSS_557	VSS_562	BB39	BL22	VSS_781	VSS_786	BL32	BP45	VSS_898	VSS_1010	E43	L34	VSS_122	VSS_1236	T23
A4	VSS_3	VSS_115	AE3	AN16	VSS_334	VSS_340	AN28	BB66	VSS_558	VSS_563	BB41	BL26	VSS_782	VSS_787	BL36	BP49	VSS_899	VSS_1011	E44	L36	VSS_123	VSS_1237	T24
A5	VSS_4	VSS_116	AE4	AN18	VSS_335	VSS_341	AN30	BB77	VSS_559	VSS_564	BB43	BL30	VSS_783	VSS_788	BL40	BP53	VSS_900	VSS_1012	E45	L38	VSS_124	VSS_1238	T25
A6	VSS_5	VSS_117	AE5	AN20	VSS_336	VSS_342	AN32	BB88	VSS_560	VSS_565	BB45	BL34	VSS_784	VSS_789	BL44	BP57	VSS_901	VSS_1013	E46	L40	VSS_125	VSS_1239	T26
A7	VSS_6	VSS_118	AE6	AN22	VSS_337	VSS_343	AN34	BB99	VSS_561	VSS_566	BB47	BL38	VSS_785	VSS_790	BL48	BP61	VSS_902	VSS_1014	E47	L42	VSS_126	VSS_1240	T27
A8	VSS_7	VSS_119	AE7	AN24	VSS_338	VSS_344	AN36	BB10	VSS_562	VSS_567	BB49	BL42	VSS_786	VSS_791	BL52	BP65	VSS_903	VSS_1015	E48	L44	VSS_127	VSS_1241	T28
A9	VSS_8	VSS_120	AE8	AN26	VSS_339	VSS_345	AN38	BB11	VSS_563	VSS_568	BB51	BL46	VSS_787	VSS_792	BL56	BP69	VSS_904	VSS_1016	E49	L46	VSS_128	VSS_1242	T29
A10	VSS_9	VSS_121	AE9	AN28	VSS_340	VSS_346	AN40	BB12	VSS_564	VSS_569	BB53	BL50	VSS_788	VSS_793	BL60	BP73	VSS_905	VSS_1017	E50	L48	VSS_129	VSS_1243	T30
A11	VSS_10	VSS_122	AE10	AN30	VSS_341	VSS_347	AN42	BB13	VSS_565	VSS_570	BB55	BL54	VSS_789	VSS_794	BL64	BP77	VSS_906	VSS_1018	E51	L50	VSS_130	VSS_1244	T31
A12	VSS_11	VSS_123	AE11	AN32	VSS_342	VSS_348	AN44	BB14	VSS_566	VSS_571	BB57	BL58	VSS_790	VSS_795	BL68	BP81	VSS_907	VSS_1019	E52	L52	VSS_131	VSS_1245	T32
A13	VSS_12	VSS_124	AE12	AN34	VSS_343	VSS_349	AN46	BB15	VSS_567	VSS_572	BB59	BL62	VSS_791	VSS_796	BL72	BP85	VSS_908	VSS_1020	E53	L54	VSS_132	VSS_1246	T33
A14	VSS_13	VSS_125	AE13	AN36	VSS_344	VSS_350	AN48	BB16	VSS_568	VSS_573	BB61	BL66	VSS_792	VSS_797	BL76	BP89	VSS_909	VSS_1021	E54	L56	VSS_133	VSS_1247	T34
A15	VSS_14	VSS_126	AE14	AN38	VSS_345	VSS_351	AN50	BB17	VSS_569	VSS_574	BB63	BL70	VSS_793	VSS_798	BL80	BP93	VSS_910	VSS_1022	E55	L58	VSS_134	VSS_1248	T35
A16	VSS_15	VSS_127	AE15	AN40	VSS_346	VSS_352	AN52	BB18	VSS_570	VSS_575	BB65	BL74	VSS_794	VSS_799	BL84	BP97	VSS_911	VSS_1023	E56	L60	VSS_135	VSS_1249	T36
A17	VSS_16	VSS_128	AE16	AN42	VSS_347	VSS_353	AN54	BB19	VSS_571	VSS_576	BB67	BL78	VSS_795	VSS_800	BL88	BP101	VSS_912	VSS_1024	E57	L62	VSS_136	VSS_1250	T37
A18	VSS_17	VSS_129	AE17	AN44	VSS_348	VSS_354	AN56	BB20	VSS_572	VSS_577	BB69	BL82	VSS_796	VSS_801	BL92	BP105	VSS_913	VSS_1025	E58	L64	VSS_137	VSS_1251	T38
A19	VSS_18	VSS_130	AE18	AN46	VSS_349	VSS_355	AN58	BB21	VSS_573	VSS_578	BB71	BL86	VSS_797	VSS_802	BL96	BP109	VSS_914	VSS_1026	E59	L66	VSS_138	VSS_1252	T39
A20	VSS_19	VSS_131	AE19	AN48	VSS_350	VSS_356	AN60	BB22	VSS_574	VSS_579	BB73	BL90	VSS_798	VSS_803	BL100	BP113	VSS_915	VSS_1027	E60	L68	VSS_139	VSS_1253	T40
A21	VSS_20	VSS_132	AE20	AN50	VSS_351	VSS_357	AN62	BB23	VSS_575	VSS_580	BB75	BL94	VSS_799	VSS_804	BL104	BP117	VSS_916	VSS_1028	E61	L70	VSS_140	VSS_1254	T41
A22	VSS_21	VSS_133	AE21	AN52	VSS_352	VSS_358	AN64	BB24	VSS_576	VSS_581	BB77	BL98	VSS_800	VSS_805	BL108	BP121	VSS_917	VSS_1029	E62	L72	VSS_141	VSS_1255	T42
A23	VSS_22	VSS_134	AE22	AN54	VSS_353	VSS_359	AN66	BB25	VSS_577	VSS_582	BB79	BL102	VSS_801	VSS_806	BL112	BP125	VSS_918	VSS_1030	E63	L74	VSS_142	VSS_1256	T43
A24	VSS_23	VSS_135	AE23	AN56	VSS_354	VSS_360	AN68	BB26	VSS_578	VSS_583	BB81	BL106	VSS_802	VSS_807	BL116	BP129	VSS_919	VSS_1031	E64	L76	VSS_143	VSS_1257	T44
A25	VSS_24	VSS_136	AE24	AN58	VSS_355	VSS_361	AN70	BB27	VSS_579	VSS_584	BB83	BL110	VSS_803	VSS_808	BL120	BP133	VSS_920	VSS_1032	E65	L78	VSS_144	VSS_1258	T45
A26	VSS_25	VSS_137	AE25	AN60	VSS_356	VSS_362	AN72	BB28	VSS_580	VSS_585	BB85	BL114	VSS_804	VSS_809	BL124	BP137	VSS_921	VSS_1033	E66	L80	VSS_145	VSS_1259	T46
A27	VSS_26	VSS_138	AE26	AN62	VSS_357	VSS_363	AN74	BB29	VSS_581	VSS_586	BB87	BL118	VSS_805	VSS_810	BL128	BP141	VSS_922	VSS_1034	E67	L82	VSS_146	VSS_1260	T47
A28	VSS_27	VSS_139	AE27	AN64	VSS_358	VSS_364	AN76	BB30	VSS_582	VSS_587	BB89	BL122	VSS_806	VSS_811	BL132	BP145	VSS_923	VSS_1035	E68	L84	VSS_147	VSS_1261	T48
A29	VSS_28	VSS_140	AE28	AN66	VSS_359	VSS_365	AN78	BB31	VSS_583	VSS_588	BB91	BL126	VSS_807	VSS_812	BL136	BP149	VSS_924	VSS_1036	E69	L86	VSS_148	VSS_1262	T49
A30	VSS_29	VSS_141	AE29	AN68	VSS_360	VSS_366	AN80	BB32	VSS_584	VSS_589	BB93	BL130	VSS_808	VSS_813	BL140	BP153	VSS_925	VSS_1037	E70	L88	VSS_149	VSS_1263	T50
A31	VSS_30	VSS_142	AE30	AN70	VSS_361	VSS_367	AN82	BB33	VSS_585	VSS_590	BB95	BL134	VSS_809	VSS_814	BL144	BP157	VSS_926	VSS_1038	E71	L90	VSS_150	VSS_1264	T51
A32	VSS_31	VSS_143	AE31	AN72	VSS_362	VSS_368	AN84	BB34	VSS_586	VSS_591	BB97	BL138	VSS_810	VSS_815	BL148	BP161	VSS_927	VSS_1039	E72	L92	VSS_151	VSS_1265	T52
A33	VSS_32	VSS_144	AE32	AN74	VSS_363	VSS_369	AN86	BB35	VSS_587	VSS_592	BB99	BL142	VSS_811	VSS_816	BL152	BP165	VSS_928	VSS_1040	E73	L94	VSS_152	VSS_1266	T53
A34	VSS_33	VSS_145	AE33	AN76	VSS_364	VSS_370	AN88	BB36	VSS_588	VSS_593	BB101	BL146	VSS_812	VSS_817	BL156	BP169	VSS_929	VSS_1041	E74	L96	VSS_153	VSS_1267	T54
A35	VSS_34	VSS_146	AE34	AN78	VSS_365	VSS_371	AN90	BB37	VSS_589	VSS_594	BB103	BL150	VSS_813	VSS_818	BL160	BP173	VSS_930	VSS_1042	E75	L98	VSS_154	VSS_1268	T55
A36	VSS_35	VSS_147	AE35	AN80	VSS_366	VSS_372	AN92	BB38	VSS_590	VSS_595	BB105	BL154	VSS_814	VSS_819	BL164	BP177	VSS_931	VSS_1043	E76	L100	VSS_155	VSS_1269	T56
A37	VSS_36	VSS_148	AE36	AN82	VSS_367	VSS_373	AN94	BB39	VSS_591	VSS_596	BB107	BL158	VSS_815	VSS_820	BL168	BP181	VSS_932	VSS_1044	E77	L102	VSS_156	VSS_1270	T57
A38	VSS_37	VSS_149	AE37	AN84	VSS_368	VSS_374	AN96	BB40	VSS_592	VSS_597	BB109	BL162	VSS_816	VSS_821	BL172	BP185	VSS_933	VSS_1045	E78	L104	VSS_157	VSS_1271	T58
A39	VSS_38	VSS_150	AE38	AN86	VSS_369	VSS_375	AN98	BB41	VSS_593	VSS_598	BB111	BL166	VSS_817	VSS_822	BL176	BP189	VSS_934	VSS_1046	E79	L106	VSS_158	VSS_1272	T59
A40	VSS_39	VSS_151	AE39	AN88	VSS_370	VSS_376	AN100	BB42	VSS_594	VSS_599	BB113	BL170	VSS_818	VSS_823	BL180	BP193	VSS_935	VSS_1047	E80	L108	VSS_159	VSS_1273	T60
A41	VSS_40	VSS_152	AE40	AN90	VSS_371	VSS_377	AN102	BB43	VSS_595	VSS_600	BB115	BL174	VSS_819	VSS_824	BL184	BP197	VSS_936	VSS_1048	E81	L110	VSS_160	VSS_1274	T61
A42	VSS_41	VSS_153	AE41	AN92	VSS_372	VSS_378	AN104	BB44	VSS_596	VSS_601	BB117	BL178	VSS_820	VSS_825	BL188	BP201	VSS_937	VSS_1049	E82	L112	VSS_161	VSS_1275	T62
A43	VSS_42	VSS_154	AE42	AN94	VSS_373	VSS_379	AN106	BB45	VSS_597	VSS_602	BB119	BL182	VSS_821	VSS_826	BL192	BP205	VSS_938	VSS_1050	E83	L114	VSS_162	VSS_1276	T63
A44	VSS_43	VSS_155	AE43	AN96	VSS_374	VSS_380	AN108	BB46	VSS_598	VSS_603	BB121	BL186	VSS_822	VSS_827	BL196	BP209	VSS_939	VSS_1051	E84	L116	VSS_163	VSS_1277	T64
A45	VSS_44	VSS_156	AE44	AN98	VSS_375	VSS_381	AN110	BB47	VSS_599	VSS_604	BB123	BL190	VSS_823	VSS_828	BL200	BP213	VSS_940	VSS_1052	E85	L118	VSS_164	VSS_1278	T65
A46	VSS_45	VSS_157	AE45	AN100	VSS_376	VSS_382	AN112	BB48	VSS_600	VSS_605	BB125	BL194	VSS_824	VSS_829	BL204	BP217	VSS_941	VSS_1053	E86	L120	VSS_165	VSS_1279	T66
A47	VSS_46	VSS_158	AE46	AN102	VSS_377	VSS_383	AN114	BB49	VSS_601	VSS_606	BB127	BL198	VSS_825	VSS_830	BL208	BP221	VSS_942	VSS_1054	E87	L122	VSS_166	VSS_1280	T67
A48	VSS_47	VSS_159	AE47	AN104	VSS_378	VSS_384	AN116	BB50	VSS_602	VSS_607	BB129	BL202	VSS_826	VSS_831	BL212	BP225	VSS_943	VSS_1055	E88	L124	VSS_167	VSS_1281	T68
A49	VSS_48	VSS_160	AE48	AN106	VSS_379	VSS_385	AN118	BB51	VSS_603	VSS_608	BB131	BL206	VSS_827	VSS_832	BL216	BP229	VSS_944	VSS_1056	E89	L126	VSS_168	VSS_1282	T69
A50	VSS_49	VSS_161	AE49	AN108	VSS_380	VSS_386	AN120	BB52	VSS_604	VSS_609	BB133	BL210	VSS_828	VSS_833	BL220	BP233	VSS_945	VSS_1057	E90	L128	VSS_169	VSS_1283	T70
A51	VSS_50	VSS_162	AE50	AN110	VSS_381	VSS_387	AN122	BB53	VSS_605	VSS_610	BB135	BL214	VSS_829	VSS_834	BL224	BP237	VSS_946	VSS_1058	E91	L130	VSS_170	VSS_1284	T71
A52	VSS_51	VSS_163	AE51	AN112	VSS_382	VSS_388	AN124	BB54	VSS_606	VSS_611	BB137	BL218	VSS_830	VSS_835	BL228	BP241	VSS_947	VSS_1059	E92	L132	VSS_171	VSS_1285	T72
A53	VSS_52	VSS_164	AE52	AN114	VSS_383	VSS_389	AN126	BB55	VSS_607	VSS_612	BB139	BL222	VSS_831	VSS_836	BL232	BP245	VSS_948	VSS_1060	E93	L134	VSS_172	VSS_1286	T73
A54	VSS_53	VSS_165	AE53	AN116	VSS_384	VSS_390	AN128	BB56	VSS_608	VSS_613	BB141	BL226	VSS_832	VSS_837	BL236	BP249	VSS_949	VSS_1061	E94	L136	VSS_173	VSS_1287	T74
A55	VSS_54	VSS_166	AE54	AN118	VSS_385	VSS_391	AN130	BB57	VSS_609	VSS_614	BB143	BL230	VSS_833										



ATX POWER

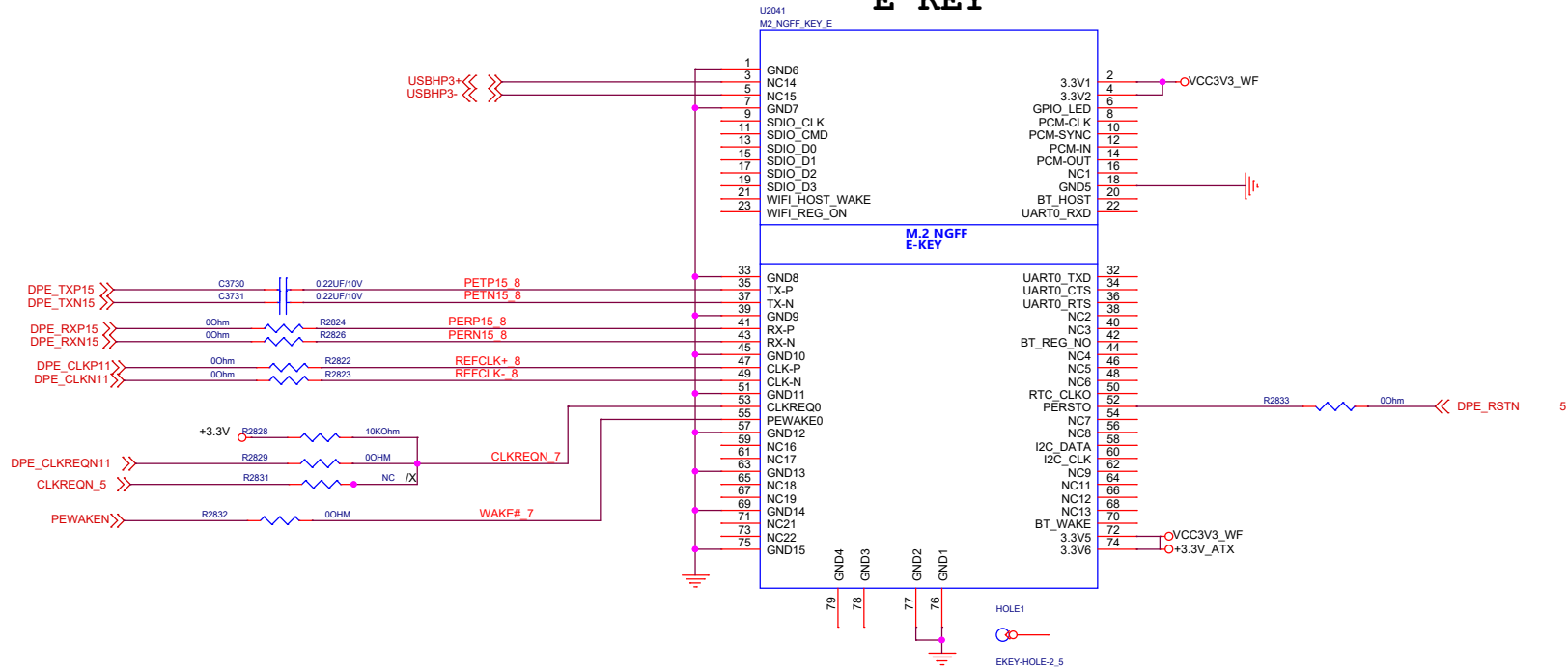




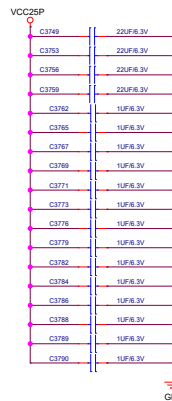
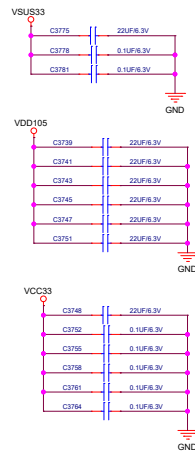
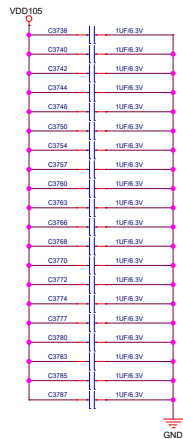
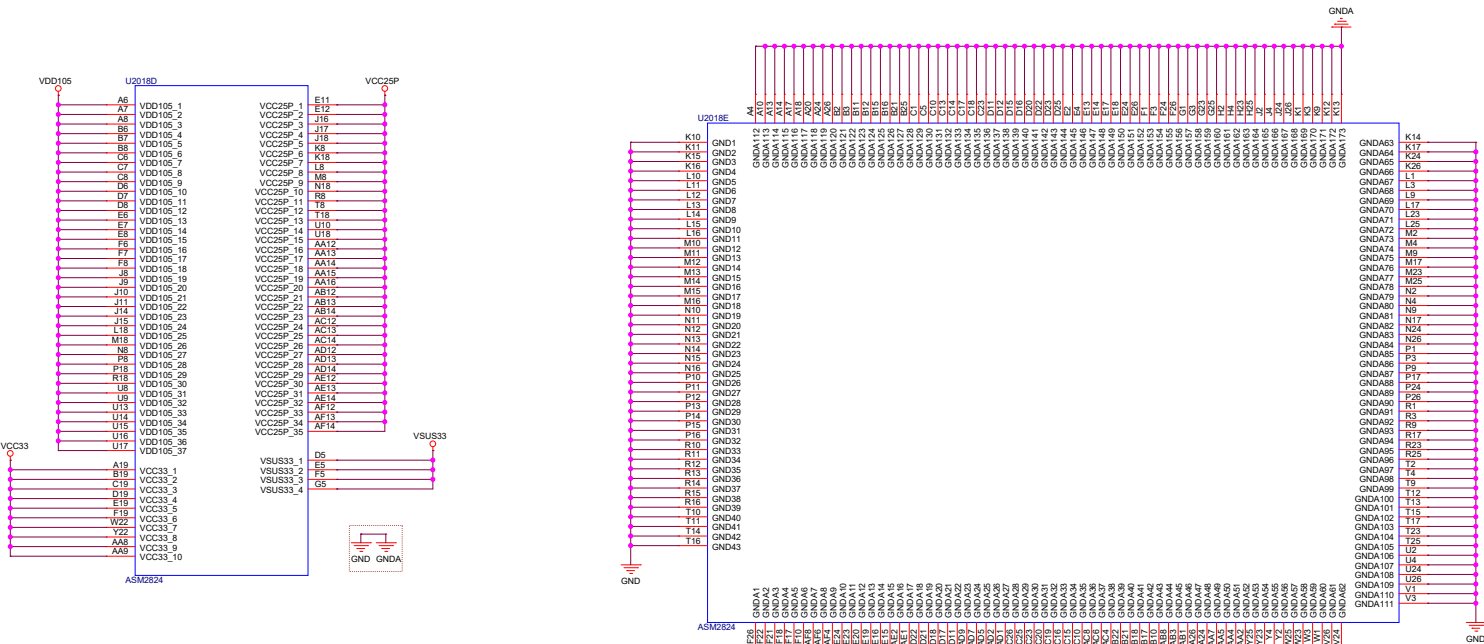


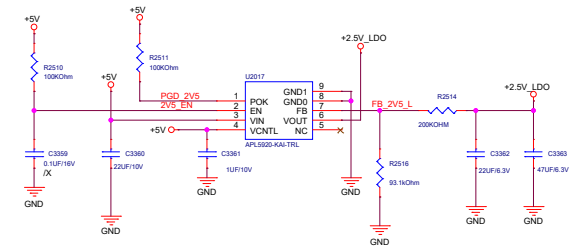
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Date:	Friday, January 18, 2024	Rev:	1.2
Designed by:	<designer>	Sheet:	21 of 36

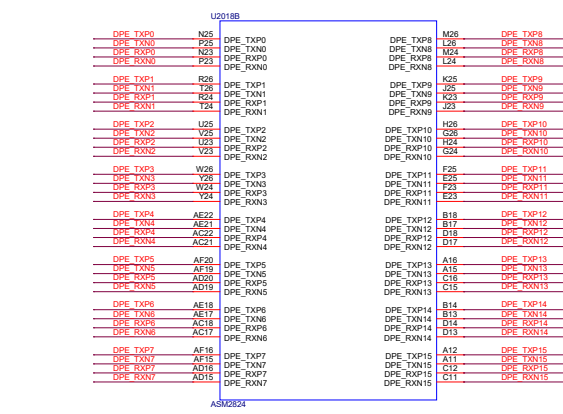
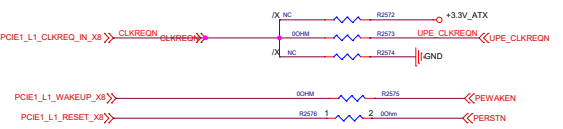
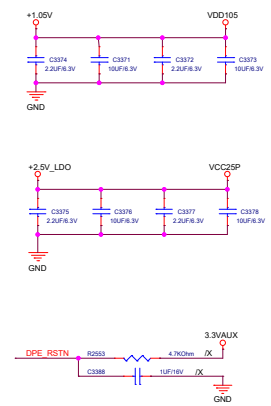
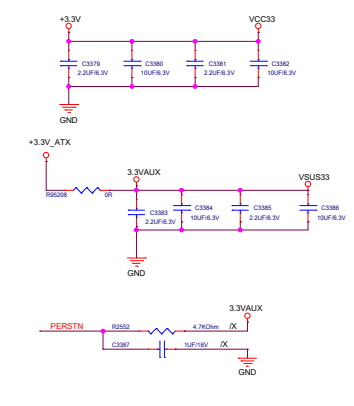
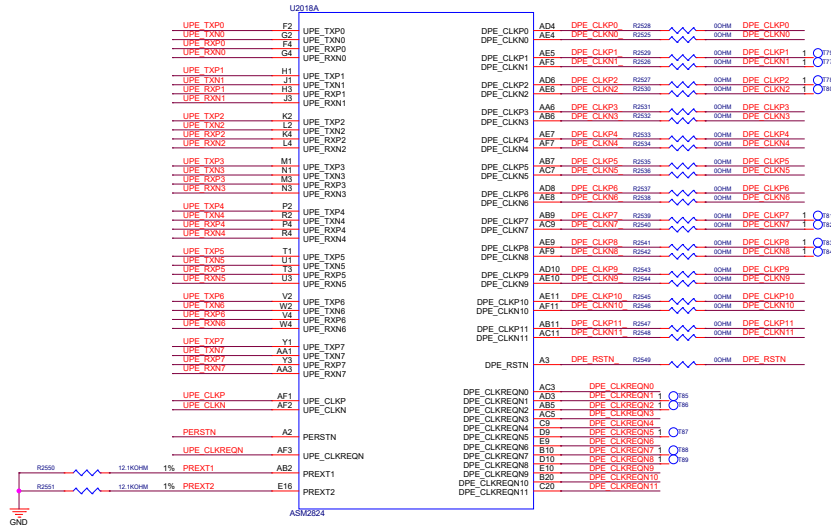
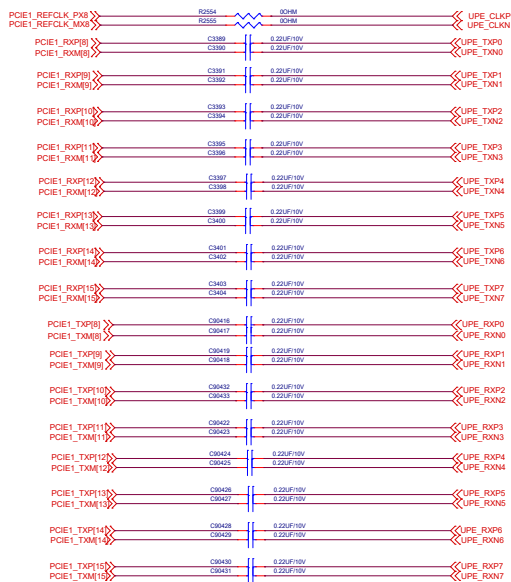
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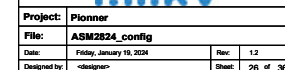


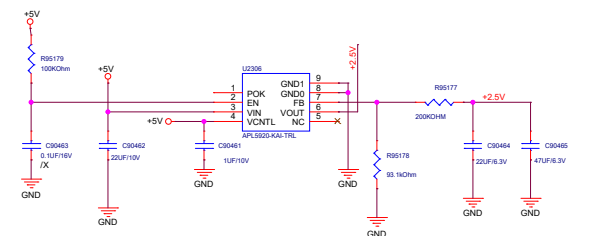
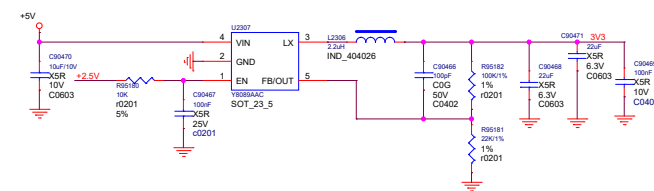
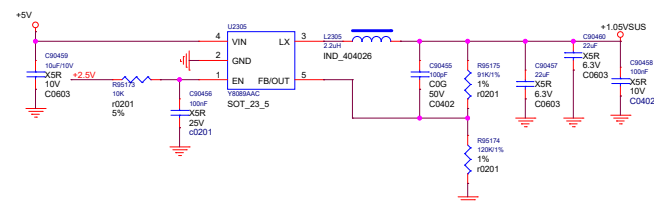
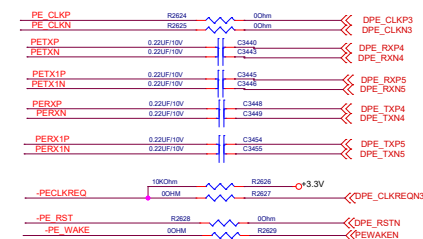
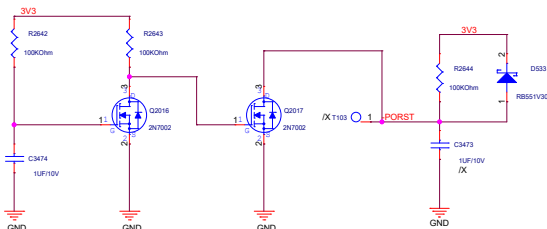
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Date: Friday, January 19, 2024	Rev: 1.2		
Designed by: <designer>	Sheet: 22 of 36		

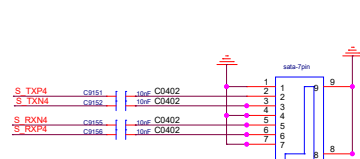
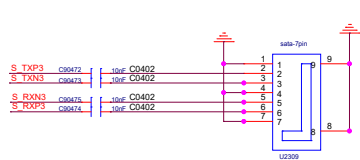
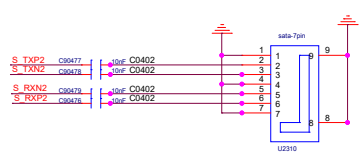
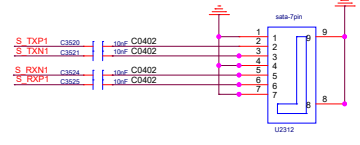
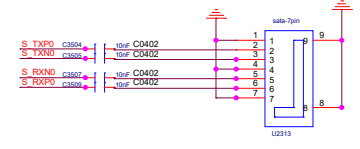
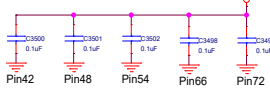
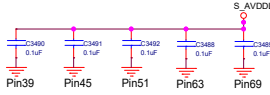
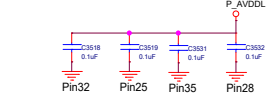
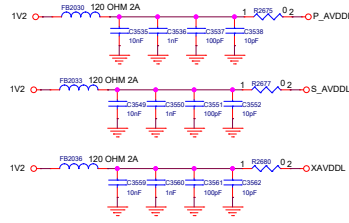
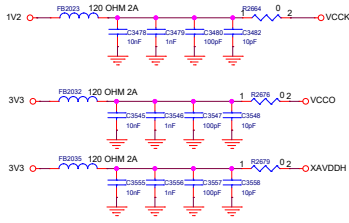
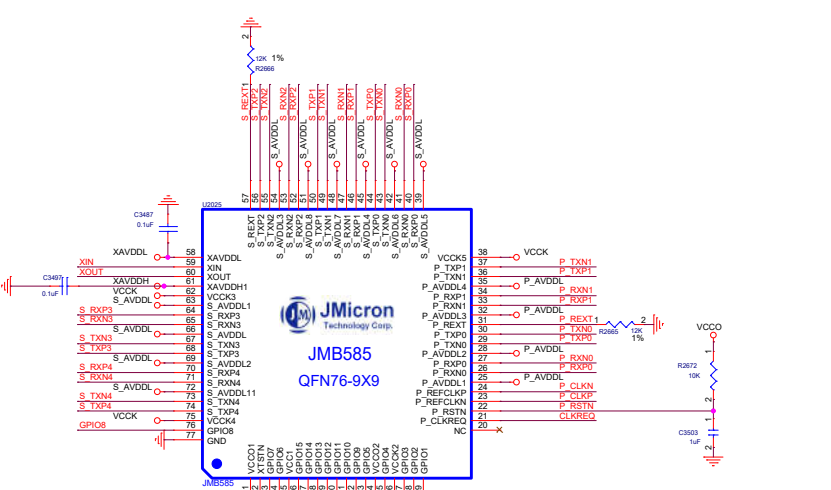
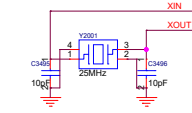
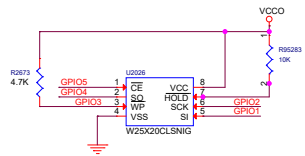




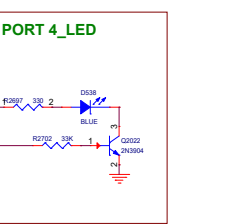
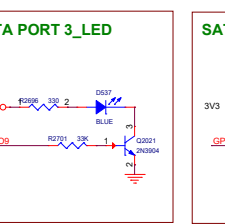
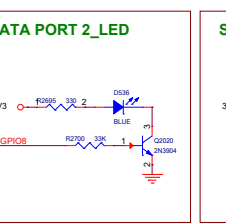
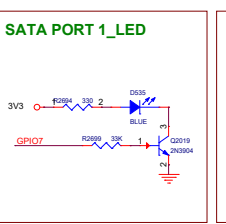
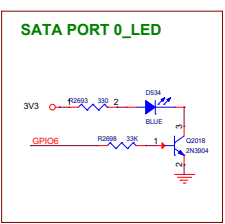
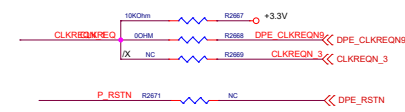
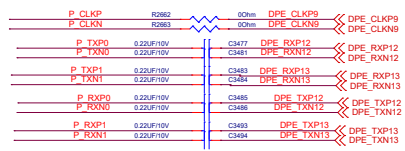
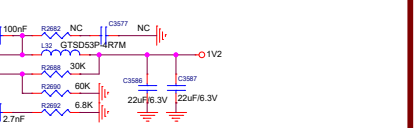
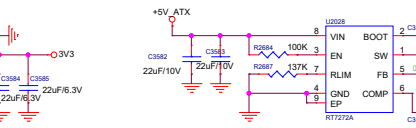
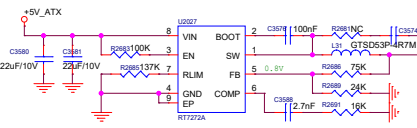


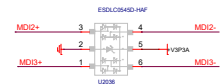
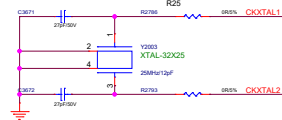
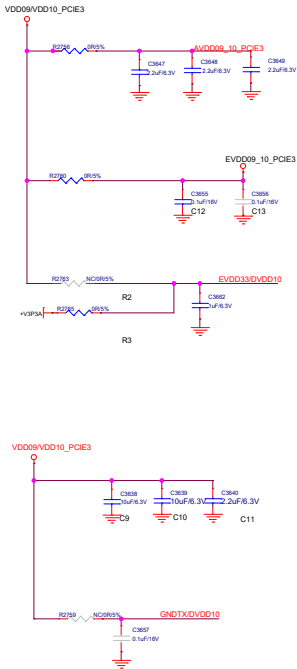


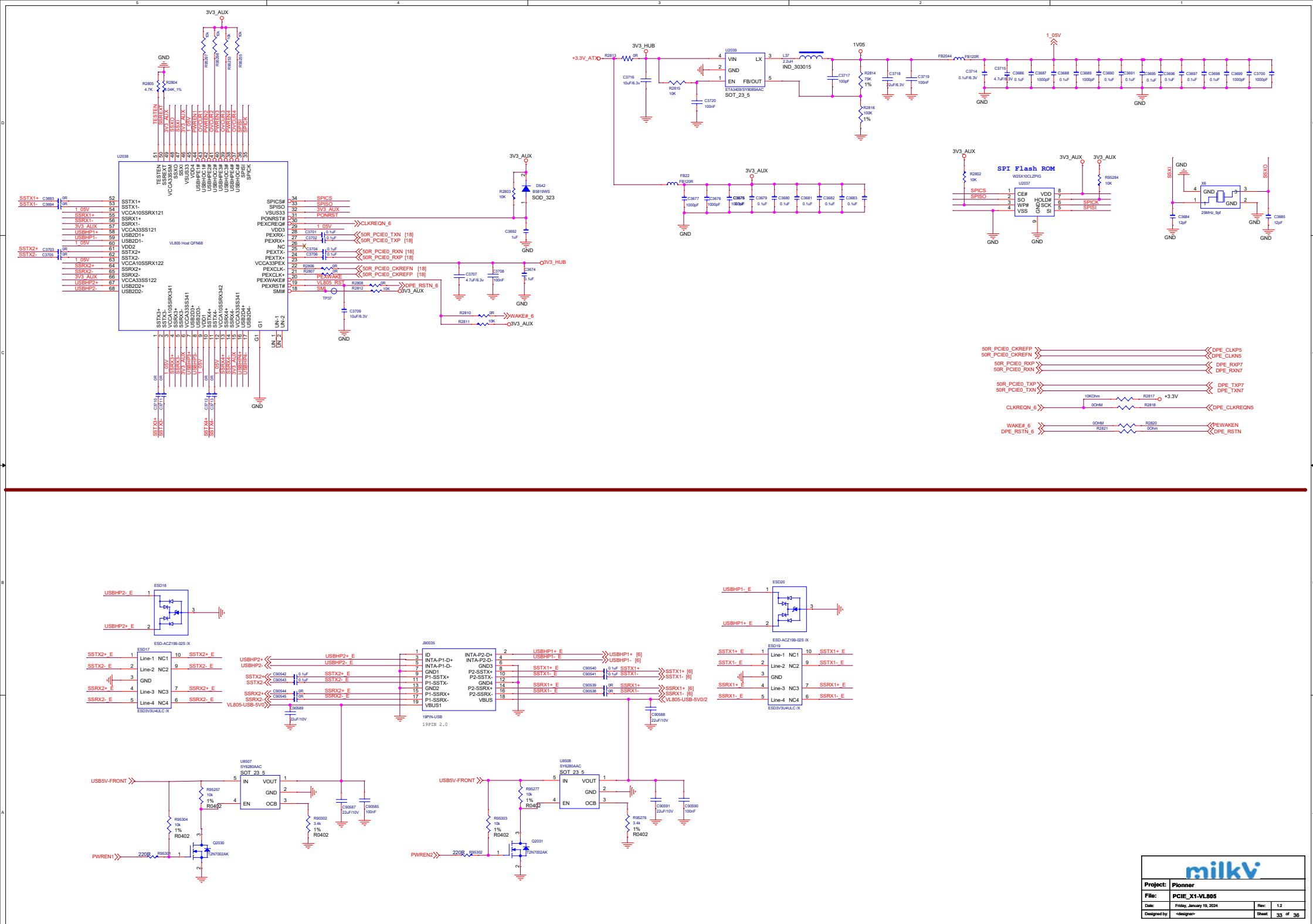


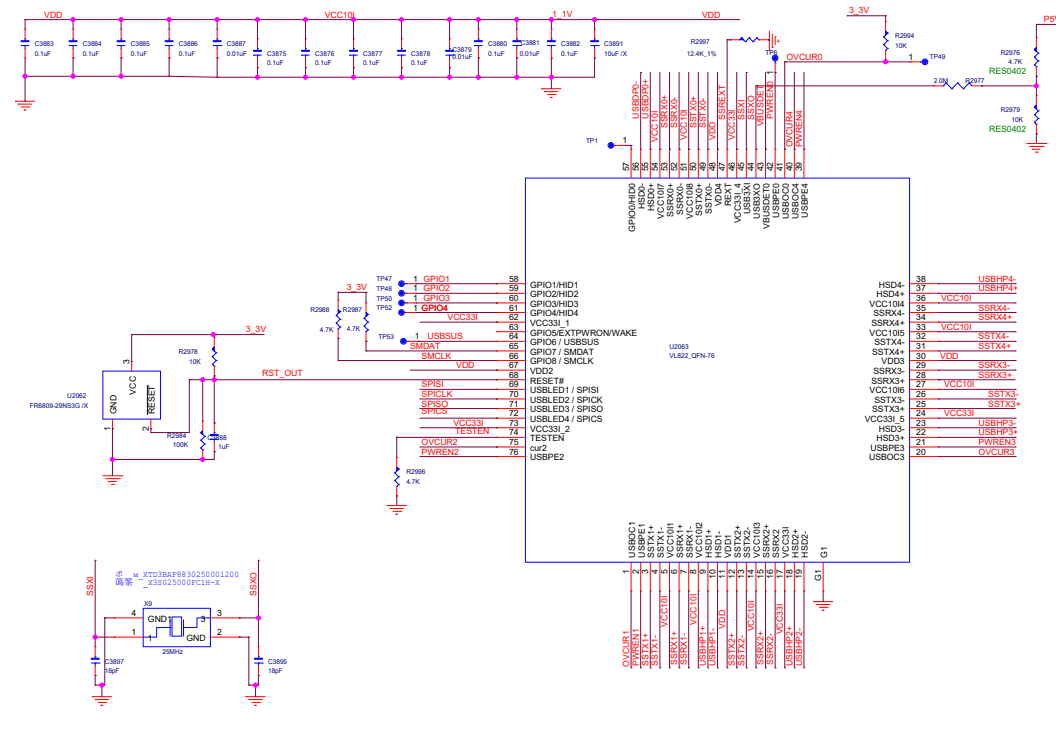


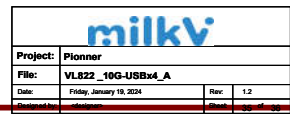
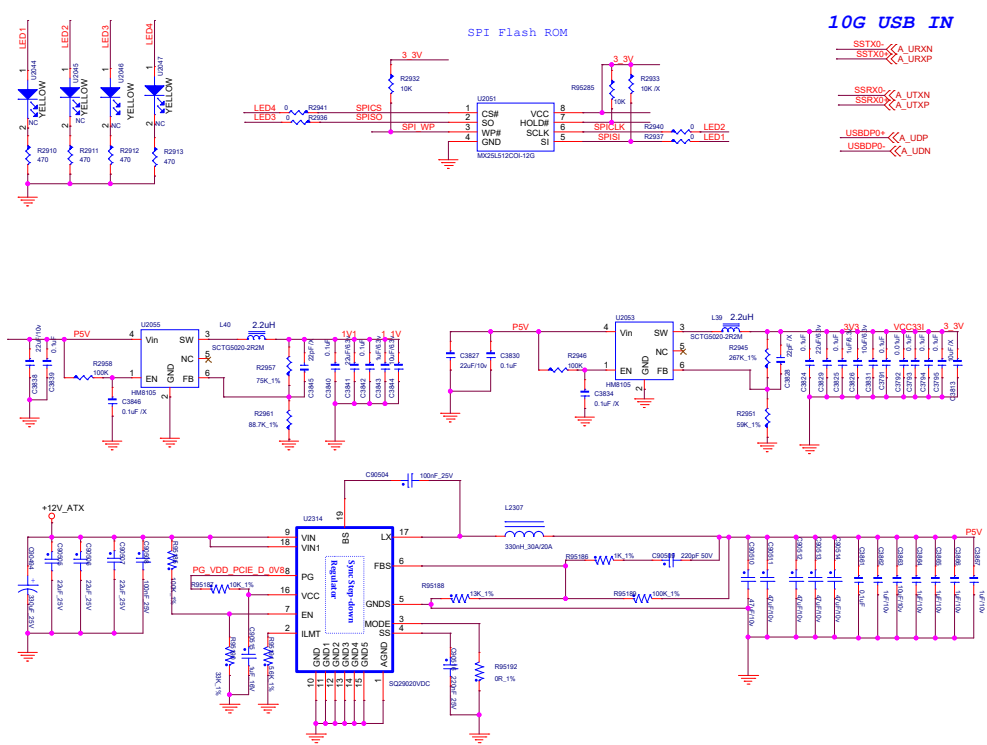
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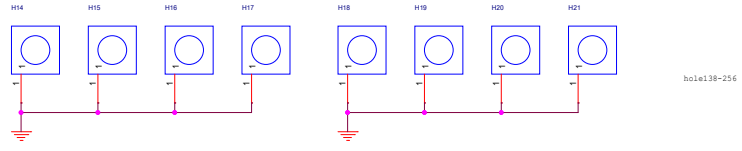
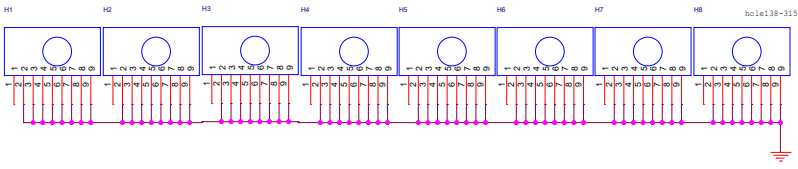








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