

Compal Confidential

Schematics Document

INTEL Auburndale BGA with IBEX core logic

Fossil 2.0 UMA

LA-6161P

2010-05-24

REV:1.0

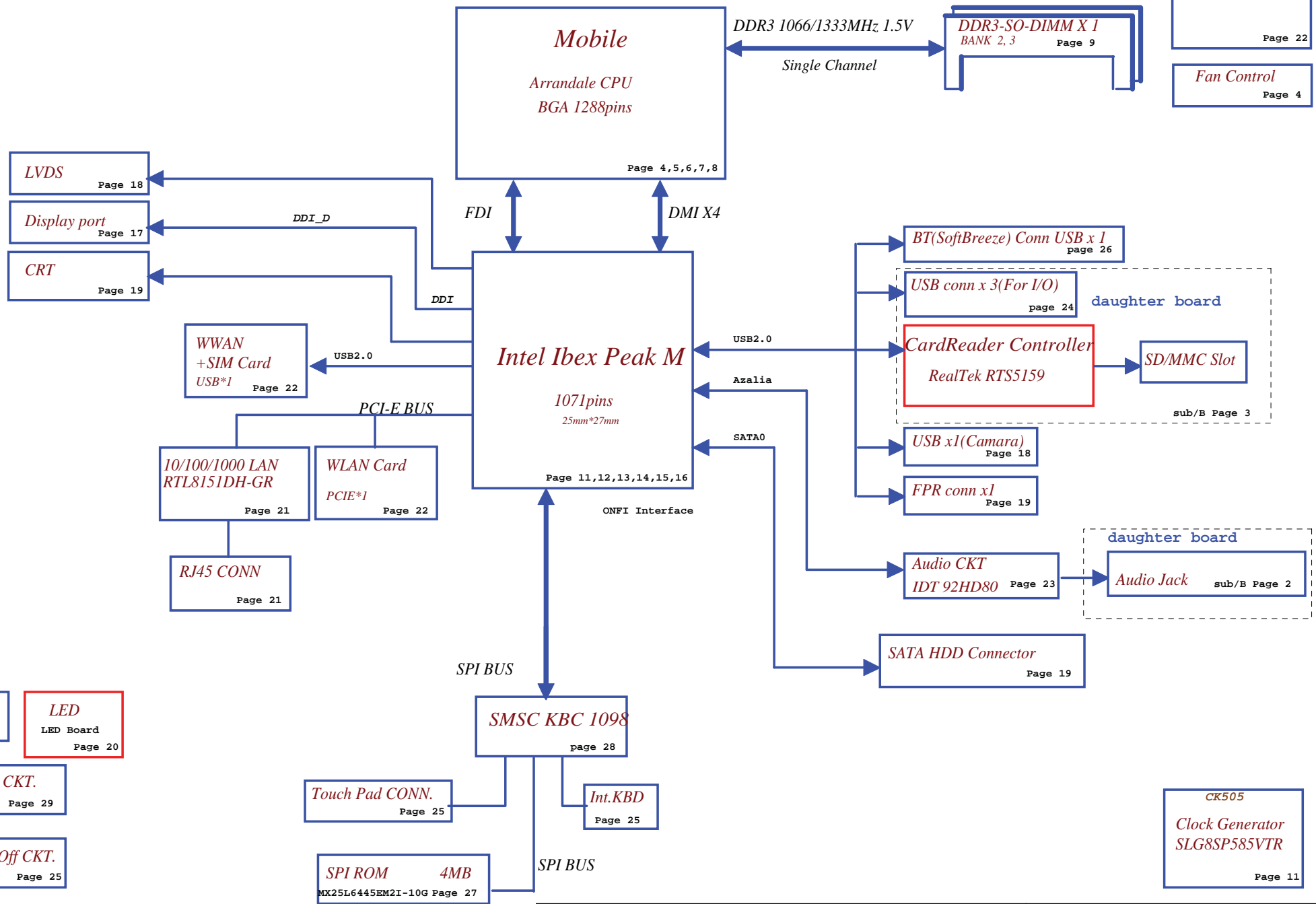
Security Classification	Compal Secret Data			<i>Compal Electronics, Inc.</i>		
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Fossil 2.0 UMA

XDP Conn.
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Accelerometer
LIS302DLTR
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Fan Control
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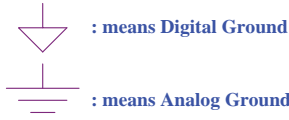


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Voltage Rails (O MEANS ON X MEANS OFF)

power plane State	+RTCVCC	+B +3VL	+5VALW +3VALW	+1.5V +0.75V	+5VS +3VS +1.5VS +VCCP +CPU_CORE +1.05VS +1.8VS	
S0	O	O	O	O	O	
S1	O	O	O	O	O	
S3	O	O	O	O	X	
S5 S4/AC	O	O	O	X	X	
S5 S4/ Battery only	O	O	X	X	X	
S5 S4/AC & Battery don't exist	O	X	X	X	X	

Symbol Note :



@ : means just reserve , no build
 ULV@ : means just install for ULV CPU
 CONN@ : means ME part.

Layout Notes



Install below 45 level BOM structure for ver. 0.1

45@ : means just put it in the BOM of 45 level.

Install below 43 level BOM structure for ver. 0.1

DEBUG@ : means just build when PCIE port 80 CARD function enable *Remove before MP*

SMBUS Control Table

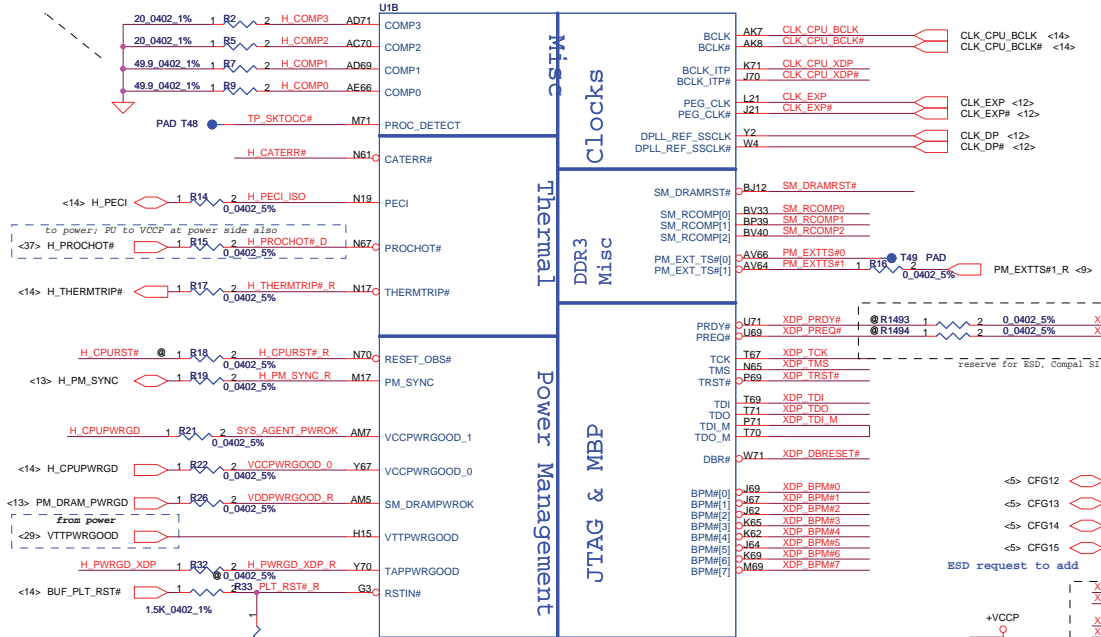
	SOURCE	BATT	XDP	SODIMM	CLK CHIP	MINI CARD	DOCK	NIC	THERMAL SENSOR	G-SENSOR
SMB_EC_CK1 SMB_EC_DA1	SMSC1098	V	X	X	X	X	X	X	X	X
SMBCLK SMBDATA	Calpella	X	V	V	V	V	V	X	X	V
SML0CLK SML0DATA	Calpella	X	X	X	X	X	X	V	X	X
SML1CLK SML1DATA	Calpella	X	X	X	X	X	X	X	V	V

Strapping Options Flash

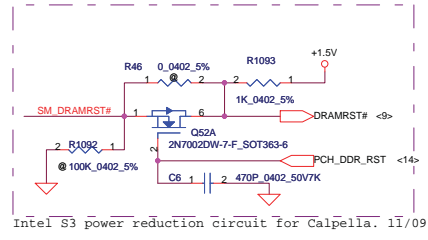
GNT1#	GNT0#	Routing
0	1	Reserved
1	0	Flash Cycles Routed to PCI
1	1	Flash Cycles Routed to SPI
0	0	Flash Cycles Routed to LPC

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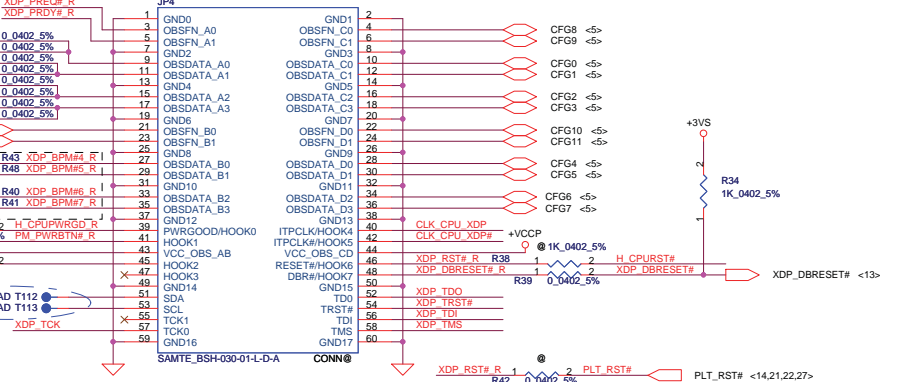
Layout rule : 10mil width trace
length < 0.5", spacing 20mil



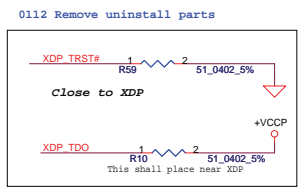
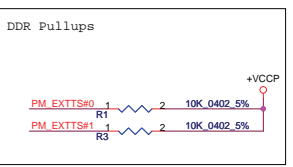
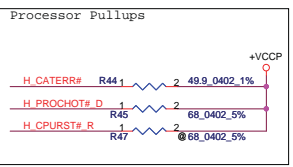
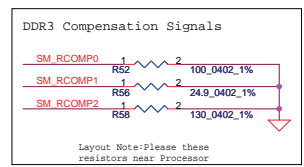
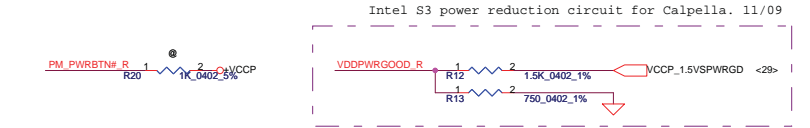
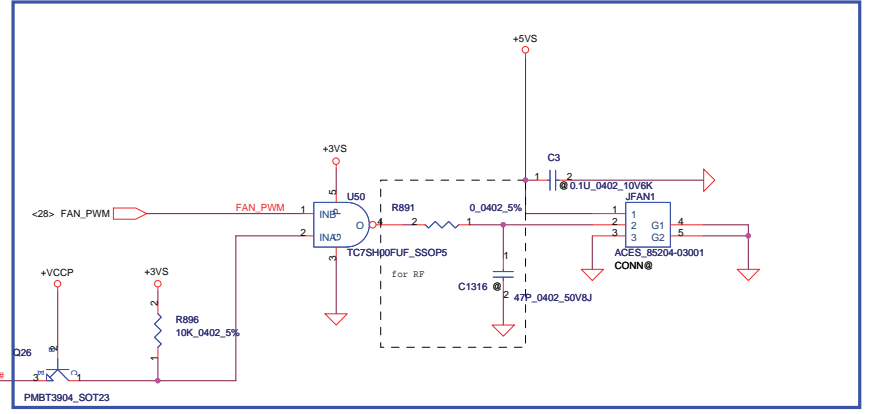
2nd Source :
 SV - 15-540M CPU : 2.53G (K0)
 SV - 15-450M CPU : 2.4G (K0)
 SV - i3-350M CPU : 2.26G (K0)
 SV - i3-370M CPU : 2.4G (K0)
 ULV -U3400 CPU : 1.06G (K0)



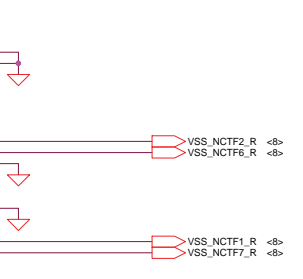
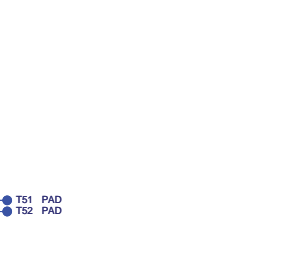
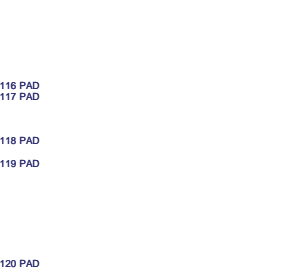
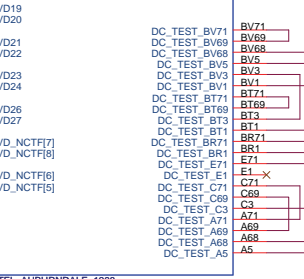
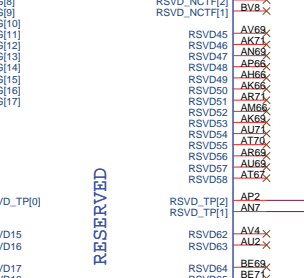
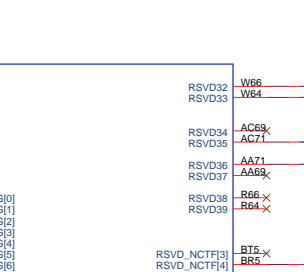
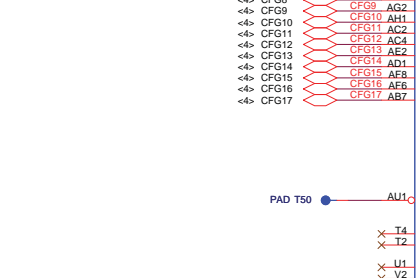
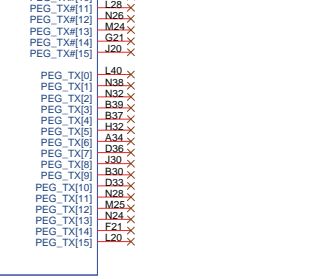
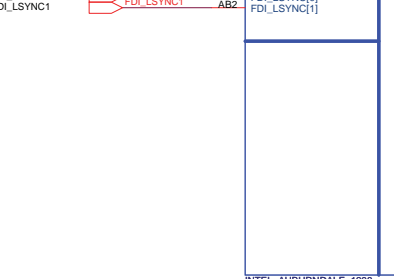
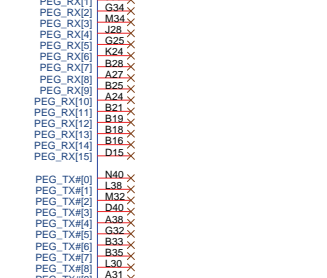
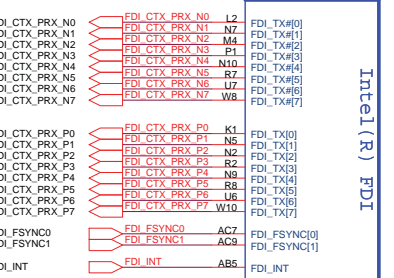
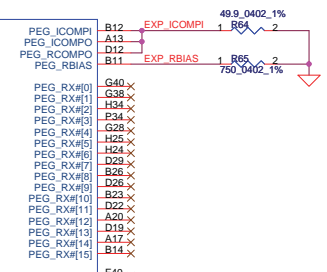
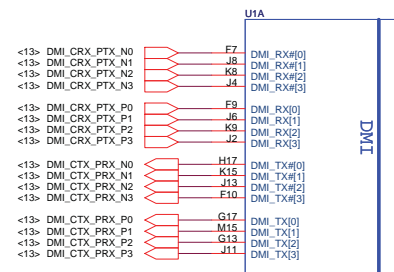
CPU XDP Connector



PWM Fan Control circuit



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CFG Straps for PROCESSOR

CFG0 R68 1 2 @3.01K_0402_1%

PCI-Express Confirmation Select
 1: Single PEG
 0: Bifurcation enabled
 Not applicable for Clarkfield Processor

CFG3 R69 1 2 @3.01K_0402_1%

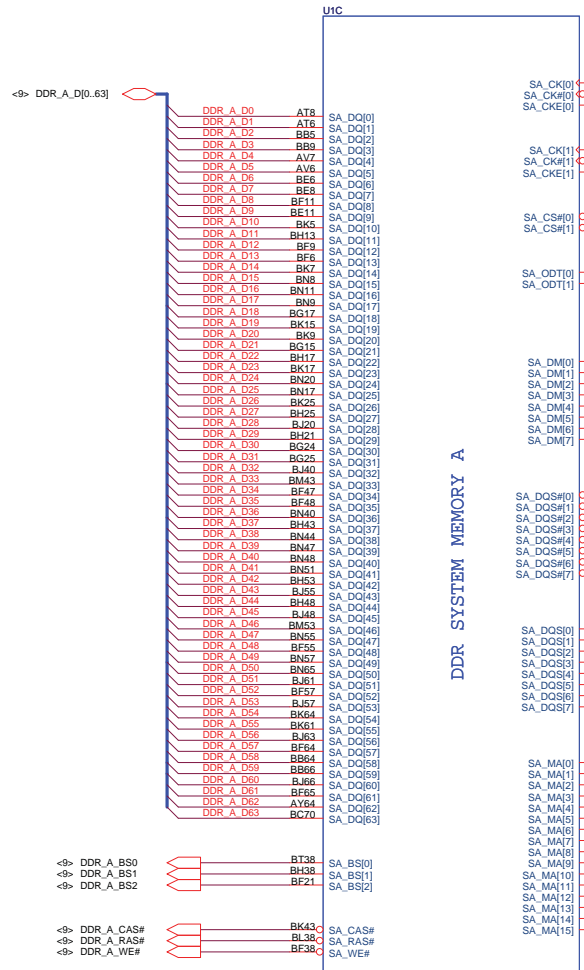
CFG3-PCI Express Static Lane Reversal
 1: Normal Operation
 0: Lane Numbers Reversed
 15 -> 0, 14 -> 1,

CFG4 R70 1 2 3.01K_0402_1%

ES1 sample need negative voltage
 ES2 sample contact to GND

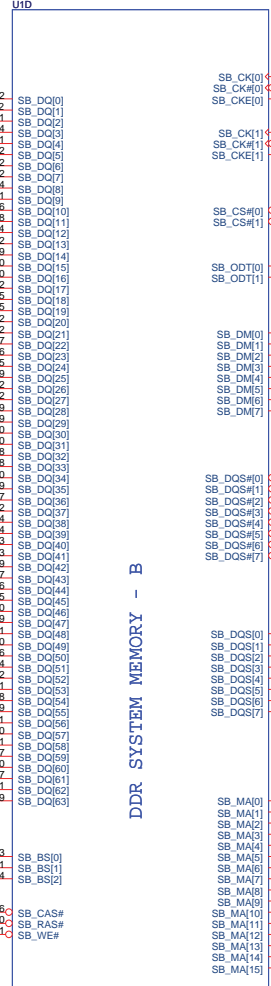
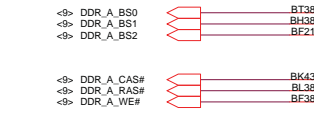
CFG4-Display Port Presence
 1: Disabled: No Physical Display Port attached to Embedded Display Port
 0: Enabled: An external Display Port device is connected to the Embedded Display Port

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DDR SYSTEM MEMORY - A

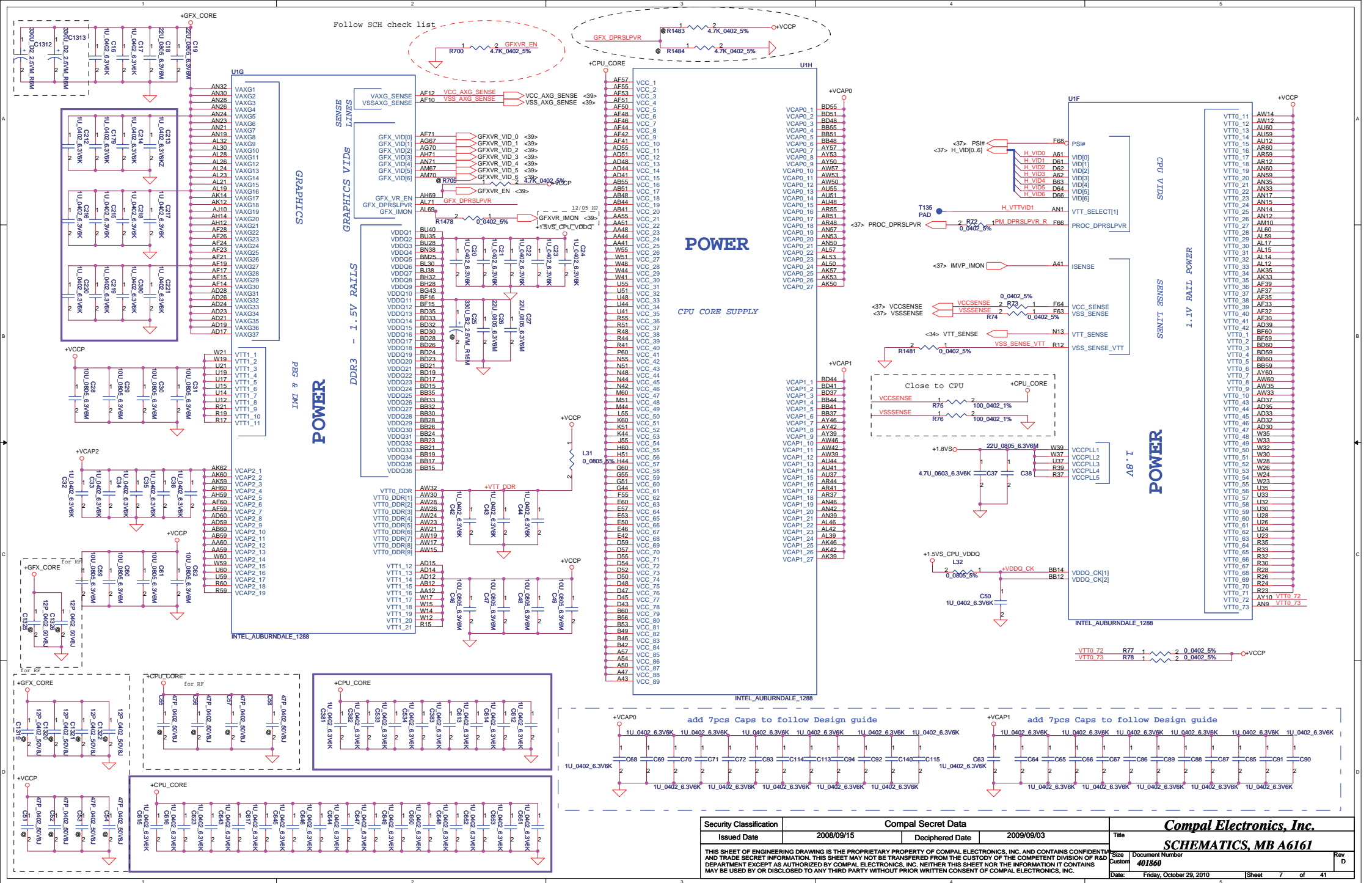
INTEL_AUBURNDALE_1288



DDR SYSTEM MEMORY - B

INTEL_AUBURNDALE_1288

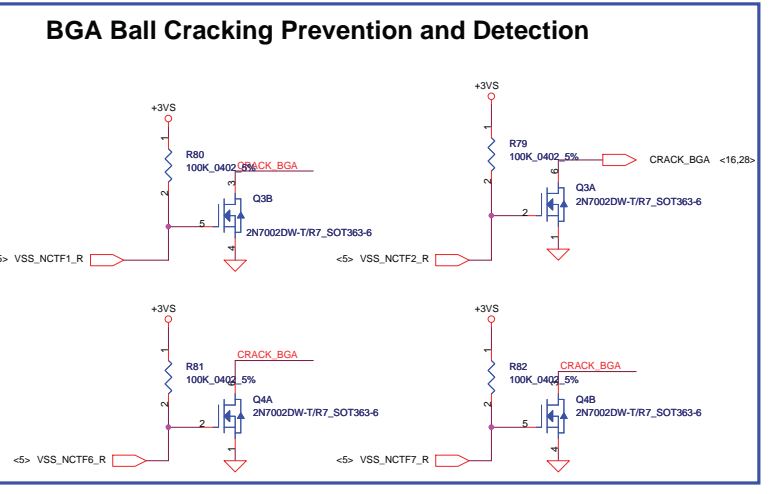
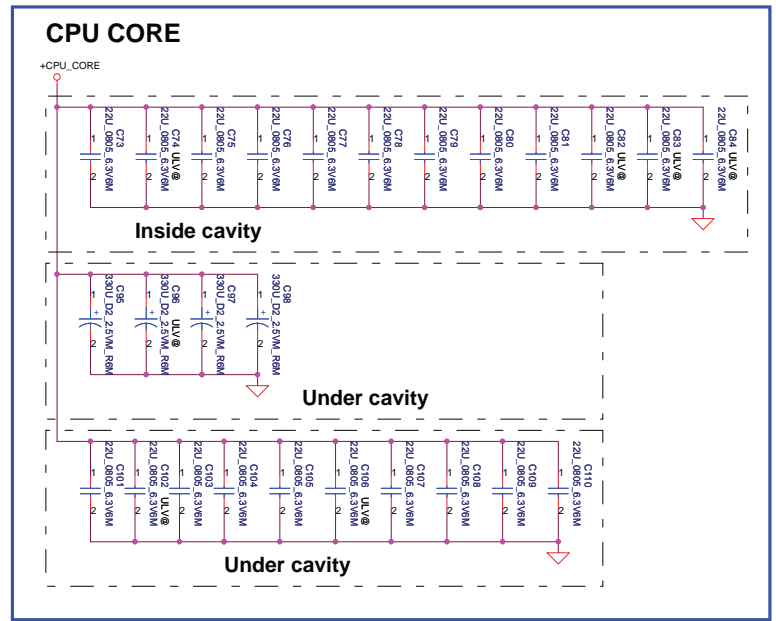
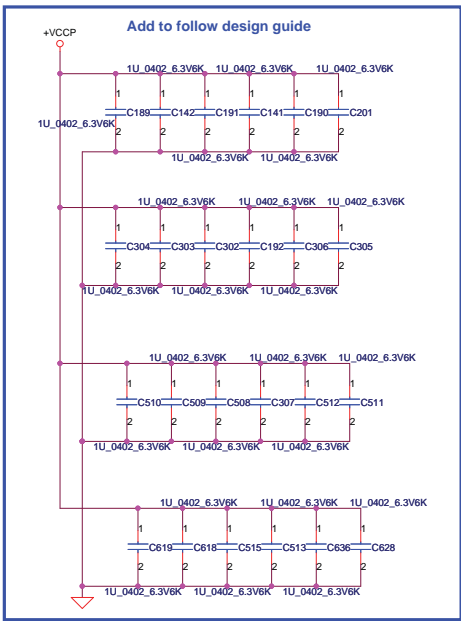
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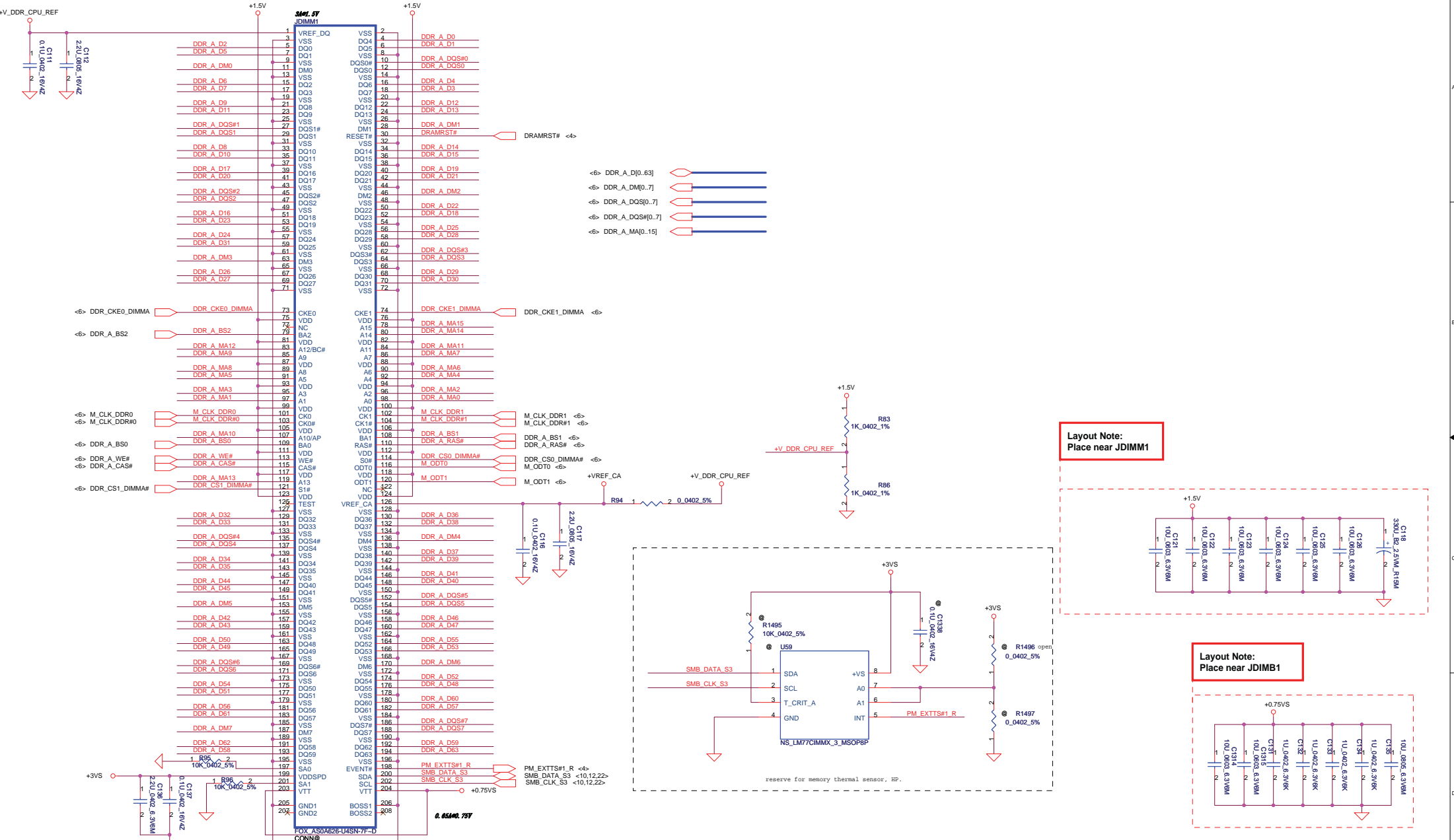
U1I			
BU62	VSS1	AV24	VSS90
BU58	VSS2	AV21	VSS91
BU55	VSS3	AV19	VSS92
BU51	VSS4	AV17	VSS93
BU48	VSS5	AV15	VSS94
BU44	VSS6	AV14	VSS95
BU37	VSS7	AV12	VSS96
BU32	VSS8	AV8	VSS97
BU25	VSS9	AV4	VSS98
BU21	VSS10	AV67	VSS99
BU18	VSS11	AV62	VSS100
BU14	VSS12	AV59	VSS101
BU11	VSS13	AV55	VSS102
BU7	VSS14	AV51	VSS103
BP42	VSS15	AV48	VSS104
BN64	VSS16	AV44	VSS105
BN6	VSS17	AV41	VSS106
BM70	VSS18	AV37	VSS107
BM51	VSS19	AV9	VSS108
BM44	VSS20	AV1	VSS109
BM32	VSS21	AV0	VSS110
BM24	VSS22	AU70	VSS111
BM17	VSS23	AU62	VSS112
BL57	VSS24	AU57	VSS113
BL48	VSS25	AU53	VSS114
BL40	VSS26	AU50	VSS115
BL28	VSS27	AU46	VSS116
BL20	VSS28	AU43	VSS117
BK63	VSS29	AU35	VSS118
BK60	VSS30	AU33	VSS119
BK53	VSS31	AU32	VSS120
BK34	VSS32	AU30	VSS121
BK10	VSS33	AU28	VSS122
BJ64	VSS34	AU24	VSS123
BJ21	VSS35	AU23	VSS124
BJ	VSS36	AU23	VSS125
BJ1	VSS37	AU20	VSS126
BH70	VSS38	AU19	VSS127
BH65	VSS39	AU17	VSS128
BH47	VSS40	AU15	VSS129
BH32	VSS41	AU14	VSS130
BH24	VSS42	AU4	VSS131
BH20	VSS43	AT64	VSS132
BH15	VSS44	AT10	VSS133
BG51	VSS45	ARE2	VSS134
BG36	VSS46	ARE2	VSS135
BG2	VSS47	AR50	VSS136
BF30	VSS48	AR46	VSS137
BF13	VSS49	AN5	VSS138
BF3	VSS50	AN4	VSS139
BE70	VSS51	AN4	VSS140
BE65	VSS52	AN4	VSS141
BE9	VSS53	AN3	VSS142
BE1	VSS54	AN5	VSS143
BD57	VSS55	AN4	VSS144
BD53	VSS56	AM64	VSS145
BD40	VSS57	AM6	VSS146
BD46	VSS58	AB30	VSS147
BD42	VSS59	AL62	VSS148
BD39	VSS60	AL51	VSS149
BD14	VSS61	AL48	VSS150
BB71	VSS62	AL44	VSS151
BB62	VSS63	AL41	VSS152
BB57	VSS64	AB17	VSS153
BB53	VSS65	AB15	VSS154
BB50	VSS66	AB14	VSS155
BB46	VSS67	AB9	VSS156
BB42	VSS68	AK70	VSS157
BB39	VSS69	AK64	VSS158
BB7	VSS70	AK55	VSS159
BB1	VSS71	AK51	VSS160
BA70	VSS72	AK48	VSS161
AY71	VSS73	AK44	VSS162
AY66	VSS74	AK41	VSS163
AY62	VSS75	AK37	VSS164
AY59	VSS76	AK37	VSS165
AY55	VSS77	AK30	VSS166
AY51	VSS78	AK28	VSS167
AY48	VSS79	AK26	VSS168
AR42	VSS80	AK23	VSS169
AR39	VSS81	AK23	VSS170
AR35	VSS82	AK21	VSS171
AR33	VSS83	AK19	VSS172
AR32	VSS84	AK17	VSS173
AR30	VSS85	AK15	VSS174
AR28	VSS86	AK15	VSS175
AR26	VSS87	AH2	VSS176
AR24	VSS88	AH2	VSS177
AR23	VSS89	AH57	VSS178
AR21	VSS90	AH55	VSS179
AR19	VSS91	AV66	VSS180
AR17	VSS92	BV64	VSS181
AR15	VSS93	BV64	VSS182
AR14	VSS94	BT68	VSS183
AR4	VSS95	E0	VSS184
AR1	VSS96	BR08	VSS185
AP70	VSS97	BR08	VSS186
AP64	VSS98	BR1	VSS187
AN62	VSS99	BL71	VSS188
AN55	VSS100	BL1	VSS189
AY44	VSS101	H71	VSS190
AY41	VSS102	F71	VSS191
AY37	VSS103	D13	VSS192
AY35	VSS104	D10	VSS193
AY33	VSS105	D6	VSS194
AY32	VSS106	A64	VSS195
AY30	VSS107	E5	VSS196
AY28	VSS108	C68	VSS197
AY26	VSS109		VSS198

U1J			
AH63	VSS202	VS404	A40
AH59	VSS203	VS405	A36
AH50	VSS204	VS406	A33
AH48	VSS205	VS407	A29
AH44	VSS206	VS408	A26
AH44	VSS207	VS409	A22
AH42	VSS208	VS410	A19
AH41	VSS209	VS411	A15
AH39	VSS210	VS412	A12
AH37	VSS211	VS413	A8
AH36	VSS212	VS414	B62
AH33	VSS213	VS415	B68
AH30	VSS214	VS416	B51
AH28	VSS215	VS417	B48
AH26	VSS216	VS418	B44
AH24	VSS217	VS419	A69
AH23	VSS218	VS420	A65
AH22	VSS219	VS421	A52
AH19	VSS220	VS422	A48
AH17	VSS221	VS423	A45
AH15	VSS222	VS424	AA17
AH4	VSS223	VS425	AA15
AG9	VSS224	VS426	AA14
AG64	VSS225	VS427	W69
AG6	VSS226	VS428	W62
AF69	VSS227	VS429	W57
AF62	VSS228	VS430	W53
AF1	VSS229	VS431	W50
AE70	VSS230	VS432	W46
AE64	VSS231	VS433	W42
AE64	VSS232	VS434	W6
AD57	VSS233	VS435	W1
AD53	VSS234	VS436	W0
AD30	VSS235	VS437	U70
AD46	VSS236	VS438	U64
AD42	VSS237	VS439	U62
AD4	VSS238	VS440	U57
AD4	VSS239	VS441	U50
AC67	VSS240	VS442	U43
AC64	VSS241	VS443	U39
AC10	VSS242	VS444	U9
AT10	VSS243	VS445	U8
AC1	VSS244	VS446	U7
AB70	VSS245	VS447	U6
AB62	VSS246	VS448	R70
AB50	VSS247	VS449	R62
AB46	VSS248	VS450	R57
AB42	VSS249	VS451	R53
AB39	VSS250	VS452	R50
AB37	VSS251	VS453	R46
AB35	VSS252	VS454	R42
AB34	VSS253	VS455	R39
AB33	VSS254	VS456	R5
AB32	VSS255	VS457	R4
AB30	VSS256	VS458	N63
AB28	VSS257	VS459	N57
AB26	VSS258	VS460	N53
AB24	VSS259	VS461	N50
AB23	VSS260	VS462	N46
AB21	VSS261	VS463	N42
AB19	VSS262	VS464	N30
AB17	VSS263	VS465	N21
AB16	VSS264	VS466	N15
AB15	VSS265	VS467	M53
AB14	VSS266	VS468	M42
AB9	VSS267	VS469	M36
AA66	VSS268	VS470	M1
AA64	VSS269	VS471	L70
AA62	VSS270	VS472	L57
AA55	VSS271	VS473	L48
AA53	VSS272	VS474	L47
AA50	VSS273	VS475	L13
AA46	VSS274	VS476	K64
AA42	VSS275	VS477	K53
AA39	VSS276	VS478	K43
AA37	VSS277	VS479	K36
AA35	VSS278	VS480	K34
AA33	VSS279	VS481	K32
AA32	VSS280	VS482	K25
AA30	VSS281	VS483	K17
AA28	VSS282	VS484	K11
AA26	VSS283	VS485	K6
AA24	VSS284	VS486	K4
AA23	VSS285	VS487	J65
AA21	VSS286	VS488	J57
AA19	VSS287	VS489	J48
F20	VSS288	VS490	J47
E37	VSS289	VS491	J40
F4	VSS290	VS492	J37
E33	VSS291	VS493	H53
E30	VSS292	VS494	H43
E0	VSS293	VS495	H43
D16	VSS294	VS496	H36
D13	VSS295	VS497	H1
D11	VSS296	VS498	G70
D8	VSS297	VS499	G57
D34	VSS298	VS500	G53
D31	VSS299	VS501	G48
D27	VSS300	VS502	G40
D24	VSS301	VS503	G43
D20	VSS302	VS504	G30
D17	VSS303	VS505	G24
D13	VSS304	VS506	G20
D10	VSS305	VS507	G16
D6	VSS306	VS508	F61
A64	VSS307	VS509	F48
E5	VSS308	VS510	F47
B65	VSS309	VS511	F28
B40	VSS310	VS512	F28
	VSS311	VS513	



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Customer	401860	Rev D	Date	Friday, October 29, 2010
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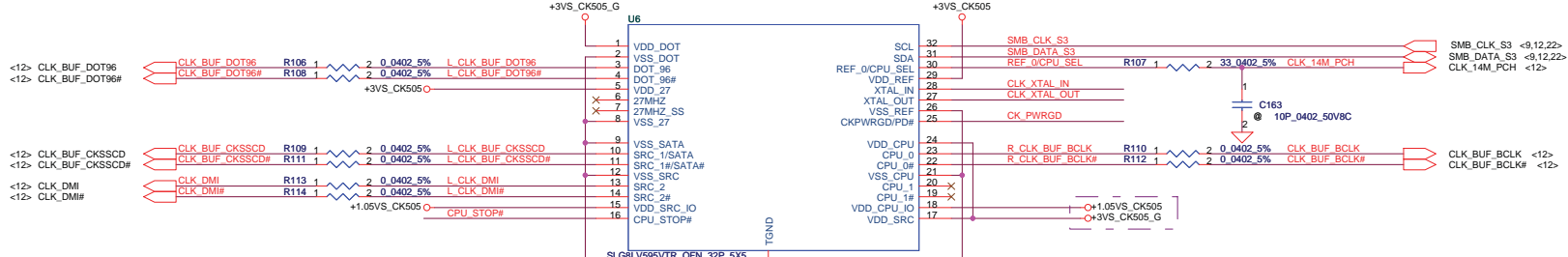
DDR3 SO-DIMM A



Layout Note:
Place near JDIMM1

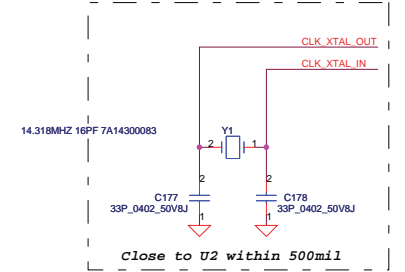
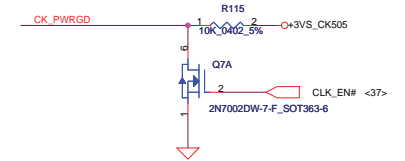
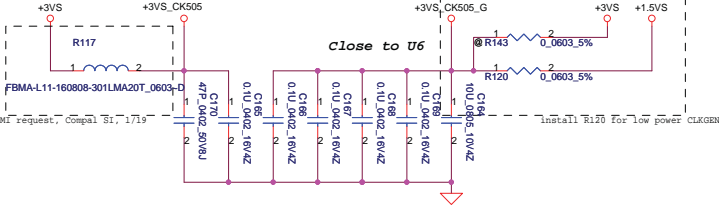
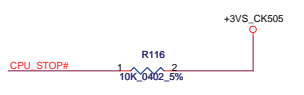
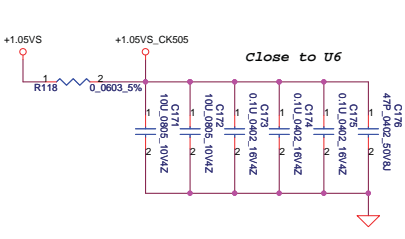
Layout Note:
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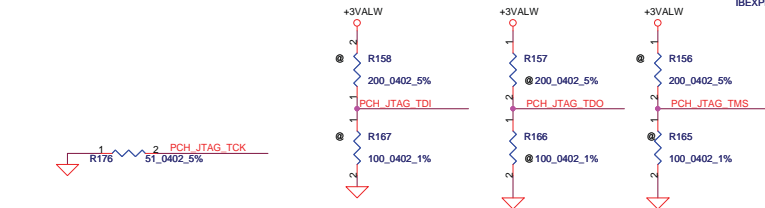
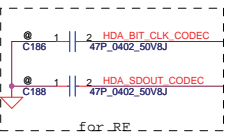
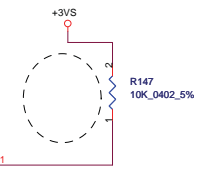
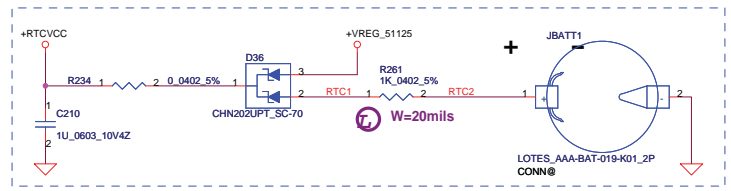
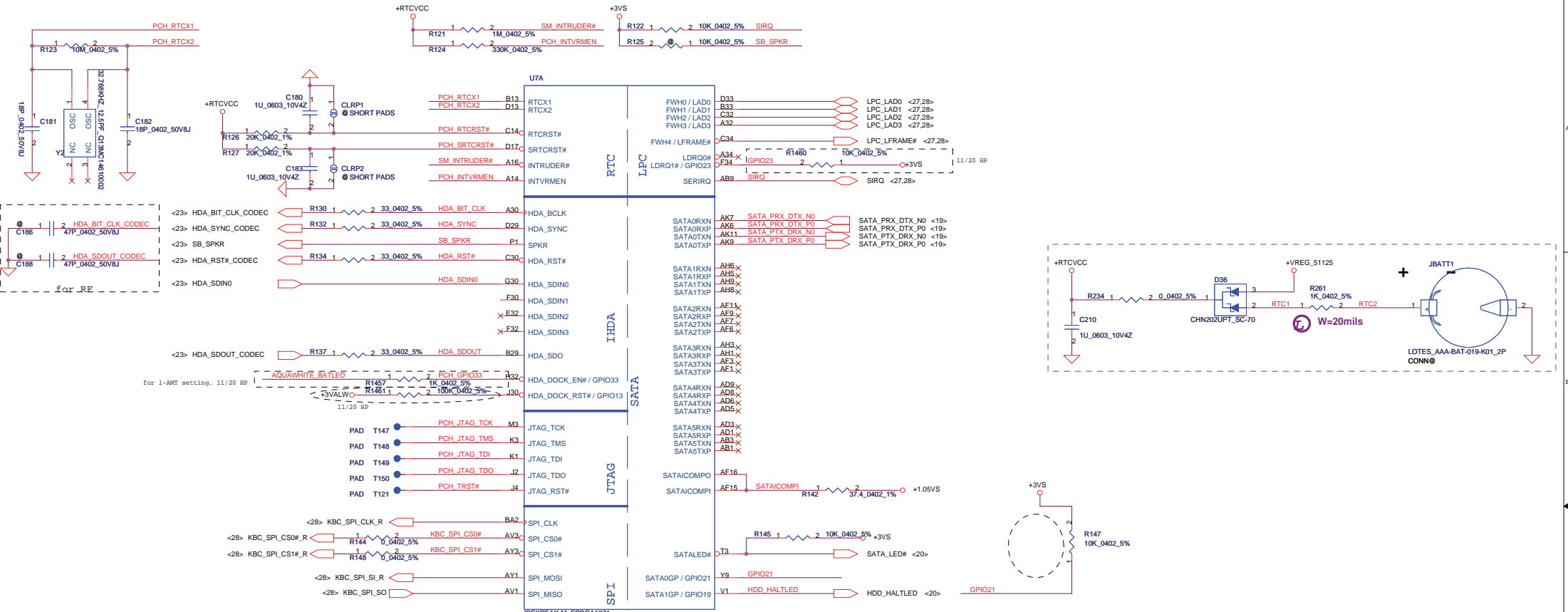


2nd Source :
 IDT ICS9LV83197BKLF MLF 32P
 REALTEK RTM890N-632-VB-GRT QFN 32P

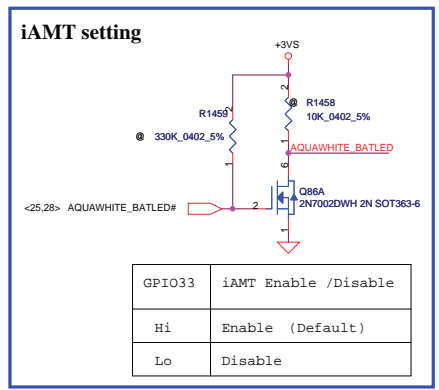
PIN 30	CPU_0	CPU_1
0 (Default)	133MHz	133MHz
1	100MHz	100MHz



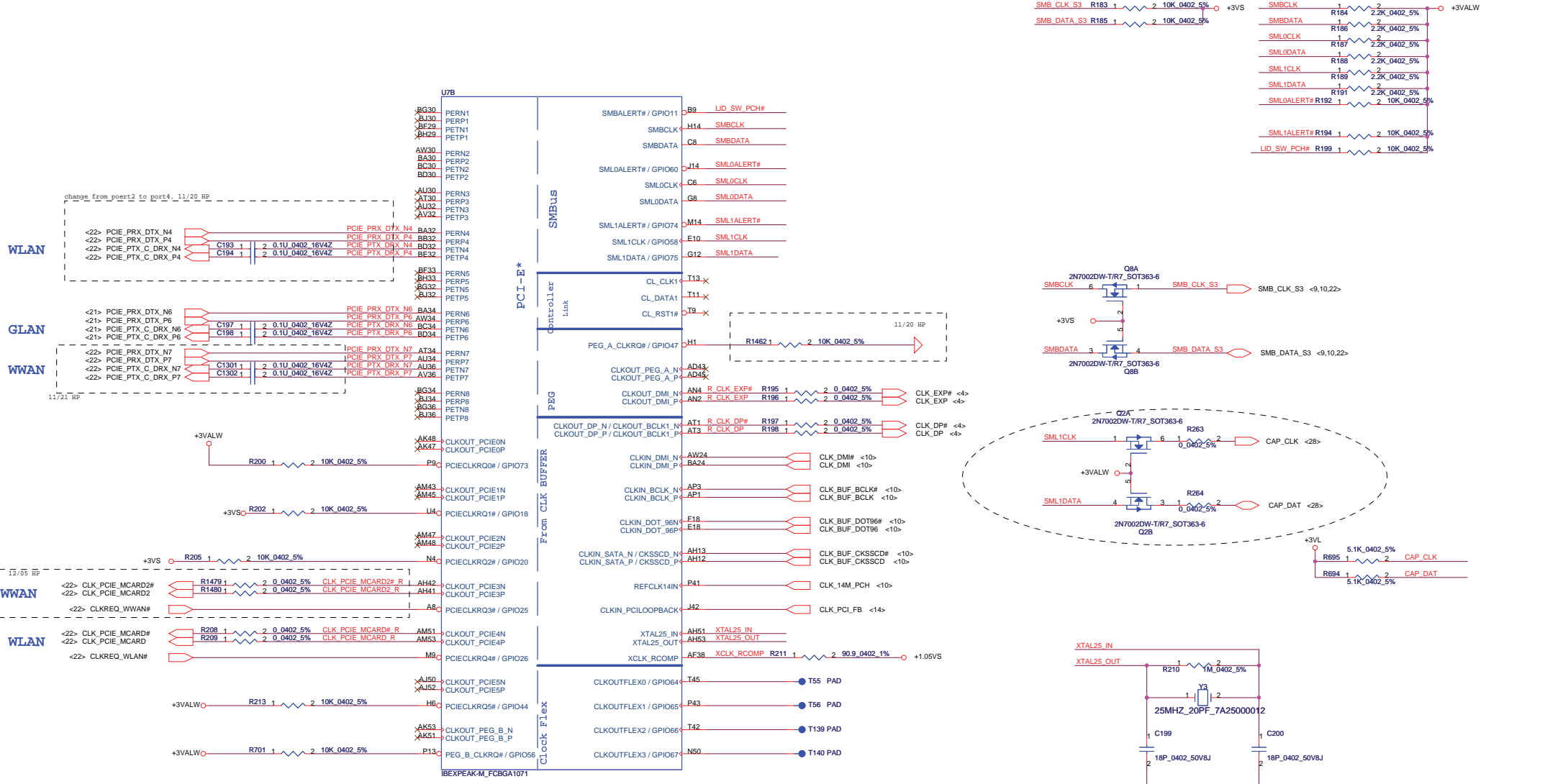
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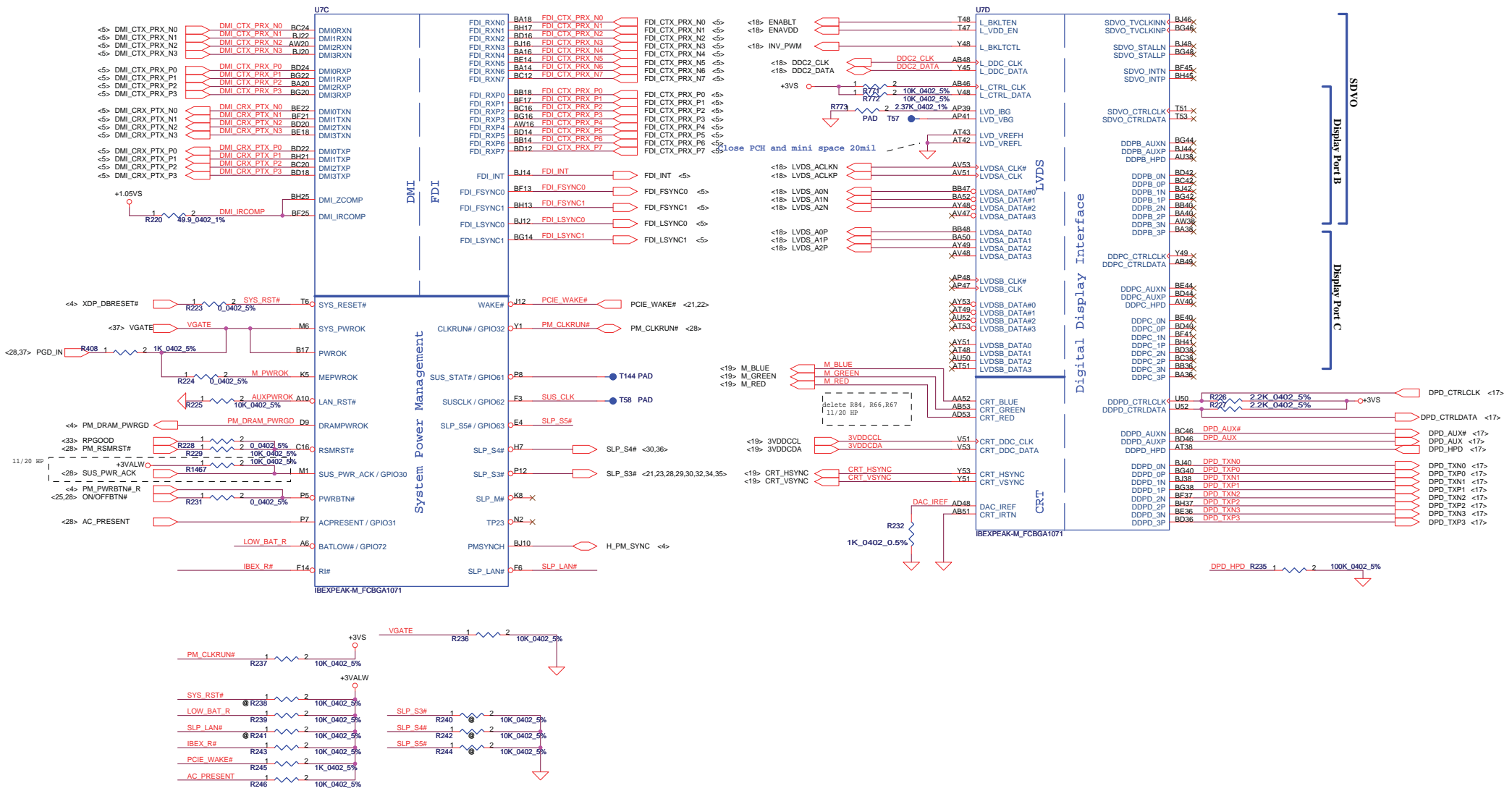
PCH Pin	Pre-Production Units		Production
	Ref.	ES1	ES2
PCH_JTAG_TDO	R157	Unstuff	200 ohm
	R166	Unstuff	100ohm
PCH_JTAG_TDI	R158	200 ohm	200 ohm
	R167	100ohm	100ohm
PCH_JTAG_TMS	R156	200 ohm	200 ohm
	R165	100ohm	100ohm
PCH_JTAG_TCK	R176	51 ohm 5%	51 ohm 5%

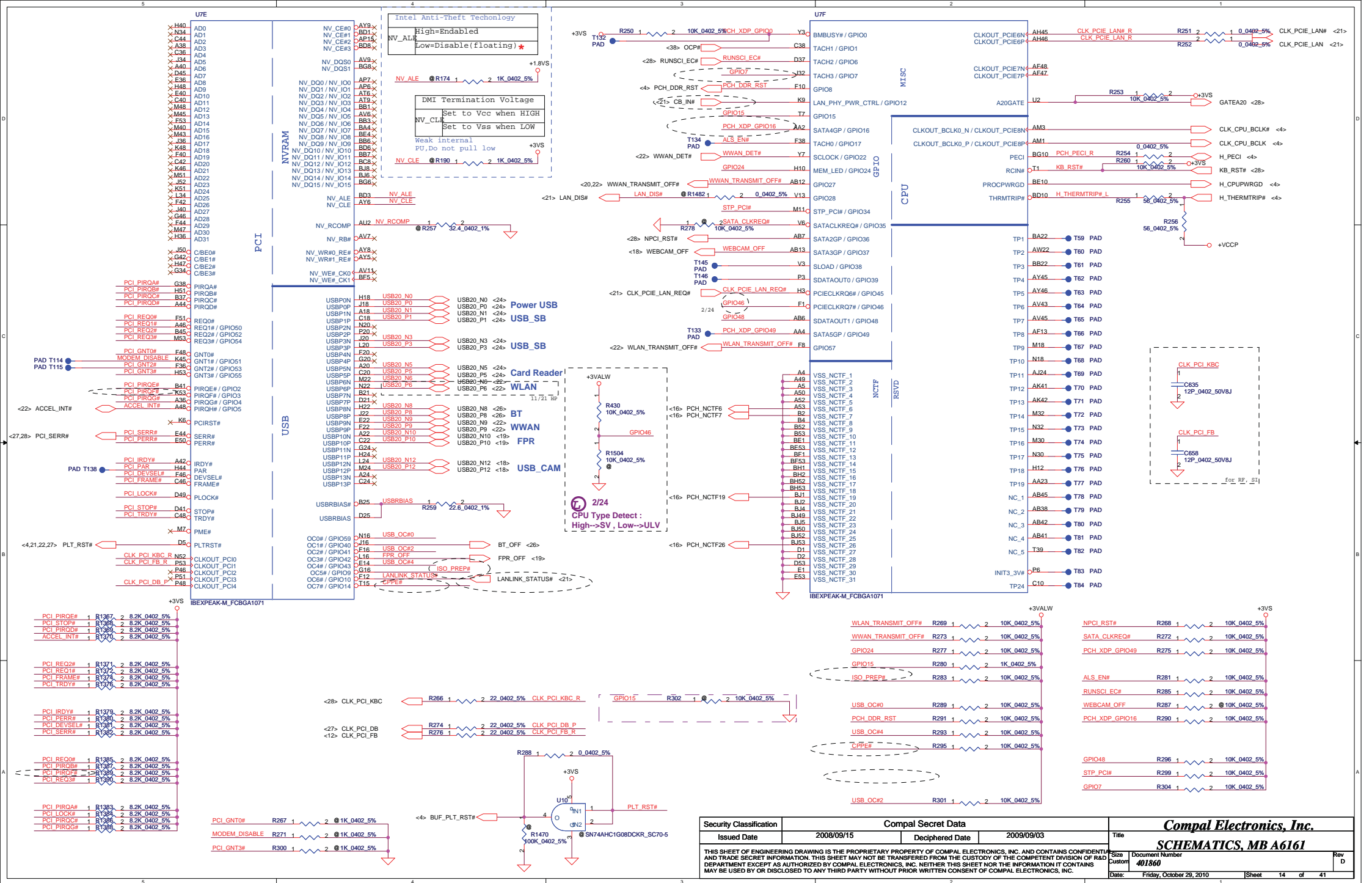


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Intel Anti-Theft Technology

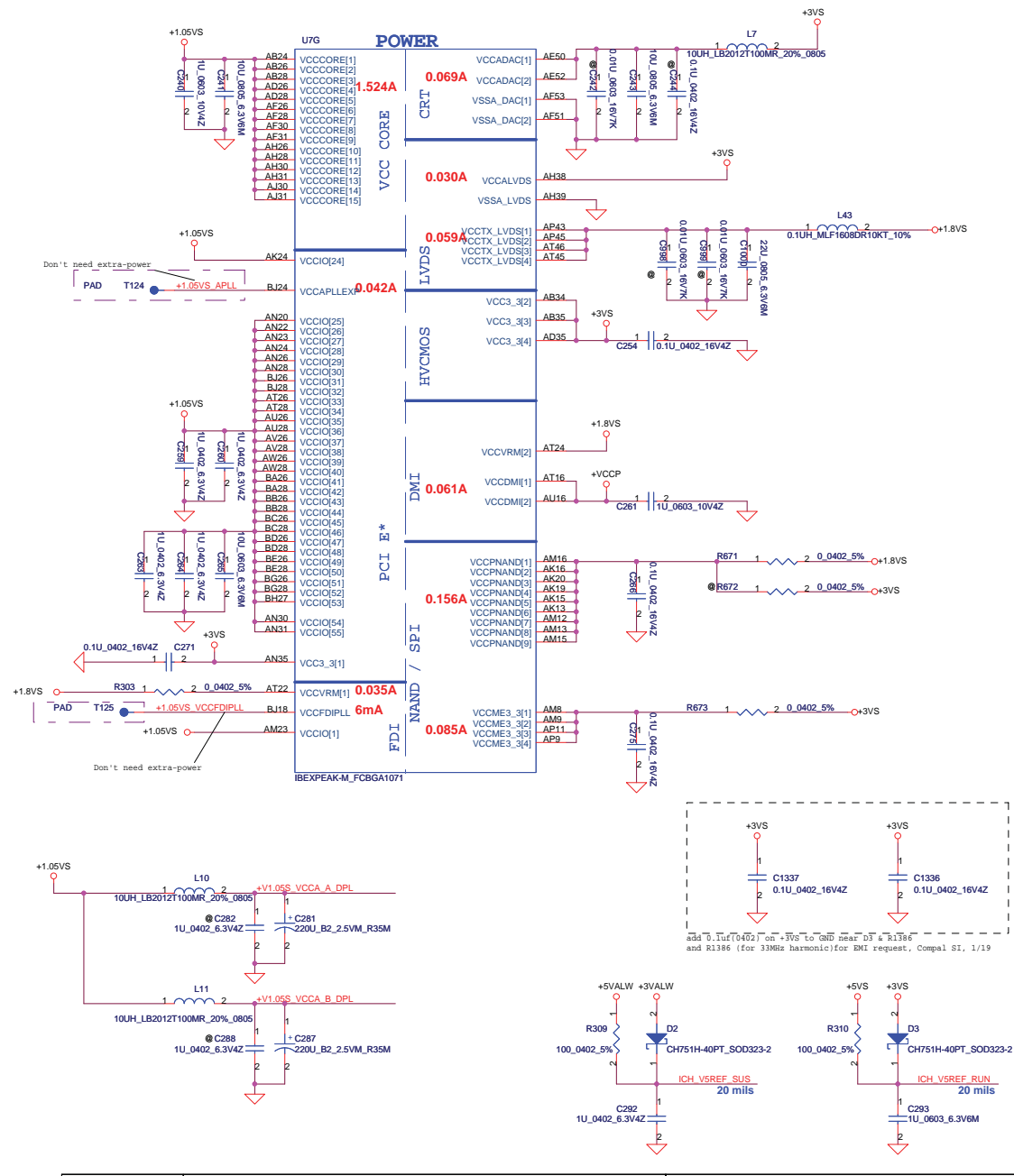
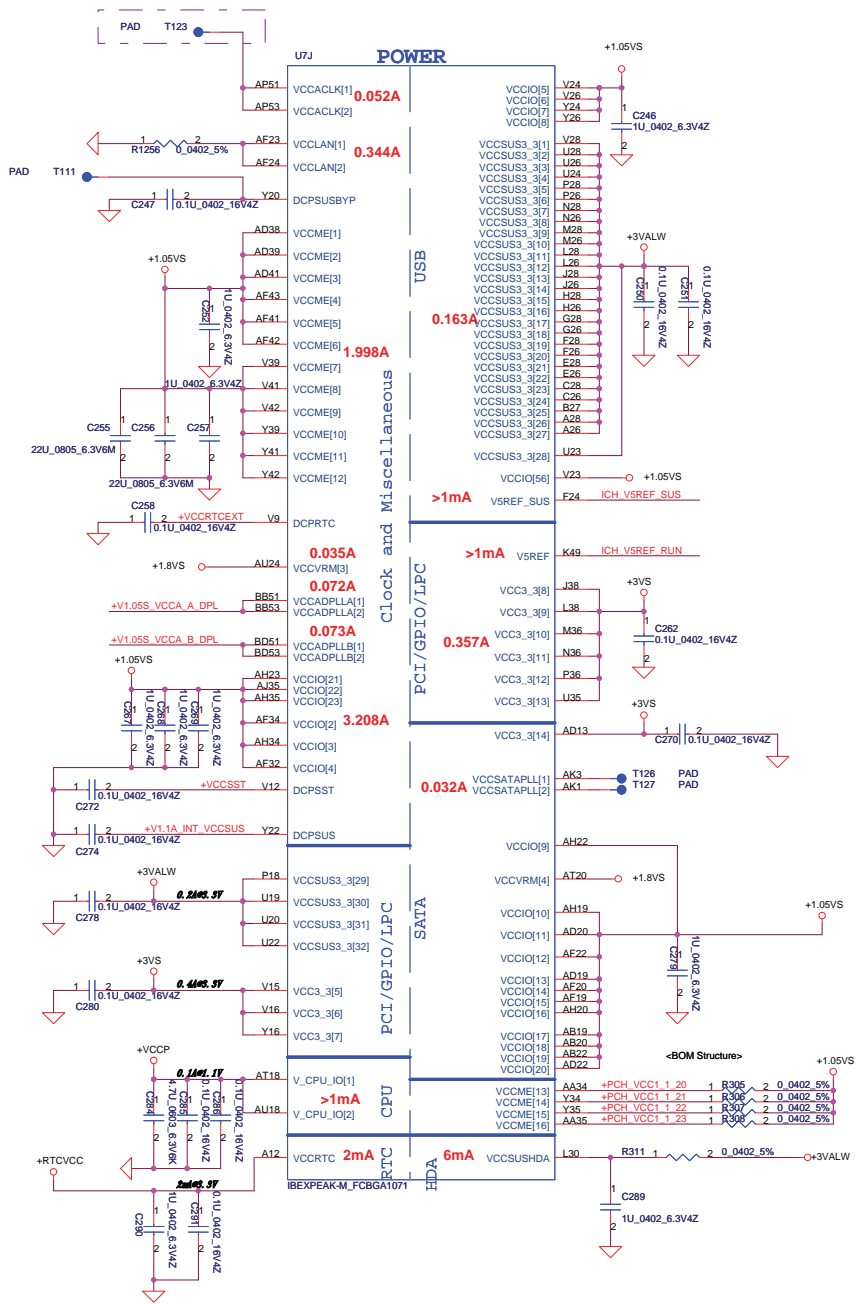
High=Enabled
Low=Disable(floating) *

NV_ALE @R174 1 2 1K 0.402 5%

DMI Termination Voltage
Set to Vcc when HIGH
Set to Vss when LOW
Weak internal PU, Do not pull low

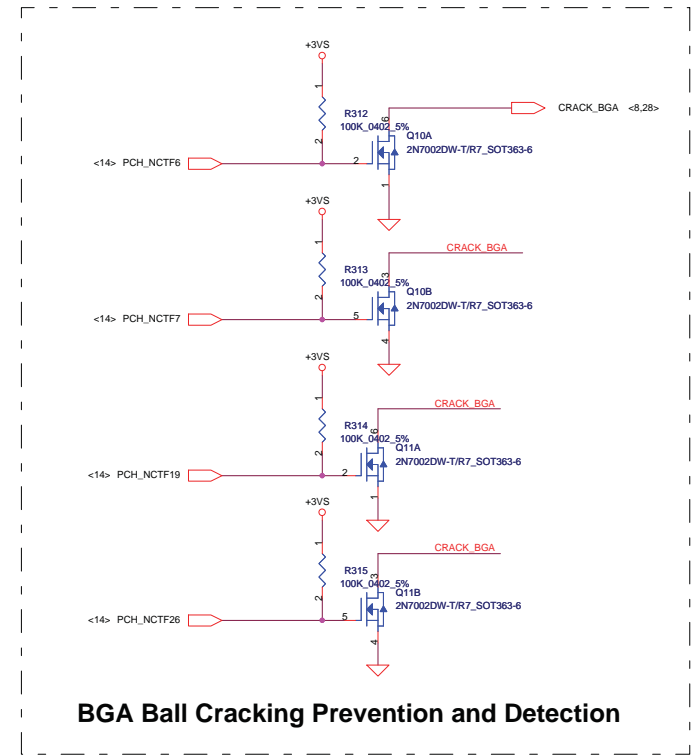
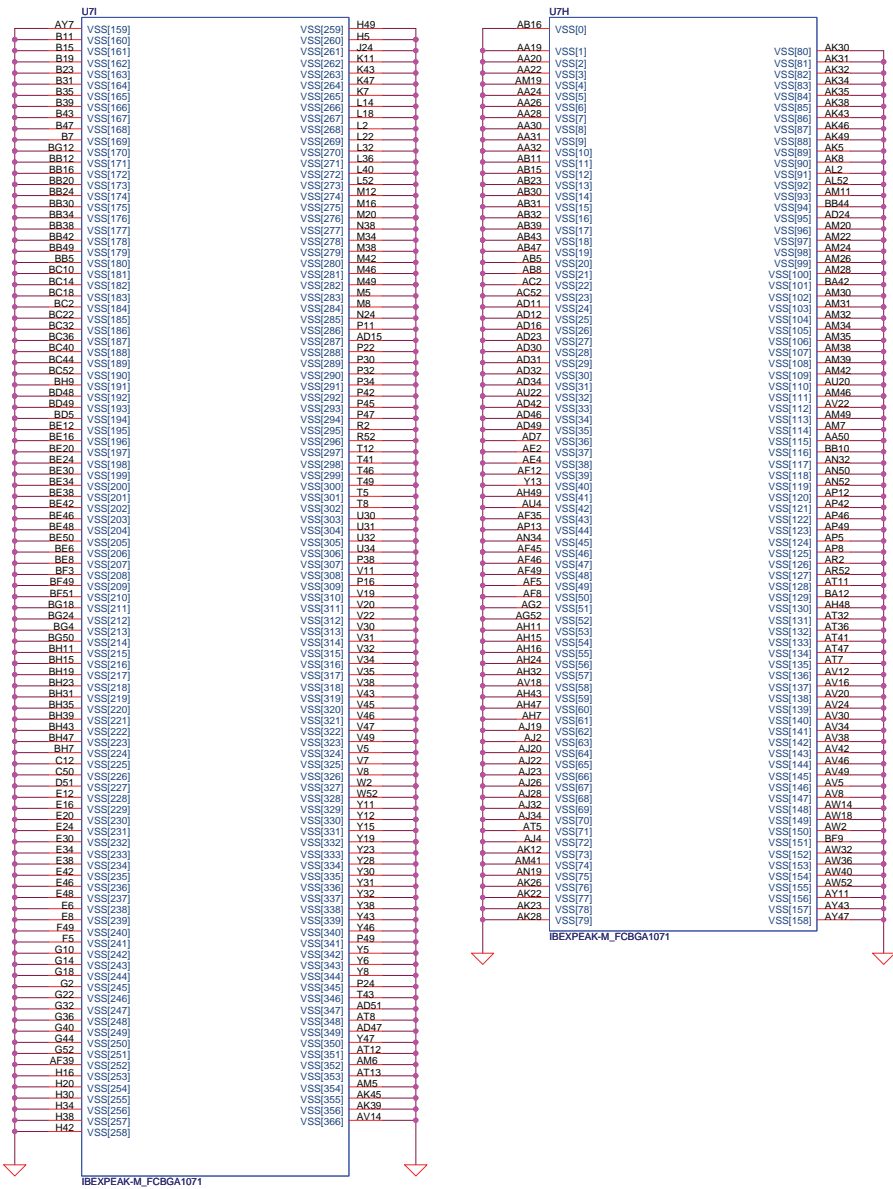
NV_CLE @R190 1 2 1K 0.402 5%

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				SCHEMATICS, MB A6161	
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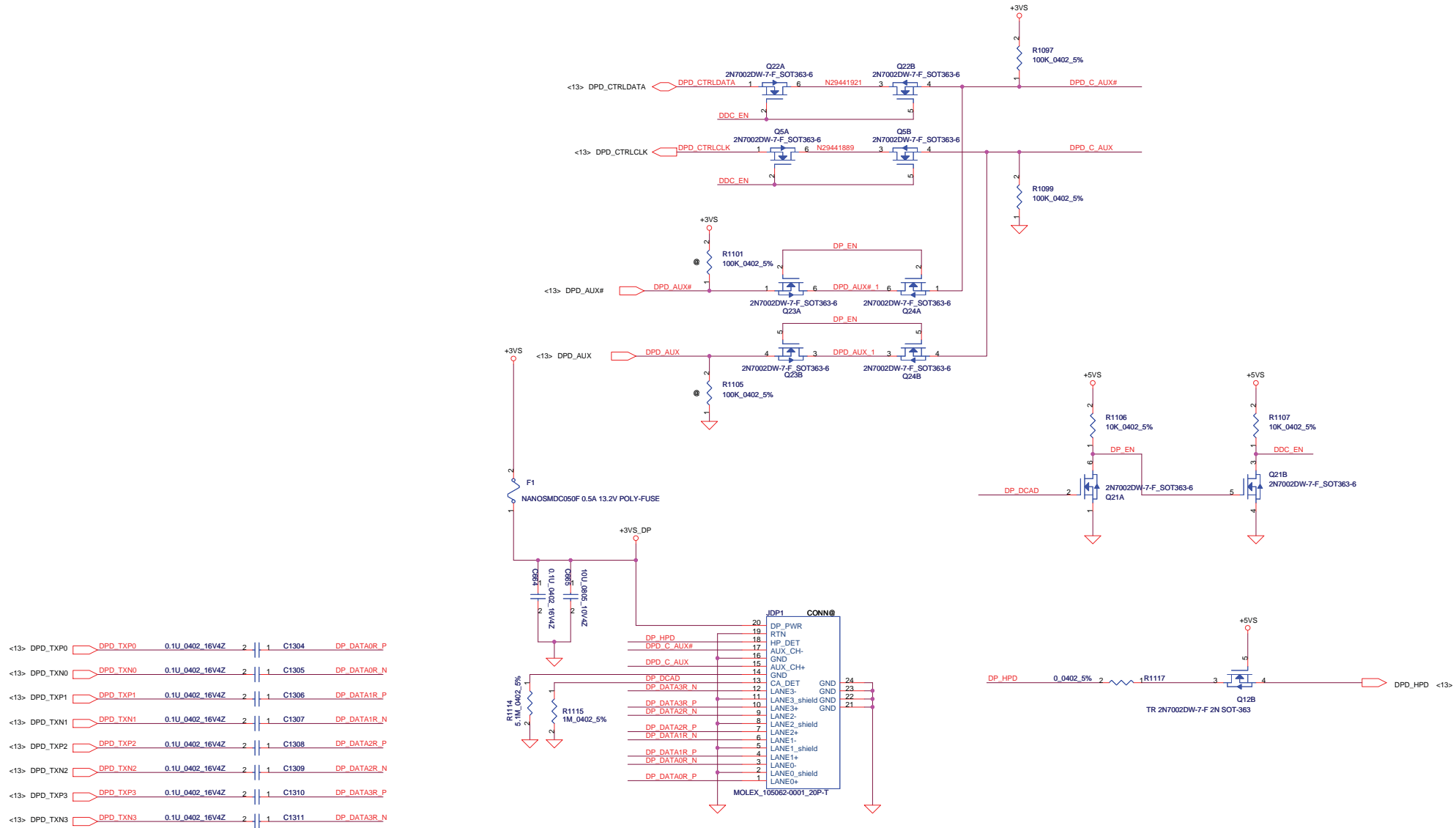


add 0.1uF(0.402) on +3Vs to GND near B3 & R1386 and R1386 (for 33MHz harmonic) for BMI request. Compal SI, 1/19

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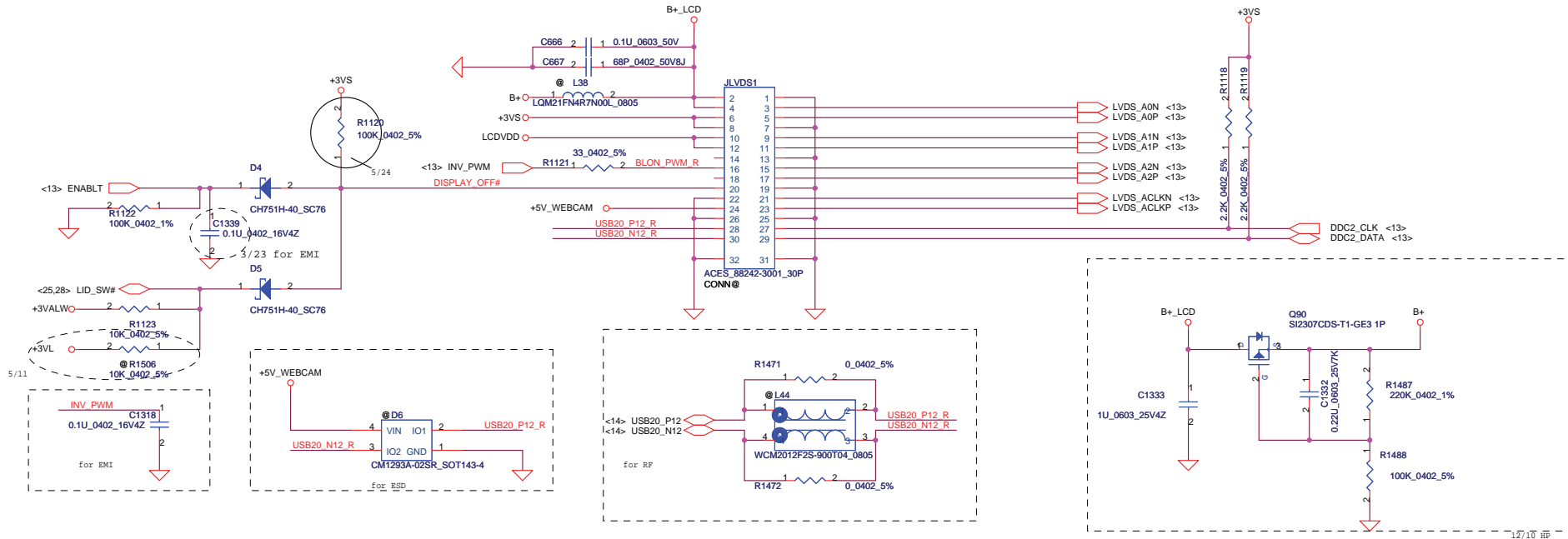
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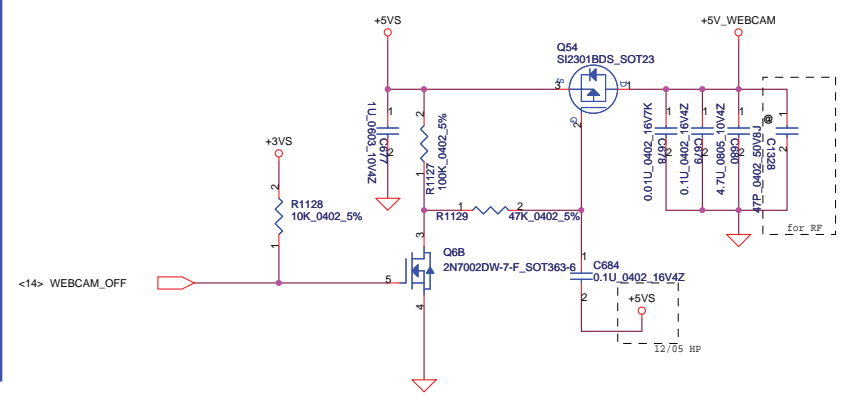
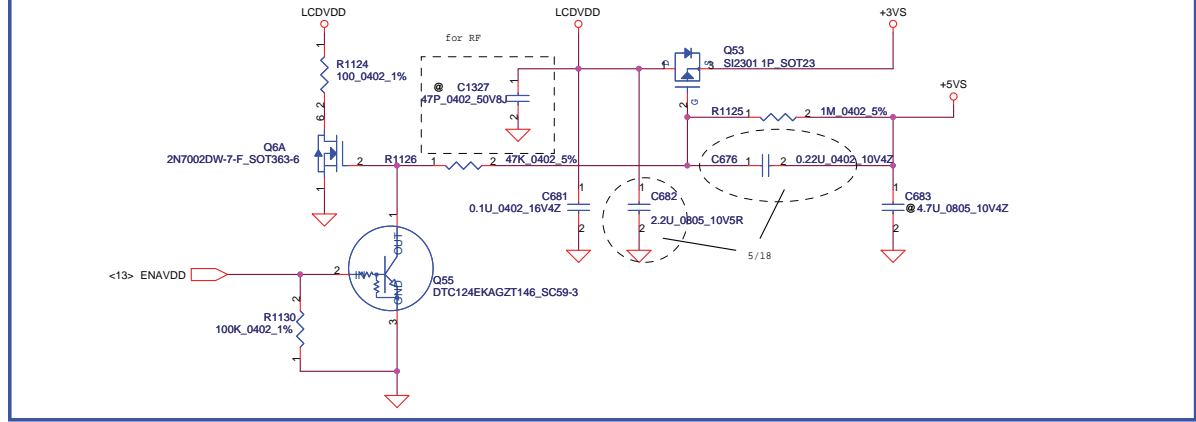
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<13>	DPD_TXN1	DPD_TXN1	0.1U_0402_16V4Z	2	1	C1307	DP_DATA1R_N
<13>	DPD_TXP2	DPD_TXP2	0.1U_0402_16V4Z	2	1	C1308	DP_DATA2R_P
<13>	DPD_TXN2	DPD_TXN2	0.1U_0402_16V4Z	2	1	C1309	DP_DATA2R_N
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LED/PANEL BD. CONN.



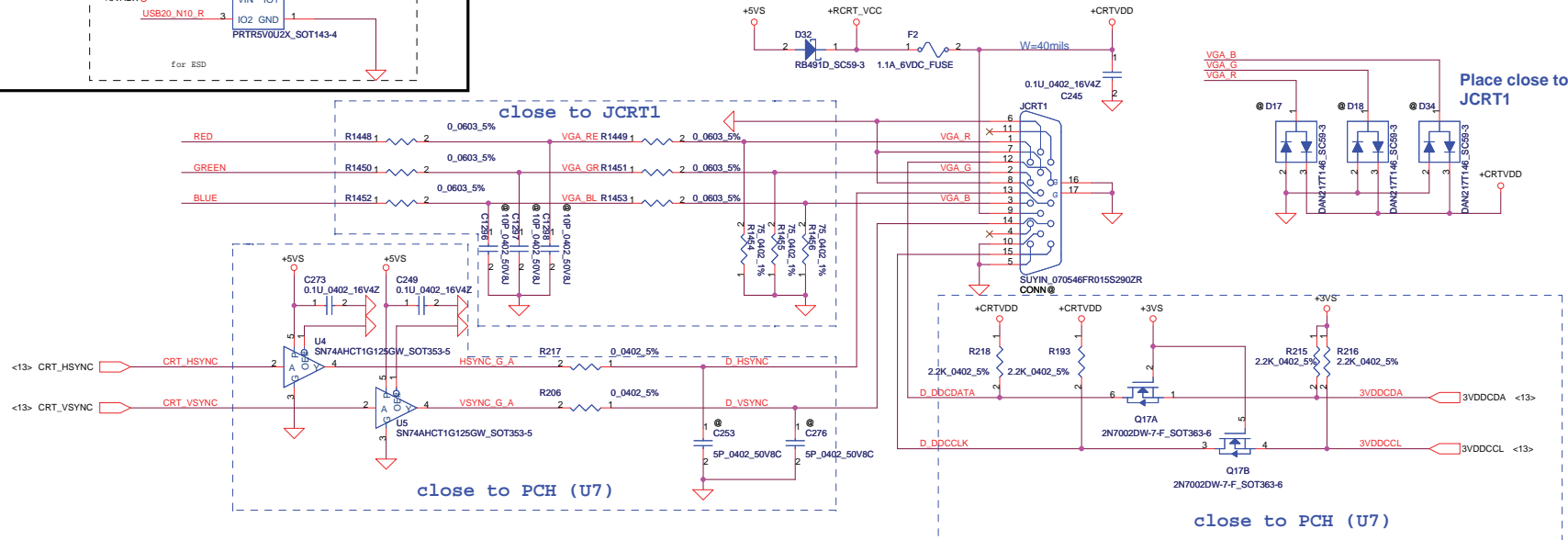
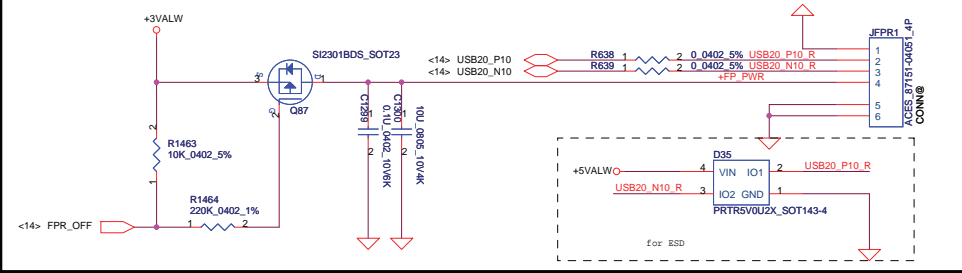
LCD POWER CIRCUIT



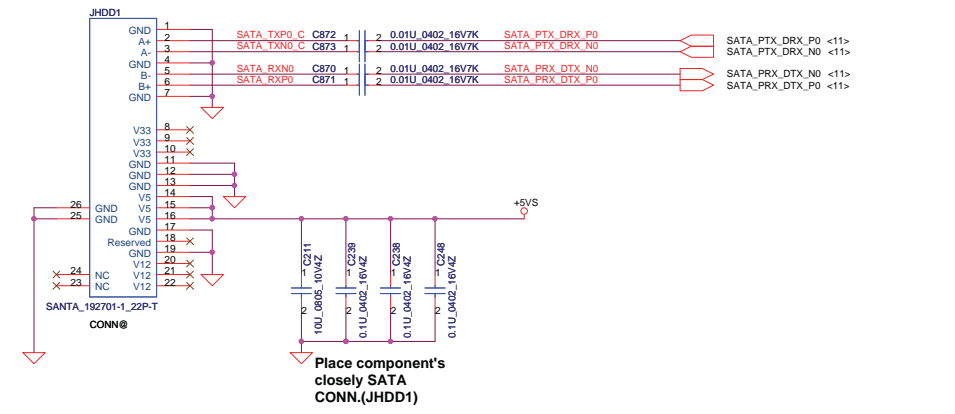
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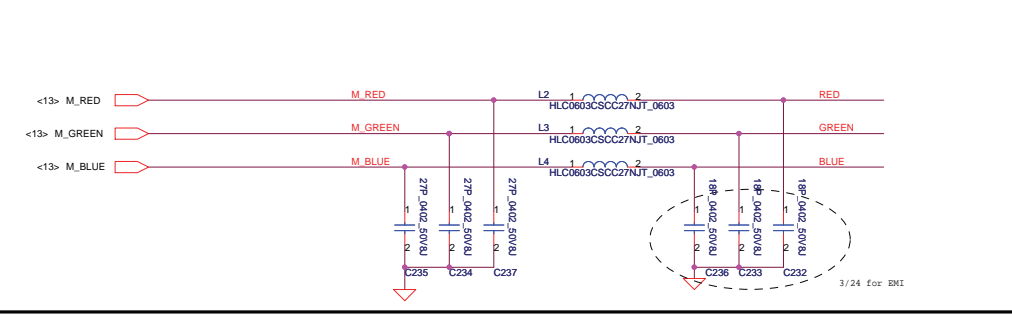
Finger printer



2.5' SATA HDD Connector

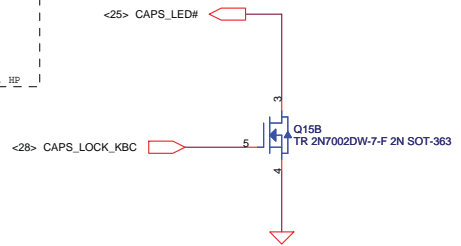
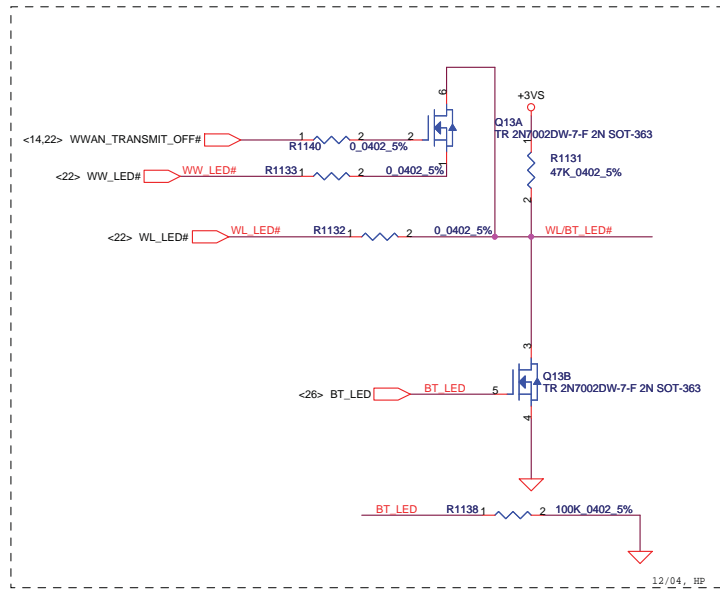
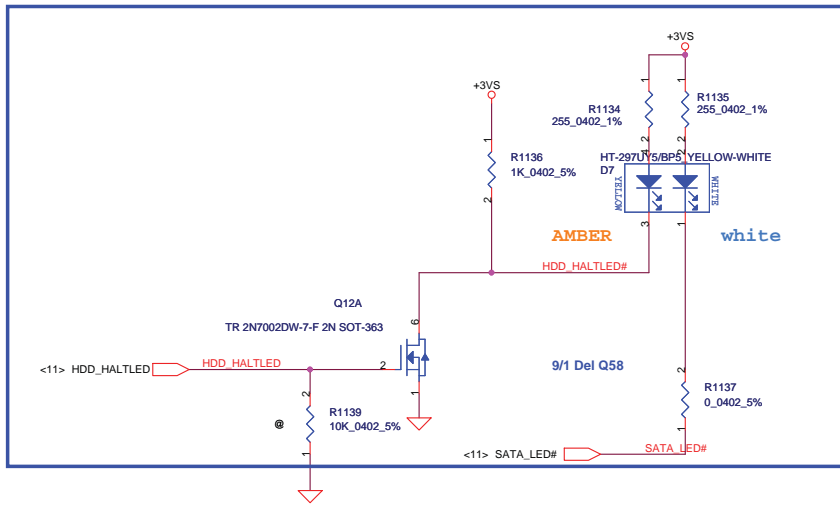


CRT Termination/EMI Filter close to PCH (U7)

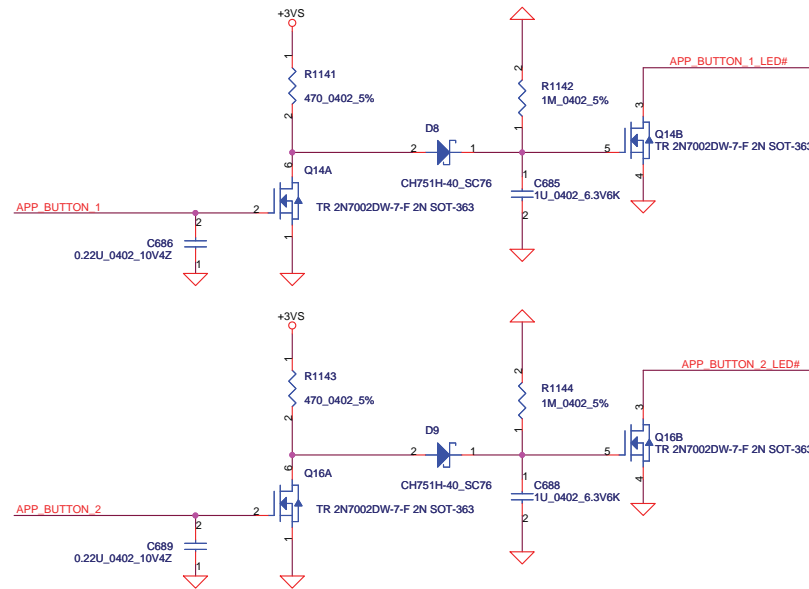
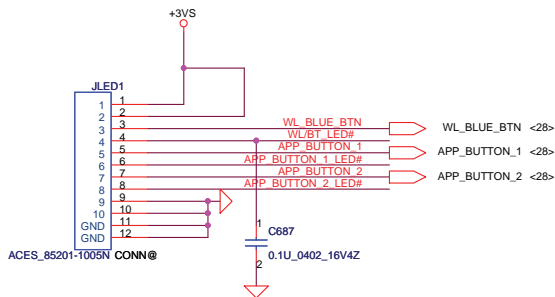


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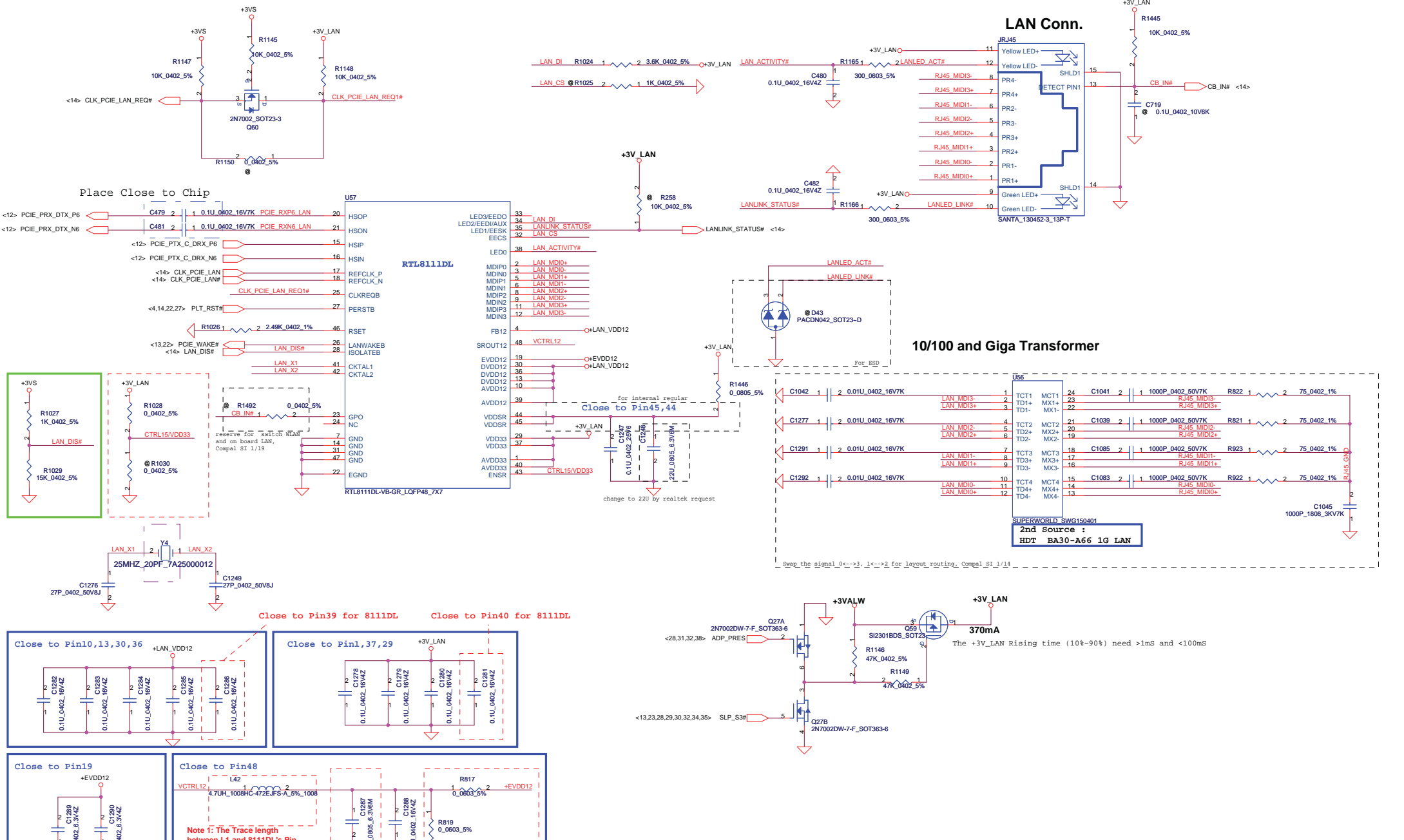
HDD active LED



To LED small board



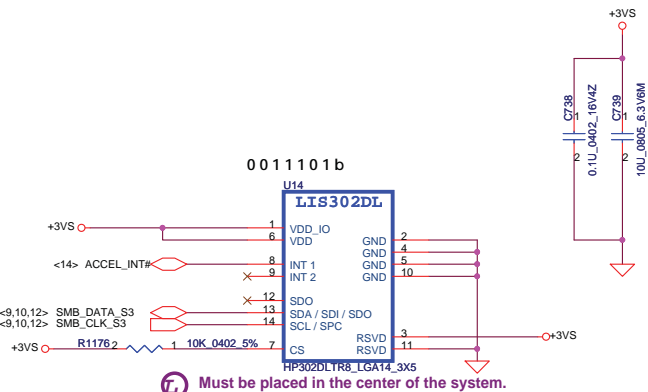
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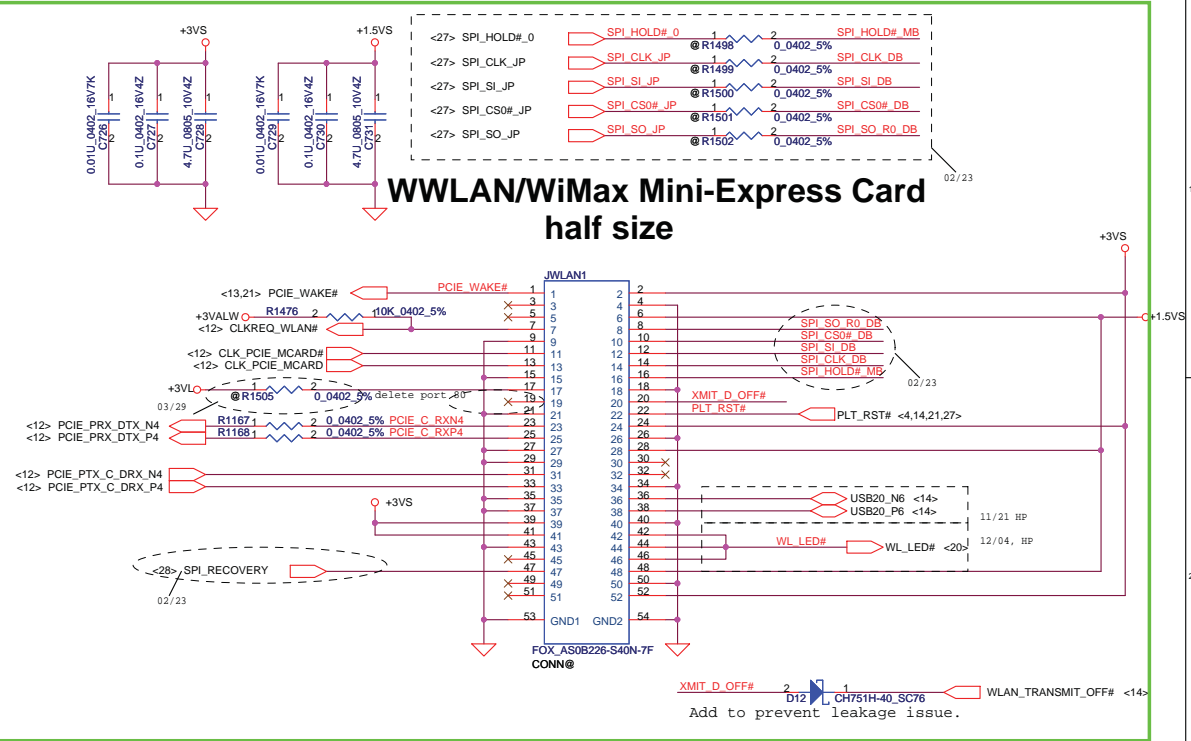
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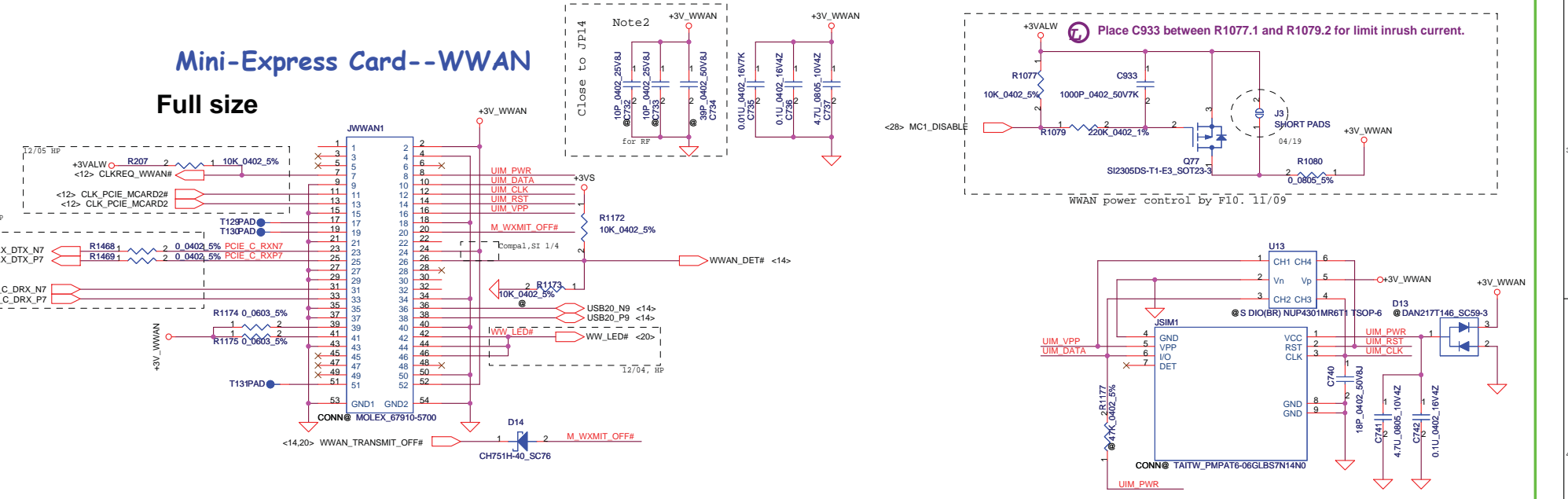
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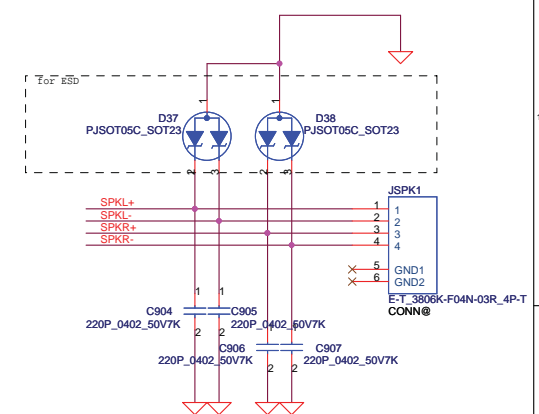
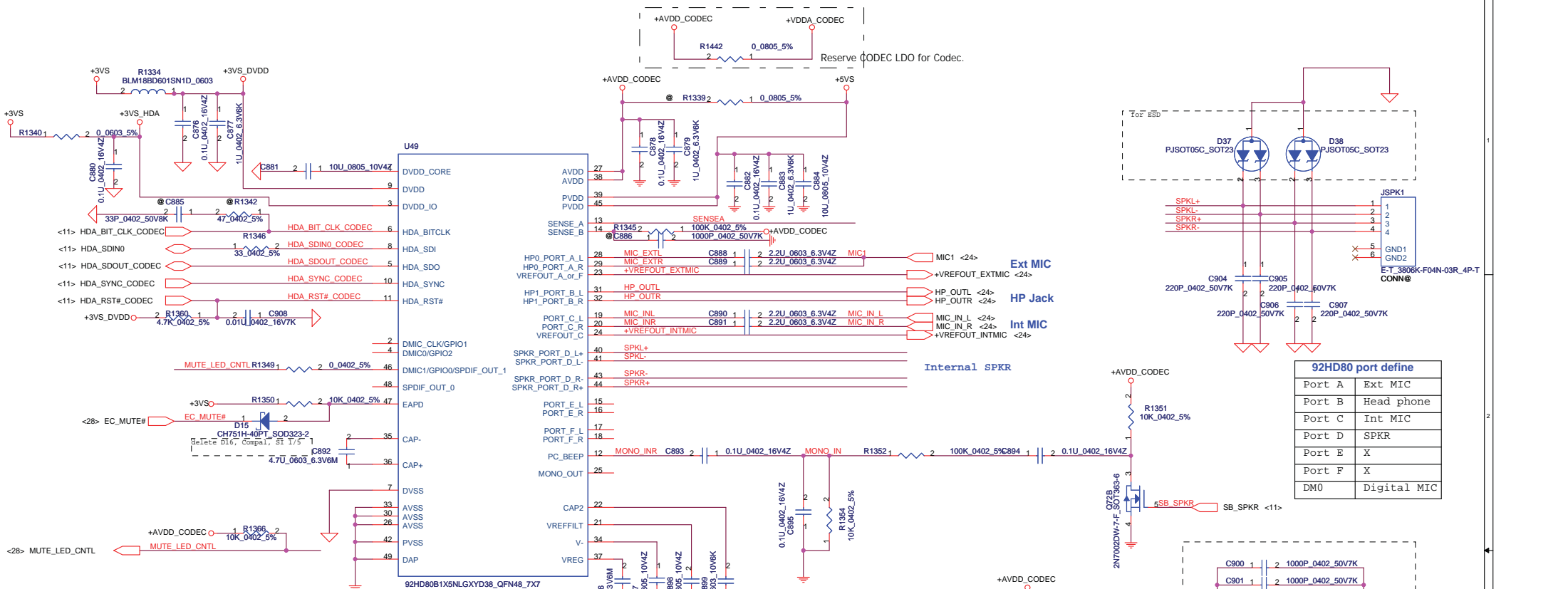


WWLAN/WiMax Mini-Express Card half size

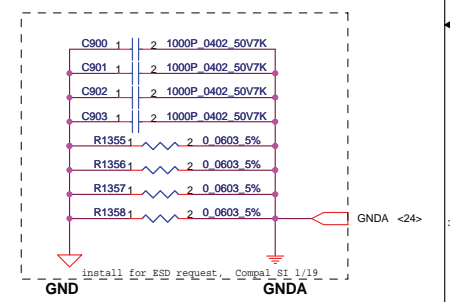
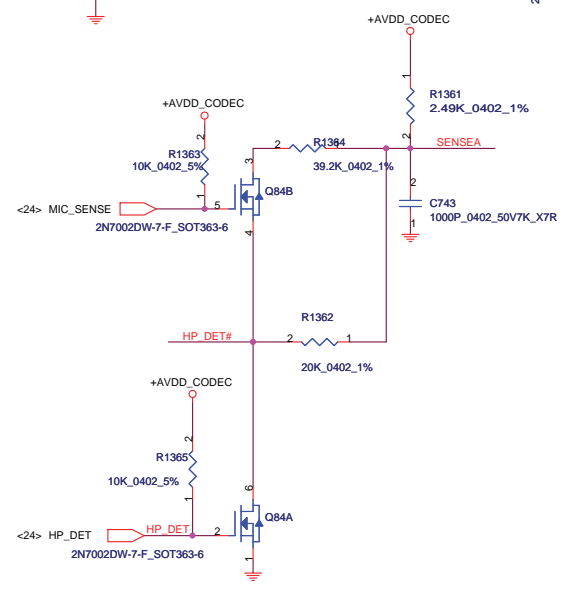
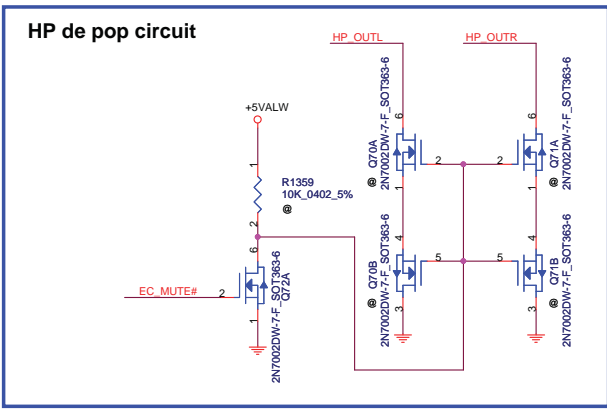
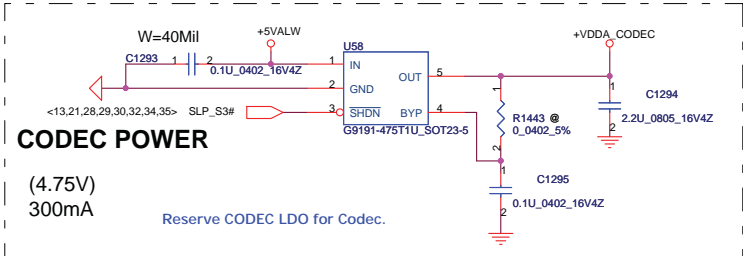


Mini-Express Card--WWAN Full size

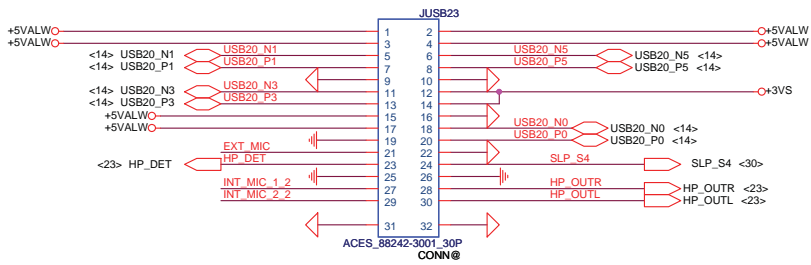




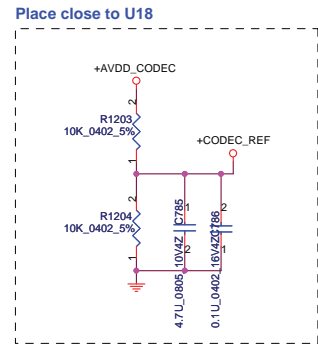
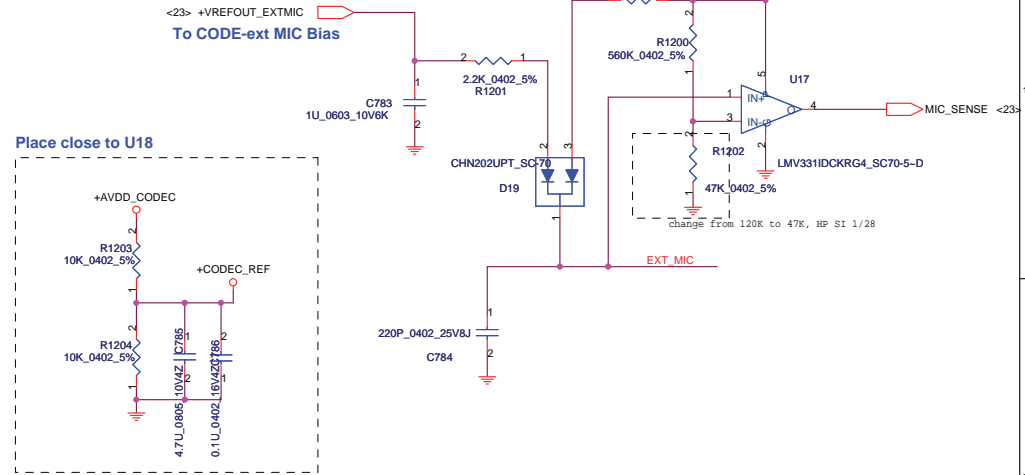
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Port A	Ext MIC
Port B	Head phone
Port C	Int MIC
Port D	SPKR
Port E	X
Port F	X
DM0	Digital MIC



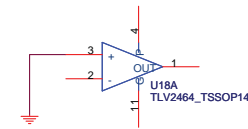
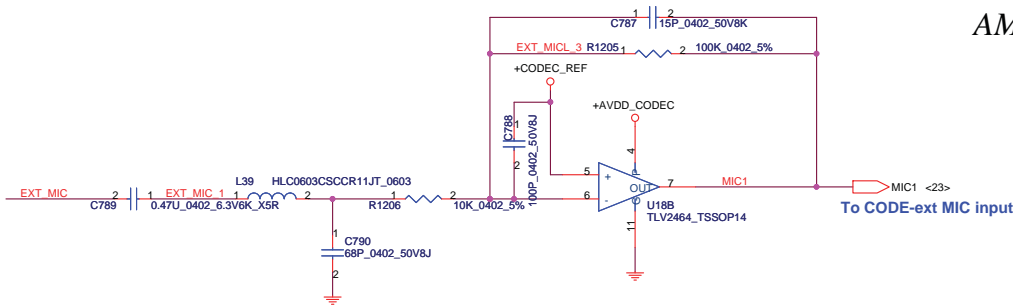
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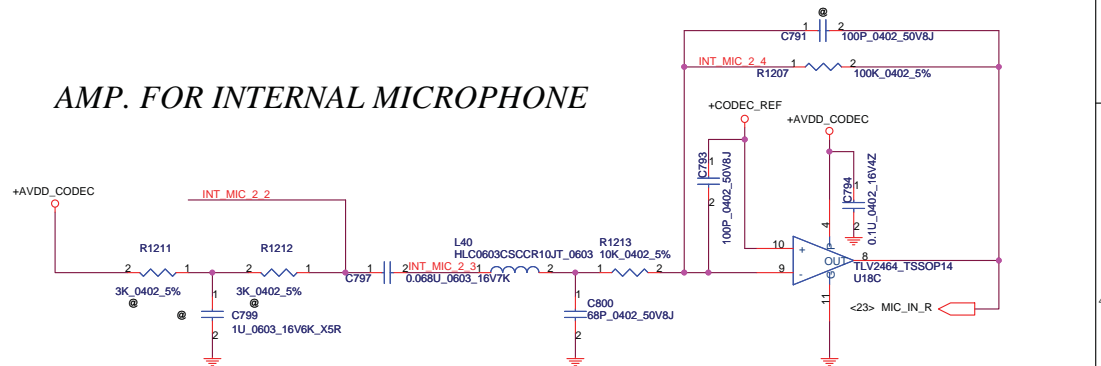
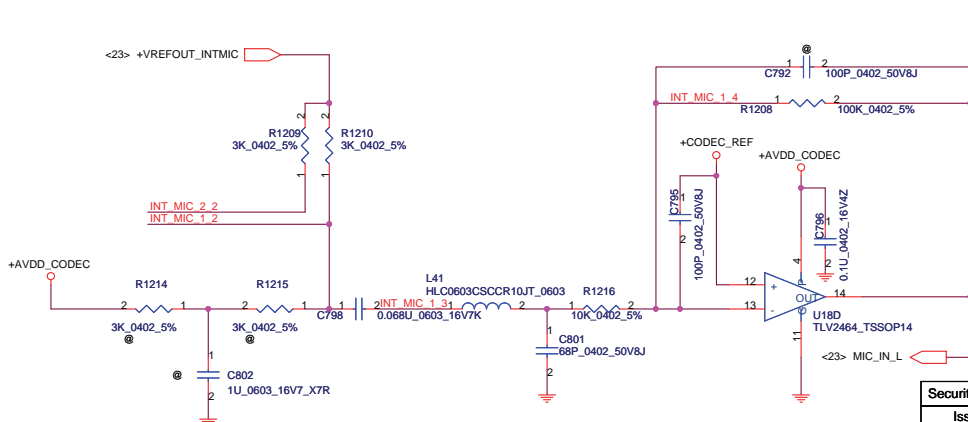
USB I/O connx2 , Audio JACK
Card reader transfer conn



AMP. FOR EXTERNAL MICROPHONE

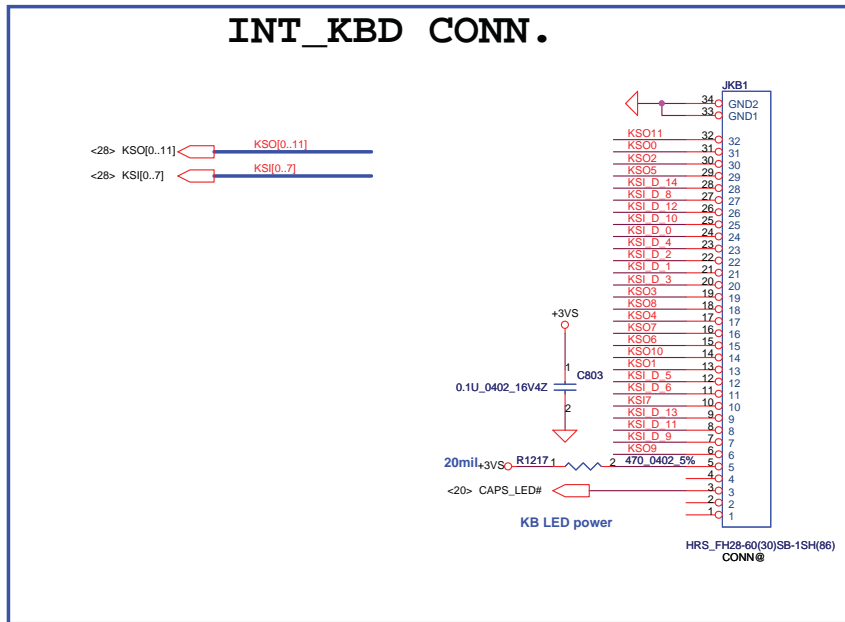


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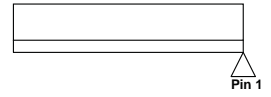
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INT_KBD CONN.



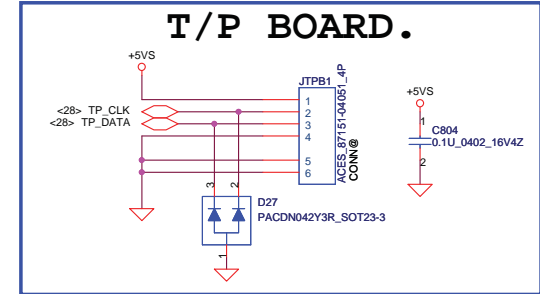
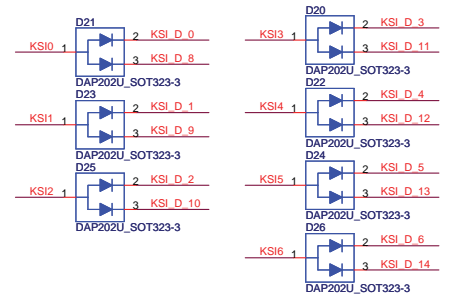
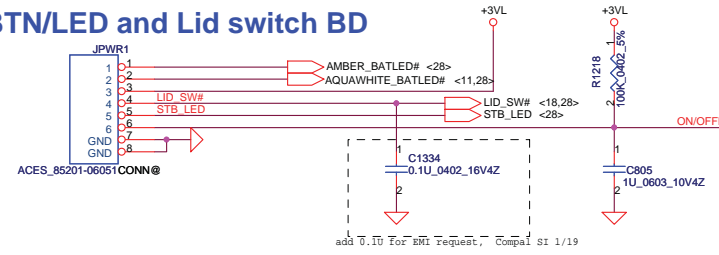
For EMI

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KSO0	@ C656	1	2	100P_0402_50V8J
KSO2	@ C624	1	2	100P_0402_50V8J
KSO5	@ C621	1	2	100P_0402_50V8J
KSI_D_14	@ C622	1	2	100P_0402_50V8J
KSI_D_8	@ C625	1	2	100P_0402_50V8J
KSI_D_12	@ C626	1	2	100P_0402_50V8J
KSI_D_10	@ C627	1	2	100P_0402_50V8J
KSI_D_0	@ C630	1	2	100P_0402_50V8J
KSI_D_4	@ C629	1	2	100P_0402_50V8J
KSI_D_2	@ C631	1	2	100P_0402_50V8J
KSI_D_1	@ C632	1	2	100P_0402_50V8J
KSI_D_3	@ C633	1	2	100P_0402_50V8J
KSO3	@ C634	1	2	100P_0402_50V8J
KSO8	@ C641	1	2	100P_0402_50V8J
KSO4	@ C637	1	2	100P_0402_50V8J
KSO7	@ C657	1	2	100P_0402_50V8J
KSO6	@ C638	1	2	100P_0402_50V8J
KSO10	@ C639	1	2	100P_0402_50V8J
KSO1	@ C640	1	2	100P_0402_50V8J
KSI_D_5	@ C660	1	2	100P_0402_50V8J
KSI_D_6	@ C642	1	2	100P_0402_50V8J
KSI7	@ C659	1	2	100P_0402_50V8J
KSI_D_13	@ C654	1	2	100P_0402_50V8J
KSI_D_11	@ C744	1	2	100P_0402_50V8J
KSI_D_9	@ C745	1	2	100P_0402_50V8J
KSO9	@ C724	1	2	100P_0402_50V8J

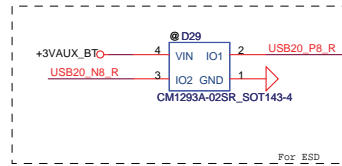


Pin1 reserve , so net name is reserve for Fossil down contact

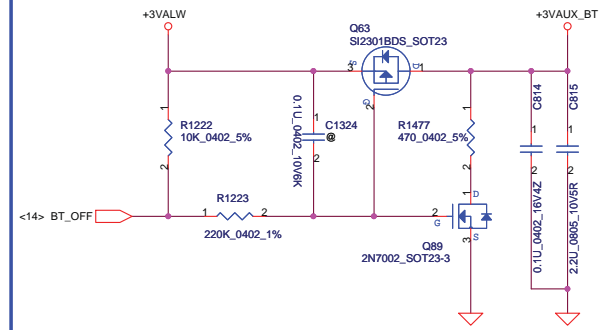
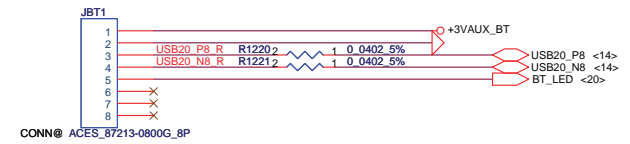
Power BTN/LED and Lid switch BD



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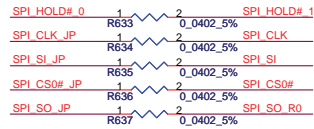
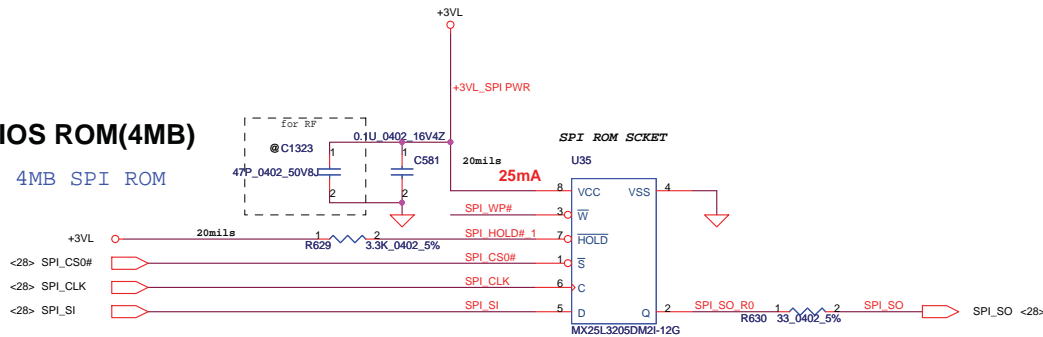
BT (SoftBreeze) Connector



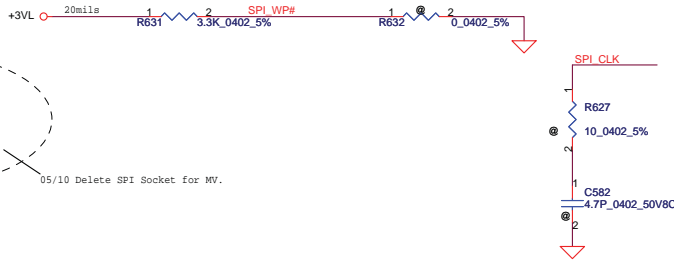
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BIOS ROM(4MB)

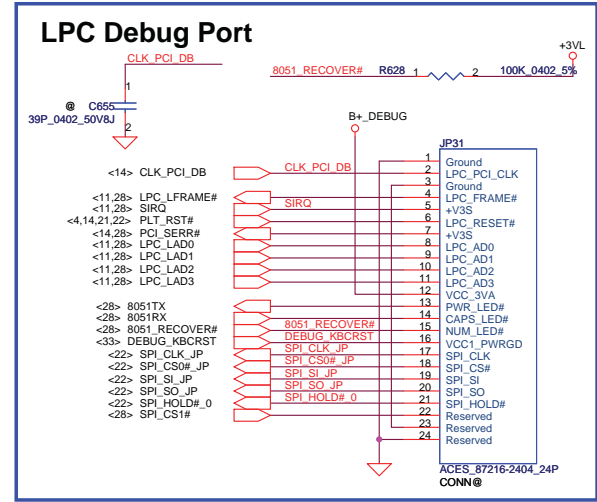
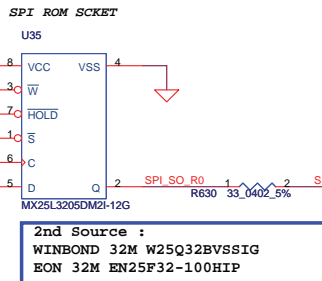
4MB SPI ROM



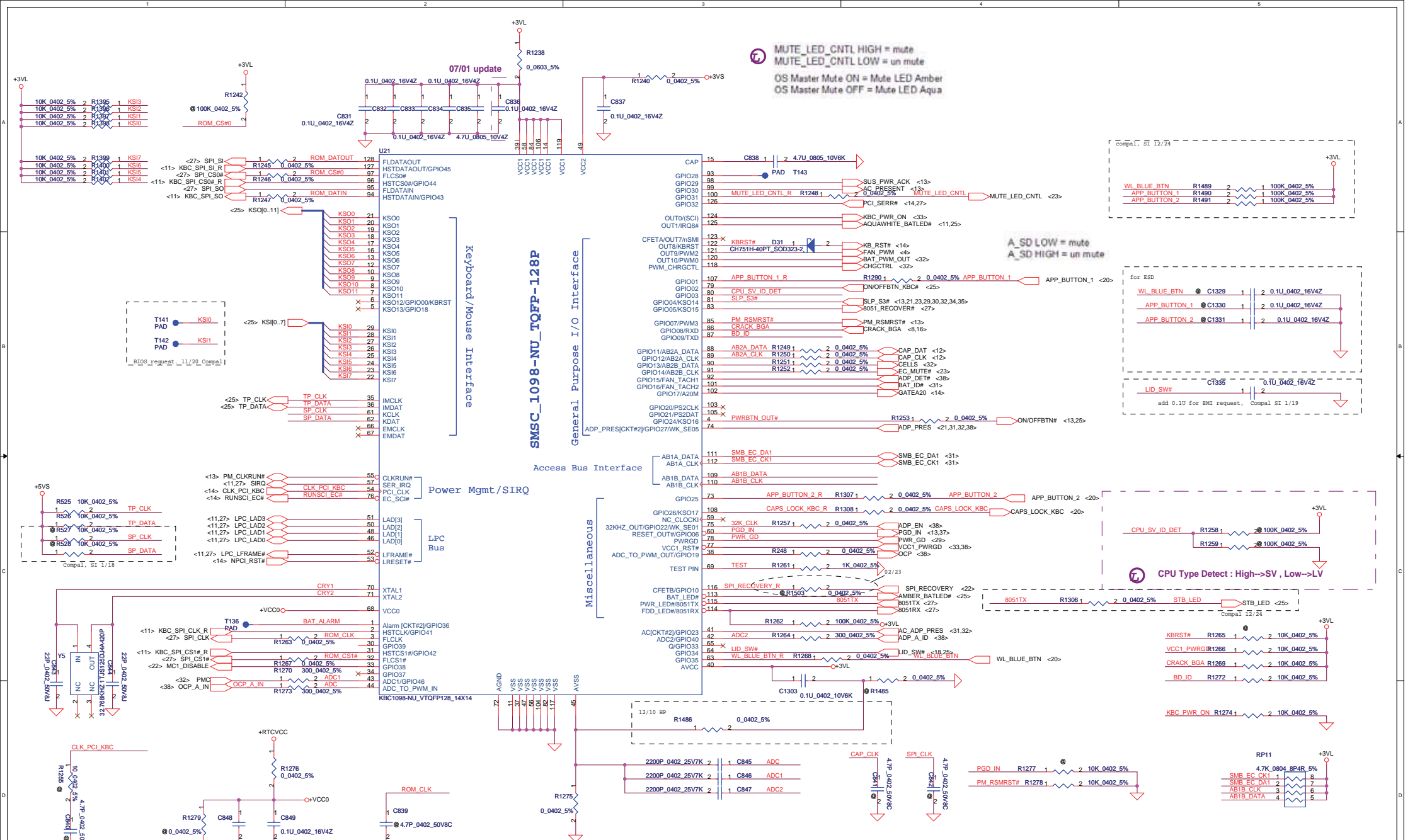
4MB SPI ROM



05/10 Delete SPI Socket for MV.

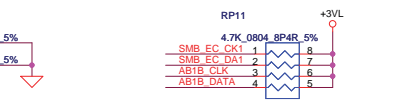
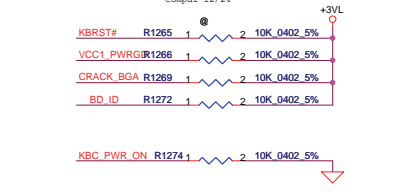
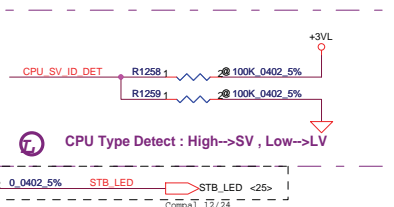
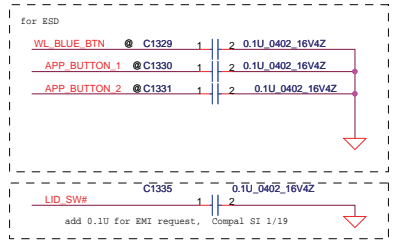
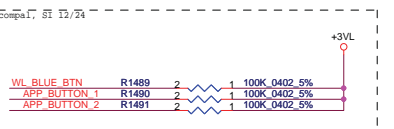


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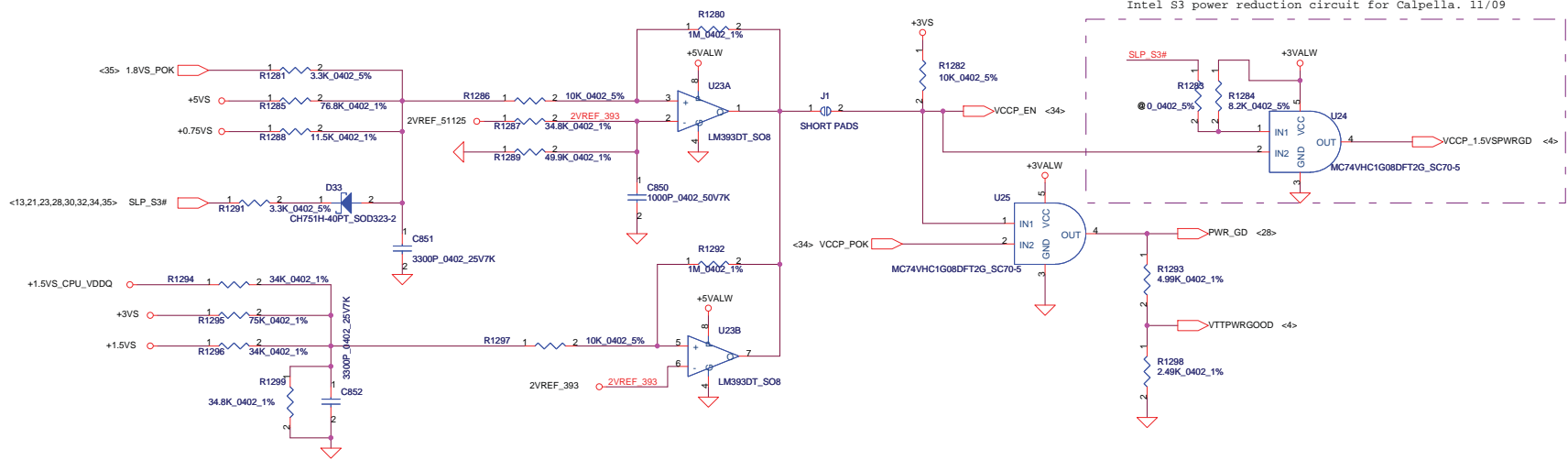


MUTE_LED_CNTL HIGH = mute
MUTE_LED_CNTL LOW = un mute
OS Master Mute ON = Mute LED Amber
OS Master Mute OFF = Mute LED Aqua

A_SD LOW = mute
A_SD HIGH = un mute



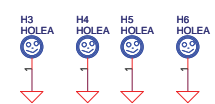
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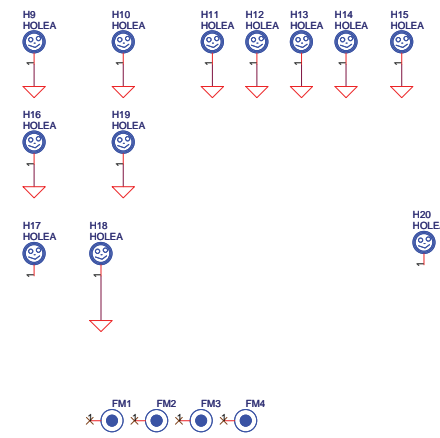
WWAN Card STANDOFF



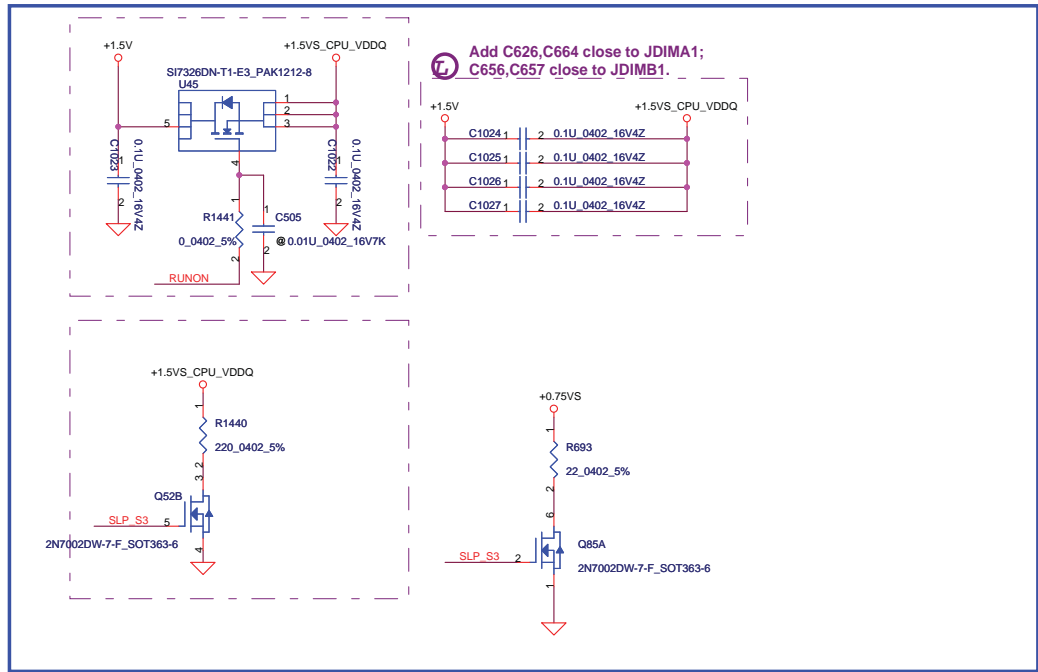
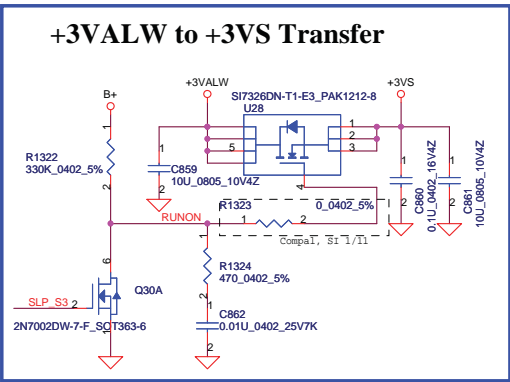
CPU support



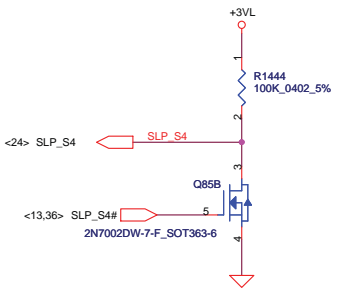
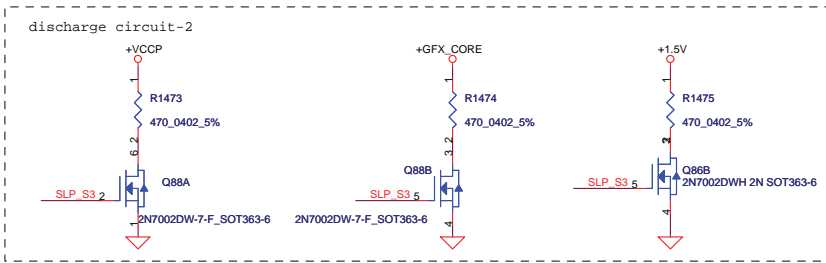
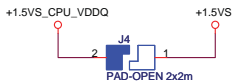
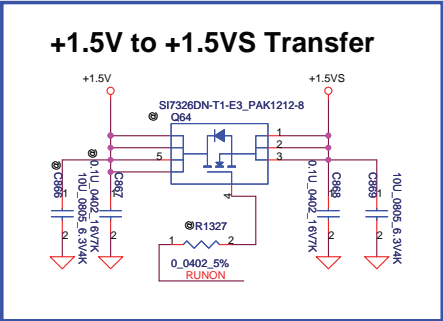
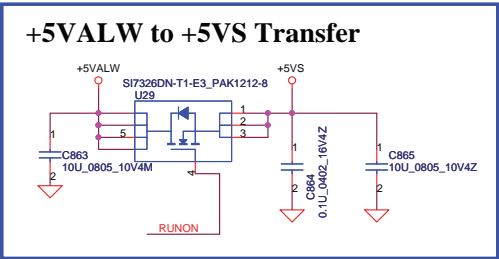
WWLAN Card STANDOFF



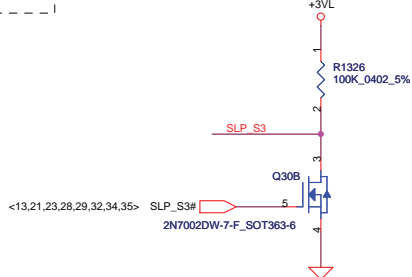
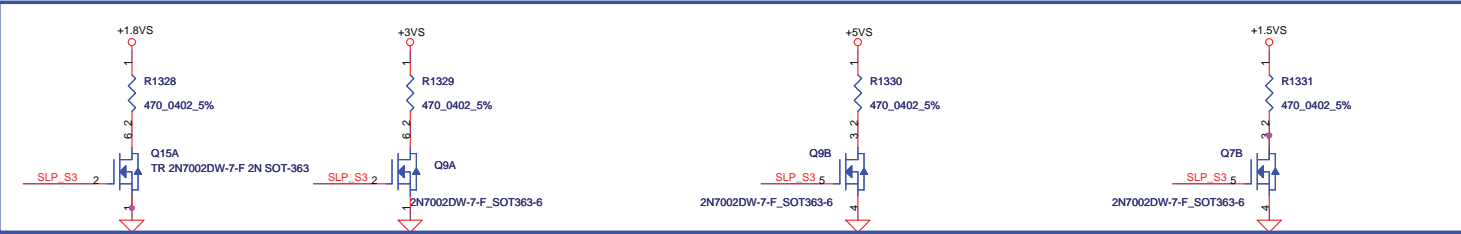
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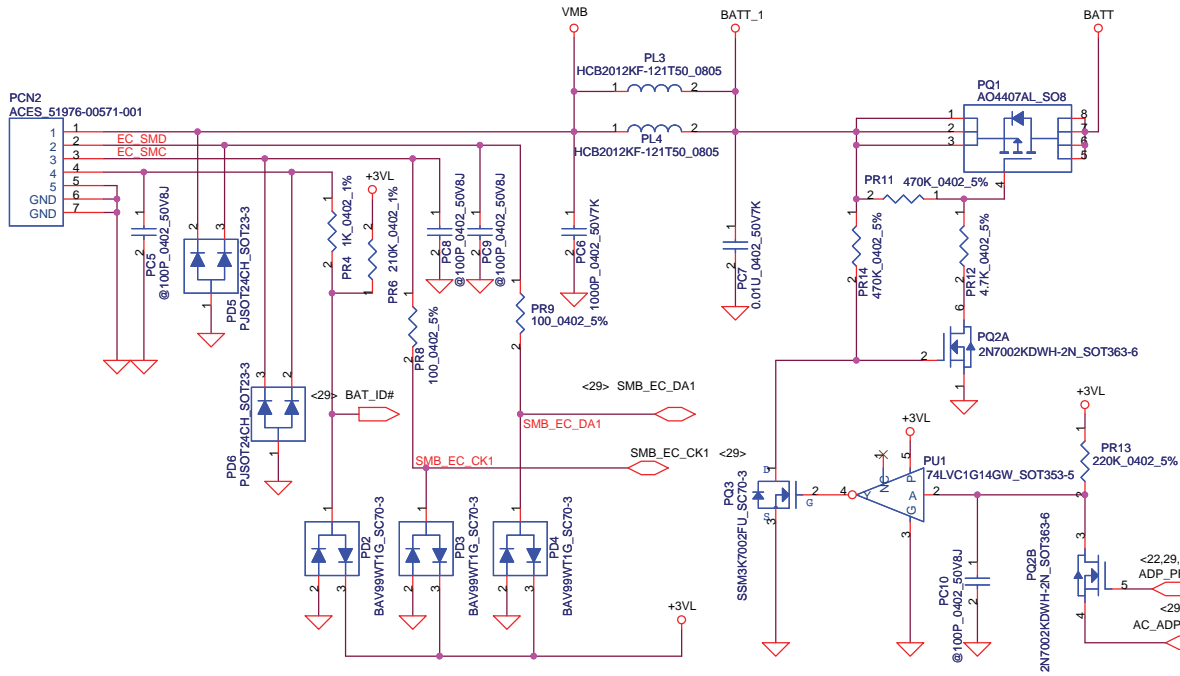
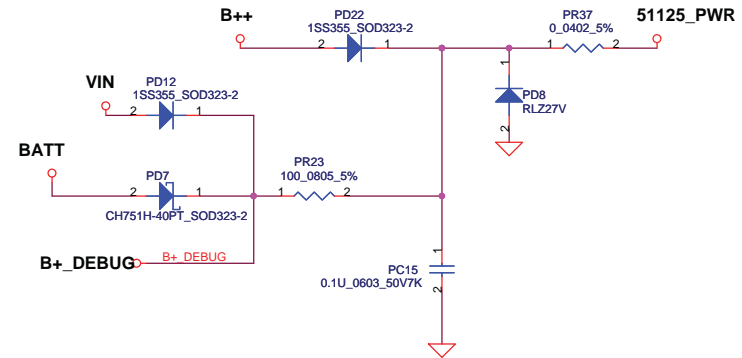
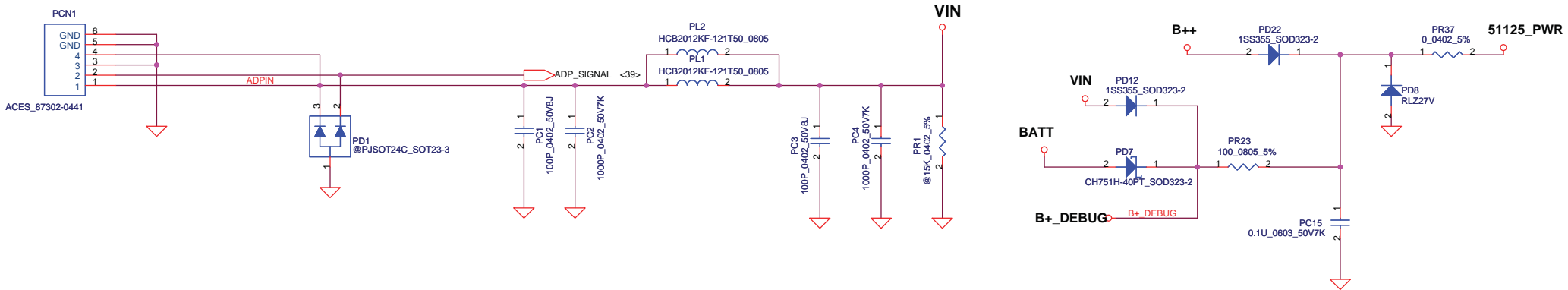
Intel S3 power reduction circuit for Calpella. 11/09



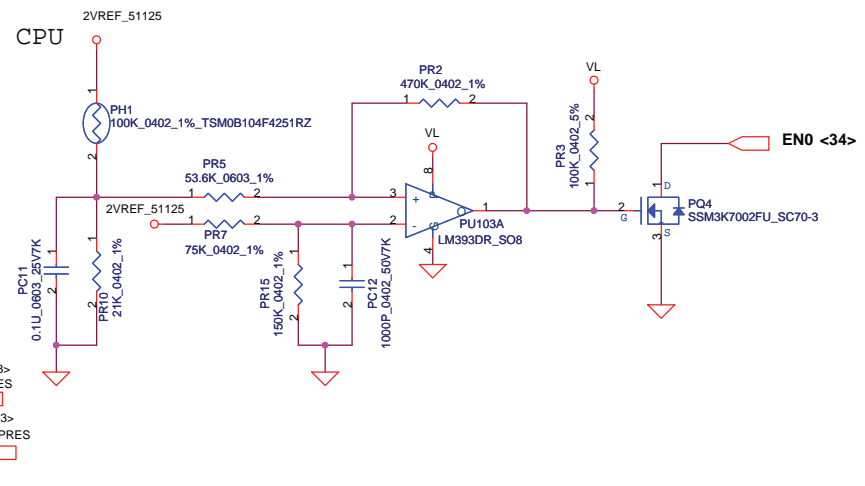
Discharge circuit-1



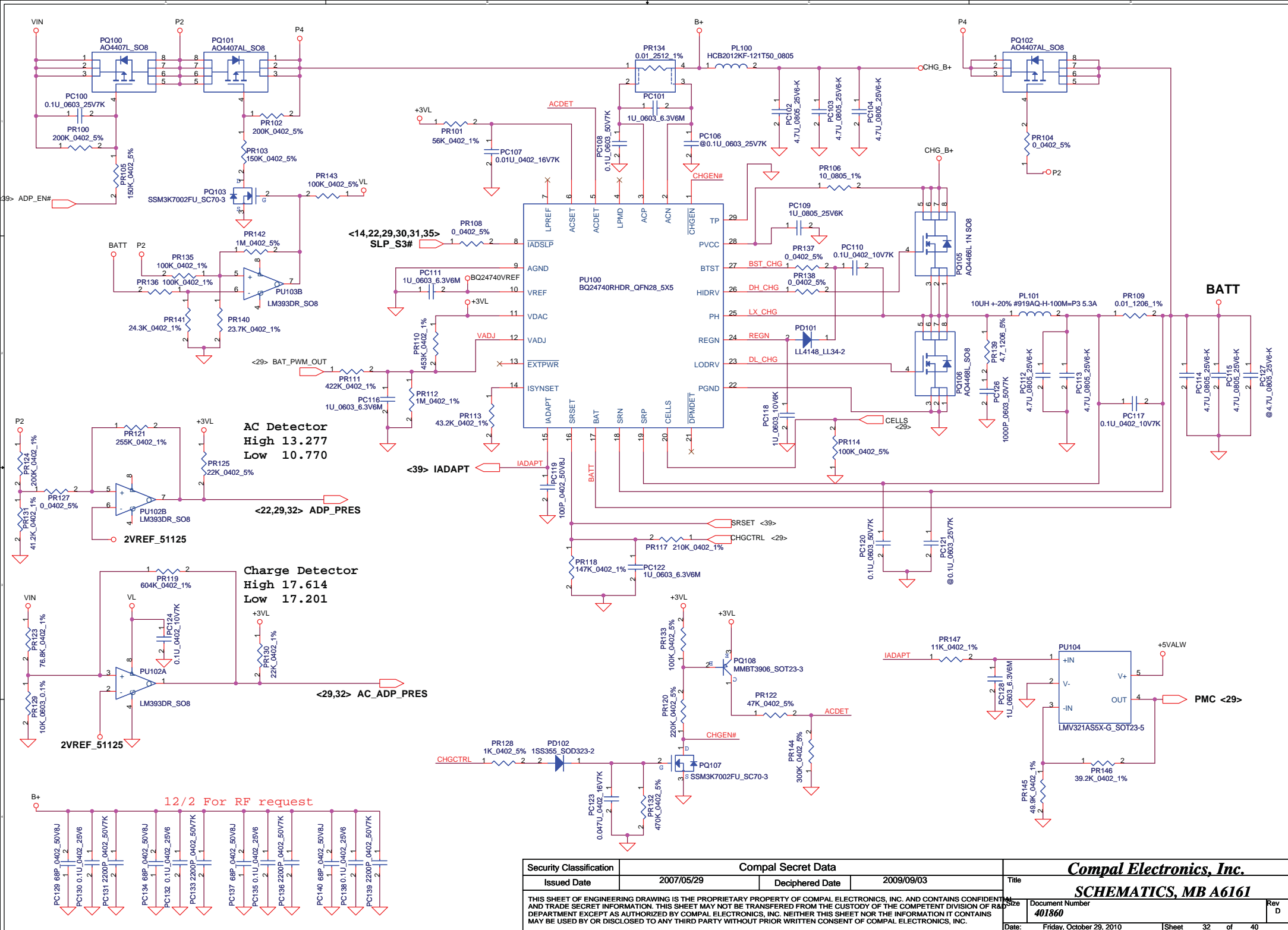
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PH1 under CPU bottom side :
 CPU thermal protection at 90 +/- 3 degree C
 Recovery at 47 +/- 3 degree C

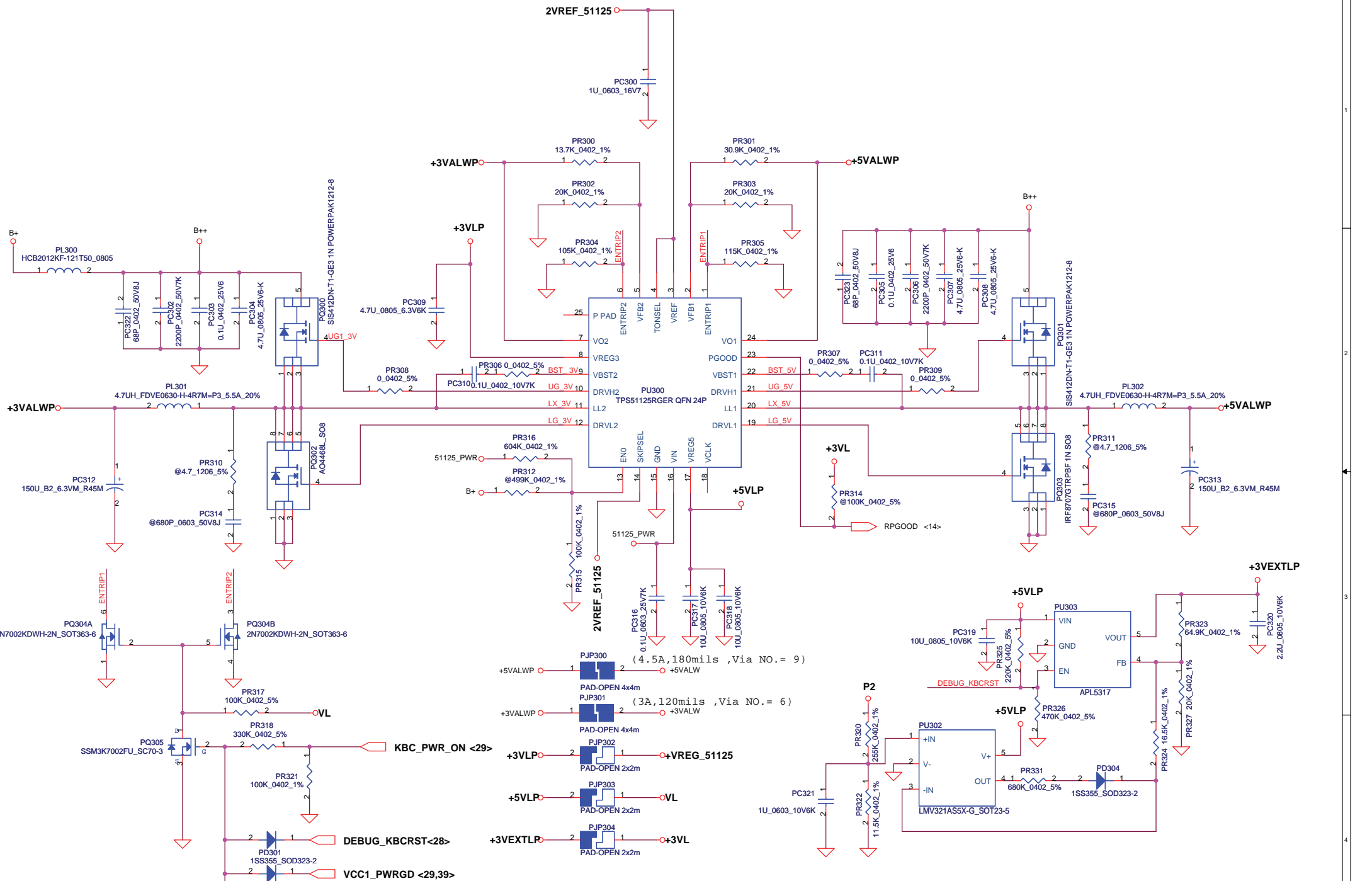


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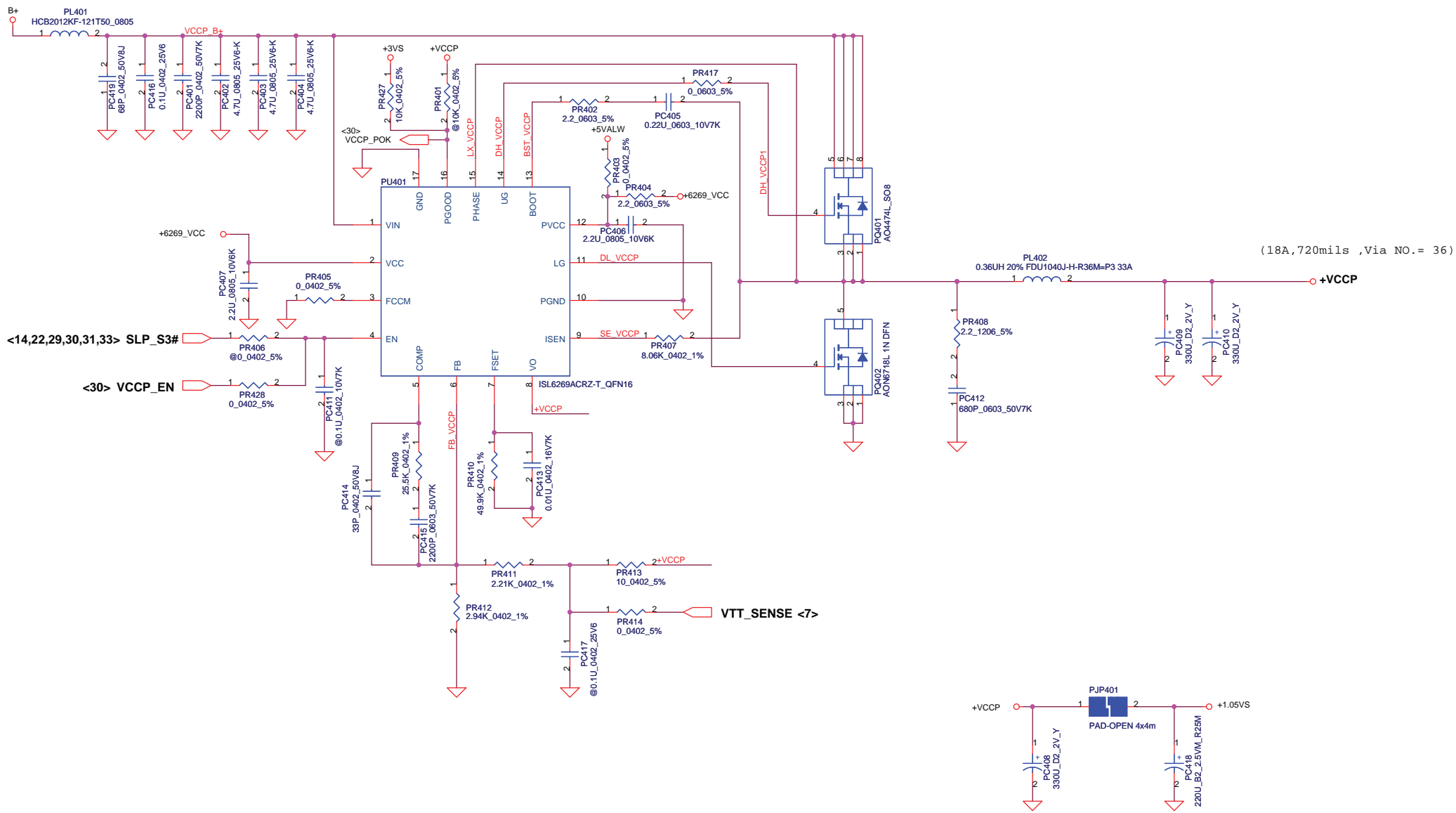
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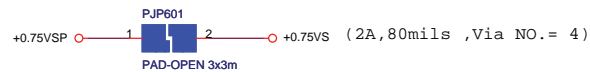
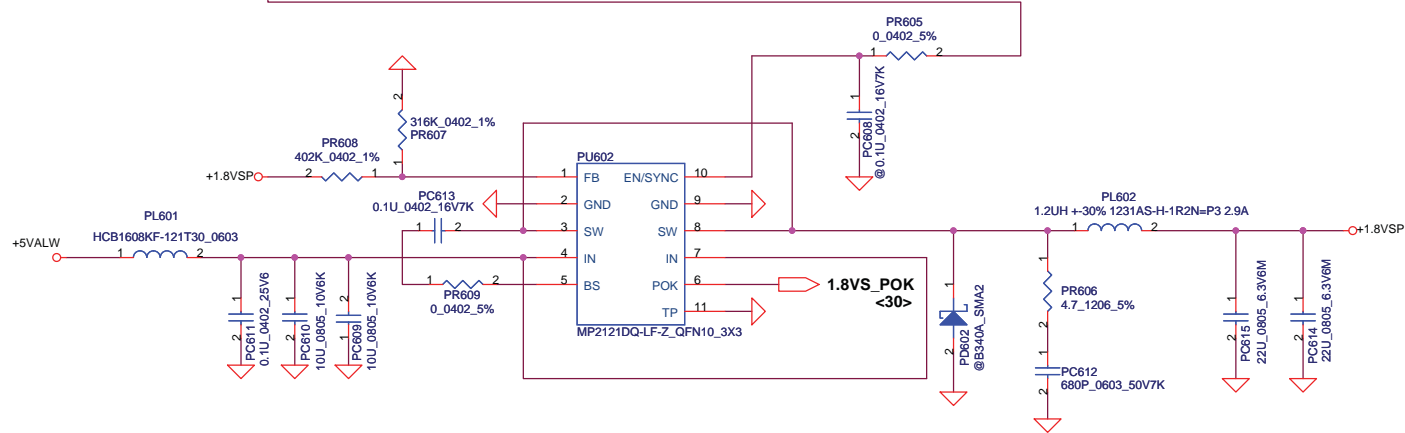
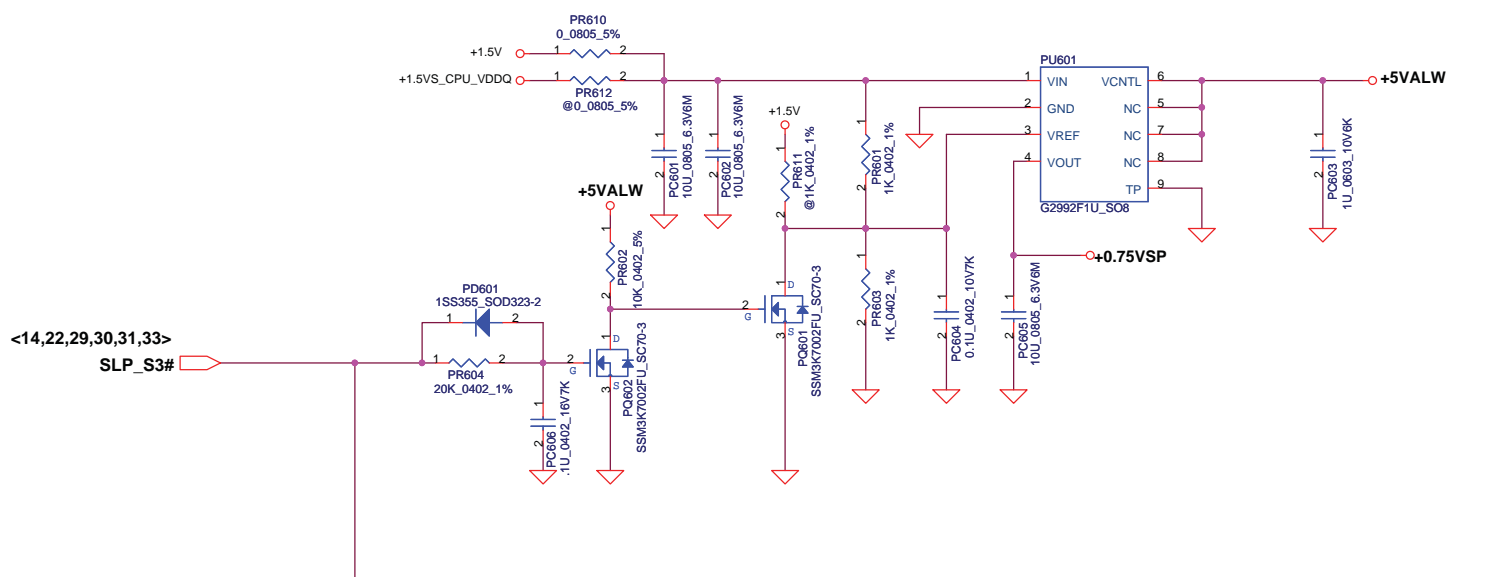
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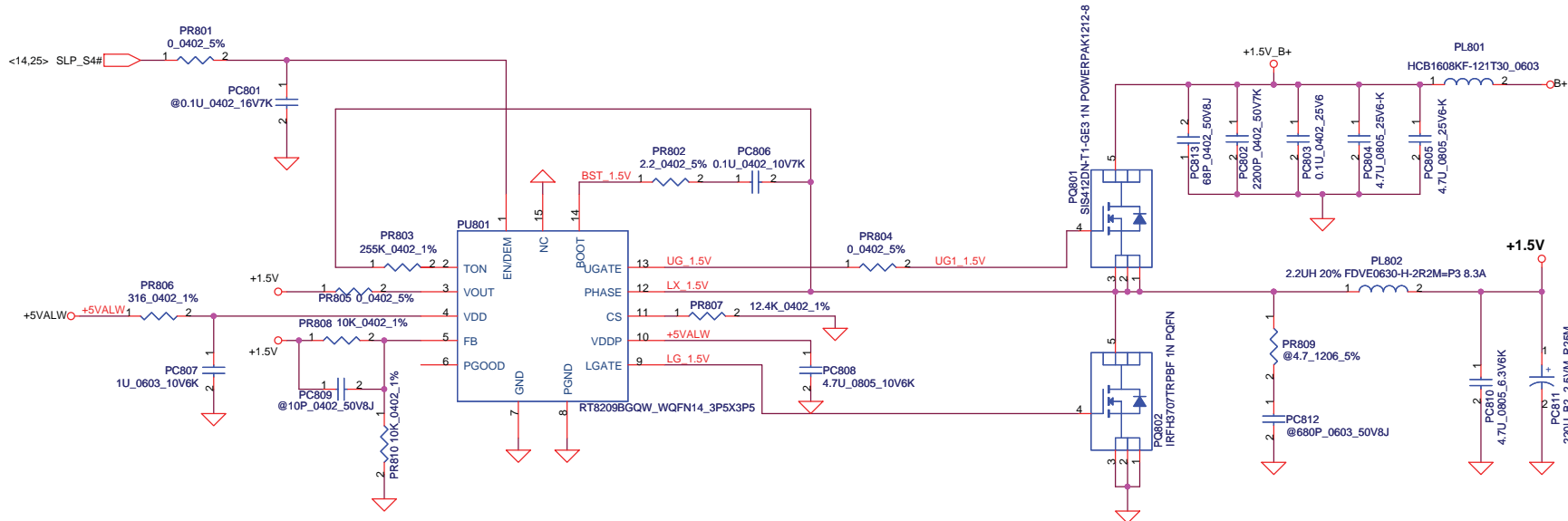


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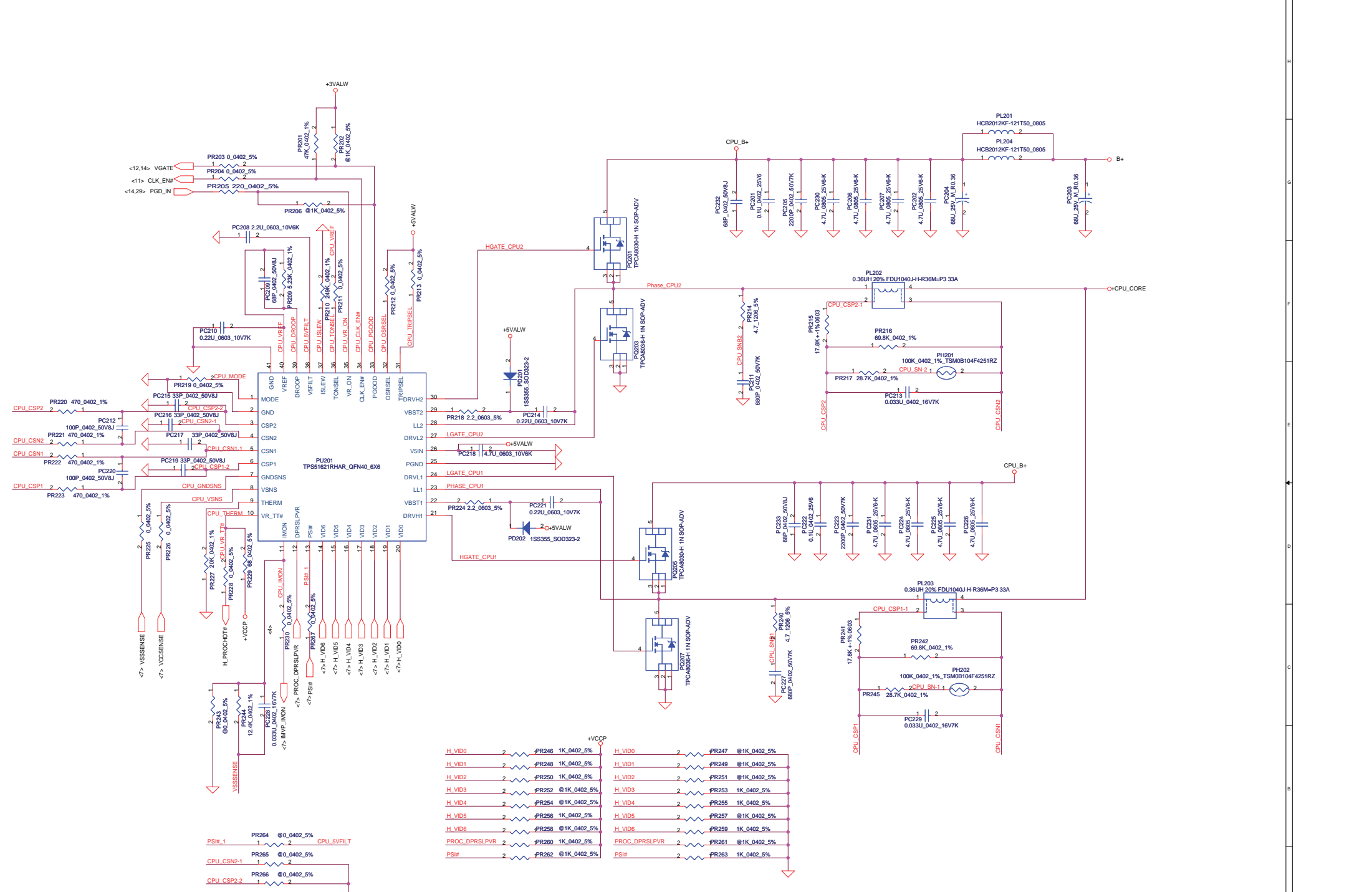
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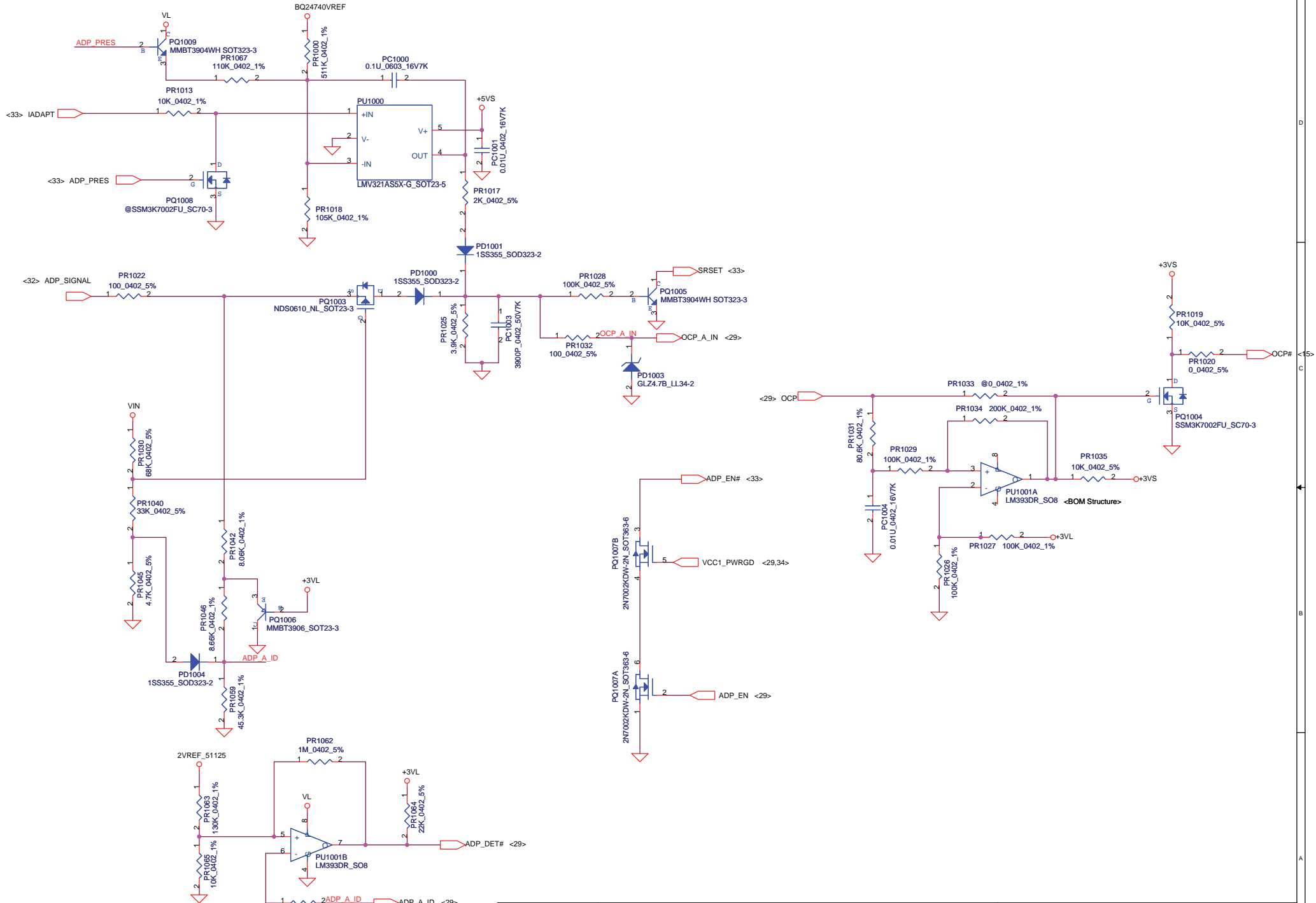


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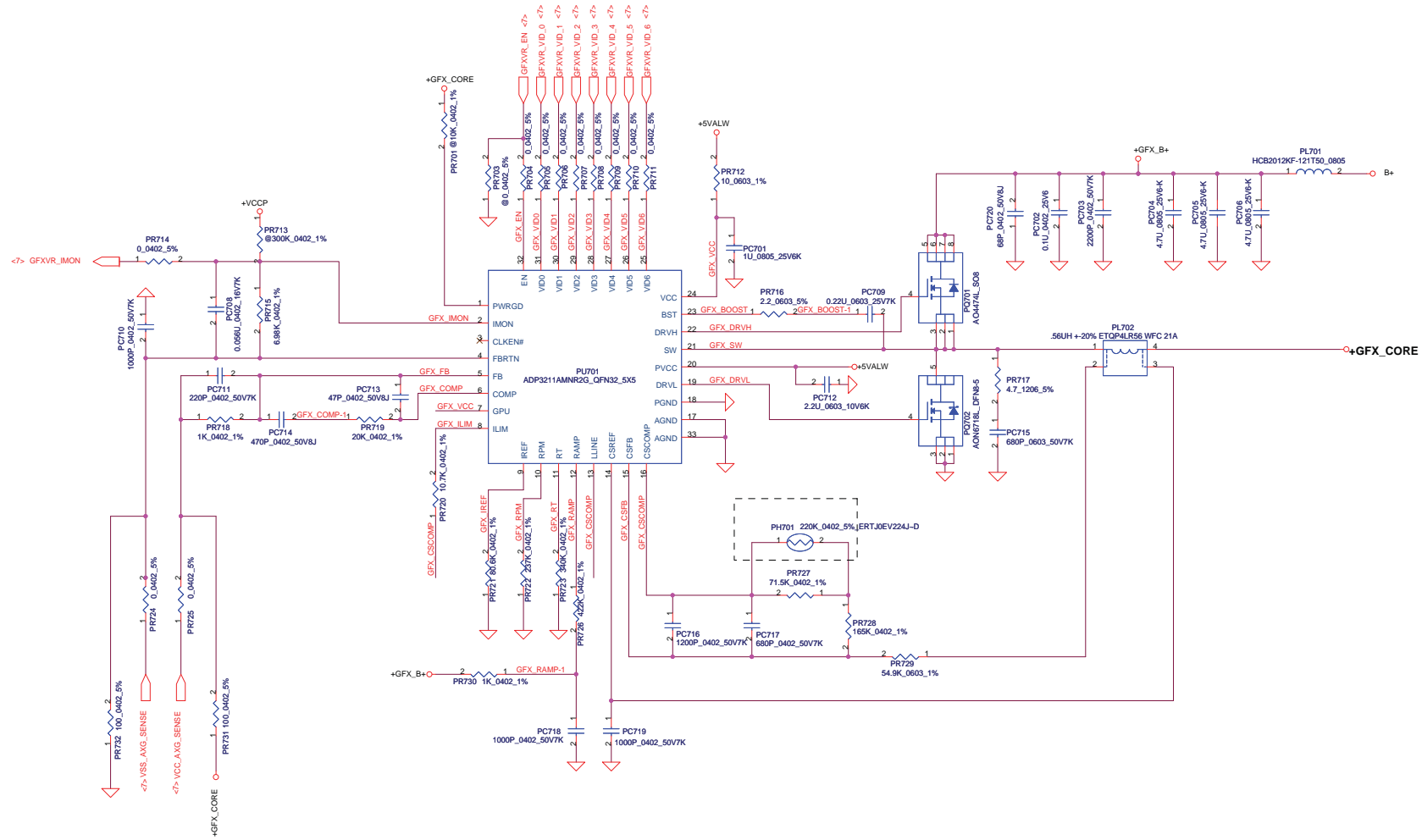


Arrandale
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Item	Reason for change	PG#	Modify List	Date	Phase
1	Tune Loadline and transient response of GFX.	P39	Change PR729 to 54.9k, PC716 to 1200pF, and PC717 to 680pF.	01/27	SI
2	Tune Loadline and transient response of CPU.	P37	Change PR209 to 5.23k.	01/27	SI
3	Add boost resistance for RF team.	P36	Change PR802 to 2.2ohm.	01/28	SI
4	Modify the throttling setting level and action speed.	P38	Change PR1013 to 10k, PR1000 to 511k, PR1018 to 105k, and PC1000 to 0.1uF.	01/28	SI
5	IN AC mode, the performance will reduce through IADAPT without PQ1008.	P38	Add PQ1008.	01/29	SI
6	OTP setting is setted same with other project.	P31	Change PR5 to 53.6k and PR10 to 19.1k.	02/01	SI
7	330uF ESR=9mOhm can pass VCCP rippe spec.	P34	Change PR408, PR409, and PR410 to 330uF_9mOhm.	02/02	SI
8	CPU thermal protection fine-tune.	P31	Change PR10 to 21K from 19.1K	03/26	PV
9	For ULV CPU, need reserved some components.	P37	Add PR264, PR265, PR266 locations which is reserved.	03/26	PV
10	For CPU accuracy get better.	P37	Change PR215 and PR241 to 0603 size and keep 17.8K	03/26	PV
11	For Electrical Noise Issue.	P37	Add PC204, whcih is 68u	03/31	PV
11	For EMI request.	P32	Add snabber, PR139 to 4.7ohm, PC126 to 1n	03/31	PV

Version Change List (P. I. R. List) for HW Circuit

Item	Page#	Title	Date	Request Owner	Issue Description	Solution Description	Rev.
1	28	Quick look/web	12/24	Compal	The LED Status about Wireless/QuickLook3/QuickWeb is abnormal . OTS#603778	APP_BUTTON_1 APP_BUTTON_2 add 100k ohm pull high to +3VL	0.2
2	28	PWR LED	12/24	Compal	PWR LED can't flash in S3. OTS#603774	Change STB_LED signal from KBC pin105 to pin115	0.2
3	22	WWAN	1/4	Compal	the LED panel was auto turn on whhen plug in AC. OTS#603786	correct the JWWAN1 pin24 power rail from +3VS to +3V_WWAN	0.2
4	23	Audio	1/5	Compal	audio no functtion. OTS#603777	delet D16	0.2
5	22	WLAN	1/6	Compal	Debug port 80 is not used	delete signal of PCI_RST#,CLK_PCI_DEBUG, LPC_LFRAME#,LPC_LAD3,2,1,0 and remove C1317, R270	0.2
6	11, 21		1/6	Compal	resistance too small will impact the SMT line yield rate	change R1457, R1458,R1027 from 0201 to 0402	0.2
7	23	Audio	1/6	Compal	PC_BEEP no sound in DOS mode. OTS#604314	install Q72 and change R1352 from 4.7K to 100K, change C895 from 0.1U to 0.01U	0.2
8	30	DC-DC	1/11	Compal	power down sequence havv problem with +5VS & +3VS. (+5VS goes to low after +3VS)	change R1323 from 330K to 0 ohm	0.2
9	14	GLAN	1/13	Compal	System can't wake up from S3 & S5.OTS#605647	remove R1482	0.2
10	14	Transformer	1/14	Compal	EMI noise	Swap the signal of MID0 <-->3, MID1<-->2 to improve the layout routing. (avoid the trace routing under the T)	0.2
11	9	Transformer	1/21	HP	reserve memory thermal sensor by HP request	reserve U59,R1496,R1497,C1338,R1495	0.2
12	24	Audio	1/28	HP	for the mic detection comparator	change R1202 from 120K to 47K	0.2
13	22	SPI	2/23	Compal	For SPI ROM Recovery	Reserve R1498, R1499, R1500, R1501, R1502 , R1503. Add R1504 which is pull down to GND and connect to GPIO46.	0.3
14	14	CPU	2/24	Compal	For CPU Type Detect		0.3
15	22	SPI	3/12	Compal	Can't power on with Intel's WLAN card.	Change power pin +3VL from pin 47 to 51.	0.4
16	18	LCD	3/23	Compal	For EMI's request	add 0.1uF (C1339) on ENABL to GND near R1122.	0.4
17	19	CRT	3/24	Compal	For EMI's request	Change C232, C233, C236 from 6.8pF to 18pF.	0.4
18	18	LCD	5/18	Compal	Fine tune LED power on sequence.	Change C676 to 0.22 uF and C682 to 2.2 uF.	0.5
19	18	LCD	5/24	Compal	Panel will flash once before HP LOGO while cold boot the unit. OTS#625876	Change R1120 from 10K to 100K Ohm.	0.5

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