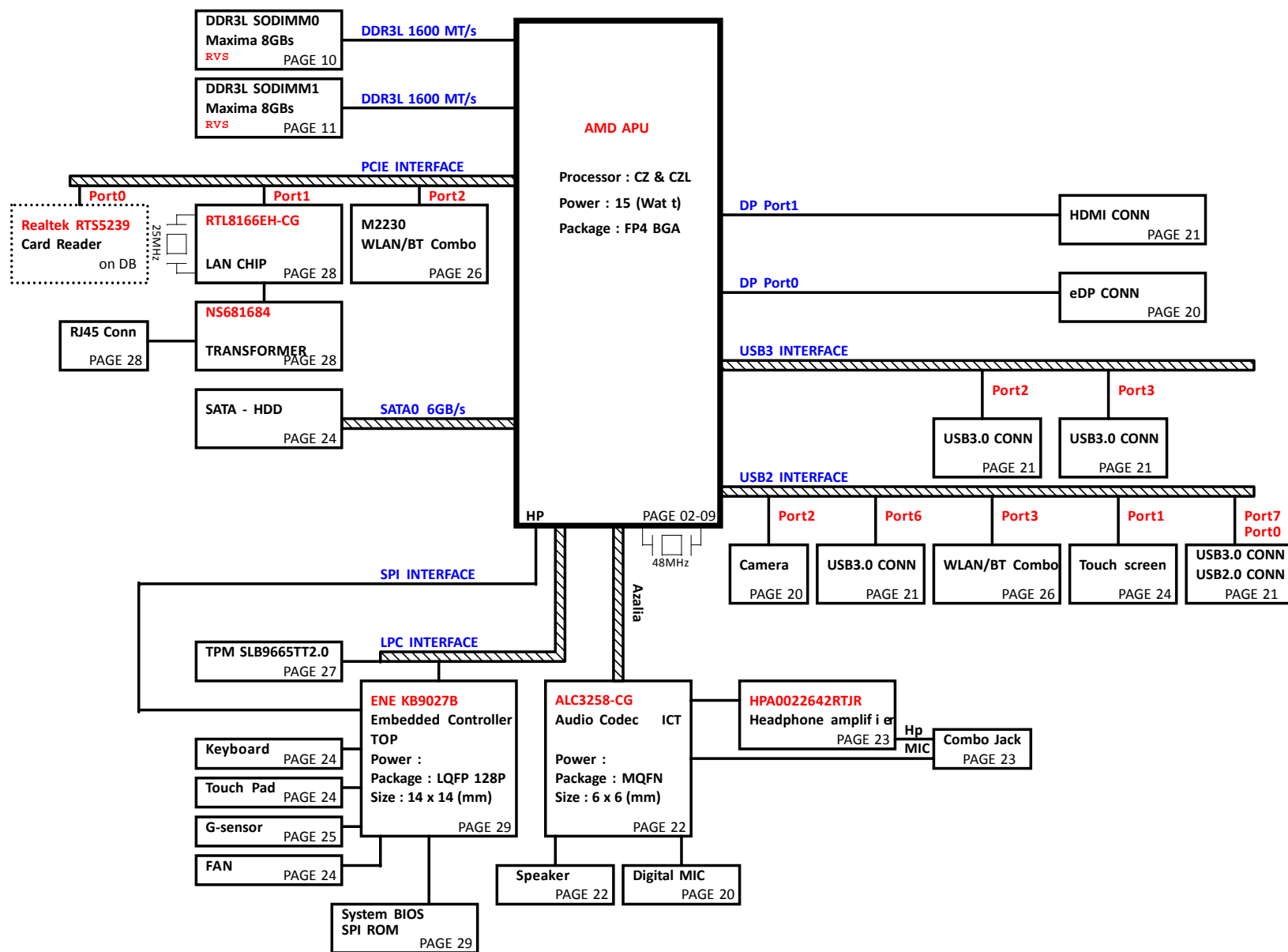


Dessert AMD CZ & CZL UMA 14"



PCB 6L STACK UP

LAYER 1 : TOP
LAYER 2 : SGND
LAYER 3 : IN1
LAYER 4 : IN2
LAYER 5 : SVCC
LAYER 6 : BOT

Power Source

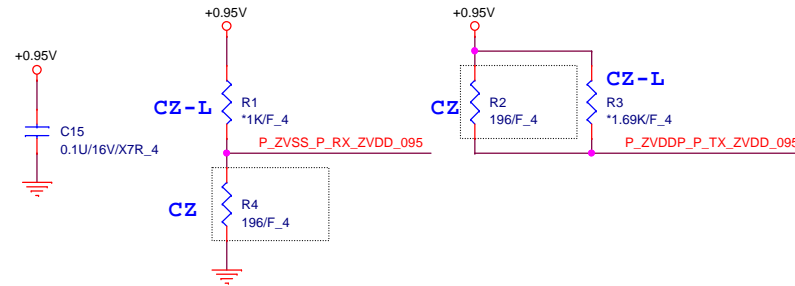
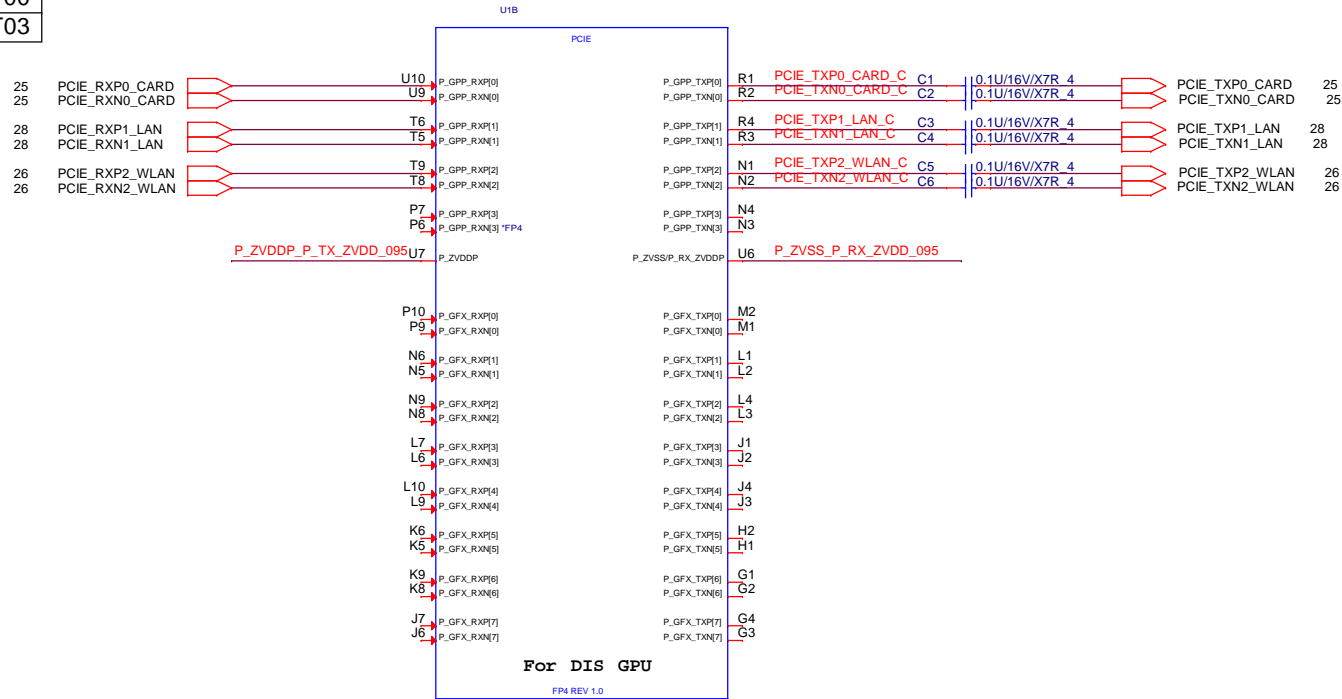
ISL88750 System Charge Power (+BATCHG) PAGE 31
SY8208B/SY8286C System Power (+3VPCU/+5VPCU/+3VSS/+5VSS) PAGE 32
RT8231B System Memory Power (+1.2VSUS/+0.6V_DDR_VTT/+2.5VSUS) PAGE 33
APW8826/APW8826/G9336 Processor Power (+0.95VS5/1.5VS5/0.775VS5) PAGE 34
AOZ1267/RT8068AZQW Processor Power (+0.95V/+1.8VS5) PAGE 35
ISL62771 Processor Power (+VCC_CORE/+VDDNB_CORE) PAGE 36.37
ISL62771 Processor Power (+APU_VDDGFX) PAGE 38.39
APL3523A *3 System Power (+3/+3VLAVCC/+5V/+3VSUS/ +1.5V/+1.8V_ROM/+1.8V) PAGE 40
G5018 Processor Power (+VDDCR_FCH_S5) PAGE 41



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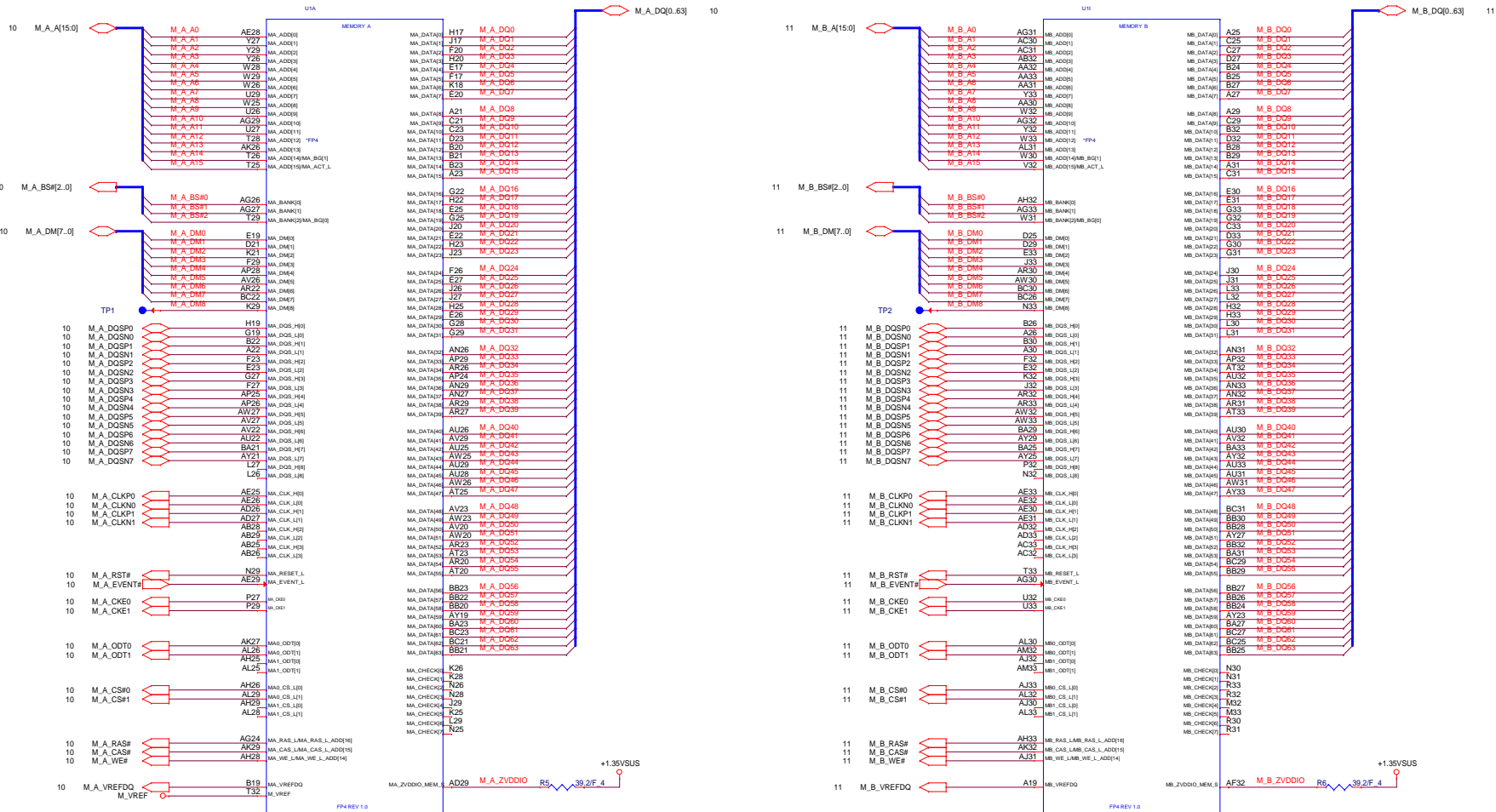
Size	Document Number	Rev
	Block Diagram	1A
Date: Monday, April 11, 2016	Sheet	1 of 41

	QBCON	TOPBSQ
Carrizo	AJ00870UT01	AJ00870UT00
Carrizo-L	AJ07410UT04	AJ07410UT03

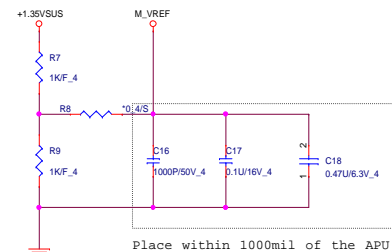


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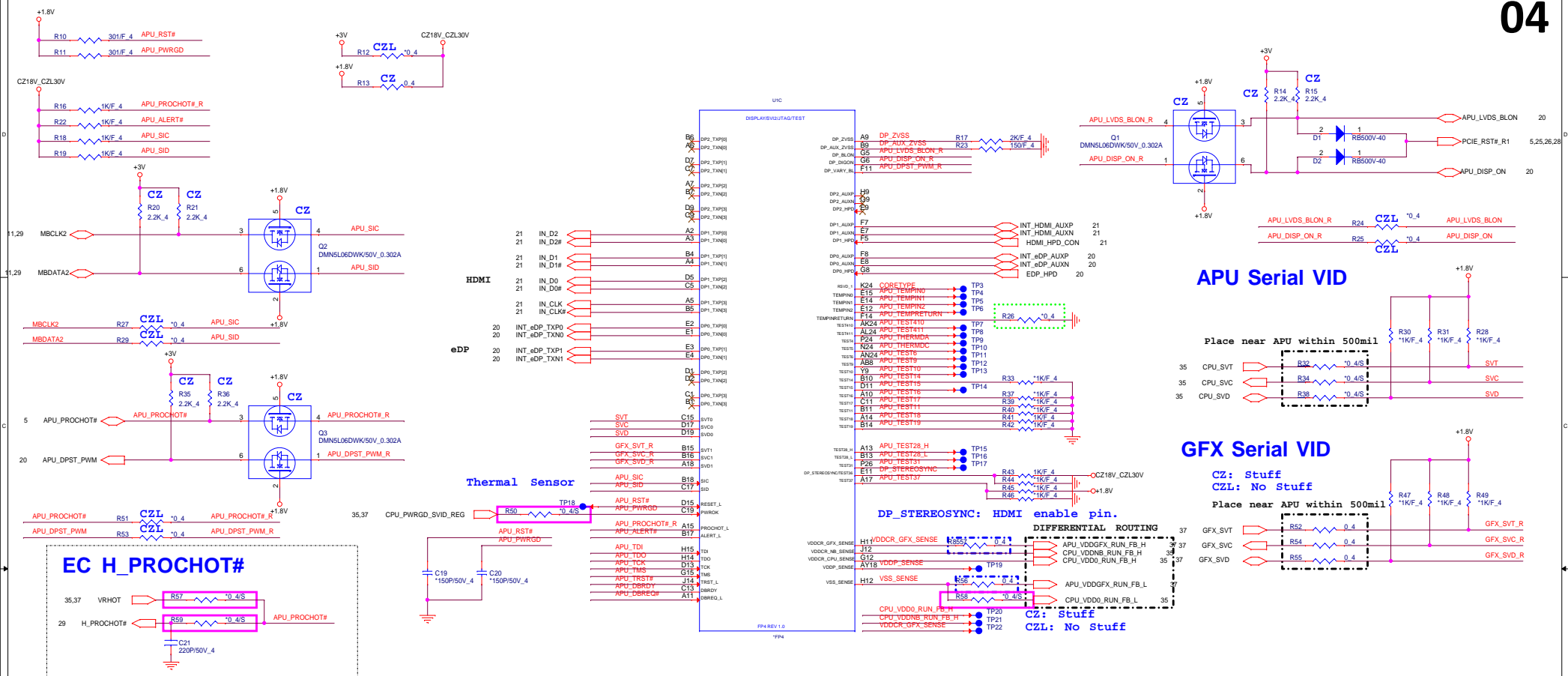
Size	Document Number	Rev
	CZ & CZL 1/7 (PCIE)	1A
Date: Monday, April 11, 2016	Sheet 2 of 41	

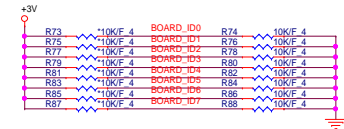
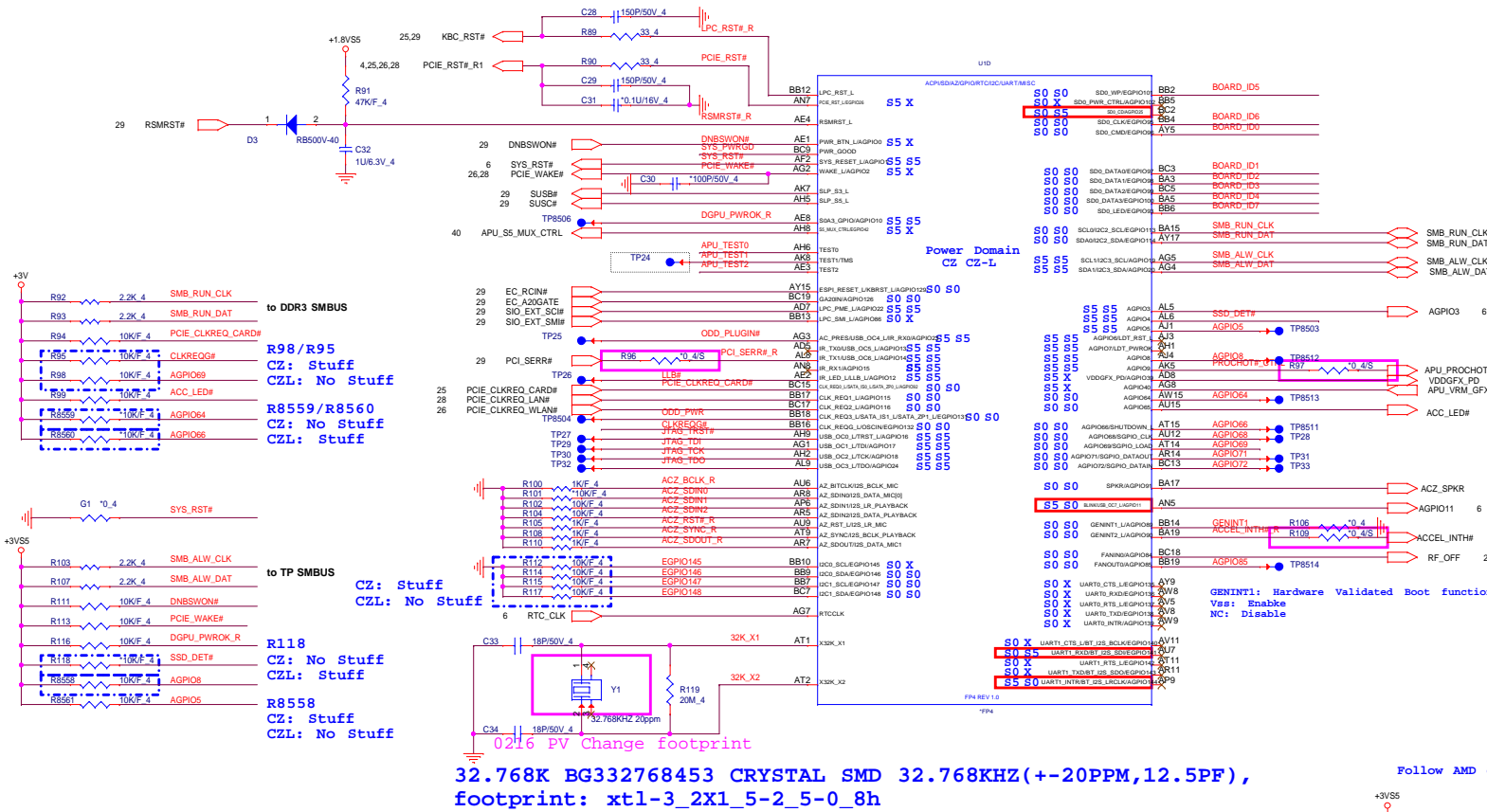


CR-L only channel B



Place within 1000mil of the APU





BOARD ID SETTING

Board ID 0	Definition
0	UMA
1	DIS

Board ID [2:1]	Definition
00	14"
01	15"
10	17"
11	Reserve

Board ID [4:3]	Definition
00	Pavilion
01	Reserve
10	Reserve
11	Reserve

Board ID [5]	Definition
0/1	Reserve

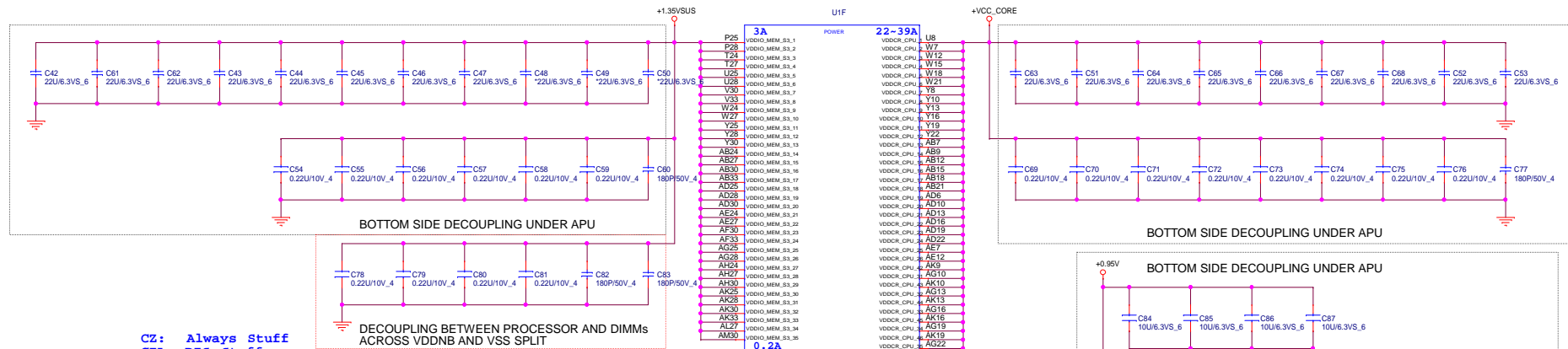
Board ID [6]	Definition
0/1	Reserve

Board ID [7]	Definition
0/1	Reserve

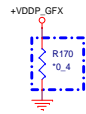
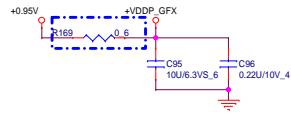
Follow AMD checklist 53537_1_09 suggestion.



TEST2	TEST1	TEST0	Description
0	0	0	FCH TAP accessible from APU when TAPEN is asserted FCH JTAG pins are overloaded for multiple functions, in this configuration the FCH JTAG are used as non-JTAG pins
0	0	1	Reserved
0	1	X	Reserved
1	TMS	0	FCH JTAG multi-function pins are configured as JTAG pins, in this configuration the FCH TAP can be accessed from FCH JTAG pins
1	TMS	1	Use on ATE only Yuba JTAG enabled

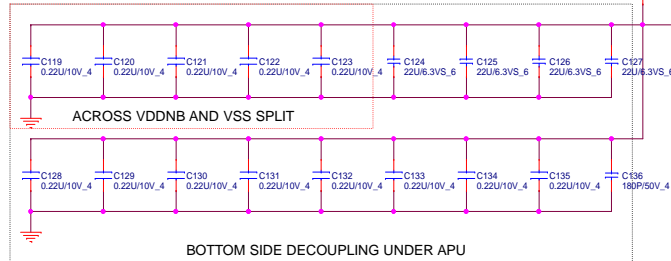
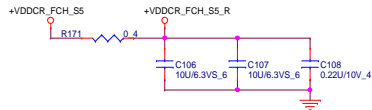


```
CZ:  Always Stuff
CZL: DIS  Stuff
      UMA No  Stuff
```



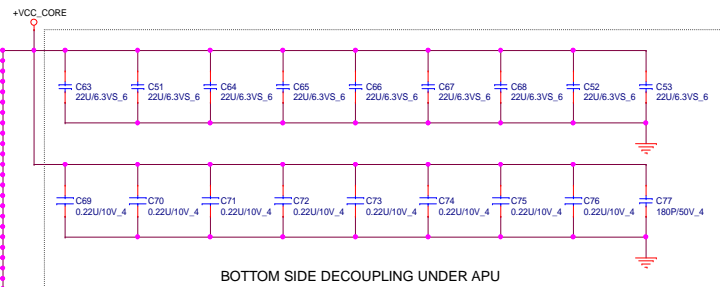
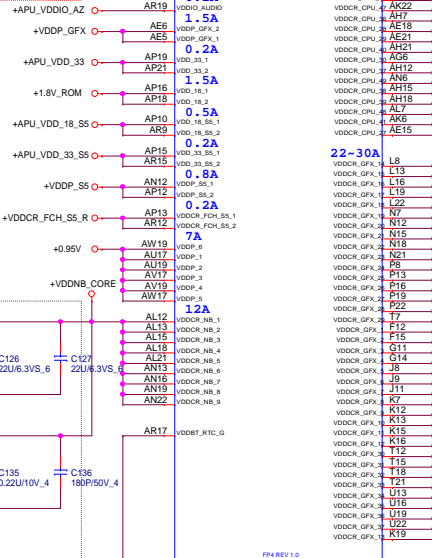
Only Stuff: CZL UMA

```
+VDDCR_FCH_S5
R171
CZ: Stuff
CZ-L: No Stuff
```

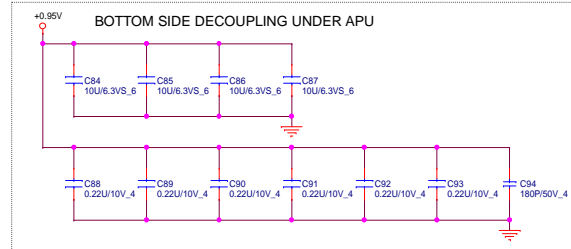


ACROSS VDDNB AND VSS SPLIT

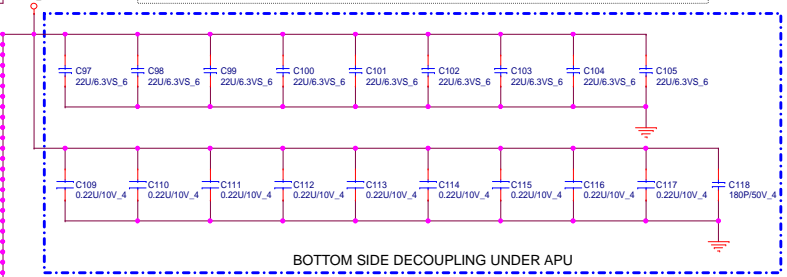
BOTTOM SIDE DECOUPLING UNDER APU



BOTTOM SIDE DECOUPLING UNDER APU

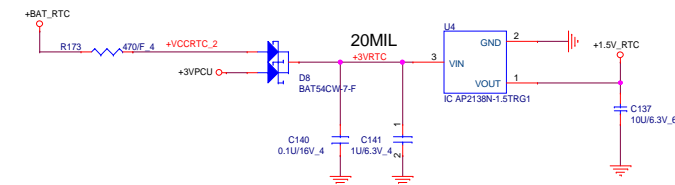


BOTTOM SIDE DECOUPLING UNDER APU

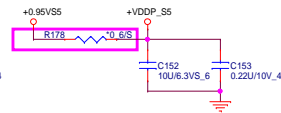
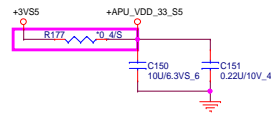
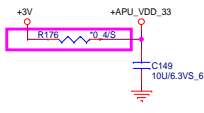
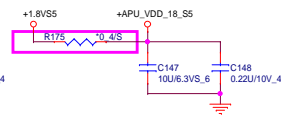
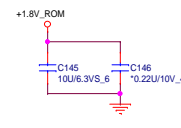
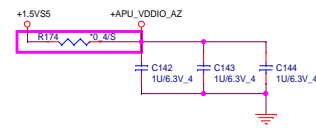


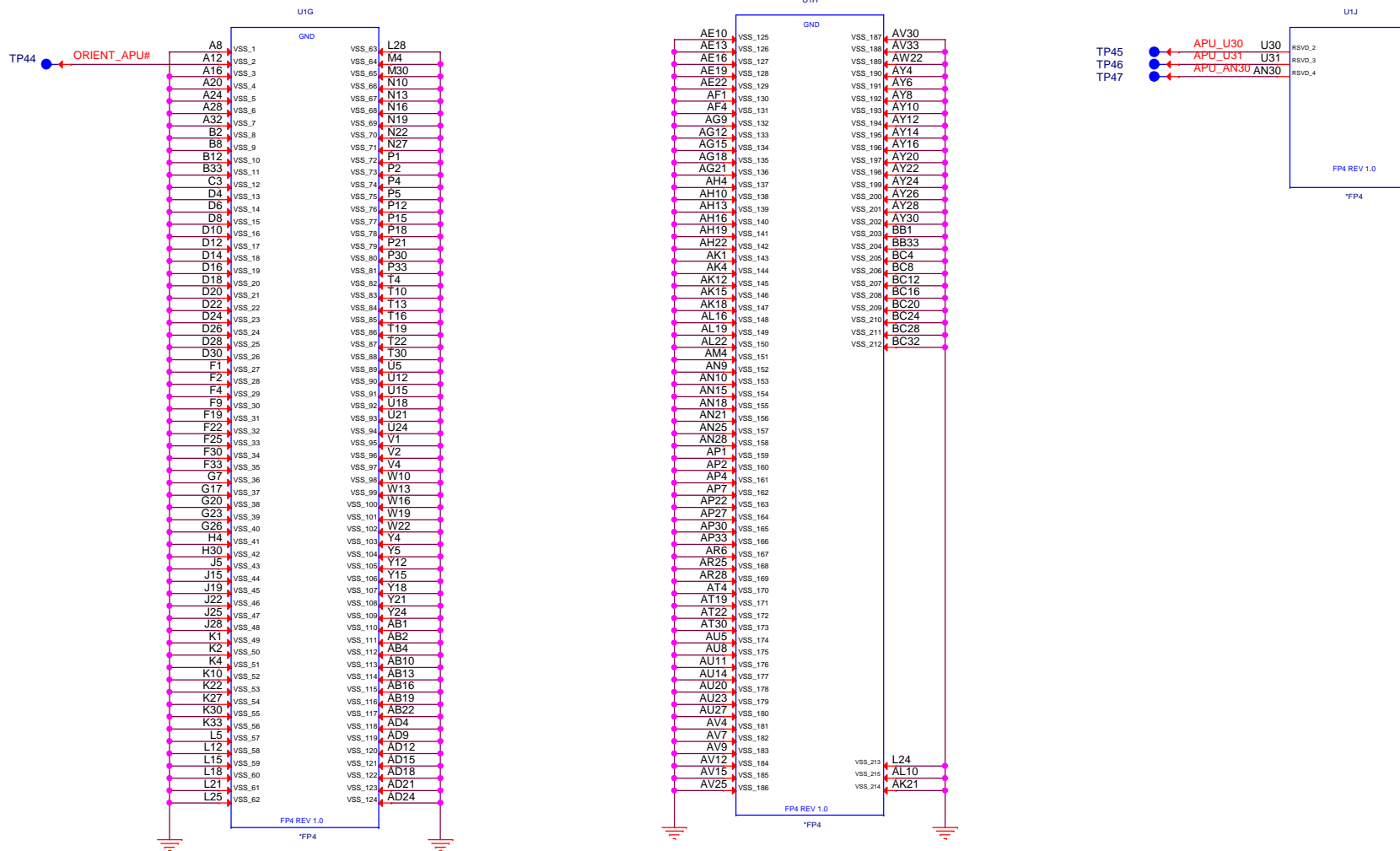
BOTTOM SIDE DECOUPLING UNDER APU

CZ: All +APU_VDDGFX_RUN cap Stuff.
CZ-L: All +APU_VDDGFX_RUN cap No Stuff.



1.5V For HDA Only





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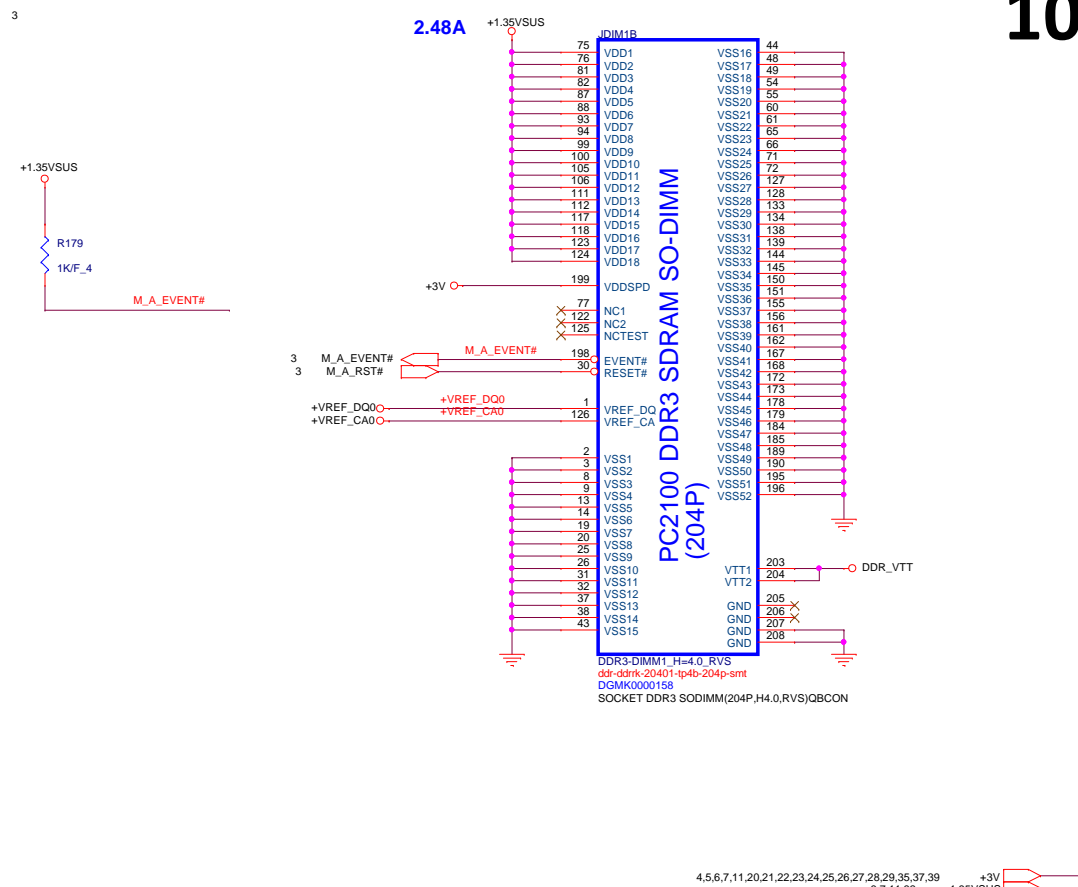
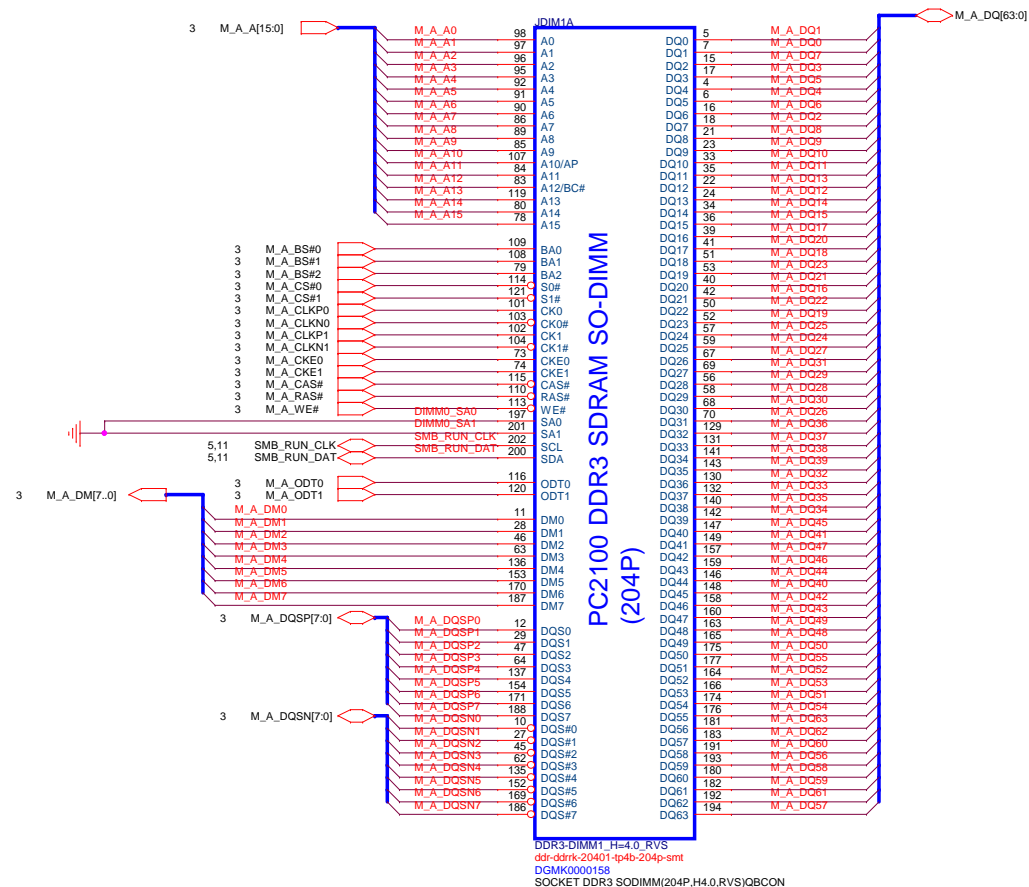
Size	Document Number	Rev
	CZ & CZL 7/7 (GND)	1A
Date: Monday, April 11, 2016 Sheet 8 of 41		

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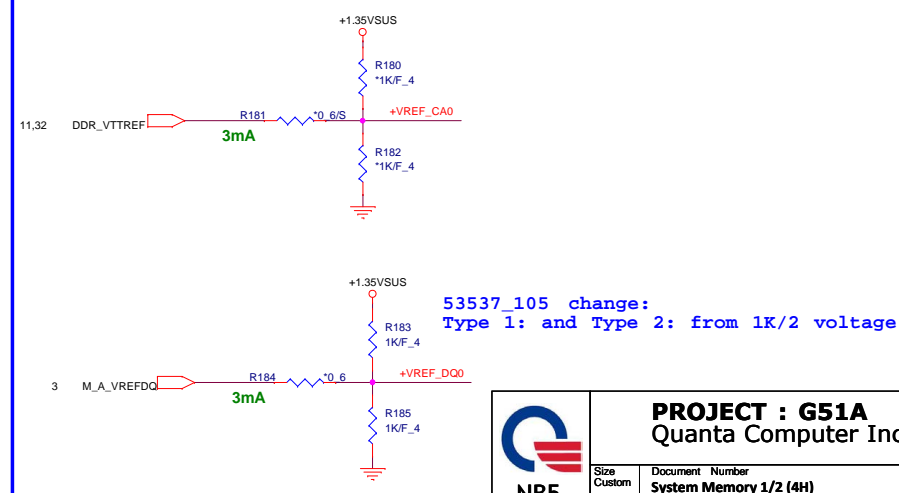
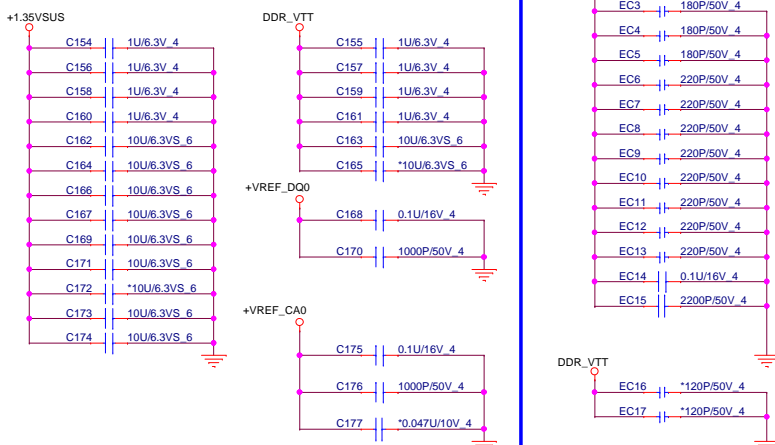


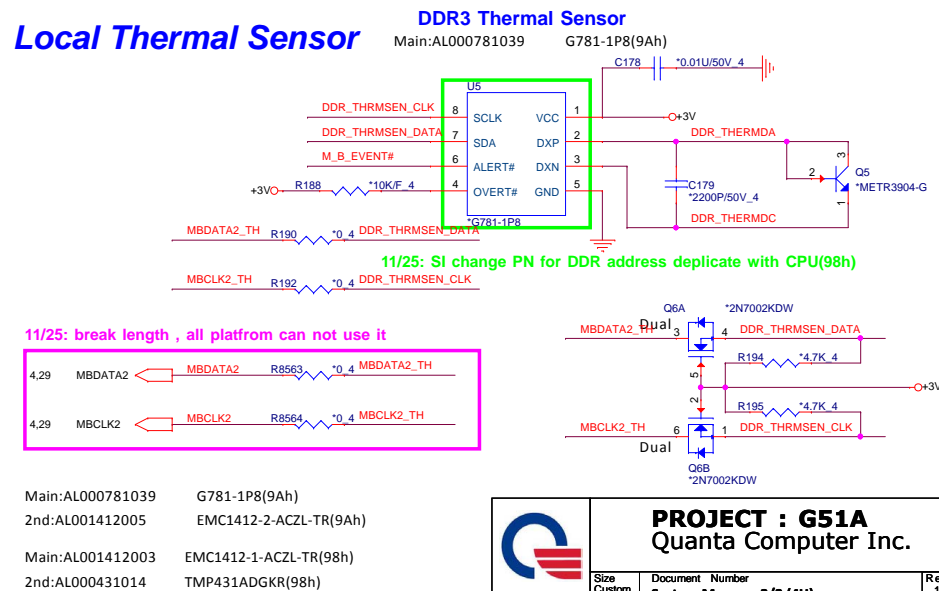
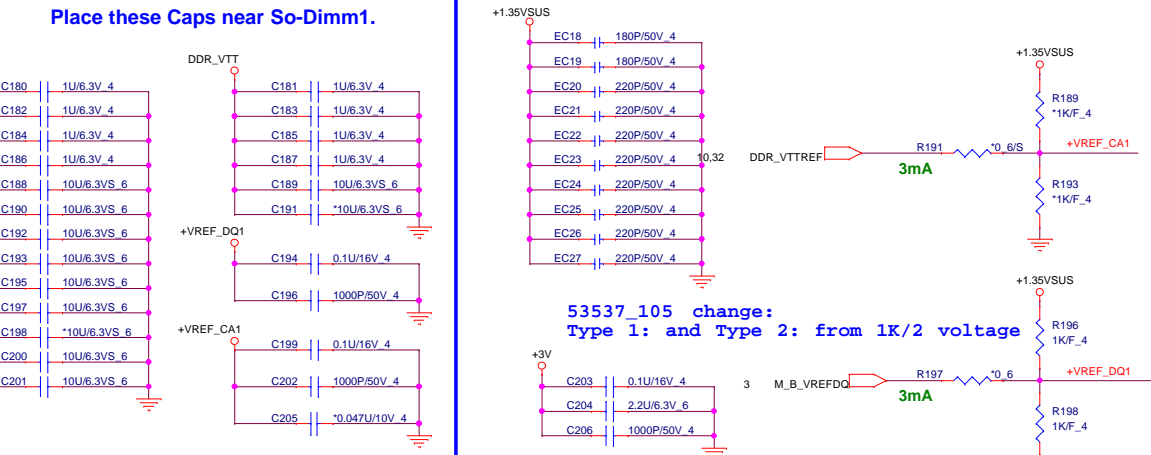
PROJECT : G51A
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Size A	Document Number Reserved	Rev 1A
Date: Monday, April 11, 2016 Sheet 9 of 41		




Place these Caps near So-Dimm0.







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	PROJECT : G51A Quanta Computer Inc.		
	Size A	Document Number Reserved	Rev 1A
	Date: Monday, April 11, 2016 Sheet 12 of 41		

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	Size A	Document Number Reserved <div>ICT</div>	Rev 1A
	Date: Monday, April 11, 2016 Sheet 13 of 41		

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	PROJECT : G51A Quanta Computer Inc.		
	Size A	Document Number Reserved	Rev 1A
	Date: Monday, April 11, 2016		Sheet 14 of 41

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PROJECT : G51A
Quanta Computer Inc.

Size A	Document Number Reserved	HP	Rev 1A
Date: Monday, April 11, 2016		Sheet	15 of 41


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PROJECT : G51A
Quanta Computer Inc.

Size A	Document Number Reserved	Rev 1A
Date: Monday, April 11, 2016		
Sheet	16 of	41

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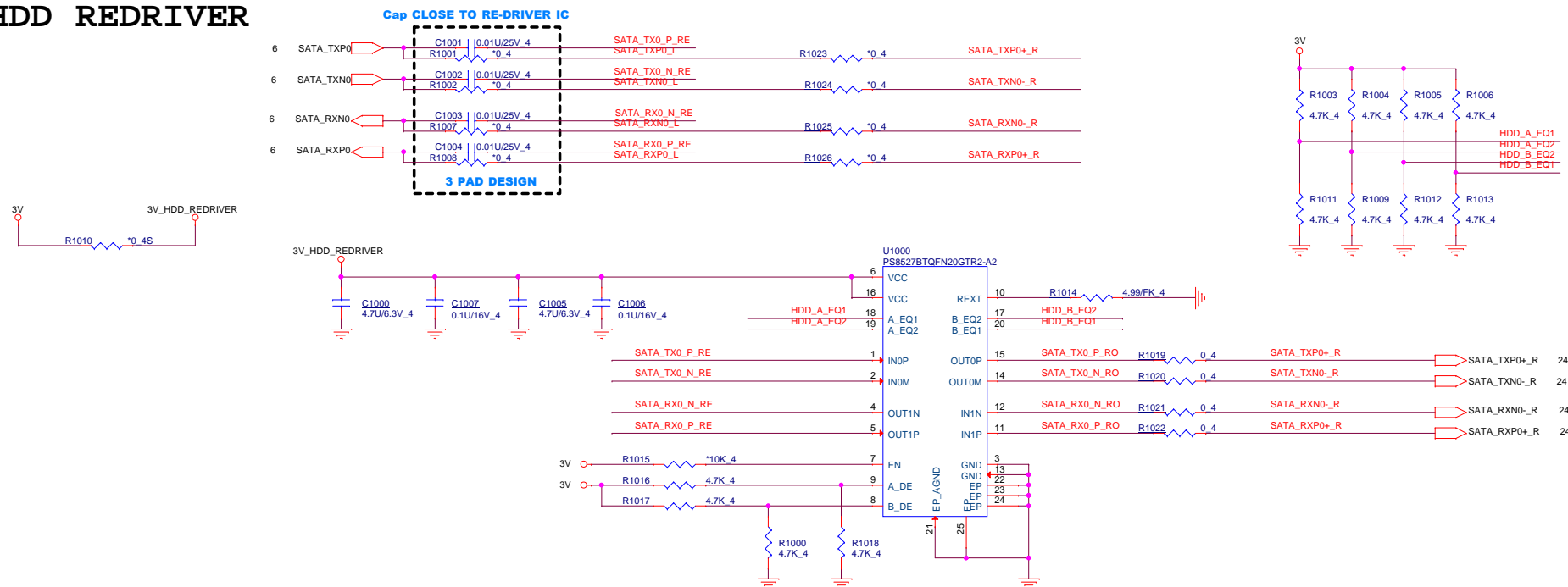
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	Size A	Document Number Reserved	Rev 1A
	Date: Monday, April 11, 2016 Sheet 17 of 41		

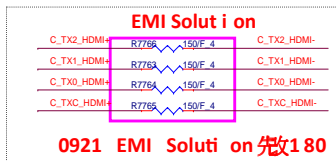
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	Size A	Document Number Reserved	Rev 1A
	Date: Monday, April 11, 2016		
Sheet		18 of 41	

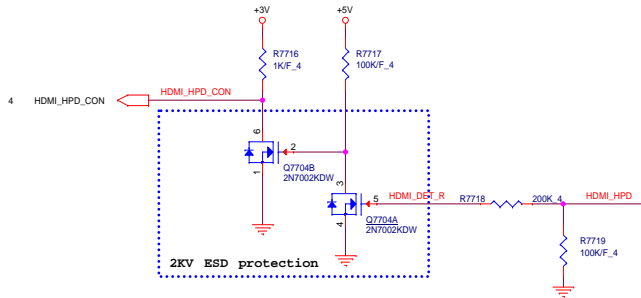
0407 : MV modify it

HDD REDRIVER

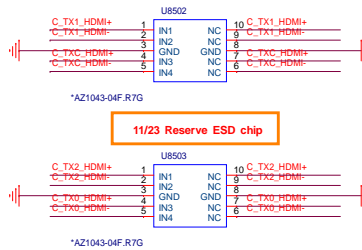




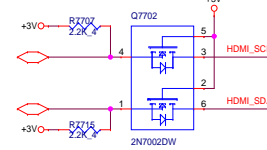
4	IN_D0	C7701	0.1U/10V_4	C.TX0_HDMI+
4	IN_D0+	C7702	0.1U/10V_4	C.TX0_HDMI+
4	IN_D1	C7703	0.1U/10V_4	C.TX1_HDMI+
4	IN_D1+	C7704	0.1U/10V_4	C.TX1_HDMI+
4	IN_D2	C7705	0.1U/10V_4	C.TX2_HDMI+
4	IN_D2+	C7706	0.1U/10V_4	C.TX2_HDMI+
4	IN_CLK	C7707	0.1U/10V_4	C.TXC_HDMI+
4	IN_CLK+	C7708	0.1U/10V_4	C.TXC_HDMI+



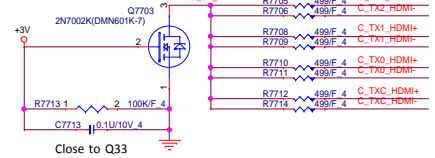
1014 改P



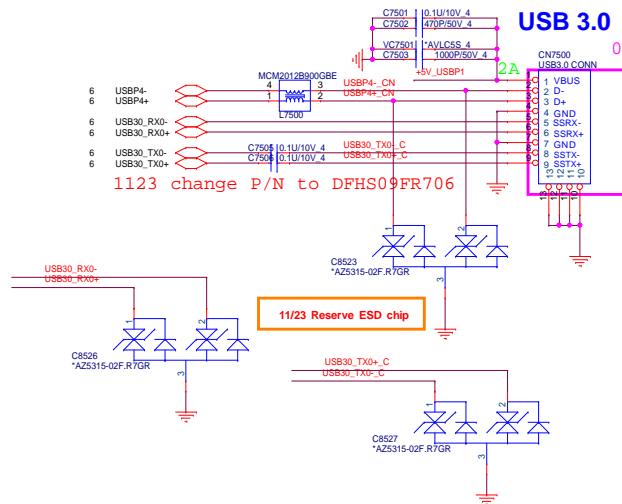
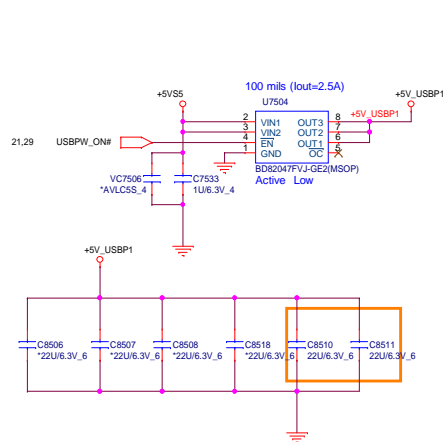
HDMI SMBus Isolati on



Close to HDMI connector



USB 2.0/3.0 Combo

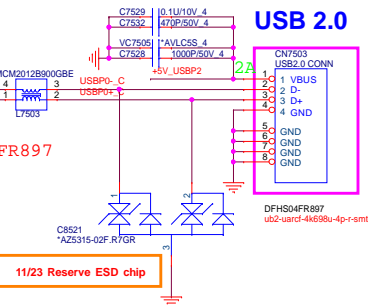


USB 3.0

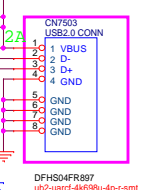
0216 PV Change footprint

1123 Change to DFHS04FR897

0216 PV Change footprint

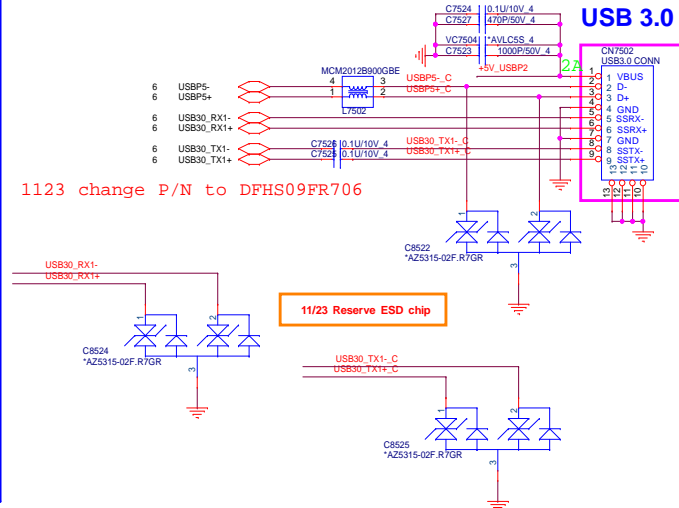


USB 2.0



0216 PV Change footprint

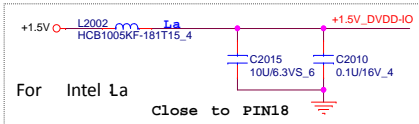
USB 3.0



1123 change P/N to DFHS09FR706

Schematic diagram of the +5V_AVDD power supply for the HCB1005KF-18T15. The circuit shows a +5V_AVDD input line connected to a network of capacitors and an inductor. A 10uF/6.3VS_6 capacitor (C2016) is connected to the input. A 0.1uF/16V_4 capacitor (C2013) is connected to the input and the inductor L2003. The inductor L2003 is connected to the +5V line. A diode C2014 (*AZ2015-01H) is connected between the +5V line and the inductor. The output of the inductor is connected to the +5V line. A note indicates that the capacitors should be placed "Close to PIN40".

Diagram illustrating the power supply circuit for +1.8V_AVDD. The circuit includes a capacitor C2021 (10u/6.3VS_6) connected to AGND, and a capacitor C2022 (0.1u/16V_4) connected to AGND. The output is labeled +1.8V. A note indicates the connection is "Close to PIN20".

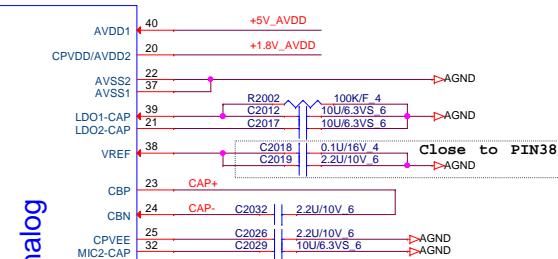
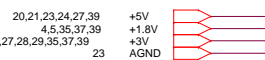
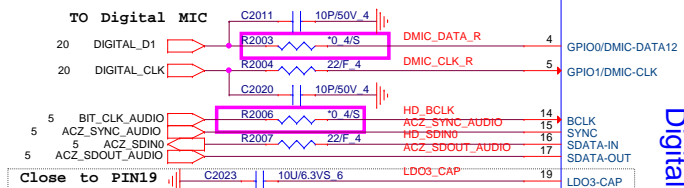


Close to PIN41

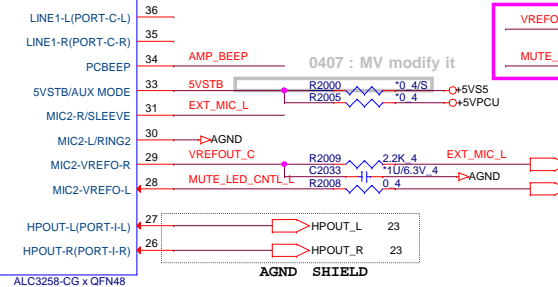
Close to PIN46

C2030
10U/6.3VS_6

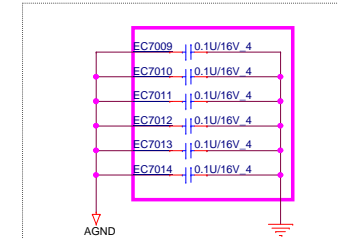
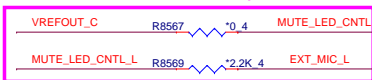
C2031
0.1U/16V_4



Analog

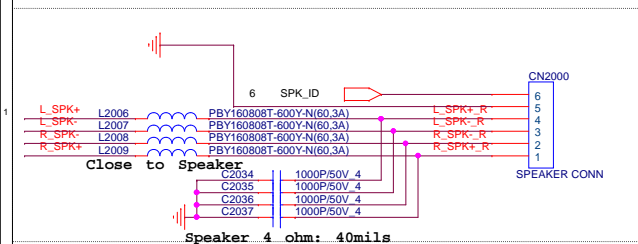


0215 : PV modify it

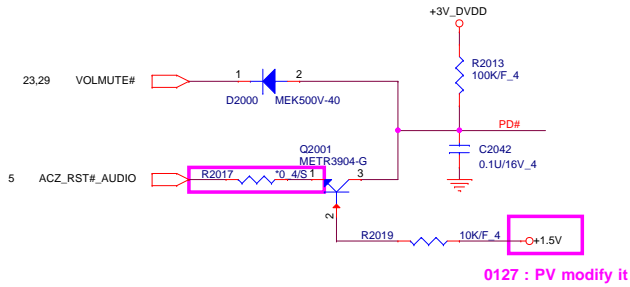
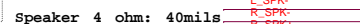


0218 : PV modify it from EMI request

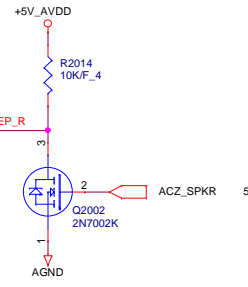
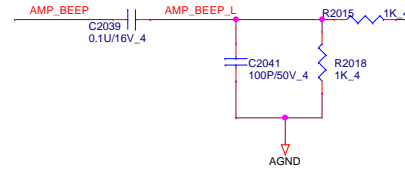
place to near or under codec

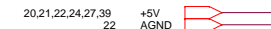


SI 1123 modify to 6pin



0127 : PV modify it



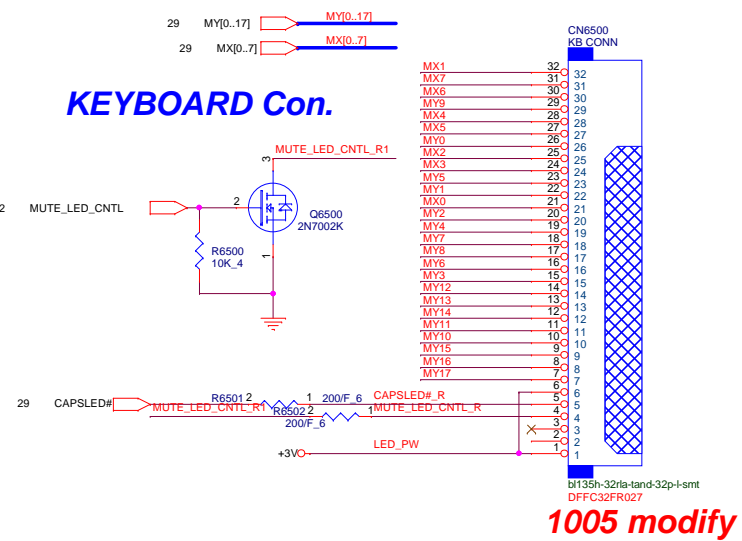


The schematic diagram illustrates the audio signal path on the Audio Combo board. It starts with the **EXT_MIC_1** input, which passes through a resistor **R2613** (22K/F_4) and an inductor **L2601** to the **HCB1608KF-601T10** component. The signal then splits into two channels: **LINEOUT_L_C** and **LINEOUT_R_C**. Each channel passes through a resistor (**R2615** and **R2616**, both 30/F_4) and an inductor (**L2602** and **L2603**) before reaching the **FCM1005KF-301T03** components. The output signals are **LINEOUT_L_C2** and **LINEOUT_R_C2**, which are connected to the **CN2600** Audio Combo Jack. The diagram also shows various ground connections, including **AGND** and **DGND**, and components like **VC2600** and **EC2600** capacitors. Annotations include **0218 : PV modify it from EMI request** and **1123 modify to DGND**.

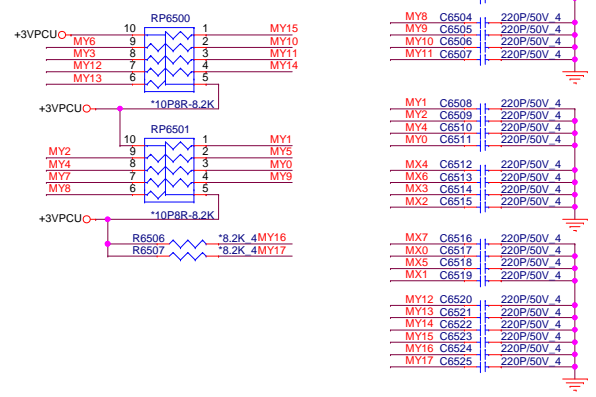
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1123 modify P/N to DFTJ06FR836
1123 modify FP to audio-2sj3095-096211f-6p
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1123 modify to DGND

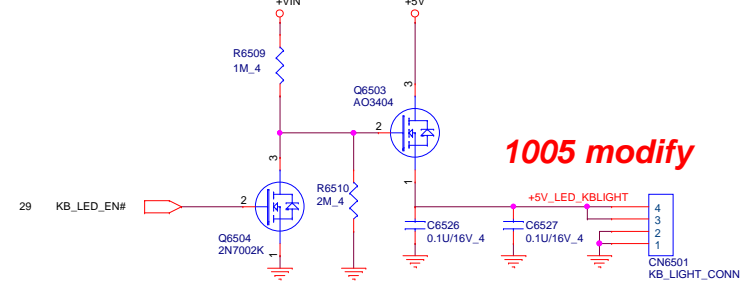
KEYBOARD Con.



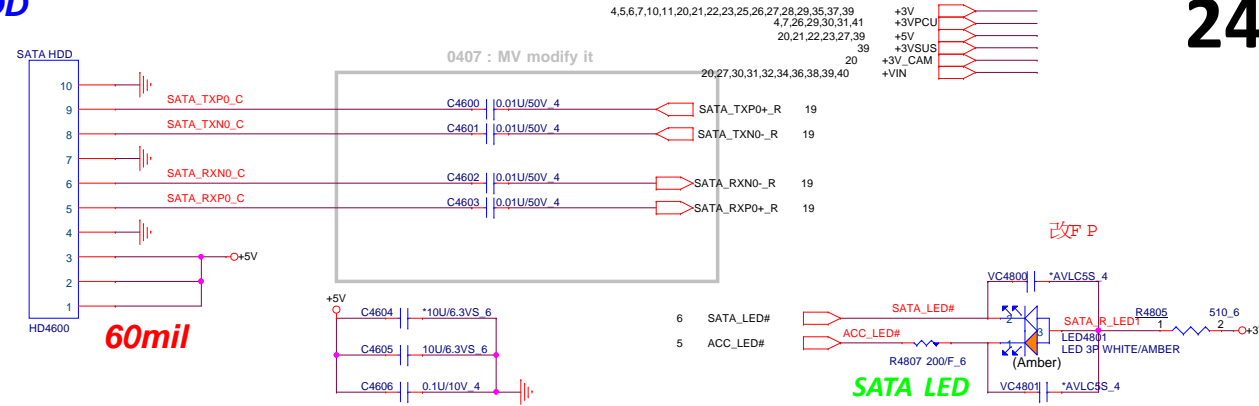
KEYBOARD PULL-UP



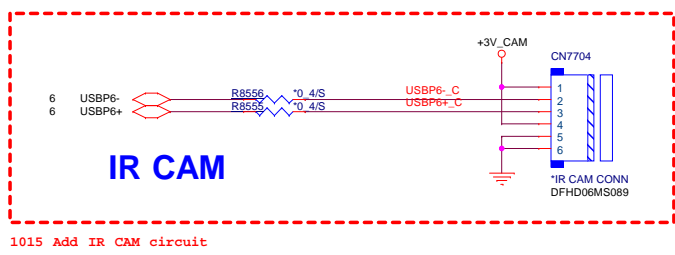
KB LIGHT CONN



HDD

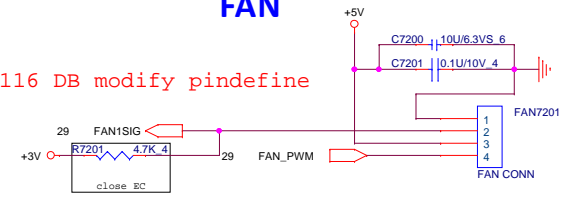


IR CAM

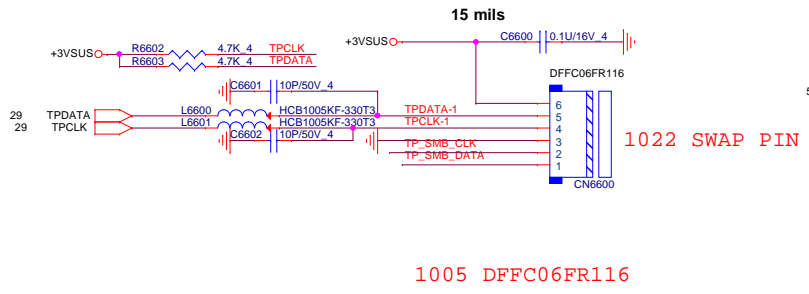


FAN

1116 DB modify pindefine

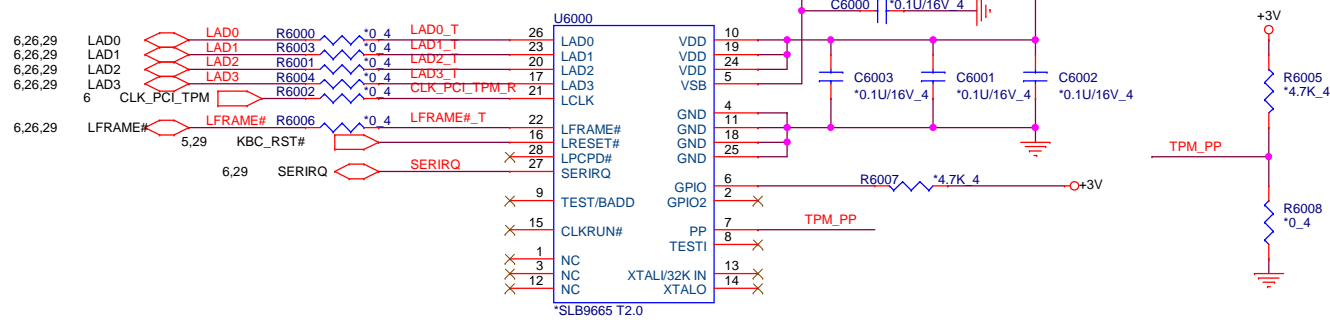


Touch Pad Connector

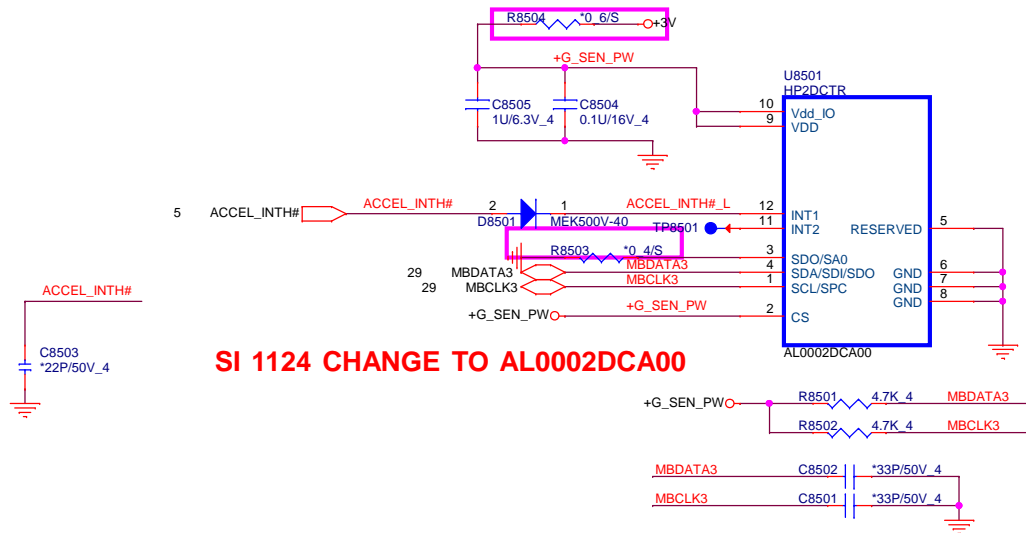


TPM (2.0)

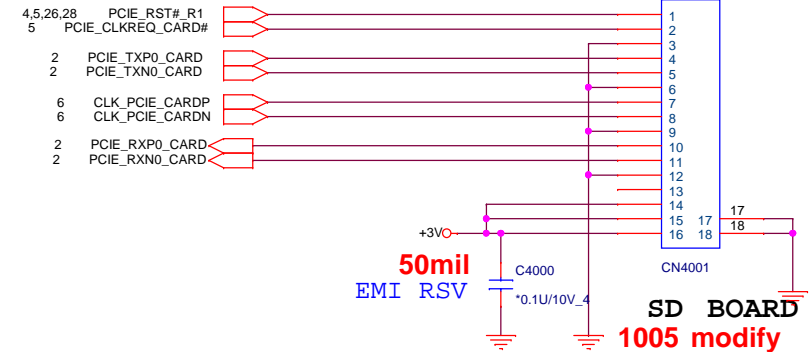
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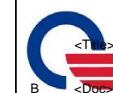
Accelerometer Sensor



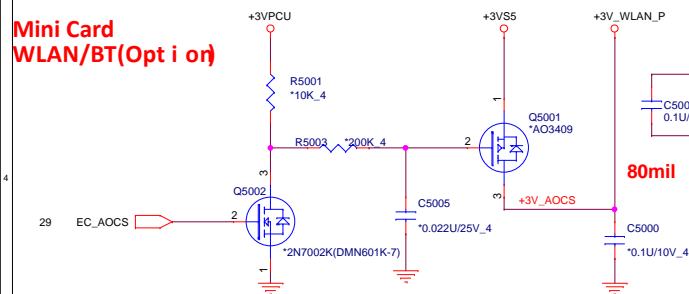
1014 modify pindefine

51619-01601-v01-16p-l
DFFC16FR042

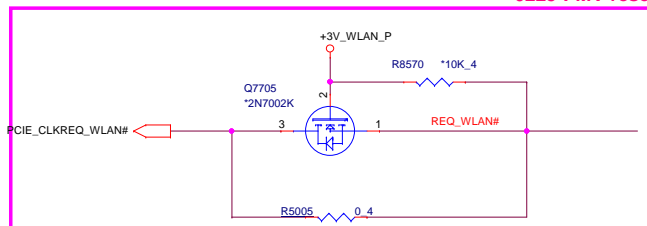
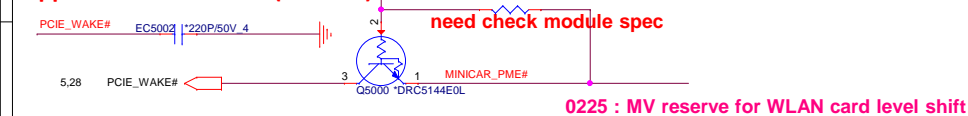
4,5,6,7,10,11,20,21,22,23,24,26,27,28,29,35,37,39 +3V

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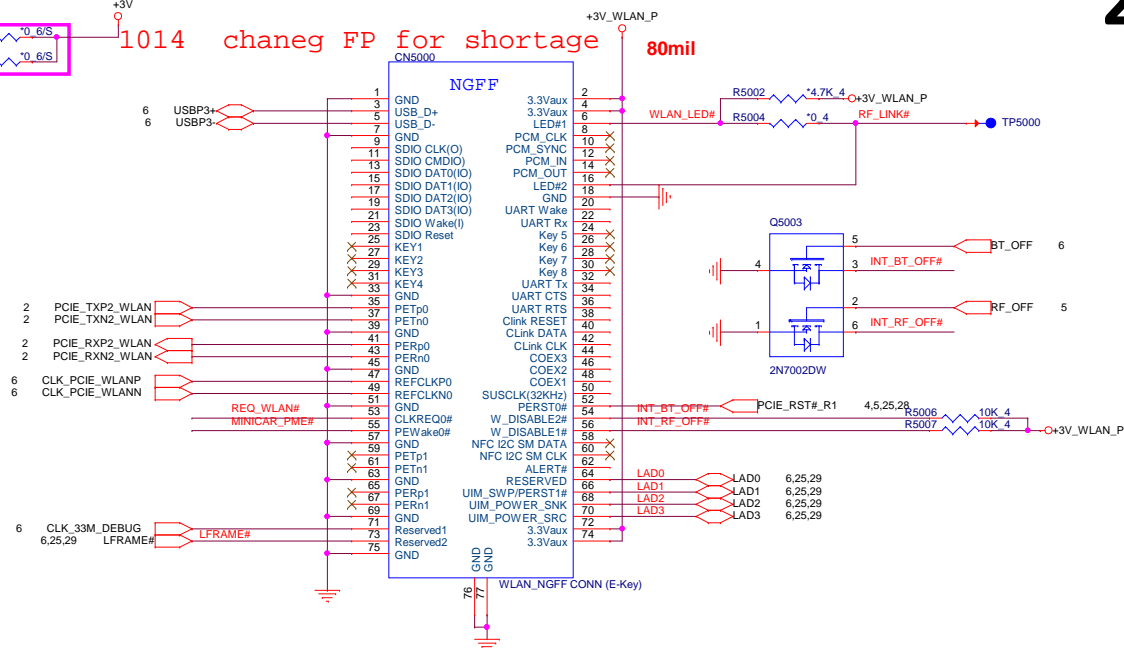
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Mini Card
WLAN/BT(Optional)

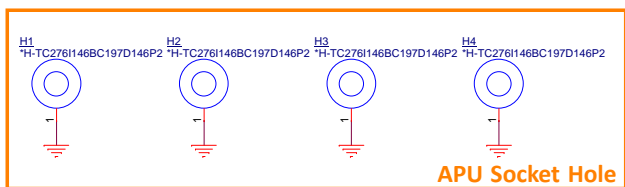
Support Wake Function (Reserved)



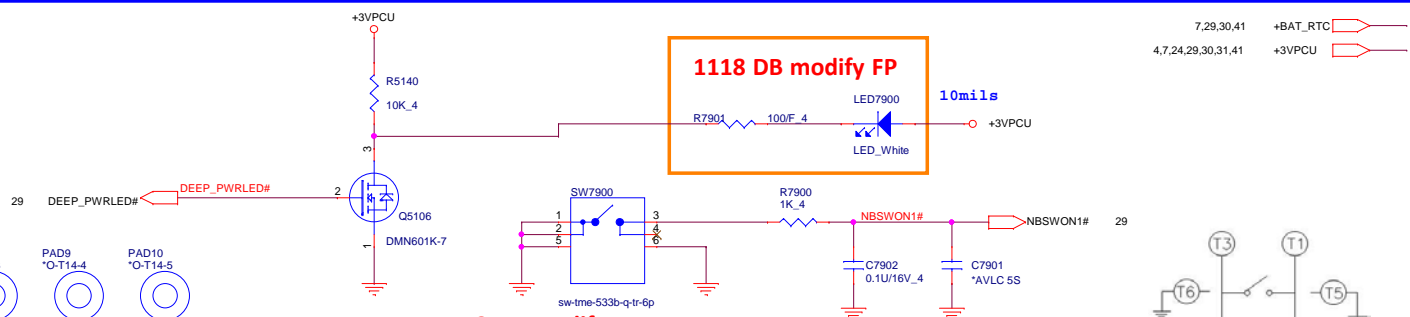
1014 change FP for shortage



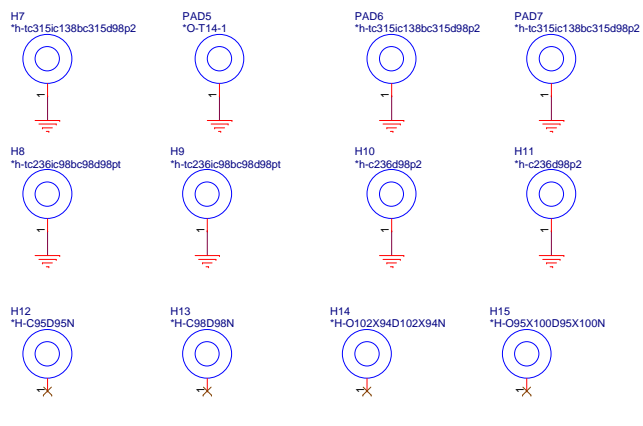
PAD/HOLE



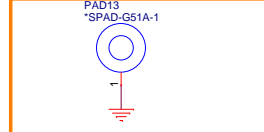
APU Socket Hole



1118 DB modify FP



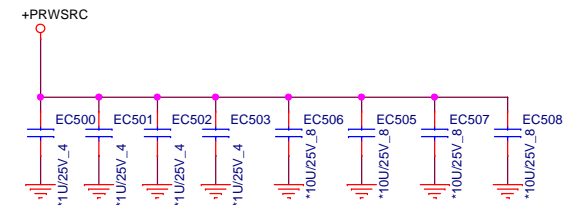
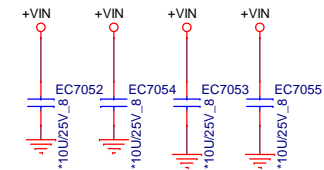
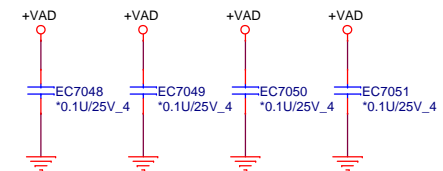
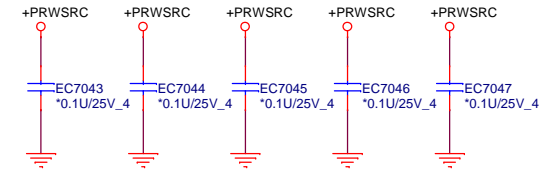
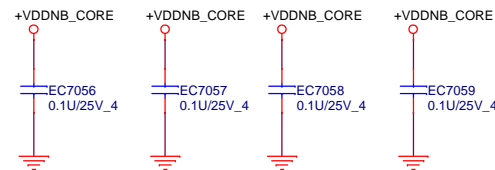
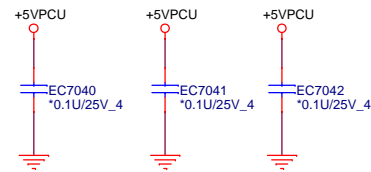
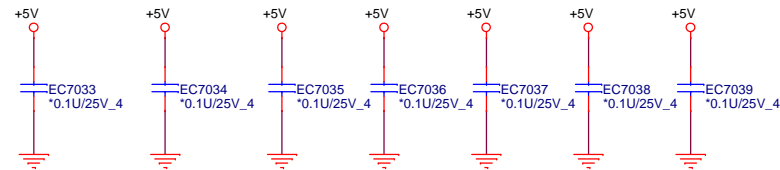
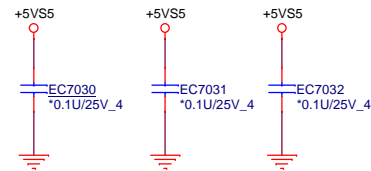
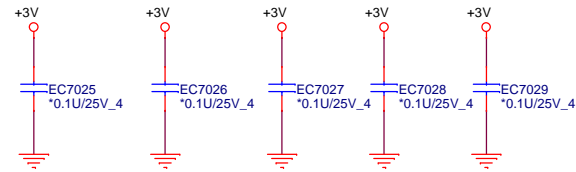
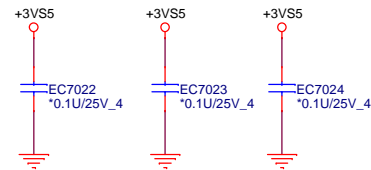
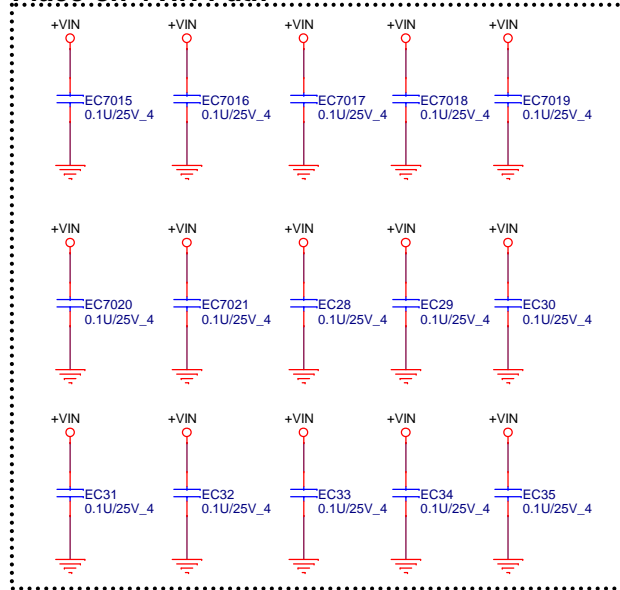
Add for EMI



1118 change to M2 MBZRQ001010

EMI CAPs

Place on +VIN Path



4,5,6,7,10,11,20,21,22,23,24,25,26,28,29,35,37,39 +3V



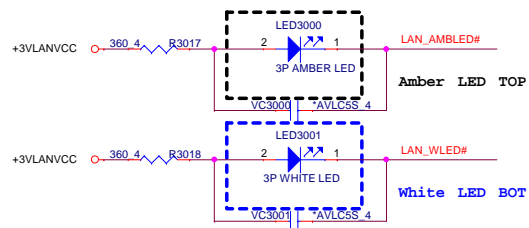
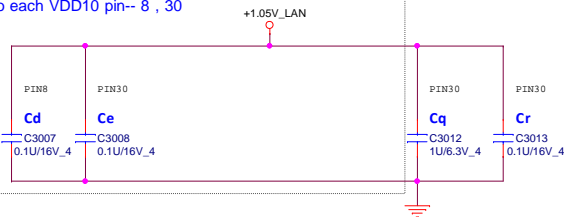
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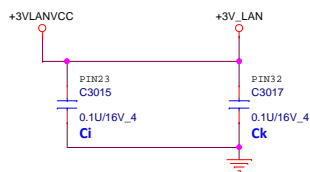
LAN & RJ45

* Place Cq,Cr for RTL8166EH
close to each VDD10 pin-- 30(reserved)

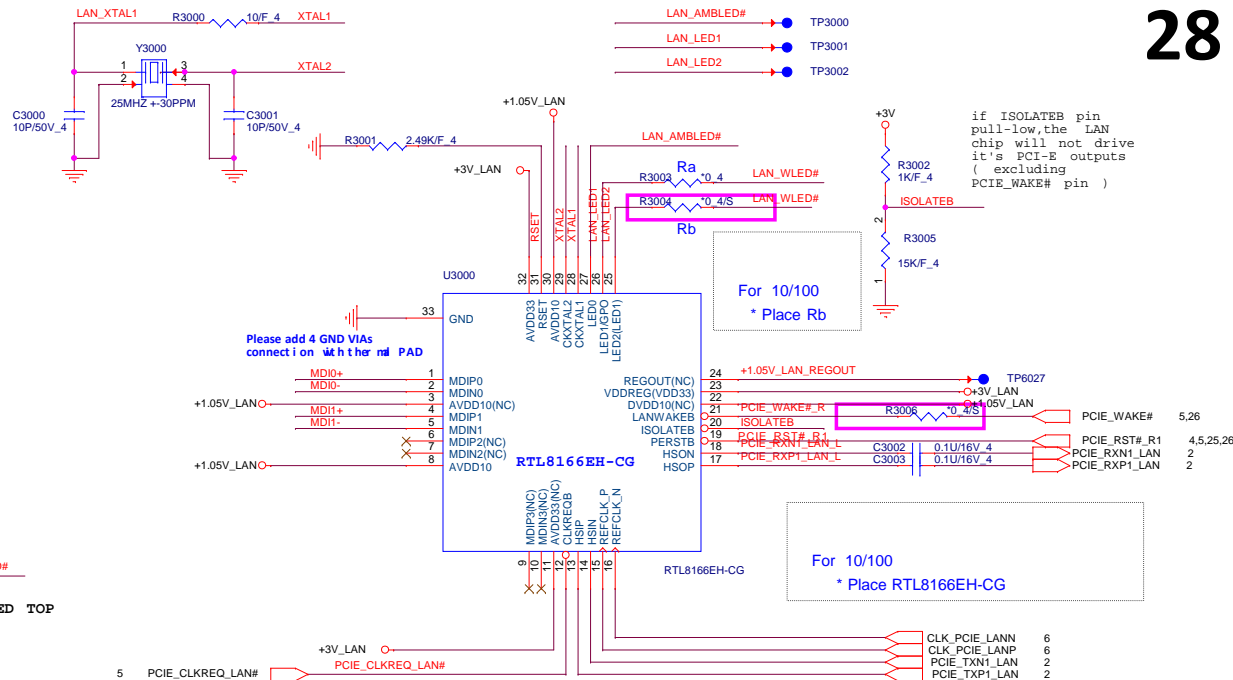
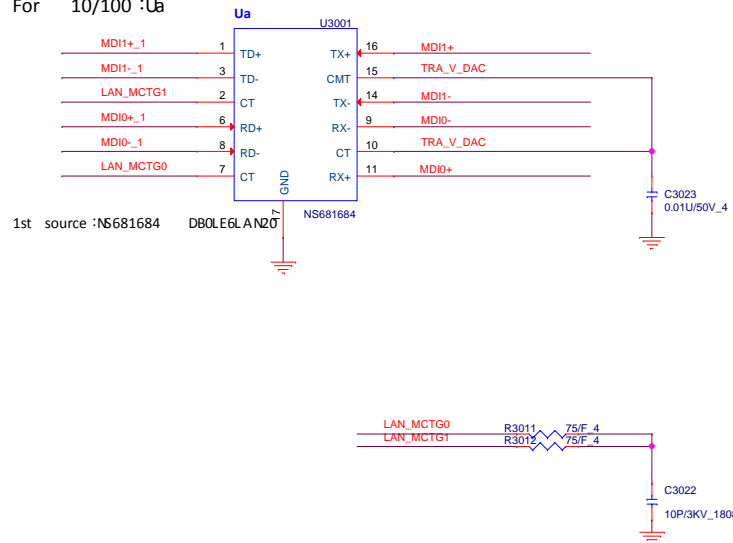
* Place Ce,Cd for RTL8166EH
close to each VDD10 pin-- 8 , 30



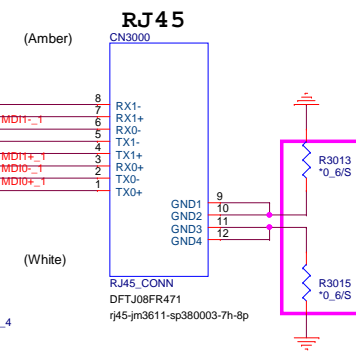
* Place Ci and Ck, close to each VDD33 pin-- 23, 32 for RTL8166EH

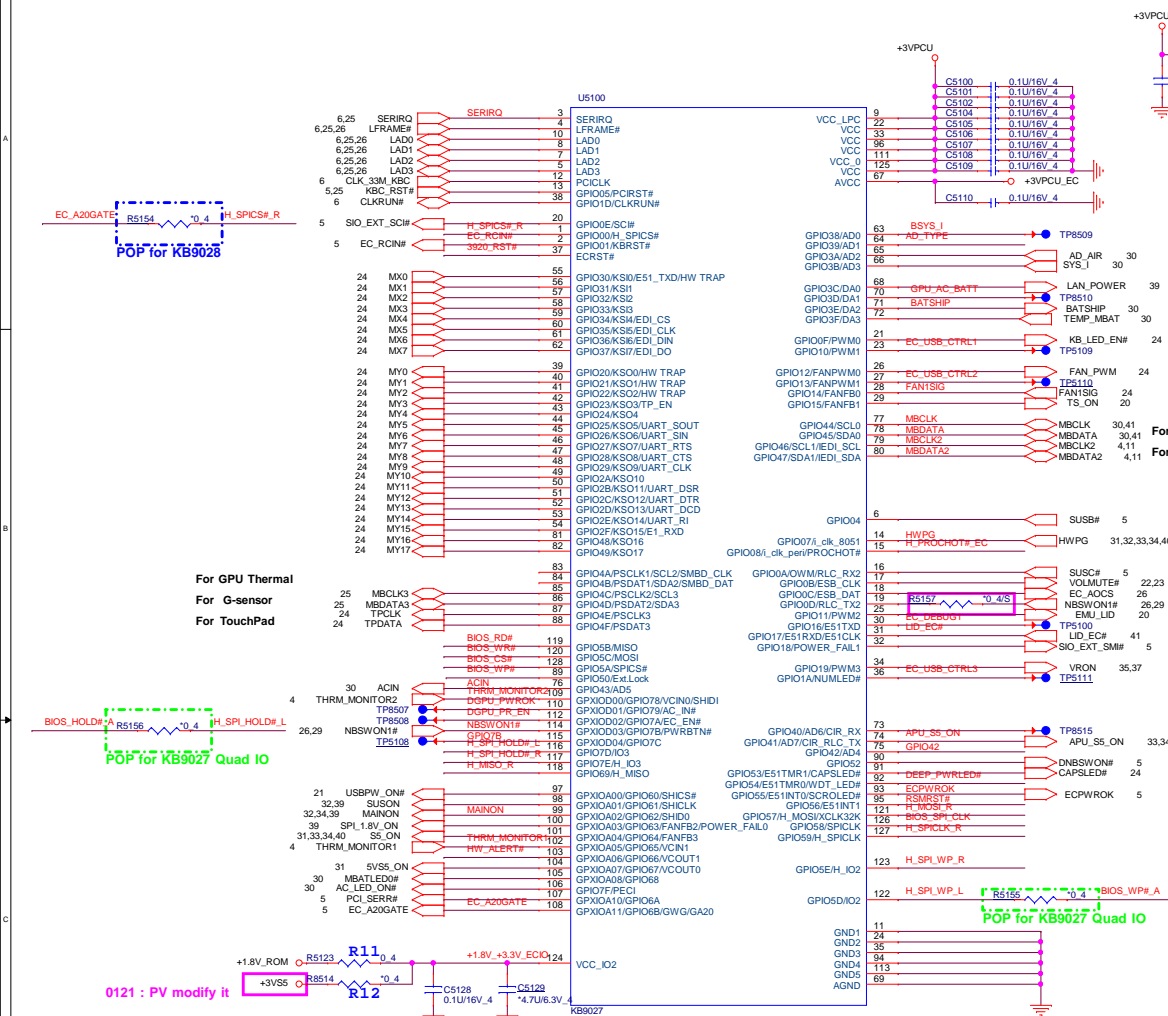


For 10/100 :Ua



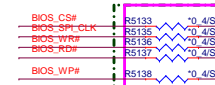
Close RJ45





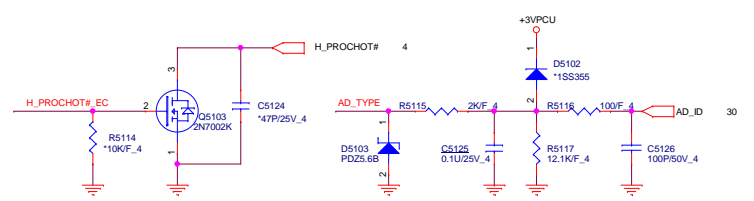
TPs need place to all TOP or all BOT

POP for KB9027

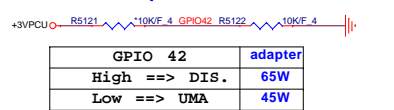


POP for KB9027 Quad IO

Smart Adapter Type Check

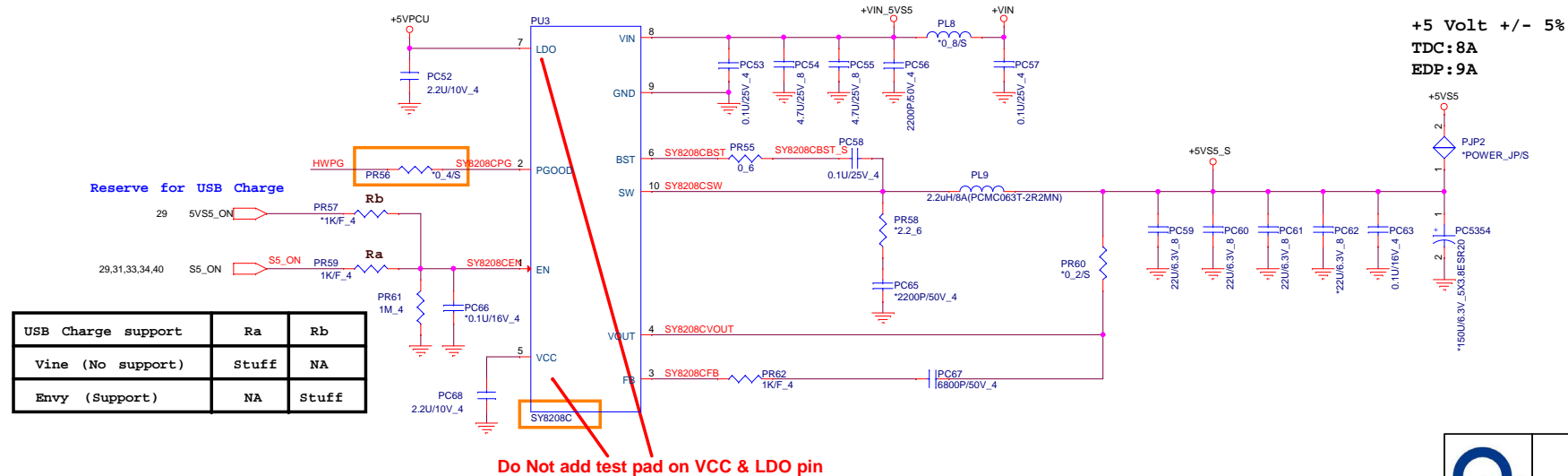
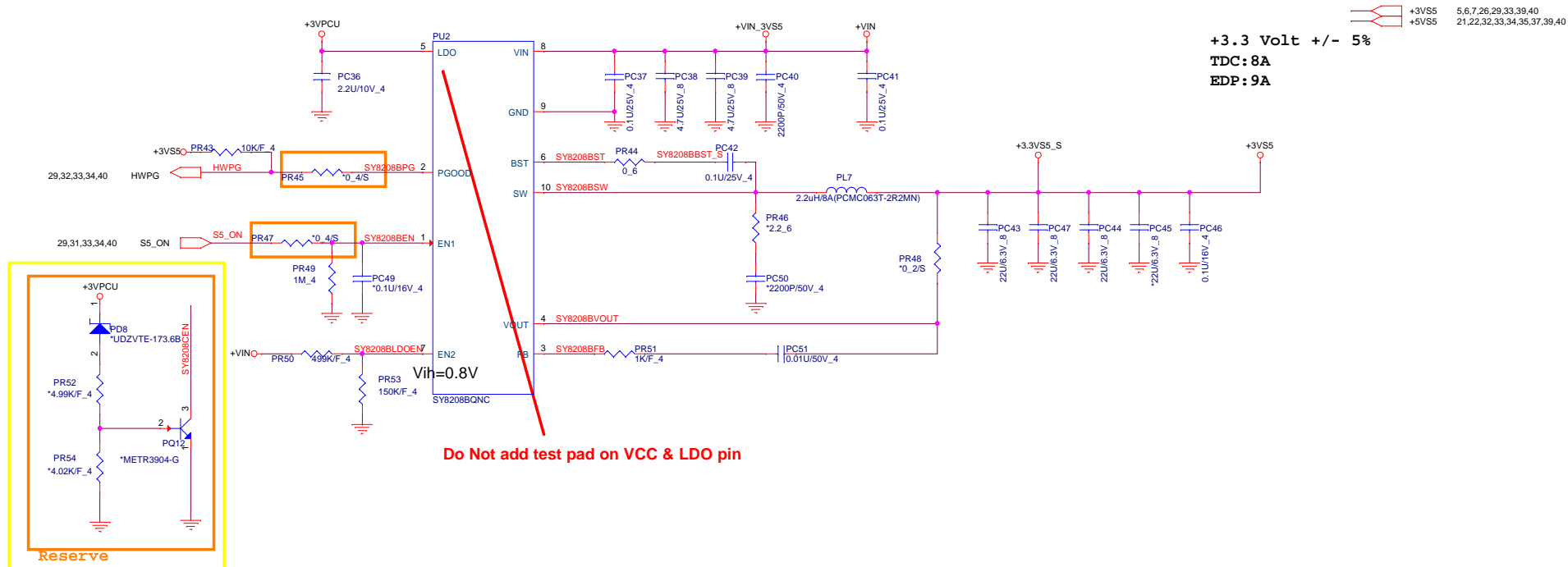


Adapter Select



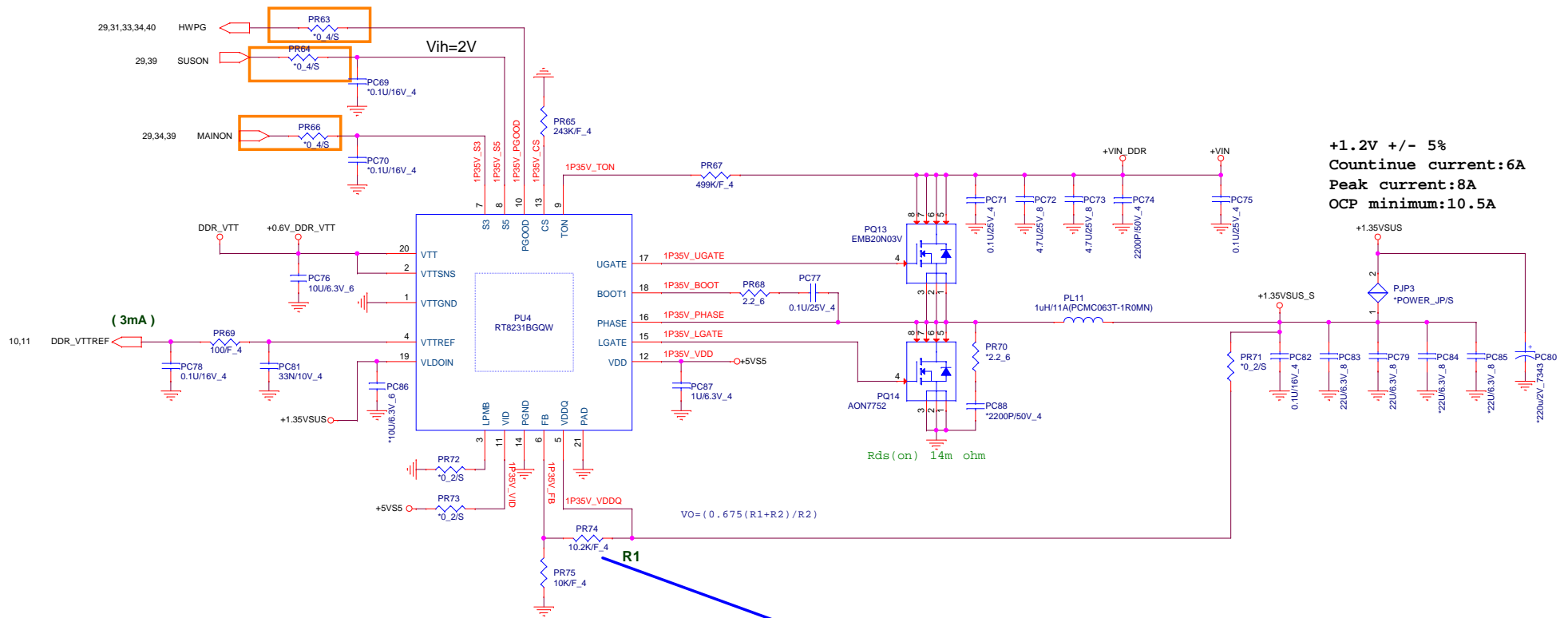
Vender	Size	P/N (3.3V)
WND	8M	AKE3EFP0N06
GGD	8M	AKE2EFN0Q00
Socket		DFHS08FS023



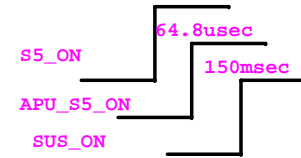
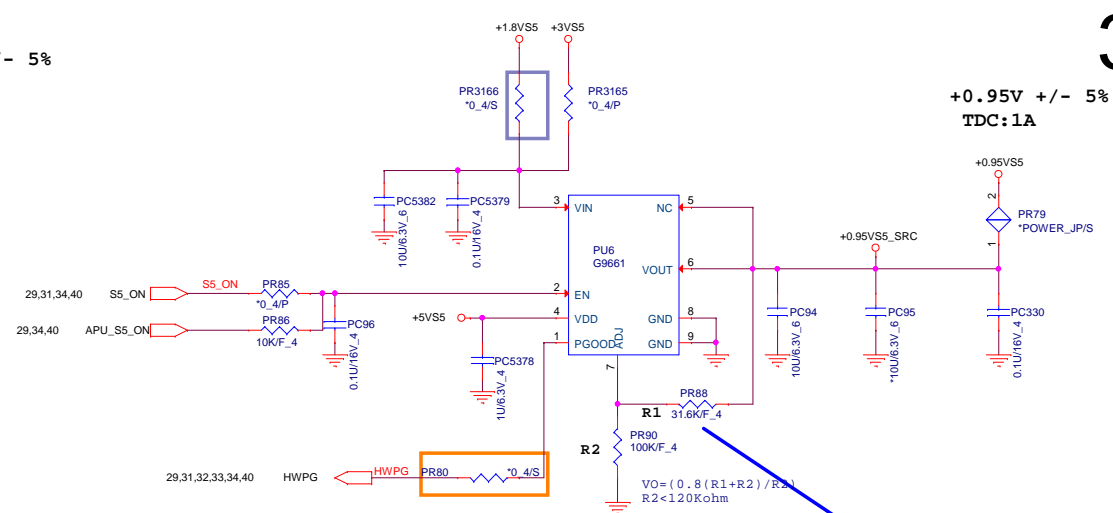
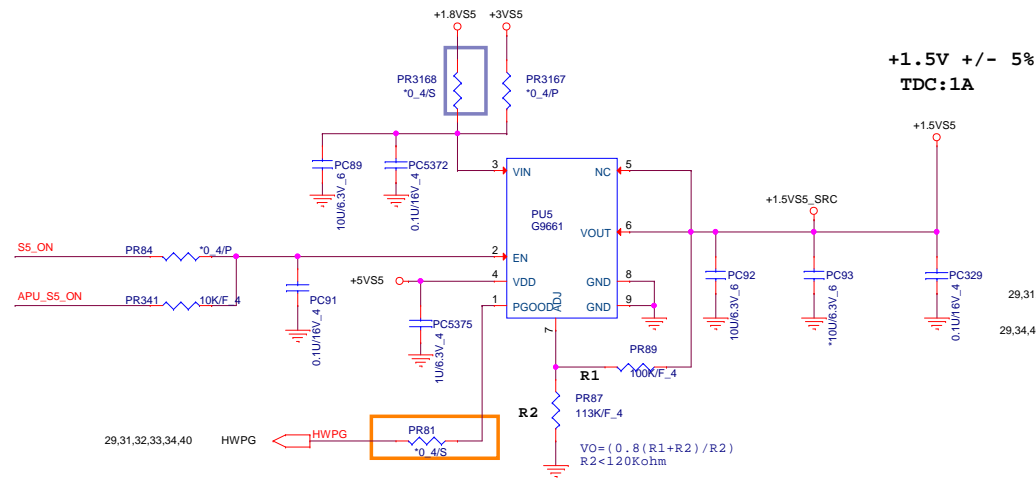


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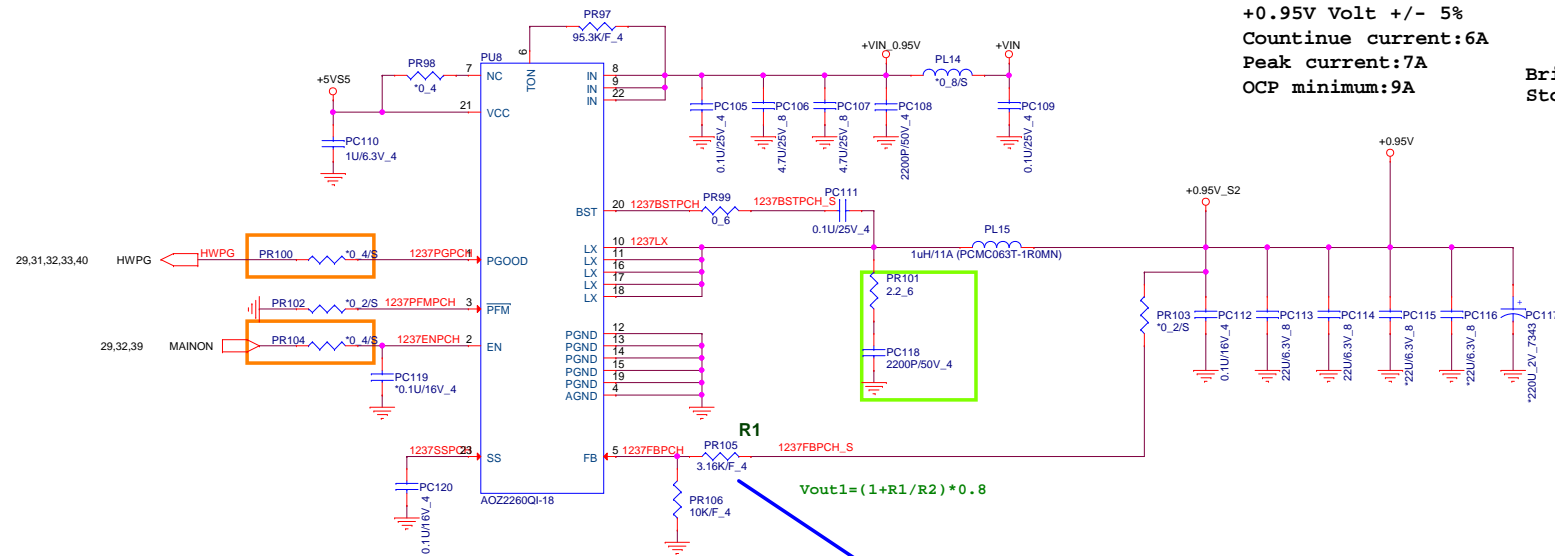


	R1		
DDR3L	10.2K	CS31022FB17	1.35V
DDR4	7.87K	CS27872FB13	1.2V



	R1		
Carrizo-L & Stoney	18.7K	CS31872FB19	0.95V
Bristol & Carrizo	31.6K	CS33162FB14	1.05V

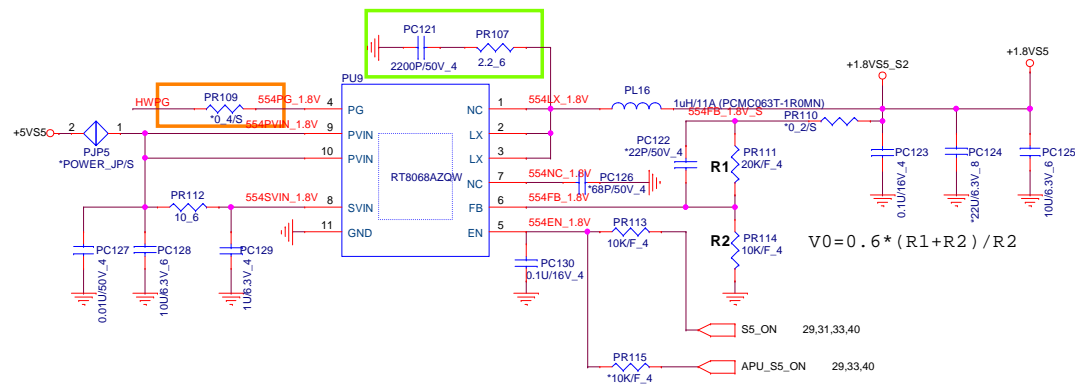
Bristol VDDP=1.05V
Stoney VDDP=0.95V

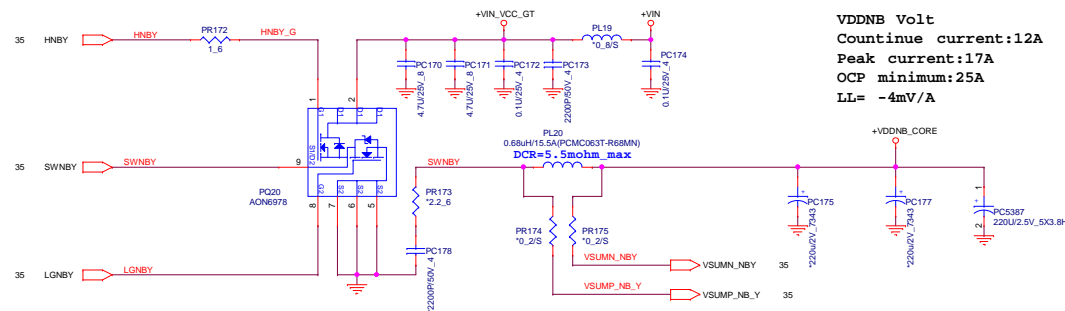
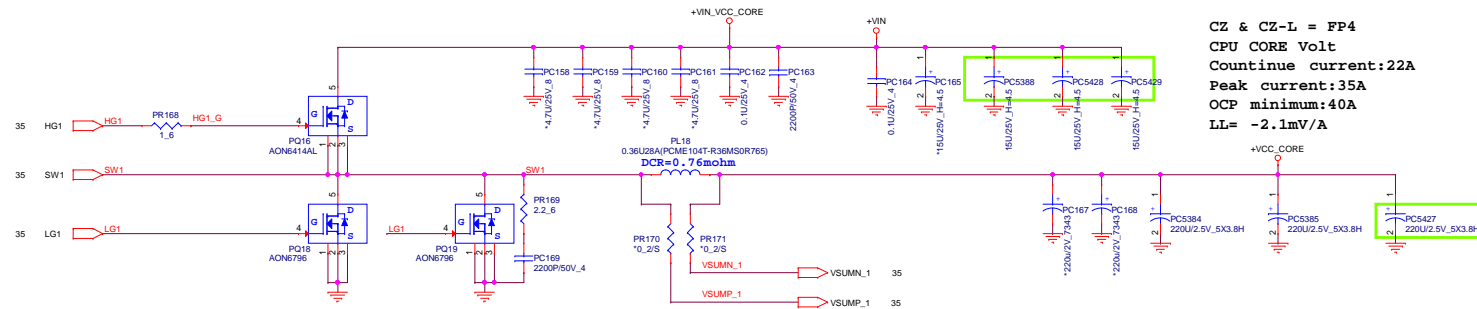


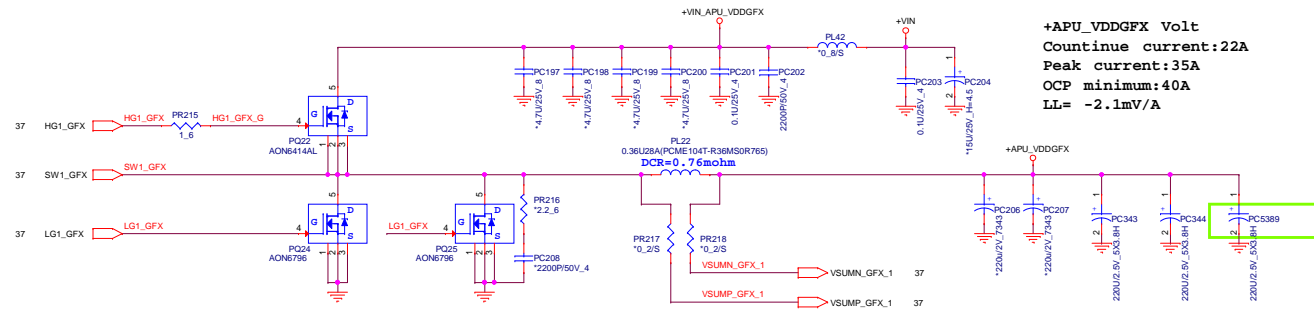
Vo	Rton
0.95V	82k
1V	84.5k
1.05V	95.3k
1.35V	113k
1.5V	127k

	R1		
Carrizo-L & Stoney	1.91K	CS21912FB13	0.95V
Bristol & Carrizo	3.16K	CS23162FB04	1.05V

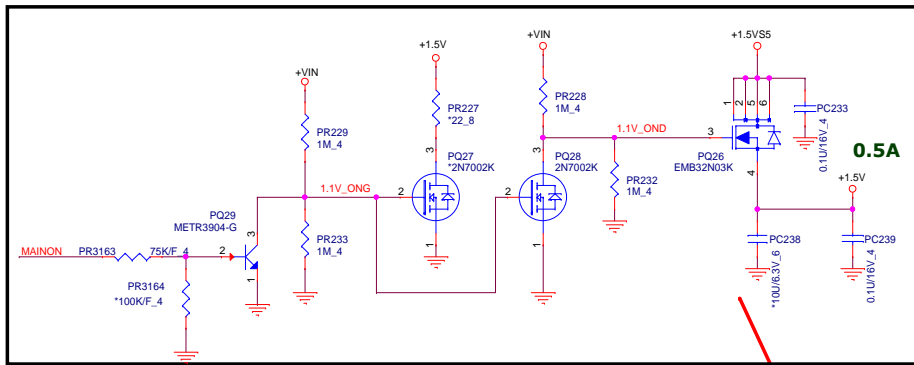
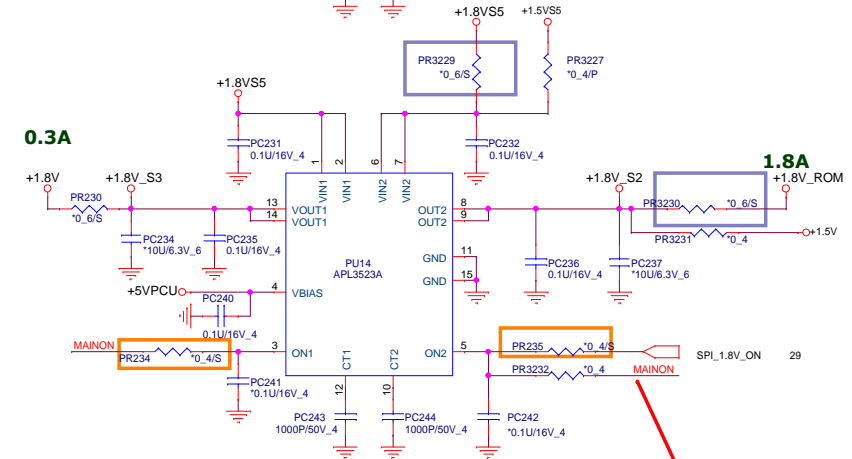
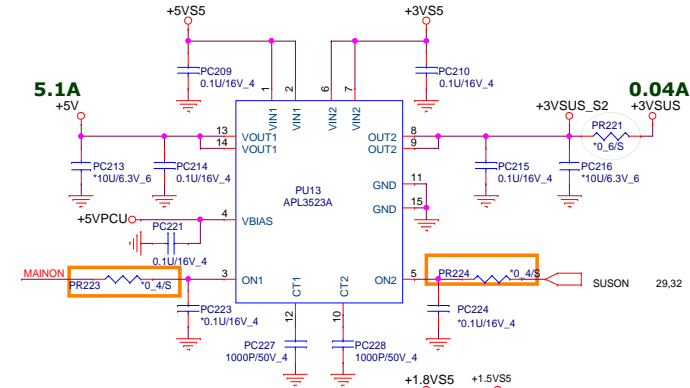
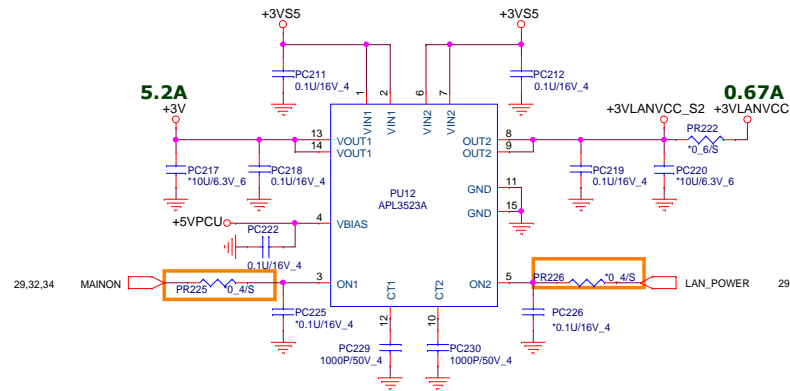
1.8VS5 +/- 3%
 TDC: 3A
 EDP: 4A







4,5,6,7,10,11,20,21,22,23,24,25,26,28,29,35,37	+3V
20,21,22,23,24	+5V
20,24,30,31,32,34,36,38,40	+VIN
5,6,7,26,29,31,33,40	+3VS5
21,22,31,32,33,34,35,37,40	+5VS5
28	+3VLAVCC



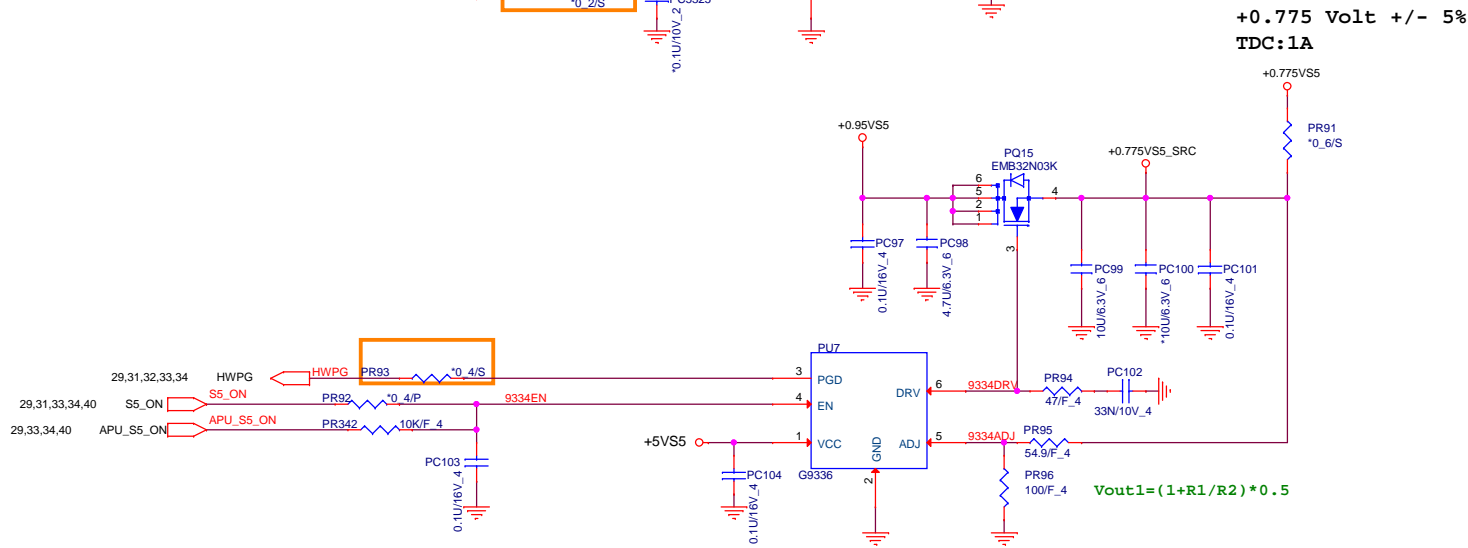
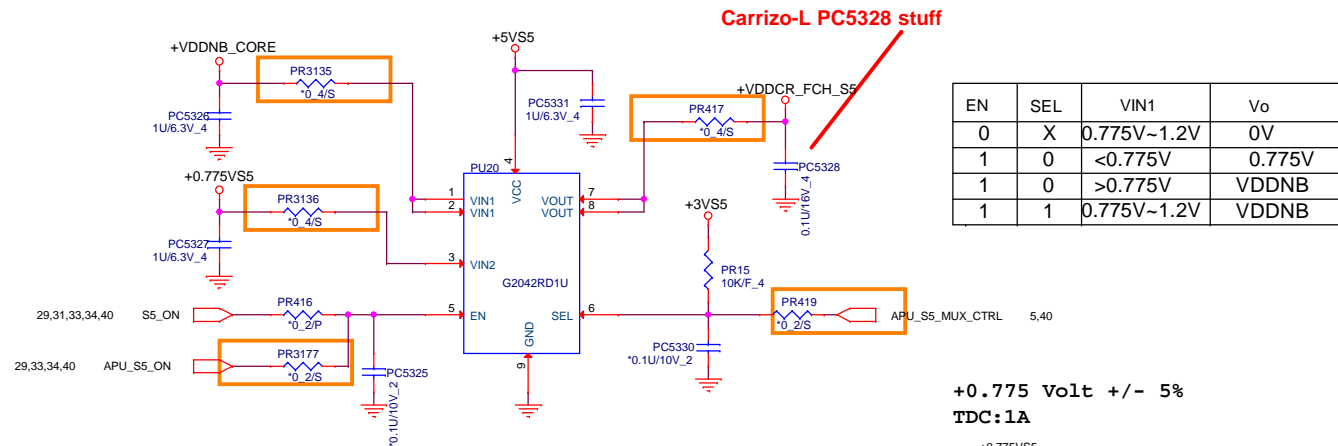
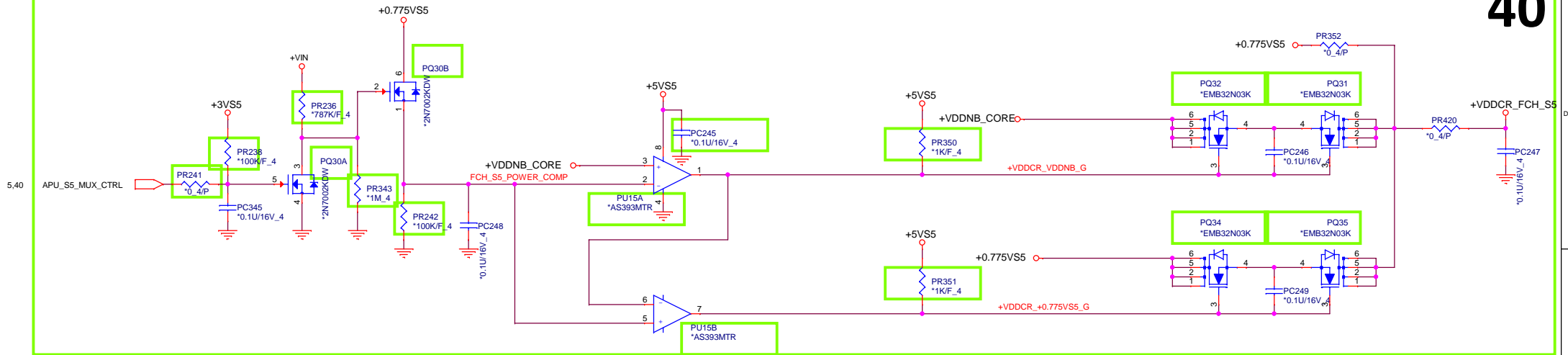
Carrizo-L; Unstuff

Carrizo	Stuff PR235 ,PR3230,PR3229
Carrizo-L	stuff PR3232 ,PR3231,PR3227



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