

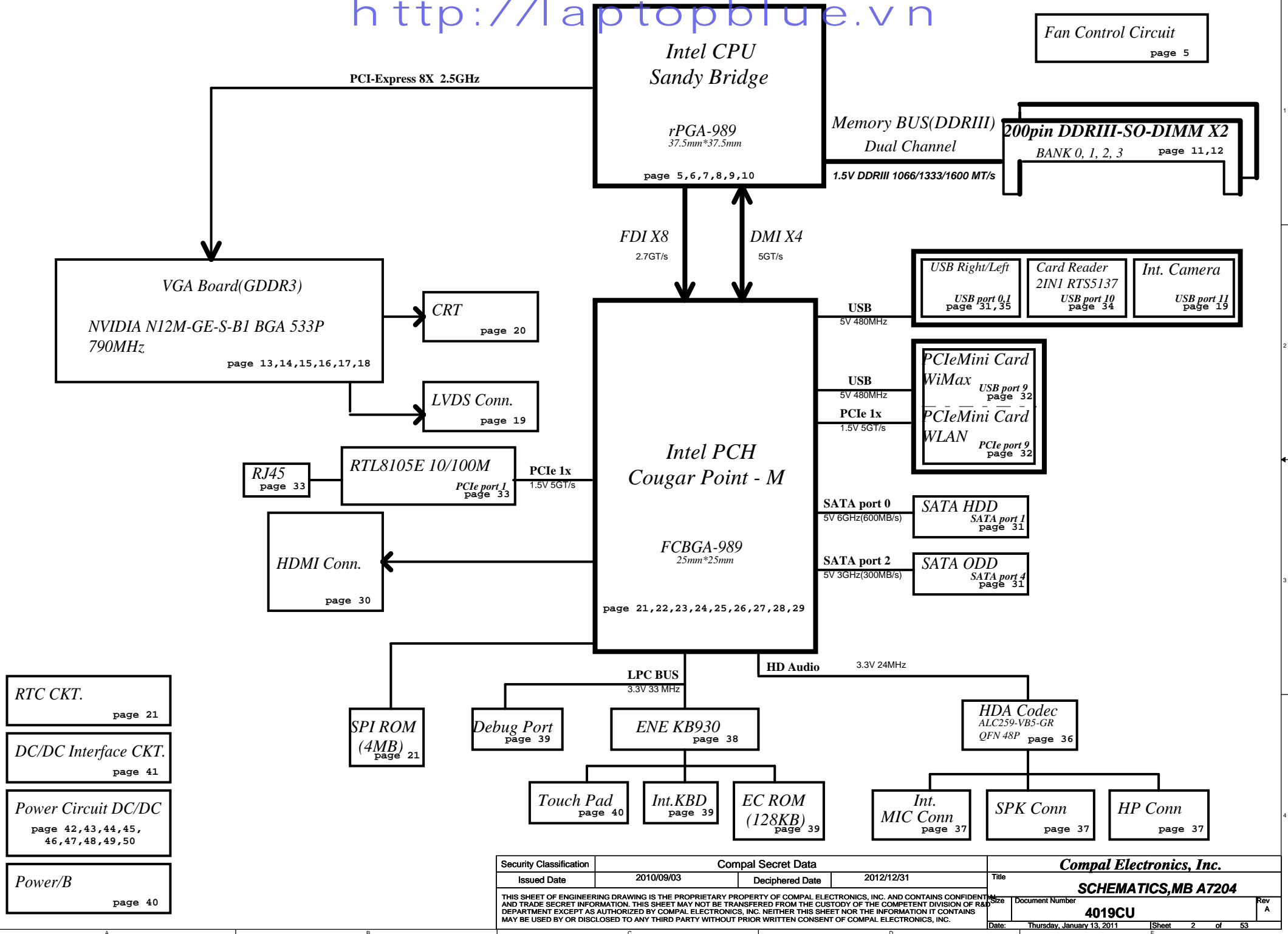
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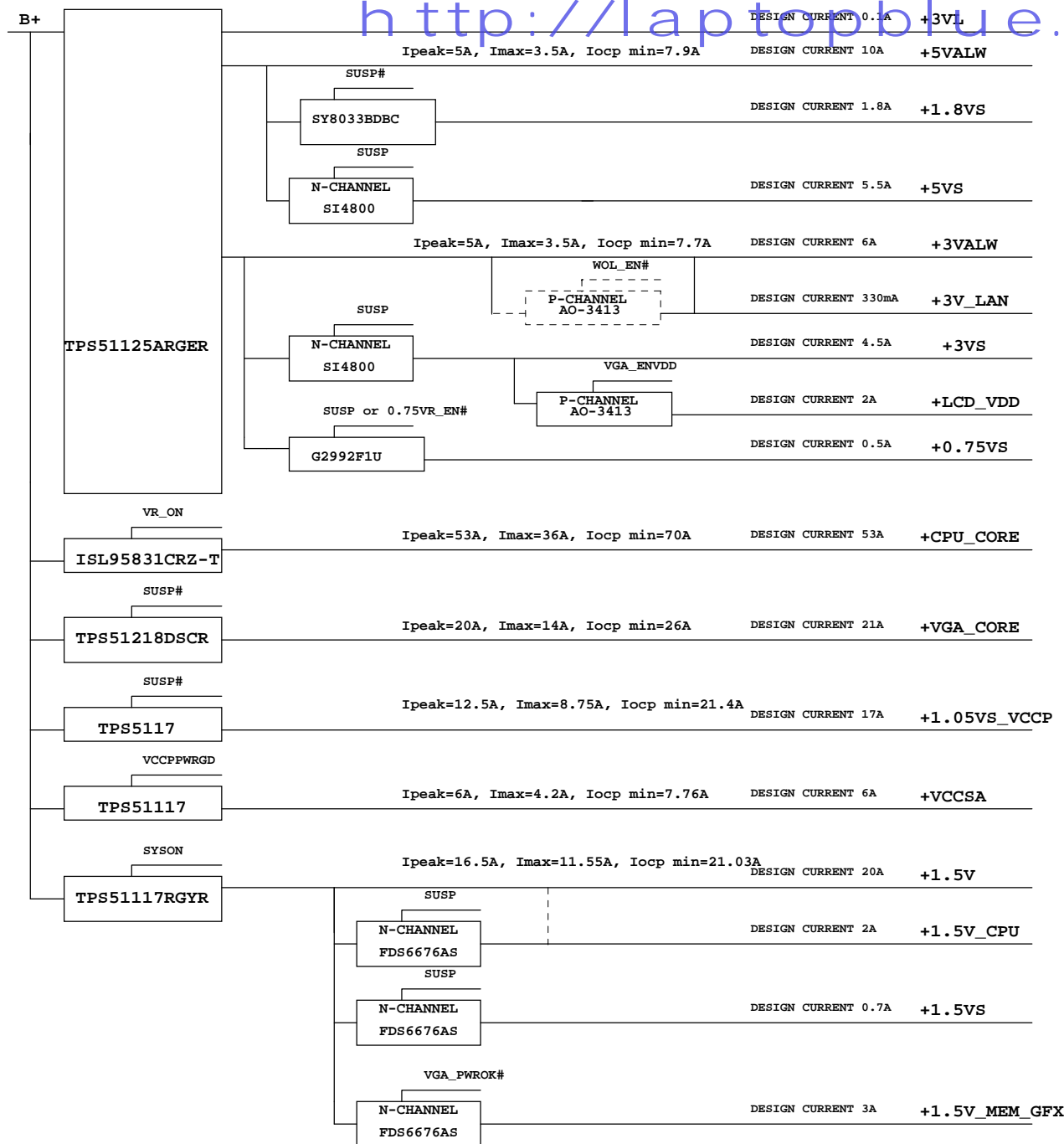
***Delhi 10RG***

# LA-7204P REV 0.1 Schematic

Intel Processor(Sandy Bridge) / PCH(Cougar Point)  
2010-12-19 Rev 0.1

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## Voltage Rails

( O MEANS ON X MEANS OFF )

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

## PCH SM Bus Address

Power	Device	HEX	Address
+3VS	DDR SO-DIMM 0	A0 H	1010 0000 b
+3VS	DDR SO-DIMM 1	A4 H	1010 0100 b
+3VS	WLAN/WIMAX		

## EC SM Bus1 Address

## EC SM Bus2 Address

Power	Device	HEX	Address	Power	Device	HEX	Address
+3VL	Smart Battery	16 H	0001 0110 b	+3VS	PCH	96 H	1001 0110 b

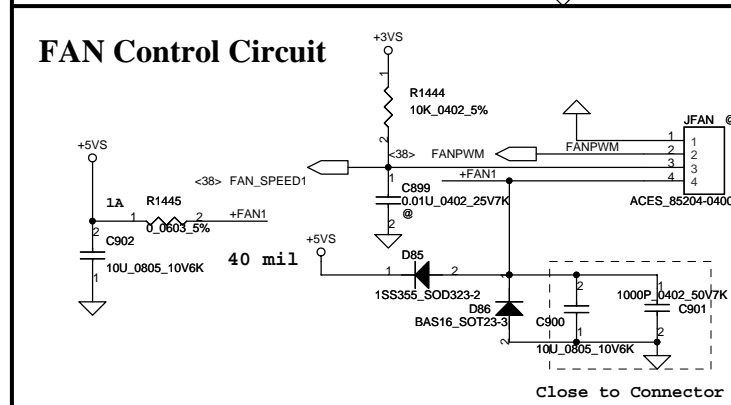
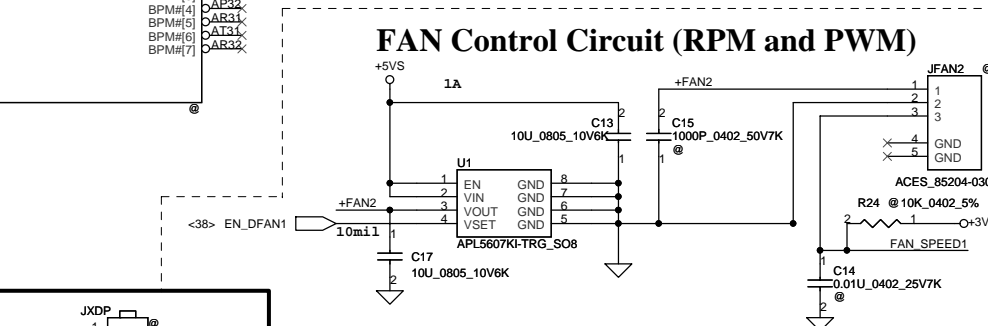
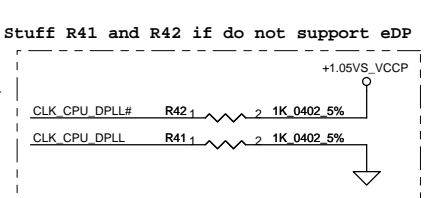
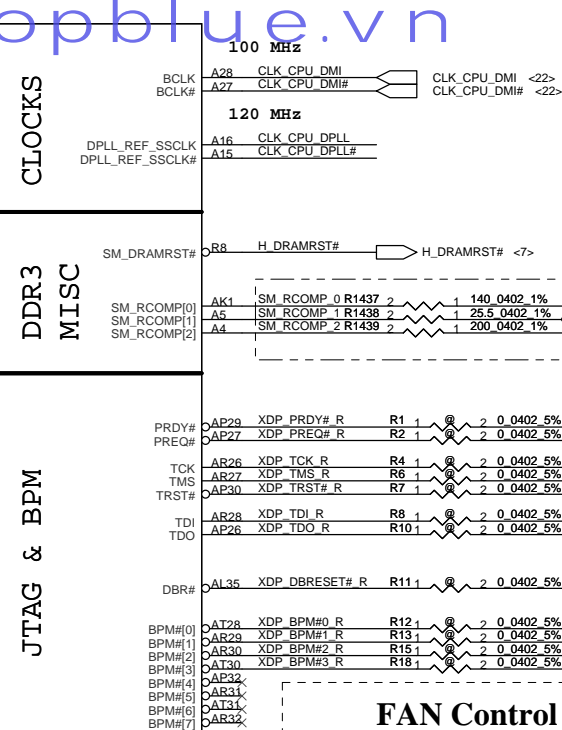
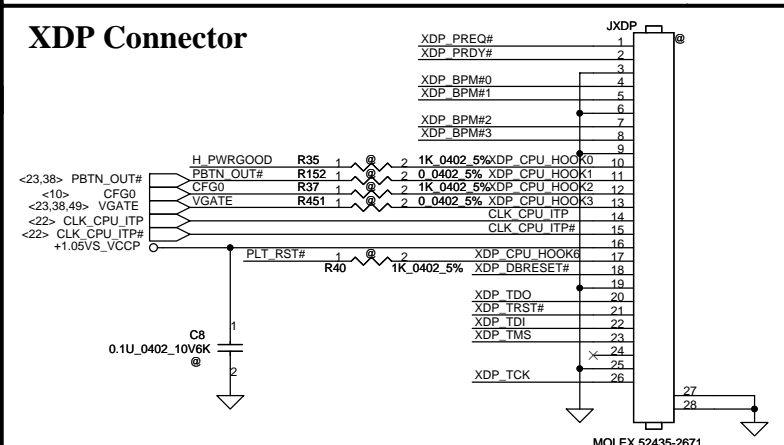
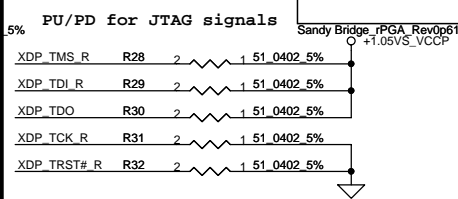
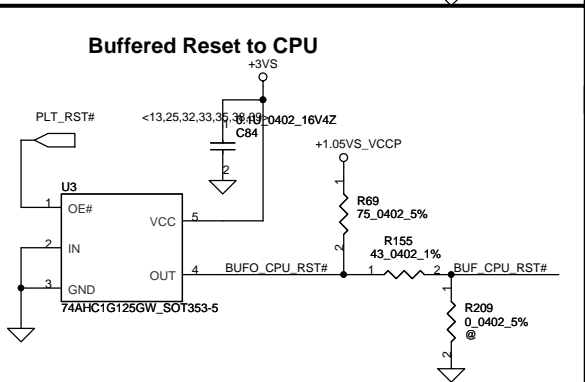
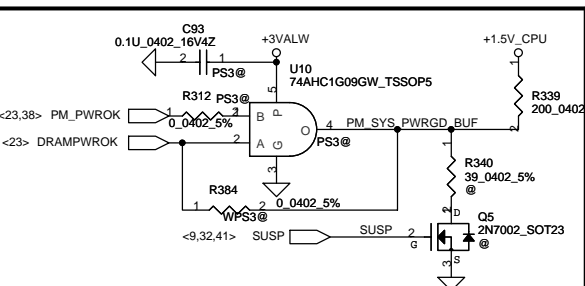
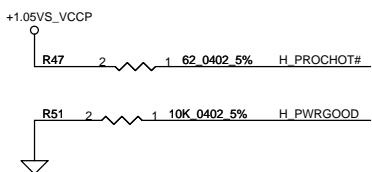
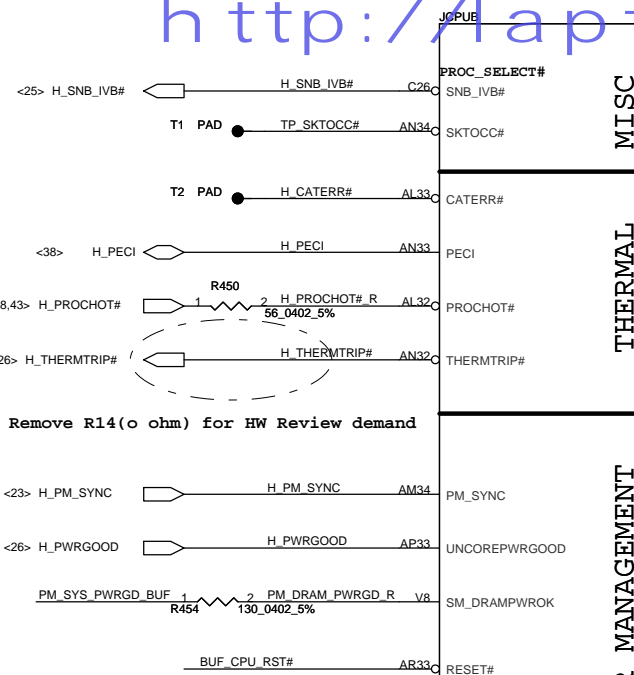
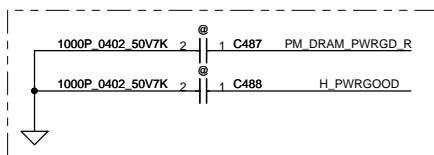
## BTO Option Table

Function	DIS only	MINI PCI-E SLOT	LAN			Camera & Mic
description		SLOT1	LAN			Camera & Mic
explain		WIMAX	10/100M	Giga		Camera & Mic
BTO	DIS@	WIMAX@	8105ELDO@	8105ESWR@	8111E@	CAM@

Function	PCH	HDMI				
description						
explain						
BTO	Q65R3@	HDMI@				

STATE \ SIGNAL	SLP_S3#	SLP_S4#	SLP_S5#
Full ON	HIGH	HIGH	HIGH
S1(Power On Suspend)	HIGH	HIGH	HIGH
S3 (Suspend to RAM)	LOW	HIGH	HIGH
S4 (Suspend to Disk)	LOW	LOW	HIGH
S5 (Soft OFF)	LOW	LOW	LOW
G3	LOW	LOW	LOW

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DDR SYSTEM MEMORY A

DDR SYSTEM MEMORY B

<11> DDR\_A\_BS0# <11> DDR\_A\_BS1# <11> DDR\_A\_BS2# <11> DDR\_A\_CAS# <11> DDR\_A\_RAS# <11> DDR\_A\_WE#

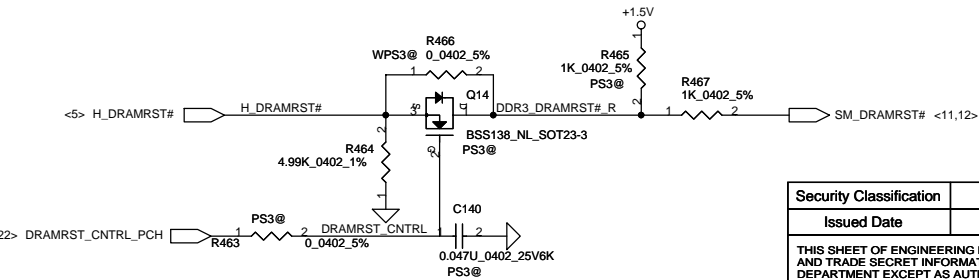
SA\_CLK[0] SA\_CLK#0 SA\_CKE[0] SA\_CLK[1] SA\_CLK#1 SA\_CKE[1] SA\_CLK[2] SA\_CLK#2 SA\_CKE[2] SA\_CLK[3] SA\_CLK#3 SA\_CKE[3] SA\_CS#0 SA\_CS#1 SA\_CS#2 SA\_CS#3 SA\_ODT[0] SA\_ODT[1] SA\_ODT[2] SA\_ODT[3] SA\_DQS#0 SA\_DQS#1 SA\_DQS#2 SA\_DQS#3 SA\_DQS#4 SA\_DQS#5 SA\_DQS#6 SA\_DQS#7 SA\_MA[0] SA\_MA[1] SA\_MA[2] SA\_MA[3] SA\_MA[4] SA\_MA[5] SA\_MA[6] SA\_MA[7] SA\_MA[8] SA\_MA[9] SA\_MA[10] SA\_MA[11] SA\_MA[12] SA\_MA[13] SA\_MA[14] SA\_MA[15]

<12> DDR\_B\_BS0# <12> DDR\_B\_BS1# <12> DDR\_B\_BS2# <12> DDR\_B\_CAS# <12> DDR\_B\_RAS# <12> DDR\_B\_WE#

SB\_CLK[0] SB\_CLK#0 SB\_CKE[0] SB\_CLK[1] SB\_CLK#1 SB\_CKE[1] SB\_CLK[2] SB\_CLK#2 SB\_CKE[2] SB\_CLK[3] SB\_CLK#3 SB\_CKE[3] SB\_CS#0 SB\_CS#1 SB\_CS#2 SB\_CS#3 SB\_ODT[0] SB\_ODT[1] SB\_ODT[2] SB\_ODT[3] SB\_DQS#0 SB\_DQS#1 SB\_DQS#2 SB\_DQS#3 SB\_DQS#4 SB\_DQS#5 SB\_DQS#6 SB\_DQS#7 SB\_MA[0] SB\_MA[1] SB\_MA[2] SB\_MA[3] SB\_MA[4] SB\_MA[5] SB\_MA[6] SB\_MA[7] SB\_MA[8] SB\_MA[9] SB\_MA[10] SB\_MA[11] SB\_MA[12] SB\_MA[13] SB\_MA[14] SB\_MA[15]

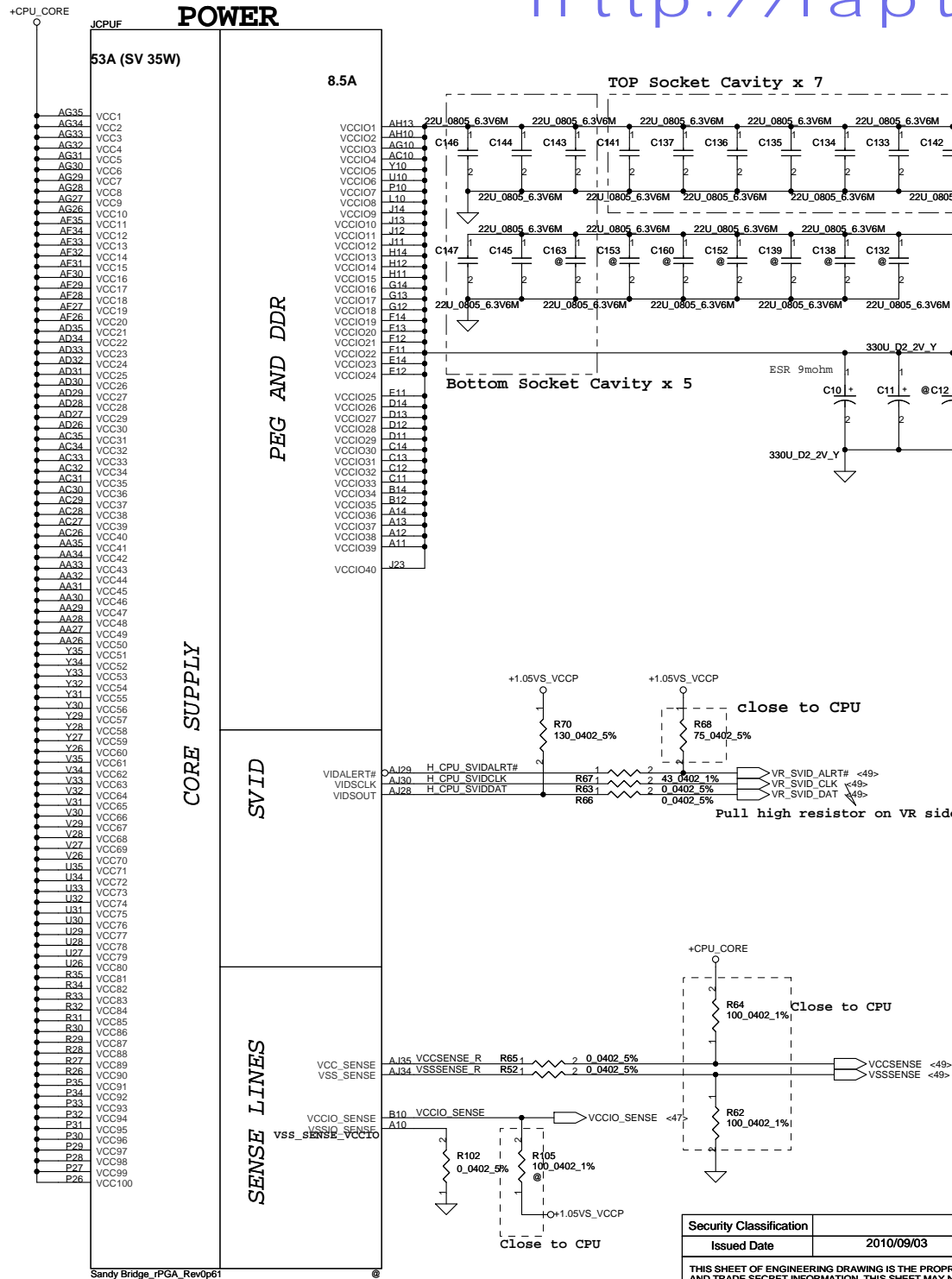
Sandy Bridge\_rPGA\_Rev0p61

Sandy Bridge\_rPGA\_Rev0p61



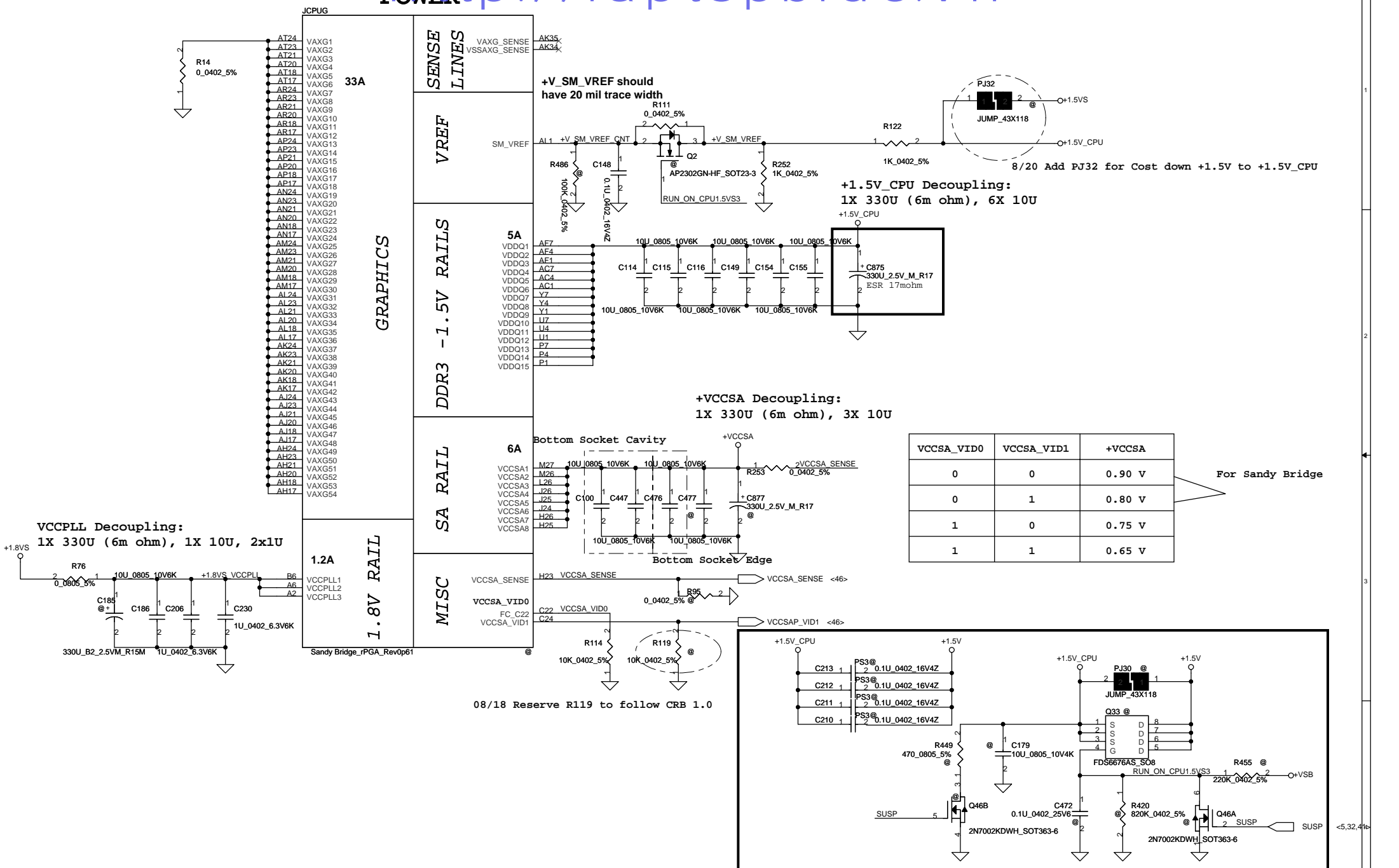
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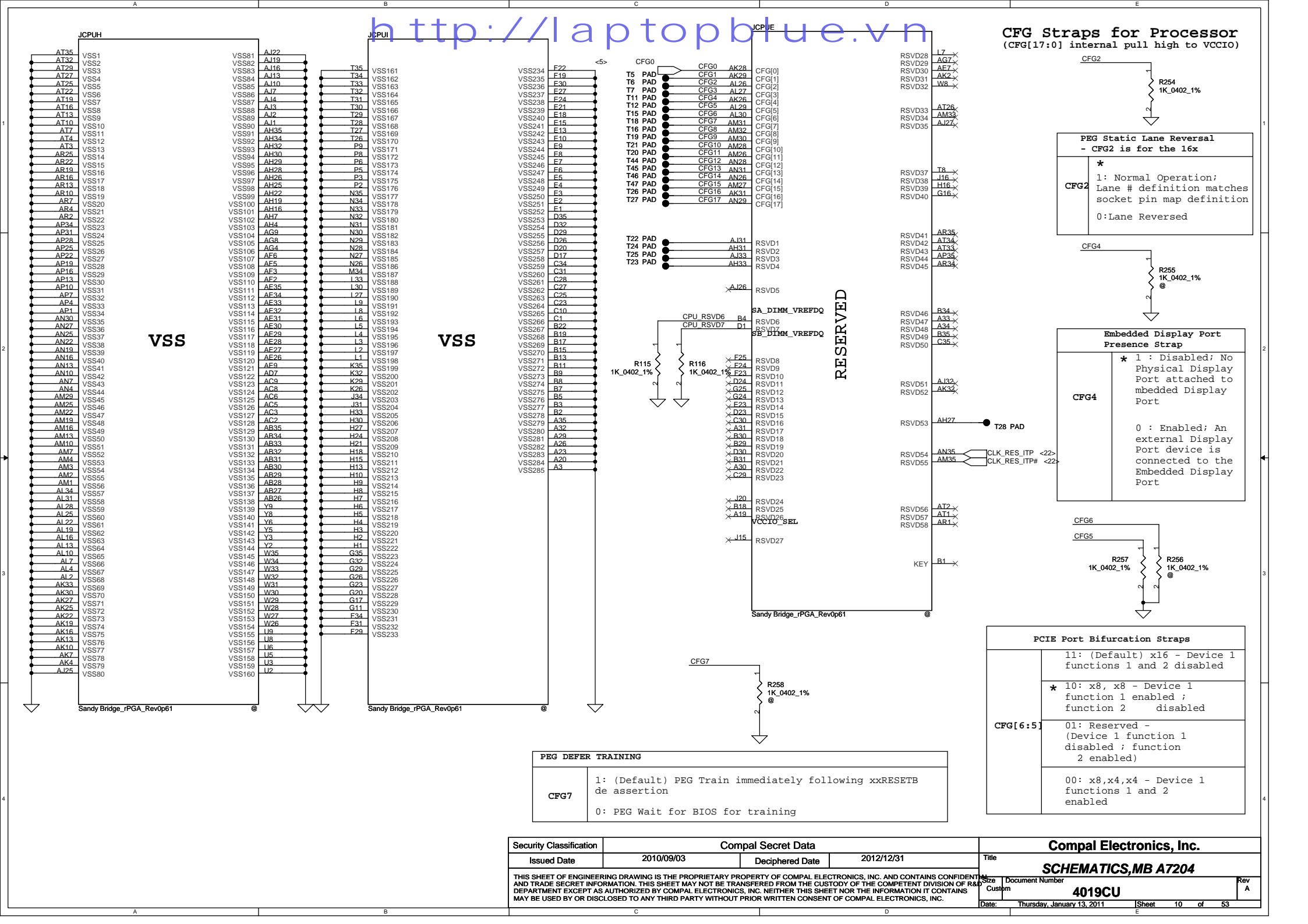






POWER





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**CFG Straps for Processor**  
(CFG[17:0] internal pull high to VCCIO)

**CFG2**

PEG Static Lane Reversal  
- CFG2 is for the 16x

**CFG2**

1: Normal Operation;  
Lane # definition matches  
socket pin map definition

0: Lane Reversed

**CFG4**

Embedded Display Port  
Presence Strap

**CFG4**

1: Disabled; No  
Physical Display  
Port attached to  
mbedded Display  
Port

0: Enabled; An  
external Display  
Port device is  
connected to the  
Embedded Display  
Port

**CFG6**

PCIE Port Bifurcation Straps

**CFG6**

11: (Default) x16 - Device 1  
functions 1 and 2 disabled

**CFG6**

10: x8, x8 - Device 1  
function 1 enabled ;  
function 2 disabled

**CFG6**

01: Reserved -  
(Device 1 function 1  
disabled ; function  
2 enabled)

**CFG6**

00: x8,x4,x4 - Device 1  
functions 1 and 2  
enabled

**CFG7**

PEG DEFER TRAINING

**CFG7**

1: (Default) PEG Train immediately following xxRESETB  
de assertion

0: PEG Wait for BIOS for training

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**PEG DEFER TRAINING**

CFG7	CFG7
1: (Default) PEG Train immediately following xxRESETB de assertion	
0: PEG Wait for BIOS for training	

**PCIE Port Bifurcation Straps**

CFG[6:5]	CFG[6:5]
11: (Default) x16 - Device 1 functions 1 and 2 disabled	
* 10: x8, x8 - Device 1 function 1 enabled ; function 2 disabled	
01: Reserved - (Device 1 function 1 disabled ; function 2 enabled)	
00: x8,x4,x4 - Device 1 functions 1 and 2 enabled	

**CFG Straps for Processor**  
(CFG[17:0] internal pull high to VCCIO)

**CFG2**

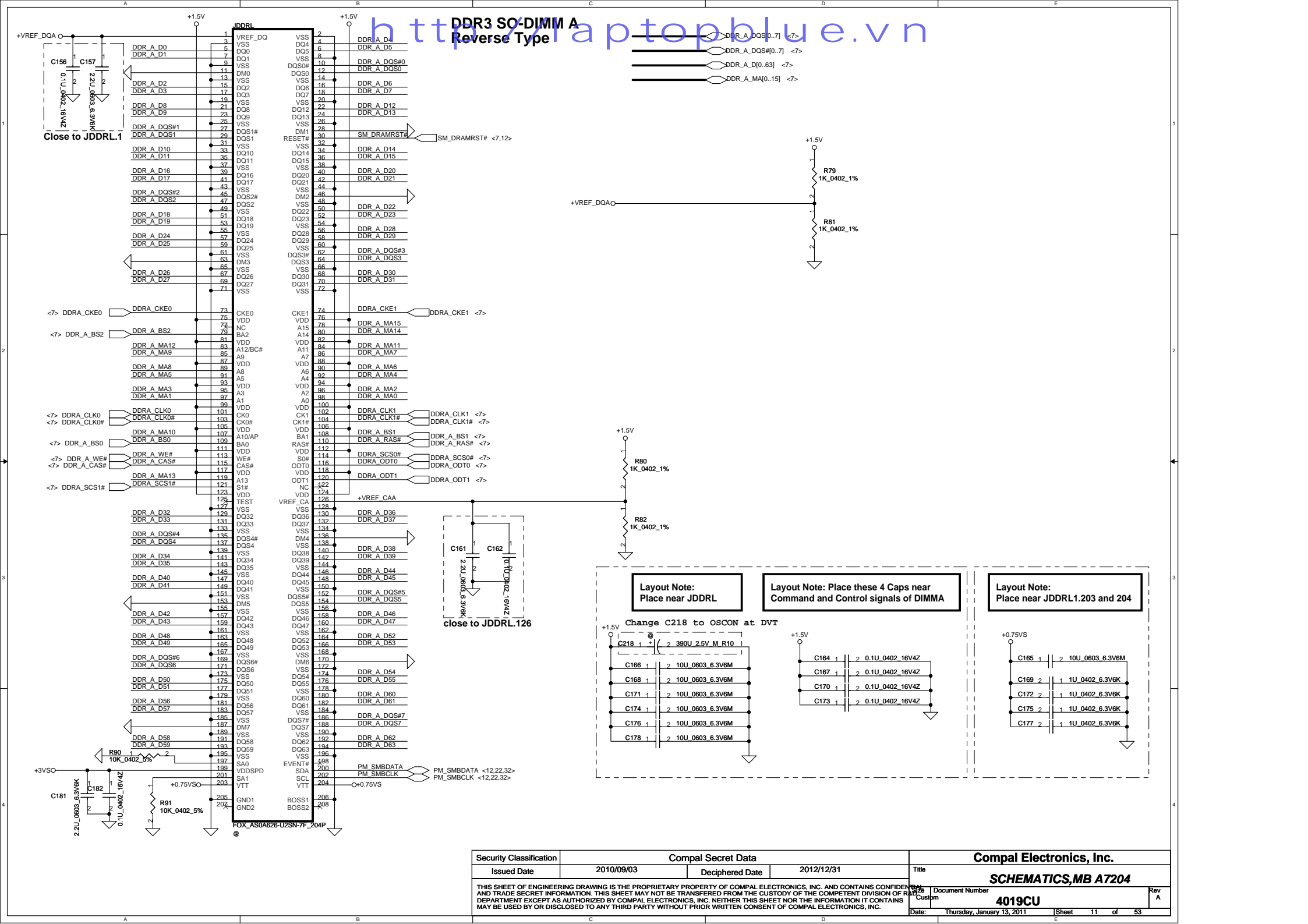
CFG2	CFG2
* 1: Normal Operation; Lane # definition matches socket pin map definition	
0: Lane Reversed	

**CFG4**

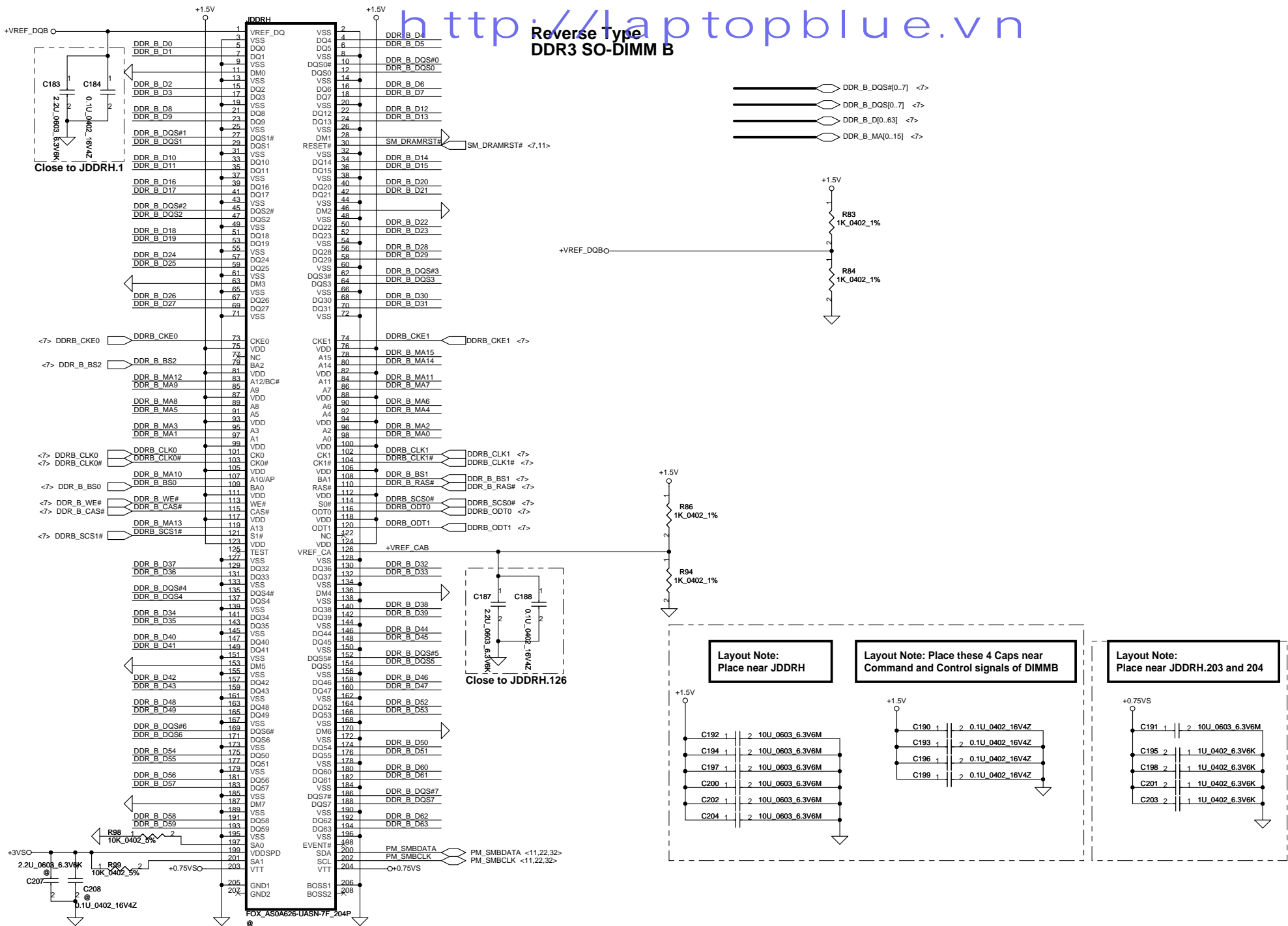
CFG4	CFG4
* 1: Disabled; No Physical Display Port attached to mbedded Display Port	
0: Enabled; An external Display Port device is connected to the Embedded Display Port	

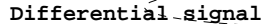
**CFG6**

CFG6	CFG6
11: (Default) x16 - Device 1 functions 1 and 2 disabled	
* 10: x8, x8 - Device 1 function 1 enabled ; function 2 disabled	
01: Reserved - (Device 1 function 1 disabled ; function 2 enabled)	
00: x8,x4,x4 - Device 1 functions 1 and 2 enabled	

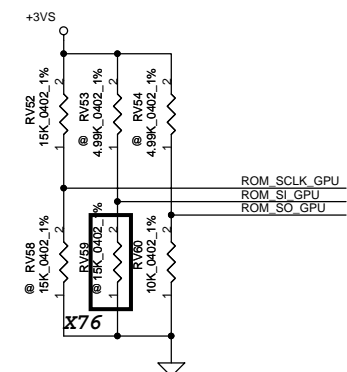
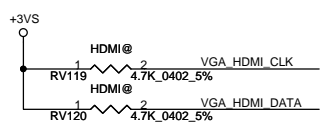
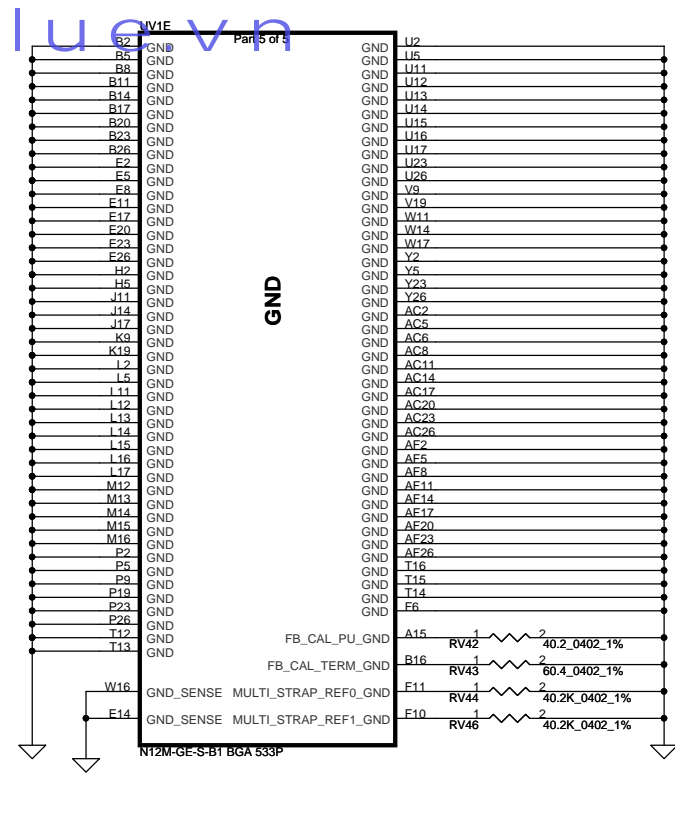
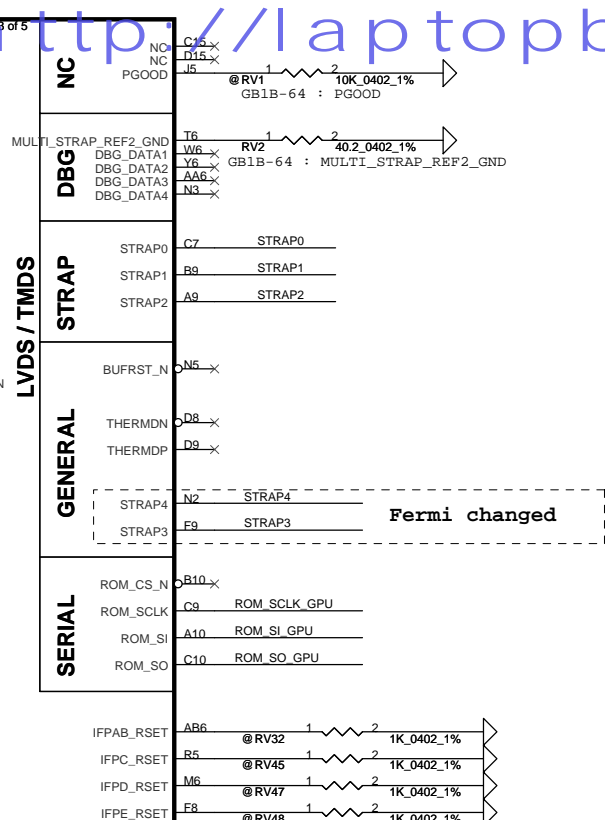
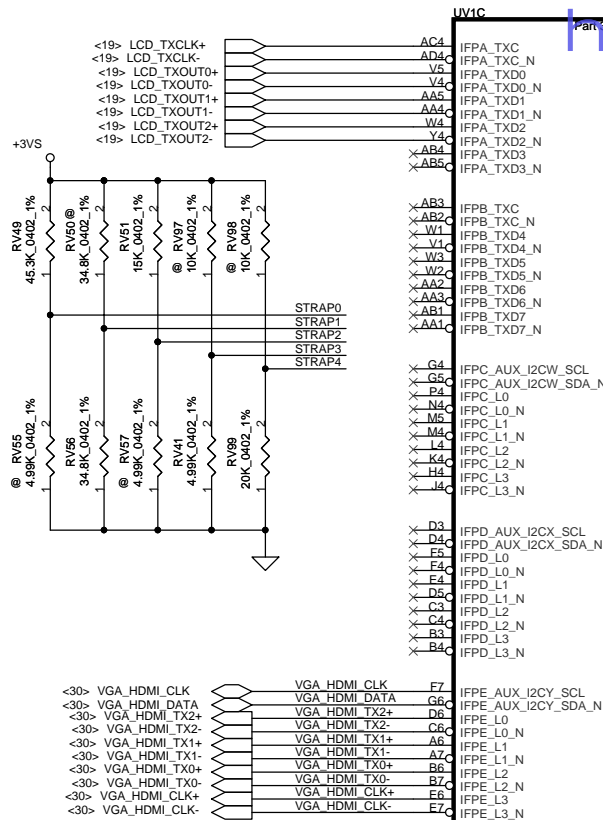


Reverse Type  
DDR3 SO-DIMM B





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Physical Strapping pin	Power Rail	Logical Strapping Bit3	Logical Strapping Bit2	Logical Strapping Bit1	Logical Strapping Bit0
ROM_SO	+3VS	XCLK_417	FB_0_BAR_SIZE	SMB_ALT_ADDR	VGA_DEVICE
ROM_SCLK	+3VS	PCI_DEVID[4]	SUB_VENDOR	SLOT_CLK_CFG	PEX_PLLEN_TERM
ROM_SI	+3VS	RAMCFG[3]	RAMCFG[2]	RAMCFG[1]	RAMCFG[0]
STRAP2	+3VS	PCI_DEVID[3]	PCI_DEVID[2]	PCI_DEVID[1]	PCI_DEVID[0]
STRAP1	+3VS	3GIO_PADCFG[3]	3GIO_PADCFG[2]	3GIO_PADCFG[1]	3GIO_PADCFG[0]
STRAP0	+3VS	USER[3]	USER[2]	USER[1]	USER[0]

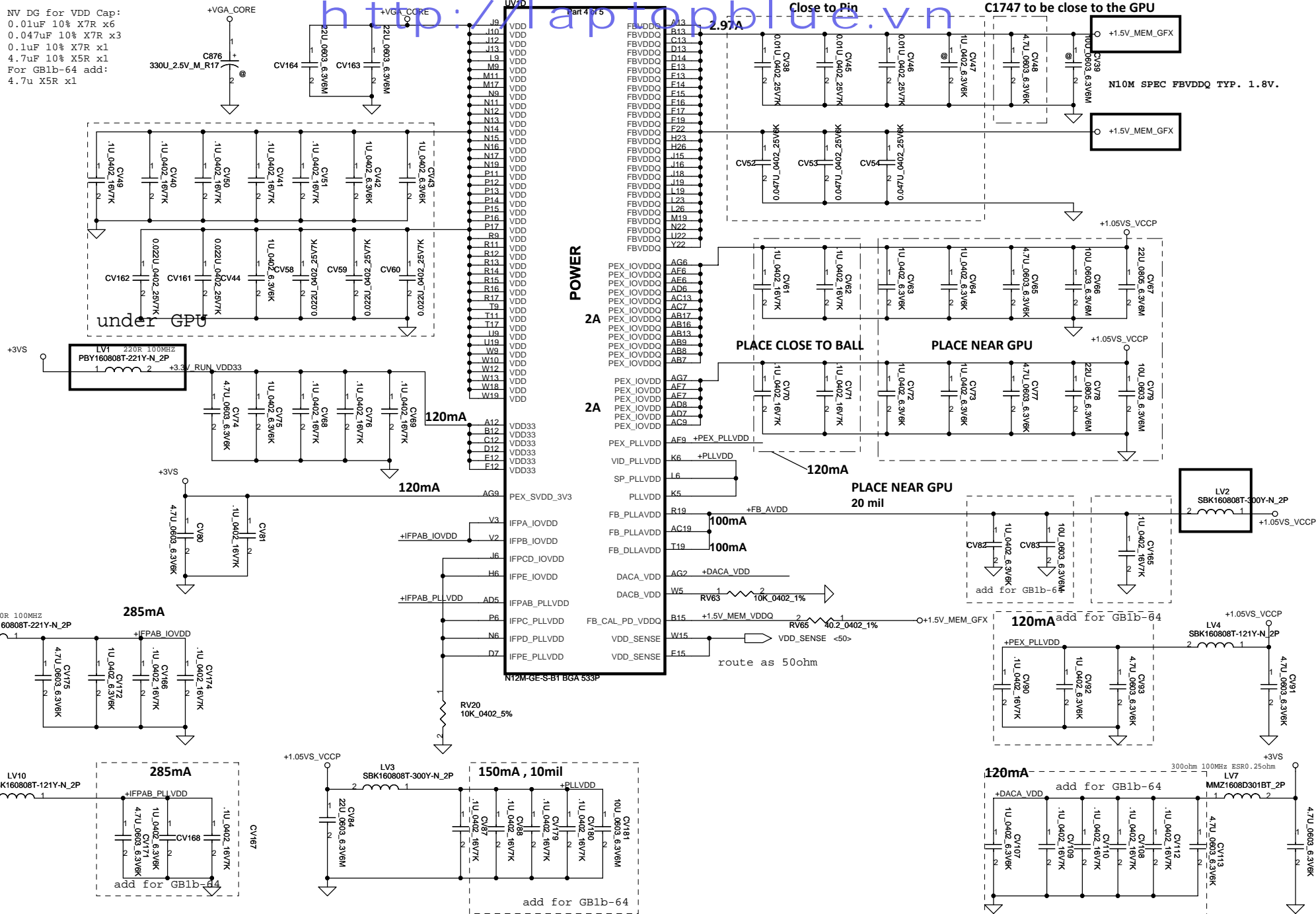
Resistor Values	Pull-up to +3VS	Pull-down to Gnd
5K	1000	0000
10K	1001	0001
15K	1010	0010
20K	1011	0011
25K	1100	0100
30K	1101	0101
35K	1110	0110
45K	1111	0111

Hynix (800MHZ) 64M16 H5TQ1G63DFR-12C SA0000324C0	512MB(64Mx16)	0010	RV59 PD 15K	(SD034150280)
	1GB (128Mx16)	0110	RV59 PD 34.8K	(SD034348280)
Samsung (800MHZ) 64MX16 K4W1G1646G-BC12 SA00004HS00	512MB(64Mx16)	0011	RV59 PD 20K	(SD034200280)
	1GB (128Mx16)	0111	RV59 PD 45.3K	(SD034453280)

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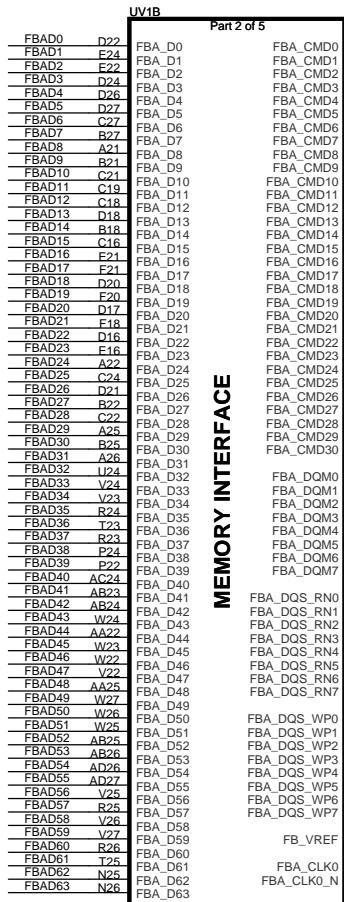
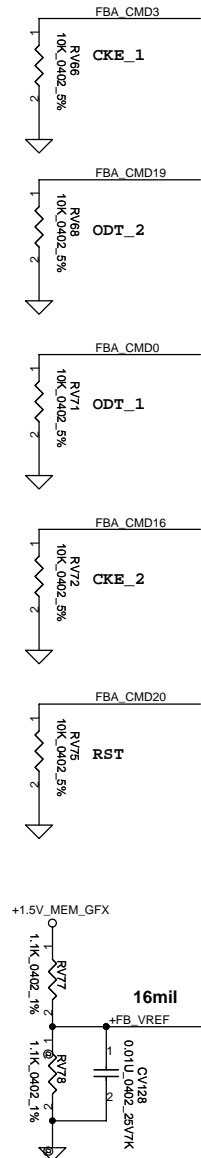
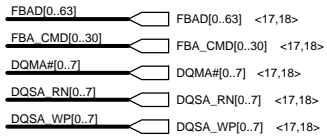


NV DG for VDD Cap:  
 0.01uF 10% X7R x6  
 0.047uF 10% X7R x3  
 0.1uF 10% X7R x1  
 4.7uF 10% X5R x1  
 For GB1b-64 add:  
 4.7u X5R x1

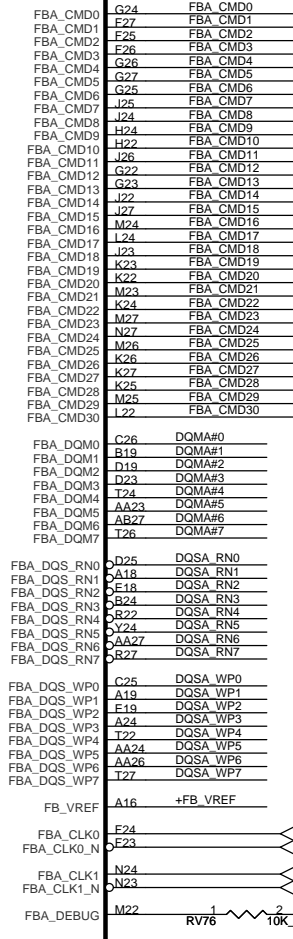


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## MEMORY INTERFACE



## Mode E - Mirror Mode Mapping

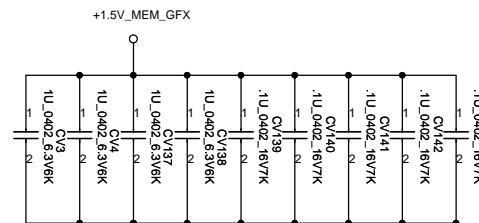
DATA Bus		
Address	0..31	32..63
CMD0	ODT_L	
CMD1	CS1#_L	
CMD2	CS0#_L	
CMD3	CKE_L	
CMD4	A9	A11
CMD5	A6	A7
CMD6	A3	BA1
CMD7	A0	A12
CMD8	A8	A8
CMD9	A12	A0
CMD10	A1	A2
CMD11	RAS#	RAS#
CMD12	A13	A14
CMD13	BA1	A3
CMD14	A14	A13
CMD15	CAS#	CAS#
CMD16		CKE_H
CMD17		CS1#_H
CMD18		CS0#_H
CMD19		ODT_H
CMD20	RST	RST
CMD21	A7	A6
CMD22	A4	A5
CMD23	A11	A9
CMD24	A2	A1
CMD25	A10	WE#
CMD26	A5	A4
CMD27	BA2	A15
CMD28	WE#	A10
CMD29	BA0	BA0
CMD30	A15	BA2

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power 32 bits `http://laptopblue.vn`

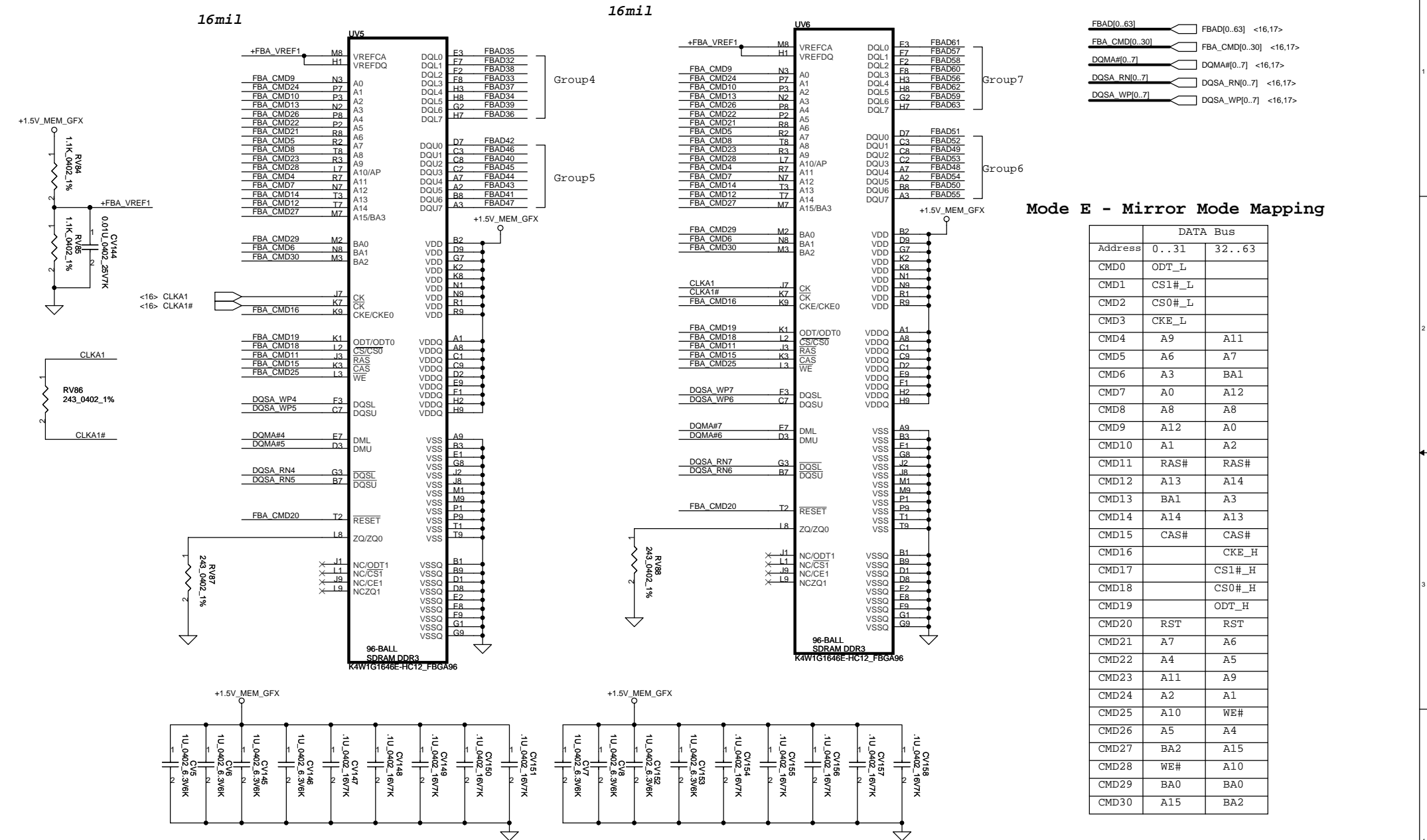


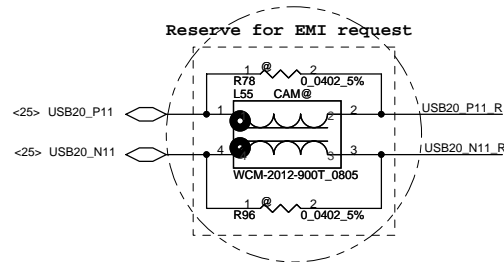
The schematic diagram illustrates the MEMS\_GFX supply rail. It begins with a +1.5V MEM\_GFX input. This input is connected to a series of capacitors (Cv1 through Cv13) and resistors (1U 0402 6.3/6K) connected to ground. The components are arranged in a ladder network to filter the supply voltage. The capacitors are labeled Cv1, Cv2, Cv30, Cv131, Cv132, Cv133, Cv134, Cv135, and Cv136. The resistors are labeled 1U 0402 6.3/6K. The ground connection is indicated by a triangle symbol.



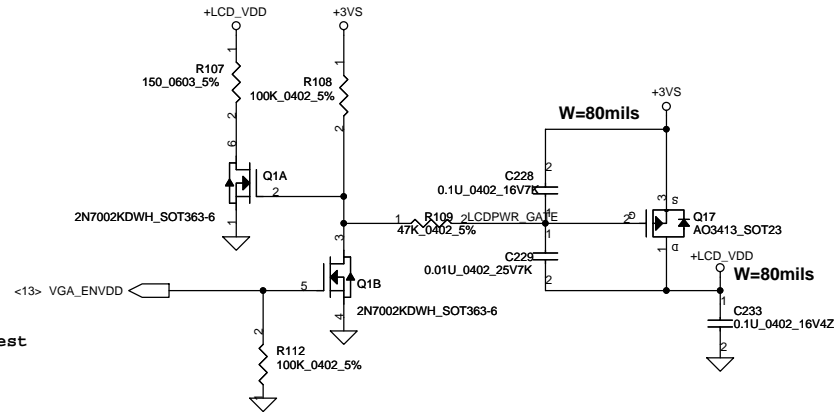
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# Memory Partition A - Upper 32 bits



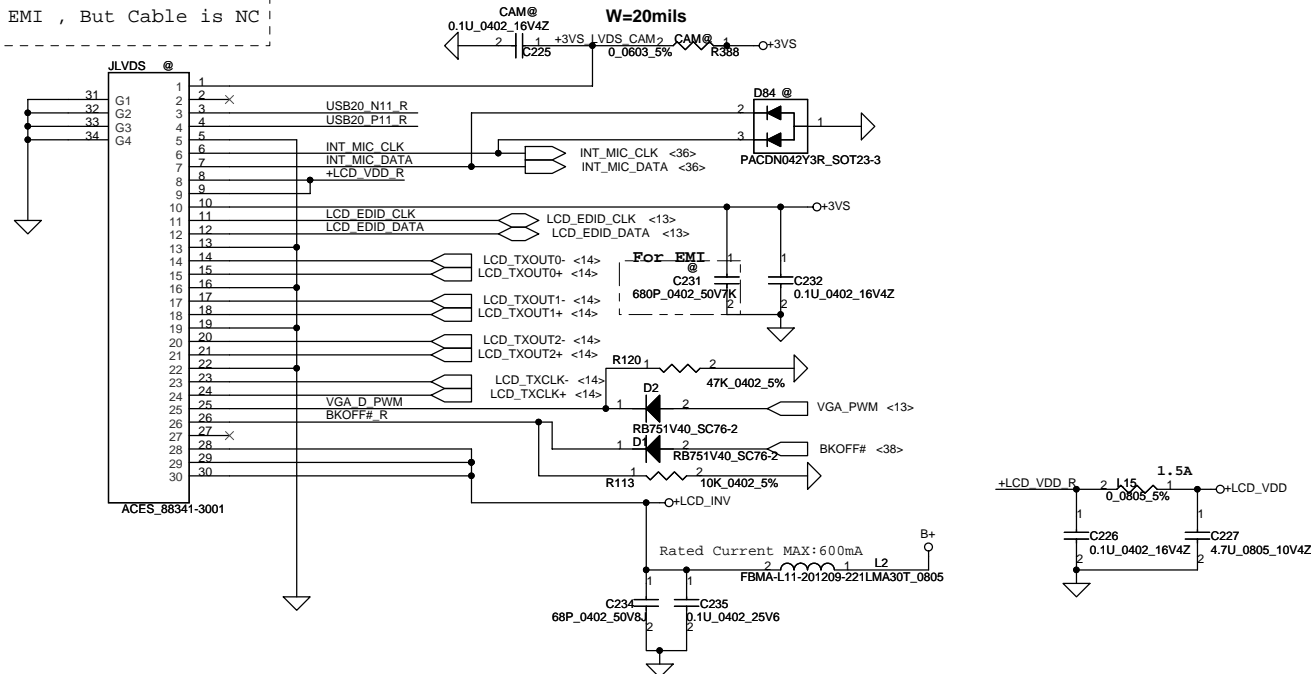


8/20 Swap USB20\_P11 and USB20\_N11 for layout request

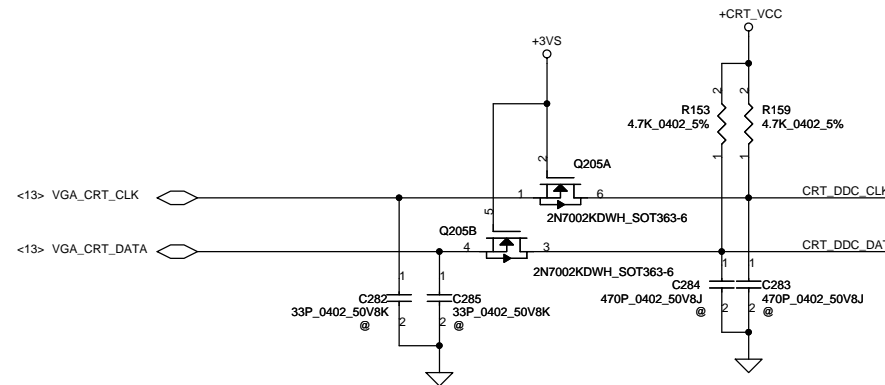
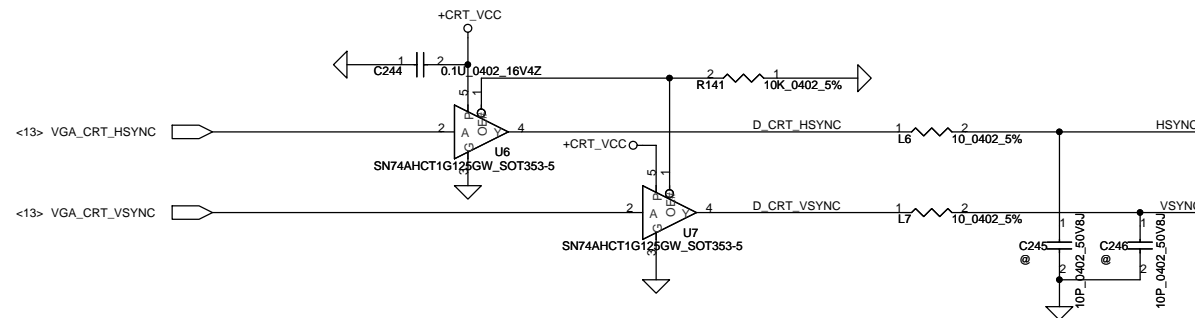
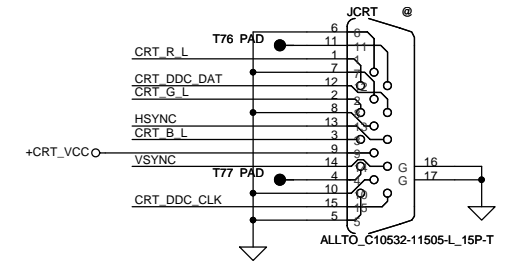
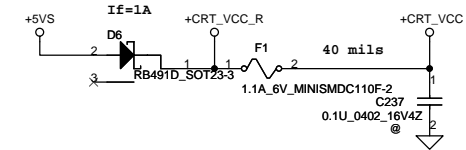
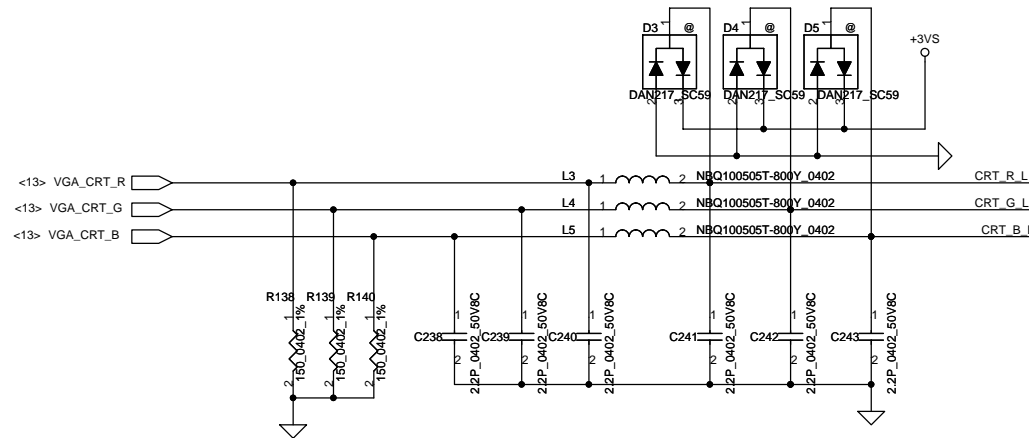


### LCD/PANEL BD. Conn.

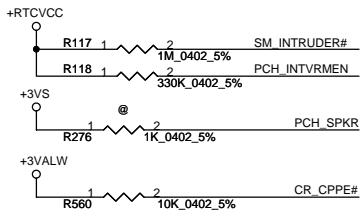
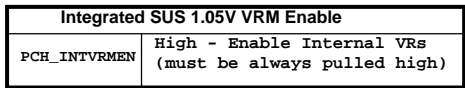
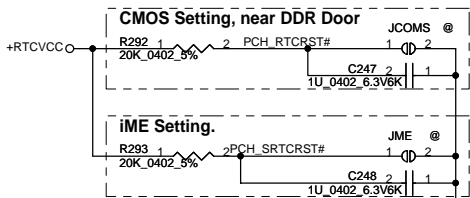
Pin13 GND for EMI , But Cable is NC



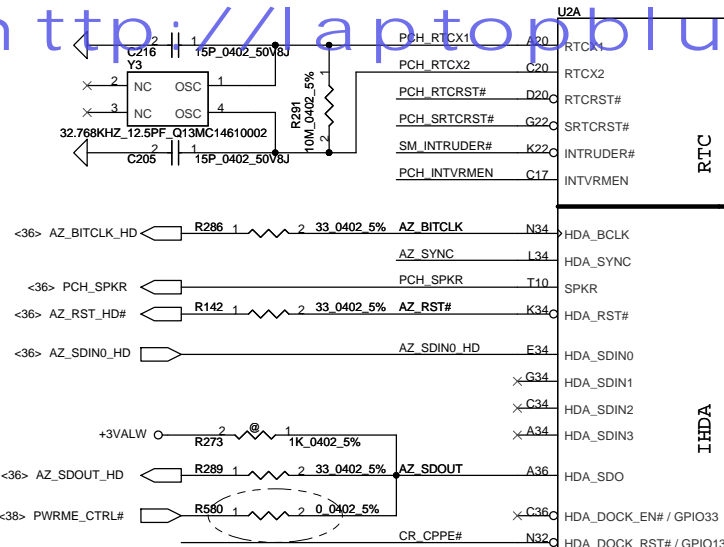
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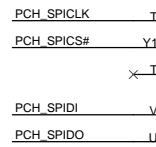
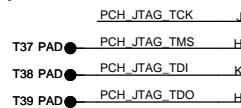
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**PCH\_SPK**  
High = Enabled (No Reboot)  
Low = Disabled (Default)

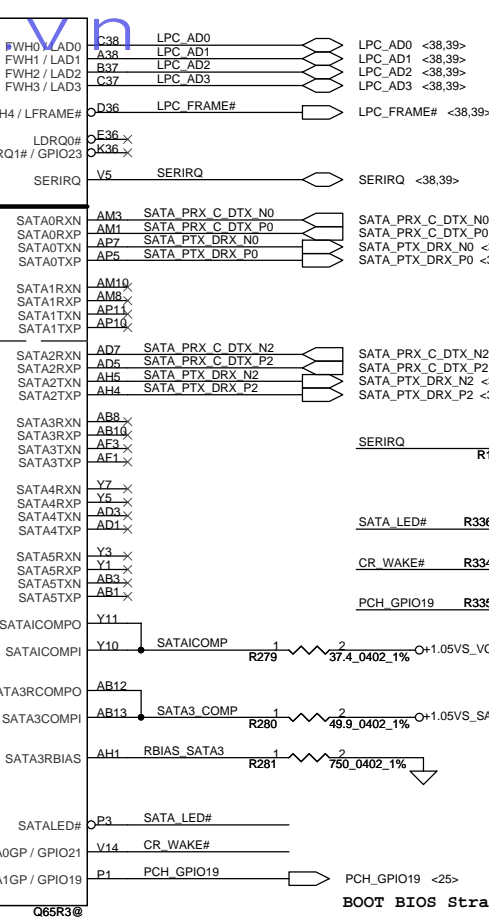


8/30 Change PWRME\_CTRL# to HDA\_SDO by PCH EDS



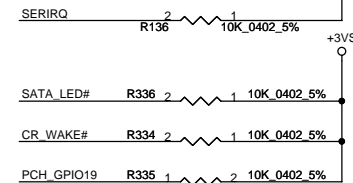
for EMI

COUGARPOINT\_FCBGA989-D



**HDD**

**ODD**



**HDA\_SDO**

ME debug mode, this signal has a weak internal pull down

\*Low = Disable (default)

High = Enable (flash descriptor security override)

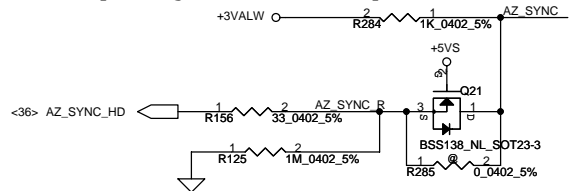
**HDA\_SYNC**

\*This signal has a weak internal pull down

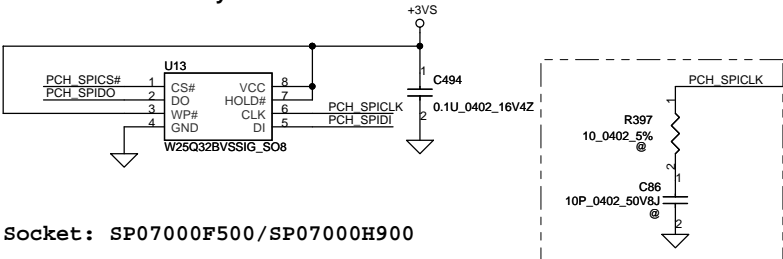
H=>On Die PLL is supplied by 1.5V

L=>On Die PLL is supplied by 1.8V

Need to pull high for Huron River platform



**4M Byte**

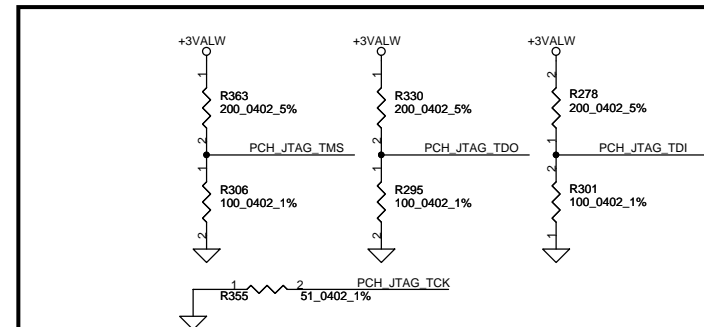
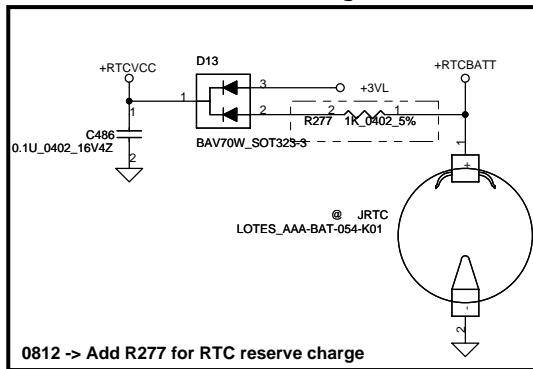


Socket: SP07000F500/SP07000H900

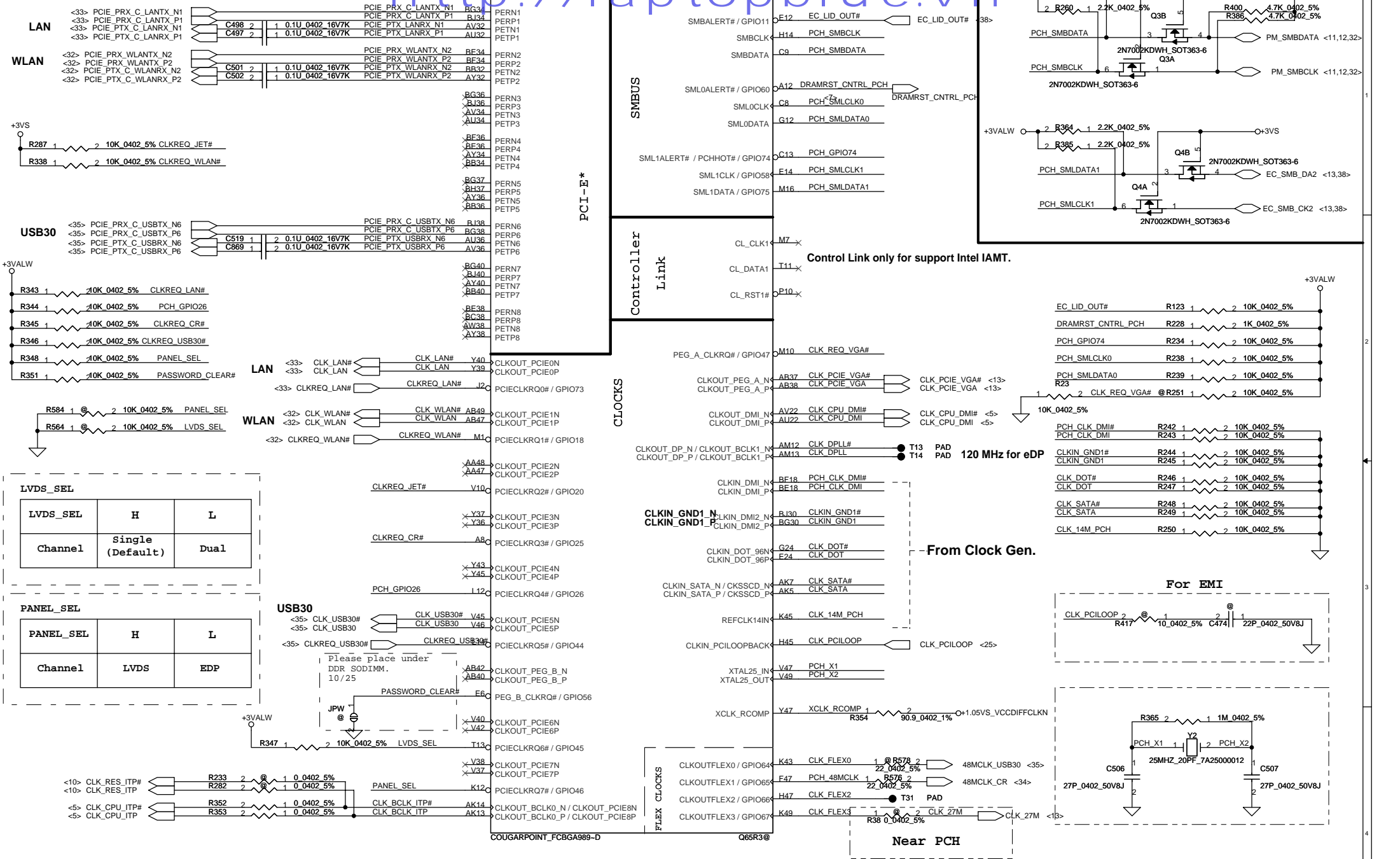
Please close to U2 PCH

8/30 Change U13 from SA000021A00 to SA000031N00 due to EOL of SA000021A00

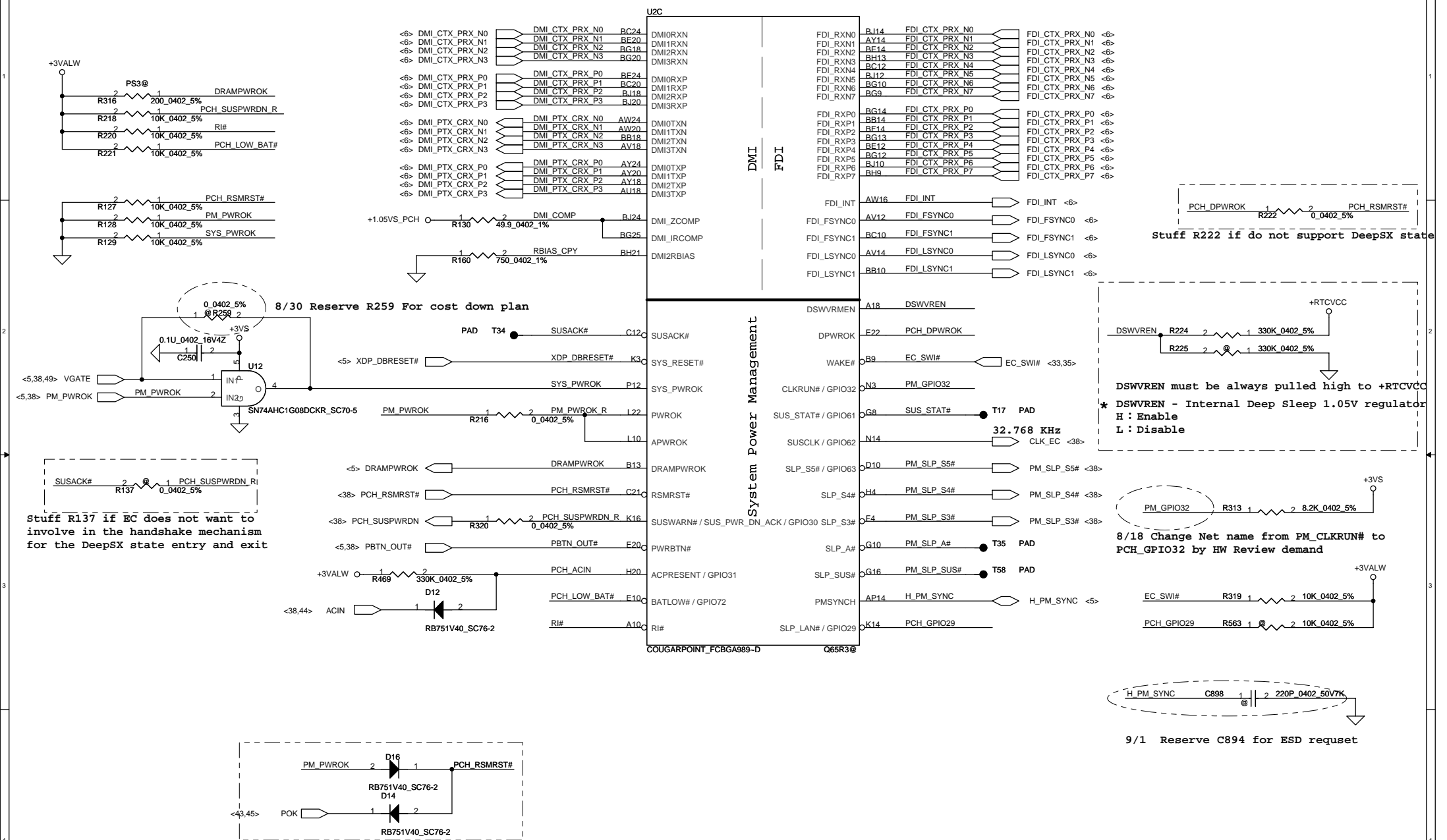
**RTC schematic for non-chargeable**



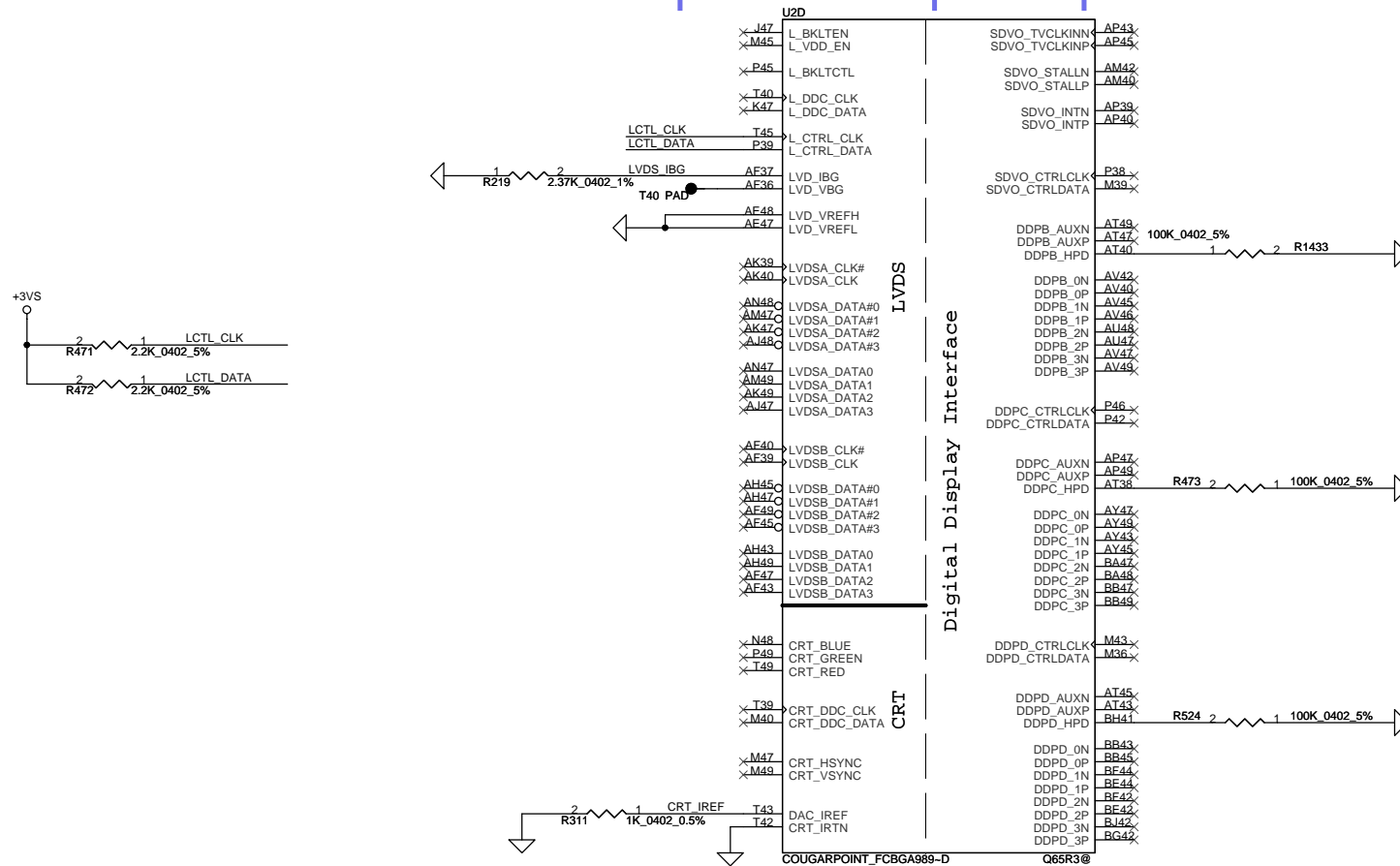
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						Date:		Thursday, January 13, 2011		Sheet 21 of 53	



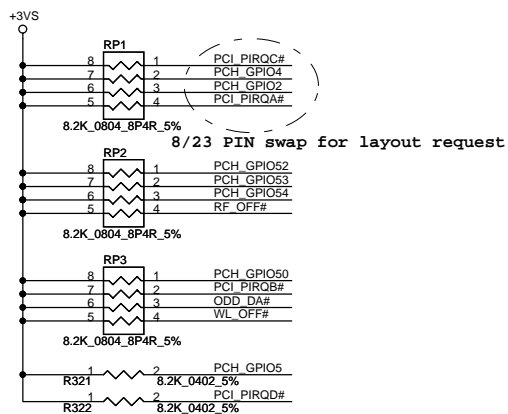




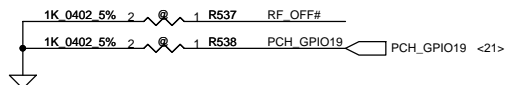
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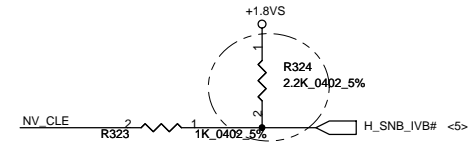
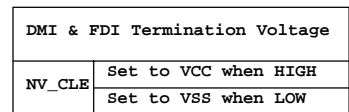
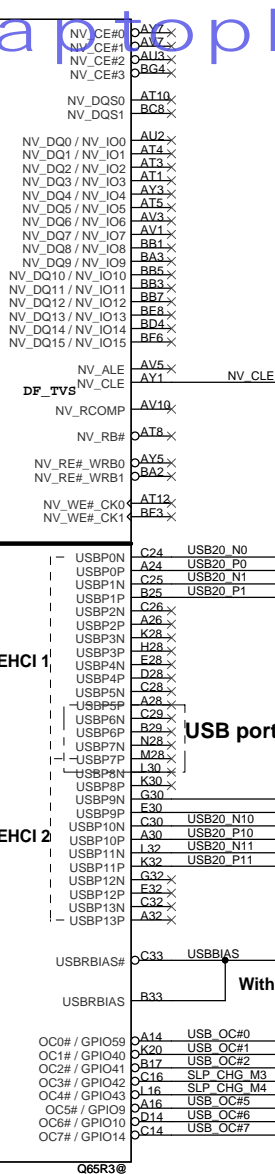
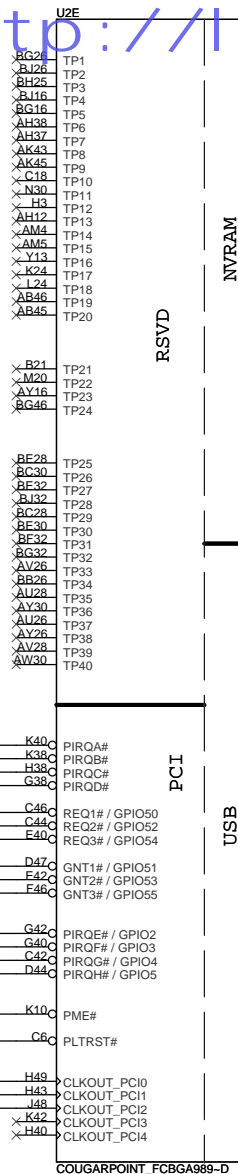
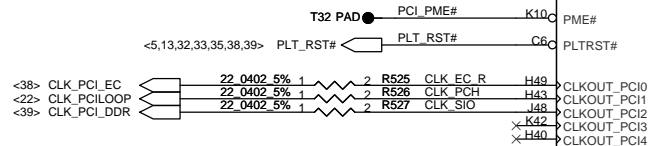
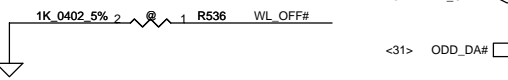
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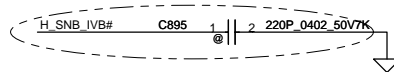
Boot BIOS Strap		
RF_OFF#	PCH_GPIO19	Boot BIOS Loaction
0	0	LPC
0	1	Reserved
1	0	PCI
1	1	SPI *



A16 Swap Override Strap	
WL_OFF#	* Low= A16 swap override Enable High= A16 swap override Disable

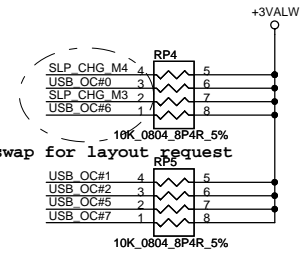
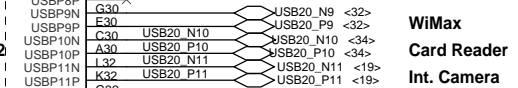


8/18 Change R324 From 1K to 2.2K by  
Intel check list demand

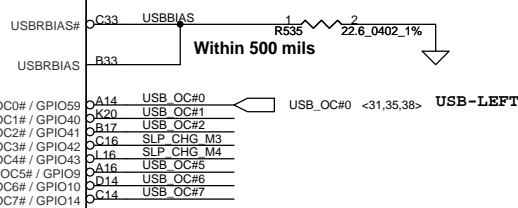


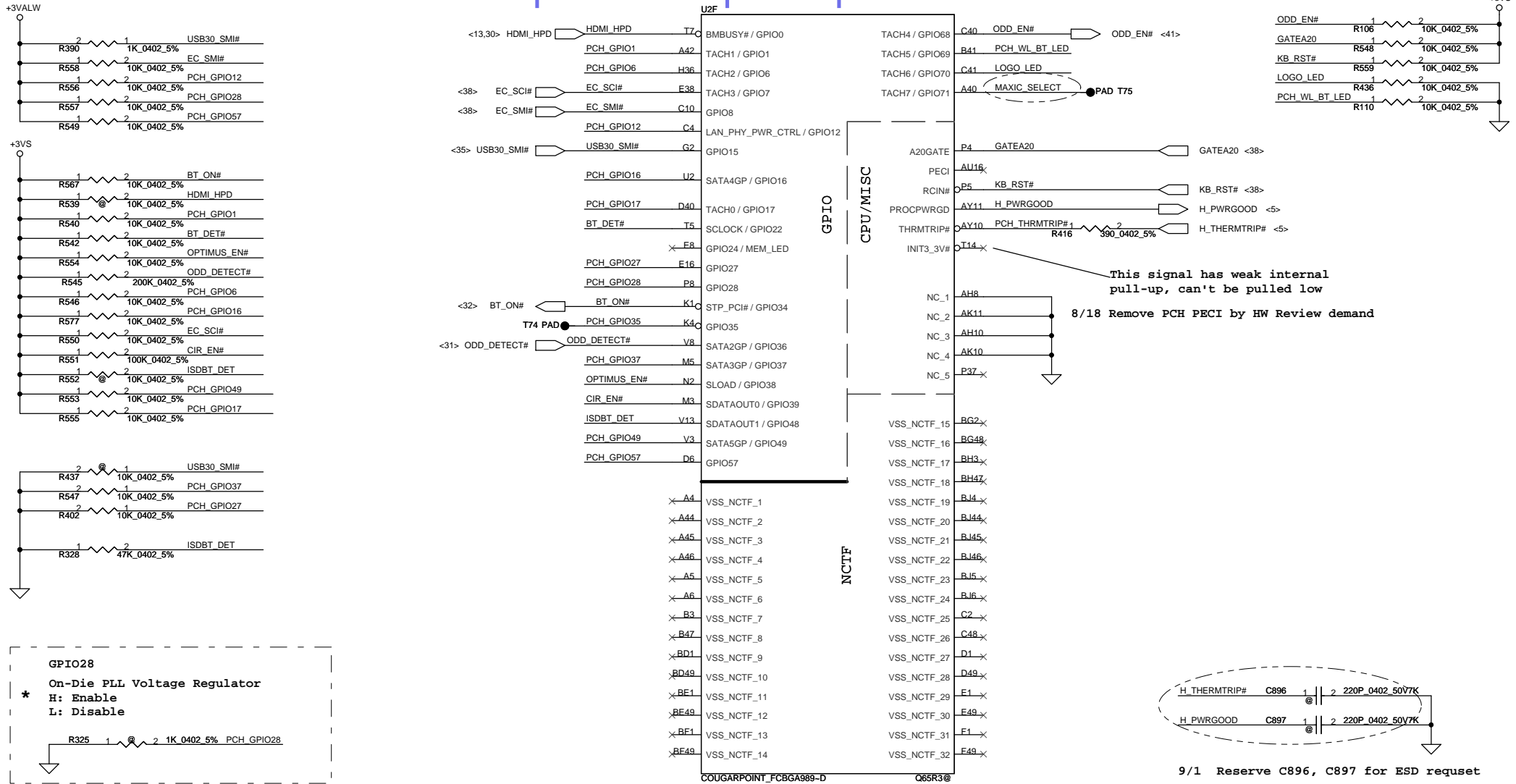
9/1 Reserve C895 for ESD request

**USB port6 and port7 are disabled on HM65**

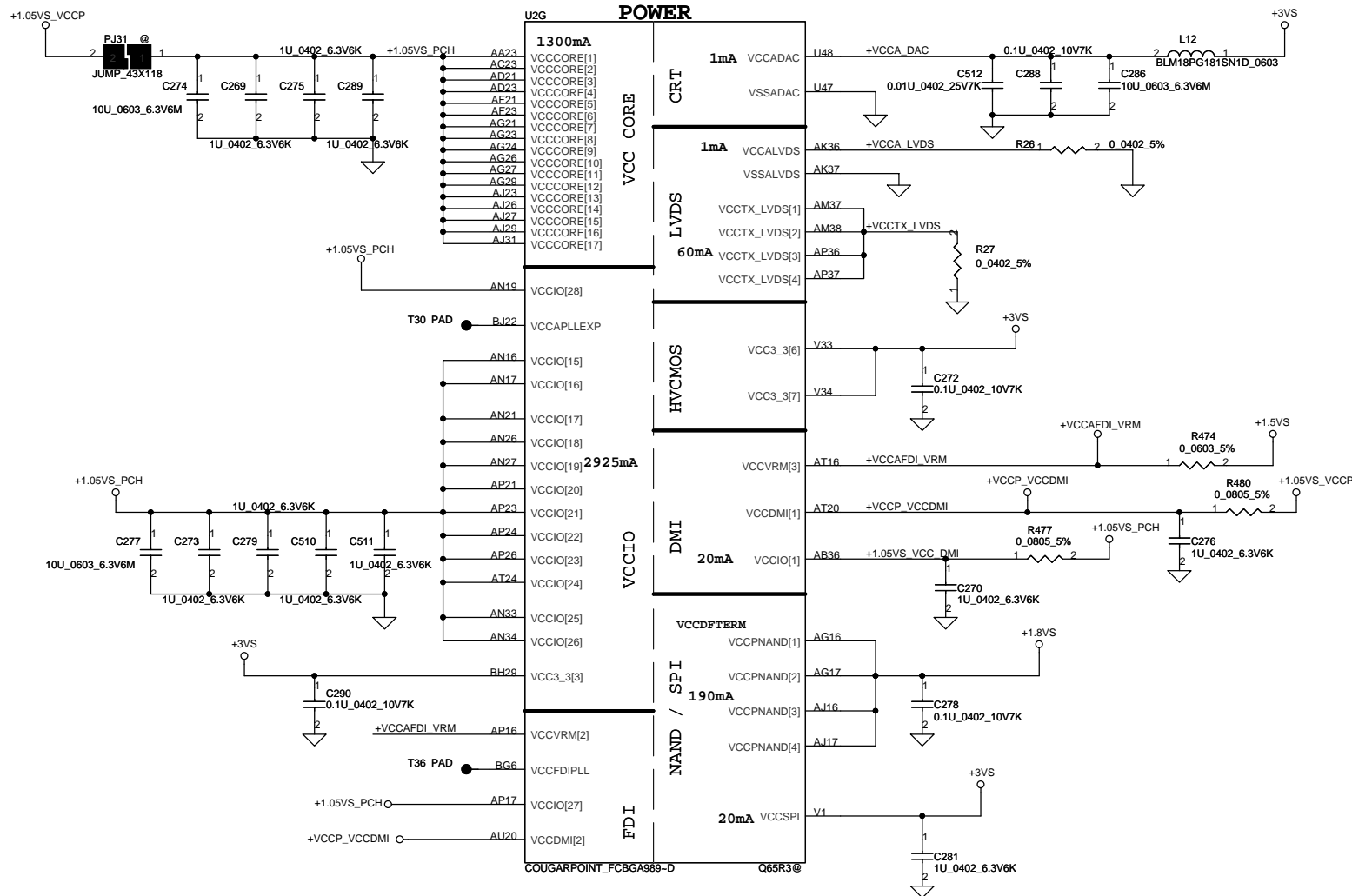


8/23 PIN swap for layout request



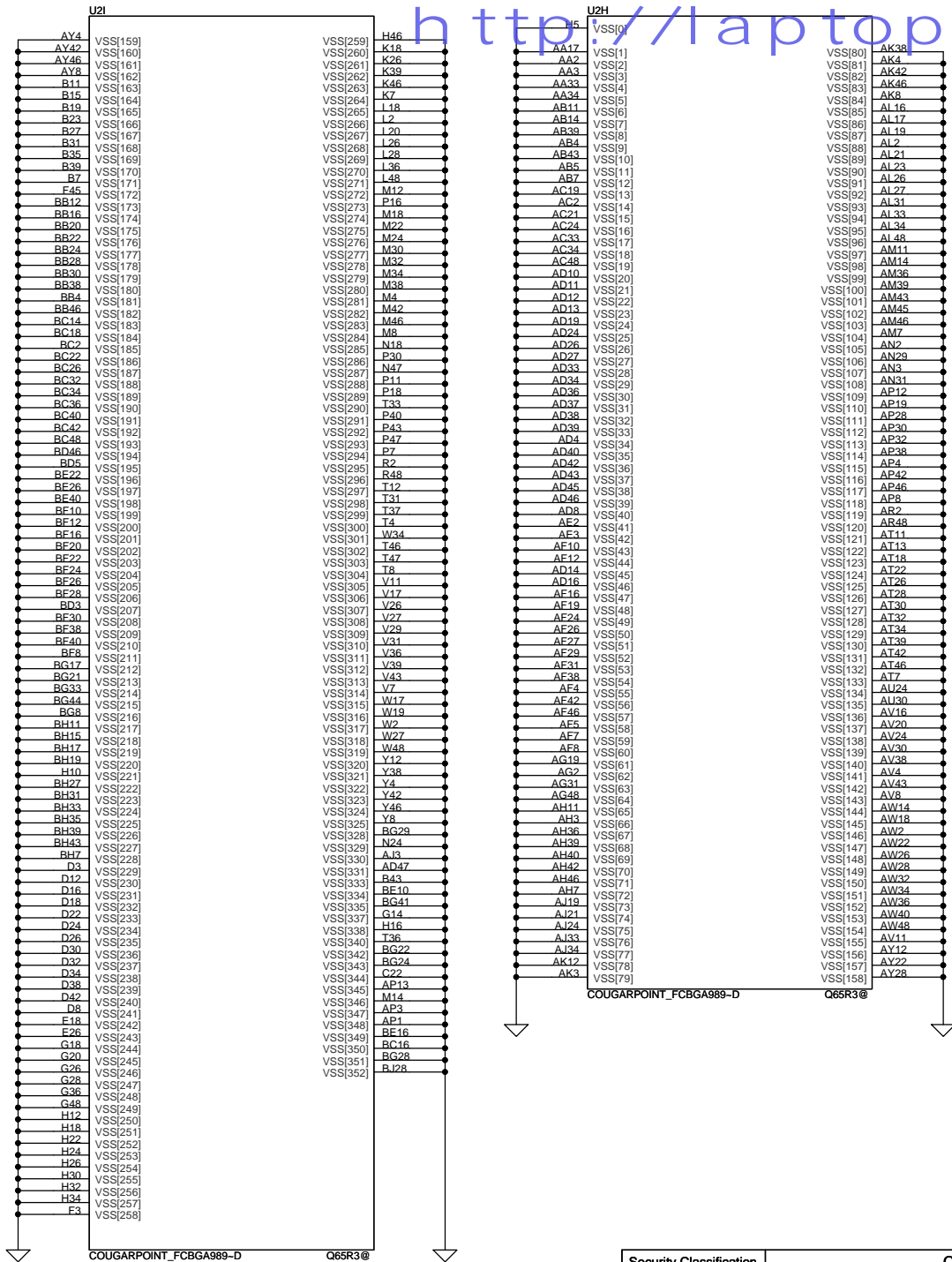


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PCH Power Rail Table		
Voltage Rail	Voltage	50 Iccmax Current (A)
V_PROC_IO	1.05	0.001
V5REF	5	0.001
V5REF_SUS	5	0.001
VCC3_3	3.3	0.266
VCCADAC	3.3	0.001
VCCADPLLA	1.05	0.08
VCCADPLLB	1.05	0.08
VCCCORE	1.05	1.3
VCCDMI	1.05	0.042
VCCIO	1.05	2.925
VCCASW	1.05	1.01
VCCSPI	3.3	0.02
VCCDSW	3.3	0.002
VCCDFTERM	1.8	0.19
VCCRTC	3.3	6 uA
VCCSUS3_3	3.3	0.97
VCCSUSHDA	3.3 / 1.5	0.01
VCCVRM	1.5	0.16
VCCCLKDMI	1.05	0.02
VCCSSC	1.05	0.095
VCCDIFFCLKN	1.05	0.055
VCCALVDS	3.3	0.001
VCCTX_LVDS	1.8	0.06

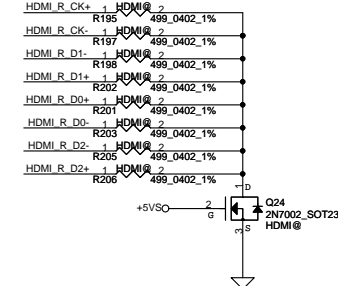
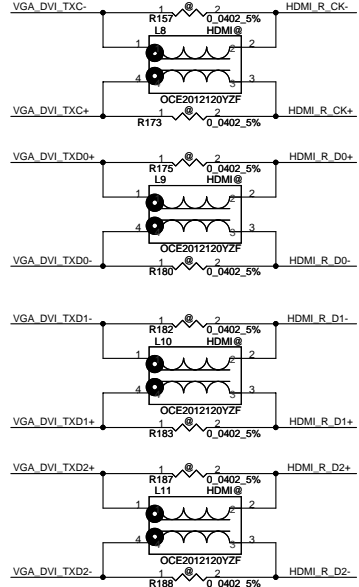
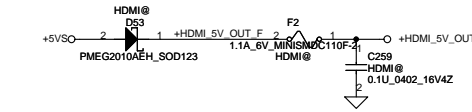
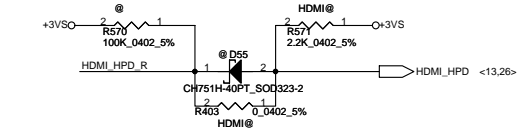
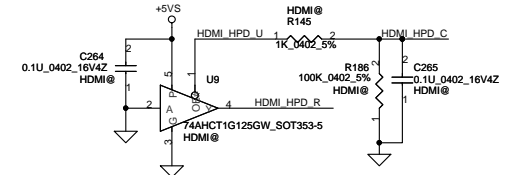
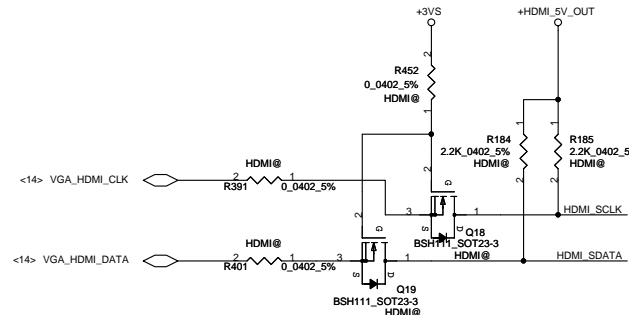




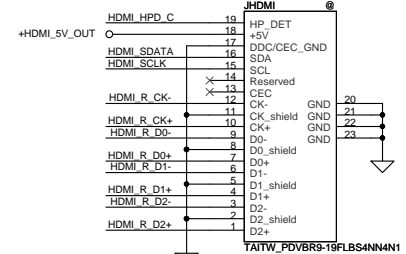


### For DISCRETE

<14> VGA_HDMI_CLK+	CV296	1	2	0.1U_0402_16V7K	HDMI@	VGA_DVI_TXC+
<14> VGA_HDMI_CLK-	CV293	1	2	0.1U_0402_16V7K	HDMI@	VGA_DVI_TXC-
<14> VGA_HDMI_TX0+	CV294	1	2	0.1U_0402_16V7K	HDMI@	VGA_DVI_TXD0+
<14> VGA_HDMI_TX0-	CV297	1	2	0.1U_0402_16V7K	HDMI@	VGA_DVI_TXD0-
<14> VGA_HDMI_TX1+	CV299	1	2	0.1U_0402_16V7K	HDMI@	VGA_DVI_TXD1+
<14> VGA_HDMI_TX1-	CV298	1	2	0.1U_0402_16V7K	HDMI@	VGA_DVI_TXD1-
<14> VGA_HDMI_TX2+	CV295	1	2	0.1U_0402_16V7K	HDMI@	VGA_DVI_TXD2+
<14> VGA_HDMI_TX2-	CV300	1	2	0.1U_0402_16V7K	HDMI@	VGA_DVI_TXD2-

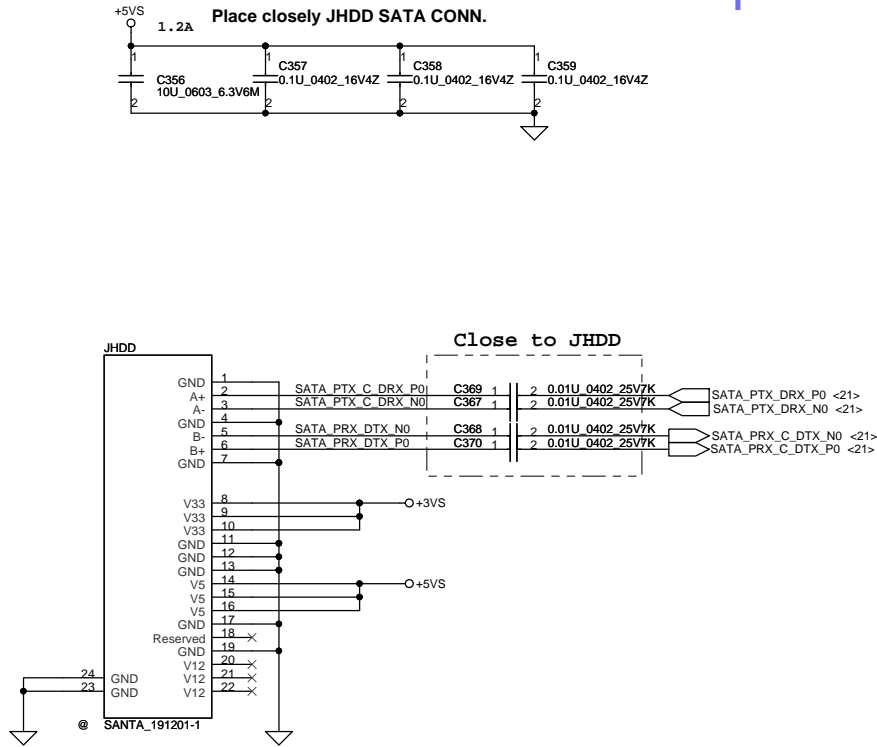


### HDMI Connector

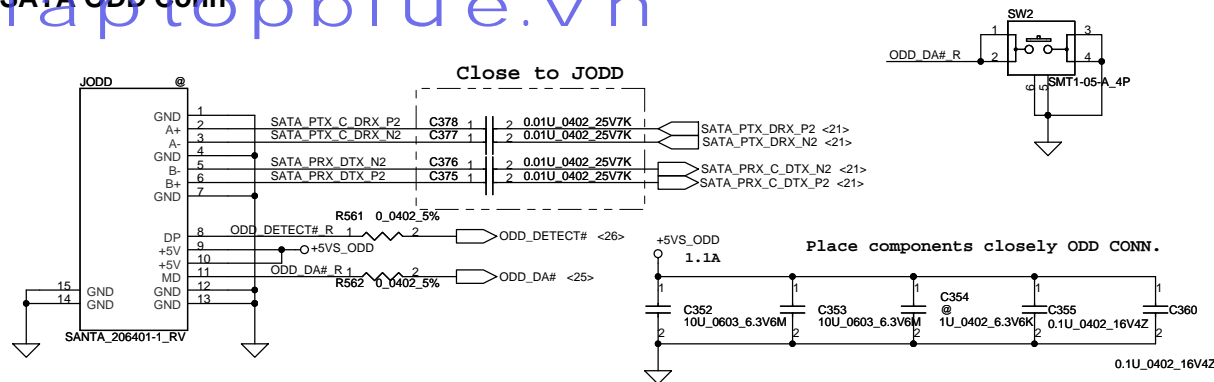


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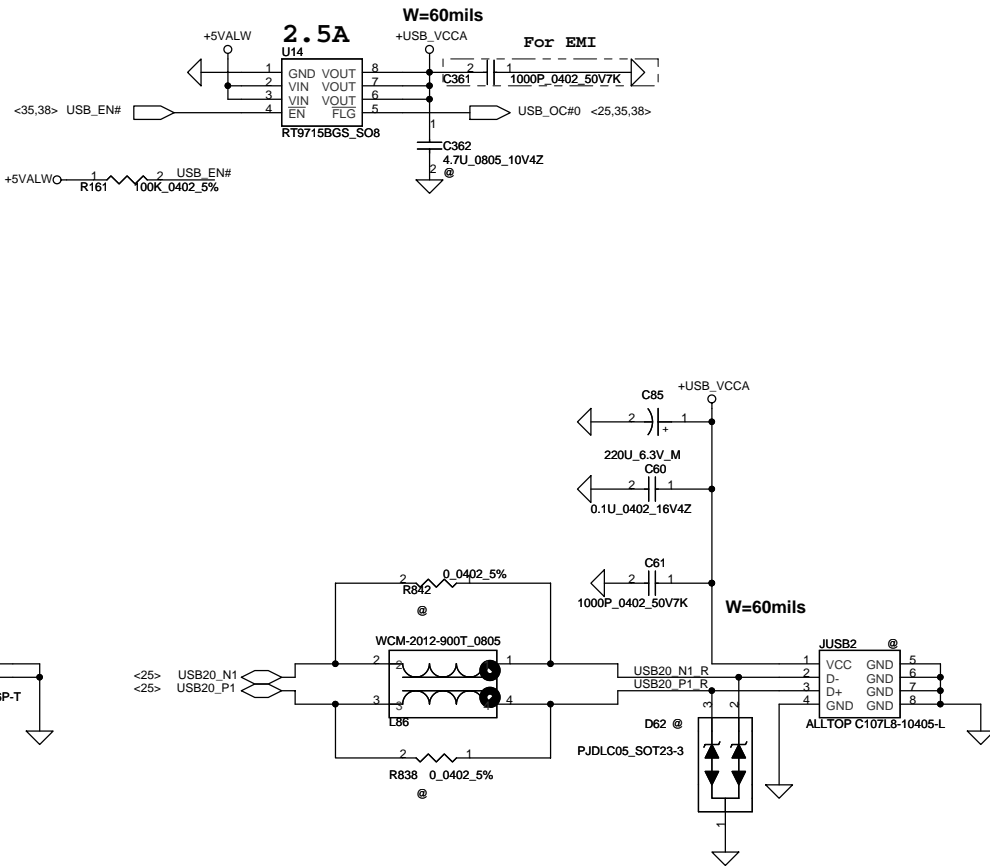
SATA HDD Conn



SATA ODD Conn

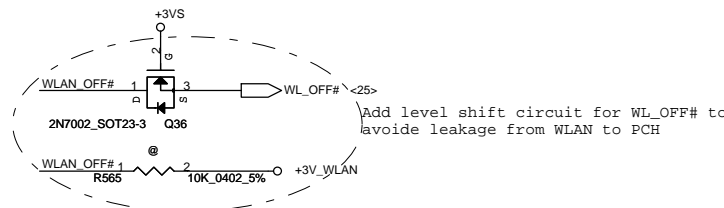
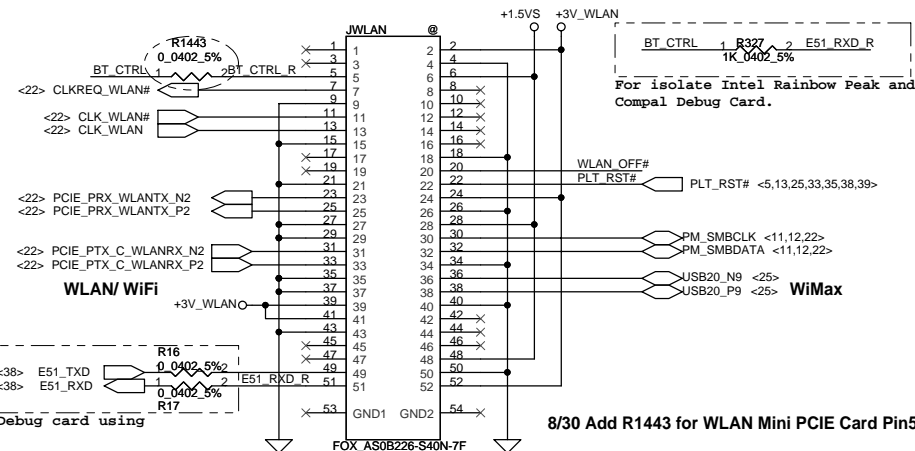
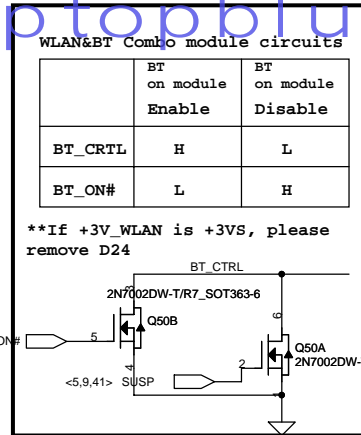
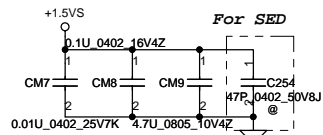
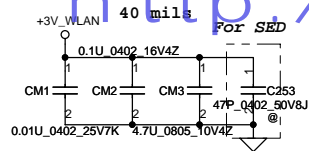
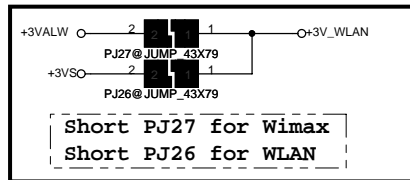


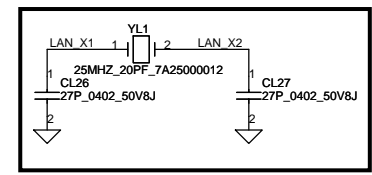
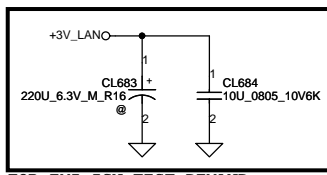
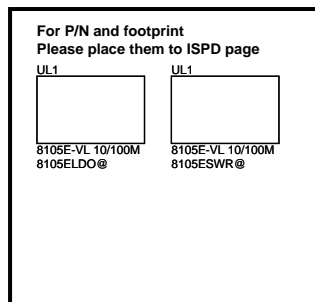
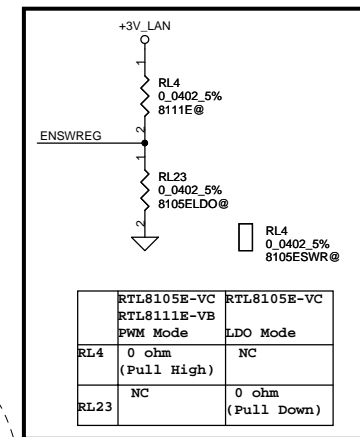
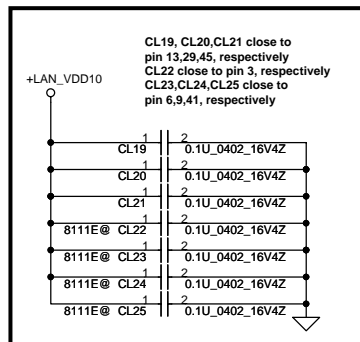
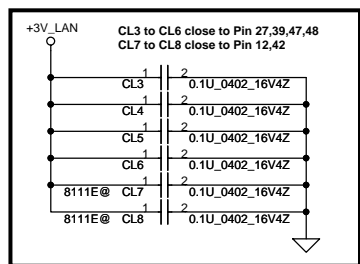
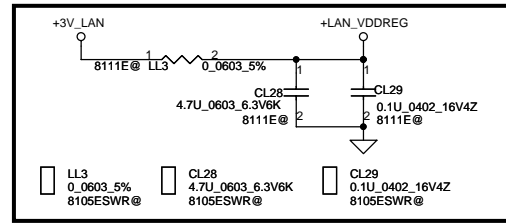
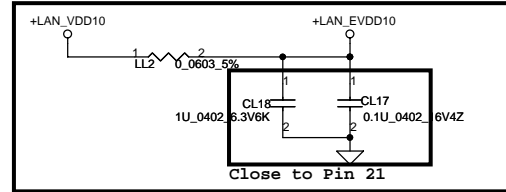
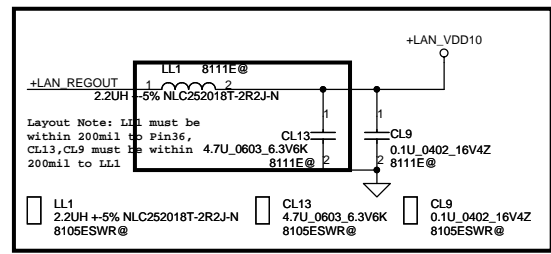
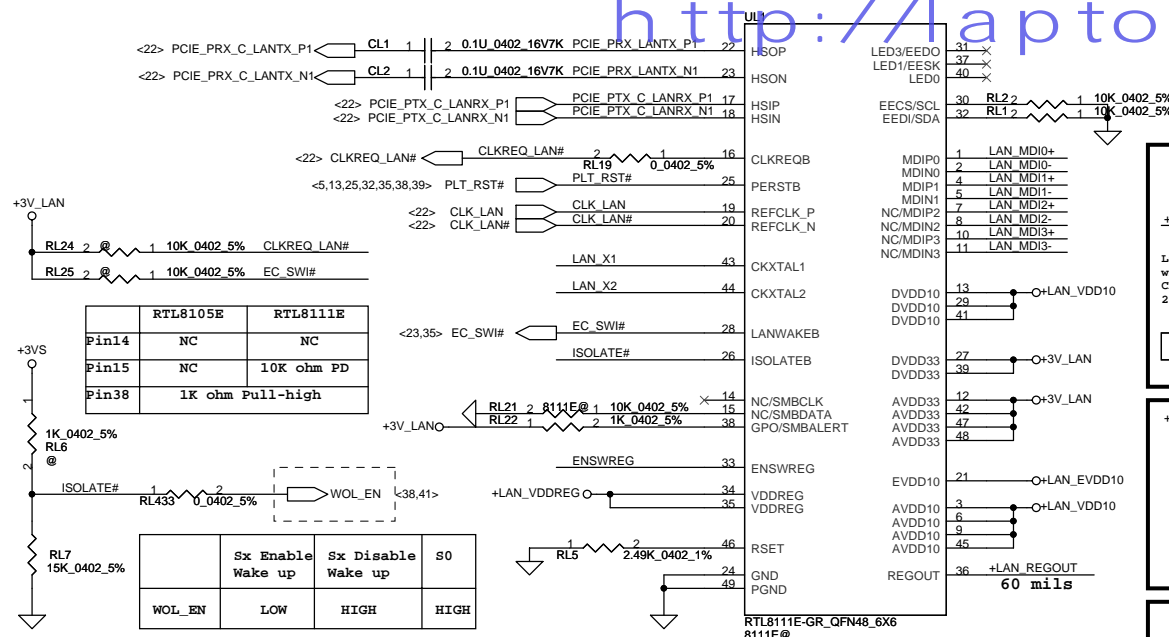
USB Conn



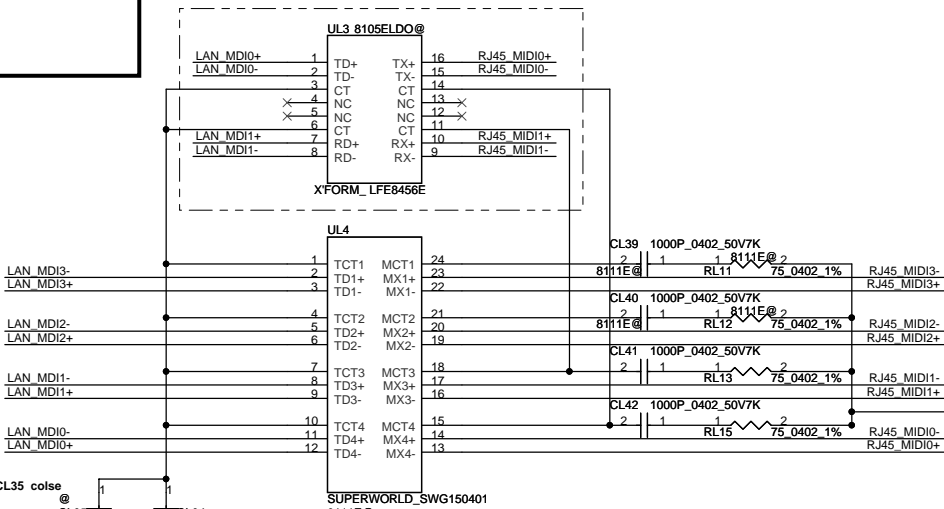
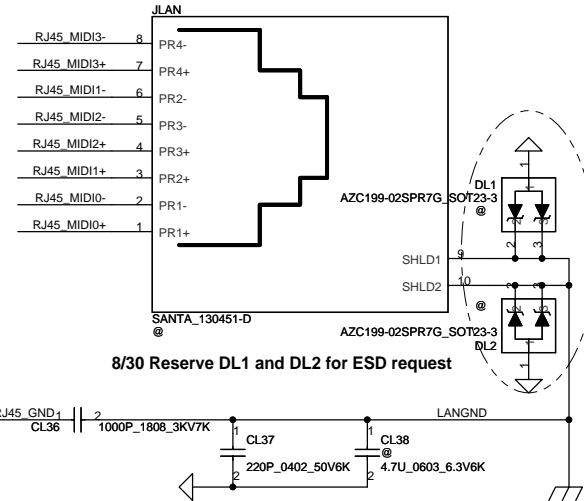
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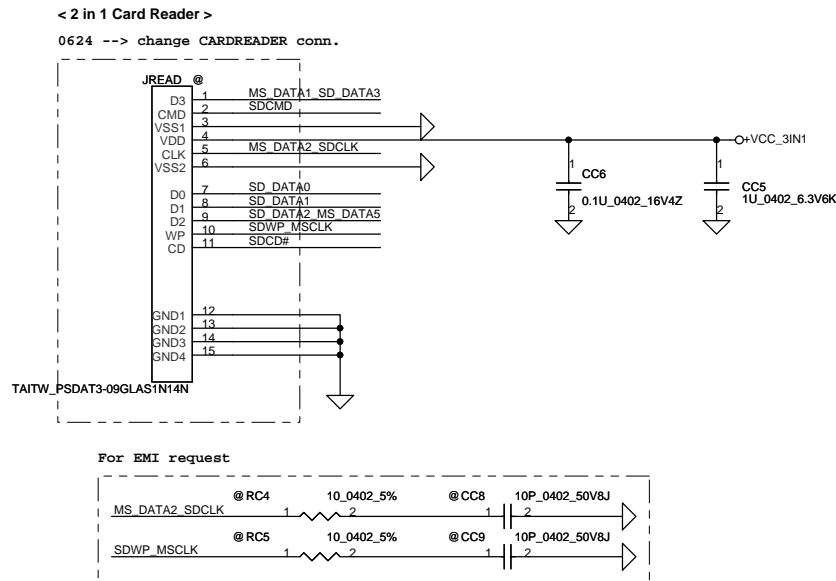
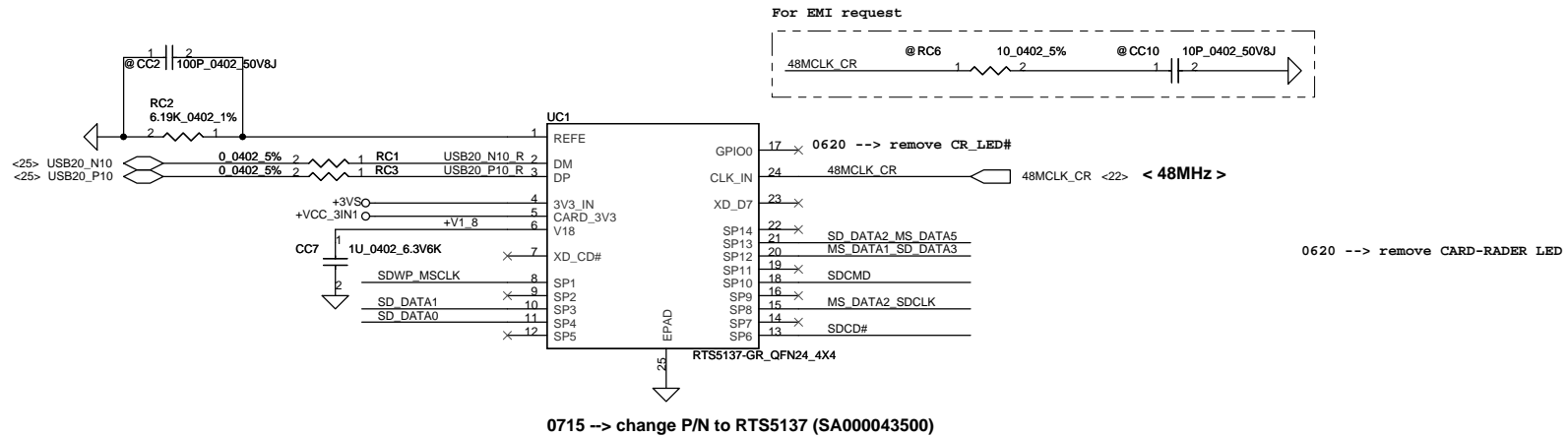
# Half PCIe Mini Card-WLAN/ WiMax





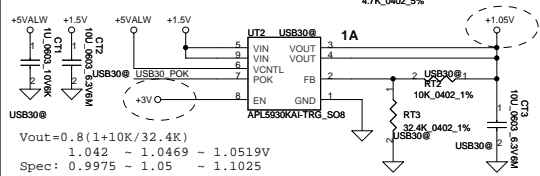
### LAN Conn.



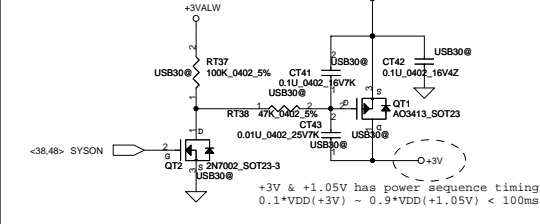


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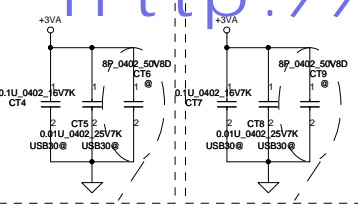
## +1.5V to +1.05V Transfer



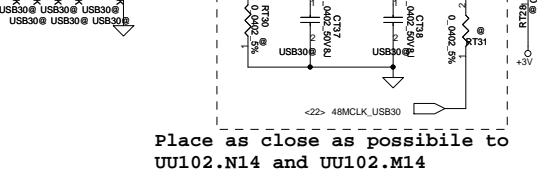
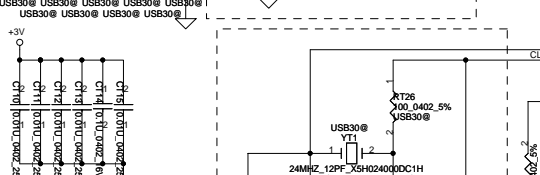
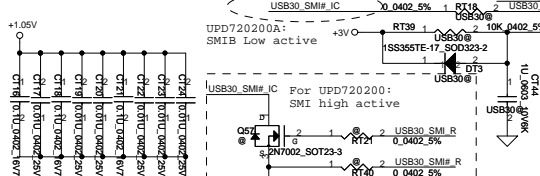
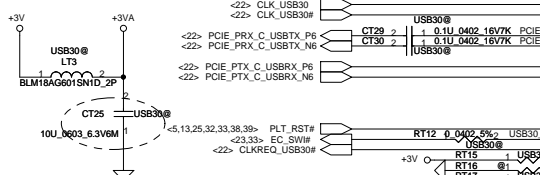
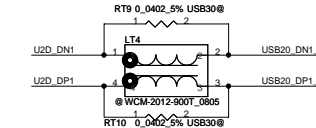
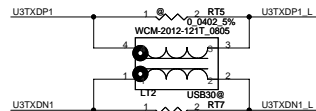
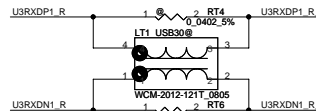
## +3VALW to +3V Transfer



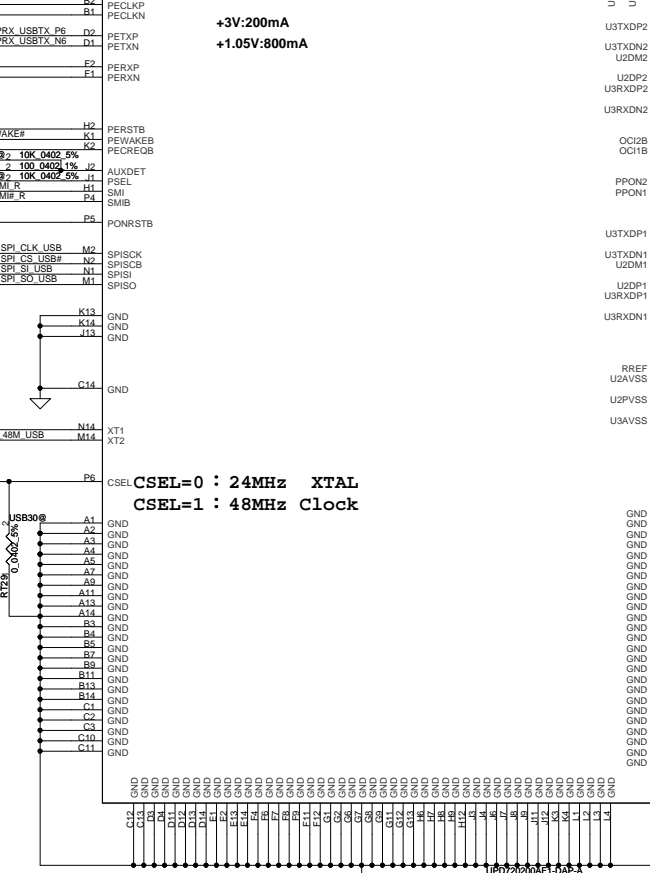
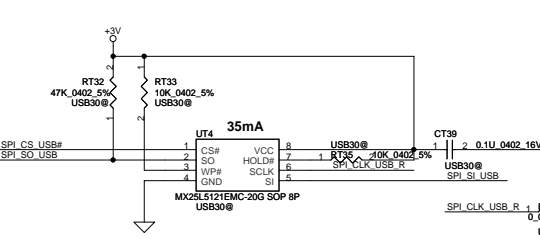
## Close to U102.D7 Close to U102.P13



Follow Vendor recommend.

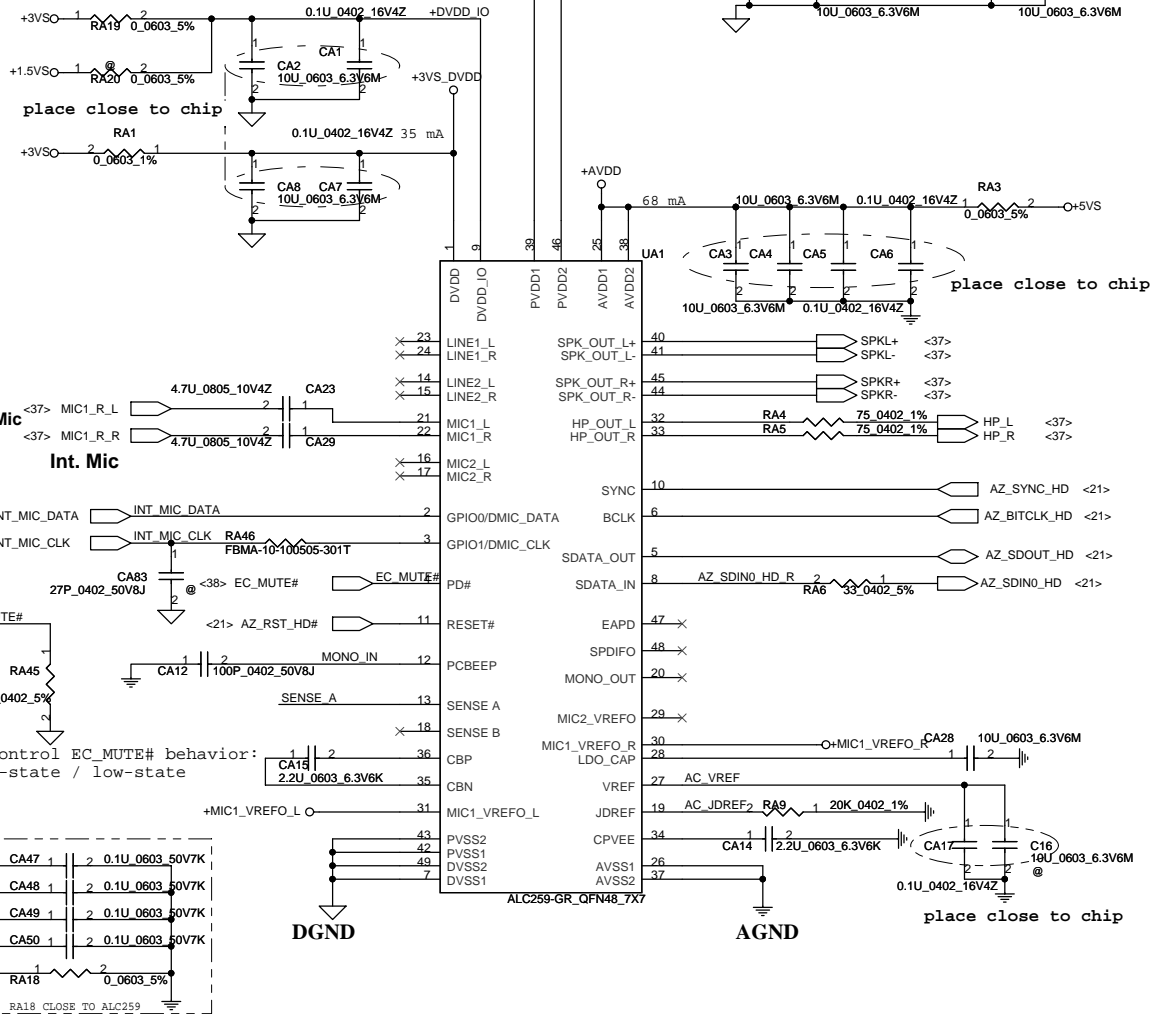


9/2 Change CT25 from SE093106K80 (10uF 0805) to SE000005780 (10uF 0603) by sourcer demand

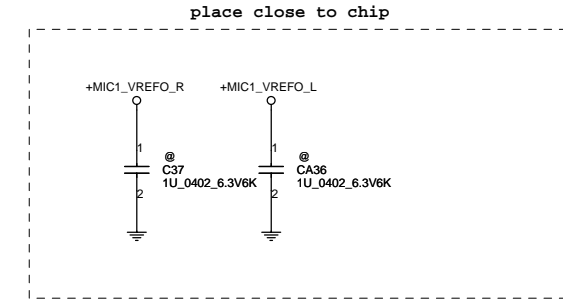
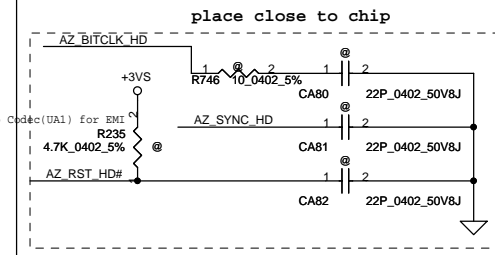
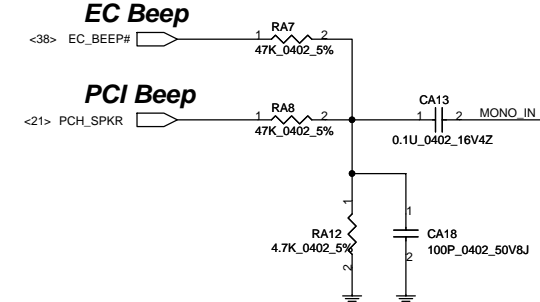


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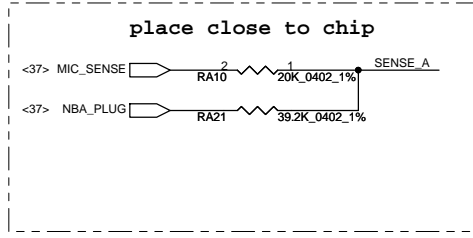
# Codec



## Beep sound



Sense Pin	Impedance	Codec Signals	Function
SENSE A	39.2K	PORT-I (PIN 32, 33)	Headphone out
	20K	PORT-B (PIN 21, 22)	Ext. MIC
	10K	PORT-C (PIN 23, 24)	
	5.1K	(PIN 48)	
SENSE B	39.2K	PORT-E (PIN 14, 15)	
	20K	PORT-F (PIN 16, 17)	Int. MIC
	10K	PORT-H (PIN 20)	

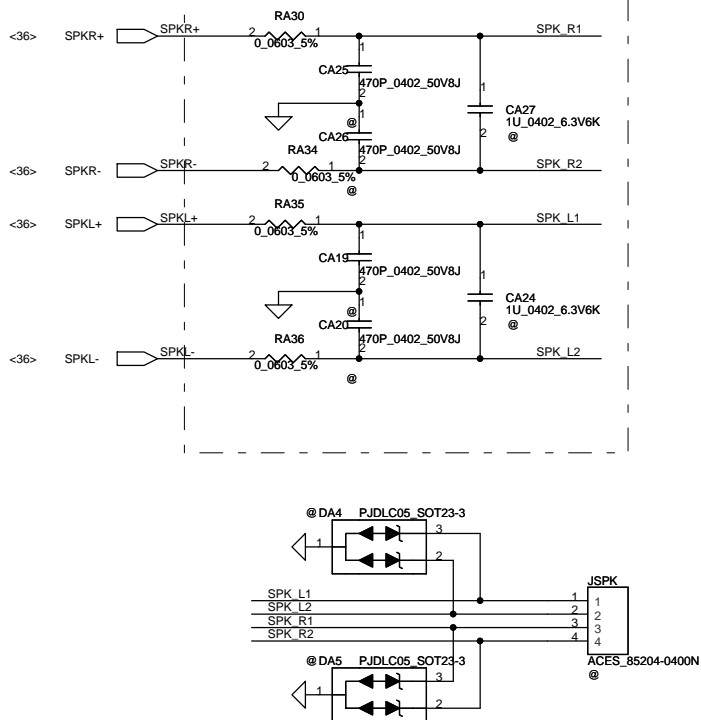


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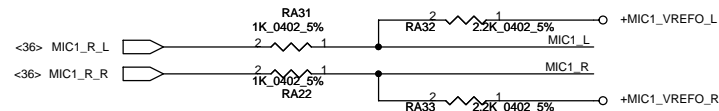


## Speaker Connector

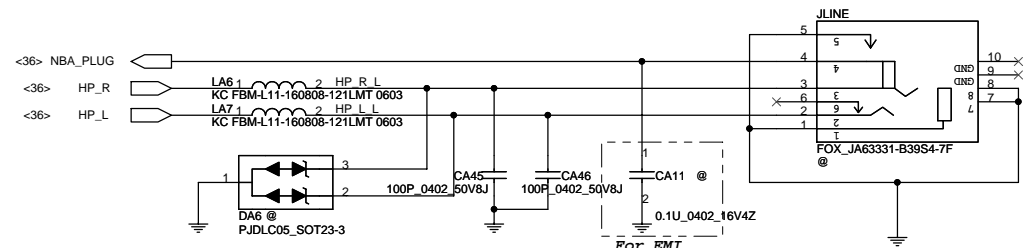
placement near Audio Codec UA1



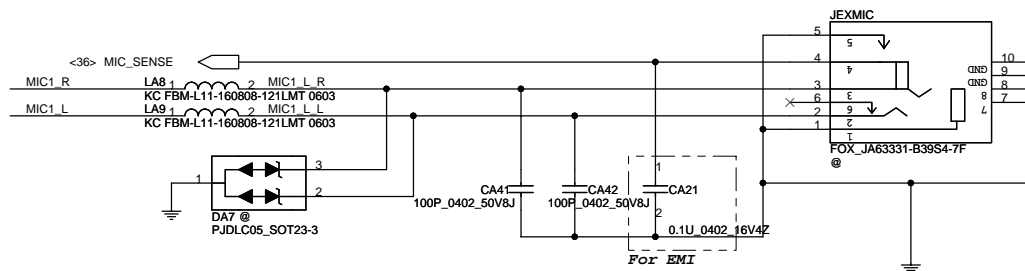
## Ext. Mic



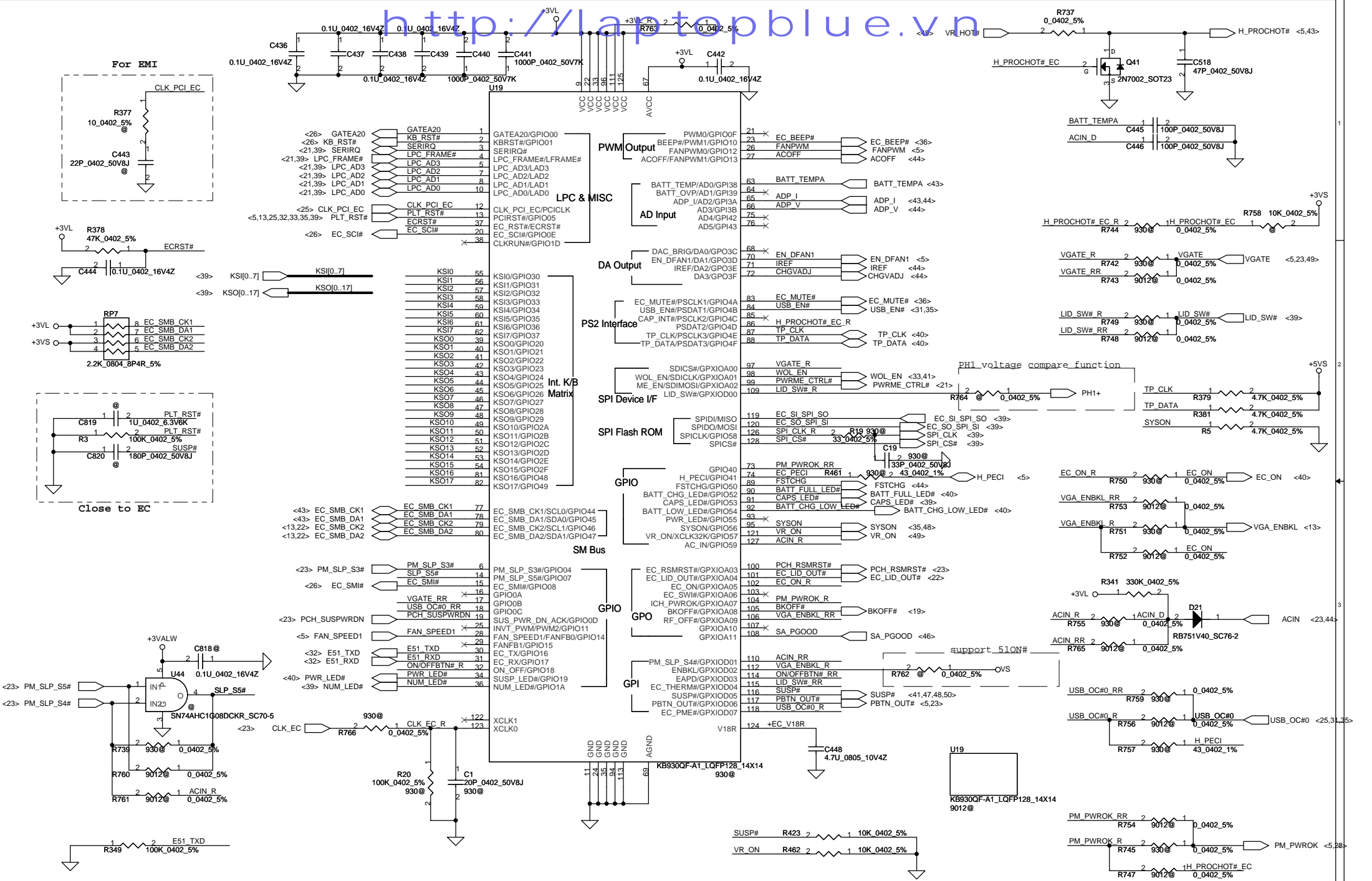
## HeadPhone/LINE Out JACK



## Ext.MIC/LINE IN JACK

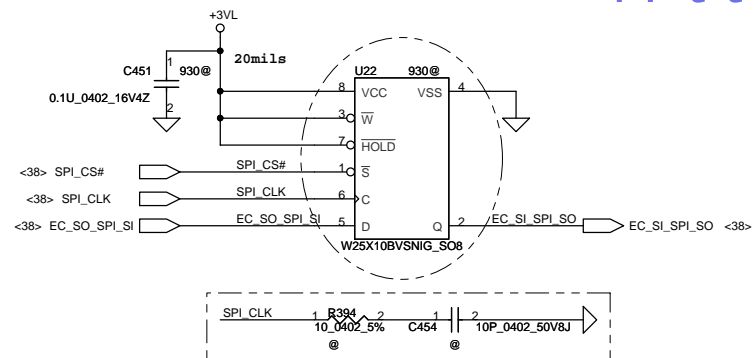


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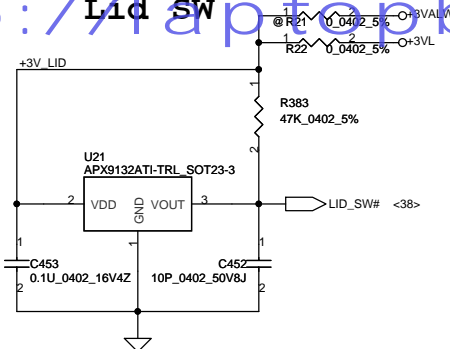


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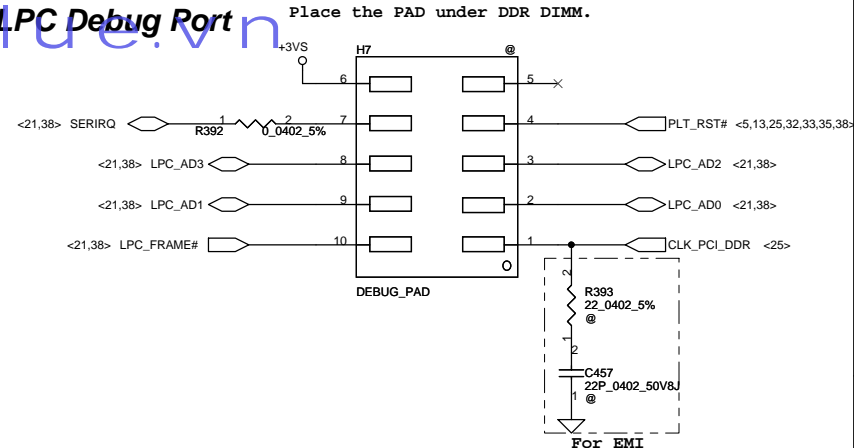
## SPI Flash (256KB)



## Lid SW



## LPC Debug Port

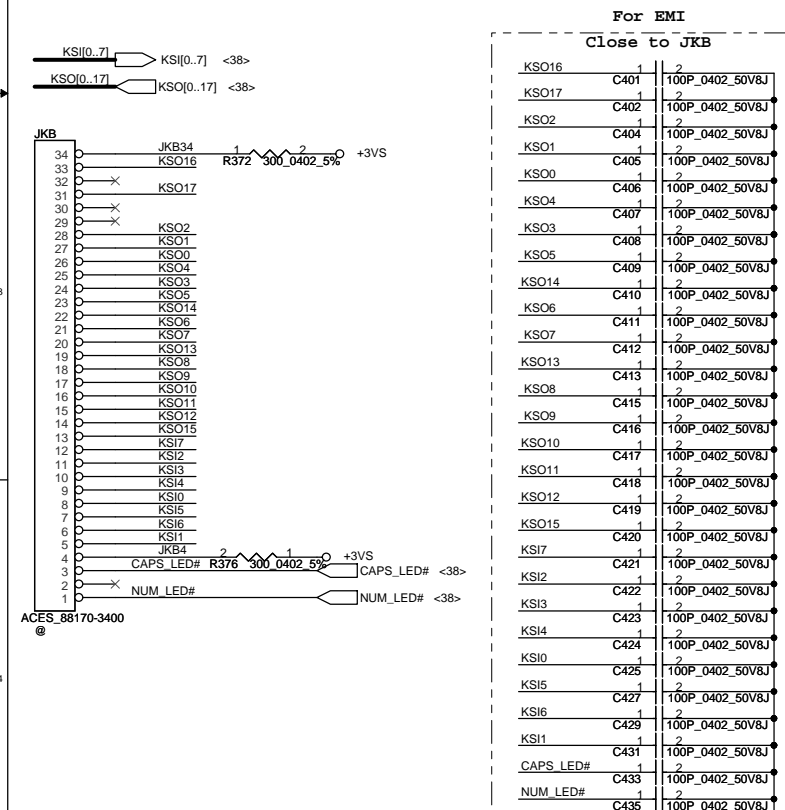


8/30 Change U22 From SA00003GK00 to SA00003GM10 due to EOL of SA00003GK00

9/03 Change U22 change to SA00003FL10

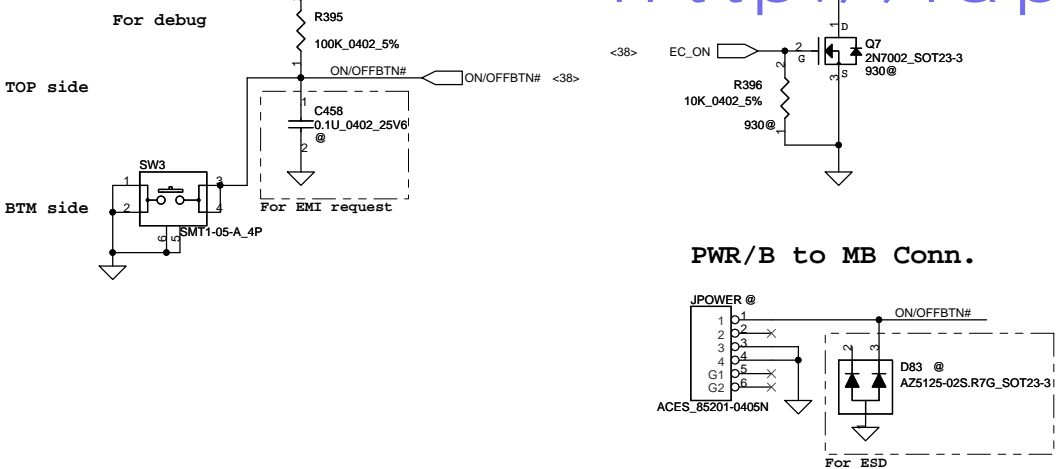
## KEYBOARD CONN.

Noticed: KB Connector Pin Definition  
Reversed with KB Membrane Pin Definition

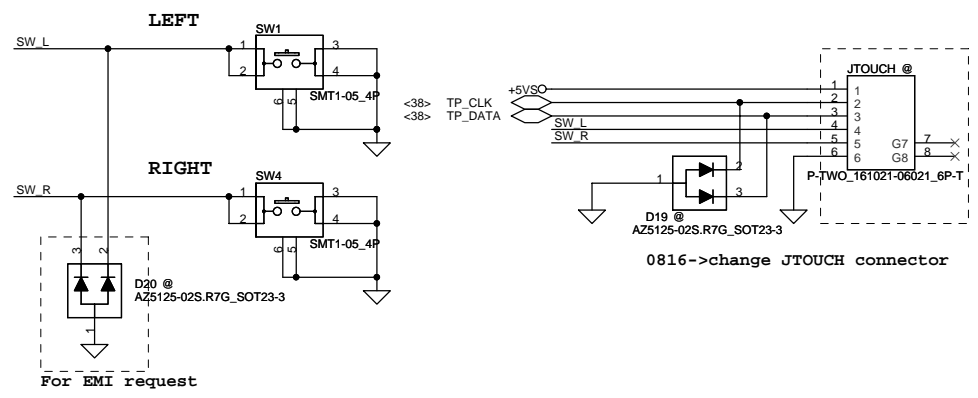


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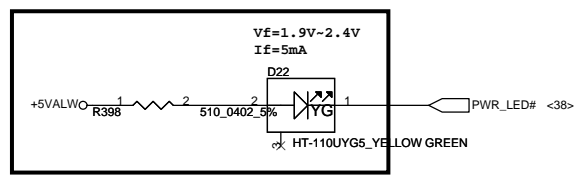
Power Button



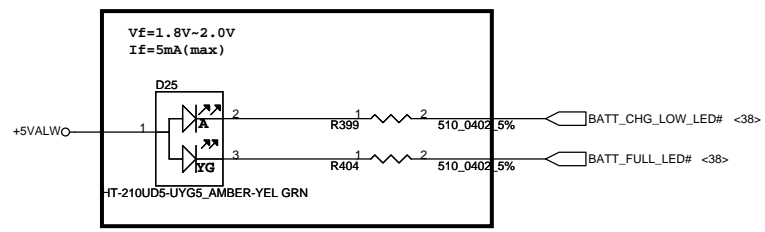
TP Button/Conn.



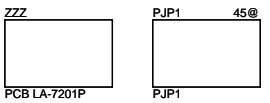
POWER/SUSPEND LED



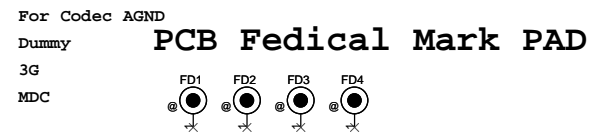
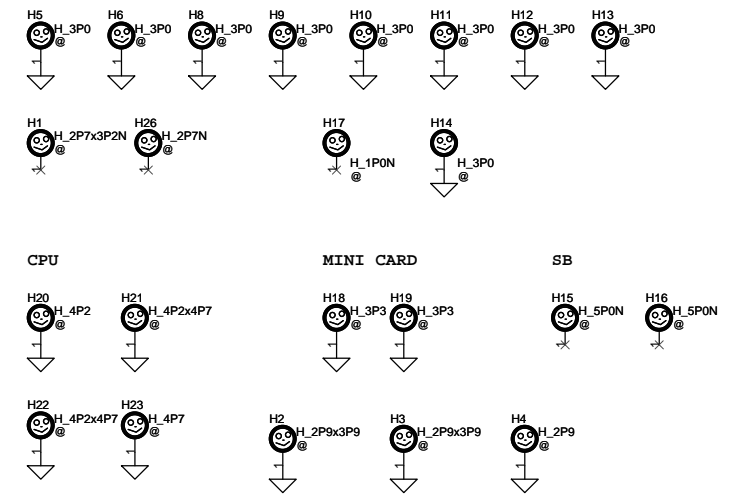
BATT CHARGE/FULL LED



ISPD

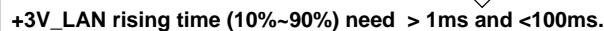
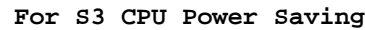


Screw Hole

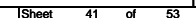
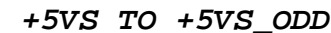
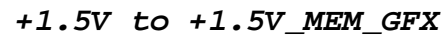
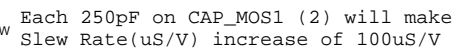


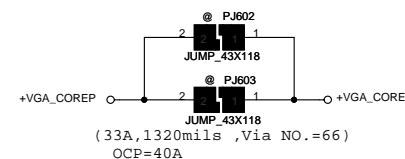
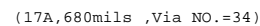
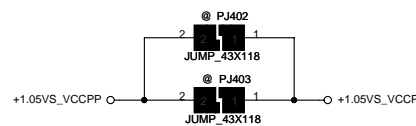
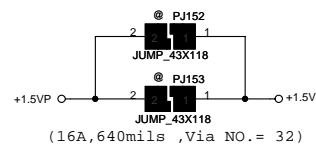
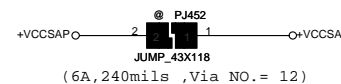
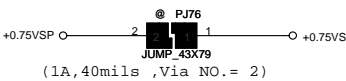
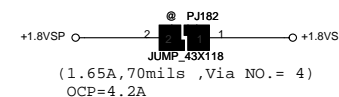
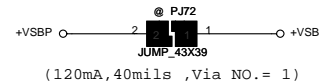
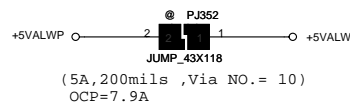
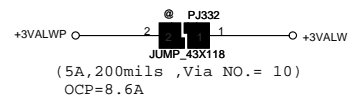
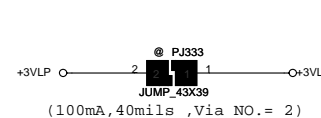
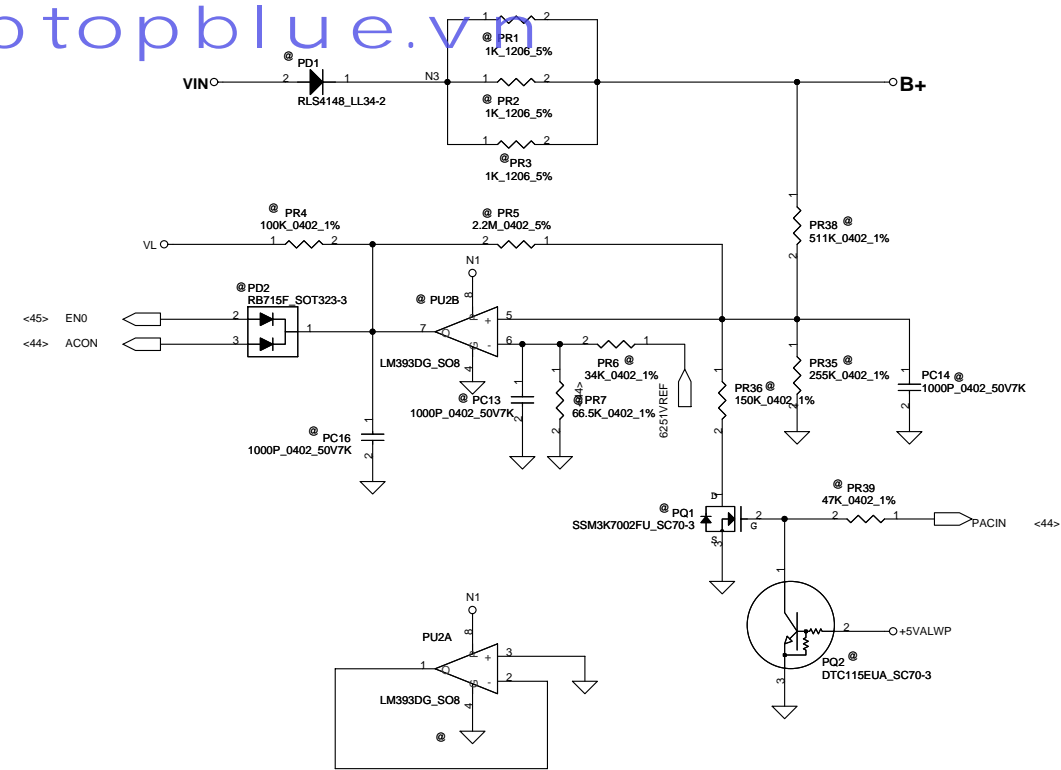
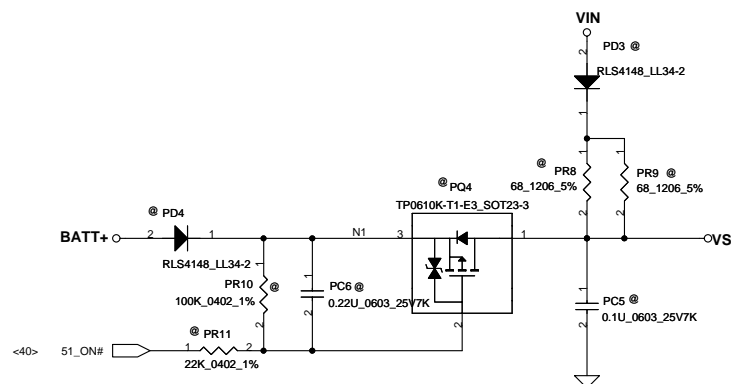
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for EMI



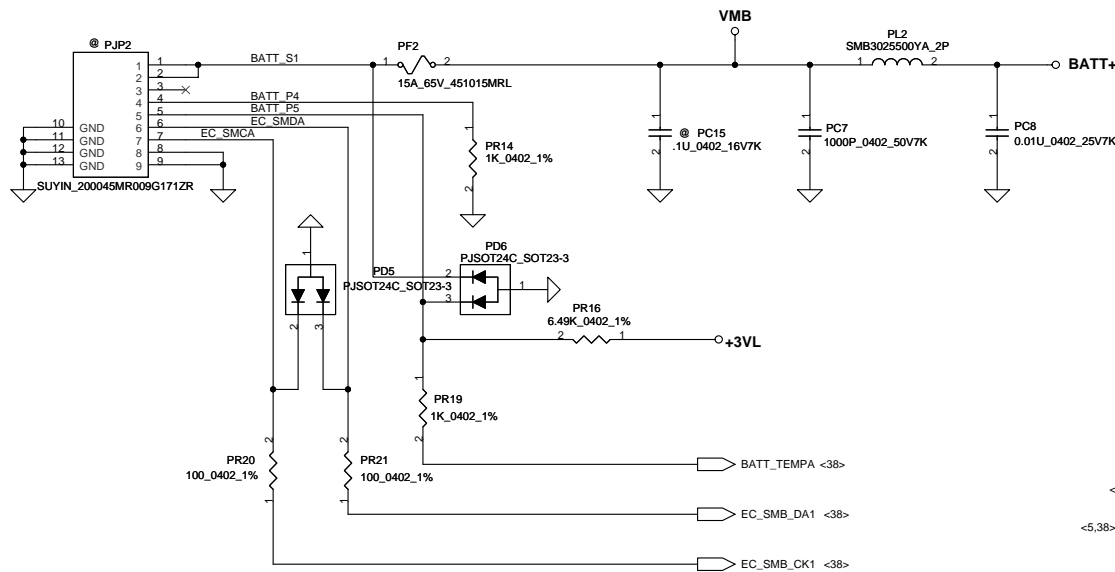
$V_{GS}=10V, I_D=9A, R_{DS}=18.5m\Omega$





ACIN			
	Precharge detector		
	Min.	typ.	Max.
H-->L	14.42V	14.74V	15.23V
L-->H	15.39V	15.88V	16.39V

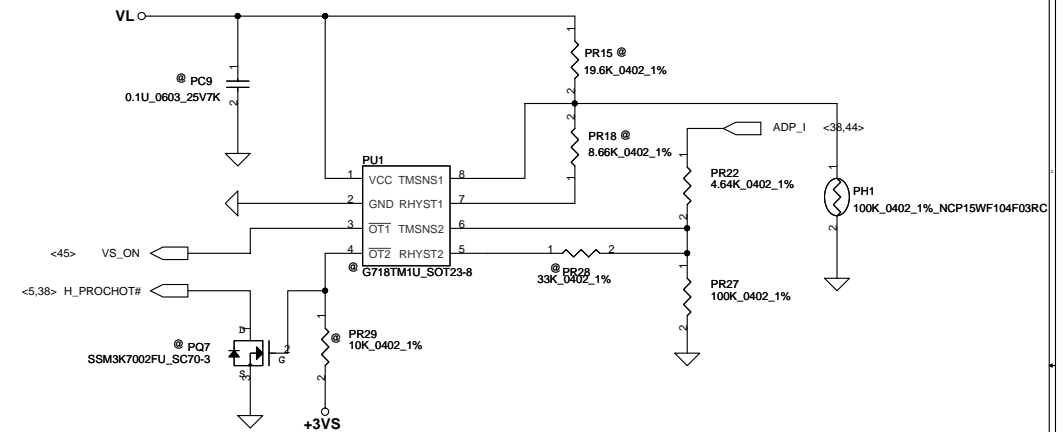
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PH1 under CPU botten side :

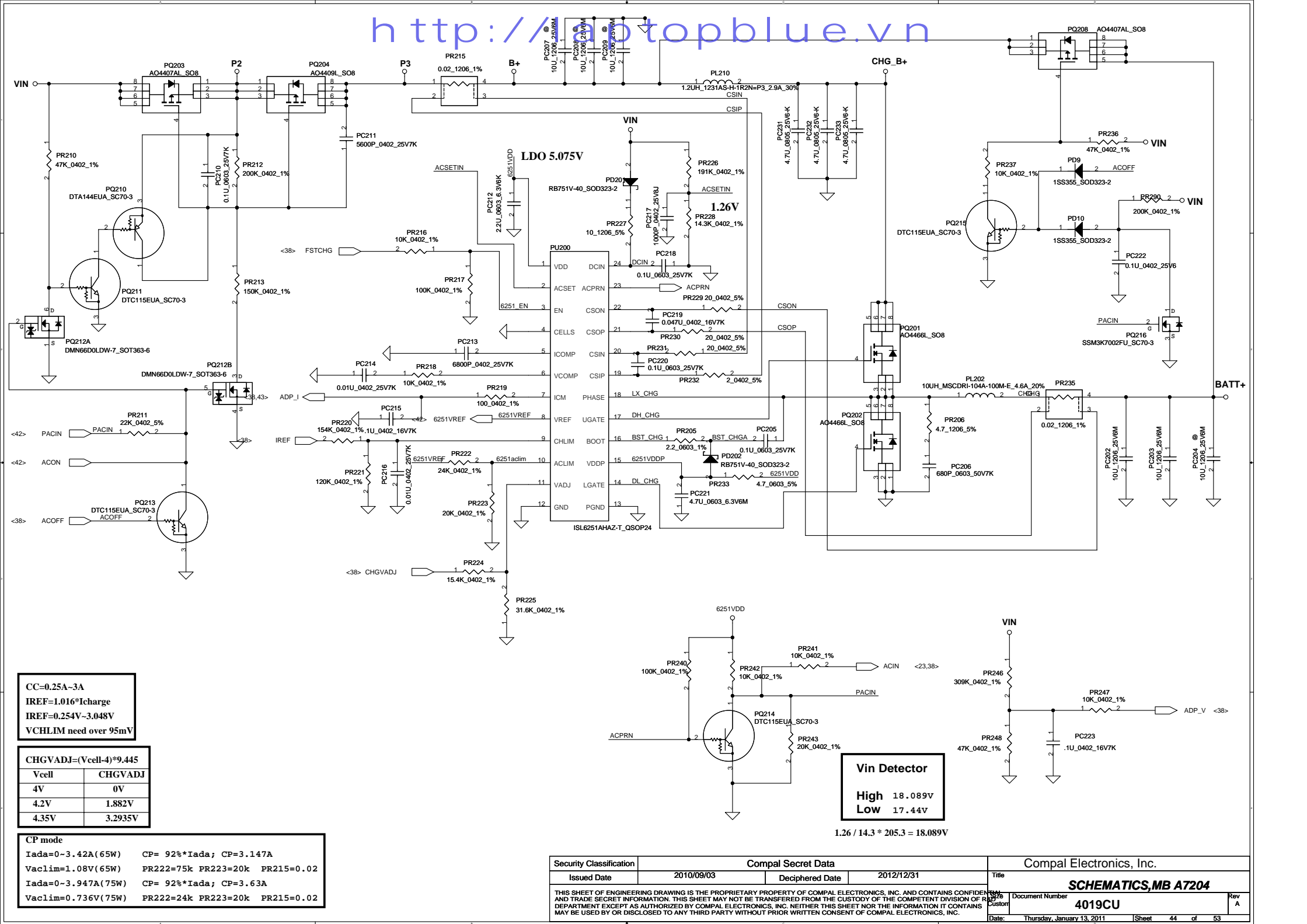
CPU thermal protection at 95 degree C

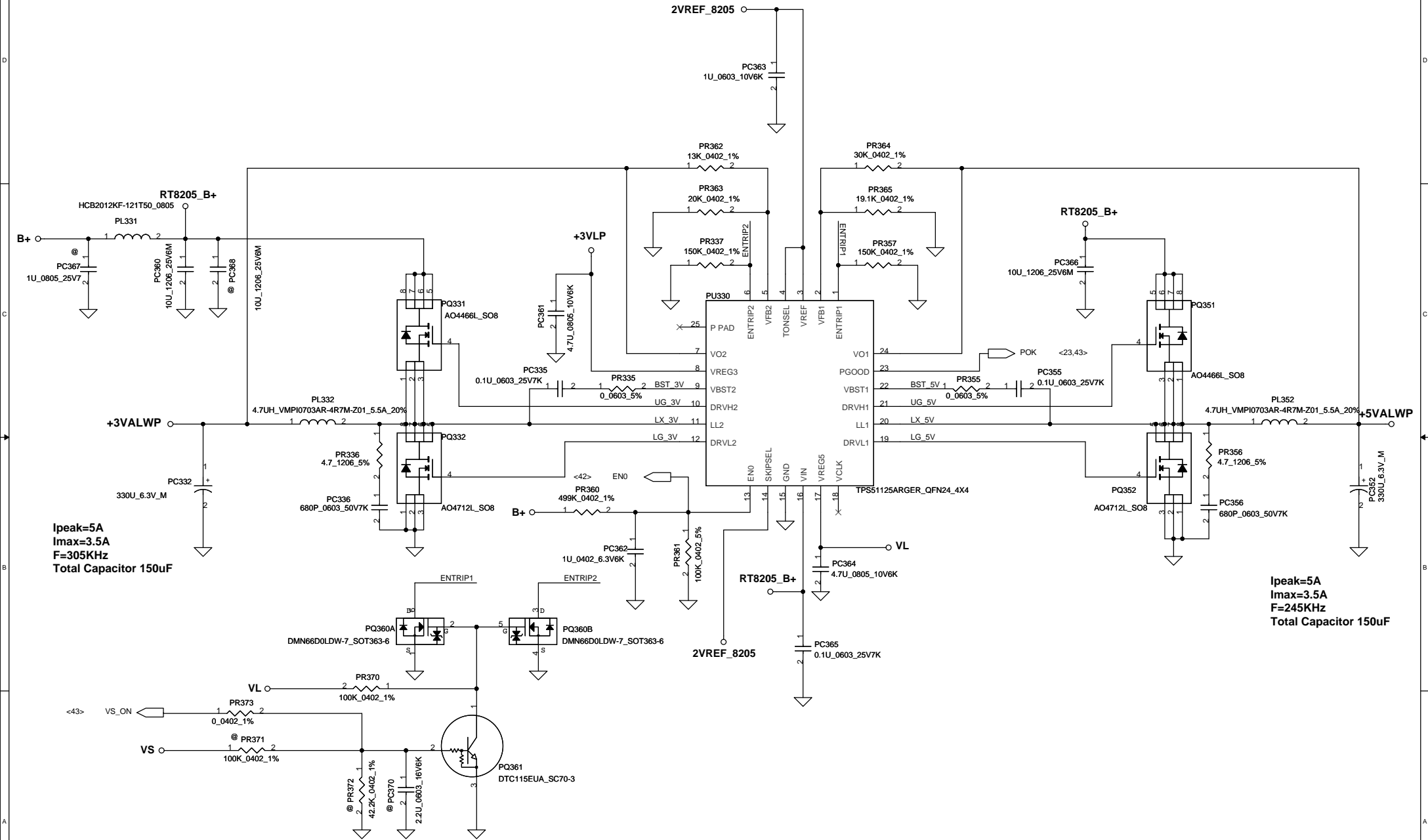
Recovery at 56 degree C



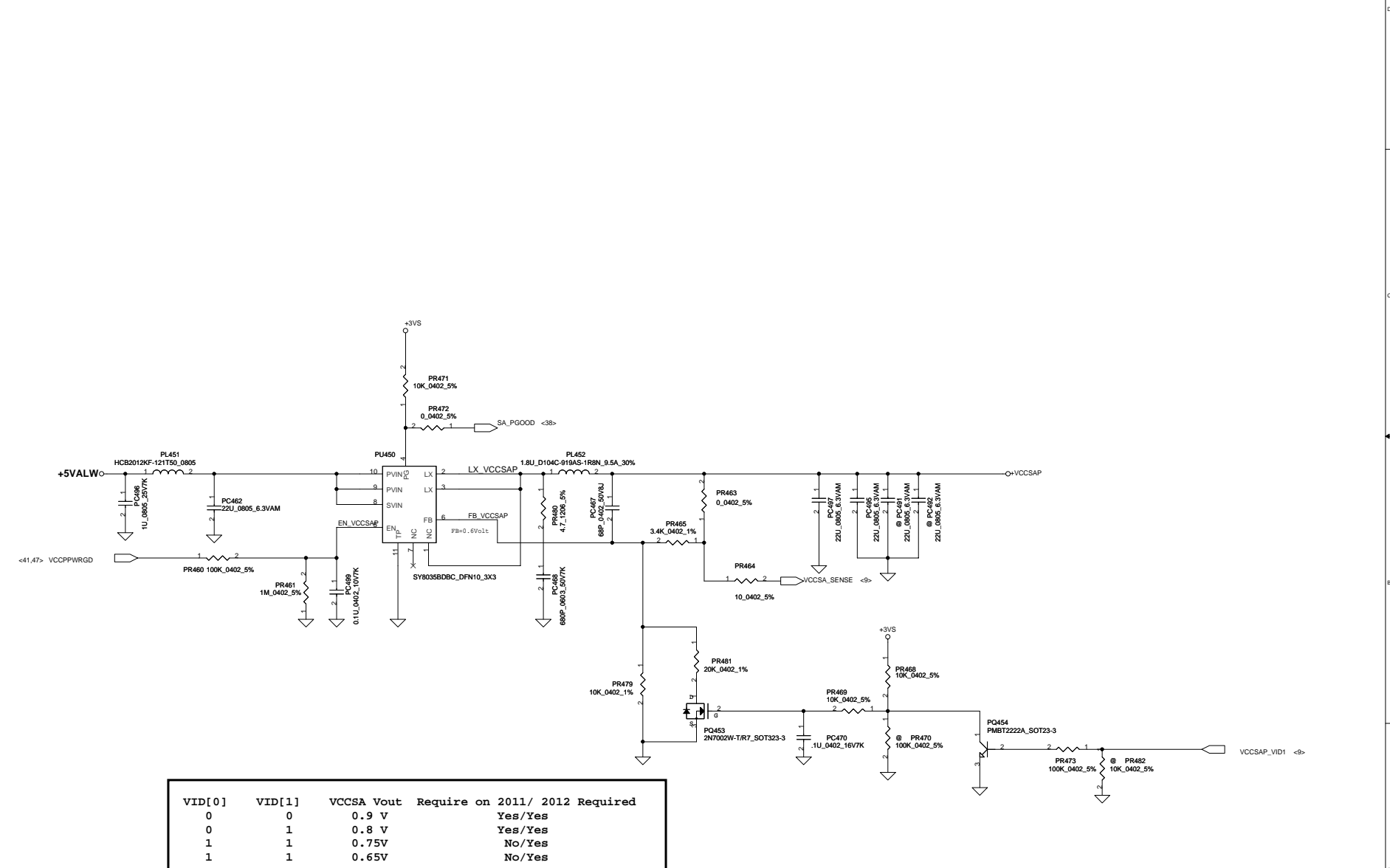
Adapter	Throttle Watt	Recovery Watt	Throttle Point	Recovery Point
65W_UMA	71.25W	62.4W	1.48V	1.308V
75W_DIS	85.5W	72W	1.78V	1.5V
75W_QCore	85.5W	72W	1.78V	1.5V







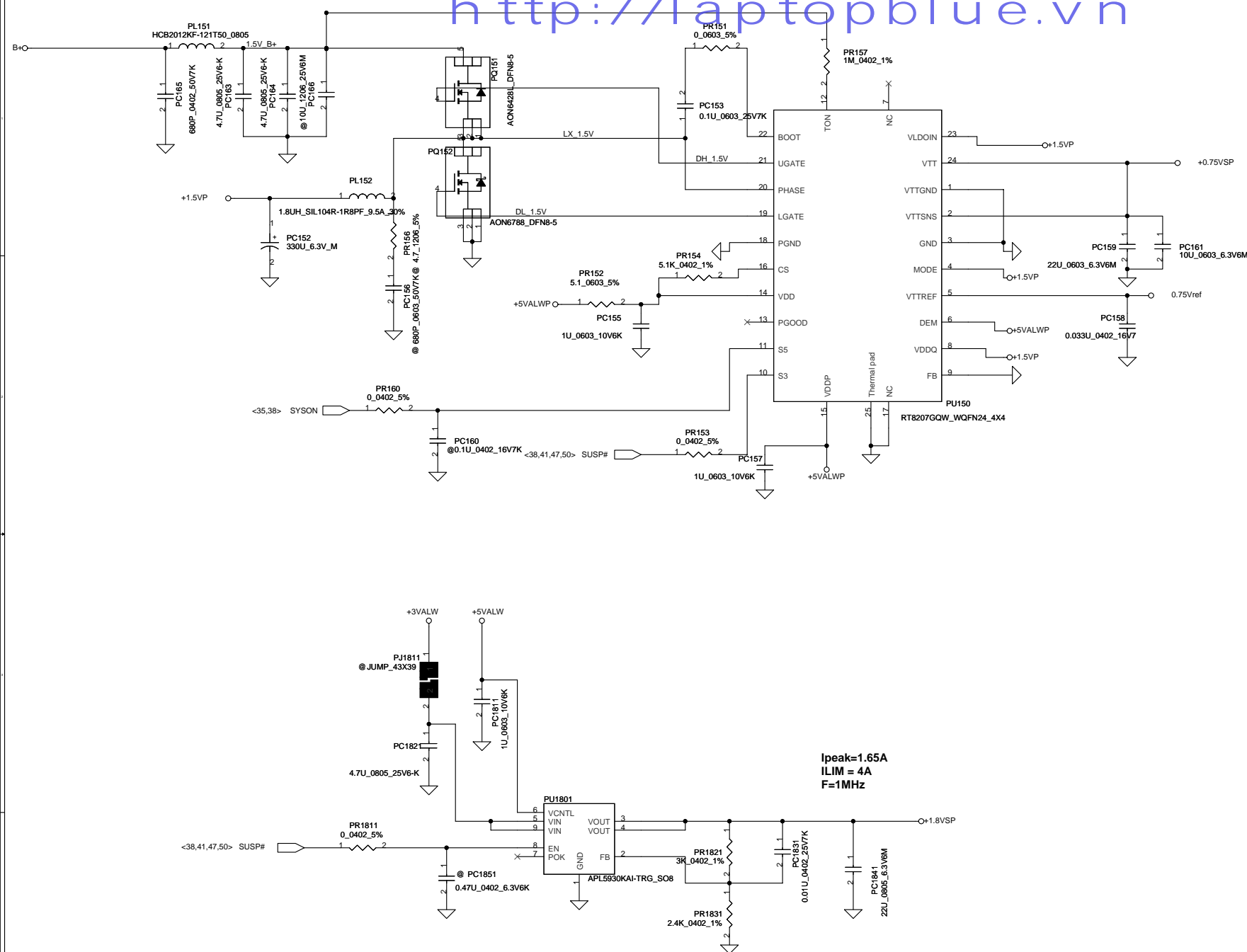
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Note: Use VCCSA\_SEL to switch High & Low Level for VID[1] (ie. VCCSA\_SEL) due to the VID[0] is don't care for this setting.

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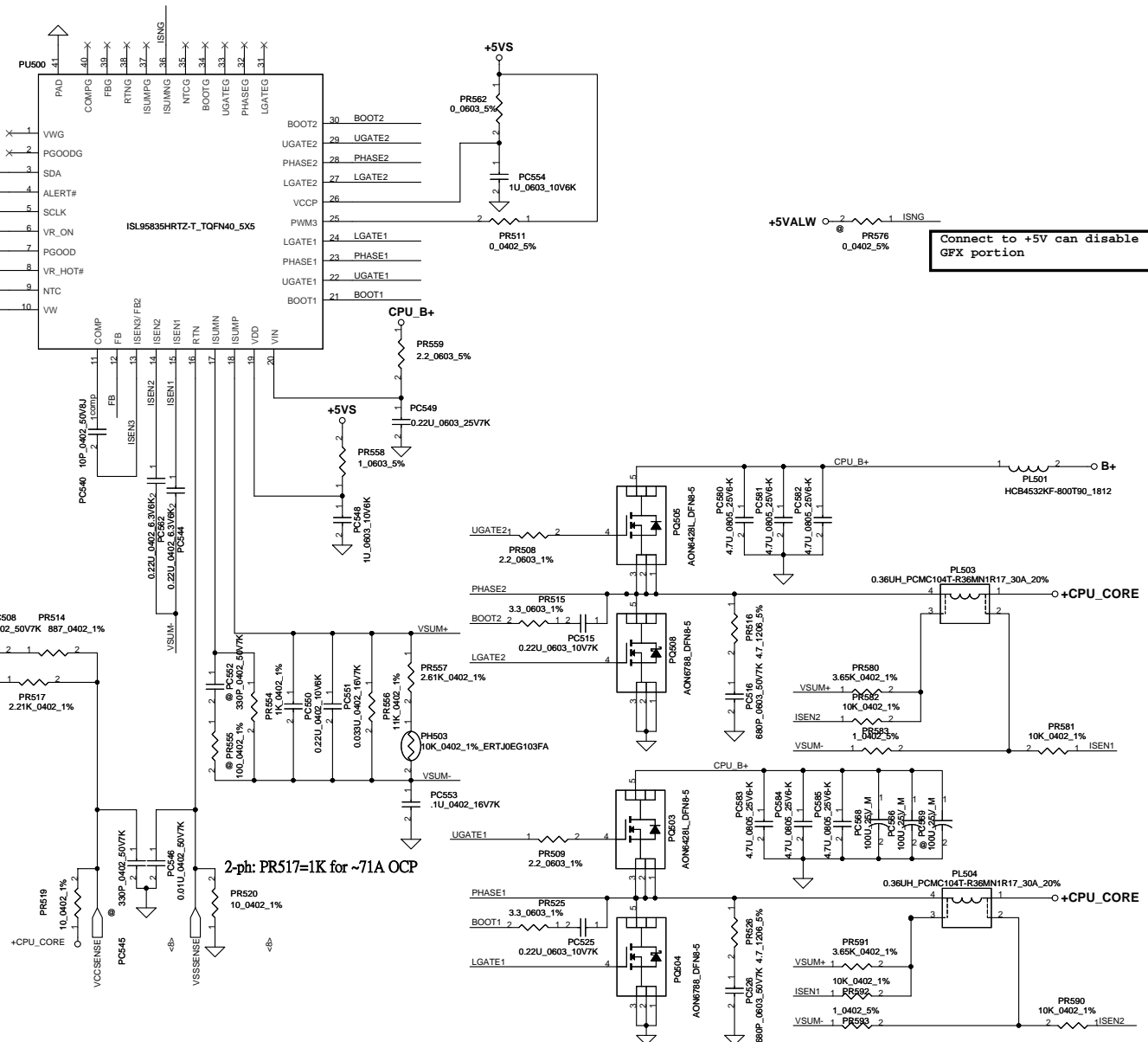


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2-ph: PR172=20.5K Vboot=0V, Iccmax=54A  
2-ph: PR172=169K Vboot=1.1V, Iccmax=54A

2-ph: PR517=1K for ~71A OCP

+CPU_CORE	+GFX_CORE
Iocp=72A, IccMAX=53A	Iocp=40A, IccMAX=24A
Load line=1.9mohm	Load line=3.9mohm
DCR=1.1mohm	DCR=1.1mohm



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	A		B		C		D		E
NO	DATE	PAGE	MODIFICATION LIST	PURPOSE					
1	2010/04/20	P36-P45	Release						

# HW PIR (Product Improve Record)

PWWHA LA-7201P SCHEMATIC CHANGE LIST

REVISION CHANGE: 0.1 TO 0.2

GERBER-OUT DATE: 2010/10/29

NO	DATE	PAGE	MODIFICATION LIST	PURPOSE
1	10/29	17	SWAP FBA_CMD2 and FBA_CMD11	Schematic error
2	10/29	18	SWAP FBA_CMD18 and FBA_CMD11	Schematic error
3	10/29	21	Chane +3V_SPI to +3VS	Schematic error
4	10/29	22	Add R23 for CLK_REQ_VGA#	Reserve pull down for clock request

REVISION CHANGE: 0.2 TO 0.3

GERBER-OUT DATE: 2010/11/11

NO	DATE	PAGE	MODIFICATION LIST	PURPOSE
1	11/03	25,31	Add USB20_N9 & USB20_P9	Support Wimax
2	11/03	32	Co-Lay Giga LAN	Giga LAN support
3	11/22	22	Add R584 & R564 for Panel select	For HW common design
4	11/22	5	change D86 (SC100001M00)	For HW common design
5	11/22	5	cancel D85 @	For HW common design
6	11/24	32	LAN 8105E-VC update to 8105E-VL	For HW common design

REVISION CHANGE: 0.3 TO 0.4

GERBER-OUT DATE: 2010/12/29

NO	DATE	PAGE	MODIFICATION LIST	PURPOSE
1	11/22	22	Add R584 & R564 for Panel select	For HW common design
2	11/22	5	change D86 (SC100001M00)	For HW common design
3	11/22	5	cancel D85 @	For HW common design
4	11/24	32	LAN 8105E-VC update to 8105E-VL	For HW common design
5	11/29	32	Add WOL_EN output pin	For HW common design
6	12/03	28,23	D7,D8,D12,D14,D16,D21 Change material	For HW common design
7	12/03	21	SC1N202U010 (CHENMKO) change use SC600000B00	For HW common design
8	12/03	21	change U13 and follow UMA schematics (45@)	For HW common design
9	12/03	19	R103 change use D1(SCS00002G00)	For HW common design
10	12/03	13	net VGA_BL_PWM change to VGA_PWM and Add D2	For HW common design
11	12/03	39	Add +5VS TO +5VS_ODD schematics for ODD	For PRD request
12	12/03	36	Add R349(100K)pull down for E51_TXD	For HW common design
13	12/07	30	JODD Pin8 add ODD_DETECT#	For PRD request
14	12/07	30	JODD Pin11 add ODD_DA#	For PRD request
15	12/07	30	Change +5VS to +5VS_ODD	For PRD request
16	12/14	15	+VGA_CORE add 330u (C876)	For HW common design
17	12/18	30	Add SW2	For test Zero power ODD
18	12/18	8	Add C3	To increase number of +CPU_CORE CAP
19	12/18	36	Add R739 to connect PM_SLP_S4# with SLP_S5#	For HW common design
20	12/18	5	Add FAN RPM circuit	For FAN BTO
21	12/19	30	Add USB3.0 function	For USB3.0 BTO
22	12/19	30	Cancel USB2.0(JUSB2)	For PRD request
23	12/19	27	Add HDMI function	For PRD request
24	12/23	19	change LVDS connectorFor PUR request	
25	12/24	41	Add U46	For Low Switch
26	12/24	28	Cancel R541,C514,C513,C256,L1	For HW common design
27	12/24	13	Add circuit for PCH to GPU 27Mhz	For HW test
28	12/29	38	Change EC Schematic	
29	12/29	33	Change UL3 material	For HW common design
30	12/29	17,18	Change UV3,UV4,UV5,UV6 material	For NVidia require
31	12/29	21	Change U2 material For PJE require	
32	12/29	2	Modify Block Diagram	

Update

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HW PIR (Product Improve Record)

REVISION CHANGE: 0.3 TO 0.4

GERBER-OUT DATE: 2011/01/04

NO    DATE    PAGE    MODIFICATION LIST

1	01/04	41	Change C252 0.1u to 120p
2	01/04	19	Change C120 10K to 47K
3	01/04	5	Change U10,R312,C93 to PS3@
4	01/04	7	Change Q14,R463,C140,R465 to PS3@
5	01/04	9	Change C213,C212,C211,C210 to PS3@
6	01/04	23	Change R316 to PS3@

PURPOSE

Update HW design
Update HW design
Update HW design
Update HW design
Update HW design
Update HW design

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