

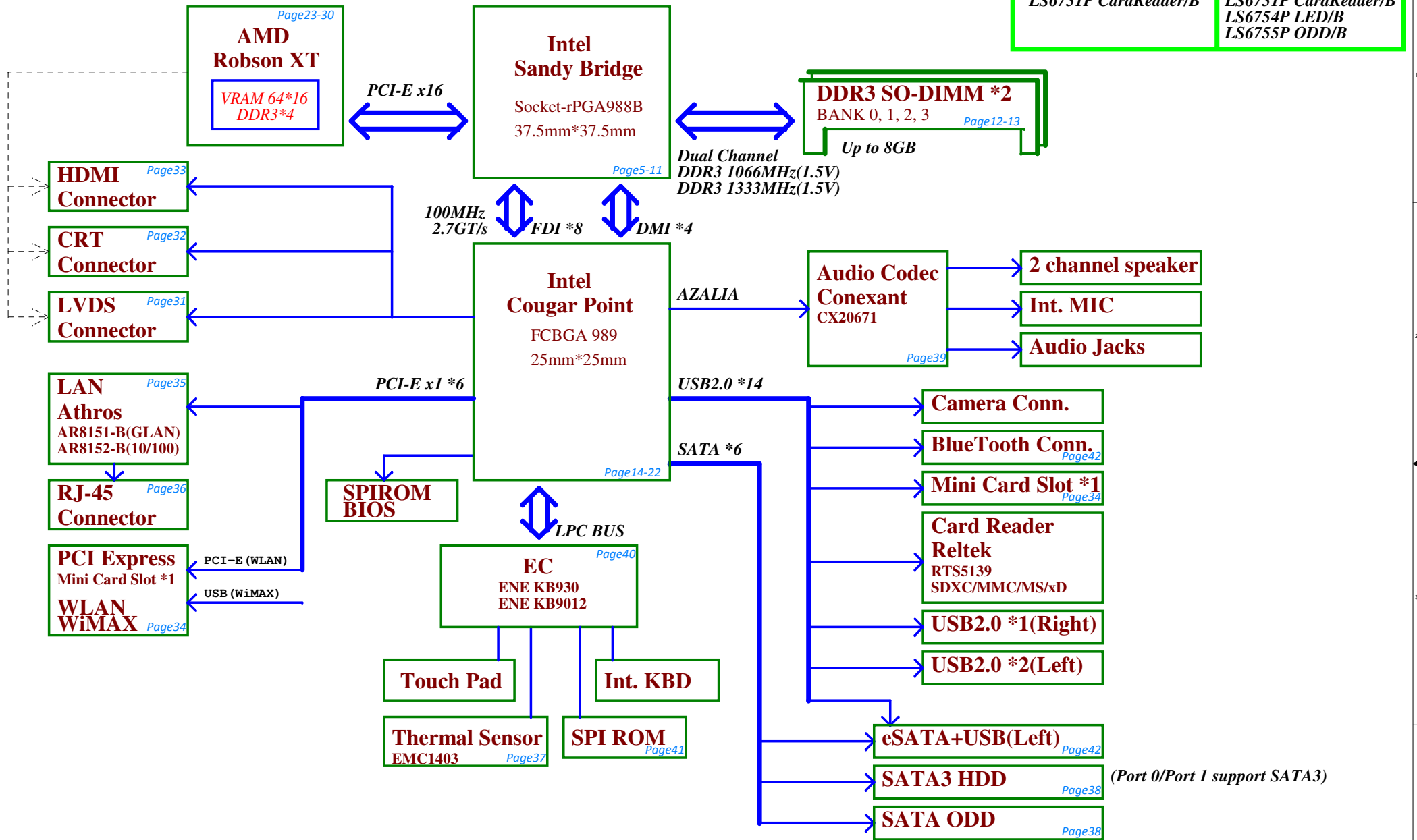
Compal Confidential

G470/G570 DIS+UMA+Muxless M/B Schematics Document

Intel Sandy Bridge Processor with DDRIII + Cougar Point PCH ATI Robson/PX3.0,PX4.0

2010-10-22
LA-6751P / LA-6753P
REV: 0.3

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Voltage Rails

power plane	State	+B	+5VALW +3VALW	+1.5V	+5VS +3VS +1.5VS +VCCP +CPU_CORE +VGA_CORE +GFX_CORE +1.8VS +0.75VS +1.05VS
S0		○	○	○	○
S3		○	○	○	✗
S5 S4/AC		○	○	✗	✗
S5 S4/ Battery only		○	✗	✗	✗
S5 S4/AC & Battery don't exist		✗	✗	✗	✗

EC SM Bus1 address

EC SM Bus2 address

Device	Address	Device	Address
Smart Battery	0001 011Xb	Thermal Sensor EMC1403-2	1001_101xb
		Thermal Sensor EMC1402-1	100_1100b

PCH SM Bus address

Device	Address
DDR DIMM0	1001 000Xb
DDR DIMM2	1001 010Xb

SMBUS Control Table

	SOURCE	VGA	BATT	KE930	SODIMM	WLAN WWAN	Thermal Sensor	PCH
SMB_EC_CK1	KB930	✗	✓	✗	✗	✗	✗	✗
SMB_EC_DA1	+3VALW		+3VALW					
SMB_EC_CK2	KB930	✗	✗	✗	✗	✗	✗	✓
SMB_EC_DA2	+3VALW							+3VS
SMBCLK	PCH	✗	✗	✗	✓	✓	✗	✗
SMBDATA	+3VALW				+3VS	+3VS		
SML0CLK	PCH	✗	✗	✗	✗	✗	✗	✗
SML0DATA	+3VALW							
SML1CLK	PCH	✓	✗	✓	✗	✗	✓	✗
SML1DATA	+3VALW	+3VS		+3VS			+3VS	

STATE	SIGNAL	SLP_S1#	SLP_S3#	SLP_S4#	SLP_S5#	+VALW	+V	+VS	Clock
Full ON		HIGH	HIGH	HIGH	HIGH	ON	ON	ON	ON
S1 (Power On Suspend)		LOW	HIGH	HIGH	HIGH	ON	ON	ON	LOW
S3 (Suspend to RAM)		LOW	LOW	HIGH	HIGH	ON	ON	OFF	OFF
S4 (Suspend to Disk)		LOW	LOW	LOW	HIGH	ON	OFF	OFF	OFF
S5 (Soft OFF)		LOW	LOW	LOW	LOW	ON	OFF	OFF	OFF

BOARD ID Table

Board ID	PCB Revision
0	0.1
1	
2	
3	
4	
5	
6	
7	

Board ID / SKU ID Table for AD channel

Vcc	3.3V +/- 5%				
Ra/Rc/Re	100K +/- 5%				
Board ID	Rb / Rd / Rf	VAD_BID min	VAD_BID typ	VAD_BID max	
0	0	0 V	0 V	0 V	EVT
1	8.2K +/- 5%	0.216 V	0.250 V	0.289 V	DVT
2	18K +/- 5%	0.436 V	0.503 V	0.538 V	PVT
3	33K +/- 5%	0.712 V	0.819 V	0.875 V	MP
4	56K +/- 5%	1.036 V	1.185 V	1.264 V	
5	100K +/- 5%	1.453 V	1.650 V	1.759 V	
6	200K +/- 5%	1.935 V	2.200 V	2.341 V	
7	NC	2.500 V	3.300 V	3.300 V	

USB Port Table

USB 2.0	USB 1.1	Port	3 External USB Port
EHCI1	UHCI0	0	USB/B (Right Side)
		1	USB Port (Left Side)
		2	USB Port (Left Side)
	UHCI1	3	USB Port (Left Side)
		4	
	UHCI2	5	Camera
		6	
EHCI2	UHCI3	7	
		8	Mini Card(WLAN)
	UHCI4	9	
		10	
	UHCI5	11	Card Reader
		12	
	UHCI6	13	Blue Tooth

BOM Structure Table

BTO Item	BOM Structure
UMA and PX bus	PX@
Discrete Only	DIS@
PX3.0 only, not for BACO	PX3@
BACO	BACO@
COMMON HDMI	HDMI@
UMA HDMI	UMA_HDMI@
Discrete HDMI	VGA_HDMI@
eSATA	ESATA@
Blue Tooth	BT@
Connector	ME@
45 LEVEL	45@
10/100 LAN	8152@
GIGA LAN	GIGA@
Camera	CMOS@
Unpop	@

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Power-Up/Down Sequence

1. All the ASIC supplies must fully reach their respective nominal voltages within 20 ms of the start of the ramp-up sequence, though a shorter ramp-up duration is preferred.

2. VDDR3 should ramp-up before or simultaneously with VDDC.

3. For LVDS, DPx_VDD10 should ramp-up before DPx_VDD18 and the PCIe Reference clock should begin before DPx_VDD18. For power-down, DPx_VDD18 should ramp-down before DPx_VDD10.

4. The external pull-ups on the DDC/AUX signals (if applicable) should ramp-up before or after both VDDC and VDD_CT have ramped up.

5. VDDC and VDD_CT should not ramp-up simultaneously. (e.g., VDDC should reach 90% before VDD_CT starts to ramp-up (or vice versa).)

VDDR3(3.3VGS)

PCIE_VDDC(1.0V)

VDDR1(1.5VGS)

VDDC/VDDCI(1.12V)

VDD_CT(1.8V)

PERSTb

REFCLK

Straps Reset

Straps Valid

Global ASIC Reset

Note: Do not drive any IOs before VDDR3 is ramped up.

T4+16clock

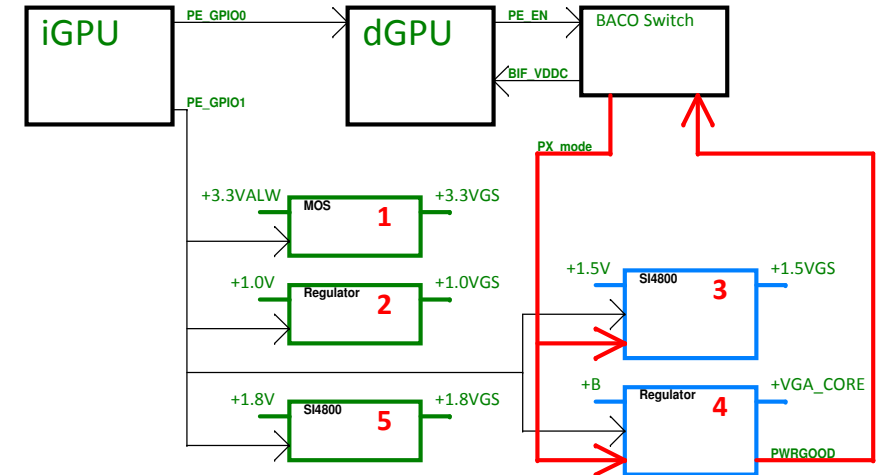
Without BACO option :

PE_GPIO0 : Low -> Reset dGPU ; High -> Normal operation
PE_GPIO1 : Low -> dGPU Power OFF ; High -> dGPU Power ON

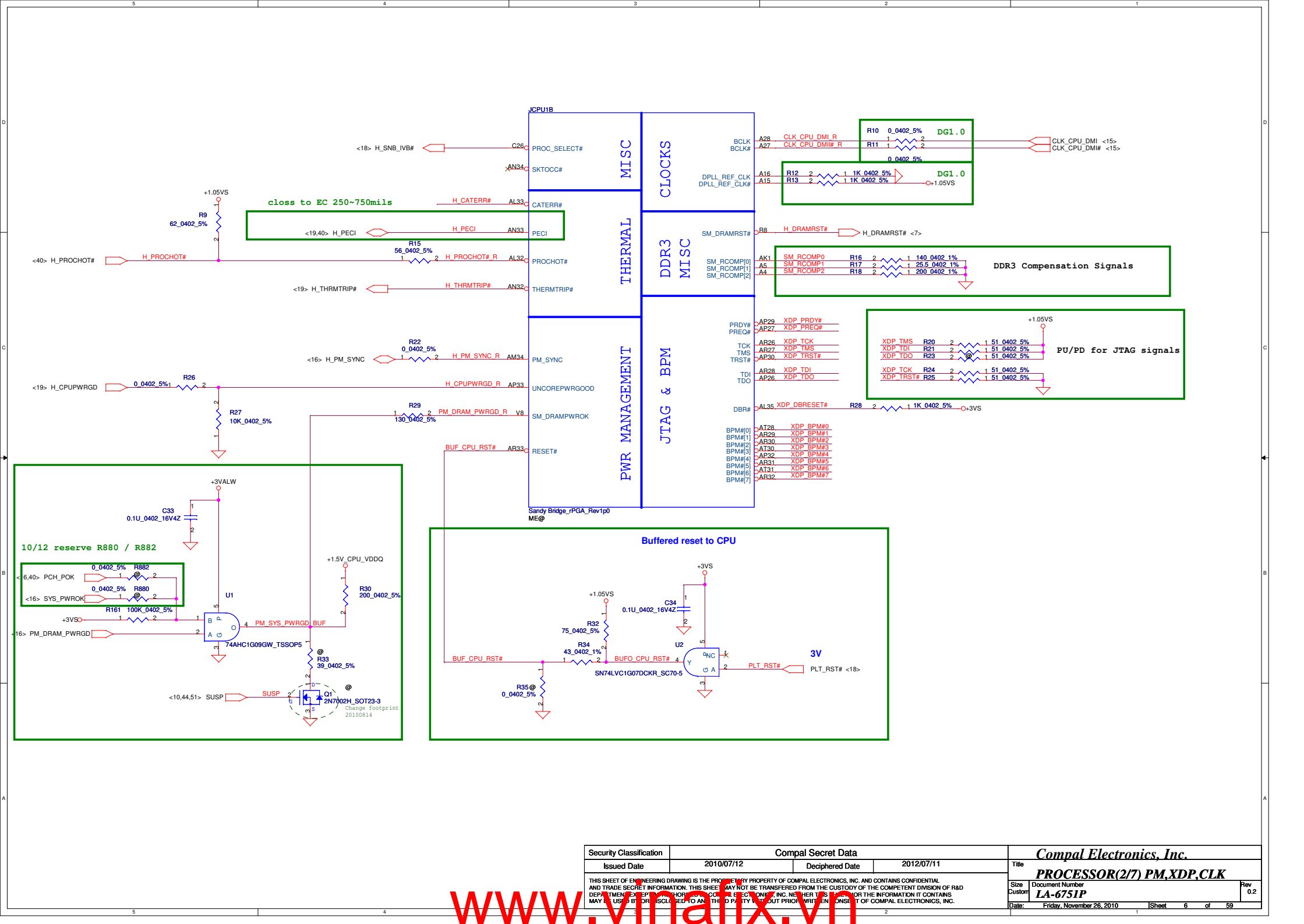
BACO option :

PE_GPIO0 : High -> Normal operation (dGPU is not reset on BACO mode)
PE_GPIO1 : Low -> dGPU Power OFF ; High -> dGPU Power ON (always High)

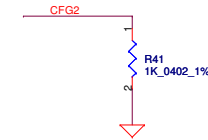
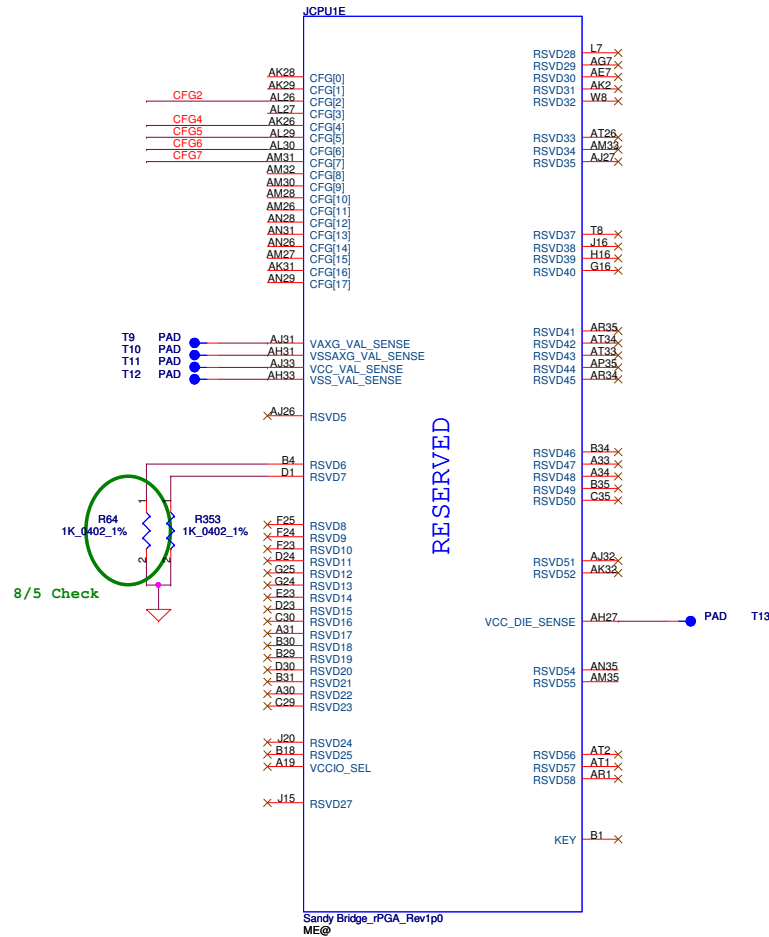
dGPU Power Pins	Voltage	PX 3.0	BACO Mode	Max current
PCIE_PVDD, PCIE_VDDR, TSVDD, VDDR4, VDD_CT, DPE_PVDD, DP[F:E]_VDD18, DP[D:A]_PVDD, DP[D:A]_VDD18, AVDD, VDD1DI, A2VDDQ, VDD2DI, DPLL_PVDD, MPV18, and SPV18	1.8V	OFF	ON	1679mA
DP[F:E]_VDD10, DP[D:A]_VDD10, DPLL_VDDC, and SPV10	1.0V	OFF	ON	575mA
PCIE_VDDC	1.0V	OFF	ON	2A
VDDR3 , and A2VDD	3.3V	OFF	ON	190mA
BIF_VDDC (current consumption = 55mA@1.0V, in BACO mode)	Same as VDDC	OFF	ON Same as PCIE_VDDC	70mA
VDDR1	1.5V	OFF	OFF	2.8A
VDDC/VDDCI	1.12V	OFF	OFF	12.9A



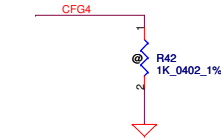
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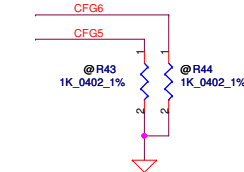
CFG Straps for Processor



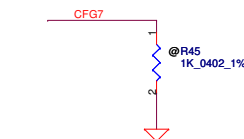
PEG Static Lane Reversal - CFG2 is for the 16x	
CFG2	1: Normal Operation; Lane # definition matches socket pin map definition * 0: Lane Reversed



Display Port Presence Strap	
CFG4	* 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



PCIe Port Bifurcation Straps	
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



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

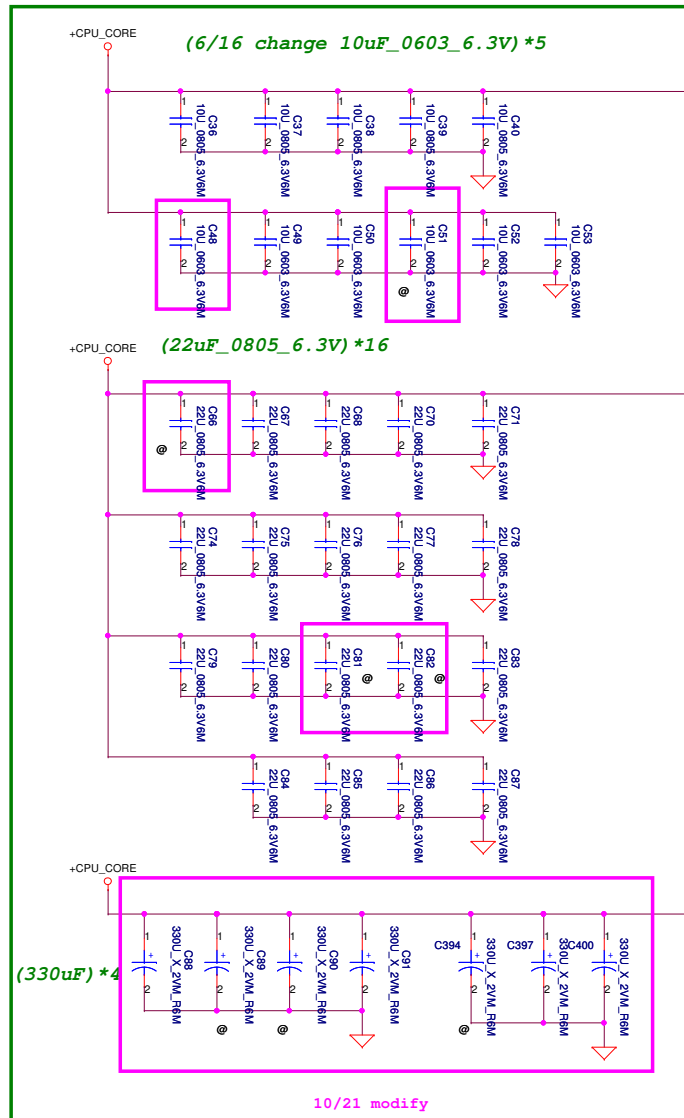
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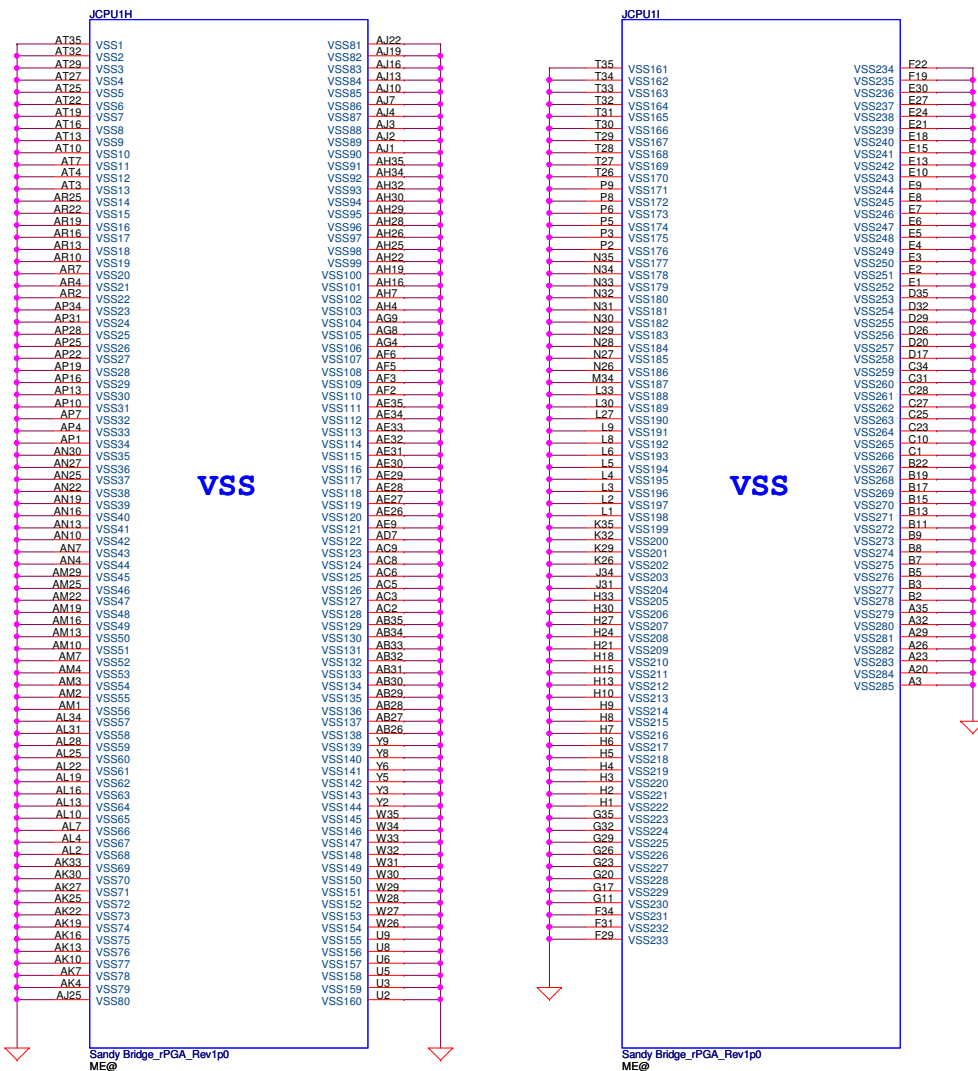
POWER

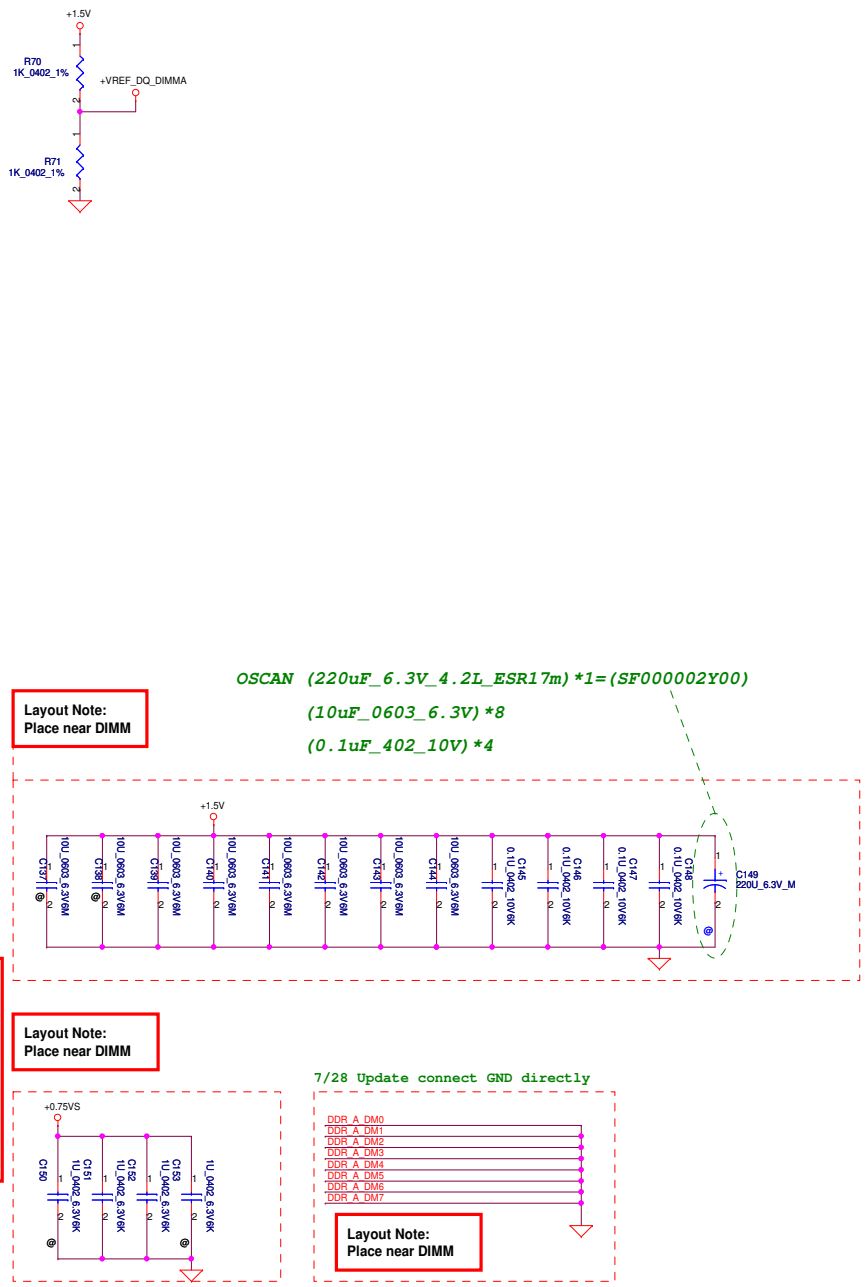
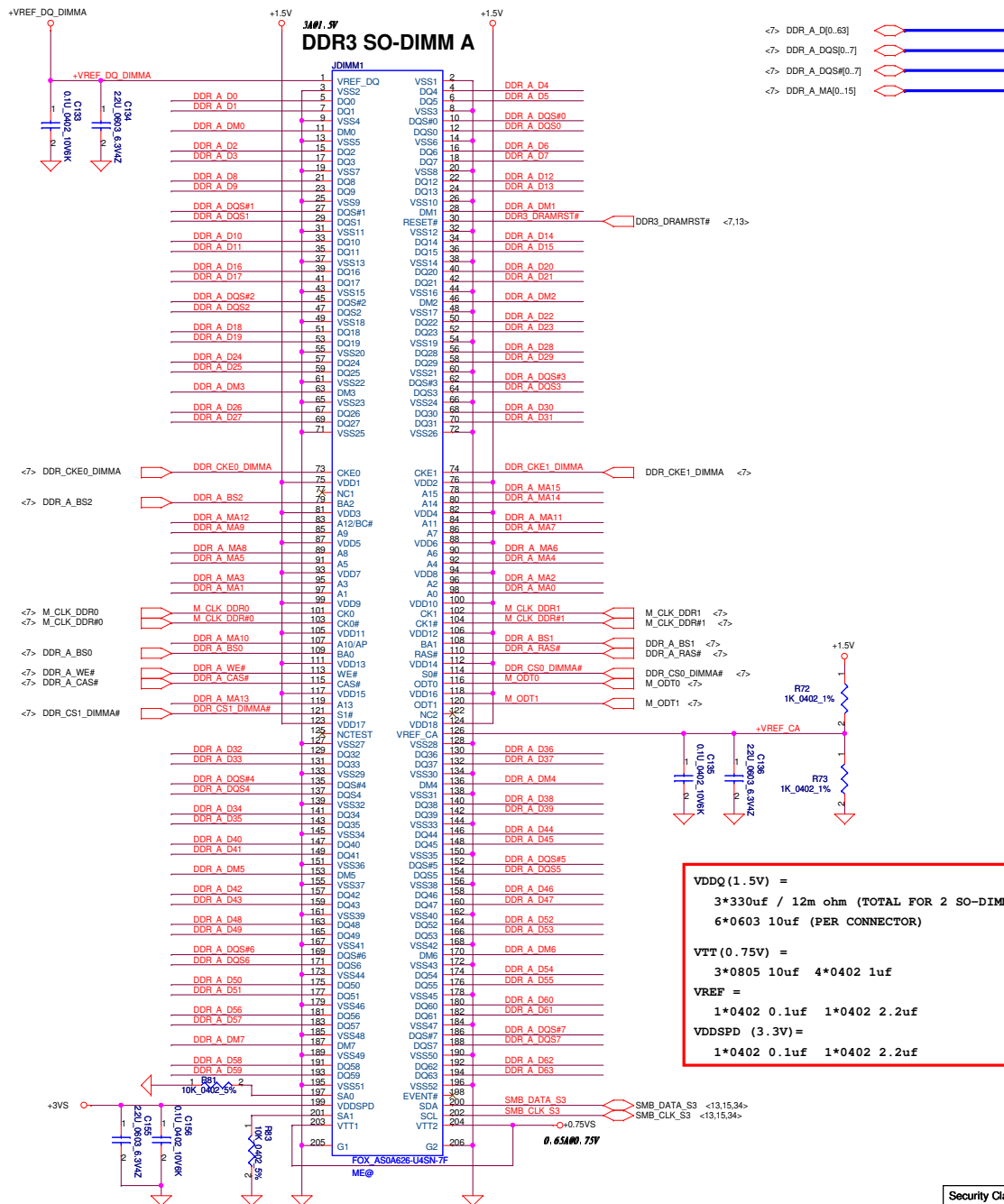
CORE SUPPLY

SVID

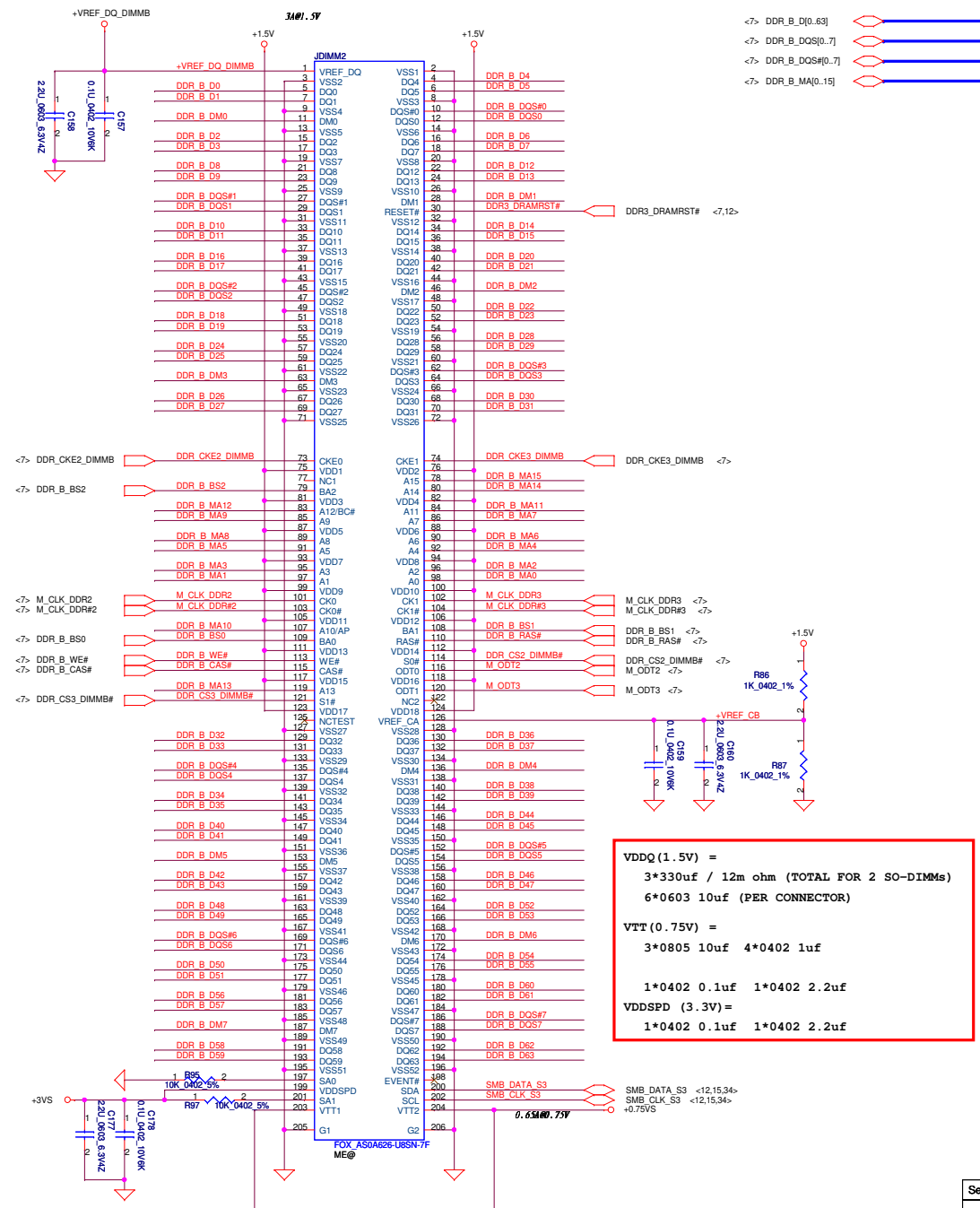
SENSE LINES







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For Arranale only +VREF_DQ_DIMMB supply from a external 1.5V voltage divide circuit.

07/17/2009

Layout Note:
Place near DIMM

(10uF_0603_6.3V)*8
(0.1uF_402_10V)*4

Layout Note:
Place near DIMM

7/28 Update connect GND directly

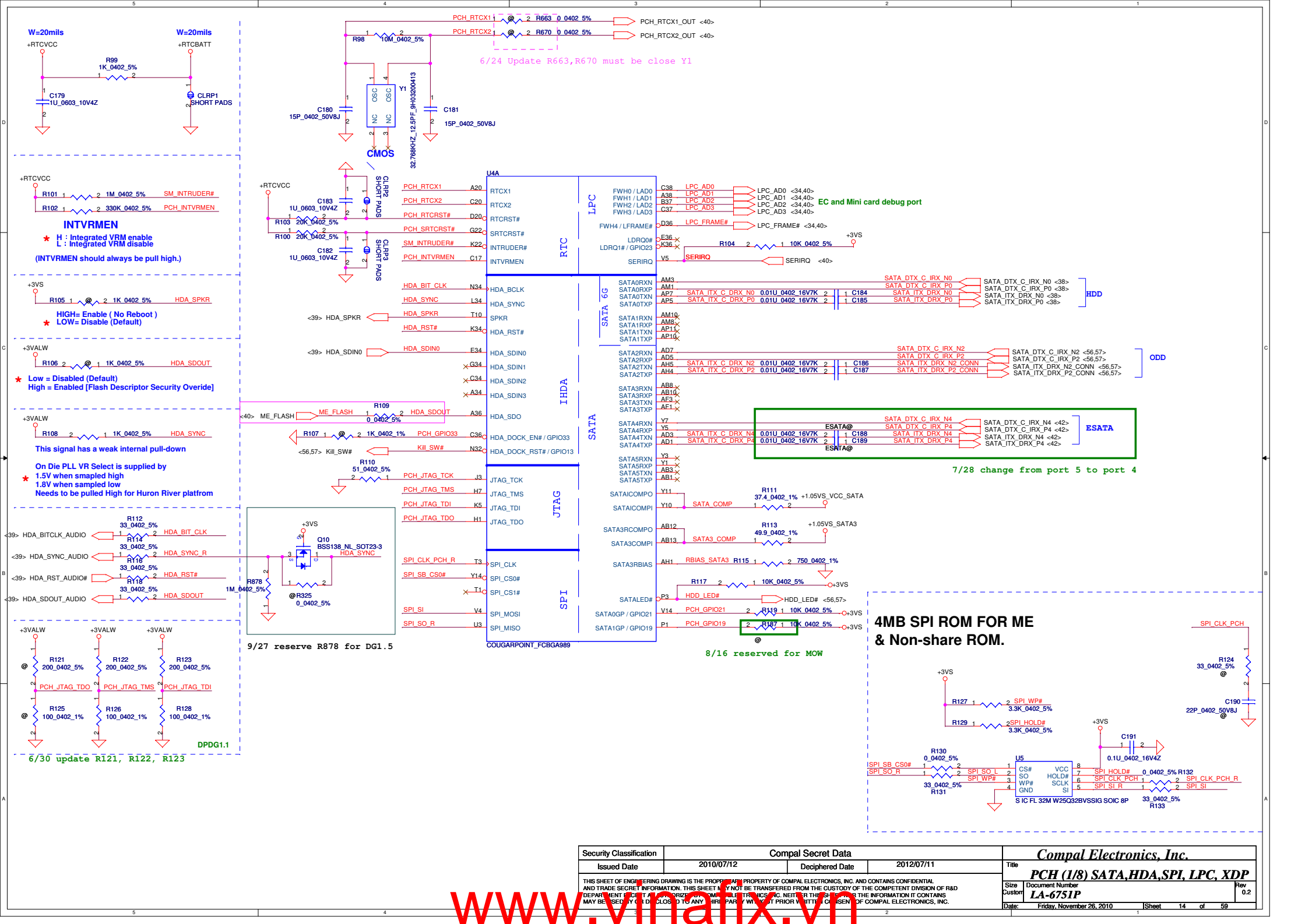
Layout Note:
Place near DIMM

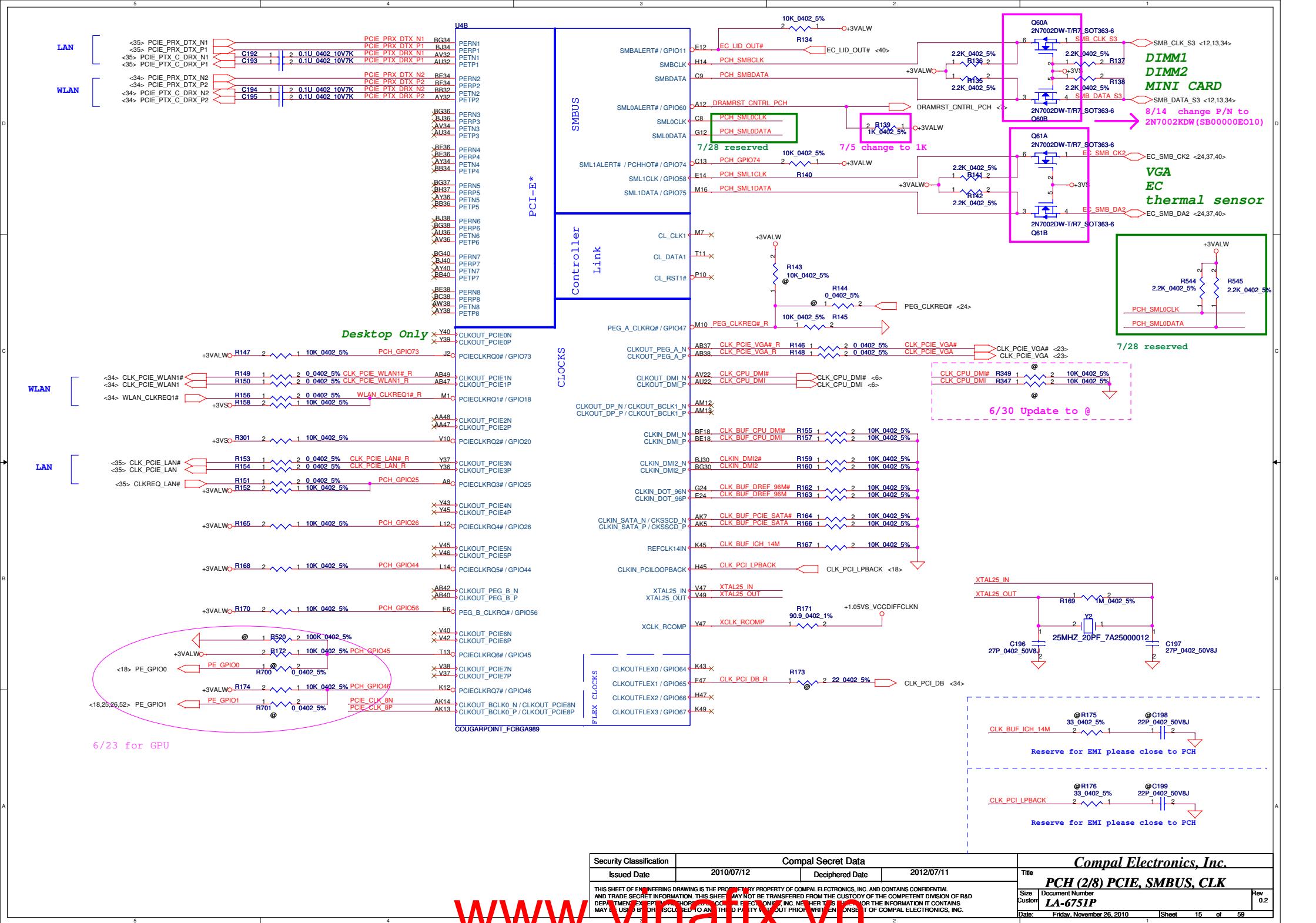
VDDQ (1.5V) =
3*330uF / 12m ohm (TOTAL FOR 2 SO-DIMMs)
6*0603 10uF (PER CONNECTOR)

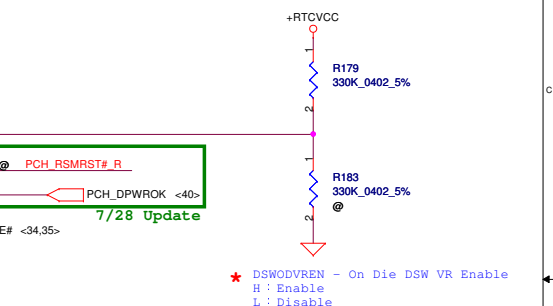
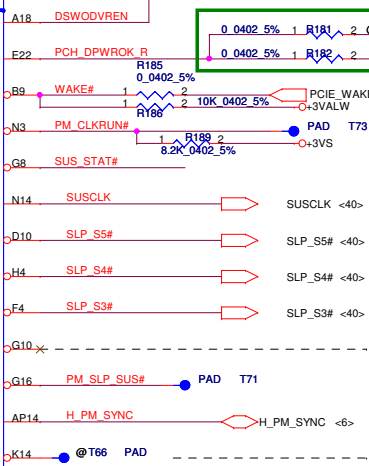
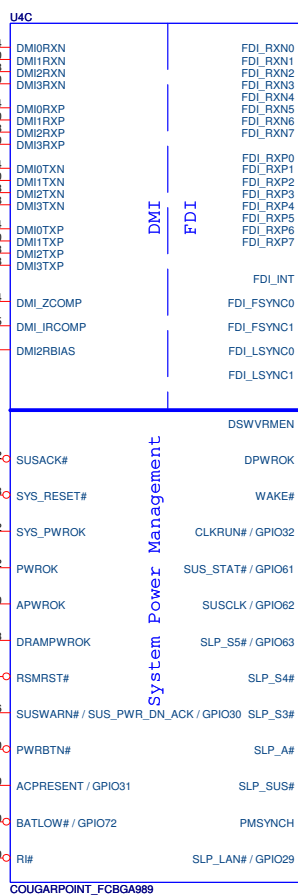
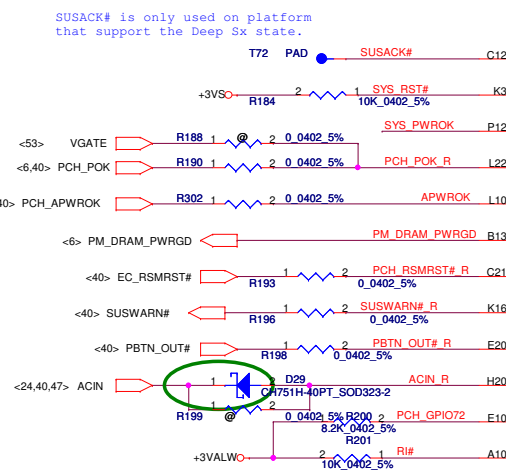
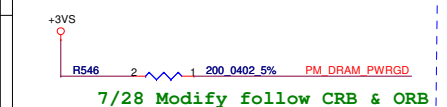
VTT (0.75V) =
3*0805 10uF 4*0402 1uF

1*0402 0.1uF 1*0402 2.2uF
VDDSPD (3.3V) =
1*0402 0.1uF 1*0402 2.2uF

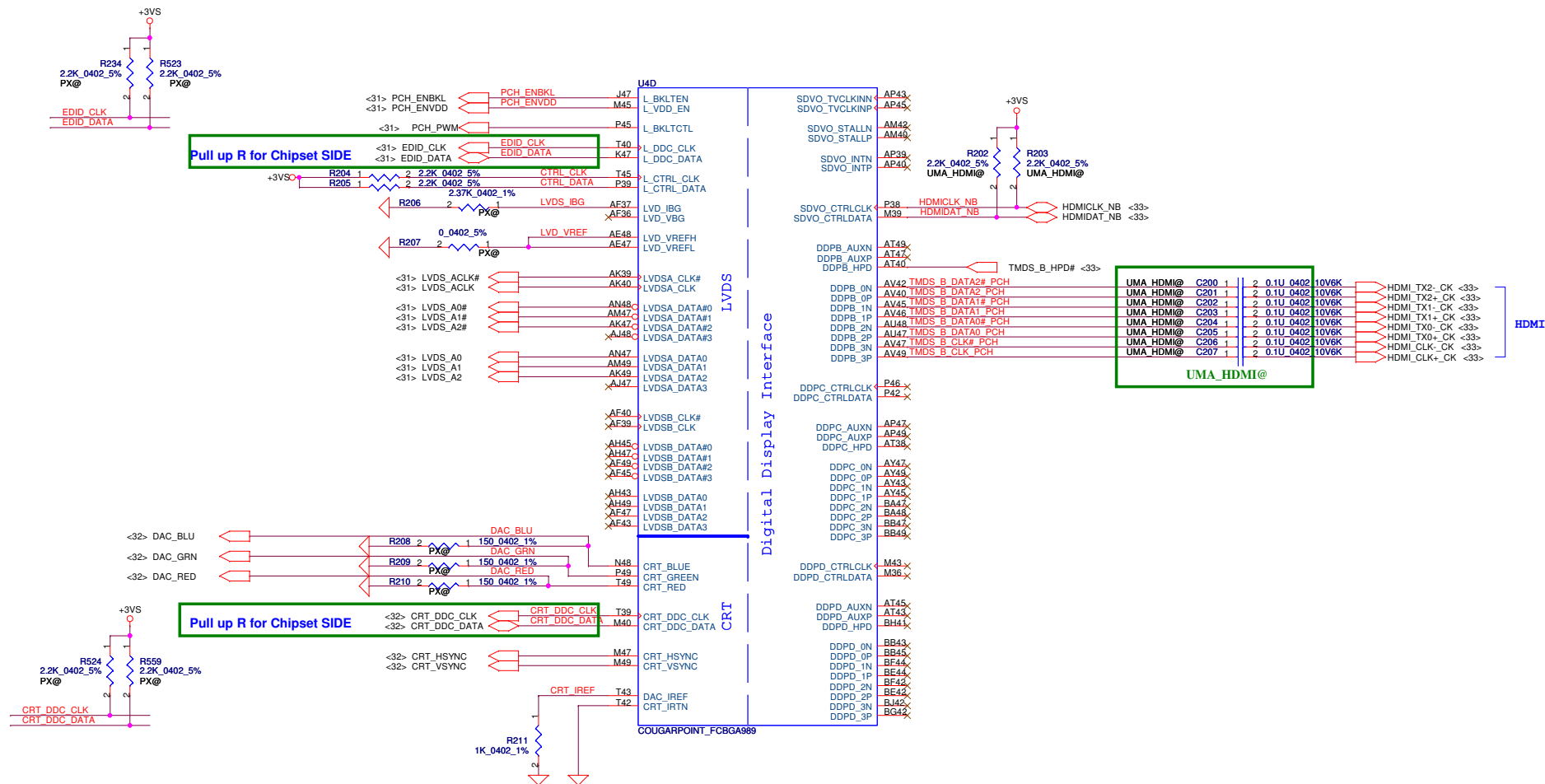
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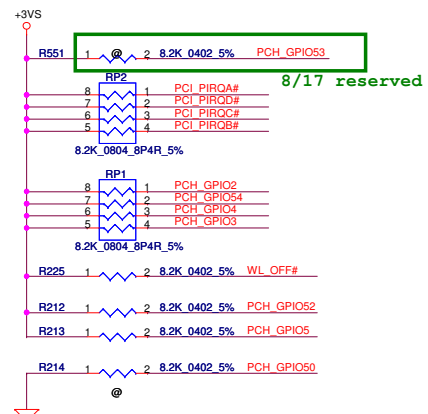




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Boot BIOS Strap bit1 BBS1

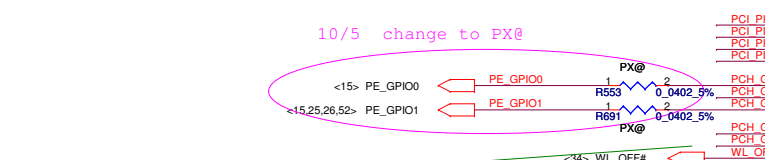
Bit11	Bit10	Destination
0	1	Reserved
1	0	Reserved
1	1	★ SPI (Default)
0	0	LPC

WL OFF# R215 1 2 1K 0402 5%

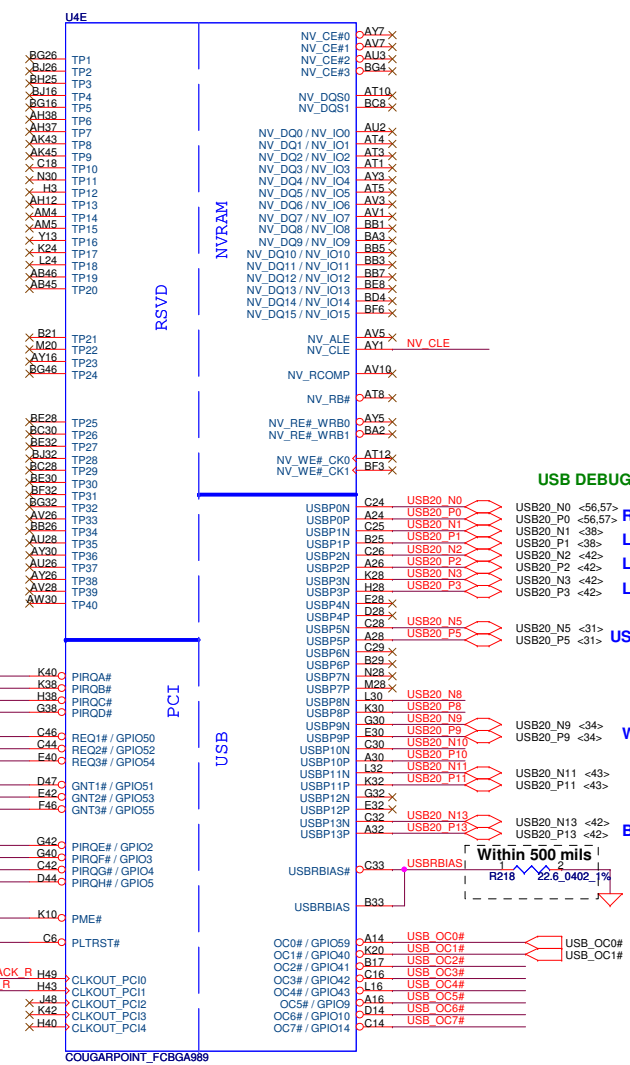
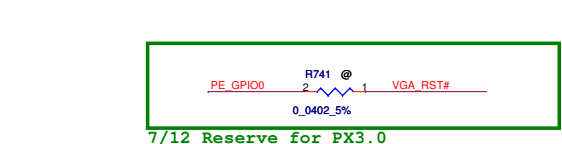
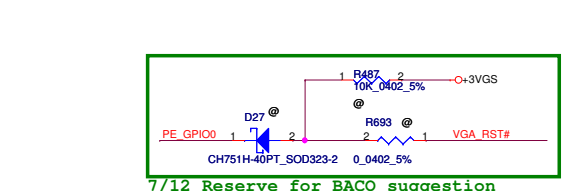
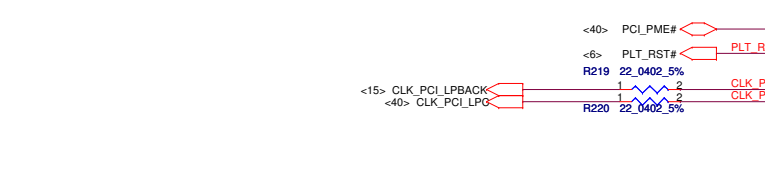
Al6 swap override Strap/Top-Block Swap Override jumper

Low=Al6 swap override/Top-Block Swap Override enabled	High=Default
★	

PCI_GNT13#



GPI053=This Signal has a weak internal pull-up.
NOTE: The internal pull-up is disabled after PLTRST# deasserts.



ICC_EN#
Integrated Clock Chip Enable
H ; Disable
L ; Enable
7/22 update to reserve only
R235 1 2 1K 0402 5% EC_SMI#
Weak internal pull-high

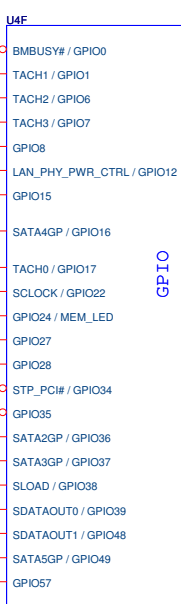
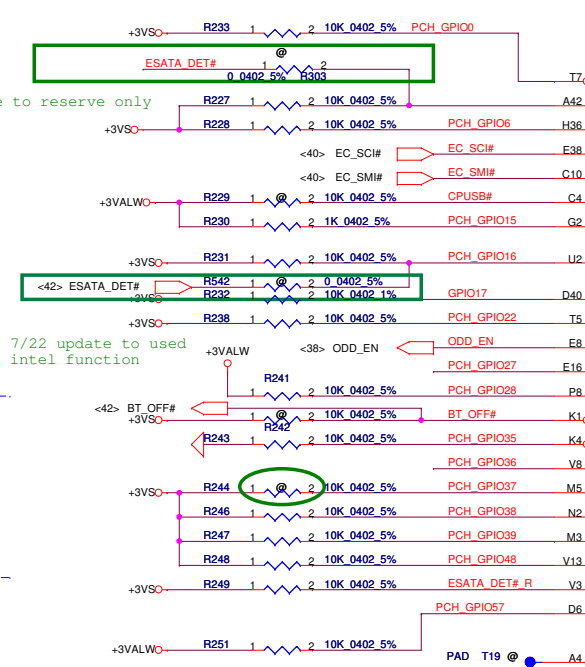
GPIO28
On-Die PLL Voltage Regulator
This signal has a weak internal pull up
H : On-Die voltage regulator enable
L : On-Die PLL Voltage Regulator disable
R240 1 2 1K 0402 5% PCH_GPIO28

PCH_GPIO27 (Have internal Pull-High)
High: VCCVRM VR Enable
Low: VCCVRM VR Disable
R245 1 2 1K 0402 5% PCH_GPIO27

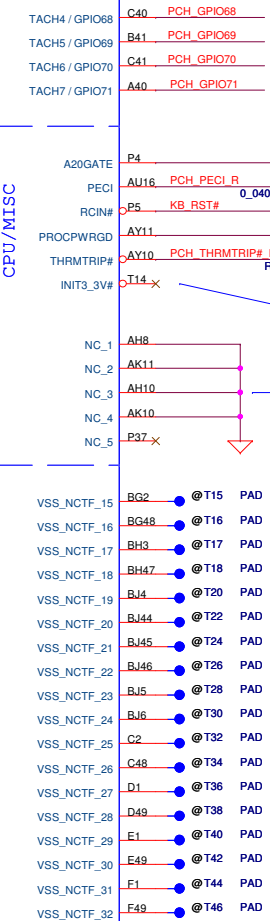
R250 1 2 1K 0402 5% PCH_GPIO36
R547 1 2 1K 0402 5%
8/5 update to pull down

R881 1 2 1K 0402 5% PCH_GPIO37

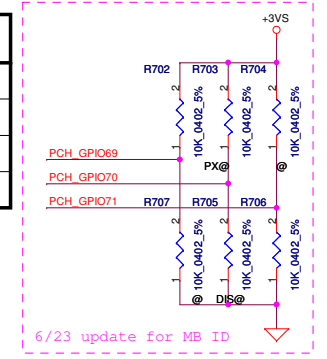
10/8 update to pull down for checklist Rev1.2



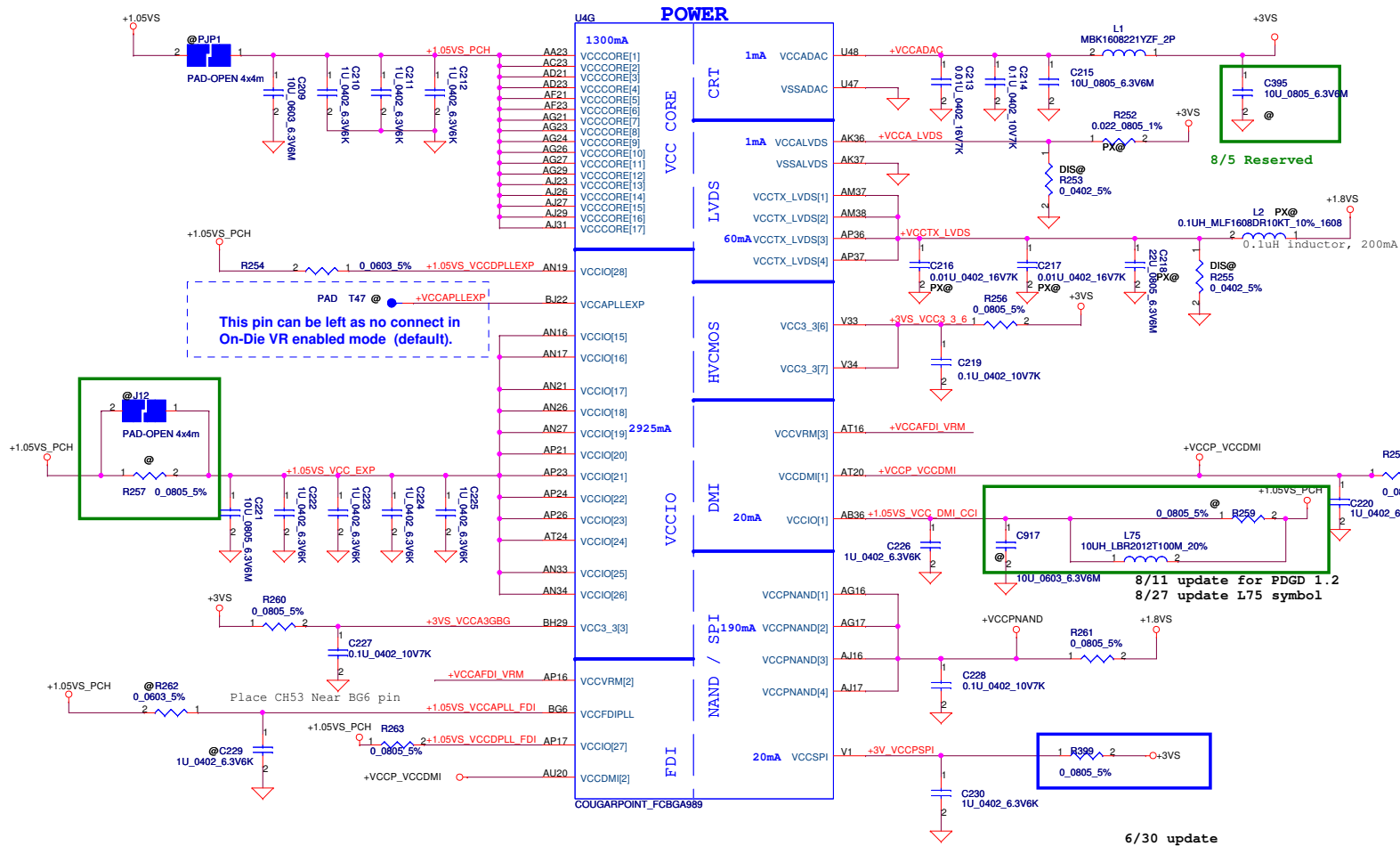
GPIO
CPU/MISC
NCTF



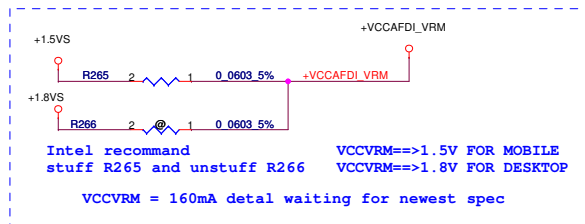
PCH_GPIO69	PCH_GPIO70	PCH_GPIO71	Function
0	0	0	UMA
1	0	0	DIS
0	1	0	PX3.0
1	1	0	PX4.0 *

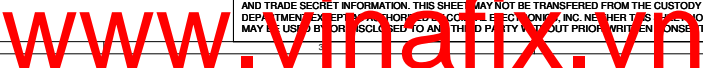


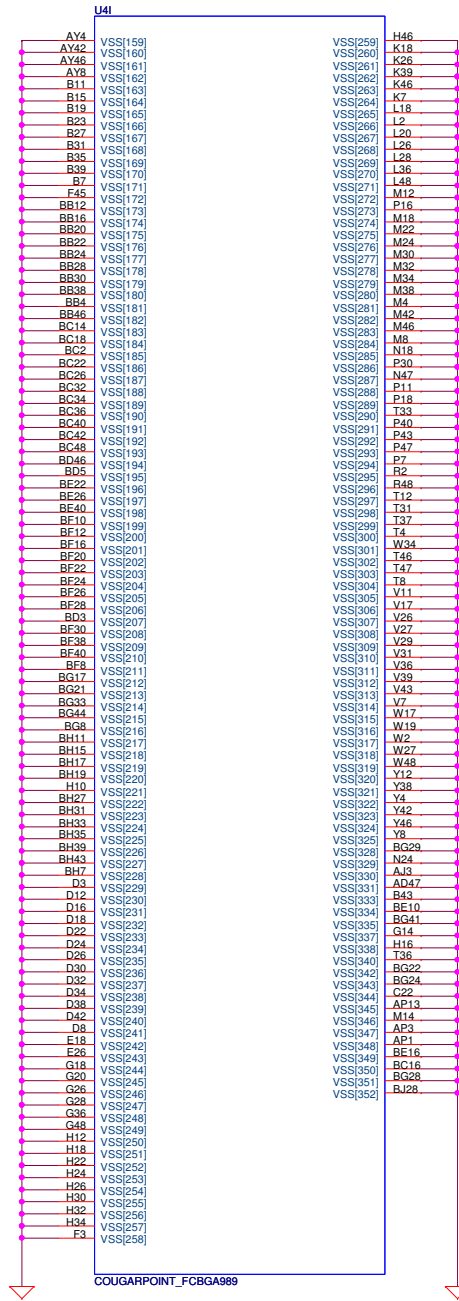
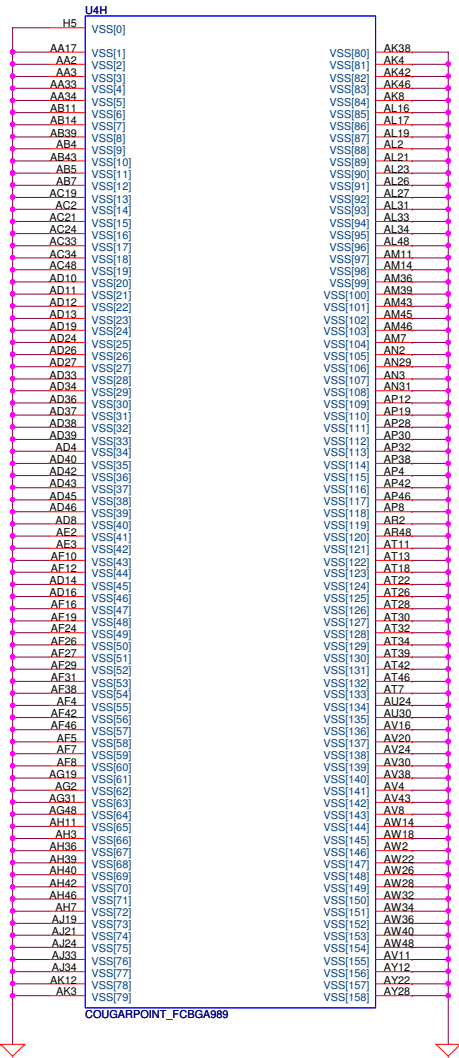
COUGARPOINT_FCBGA989



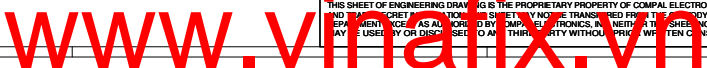
PCH Power Rail Table		
Voltage Rail	Voltage	SO Iccmax Current (A)
V_PROC_IO	1.05	0.001
V5REF	5	0.001
V5REF_Sus	5	0.001
Vcc3_3	3.3	0.266
VccADAC	3.3	0.001
VccADPLLA	1.05	0.08
VccADPLLB	1.05	0.08
VccCore	1.05	1.3
VccDMI	1.05	0.042
VccIO	1.05	2.925
VccASW	1.05	1.01
VccSPI	3.3	0.02
VccDSW	3.3	0.003
VccpNAND	1.8	0.19
VccRTC	3.3	6 uA
VccSus3_3	3.3	0.119
VccSusHDA	3.3 / 1.5	0.01
VccVRM	1.8 / 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

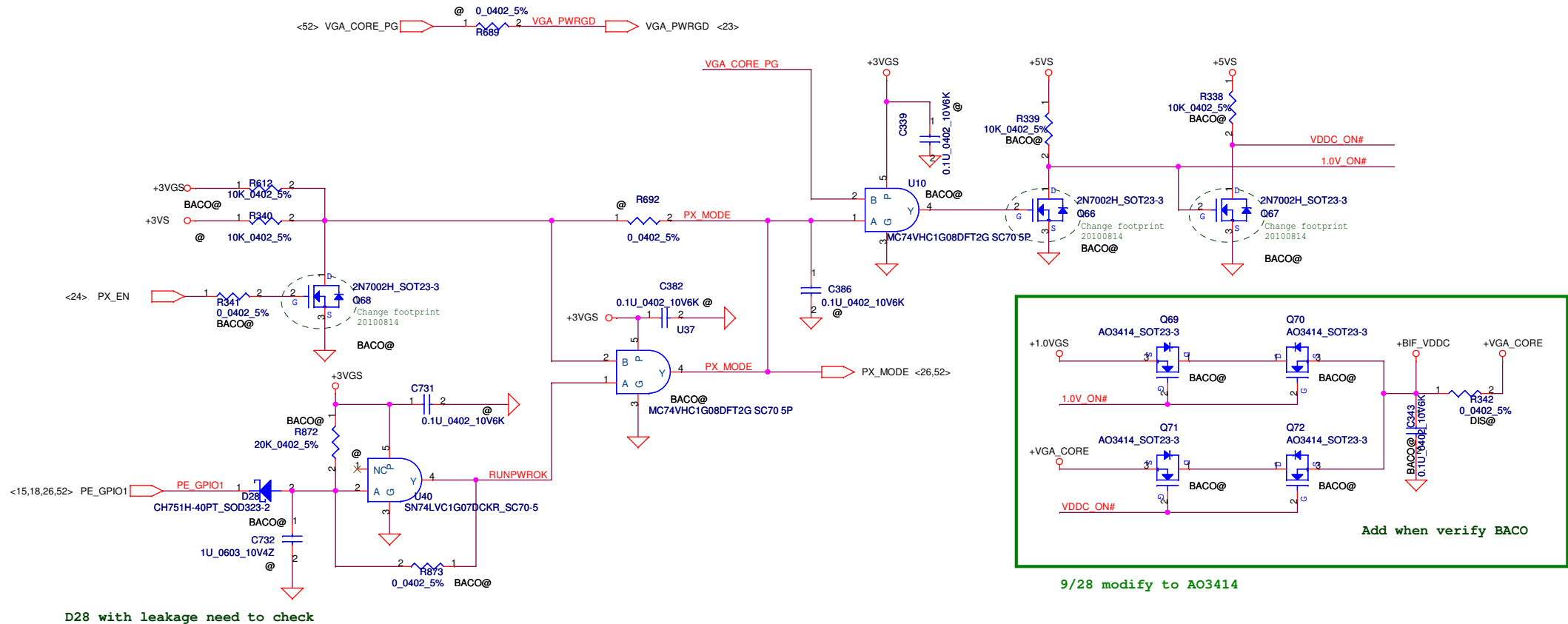






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Size	Custom	Document Number	LA-6751P	Rev	0.2
Date:	Friday, November 26, 2010	Sheet	22	of	59

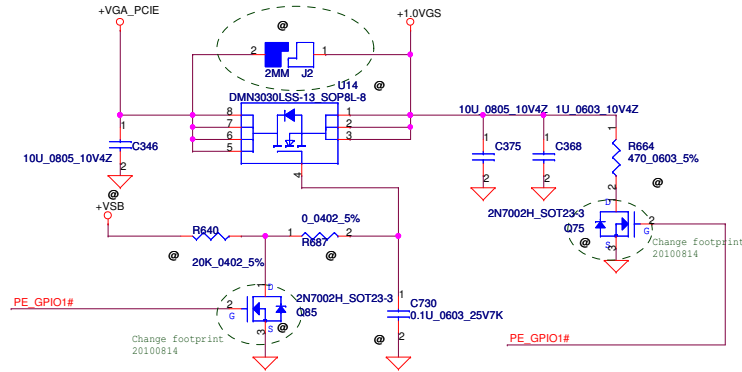




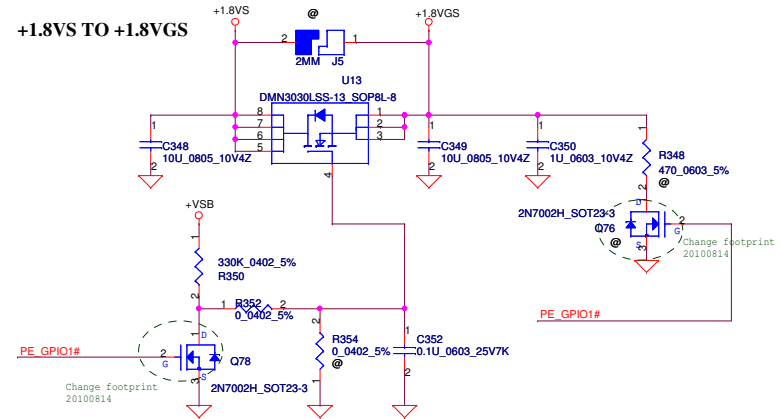
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Size B		Document Number			Rev 0.1
Date:		Friday, November 26, 2010			Sheet 25 of 59

+VGA_PCIE TO +1.0VGS

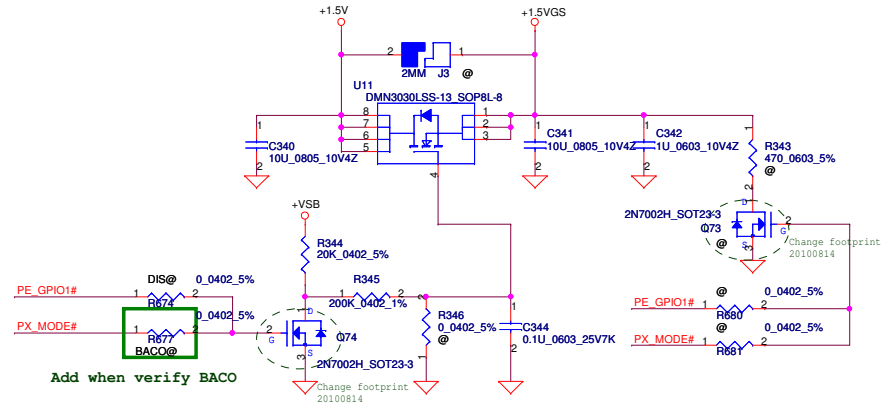
Short J2 for control sequence at PWM



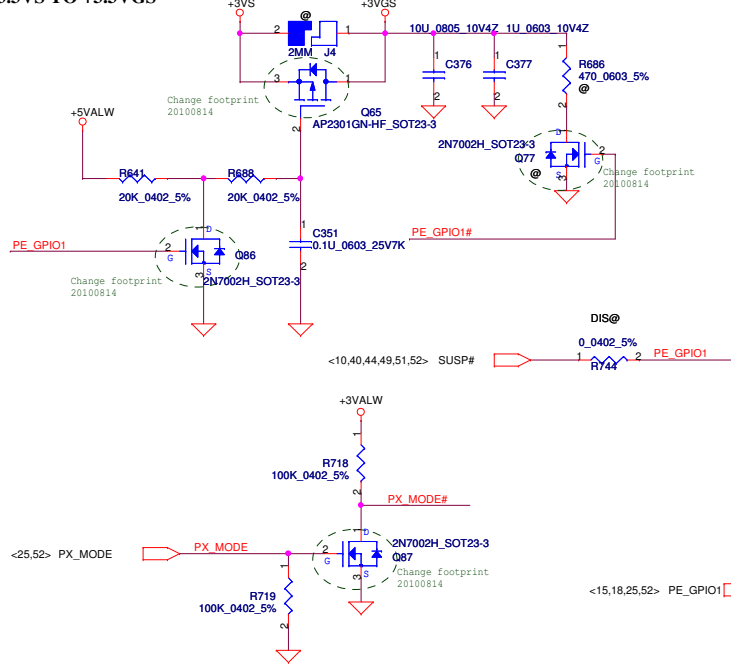
+1.8VS TO +1.8VGS



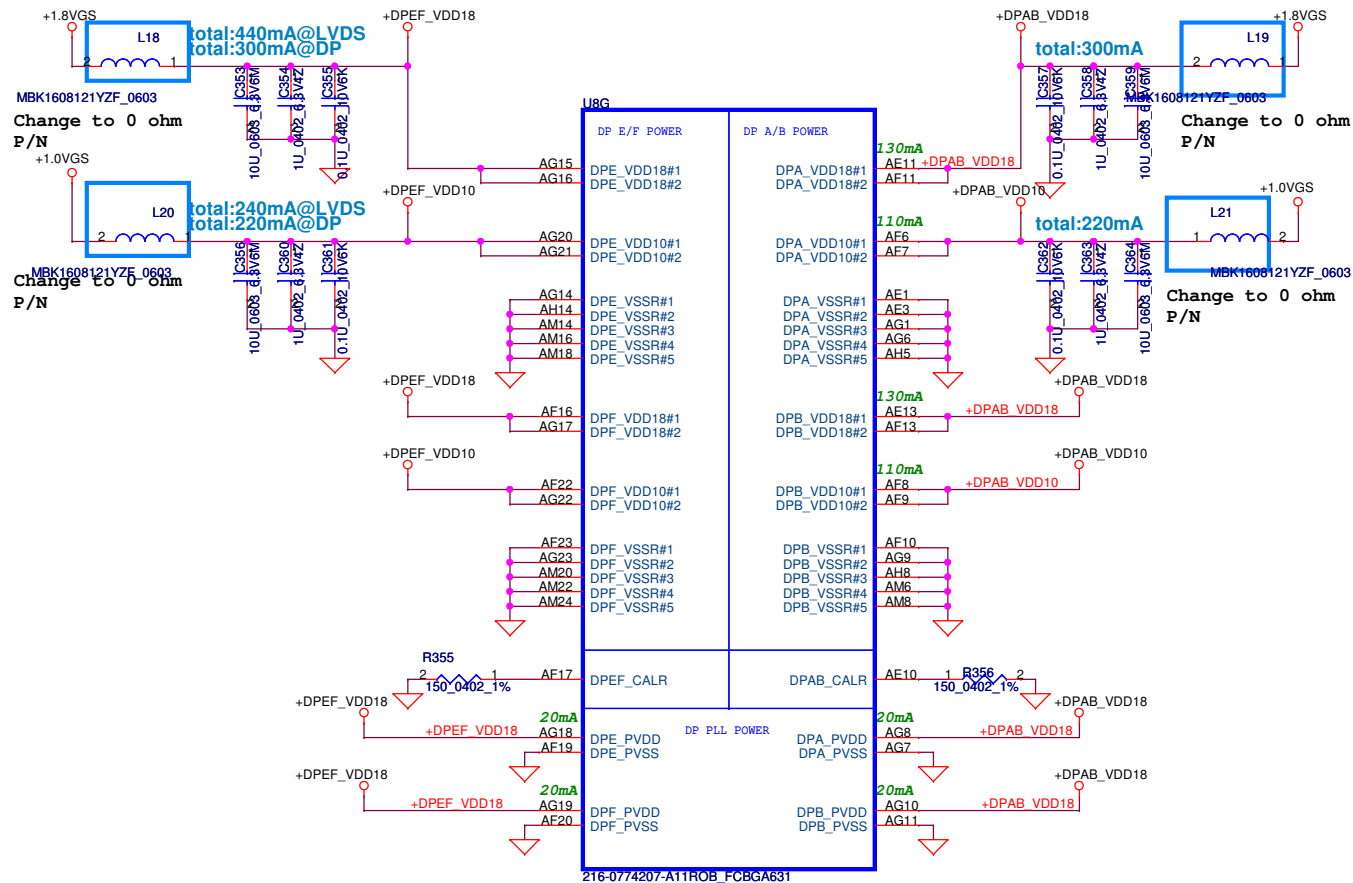
+1.5VS TO +1.5VGS



+3.3VS TO +3.3VGS

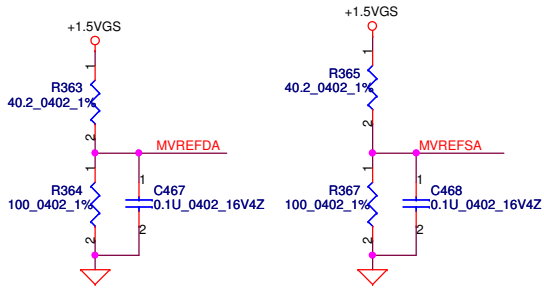


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Size		Document Number		Rev	
Custom		LA-6751P		0.1	
Date:		Friday, November 26, 2010		Sheet 26 of 59	



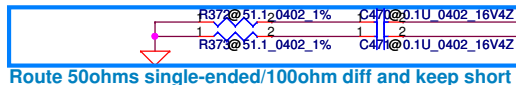
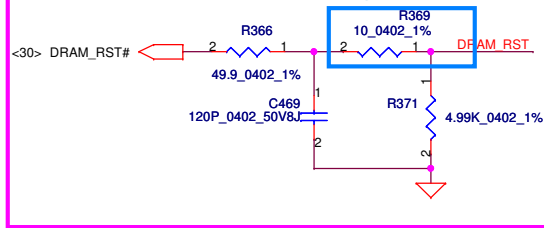
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				Size B	Document Number
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				Rev	0.1

<30> M_DA[63..0] M_DA[63..0]
<30> M_MA[13..0] M_MA[13..0]
<30> M_DQM[7..0] M_DQM[7..0]
<30> M_DQS[7..0] M_DQS[7..0]
<30> M_DQS#[7..0] M_DQS#[7..0]

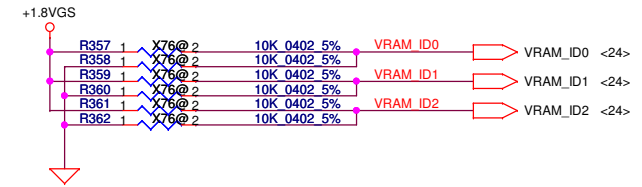
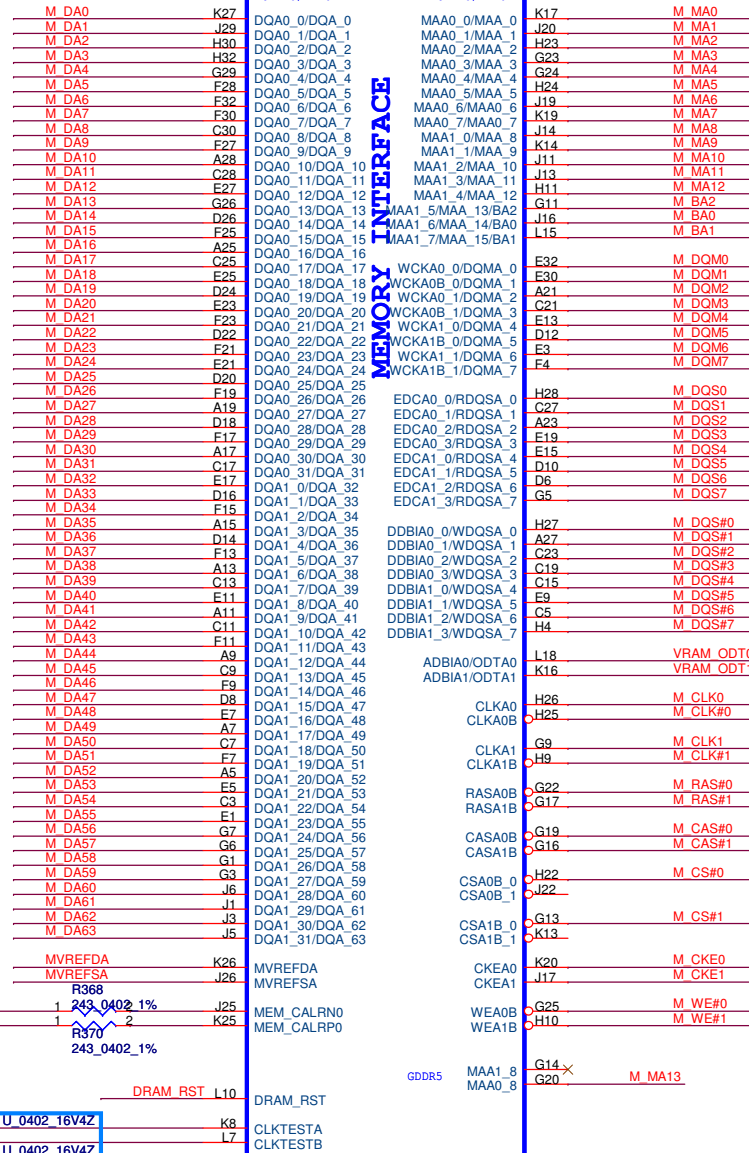


PARK SCL has different
recommand

9/28 change P/N to SD034100A80



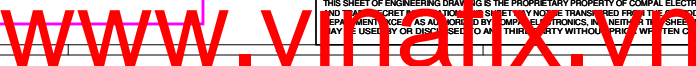
Route 50ohms single-ended/100ohm diff and keep short
debug only, for clock observation,if not need,
DNI.



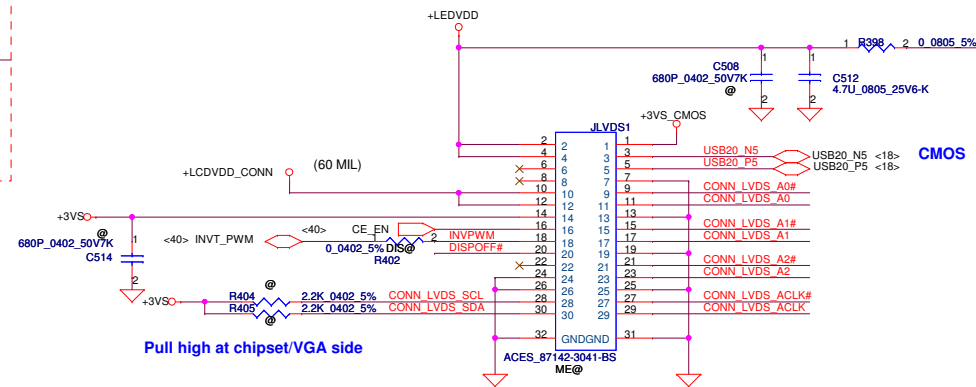
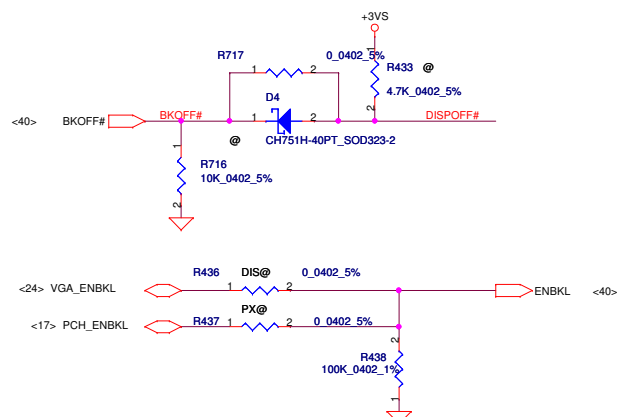
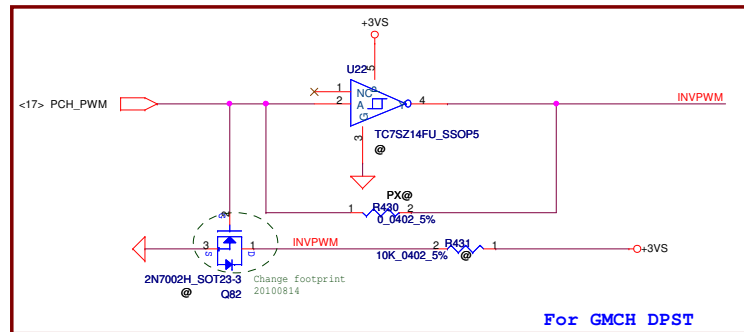
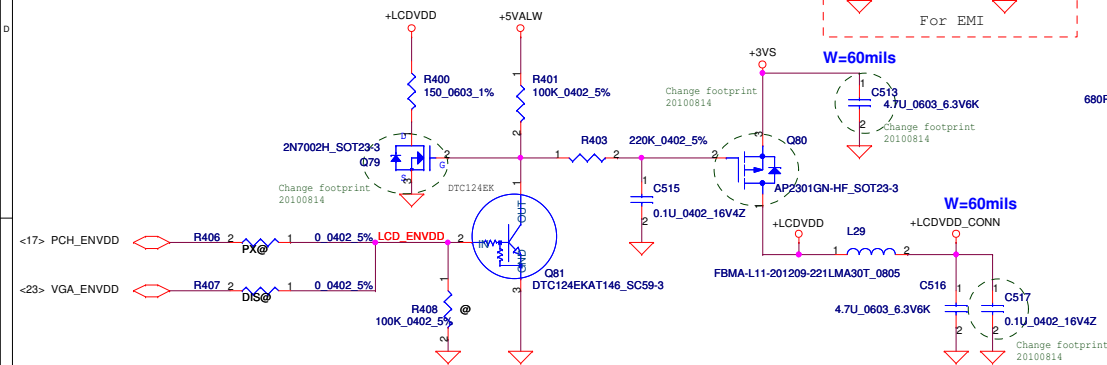
Vendor	VRAM_ID0	VRAM_ID1	VRAM_ID2
Hynix 512MB PN:SA000032460	R357	R360	R362
Samsung 512MB PN:SA000035700	R358	R359	R362
Hynix 1GB PN:SA00003VS20	R357	R360	R361
Samsung 1GB PN:SA00003MQ20	R358	R359	R361

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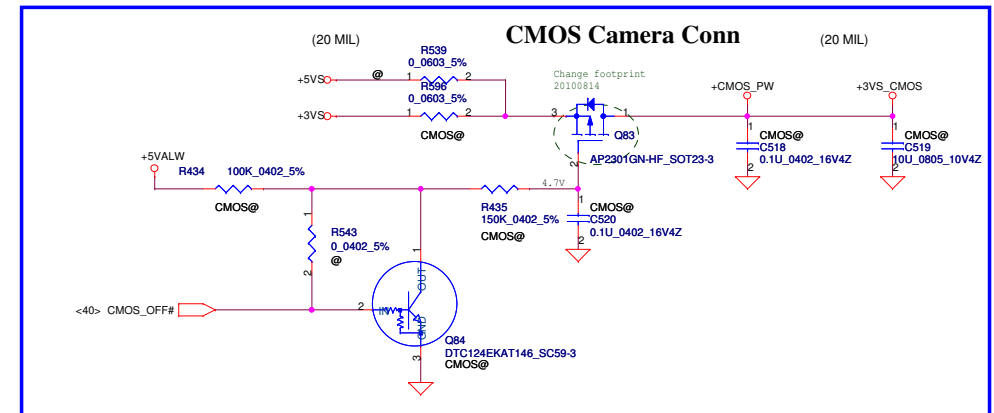
Compal Electronics, Inc.			
RobsonXT-S3 MEM Interface			
Size B	Document Number		Rev 0.2
Date:	Friday, November 26, 2010		Sheet 29 of 59



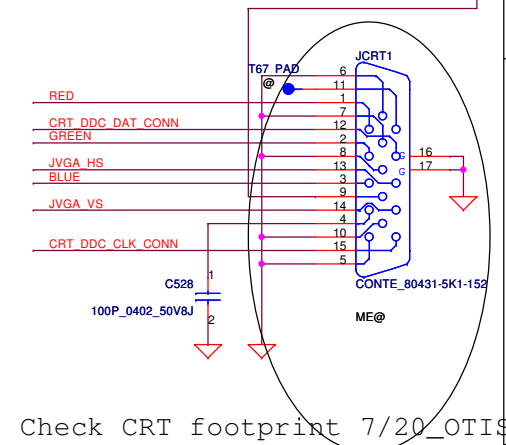
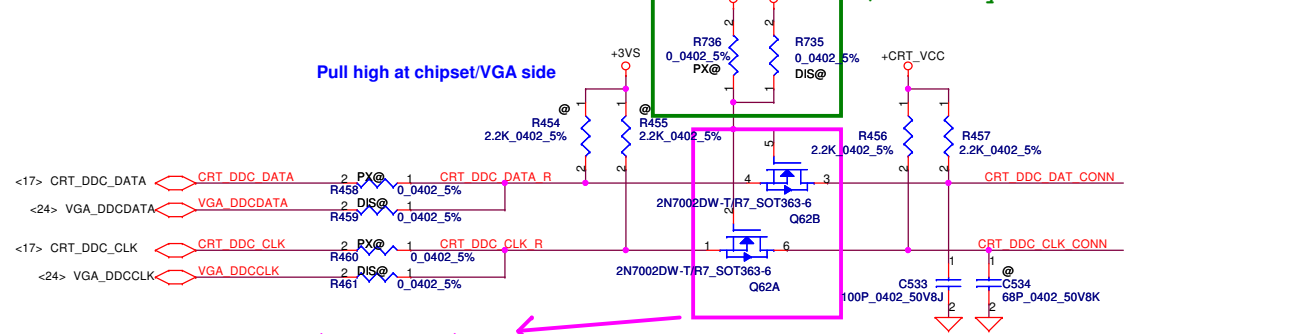
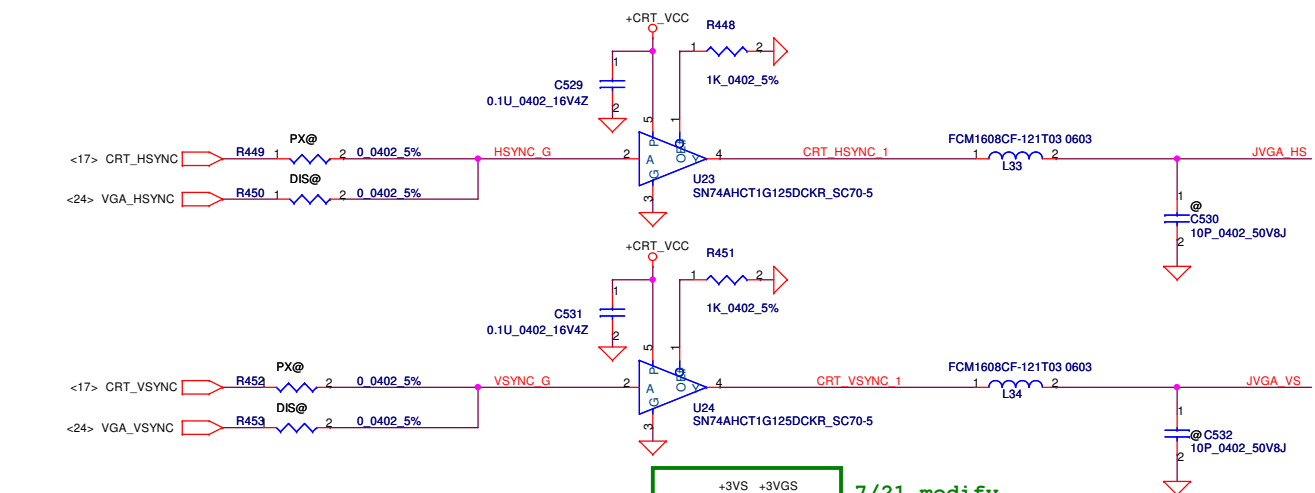
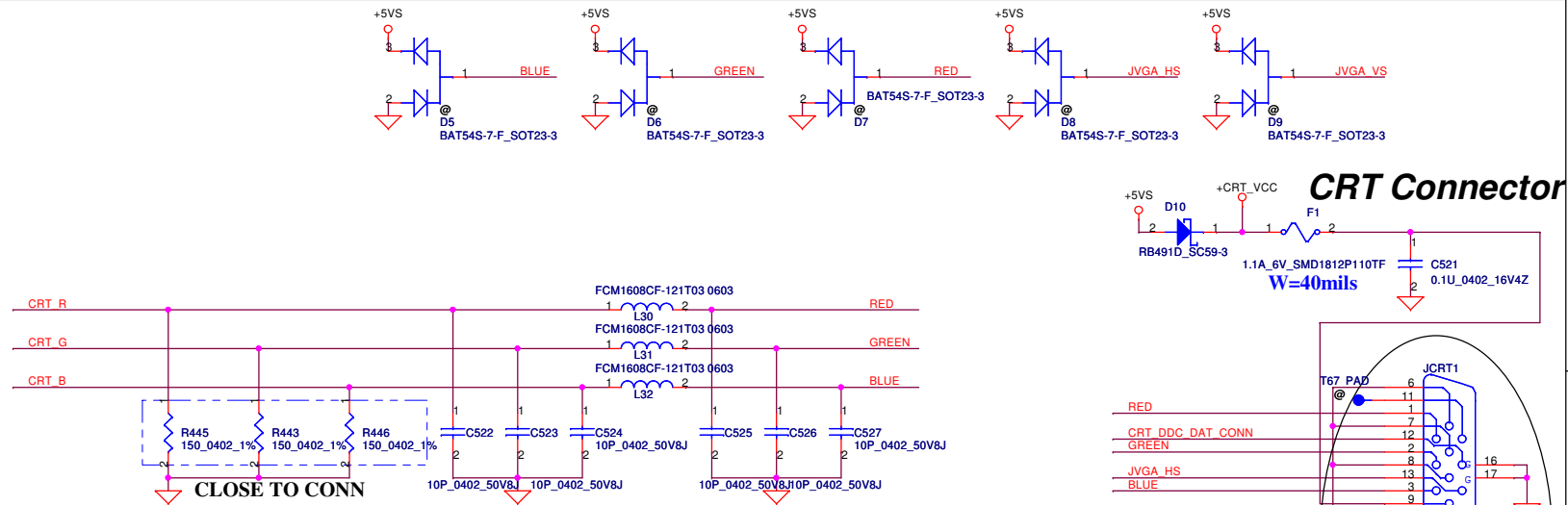
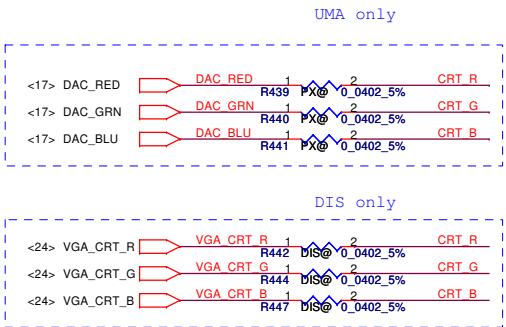
LCD POWER CIRCUIT



- | | | | | | | | | |
|---------------------|----------------|--------|----|---|------|---|------|-----------------|
| <24> VGA_LVDS_SCL | VGA LVDS SCL | 0.0402 | 5% | 2 | DIS0 | 1 | R409 | CONN LVDS SCL |
| <24> VGA_LVDS_SDA | VGA LVDS SDA | 0.0402 | 5% | 2 | DIS0 | 1 | R410 | CONN LVDS SDA |
| <23> VGA_LVDS_A0 | VGA LVDS A0# | 0.0402 | 5% | 2 | DIS0 | 1 | R411 | CONN LVDS A0 |
| <23> VGA_LVDS_A0# | VGA LVDS A0# | 0.0402 | 5% | 2 | DIS0 | 1 | R412 | CONN LVDS A0# |
| <23> VGA_LVDS_A1 | VGA LVDS A1 | 0.0402 | 5% | 2 | DIS0 | 1 | R413 | CONN LVDS A1 |
| <23> VGA_LVDS_A1# | VGA LVDS A1# | 0.0402 | 5% | 2 | DIS0 | 1 | R414 | CONN LVDS A1# |
| <23> VGA_LVDS_A2 | VGA LVDS A2# | 0.0402 | 5% | 2 | DIS0 | 1 | R415 | CONN LVDS A2 |
| <23> VGA_LVDS_A2# | VGA LVDS A2# | 0.0402 | 5% | 2 | DIS0 | 1 | R416 | CONN LVDS A2# |
| <23> VGA_LVDS_ACLK | VGA LVDS ACLK | 0.0402 | 5% | 2 | DIS0 | 1 | R417 | CONN LVDS ACLK |
| <23> VGA_LVDS_ACLK# | VGA LVDS ACLK# | 0.0402 | 5% | 2 | DIS0 | 1 | R418 | CONN LVDS ACLK# |
| <17> EDID_CLK | EDID_CLK | 0.0402 | 5% | 2 | PXG0 | 1 | R419 | CONN LVDS SCL |
| <17> EDID_DATA | EDID_DATA | 0.0402 | 5% | 2 | PXG0 | 1 | R420 | CONN LVDS SDA |
| <17> LVDS_A0 | LVDS A0# | 0.0402 | 5% | 2 | PXG0 | 1 | R421 | CONN LVDS A0 |
| <17> LVDS_A0# | LVDS A0# | 0.0402 | 5% | 2 | PXG0 | 1 | R422 | CONN LVDS A0# |
| <17> LVDS_A1 | LVDS A1# | 0.0402 | 5% | 2 | PXG0 | 1 | R423 | CONN LVDS A1 |
| <17> LVDS_A1# | LVDS A1# | 0.0402 | 5% | 2 | PXG0 | 1 | R424 | CONN LVDS A1# |
| <17> LVDS_A2 | LVDS A2# | 0.0402 | 5% | 2 | PXG0 | 1 | R425 | CONN LVDS A2 |
| <17> LVDS_A2# | LVDS A2# | 0.0402 | 5% | 2 | PXG0 | 1 | R427 | CONN LVDS A2# |
| <17> LVDS_ACLK | LVDS ACLK | 0.0402 | 5% | 2 | PXG0 | 1 | R428 | CONN LVDS ACLK |
| <17> LVDS_ACLK# | LVDS ACLK# | 0.0402 | 5% | 2 | PXG0 | 1 | R429 | CONN LVDS ACLK# |



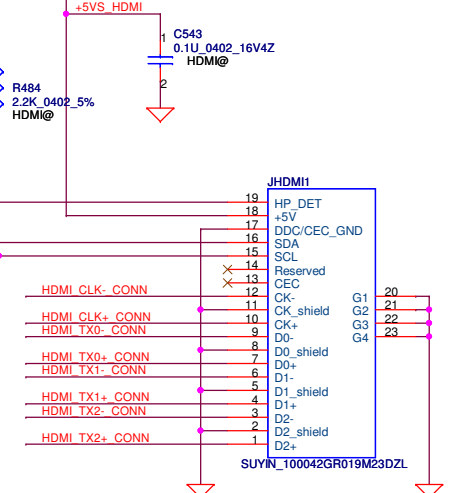
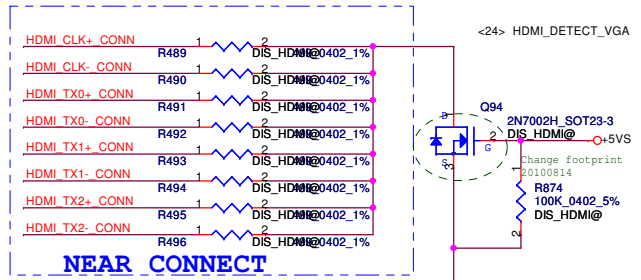
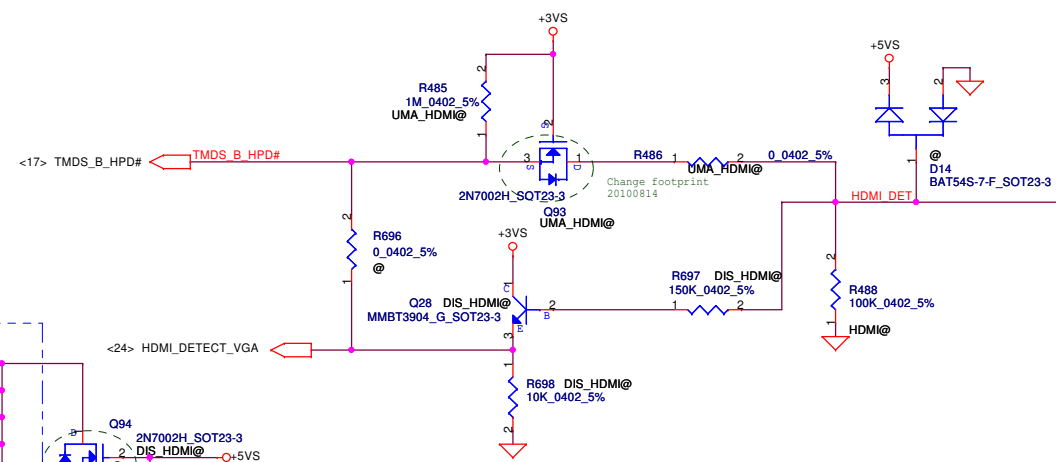
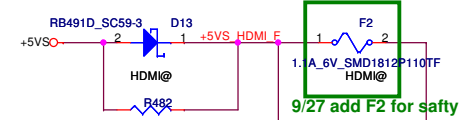
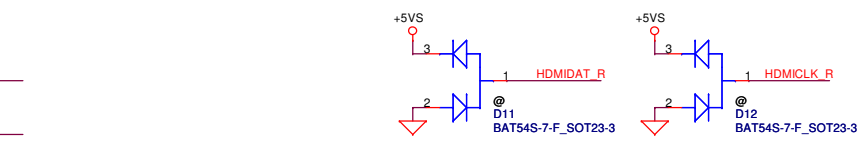
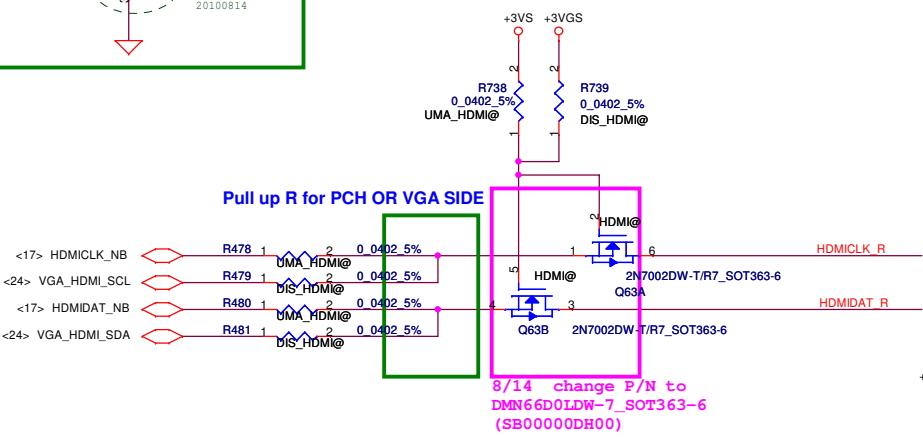
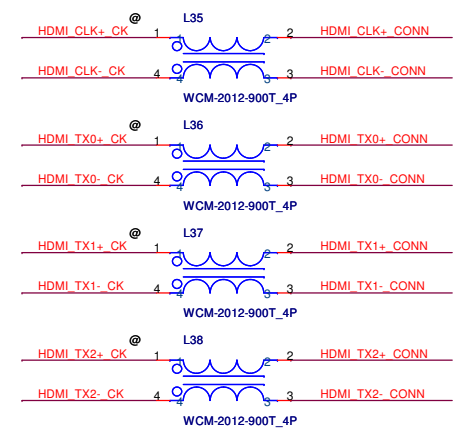
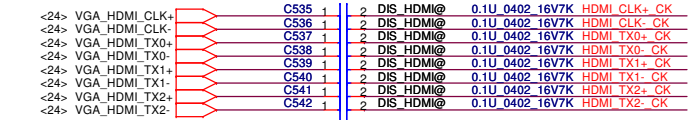
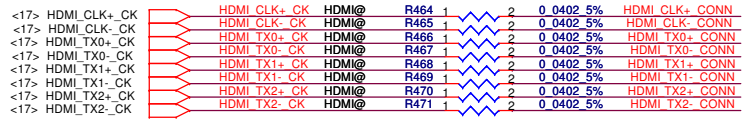
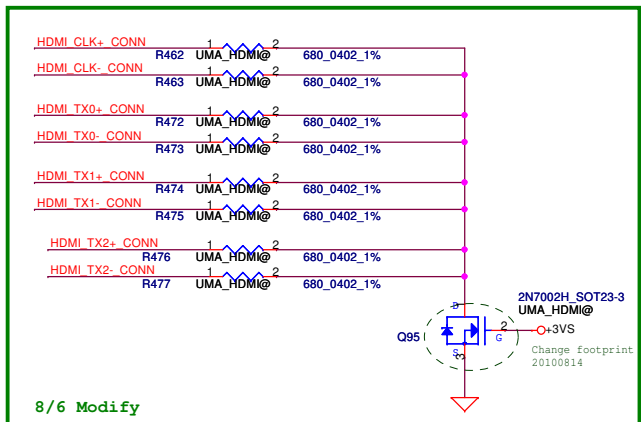
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Check CRT footprint 7/20_OTIS

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Size		Document Number		Rev	
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Date:		Friday, November 26, 2010		Sheet 32 of 59	

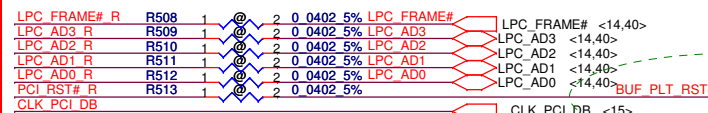
www.vinafix.vn



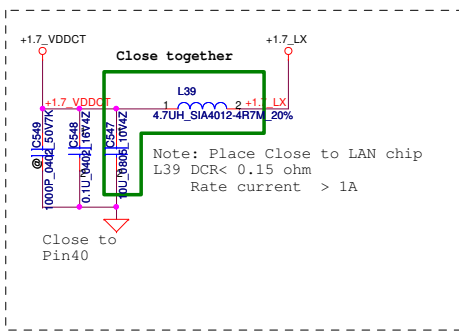
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Date		Friday, November 26, 2010		Sheet	33 of 59

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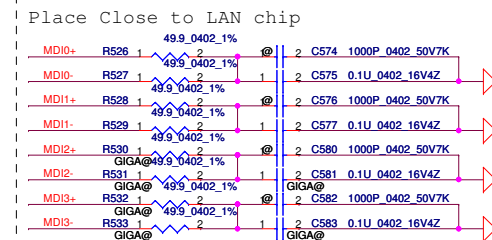
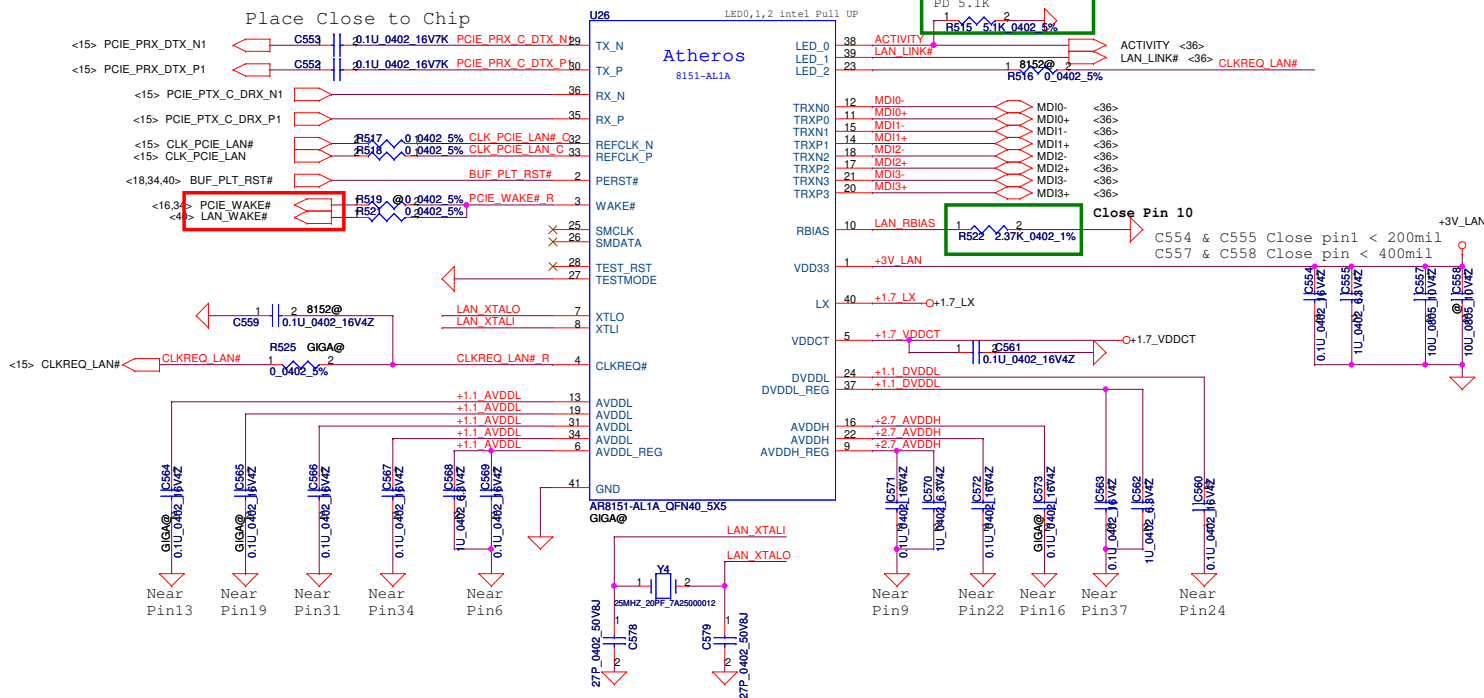
Mini-Express Card(WLAN/WiMAX)



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Power On strapping		
Pin	Description	Chip Default
LED0	H:Over Clock Enable L:Over Clock Disable *	H
LED2	H:SWR Switch mode regulator Select AR8151 Pin23=LED2. AR8152, Pin23 is CLKREQ	--

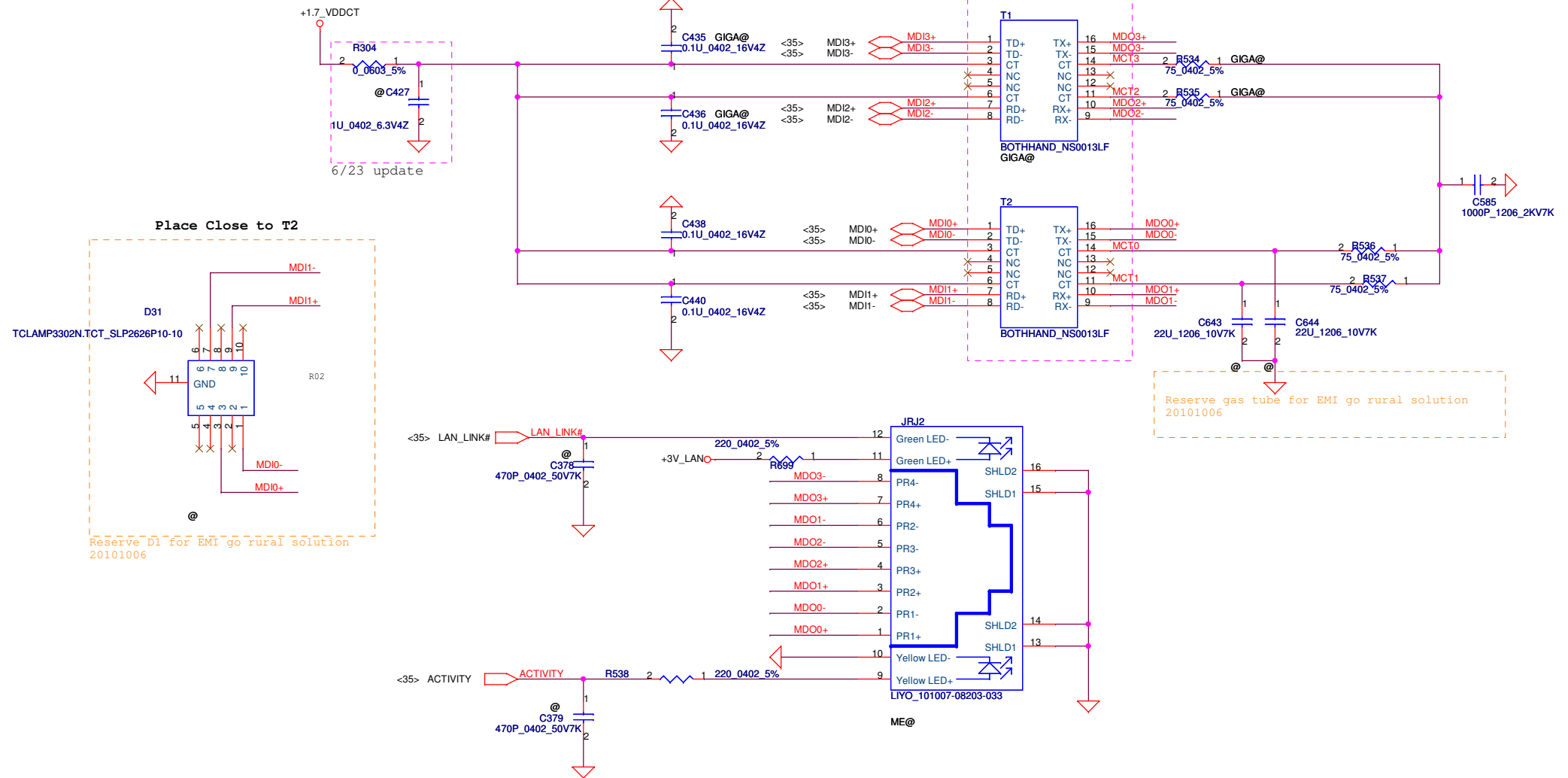


¹ Note 2 : C574, C576, C580, C582, reserved for EMI.

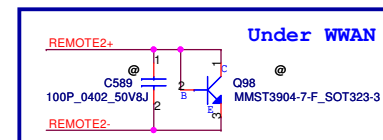
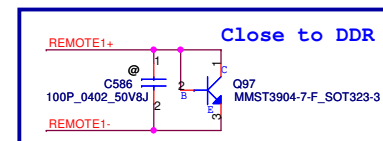
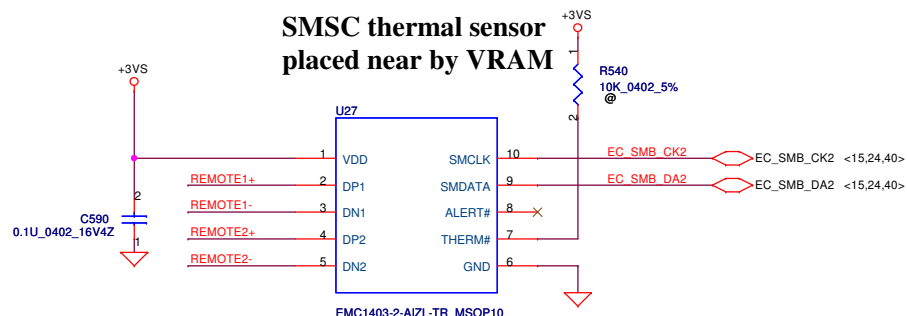
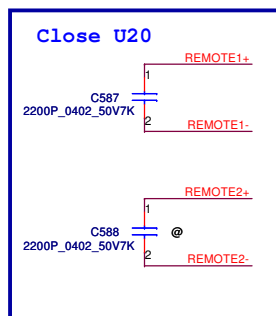
	Pin4	Configure			Pin23	Configure
		R525	C559			
AR8152	VDDCT_REG		★		CLKREQn	★
AR8151	CLKREQn	★			LED[2]	

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				Size	Document Number	Rev
				Custom	LA-6751P	0.1
Date:	Friday, November 26, 2010		Sheet	35	of	59

8/23 Change T1,T2 P/N to SP050006E00

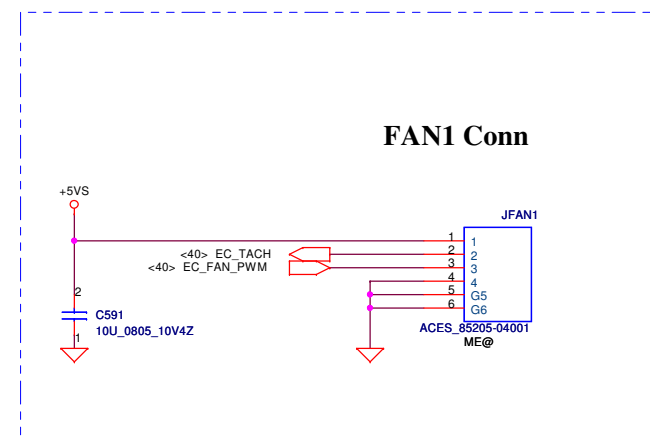


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Size	Document Number	LA-6751P		Rev	0.2
Date:	Friday, November 26, 2010	Sheet	36	of	59



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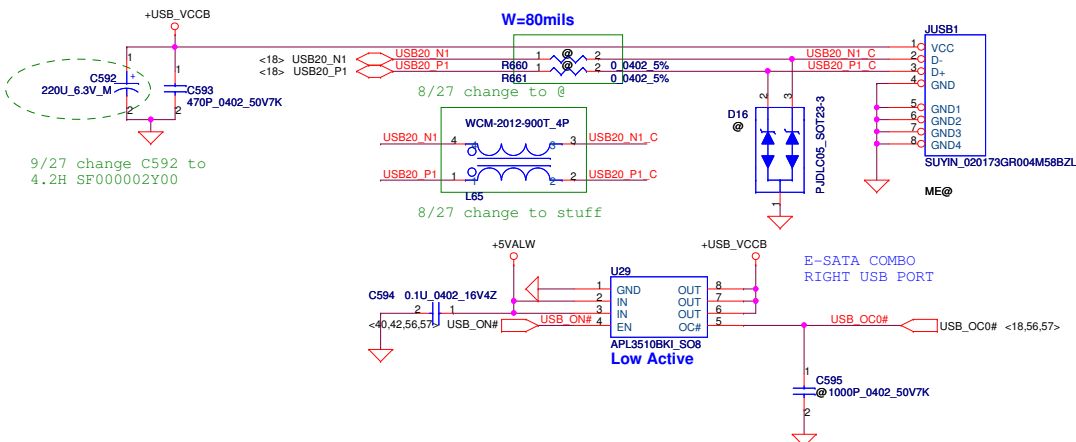
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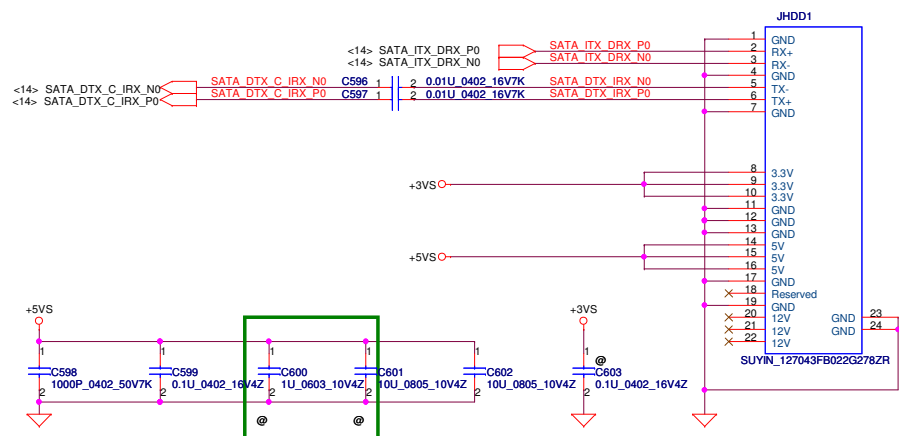
Security Classification		Compal Secret Data		Compal Electronics, Ltd.	
Issued Date	2010/07/12	Deciphered Date	2012/07/11	Title	EMC1403 Thermal sensor/FAN
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				Date: Friday, November 26, 2010	Sheet 37 of 59

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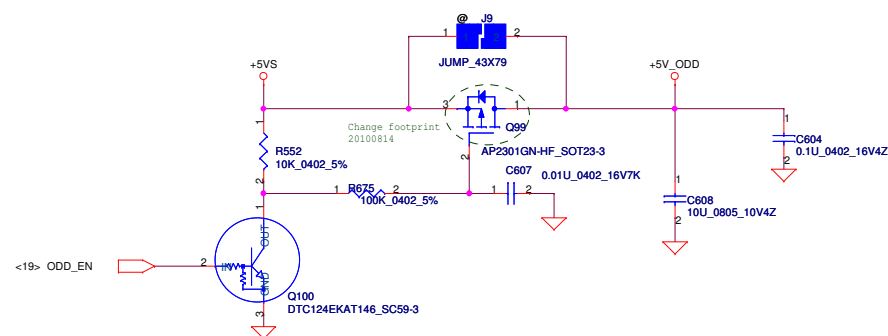
Left USB Conn.



SATA HDD Conn.

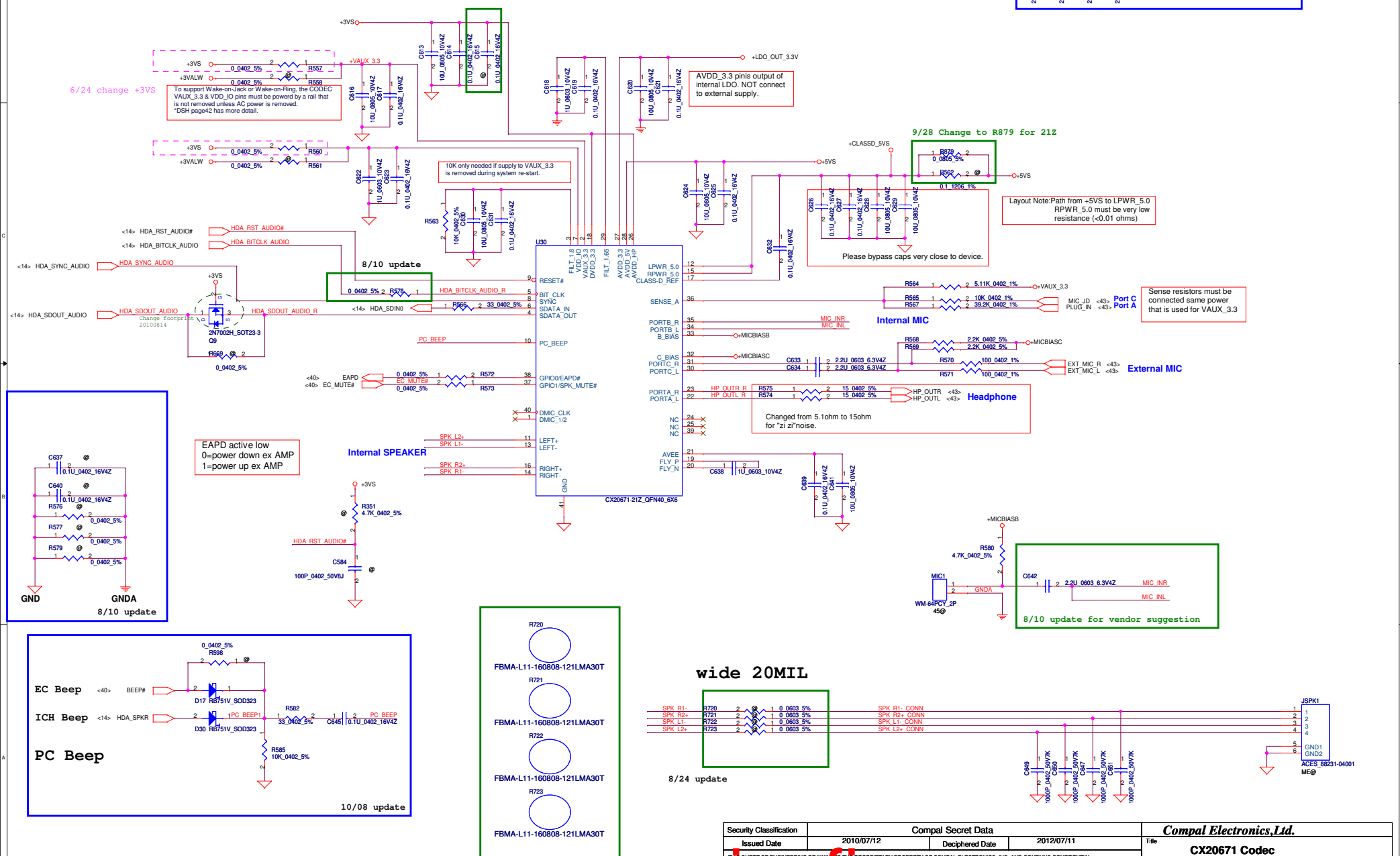
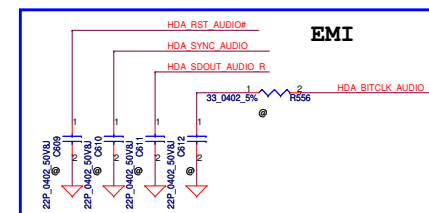


ODD Power Control

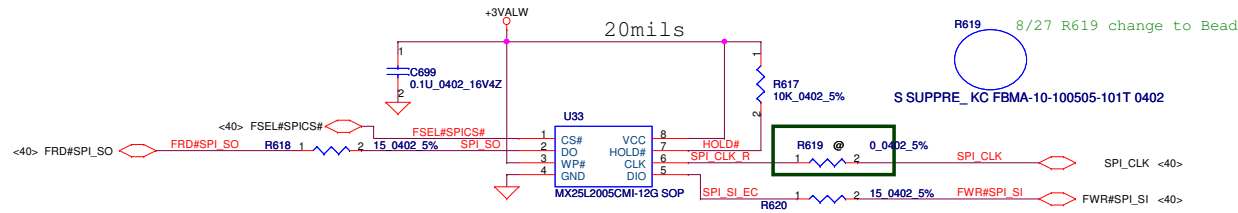


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								Size B		Document Number		Rev 0.2	
										LA-6751P			
								Date:		Friday, November 26, 2010		Sheet 38 of 59	

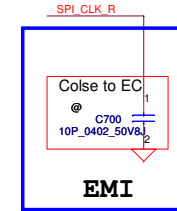
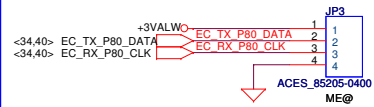
9/27 Update U30 P/N to SA00003K410



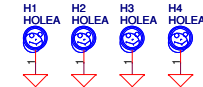
FOR EC 128KB SPI ROM
(150mil PACKAGE)
SA00003FL10
SA00003JD00



EC DEBUG PORT



H_3P8



H_3P3



H_3P0x4P5N



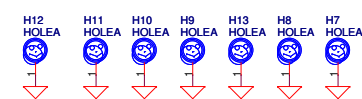
H_3P0N



H_6P0



H_2P8

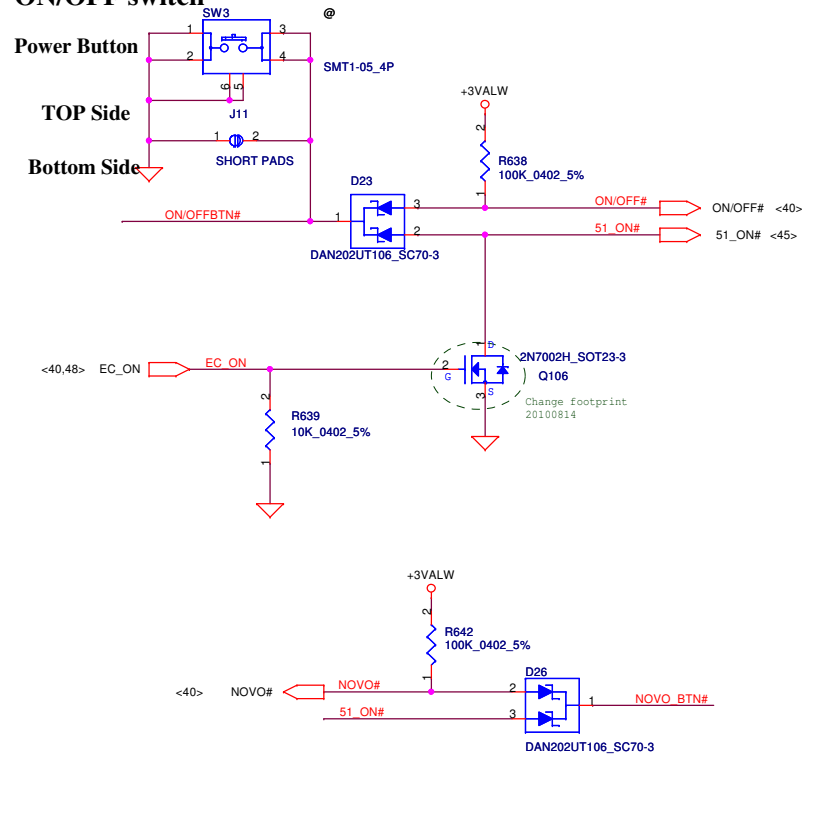


H_5P5N

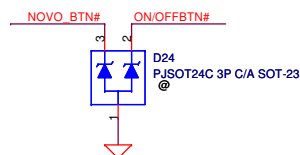
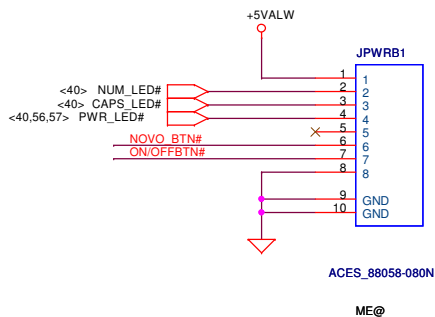


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				Date:	Friday, November 26, 2010
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ON/OFF switch



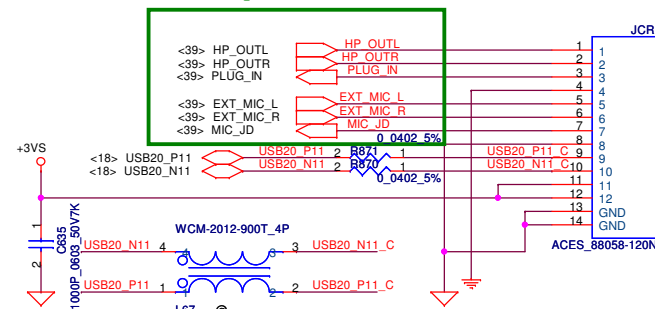
Power Bottom Board Conn. 8pin



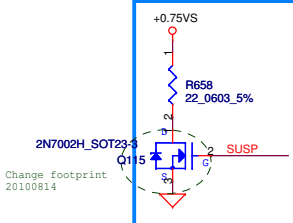
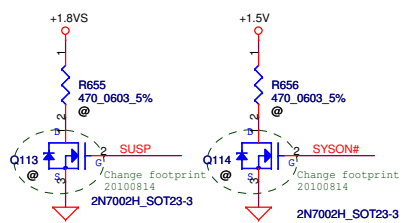
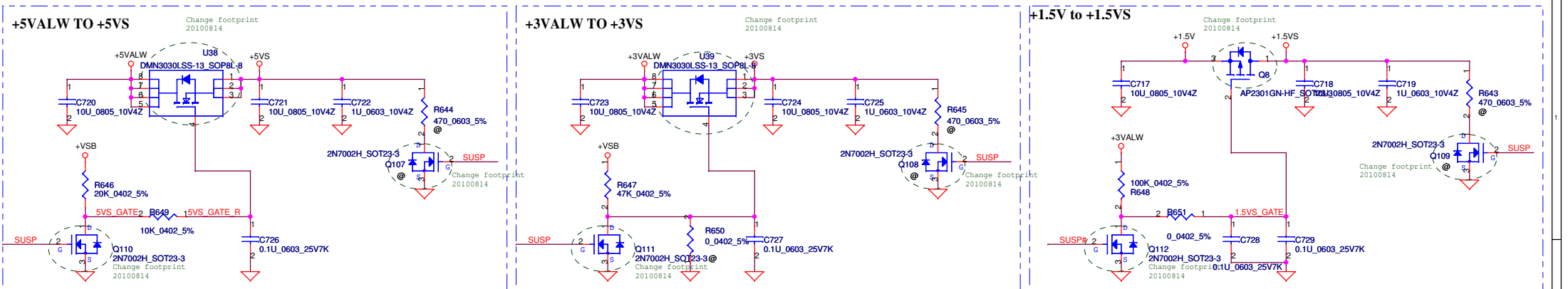
EMI REQUEST 1ST = SCA00000E00
2ST = SCA00000R00

Card Reader/Audio Jack SB CONN

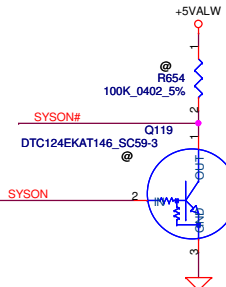
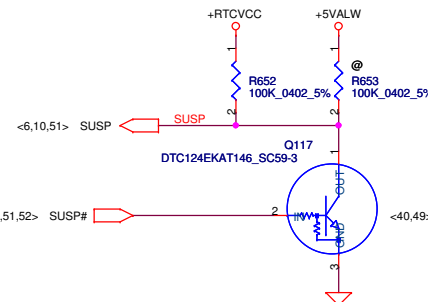
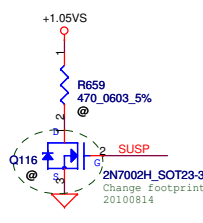
8/5 modify



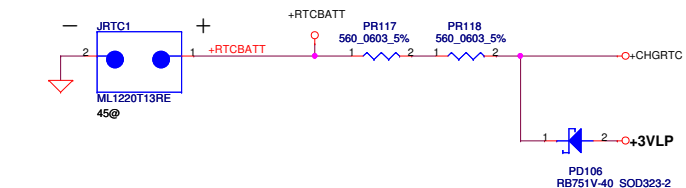
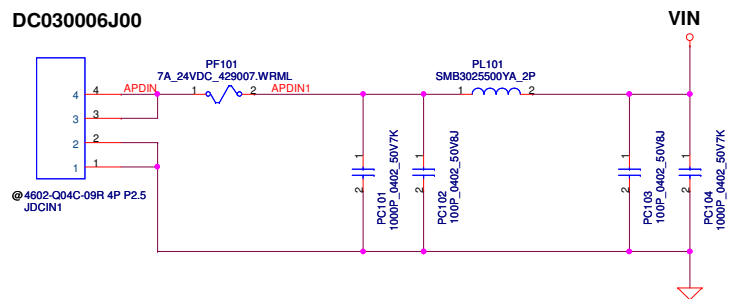
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Issued Date	2010/07/12	Deciphered Date	2012/07/11	Title
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Size Custom	Document Number	LA-6751P		Rev 0.2
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For Intel S3 Power Reduction.



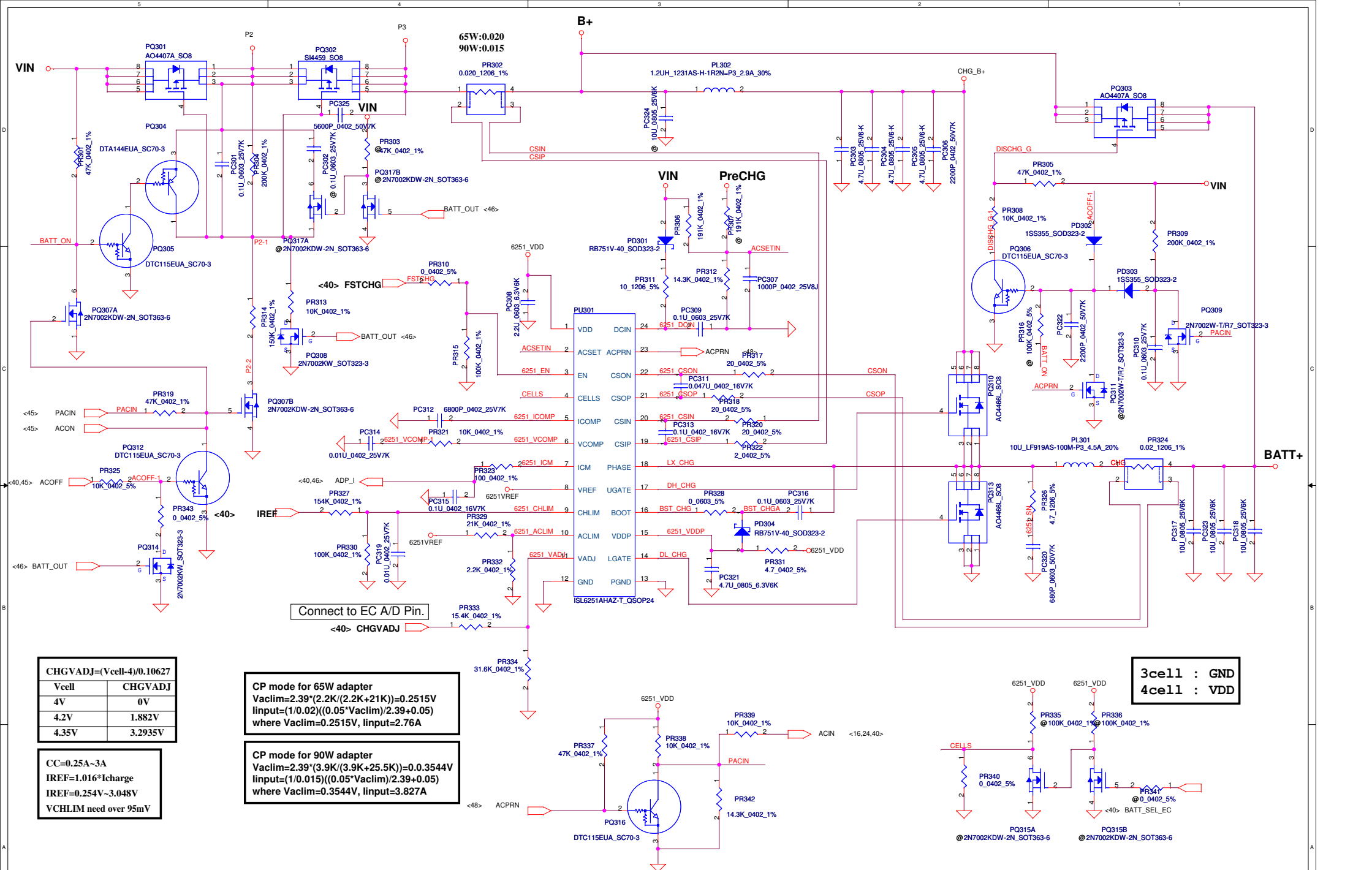
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/07/12	Deciphered Date	2012/07/11	Title	
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	Precharge detector		
	Min.	typ.	Max.
L-->H	14.991V	15.381V	15.782V
H-->L	13.860V	14.247V	14.621V

BATT ONLY

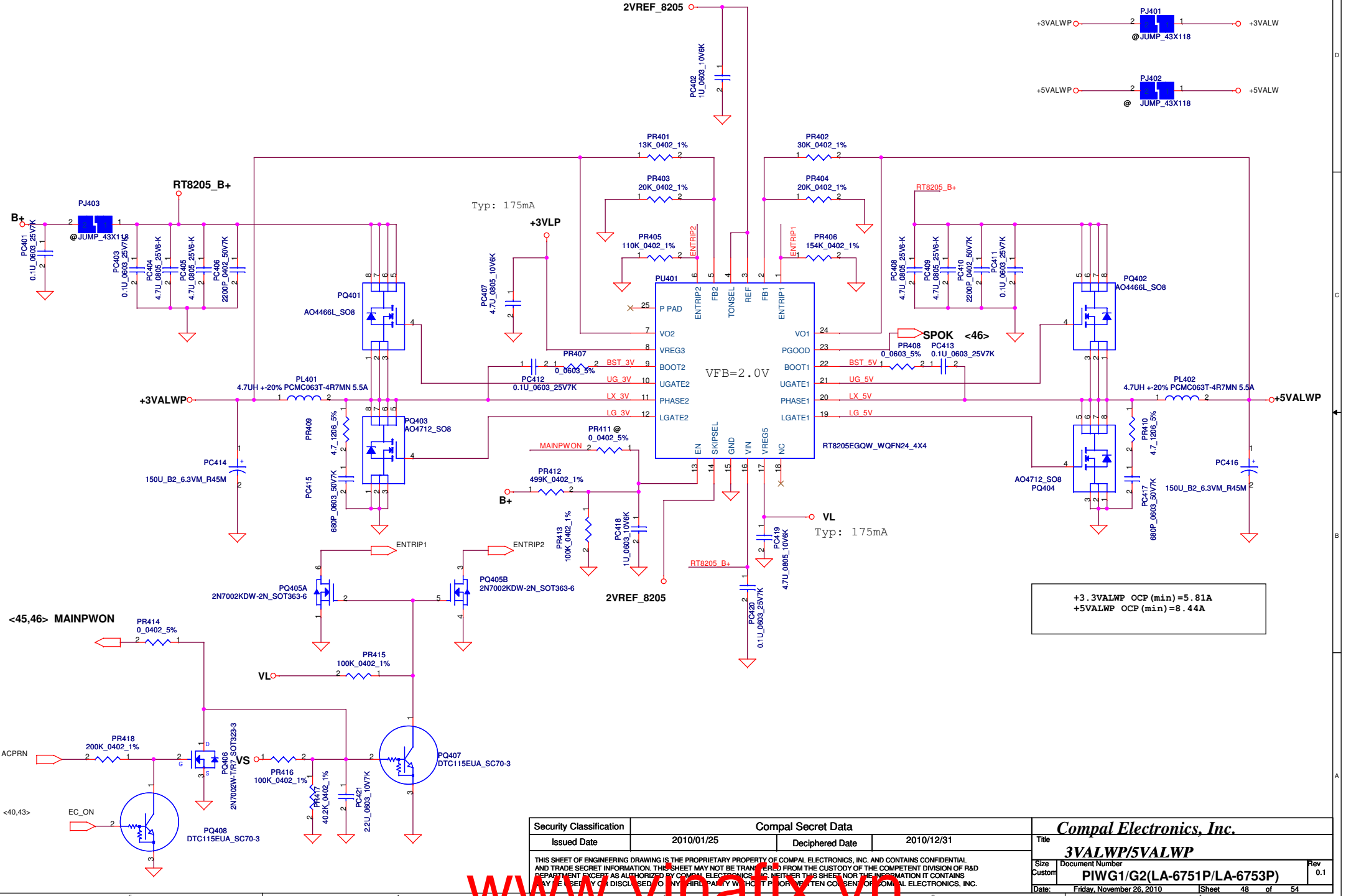
	Precharge detector		
	Min.	typ.	Max.
L-->H	7.196V	7.349V	7.505V
H-->L	6.138V	6.214V	6.056V



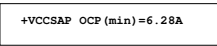
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/01/13	Deciphered Date	2011/01/13	Title	CHARGER
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				Date	Friday, November 26, 2010
				Sheet	47 of 54
				Rev	0.2
				PIWG1/G2(LA-6751P/LA-6753P)	

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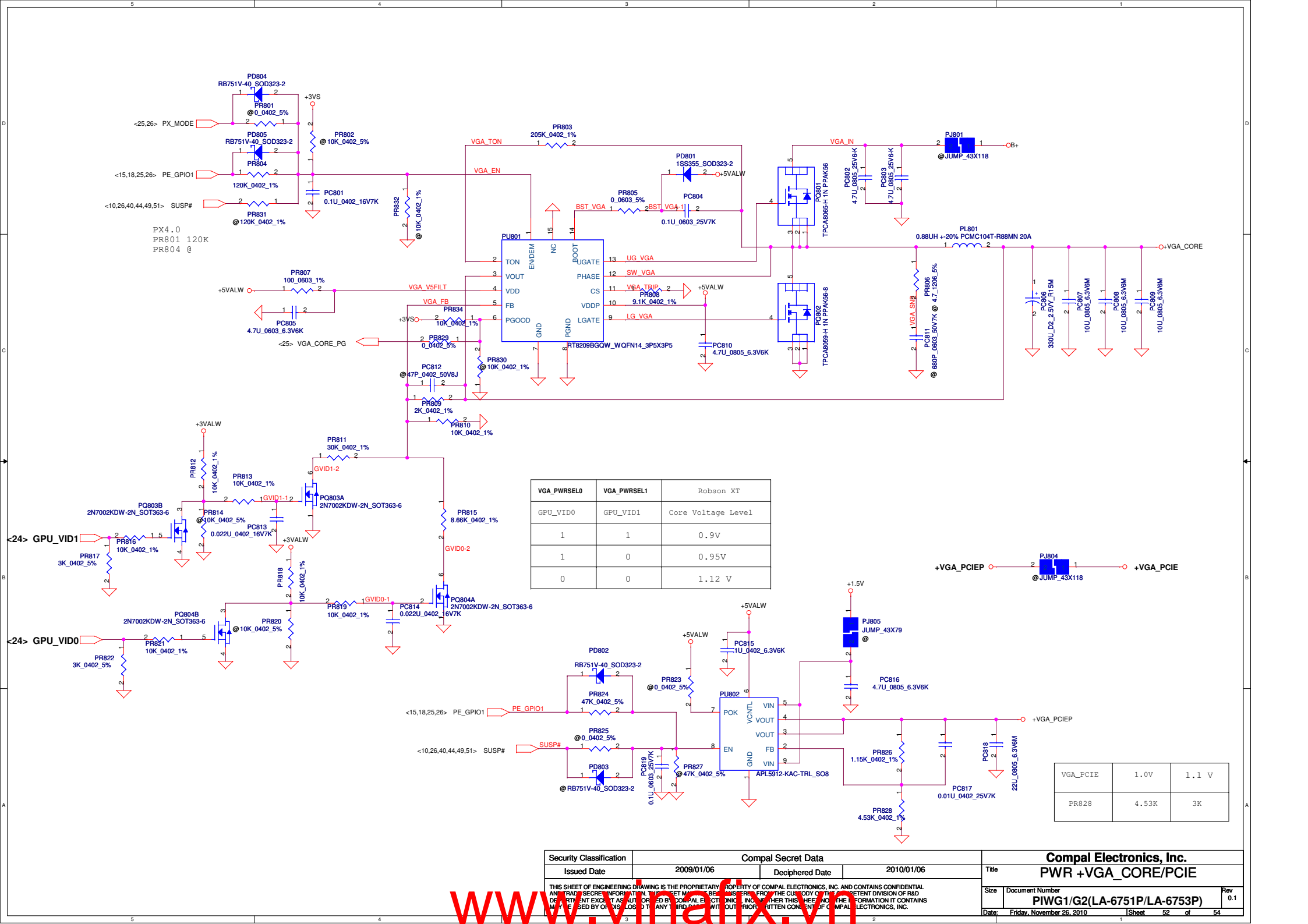
Note:
Use TPS51125 IC can remove RTC refernece LDO
Use TPS51427 IC must keep RTC refernece LDO



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Issued Date	2010/01/25	Deciphered Date	2010/12/31	Title	3VALWP/5VALWP
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				Custom	PIWG1/G2(LA-6751P/LA-6753P)
				Date	Friday, November 26, 2010
				Sheet	48 of 54
				Rev	0.1



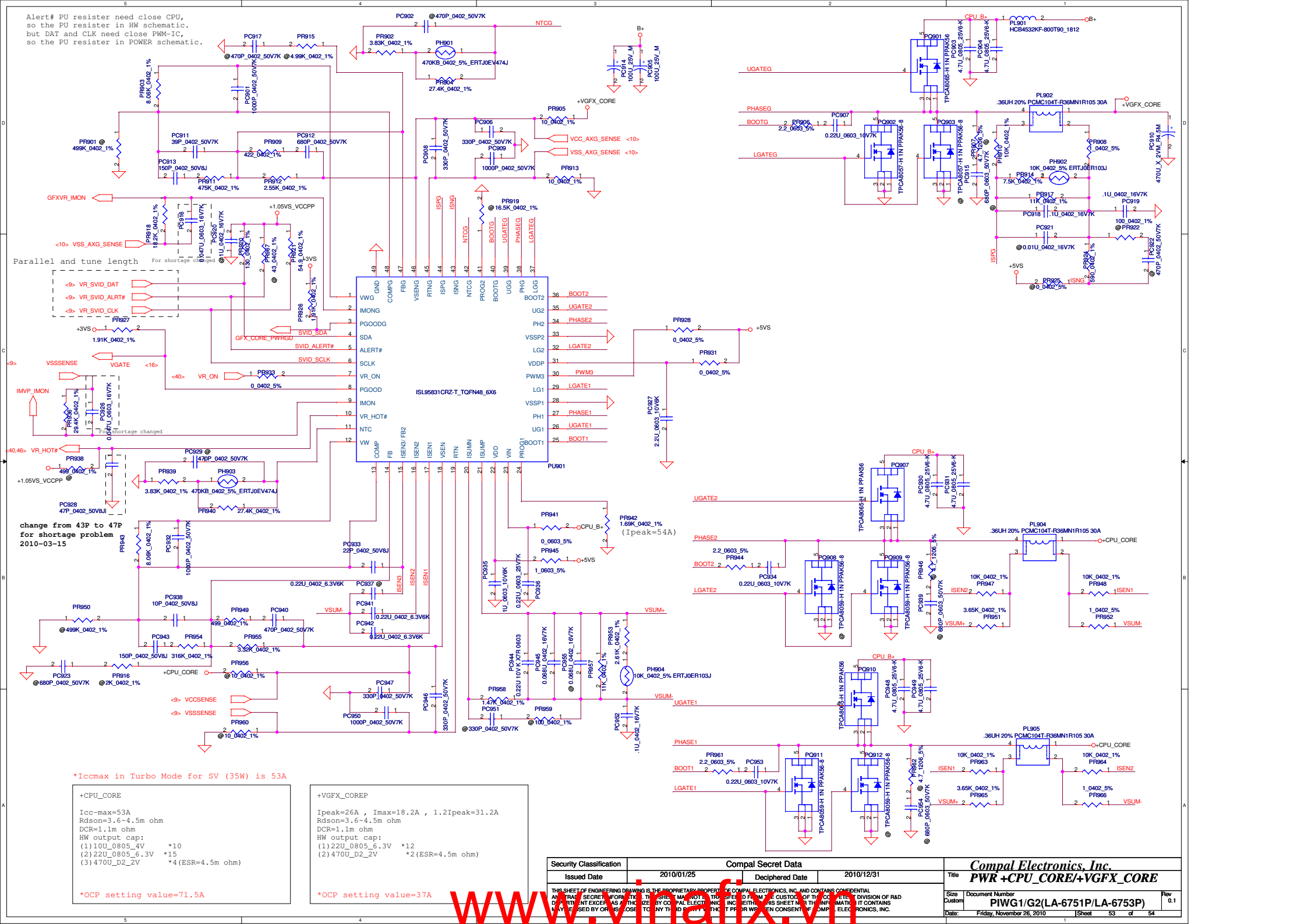
Note: Use VCCSA_SEL to switch High & Low Level for VID[1] (ie. VCCSA_SEL) due to the VID[0] is don't care for this setting.



VGA_PWRSEL0	VGA_PWRSEL1	Robson XT
GPU_VID0	GPU_VID1	Core Voltage Level
1	1	0.9V
1	0	0.95V
0	0	1.12 V

VGA_PCIE	1.0V	1.1 V
PR828	4.53K	3K

Alert# PU resistor need close CPU,
so the PU resistor in HW schematic.
but DAT and CLK need close PWM-IC,
so the PU resistor in POWER schematic.

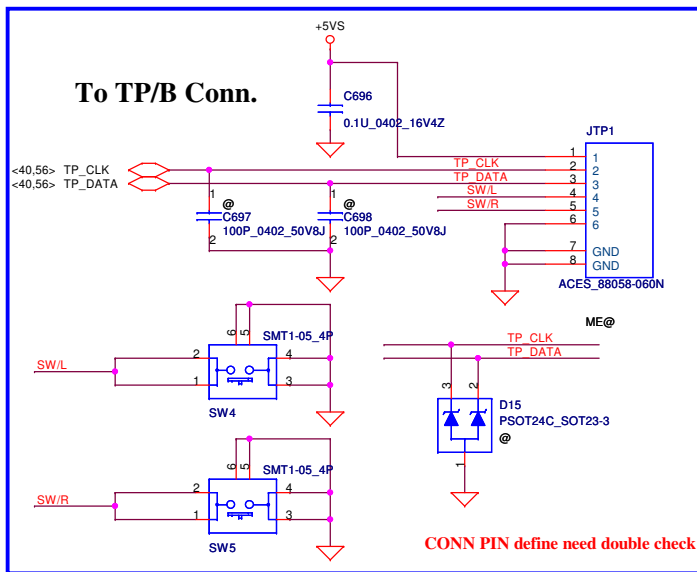
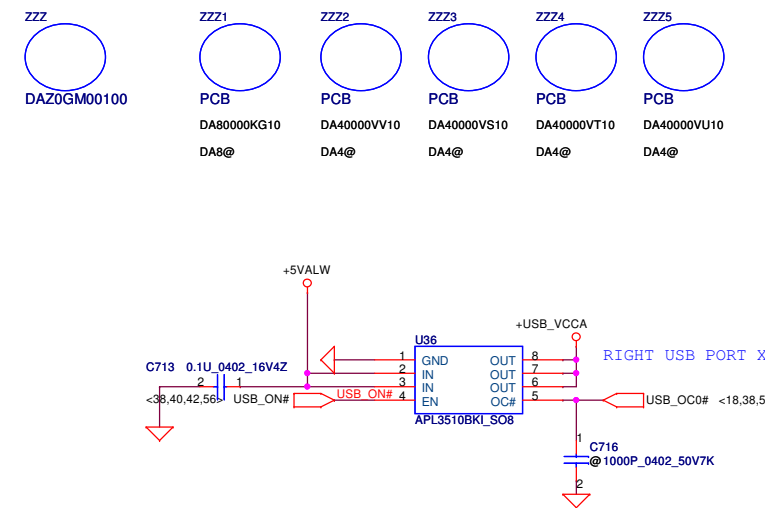
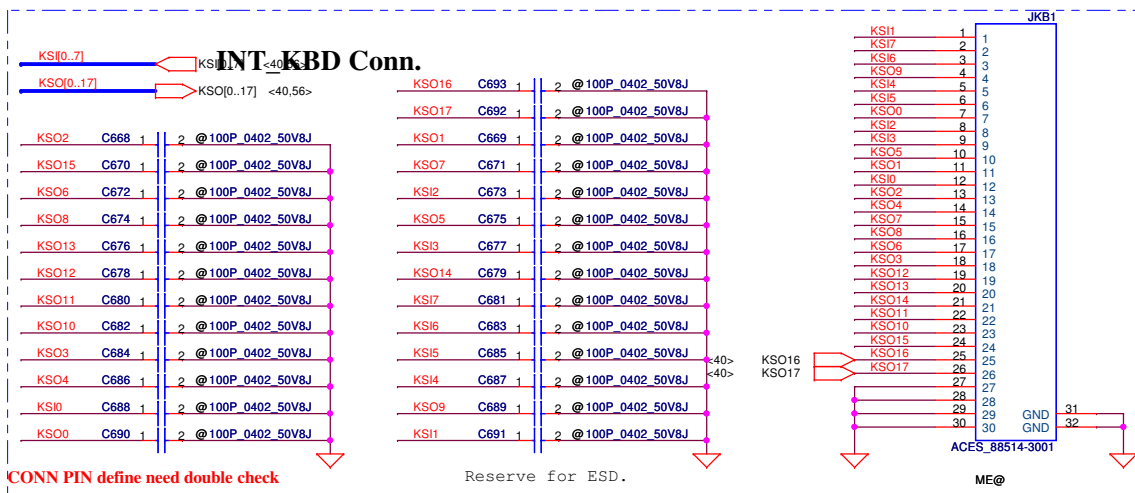


Version change list (P.I.R. List)

Page 1 of 1
for PWR

Item	Reason for change	PG#	Modify List	Date	Phase
1	To reduce charger ripple	47	Add PC323	2010.08.15	DVT
2	HW request for power sequence	51	Change +VGA_PCIE enable signal from PX_MODE to PE_GPIO1 PR804:120K PR831,PR801,PR825 UN-POP PR824:47K PC819:0.2uF	2010.08.15	DVT
3	Change Vboot setting	52	Change PR942 as 4.32K	2010.08.15	DVT
4	Change OCP setting	52	Change PR958 as 1.47K	2010.08.15	DVT
5	Add PC955 for loadline adjust	52	Add PC955	2010.08.15	DVT
6	Reserve pull low resistor	51	Add PR718,PR832	2010.09.29	PVT
7	Remove jump	51	Remove PJ802,PJ803	2010.09.29	PVT
8	Adapter protect circuit	46	Pop PR222,PR208,PH202,PR221,PQ204 Un-Pop PR223,PR203	2010.09.29	PVT
9	EMI Request	47	Remove PJ301 Add PL302 and reserve PC324	2010.09.29	PVT
10					
11					
12					
13					
14					
15					
16					
17					

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Issued Date	2009/01/06	Deciphered Date	2009/01/06	Title	
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Size	Document Number	PIWG1/G2		Rev	0.1
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		Sheet		54	of 54



PHASE	PAGE	Modification list	PURPOSE
0.2	P31	Change CRT Symbol	For CRT footprint issue
0.2	P31	Del C510	For Non-used part
0.2	P39	change C610 pin 1 net name	change C610 pin 1 net name to correct
0.2	P35	U25 change to U26	For co-lay 10/100 and GIGA
0.2	P32	Add R735,R736	For DiS only SMBus pull high
0.2	P33	Add R738,R739	For DiS only SMBus pull high
0.2	P33	Change Q63 BOM structure to HDMI@	For DiS HDMI function
0.2	P40	Add R740, C93	For EC request
0.2	P18	Change R215 pin1 net name	Change R215 pin1 net name to correct
0.2	P18	Add R741	Add R741 for Reserved PE_GPIO0
0.2	P16	Add R742, R743	For PCH power sequence
0.2	P38	Del U28, R542~R551 , J12	Del USB charger circuit
0.2	P40	Add EC pin 97,98,103	Add EC pin 97 for SYS_PWROK_EC , pin 98 for CE_EN , pin 103 for BATT_SEL_EC
0.2	P24	Change R662 pin 2 net name	Change R662 pin 2 net name to correct
0.2	P28	Del C421,C422,C431,C432,C433, L27, Add R745, U8 pin N11,N12 change to NC	For AMD new document suggestion
0.2	P26	Add R744	Add R744 for control PE_GPIO1 from SUSP#
0.2	P39	Change J10 footprint and Add J13	Change J10 footprint by Dfx request and Add J13 by vendor suggestion
0.2	P39	Change PC_Beep circuit	Change PC_Beep circuit
0.2	P6	Add R161, R182, R192 BOM structure hange to @	Follow ORB circuit
0.2	P58/59	Add R615 in 15" and 17" page	Pull high LiD_SW# at M/B side
0.2	P31	Add Q83 pin 1 power net name +CMOS_PW	For power trace net
0.2	P56/57/58	Change JP21 to JKB1	Change connector to standard name
0.2	P56/57/58	Change JP4 to JTP1	Change connector to standard name
0.2	P43/60	Change JP6 to JPWRB1	Change connector to standard name
0.2	P34	Change JP1 to JWLN1	Change connector to standard name
0.2	P42	Change JP5 to JBT1	Change connector to standard name
0.2	P43/60	Change JP7 to JCR1	Change connector to standard name
0.2	P19	Add R542	For ESATA detect function
0.2	P42	Add R886, R887 , C735	For ESATA detect function
0.2	P31	Add R543	For reserve EC control directly
0.2	P39	Change J10 footprint, Del C635, C636	Change J10 for Dfx and Del component for layout
0.2	P42	Add R877	For reserve EC control directly
0.2	P42	SW3 BOM structure change to @	For ME ASSY concern
0.2	P24	R324 BOM structure change, del @	For AMD update
0.2	P25	Change Q69,Q70,Q71,Q72 to BSS138, change Q66,Q67 pin 1 net name, D28 change to @	For Change BACO part follow AMD reference DATA ,D28 change to @ for leakage
0.2	P42	Change ESATA from port 5 to port 4	For intel risk
0.2	P15	Add R544,R545	For Pull high SMBus
0.2	P12/13	Del R74~R80,R82 R88~R94,R96	For DDR3 DM Bus to GND
0.2	P16	Add R182,R546	Add 186 for reserve sequence, Add R546 for follow CRB & ORB
0.2	P20	Del Add J12, R257 change to @	For voltage drop
0.2	P26	R161 Change Q6 to U14	Change SI2301 to SI4800 for loading current
0.2	P6	R161 change to 100K	Follow CRB
0.2	P19	Add R547 , R250 change to @	Follow Module and CRB
0.2	P18	WLAN USB port for port8 to port9	For debug port
0.2	P25	AND Gate power change to +3VGS	For VGA circuit
0.2	P24	Add R548, R549	For DiS HDMI audio strap
0.2	P39	Del J13	For layout space
0.2	P20,39,42	Add C395 , R581 , R583 , R584 , R586 , R587	For customer request reserved
0.2	P20	Add C129, C396 , Del R264	For reserved
0.2	P40	Add PIN 66 , R740,C93 change to @	Add IMVP_IMON
0.2	P9	Add R74	For VCCIO_SENSE / VSSIO_SENSE differential routing

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2010/07/12

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2012/07/11

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KB /SW /LPC Debug Conn.

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Friday, November 26, 2010

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PHASE	PAGE	Modification list	PURPOSE
0.2	P33	Del RQ51 ~ Q54 Add Q95	For DIS HDMI
0.2	P39	Del J10, C637,C640,R576,R577,R579 change to @ , L40~L43 change to R720~R723 Del C643, R578 , MIC_INR connect MIC_INL , Add R578	For Vendor suggestion and EMI Del C653, R578 connect MIC_INR/L for vendor suggestion , Add R578 for EMI
0.2	P20	Add L75 , R264 , C917, R259 C226 change to @	For intel PDDG update
0.2	P20	Change JCR1 pin define , MIC change with HP	For correct ID
0.2	P9	Add C394, C397 ,C400 ,Add R75	For CPU_CORE power reserved at Bottom side, Add R75 for reserved at cpu side and pwr side
0.2	P26	Add R688 change to 20k, R345 change to 200k , R350 change to 330k , Q65 stuff	For VGA power sequence
0.2	P42	Change C706 P/N to SF000001500	Change to H=6 OSCAN
0.2	P10	Change CI28 to @	For Reserved
0.2	P26	Change D3 change to @	For VGA leakage
0.2	P25	Change BiF_VDDC control pin net name	For correct behavior
0.2	P56	Update JODDI symbol	For ME update drawing
0.2	P16	D29 change to @	For AC detect issue
0.2	P24	R548,R549 change to DIS@	For AC detect issue
0.2	P10	CI28 change to stuff	For test on DVT
0.2	P44	Del Q118, R657	For not need
0.2	P57	Change I5" C714 to OSCAN	For ME Space ok
0.2		Change R513, R516 ,R667 P/N and from 0805 to 0603	For common part
0.2		Change C633, C634 , C642	For common part
0.2		Change D3, D29 P/N and symbol	For common part
0.2		Change U3,U11,U13,U14,U38,U39 P/N and symbol	For common part
0.2		Change U3,U11,U13,U14,U38,U39 P/N and symbol	For common part
0.2		Change Q8,Q65,Q80,Q83,Q99,Q104 P/N and symbol	For common part
0.2		Change Q1,Q37,Q93 P/N and symbol	For common part
0.2		Change Q94, Q95 P/N and symbol	For common part
0.2		Change Q3,Q4,Q7,Q9,Q66,Q67,Q68,Q73,Q74,Q75,Q76,Q77,Q78, Q79,Q82,Q85,Q86,Q87,Q102,Q106,Q107,Q108,Q109,Q110,Q111,Q112,Q113,Q114,Q115,Q116 P/N and symbol	For common part
0.2	P43	Change C635 part and change to @	For EMI
0.2	P18	Reserved R551	Reserved
0.2	P9	Change C53,C85,C86,C87 ,C394,C397,C400 to stuff and change C48,C80,C81,C82,C89,C90,C91 to @	For CPU_CORE
0.2	P10	Change C110,C111,C112,C113 to stuff	For VGFX_CORE
0.2	P56	Change LED1/LED3/LED4 P/N to SC50000A300	Change P/N
0.2	P36	Change T1,T2 P/N to SP050003N00	For test pass part
0.2	P40	Change R611,R740,C93 to stuff and change Y5,C347,C367 to @ Change R695 to 18K, Q37 change to @, R747 change to stuff,	For SUS_CLK R695 for Board ID, Q37, R747 for VR_HOT
0.2	P41	Change U33 P/N to SA00003FL10	For BIOS ROM
0.2		Change C509,C511,C635 to stuff	For EMI request
0.2	P56	Change I4" C714 P/N to SGA00002N80	For Sourcer request
0.2	P39	Change R720,R721,R722,R723 P/N to SM01000BZ00(Bead), and Change C647,C649,C650,C651 to Stuff	For EMI request
0.2	P19	Change R303 to Stuff, and change R542 to @	For BIOS ESATA detect function
0.2	P56	Change U32 P/N to SA000031C00	For common part
0.2	P36	Change T1,T2 P/N to SP050006E00	For correct part
0.2	P10	R688 change to stuff , R687 ,Q7 change to @	For S3 power reduction
0.2		Change R660,R661,R862,R863,R864,R865,R868,R869 to @ , change L63,L64,L65,L66 to stuff , change R619 to Bead (SM01000DI00)	For EMI
0.2	P20	Change L75 symbol	For common part

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PHASE	PAGE	Modification list	PURPOSE
0.3	P10	Update Q5 symbol	For update symbol
0.3	P33	Add F2	For safty request
0.3	P39	Update U30 P/N to SA00003K410 and Add R879	For Audio update to 21Z
0.3	P10	Change C128 to D2 size and e	Change size for M/E issue
0.3	P14	Add reserve R878	For Intel DG 1.5
0.3	P37	C592 change P/N to SF000001500 (H=6)	For ME Z high ok
0.3	P25	Update Q69-Q72 to A03414 ,D28 R873 change to BACO@ , U40 change to @	For PX4.0
0.3	P28	Add reserve C94	For reserve VGA_CORE
0.3	P29	R369 P/N change to SD034100A80	For GP part
0.3	P18	R553,R691,R684,R682,U12 change to PX@	For PX 4.0
0.3	P6	Reserved R880 to SYS_PWR0K	Follow ORB
0.3	P10	R62,R63 change to 1K	Follow CRB
0.3	P19	R303 change to @, Change M/B ID to PX4.0	For ESATA and PX4.0
0.3	P25	Q69-Q72 change to BACO @	For PX4.0
0.3	P26	R719 change to stuff, R744 change to @ , R677 change to BACO@	For PX4.0
0.3	P33	R483,R484 change connect to +5V_HDMI_F	For Add F2
0.3	P37	Change U27 P/N to SA000046C00	For Fintek
0.3	P40	Change R594 pull high to +5VALW	For leakage issue
0.3	P19	R881 change to Dstuff, R244 change to @	For intel MRC Rev0.9
0.3	P14	R878 change to stuff	For intel DG 1.5
0.3	P31	Del R432	For non-used part
0.3	P36	Reserved D31 , C643 , C644	For reserved EMI parts
0.3	P37	Del R581	For non-used part
0.3	P38	Del R550	For non-used part
0.3	P38	Change C592 P/N to SF000002Y00	For M/E Z high limlt
0.3	P39	Del R584, R586 , R587	For non-used part
0.3	P40	Change R600, R604 to 2.2K Change R695 to 8.2k	Change R600, R604 for Battery SMBus, R695 for Board ID
0.3	P42	Del R583	For non-used part
0.3	P6	Reserved R882 connect to PCH_PWR0K	Reserved for intel
0.3	P56	R765 change to 300 ohm	For LED
0.3	P25	R324, R744 , R674 change DIS@	For DIS only sku

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