

Compal Confidential

Cougar 2.0

Schematics Document

Intel Cedar Trail Processor/ Tiger point

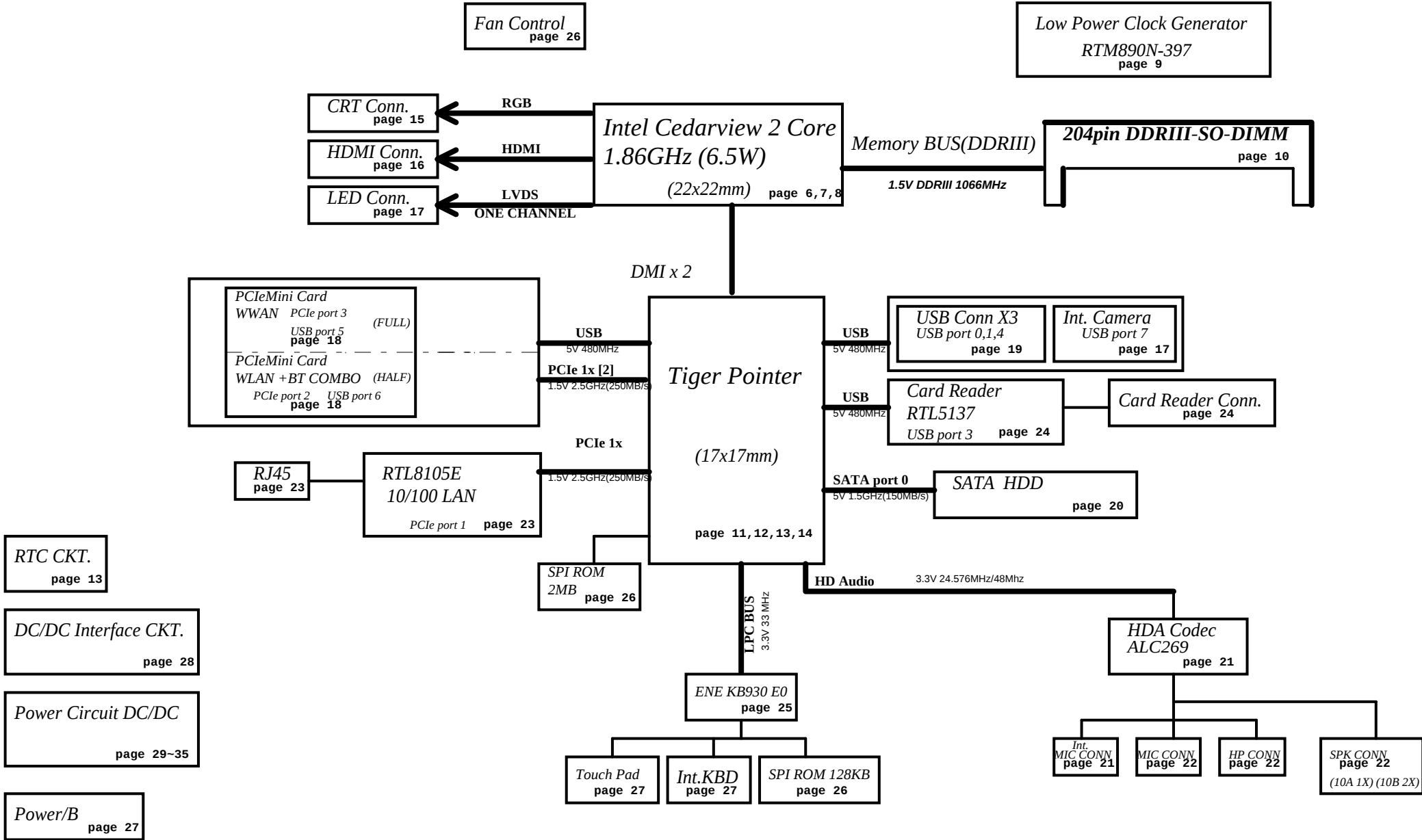
2011-11-07

LA-6859P REV:1.0

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				Custom	4019EG
				Date	Thursday, November 17, 2011
				Sheet	1 of 38
				Rev	B

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Model Name : Cougar 2.0
Project Code : QBU00



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					4019EG
				Date	Thursday, November 17, 2011
				Sheet	2 of 38
				Rev	B

Voltage Rails

Power Plane	Description	S1	S3	S5	G3
VIN	Adapter power supply (19V)	ON	ON	ON	OFF
B+	AC or battery power rail for power circuit.	ON	ON	ON	ON
+CPU_CORE	Core voltage for CPU	ON	OFF	OFF	OFF
+GFX_CORE	GFX support voltage	ON	OFF	OFF	OFF
+0.75VS	0.75V switched power rail for DDR terminator	ON	OFF	OFF	OFF
+1.05VS	VCCP switched power rail	ON	OFF	OFF	OFF
+1.5VS	1.5V switched power rail	ON	OFF	OFF	OFF
+1.5V	1.5V power rail for DDR	ON	ON	OFF	OFF
+1.8VS	1.8VS switched power rail	ON	OFF	OFF	OFF
+3VALW	3.3V always on power rail	ON	ON	ON	OFF
+3V_LAN	3.3V power rail for LAN	ON	ON	OFF	OFF
+3V_WLAN	3.3V power rail for LAN	ON	OFF	OFF	OFF
+3VS	3.3V switched power rail	ON	OFF	OFF	OFF
+5VALW	5V always on power rail	ON	ON	ON	OFF
+5VS	5V switched power rail	ON	OFF	OFF	OFF
+VSB	VSB always on power rail	ON	ON	ON	OFF
+RTCVCC	RTC power	ON	ON	ON	ON
+3VS_PRIME	3.3V power rail for CPU and PCH	ON	OFF	OFF	OFF

Note : ON* means that this power plane is ON only with AC power available, otherwise it is OFF.

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

BTO Option Table

Function	Mini PCI-E SLOT			Display		Clock gen	
description							
explain	Wi-Fi	WWAN	3G	CRT	HDMI	Tpye	
BTO	WLAN@	WWAN@	3G@	CRT@	HDMI@	low@	normal@

EC SM Bus1 address

Device	Address	Device	Address
Smart Battery	0001 011X b	EMC1402	1001 010X b

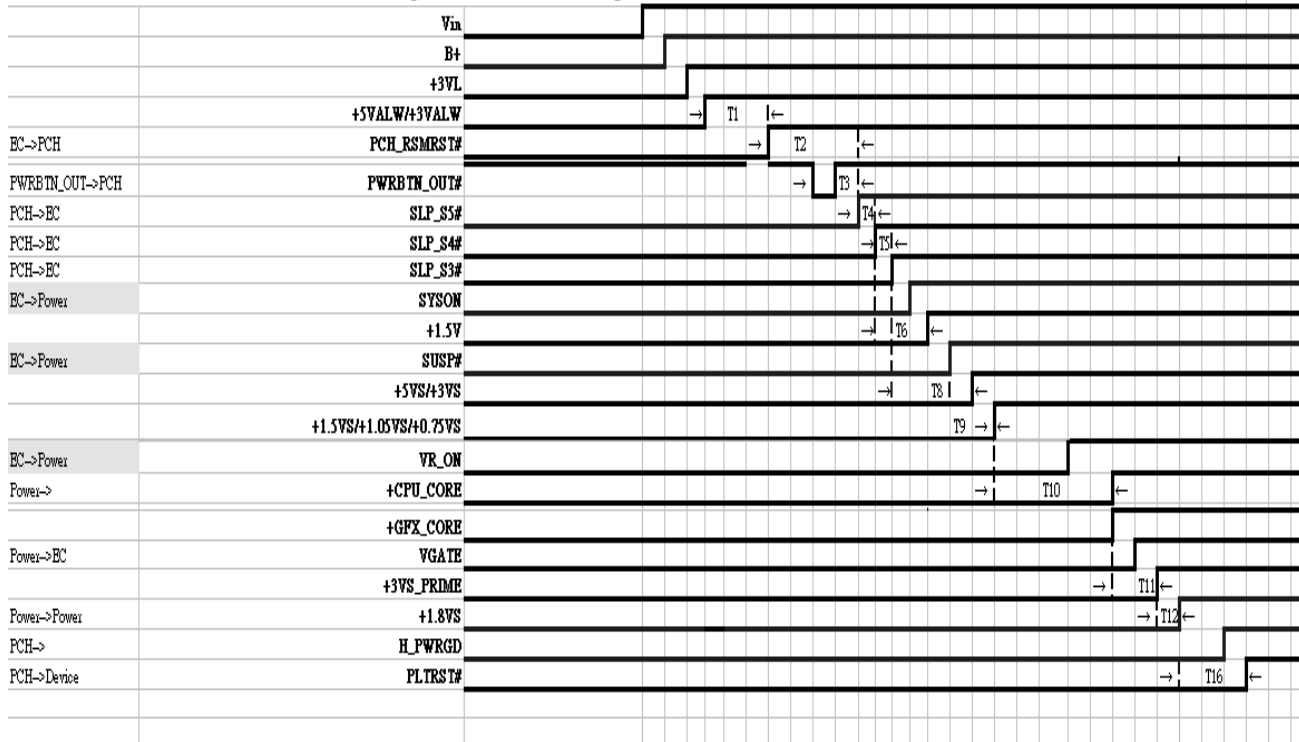
EC SM Bus2 address

NM10 SM Bus address

Device	Address
Clock Generator (SLG8SP556VTR)	1101 001Xb
DDR DIMMA	1010 000Xb
WWAN/WLAN	

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								SCHEAMTIC A6859	
								Document Number	
								4019EG	
								Date	
								Thursday, November 17, 2011	
								Sheet 3 of 38	
								Rev B	

QBU00 Power ON sequence



Power-on Sequence

Time	Description	Expected
T1	+5V/3VALW to PCH_RSMRST# inactive	>0ms
T2	PCH_RSMRST# inactive to SLP_S5# inactive	<110ms
T3	PWRBTN_OUT# inactive to SLP_S5# inactive	>0ms
T4	SLP_S5# inactive to SLP_S4# inactive	28.992us ~ 64.088us
T5	SLP_S4# inactive to SLP_S3# inactive	28.992us ~ 64.088us
T6	SLP_S4# inactive to +1.5V active	>0ms
T8	SLP_S3# inactive to +5VS inactive	>0ms
T9	+1.5VS active to +1.05VS active	>0ms
T10	+1.05VS active to +CPU_CORE	>0ms
T11	+CPU_CORE active to +3.3V_PRIME	>0ms
T12	+3.3V_PRIME active to +1.8VS	3.3-1.8<700mV
T16	H_PWRGD inactive to PLTRST# inactive	34<RTCCLK<41

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				4019EG
				Rev B
				Date: Thursday, November 17, 2011
				Sheet 4 of 38

Cougar Power Map

B+

DESIGN CURRENT 250mA

Ipeak=6.97A, I_{max}=4.88A

DESIGN CURRENT 522mA

+3VALWP +-5%

TPS51125ARGER

** The SW just is reserved.
The power passes by jump or
0-ohm resistor.

WOL_EN#

** P-CHANNEL
A03413

DESIGN CURRENT 300mA

+3V_LAN

Ipeak=3.98A, I_{max}=2.8A

DESIGN CURRENT 3010mA

+5VALWP +-5%

SUSP

N-CHANNEL
SI7326DN

DESIGN CURRENT 2286mA

+5VS

VGATE

APL5930KA

DESIGN CURRENT 151mA

+1.8VS

SUSP

N-CHANNEL
SI7326DN

DESIGN CURRENT 5586mA

+3VS

ENVDD

P-CHANNEL
A03413

DESIGN CURRENT 2000mA

+LCD_VDD

VGATE#

N-CHANNEL
SI7326DN

DESIGN CURRENT 294mA

+3VS_PRIME

SUSP#

SY8033BDBC

Ipeak=1.308A, I_{max}=4A

DESIGN CURRENT 3489mA

+1.05VSP +-5%

VR_ON

RT8165BGQW

I_{max}=3.5A

DESIGN CURRENT 4500mA

+CPU_COREP

DESIGN CURRENT 2000mA

+GFX_COREP

SYSON

G5603RU1U

Ipeak=19.6A, I_{max}=13.72A

DESIGN CURRENT 2270mA

+1.5VP +-5%

SUSP#

SI7326DN

DESIGN CURRENT 2112mA

+1.5VSP

SUSP

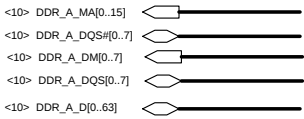
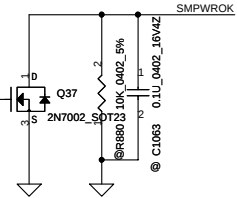
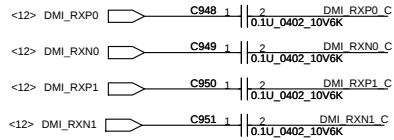
G2992F1U

DESIGN CURRENT 500mA

+0.75VSP

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				Date:	Thursday, November 17, 2011	Sheet 5 of 38

+1.5V pull up must be placed within 500 mils from Cedarview



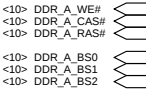
N2800@
U1
QB0Y B2 1.86G

U1B N2600@

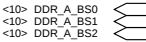
CEDARVIEW
REV = 1.10



DDR3_WE#
DDR3_CAS#
DDR3_RAS#



DDR3_BS0
DDR3_BS1
DDR3_BS2



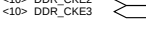
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DDR3_CS#3



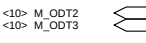
DDR3_CKE0
DDR3_CKE1
DDR3_CKE2
DDR3_CKE3



DDR3_ODT0
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DDR3_ODT3



DDR3_CK0
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DDR3_CK#2
DDR3_CK3
DDR3_CK#3



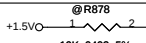
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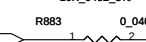
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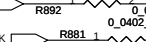
DDR3_REFP
DDR3_REFN



DDR3_DRAM_PWROK
DDR3_VCCA_PWROK



DDR3_ODTPU
DDR3_CMDPU
DDR3_DQPU



DDR3_DM0
DDR3_DM1
DDR3_DM2
DDR3_DM3
DDR3_DM4
DDR3_DM5
DDR3_DM6
DDR3_DM7



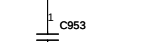
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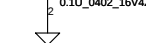
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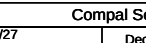
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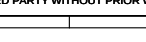
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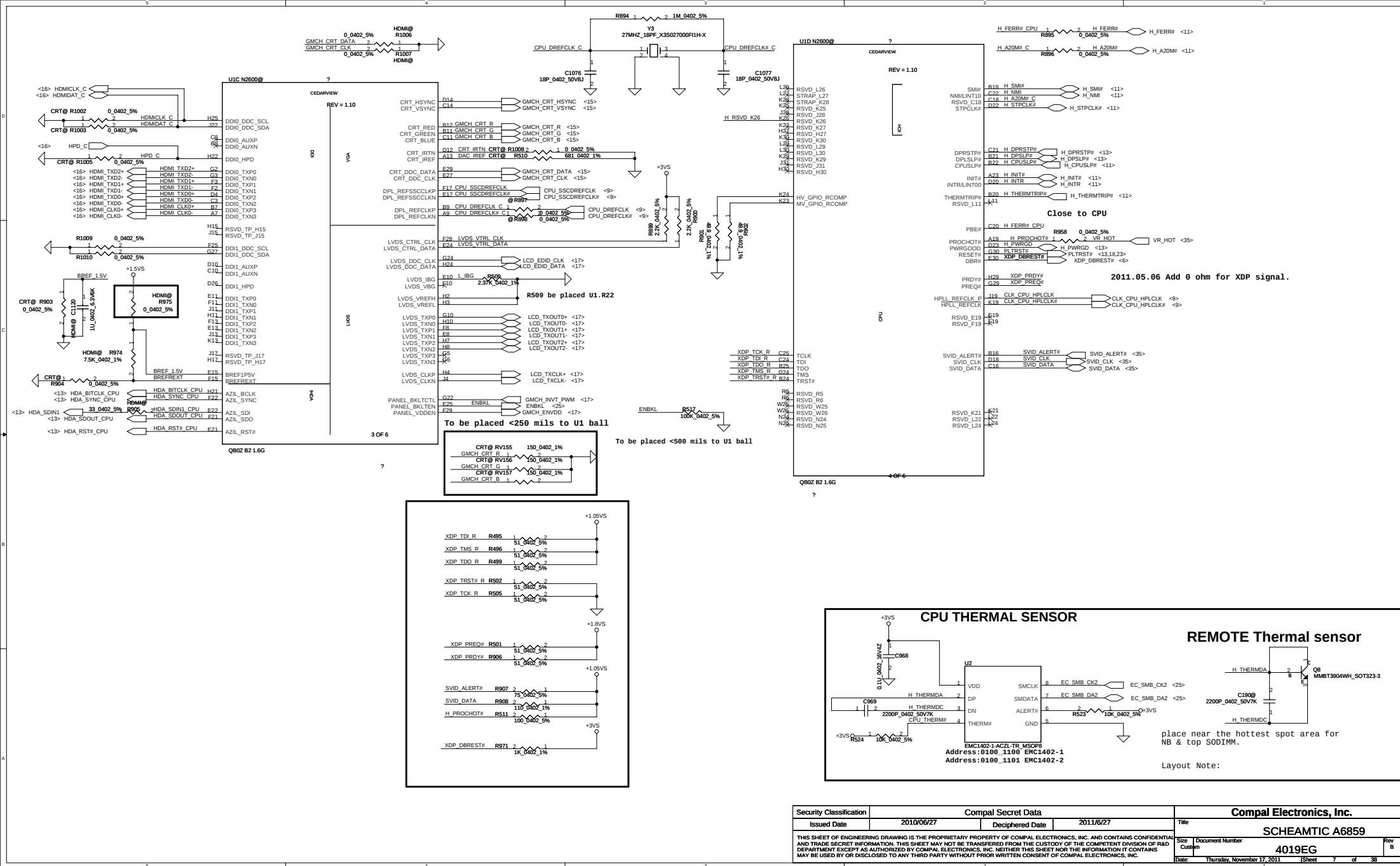
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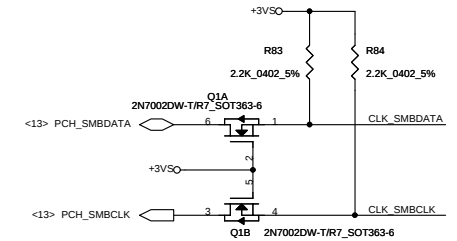


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				4019EG	4019EG	B
				Date: Thursday, November 17, 2011	Sheet 6 of 38	

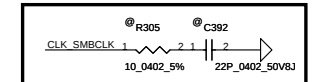


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				Date:	Thursday, November 17, 2011	Sheet	7

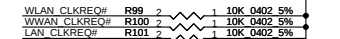
	Normal Power	Low Power
R477	@	Stuff
R478	Stuff	@
R479	Stuff	@
R480	@	Stuff
R483	@	Stuff



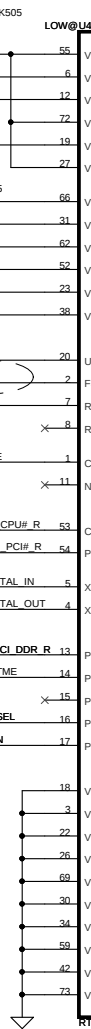
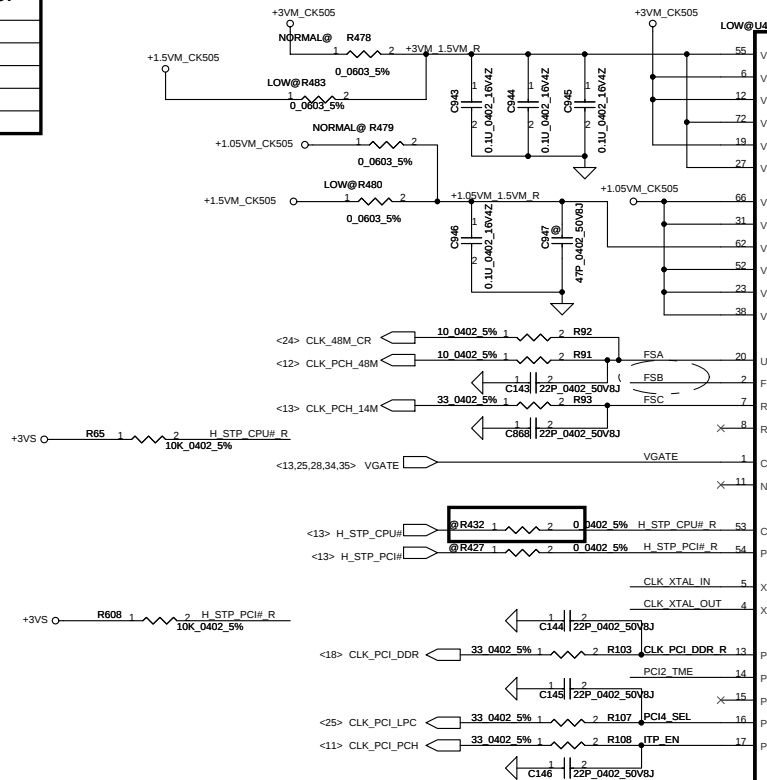
2011.04.29 Reserve R305,C392 for RF



PORT	DEVICE
SRC0	CPU_DREFCLK
SRC2	
SRC3	CPU_EXP
SRC4	PCIE_SATA
SRC6	PCIE_WLAN
SRC7	
SRC8	
SRC9	PCIE_LAN
SRC10	PCIE_PCH
SRC11	PCIE_WWAN



PORT	DEVICE
REQ_3#	
REQ_4#	
REQ_6#	PEIC_WLAN
REQ_7#	
REQ_9#	PCIE_LAN
REQ_10#	
REQ_11#	PEIC_WWAN
REQ_A#	



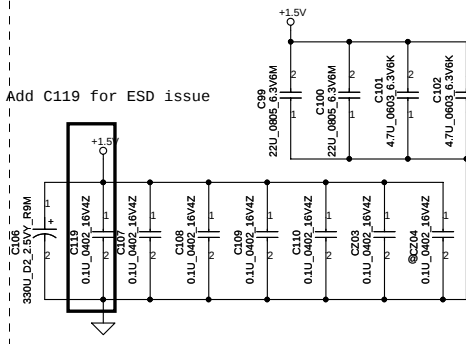
Signal	Pin	Function	Direction	Notes
SDA	9	CLK_SMBDATA	Input	CLK_SMBDATA <10,18>
SCL	10	CLK_SMBCLK	Input	CLK_SMBCLK <10,18>
CPU_0	71	CLK_CPU_HPLCLK	Input	CLK_CPU_HPLCLK <7>
CPU_0#	70	CLK_CPU_HPLCLK#	Input	CLK_CPU_HPLCLK# <7>
CPU_1	68	CLK_CPU_MPLL_C	Input	CLK_CPU_MPLL_C <6>
CPU_1#	67	CLK_CPU_MPLL#_C	Input	CLK_CPU_MPLL#_C <6>
SRC_0/DOT_90	24	CPU_DREFCLK	Input	CPU_DREFCLK <7>
SRC_0#/DOT_90#	25	CPU_DREFCLK#	Input	CPU_DREFCLK# <7>
LCDCLK/27M	28	CPU_SSCDREFCLK	Input	CPU_SSCDREFCLK <7>
LCDCLK#/27M_SS	29	CPU_SSCDREFCLK#	Input	CPU_SSCDREFCLK# <7>
2011.06.29 Swap CLK Gen output for CPU_SCDREFFCLK and CPU_DREFCLK				
SRC_2	32	CLK_CPU_EXP	Input	CLK_CPU_EXP <6>
SRC_2#	33	CLK_CPU_EXP#	Input	CLK_CPU_EXP# <6>
2011.03.30 CLK_CPU_EXP change to SRC3				
SRC_3	35	CLK_PCIE_SATA	Input	CLK_PCIE_SATA <11>
SRC_3#	36	CLK_PCIE_SATA#	Input	CLK_PCIE_SATA# <11>
SRC_4	39	CLK_PCIE_WLAN	Input	CLK_PCIE_WLAN <18>
SRC_4#	40	CLK_PCIE_WLAN#	Input	CLK_PCIE_WLAN# <18>
SRC_5	57	CLK_PCIE_WLAN	Input	CLK_PCIE_WLAN <18>
SRC_5#	56	CLK_PCIE_WLAN#	Input	CLK_PCIE_WLAN# <18>
SRC_7	61			
SRC_7#	60			
SRC_8/CPU_1TP	64	CPU_1TP	Input	0 0402 5% R9809
SRC_8#/CPU_1TP#	63	CPU_1TP#	Input	0 0402 5% R9839
SRC_9	44	CLK_PCIE_LAN	Input	CLK_PCIE_LAN <23>
SRC_9#	45	CLK_PCIE_LAN#	Input	CLK_PCIE_LAN# <23>
SRC_10	50	CLK_PCIE_PCH	Input	CLK_PCIE_PCH <12>
SRC_10#	51	CLK_PCIE_PCH#	Input	CLK_PCIE_PCH# <12>
SRC_11	48	CLK_PCIE_WWAN	Input	CLK_PCIE_WWAN <18>
SRC_11#	47	CLK_PCIE_WWAN#	Input	CLK_PCIE_WWAN# <18>
CLKREQ_3#	37			
CLKREQ_4#	41			
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CLKREQ_11#	46	WWAN_CLKREQ#	Input	WWAN_CLKREQ# <18>
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					4019EG	
Date:				Thursday, November 17, 2011	Sheet	9 of 38

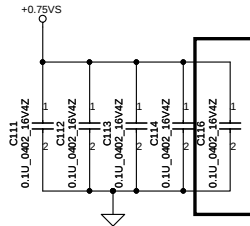
<6> DDR_A_DQS#[0..7]
<6> DDR_A_D[0..63]
<6> DDR_A_DM[0..7]
<6> DDR_A_DQS[0..7]
<6> DDR_A_MA[0..15]

Layout Note:
Place near JDDR1

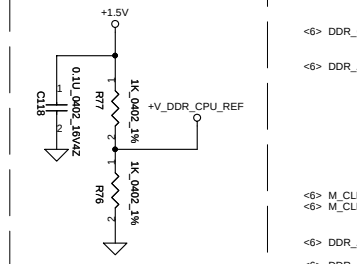
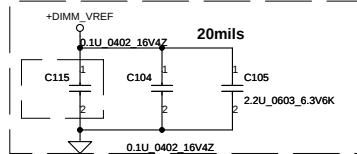
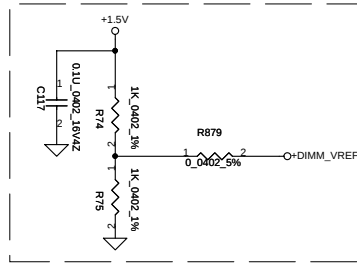
2011.06.14 Add C119 for ESD issue



Layout Note:
Place one cap close to every 2 pullup
resistors terminated to +0.75VS

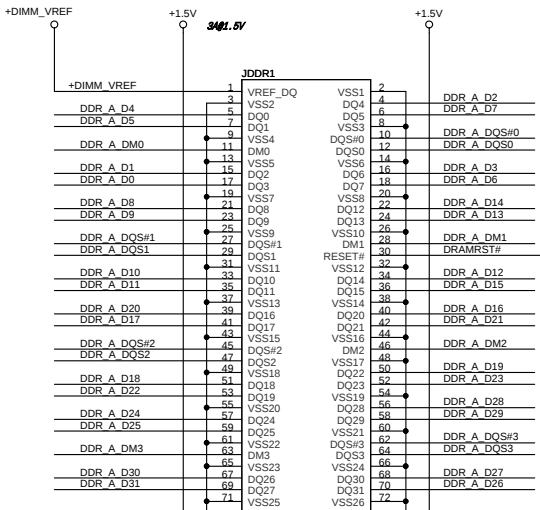
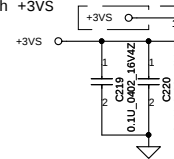


2011.06.14 Add C116 for ESD issue

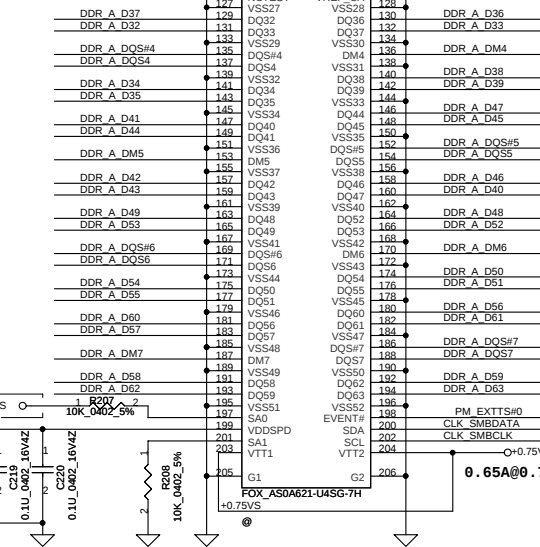


<6> DDR_CKE2
<6> DDR_A_BS2
<6> M_CLK_DDR2
<6> M_CLK_DDR#2
<6> DDR_A_BS0
<6> DDR_A_WE#
<6> DDR_A_CAS#
<6> DDR_CS#

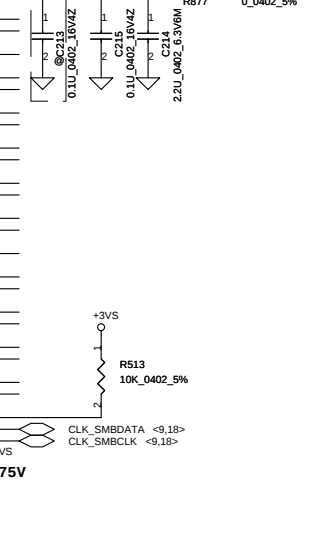
DVT# SA0 change to
pull high +3VS



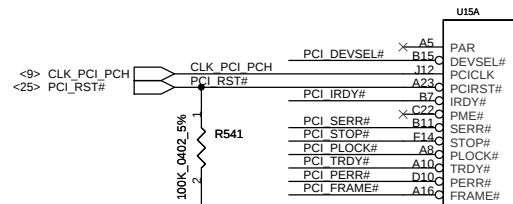
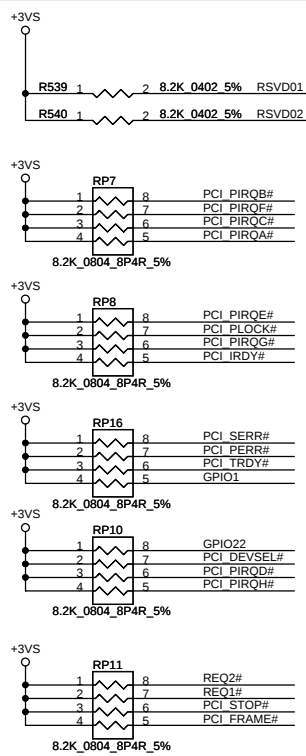
DDR_CKE2
DDR_A_BS2
DDR_A_MA12
DDR_A_MA9
DDR_A_MA8
DDR_A_MA5
DDR_A_MA3
DDR_A_MA1
M_CLK_DDR2
M_CLK_DDR#2
DDR_A_MA10
DDR_A_BS0
DDR_A_WE#
DDR_A_CAS#
DDR_A_MA13
DDR_CS#



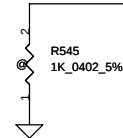
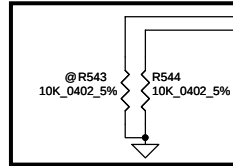
DDR_CKE3
DDR_A_MA15
DDR_A_MA14
DDR_A_MA11
DDR_A_MA7
DDR_A_MA6
DDR_A_MA4
DDR_A_MA2
DDR_A_MA0
M_CLK_DDR3
M_CLK_DDR#3
DDR_A_BS1
DDR_A_RAS#
DDR_CS2#
M_ODT2
M_ODT3
M_ODT3 <6>+VREF_CA



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					4019EG			
					Date: Thursday, November 17, 2011		Sheet 10 of 38	

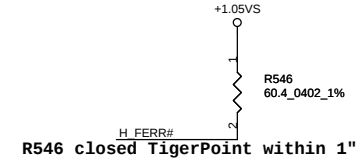
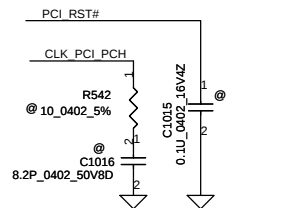
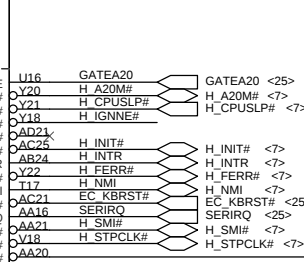
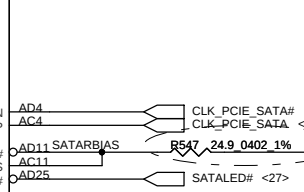
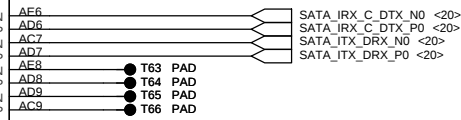
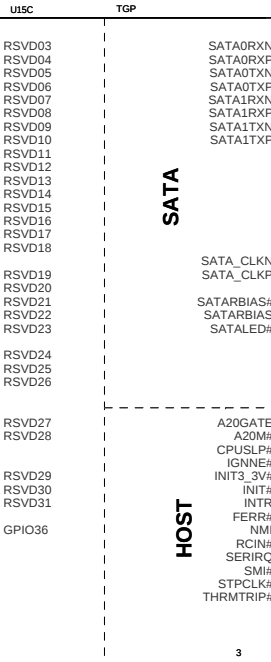
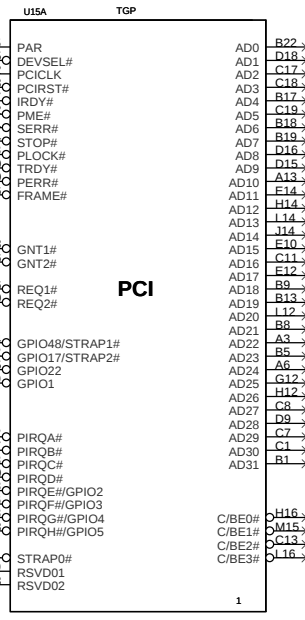
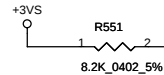


2011.04.20 Stuff R544 for SPI mode

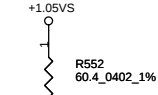
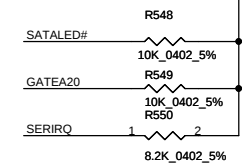


Signals have weak internal pull-ups

	GPI017	GPI048
SPI	0	1
PCI	1	0
LPC	1	1



Please closed Tiger point PIN within 500 mils

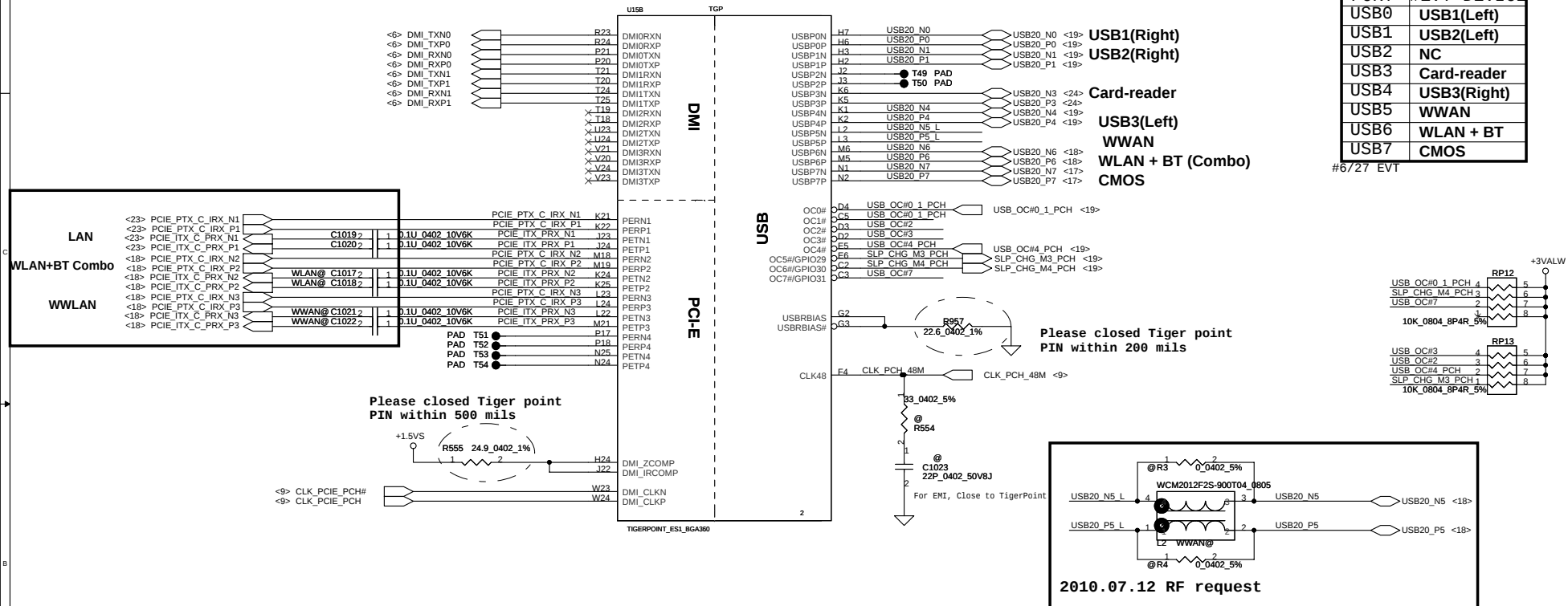


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						Size		Document Number		Rev	
								4019EG		B	
						Date:		Thursday, November 17, 2011		Sheet 11 of 38	

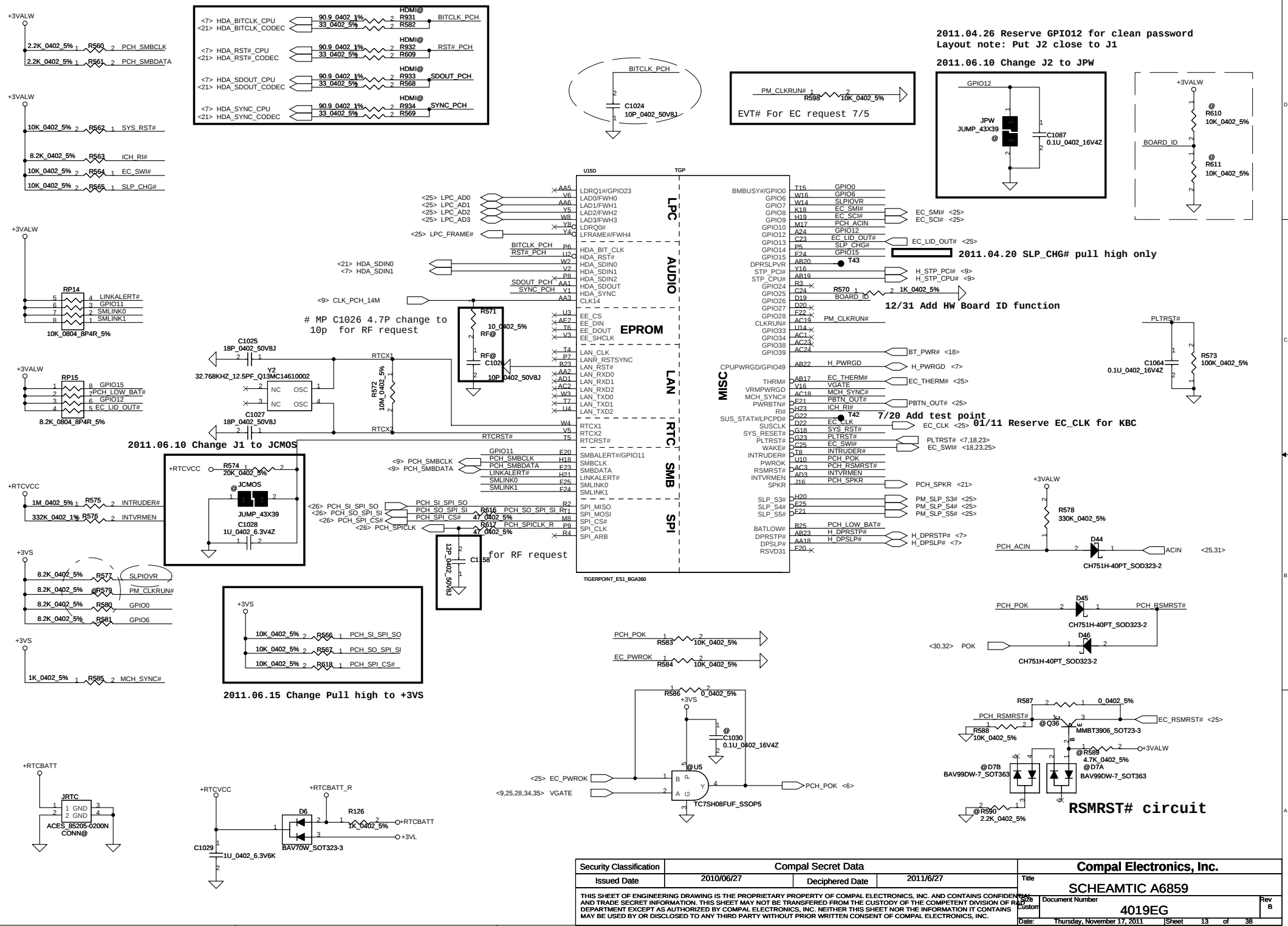
USB PORT LIST

PORT	#EVT	DEVICE
USB0		USB1(Left)
USB1		USB2(Left)
USB2		NC
USB3		Card-reader
USB4		USB3(Right)
USB5		WWAN
USB6		WLAN + BT
USB7		CMOS

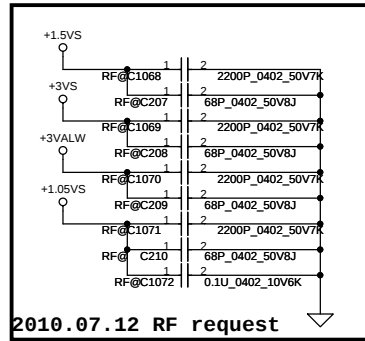
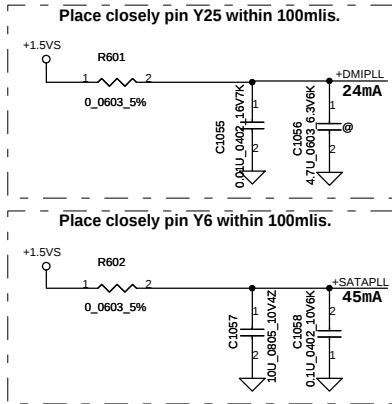
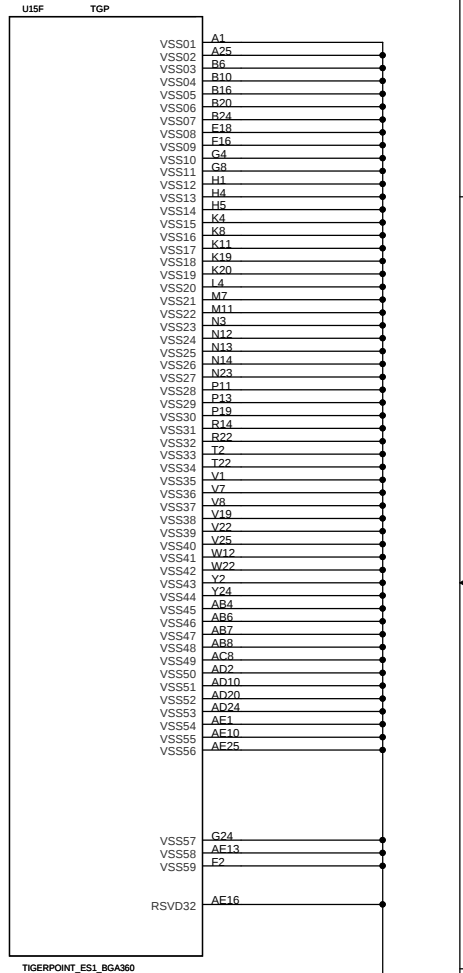
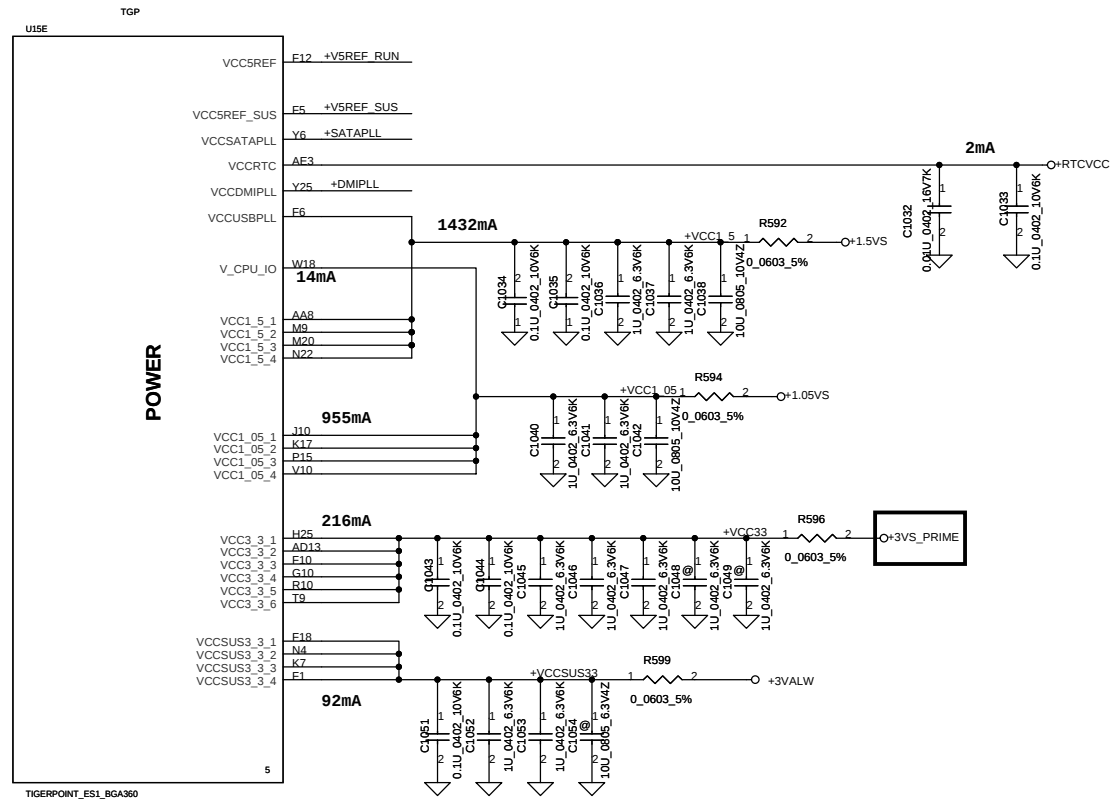
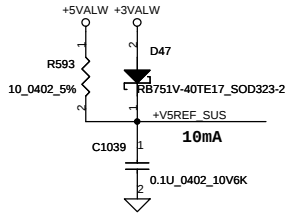
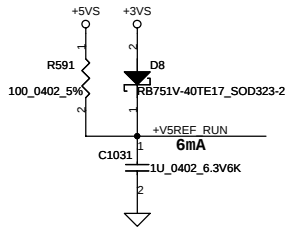
#6/27 EVT



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Date: Thursday, November 17, 2011				Sheet 12 of 38	

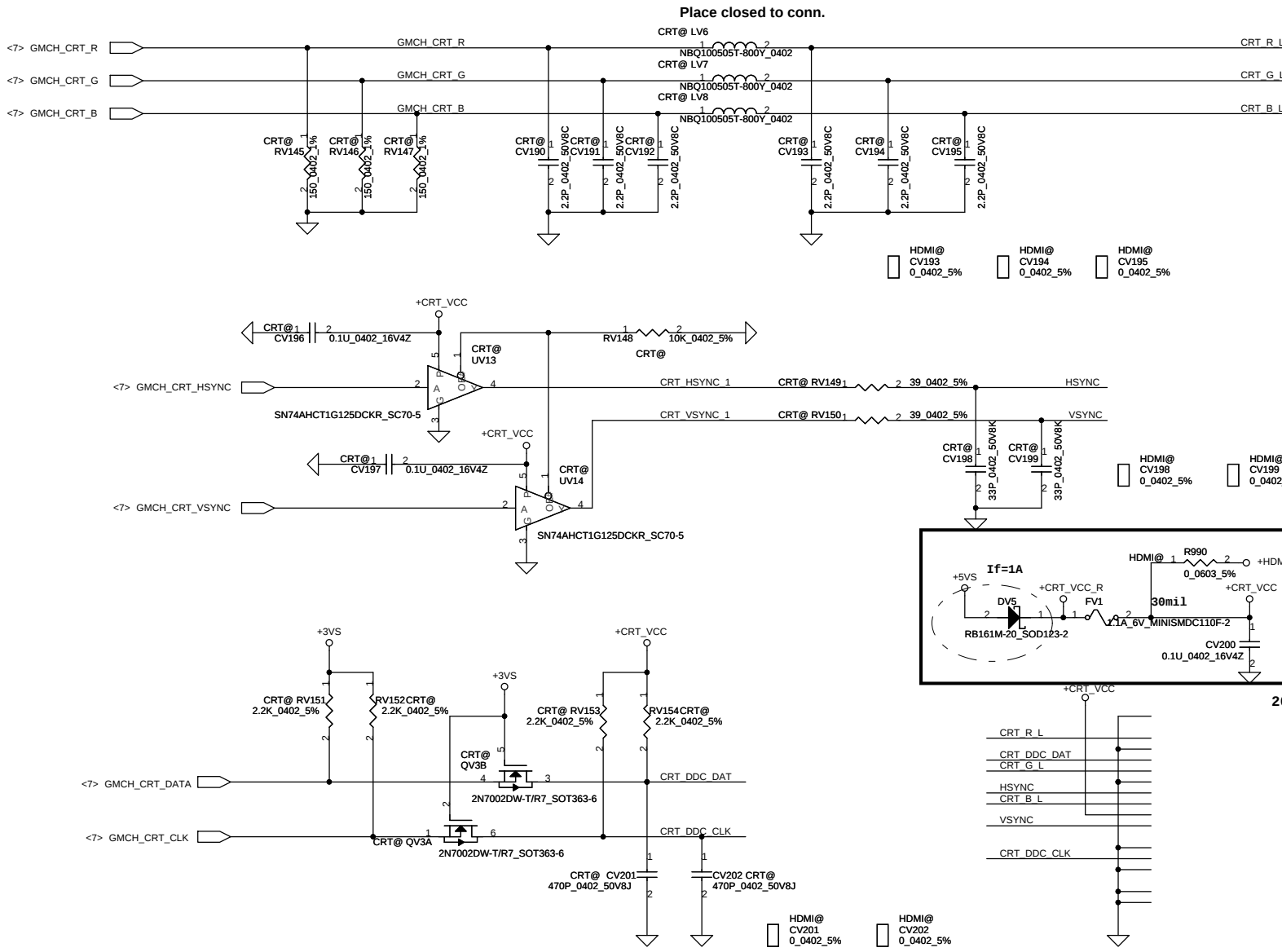


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				Document Number	
				4019EG	
Date:	Thursday, November 17, 2011	Sheet	13	of	38



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				Date	Thursday, November 17, 2011
				Sheet	14 of 38

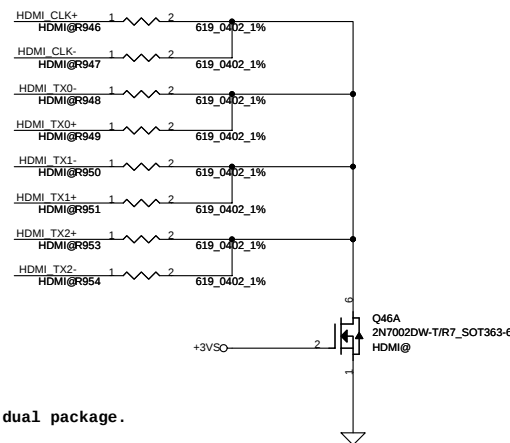
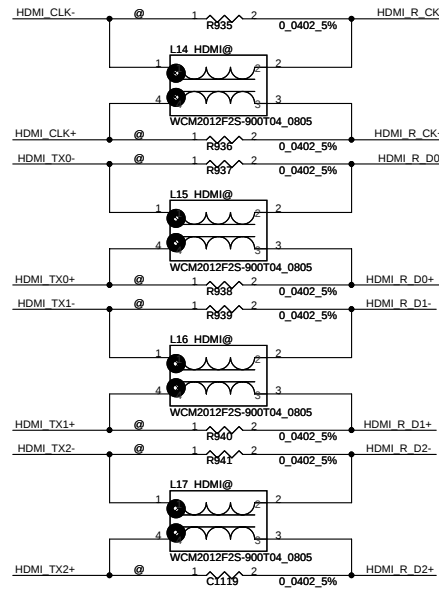
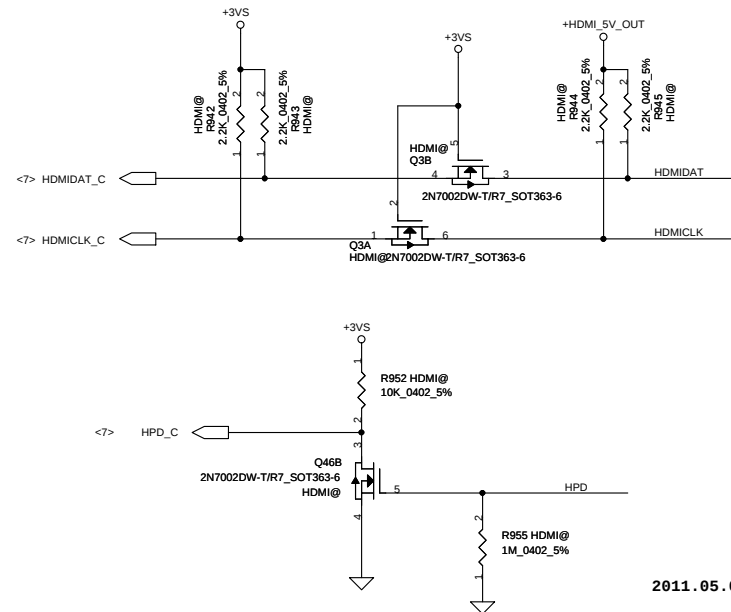
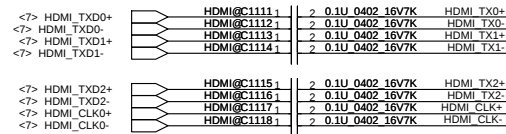
CRT CONNECTOR



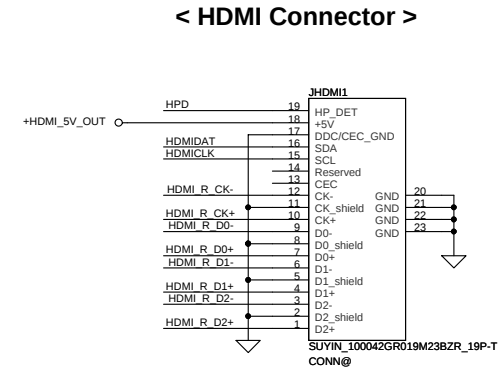
2011.05.10 Co-layer with HDMI port

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					4019EG
				Date	Thursday, November 17, 2011
				Sheet	15 of 38
				Rev	B

HDMI CONNECTOR

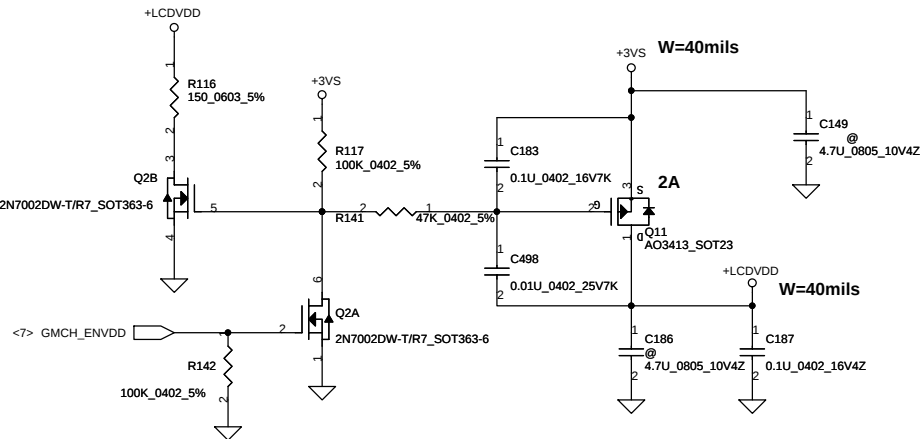


2011.05.04 Change Q42,Q43 to dual package.

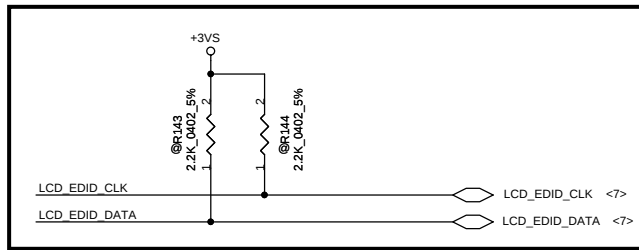


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				4019EG	
Date:	Thursday, November 17, 2011	Sheet	16	of	38

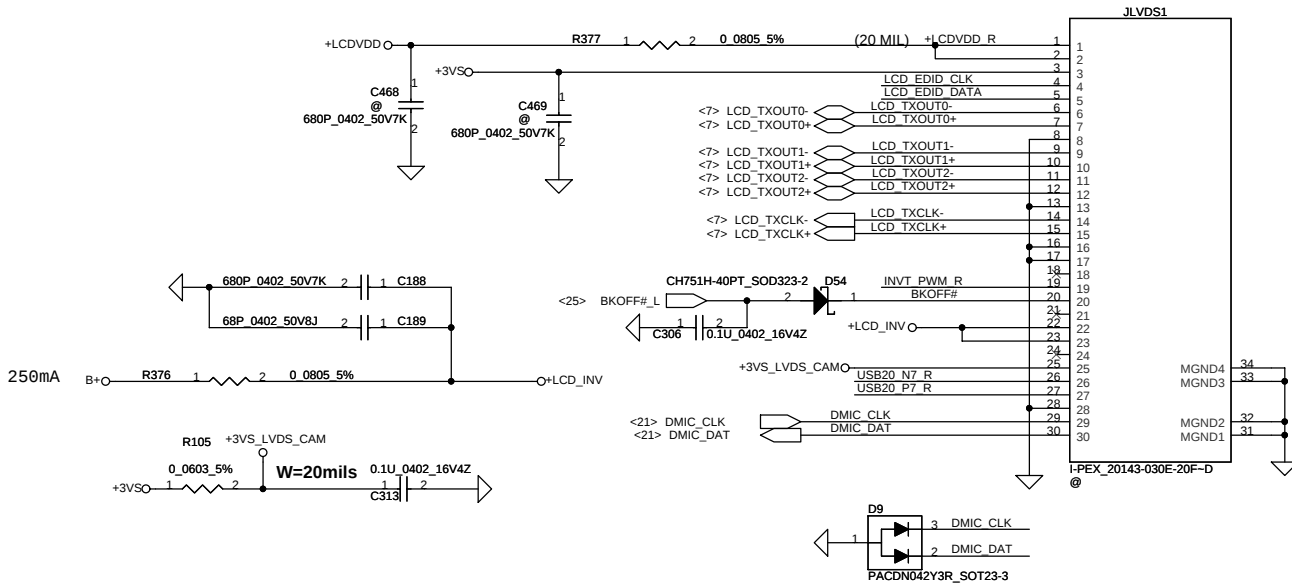
LCD POWER CIRCUIT



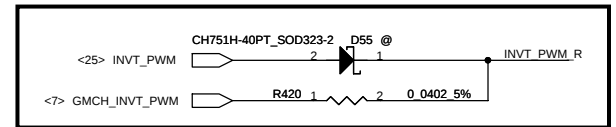
2011.05.22 Remove EDID pull up resistors for Intel issue



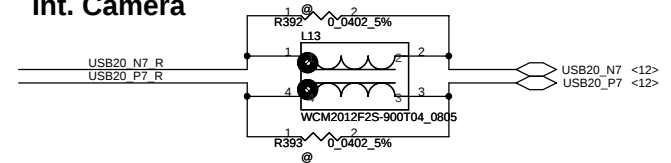
LED/PANEL BD. Conn.



2011.05.20 LCD brightness will controlled by CPU(DPST)

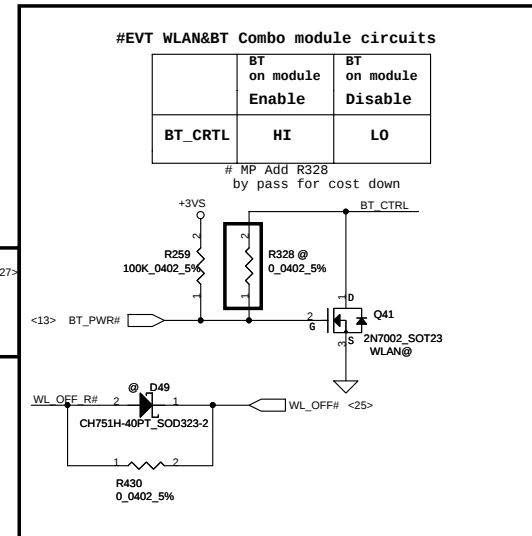


Int. Camera

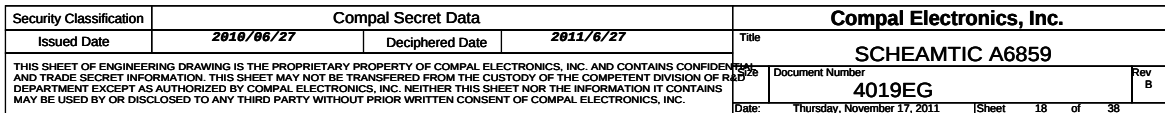


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					4019EG	B	
				Date:	Thursday, November 17, 2011	Sheet 17 of 38	

```
2/25 PVT:Mount C479,C480 with 47pf
3/16 PVT:Add BOM Config of C481,C482 to WLAN@
```

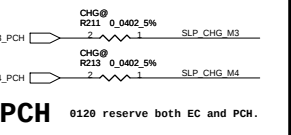
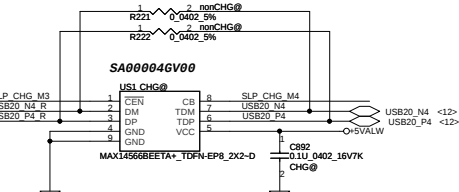


3G current need to 2750mA 3/16 PVT:Add BOM Config of C481,C482 to 3GGPS@

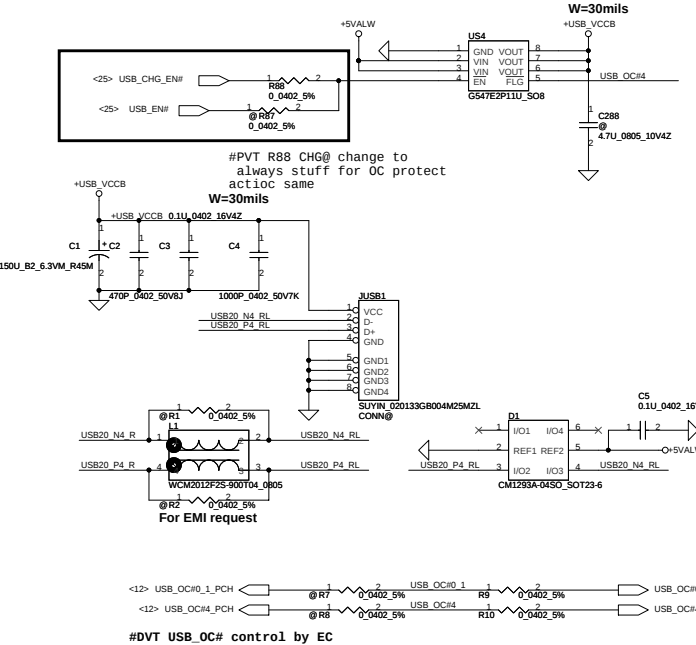
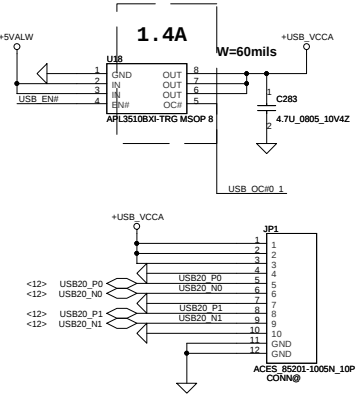


USB Sleep & Charge
Auto-Mode
Mode3

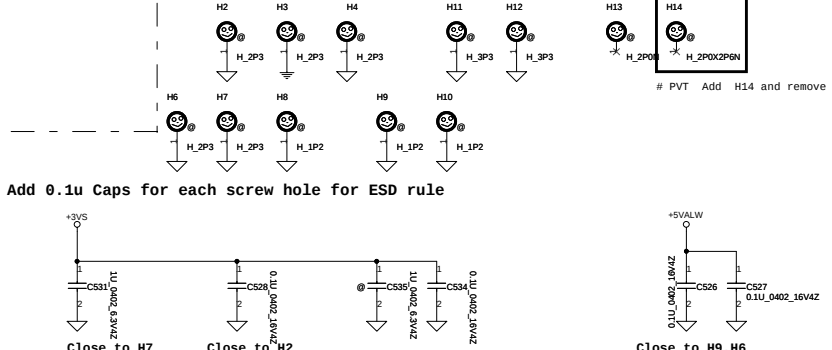
MAX14566B		
CB0 SLP_CHG_M4	CB1 (CEN#) SLP_CHG_M3	STATUS
0	0	AUTO MODE
0	1	Force Dedicated charger mode (MODE3)
1	X	Pass-Through (USB) Mode: Connect DP/DM to TDP/TDM



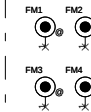
USB CONN



For EMI request
2/3 DVT: Change D38, D37 from PRT85V0U2X_S0T143-4 to CM1293A-04S0_S0T23-6

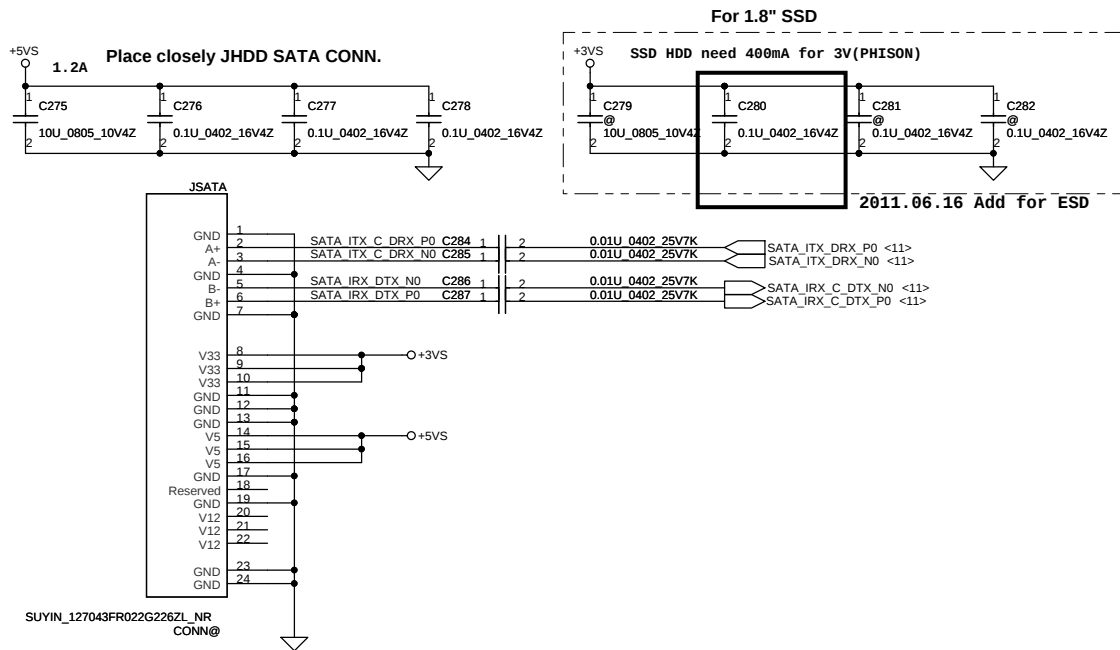


FIDUCIAL_C40M80



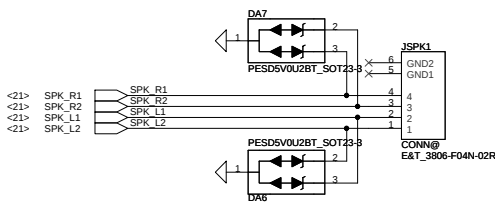
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				Date	4019EG
				Thursday, November 17, 2011	Sheet 19 of 38

SATA Conn.

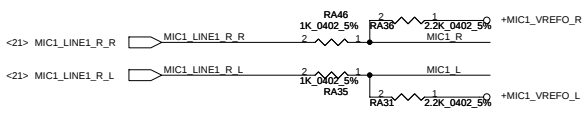


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					Size	Document Number	Rev
					Custom	4019EG	B
					Date:	Thursday, November 17, 2011	Sheet 20 of 38

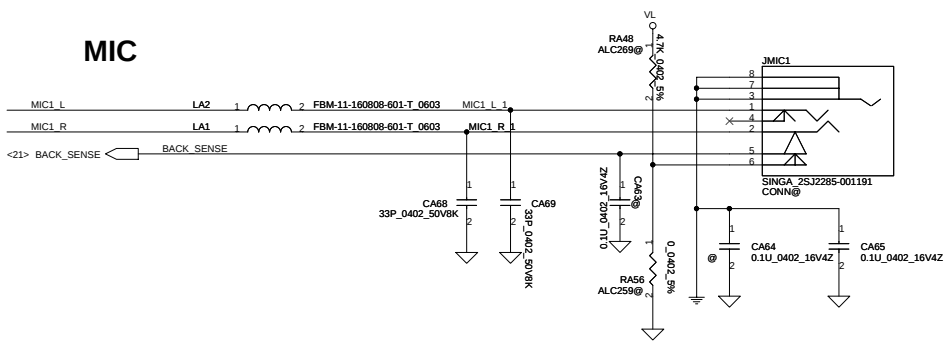
SPEAKER



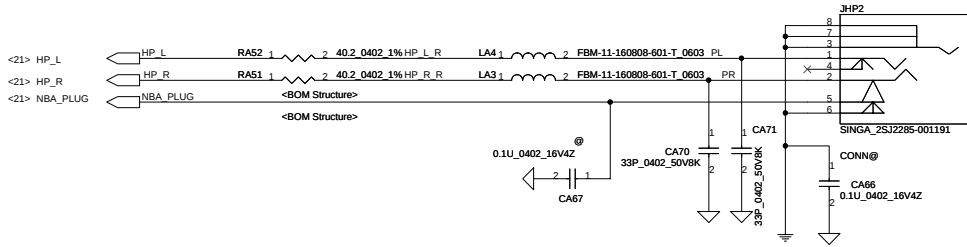
Ext.MIC/LINE IN JACK



MIC

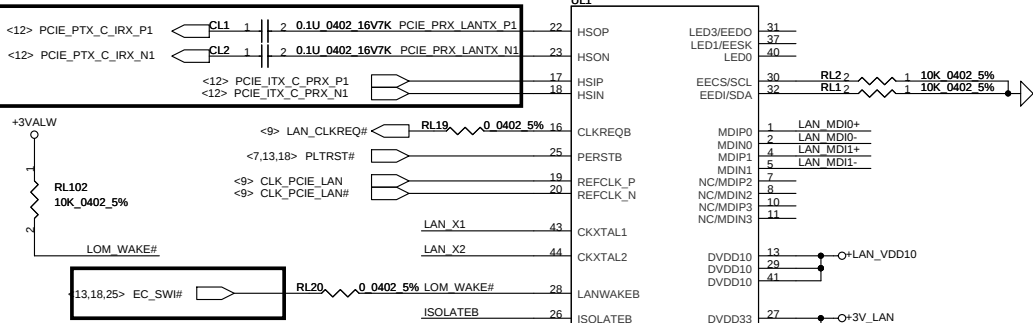


Head phone

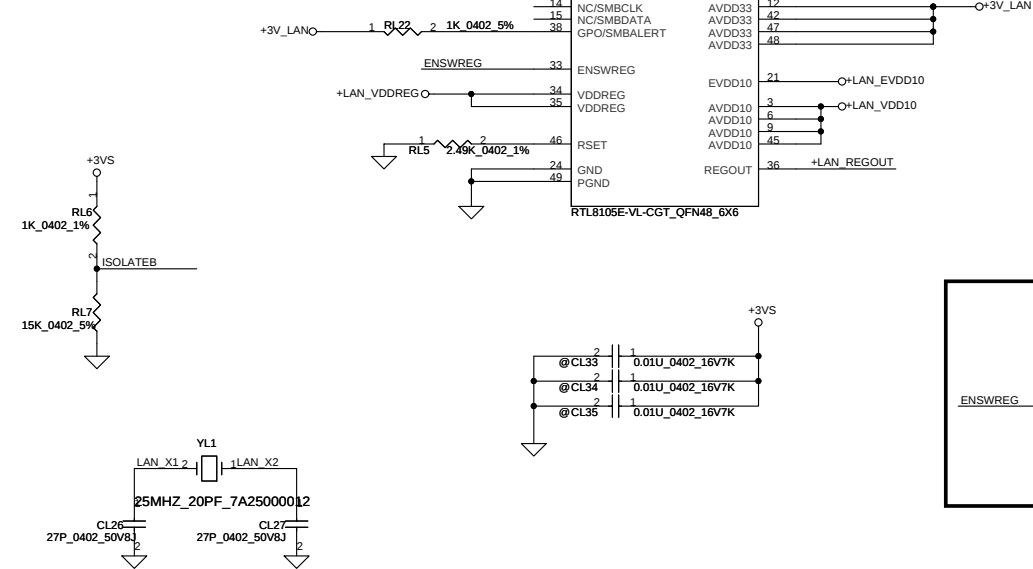


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Date: Thursday, November 17, 2011				Sheet 22 of 38

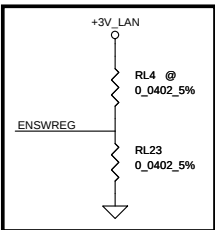
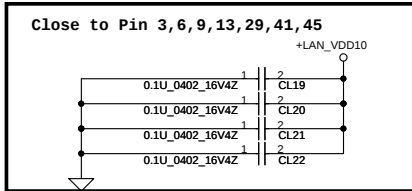
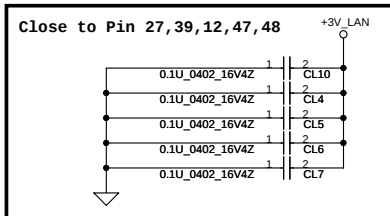
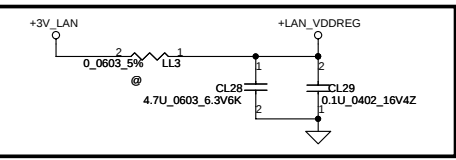
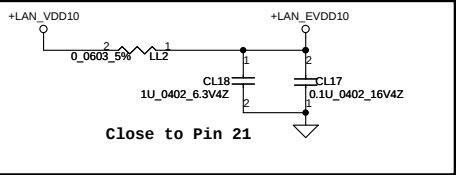
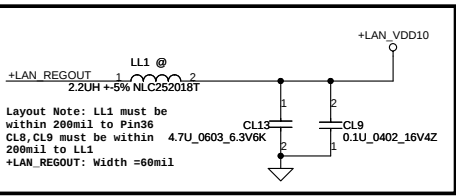
2011.04.20 Change to port 1



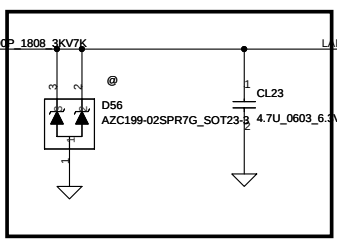
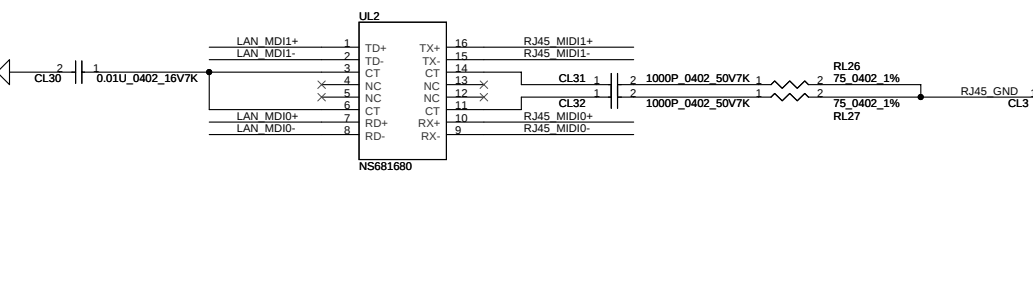
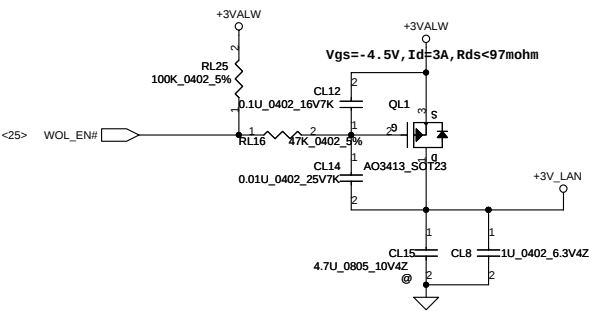
2011.04.26 Change control signal to EC_SWI#



3/10 Change CL13 0805-->0603



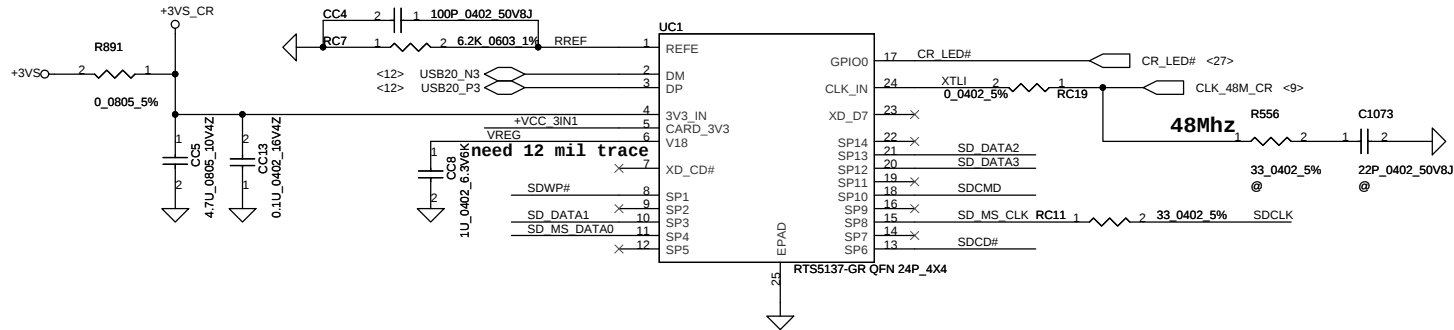
+3VALW TO +3V_LAN



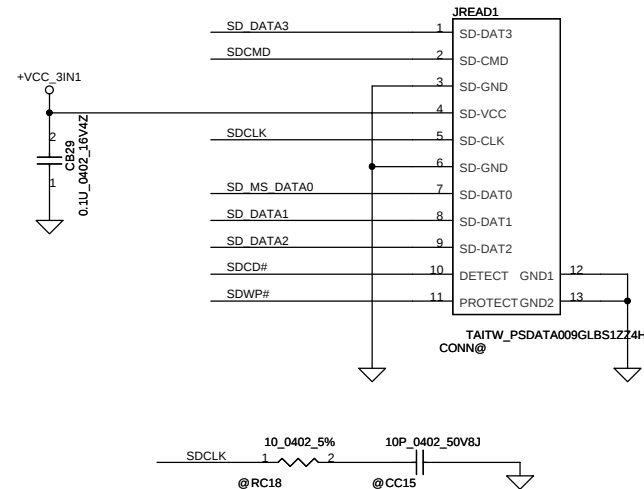
2011/04/18 Add D56 for ESD request

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				Date	Thursday, November 17, 2011
				Sheet	23 of 38

	XD_CD#		
SP1	XD_RDY	SD_WP	MS_CLK
SP2	XD_RE#		MS_INS#
SP3	XD_CEF	SD_D1	
SP4	XD_CLE	SD_D0	MS_D7
SP5	XD_ALE	SD_D7	MS_D3
SP6	XD_WE#	SD_CD#	
SP7	XD_WP	SD_D6	MS_D6
SP8	XD_D0	SD_CLK	MS_D2
SP9	XD_D1	SD_D5	MS_D0
SP10	XD_D2	SD_CMD	
SP11	XD_D3	SD_D4	MS_D4
SP12	XD_D4	SD_D3	MS_D1
SP13	XD_D5	SD_D2	MS_D5
SP14	XD_D6		MS_BS
	XD_D7		

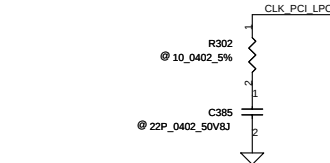


2 in 1 Card Reader



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				Document Number	4019EG
				Date	Thursday, November 17, 2011
				Sheet	24 of 38
				Rev	B

<18> LPC_FRAME#_R LPC_FRAME#_R 1 2 LPC_FRAME#
 0.0402_5% DEBUG@ R310
 <18> LPC_AD3_R LPC_AD3_R 1 2 LPC_AD3
 0.0402_5% DEBUG@ R311
 <18> LPC_AD2_R LPC_AD2_R 1 2 LPC_AD2
 0.0402_5% DEBUG@ R315
 <18> LPC_AD1_R LPC_AD1_R 1 2 LPC_AD1
 0.0402_5% DEBUG@ R316
 <18> LPC_AD0_R LPC_AD0_R 1 2 LPC_AD0
 0.0402_5% DEBUG@ R317

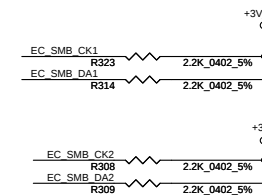


2011.04.26 Reserve GPIO to control LED



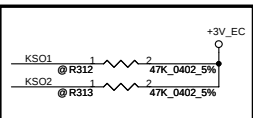
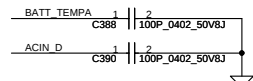
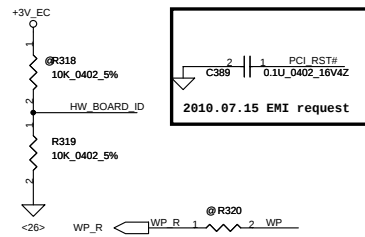
<26> KSI[0..15] KSI[0..15]
 <26> KSI[0..7] KSI[0..7]

confirm battery team change +5VALW to +3VALW

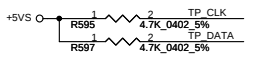
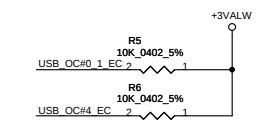
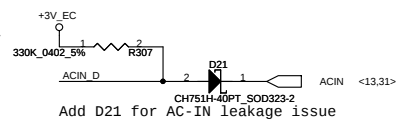
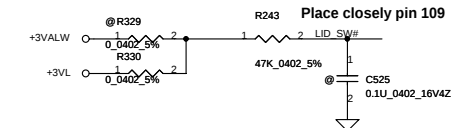
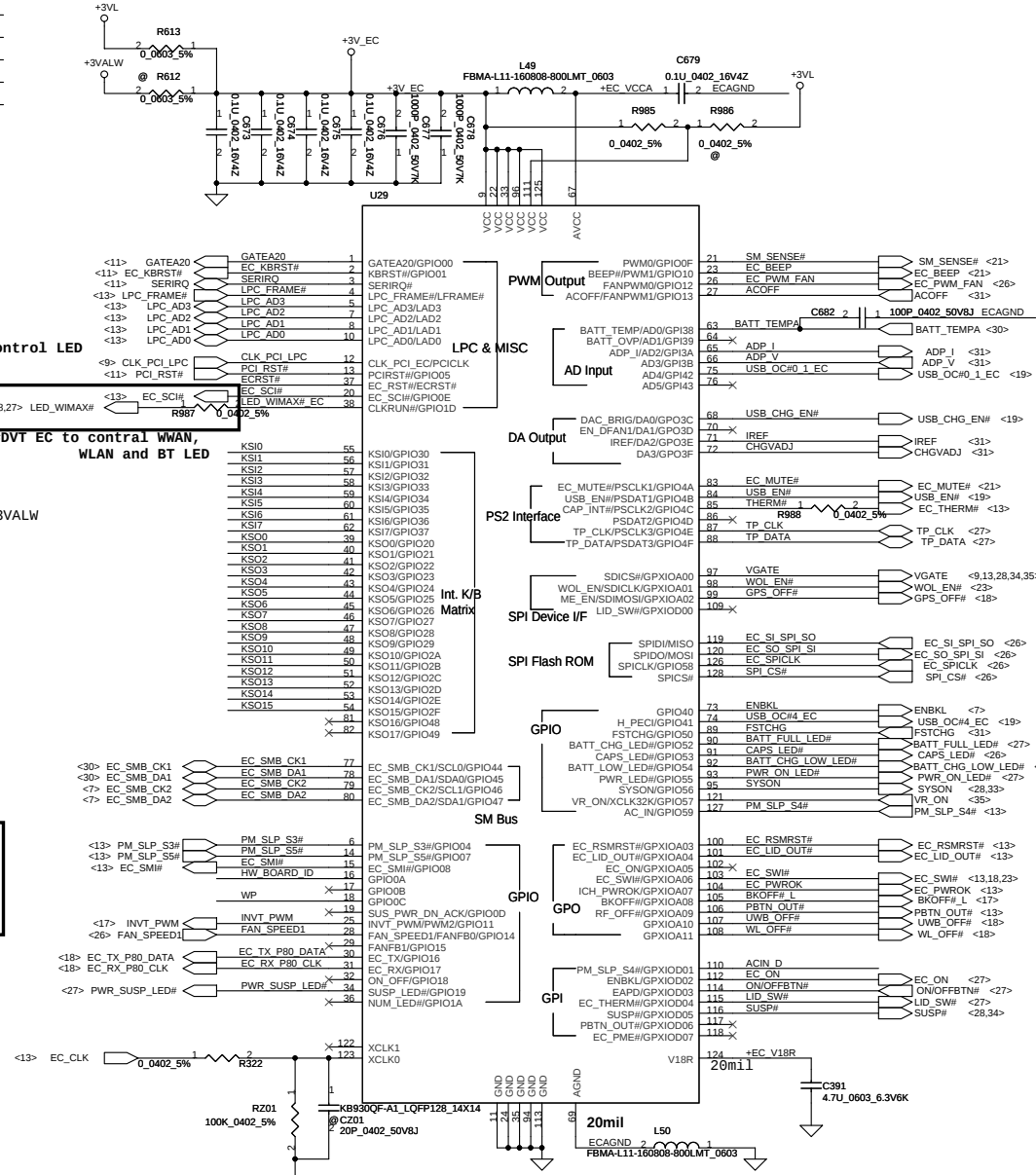


For EC recommend 10/17

01/06 Add HW board ID in EC pin16

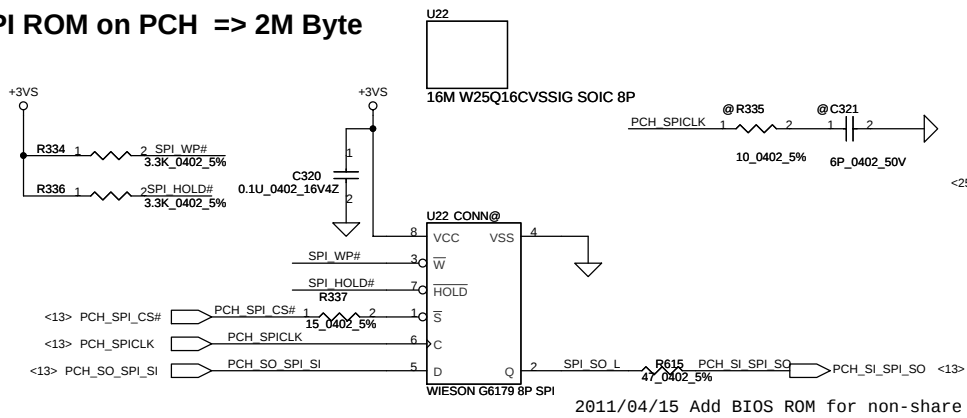


2011.08.29 Un-stuff R312,R313, KB930 dosen't need pull high



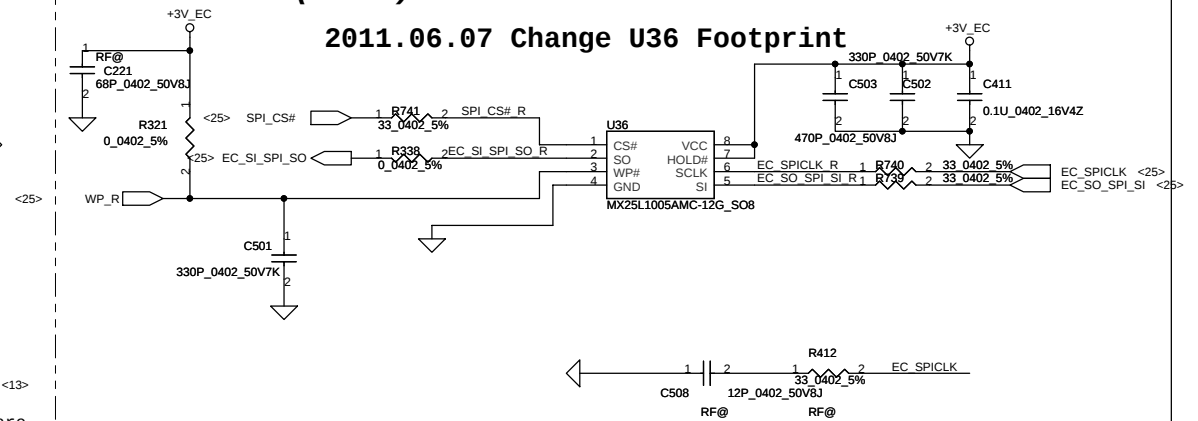
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				Date	Thursday, November 17, 2011
				Sheet	25 of 38
				Rev	B

SPI ROM on PCH => 2M Byte

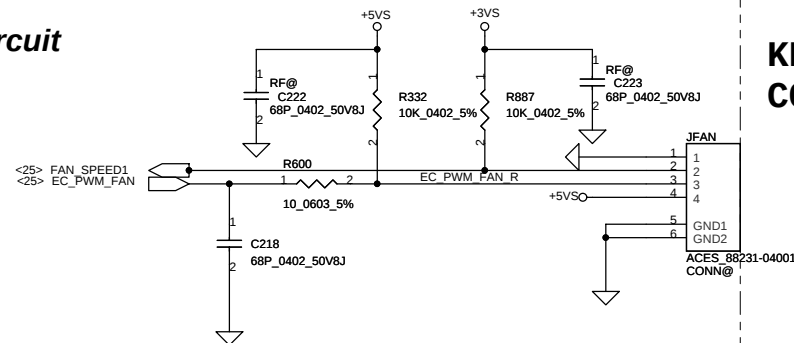


SPI Flash (1Mb*1)

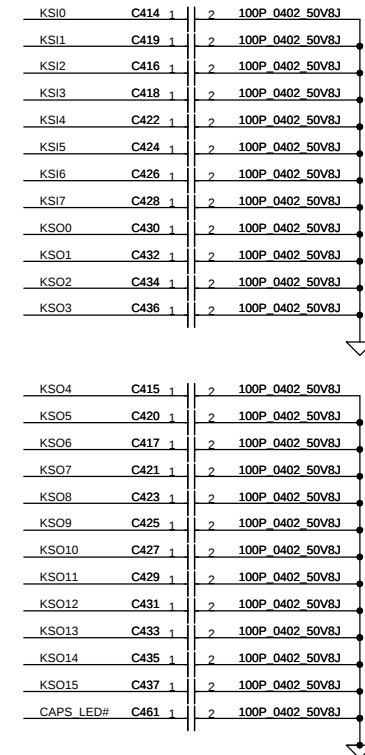
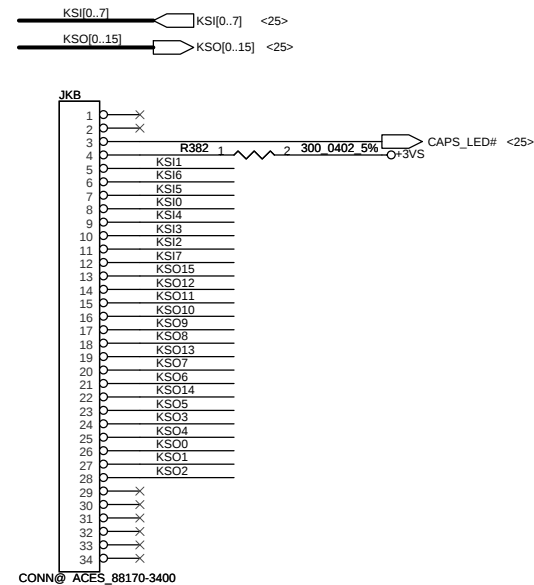
2011.06.07 Change U36 Footprint



FAN Control Circuit

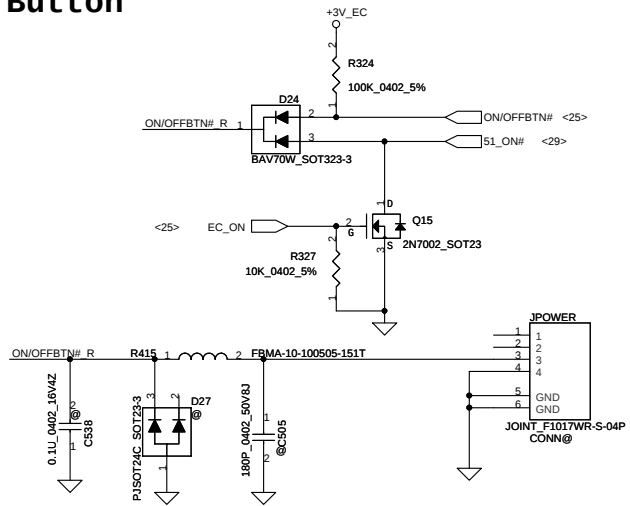


**KEYBOARD
CONN.**

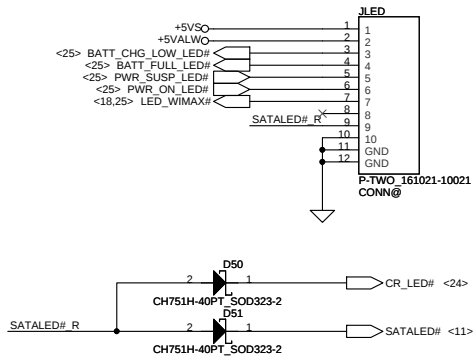


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					4019EG	
				Date: Thursday, November 17, 2011	Sheet 26 of 38	

Power Button

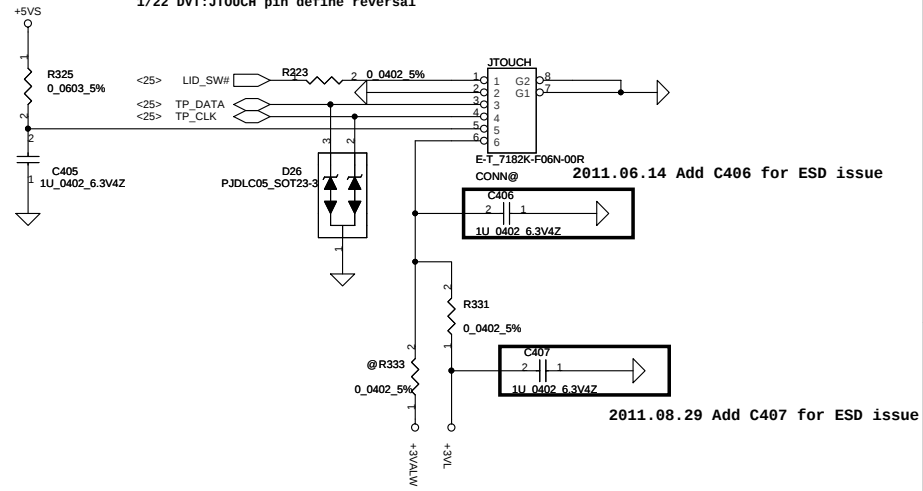


LED Conn

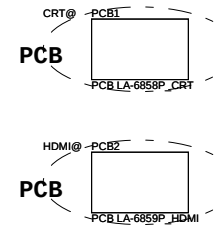


Touch/B Connector

1/22 DVT:JTOUCH pin define reversal



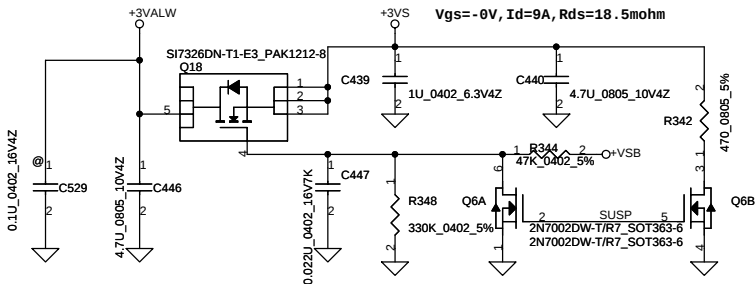
ISPD



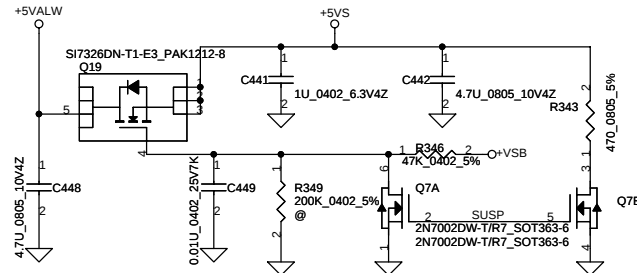
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				Rev B	
Date:		Thursday, November 17, 2011		Sheet	27 of 38

+3VALW TO +3VS

Vgs=-0V, Id=9A, Rds=18.5mohm

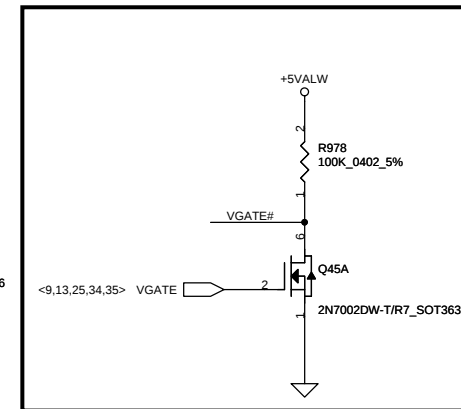
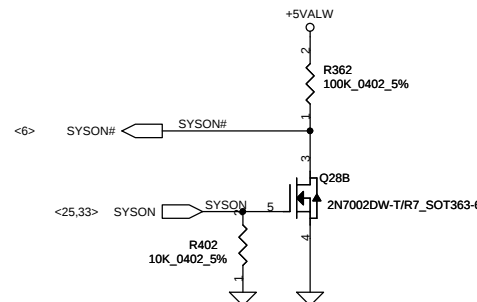
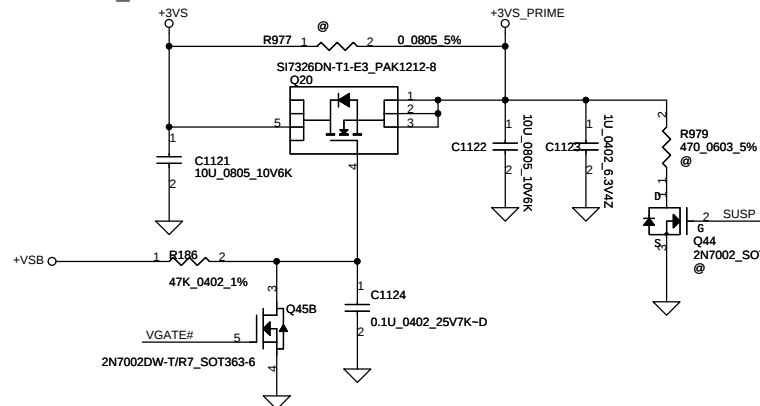


+5VALW TO +5VS

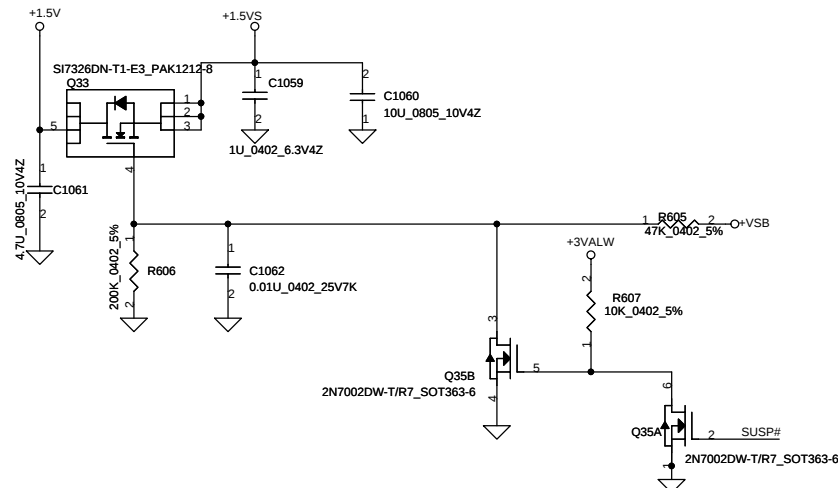


4/2 MP:For EMI ESD solution

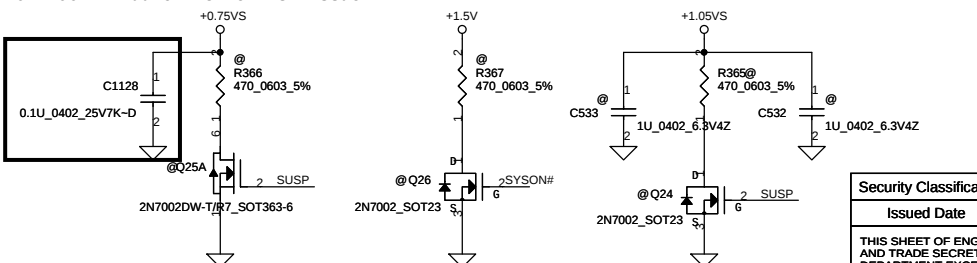
+3VS TO +3VS_PRIME



+1.5V TO +1.5VS

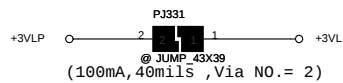
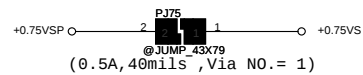
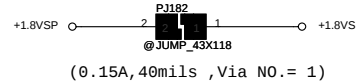
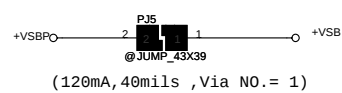
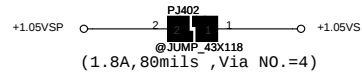
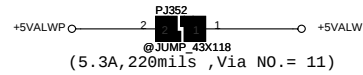
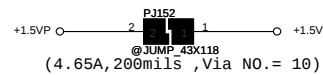
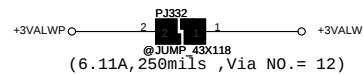
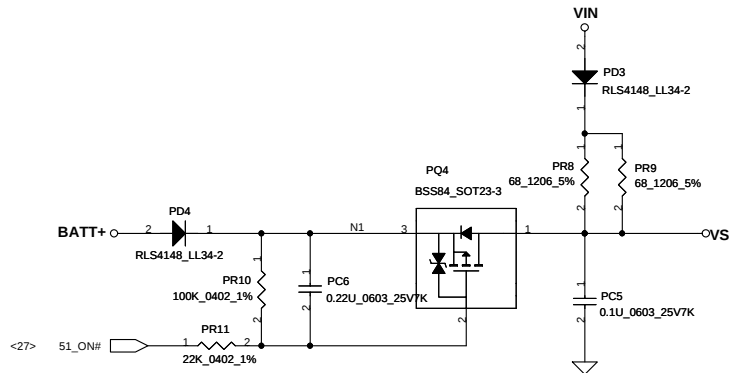
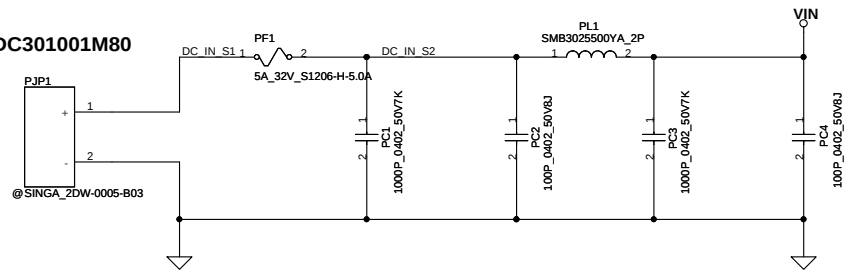


2011.06.14 Add C1128 for ESD issue

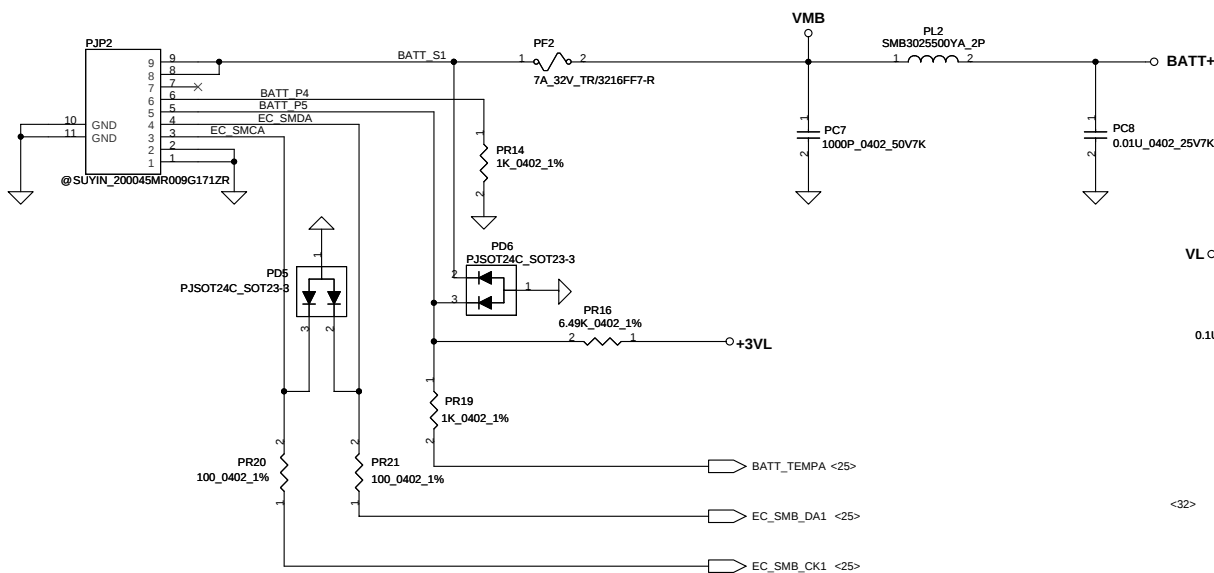


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				4019EG	
Date: Thursday, November 17, 2011				Sheet 28	of 38

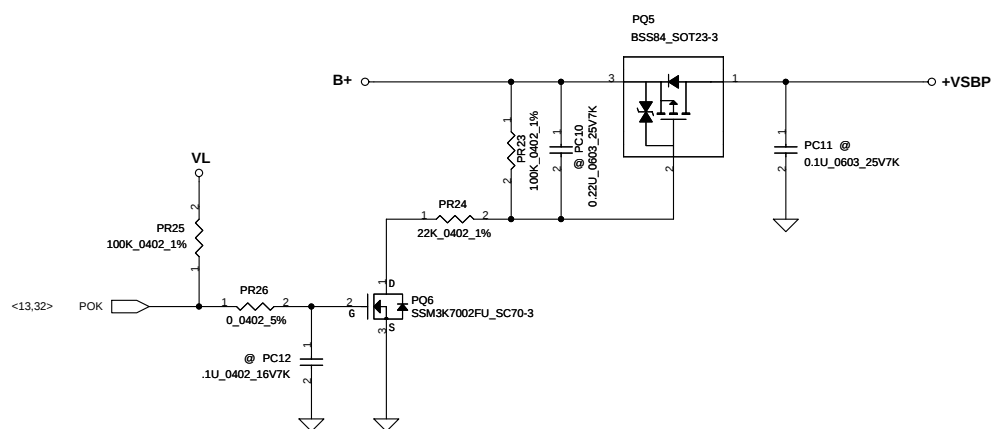
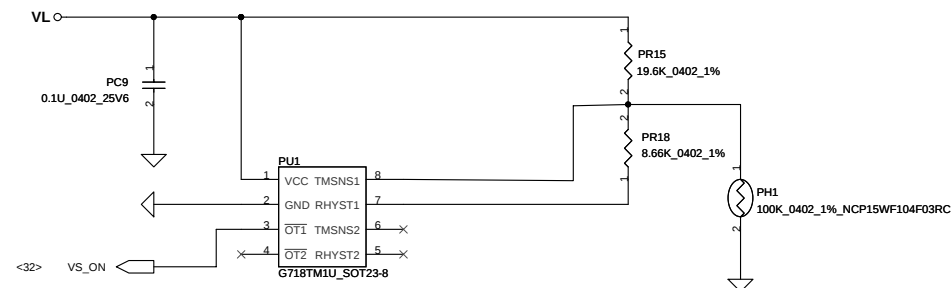
DC301001M80



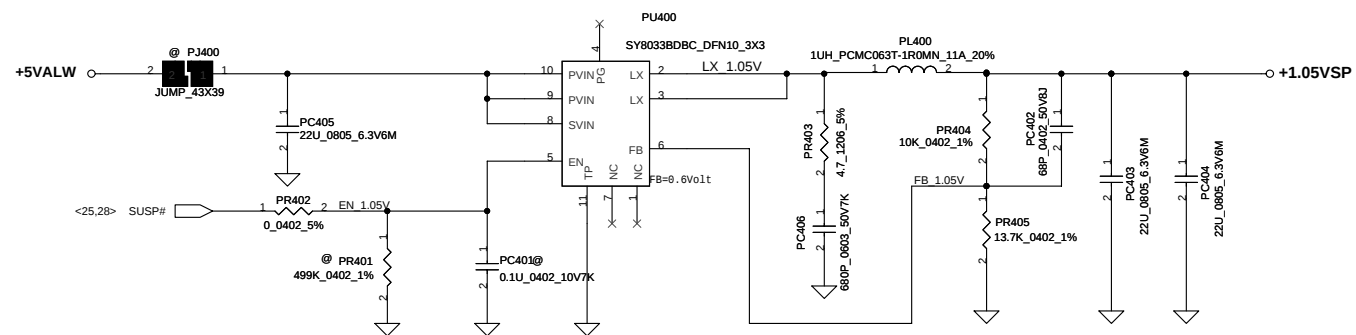
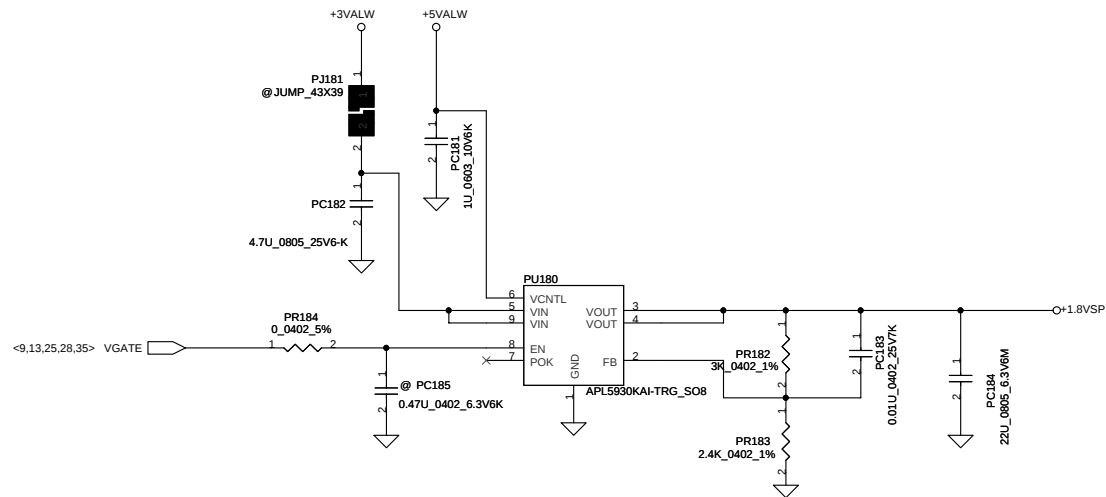
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				4019EG
				Rev B
				Date: Thursday, November 17, 2011
				Sheet 29 of 38



PH1 under CPU botten side :
CPU thermal protection at 95 degree C
Recovery at 56 degree C



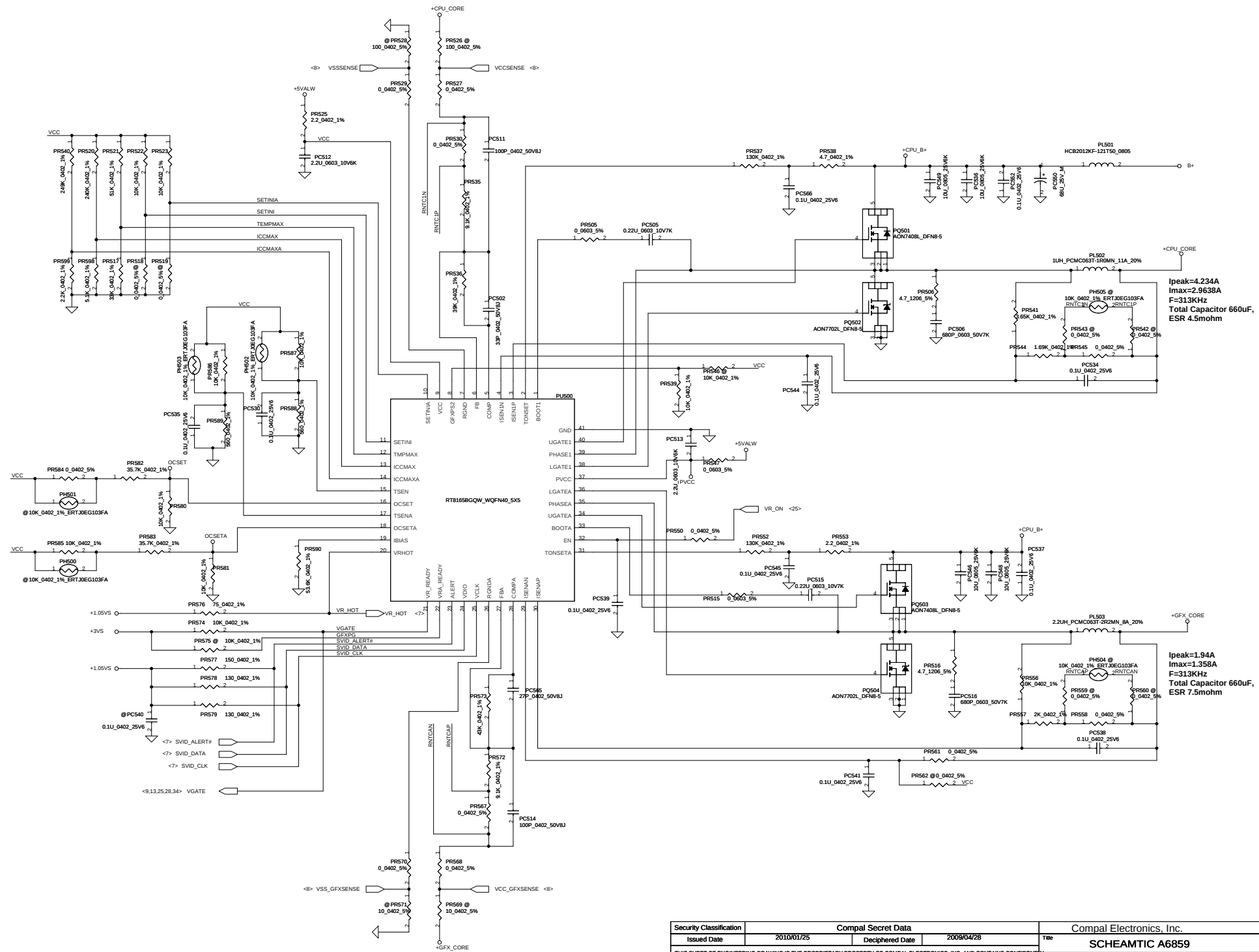
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				4019EG	B
Date: Thursday, November 17, 2011				Sheet	30 of 38



$I_{peak} = 1.8A$
 $I_{LIM} = 1.26A$
 $F = 1MHz$
 Total Capacitor 330uF, 9mohm

Pin 1 define same with Pin 2 & Pin 3 that just for SY8035 ,
 SY8035 is for 5A loading , let LX shape can bigger!!

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				4019EG	B
Date: Thursday, November 17, 2011				Sheet	34 of 38



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Date:		Thursday, November 17, 2011	Sheet	35	of 38

PIR (Product Improve Record)

QBU00 LA-6858P SCHEMATIC CHANGE LIST
REVISION CHANGE: 0.1

NO DATE PAGE MODIFICATION LIST				PURPOSE
01.	04/ 26	06	Delete C948,C949,C950,C951	ES2 CPU only support 2 pairs DMI
02.	04/ 26	06	Add DDR_A_MA15 signal in CPU side	Cedar Trail platform supports MA0-MA15 total sixteen address signals
03.	04/ 26	07	Reserve 0 ohm for DDC_SCL / SDA , HPD, BREF1P5V, BREFREXT connect to GND.	Follow Intel V1.0 check list to disable HDMI
04.	04/ 26	07	Add CRT DAC,SYNC signals and add RV155,RV156,RV157 150 ohm pull down resistor for CRT DAC signal.	Follow Intel V1.0 check list to enable RGB I/F
05.	04/ 26	08	Reserve 0 ohm for VCCADP / VCCADP_SFR connect to GND	Follow Intel V1.0 check list to disable HDMI
06.	04/ 26	08	Add R1004,C166 for +VCCDIO / R535,C1125 for +VCC_CRT_DAC	Follow Intel V1.0 check list to enable RGB I/F
07.	04/ 26	10	Add MA15 signal for SODIMM connector	Cedar Trail platform supports MA0-MA15 total sixteen address signals
08.	04/ 26	11	Stuff R544	System will change to non-share ROM design, PCH STRAP2/1 will be 01
09.	04/ 26	12	Change PCIe port arrangement	Follow BIOS team's request to re-arrang PCIe port for power saving.
10.	04/ 26	13	Use BOM option for R931,R932,R933,R934	Follow Intel V1.0 check list to disable HDMI
11.	04/ 26	13	Add J2 and C1087 for PCH GPIO12	BIOS will use GPIO12 for clean password function.
12.	04/ 26	13	Add R566,R567,R618 10K pull high resistors for PCH SPI I/F	System will change to non-share ROM design
13.	04/ 26	15	Add CRT circuit	Follow Intel PDG and V1.0 check list to implement CRT circuit
14.	04/ 26	19	Change USB charger(US1) solution to MAX14566B	Follow A51 common design
15.	04/ 26	19	Reserve US2 bus switch	Support BIOS team's new debug card.
16.	04/ 26	19	Change US4 USB power switch to 2A	Support USB charge V1.1 SPEC--->support 1.8A
17.	04/ 26	23	Change LOM_WAKE# control signal to EC_SWI#	LOM WAKE# will connect to PCH directly and change net name to "EC_SWI#"
18.	04/ 26	25	Change KBC to KB930/KB9012	Follow EC team KB930/KB9012 common design
19.	04/ 26	26	Add U22 -->2MB SPI ROM	System will change to non-share ROM design
20.	04/ 28	18	Reserve 0 ohm and test points in JGPS pin1/3/5/44/46/51	Cougar 2.0 will support new 3G/LTE module
21.	04/ 29	25	Delete C211,C212,C216,C217	RF team has no necessity
22.	04/ 29	07	Delete 220p caps for sideband signals.	EMC team has no necessity
23.	04/ 29	09	Delete C940,C941	RF team has no necessity
24.	04/ 29	09	Delete C1067,C1066	RF team has no necessity
25.	04/ 29	09	Reserve R305,C392 for SMBus_CLK	Reserve R-C for RF team's requirement
26.	04/ 29	17	Delete C227,C228,C290,C230,C231,C232,C1074,C1075	RF team has no necessity
27.	04/ 29	18	Delete C307,C298,C297	RF team has no necessity
28.	05/ 03	07	Add R984 0 ohm resistor for XDP pin17	Reserve 0 ohm for XDP when XDP connector no use.
29.	05/ 04	16	Change Q42,Q43 to dual package	Save layout space and cost
30.	05/ 06	07	Add R989 (0 ohm) for XDP signal	Reserve 0 ohm for XDP when XDP connector no use.
31.	05/ 10	15	Delete D53,F1,C1110	Share 5V with CRT circuit.
32.	05/ 10	07	Change XDP un-define net name	Follow naming rule

QBU00 LA-6858P SCHEMATIC CHANGE LIST
REVISION CHANGE: 0.2

NO DATE PAGE MODIFICATION LIST				PURPOSE
01.	06/ 07	07	Remove XDP connector	XDP debug port is no necessary in PVT
02.	06/ 07	08	Keep +VCCADP_1.05, +VCCADP_SFR power rail even disable DDI interface	Intel correct their DDI disable guideline
03.	06/ 07	26	Change U36 Symbol and footprint	Fix DFB issue
04.	06/ 10	13	Change J1 to JCMOS, J2 to JPW	Follow A51 jumper naming rule
05.	06/ 10	19	Remove US2 USB bus switch	PVT won't reserve USB debug port
06.	06/ 14	08	Stuff 1u (C1007,C1008,C1009) on GFX_CORE	To solve ESD issue
07.	06/ 14	28	Add 0.1u (C1128) on +0.75VS power rail	To solve ESD issue
08.	06/ 14	10	Add 0.1u (C116) on +0.75VS power rail	To solve ESD issue
09.	06/ 14	10	Add 0.1u (C119) on +1.5V power rail	To solve ESD issue
10.	06/ 14	10	Add 0.1u (C406) on +1.5V power rail	To solve ESD issue
11.	06/ 14	27	Add 1u (C406) on touch pad power rail	To solve ESD issue
12.	06/ 15	13	Change PCH SPI I/F pull high to +3VS	To solve S3/S5 +3VS power plan leakage issue
13.	06/ 16	20	Stuff 0.1u (C280) on +3VS power rail	To solve ESD issue
14.	06/ 18	07	Add R1009, R1010 for DDI1_DDC_SCL/SDA	Follow Intel DDI disable guideline

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Issued Date		2009/04/07		Deciphered Date		2012/10/21		Title			
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						Document Number		4019EG		Rev B	
						Date:		Thursday, November 17, 2011		Sheet 36 of 38	

PIR (Product Improve Record)

QBU00 LA-6858P SCHEMATIC CHANGE LIST
REVISION CHANGE: 0.3

NO DATE PAGE MODIFICATION LIST				PURPOSE
01.	06/ 29	09	Swap CLK Gen output for CPU_SCDREFFCLK and CPU_DREFCLK	Intel recommend CPU_SSCDREFFCLK use SSC CLK

QBU00 LA-6858P SCHEMATIC CHANGE LIST
REVISION CHANGE: 1.0

NO DATE PAGE MODIFICATION LIST				PURPOSE
01.	08/ 29	07	Change R975 from 10ohm to 0 ohm	Follow Intel CRB design.
02.	08/ 29	25	Un-stuff R312,R313	KS01,KS02 of KB930 don't need to pull high.
03.	08/ 29	27	Add 1u(C406) on touch pad power rail.	To solve ESD issue

NO	DATE	PAGE	MODIFICATION LIST	PURPOSE
2011/06/14		32	PR336, PR356 to 1206 4.7ohm; PC336, PC356 to 0603 680pF	For EMI Solution
2011/06/14		35	PR526, PR528, PR569, PR571 to @ PR506, PR516 to 1206 4.7ohm; PC506, PC516 to 0603 680pF	For EMI Solution
2011/06/14		33	PU150 change to RT8209MGQW	
2011/06/14		33	PR157 change to S RES 1/16W 7.87K +-1% 0402	For OCP Solution
2011/06/14		35	PC550 to @	Reserve PC550 location and change it to 5.3mm cap (SF000003Z00) for ME solution
2011/06/21		35	PC536 to 42.2K	Change PR536 to 42.2Kohm to meet Cedar Trail loadline spec
2011/06/27		35	PH505, PR542, PR543, PH504, PR559, PR560 to @ PR545, PR558, PR530, PR567 to 0ohm PR541 to 3.62K, PR544 to 1.69K, PR556 to 10K PR557 to 2K, PR536 to 39K	For Cedar Trail loadline spec
2011/06/27		35	PR582, PR583 to 35.7K	For CPU & GFX OCP Solution
2011/06/27		35	PL503 to 2.2uH	Base on GFX_Core ripple & dynamic test result
2011/06/27		35	PR584 to 0_0402_5%	For AP Code material
2011/11/1		29	PF1 change to SART 5A_32V_S1206-H-5.0A	For burn out issue
2011/11/1		30	PF2 change to Cooper 7A_32V_TR/3216FF-R	For burn out issue
2011/11/1		32	PU330 change to RT8205EGQW	For burn out issue
2011/11/1		35	PC550 change to Lelon 68uF 5.3H	For acoustic issue

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Date:		Thursday, November 17, 2011		Sheet	38 of 38