

MODEL NAME : *AAM00*

PCB NO : *LA-C361P*

BOM P/N :

# Dell/Compal Confidential

## Schematic Document

### SKYLAKE-H

2014-05-22

Rev: 0.0 (M00)

@ : Nopop Component

CONN@ : Connector Component

R1@ / R3@ : R1/R3 CPN for CPU, GPU, PCB

TPM@ : TPM function

EMC@ : Pop of EMI parts

VRAMS@ : Samsung GDDR5 for GPU

VRAMH@ : Hynix GDDR5 for GPU

VRAMM@ : Micron GDDR5 for GPU

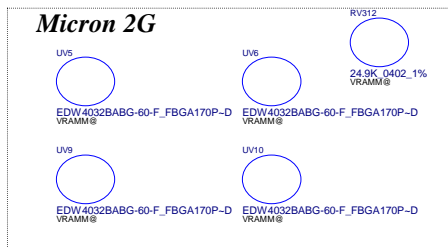
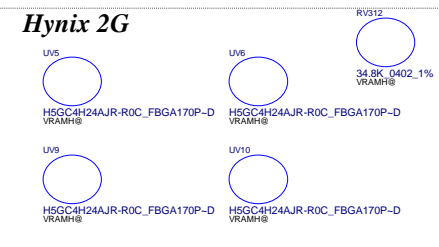
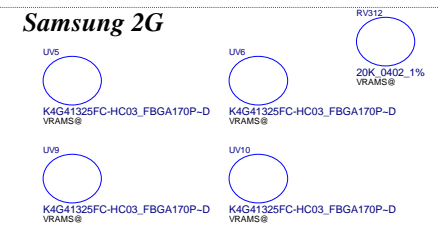
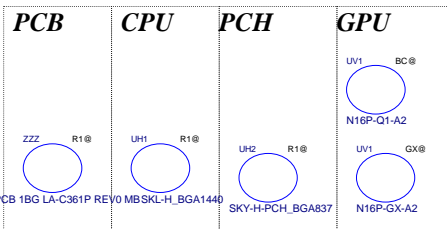
BreakDown@ : for measure power consumption

CSMB@ : CSMB sku

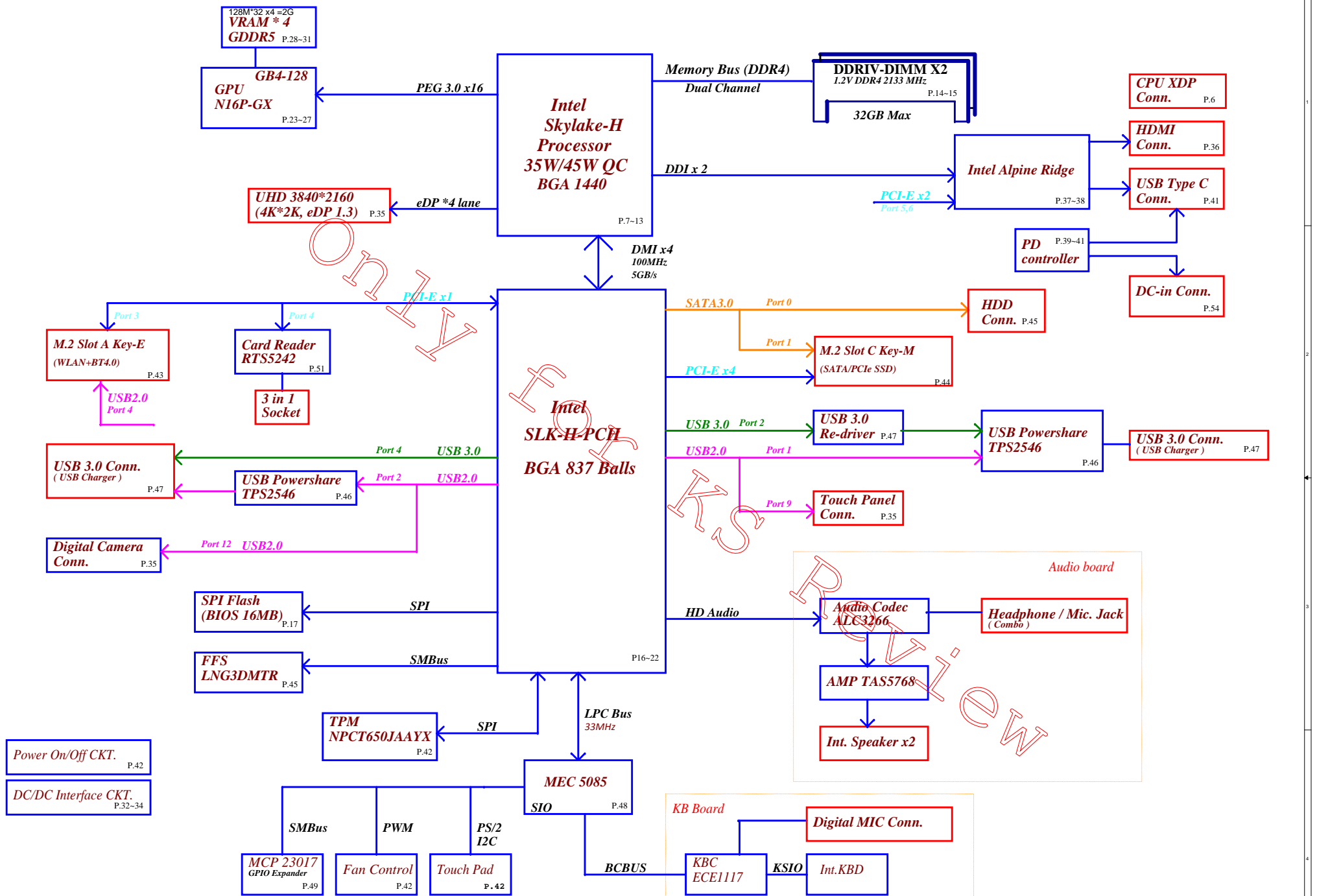
BC@ : BC sku (GPU N16P-Q1)

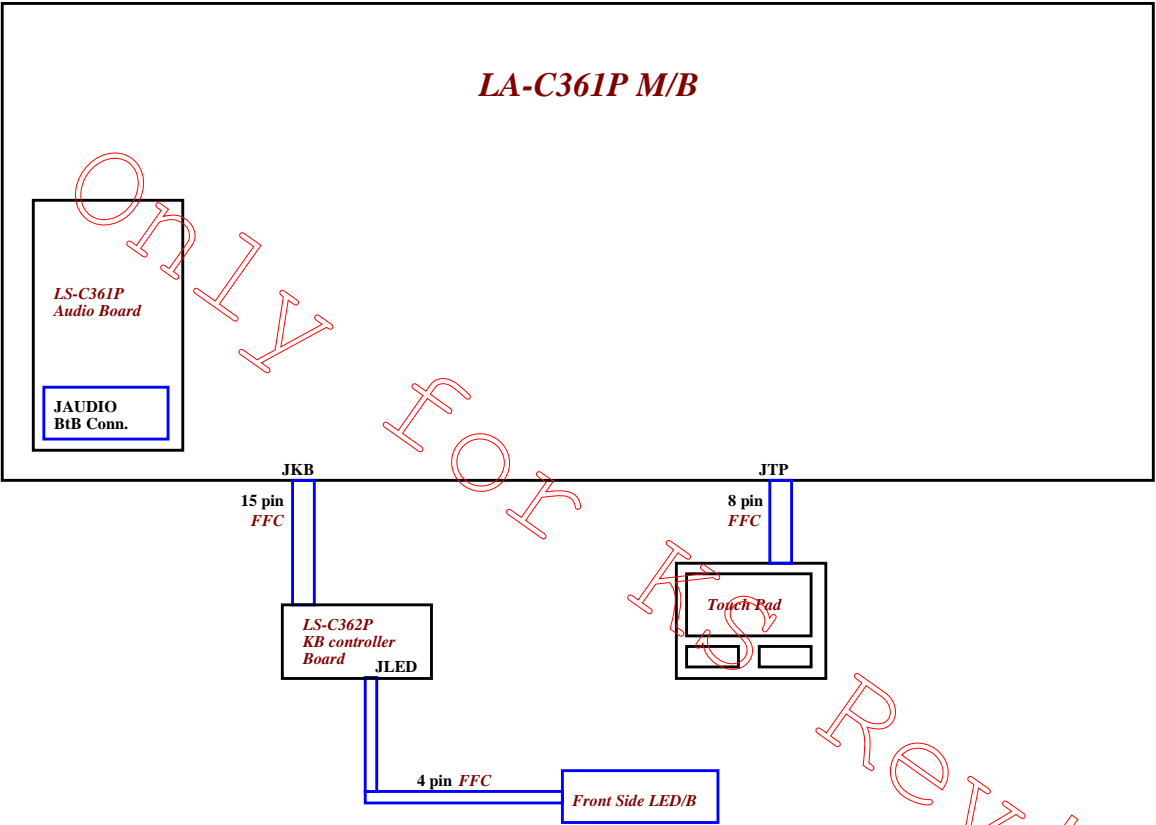
GX@ : GPU N16P-GX

UMA@ / DIS@ : UMA/DIS



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Date				Thursday, August 05, 2015	Rev 0.1000
Sheet				1	of 71





Board ID	Resistor
X00	N/A
X01	
X02	
X03	
A00	

USB3	DESTINATION
1	USB Conn 1 (Right Side)
2	USB Conn 2 (Left Side)
3	None
4	None
5	None
6	None

USB 2.0	DESTINATION
1	USB Conn 1 (Right Side)
2	USB Conn 2 (Left Side)
3	None
4	NGFF-1 WLAN + BT
5	None
6	None
7	None
8	None
9	Touch screen
10	None
11	None
12	CAMERA



DDI	DESTINATION
1	Alpine Ridge
2	Alpine Ridge
3	None

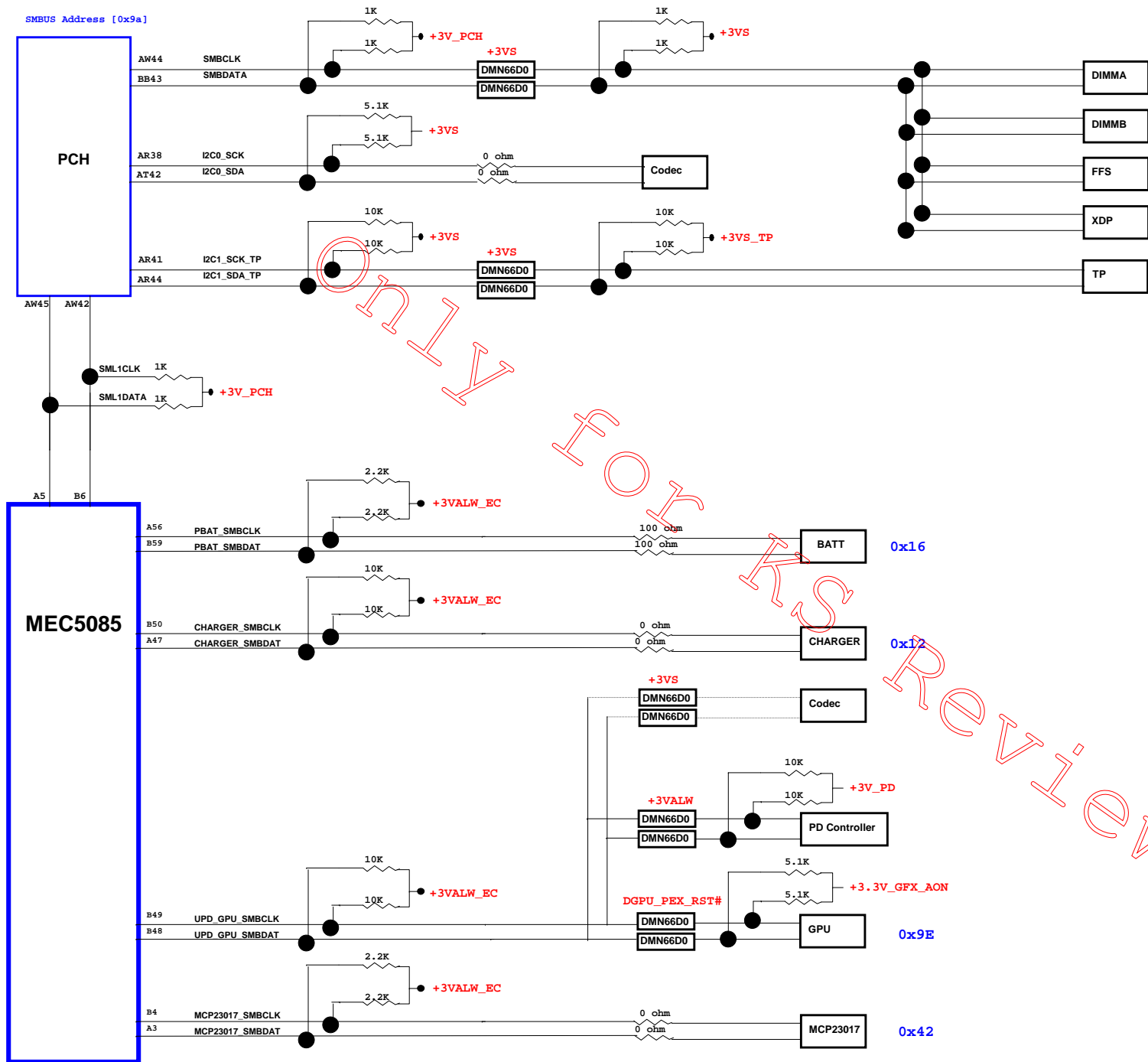
LPC	DESTINATION
LPC0	MEC5085
LPC1	DEBUG PORT

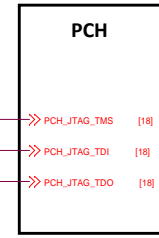
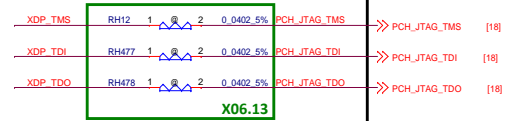
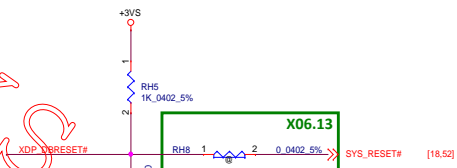
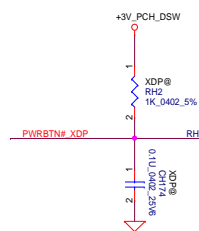
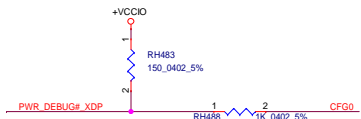
PCI EXPRESS	DESTINATION	USB3	DESTINATION
Lane 1	NGFF-1 WLAN + BT	7	None
Lane 2	CARD READER	8	None
Lane 3	None	9	None
Lane 4	None	10	None
Lane 5	None		
Lane 6	None		
Lane 7	None		
Lane 8	None		
Lane 9	SSD	SATA	DESTINATION
Lane 10	SSD	0A	SSD
Lane 11	SSD	1A	N/A
Lane 12	SSD	N/A	N/A
Lane 13	SSD	N/A	N/A
Lane 14	SSD	N/A	N/A
Lane 15	SSD	0B	None
Lane 16	SSD	1B	HDD
Lane 17	SSD	2	None
Lane 18	SSD	3	None

CLKOUT_PCIE	DESTINATION	CLKOUT_PCIE	DESTINATION
0	None	10	None
1	None	11	None
2	None	12	None
3	NGFF-1 WLAN	13	None
4	CARD READER	14	None
5	Thunderbolt	15	None
6	NGFF-2 SSD		
7	GPU		
8	None		
9	None		

Symbol Note :

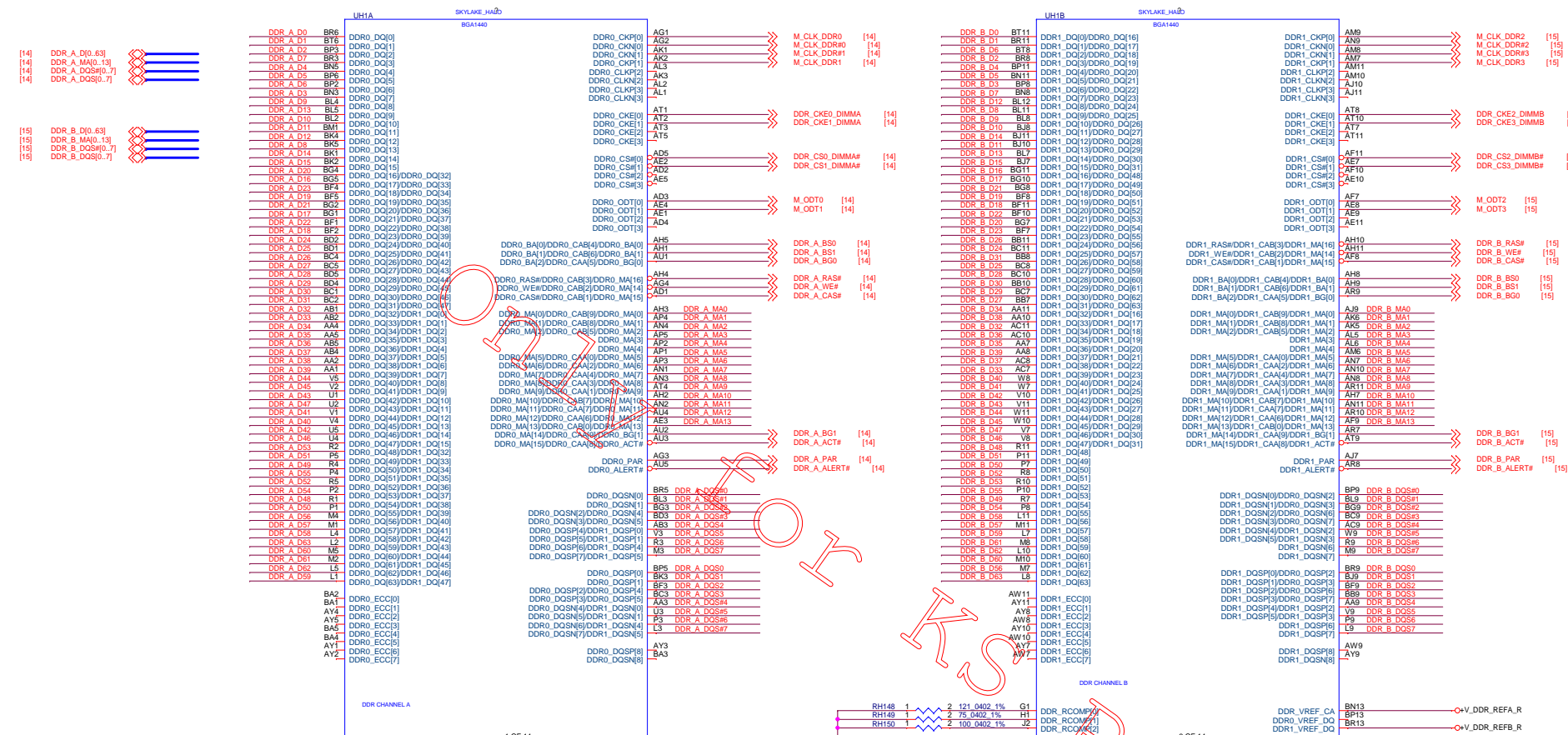
 : means Digital Ground
  : means Analog Ground







## Interleave

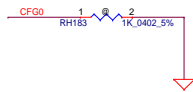


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				Size	Document Number
Date: Thursday, August 06, 2015				Sheet	8 of 71
					0.1/000

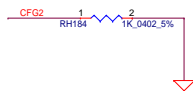


## CFG Straps for Processor

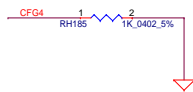
Stall reset sequence after PCU PLL lock until de-asserted	
CFG0	<p>* 1 = (Default) Normal Operation; No stall.</p> <p>0 = Stall.</p>



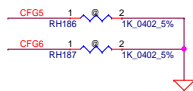
PCI EXPRESS STATIC LANE REVERSAL FOR ALL PEG PORTS	
CFG2	1: Normal Operation; Lane # definition matches socket pin map definition  * 0: Lane Reversed



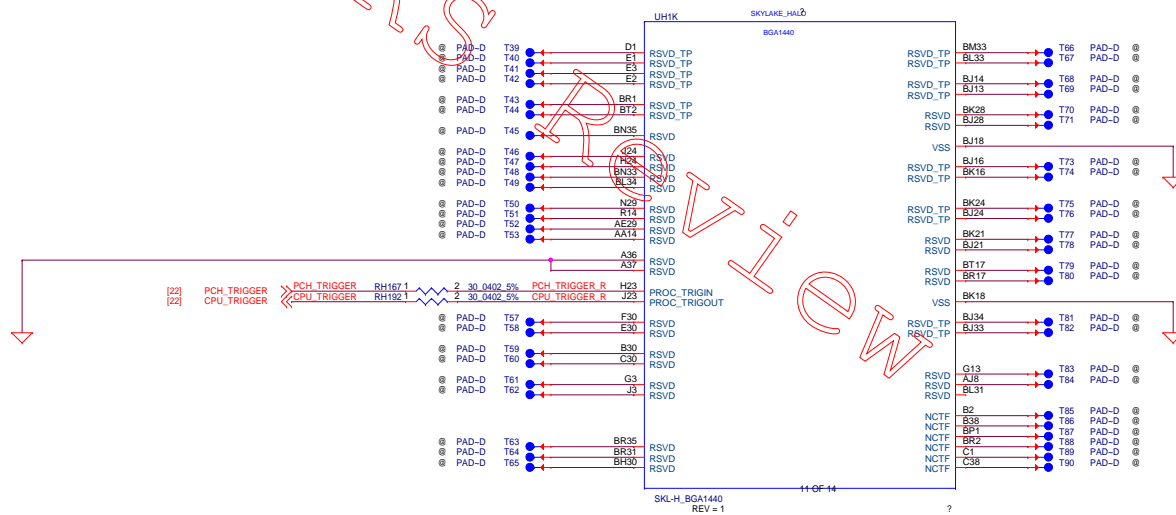
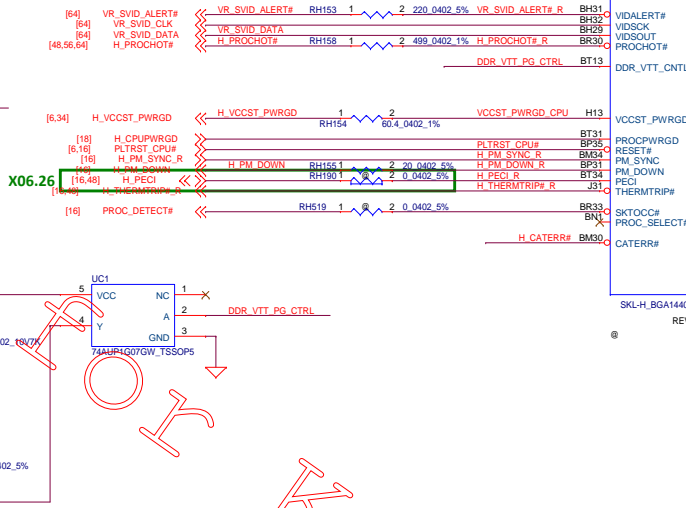
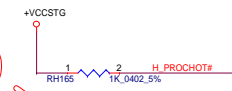
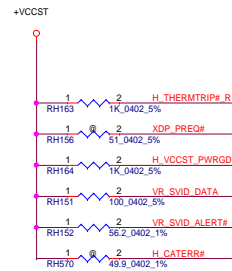
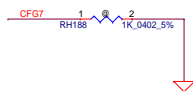
Display Port Presence Strap	
CPG4	<p>1 : Disabled; No Physical Display Port attached to Embedded Display Port</p> <p>★ 0 : Enabled; An external Display Port device is connected to the Embedded Display Port</p>



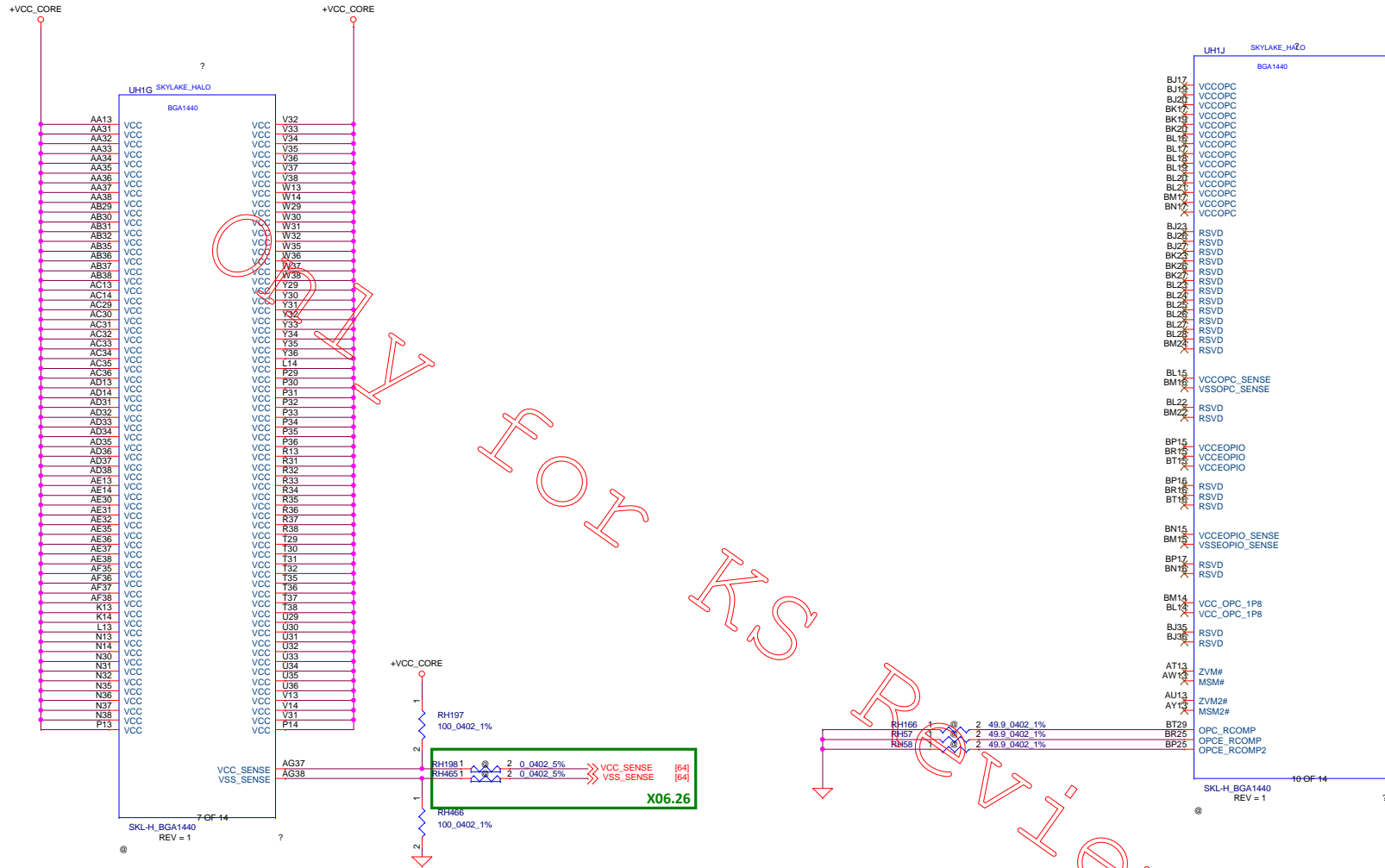
PCIe Port Bifurcation Straps	
CFG[6:5]	*11: (Default) x16 - Device 1 functions 1 and 2 disabled
	x0: x8, x8 - Device 1 function 1 enabled ; function 2 disabled
	01: Reserved - (Device 1 function 1 disabled ; function 2 enabled)
	00: x8,x4,x4 - Device 1 functions 1 and 2 enabled

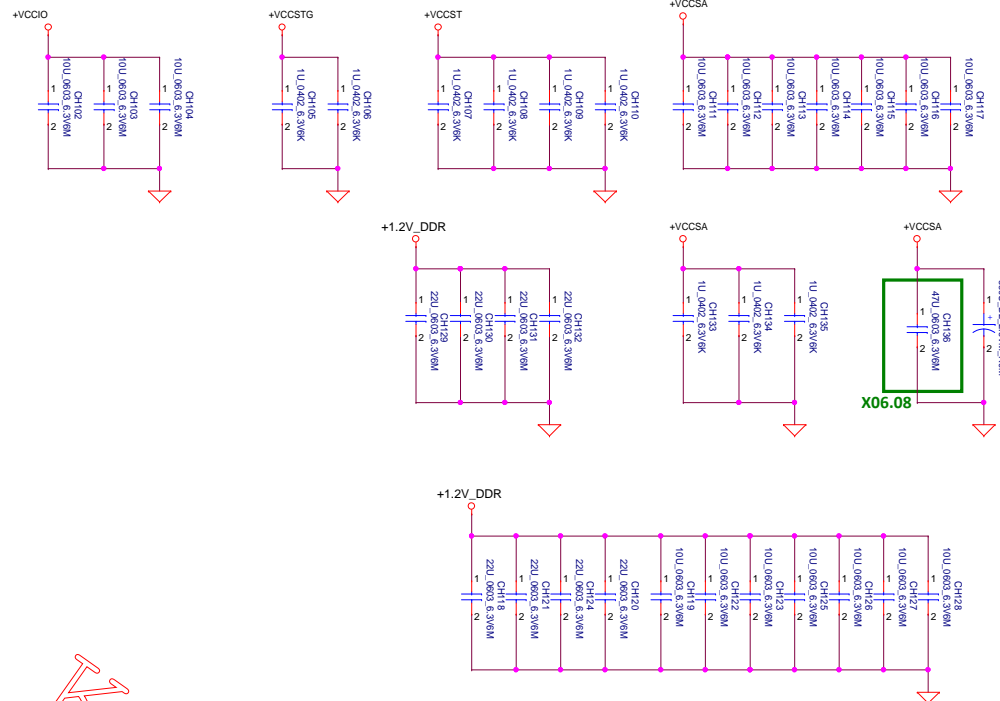
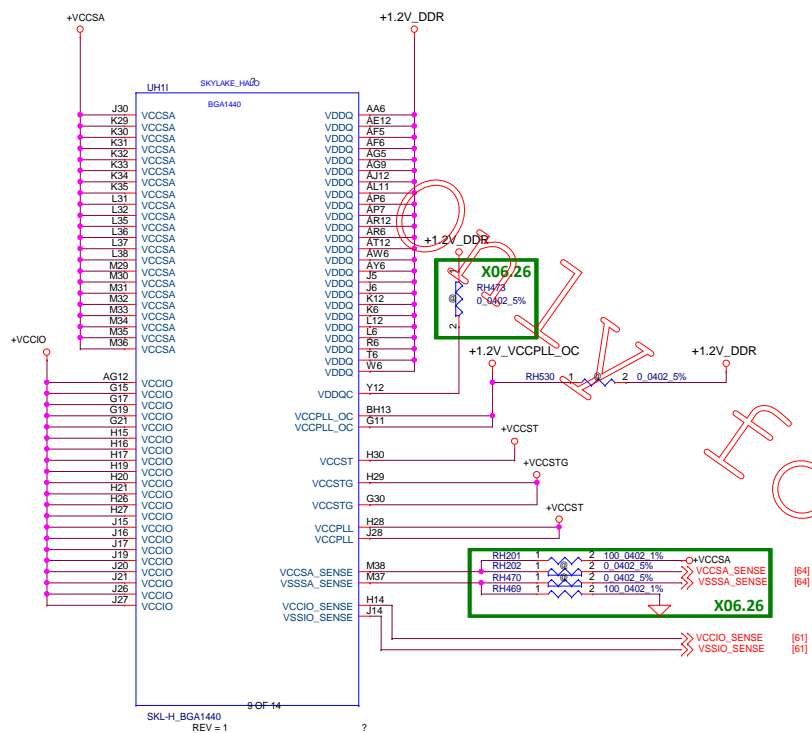


PEG DEFER TRAINING	
CFG7	<p>★ 1: (Default) PEG Train immediately following xxRESETB de assertion</p> <p>0: PEG Wait for BIOS for training</p>

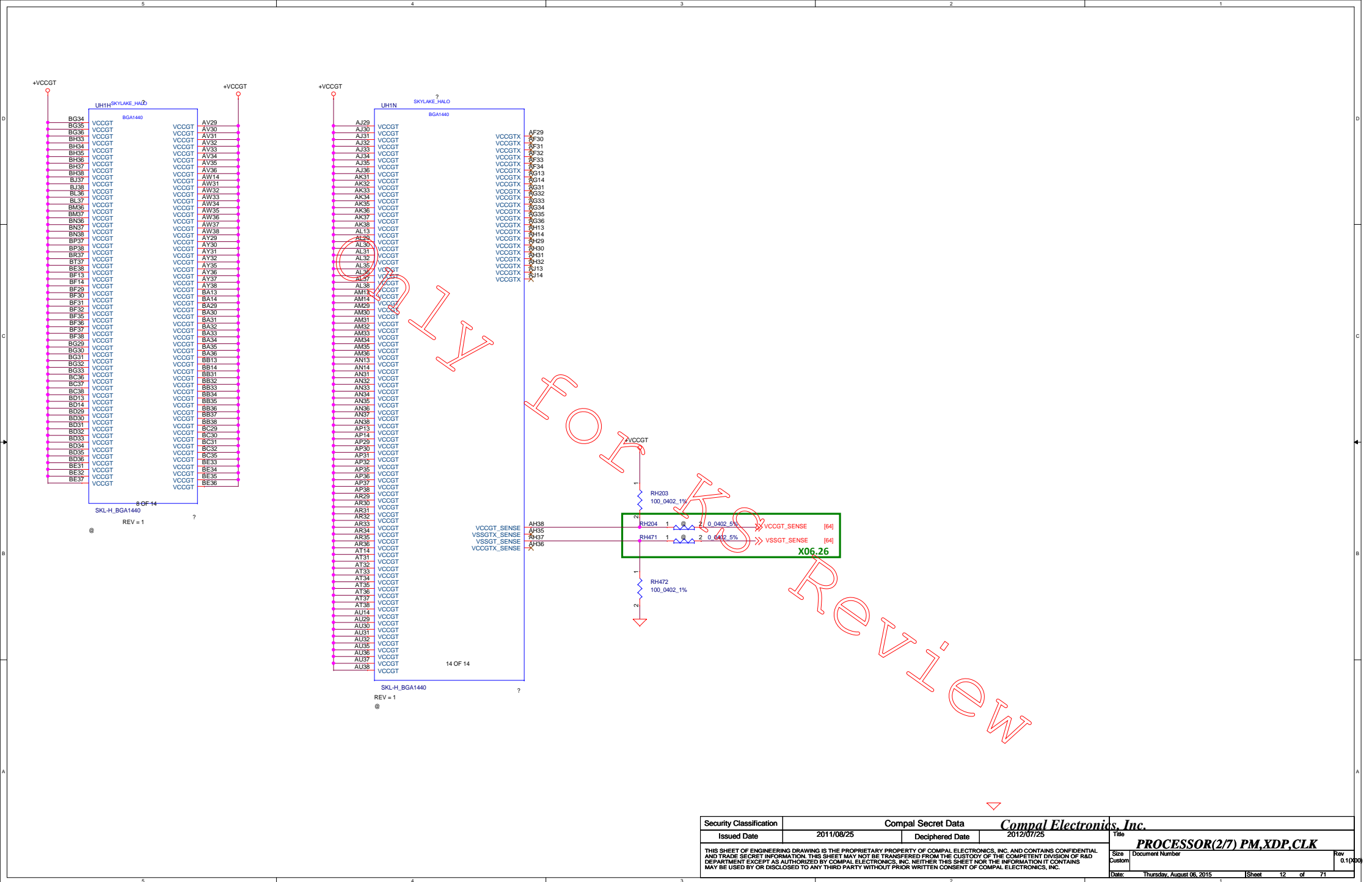


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				PROCESSOR(4/7) RSVD_CFG	
				Size	Document Number
				C	Rev
				0.1(100)	
Date:		Thursday, August 06, 2015		Sheet 9 of 71	

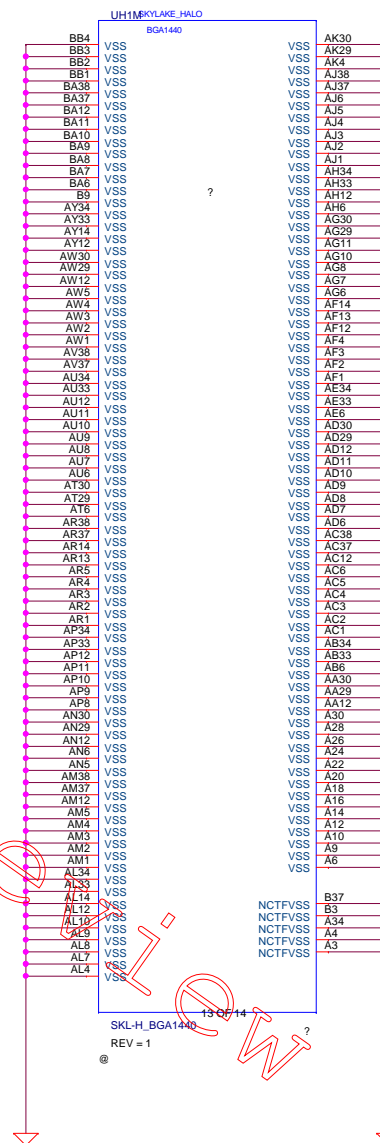
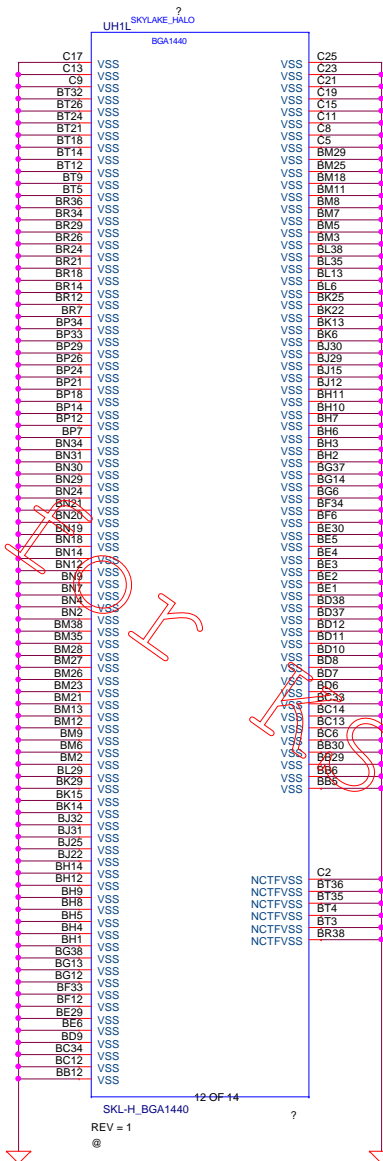
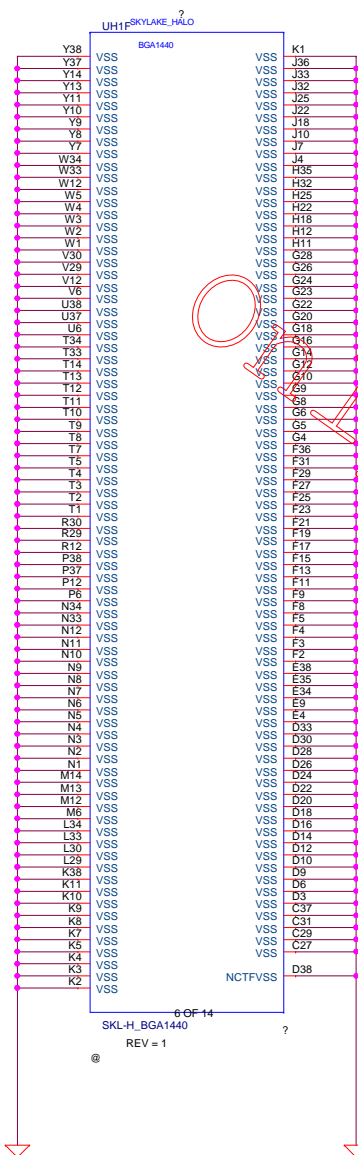




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Date: Thursday, August 06, 2015		Sheet 11 of 71		Rev 0.10000

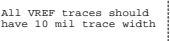
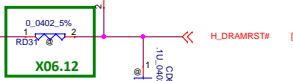


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Date: Thursday, August 06, 2015				Sheet 12 of 71



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				Customer	01(00)
Date:		Thursday, August 06, 2015		Sheet	13 of 71

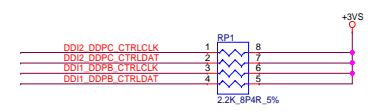
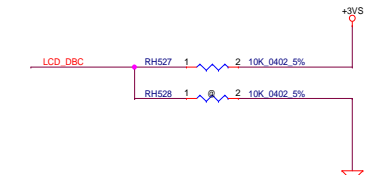
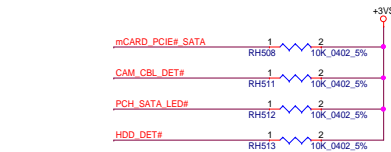
The diagram illustrates the power supply section of the TMS320C6748 evaluation board. It features two 1.2V DDR power planes connected to a common ground. The top plane, labeled +1.2V\_DDR, includes capacitors CD178 through CD186. The bottom plane, also labeled +1.2V\_DDR, includes capacitors CD171 through CD179. Each capacitor is connected to a specific power pin (e.g., NU\_0002, NU\_0003, NU\_0004) and ground. A red 'X' is marked on the right side of the diagram.



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				Date	Thursday, August 06, 2015	Sheet 14 of 71

Security Classification	Compal Secret Data		<b>Compal Electronics, Inc.</b> Title <b>DDRIII DIMMB</b> Docuement Number <b>LA-C361P</b> Date: <b>Thursday, August 06, 2015</b> Sheet <b>15</b> of <b>71</b>	
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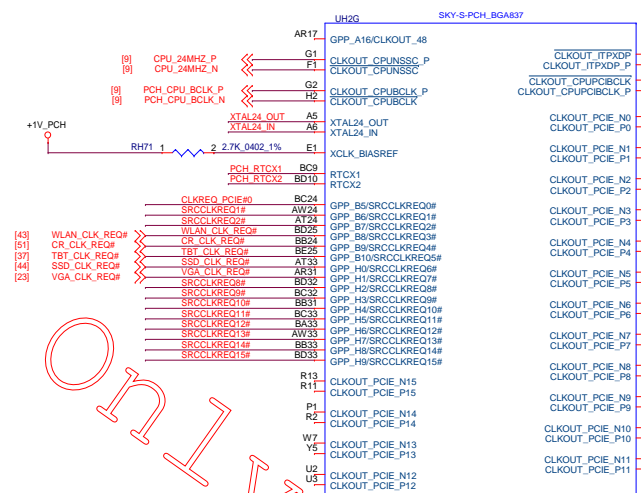
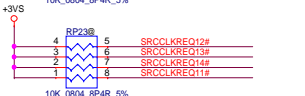
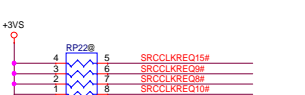
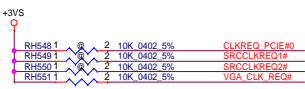
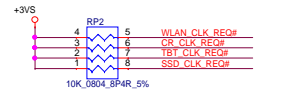




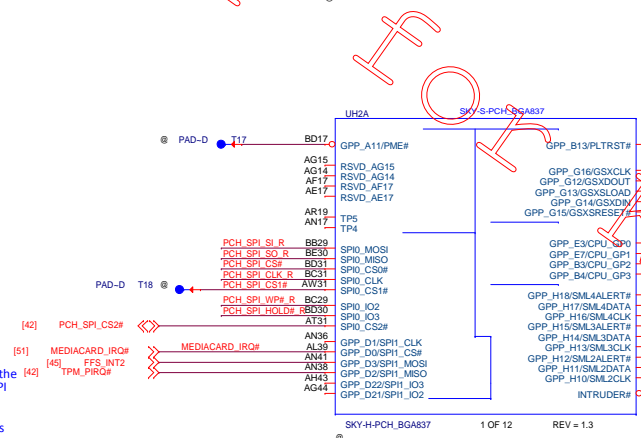
## DisplayPort\* Disabling and Termination Guidelines

Port	Strap	How to Enable Port?	How to Disable Port?
Port B	DDPB_CTRLDATA	Pull up to 3.3 V with 2.2-k $\Omega$ $\pm$ 5% resistor	No Connect
Port C	DDPC_CTRLDATA	Pull up to 3.3 V with 2.2-k $\Omega$ $\pm$ 5% resistor	No Connect
Port D	DDPD_CTRLDATA	Pull up to 3.3 V with 2.2-k $\Omega$ $\pm$ 5% resistor	No Connect



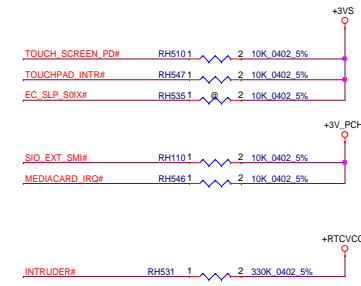
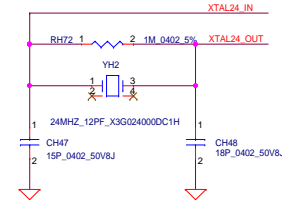
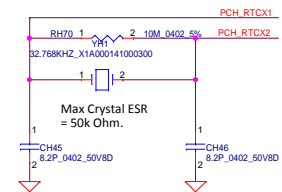


SKY-H-PCH\_BGA837 REV = 1.3 7 OF 12



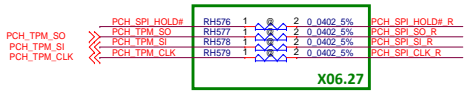
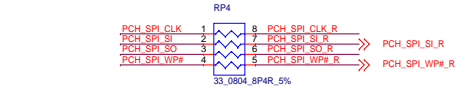
SKY-H-PCH\_BGA837 1 OF 12 REV = 1.3

# RTC CRYSTAL

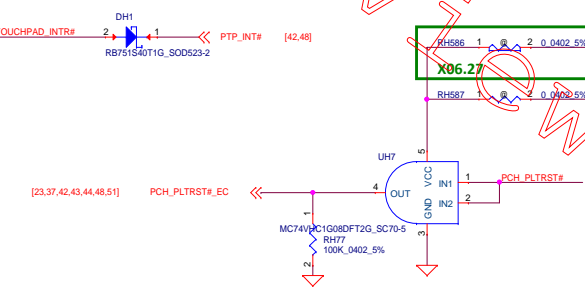


9/5 MOW  
Option 1: Implement a 1 kOhm pull-down resistor on the signal and de-populate the required 1 kOhm pull-up resistor. In this case, customers must ensure that the SPI flash device on the platform has HOLD functionality disabled by default.

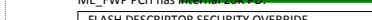
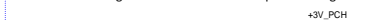
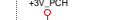
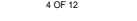
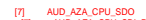
Note that the pull down resistor on SPI0\_IO3 is only needed for SKL U/Y platforms with ES and SKL S/H platforms with pre-E51/E51 samples.



## SPI ROM FOR ME ( 16MByte )



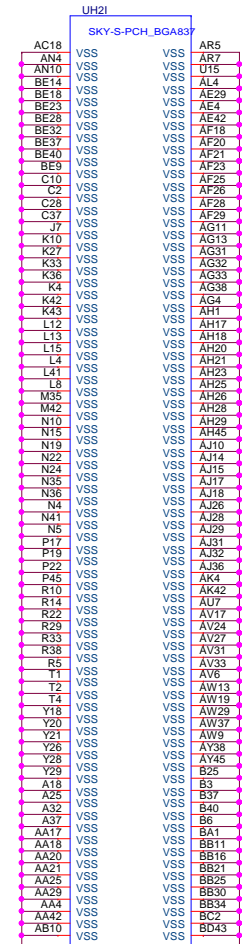
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Size	Document Number	Rev	0.1(200)	
Date	Thursday, August 06, 2015	Sheet	17	of 71



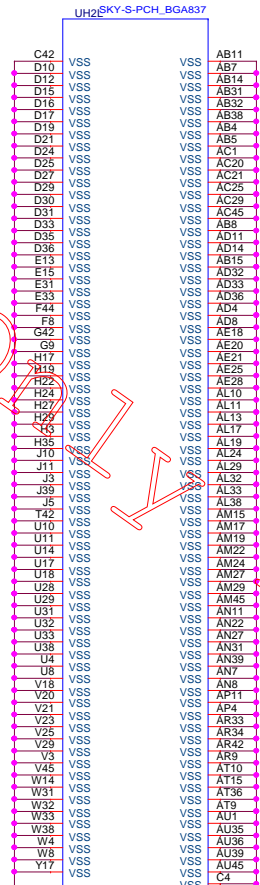




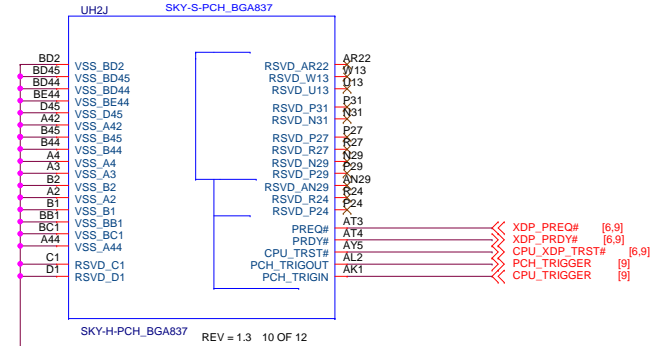




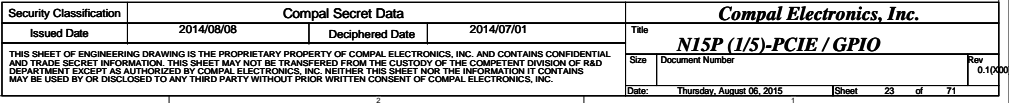
SKY-H-PCH\_BGA837  
REV = 1.3 9 OF 12  
@



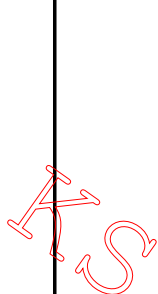
SKY-H-PCH\_BGA837  
12 OF 12 REV = 1.3  
@



SKY-H-PCH\_BGA837  
REV = 1.3 10 OF 12  
@





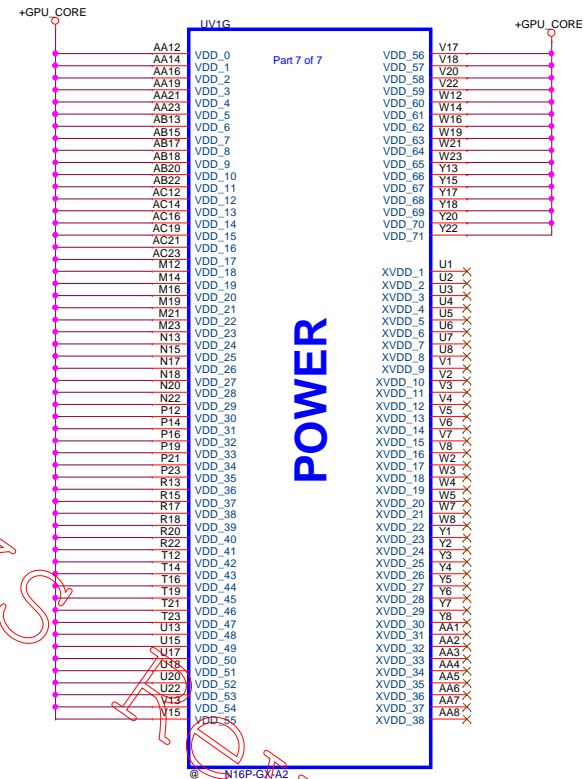
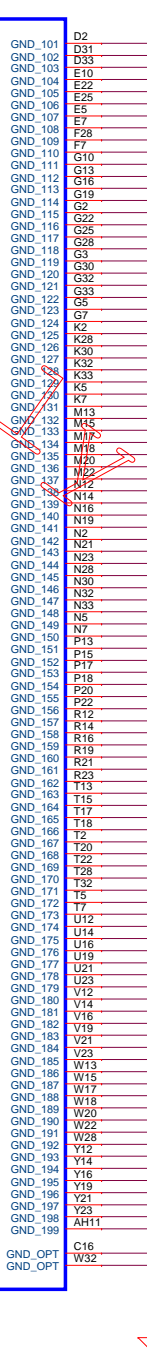
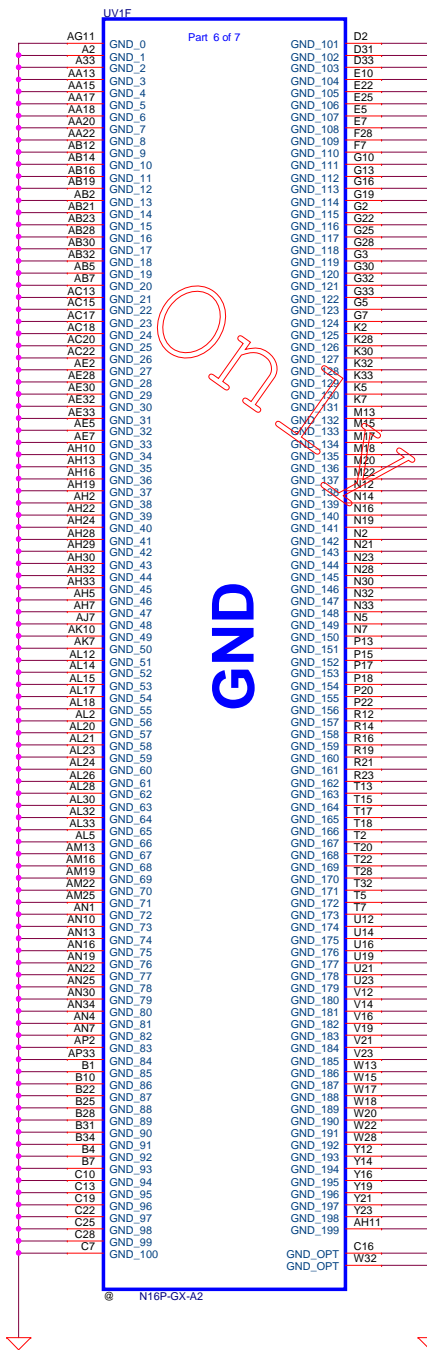


Resistor Values	Pull-Up to 3V3_MAIN	Pull-Down to GND
4.99 kΩ	1000	0000
10.0 kΩ	1001	0001
15.0 kΩ	1010	0010
20.0 kΩ	1011	0011
24.9 kΩ	1100	0100
30.1 kΩ	1101	0101
34.8 kΩ	1110	0110
45.3 kΩ	1111	0111

Strap Pin Name	Logical Strapping Bit 3	Logical Strapping Bit 2	Logical Strapping Bit 1	Logical Strapping Bit 0
ROM_SCLK	SOR3_EXPOSED	SOR2_EXPOSED	SOR1_EXPOSED	SOR0_EXPOSED
ROM_SI	RAM_CFG[3]	RAM_CFG[2]	RAM_CFG[1]	RAM_CFG[0]
ROM_SO	DEVID_SEL	PCIE_CFG	SMB_ALT_ADDR	VGA_DEVICE
STRAP0	Keep foot print for pull-up to 3V3_AOH and pull-down to GND. Stuff 49.9 kΩ pull-up.			
STRAP1	Keep foot print for pull-up to 3V3_AOH and pull-down to GND. Do not stuff.			
STRAP2				
STRAP3				
STRAP4				



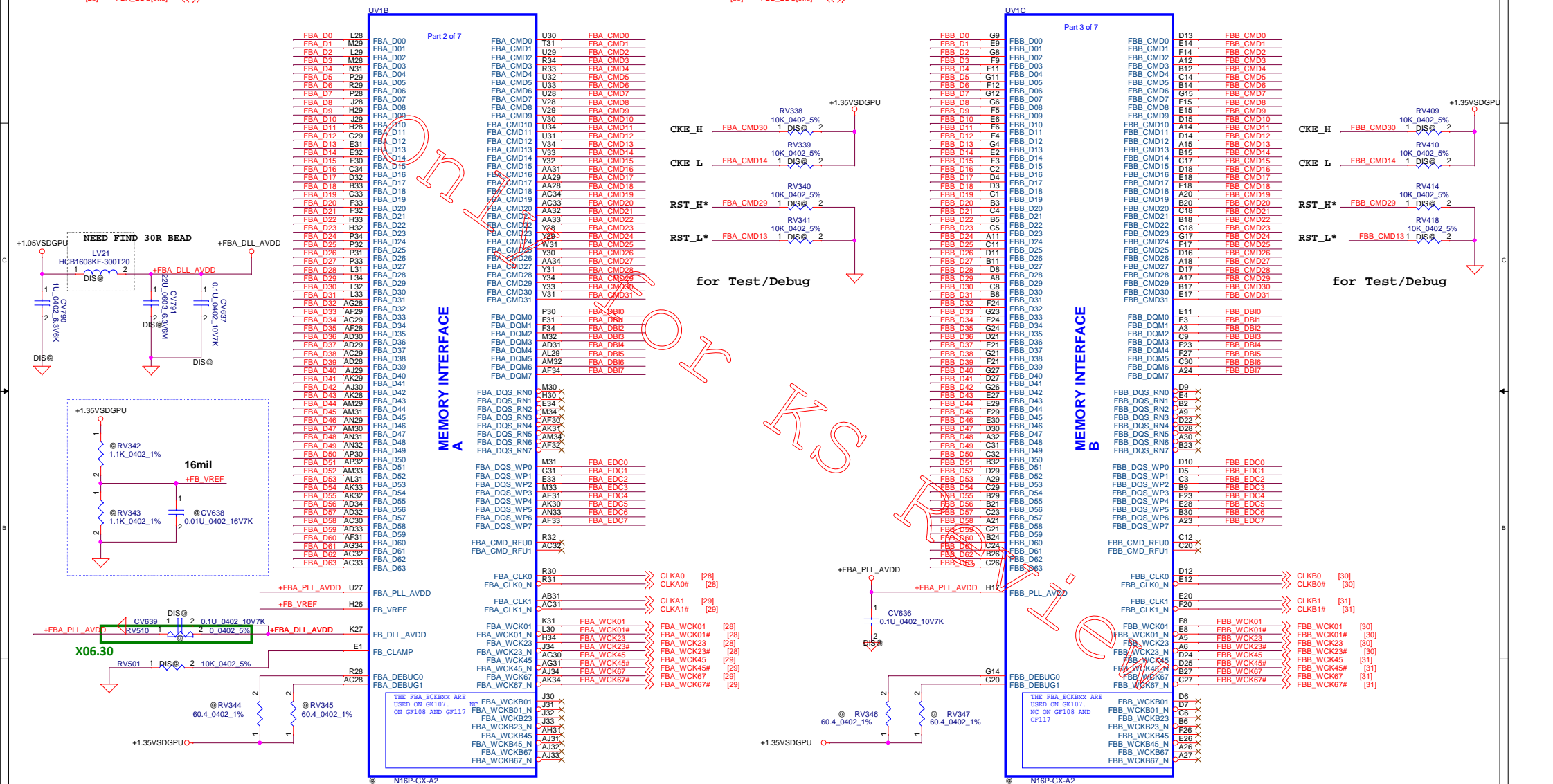




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				Date: Thursday, August 06, 2015	Sheet 26 of 71

[28] FBA\_D[0..31] <<> FBA\_D[0..31]  
[29] FBA\_D[32..63] <<> FBA\_D[32..63]  
[28,29] FBA\_CMD[0..31] <<> FBA\_CMD[0..31]  
[29] FBA\_DB[4..7] <<> FBA\_DB[4..7]  
[28] FBA\_DB[0..3] <<> FBA\_DB[0..3]  
[29] FBA\_EDC[4..7] <<> FBA\_EDC[4..7]  
[28] FBA\_EDC[0..3] <<> FBA\_EDC[0..3]

[30] FBB\_D[0..31] <<> FBB\_D[0..31]  
[31] FBB\_D[32..63] <<> FBB\_D[32..63]  
[30,31] FBB\_CMD[0..31] <<> FBB\_CMD[0..31]  
[31] FBB\_DB[4..7] <<> FBB\_DB[4..7]  
[30] FBB\_DB[0..3] <<> FBB\_DB[0..3]  
[31] FBB\_EDC[4..7] <<> FBB\_EDC[4..7]  
[30] FBB\_EDC[0..3] <<> FBB\_EDC[0..3]



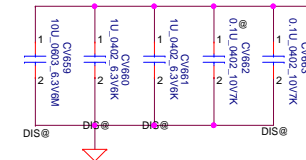
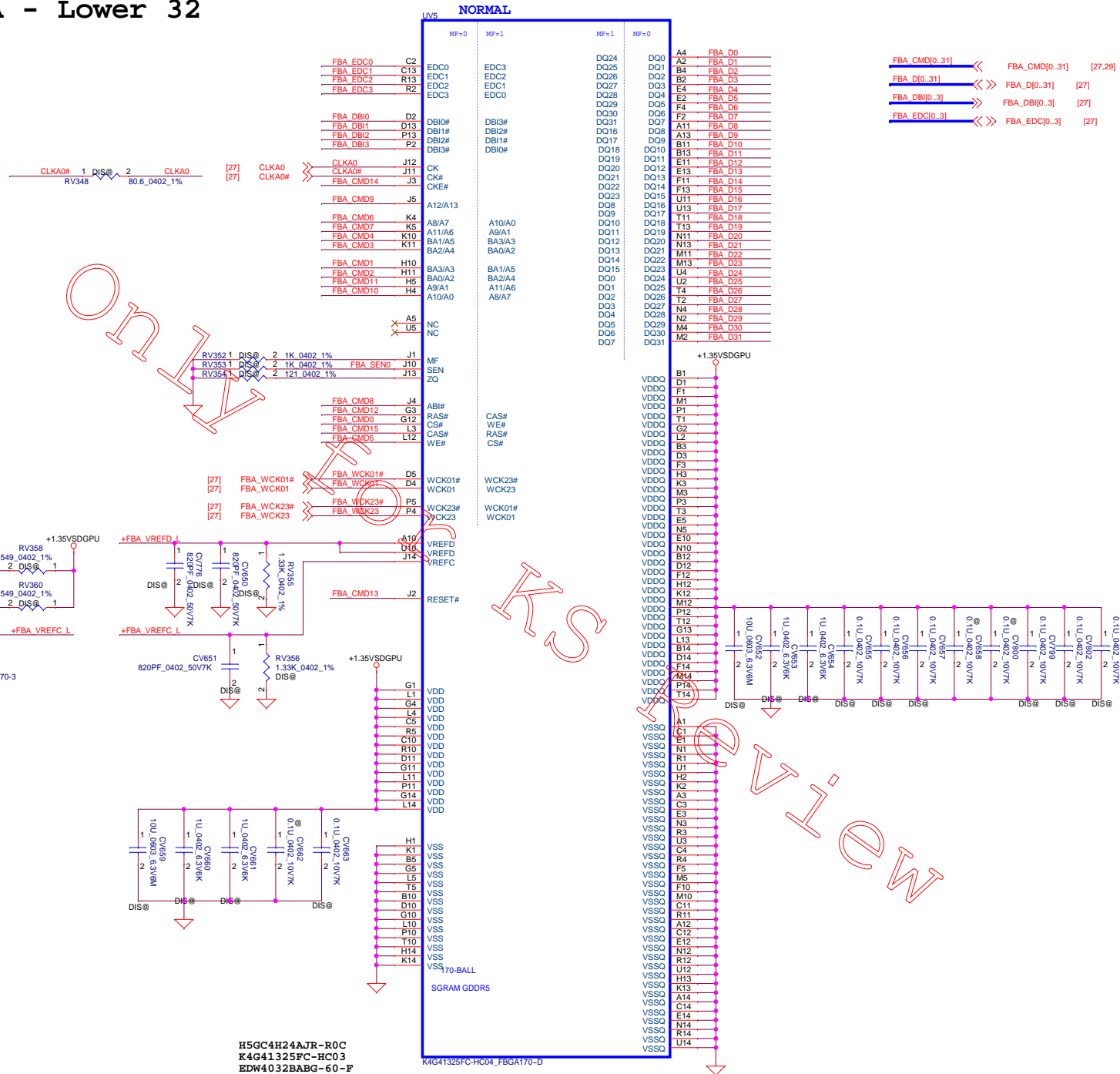
Security Classification	Compal Secret Data		Title	
Issued Date	2014/08/08	Deciphered Date	2014/07/01	N15P (5/5)-Memory A/B
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Date:	Thursday, August 06, 2015	Sheet	27	of 71

# Memory Partition A - Lower 32 bits

64X32 GDDR5

Table 46. GDDR5 Mode H Mapping

GB2-64, GB4-128	Channel 0 0...31	GB2-64, GB4-128	Channel 1 32...63
CMD0	CS*	CMD16	CS*
CMD1	A3_BA3	CMD17	A3_BA3
CMD2	A2_BA0	CMD18	A2_BA0
CMD3	A4_BA2	CMD19	A4_BA2
CMD4	A5_BA1	CMD20	A5_BA1
CMD5	WE*	CMD21	WE*
CMD6	A7_A8	CMD22	A7_A8
CMD7	A6_A11	CMD23	A6_A11
CMD8	AB1*	CMD24	AB1*
CMD9	A12_RFU	CMD25	A12_RFU
CMD10	A0_A10	CMD26	A0_A10
CMD11	A1_A9	CMD27	A1_A9
CMD12	RA5*	CMD28	RA5*
CMD13	R5T*	CMD29	R5T*
CMD14	CKE*	CMD30	CKE*
CMD15	CAS*	CMD31	CAS*



H5GC4H24AJR-R0C  
K4G41325FC-HC03  
EDW4032BABG-60-F

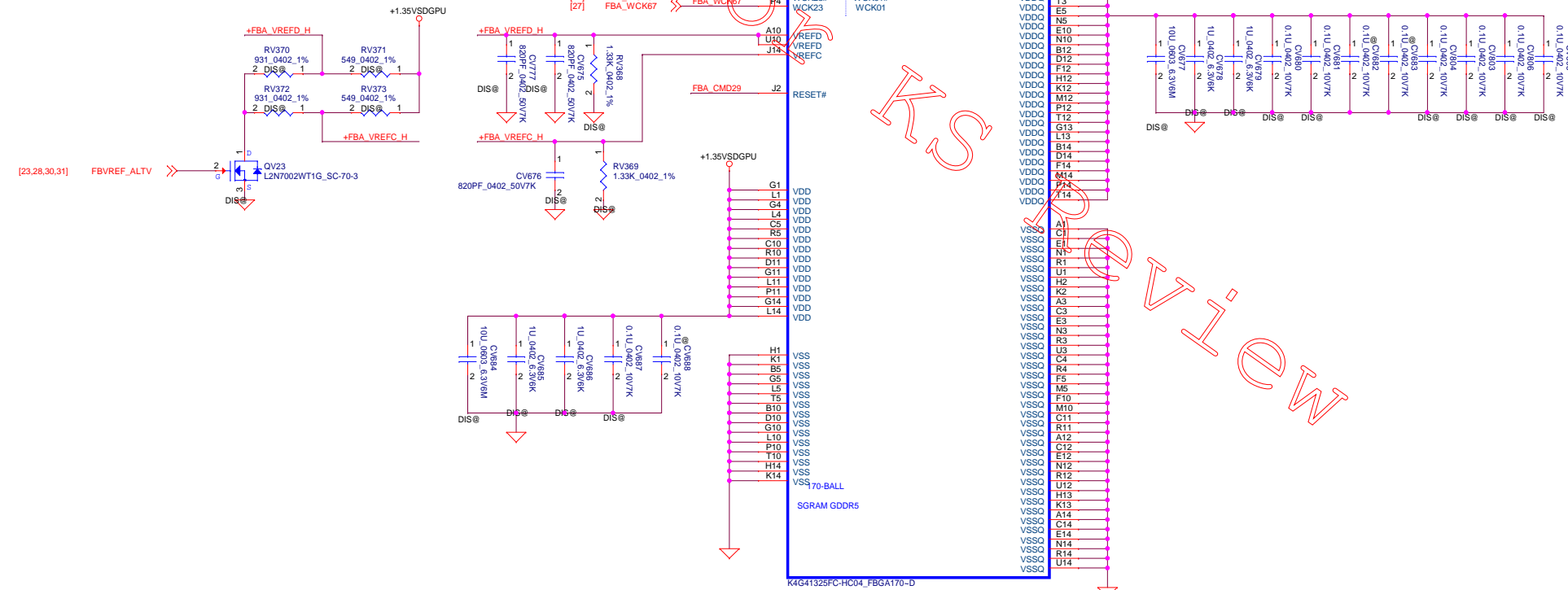
Security Classification		Compal Secret Data	
Issued Date	2014/08/08	Deciphered Date	2014/07/01
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Compal Electronics, Inc.			
Title <b>VRAM GDDR5 A Lower</b>			
Size	Document Number	Rev	0.1(X00)
Date:	Thursday, August 06, 2015	Sheet	28 of 71

Memory Partition A - Upper 32 bits

Table 46. GDDR5 Mode H Mapping

GB2-64, GB4-128	Channel 0 0...31	GB2-64, GB4-128	Channel 1 32..63
CMD0	C5*	CMD16	C5*
CMD1	A3_BA3	CMD17	A3_BA3
CMD2	A2_BA0	CMD18	A2_BA0
CMD3	A4_BA2	CMD19	A4_BA2
CMD4	A5_BA1	CMD20	A5_BA1
CMD5	WE*	CMD21	WE*
CMD6	A7_A8	CMD22	A7_A8
CMD7	A6_A11	CMD23	A6_A11
CMD8	AB1*	CMD24	AB1*
CMD9	A12_RFU	CMD25	A12_RFU
CMD10	A0_A10	CMD26	A0_A10
CMD11	A1_A9	CMD27	A1_A9
CMD12	RA5*	CMD28	RA5*
CMD13	RST*	CMD29	RST*
CMD14	CKE*	CMD30	CKE*
CMD15	CAS*	CMD31	CAS*

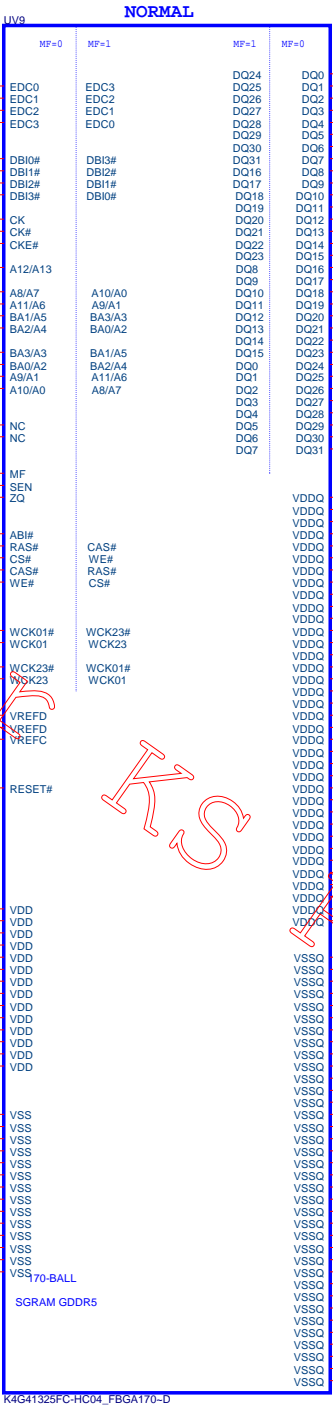
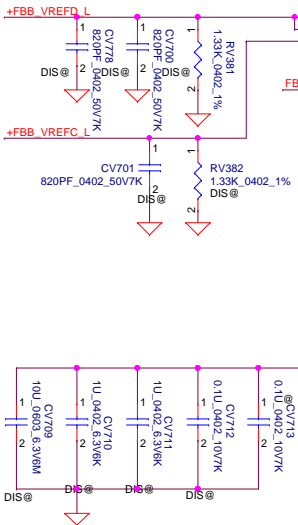
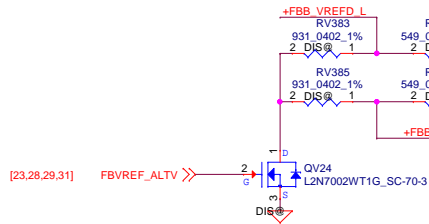


Memory Partition B - Lower 32 bits

64X32 GDDR5

Table 46. GDDR5 Mode H Mapping

GB2-64, GB4-128	Channel 0 0..31	GB2-64, GB4-128	Channel 1 32..63
CMD0	CS*	CMD16	CS*
CMD1	A3_BA3	CMD17	A3_BA3
CMD2	A2_BA0	CMD18	A2_BA0
CMD3	A4_BA2	CMD19	A4_BA2
CMD4	A5_BA1	CMD20	A5_BA1
CMD5	WE*	CMD21	WE*
CMD6	A7_A8	CMD22	A7_A8
CMD7	A6_A11	CMD23	A6_A11
CMD8	AB1*	CMD24	AB1*
CMD9	A12_RFU	CMD25	A12_RFU
CMD10	A0_A10	CMD26	A0_A10
CMD11	A1_A9	CMD27	A1_A9
CMD12	RAS*	CMD28	RAS*
CMD13	R5T*	CMD29	R5T*
CMD14	CKE*	CMD30	CKE*
CMD15	CAS*	CMD31	CAS*



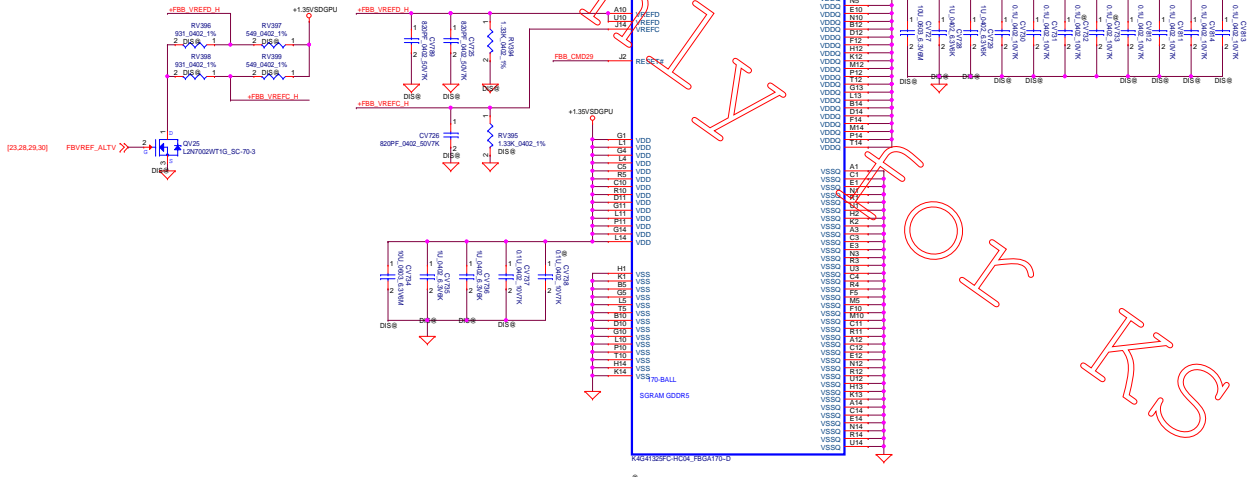
FBB\_CMD[0..31] << FBB\_CMD[0..31] [27,31]  
FBB\_D[0..31] << FBB\_D[0..31] [27]  
FBB\_DB[0..31] << FBB\_DB[0..31] [27]  
FBB\_EDC[0..31] << FBB\_EDC[0..31] [27]



### Memory Partition B - Upper 32 bits

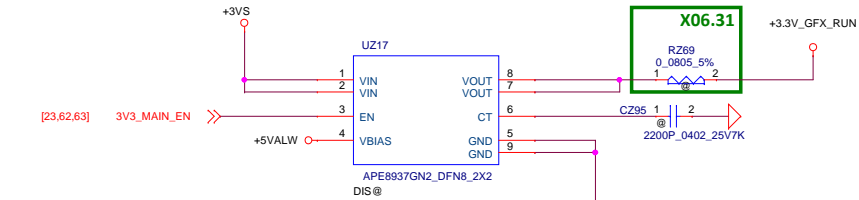
Table 46. GDDR5 Mode H Mapping

GB2-64, GB4-128	Channel 0 0..31	GB2-64, GB4-128	Channel 1 32..63
CM00	C5*	CM016	C5*
CM01	A3, B43	CM017	A3, B43
CM02	A2, B40	CM018	A2, B40
CM03	A4, B42	CM019	A4, B42
CM04	A5, B41	CM020	A5, B41
CM05	WE*	CM021	WE*
CM06	A7, A8	CM022	A7, A8
CM07	A8, A11	CM023	A8, A11
CM08	AB*	CM024	AB*
CM09	A12, RFU	CM025	A12, RFU
CM010	AD, A10	CM026	AD, A10
CM011	A1, A9	CM027	A1, A9
CM012	RA*	CM028	RA*
CM013	RS*	CM029	RS*
CM014	CR*	CM030	CR*
CM015	CA*	CM031	CA*

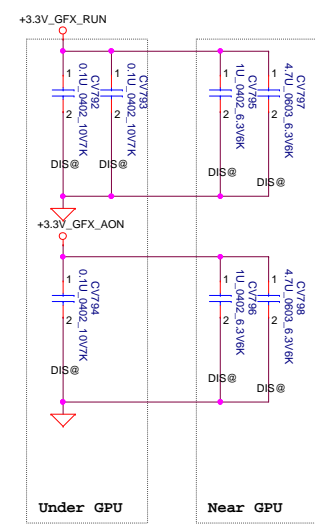
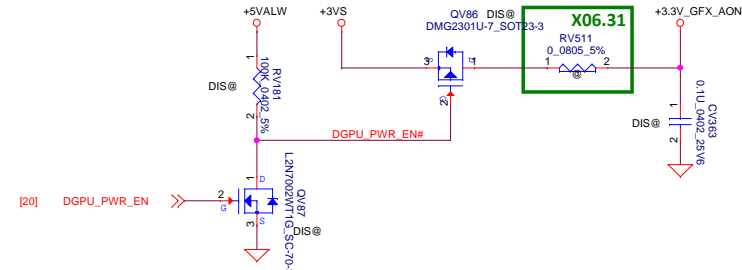


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Issued Date		Deciphered Date		Title	
				VRAM GDDR5 R3 Upper	
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				Rev	
				0100	
				Date	
				Thursday, August 08, 2015	
				Sheet	
				31 of 71	

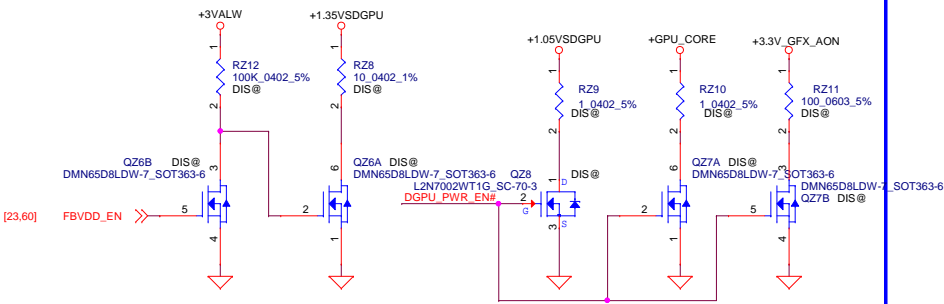
+3.3V\_GFX\_RUN



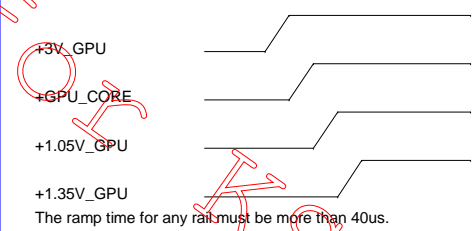
+3VALW to +3.3V\_GFX\_AON



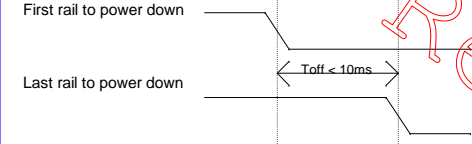
Discharge



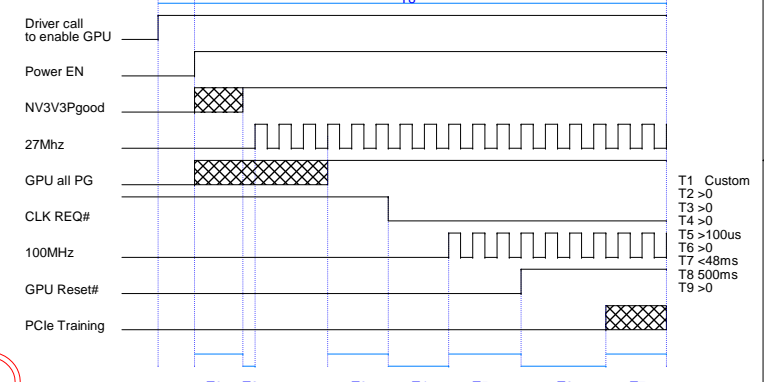
GPU Power Up Power Rail Sequence



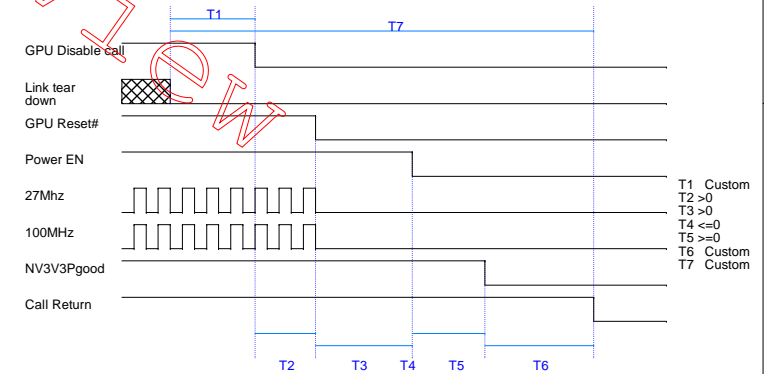
GPU Power Down Sequence



GPU Power Up Sub-system Sequence



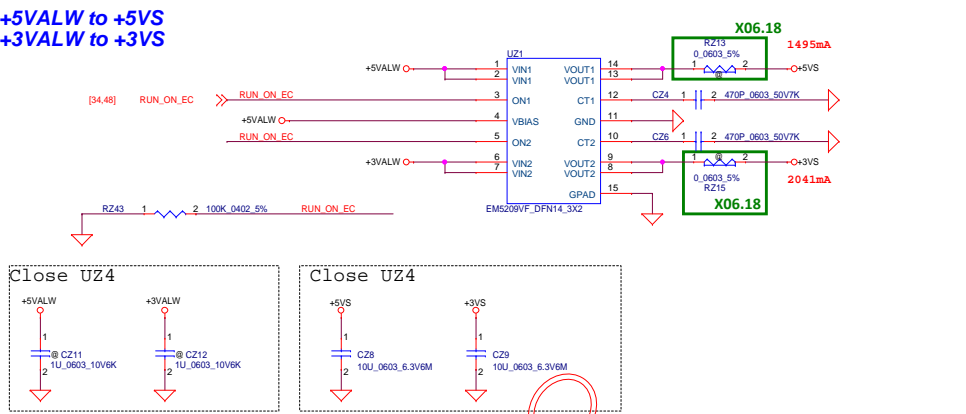
GPU Power Down Sub-system Sequence



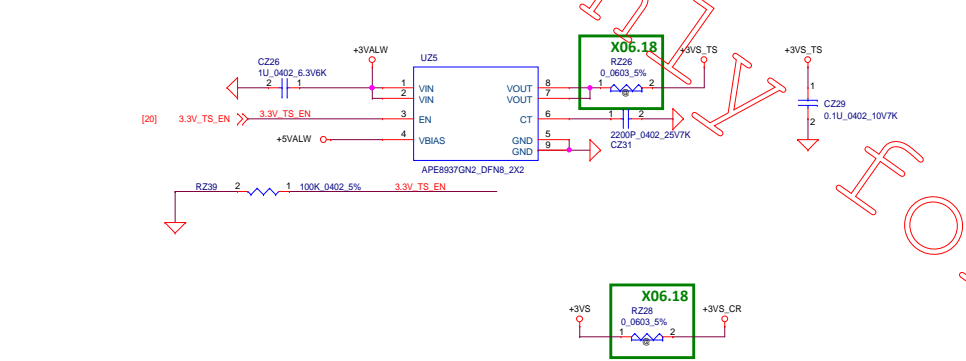
Security Classification		Compal Secret Data				Compal Electronics, Inc.			
Issued Date		2011/08/25		Deciphered Date		2012/07/25		Title	
								GPU DC/DC interface	
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Date: Thursday, August 06, 2015								Sheet 32 of 71	
Document Number								Rev 0.1(100)	



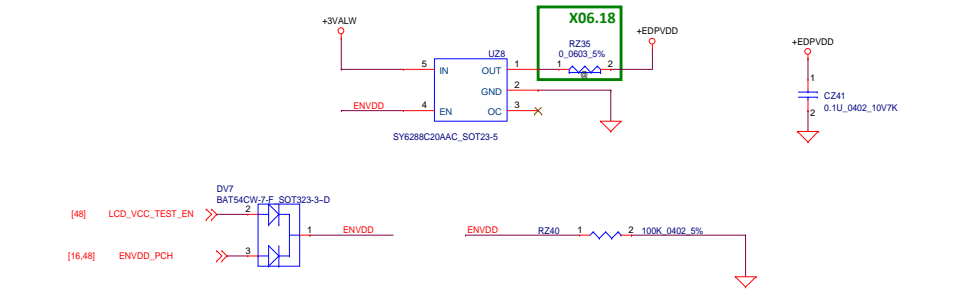
**+5VALW to +5VS**  
**+3VALW to +3VS**



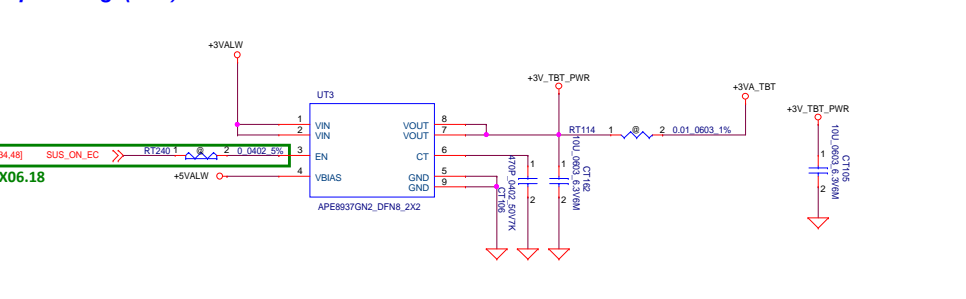
**Touch Screen Load Switch & Card Reader**



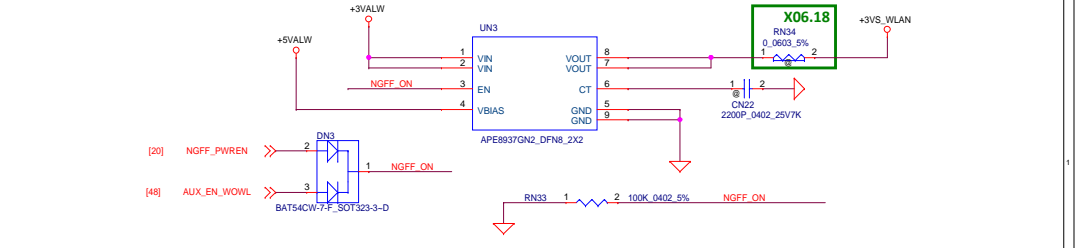
**eDP & Camera Load Switch**



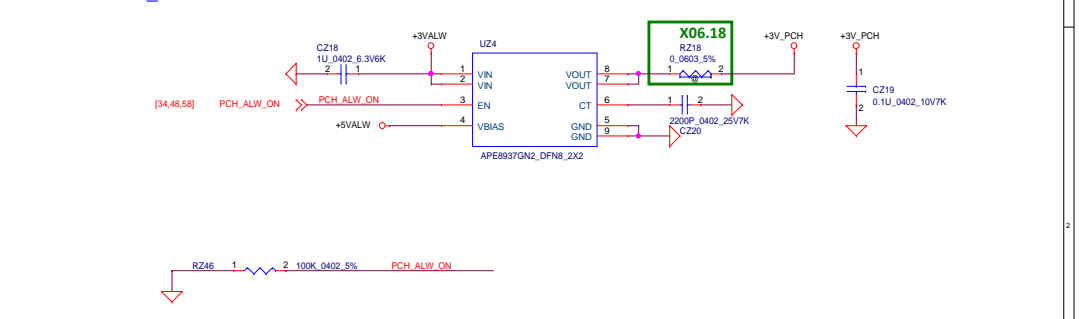
**Alpine Ridge(TBT) Load Switch**



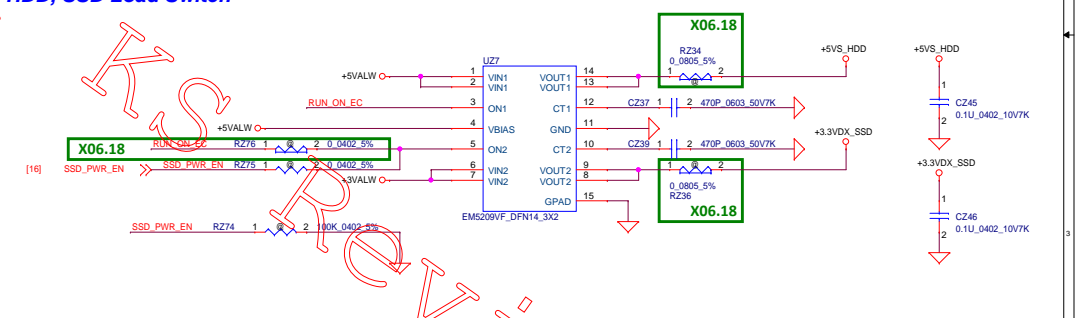
**WLAN Load Switch**



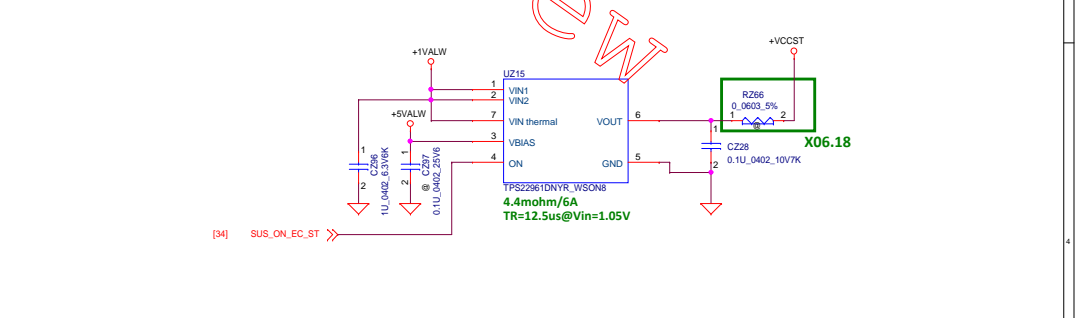
**+3VALW to +3V\_PCH**



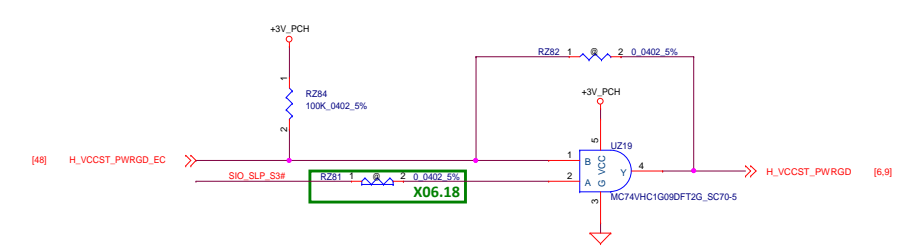
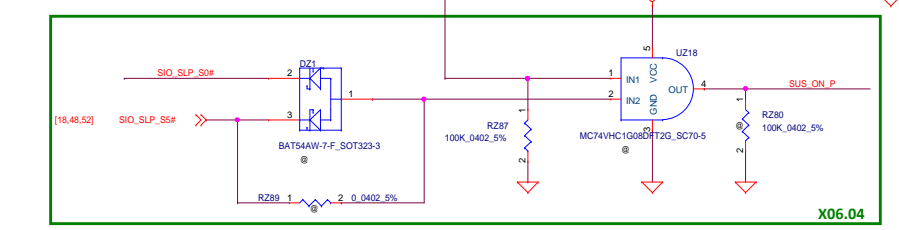
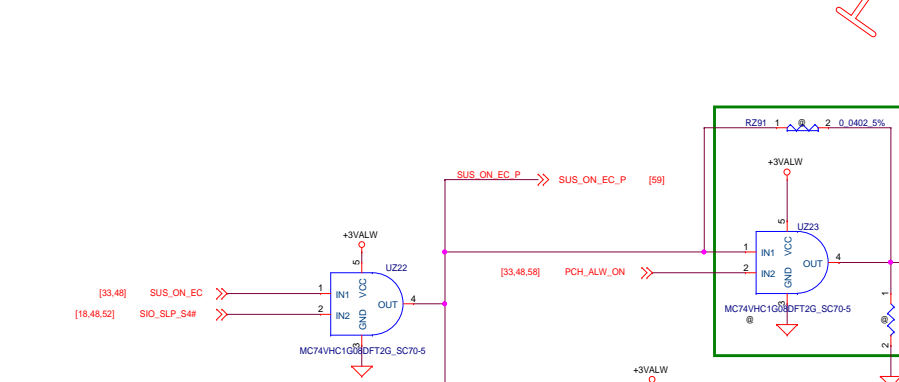
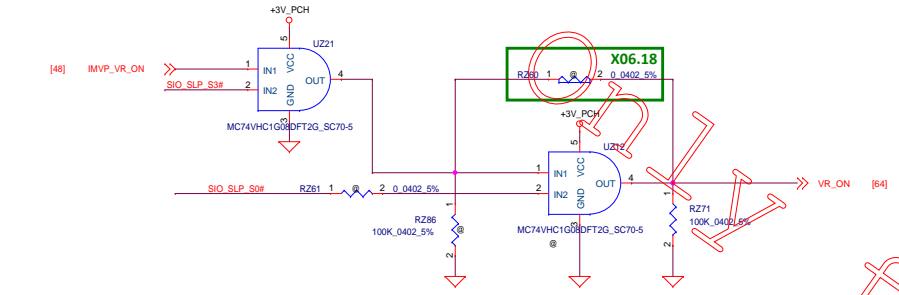
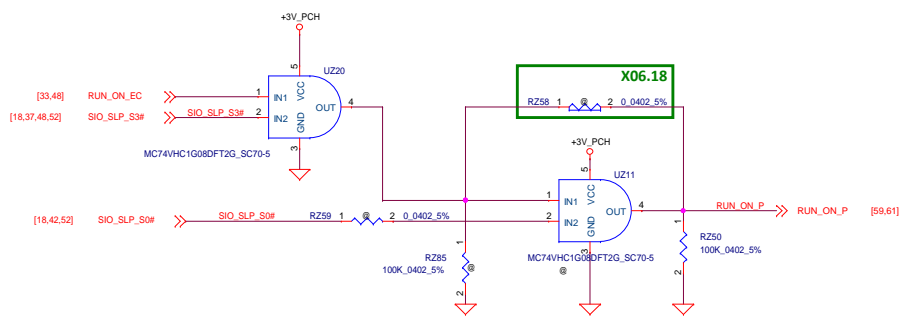
**HDD, SSD Load Switch**



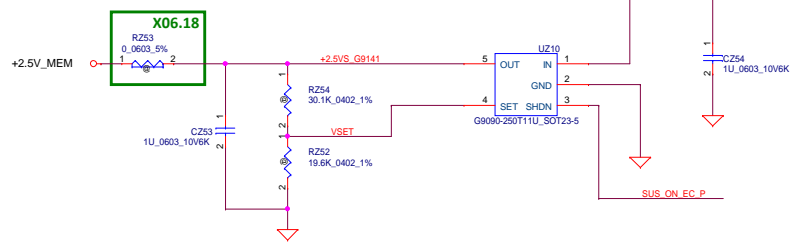
**+VCCST Load Switch**



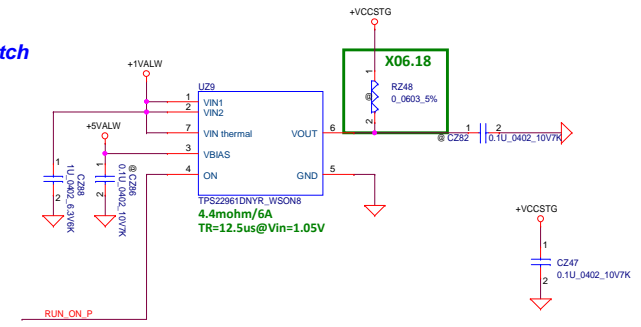
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Issued Date	2011/08/25	Deciphered Date	2012/07/25
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		Date	Thursday, August 06, 2015
		Sheet	33 of 71



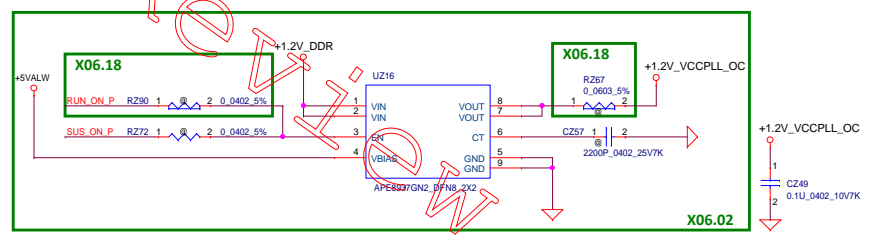
### DDR4 VPP Load Switch



### +VCCSTG Load Switch



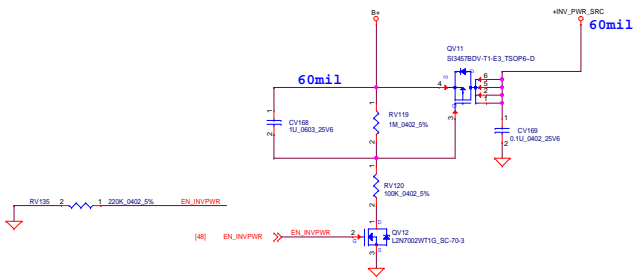
### +VCCPLL\_OC Load Switch



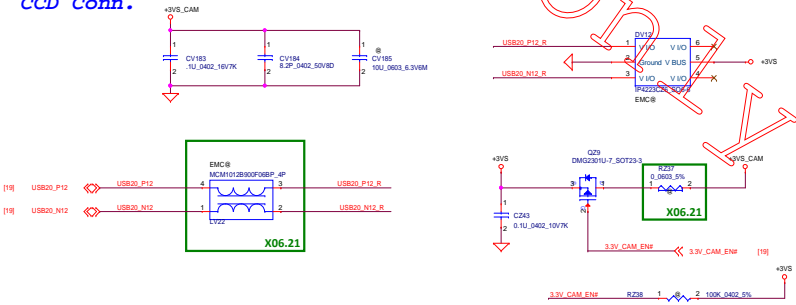
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				Size	Document Number
				LA-C361P	Rev
				Date	Thursday, August 06, 2015
				Sheet	34 of 71

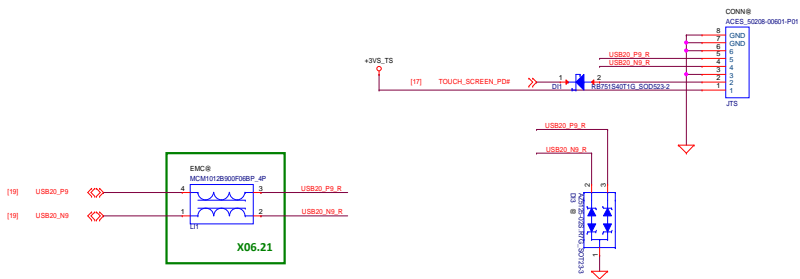
## LCD backlight PWR CTRL



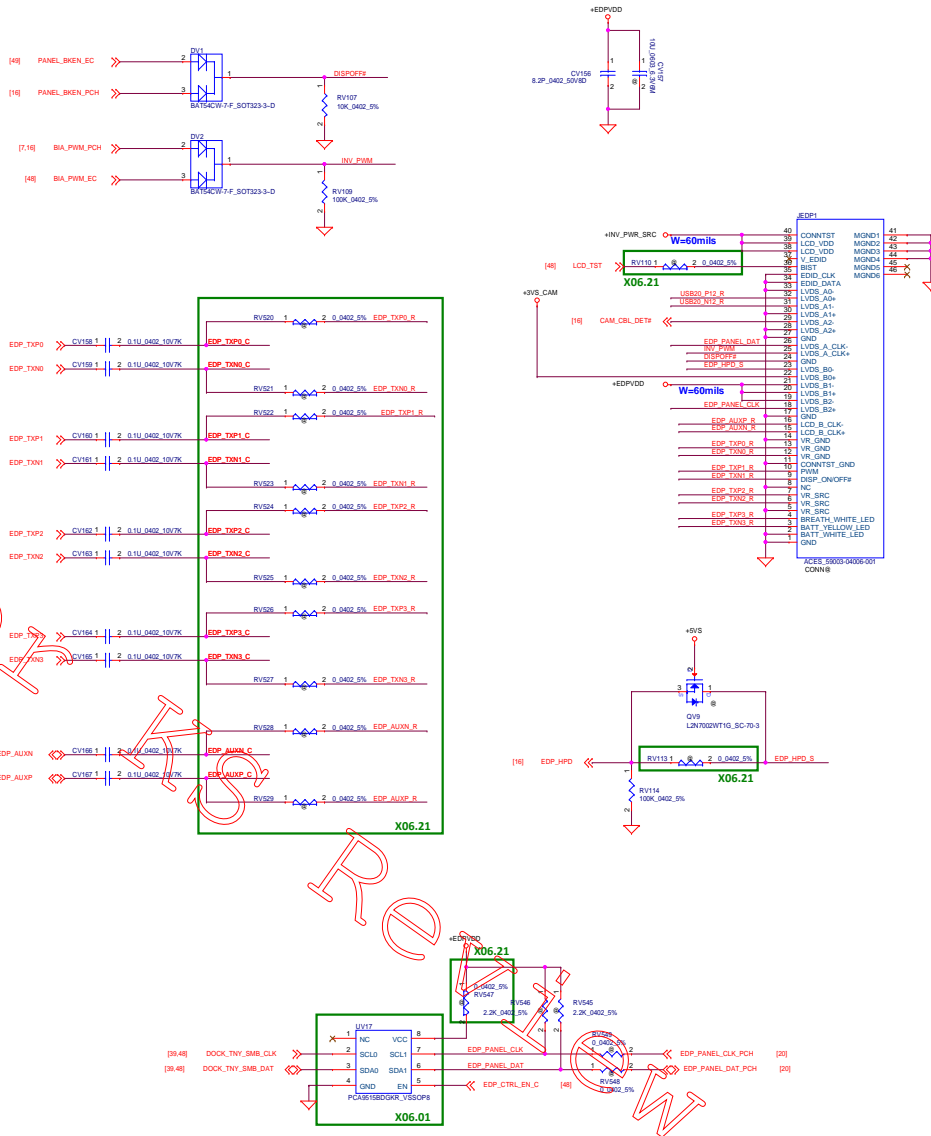
CCD Conn.



*Touch Screen Conn.*

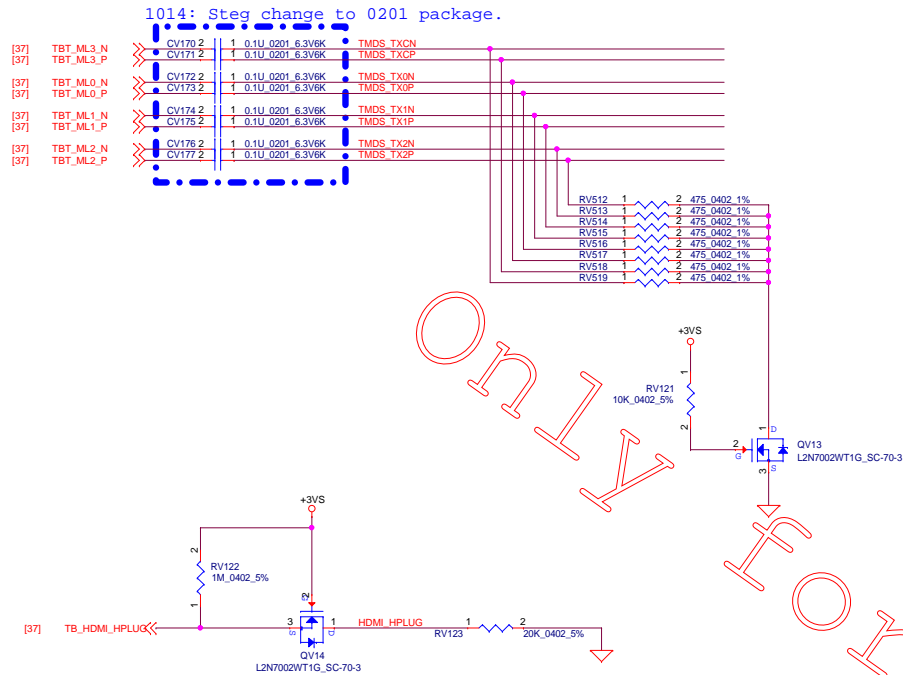


**eDP & TS Conn.**

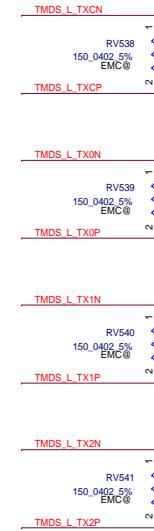


Security Classification		Compal Secret Data		Title	
Issued Date	2011/08/25	Deciphered Date	2012/07/25	eDP/TS conf.	
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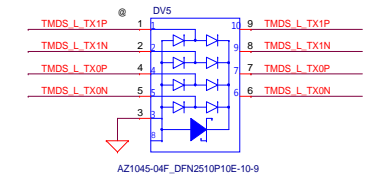
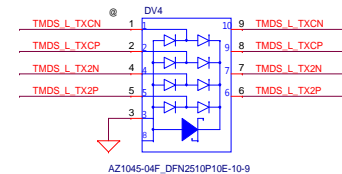
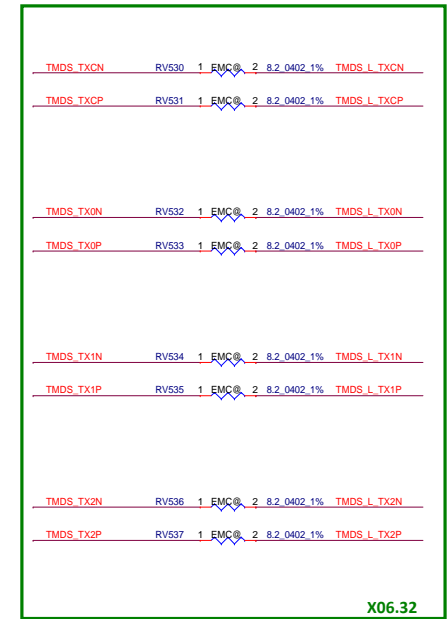
## HDMI Active Level Shift(ALS type)



## Place between ESD and CM-Choke

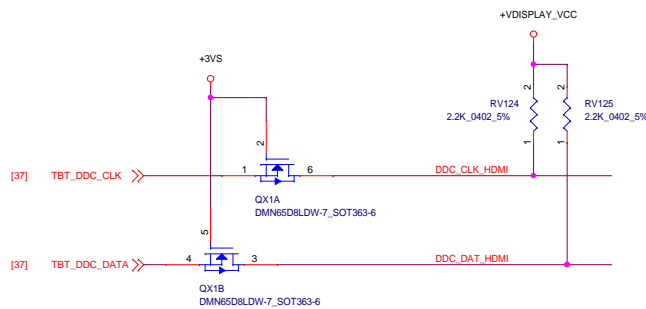


## Place close to JHDMI1

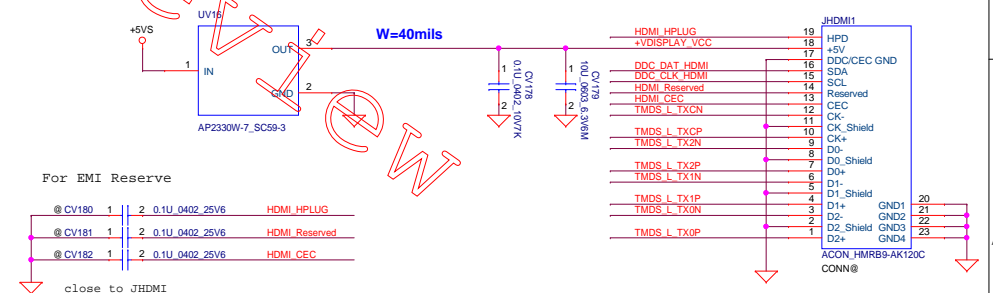


X06.32

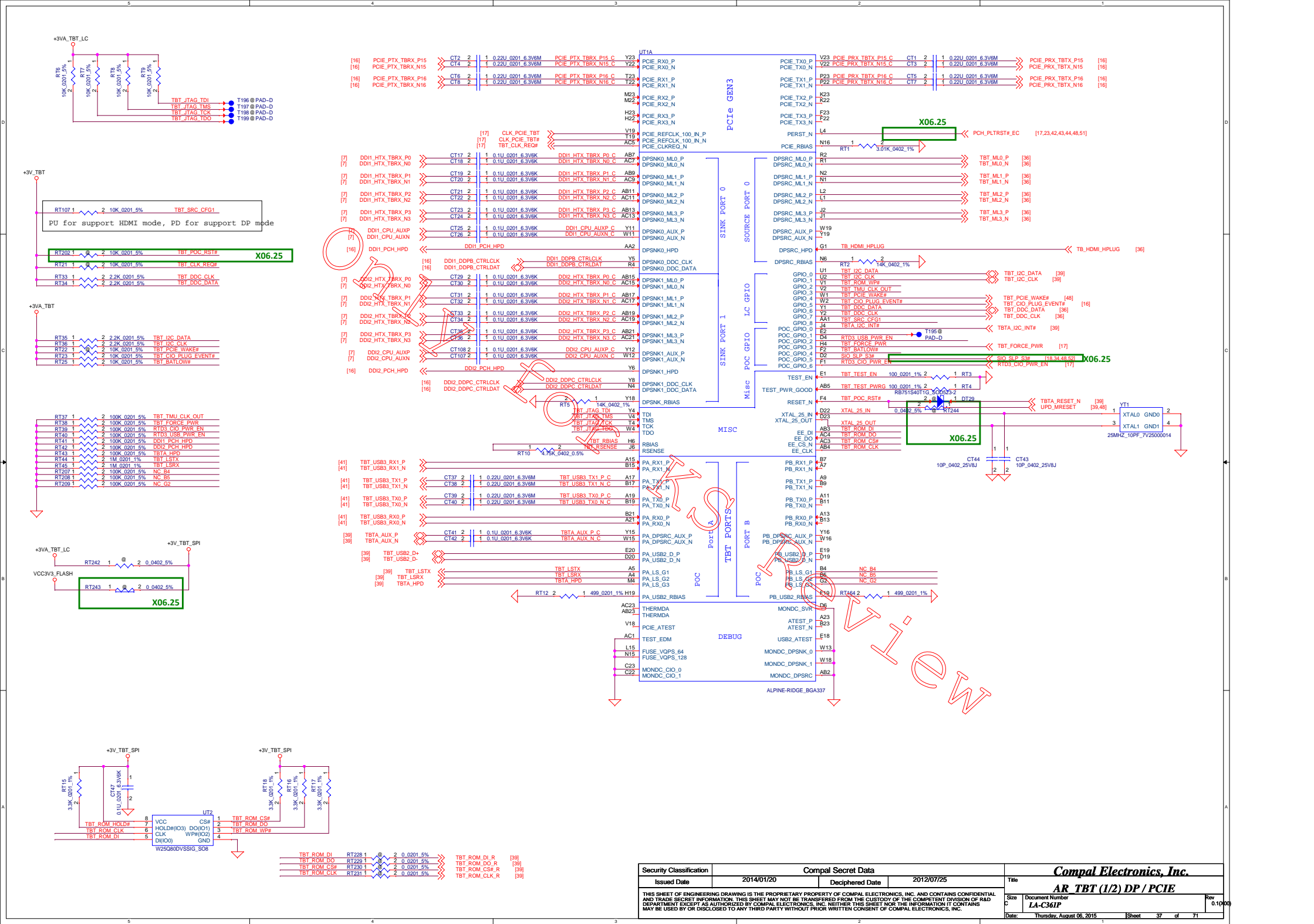
## HDMI DDC



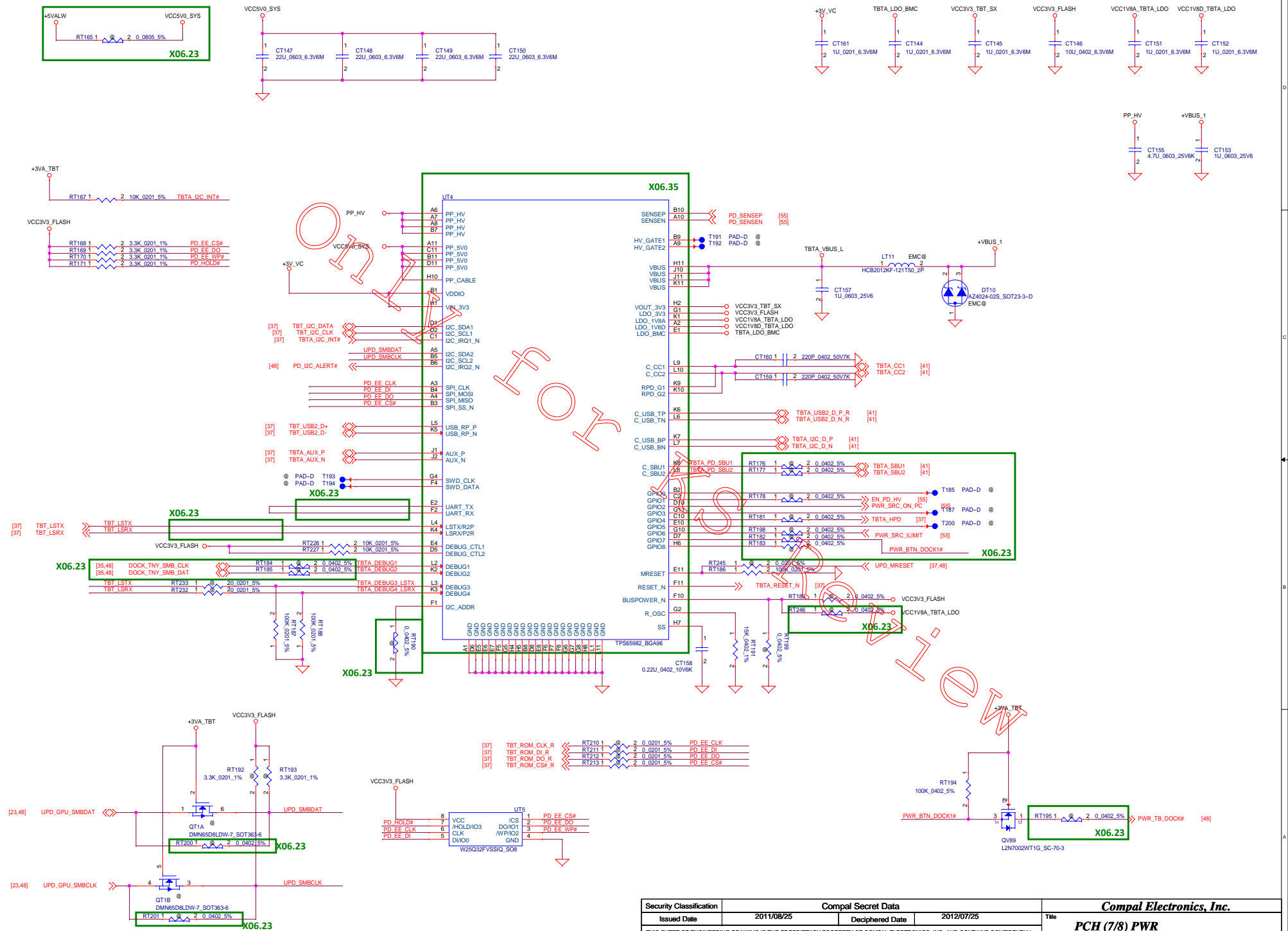
## HDMI conn



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Size	Custom	Document Number	La-C361P	Date: Thursday, August 06, 2015
Sheet	36	of	71	







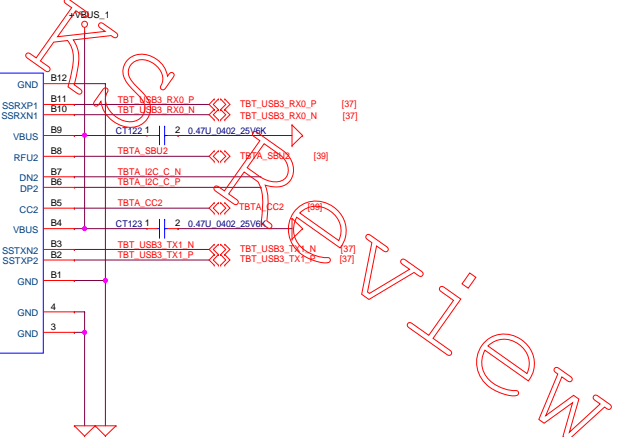
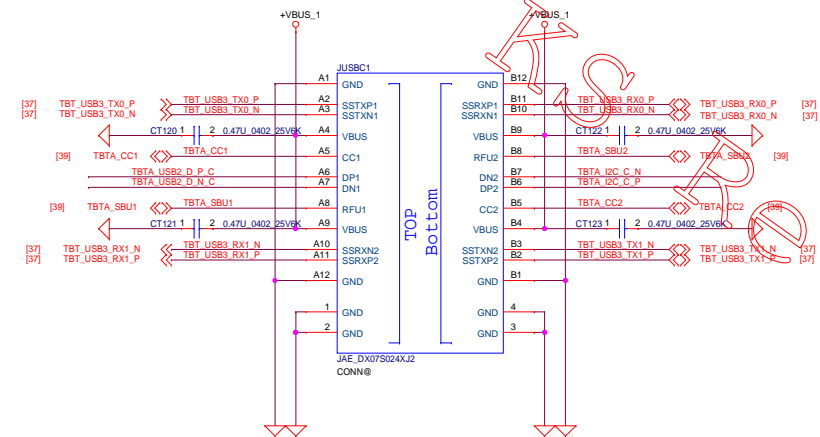
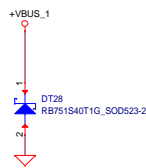
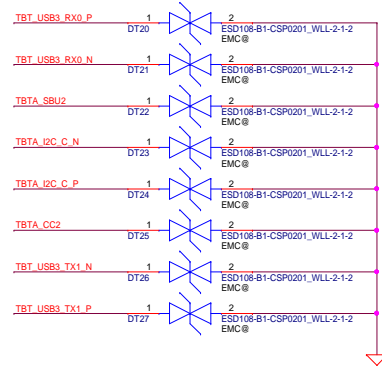
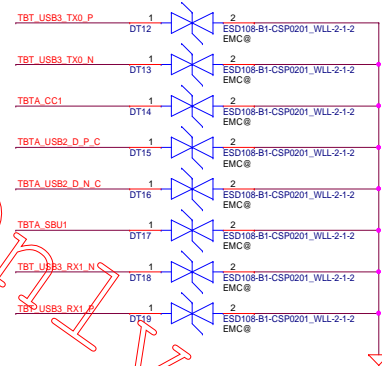
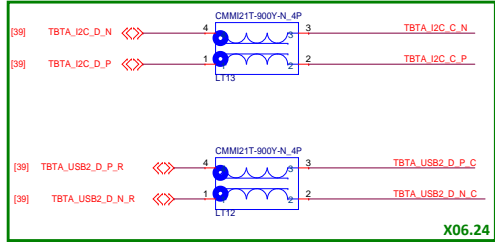
Security Classification	Compal Secret Data			<b>Compal Electronics, Inc.</b>		
Issued Date	2011/08/25	Deciphered Date	2012/07/25	Title	<b>PCH (7/8) PWR</b>	
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					<b>LA-C361P</b>	0.0000
				Date:	Thursday, August 06, 2015	Sheet 39 of 71

Reserve

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				0.1 (A00)	
Date: Thursday, August 06, 2015				Sheet 40 of 71	

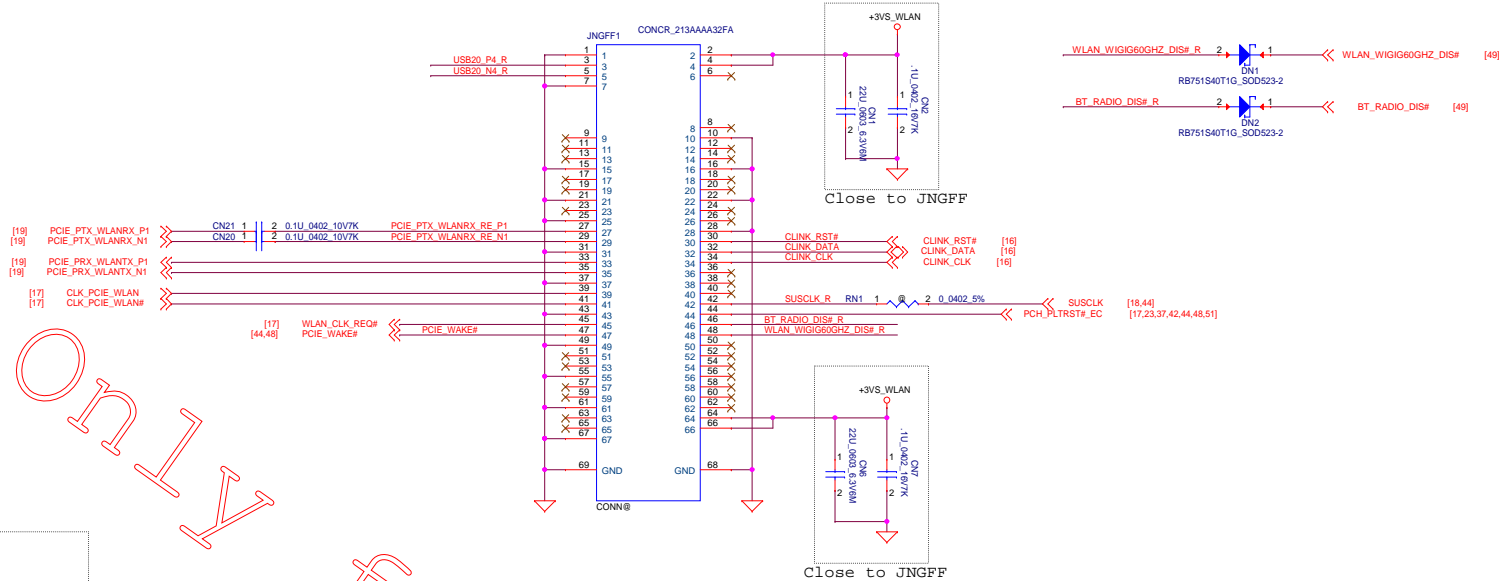
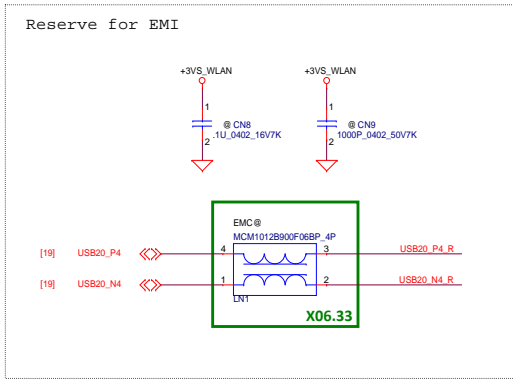




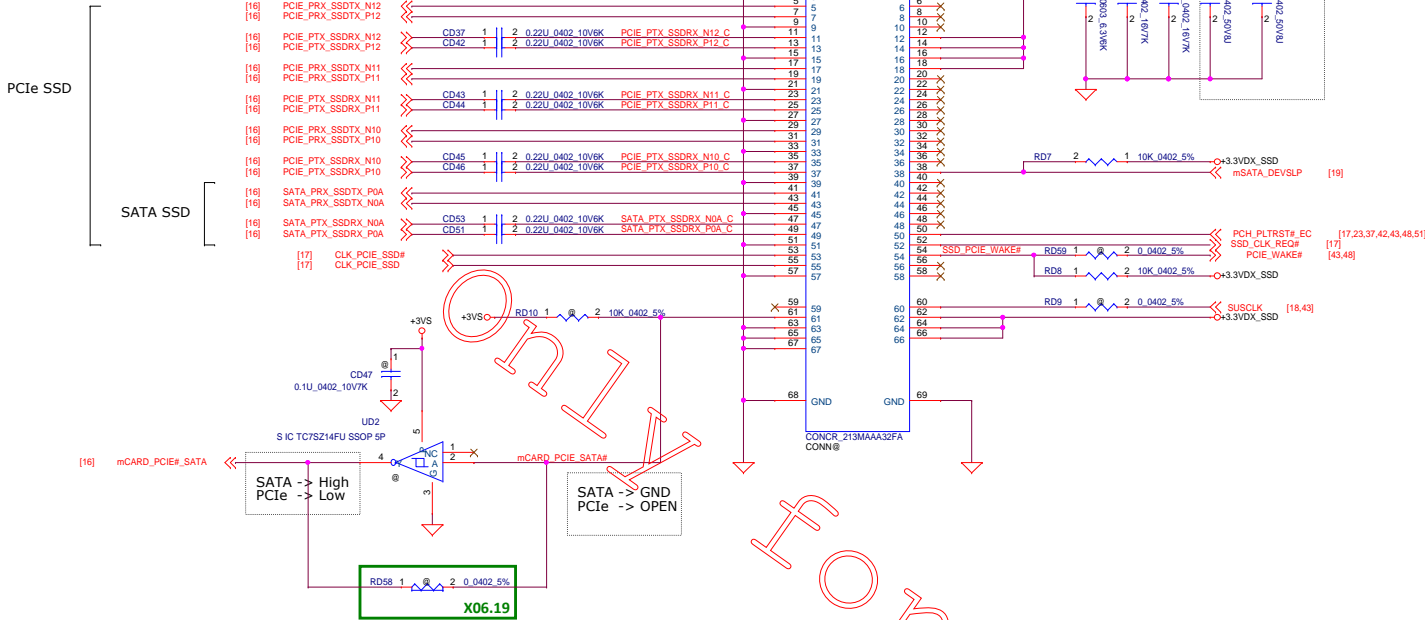


M.2 Slot-A Key-A (WLAN + BT)

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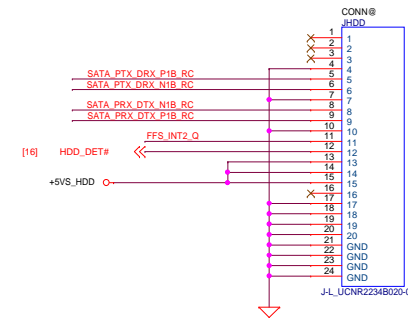


M.2 Slot-C Key-M (SSD)

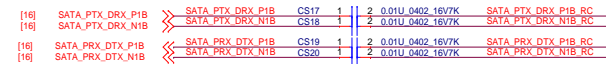
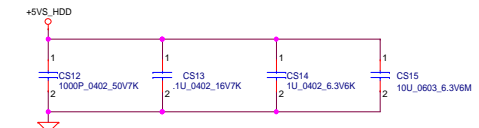


ONLY FOR

## HDD CONN

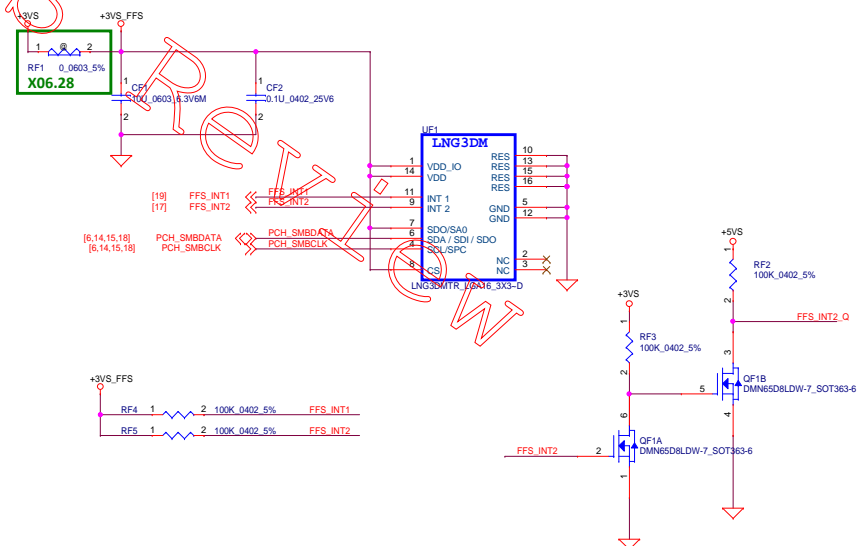


### Place near HDD CONN (JHDD1)



### BYPASS Circuit

## Free Fall Sensor

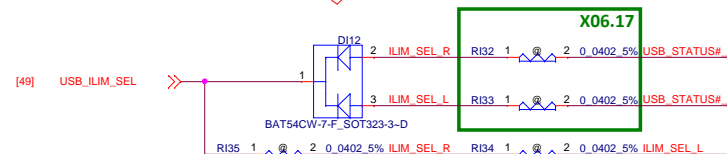
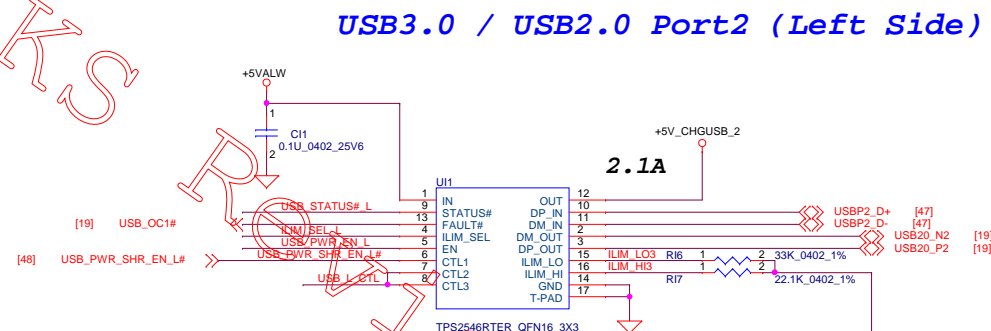
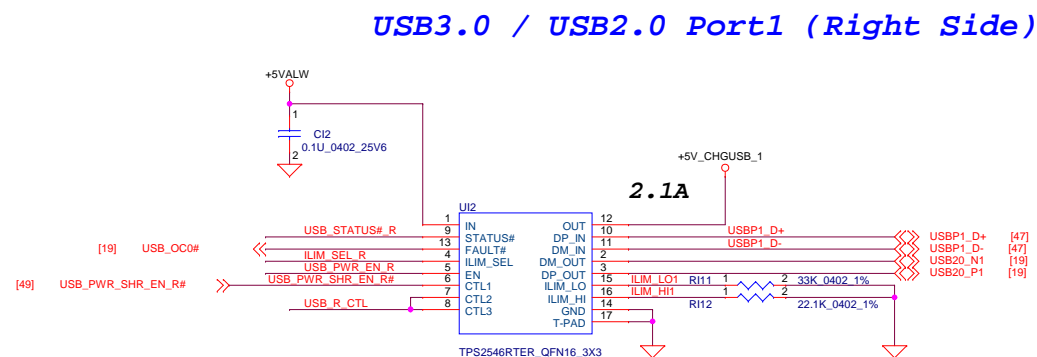
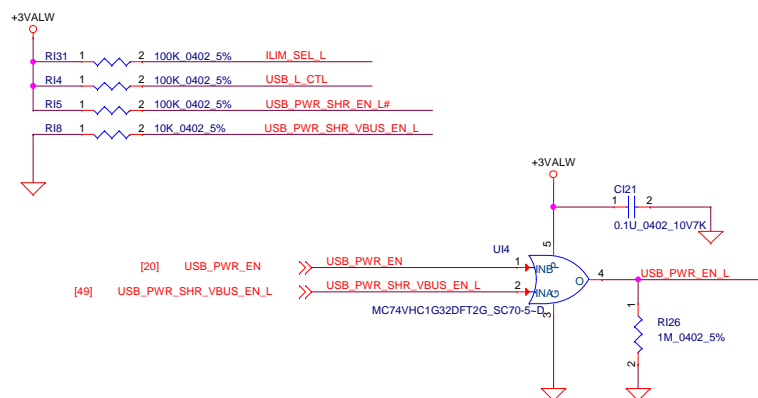
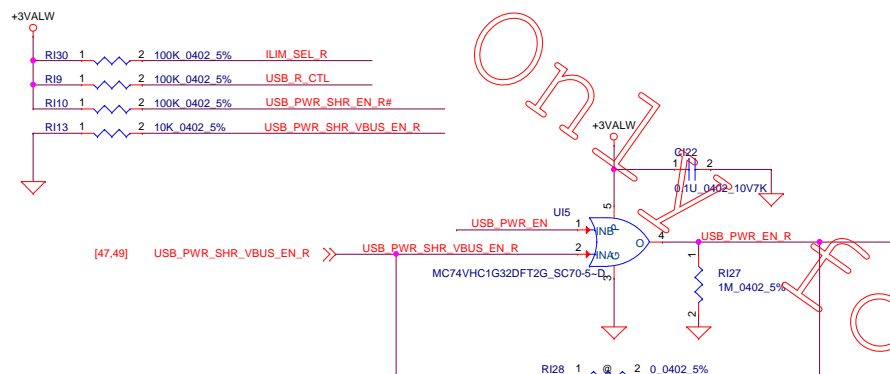


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				Size	Document Number
				C	LA-C361P
				Date:	Thursday, August 06, 2015
				Sheet	45 of 71
				Rev	0.1(000)

## USB Powershare

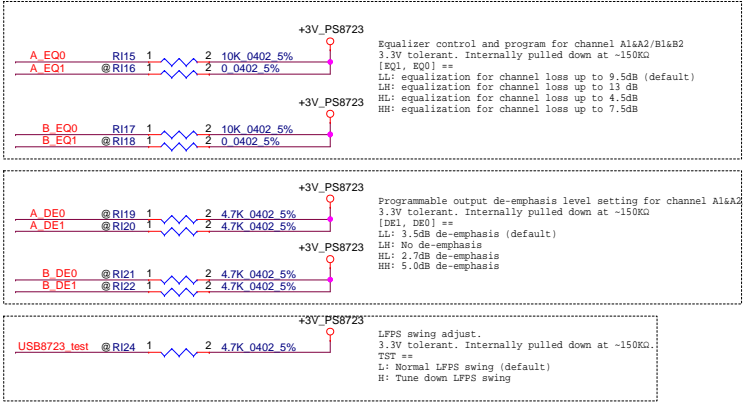
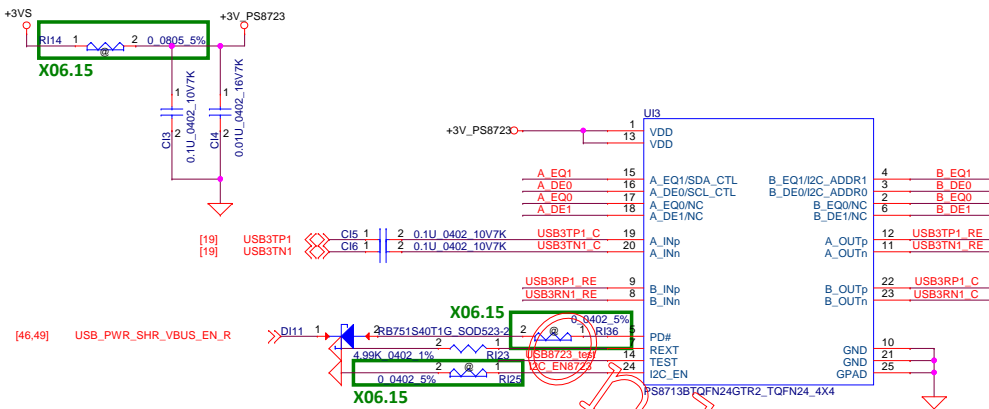
Device Control Pins				Flow Line Condition
CTL1	CTL2	CTL3	ILIM_SEL	
0	1	1	X	DCP AUTO
1	1	1	0	SDP
1	1	1	1	CDP

Suspend mode	CTL1 = 0 : Enable Power Share DCP mode in Suspend mode
	CTL1 = 1 : Disable Power Share in Suspend mode (For Support USB wake)
S0 mode	ILIM_SEL = 0 : SDP mode (0.9A by ILIM_LO setting)
	ILIM_SEL = 1 : CDP mode (STATUS# trigger by ILIM_HI = 2.2A)

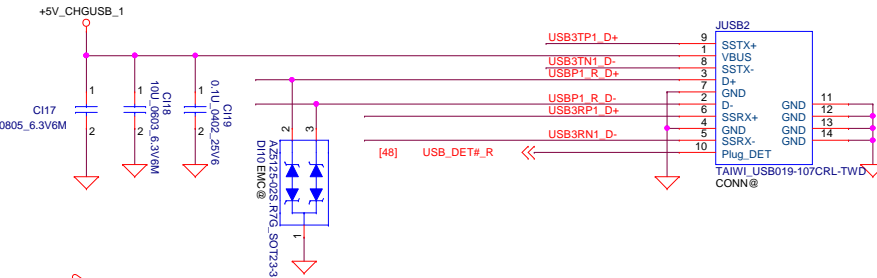
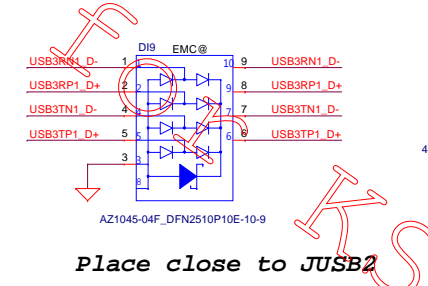
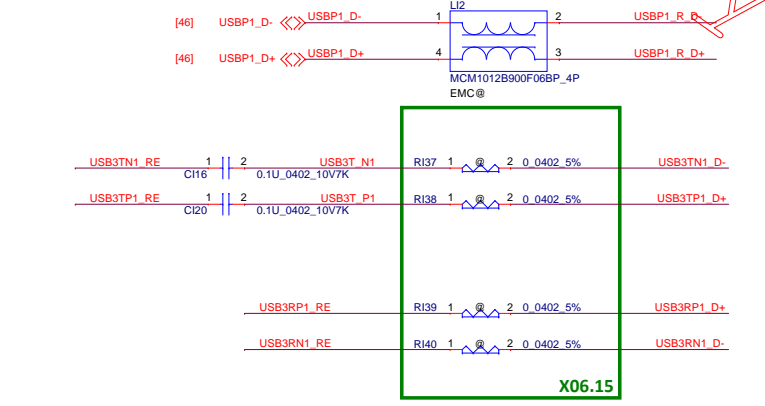


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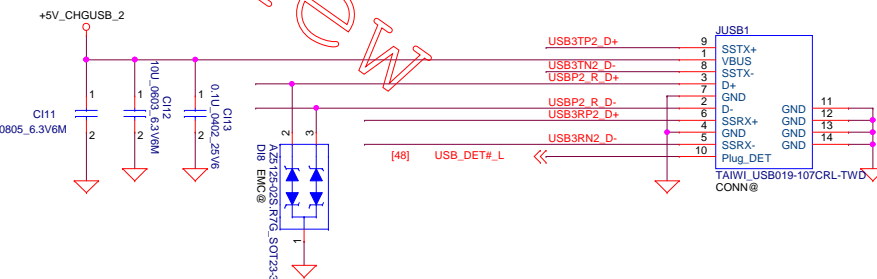
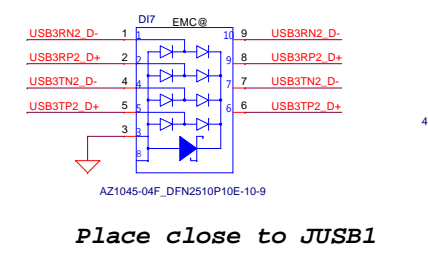
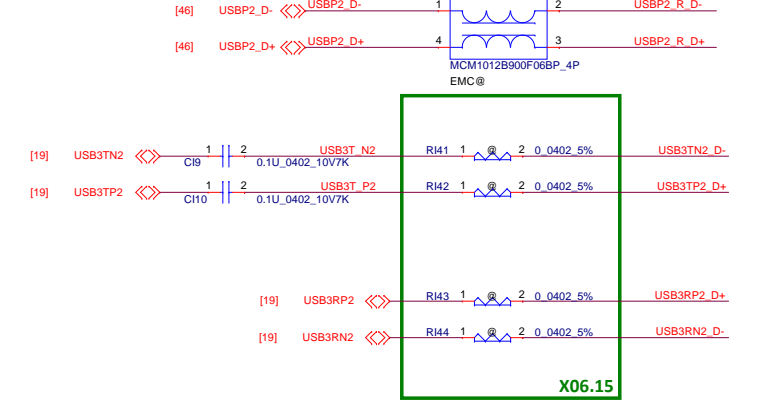
USB3.0 Re-driver



USB3.0 / USB2.0 Port1 (Right Side)

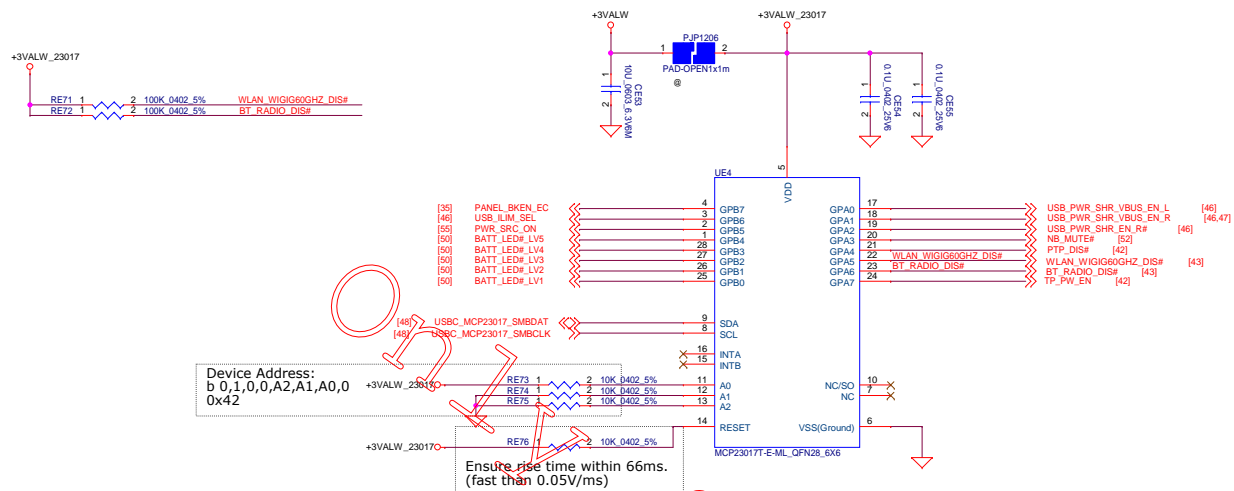


USB3.0 / USB2.0 Port2 (Left Side)

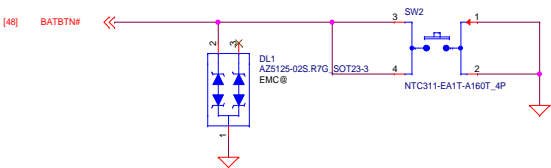




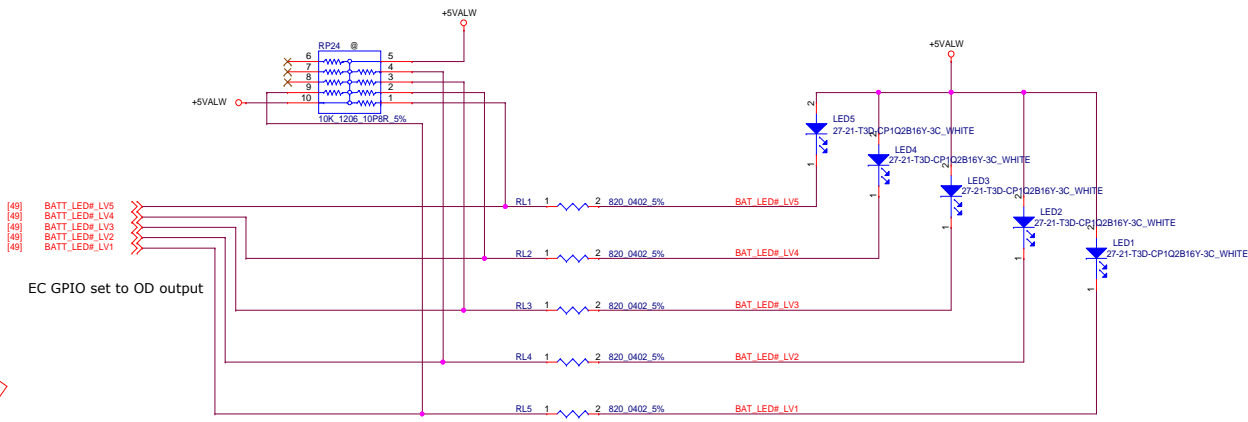




BATT LED Power Button



Battery Gauge LED

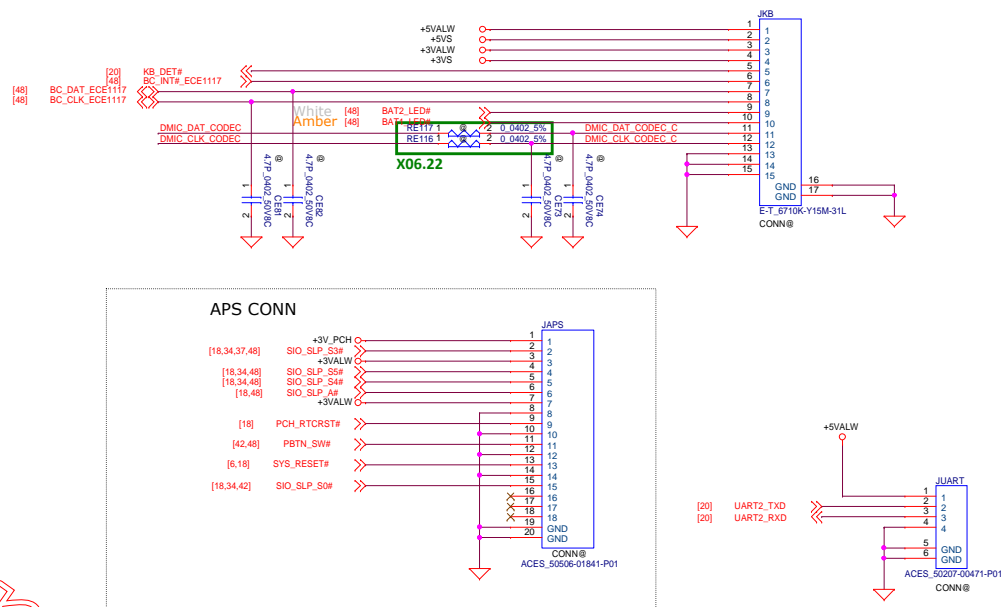


EC GPIO set to OD output

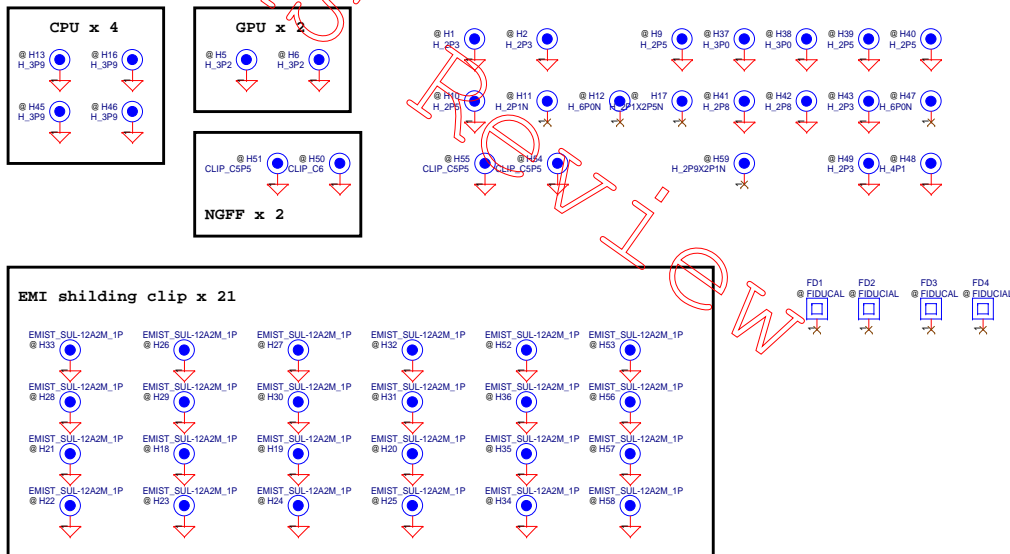
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## Keyboard Controller board + DMIC



## Screw Hole



**+RTCBATT**

**+3VLP**

RH67  
1.3K\_0402\_5%

W=20mils

D122  
BAS40-04\_SOT23-3

W=20mils

CH44  
1U\_0402\_6.3V6K

**+RTCVCC**

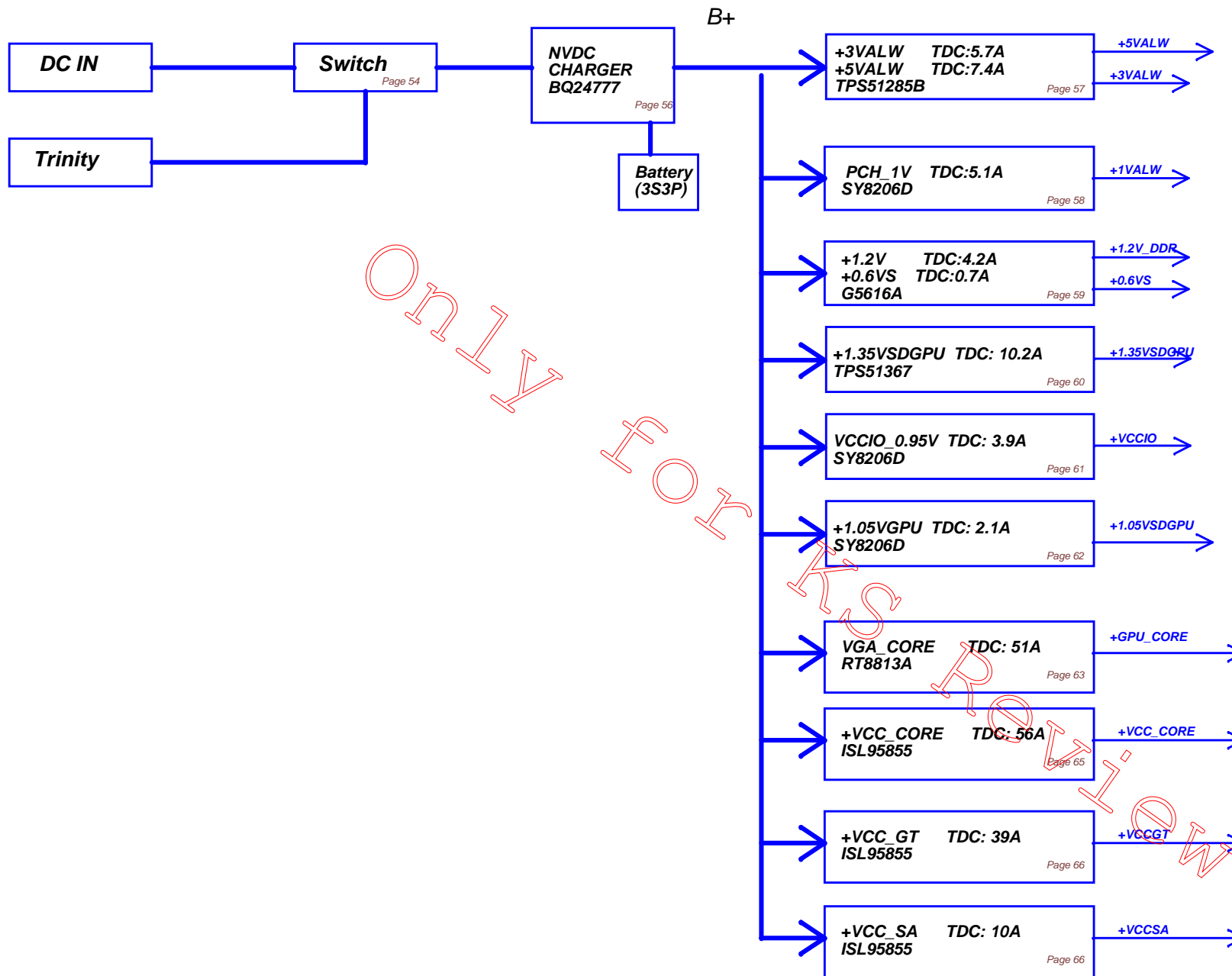
EMC @  
CH196  
1SP\_0402\_50V6J

RF Reserved.

JRC

EXT\_3806K-F02N-03R  
CONN@

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				Size	Document Number
				LA-C361P <span style="float: right;">Rev 6.1(1000)</span>	
Date: Thursday, August 06, 2015				Sheet	52 of 71



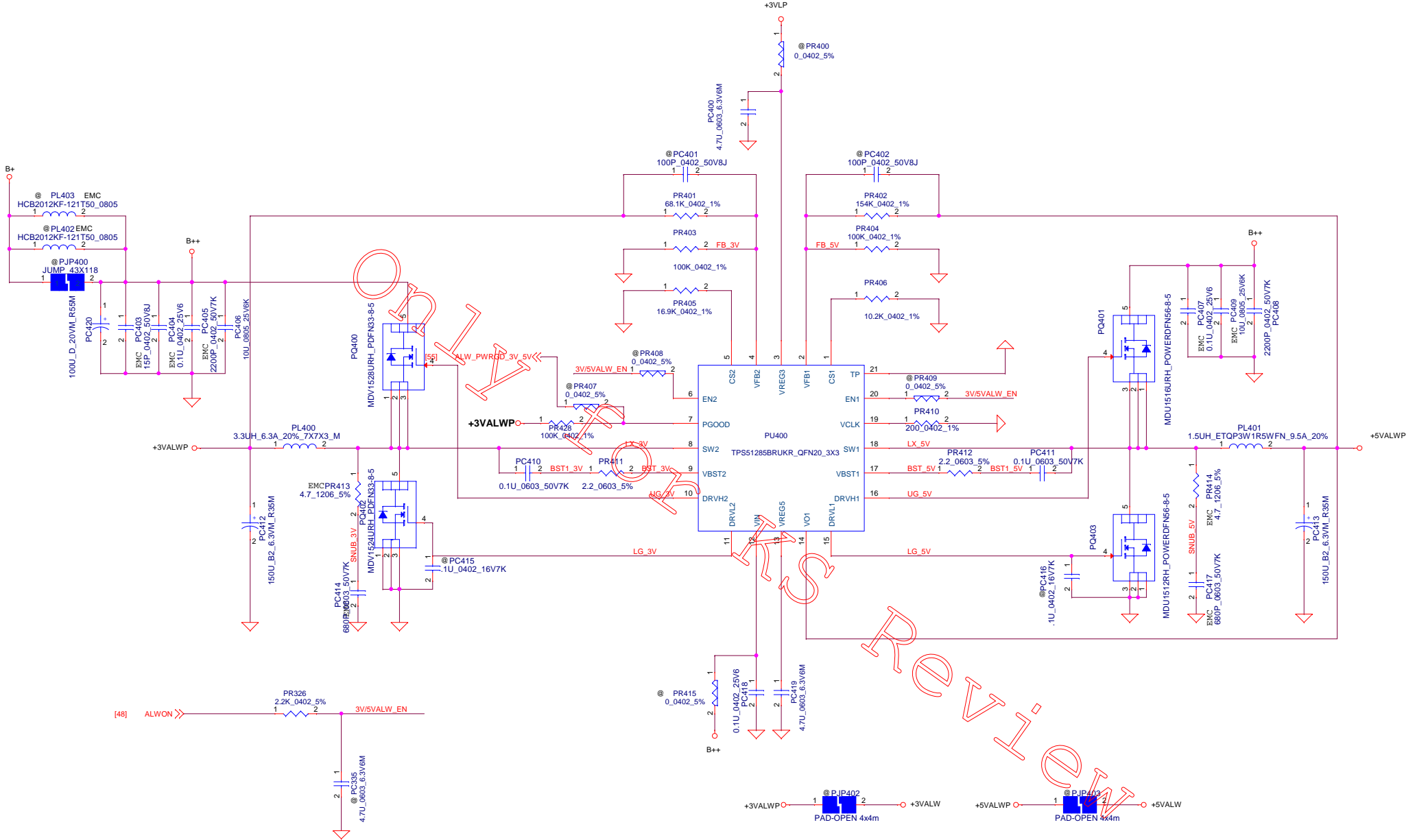
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Size	Document Number	Rev	0.1 (A00)	
Date	Tuesday, August 11, 2015	Sheet	53	of 71









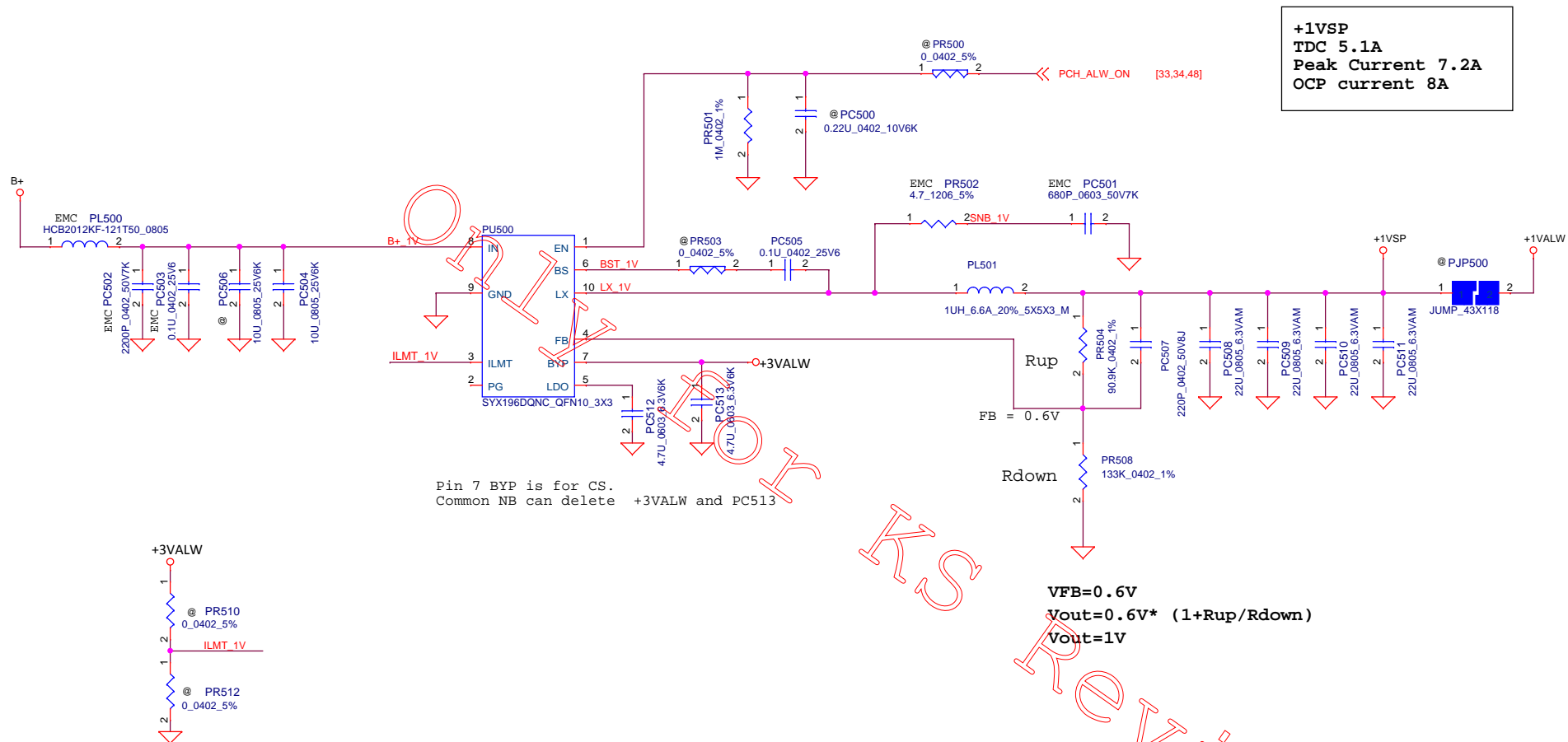


3.3VALWP  
TDC 5.7A  
Peak Current 8.1A  
OCP current 9.7A

5VALWP  
TDC 7.4A  
Peak Current 10.5A  
OCP current 12.6A

3V/5V controller(35.1), Support component(35.2)

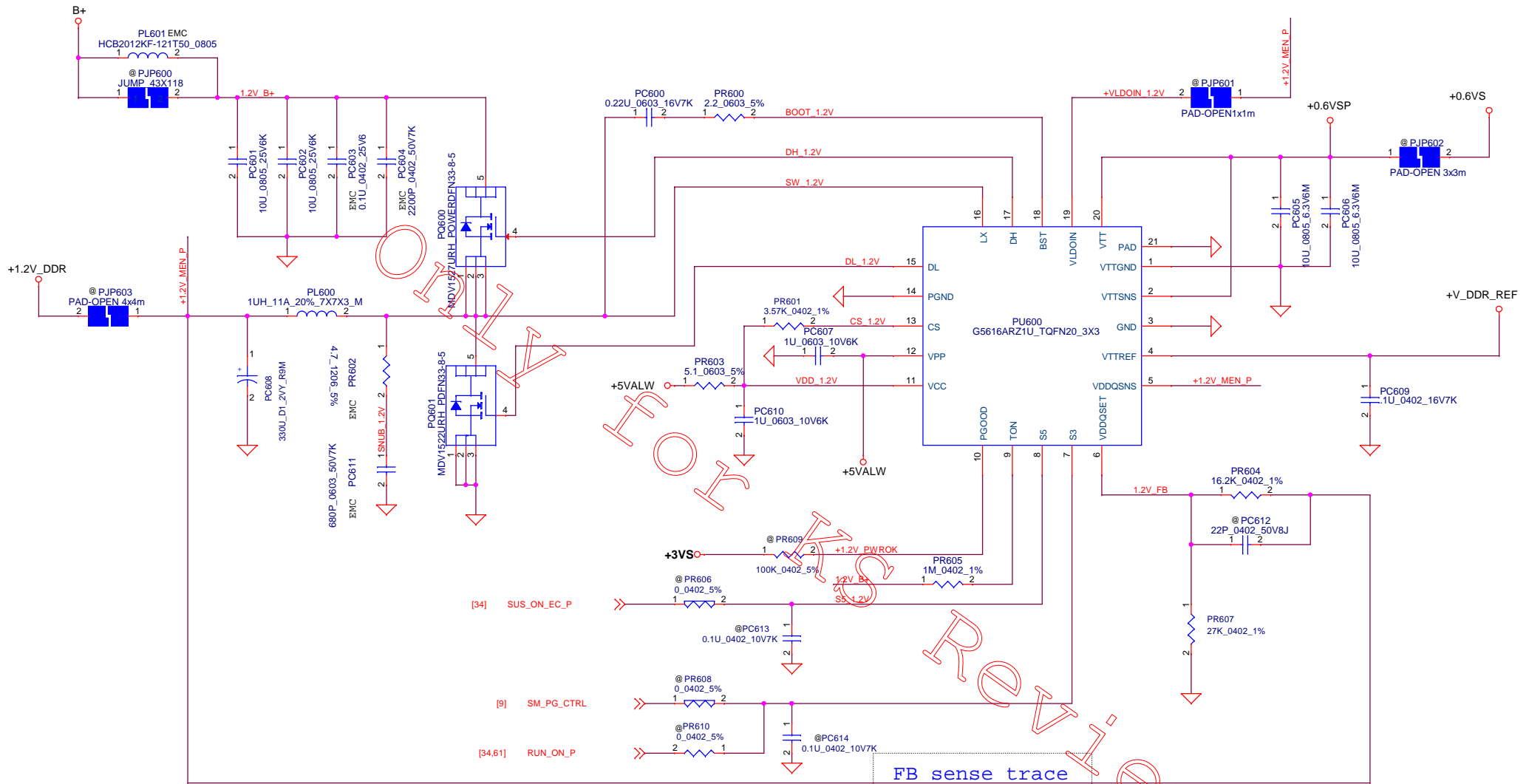
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+1VSP  
 TDC 5.1A  
 Peak Current 7.2A  
 OCP current 8A

PWR.Plane.Regulator(35.25), Support component(35.26)

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				Date:	Tuesday, August 11, 2015
				Sheet	58 of 71
				Rev	0.1



1.2Volt +/- 5%  
TDC 4.2A  
Peak Current 6A  
OCP current 7.2A

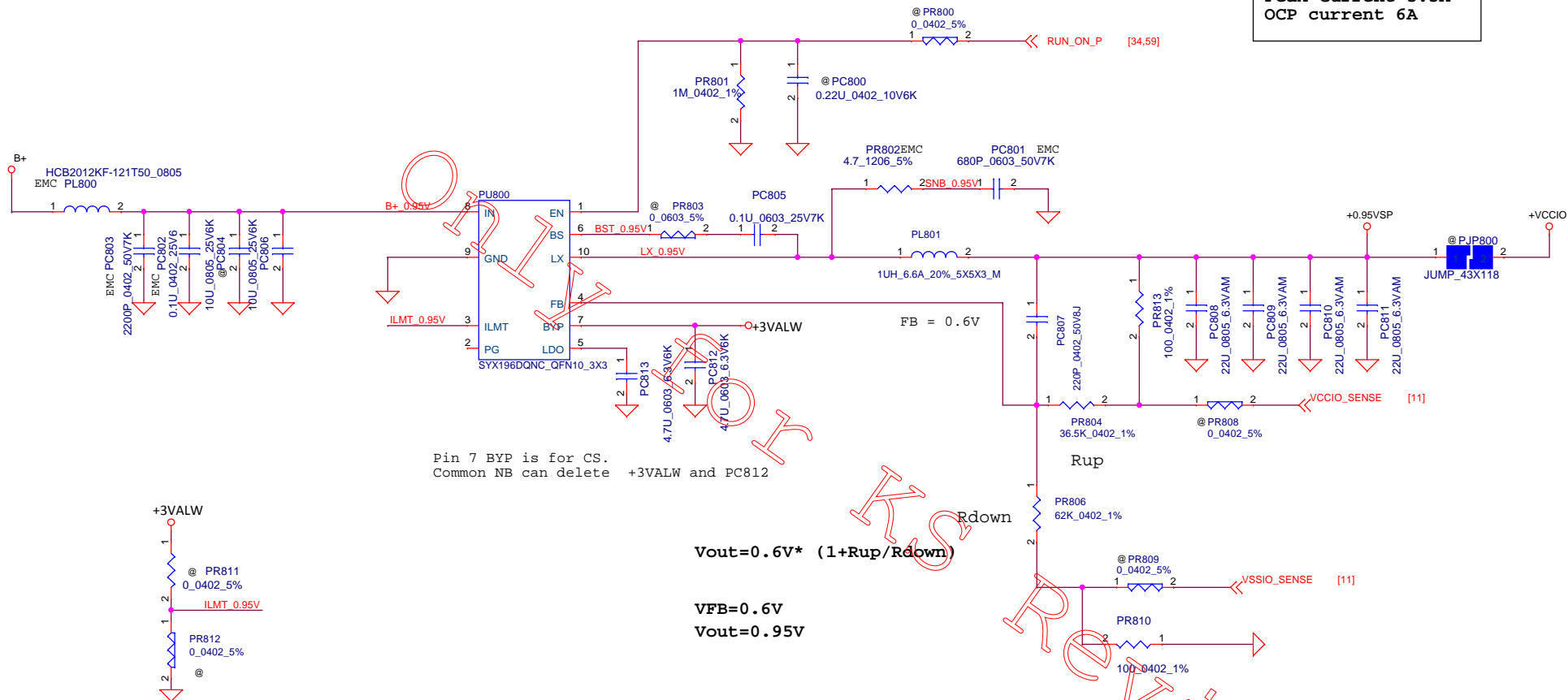
0.6Volt +/- 5%  
TDC 0.7A  
Peak Current 1A  
OCP Current 1.2A

DDR controller(35.3), Support component(35.4)

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Compal Electronics, Inc.			
Title	+1.35V_MEN/+0.675V_DDR_VTT		
Size	Document Number	Rev 1.0(400)	
LA-C361P			
Date:	Tuesday, August 11, 2015	Sheet	59 of 71





The current limit is set to 6A, 8A or 12A when this pin is pull low, floating or pull high

1.05V controller(35.5), Support component(35.6)

Pin 7 BYP is for CS.  
Common NB can delete

+3VALW and PC812

$$V_{out} = 0.6V * (1 + R_{up}/R_{down})$$

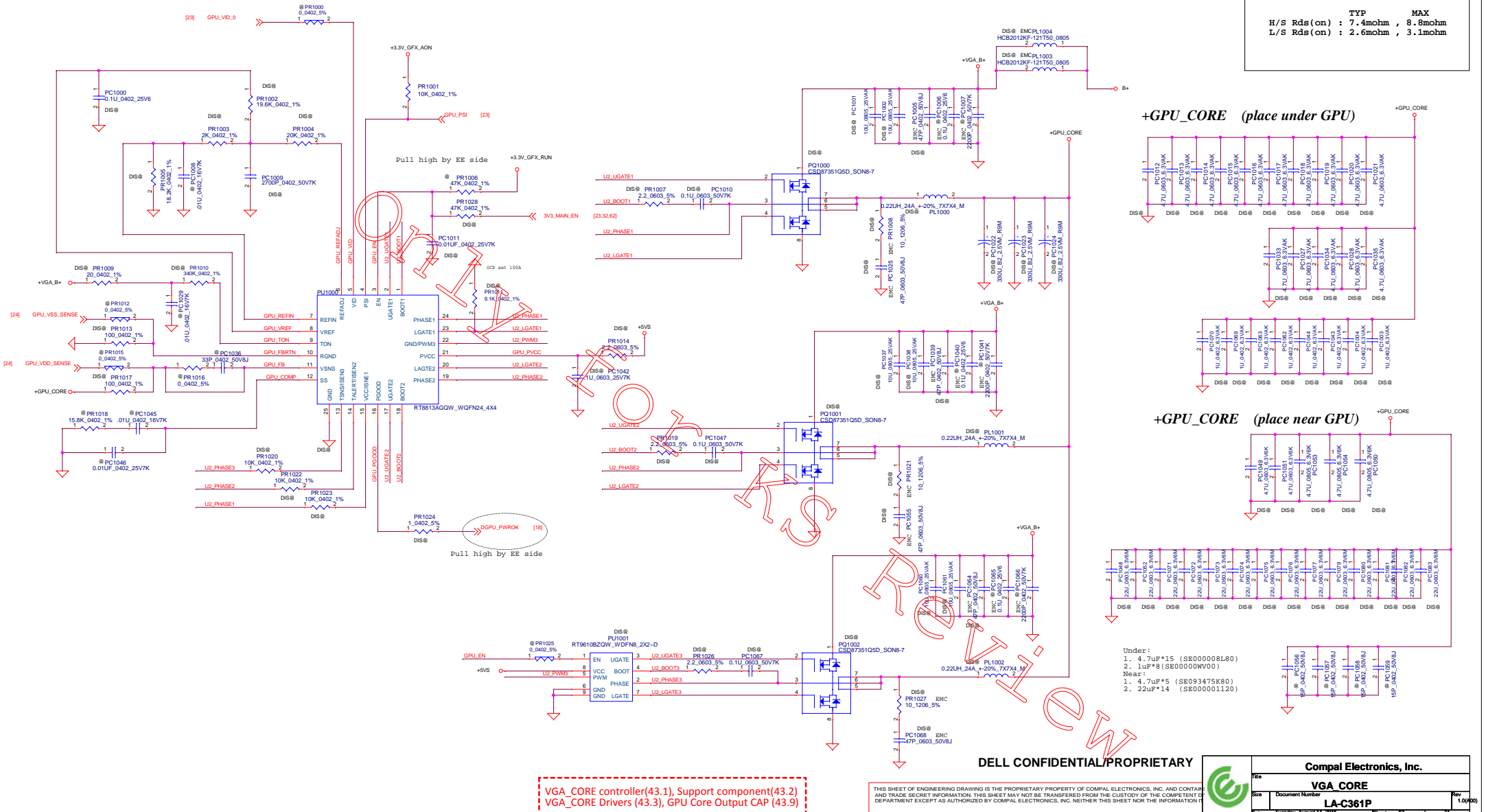
VFB=0.6V  
Vout=0.95V

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				Document Number
				Rev
				0.1
				Date: Tuesday, August 11, 2015
				Sheet 61 of 71



GPU\_CORE (0.95V)  
TDC 51A  
Peak Current 87A  
OCP current 100A  
DCR 0.97mohm +/- 5%

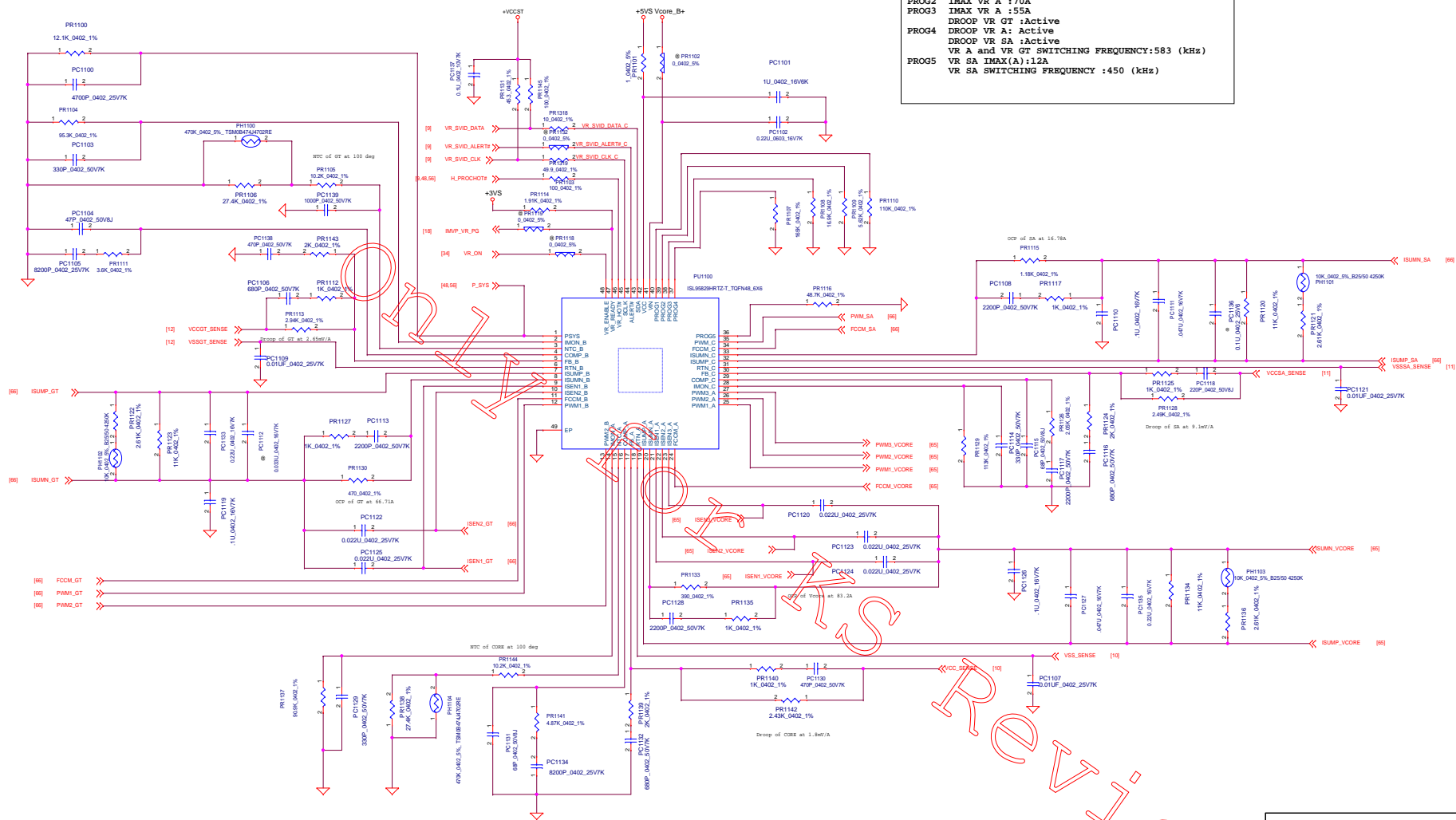
TYP MAX  
H/S Rds(on) : 7.4mohm , 8.8mohm  
L/S Rds(on) : 2.6mohm , 3.1mohm



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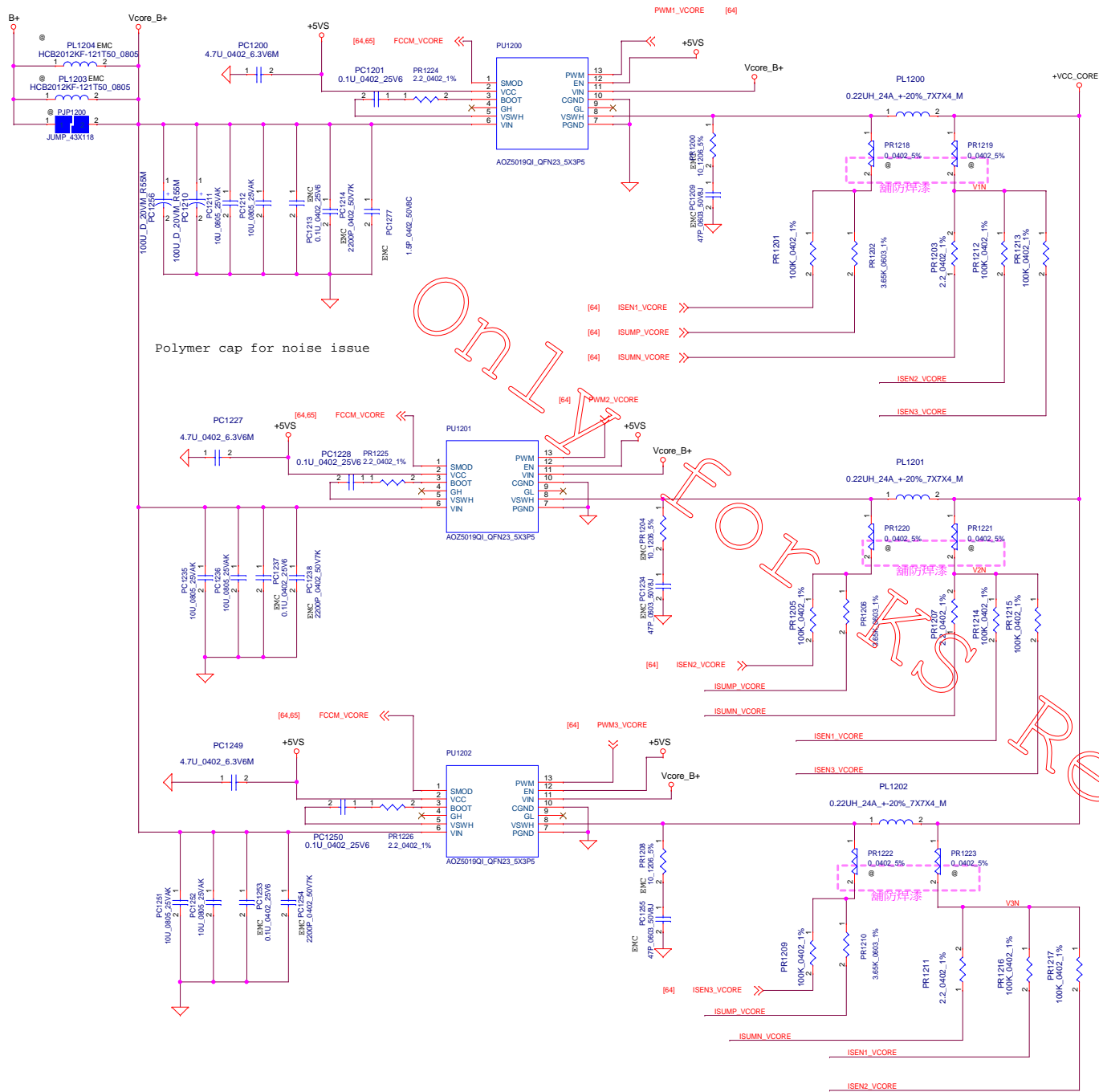


PROG sets (Base on PNTD.6 July 25, 2014)  
 PROG1 Vboot :0V  
 slow rate :30 mV/uS  
 PROG2 IMAX VR A :70A  
 PROG3 IMAX VR A :55A  
 DROOP VR GT :Active  
 PROG4 DROOP VR A :Active  
 DROOP VR SA :Active  
 VR A and VR GT SWITCHING FREQUENCY:583 (kHz)  
 VR SA IMAX(A):12A  
 VR SA SWITCHING FREQUENCY :450 (kHz)



CPU\_Vcore controller(36.1), Drivers(36.2), Support component(36.3)  
 Acoustic Noise B+ Bulk CAP(37.2)

File	<Title>	
Doc	Document Number	
Comp	Customer	
Date	Thursday, August 11, 2015	Sheet 64 of 71



VCC\_core (Base on PDDG rev 0.7)  
 PL2 TDC\_default):TB  
 PL2 TDC\_max (40Sec):56A  
 Peak Current 68A  
 DC Load line ~1.8mV/A  
 AC Load line ~1.8mV/A  
 OCP Current 83.2A  
 DCR 0.97mohm +/-5%

CPU\_Vcore controller(36.1), Drivers(36.2), Support component(36.3), CPU\_Core output CAP(36.4), Acoustic Noise B+ Bulk CAP(37.2)

Title		<Title>	Rev <RevCode>
Size	Document Number	LA-C361P	
Date:	Tuesday, August 11, 2015	Sheet	65 of 71





Version Change List (P. I. R.

Page

Page #

Title

Date

Request Owner

Issue  
Description

1

Solution  
Description

Rev.

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Item	Page #	Title	Date	Request Owner	Issue Description	Solution Description	Rev.
1	6	XDP	2014/12/12	EE	Change Pull high power for leakage issue	Change RH494,RH495,RH496 from +VCCST to +VCCSTG, de-POP RH97,RH98,RH100, POP RH494,RH495.	X01
2	18	GPIO	2014/12/12	EE	Change Pull high power for double pull high the same power rail	Change RH571 power rail from +3VS to +3V_PCH, de-pop RH571, delete RH532.	X01
3	18	SPI	2014/12/12	EE	Change SPI ROM for ME register setting	Change UH8 from W25Q128FVSIQ_S08 to W25Q128FVSIQ_S08	X01
4	18	S0iX	2014/12/12	EE	Change by pass circuit design for CS mode function	Change RZ58 connection from UZ11.2 to UZ11.4, Change RZ60 connection from UZ12.2 to UZ12.4	X01
5	18	+1V_MPHY	2014/12/12	EE	Delete +1V_MPHY load switch & discharge circuit for useless.	Delete RH514,RH559,RH144,QH9,UH13,CH193,CH194,CH195. Delete net MPHP_PWR_EN, move RZ70 to page 21	X01
6	18	PD	2014/12/22	EE	Update TI PD controller circuit follow Mirama	Update UTS from W25Q80BLZPIG_WSON8 to W25Q80DVSSIQ_S08,Delete RT166,Change net VCC3V3_TBTA_LDO to VCC3V3_FLASH. Change net VCC3V3_SX_SYS to +3VA_TBTA. Add RT198 to PWR_SRC_ILIMIT.Swap UT4.B2/C2 net. Update RT165 from 1206 to 0805, RT167,RT168, RT169,RT170,RT171,RT179,RT186,RT187,RT188,RT189,RT192,RT192,RT192,RT196,RT197 from 0402 to 0201. Add RT200,RT201 to net UPD_SMBDAT/UPD_SMBCLK"	X01
7	18	EC	2014/12/15	EE	Update Board ID for EC	Update RE67 to 62K	X01
8	18	PM	2014/12/15	EE	modify for support deep sleep function	De-pop RH506	X01
9	18	DDR	2014/12/15	EE	change Power rail for correct design	Change RH525 power rail from +3VALW to +3VS	X01
10	18	SPK	2014/12/15	EE	Add pull high resistor for MB side	Add RH572 to +3VS for SPK_DET#	X01
11	18	GPIO	2014/12/15	EE	Change GPIO for sync common GPIO table	Change net DGPU_PWR_EN from GPP_D13 to GPP_D12	X01
12	18	PD	2014/12/15	EE	Pin swap for DFB review	pin swap DT4,DT9	X01
13	18	PCH	2014/12/15	EE	Add Capacitor for follow Schematic check list	Add CH200 to +3V_PCH (Close to UH2.BA15)	X01
14	18	DIS	2014/12/15	EE	Add pull high resistor by vendor request	Add RPH34 replace to RV520,RV521,RV522 and add net THERMAL_ALERT#.	X01
15	18	SPI	2014/12/15	EE	Follow CRB XDP design	Add RH574,RH575 for SPI to XDP connector	X01
16	18	VDDQC	2014/12/16	EE	Follow CRB boardfile	POP RH473	X01
17	18	DEBUG	2014/12/16	EE	Add Debug signal by EC request	Change net BID_BC to GPP_C15, Add Net UARTT0_TX from GPP_C9 to JDEG1.pin 9	X01
18	18	DEBUG	2014/12/16	EE	Modify Debug UART from closed Chassis to Open Chassis	Delet UI6,RI29.Add JUART for UART2_TXD/UART2_RXD connect.	X01
19	18	SCI	2014/12/16	EE	Change PU resistor follow Miramar	RH383 change from 100K to 10K	X01
20	18	HOLE	2014/12/16	EE	Add 2 PAD for ME NUT	Add H50, H51	X01
21	18	EC	2014/12/16	EE	Add series resistor follow CRB	Add RE111 43K series SIO_SLP_SUS#	X01
22	18	PCH	2014/12/16	EE	Change BOM to follow CRB	Change RH88 from 10K to 47K, De-POP RE33.	X01
23	18	EC	2014/12/17	EE	Modify GPIO for follow GPIO MAP by Dell	Add RE112 and Connect net BID_DIS to UE3.A10, swap Net BAT1_LED#(UE3.B1=>UE3.A40)/BAT2_LED#(UE3.A55=>UE3.B43)/ PCH_PCIE_WAKE#(UE3.A40=>UE3.B46)/ME_FWP_EC(UE3.B46=>UE3.B1)/USB_PWR_SHR_LFT_EN#(UE3.B43=>UE3.A55)	X01
24	18	EC	2014/12/17	EE	Update BOM for design change	de-POP RE27, RE63, POP RH453	X01
25	18	NGFF	2014/12/17	EE	Update NGFF from Key E. to Key A.	Change JNGFF1 to CONCR_213AAAA12FA	
26	18	PCH	2014/12/17	EE	Change array resistor to resistor for routing	Change RP21 to RH576,RH577,RH578,RH579, Add RE113,RE114,RE115 for UE1.	
27	18	USB	2014/12/18	EE	Change net name by EC request	USB_PWR_SHR_VBUS_LFT_EN -> USB_PWR_SHR_VBUS_EN_L, USB_PWR_SHR_VBUS_RHT_EN1 -> USB_PWR_SHR_VBUS_EN_R, USB_PWR_SHR_LFT_EN# -> USB_PWR_SHR_EN_L#, USB_PWR_SHR_RHT_EN1# -> USB_PWR_SHR_EN_R#, USB2_DET_EC# -> USB_DET_EC_L#, USB1_DET_EC# -> USB_DET_EC_R#	
28	18	TS	2014/12/18	EE	Update Touch Screen Connector by ME request	Update JTS to ACES_50208-00601-P01	
29	18	USB	2014/12/18	EE	Add Pull down resistor for USB2.0	Add RH580,RH581 to UH2.AD10,UH2.AG2 to GND	
30	18	AR	2014/12/19	EE	Reserve test point for Alpine Ridge	Add T199,T200,T201	
31	18	PD	2014/12/22	EE	Delete common mode chok & ESD for vendor feedback	Delete LT10,DT5	
32	18	EC	2014/12/22	EE	Delete I2C signal from EC to Codec.	Delete QE14	
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Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2013/04/10	Deciphered Date	2014/05/01	Title
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Sheet 70 of 71				Rev 1.0

Item	Page #	Title	Date	Request Owner	Issue Description	Solution Description	Rev.
1	NA	NA	2014/12/12	EE	NA	NA	X01
2				EE			X01
3				EE			X01
4				EE			X01
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