

# Compal Confidential

Model Name : V5WE2/T2 (EA/EG)

File Name : LA-9532P

# Compal Confidential

## EA50 UMA M/B Schematics Document

Intel Shark Bay ULT (Hasswell + Lynx PointLP)

2013-04-18

REV: 1.0

ZZZ

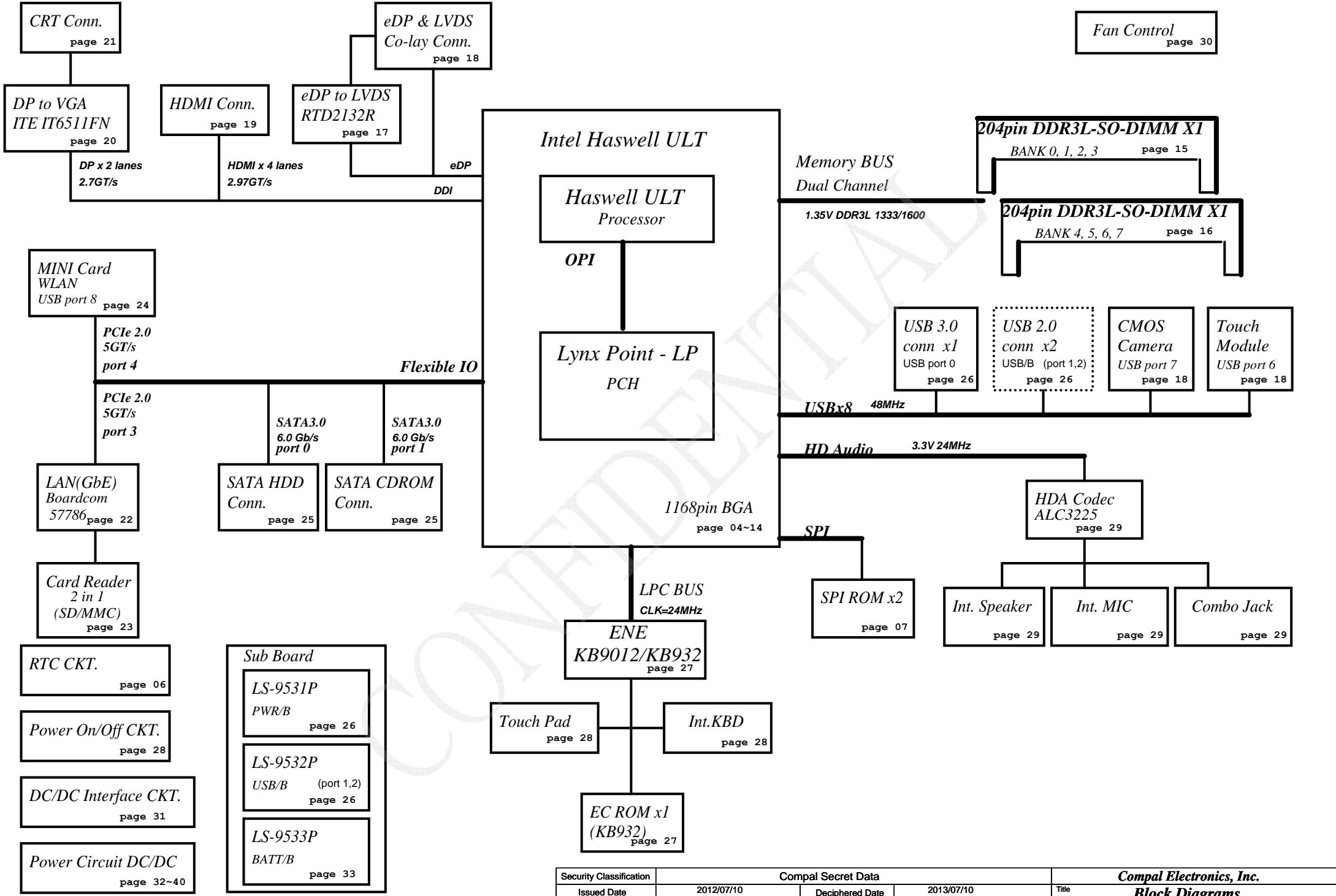
Part Number	Description
DAZ0VR00200 V5WE2_PCB	PCB V5WE2 LA-9532P LS-9531P/9532P/9533P

ZZZ1



HDMI ROYALTY  
ROYALTY HDMI W/LOGO+HDCP  
RQ0000003HM  
45@

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				V5WE2 M/B LA-9532P Schematic	0.2
				Date: Thursday, April 18, 2013	Sheet 1 of 42



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				V5WE2 M/B LA-9532P Schematic	0.2
Date: Monday, April 08, 2013				Sheet	2 of 42

### Voltage Rails

Power Plane	Description	S1	S3	S5
VIN	Adapter power supply (19V)	N/A	N/A	N/A
BATT+	Battery power supply (12.6V)	N/A	N/A	N/A
B+	AC or battery power rail for power circuit.	N/A	N/A	N/A
+CPU_CORE	Core voltage for CPU	ON	OFF	OFF
+0.675VS	+0.675VSP to +0.675VS switched power rail for DDR terminator	ON	OFF	OFF
+1.35V	+1.35VP to +1.35V power rail for DDRIIIL	ON	ON	OFF
+1.5VS	+1.5V to +1.5VS switched power rail	ON	OFF	OFF
+1.8VS	+3VS to 1.8V switched power rail to CPU	ON	OFF	OFF
+3VALW	+3VALW always on power rail	ON	ON	ON*
+3VLP	B+ to +3VLP power rail for suspend power	ON	ON	ON
+3VS	+3VALW to +3VS power rail	ON	OFF	OFF
+5VALW	+5VALWP to +5VALW power rail	ON	ON	ON*
+5VS	+5VALW to +5VS switched power rail	ON	OFF	OFF
+VSB	+VSBP to +VSB always on power rail for sequence control	ON	ON	ON*
+RTCVCC	RTC power	ON	ON	ON
+1.05VS_VTT	+1.05VSP to +1.05VS_VTT switched power rail for cpu	ON	OFF	OFF

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

### EC SM Bus1 address

Device	Address	Device	Address
Smart Battery	0001 011X b	On Board Thermal Sensor	1001_101xb

### EC SM Bus2 address

### PCH SM Bus address

Device	Address
ChannelA DIMM0 A0	1010 000X JDIMM1(SPD)

### BOM config

PCB P/N	DA60000XR00 : PCB 0VR LA-9532P REV0 M/B
EVT BOM config	9012@ ; AMIC@ ; CHR@ ; BL@ ; EMC@ ; AOAC@
DVT BOM config	9012@ ; BL@ ; EMC@ ; EDP@ (L01~L04)
	9012@ ; BL@ ; EMC@ ; TL@ (L05)
PVT BOM config	9012@ ; EMC@ ; EDP@ ; 1ROM@ ; IOAC@
PreMP BOM config	9012@ ; EMC@ ; EDP@ ; 1ROM@ ; IOAC@

11/1 Del XDP@

### 43 level BOM table

43 Level	Description
4319LWBOL01	SMT MB A9532 V5WE2 UMA I7 QDA7 HDMI
4319LWBOL02	SMT MB A9532 V5WE2 UMA I5 QDJB HDMI
4319LWBOL03	SMT MB A9532 V5WE2 UMA I5 QDJ7 HDMI
4319LWBOL04	SMT MB A9532 V5WE2 UMA I5 QDJ9 HDMI
4319LWBOL05	SMT MB A9532 V5WE2 UMA I5 QDJB LVDS HDMI
4319LWBOL06	SMT MB A9532 V5WE2 UMA WO/CPU HDMI
4319LWBOL07	SMT MB A9532 V5WE2 UMA I5 QE44 HDMI
4319LWBOL08	SMT MB A9532 V5WE2 UMA I5-4200 HDMI
4319LWBOL09	SMT MB A9532 V5WE2 UMA I3-4010 HDMI
4319LWBOL10	SMT MB A9532 V5WE2 UMA I5-4250 HDMI
4319LWBOL21	SMT MB A9532 V5WC2 UMA I5-4200 HDMI
4319LWBOL22	SMT MB A9532 V5WC2 UMA I3-4010 HDMI

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 / 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
1	8.2K +/- 5%	0.216 V	0.250 V	0.289 V
2	18K +/- 5%	0.436 V	0.503 V	0.538 V
3	33K +/- 5%	0.712 V	0.819 V	0.875 V
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

### BOARD ID Table

Board ID	PCB Revision
0	0.1
1	0.2
2	0.3
3	0.4
4	1.0
5	
6	
7	

### BTO Option Table

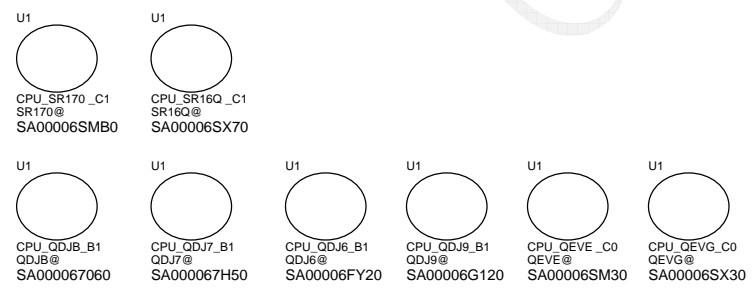
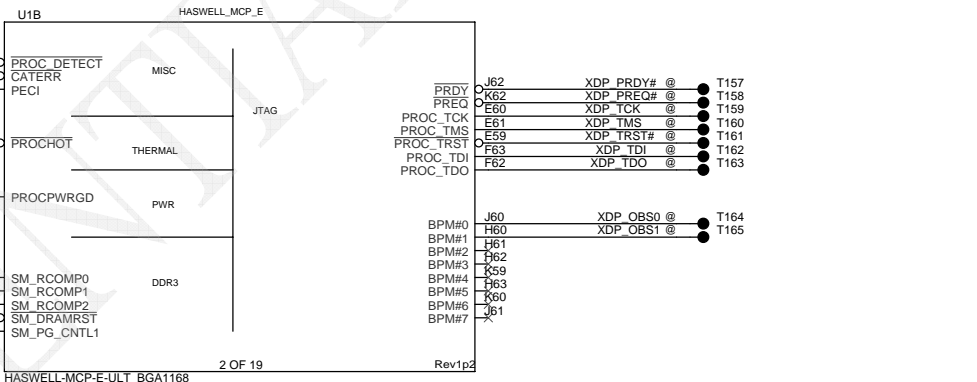
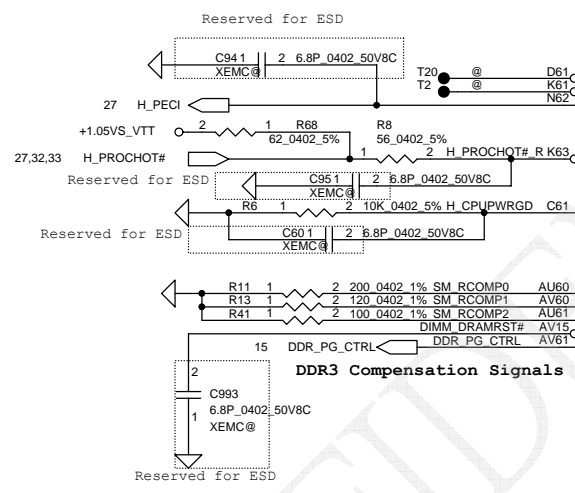
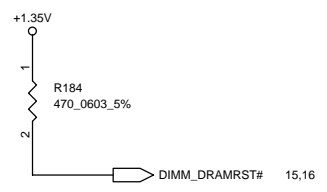
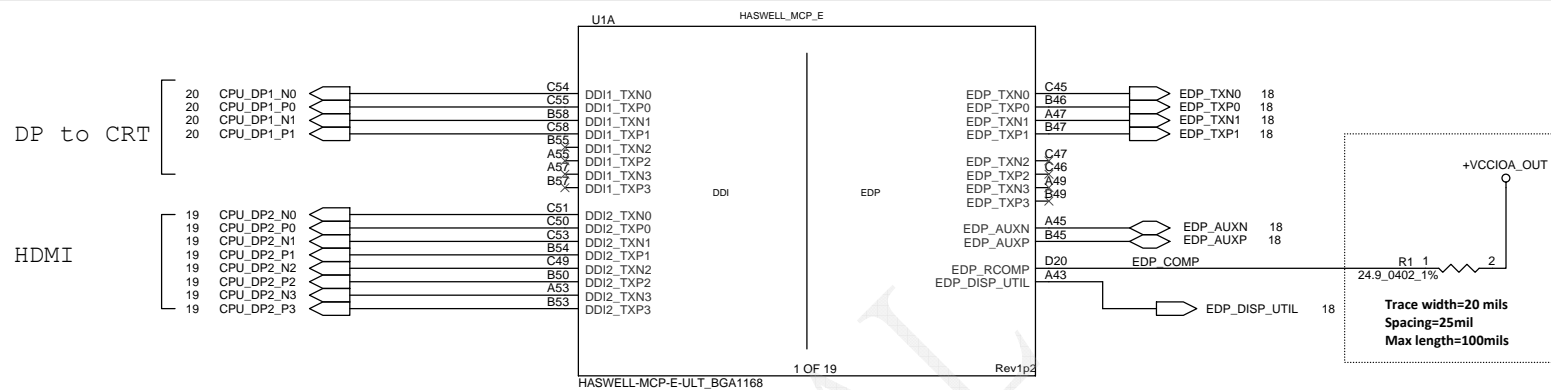
BTO Item	BOM Structure
EC 9012	9012@
EC 940	940@
Unpop	@
TPM Circuit	TPM@
eDP mode	EDP@
eDP to LVDS	TL@
Connector	CONN@
G-Sensor	GSEN@
XDP (Debug Port)	XDP@
KB Backlight	BL@
Debug Only	DEG@
MEC requirement	EMC@
MEC requirement unpop	XEMC@
GPU_Select	VGA@
reserve 3,5V MOS	35V@
BIOS 8M Solution	1ROM@
BIOS 4+2M Solution	2ROM@
IOAC Function	IOAC@
Touch screen Function	TS@

### USB Port Table

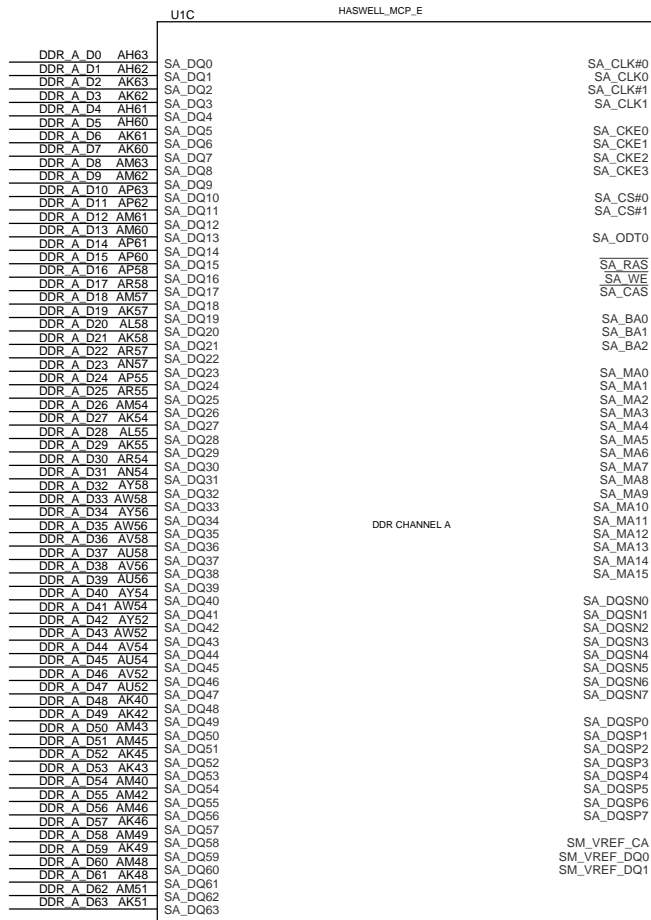
USB 3.0	Port	
XHCI	1	USB Port(Left 3.0)
	2	
	3	
	4	

USB 2.0	USB 1.1	Port	3 External USB Port
EHCI1	UHCI0	0	USB Port(Left 3.0)
		1	USB Port(Right 2.0)
	UHCI1	2	USB Port(Right 2.0)
		3	
	UHCI2	4	Mini Card(WLAN)
		5	
		6	Touch Screen
UHCI3	7	Camera	

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				<b>Notes List</b>
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				Rev 0.2
				Sheet 3 of 42



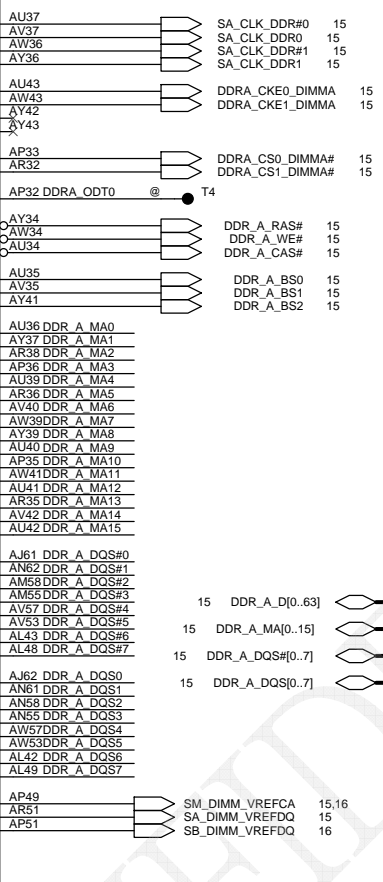
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Issued Date	2012/07/10	Deciphered Date	2013/07/10	Title <b>HSW MCP(1/11) DDI,MSIC,XDP</b>	
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Date:	Friday, April 12, 2013	Sheet	4	of	42



HASWELL-MCP-E-ULT\_BGA1168

3 OF 19

Rev1p2

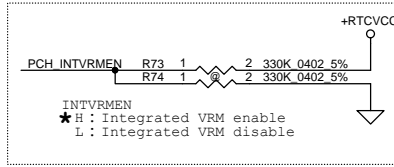
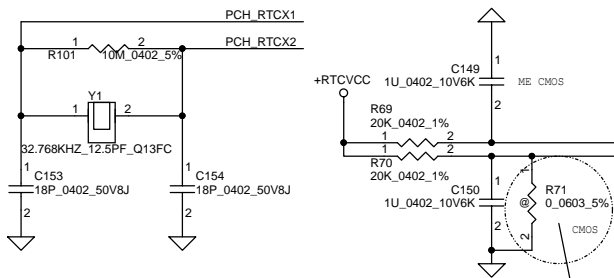


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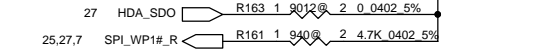
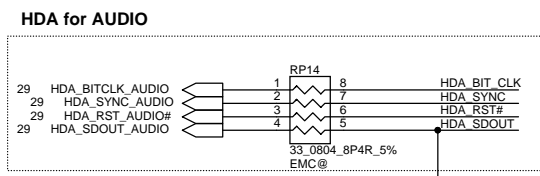
4 OF 19

Rev1p2

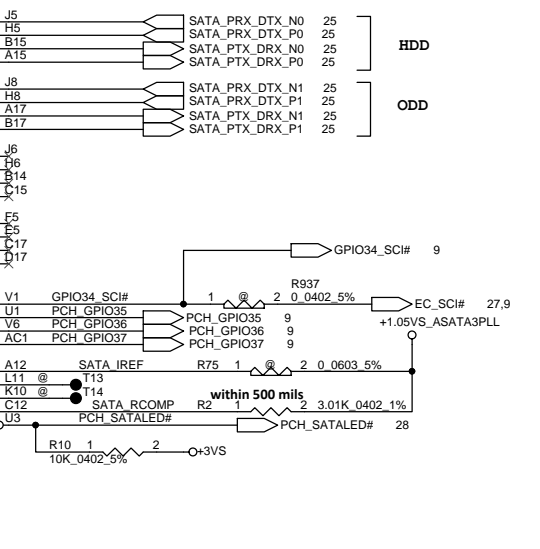
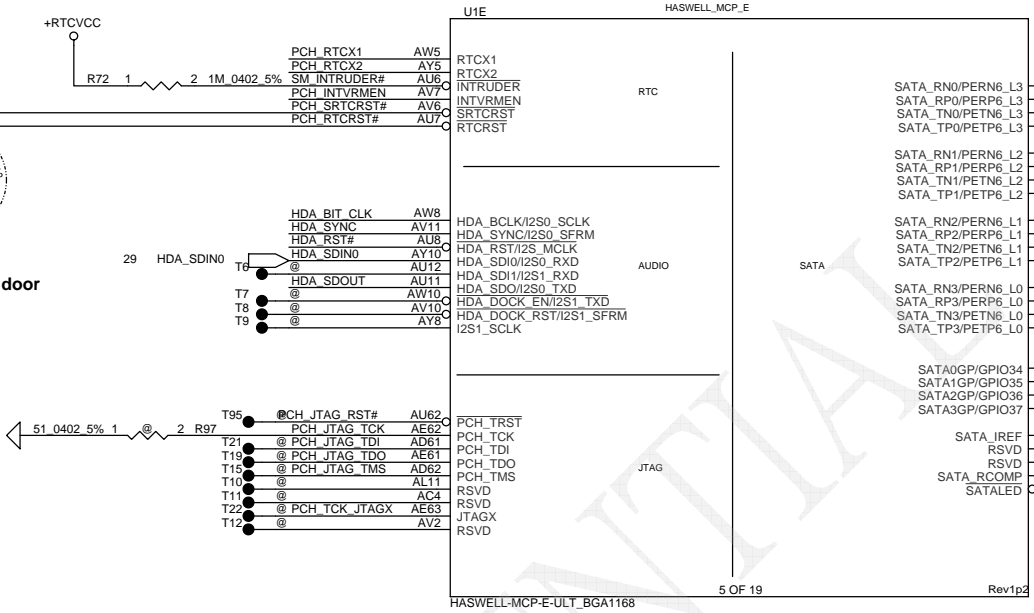
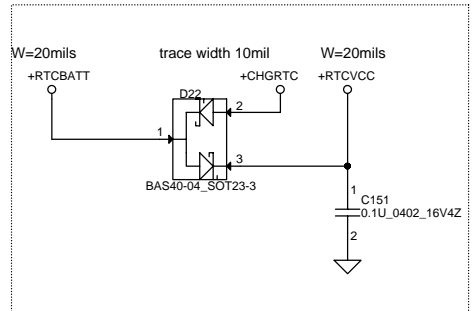
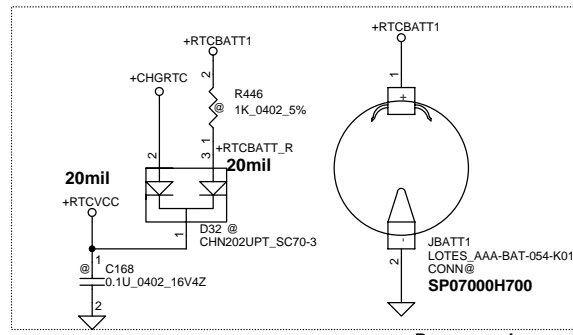
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Date:	Monday, April 08, 2013	Sheet	5	of	42



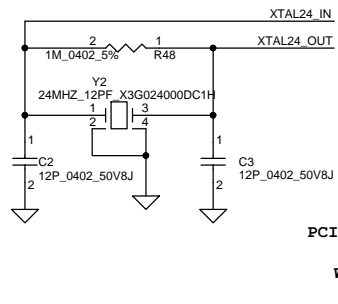
RTCRST close RAM door



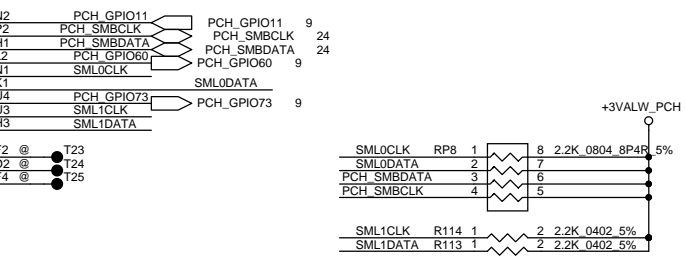
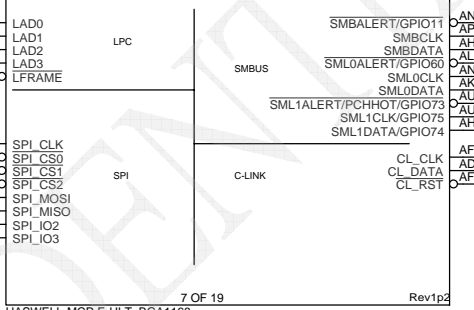
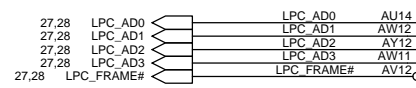
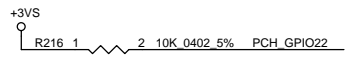
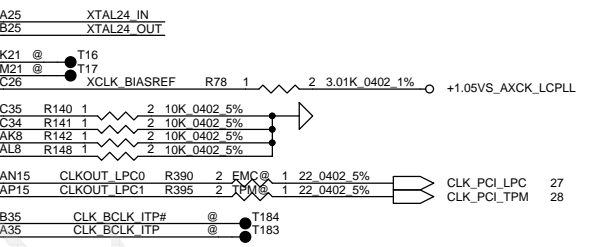
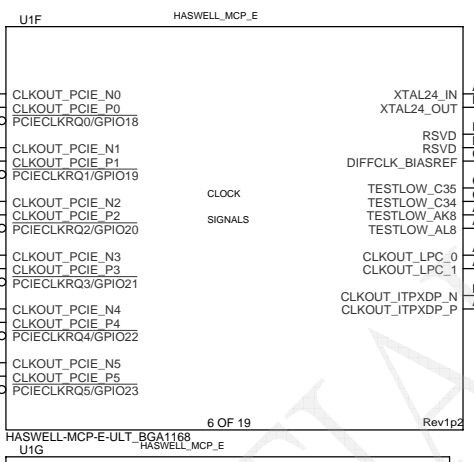
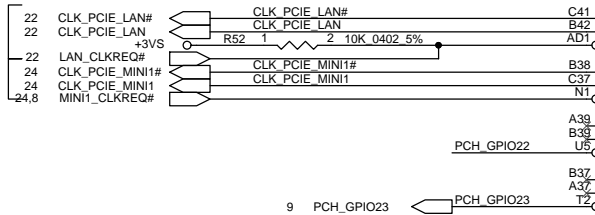
ME Debug



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				V5WE2 M/B LA-9532P Schematic	0.2
Date: Thursday, April 18, 2013				Sheet	6 of 42

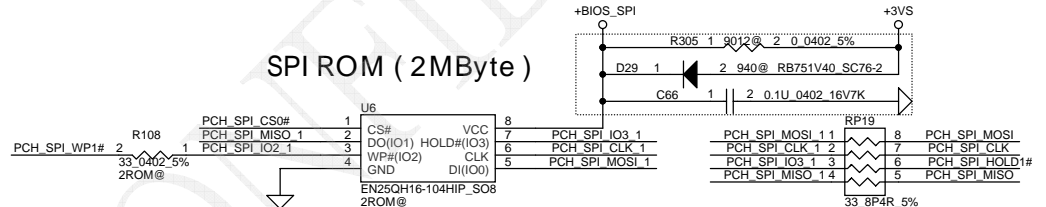


**PCIE LAN**  
**WLAN**

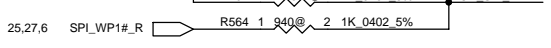
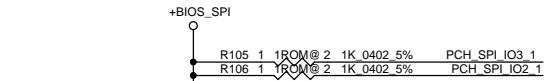
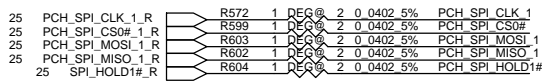
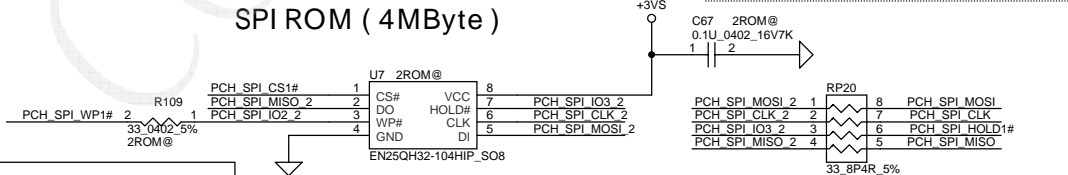


D29 design for Debug board flash SPI ROM (can be short after MP)

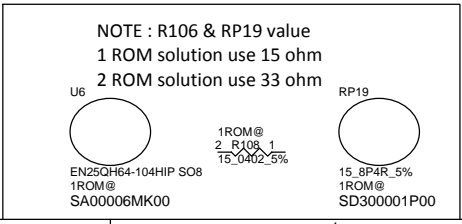
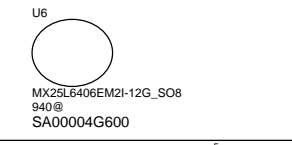
**SPI ROM ( 2MByte )**



**SPI ROM ( 4MByte )**



**SPI ROM ( 8MByte for Chrome )**



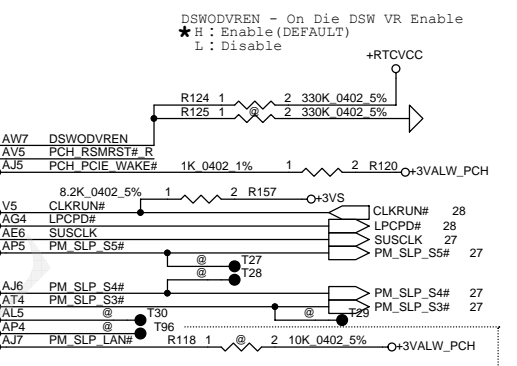
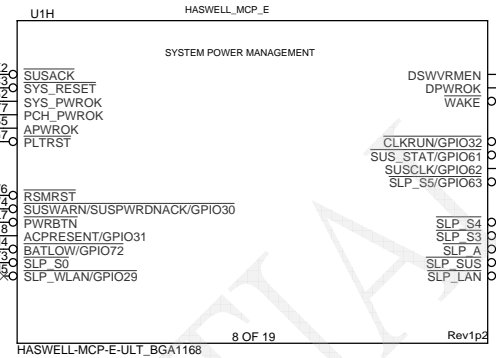
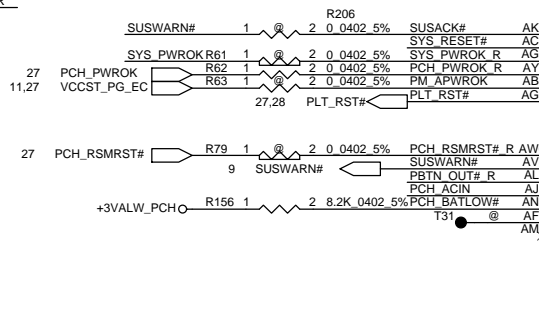
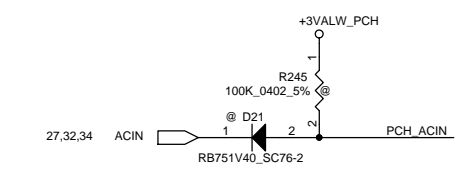
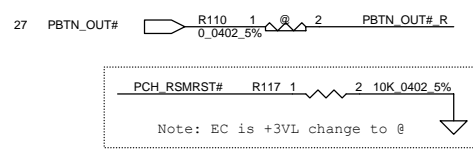
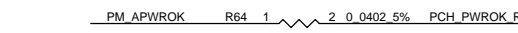
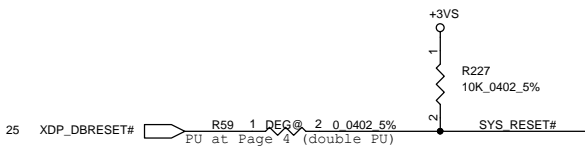
**NOTE : R106 & RP19 value**  
 1 ROM solution use 15 ohm  
 2 ROM solution use 33 ohm

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		2013/07/10

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<b>HSW MCP(4/11) CLK,SPI,SMBUS</b>	
<b>Title</b>	

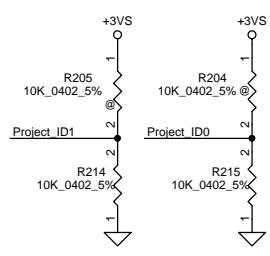
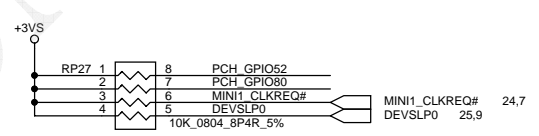
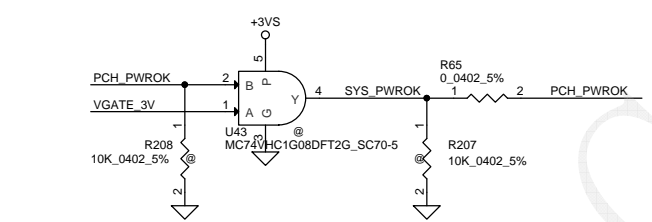
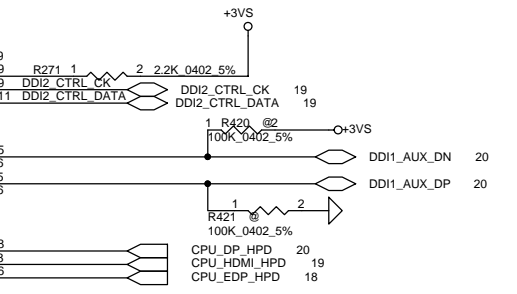
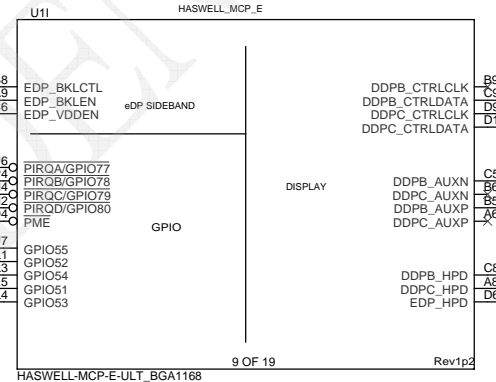
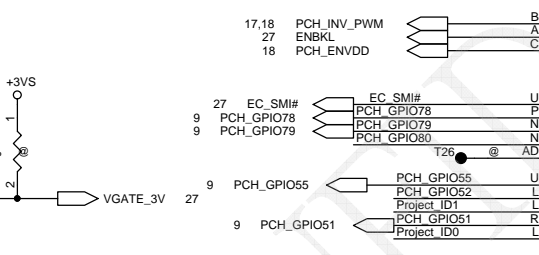
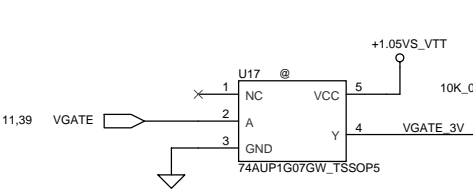
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<b>Document Number</b>	<b>Rev</b>
<b>V5WE2 M/B LA-9532P Schematic</b>	0.2
<b>Date:</b>	<b>Sheet</b>
Monday, April 08, 2013	7 of 42



DDPB\_CTRLDATA: Port B Detected  
 DDPC\_CTRLDATA: Port C Detected

\* 1: Port B or C is detected  
 0: Port B or C is not detected  
 (Have internal PD)



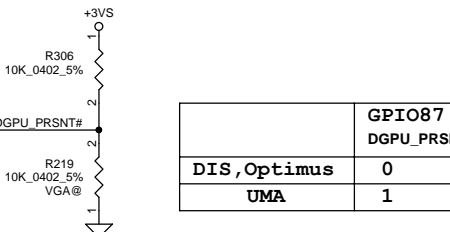
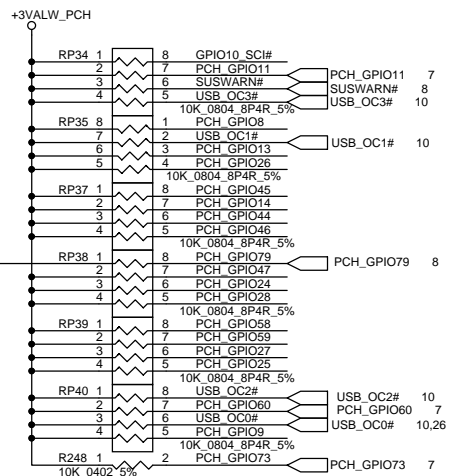
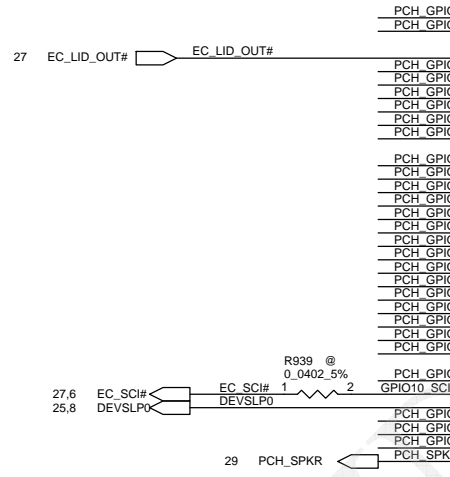
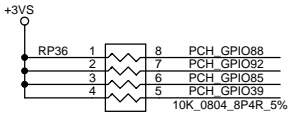
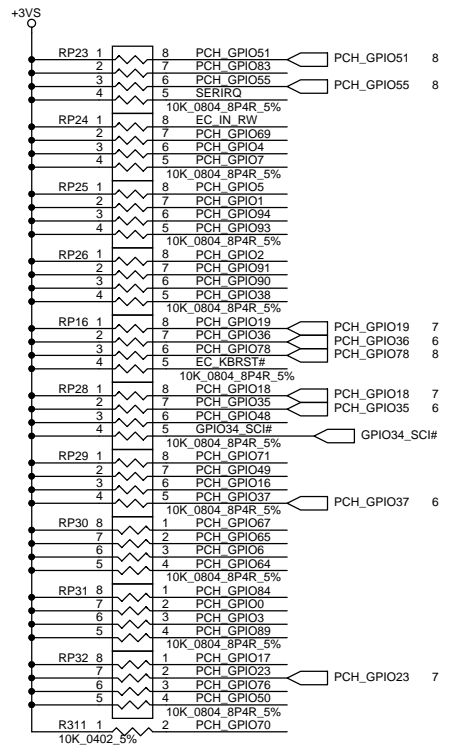
Project ID	Project_ID1 GPIO54	Project_ID0 GPIO53
*V5WE2/T2	0	0
Reserved	0	1
Reserved	1	0
Reserved	1	1

Security Classification	Compal Secret Data	
Issued Date	2012/07/10	Deciphered Date
		2013/07/10

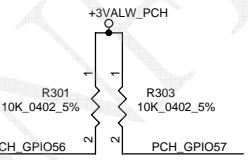
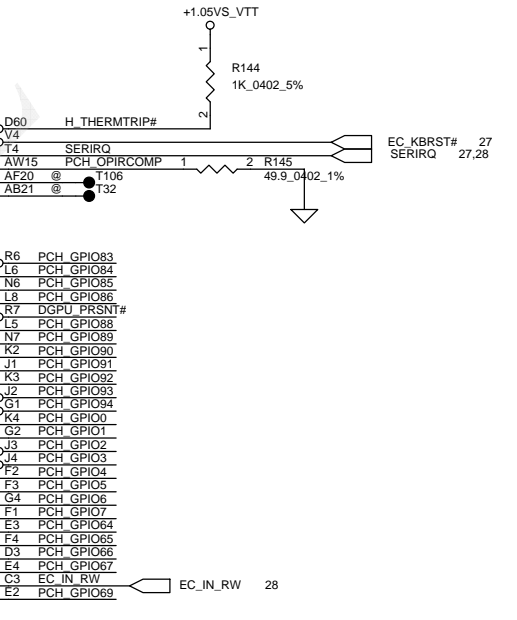
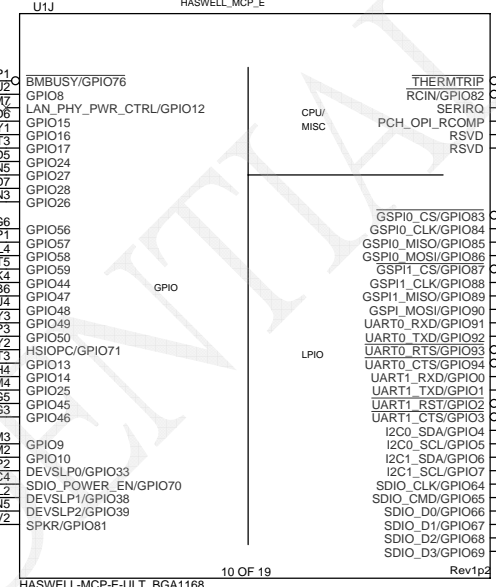
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Compal Electronics, Inc.	
HSW MCP(5/11) PM,GPIO,DDI	
Document Number	V5WE2 M/B LA-9532P Schematic
Date:	Monday, April 08, 2013
Sheet	8 of 42





	<b>GPIO87</b>
	<b>DGPU_PRSN#</b>
<b>DIS,Optimus</b>	<b>0</b>
<b>UMA</b>	<b>1</b>



PCH\_GPIO66 R270 1 @ 2 1K 0402 1%

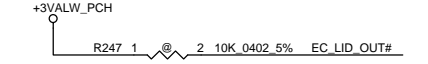
SDIO\_D0 / GPIO66 : Top-Block Swap Override

\* 1: ENABLED (Have internal PU)  
0: DISABLED

PCH\_GPIO86 R272 1 @ 2 1K 0402 1%  
R273 1 @ 2 1K 0402 5%

GSPI0\_MOSI / GPIO86 : Boot BIOS Strap

1: ENABLED  
\* 0: SPI ROM (Have internal PL)



GPIO15 : TLS Confidentiality

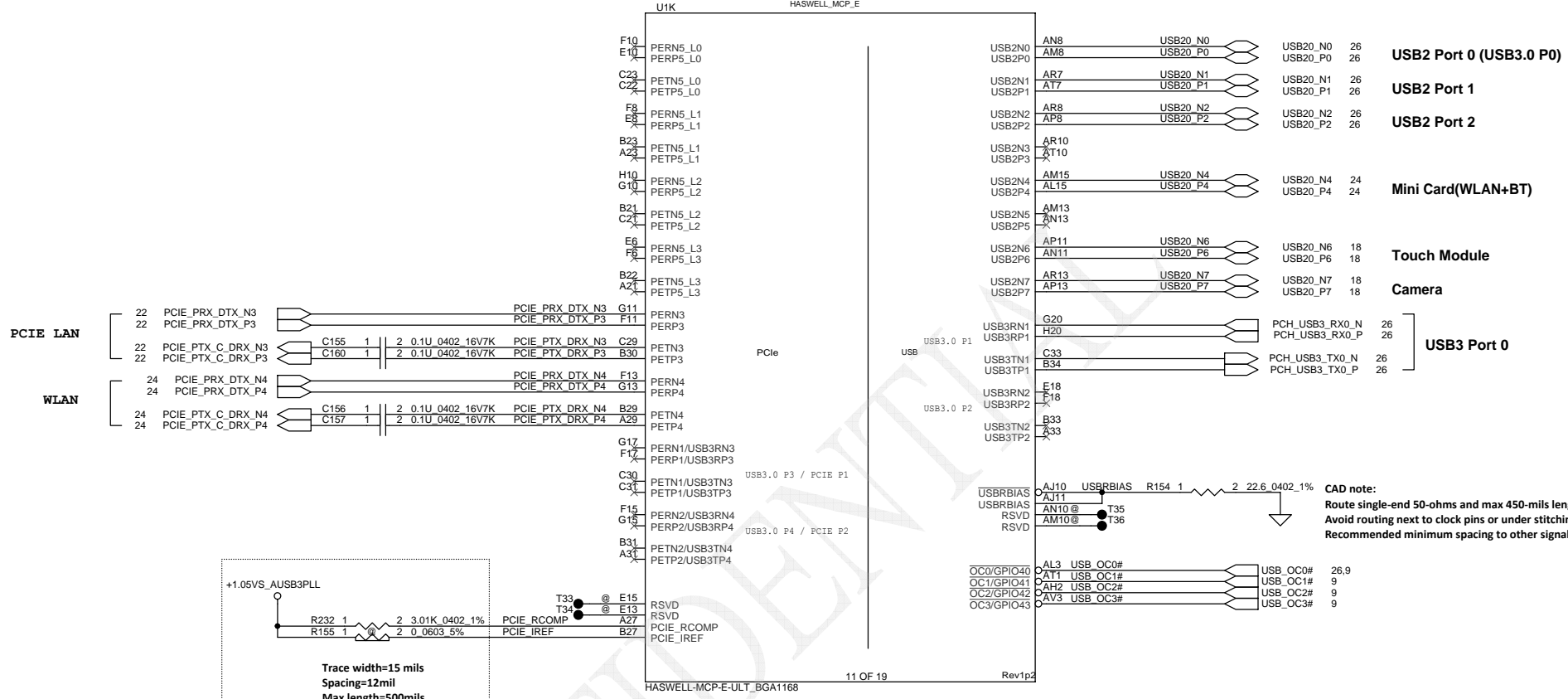
1: Intel ME TLS with confidentiality  
\* 0: Intel ME TLS with no confidentiality  
(Have internal PD)

R269 1 @ 2 1K 0402 1%

SPKR / GPIO81 : NO REBOOT

1: ENABLED  
\* 0: DISABLED (Have internal PD)

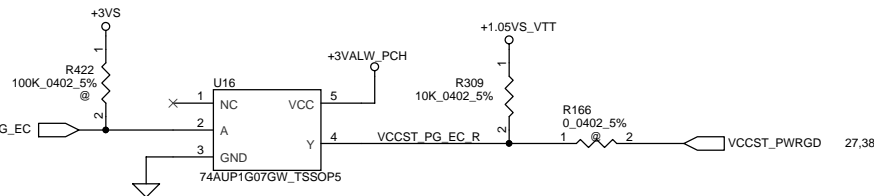
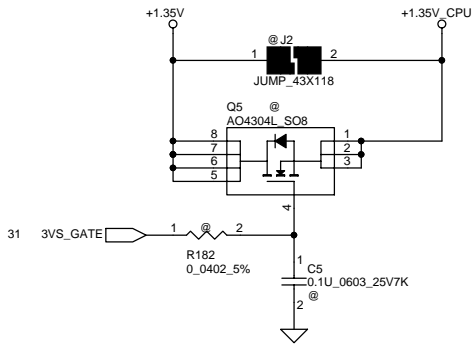
Security Classification		Compal Secret Data		Title	
Issued Date	2012/07/10	Deciphered Date	2013/07/10	Compal Electronics, Inc. <b>HSW MCP(6/11) GPIO,LPIO</b>	
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Document Number	V5WE2 M/B LA-9532P Schematic			Rev	0.2
Date:	Monday, April 08, 2013	Sheet	9	of 42	



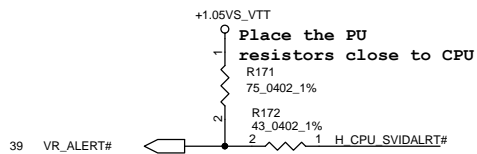
CONFIDENTIAL

Security Classification		Compal Secret Data		Title	
Issued Date	2012/07/10	Deciphered Date	2013/07/10	Compal Electronics, Inc. HSW MCP(7/11) PCIE,USB	
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				V5WE2 M/B LA-9532P Schematic	0.2
Date: Monday, April 08, 2013				Sheet 10	of 42

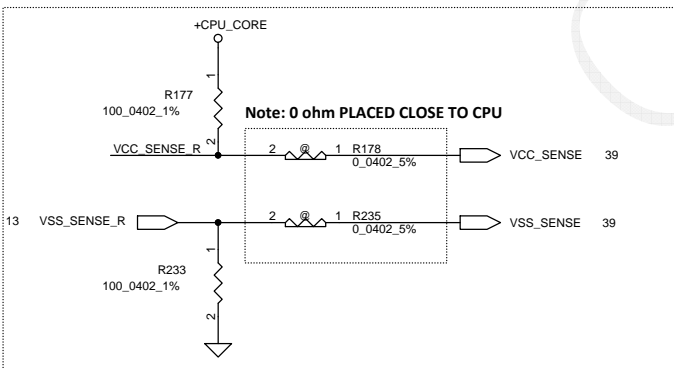
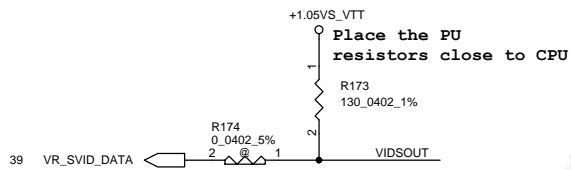
Shark Bay ULT have internal gate for VDDQ



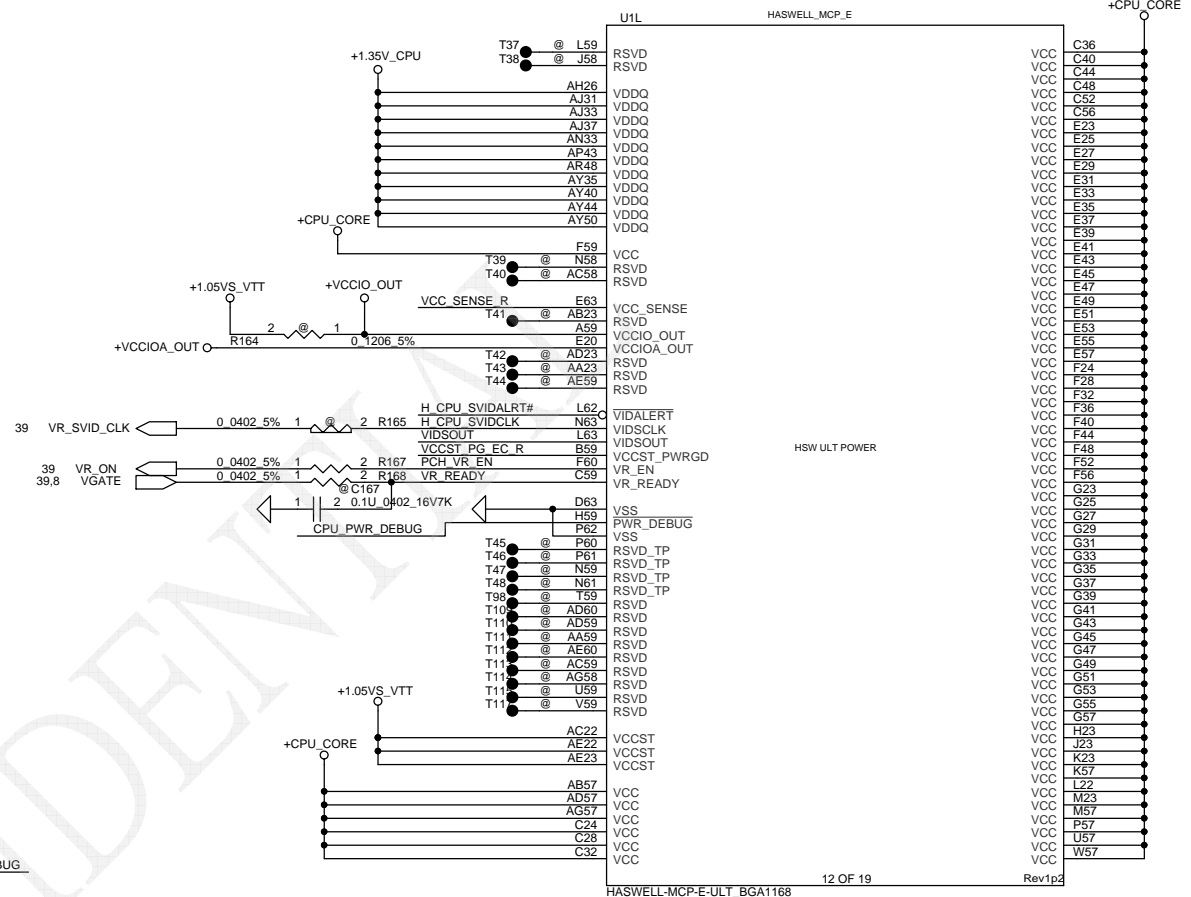
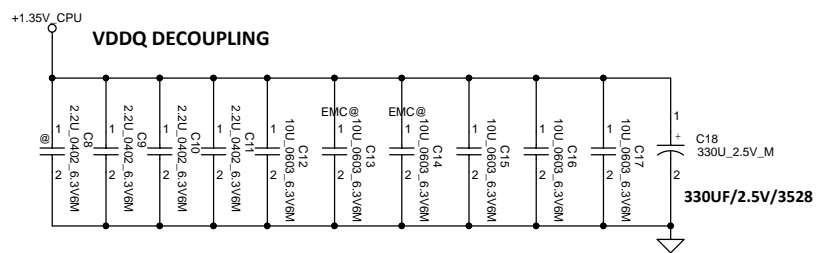
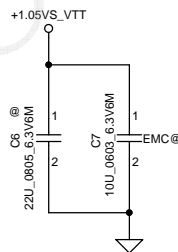
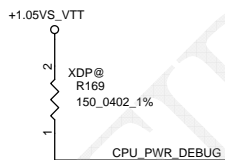
**SVID ALERT**



**SVID DATA**

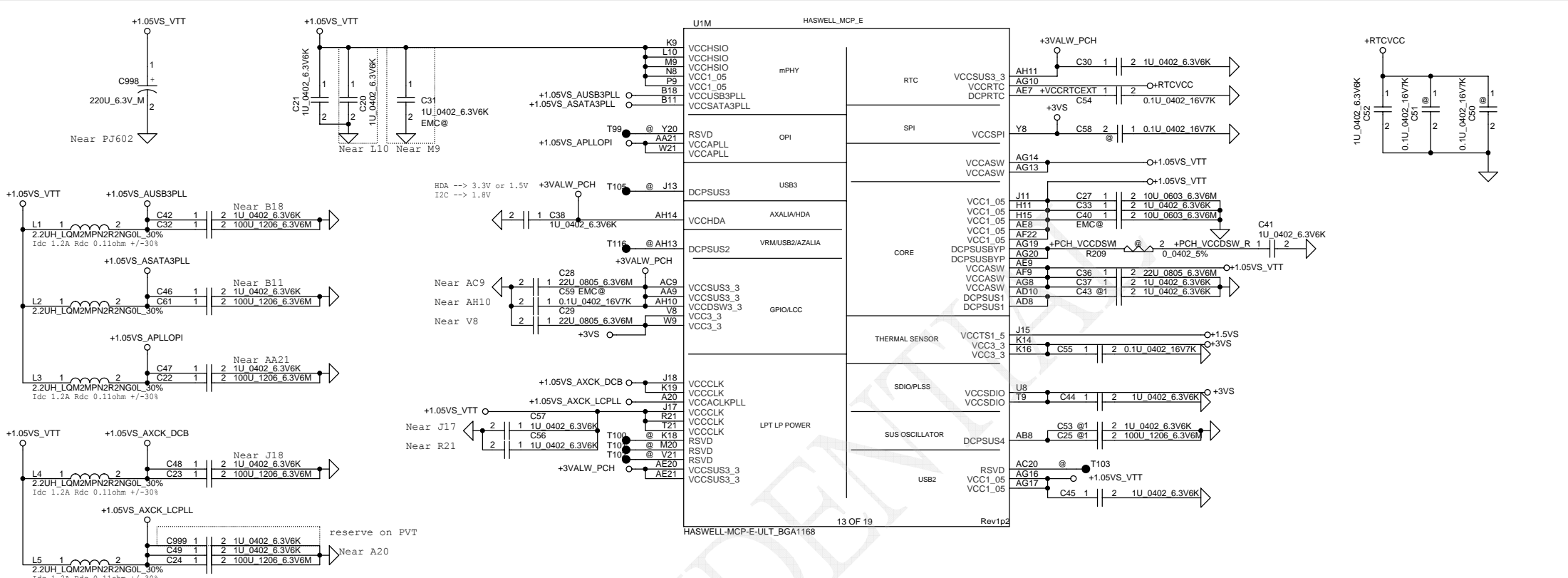


Note: 0 ohm PLACED CLOSE TO CPU

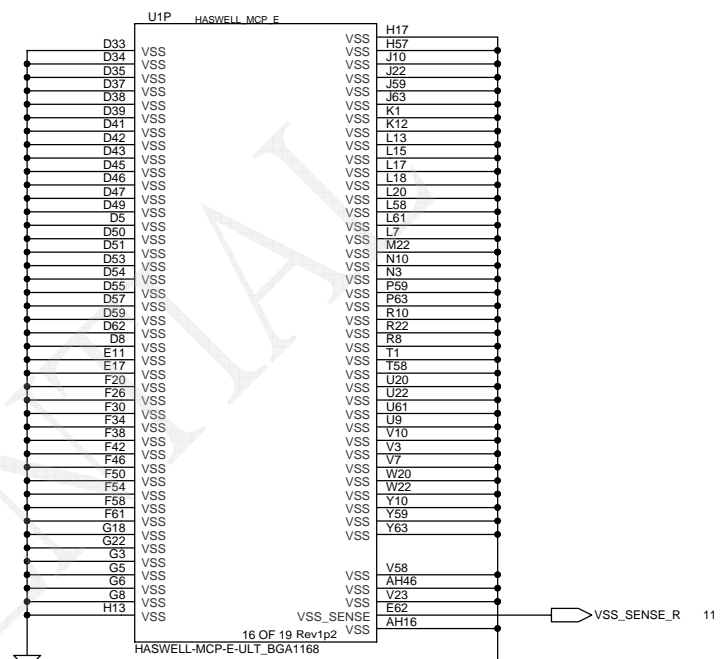
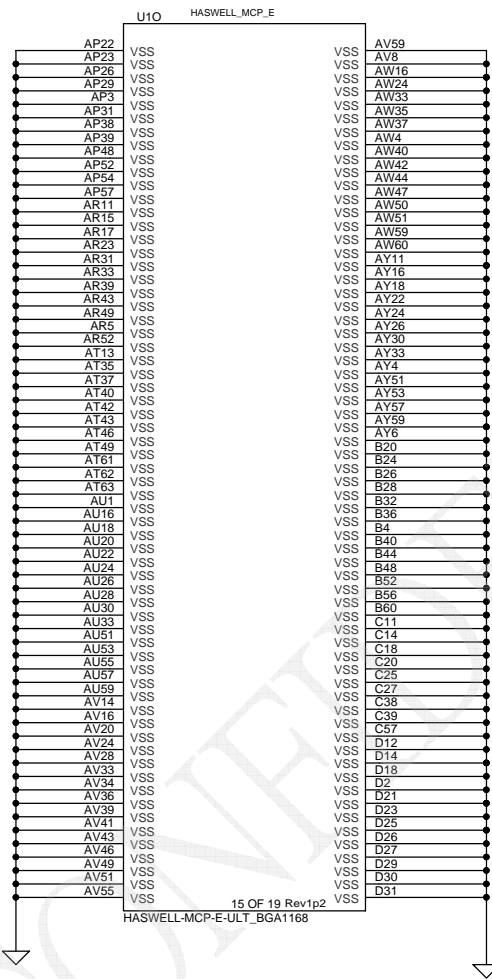
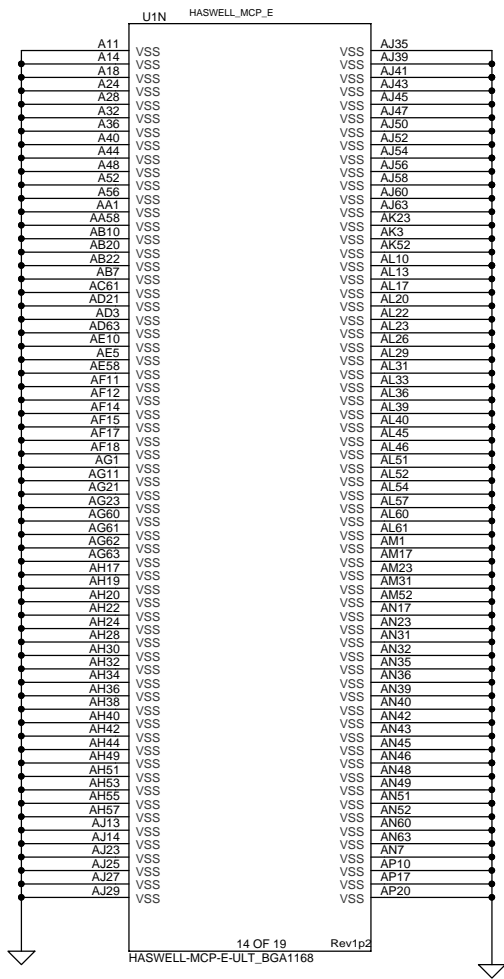


+1.35V : 470uF/2V/7343 \*2  
 10uF/6.3V/0603 \* 6  
 2.2uF/6.3V/0402 \* 4

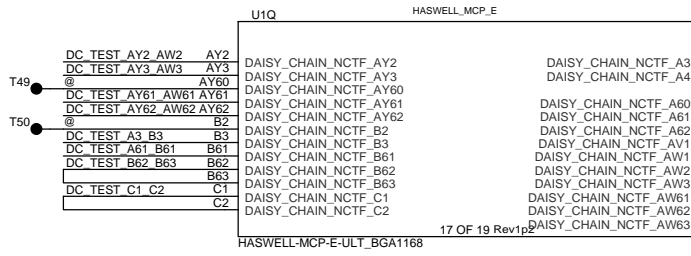
Security Classification		Compal Secret Data		Title	
Issued Date		Deciphered Date		Compal Electronics, Inc.	
2012/07/10		2013/07/10		HSW MCP(8/11) Power	
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Date:		Monday, April 08, 2013		Rev 0.2	
Sheet		11		of 42	



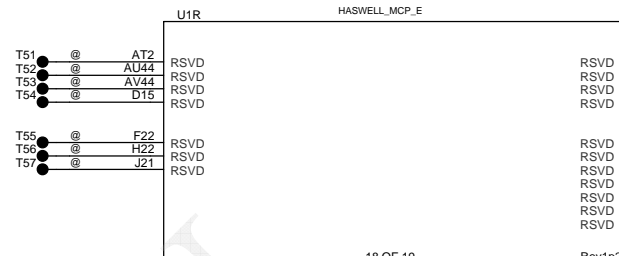
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Issued Date		Deciphered Date		Document Number	
2012/07/10		2013/07/10		V5WE2 M/B LA-9532P Schematic	
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				Monday, April 08, 2013	0.2
				Sheet 12	of 42



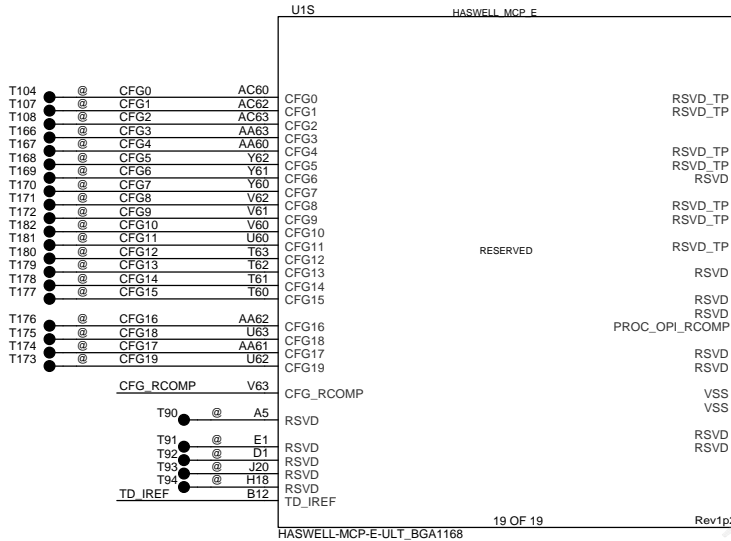
Security Classification	Compal Secret Data		Title	
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				Rev 0.2 Sheet 13 of 42



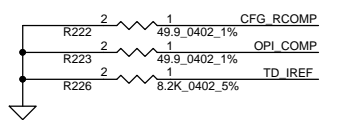
HASWELL-MCP-E-ULT\_BGA1168 17 OF 19 Rev1p2



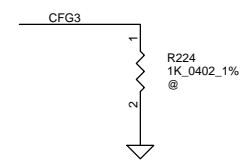
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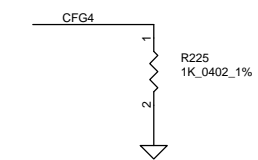
HASWELL-MCP-E-ULT\_BGA1168 19 OF 19 Rev1p2



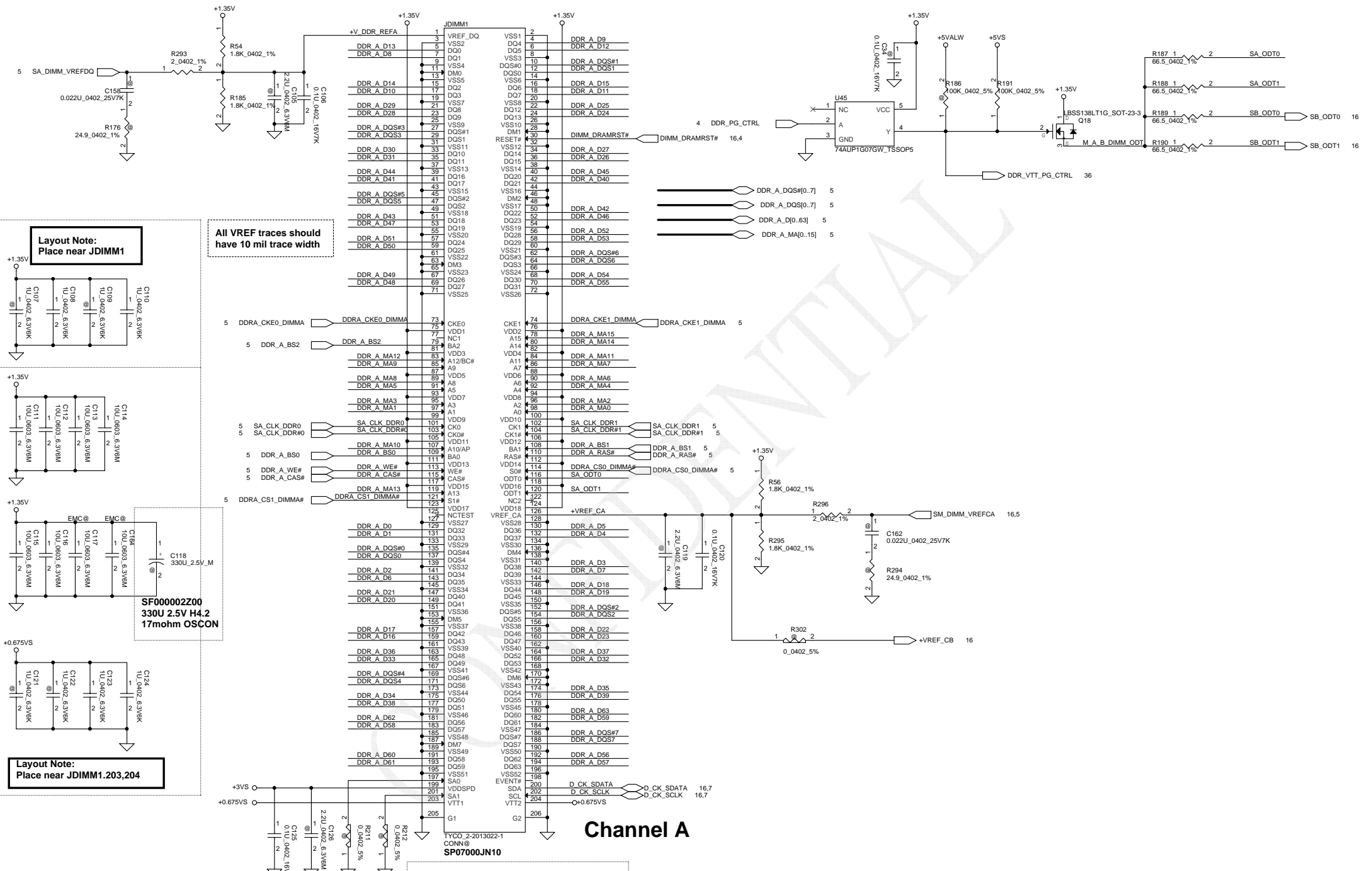
### CFG Straps for Processor

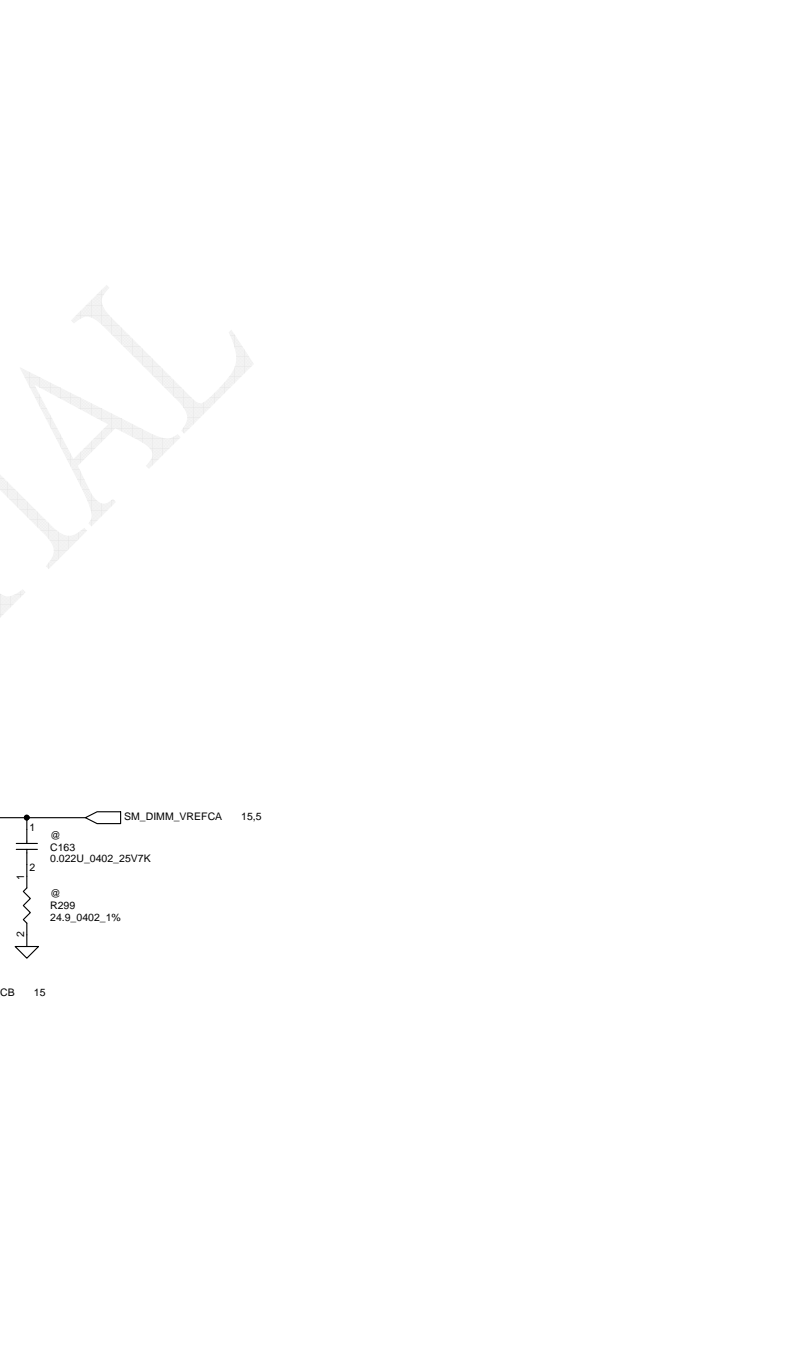
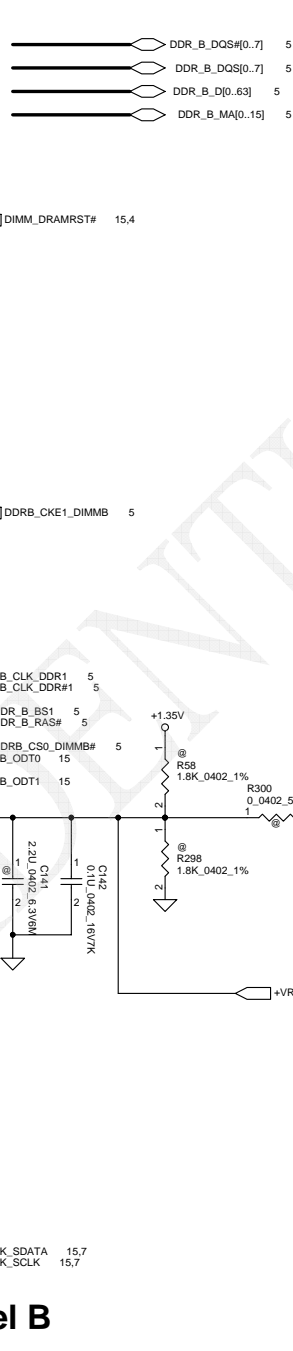
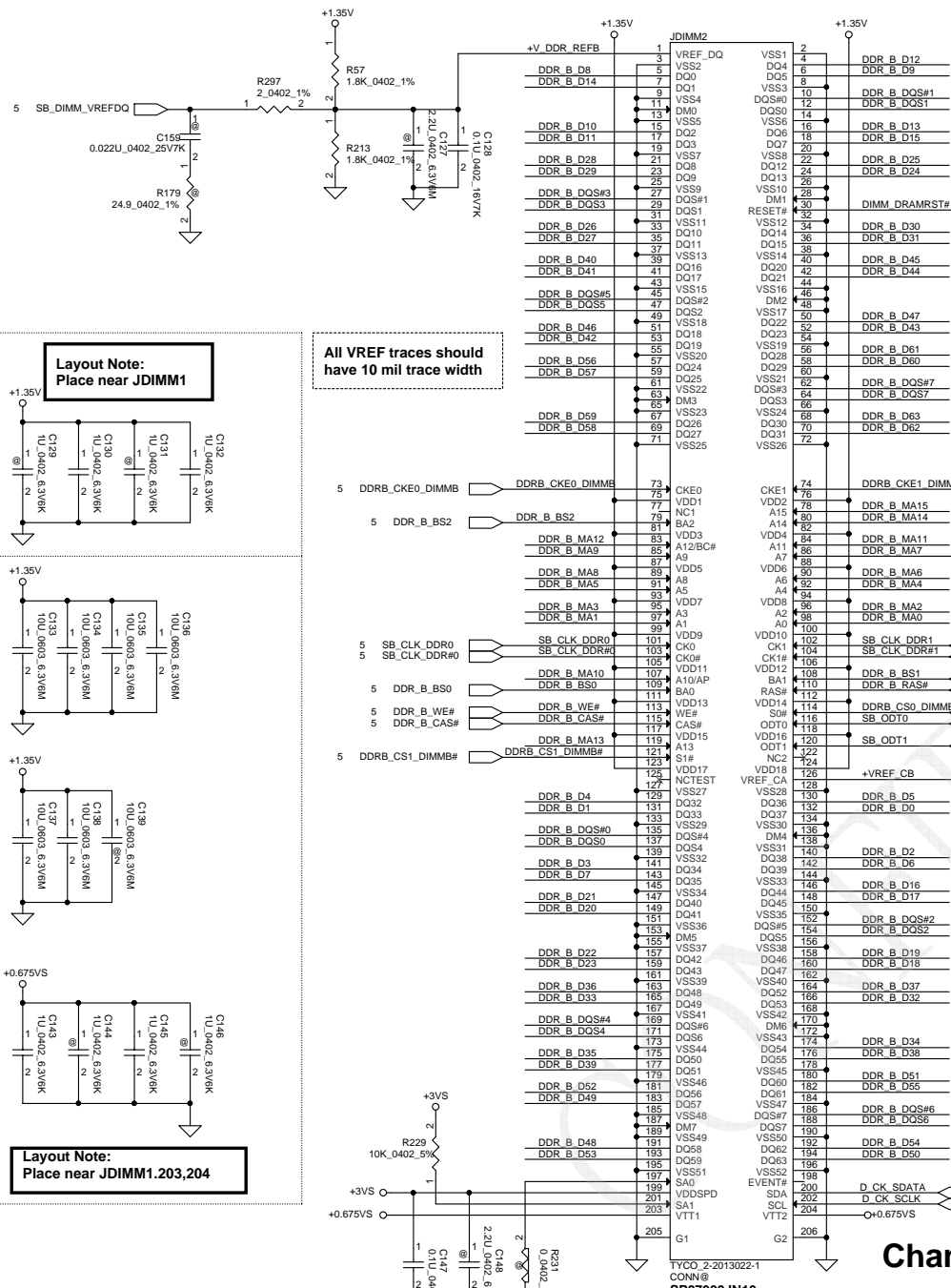


Physical Debug Enable (DFX Privacy)	
CFG3	1: DISABLED 0: ENABLED; SET DFX ENABLED BIT IN DEBUG INTERFACE MSR

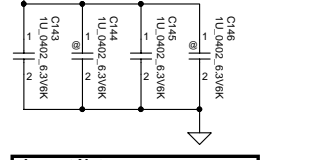
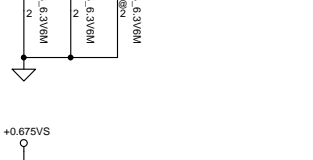
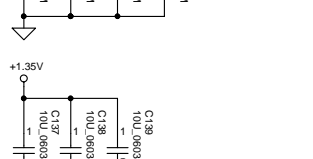
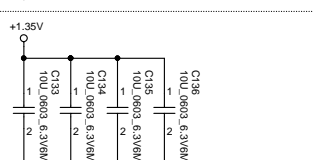
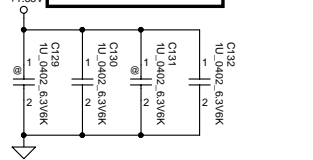


Display Port Presence Strap	
CFG4	1 : Disabled; No Physical Display Port attached to Embedded Display Port 0 : Enabled; An external Display Port device is connected to the Embedded Display Port





**Layout Note:**  
Place near JDIMM1



**Layout Note:**  
Place near JDIMM1.203,204



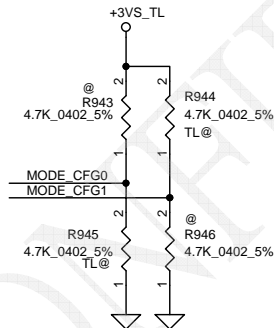
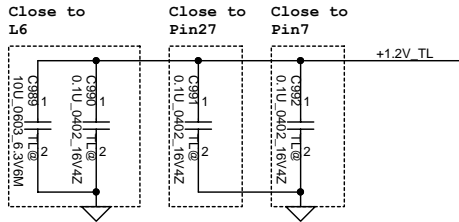
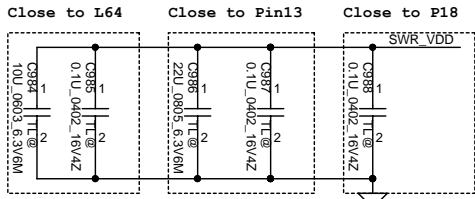
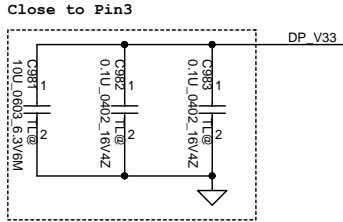
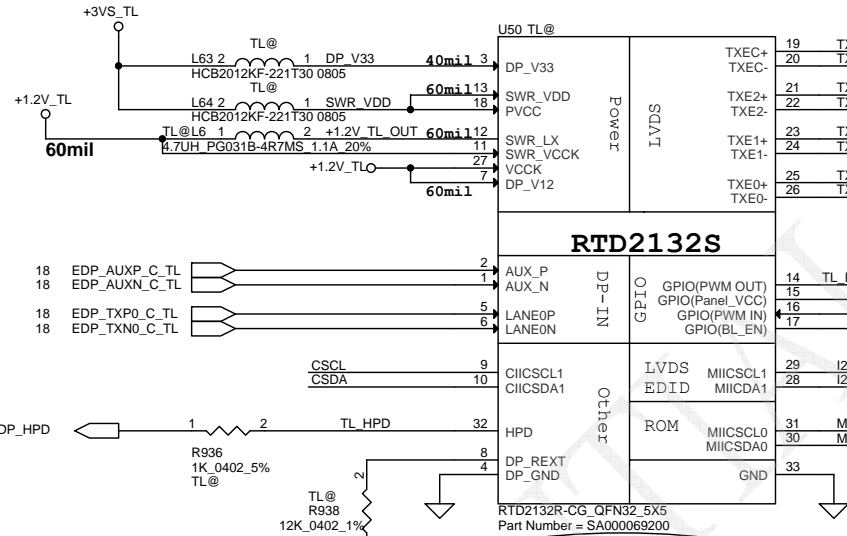
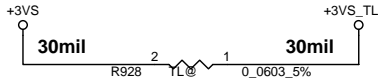
All VREF traces should have 10 mil trace width

<Address: SA1:SA0=10>  
**DIMM\_2 STD H:4mm**

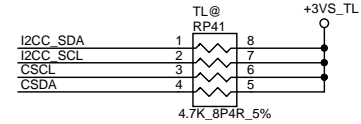
### Channel B

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Document Number			VSW2 M/B LA-9531P Schematic	
Date:	Monday, April 08, 2013	Sheet	16	of 42





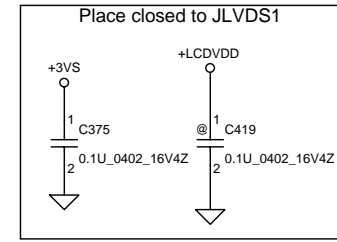
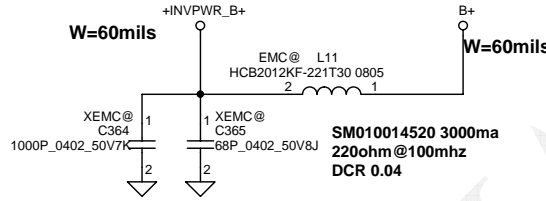
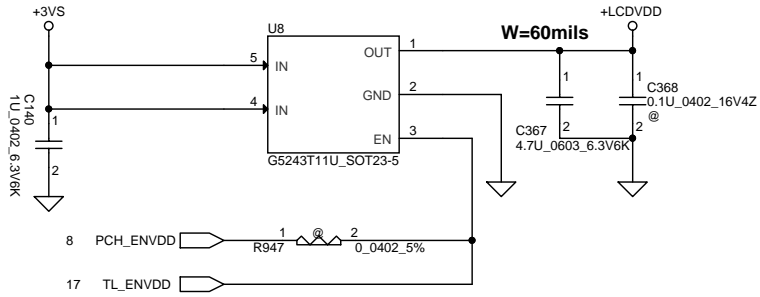
use 2132S symbol



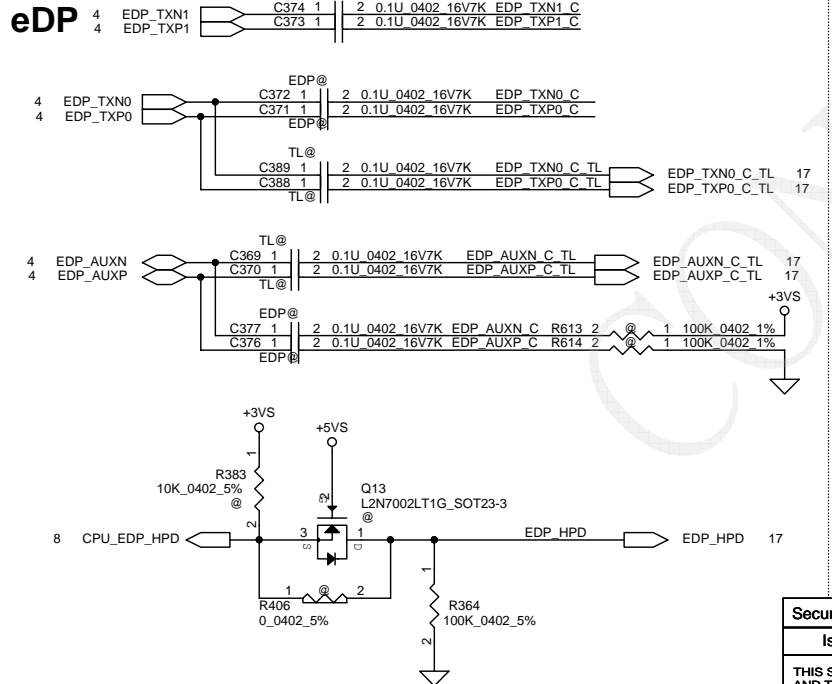
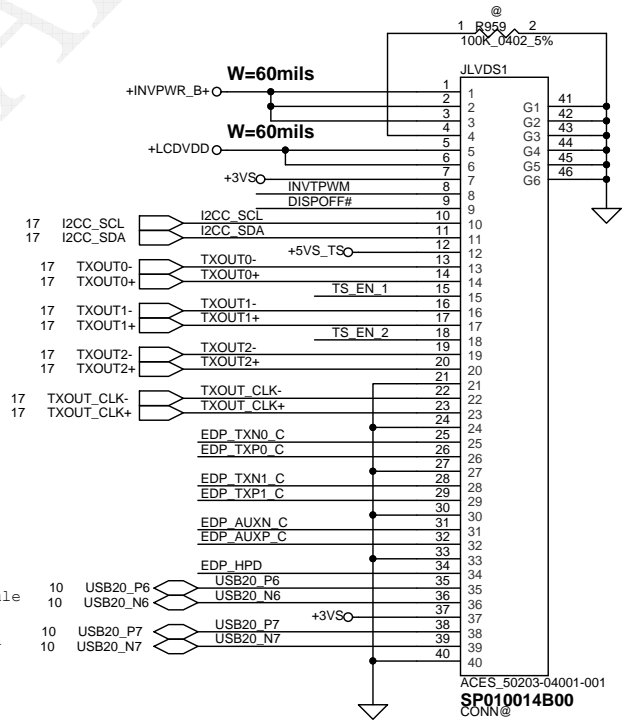
	MODE_CFG0(PIN30)	
	0	1
MODE_CFG1(PIN31)	0	EP MODE
	1	ROM ONLY MODE

Security Classification	Compal Secret Data			Title	LVDS Translator - RTD2132R
Issued Date	2011/07/08	Deciphered Date	2015/07/08	Document Number	V5WE2 M/B LA-9532P Schematic
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Date:	Monday, April 08, 2013	Sheet	17	of	42

# LCD POWER CIRCUIT

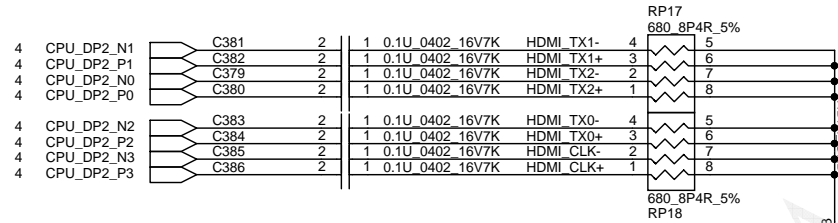
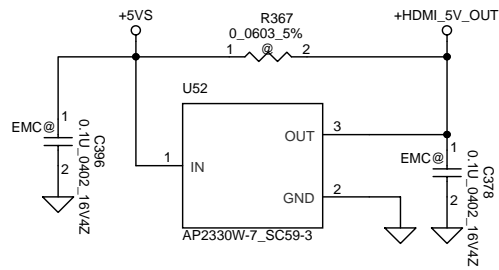


# LCD/ LED PANEL Conn.

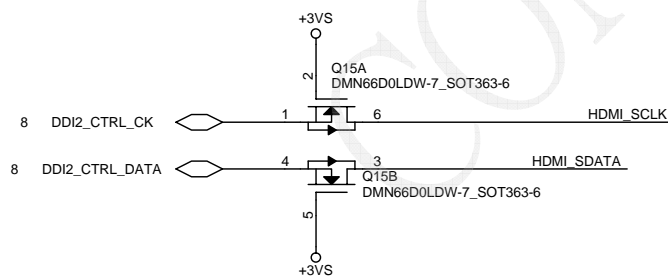
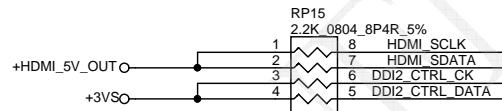
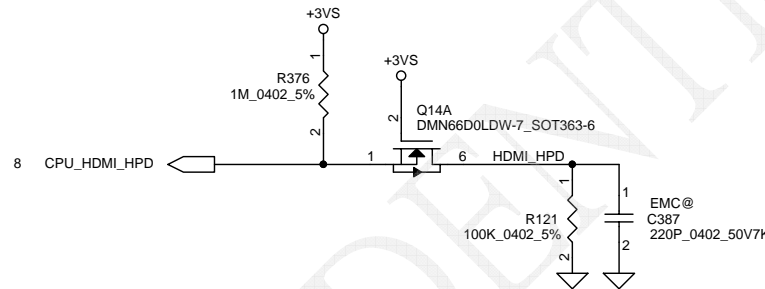
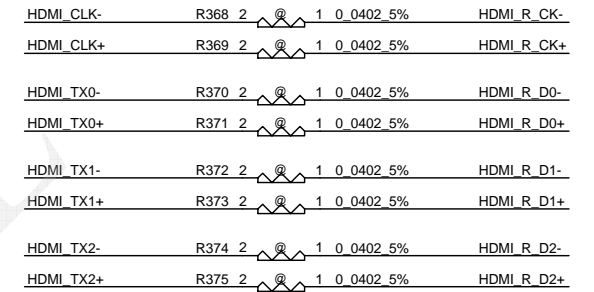


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Document Number	V5WE2 M/B LA-9532P Schematic		Rev	0.2	
Date	Monday, April 08, 2013		Sheet	18 of 42	

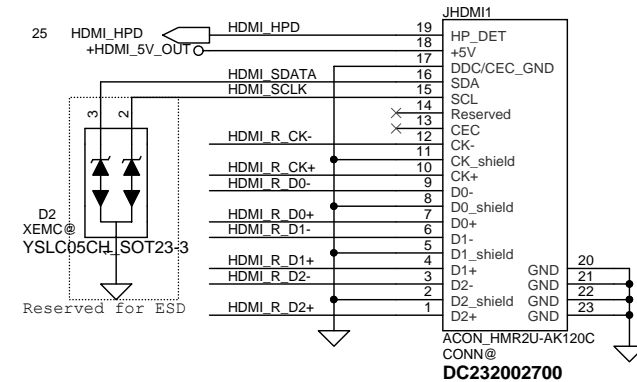
W=40mils



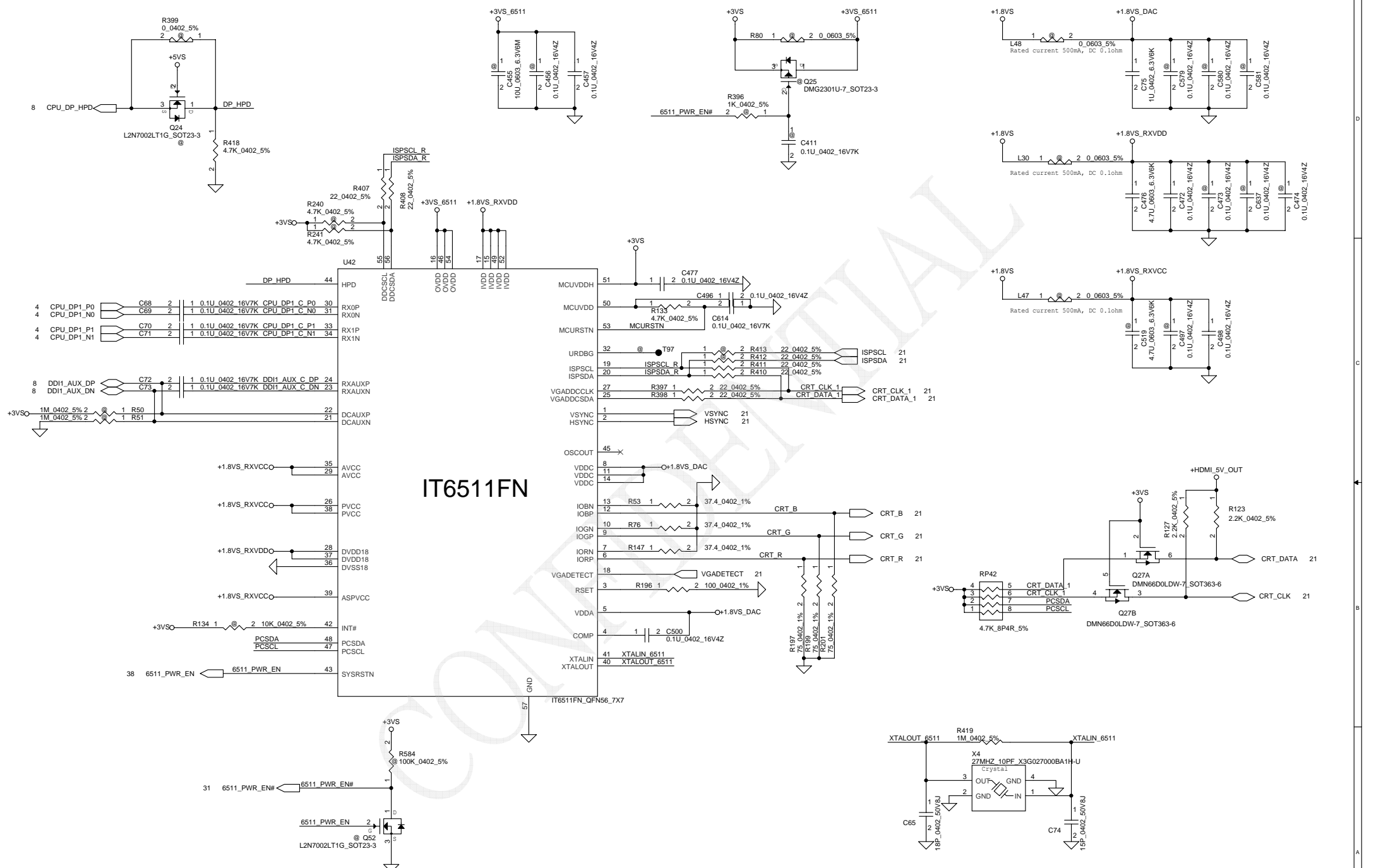
SM070001310 400ma 90ohm@100mhz DCR 0.3



HDMI connector

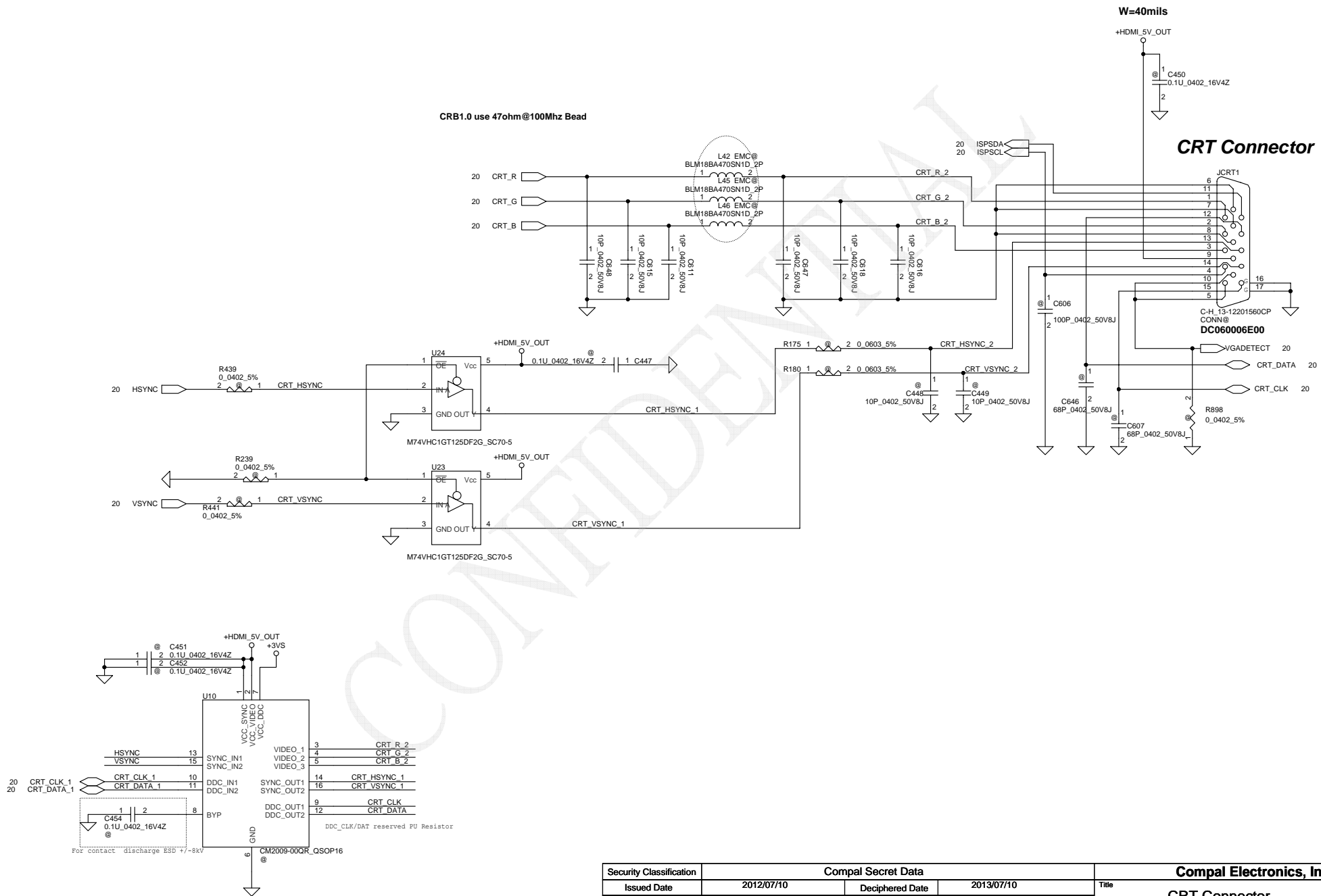


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Issued Date	2012/07/10	Deciphered Date	2013/07/10	Title	
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				Size	Document Number
				Custom	V5WE2 M/B LA-9532P Schematic
				Date:	Monday, April 08, 2013
				Sheet	19 of 42
				Rev	0.2



**IT6511FN**

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				<b>Document Number</b>
				Customer: <b>VSW52 M/B LA-9532P Schematic</b>
				Rev: <b>0.2</b>
				Date: <b>Monday, April 08, 2013</b>
				Sheet <b>20</b> of <b>42</b>



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				Customer	0.2
				Date: Monday, April 08, 2013	
				Sheet 21 of 42	

**CRT Connector**

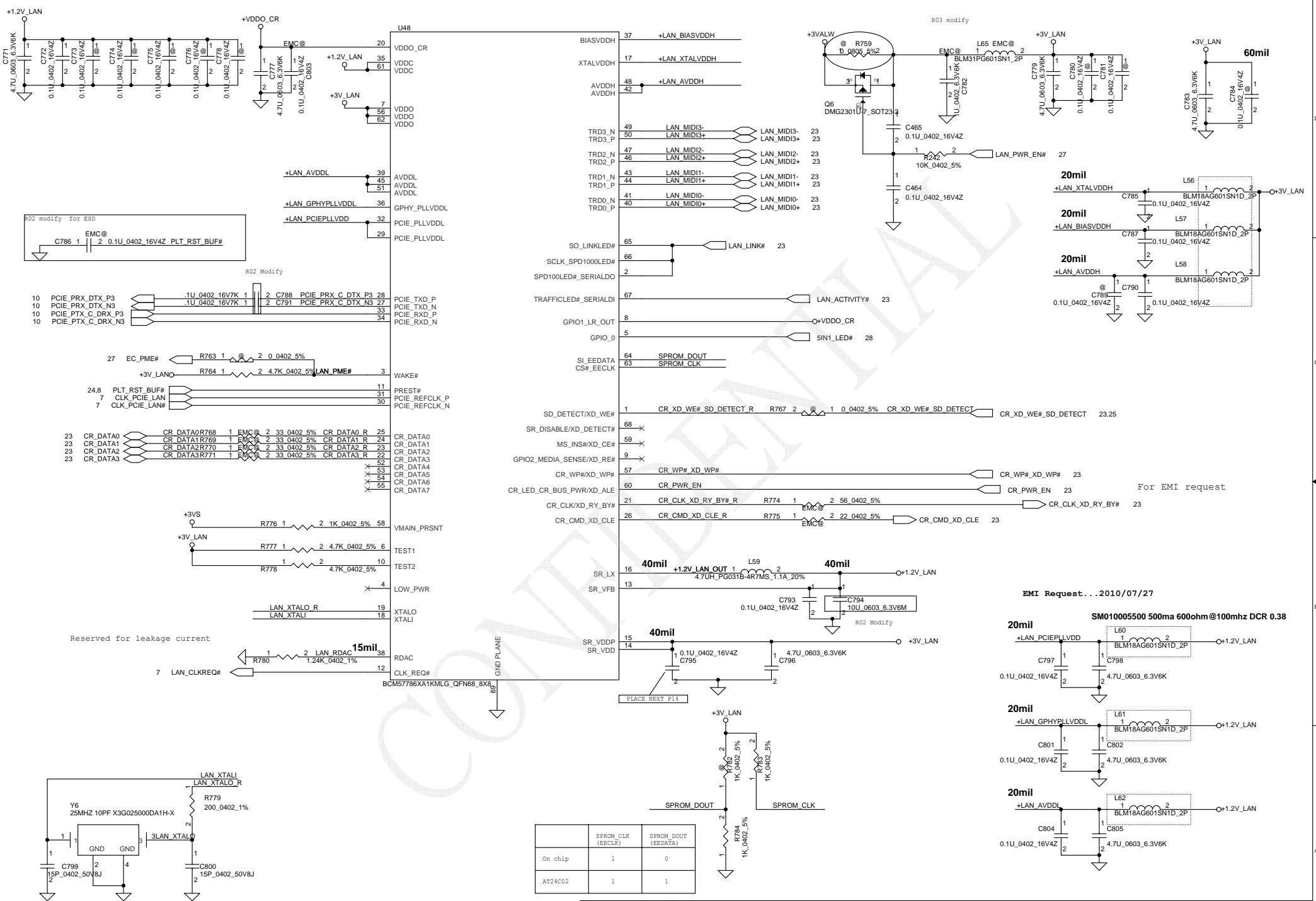
C-H 13-12201560CP  
CONN@  
**DC060006E00**

W=40mils

CRB1.0 use 47ohm@100Mhz Bead

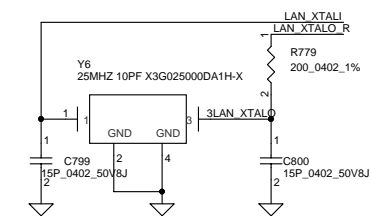
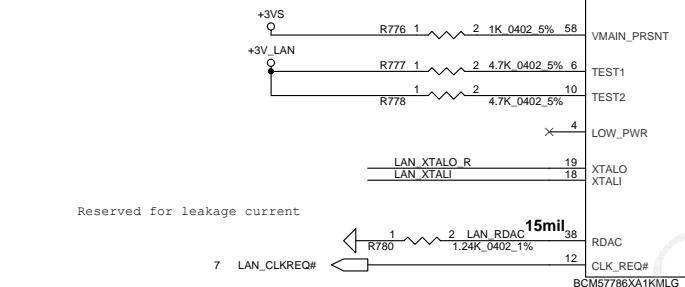
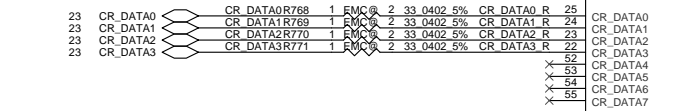
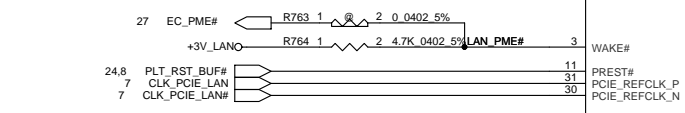
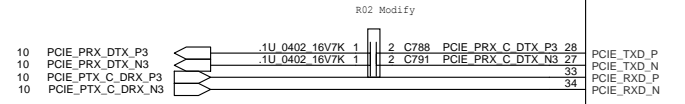
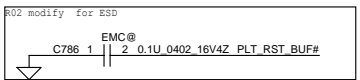
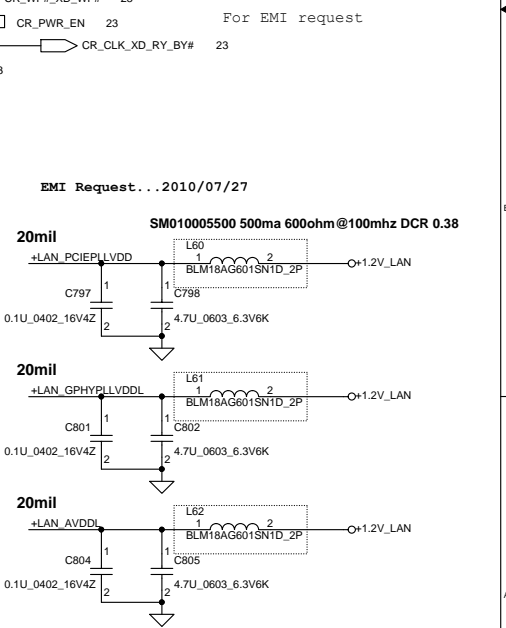
For contact discharge ESD +/-8kV

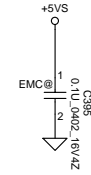
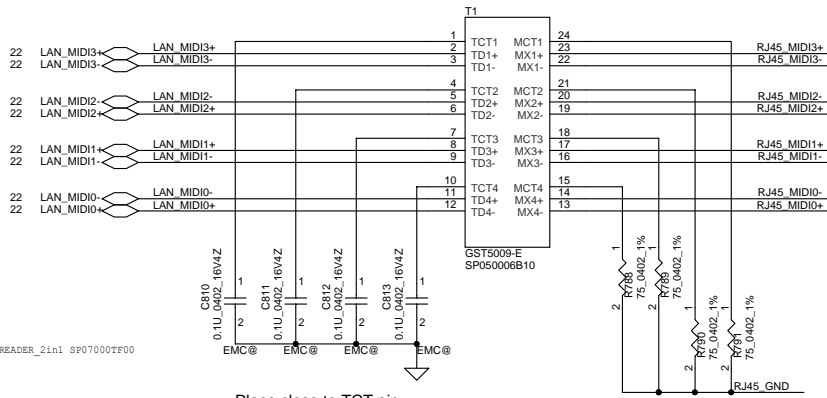




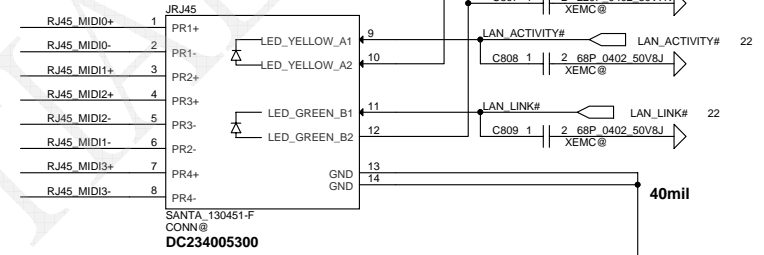
	SPROM_CLK (EECLK)	SPROM_DOUT (EEDATA)
On chip	1	0
AT24C02	1	1

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<b>Date:</b>	Monday, April 06, 2013	<b>Sheet</b>	22	<b>Rev</b>	0.2





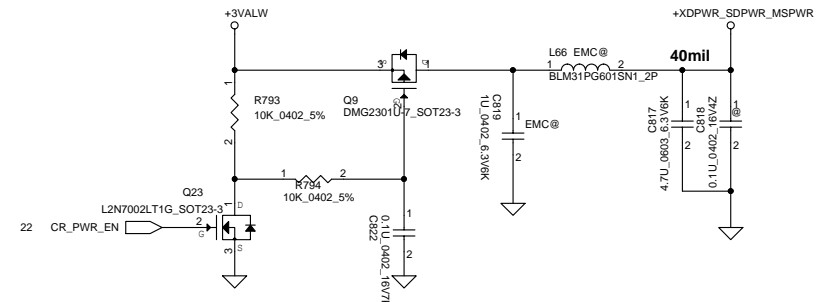
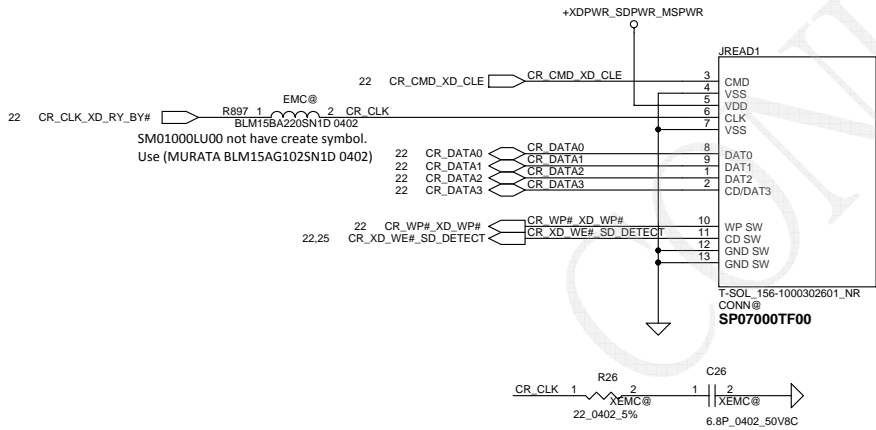
**LAN Connector**



Place close to TCT pin

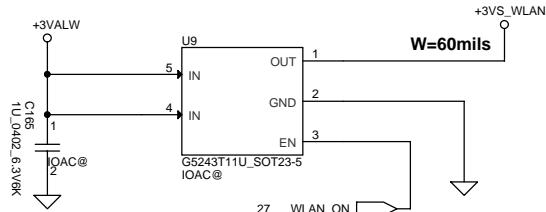
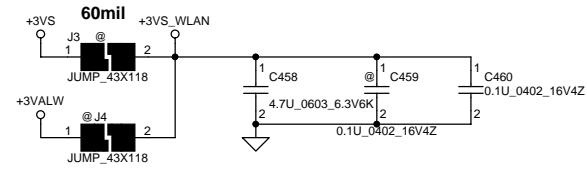
BOTHHAND: S X'FORM\_GST5009-E LF LAN, SP050006B10  
TIMAG:S X'FORM\_IH-160 LAN, SP050006F00

**Card Reader Connector**

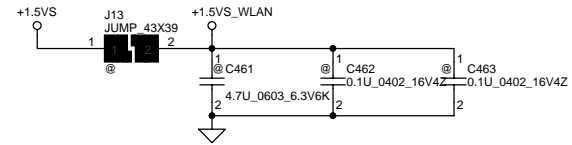


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				Rev 0.2 Sheet 23 of 42

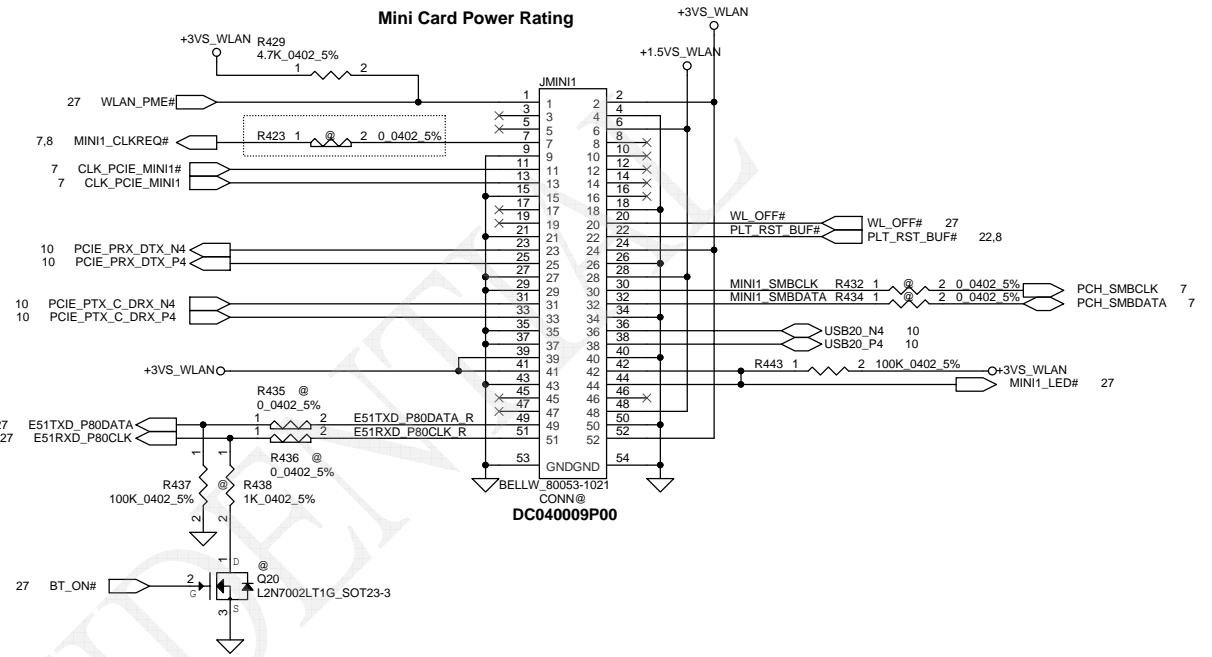
# For Wireless LAN



For DVT2 verify IOAC function



## Mini Card Power Rating

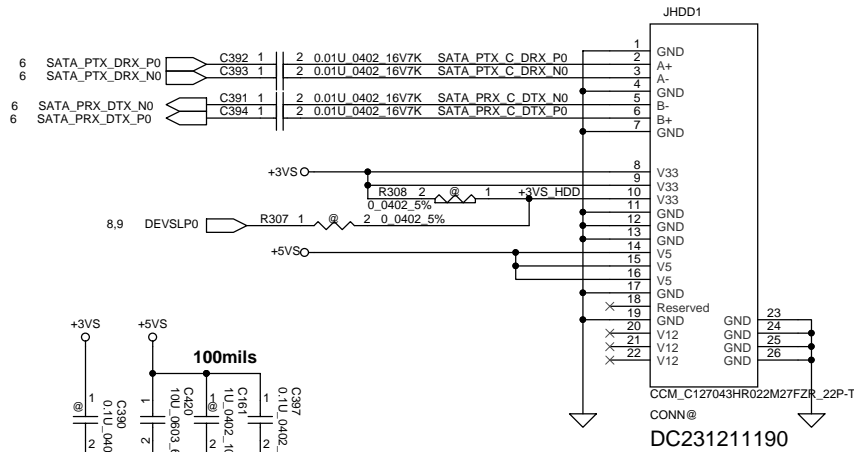


DC040009P00

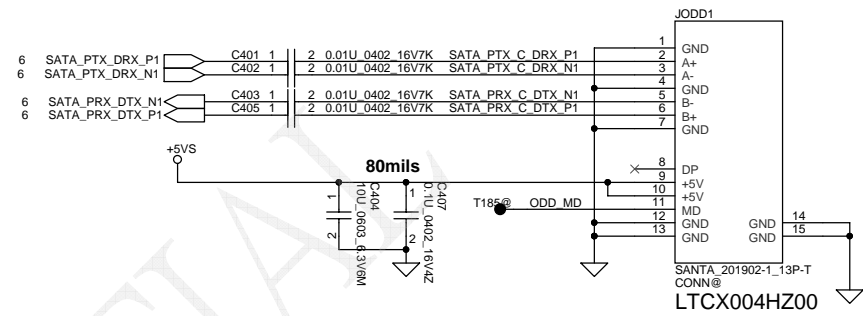
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Issued Date	2012/07/10	Deciphered Date	2013/07/10	Title	
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Date: Monday, April 08, 2013				Custom	0.2
Sheet 24 of 42				V5WE2 M/B LA-9532P Schematic	



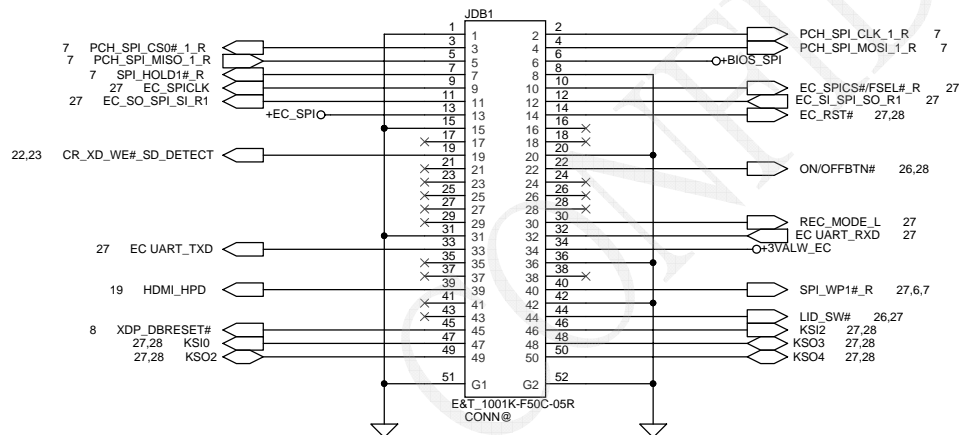
### SATA HDD1 Conn.



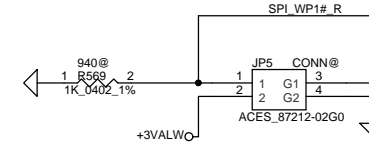
### SATA ODD Conn.



### Debug Board

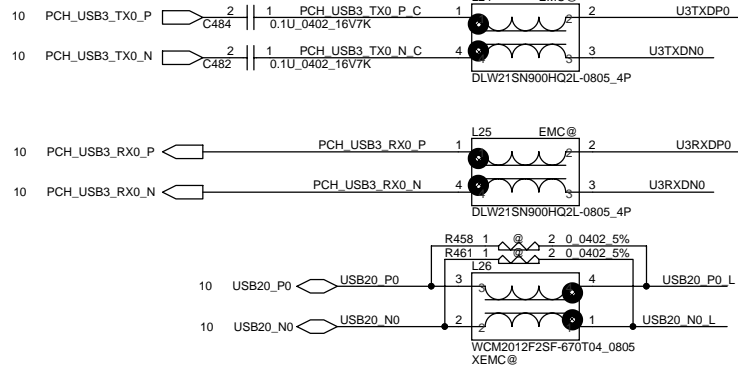


### Kill SW

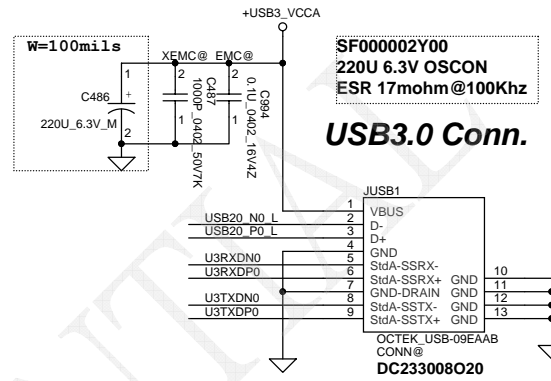
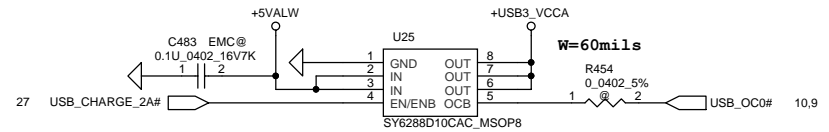
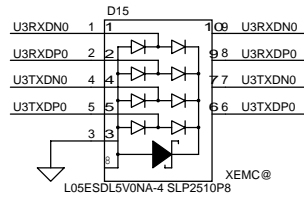


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Date:	Monday, April 08, 2013	Sheet:	25	of	42

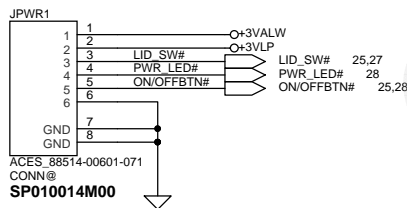
**SM070000S80 WCM2012F2SF-670T04 67ohm**



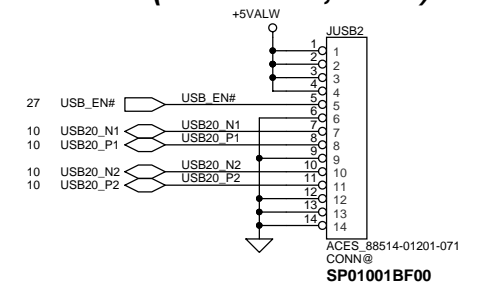
**For ESD request**



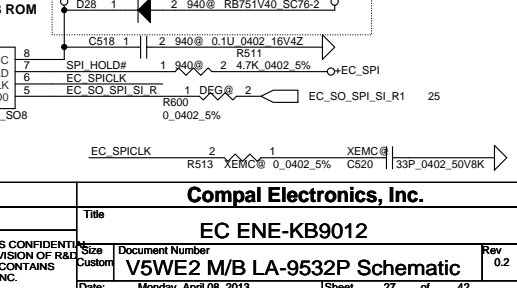
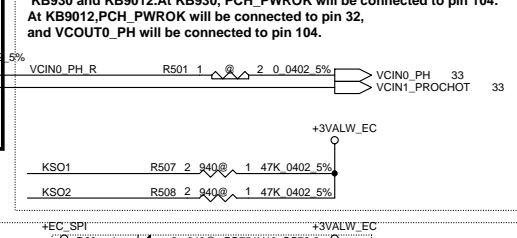
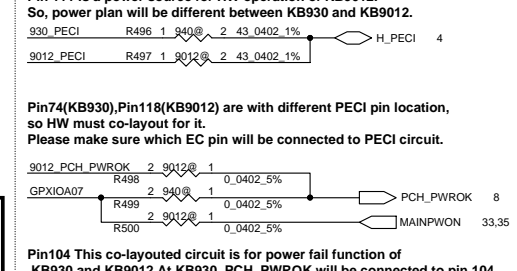
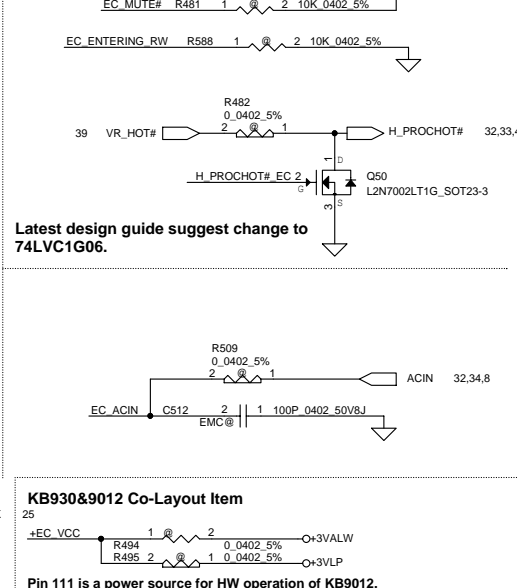
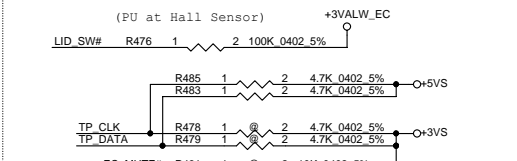
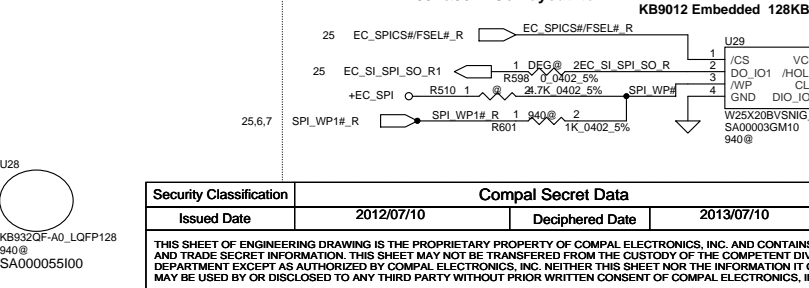
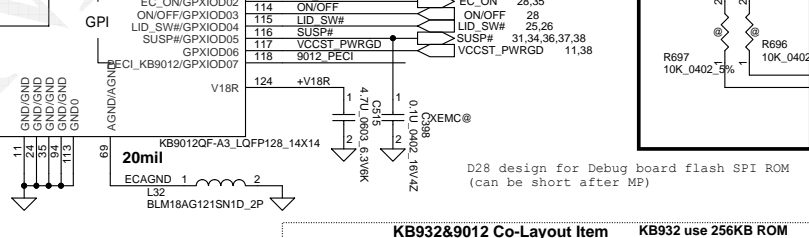
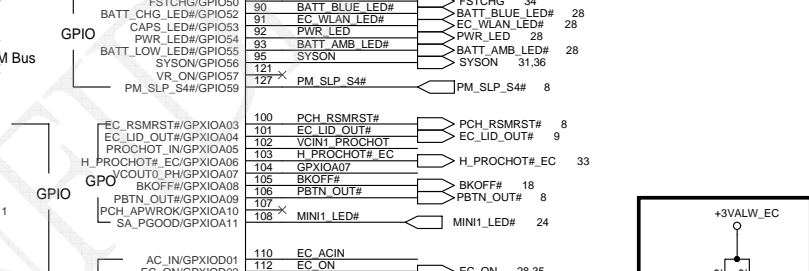
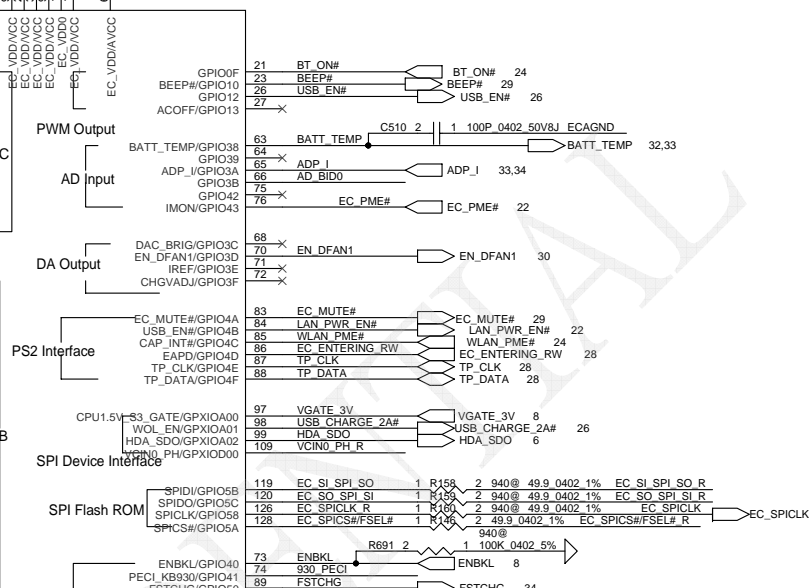
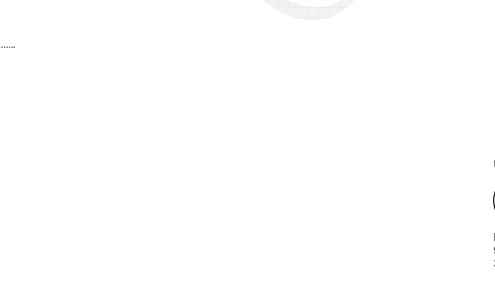
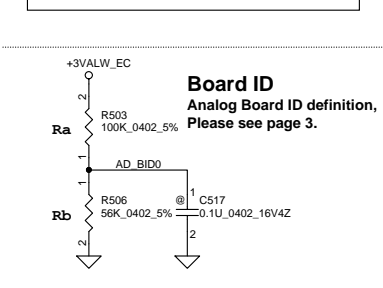
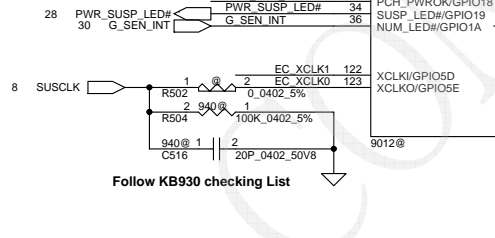
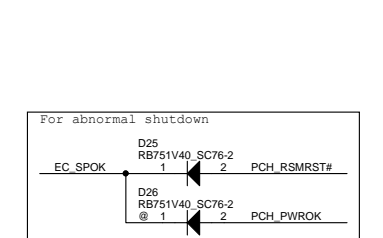
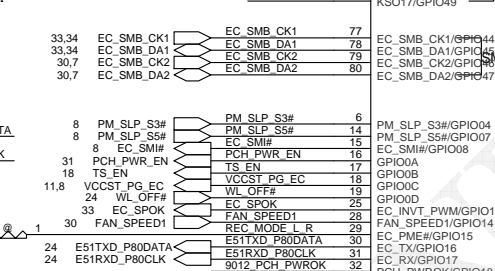
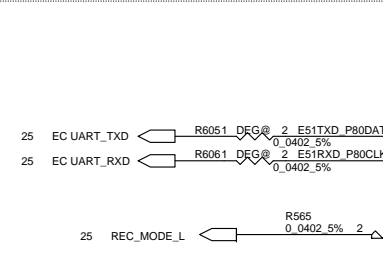
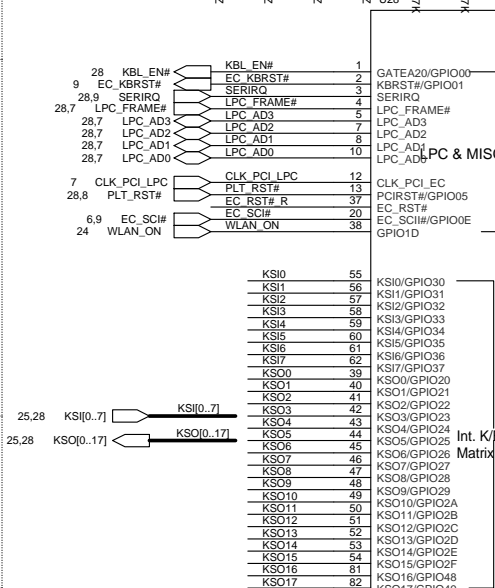
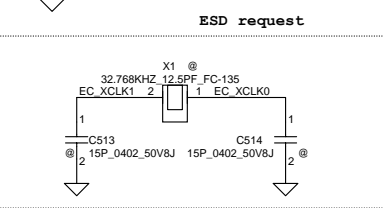
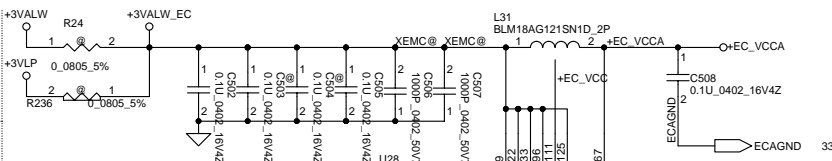
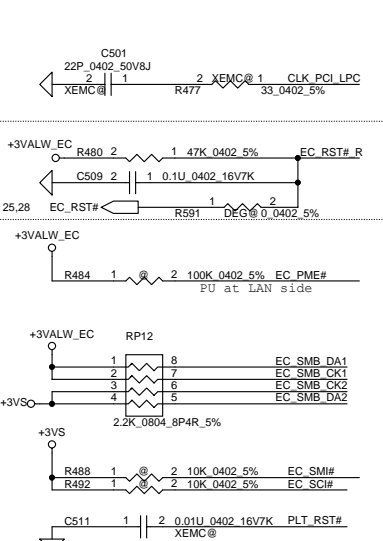
**PWR/B**



**USB/B (USB Port 1, Port2)**



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				V5WE2 M/B LA-9532P Schematic	0.2
Date: Monday, April 08, 2013				Sheet	26 of 42



**Board ID**  
Analog Board ID definition,  
Please see page 3.

**ESD request**

**KB930&9012 Co-Layout Item**

Pin 111 is a power source for HW operation of KB9012. So, power plan will be different between KB930 and KB9012.

Pin74(KB930), Pin118(KB9012) are with different PECCI pin location, so HW must co-layout for it. Please make sure which EC pin will be connected to PECCI circuit.

Pin104 this co-layouted circuit is for power fail function of KB930 and KB9012. At KB930, PCH\_PWROK will be connected to pin 104, and VCOUT0\_PH will be connected to pin 32, and VCOUT0\_PH will be connected to pin 104.

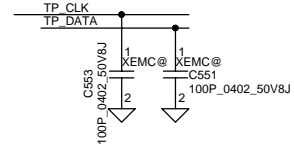
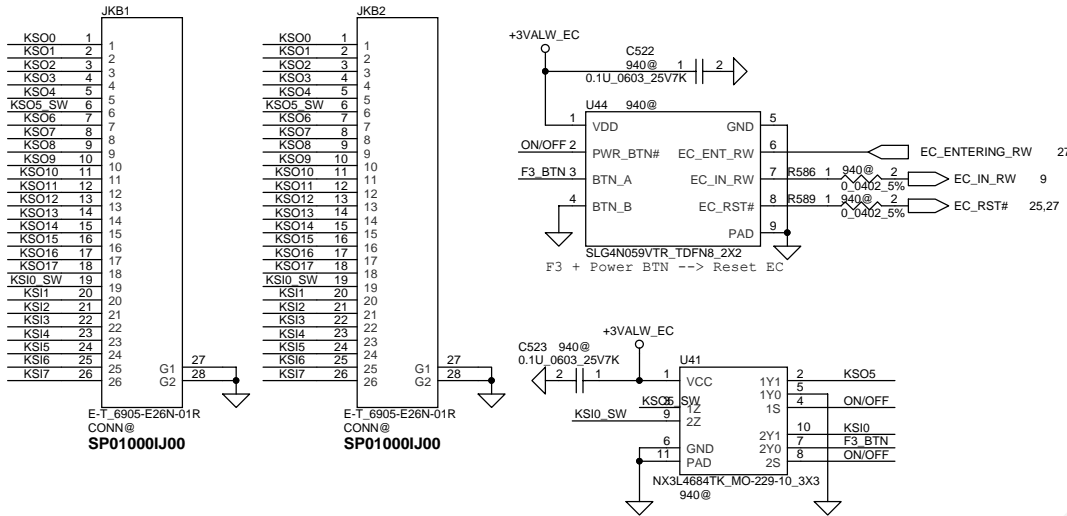
Security Classification	2012/07/10	Compal Secret Data	2013/07/10
Issued Date	2012/07/10	Deciphered Date	2013/07/10

Compal Electronics, Inc.	
EC ENE-KB9012	
Size	Document Number
Custom	V5WE2 M/B LA-9532P Schematic
Date:	Monday, April 06, 2013
Sheet	27 of 42

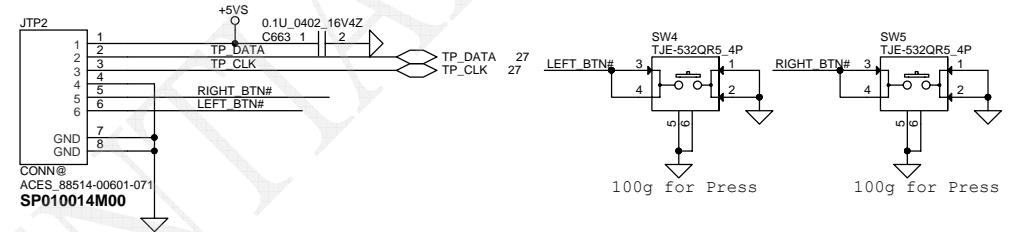
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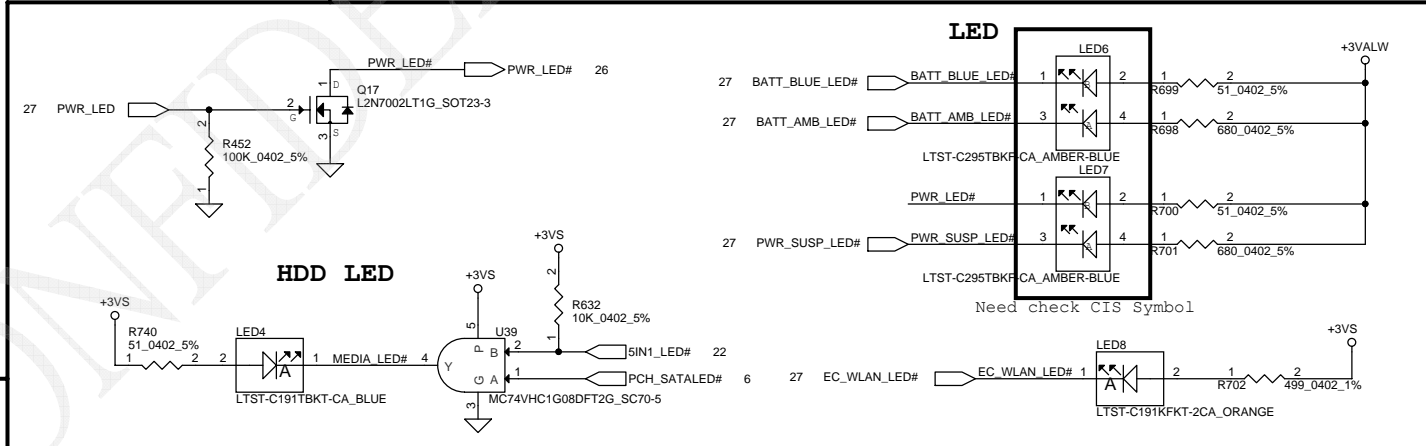
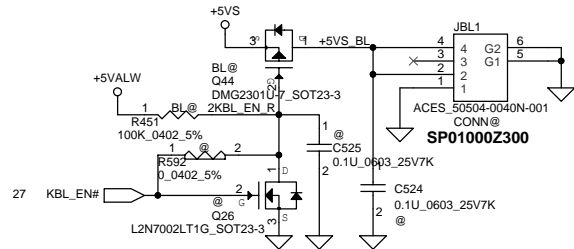
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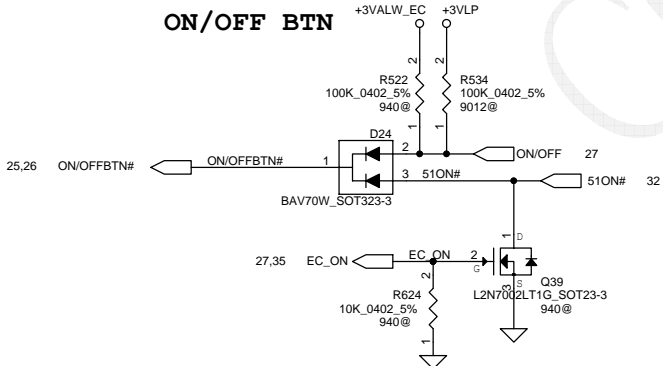
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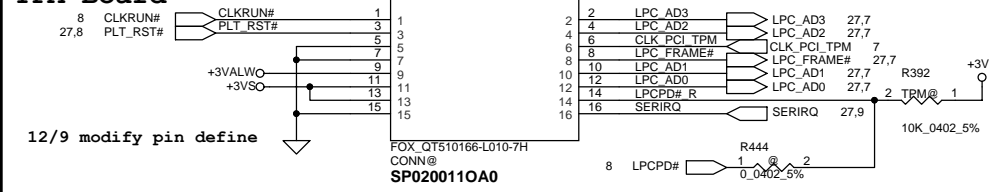
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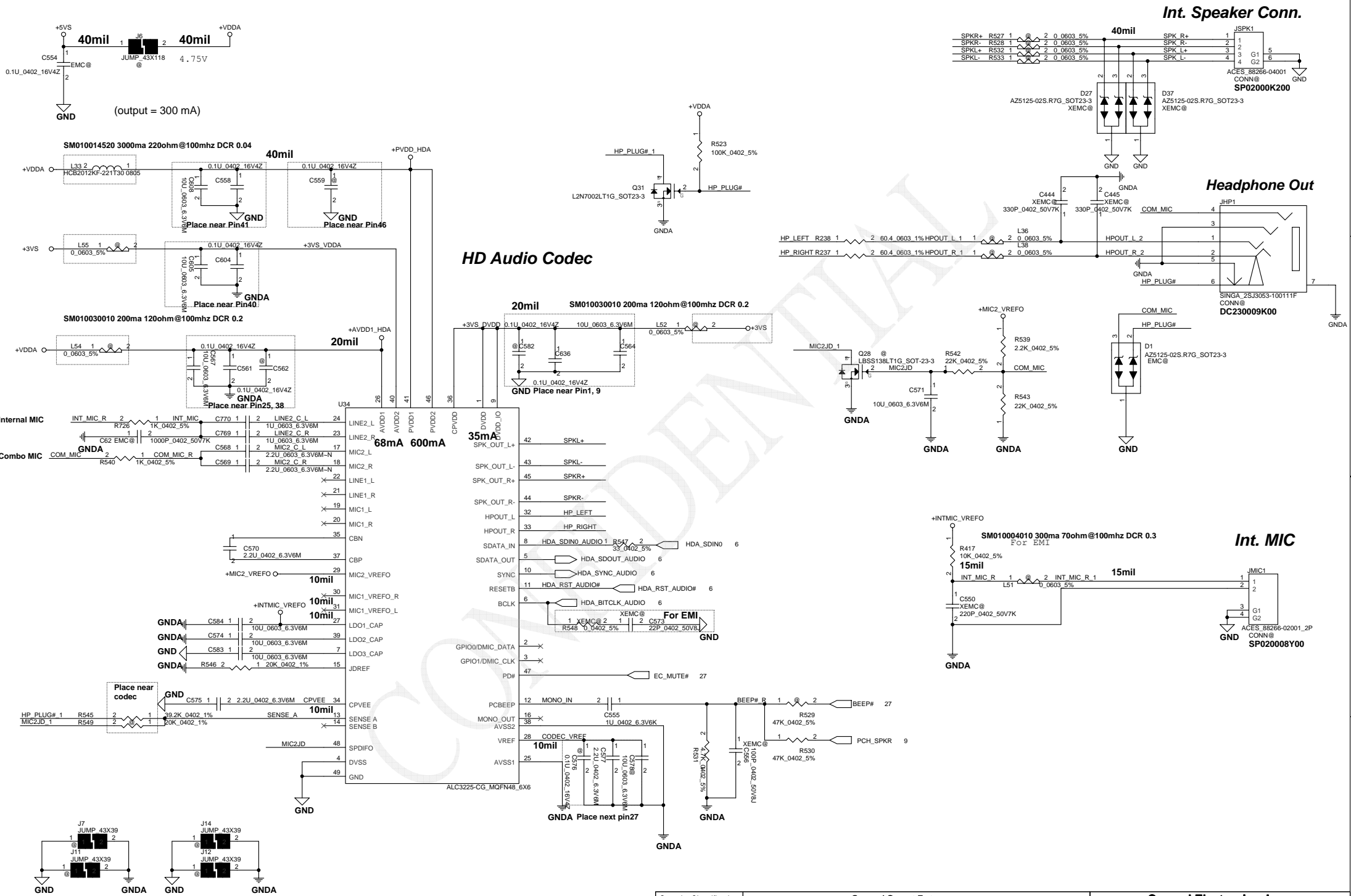
### ON/OFF BTN



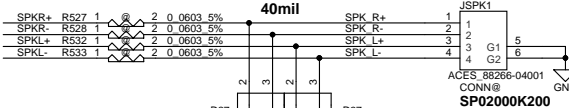
### TPM Board



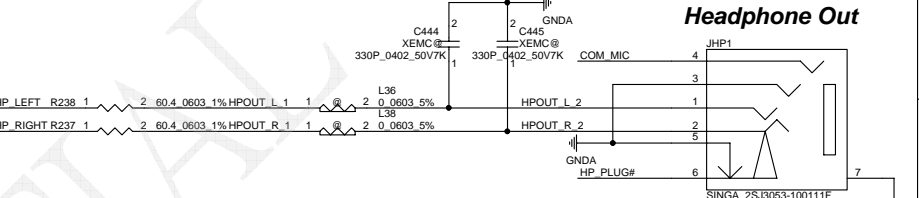
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				V5WE2 M/B LA-9532P Schematic	0.2
Date:				Monday, April 08, 2013	Sheet 28 of 42



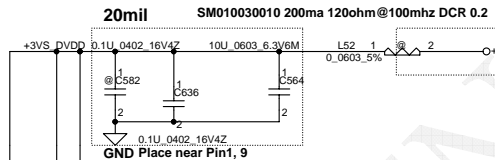
**Int. Speaker Conn.**



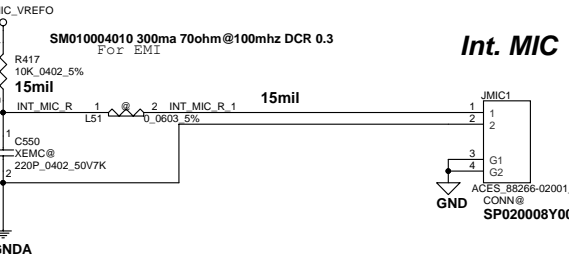
**Headphone Out**



**HD Audio Codec**

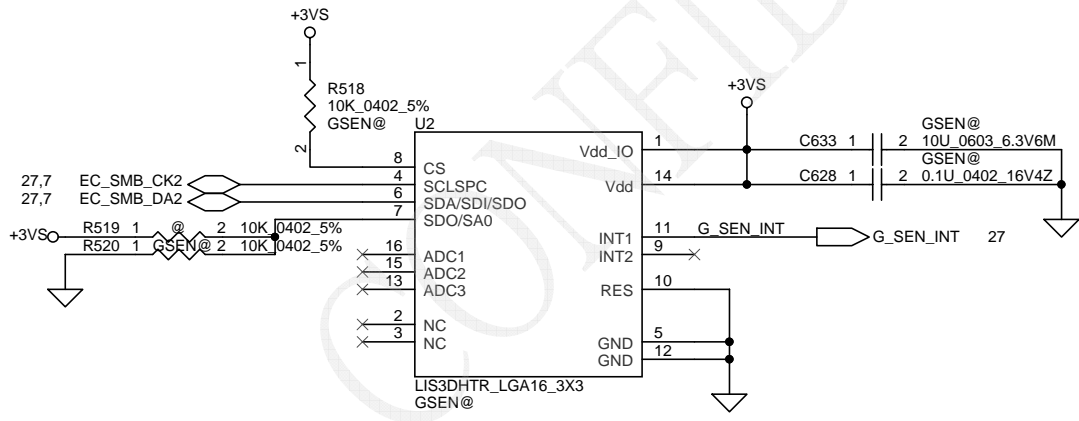
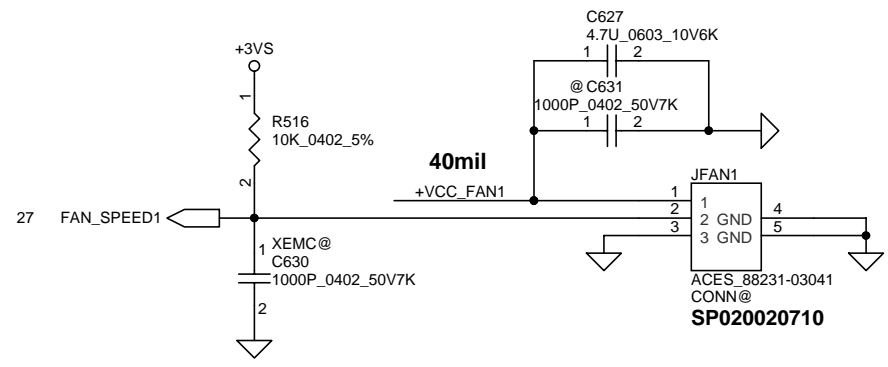
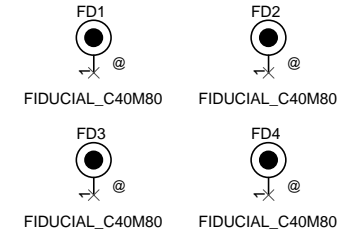
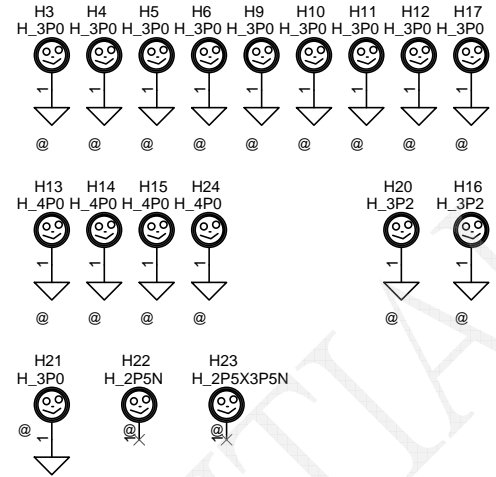
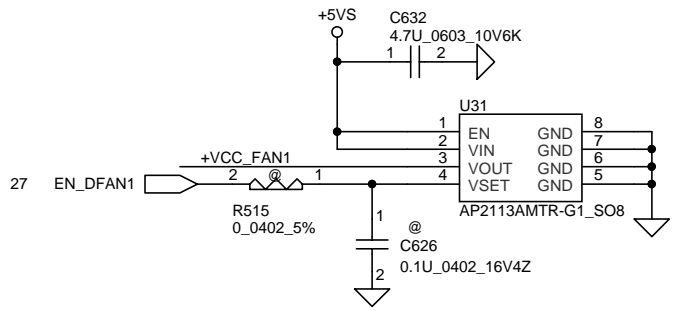


**Int. MIC**



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Date: Monday, April 08, 2013				Rev 0.2	
Sheet 29 of 42				Title: HD Audio Codec ALC3225	
Document Number: V5WE2 M/B LA-9532P Schematic					

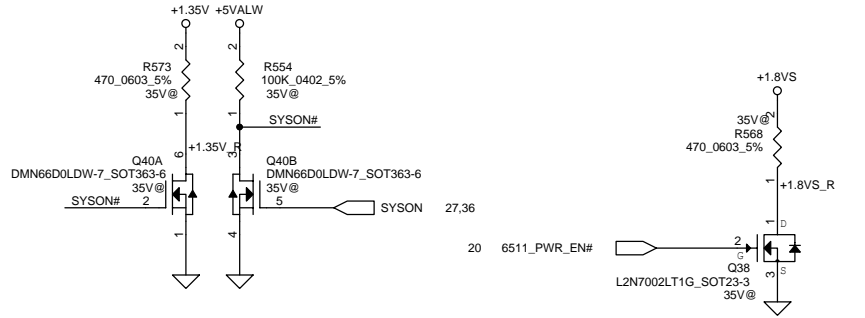
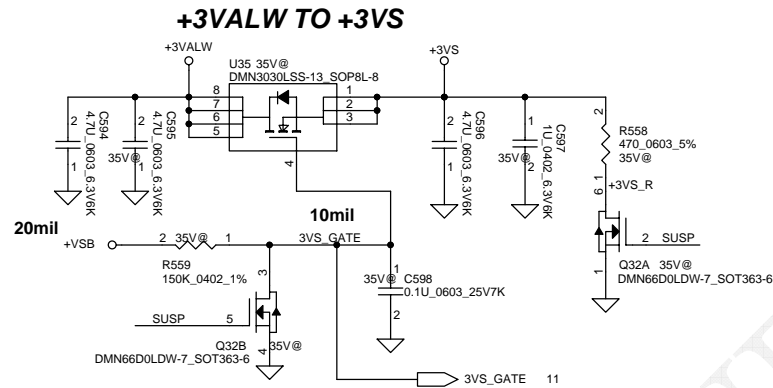
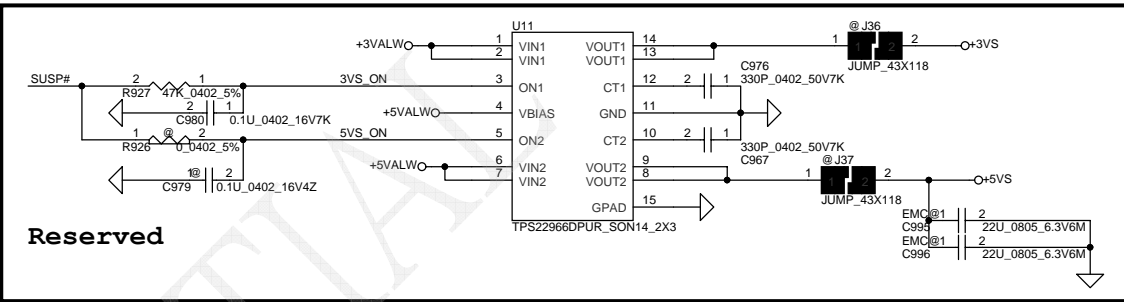
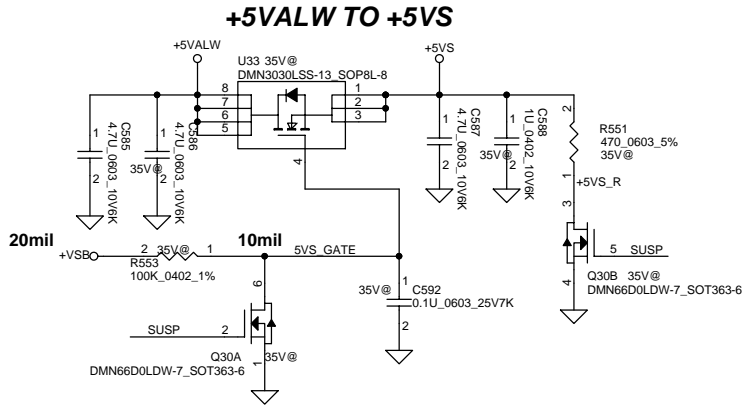
# FAN1 Conn



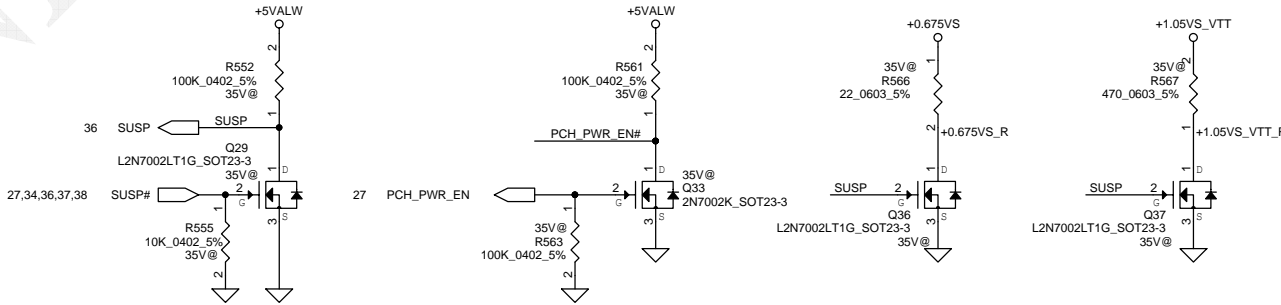
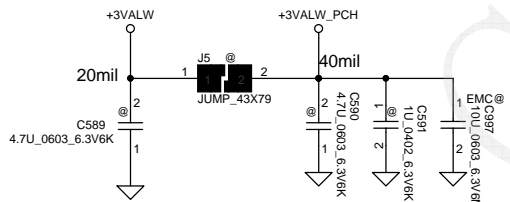
LIS3DH  
 SA0 ->0, Address is 0011 000 (0x30h)  
 SA0 ->1, Address is 0011 001 (0x32h)

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Date:	Monday, April 08, 2013	Sheet	30	of 42

# Normal Platform (Not support M-STATE and Deep Sleep)

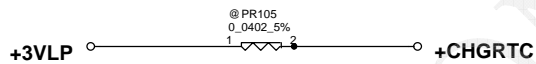
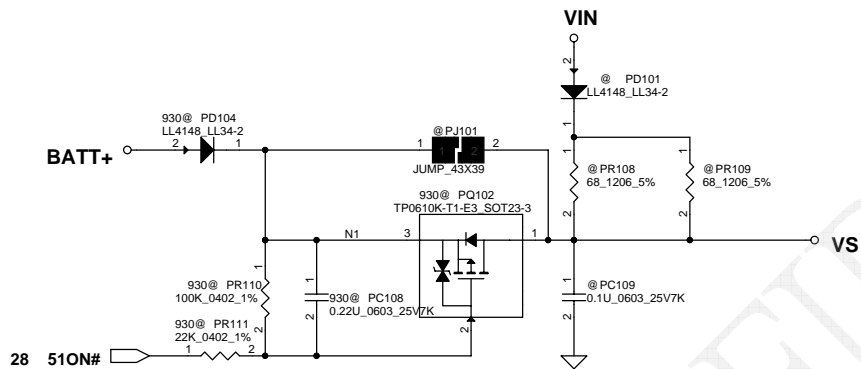
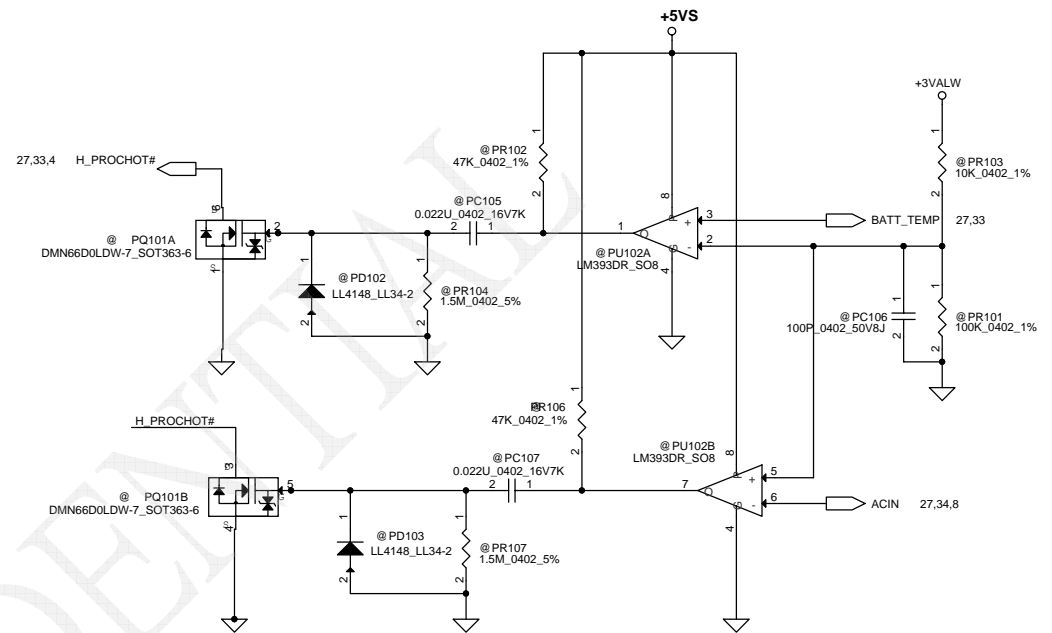
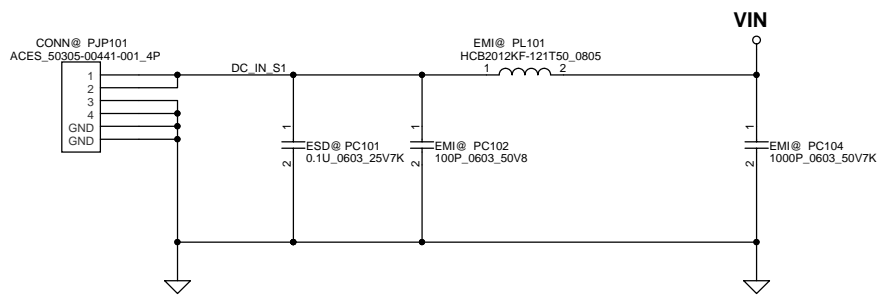


### +3VALW TO +3VALW(PCH AUX Power) Short J5 for PCH VCCSUS3.3



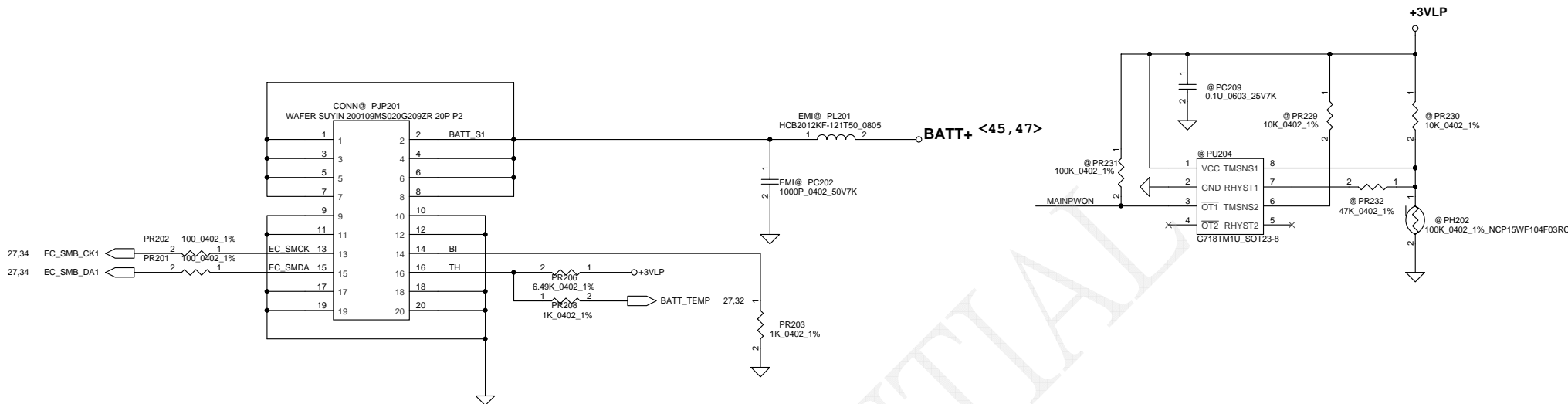
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				DC Interface	
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Date: Monday, April 08, 2013				Sheet 31 of 42	

Document Number  
Customer V5WE2 M/B LA-9532P Schematic  
Rev 0.2



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Date: Monday, April 08, 2013			Sheet	42

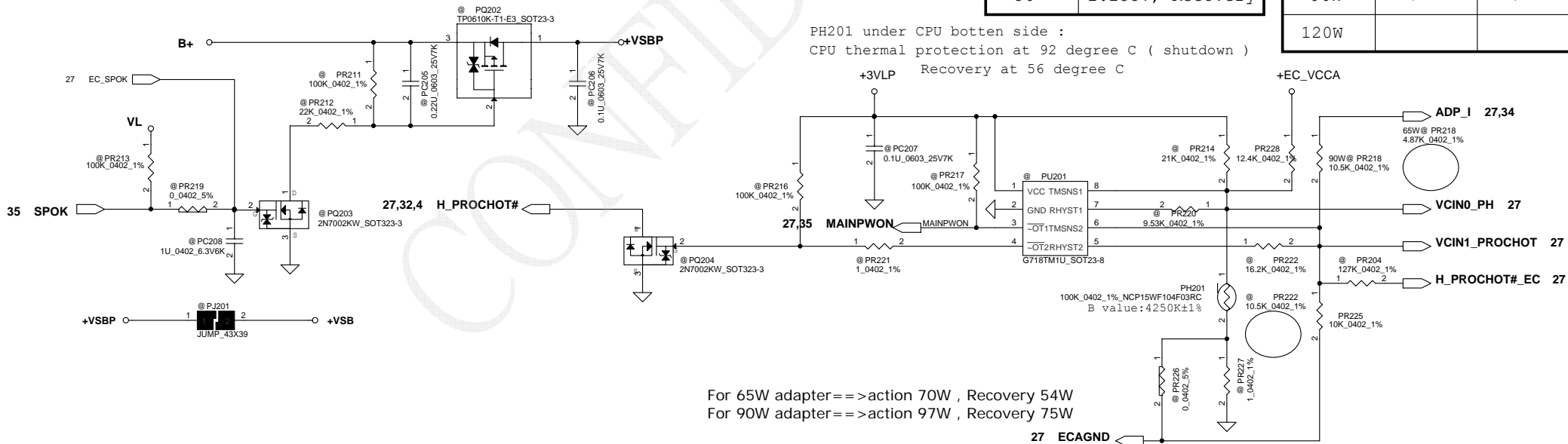




For KB9012 OTP		
92	1.2V, Active	
56	2.255V, Recovery	

For KB9012 sense 20mΩ	Active	Recovery
65W	84W, 1.2V	56W, 0.793V
90W	117W, 1.2V	77W, 0.791V
120W		

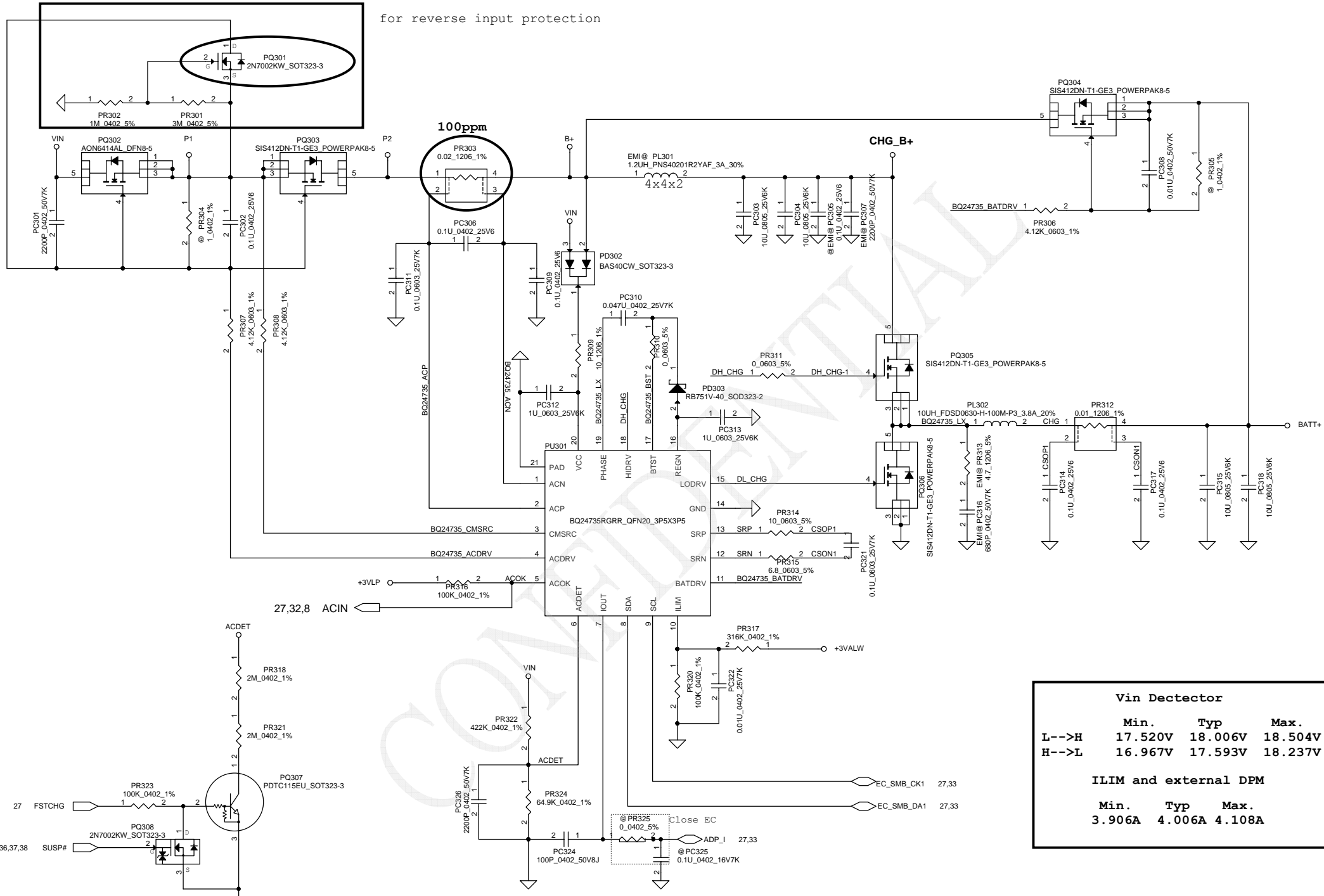
PH201 under CPU bottom side :  
CPU thermal protection at 92 degree C ( shutdown )  
Recovery at 56 degree C



For 65W adapter ==> action 70W , Recovery 54W  
For 90W adapter ==> action 97W , Recovery 75W

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Size	Document Number	Rev			
Customer	V5WE2 M/B LA-9532P Schematic	0.2			
Date:	Monday, April 08, 2013	Sheet	33	of 42	

for reverse input protection

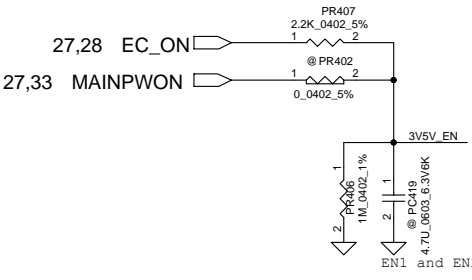
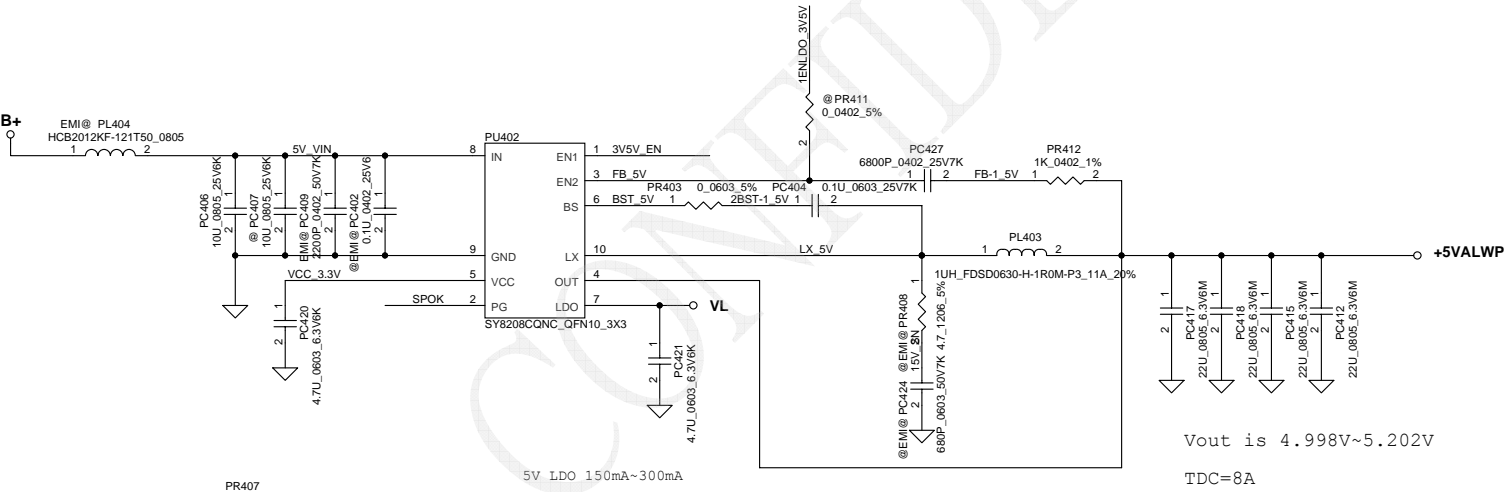
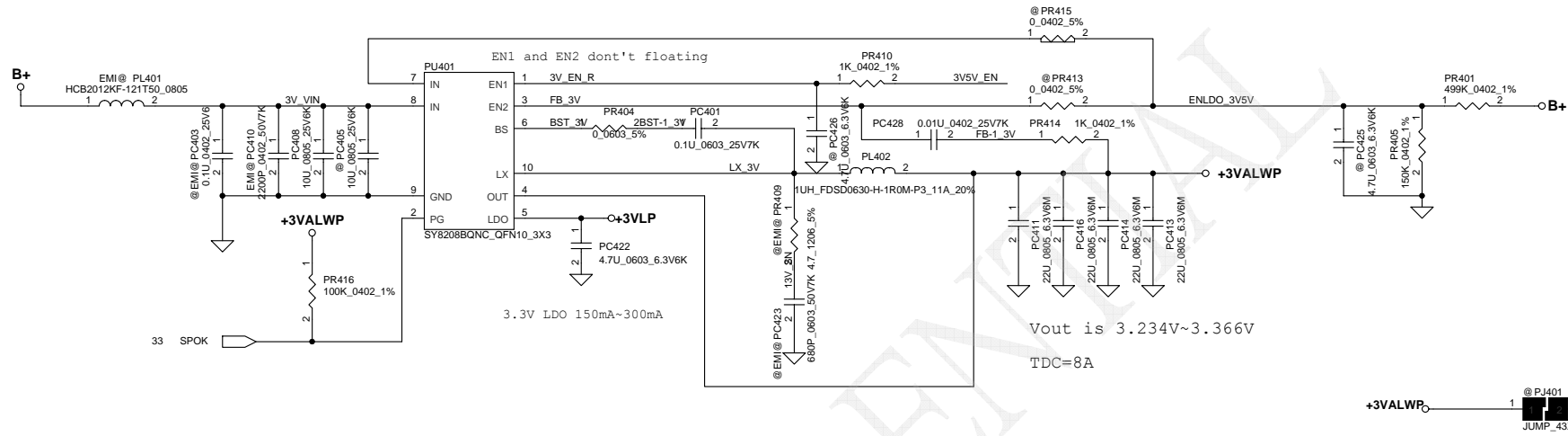


Vin Detector			
	Min.	Typ	Max.
L-->H	17.520V	18.006V	18.504V
H-->L	16.967V	17.593V	18.237V

ILIM and external DPM			
	Min.	Typ	Max.
	3.906A	4.006A	4.108A

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Size	Document Number	Rev			
Custom	V5WE2 M/B LA-9532P Schematic	0.2			
Date:	Monday, April 08, 2013	Sheet	34	of 42	



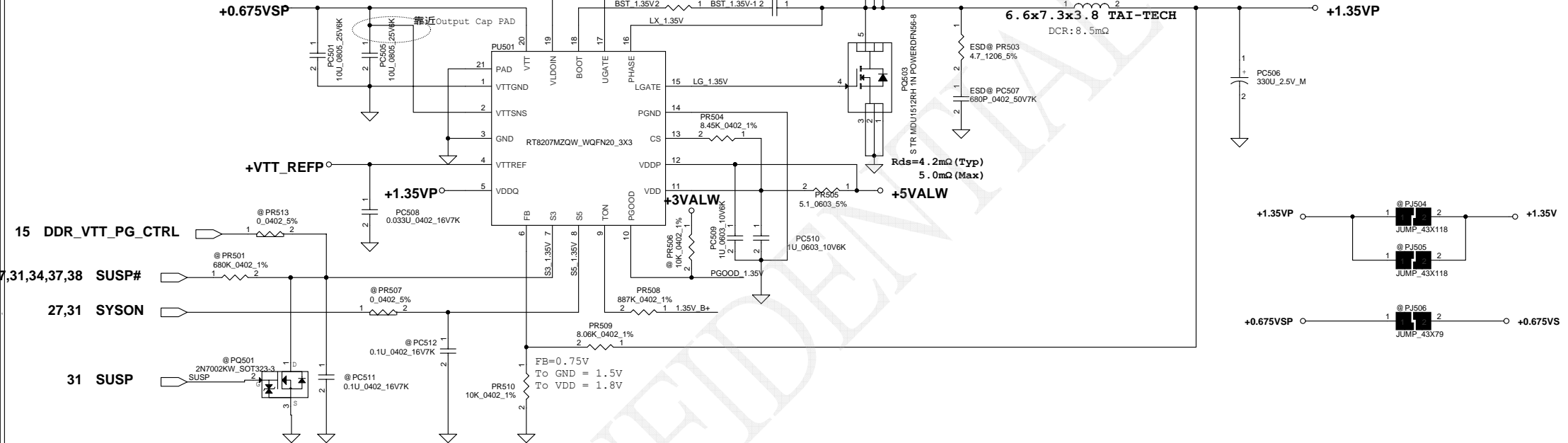
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Date:	Monday, April 08, 2013	Sheet	35	of 42

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+1.35VP
Ipeak = max{ 0.7*Ibudget, 1st +2nd max loading}
Ipeak = max{ 12.34*0.7 , 4.2+8.14 }
Ipeak=12.34A ; 1.2Ipeak=14.808A ;Imax=8.638A
1/2Delta I=0.7353A (F=300K Hz)
PR504=(1.2Ipeak-1/2Delta I) *Rds(on) (max) *1.2/9uA=8.45Kohm
choose PR504=8.45Kohm (for safety >1.2Ipeak)
Rds(on)=5.0m ohm(max) ; Rds(on)=4.2m ohm(typical)
Ilimit_min=(8.366K*9uA) / (5.0m*1.2) =15.058A
Ilimit_max=(8.535K*11uA) / (4.2m*1.2) =22.352A
Iocp=Ilimit+1/2Delta I=15.79A~23.09A
Iocp (min) >1.2Ipeak
    
```

2011/9/19

OVP=110% 115% 120%

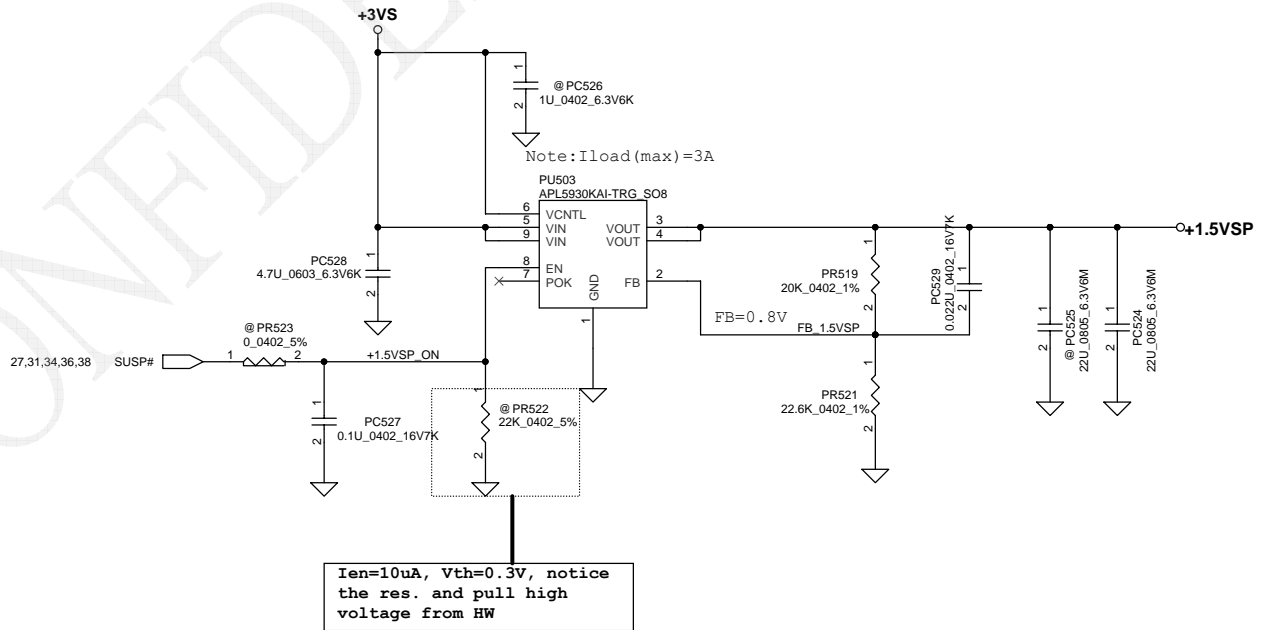
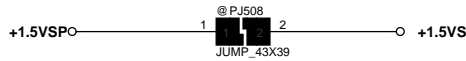


STATE	S3	S5	1.35VP	VTT_REFP	0.675VSP
S0	Hi	Hi	On	On	On
S3	Lo	Hi	On	On	Off (Hi-Z)
S4/S5	Lo	Lo	Off (Discharge)	Off (Discharge)	Off (Discharge)

Note: S3 - sleep ; S5 - power off

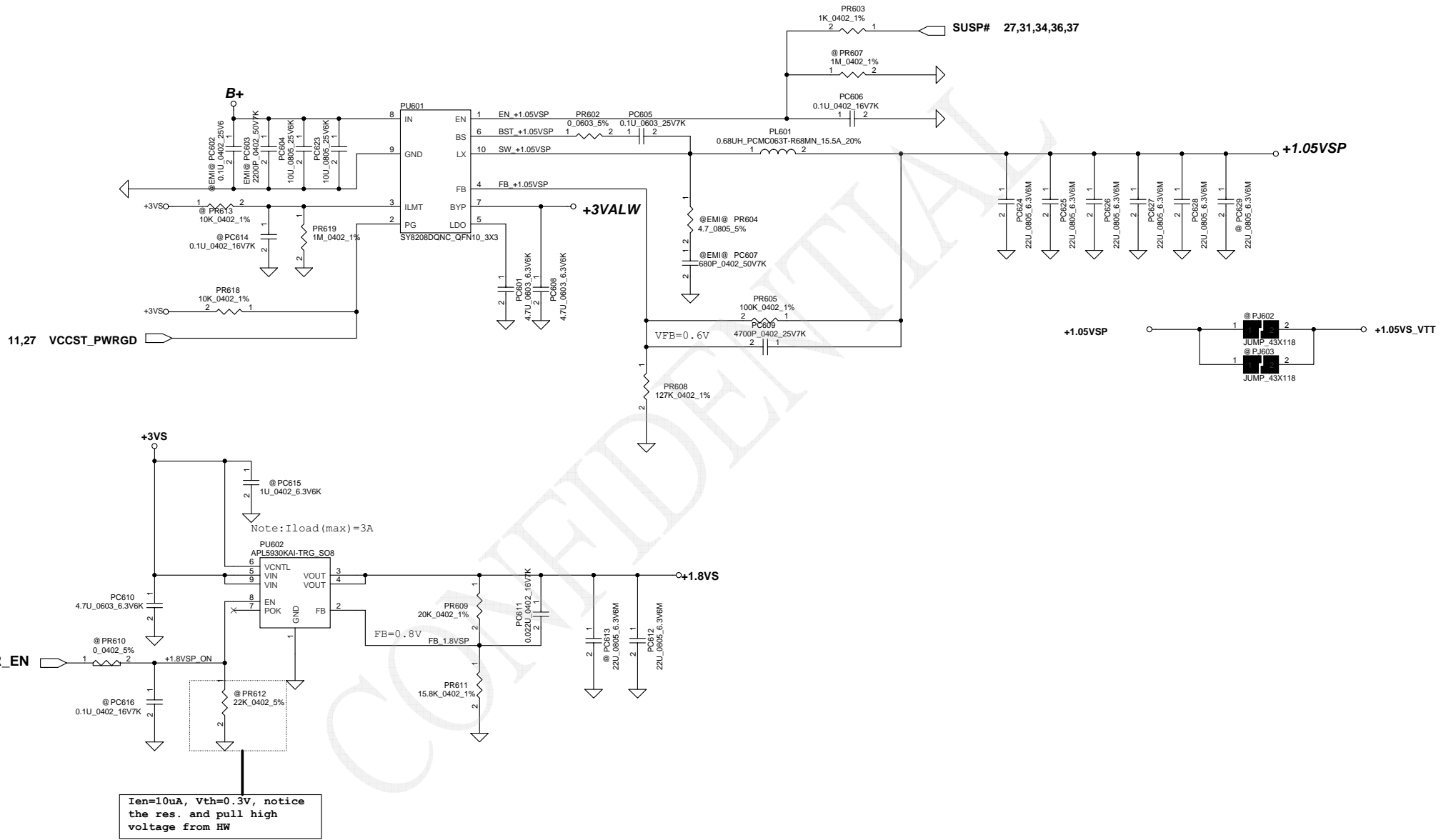
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				Customer	V5WE2 M/B LA-9532P Schematic
				Date:	Monday, April 08, 2013
				Sheet	36 of 42

Note: Use VCCSA\_SEL to switch High & Low Level for VDD11

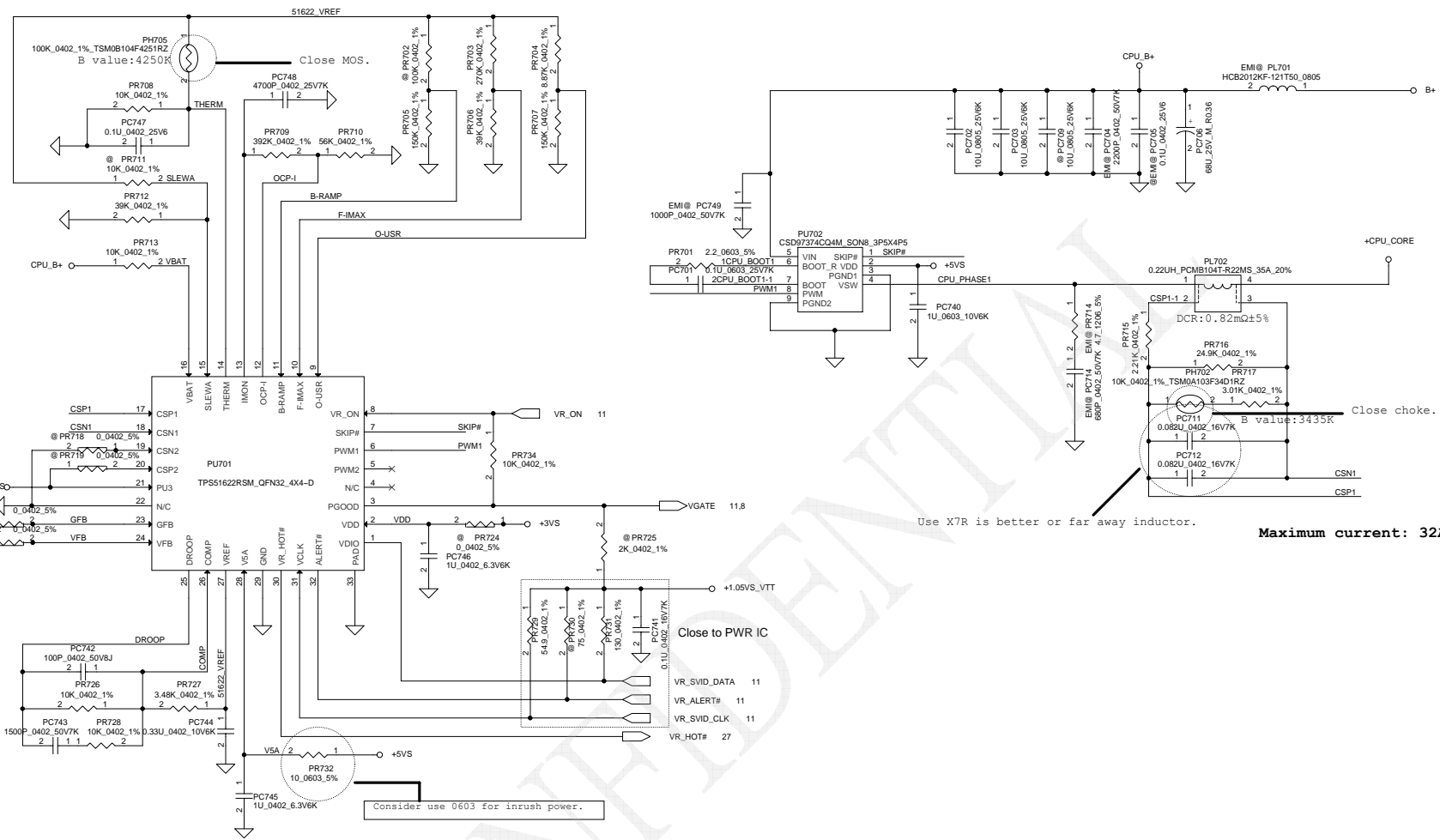


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Size	Customer	Rev	0.2	

+1.05VSP I<sub>peak</sub>=5.36A ; I<sub>max</sub>=3.752A ; 1.2I<sub>peak</sub>=6.432  
 Delta I=0.xxxxA->1/2Delta I=0.xxxxA, F= 800K Hz (typ)



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Use X7R is better or far away inductor.

Maximum current: 32A

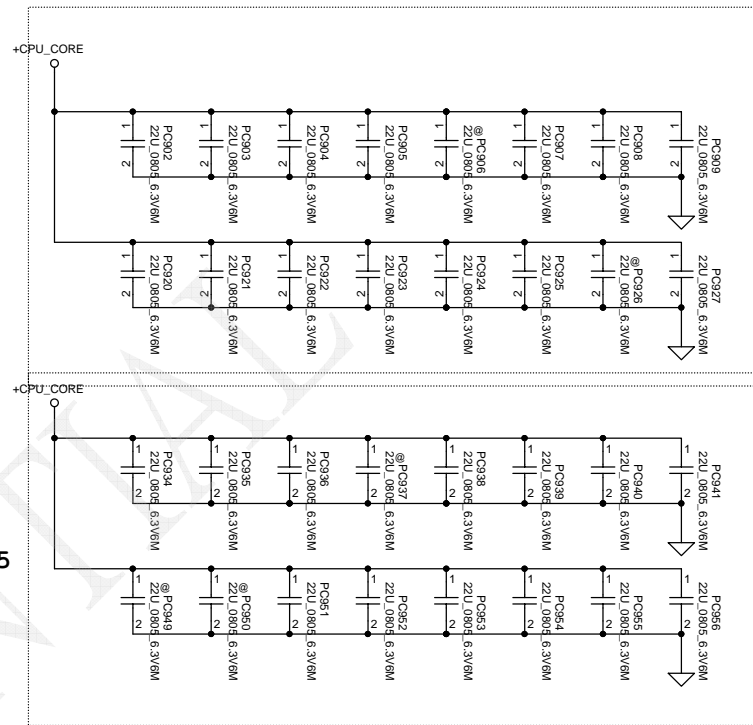
Consider use 0603 for inrush power.

Close to PWR IC

VIN	12V-20V
MAX current	32A
Thermal current	10A
Dynamic current	27A
Over current level	45A
Switching frequency	600KHz
Boot voltage	1.7V
DC Load- line	2m Ohm

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				+CPU_CORE	
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Size	Document Number	Customer	Date		Rev
	V5WE2 M/B LA-9532P Schematic		Monday, April 08, 2013		0.2
			Sheet	39 of 42	

PWR Rule  
 CPU DCLL=1.5m ohm dedign 330uF/9m \*0, 22uF \*30



22u \*27, @\*5

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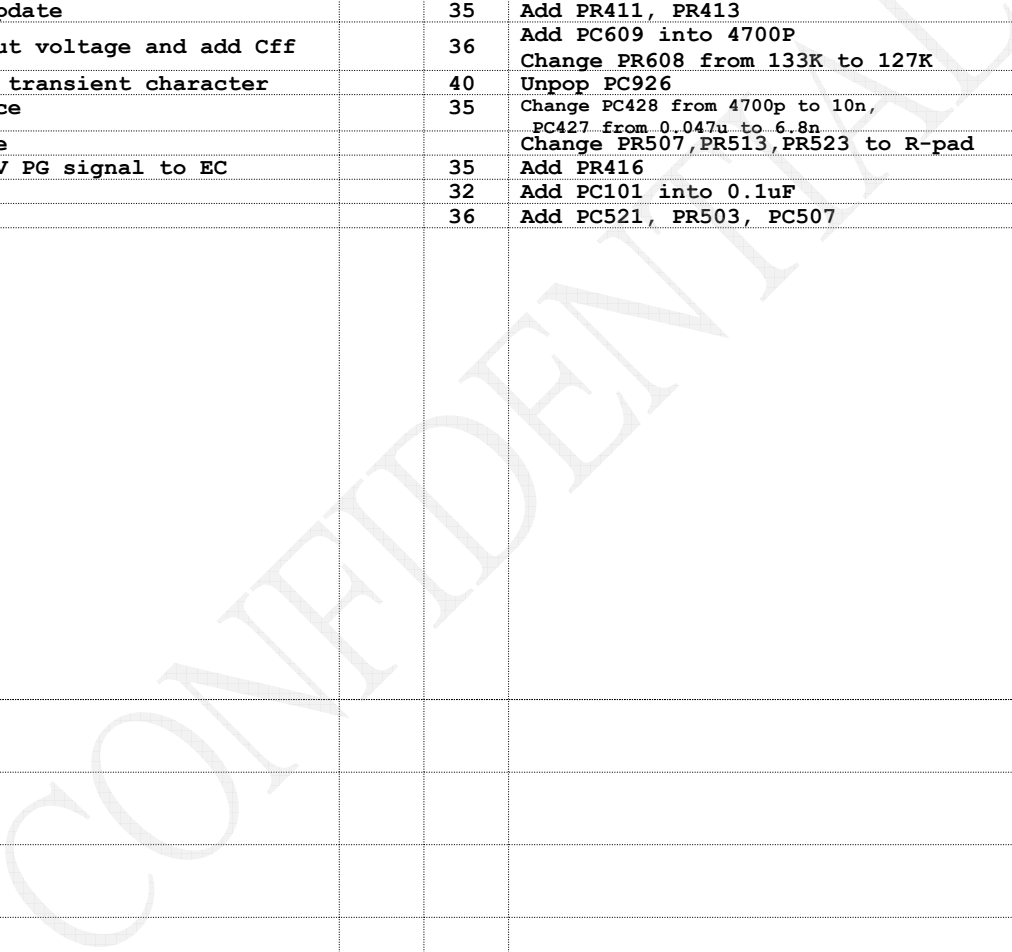
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				Customer	V5WE2 M/B LA-9532P Schematic
				Date	Monday, April 08, 2013
				Sheet	40 of 42
				Rev	0.2



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				Date:	Monday, April 08, 2013	Sheet 41 of 42

Item	Fixed Issue	Reason for change	Rev.	PG#	Modify List	Date	Phase
1	Module Design	Module Design change 3/5V solution		3/5V		11/13	DVT
2		Change RTC type to non-charge		31	Un-pop PR112, PR113	11/13	DVT
3	TPS51622 update to ES2.1	Compensation modify		39	Change PR701 to 2.2, PR703 to 270K, PR727 to 3.48K Un-pop PC742	11/16	DVT
4	EMI request	Cut-in EMI solution		EMI	Add PR313, PC316, PR714, PC714, PC749	11/20	DVT
5	EMI request	EMI confirm remove		EMI	Delete PL102, PC103, PC101, PL202, PC201 and PL703	11/26	DVT
6	Costdown			35	Change PL402, PL403 from 5x5x3 to 7x7x3	12/13	DVT2
7		SY8208B/C update		35	Add PR411, PR413	12/22	DVT2
8	+1.05V ripple close upper and mean too low	Adjust output voltage and add Cff		36	Add PC609 into 4700P Change PR608 from 133K to 127K	12/22	DVT2
9		Improve CPU transient character		40	Unpop PC926	01/09	DVT2
10		Tune sequence		35	Change PC428 from 4700p to 10n, PC427 from 0.047u to 6.8n	02/04	PVT
11		0 ohm reduce			Change PR507, PR513, PR523 to R-pad	02/22	PVT
12		Provide 3/5V PG signal to EC		35	Add PR416	02/22	PVT
13	ESD request			32	Add PC101 into 0.1uF	02/26	PVT
14	ESD request			36	Add PC521, PR503, PC507	02/26	PVT
12							
13							
14							
15							
16							
17							



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				V5WE2 M/B LA-9532P Schematic	0.2
Date: Monday, April 08, 2013				Sheet	42 of 42