

# Compal confidential

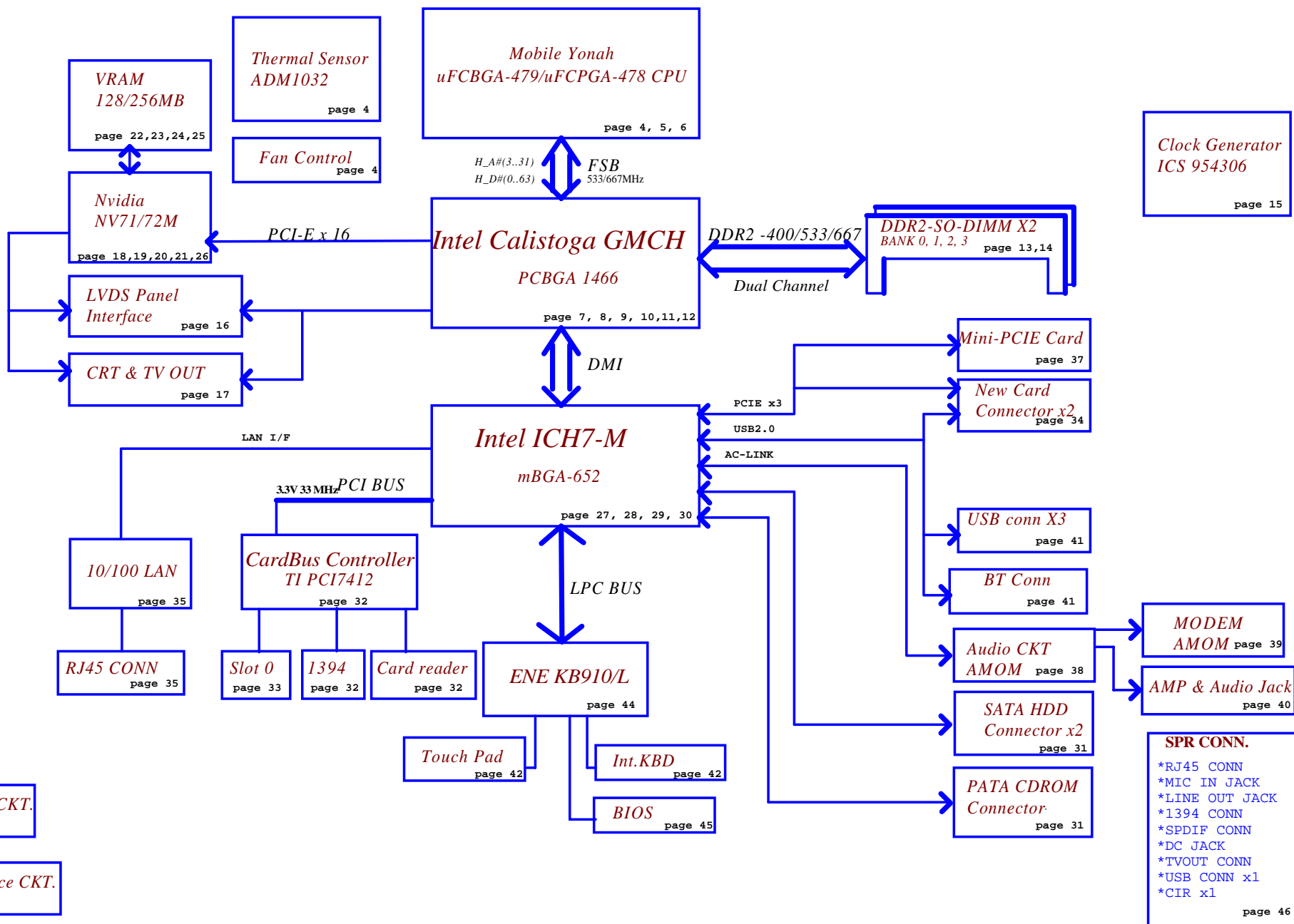
## Schematics Document

Mobile Yonah uFCPGA with Intel  
Calistoga\_GM/PM+ICH7-M core logic

2005-12-15

REV:1.0

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## Voltage Rails

power plane State	+B LDO3 LDO5	+5VALW +3VALW	+1.8V +5V	+5VS +3VS +2.5VS +1.8VS +1.5VS +1.2VS +VGA_CORE +0.9VS +CPU_CORE +VCCP
S0	O	O	O	O
S1	O	O	O	O
S3	O	O	O	X
S5 S4/AC	O	O	X	X
S5 S4/ Battery only	O	X	X	X
S5 S4/AC & Battery don't exist	X	X	X	X

O MEANS ON

X MEANS OFF

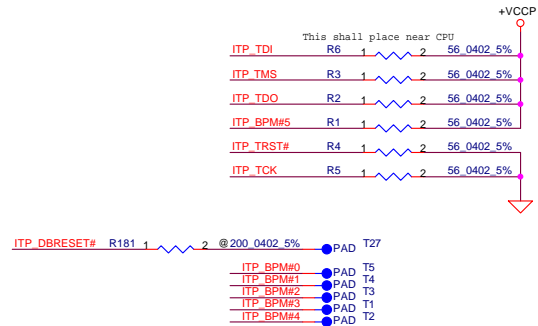
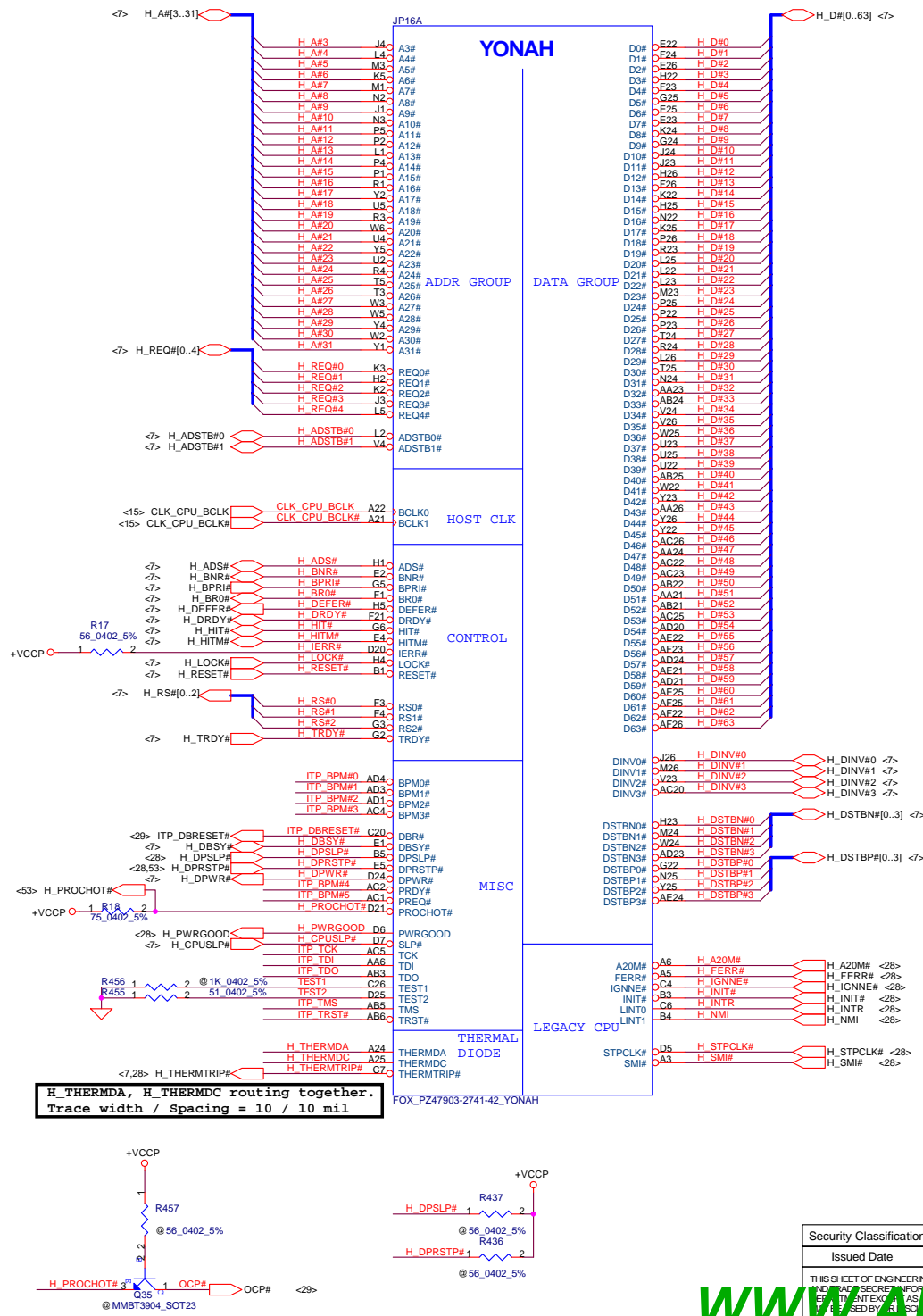
## PCI Devices

EXTERNAL	IDSEL#	REQ/GNT#	PIRQ
CARD BUS & 1394	AD22	2	C,D,E,G

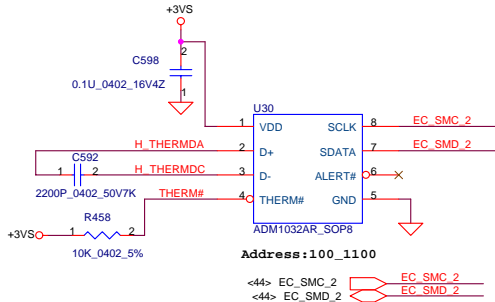
## Load BOM check item

- 1.U31 GM/PM/GML part number
- 2.U6 ICH7 part number
- 3.VRAM part number and Page26 RAM\_CFG[0:3]/PCI\_DEVID[0:3] modify check
- 4.For NV73 R510/R75/R533/R168 change to 499ohm
- 5.U33 NV7x part number

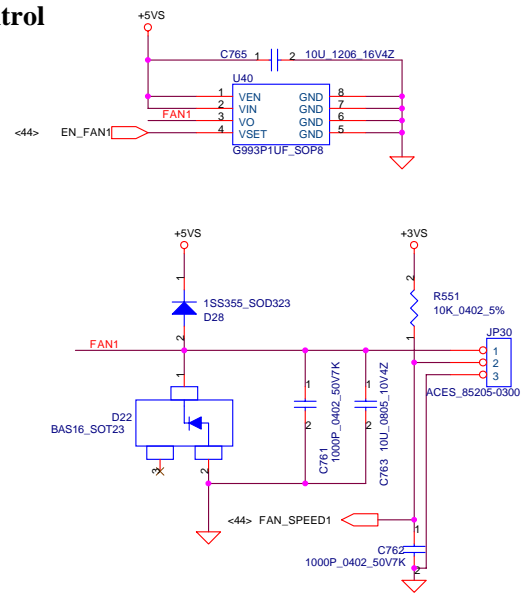
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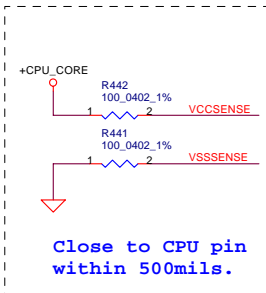
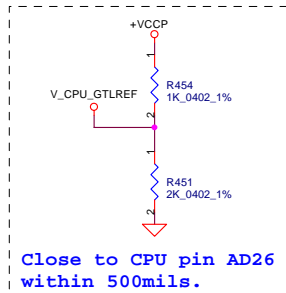
## Thermal Sensor ADM1032AR



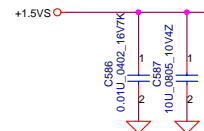
## FAN control



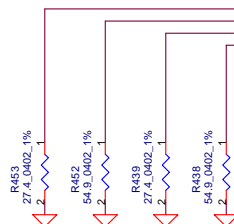
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Issued Date	2005/03/10	Deciphered Date	2006/03/10	Yonah CPU in mFCPGA479	
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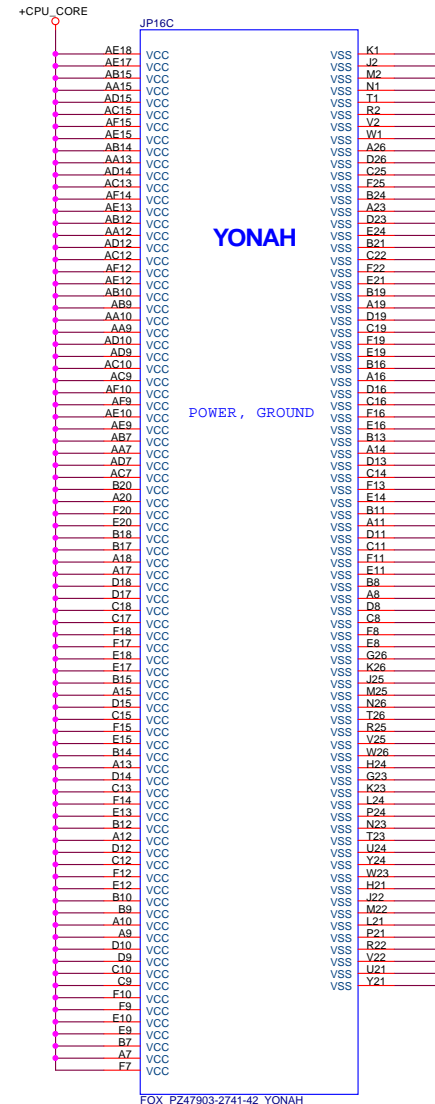
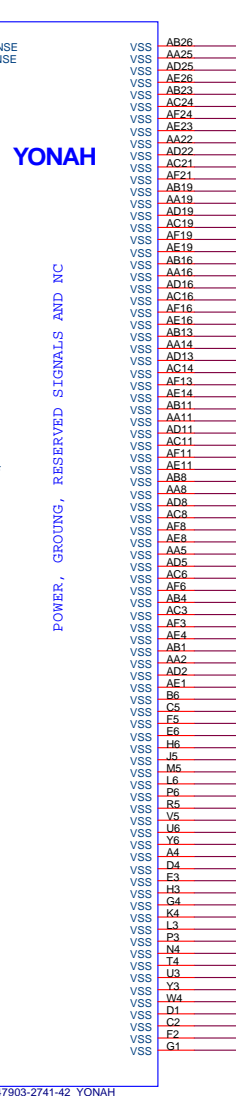
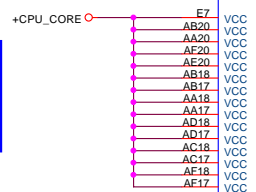
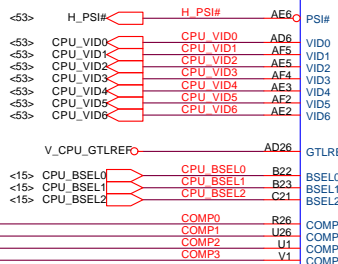
Length match within 25 mils  
The trace width 18 mils space  
7 mils

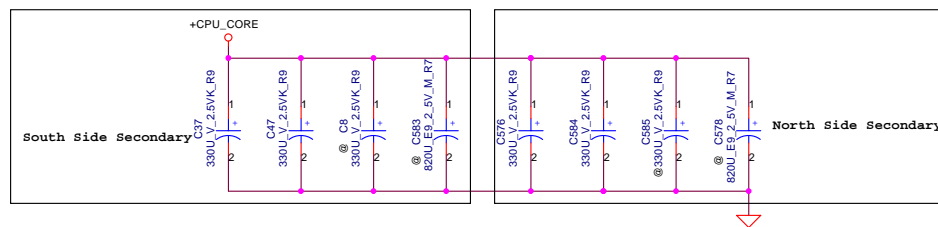
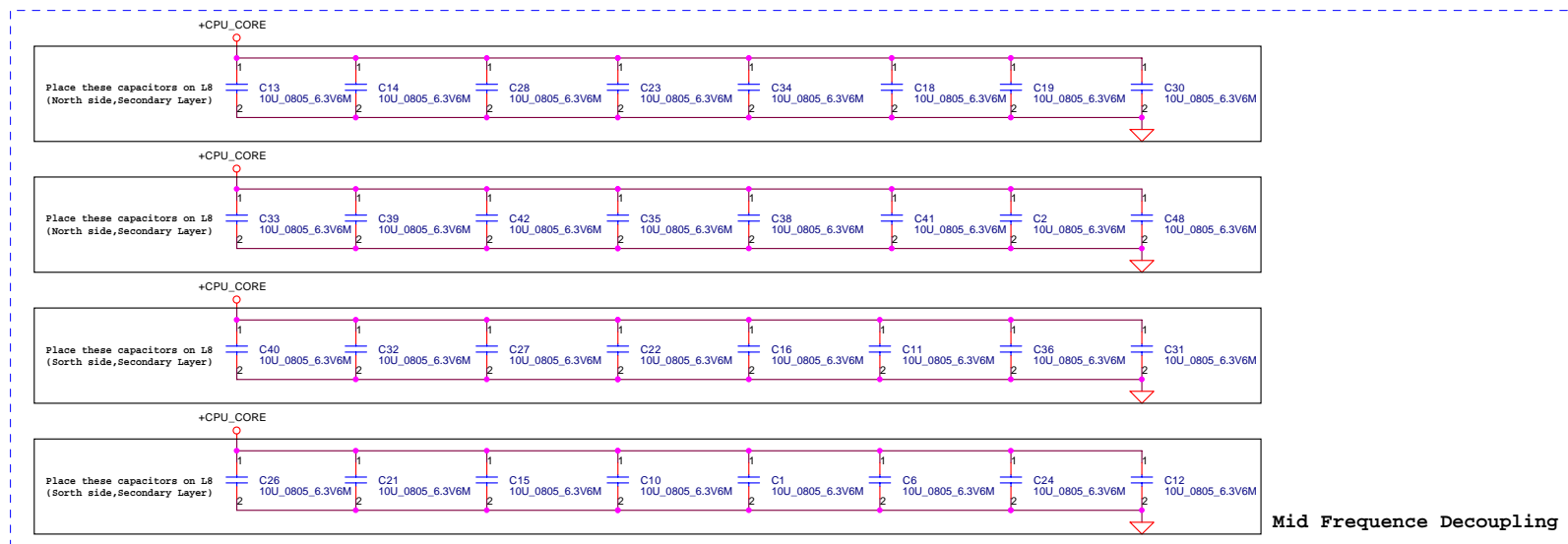


CPU_BSEL	CPU_BSEL2	CPU_BSEL1	CPU_BSEL0
133	0	0	1
166	0	1	1

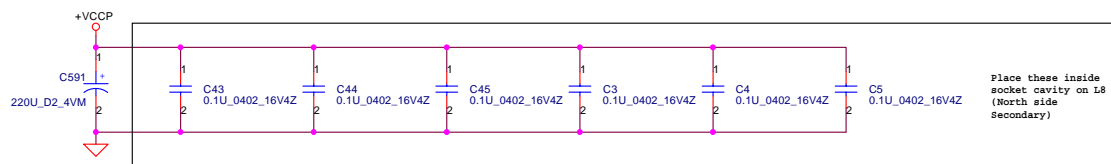


Resistor placed within 0.5" of CPU pin. Trace should be at least 25 mils away from any other toggling signal.

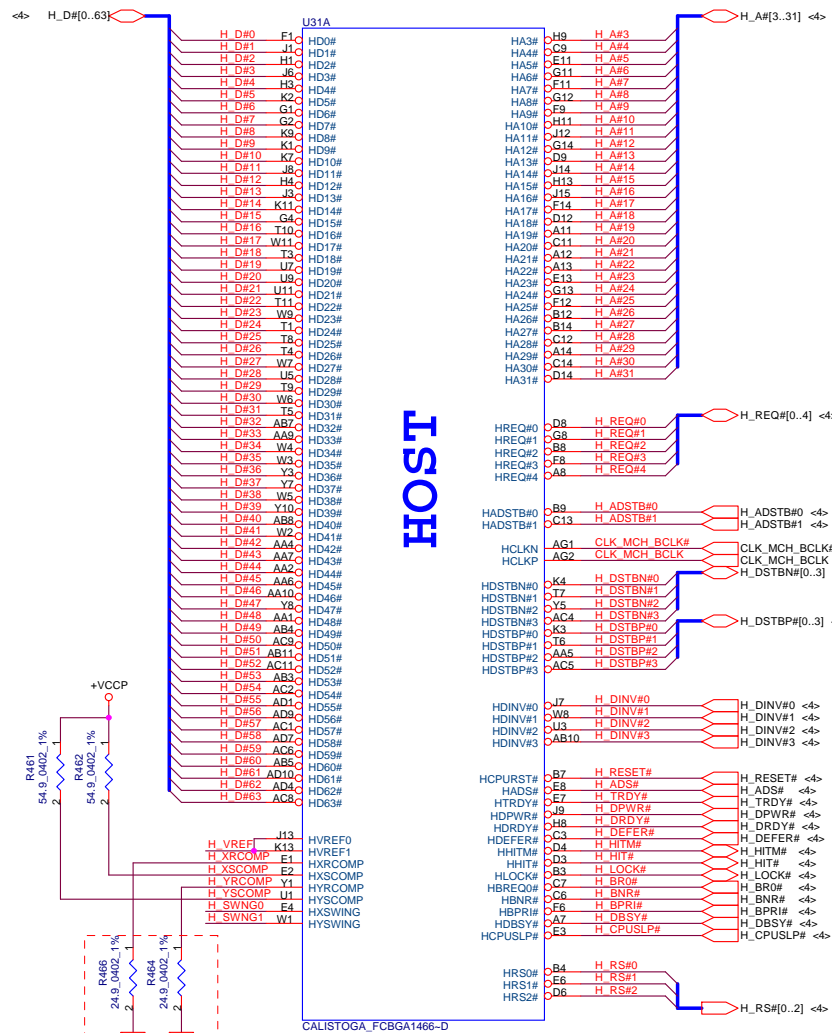




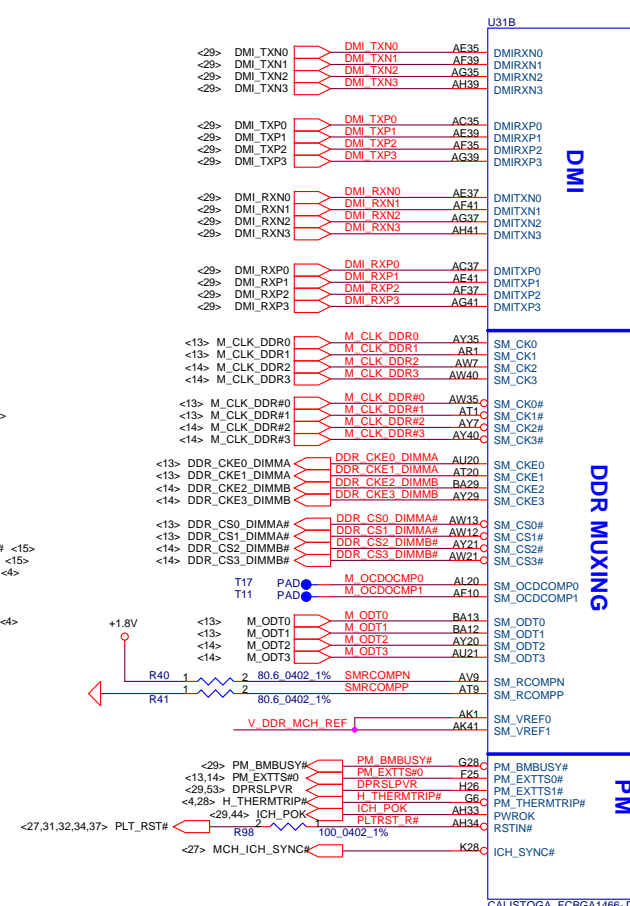
ESR <= 1.5m ohm  
Capacitor > 1980uF



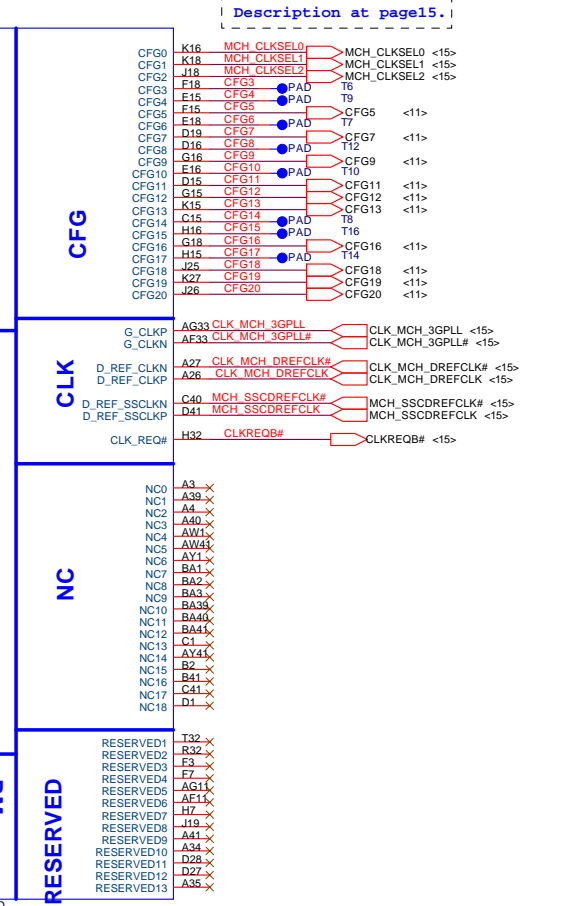
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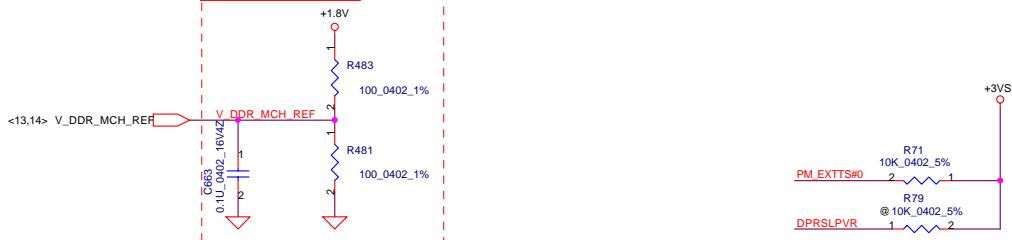
**Layout Note:**  
H\_XRCOMP / H\_YRCOMP / H\_VREF / H\_SWNG0 / H\_SWNG1 trace width and spacing is 10/20.



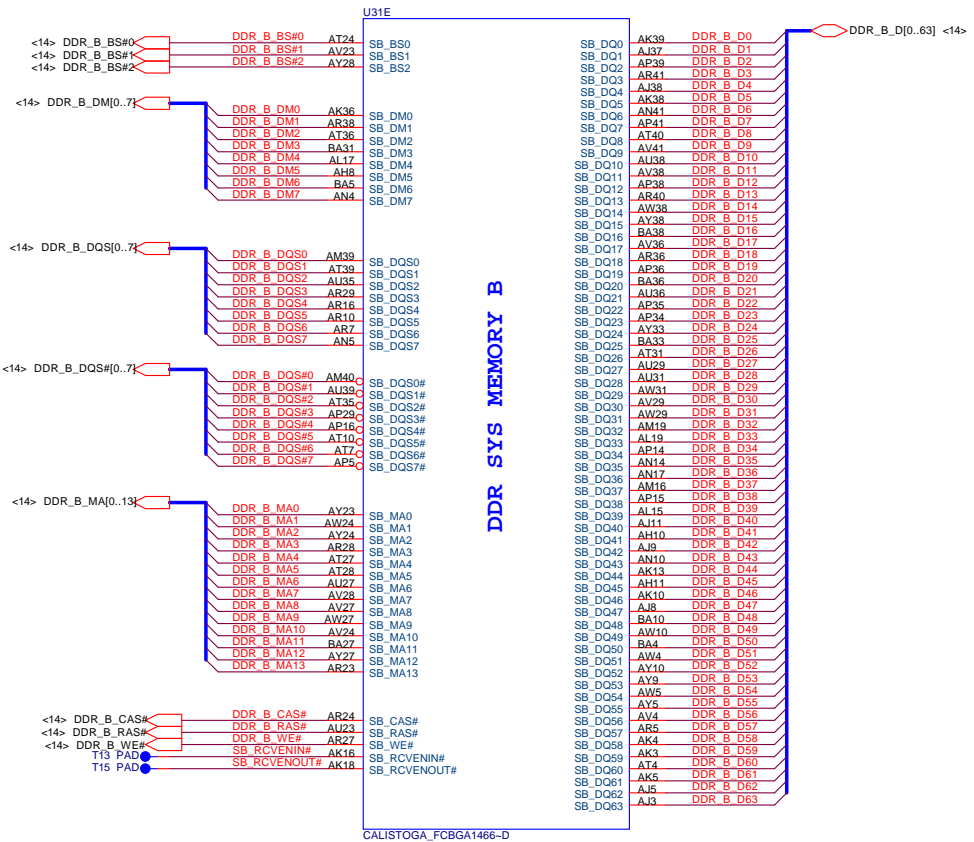
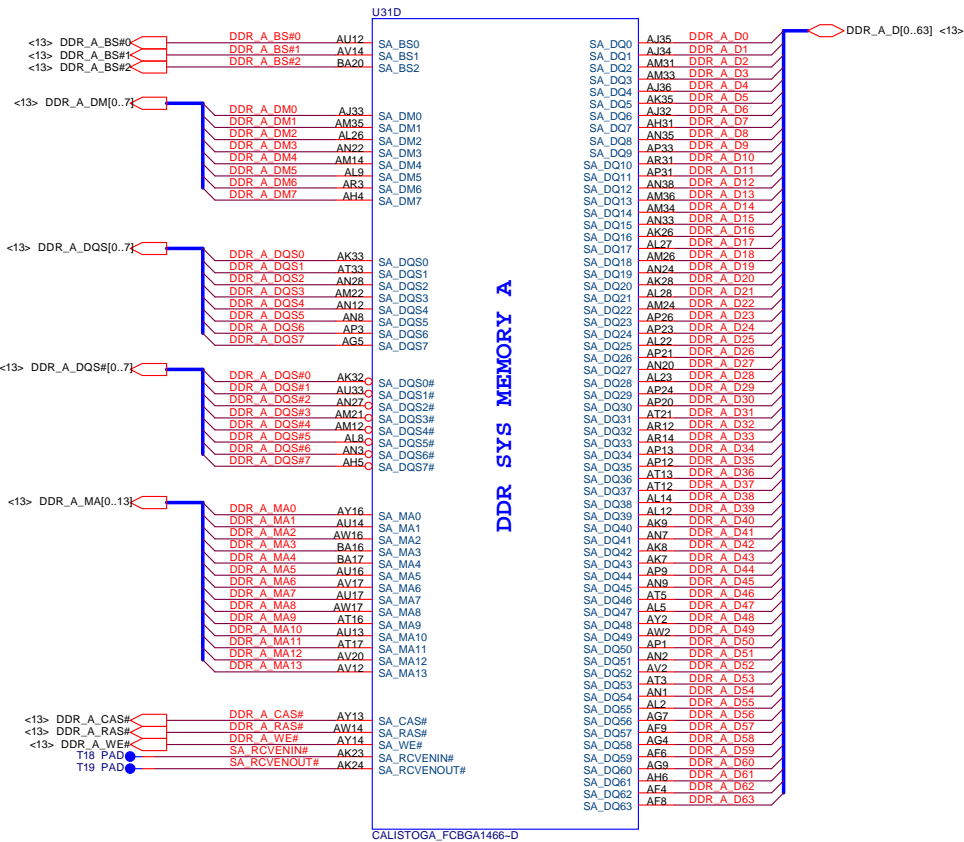
**Layout Note:**  
V\_DDR\_MCH\_REF trace width and spacing is 20/20.



Description at page15.



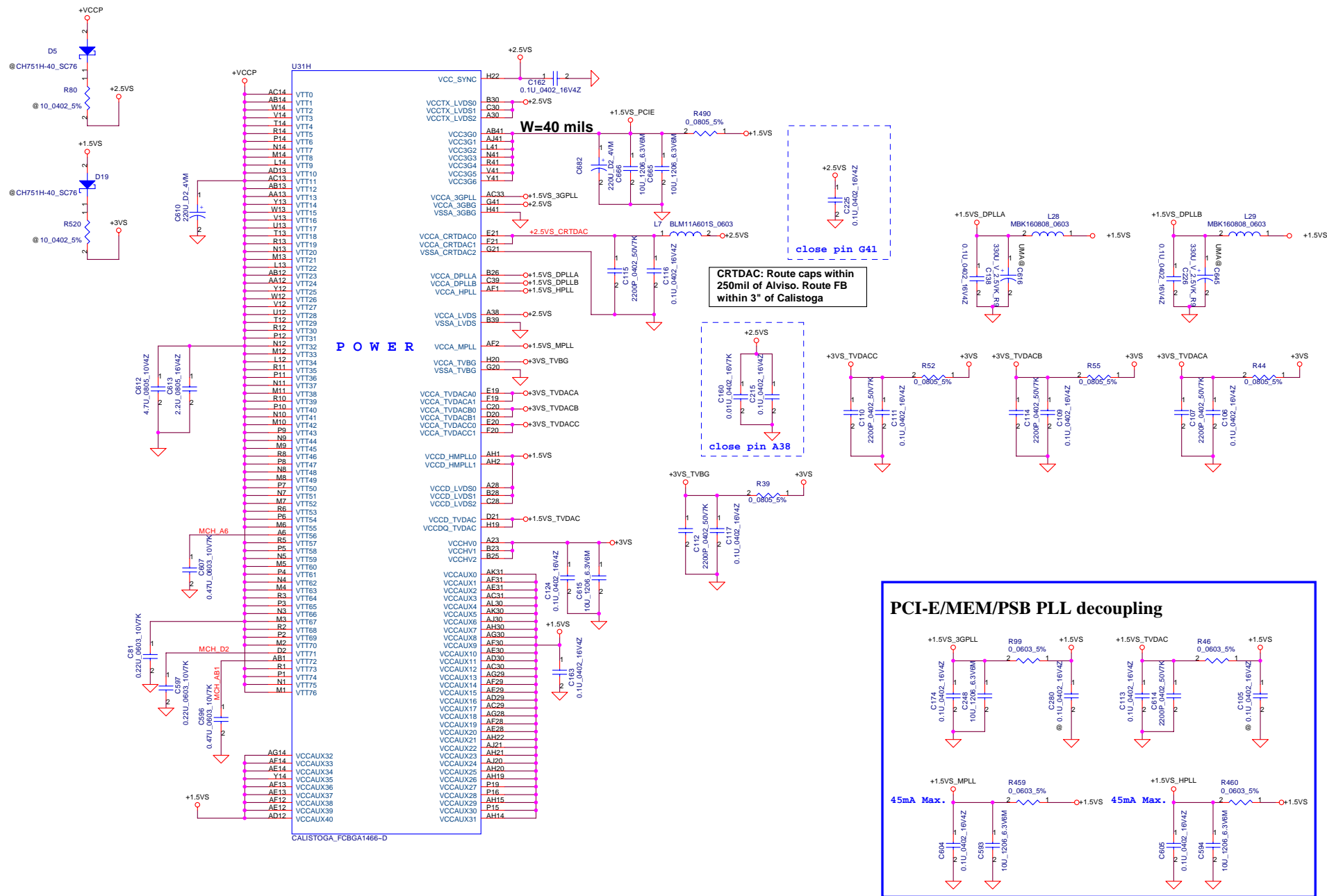
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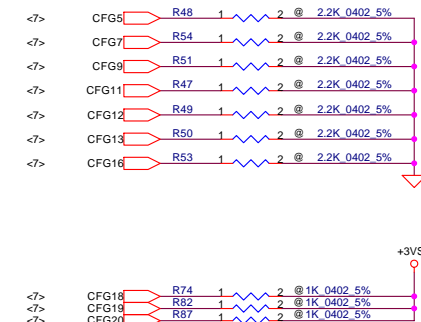
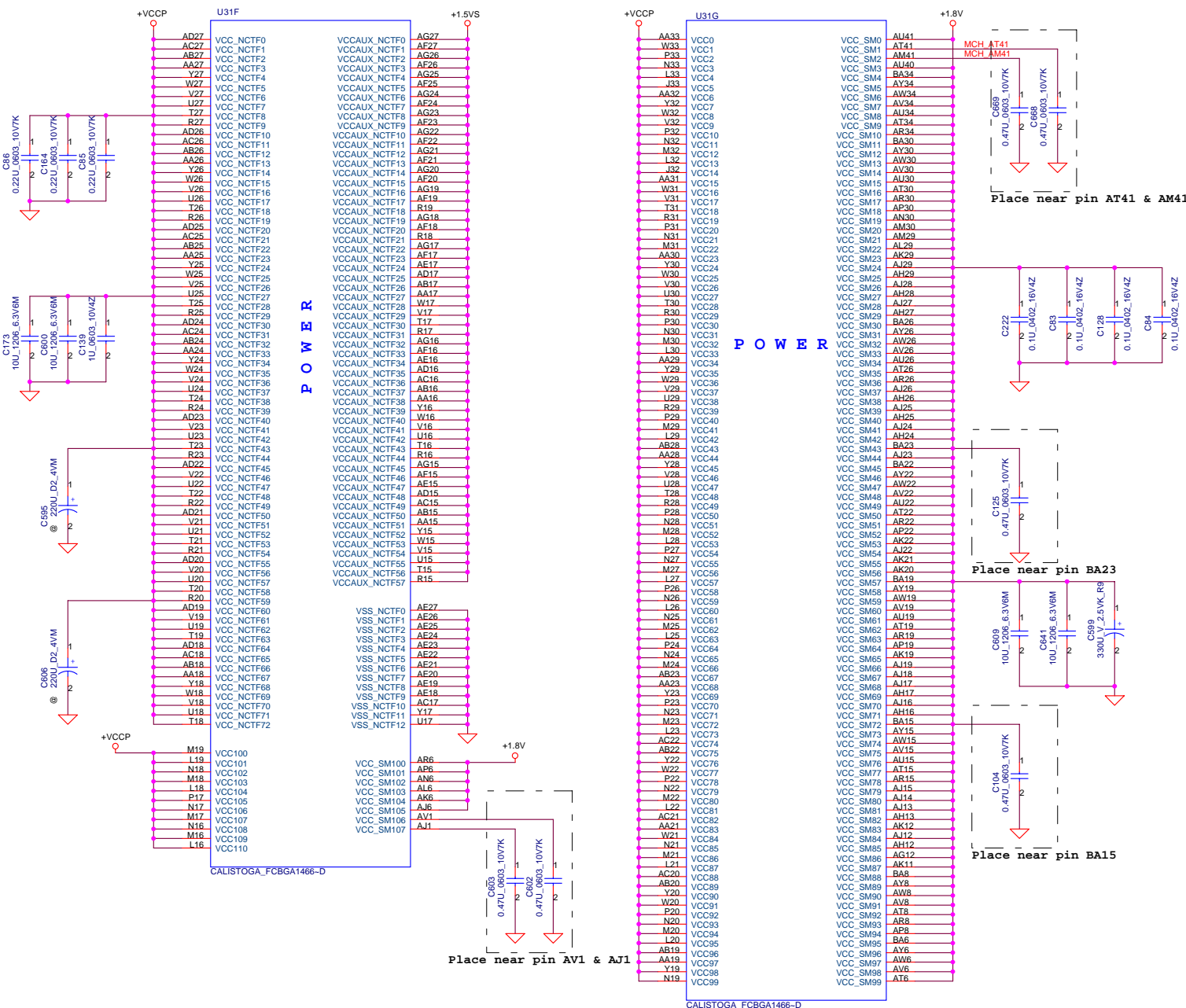


## Strap Pin Table

CFG[3:17] have internal pull up

CFG[19:18] have internal pull down

CFG[2:0]	011 = 667MT/s FSB 001 = 533MT/s FSB
CFG5	0 = DMI x 2 1 = DMI x 4 *(Default)
CFG7	0 = Reserved 1 = Mobile Yonah CPU *(Default)
CFG9	0 = Lane Reversal Enable 1 = Normal Operation (Default) *
CFG6	0 = Reserved
PSB 4X CLK Enable	1 = Calistoga *
CFG[13:12]	00 = Reserved 01 = XOR Mode Enabled 10 = All Z Mode Enabled 11 = Normal Operation *(Default)
CFG16	0 = Dynamic ODT Disabled 1 = Dynamic ODT Enabled *(Default)
CFG10 CFG18	10 = 1.05V *(Default) 01 = 1.5V
CFG19	0 = Normal Operation *(Default) 1 = DMI Lane Reversal Enable
SDVO_CTRLDATA	0 = No SDVO Device Present *(Default) 1 = SDVO Device Present
CFG20 (PCIE/SDVO select)	0 = Only PCIE or SDVO is operational. *(Default) 1 = PCIE/SDVO are operating simu.



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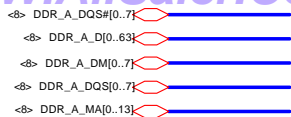
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Calistoga (5/6)	

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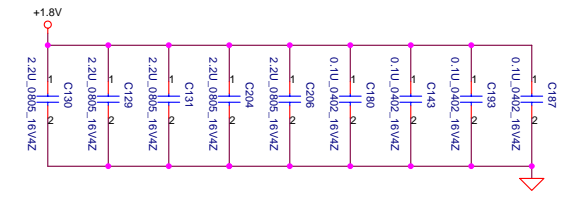
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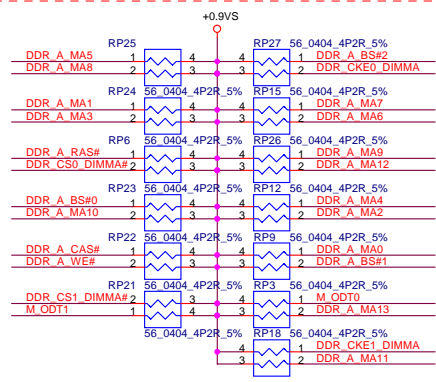
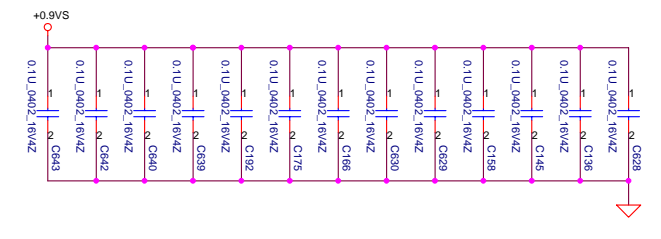
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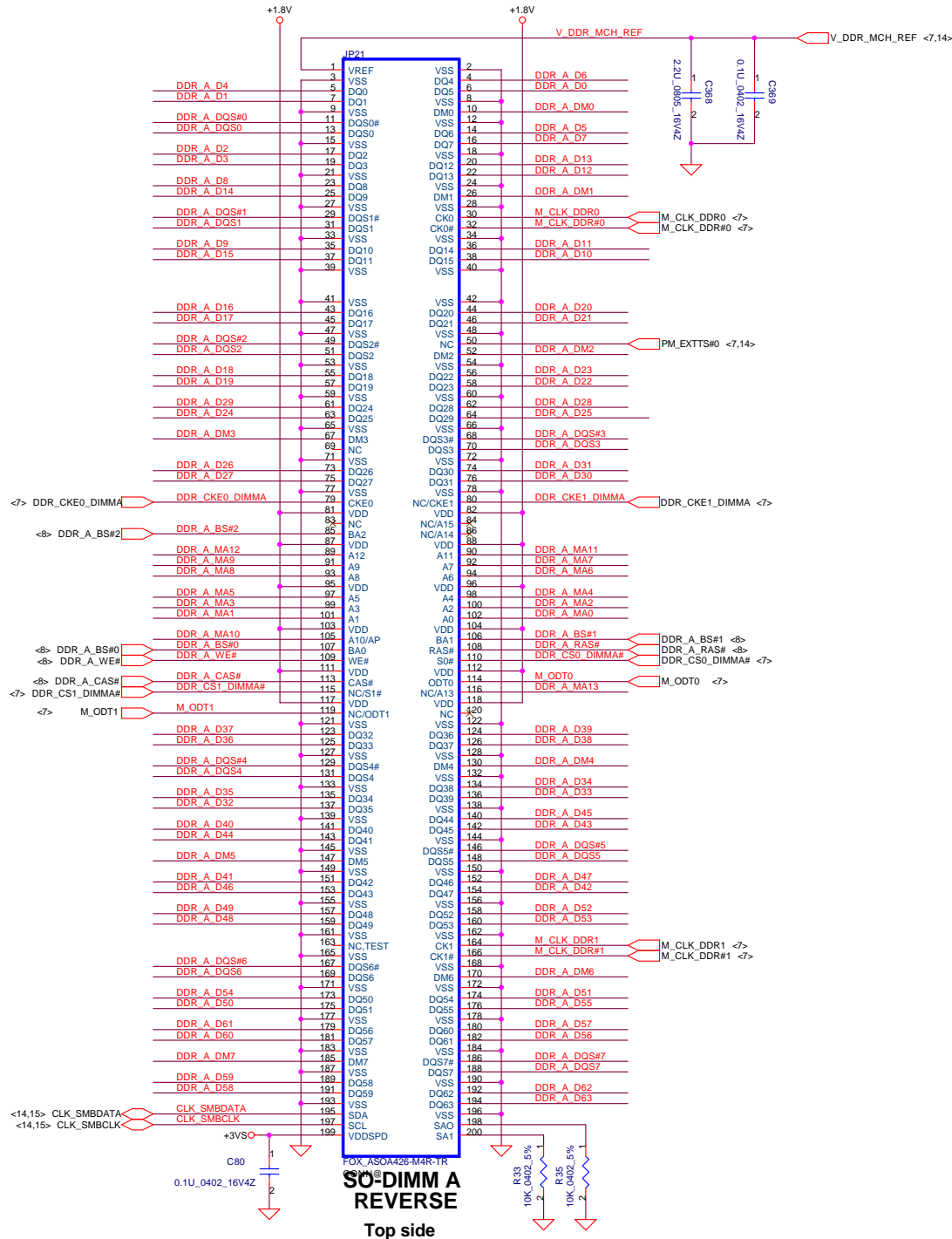
**Layout Note:**  
Place near JP41



**Layout Note:**  
Place one cap close to every 2 pullup resistors terminated to +0.9VS

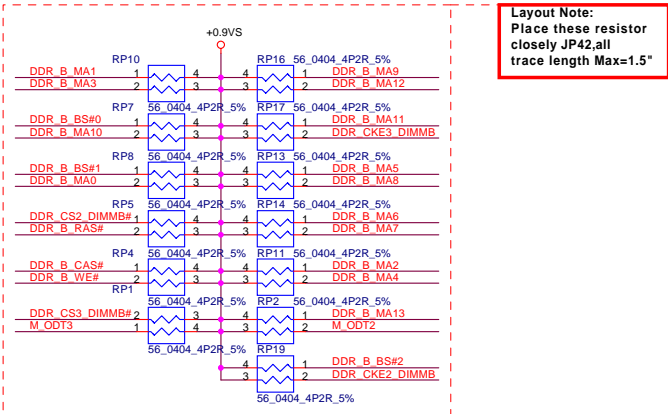


**Layout Note:**  
Place these resistor closely JP41, all trace length Max=1.5"

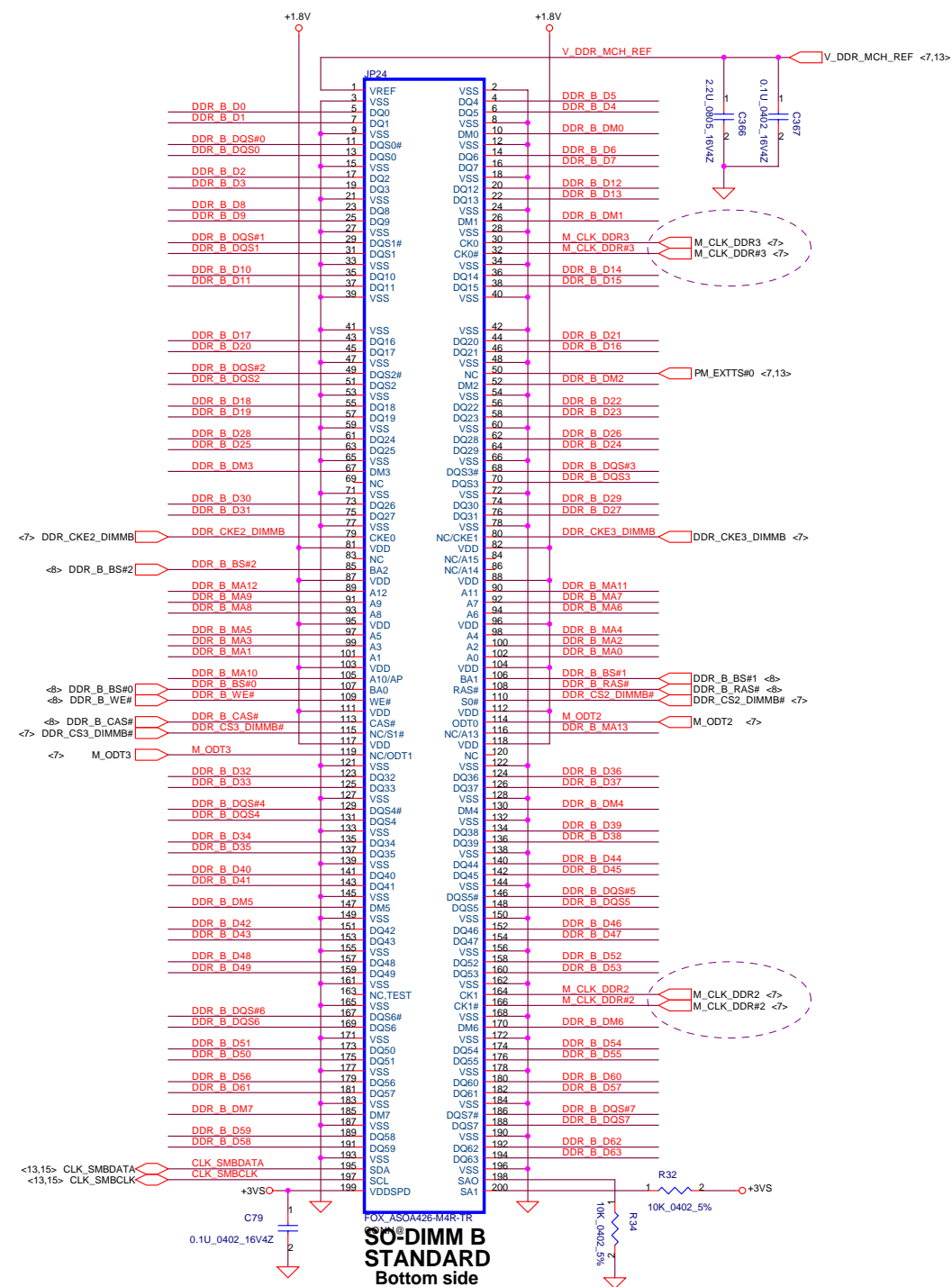


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The circuit diagram shows a 10-bit DAC implemented with a resistor ladder and an op-amp buffer. The ladder consists of 10 resistors, each labeled with a value of 0.11u, 0.0402, 16V42. The resistors are connected in series between a 0.9V source and ground. The output of the ladder is connected to the non-inverting input of an op-amp buffer. The op-amp is configured with its inverting input to ground and its output to its non-inverting input, providing a voltage follower. The output of the DAC is labeled 'DACOUT'.



**Layout Note:**  
Place these resistor  
closely JP42,all  
trace length Max=1.5"



SO-DIMM B  
STANDARD  
Bottom side

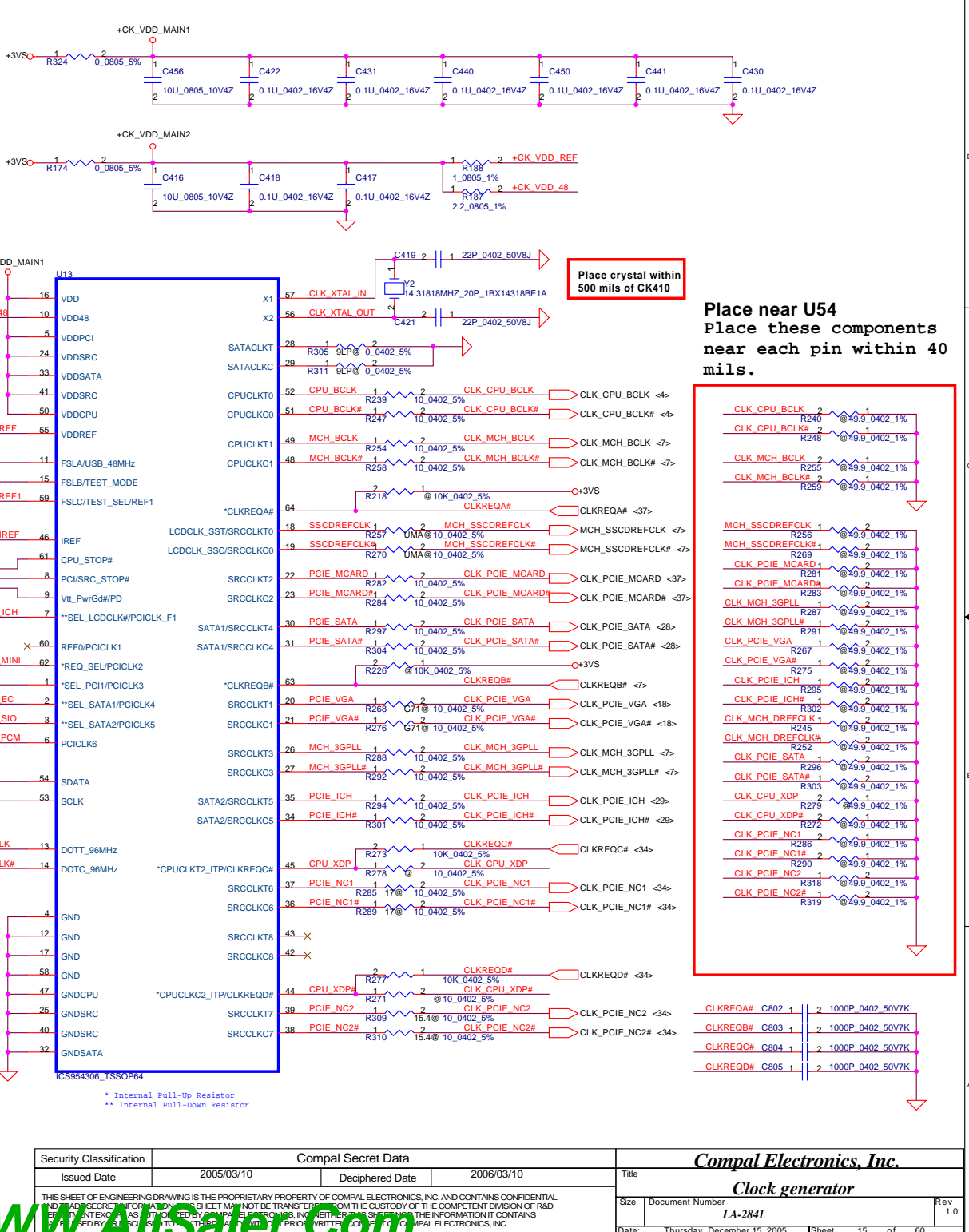
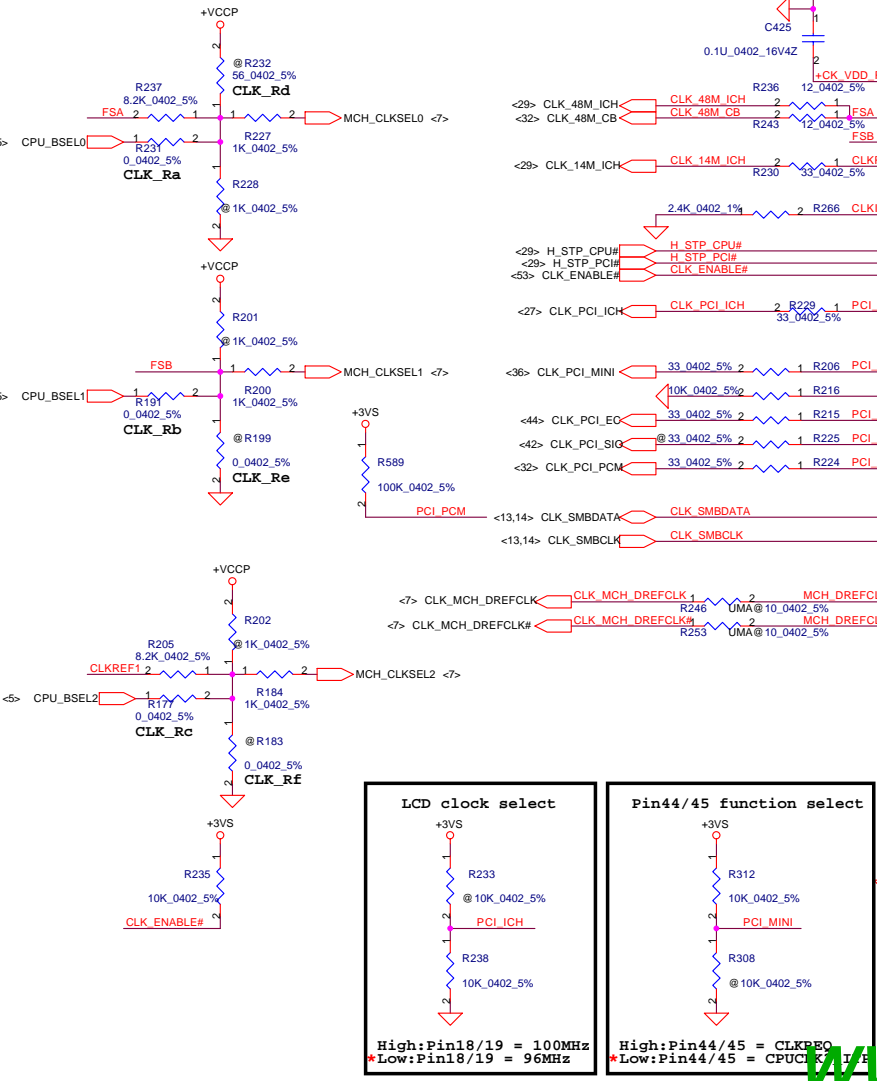
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FSLC	FSLB	FSLA	CPU	SRC	PCI
CLKSEL2	CLKSEL1	CLKSEL0	MHz	MHz	MHz
0	0	1	133	100	33.3
0	1	1	166	100	33.3

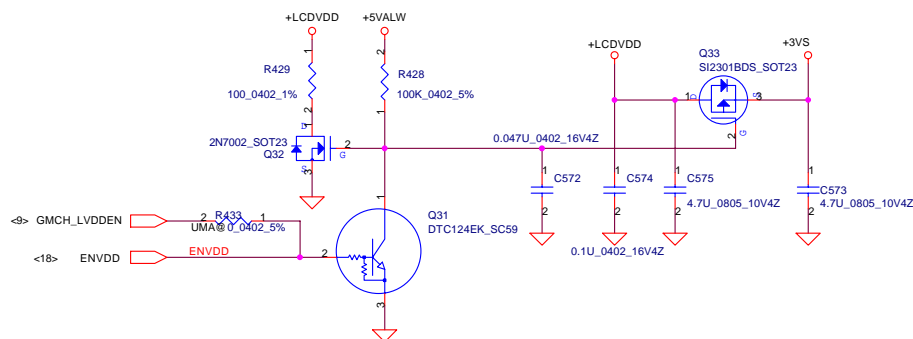
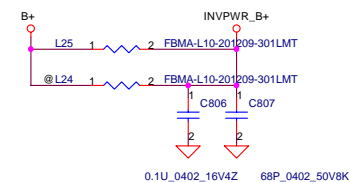
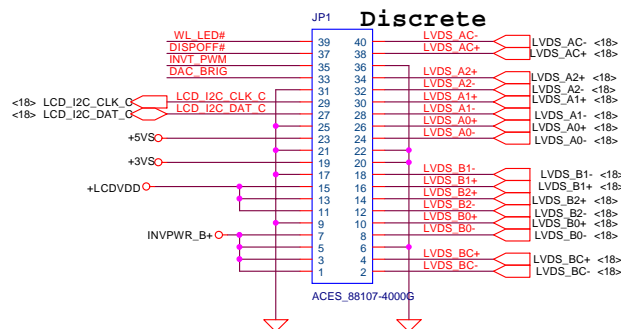
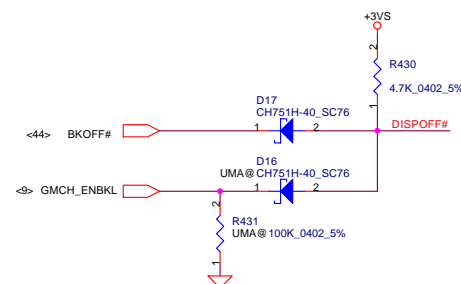
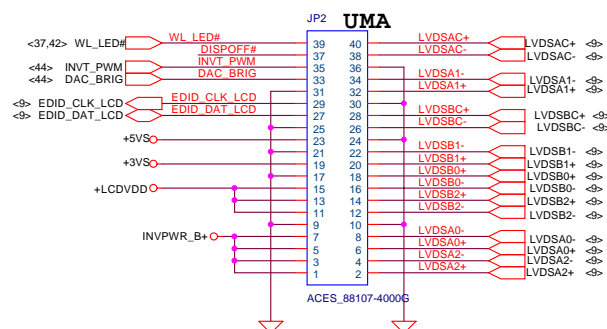
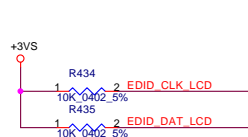
Table : ICS954306

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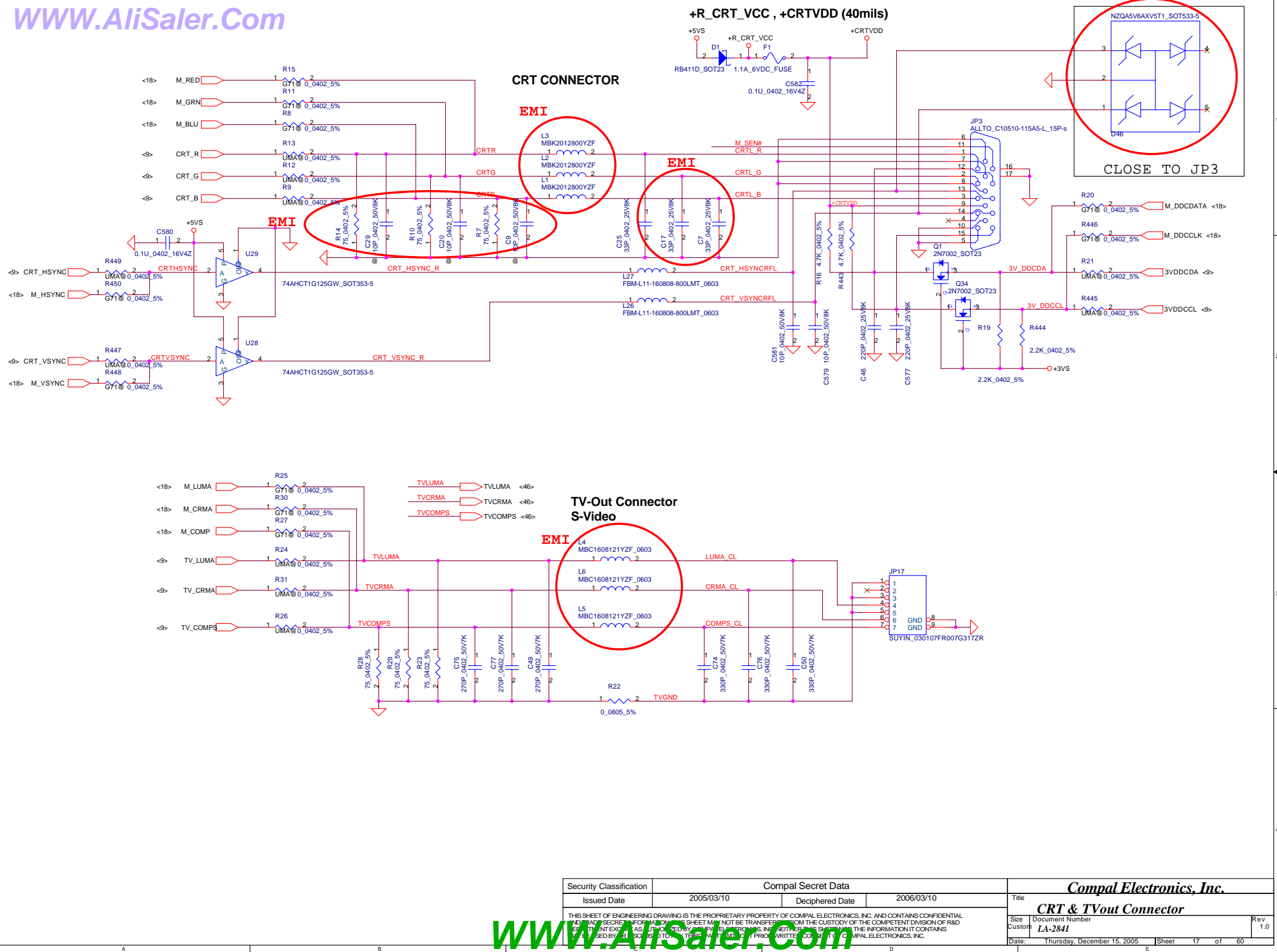
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* (Default)	No Stuff	CLK_Rd	CLK_Re	CLK_Rf
533MHz	Stuff	CLK_Rd	CLK_Re	CLK_Rf
	No Stuff	CLK_Ra	CLK_Rb	CLK_Rc
667MHz	Stuff	CLK_Rd	CLK_Rf	
	No Stuff	CLK_Ra	CLK_Rb	CLK_Rc
		CLK_Re		



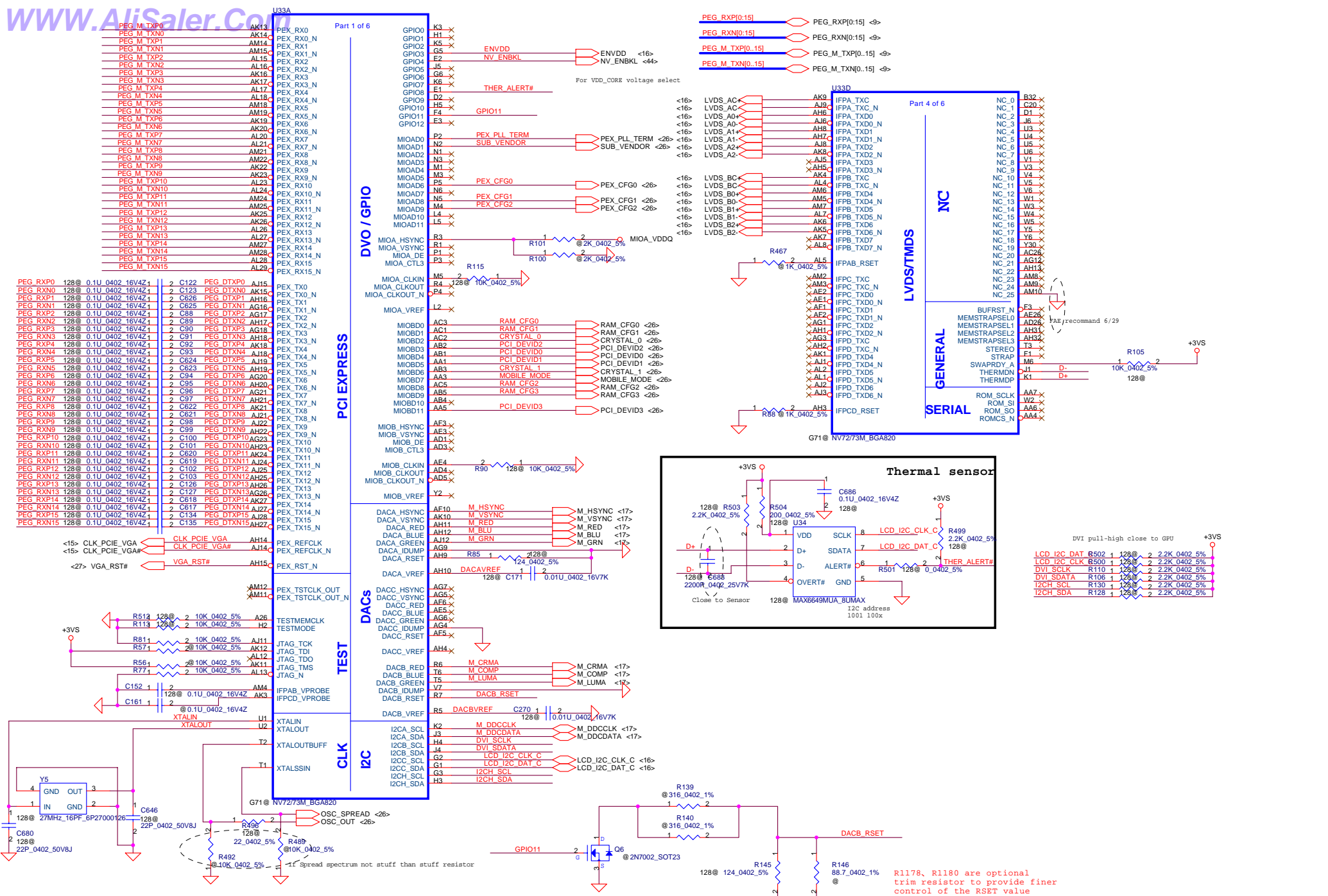
## LCD Panel &amp; inverter Connector



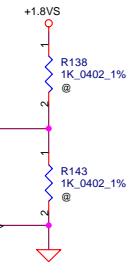
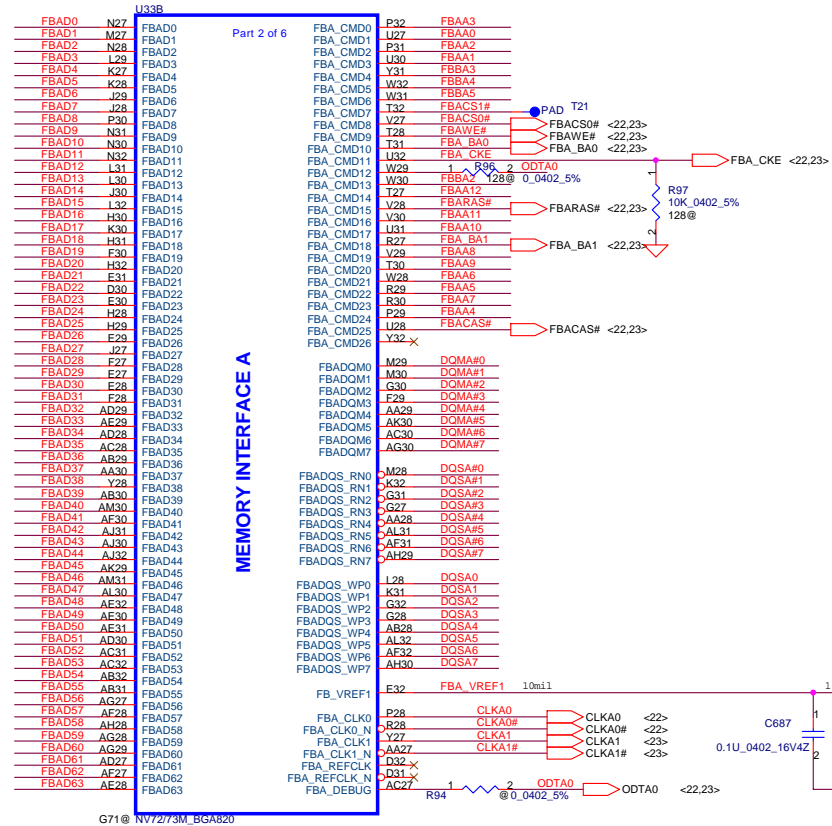
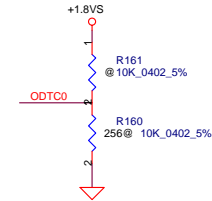
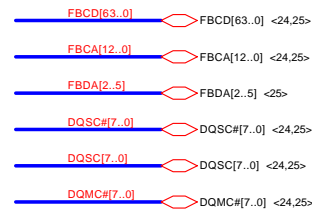
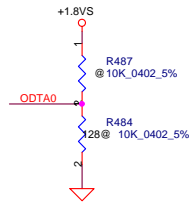
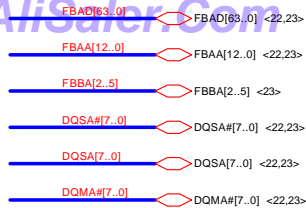
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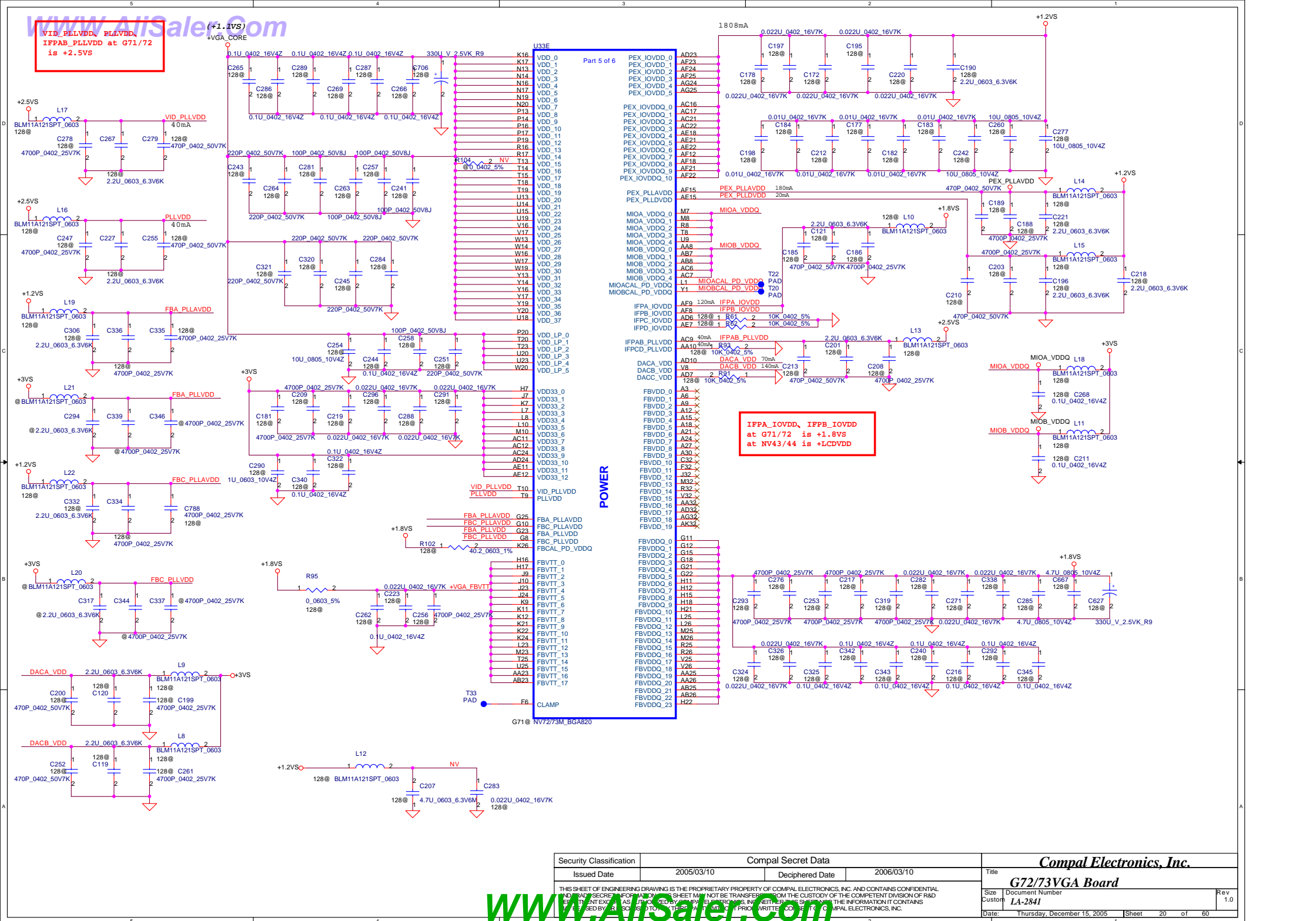
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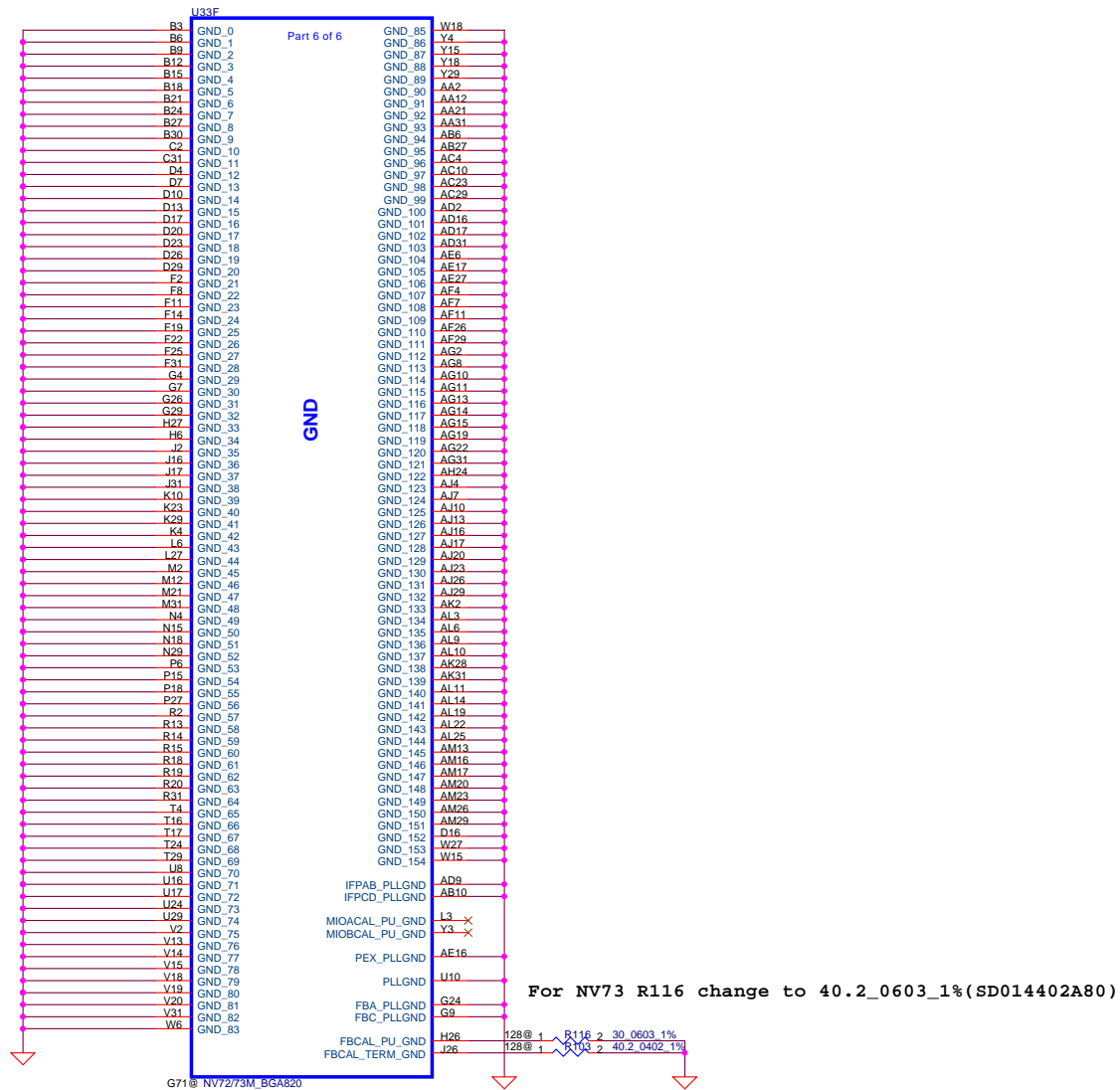
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Issued Date	2005/03/10	Deciphered Date	2006/03/10	Title	
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				Sheet	18 of 60



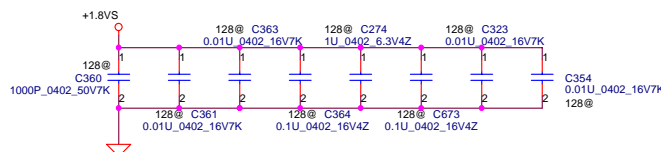
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				Date	Thursday, December 15, 2005
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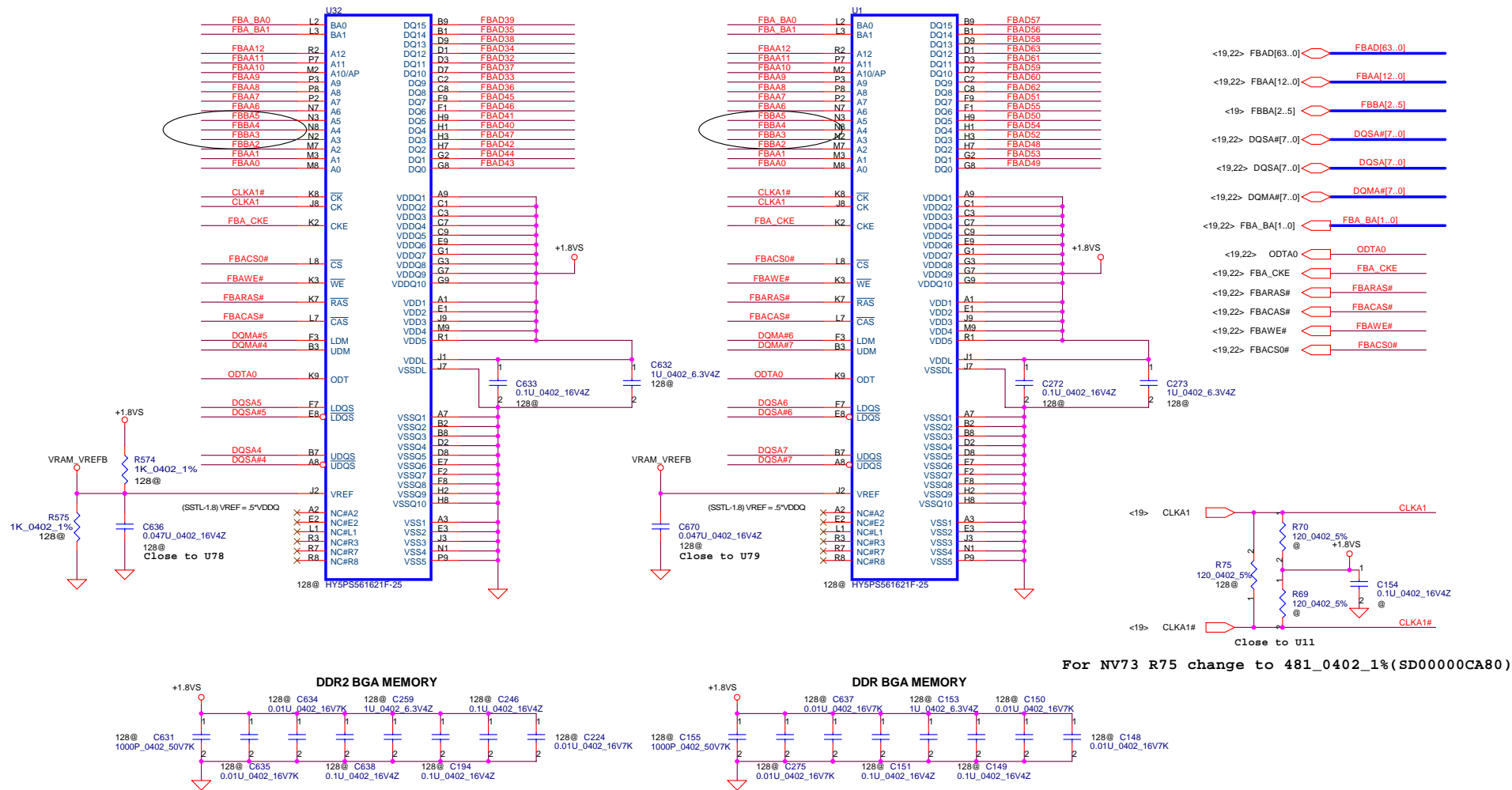
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Issued Date	2005/03/10	Deciphered Date	2006/03/10	Title	
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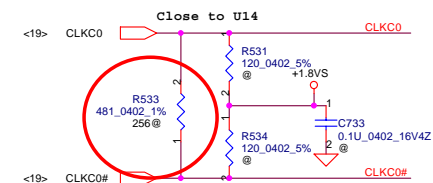
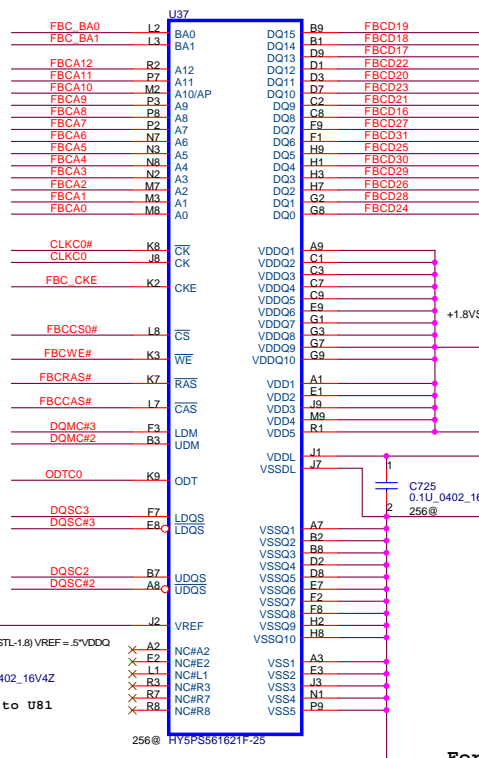
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Size	Document Number	Rev		1.0	
Custom	LA-2841	Date:		Thursday, December 15, 2005	
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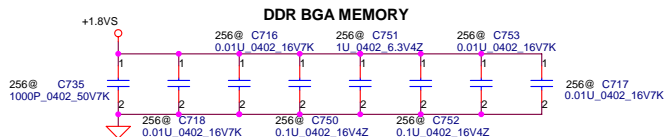
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				Date:	Thursday, December 15, 2005
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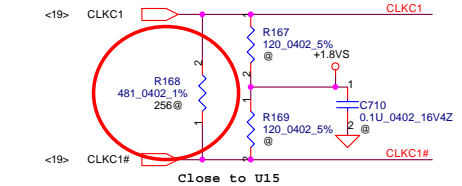
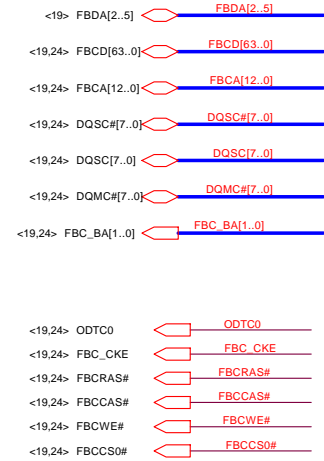
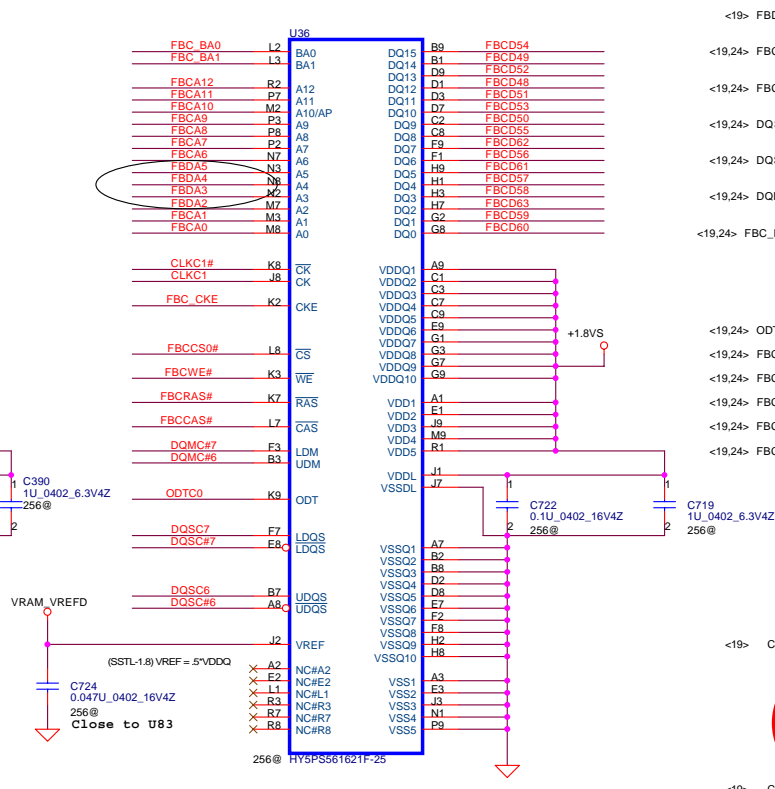
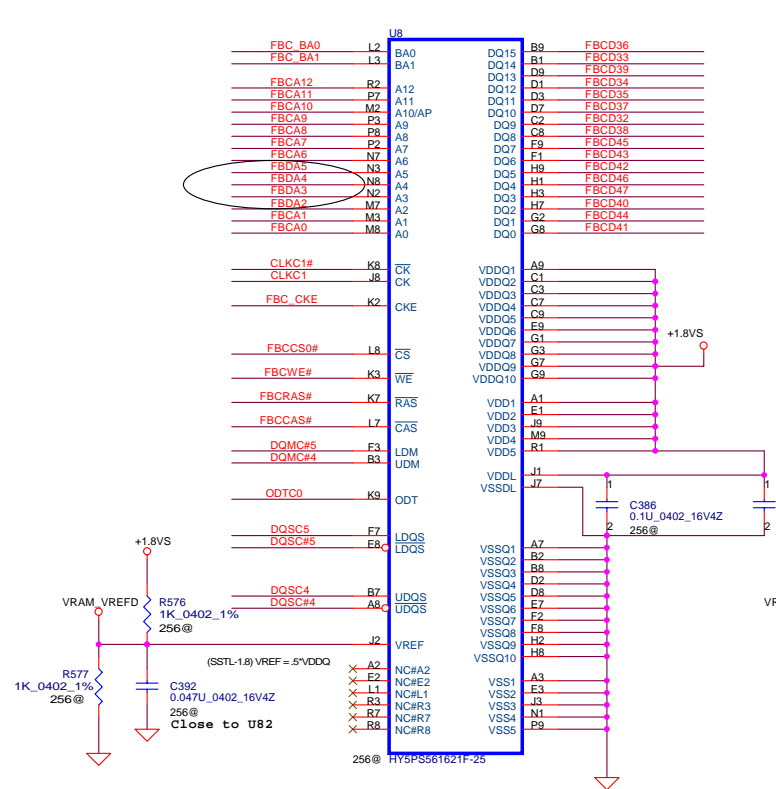
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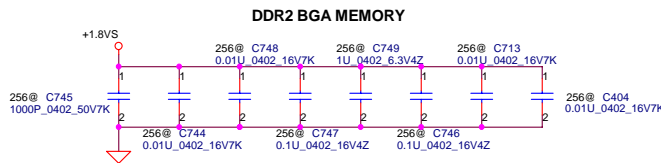
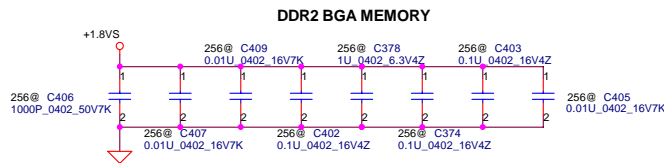
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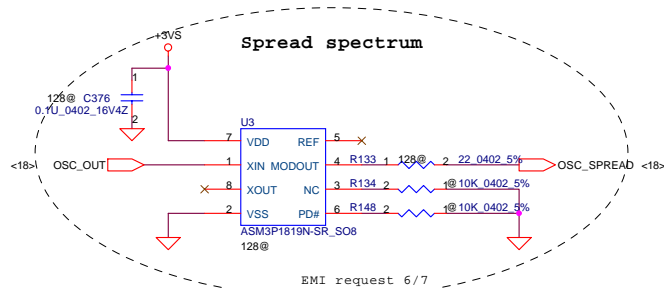
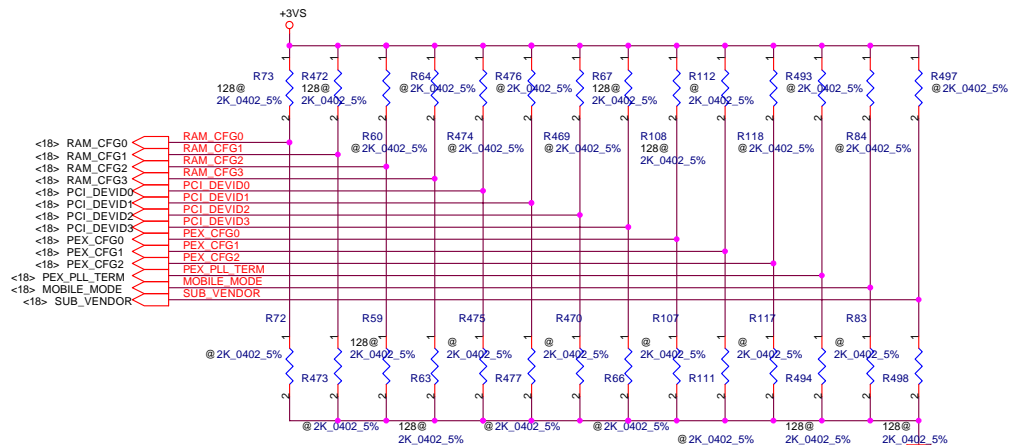
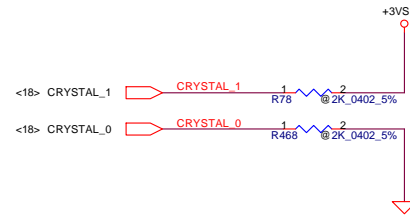


<b>Compal Electronics, Inc.</b>			
Title			
<b>G71/72VGA Board</b>			
Size	Document Number		Rev
Custom	<b>LA-2841</b>		<b>1.0</b>
Date:	Thursday, December 15, 2005	Sheet	24 of 60

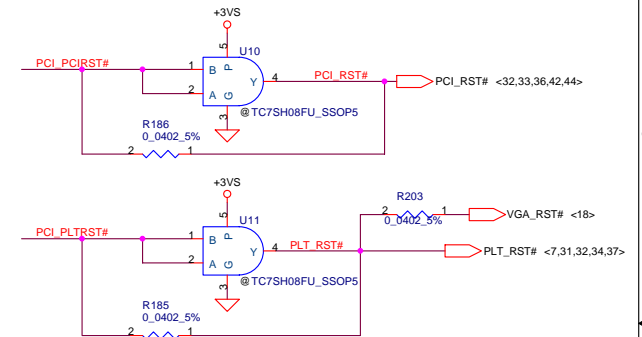
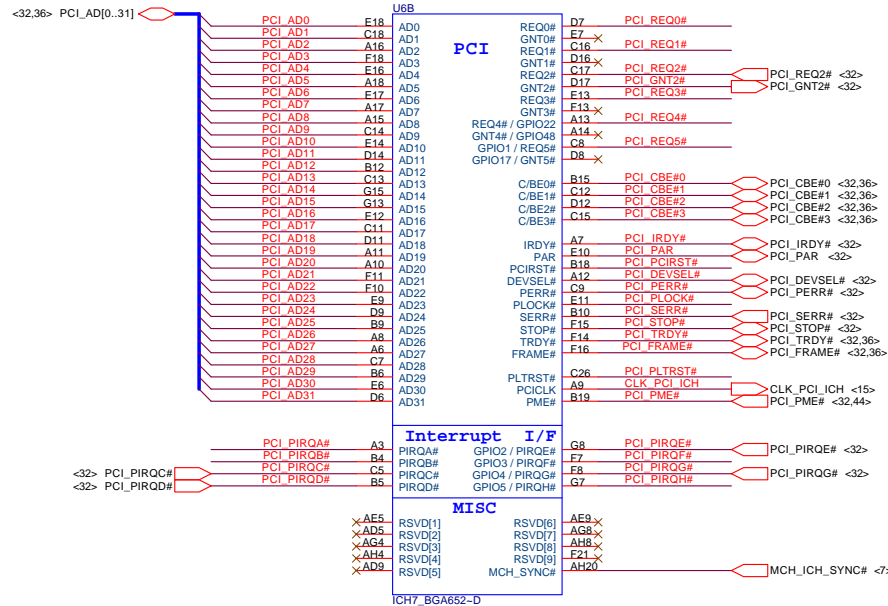
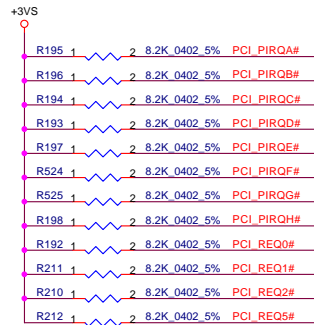
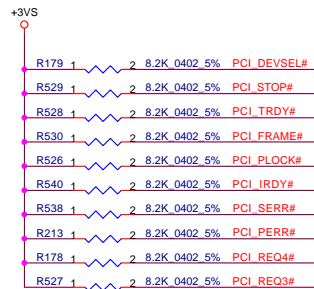


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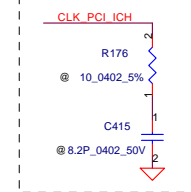




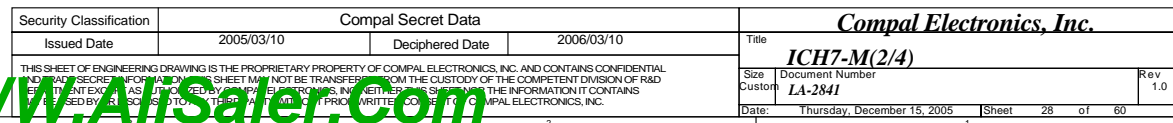
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ROM_TYPE[1:0]	MIOBD[11:10]	Parallel=00, SERIAL M25P10=01, Serial SST45VF=10	01	
SUB_VENDOR	MIOAD1	VBIOS on card (pull high) VBIOS with system BIOS (pull down)	0	
PEX_PLL_TERM	MIOAD0		0	
PEX_CFG[2:0]	MIOAD[9,8,6]	Overridden	001	
RAM_CFG[3:0]		16Mx16 (1.8V or 2.5V)Hynix X 4pcs	0011	
		16Mx16 (1.8V or 2.5V)Infineon X 4pcs	0010	
		16Mx16 (1.8V or 2.5V)Samsung X 4pcs	0001	
		16Mx16 (1.8V or 2.5V)Hynix X 8pcs	1011	
		16Mx16 (1.8V or 2.5V)Infineon X 8pcs	1010	
		16Mx16 (1.8V or 2.5V)Samsung X 8pcs	1001	
PCI_DEVID[3:0]	R01 VTPD[5:3] MIOA_HSYNC	NV72M	1000	
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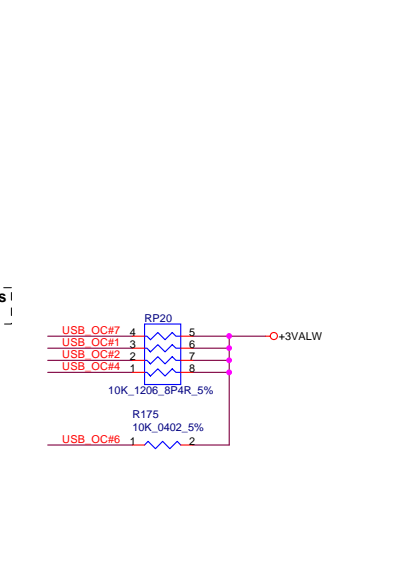
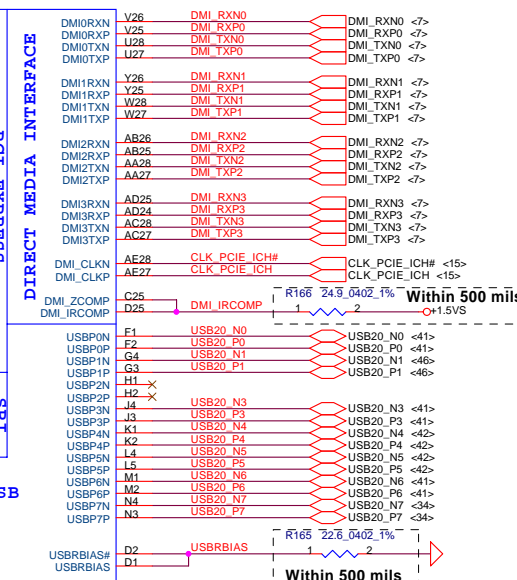
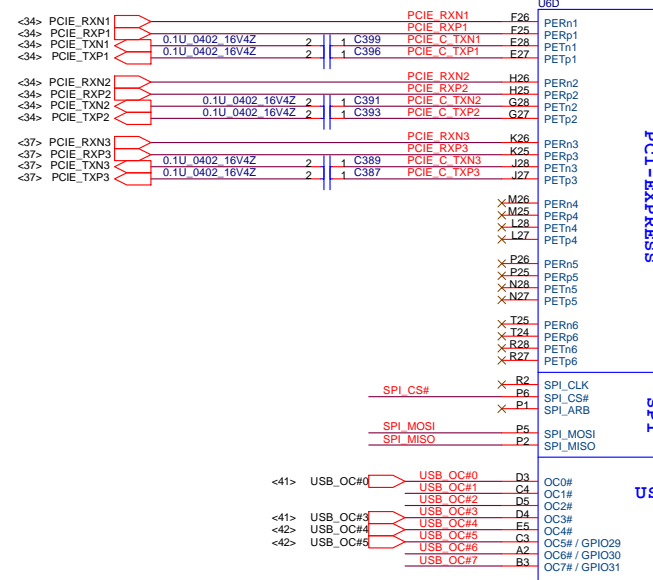
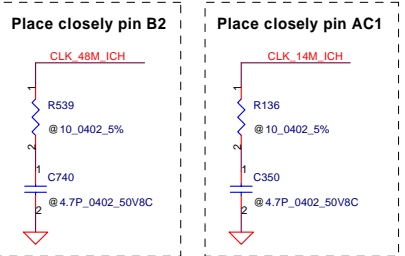
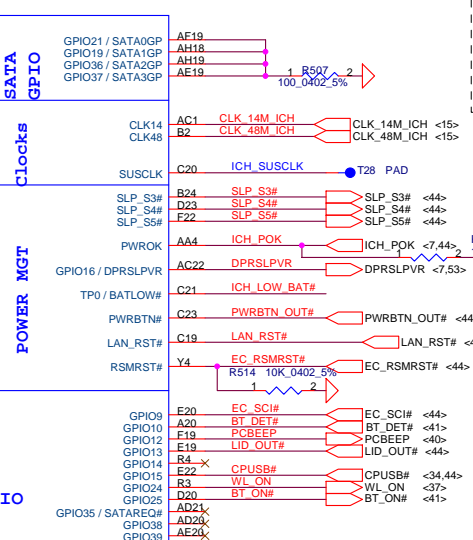
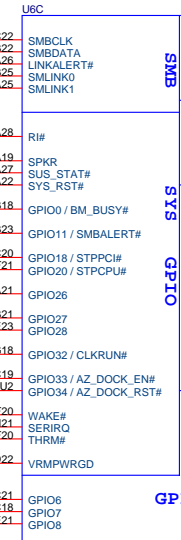
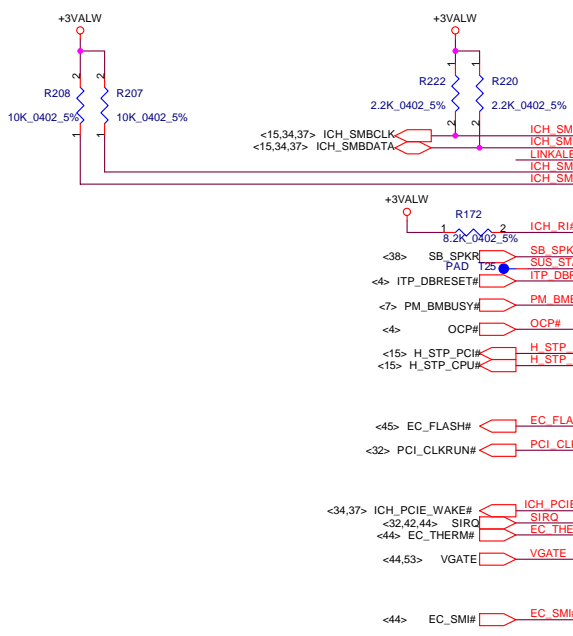
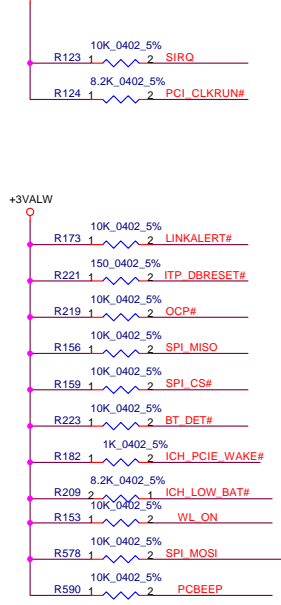


Place closely pin A9

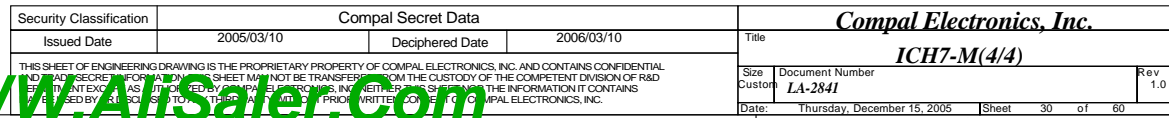


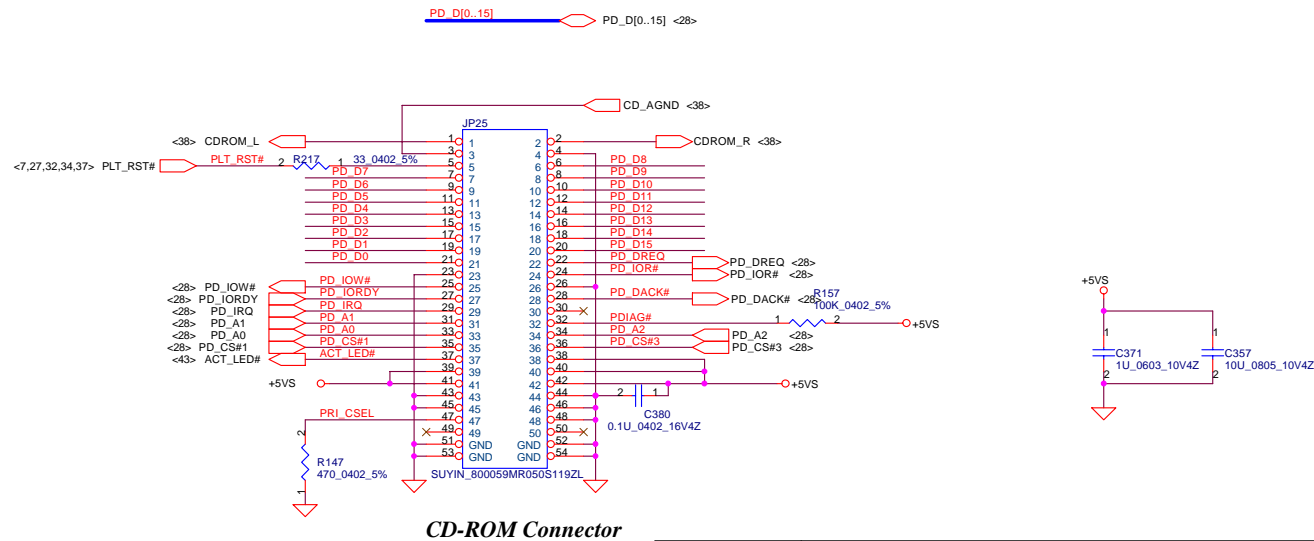
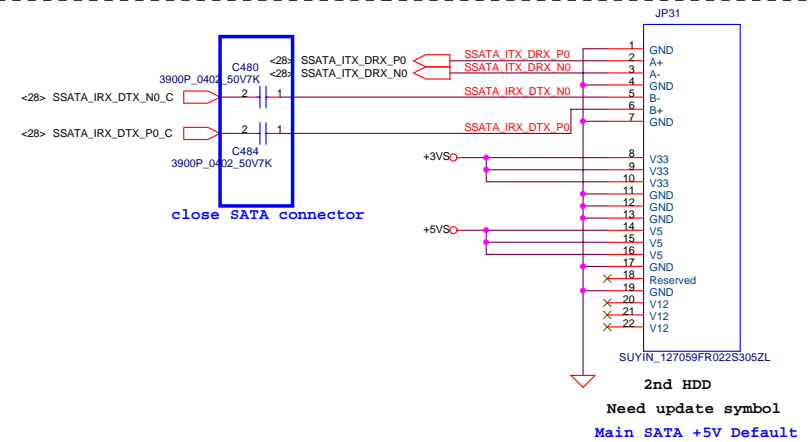
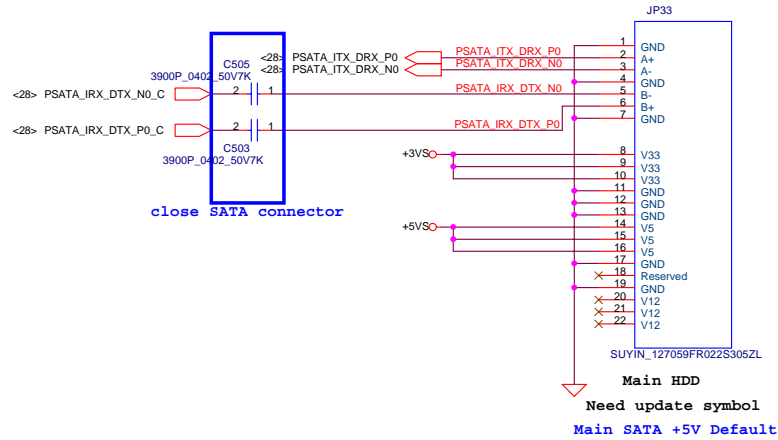
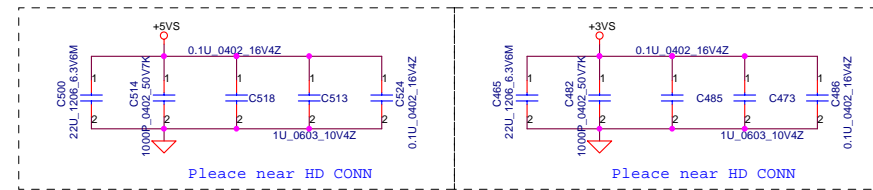
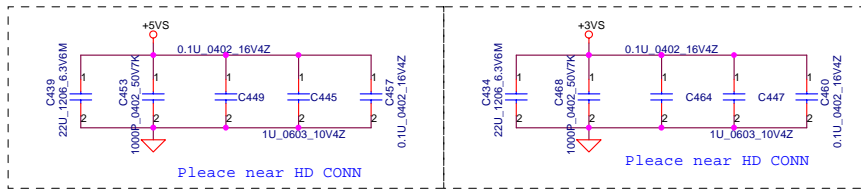
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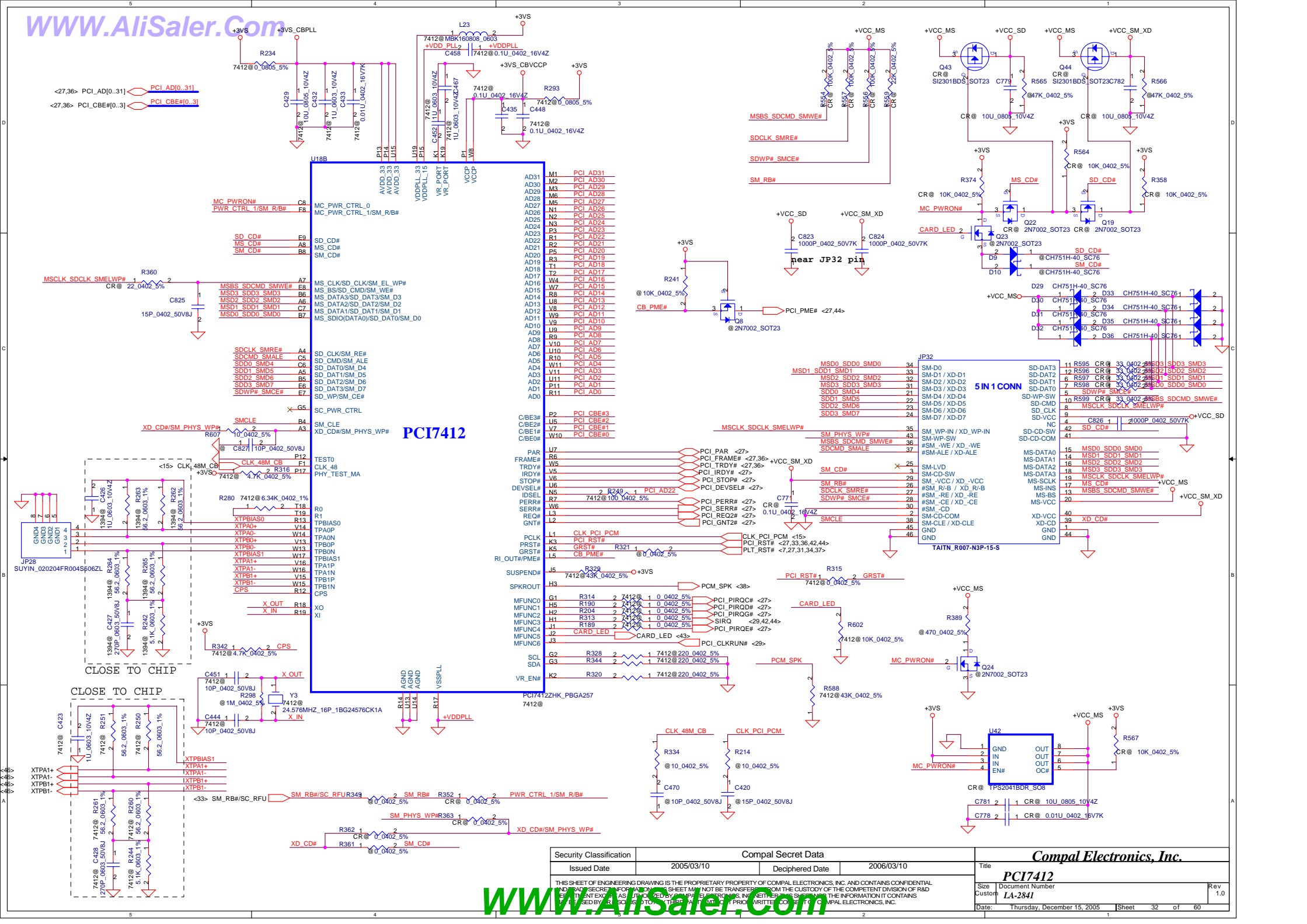


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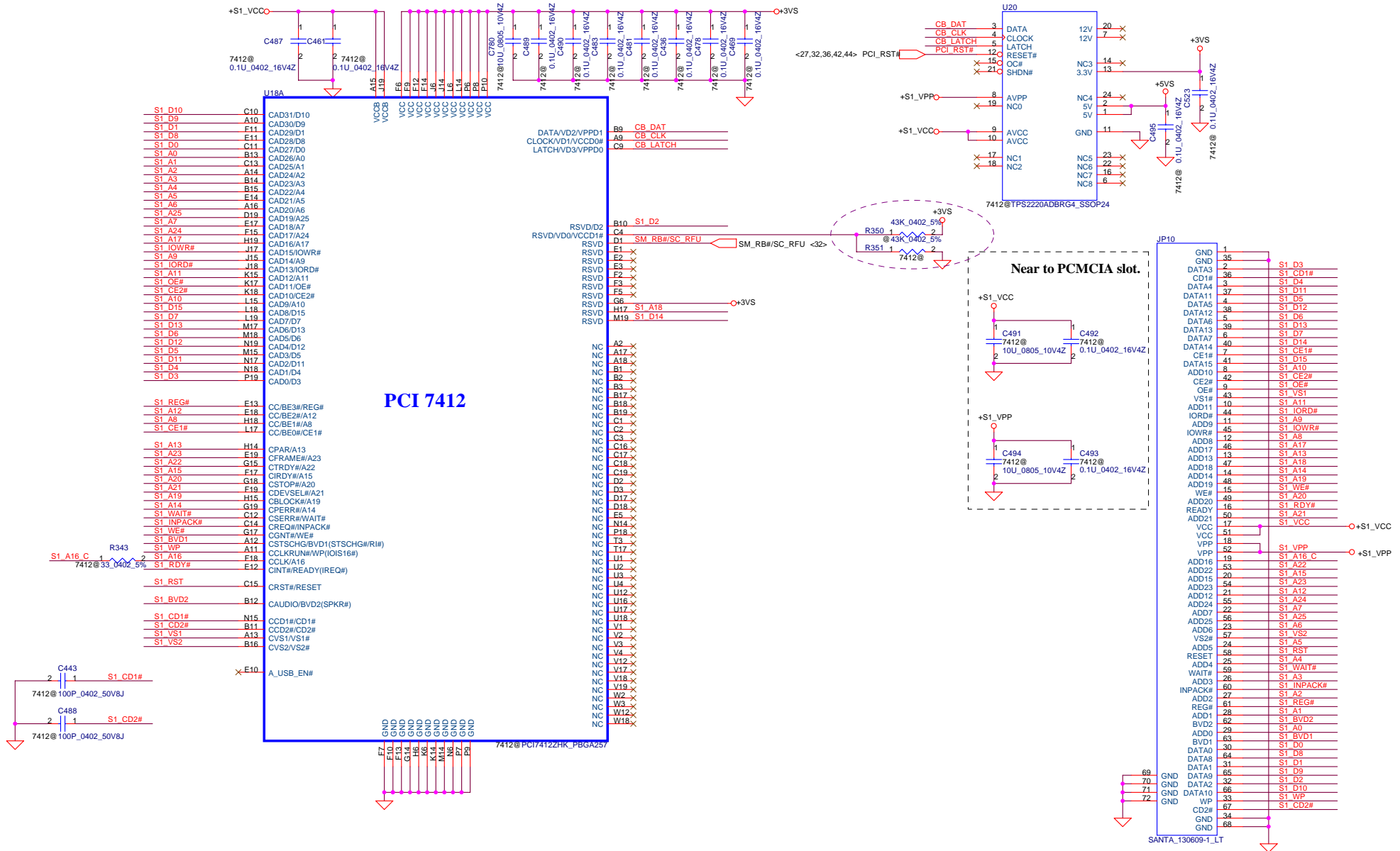


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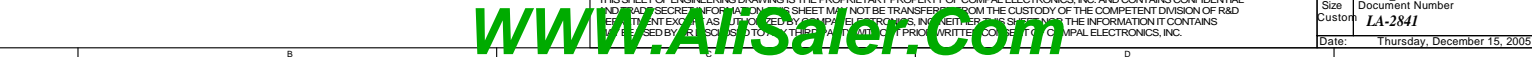
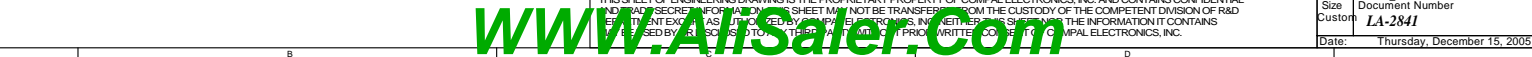
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## CardBus Power Switch

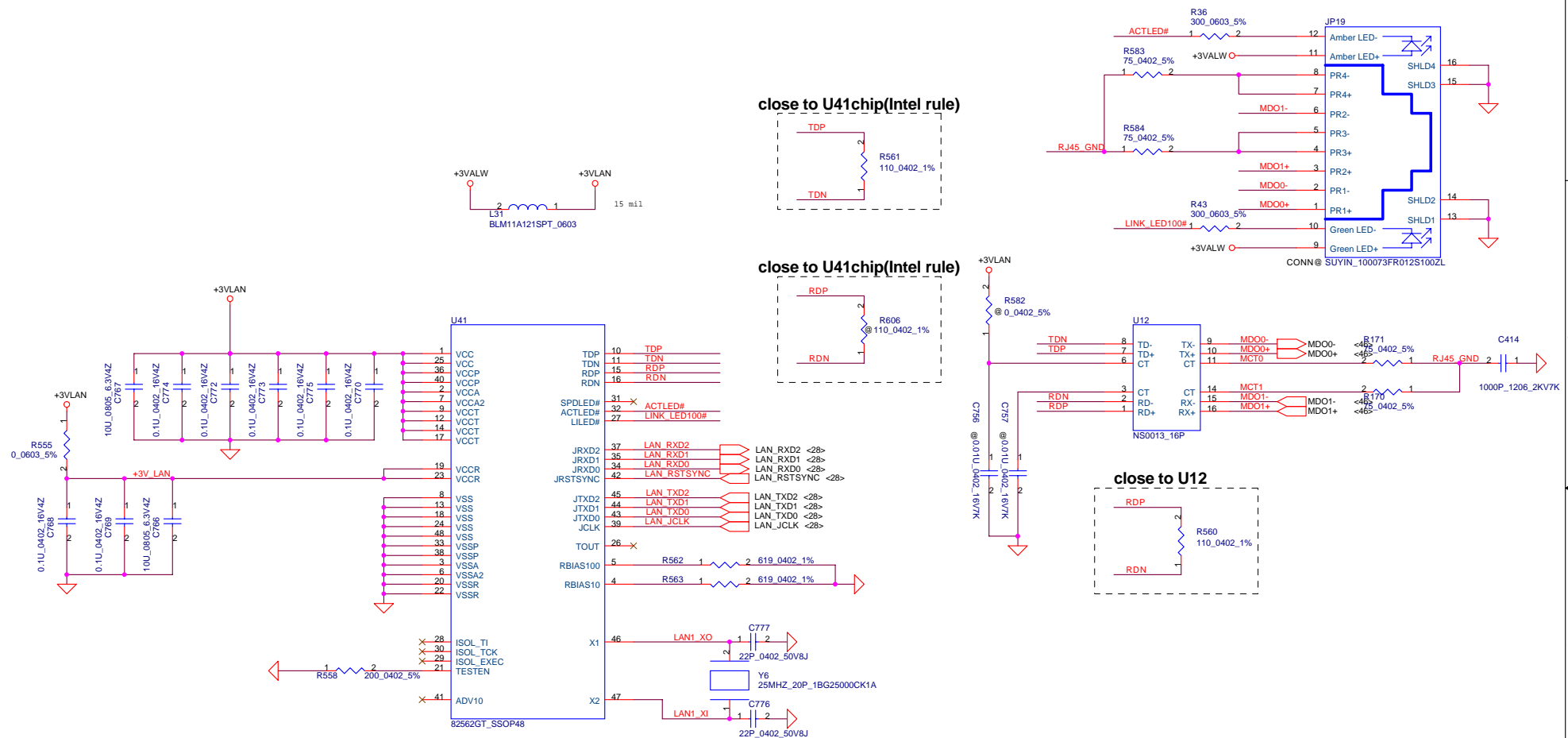


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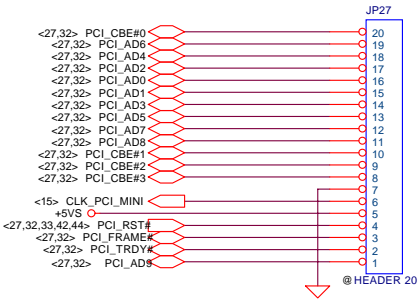
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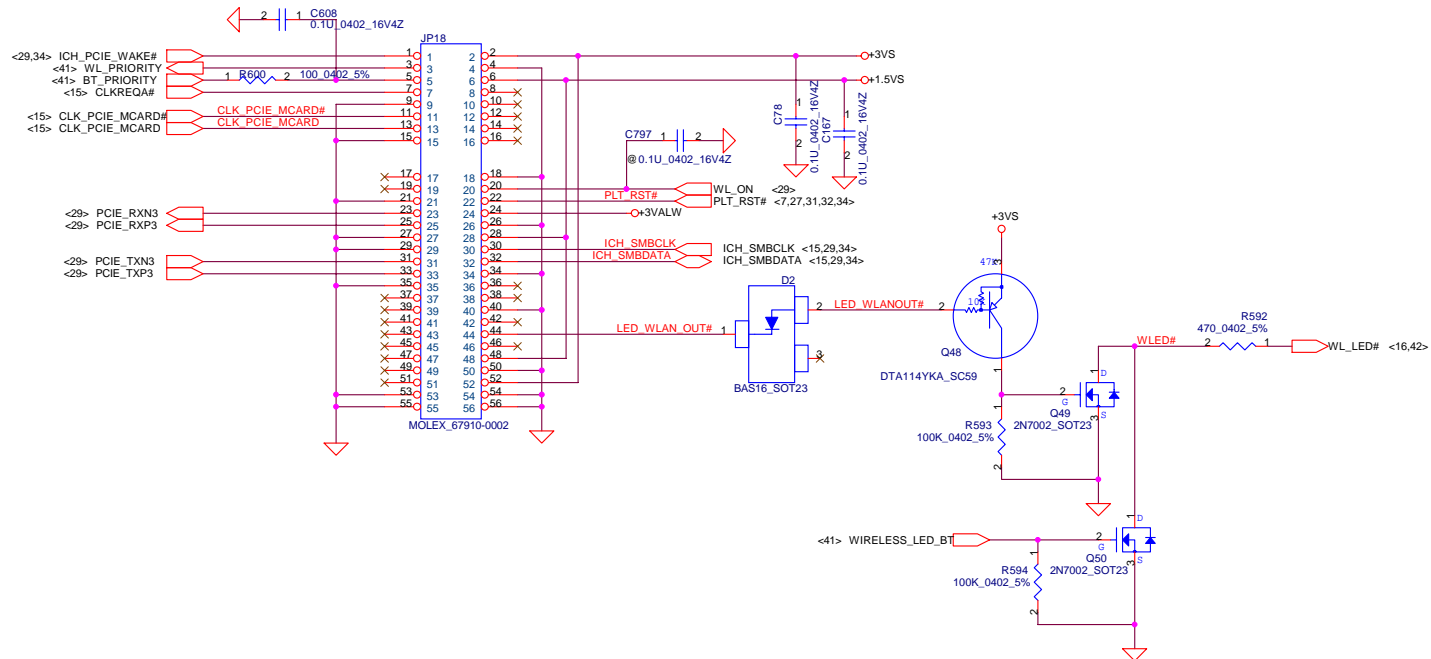
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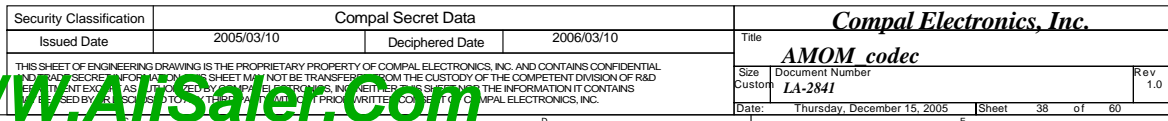
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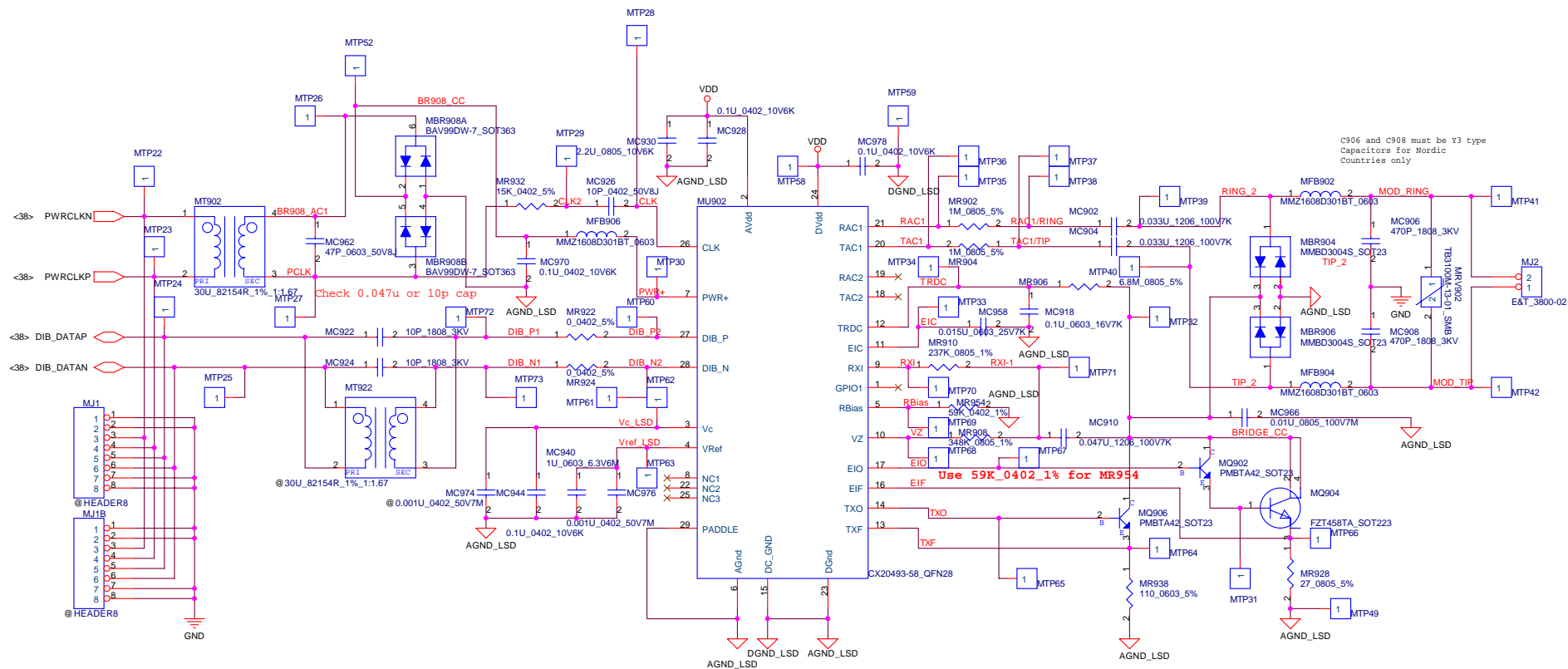


## Mini-Express Card(Slot 1-WLAN)

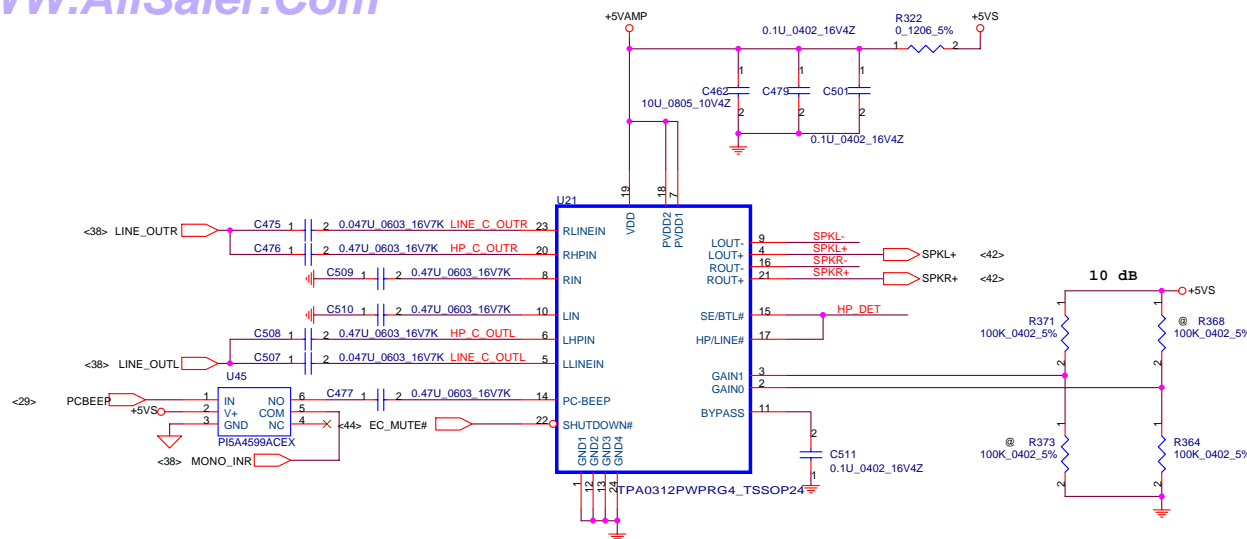


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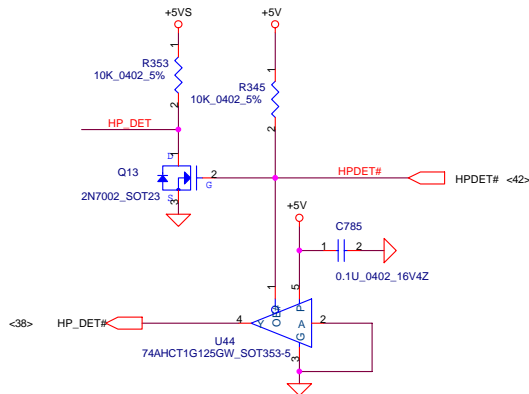
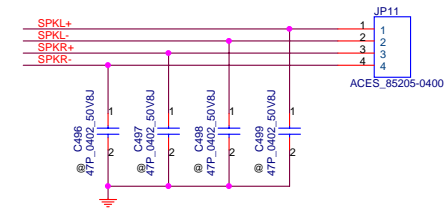


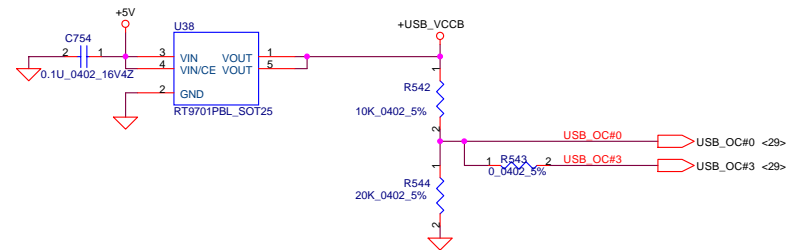
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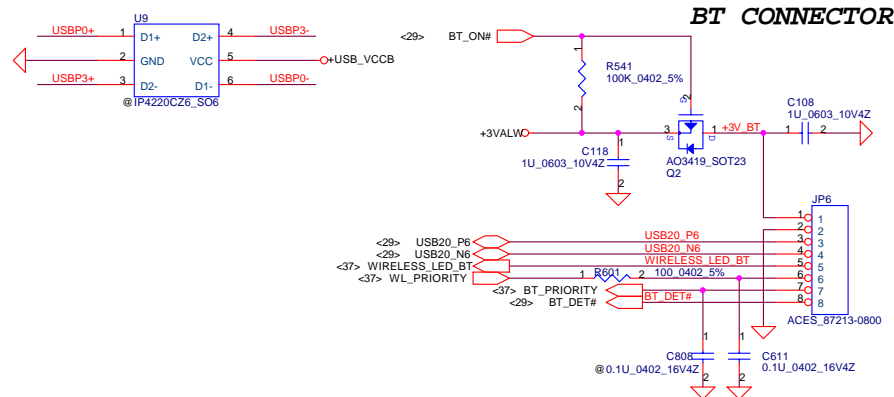
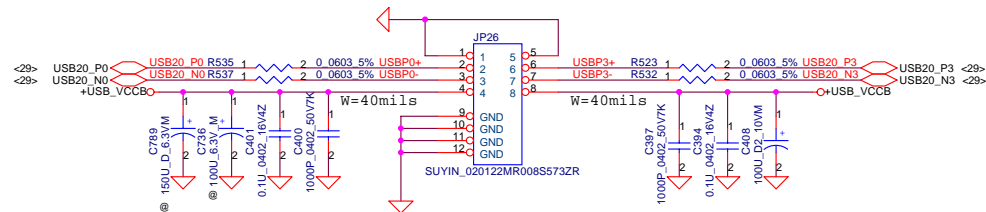
# HEADPHONE OUT/LINE OUT

Gain Settings			
GAIN0	GAIN1	SE/BTL#	Av(inv)
0	0	0	6 dB
0	1	0	* 10 dB
1	0	0	15.6 dB
1	1	0	21.6 dB
X	X	1	4.1 dB





### USB CONNECTOR (Left side)

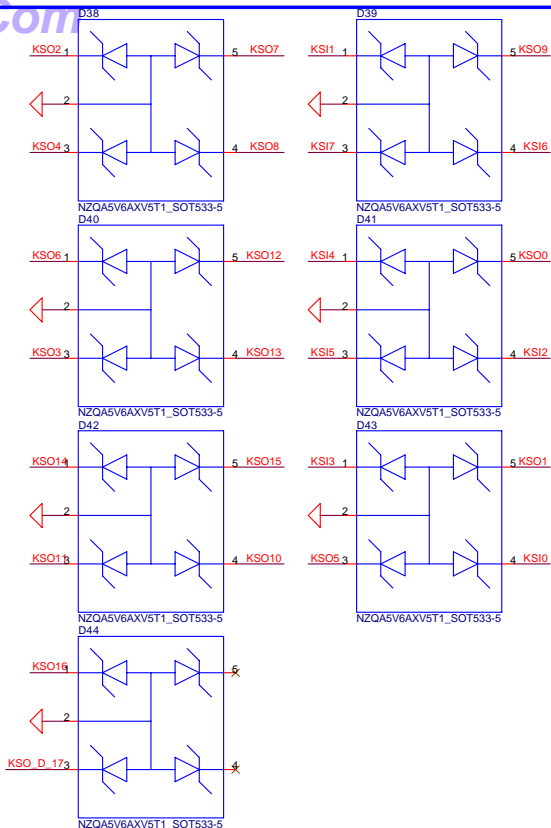
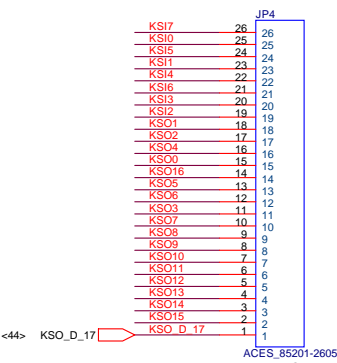


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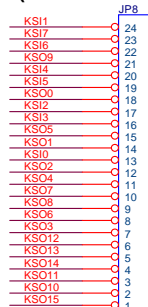
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Issued Date	2005/03/10	Deciphered Date	2006/03/10	Title	Bluetooth & USB CONN.
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				Customer	LA-2841
				Date:	Thursday, December 15, 2005
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# INT\_KBD CONN.( TYPE "D" KB)

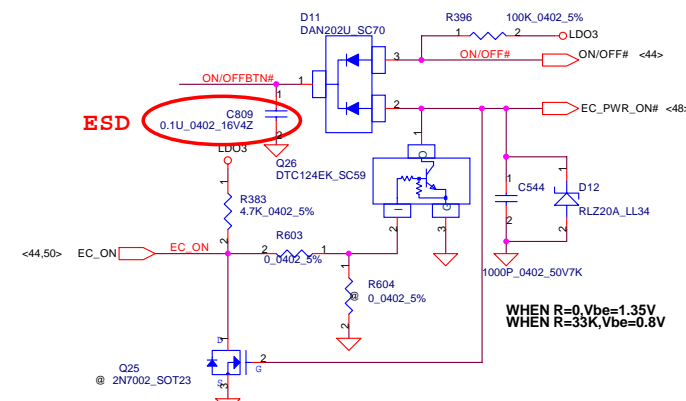
KSII[0..7] <44>  
KSO[0..16] <44>



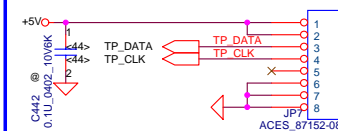
## 15.4 ( TYPE "C" KB)



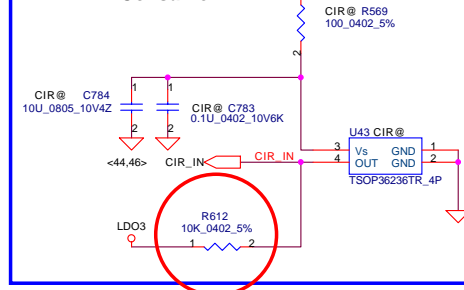
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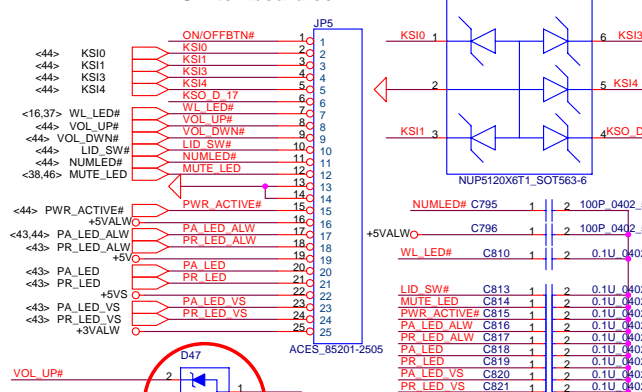
## TP to MB CONN(15.4)



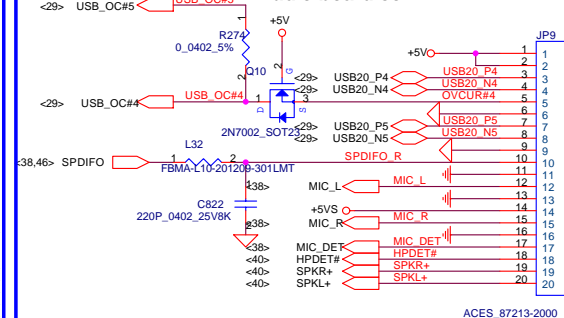
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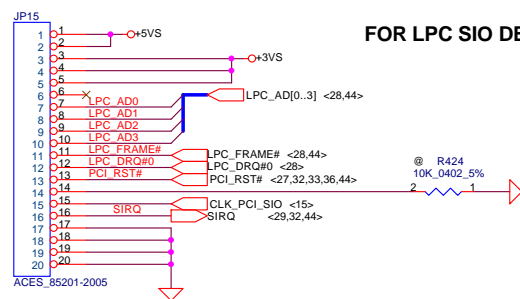
## Switch board conn



## Audio board conn



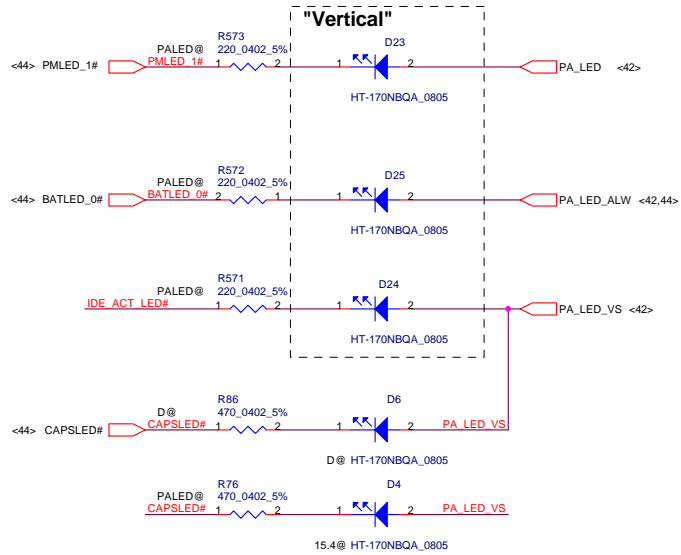
## FOR LPC SIO DEBUG PORT



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Date				Thursday, December 15, 2005	Sheet 42 of 60

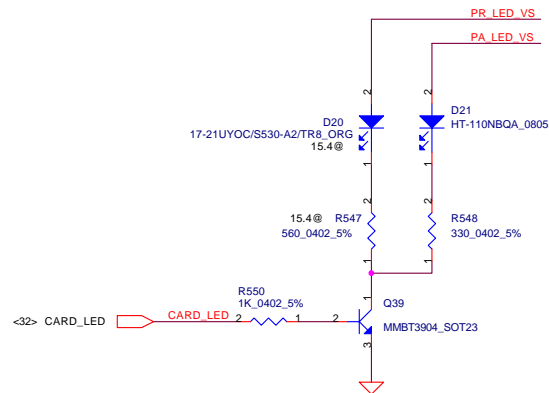
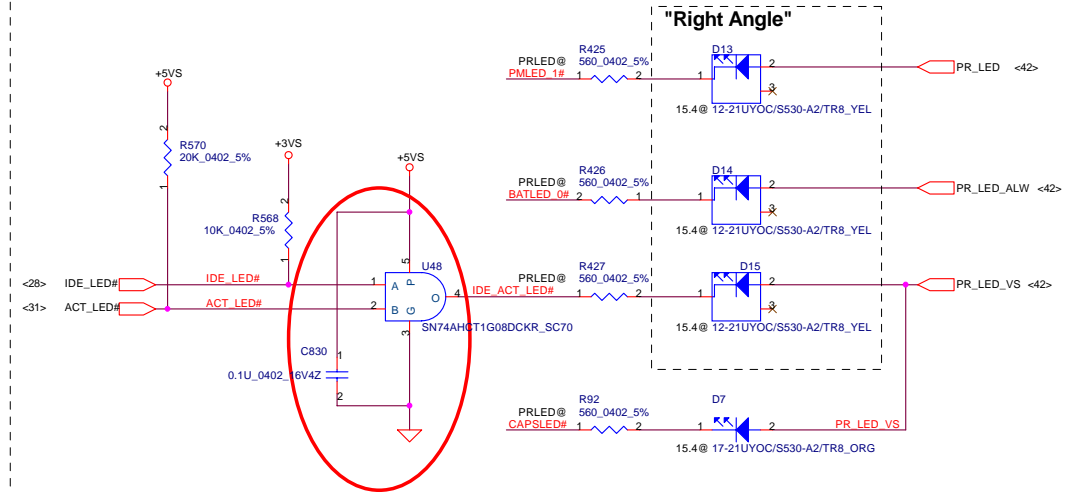
For PA

FOR POWER BUTTON BACKLIGHT SYSTEM POWER

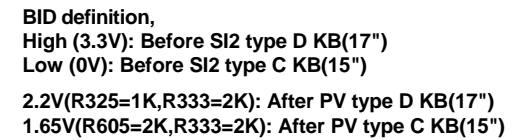


For PR

FOR POWER BUTTON BACKLIGHT SYSTEM POWER

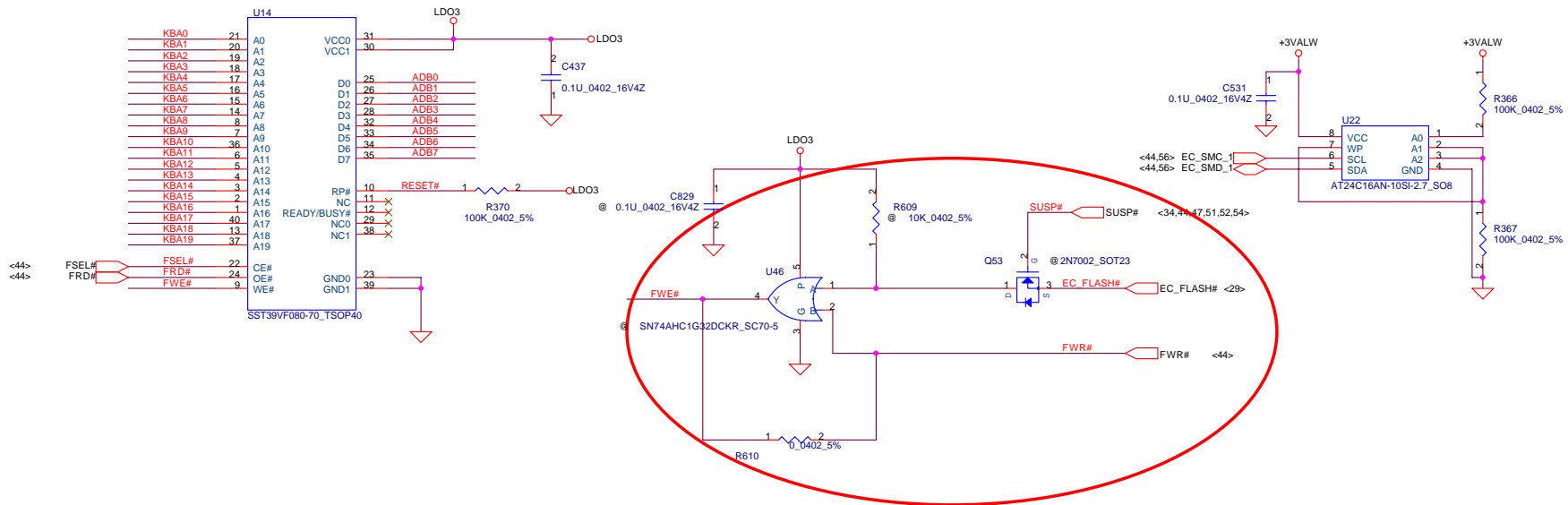
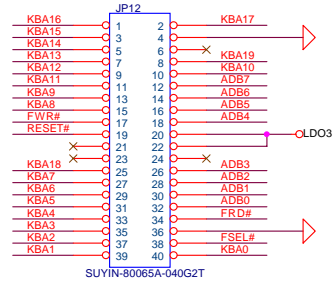


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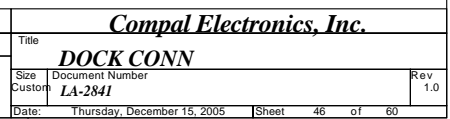


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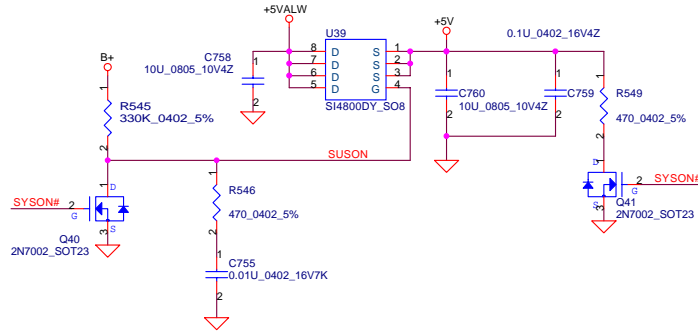
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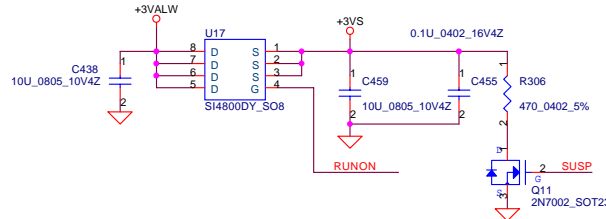
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Issued Date	2005/03/10	Deciphered Date	2006/03/10	Title		
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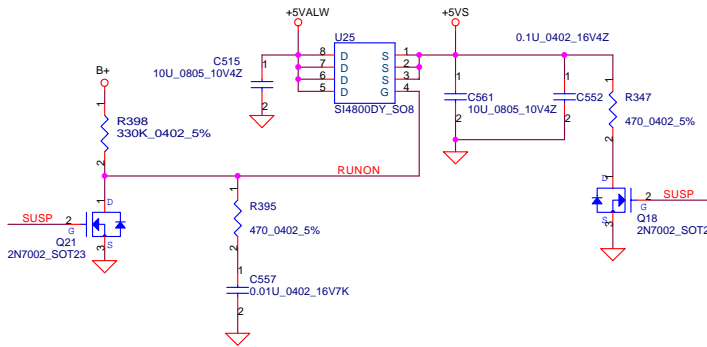
### +5VALW to +5V Transfer



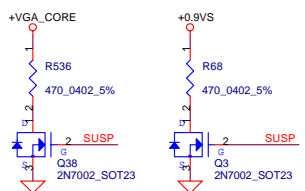
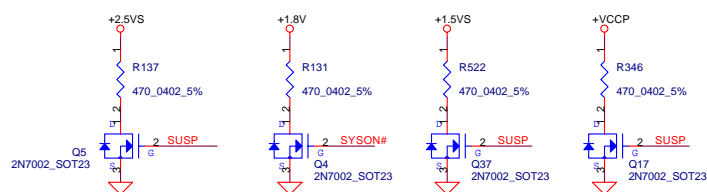
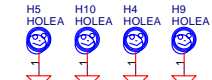
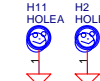
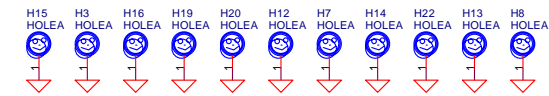
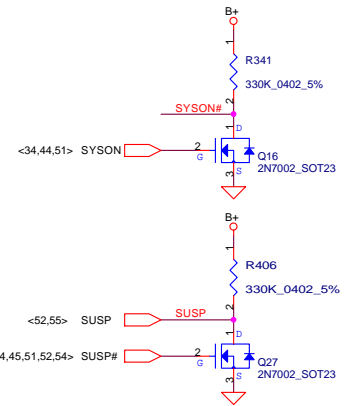
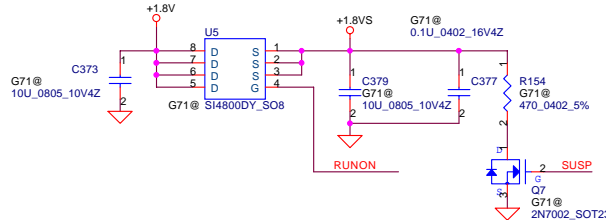
### +3VALW to +3VS Transfer



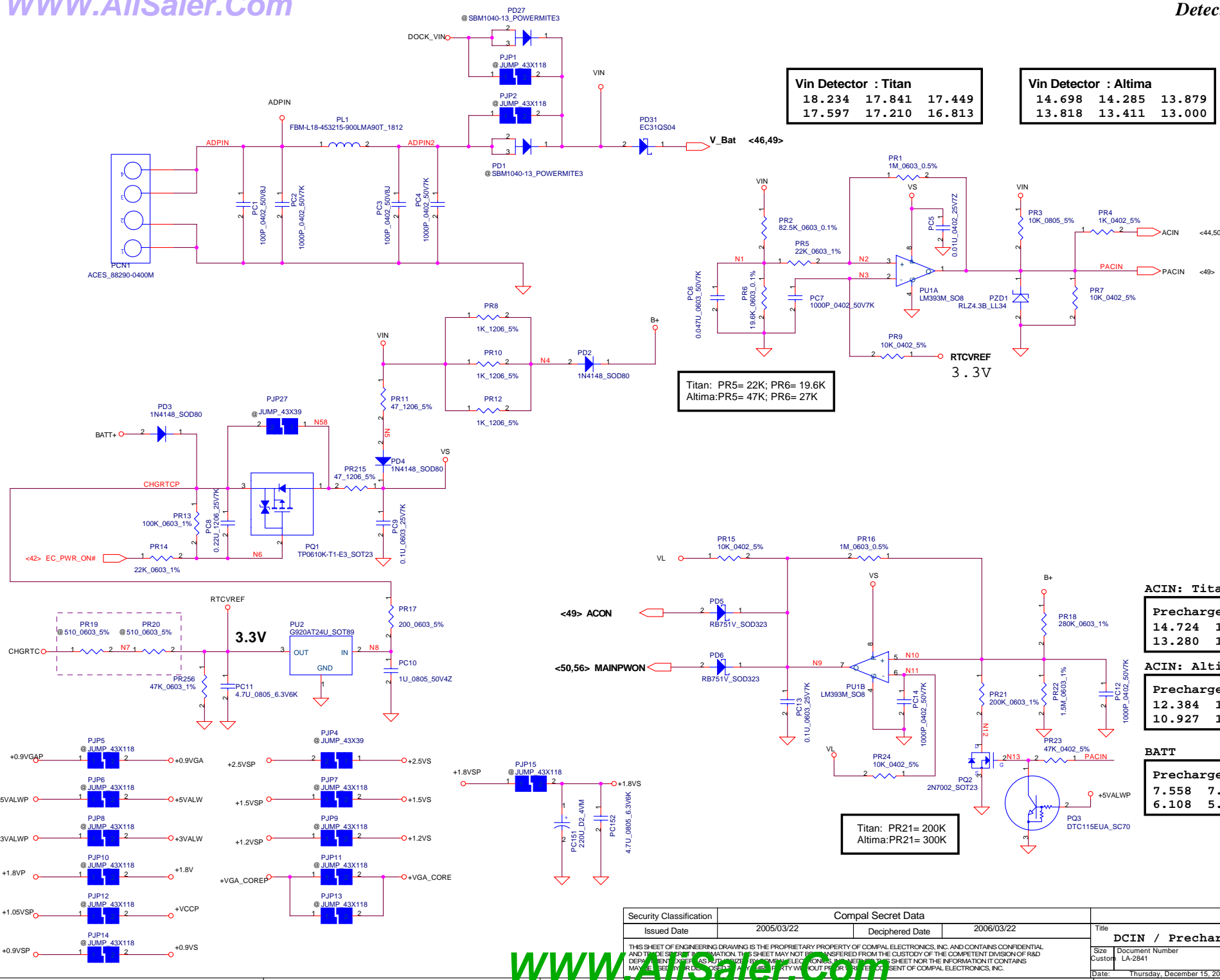
### +5VALW to +5VS Transfer

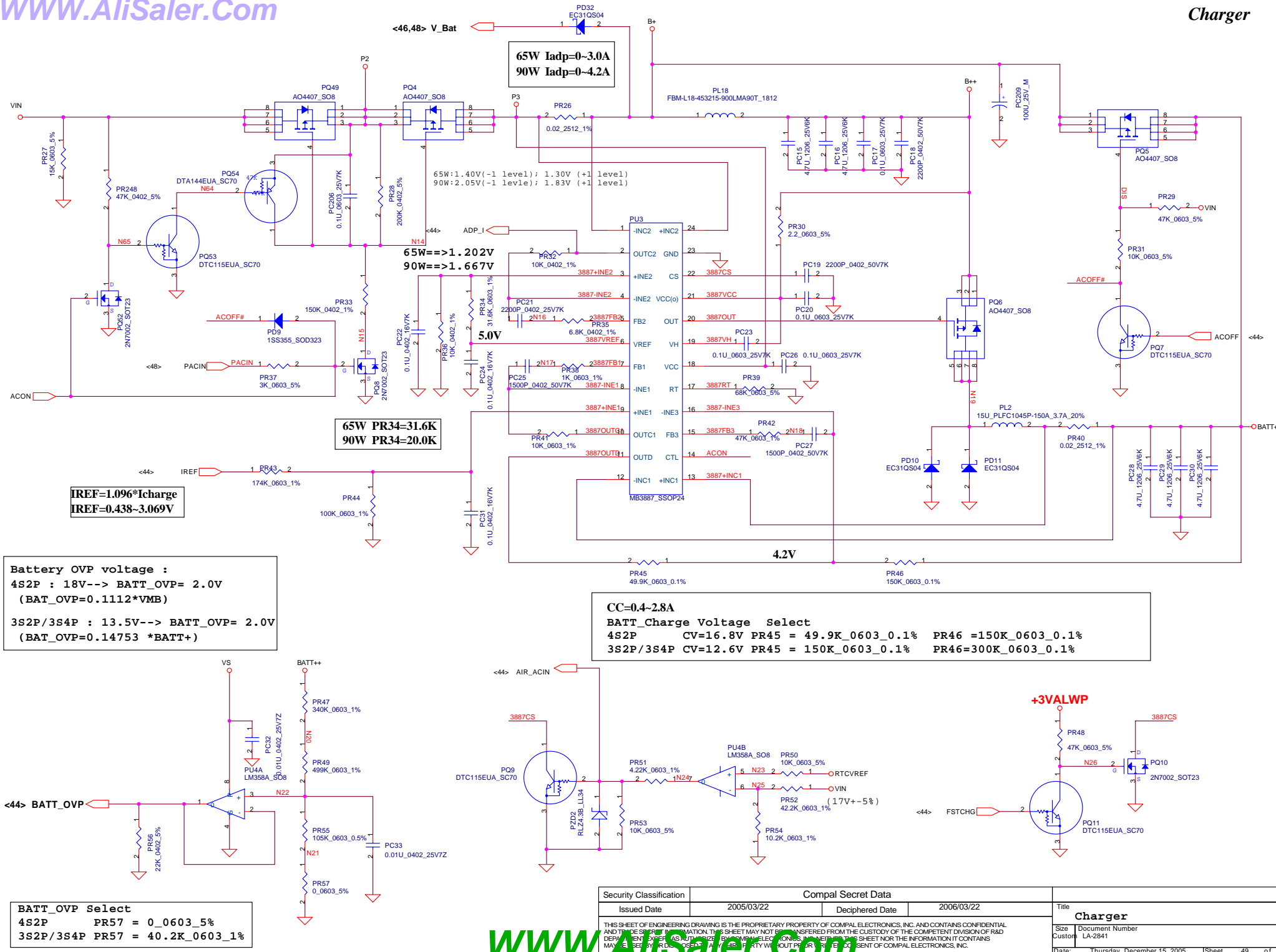


### +1.8V to +1.8VS Transfer



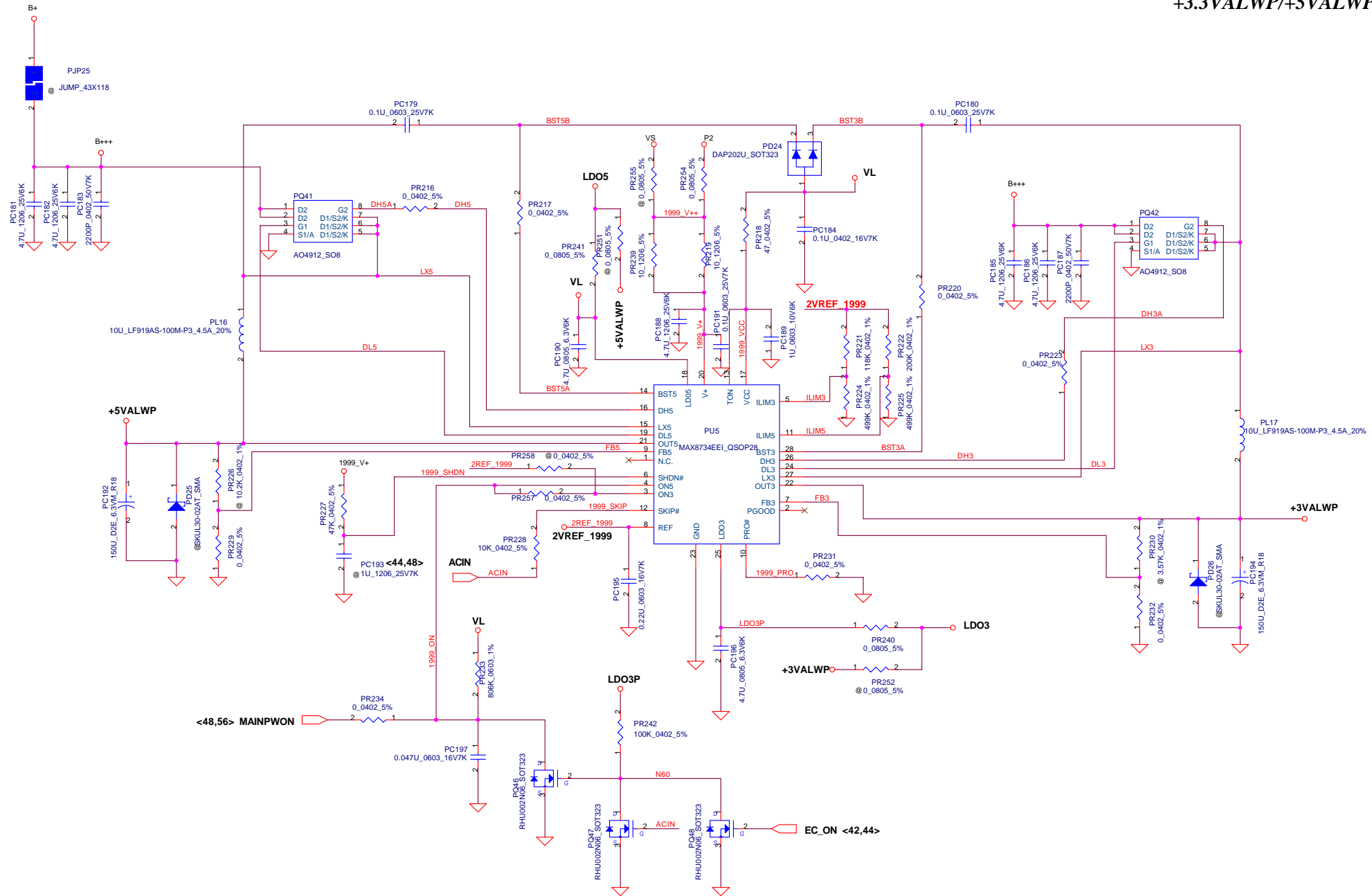
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Issued Date	2005/03/10	Deciphered Date	2006/03/10	Title	DC/DC Circuit
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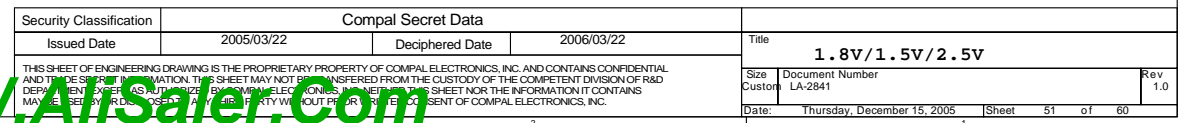


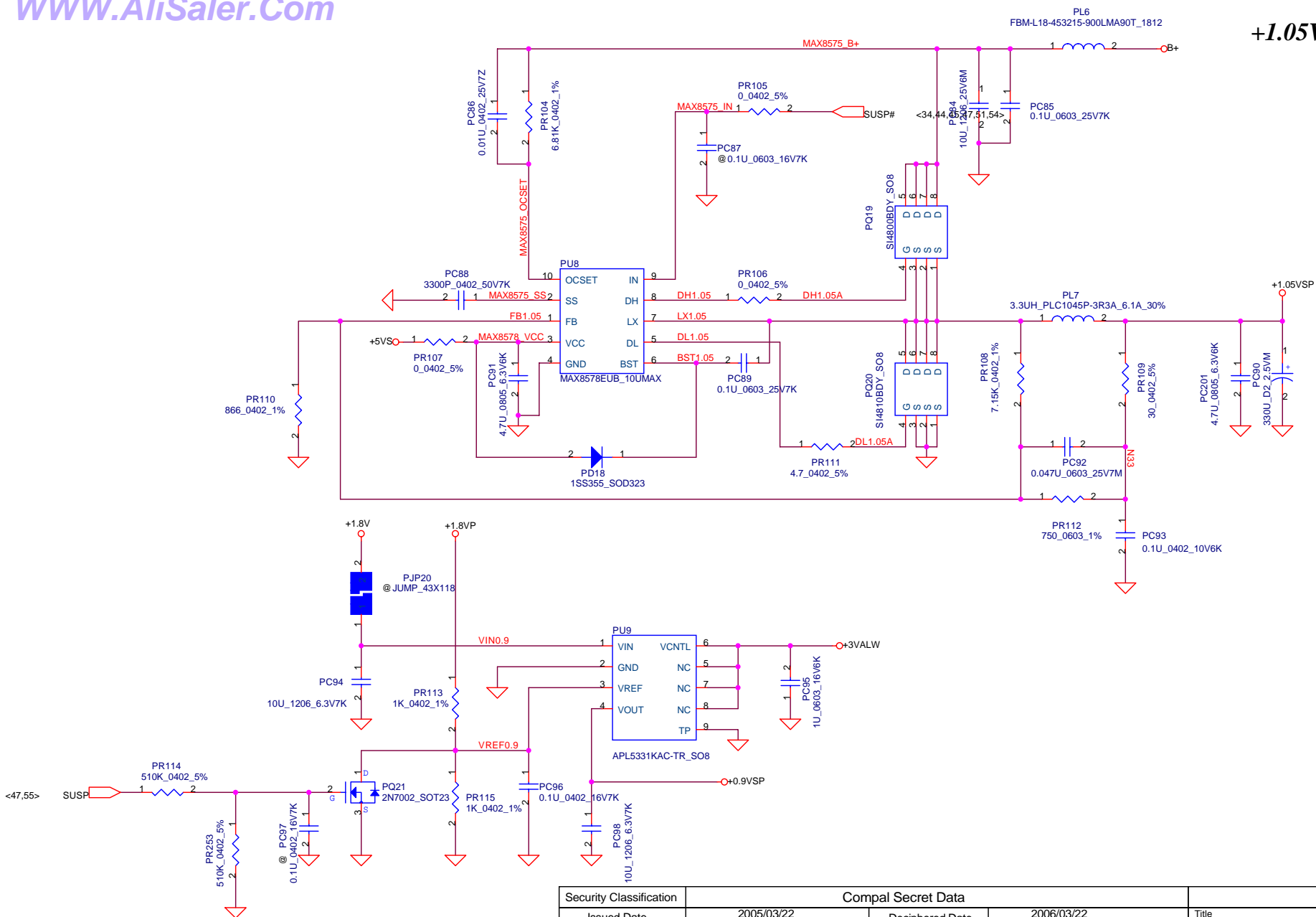
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				Size	Document Number	Rev
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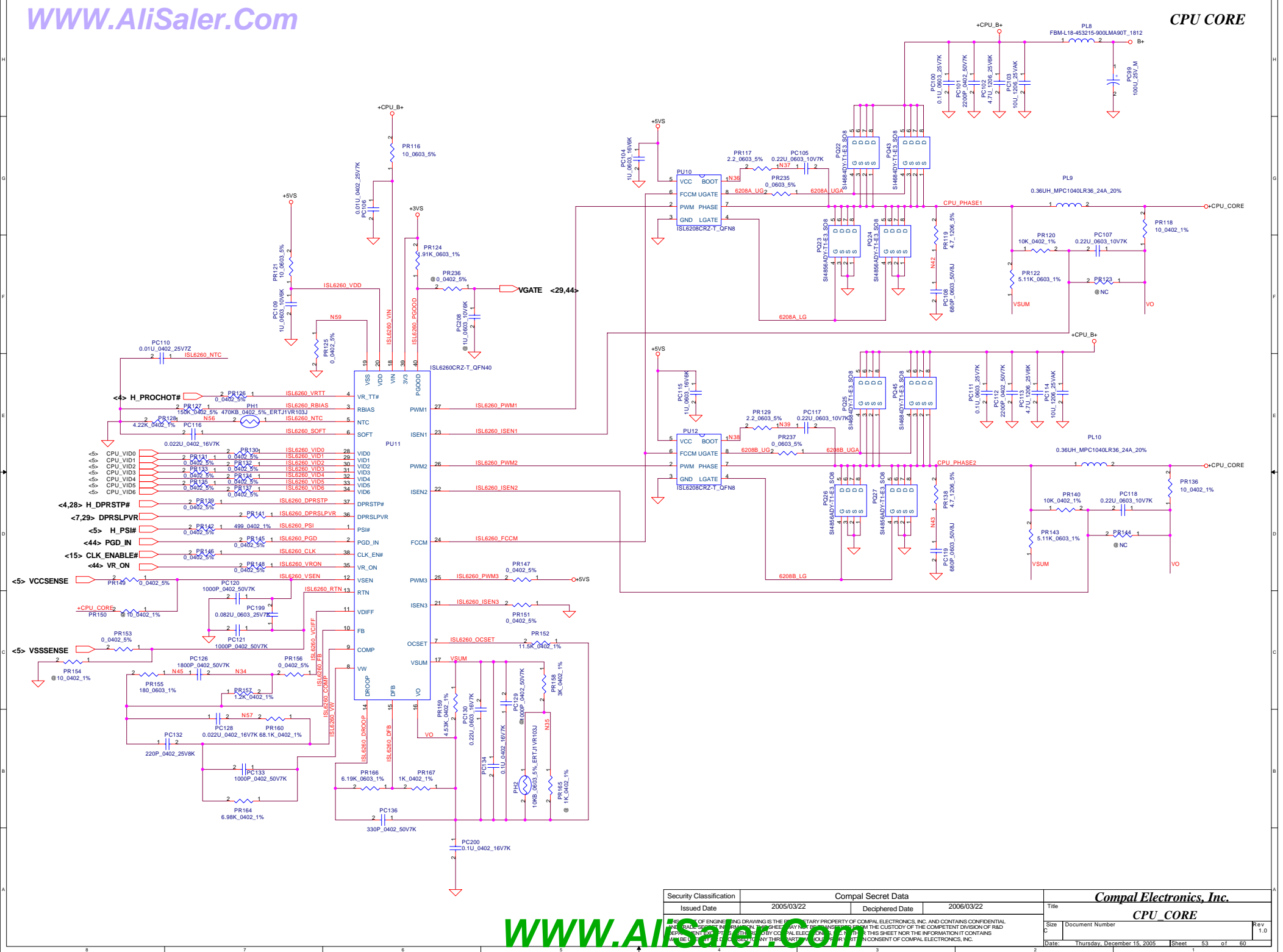
+3.3VALWP/+5VALWP



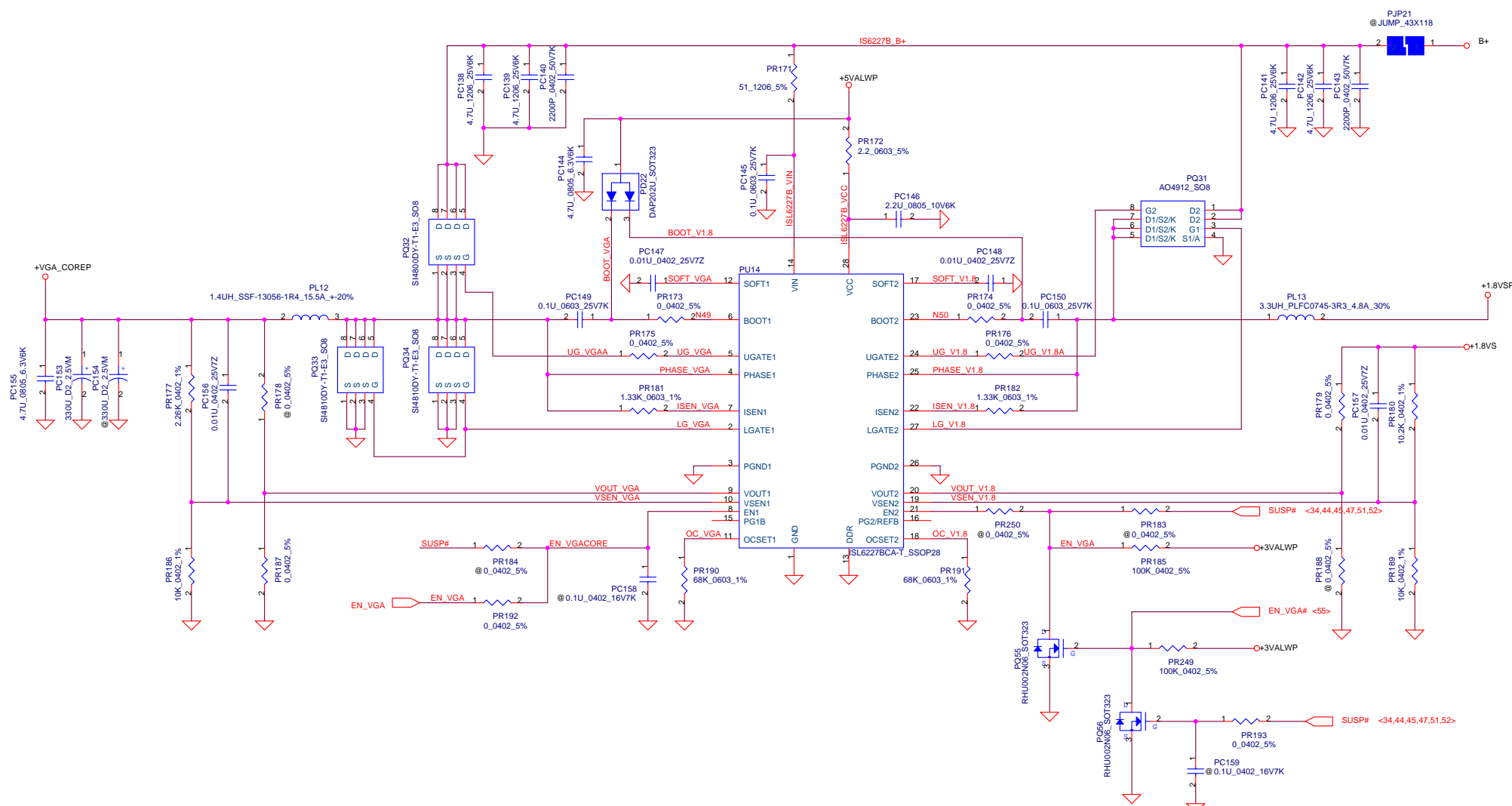
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Title		+ 3V/+5V			
Size	Document Number		Rev		
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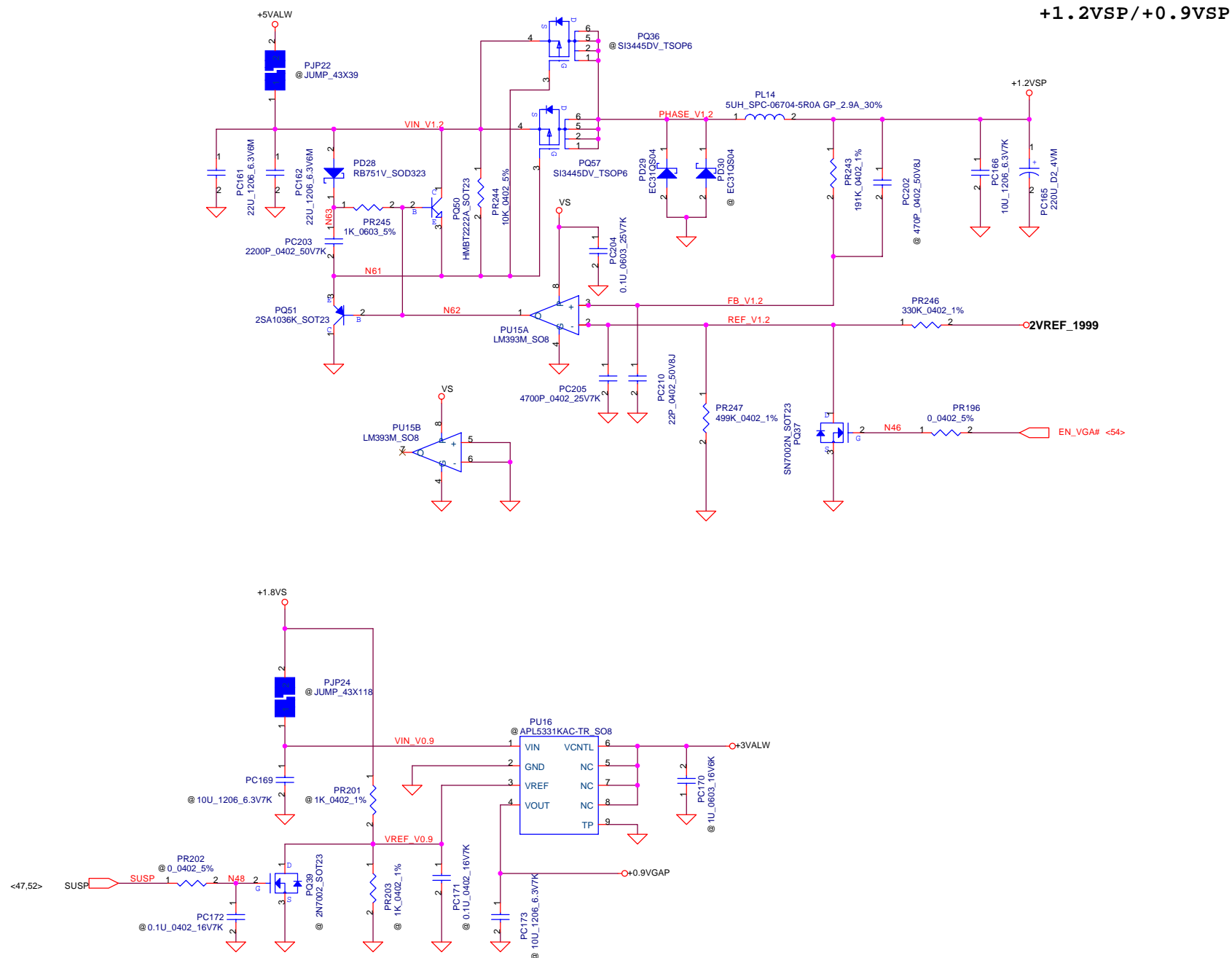




+VGA\_COREP/+1.8VSP

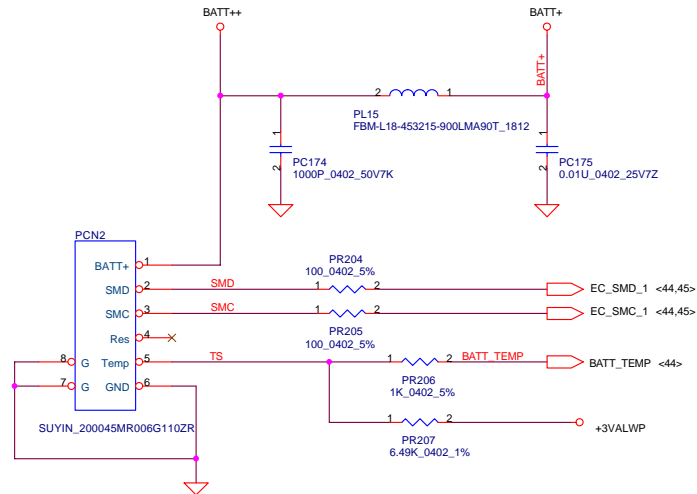


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				Date:	Thursday, December 15, 2005	Sheet



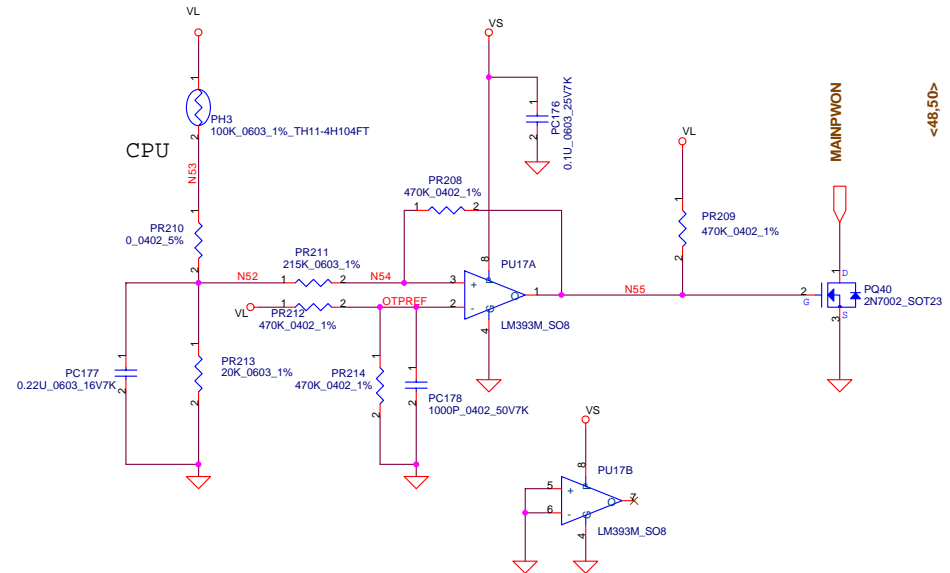
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Issued Date	2005/03/2	Deciphered Date	2006/03/22	Title	
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# Battery Connect/OTP



**PJPB1 battery connector**  
**SMART**  
**Battery:**  
**1.BATT+**  
**2.SMBD**  
**3.SMBC**  
**4.Res**  
**5.Temp**  
**6.GND**

**PH1 under CPU botten side :**  
 CPU thermal protection at 90 +-3 degree C  
 Recovery at 50 +-3 degree C



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				BATTERY CONN					
				Size		Document Number		Rev	
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## Version change list (P.I.R. List)

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Item	Modify list	Reason for change	Rev.	PG#	Modify by
1	Add R579 and R580 for EC PA/PR detec	EC team request	Rev0.2	P44	6/6 '05
2	BOM del C591 220U_D2 for +VCCP bypass capacitance	Cost down	Rev0.2	P6	6/6 '05
3	U44 pin5 change from +5VAMP to +5V	Design modify	Rev0.2	P40	6/6 '05
4	U44 pin3 change from GND to GND	Design modify	Rev0.2	P40	6/6 '05
5	JF21 50pin contact to U31_F25pin	support system memory throttling	Rev0.2	P13	6/6 '05
6	JF24 50pin contact to U31_H26pin	support system memory throttling	Rev0.2	P14	6/6 '05
7	Add D26	Add RTC Battery life	Rev0.2	P28	6/6 '05
8	BOM del R51	Change NB strap pin CFG9 to Normal Operation	Rev0.2	P11	6/6 '05
9	Change R562 from 649K_0402 to 649_0402_1k	BOM error fix LAN can't link	Rev0.2	P35	6/6 '05
10	Change R558 from 3.3K_0402 to 200_0402_5k	BOM error fix LAN can't link	Rev0.2	P35	6/6 '05
11	U24 contact to CPUSB#	Reserve new card detect input	Rev0.2	P44	6/6 '05
12	BOM del R307	no need EC control new card reset	Rev0.2	P44	6/6 '05
13	Add R582 @0_0402	Reserve	Rev0.2	P35	6/6 '05
14	Cancel U12 pin3 contact to +3VLAN	Design modify for LAN function fix LAN can't link	Rev0.2	P35	6/6 '05
15	IFPAB_PLLVDD, PLLVDD, VID_PLLVDD change from 3.3V to 2.5V	G72, G73 power modify	Rev0.2	P20	6/6 '05
16	PEX_CFG 0-2 change from 100 to 001	Overridden CFG modify	Rev0.2	P26	6/6 '05
17	Add JF34 for mini-PCIe Card	ME update	Rev0.2	P37	6/6 '05
18	Del BOM R359, R349, R361, D9, D10, Q23	For TI 7412 modify request	Rev0.2	P32	6/7 '05
19	Change MSBS_SDCMD_SMWE_FIXED# to MSBS_SDCMD_SMWE#	For TI 7412 modify request	Rev0.2	P32	6/7 '05
20	Change SDCLK_SMRE_FIXED# to SDCLK_SMRE#	For TI 7412 modify request	Rev0.2	P32	6/7 '05
21	Change SDWP#_SMCE_FIXED# to SDWP#_SMCE#	For TI 7412 modify request	Rev0.2	P32	6/7 '05
22	Change SM_RB_FIXED# to SM_RB#	For TI 7412 modify request	Rev0.2	P32	6/7 '05
23	Change R554, R556, R557, R559 from 10K to 2.2K	For TI 7412 modify request	Rev0.2	P32	6/7 '05
24	Del R369, Q20, Q9, C446, Jp29, JOPEN1, JOPEN2	Cancel TV tuner function	Rev0.2	P41	6/7 '05
25	Change LINK_LED100# contact to U41 pin27	Customer request for LAN link LED state	Rev0.2	P35	6/8 '05
26	Add R583, R584 75 ohm contact to Jp19 and RJ45_GND	LAN modify	Rev0.2	P35	6/8 '05
27	Swap DQSA0-7/DQSA#0-7 and DQSC0-7/DQSC#0-7	Schematic error modify	Rev0.2	P19	6/8 '05
28	Add R585 LIB_SW# 10K pull-high reserve	LIB_SW# floating	Rev0.2	P44	6/13 '05
29	U6 pin D23 SLP_S4# contact to U24 pin35	EC need detect SLP_S4# for S4 state	Rev0.2	P44	6/13 '05
30	BOM update add R388	D0CK_MTCR need pull-high to +C0DEC_REFC	Rev0.2	P38	6/13 '05
31	Change WL_PRIORITY contact to JPI8 pin3 and BT_PRIORITY contact to JPI8 pin5	pin define swap	Rev0.2	P37	6/14 '05
32	BOM add R587, R588, R589, R590 0 ohm	for NV72 CLK swap pin rework	Rev0.2	P19	6/14 '05
33	JF17 footprint update	DB1 footprint error, fix can't TV-out	Rev0.2	P17	6/14 '05
34	Del R587, R588, R589, R590 0 ohm	for NV72 chipset modify	Rev0.3	P19	6/17 '05
35	Add R586, R587	UMA or Disccrte PCB detect	Rev0.3	P44	6/27 '05
36	Change R145, R146 from 88.7K to 88.7 ohm	BOM error	Rev0.3	P18	6/28 '05
37	Change C419, C421 form 33F to 22p_0402	improve TV out quility.	Rev0.3	P15	6/28 '05
38	Add R588	TI recommend(it can avoid the small noise form this SPKROUT pin)	Rev0.3	P32	6/30 '05
39	JF26 footprint update	ME change new USB connector	Rev0.3	P41	6/30 '05
40	JF3 footprint update	ME change new CRT connector	Rev0.3	P17	
41	Add R589	Dual layout for 9LP306 and SLG8LP462.	Rev0.3	P15	7/05 '05
42	BOM add C591 220U_D2 for +VCCP bypass capacitance	change 220U location with C595	Rev0.3	P06	7/06 '05
43	BOM del C595 220U_D2 for +VCCP bypass capacitance	For cost down	Rev0.3	P11	7/06 '05
44	U24(EC) pin9 add AC2_RS# input	fix into xp codec out popo noise	Rev0.3	P44	7/06 '05
45	Add C790, C791, C792, C793, C794, C795, C796 100p_0402	For EMI	Rev0.3	P42	7/06 '05
46	Add R590, Q46	Switch PCBEEP path	Rev0.3	P29,40	7/07 '05
47	Add C797 reserve	For EMI	Rev0.3	P37	7/07 '05
48	Change R94, R141 to @ and change R96, R142 form @ to 128@	For NVDIA change request	Rev0.3	P19	7/08 '05
49	Change R139, Q6 to @ and change R145 form 87_0402 to 124_0402, R84 from 130_0402 change to 124_0402	For NVDIA change request	Rev0.3	P18	7/08 '05
50	Add screw HoId H23, H24	ME drawing modify	Rev0.3	P47	7/08 '05
51	R36 pin1 change contact to ACTLED#, R43 pin1 change contact to LINK_LED100#	change LAN LED state, Amber LED indicates activity, Green LED indicates the link is present	Rev0.3	P35	7/09 '05
52	Add R591 10k_0402 and Q47	fix mute LED power on turn on	Rev0.3	P38	7/11 '05
53	BOM del R383 4.7K pull-High	EC program this pin as push-pull output	Rev0.3	P42	7/13 '05

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Item	Modify list	Reason for change	Rev.	PG#	Modify by
54	BOM del R101,C161,R467,R88	nvidia recommend	Rev0.3	P18	7/13 '05
55	BOM del R78,R468,R111,R117,R63,R475,R477	nvidia recommend	Rev0.3	P26	7/13 '05
56	BOM del R108,add R112	nvidia recommend(change to PEX_CFG[2..0]=0x010b)	Rev0.3	P26	7/18 '05
57	BOM add C599	add 220u cap for 1.8V power decoupling	Rev0.4	P11	8/18 '05
58	BOM add R455	add 51_0402 resistor for intel Yonah B0 sightings update	Rev0.4	P04	8/18 '05
59	add Q46,Q49,Q50,R593,R594	modify WLED control circuit for OTS:0I64892 issue	Rev0.4	P37	8/22 '05
60	del D3	modify WLED control circuit for OTS:0I64892 issue	Rev0.4	P41	8/22 '05
61	del R440,R432,Q30	modify WLED control circuit for OTS:0I64892 issue	Rev0.4	P16	8/22 '05
62	add R592	add R592 150 ohm for WLED# current limit	Rev0.4	P37	8/22 '05
63	JP9 pin 14 contact to +5VS	change SPDIF LED power from +5V to +5VS	Rev0.4	P42	8/22 '05
64	add Q51	prevent TP82231 pin2 +3VALW leakage to +3VS	Rev0.4	P34	8/29 '05
65	JP5 pin 25 contact to +3VALW	switch board need +3VALW provide lie switch power	Rev0.4	P42	8/23 '05
66	BOM change R554/R557/R556 to 100K, change R559 to 22K	TI 7412 pull-high recommend	Rev0.4	P32	8/23 '05
67	JP3 change new part	change CRT conn from top side to bottom side for DFX request	Rev0.4	P17	8/24 '05
68	del C764,R552,R553, add D28,change U40 to G993 fan control	Fan control circuit change to G993	Rev0.4	P04	8/24 '05
69	BOM del R47	Intel WW31 document update	Rev0.4	P11	8/29 '05
70	add R595/R596/R597/R598/R599	SD card signal add 33 ohm damping resistor	Rev0.4	P32	8/30 '05
71	add R81/R77 10K_0402	NV72 AL chip recommend UTAG_TCK pull-high and UTAG_N pull-down	Rev0.4	P18	8/29 '05
72	del clock generators difference clock 49.9ohm termination	ICS9LP306 clock generators update	Rev0.4	P15	8/29 '05
73	change clock generators difference clock 33ohm damping to 10ohm	ICS9LP306 clock generators update	Rev0.4	P15	8/29 '05
74	change R266 from 475 ohm to 2.4K ohm	ICS9LP306 clock generators update	Rev0.4	P15	8/29 '05
75	add D29/D30/D31/D32/D33/D34/D35/D36	SD card signal add diode for Voltage clamp	Rev0.4	P32	8/30 '05
76	Move C8/C11/C10/C3/C4/C5/C2/C13/C14/C34/C35/C1 for layout	ME update limit area for CPU	Rev0.4	P06	8/30 '05
77	change R591 from 10K ohm to 100 ohm	Fix OTS:I63350 Calgary's mute LED can't display	Rev0.4	P38	8/30 '05
78	JP34 pin50 change contact from PM_EXITS#1 to PM_EXITS#0	Intel WW31 document update	Rev0.4	P14	8/30 '05
79	U31 pin86 change contact from PM_EXITS#1 to DPRS_LpVr	Intel WW31 document update	Rev0.4	P07	8/30 '05
80	D26 pin2 change contact from +3VALW to LD03	Add RTC Battery life	Rev0.4	P28	8/30 '05
81	BOM change R562 from 649 ohm to 619 ohm and change U12 to new part	LAN performance modify	Rev0.4	P35	8/30 '05
82	add R600 100 ohm and DEL C608 @	HP recommend	Rev0.4	P37	8/30 '05
83	add R601 100 ohm	HP recommend	Rev0.4	P41	8/30 '05
84	Reserve C8I0-C821 0.1u cap	For EMI	Rev0.4	P42	8/30 '05
85	add L32 and C822 on SPDIF signal	For EMI	Rev0.4	P42	8/30 '05
86	add C802 /C803 /C804 /C805 1000p for CLKREQA#/CLKREQB#/CLKREQC#/CLKREQD#	For EMI	Rev0.4	P15	8/30 '05
87	U40 pin5,6,7,8 contact to GND	schematic update for SI2 fan can't full turn on issue	Rev0.5	P04	10/26 '05
88	change C599 from 220u to 330u	steady the 1.8V	Rev0.5	P11	10/26 '05
89	add R103 40.2ohm	nvidia recommend	Rev0.5	P21	10/28 '05
90	change R510,R75,R533,R168 from 120ohm to 499ohm for NV73 only	nvidia recommend	Rev0.5	P22-25	10/26 '05
91	straps table PEX_CFG[2:0] from 010 to 001 and PCI_DeVID[3:0] NV73M from 1010 to 1011	nvidia recommend	Rev0.5	P26	10/26 '05
92	add C825 15p_0402 for MSLK_SCLK_SMBLW# signal	For EMI	Rev0.5	P32	10/26 '05
93	add C823 1000p_0402 for +VCC_SD	For EMI	Rev0.5	P32	10/26 '05
94	add C824 1000p_0402 for +VCC_SM_XD	For EMI	Rev0.5	P32	10/26 '05
95	add C826 1000p_0402 for JP32 pin4	For EMI	Rev0.5	P32	10/26 '05
96	change PCM_SPK pull down R588 from 43K to 10K	TI recommend	Rev0.5	P32	10/26 '05
97	D29,D30,D31,D32 pin1 contact to +VCC_MS	schematic update for SI2 MS card can't work issue	Rev0.5	P32	10/26 '05
98	add R607 22ohm and @ C827 10p	Reserve	Rev0.5	P32	10/26 '05
99	U18 pin06 contact to +3VS	TI recommend	Rev0.5	P33	10/26 '05
100	add @ R606 110ohm	Reserve	Rev0.5	P35	10/26 '05
101	change Q46 to U45 analog switch	design change	Rev0.5	P40	10/26 '05
102	change U38 pin3,4 form +5VALW to +5V	design change	Rev0.5	P41	10/26 '05
103	change Q2 from A03413 to A03419		Rev0.5	P41	10/26 '05
104	add D38-D45 for KB ESD solution	For ESD request	Rev0.5	P42	10/26 '05
105	AIR_ACIN change contact to U24 pin81 and add R605 for BID define, add D37.	design change	Rev0.5	P44	10/26 '05

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Item	Reason for change	PG#	Modify List	Date	B.Ver#
1	Solve the oscillate of +3VALWP when plug adapter.	48	Change PC11 from 10U_0805_10V to 0.1U_0603_25V.	2005.06.01	
2	Adjust VGA power rail sequence.	54	Add PQ55, PQ56 and PR249	2005.06.21	
3	To protect PQ21, because SUSP change to 18.5V from 5V.	52	Add PR253 and change PR114 to 510K_0402_5%.	2005.08.10	
4	To save S5 power consumption.	50,48	Add PR254, PR13, PR14, PQ1 and PC8. Reserve PR255.	2005.08.15	
5	To solve EMI issue.	53,49	Add PR117,PR129,PR119,PR138,PC108 and PC119. Change PJP16 to PL18 and PR30 from 0_0402 to 2.2_0603.	2005.08.15	
6	To speed up CP mode response.	49	Change PR32 to 10K; PR35 to 6.8K and PC21 to 2200P.	2005.08.23	
7	Reserve capacitor to reduce noise.	49	Reserve PC209.	2005.08.27	
8	To speed up C4 return to C0. follow Intel recommend.	53	Change PR141 from 0_0402_5% to 499_0402_1%.	2005.08.29	
9	To pull up +1.8V power plan to 1.846V.	51	Change PR89 from 10.2K to 10.5K.	2005.10.01	
10	To filter high frequency from AirCard.	55	Add PC210 22P_0402_50V.	2005.11.25	

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