

Compal confidential

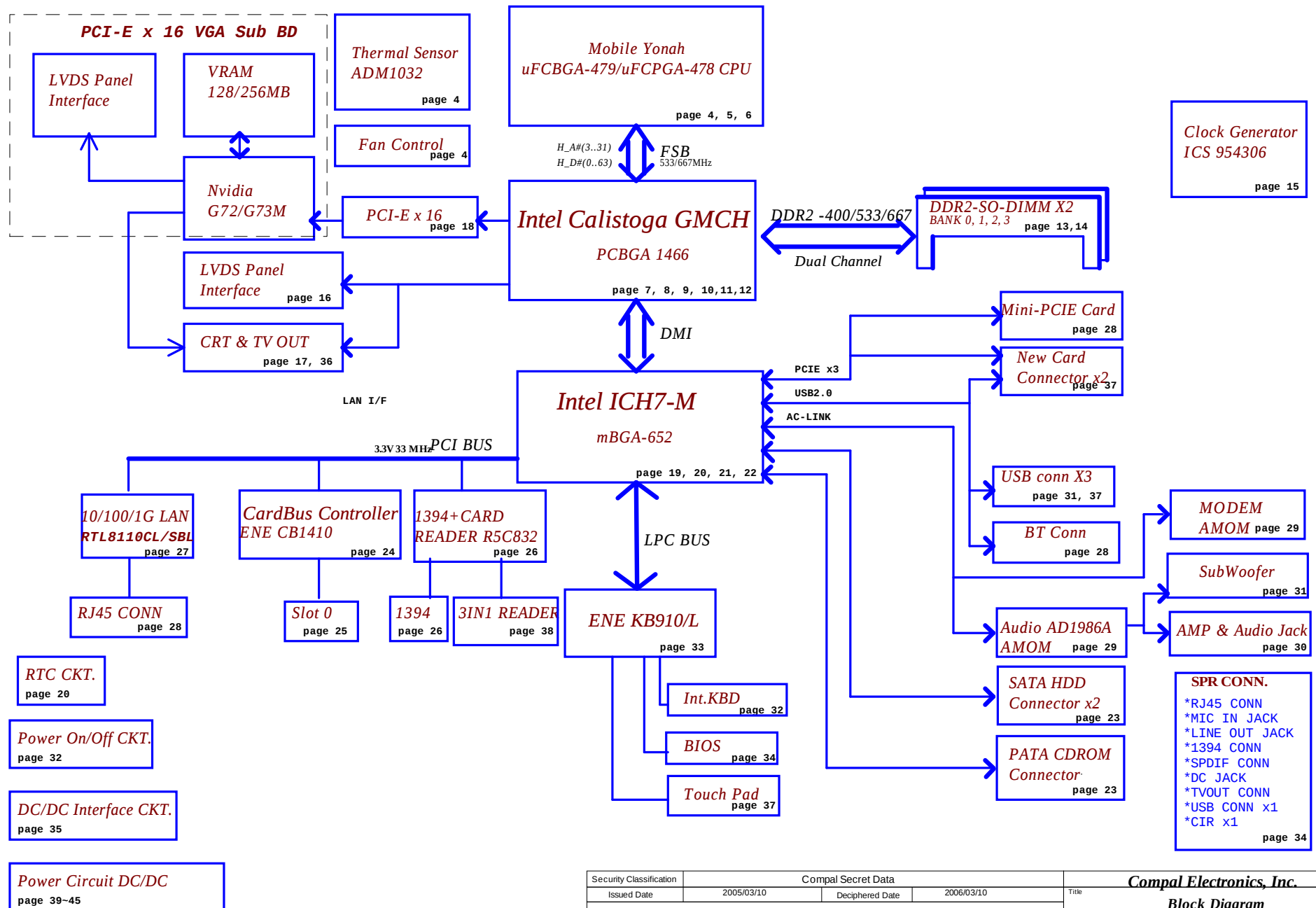
IGL50/51 Schematics Document

Mobile Yonah uFCPGA with Intel Calistoga_GM/PM+ICH7-M core logic

2006-05-15

REV:0.1

Security Classification	Compal Secret Data			Compal Electronics, Inc.		
Issued Date	2005/03/10	Deciphered Date	2006/03/10	Title		
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Security Classification		Compal Secret Data		Compal Electronics, Inc. Block Diagram		
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[illegible]

PCI DEVICES

EXTERNAL	IDSEL#	REQ/GNT#	PIRQ
CARD BUS CB1410	AD20	2	PCI_PIRQA#
CARD READER & 1394 R5C832	AD22	0	PCI_PIRQG# PCI_PIRQH#
LAN CONTROLLER RTL8110SBL/CL	AD17	3	PCI_PIRQF#

LANE	DEVICE
1	Express Card
2	Mini Card

PORT	DEVICE
0	LEFT SIDE
1	BLUE TOOTH
2	RIGHT SIDE
3	JP810
4	RIGHT SIDE
5	CMOS
6	RIGHT SIDE

DEVICE	ADDRESS R/W
KB910/L (SM1-Pulled-Up 5V)	
AT24C16AN	A3/A2 H
SMART BATTERY	17/16 H
KB910/L (SM2-Pulled-Up 3.3V)	
ADM1032AR	99/98 H
G7xM (I2CC-Pulled-Up 3.3V)	
G781-1 (RESERVED)	9B/9A
ICH7M SM Bus	
ICS9LP3R325AKLFT	D3/D2 H (3.3V)
DDR II DIMM0	A1/A0 H (3.3V)
DDR II DIMM1	A3/A2 H (3.3V)
Express Card	NC (2.5V)
Mini-Express	NC (2.5V)

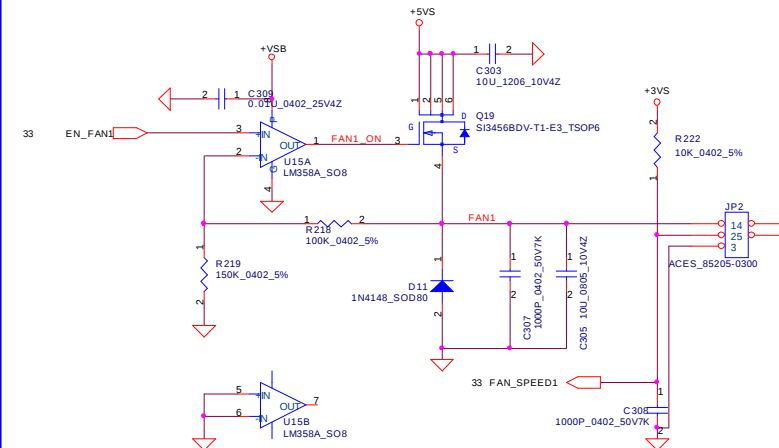
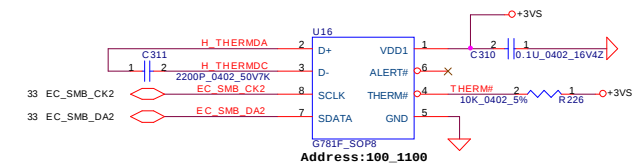
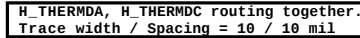
MARK	FUNCTION
@	NC FOR ALL
EXP@	PCI-E-NEW CARD
BT@	BLUE TOOTH
UMA@	Internal 945GM
VGA@	External 67xm
SUBWOOFER@	SUBWOOFER
HGT30@	HGT30
CB@	PCMIA/CARD BUS
GIGA@	8110SBL(SCL)Giga LAN
10/100@	8110CL 10/100Mb LAN

State S4 : STD S5 : S0FT OFF	power plane +B LD03 LD05	+5VALW +3VALW	+1.8V +5V	+5VS +3VS +2VS +1.8VS +1.5VS +VGA CORE +1.2VS +0.9VS +CPU CORE +VCCP
S0	0	0	0	0
S1	0	0	0	0
S3 : STR	0	0	0	X
S5 S4/AC	0	0	X	X
S5 S4/ Battery only	0	X	X	X
S5 S4/AC & Battery don't exist	X	X	X	X

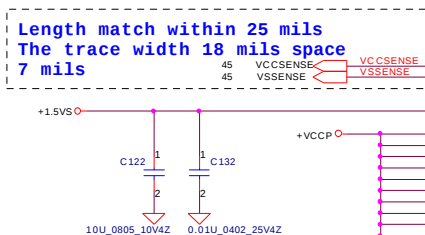
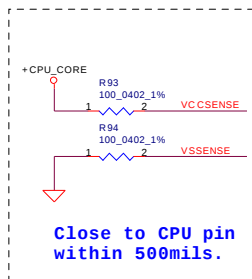
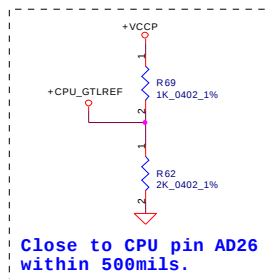
MB ID	P NAME
0	IGL-50
1	IGL-51

ID	MB REV#	R115(Rb)	Vab
0	R0.1 (EVT)	0	0
1	R0.2 (DVT)	8.2K	0.25'
2	R0.3 (PVT)	18K	0.50'
3	R1.0 (MP)	33K	0.82'
4		56K	1.19'
5		100K	1.65'
6		200K	2.20'
7		NC	3.30'

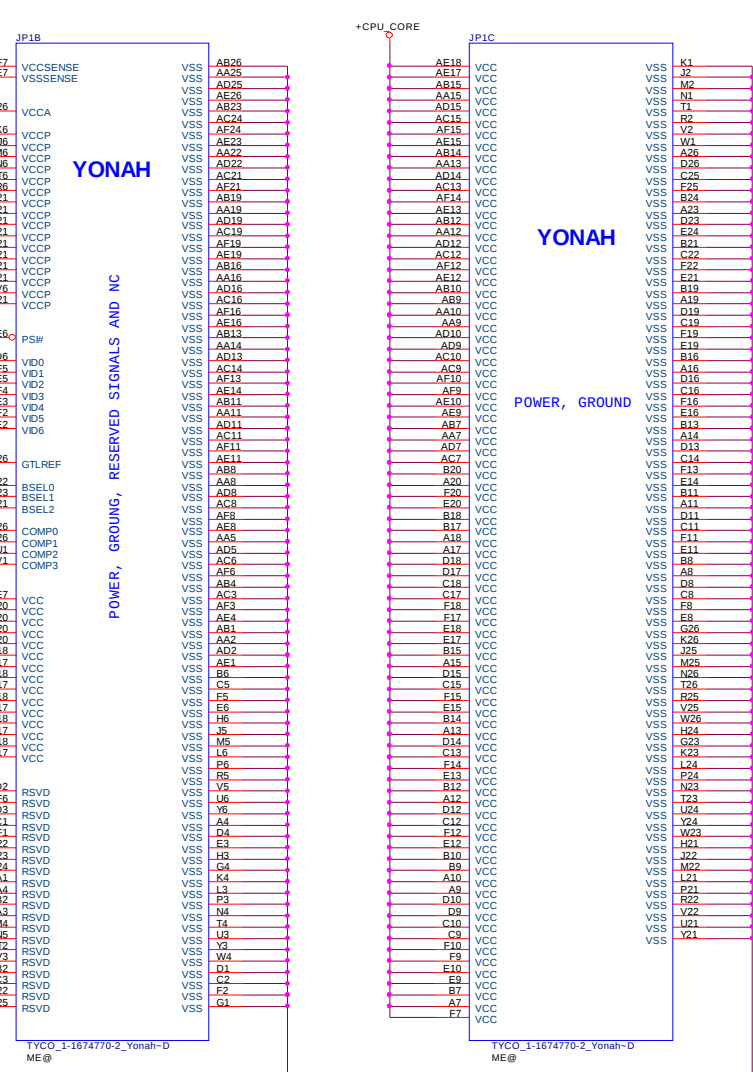
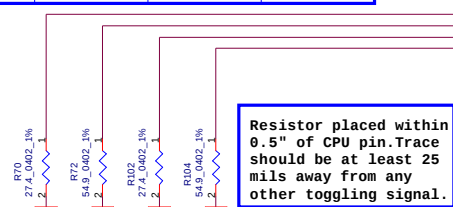
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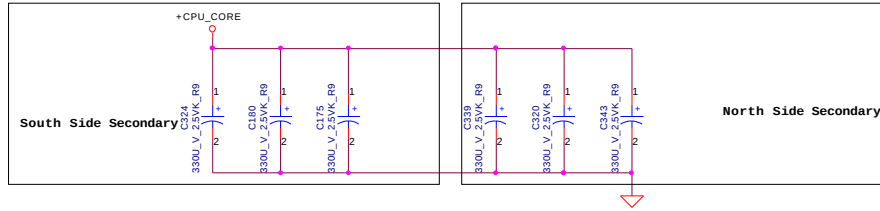
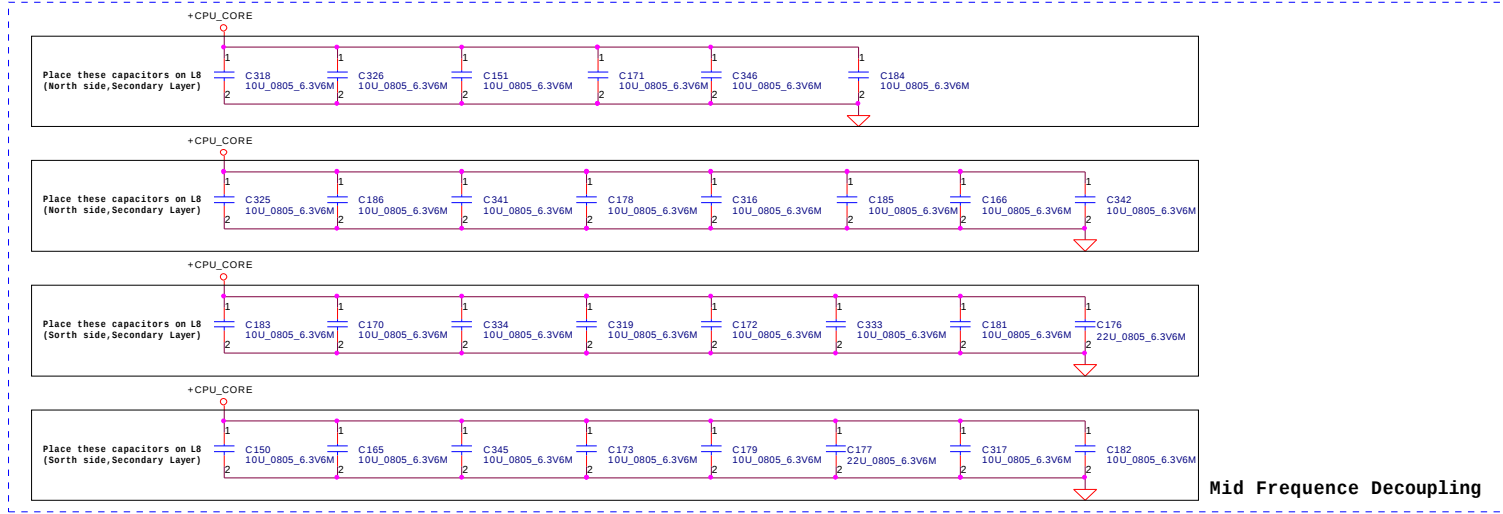


Security Classification		Compal Secret Data		Compal Electronics, Inc. Yonah CPU in mFCPGA479	
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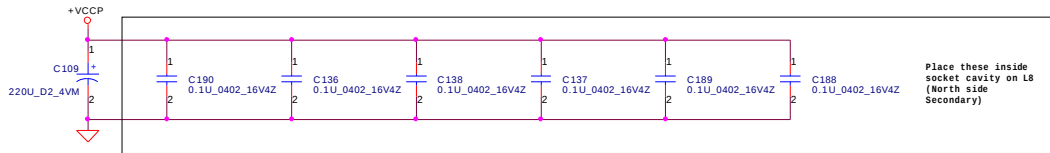


CPU_BSEL	CPU_BSEL2	CPU_BSEL1	CPU_BSEL0
133	0	0	1
166	0	1	1

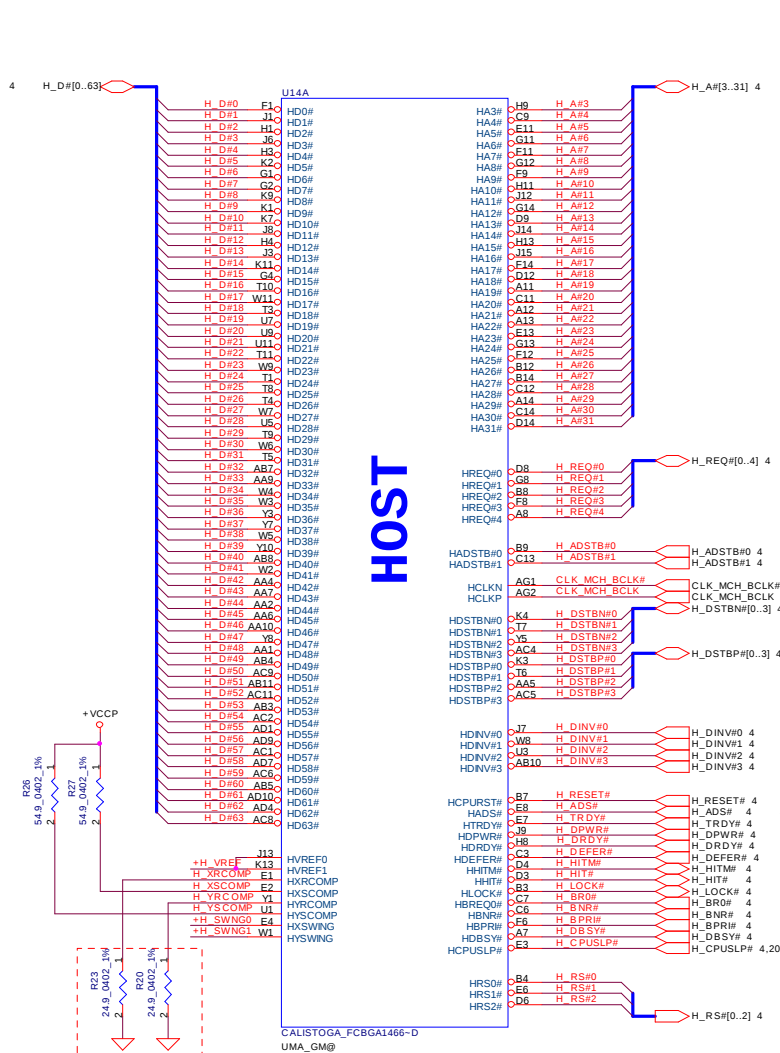




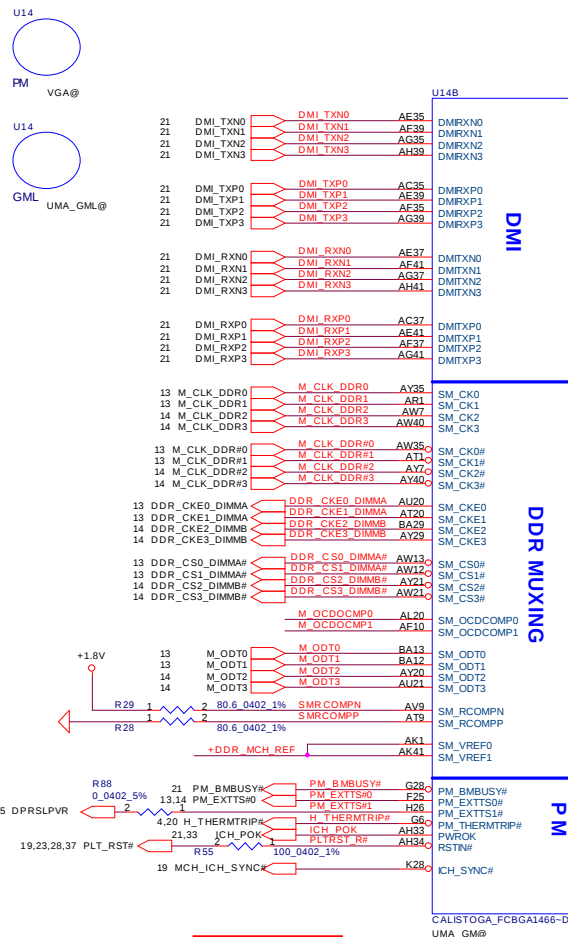
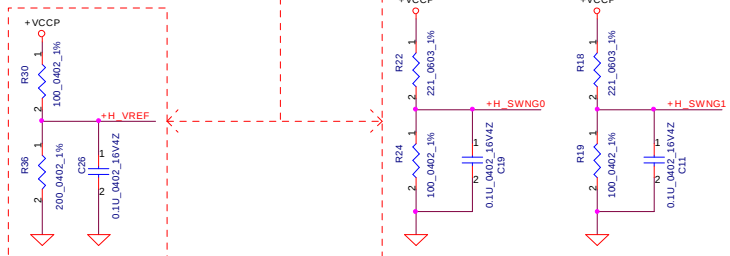
ESR <= 1.5m ohm
Capacitor > 1980uF



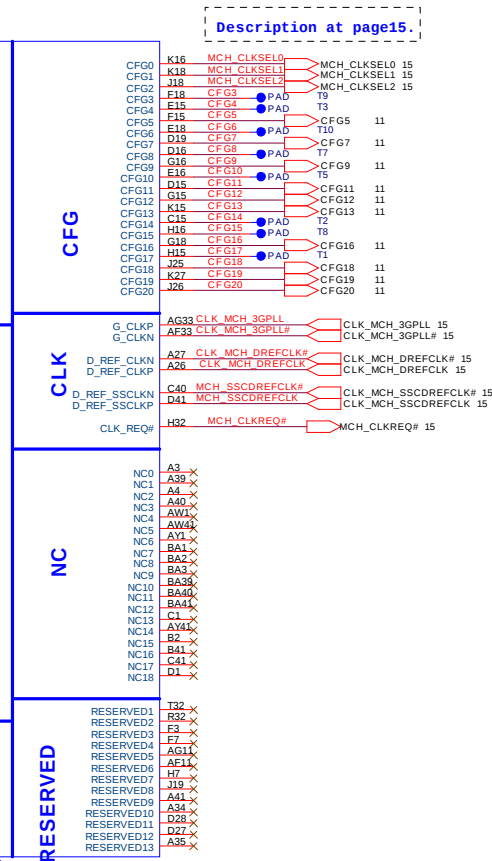
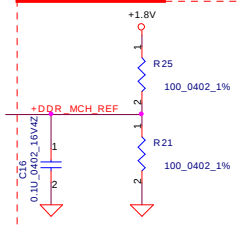
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Layout Note:
H_XRCOMP / H_YRCOMP / H_VREF / H_SWNG0 / H_SWNG1 trace width and spacing is 10/20.



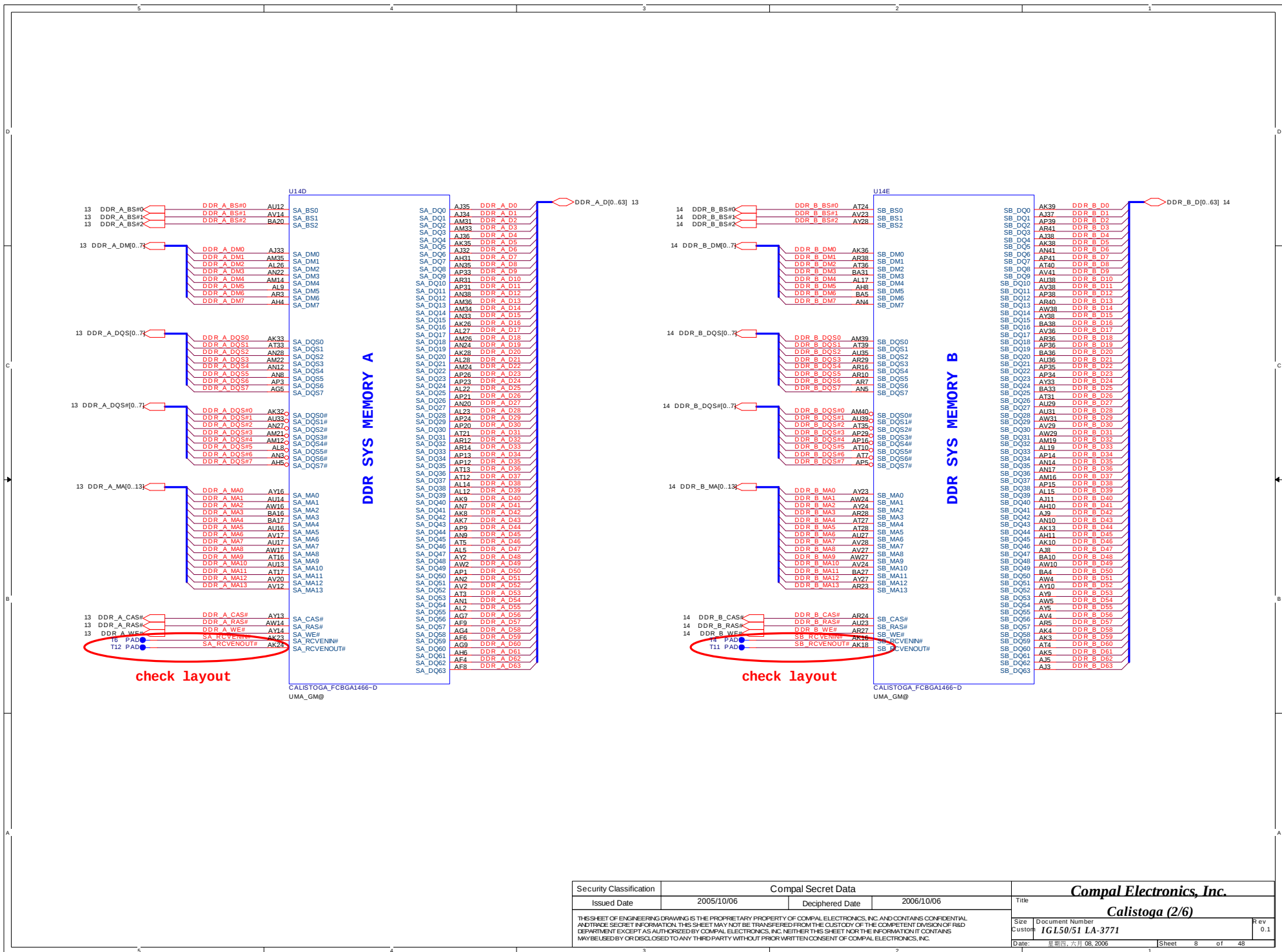
Layout Note:
+DDR_MCH_REF trace width and spacing is 20/20.

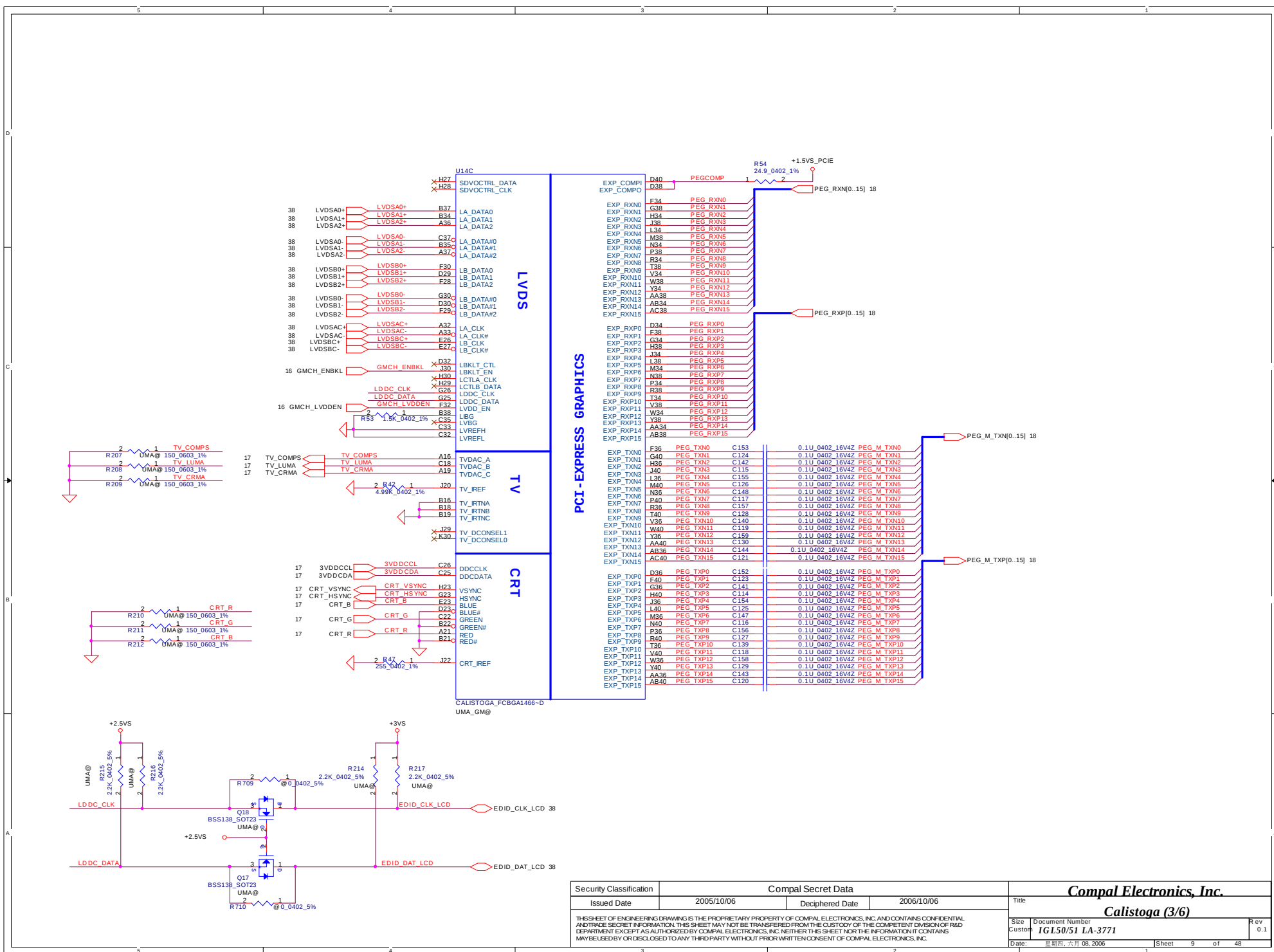


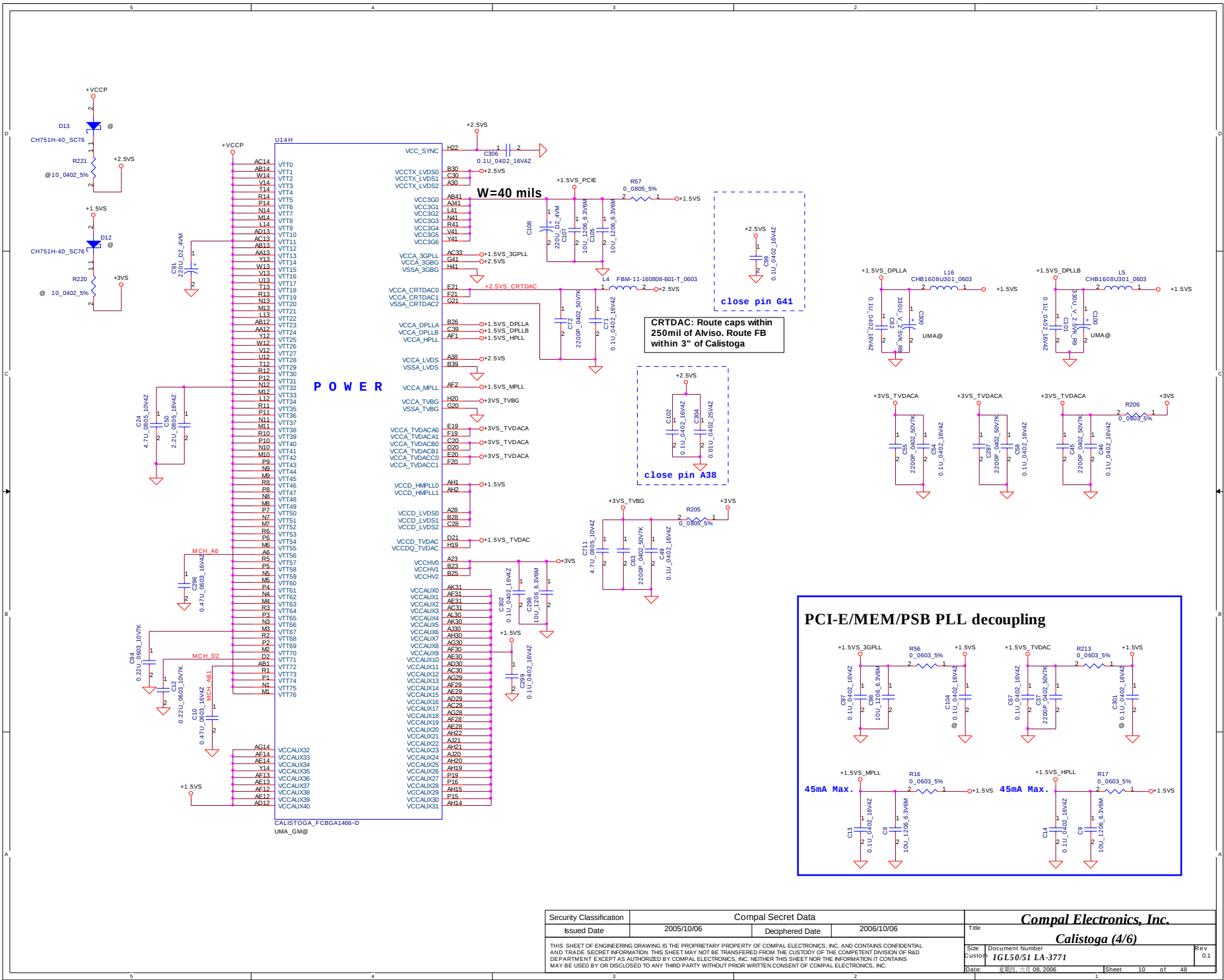
Description at page15.

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Compal Electronics, Inc.	
Calistoga (1/6)	
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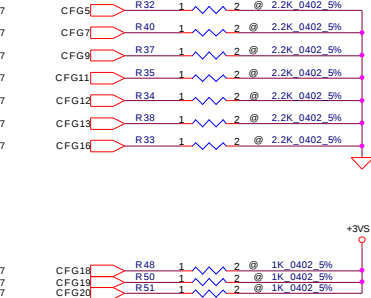




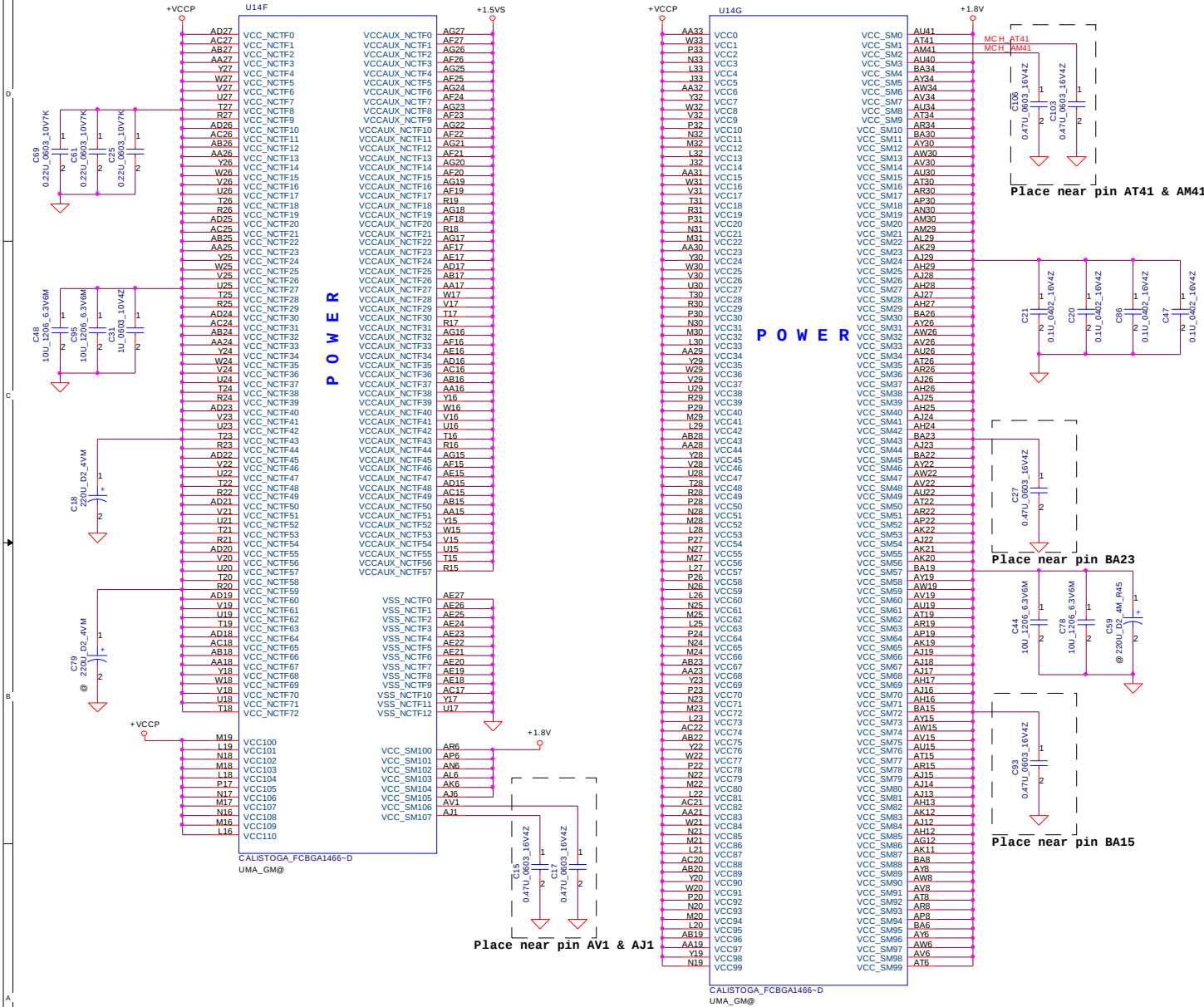
Strap Pin Table

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)*
CFG66	0 = Reserved PSB 4X CLK Enable 1 = Calistoga *
CFG[13:12]	00 = Reserved 01 = XOR 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 = No SDVO Device Present * (Default) 1 = DMI Lane Reversal
SDVO_CTRLDATA	1 = SDVO Device Present
CFG20 (PCIE/SDVO select)	0 = Only PCIE or SDVO is operational. * (Default) 1 = PCIE/SDVO are operating simu.

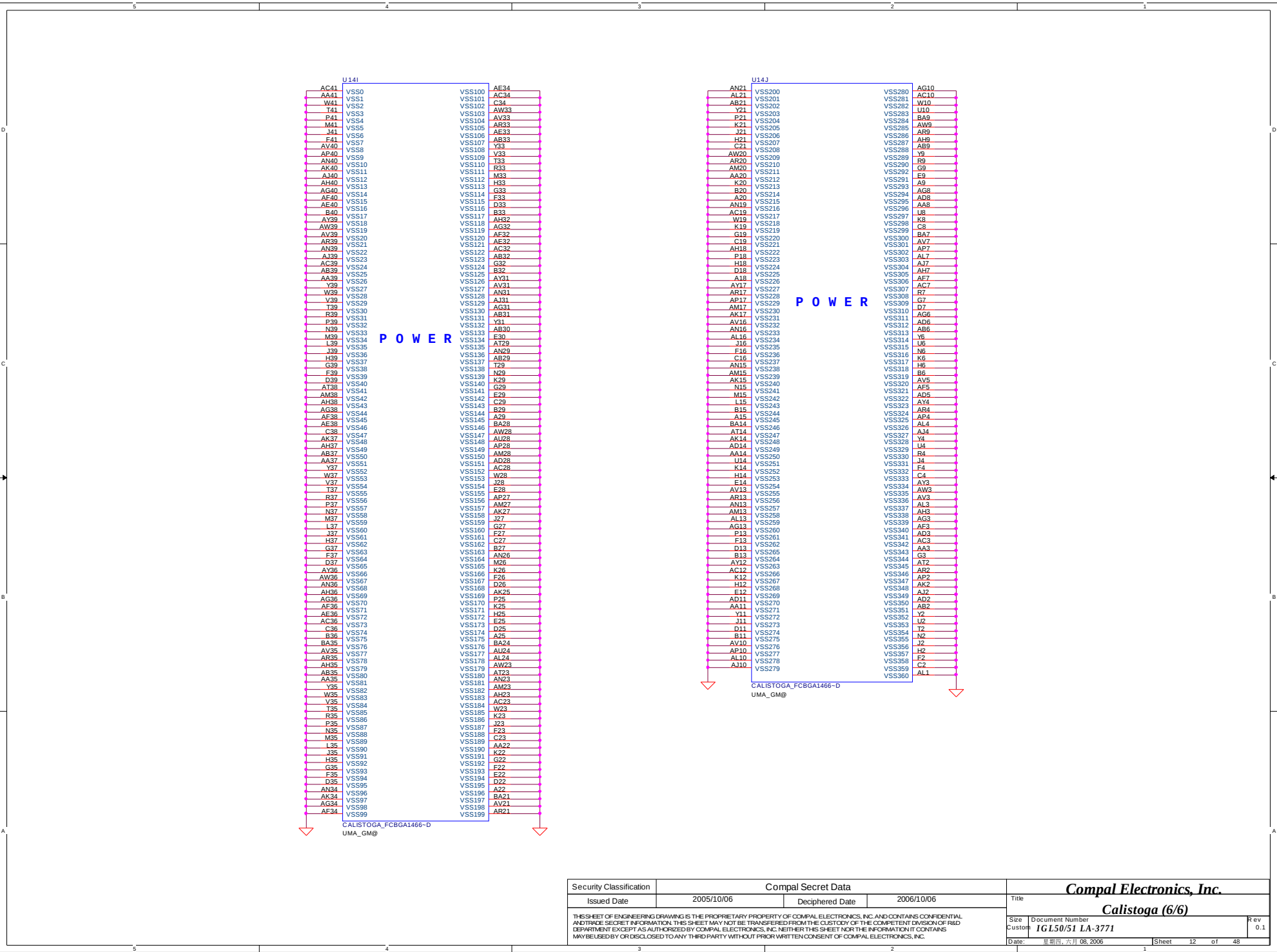


POWER



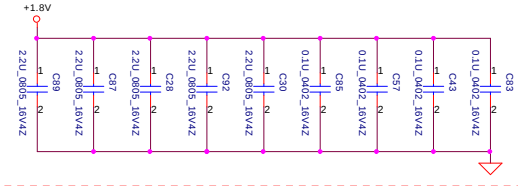
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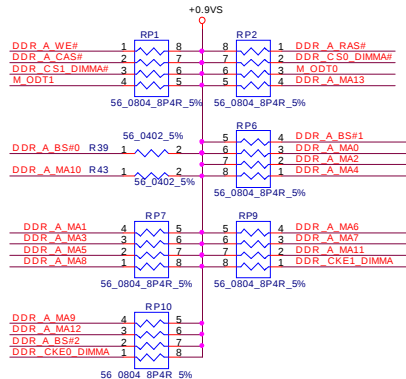
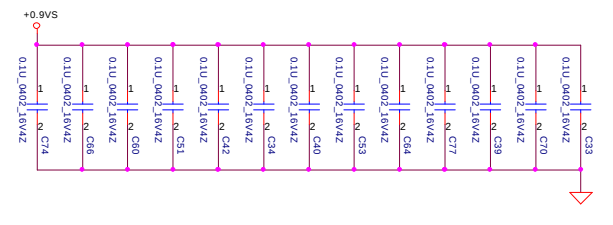


8 DDR_A_DQS#[0..7]
8 DDR_A_DJ[0..63]
8 DDR_A_DM[0..7]
8 DDR_A_DQS[0..7]
8 DDR_A_MA[0..13]

Layout Note:
Place near JP41

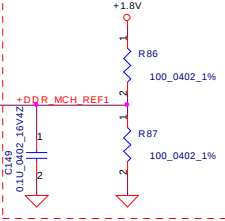


Layout Note:
Place one cap close to every 2 pullup resistors terminated to +0.9VS



Layout Note:
+DDR_MCH_REF
trace width and
spacing is 20/20.

14 +DDR_MCH_REF1



14.33 EC_P80_DATA

7 DDR_CKE0_DIMMA

14.33 EC_P80_CLK

8 DDR_A_BS#2

8 DDR_A_BS#0

8 DDR_A_CAS#

7 DDR_CS1_DIMMA#

7 M_ODT1

DDR_A_D37

DDR_A_D36

DDR_A_DQS#4

DDR_A_DQS4

DDR_A_D35

DDR_A_D32

DDR_A_D40

DDR_A_D44

DDR_A_D41

DDR_A_D46

DDR_A_D49

DDR_A_D48

DDR_A_DQS#6

DDR_A_DQS6

DDR_A_D54

DDR_A_D50

DDR_A_D61

DDR_A_D60

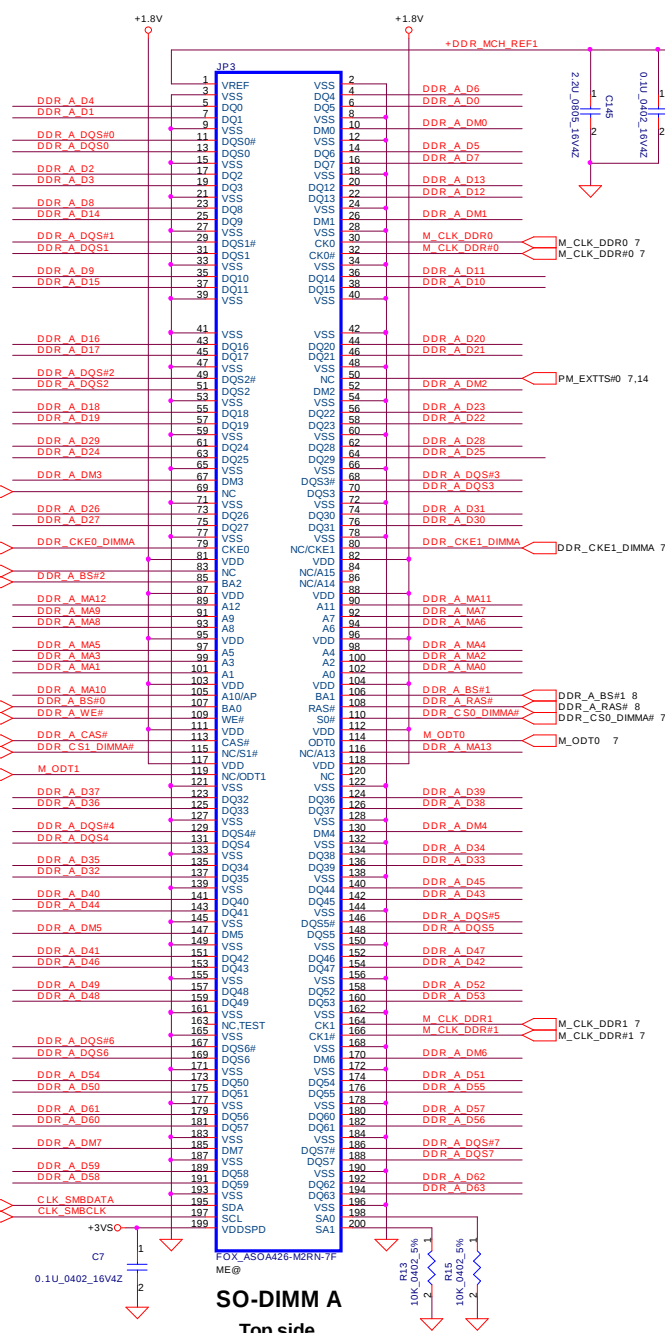
DDR_A_DM7

DDR_A_D59

DDR_A_D58

14.15 CLK_SMBDATA

14.15 CLK_SMBCLK



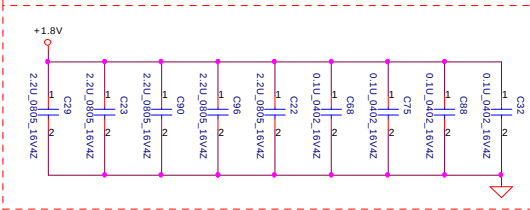
SO-DIMM A

Top side

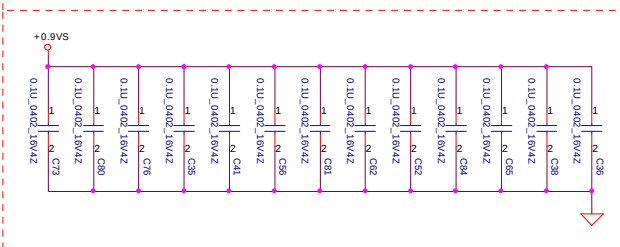
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2005/10/06		2006/10/06		DDR II - SODIMM SLOT1	
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8 DDR_B_DQS#[0..7]
8 DDR_B_D[0..63]
8 DDR_B_DM[0..7]
8 DDR_B_DQS[0..7]
8 DDR_B_MA[0..13]

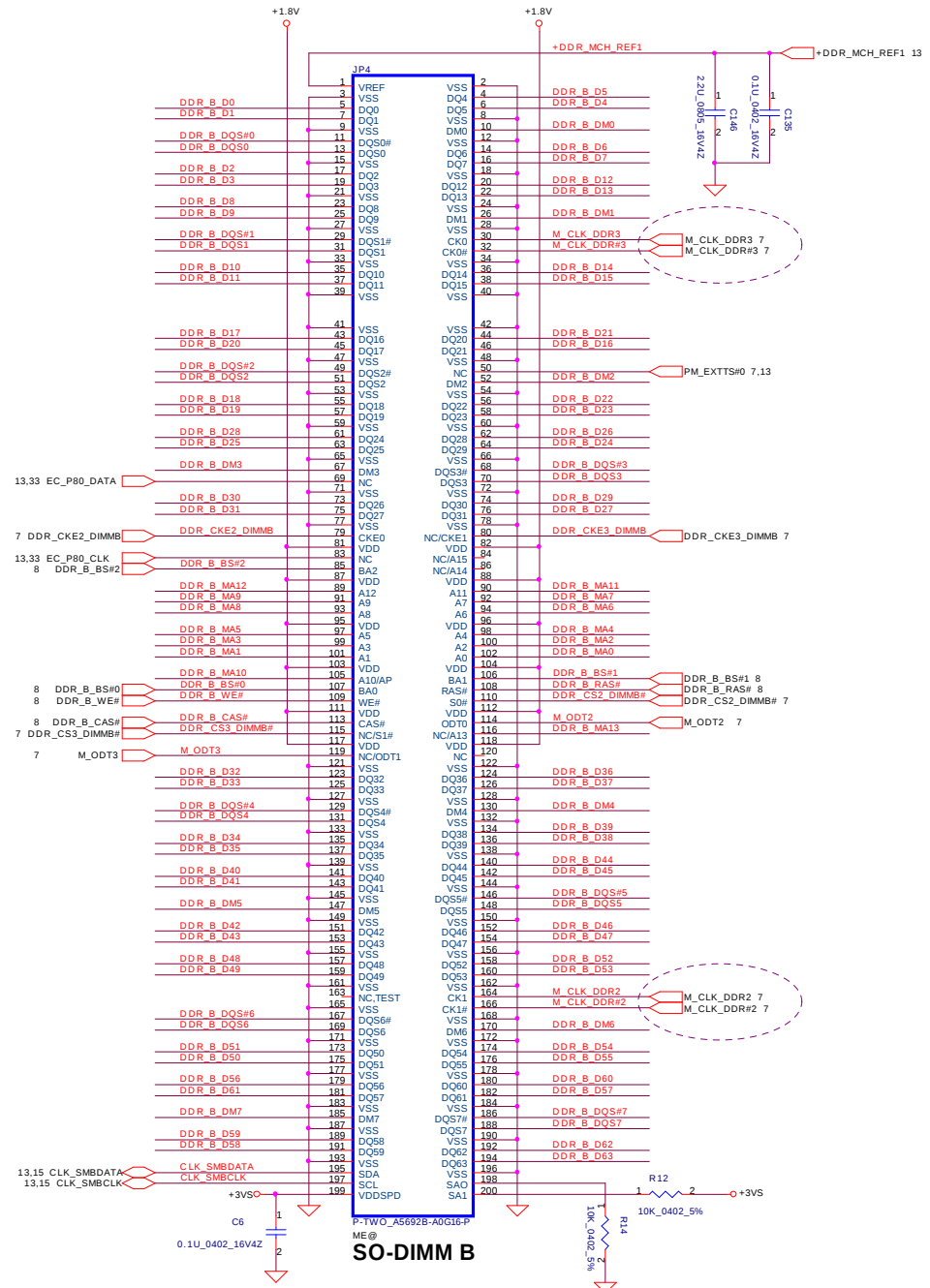
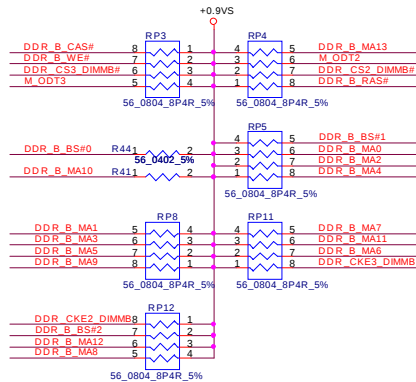
Layout Note:
Place near JP42



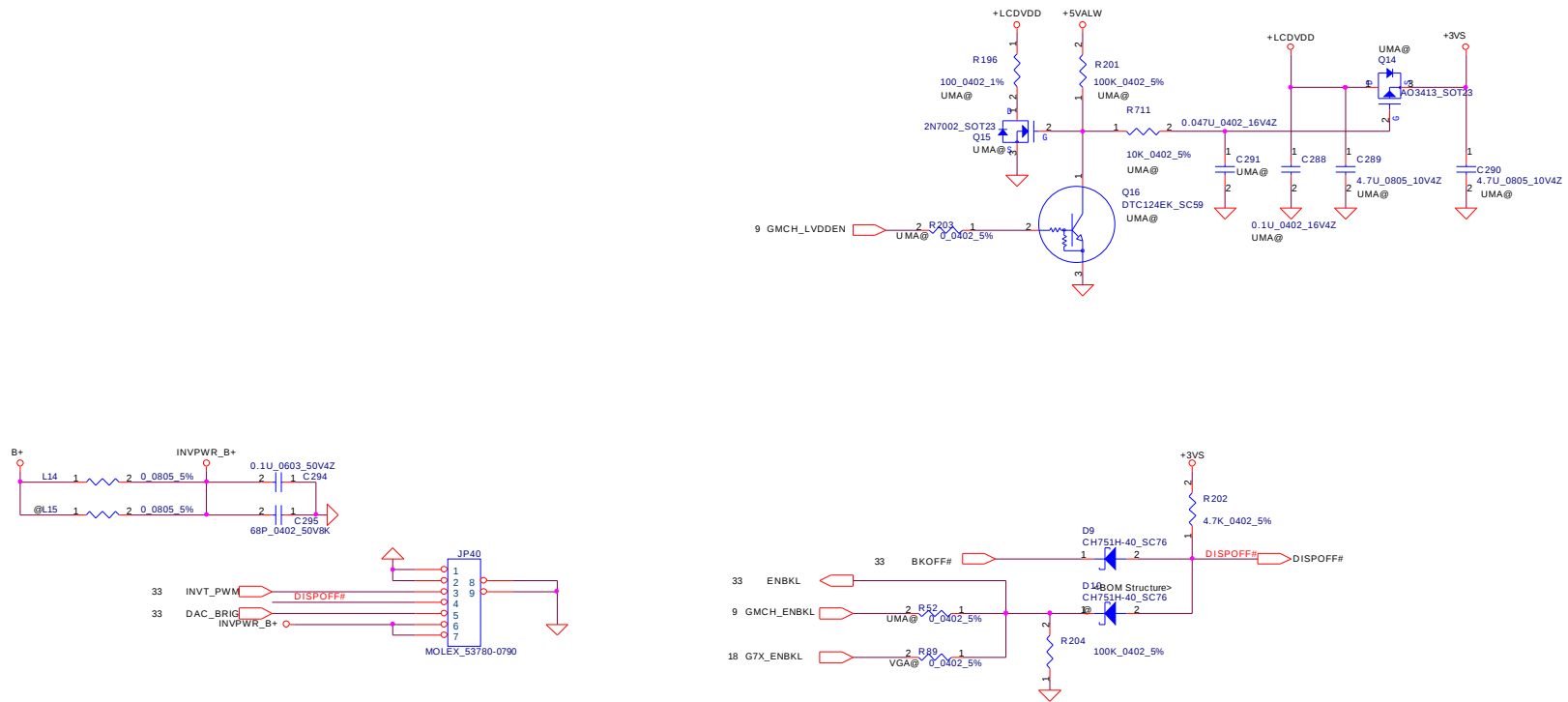
Layout Note:
Place one cap close to every 2 pullup resistors terminated to +0.9VS



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

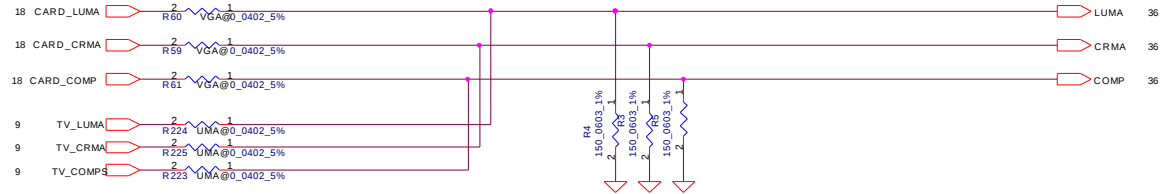


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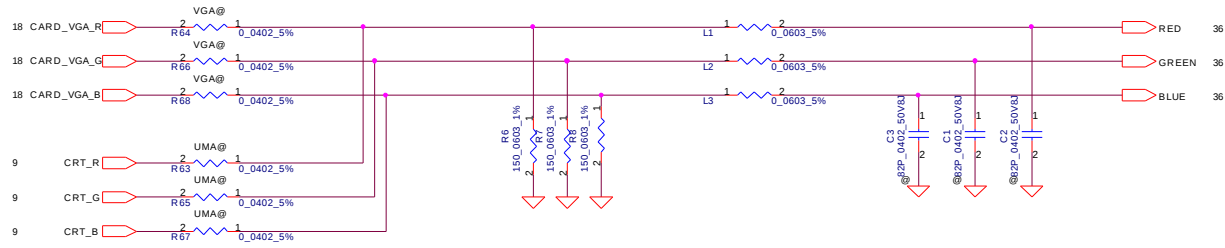
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TV-OUT Conn.

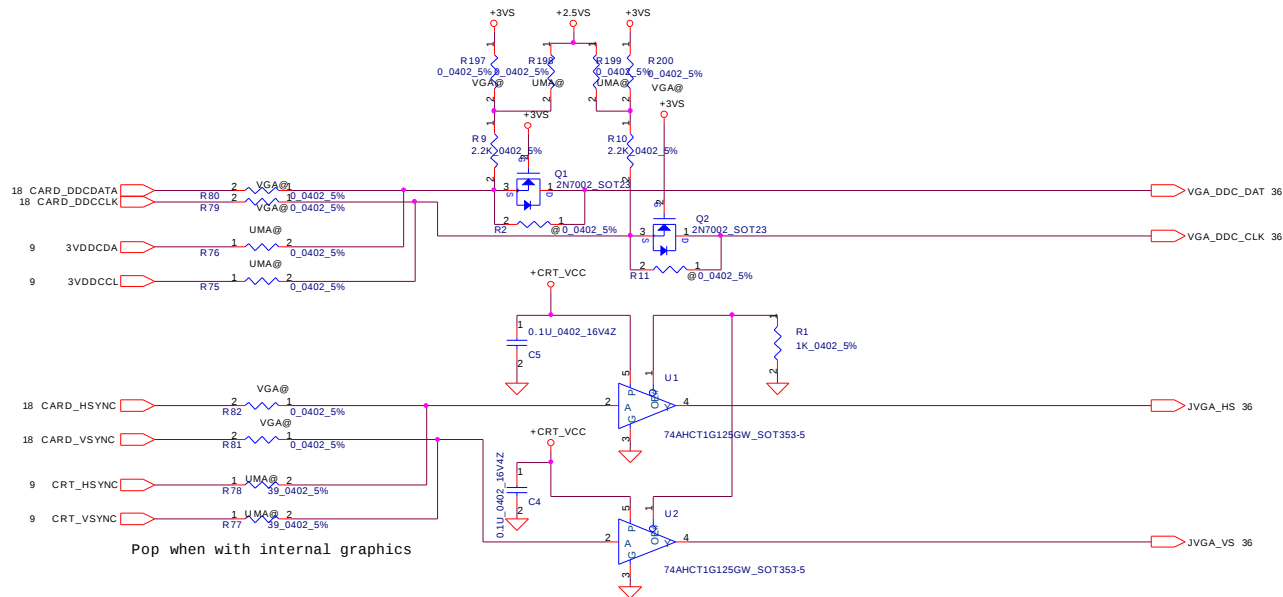


Pop when with internal graphics

CRT Conn.



Pop when with internal graphics



Pop when with internal graphics

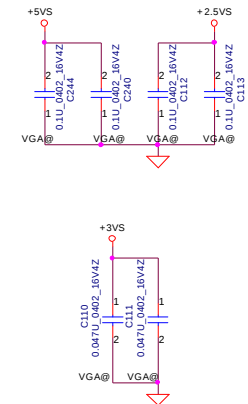
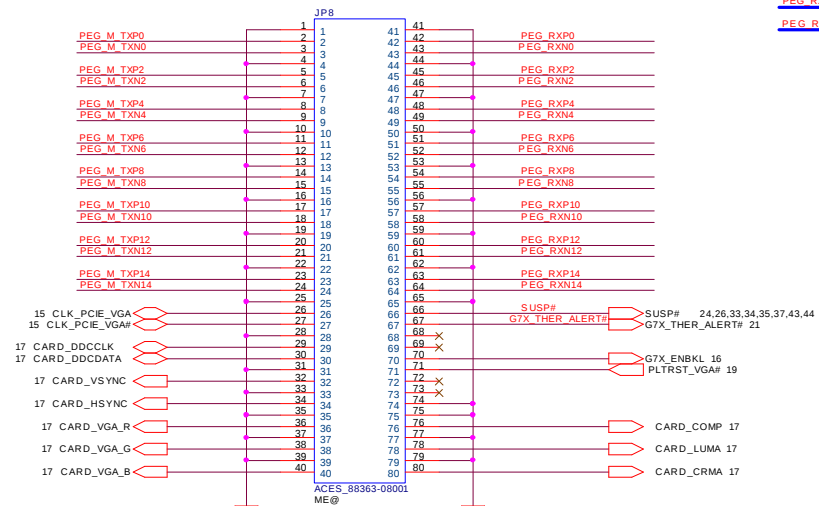
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MAX. 4.06A @ 1.8V
MAX. 130mA @ 2.5V
MAX. 655mA @ 3.3V

PEG_M_TXP[0..15] PEG_M_TXP[0..15] 9
PEG_M_TXN[0..15] PEG_M_TXN[0..15] 9
PEG_RXP[0..15] PEG_RXP[0..15] 9
PEG_RXN[0..15] PEG_RXN[0..15] 9



< New Add Pin.28 for +3VS, Pin.68 for +1.8VS @R03 >

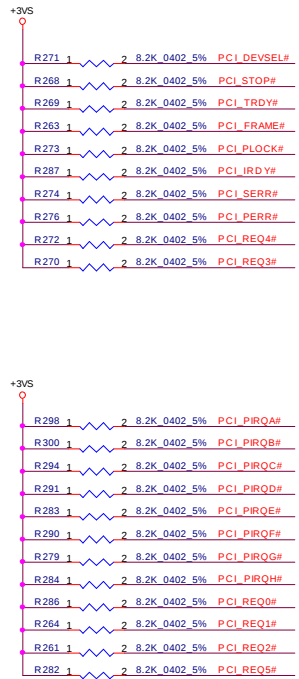


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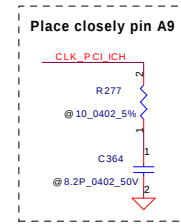
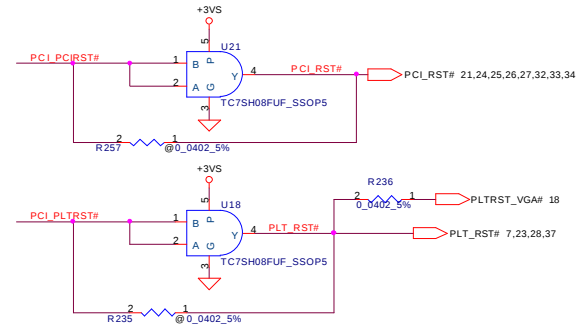
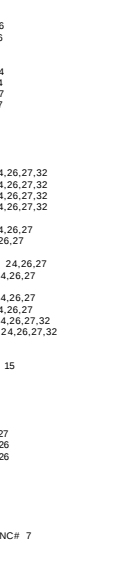
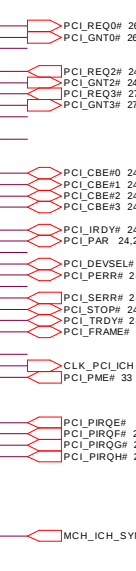
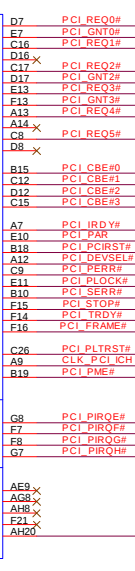
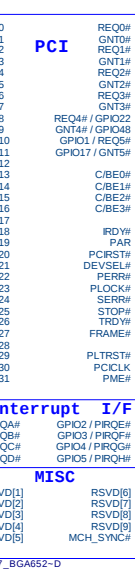
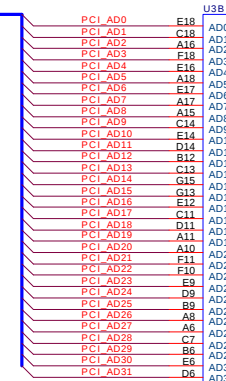
VGA/B connector

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Title	Document Number	Rev
Size	1GL50/51 LA-3771	0.1
Custom		
Date	星期四, 六月 08, 2006	Sheet 18 of 48

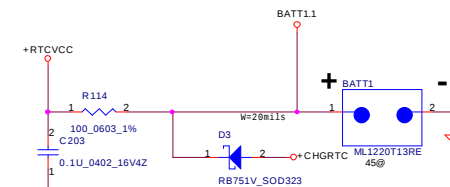
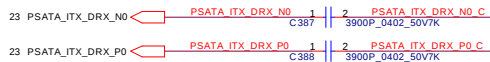


24,26,27,32 PCI_AD[0..31]

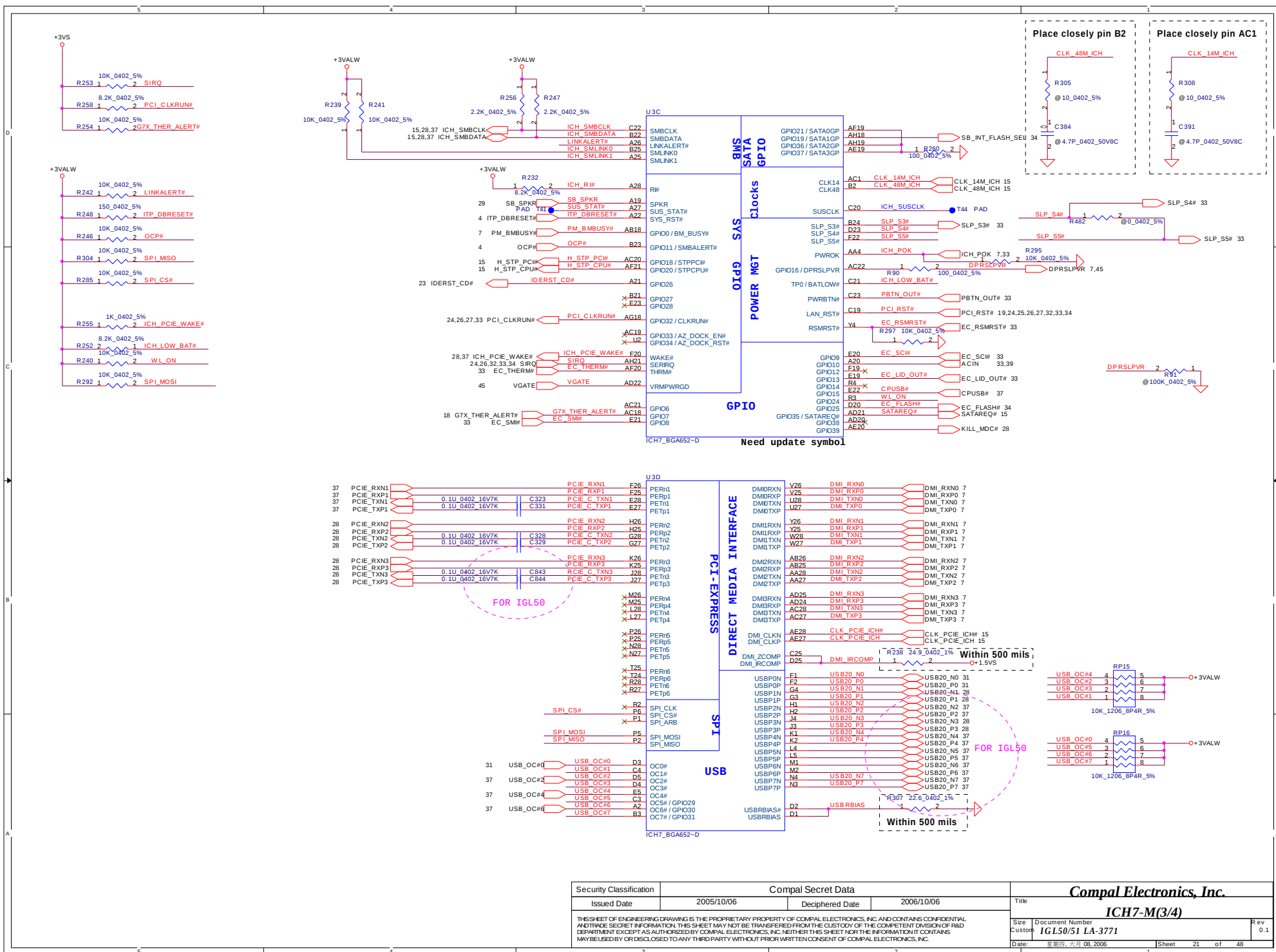


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Issued Date		2005/10/06	Deciphered Date	2006/10/06	Title
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				Date	Rev
				星期四, 六月 08, 2006	0.1
				Sheet	19 of 48

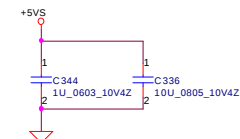
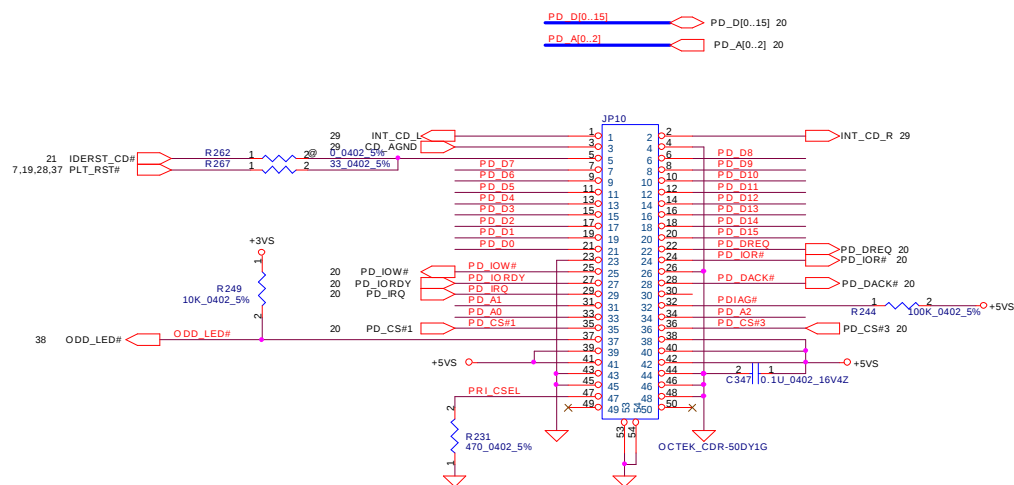
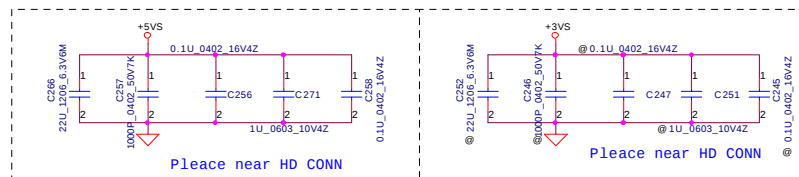
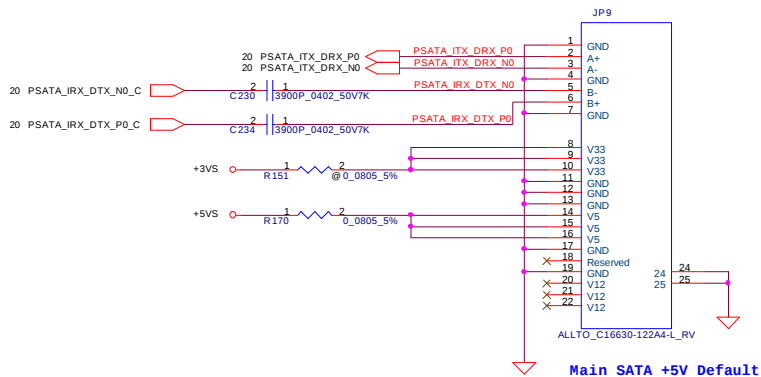
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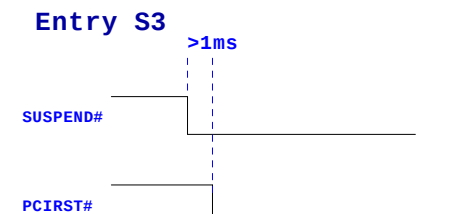
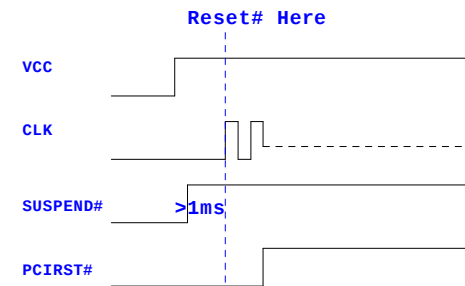
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				Rev. 0	



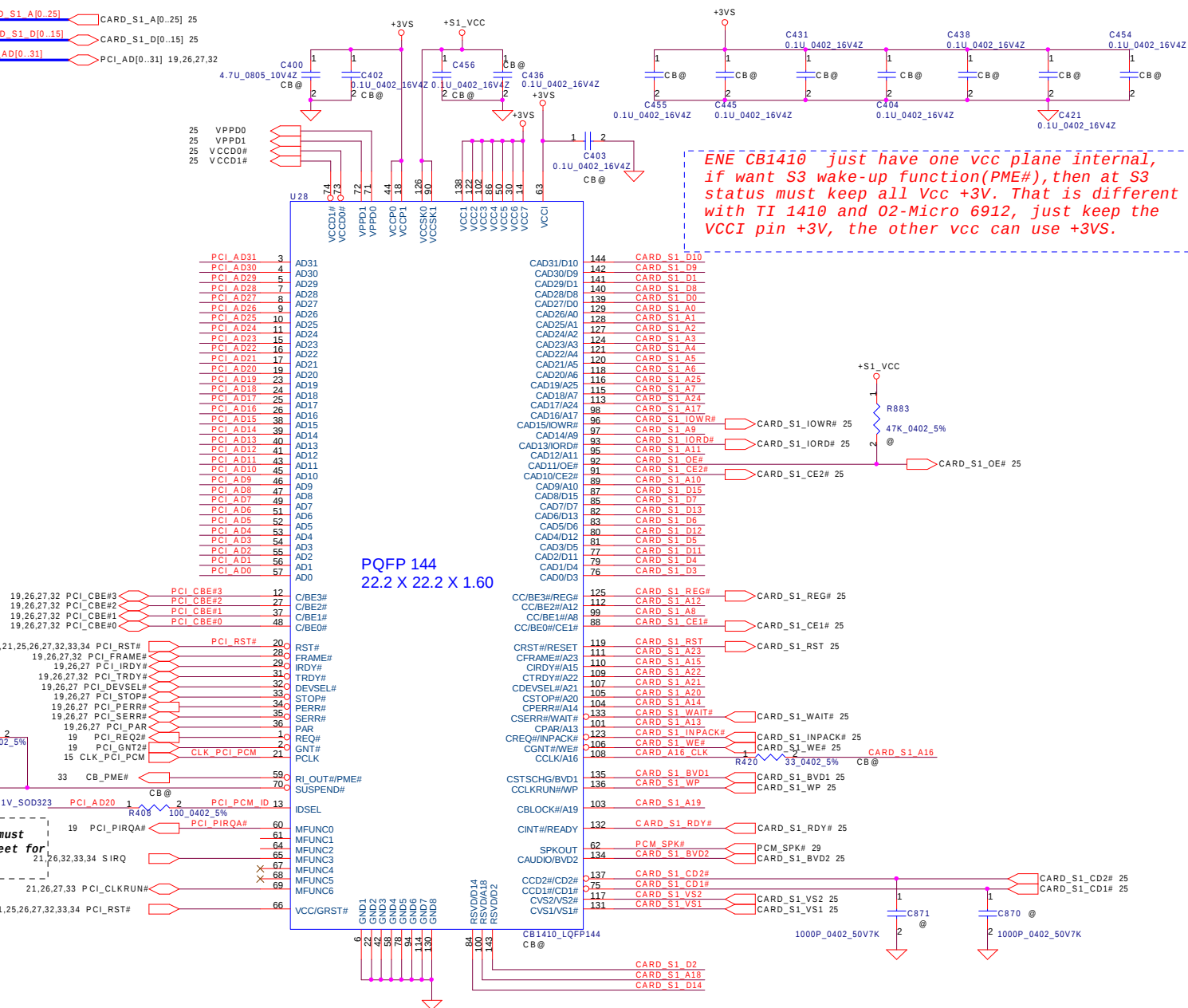
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Issued Date		2005/10/06					Deciphered Date		2006/10/06		
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						Size		Document Number		Rev	
						Custom		IG150/51 LA-3771		0.1	
						Date:		星期日, 六月 08, 2006		Sheet 21 of 48	



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2005/10/06		2006/10/06		Title	
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				Document Number	
				IGL50/51 LA-3771	
				Rev	
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				Date: 星期日, 六月 08, 2006	
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Note: MF0 -- MF0900 refer the data sheet design.

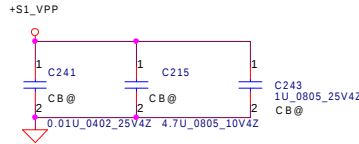


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				Custom	IGL50/51 LA-3771	Rev	0.1
				Date	星期五, 2006年10月20日	Sheet	24 of 48

PROPRIETARY NOTE

The schematic diagram illustrates the power supply section for the CP-2211-SSOP16 IC (U5). The IC is connected to several external power sources and decoupling capacitors:

- +5VS:** Connected to pins 5 and 6 (labeled 5V, 5V) via capacitor C197.
- +3VS:** Connected to pins 3 and 4 (labeled 3.3V, 3.3V) via capacitor C198.
- +12V:** Connected to pin 9 (labeled 12V) via capacitor C193.
- +S1_VCC:** Connected to pins 13, 12, and 11 (labeled VCC, VCC, VCC) via capacitor C210.
- +S1_VPP:** Connected to pin 10 (labeled VPP) via capacitor C209.
- Decoupling Capacitors:** C194, C197, C198, C210, and C209 are all 0.1uF, 0402, 16V4Z capacitors.
- IC Pins:** The IC pins are labeled: VCC (13, 12, 11), VPP (10), VCCD0 (1), VCCD1 (2), VPPD0 (15), VPPD1 (14), OC (8), GND (7), and SHDN (16).
- OC Pin:** Marked with an 'X'.
- SHDN Pin:** Connected to PCI_RST#.



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				Size	Document Number	Rev
				Cust#	IGL50/51 LA-3771 0.1	
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R5C832

SD,MMC,MS,XD multi-function pin define

MDIO PIN Name	SD Card PIN Name	MMC Card PIN Name	MS Card PIN Name	XD Card PIN Name
MDIO00	SDCD#	MMCCD#		XDCD0#
MDIO01			XDCD1#	
MDIO02			MSCD#	XDCE#
MDIO03	SDWP#			XDR/B#
MDIO04	SDPWR0	MMCPWR	MSWR	XDPWR
MDIO05	SDPWR1			XDWP#
MDIO06	SDLED#	MMCLD#	MSLED#	XDLED#
MDIO07			MSEXTCK	
MDIO08	SDCCMD	MMCCMD	MSBS	XDWE#
MDIO09	SDCLK	MMCLK	MSCCLK	XDRE#
MDIO10	SDCDAT0	MMCDAT	MSCDAT0	XDCDAT0
MDIO11	SDCDAT1		MSCDAT1	XDCDAT1
MDIO12	SDCDAT2		MSCDAT2	XDCDAT2
MDIO13	SDCDAT3		MSCDAT3	XDCDAT3
MDIO14				XDCDAT4
MDIO15				XDCDAT5
MDIO16				XDCDAT6
MDIO17				XDCDAT7
MDIO18				XDCL
MDIO19				XDALE

Function set pin define

UDIO3	UDIO4	MSEN	XDEN	Function
Pull-up	Pull-up	Pull-up	Pull-up	Enable SD, XD, MS, MMC Card

Layout Note: Place close to R5C832 and Shield GND for SDCLK, MSCLK

Layout Note: Place close to R5C832 and Shield GND for SD, CLK

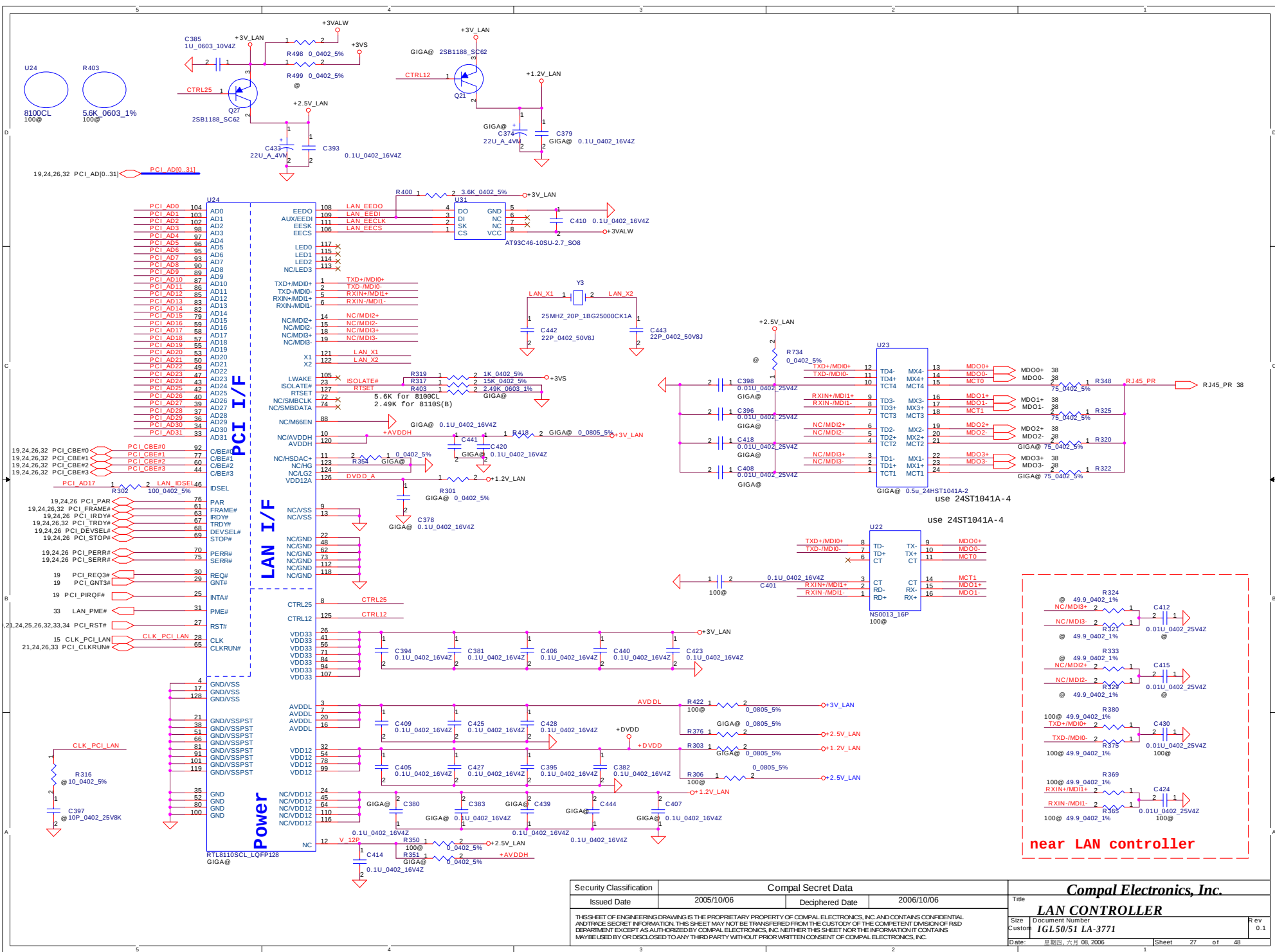
Solve MS Duo Adaptor short problem

Layout Note: Shield GND for CBS, CLK, INTERNAL and CBS, CLK

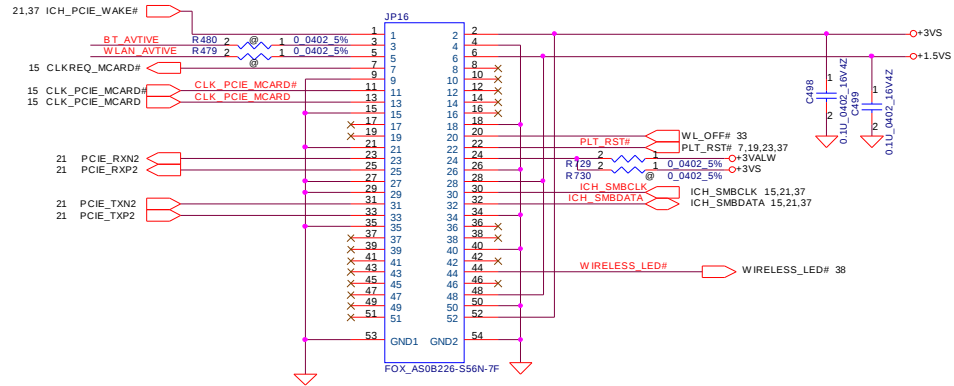
Layout Note: Shield GND for IEEE1394, TPA and TPB

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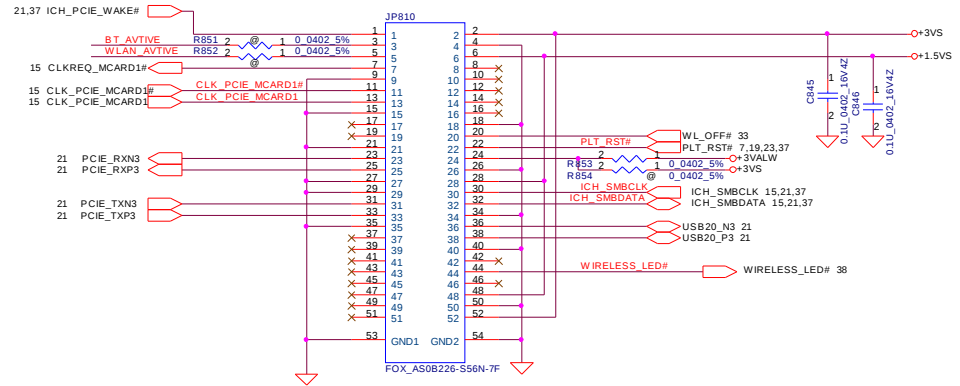
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Size	Document Number
	HGT30/31 LA3061
Date	Rev 0.1
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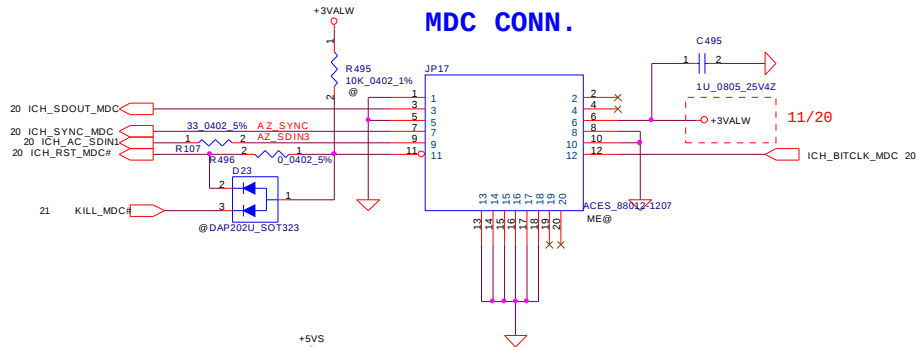
Mini-Express Card(Slot 1-WLAN)



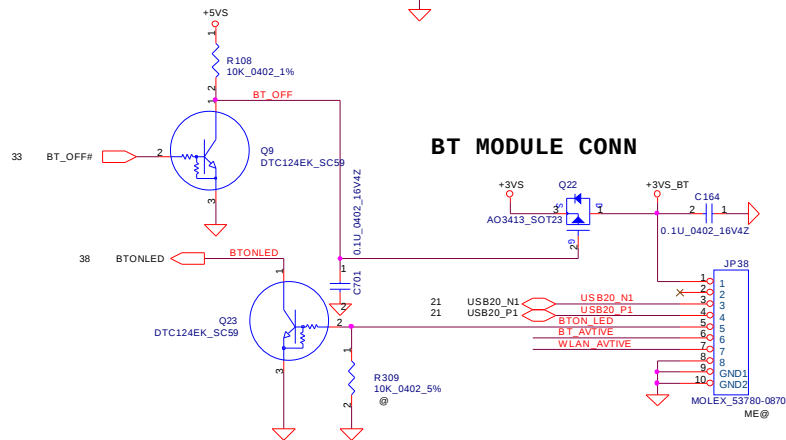
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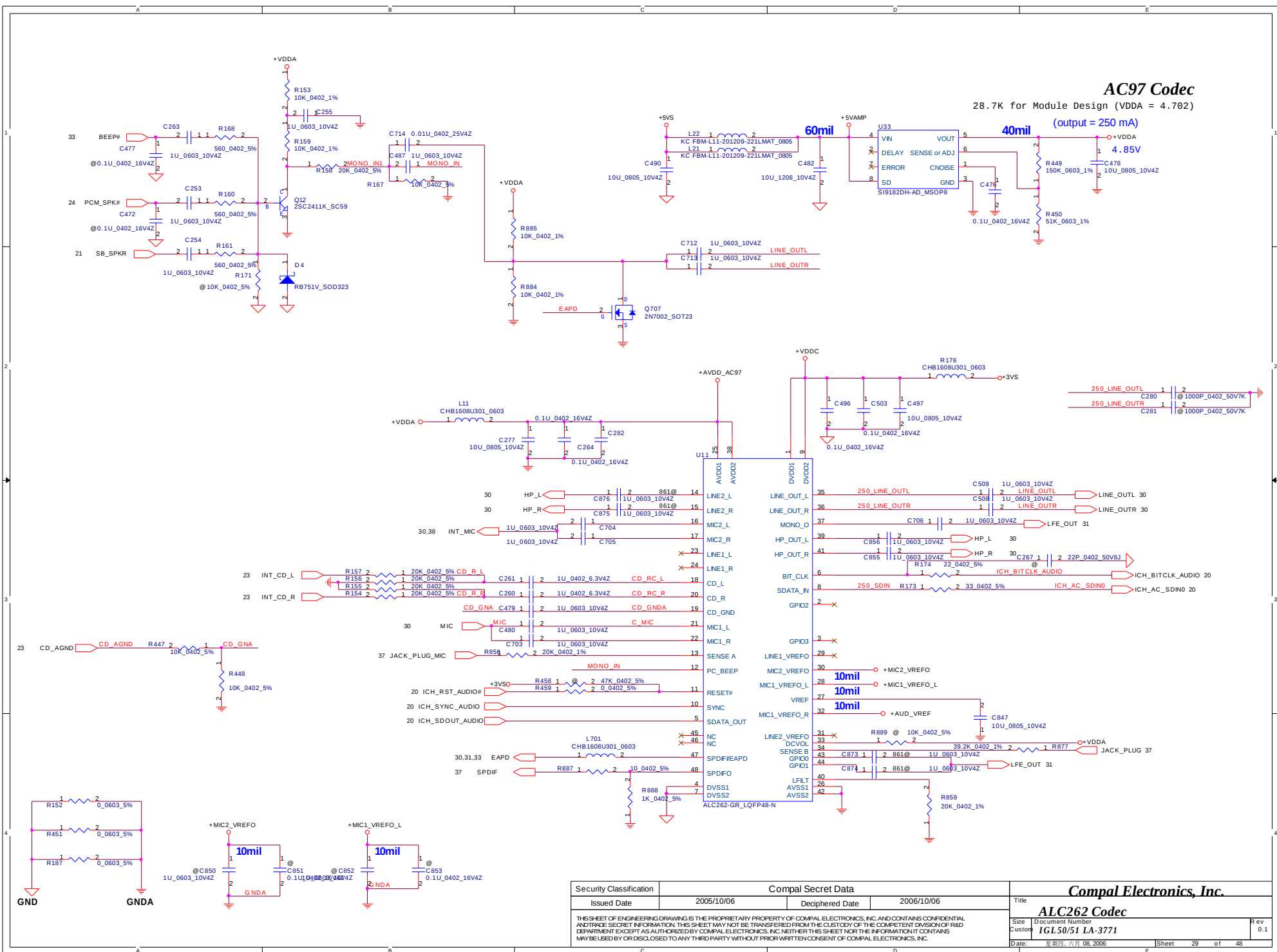
MDC CONN.

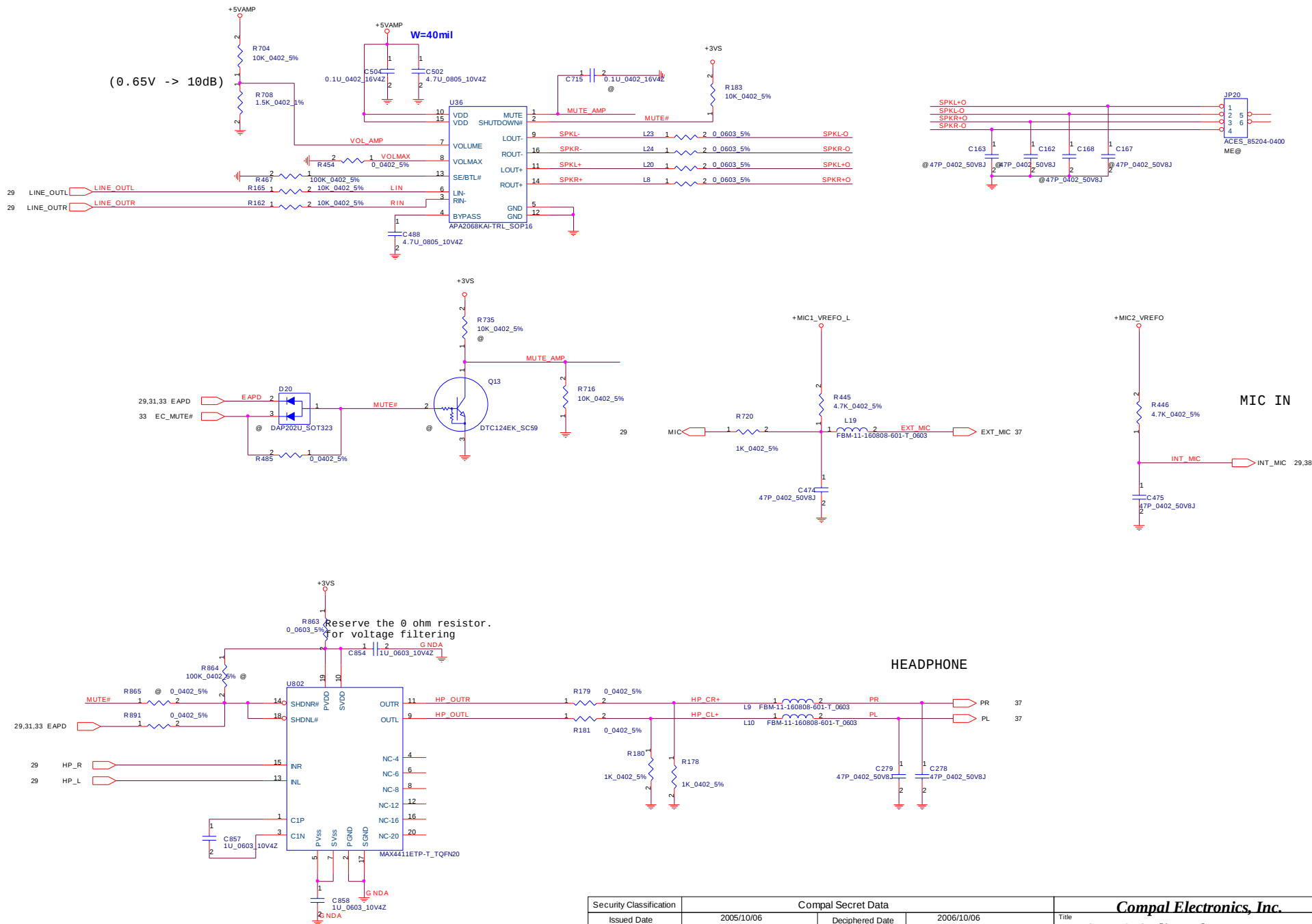


BT MODULE CONN



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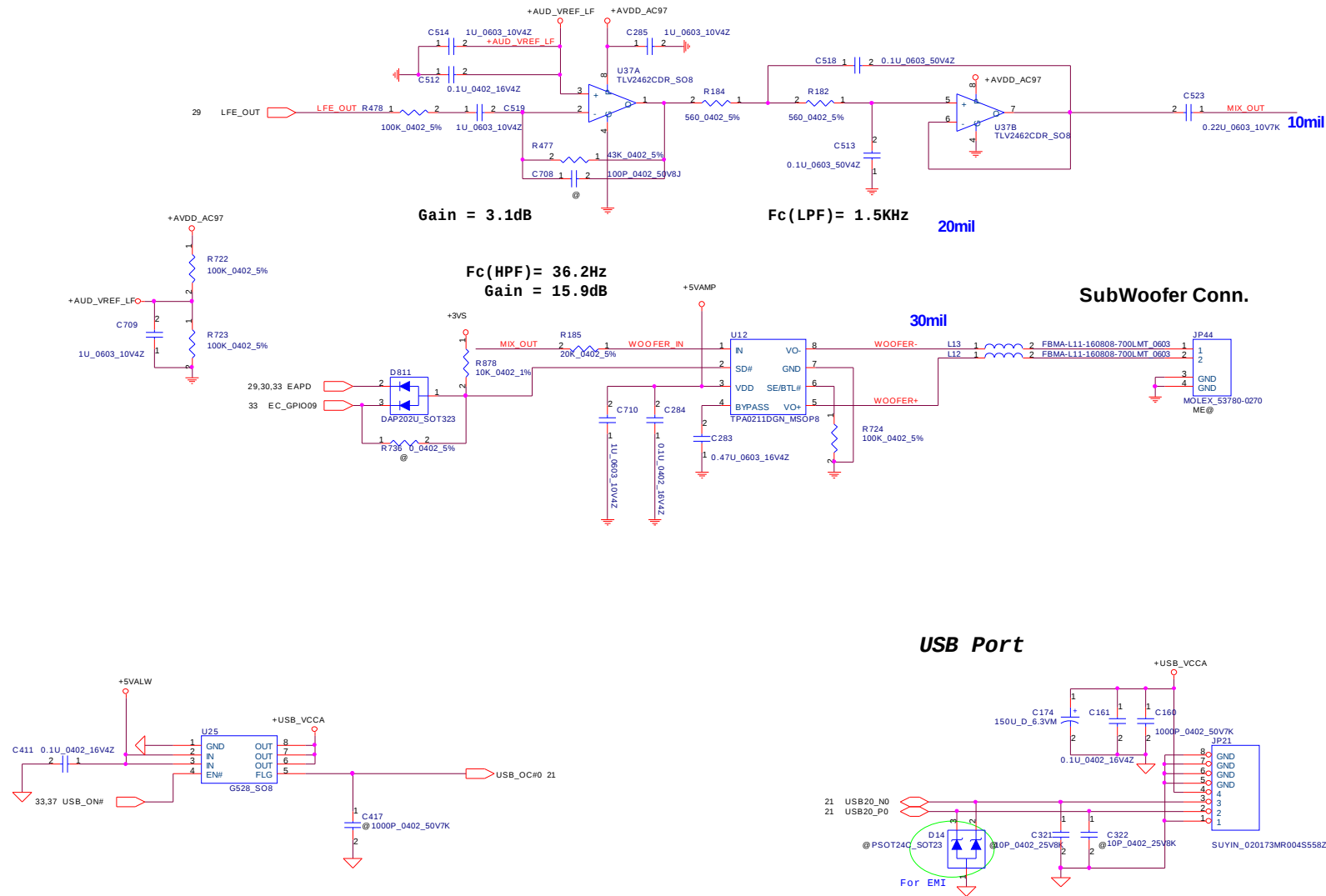




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				Date	Rev
				星期日, 六月 08, 2006	0.1
				Sheet	30 of 48

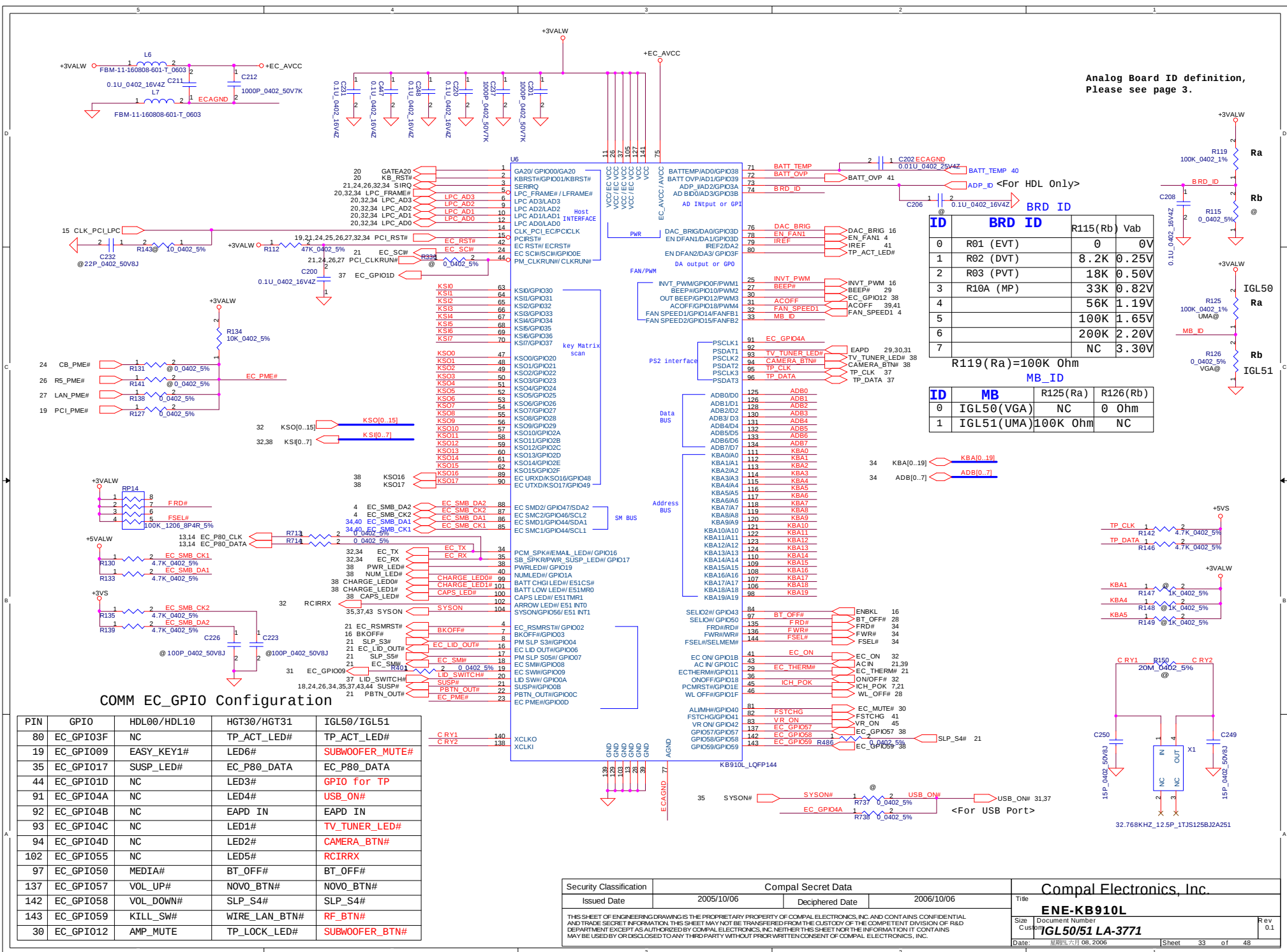
SUBWOOFER (Reserved for C38)

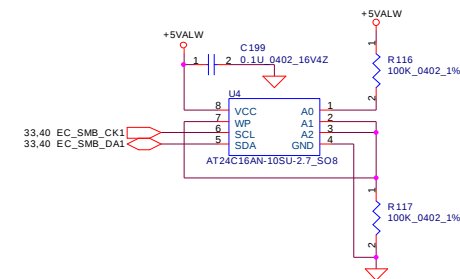
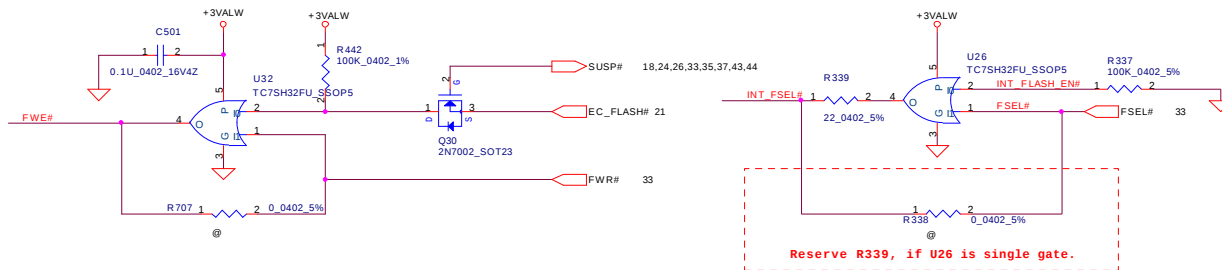
WOOFER@



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Title		Bluetooth & USB CONN.			
Size		Document Number			Rev
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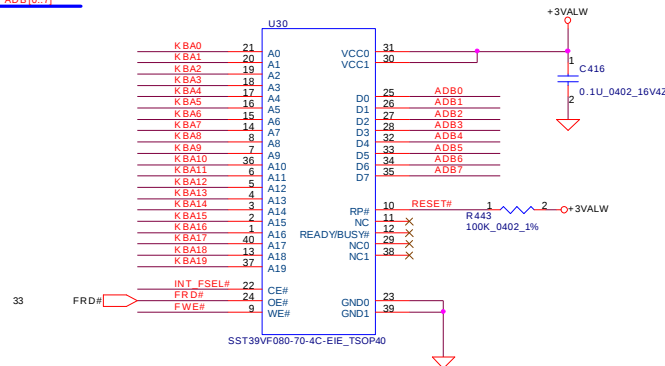
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Issued Date	2005/10/06	Deciphered Date	2006/10/06	Title	
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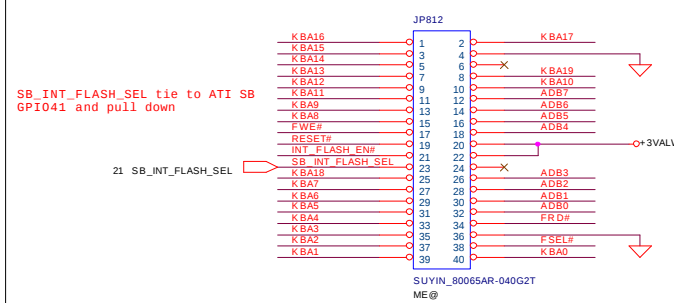


33 KBA[0..19] KBA[0..19]
33 ADB[0..7] ADB[0..7]

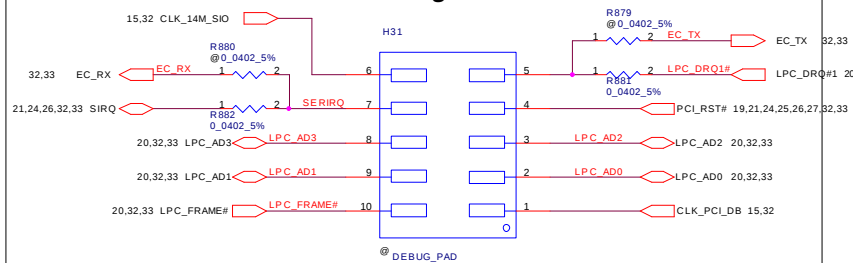
1MB Flash ROM



Change to small socket for ROM part



New LPC Debug Pad ---- MB side



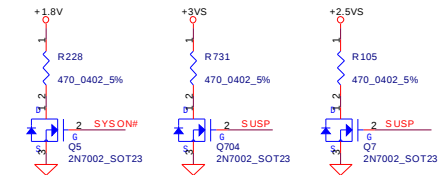
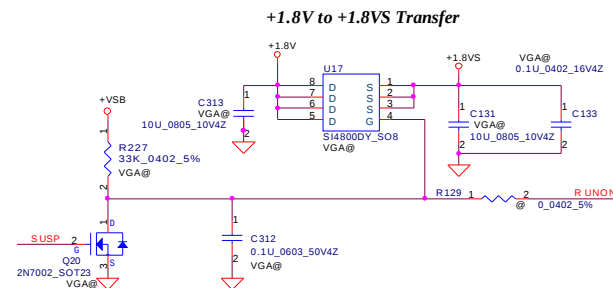
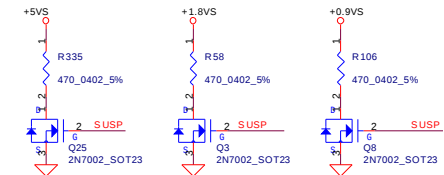
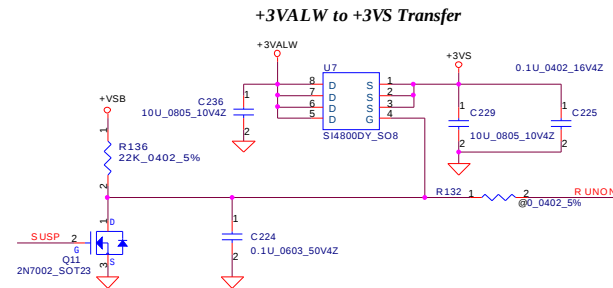
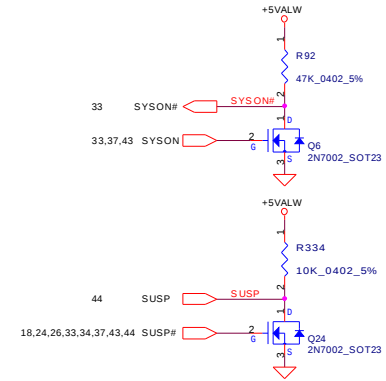
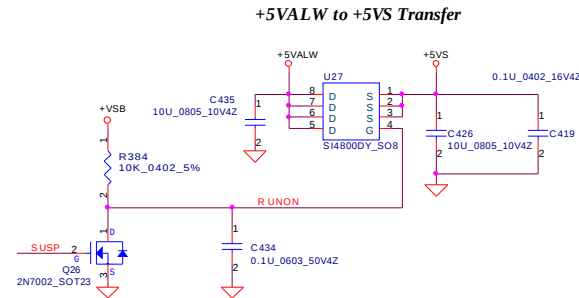
Under DDR ME Assignment Area

Keep Resistor near Debug Pad and in the same side

Standard side DIMM ---- Pin 1 near DIMM

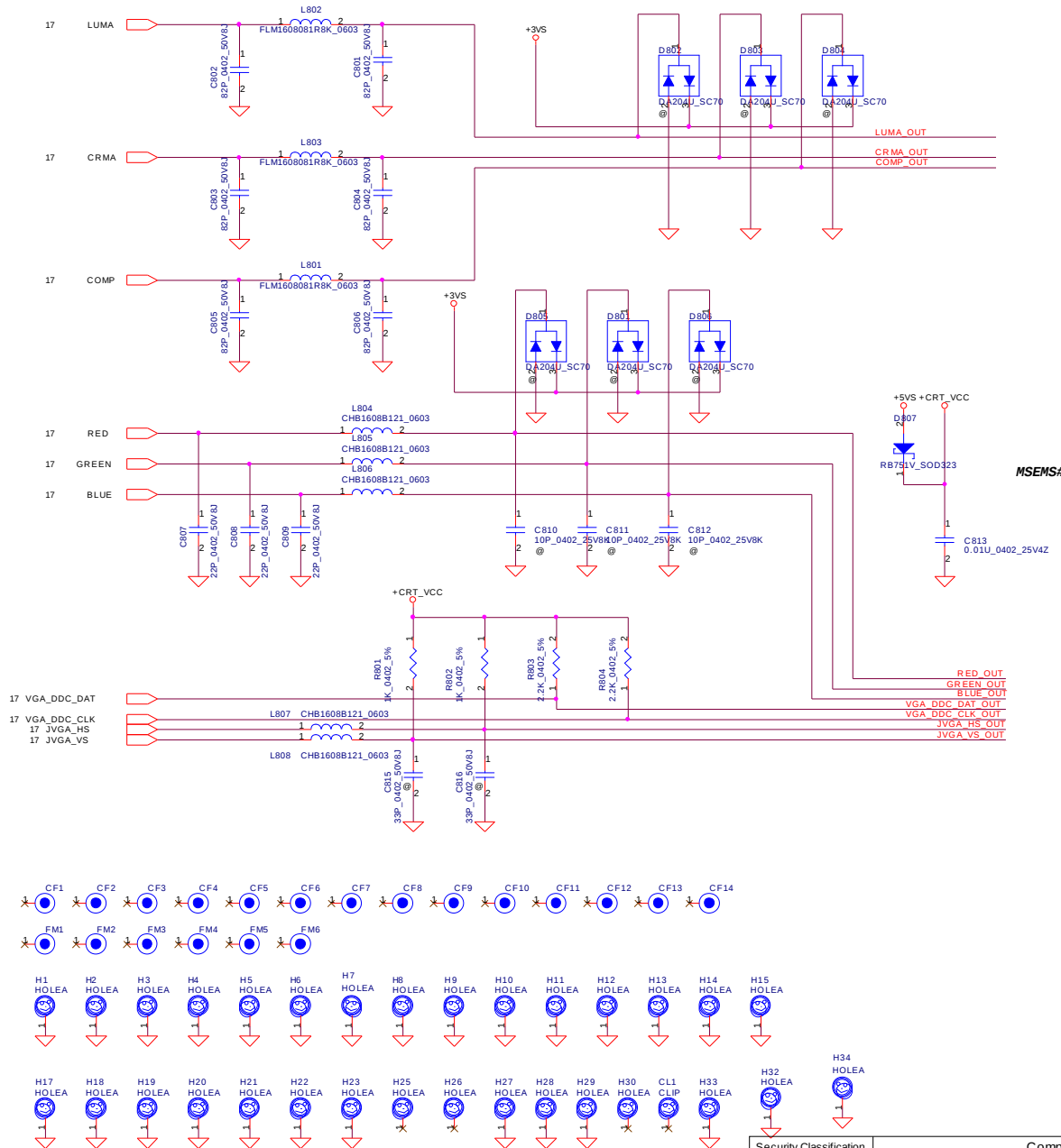
Reverse side DIMM ---- Pin 1 keep away DIMM

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Size	Custom	Document Number	1GL50/51 LA-3771	Rev 0.1
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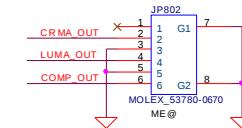
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Issued Date	2005/10/06	Deciphered Date	2006/10/06	DC/DC Circuit
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				Rev 0.1
				Date: 星期四, 六月 08, 2006
				Sheet 35 of 48

CLOSE TO JTVOUT1

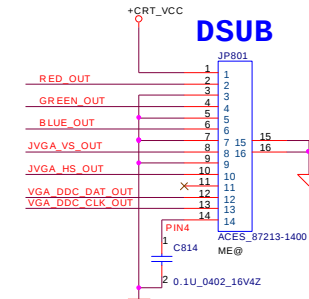


VGA I/O PORT Connector

S-VIDEO



DSUB



PIN ASSIGNMENT

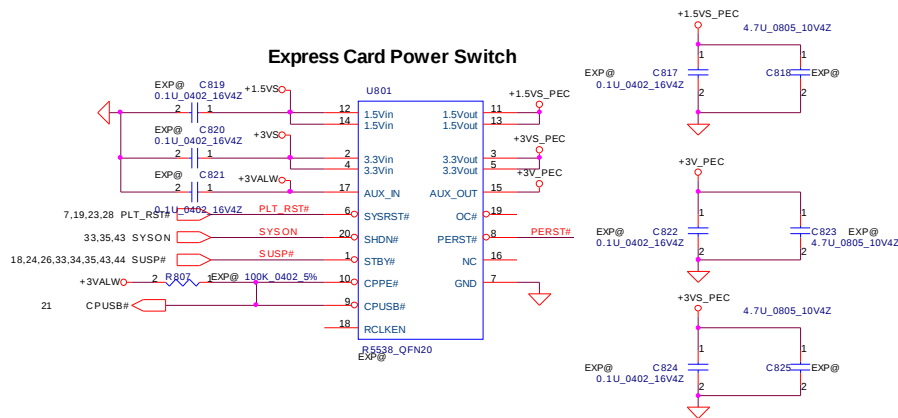
PIN	D-SUB	FUNCTION	PIN	SVIDEO	FUNCTION
1	9	+CRT_VCC	1	1	NC
2	1	RED	2	4	CRMA
3	6	GND	3	2	GND
4	2	GREEN	4	3	LUMA
5	7	GND	5	5	GND
6	3	BLUE	6	6	CVBS
7	8	GND			
8	14	VSYNC			
9	10	GND			
10	13	HSYNC			
11	11	SENSE			
12	12	SM_DAT			
13	15	SM_CLK			
14	4	PIN4			

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Issued Date	2005/03/10	Deciphered Date	2006/03/10	Title		
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				Size	Document Number	Rev
				Custom	IGL50/51 LA-3771	0.1

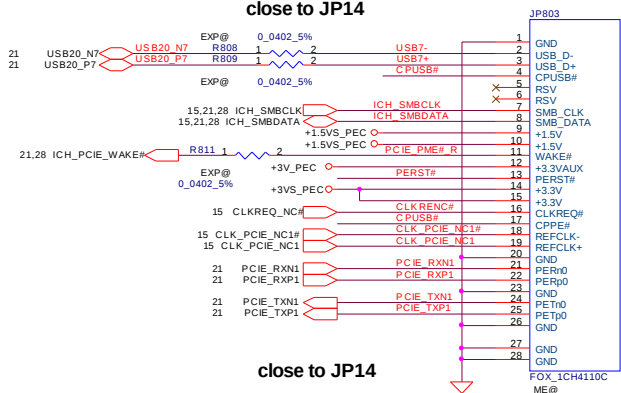
Compal Electronics, Inc.

CRT & TVout Connector

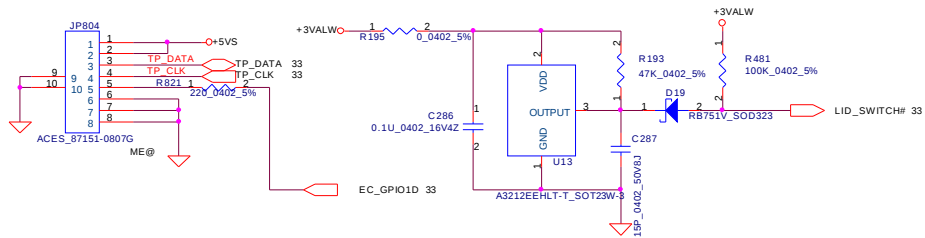
NEW CARD FOR C38



close to JP14

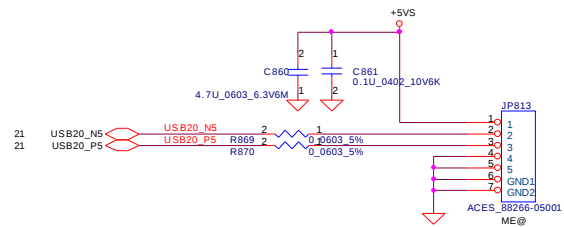


T/P Board



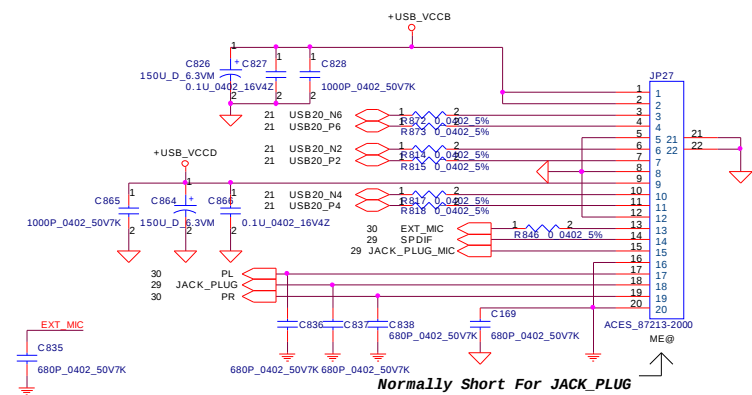
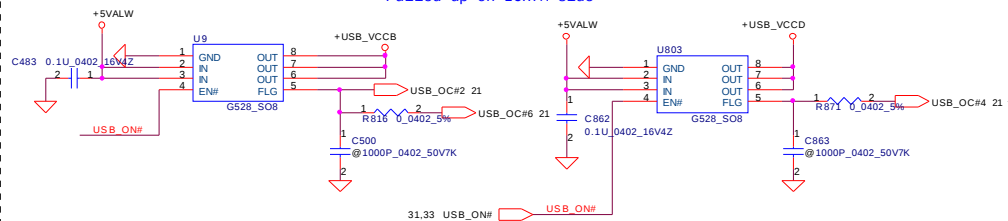
LID Switch

CMOS Camera Conn



USB board

Pulled up on ICH7M side



C835 ~ C838 For EMI Solution

Security Classification		Compal Secret Data		Compal Electronics, Inc. INDICATE LED	
Issued Date	2005/03/10	Deciphered Date	2006/03/10	Title	Rev. 0.
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				Custom	IGL50/51 LA-3771
Date:				星期四, 六月 08, 2006	Sheet 37 of 48

4 in 1 Card Reader

Pinout for TAITW_R012-210-LR (4 in 1 Card Reader):

Pin	Signal	Pin	Signal
15	SD-VCC	33	SD-D0
16	SD-CLK	34	SD-D1
17	SD-DAT0	35	SD-D2
18	SD-DAT1	36	SD-D3
19	SD-DAT2	37	SD-D4
20	SD-DAT3	38	SD-D5
21	SD-CMD	39	SD-D6
22	SD-CD-SW	40	SD-D7
23	SD-CD-COM	41	SD-D8
24	SD-WP-SW	42	SD-D9
25	SD-WP-COM	43	SD-D10
26	MS-SCLK	44	SD-D11
27	MS-DATA0	45	SD-D12
28	MS-DATA1	46	SD-D13
29	MS-DATA2	47	SD-D14
30	MS-DATA3	48	SD-D15
31	MS-MS	49	SD-D16
32	MS-BS	50	SD-D17
33	SD-GND	51	SD-D18
34	SD-GND	52	SD-D19
35	SD-GND	53	SD-D20
36	SD-GND	54	SD-D21
37	SD-GND	55	SD-D22
38	SD-GND	56	SD-D23
39	SD-GND	57	SD-D24
40	SD-GND	58	SD-D25
41	SD-GND	59	SD-D26
42	SD-GND	60	SD-D27
43	SD-GND	61	SD-D28
44	SD-GND	62	SD-D29
45	SD-GND	63	SD-D30
46	SD-GND	64	SD-D31
47	SD-GND	65	SD-D32
48	SD-GND	66	SD-D33
49	SD-GND	67	SD-D34
50	SD-GND	68	SD-D35
51	SD-GND	69	SD-D36
52	SD-GND	70	SD-D37
53	SD-GND	71	SD-D38
54	SD-GND	72	SD-D39
55	SD-GND	73	SD-D40
56	SD-GND	74	SD-D41
57	SD-GND	75	SD-D42
58	SD-GND	76	SD-D43
59	SD-GND	77	SD-D44
60	SD-GND	78	SD-D45
61	SD-GND	79	SD-D46
62	SD-GND	80	SD-D47
63	SD-GND	81	SD-D48
64	SD-GND	82	SD-D49
65	SD-GND	83	SD-D50
66	SD-GND	84	SD-D51
67	SD-GND	85	SD-D52
68	SD-GND	86	SD-D53
69	SD-GND	87	SD-D54
70	SD-GND	88	SD-D55
71	SD-GND	89	SD-D56
72	SD-GND	90	SD-D57
73	SD-GND	91	SD-D58
74	SD-GND	92	SD-D59
75	SD-GND	93	SD-D60
76	SD-GND	94	SD-D61
77	SD-GND	95	SD-D62
78	SD-GND	96	SD-D63
79	SD-GND	97	SD-D64
80	SD-GND	98	SD-D65
81	SD-GND	99	SD-D66
82	SD-GND	100	SD-D67
83	SD-GND	101	SD-D68
84	SD-GND	102	SD-D69
85	SD-GND	103	SD-D70
86	SD-GND	104	SD-D71
87	SD-GND	105	SD-D72
88	SD-GND	106	SD-D73
89	SD-GND	107	SD-D74
90	SD-GND	108	SD-D75
91	SD-GND	109	SD-D76
92	SD-GND	110	SD-D77
93	SD-GND	111	SD-D78
94	SD-GND	112	SD-D79
95	SD-GND	113	SD-D80
96	SD-GND	114	SD-D81
97	SD-GND	115	SD-D82
98	SD-GND	116	SD-D83
99	SD-GND	117	SD-D84
100	SD-GND	118	SD-D85
101	SD-GND	119	SD-D86
102	SD-GND	120	SD-D87
103	SD-GND	121	SD-D88
104	SD-GND	122	SD-D89
105	SD-GND	123	SD-D90
106	SD-GND		

4 in 1 Card Reader

Pinout for TAITW_R012-210-LR:

Pin	Signal	Pin	Signal
15	SD-VCC	33	SD-D0
16	SD-CLK	34	SD-D1
17	SD-DAT0	35	SD-D2
18	SD-DAT1	36	SD-D3
19	SD-DAT2	37	SD-D4
20	SD-DAT3	38	SD-D5
21	SD-CMD	39	SD-D6
22	SD-CD-SW	40	SD-D7
23	SD-CD-COM	41	SD-D8
24	SD-WP-SW	42	SD-D9
25	SD-WP-COM	43	SD-D10
26	MS-SCLK	44	SD-D11
27	MS-DAT0	45	SD-D12
28	MS-DAT1	46	SD-D13
29	MS-DAT2	47	SD-D14
30	MS-DAT3	48	SD-D15
31	MS-RE	49	SD-D16
32	MS-CE	50	SD-D17
33	MS-CLE	51	SD-D18
34	MS-GND	52	SD-D19
35	MS-GND	53	SD-D20
36	MS-GND	54	SD-D21
37	MS-GND	55	SD-D22
38	MS-GND	56	SD-D23
39	MS-GND	57	SD-D24
40	MS-GND	58	SD-D25
41	MS-GND	59	SD-D26
42	MS-GND	60	SD-D27
43	MS-GND	61	SD-D28
44	MS-GND	62	SD-D29
45	MS-GND	63	SD-D30
46	MS-GND	64	SD-D31
47	MS-GND	65	SD-D32
48	MS-GND	66	SD-D33
49	MS-GND	67	SD-D34
50	MS-GND	68	SD-D35
51	MS-GND	69	SD-D36
52	MS-GND	70	SD-D37
53	MS-GND	71	SD-D38
54	MS-GND	72	SD-D39
55	MS-GND	73	SD-D40
56	MS-GND	74	SD-D41
57	MS-GND	75	SD-D42
58	MS-GND	76	SD-D43
59	MS-GND	77	SD-D44
60	MS-GND	78	SD-D45
61	MS-GND	79	SD-D46
62	MS-GND	80	SD-D47
63	MS-GND	81	SD-D48
64	MS-GND	82	SD-D49
65	MS-GND	83	SD-D50
66	MS-GND	84	SD-D51
67	MS-GND	85	SD-D52
68	MS-GND	86	SD-D53
69	MS-GND	87	SD-D54
70	MS-GND	88	SD-D55
71	MS-GND	89	SD-D56
72	MS-GND	90	SD-D57
73	MS-GND	91	SD-D58
74	MS-GND	92	SD-D59
75	MS-GND	93	SD-D60
76	MS-GND	94	SD-D61
77	MS-GND	95	SD-D62
78	MS-GND	96	SD-D63
79	MS-GND	97	SD-D64
80	MS-GND	98	SD-D65
81	MS-GND	99	SD-D66
82	MS-GND	100	SD-D67
83	MS-GND	101	SD-D68
84	MS-GND	102	SD-D69
85	MS-GND	103	SD-D70
86	MS-GND	104	SD-D71
87	MS-GND	105	SD-D72
88	MS-GND	106	SD-D73
89	MS-GND	107	SD-D74
90	MS-GND	108	SD-D75
91	MS-GND	109	SD-D76
92	MS-GND	110	SD-D77
93	MS-GND	111	SD-D78
94	MS-GND	112	SD-D79
95	MS-GND	113	SD-D80
96	MS-GND	114	SD-D81
97	MS-GND	115	SD-D82
98	MS-GND	116	SD-D83
99	MS-GND	117	SD-D84
100	MS-GND	118	SD-D85
101	MS-GND	119	SD-D86
102	MS-GND	120	SD-D87
103	MS-GND	121	SD-D88
104	MS-GND	122	SD-D89
105	MS-GND	123	SD-D90
106	MS-GND	124	

[illegible][illegible]

Wireless / Bluetooth LED Blue Amber

BATT_CHG_LED#

BATT_LOW_LED

STATUS	
AC	BLUE
Chargin	Blinking Blue
Low BATT	Amber

Function		
KEY Matrix	K016	K017
KSI0	DW-UP	DW-DOWN
KSI1	DW-ENTER	MUTE

Function

--	--	--

Dial Wheel

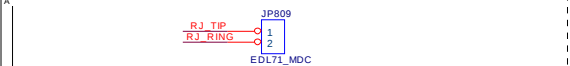


NOVA_BT01

NOVO BTN

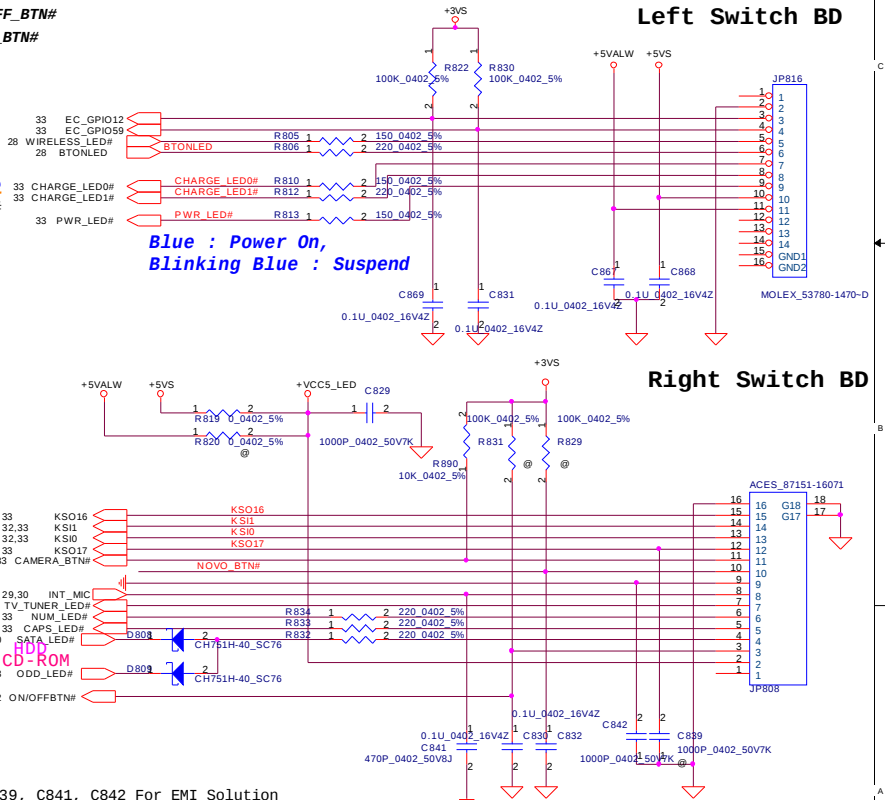
NOVO_BTN#

MDC CONN



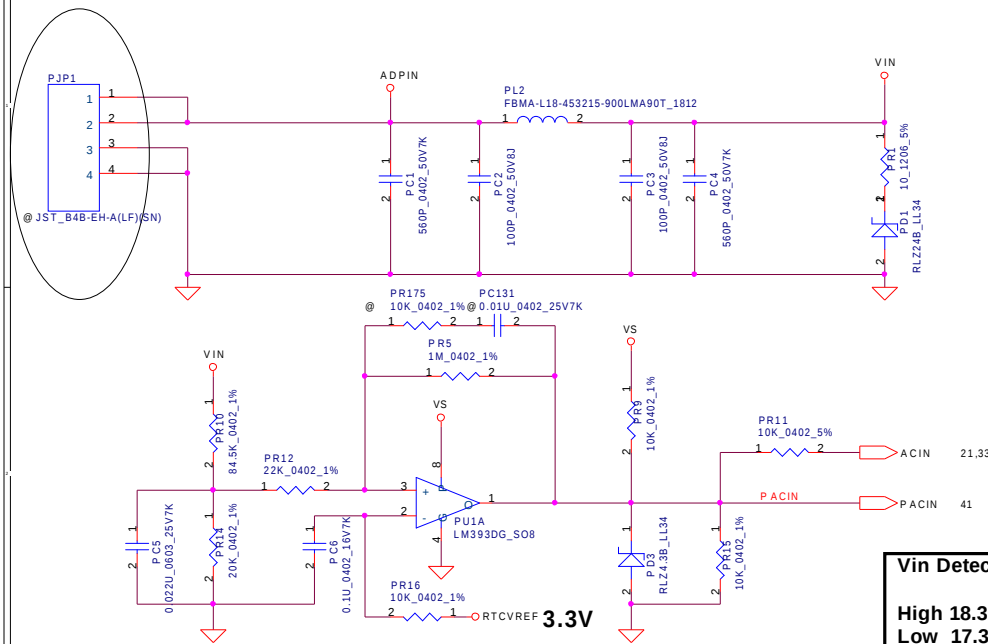
SUBWOOFER_ON/OFF_BTN#

LED Indicator	<i>RF_ON/OFF_BTN#</i>
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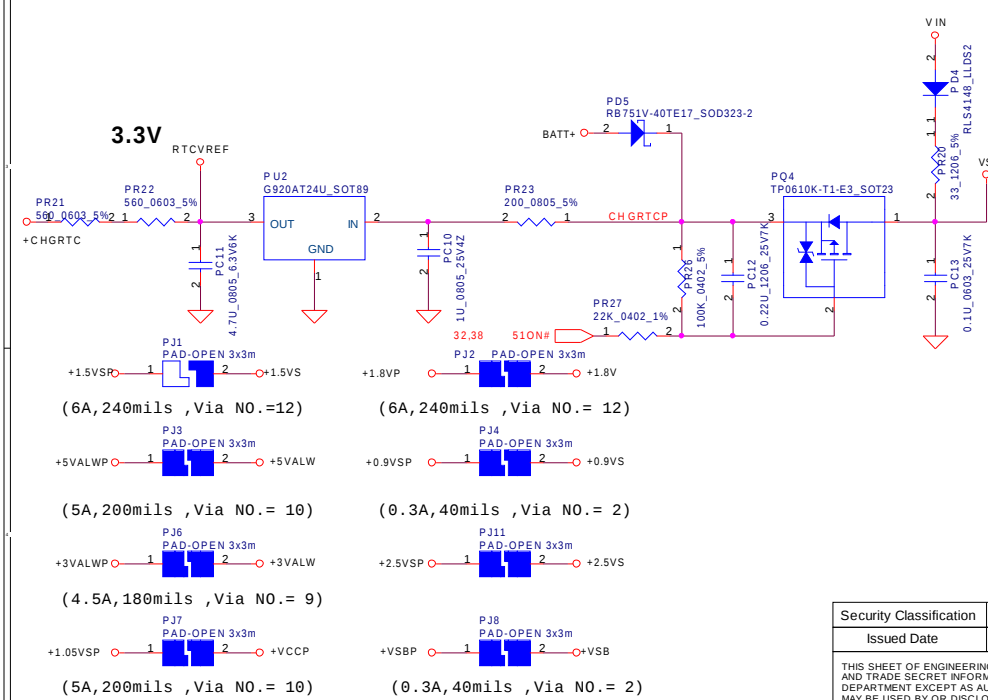


39, C841, C842 For EMI Solution

Security Classification		Compal Secret Data		Compal Electronics, Inc.		
Issued Date	2005/03/10	Deciphered Date	2006/03/10	Title	INDICATE LED	
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				Custom	1GL50/51 LA-3771	0.1

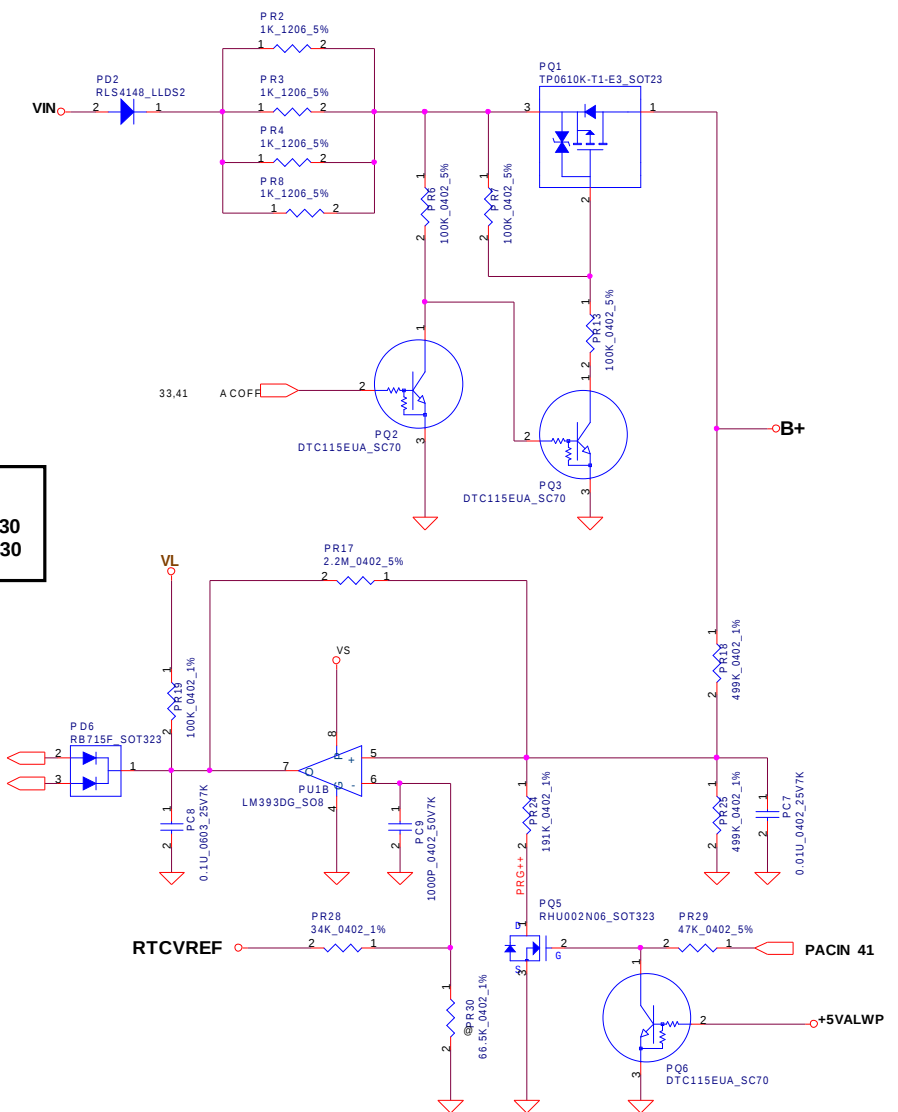


Vin Detector			
	High	17.901	17.430
	Low	17.370	16.907

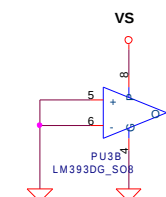
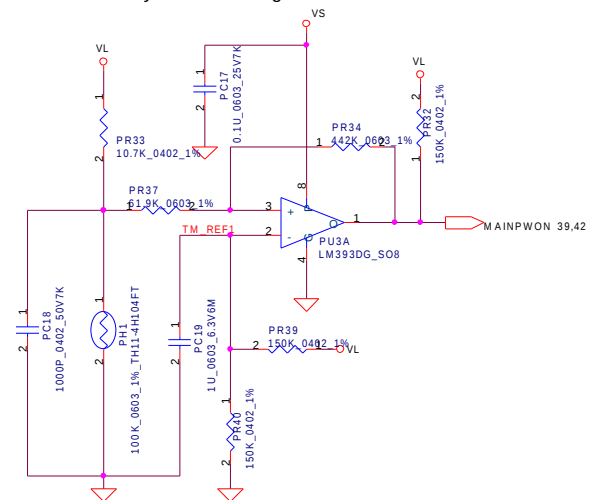
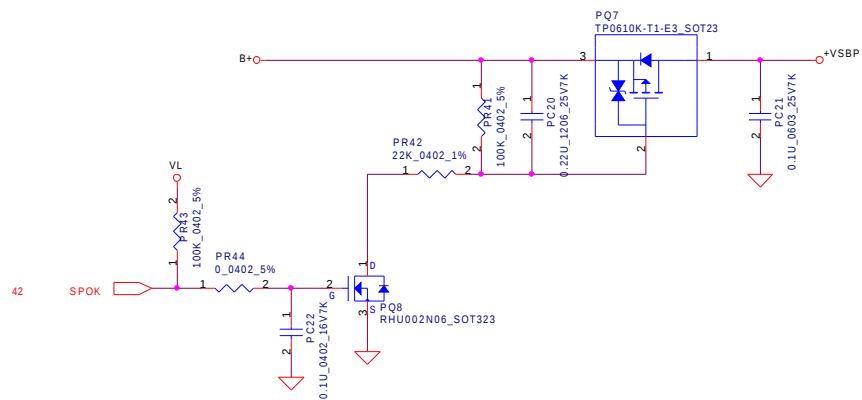


ACIN			
	Min.	typ.	Max.
H-->L	14.620V	14.853V	15.245V
L-->H	15.534V	15.970V	16.421V

BATT ONLY			
	Min.	typ.	Max.
H-->L	6.169V	6.231V	6.361V
L-->H	7.168V	7.349V	7.537V



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Size B	Document Number			Rev 0.1	
Date: 星期四, 六月 08, 2006		Sheet 39 of 48			



$$F_{osc} = 14100 / R_t = 14100 / 47 = 300 \text{ KHz}$$

IREF=0.932*Icharge
IREF=0.466~2.61V
I fast charge=2.8A

LI-3S :13.05V---BATT-0VP=1.45V
BATT-0VP=0.111*BATT+

CC=2.8A
 $(100K/(100K+133K)) * 2.61V = 1.12V$
 $1.12V / (20 * 0.02) = 2.8A$

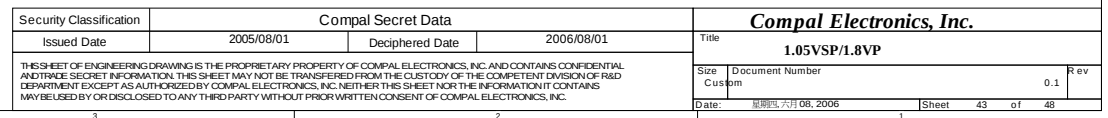
90W HGT30 CP Point=4.166A
 $5V * (10K / (30K + 10K)) = 1.666V$
 $1.666V / (20 * 0.02) = 4.166A$

65W HGT31 CP Point=3.125A
 $5V * (10K / (30K + 10K)) = 1.25V$
 $1.25V / (20 * 0.02) = 3.125A$

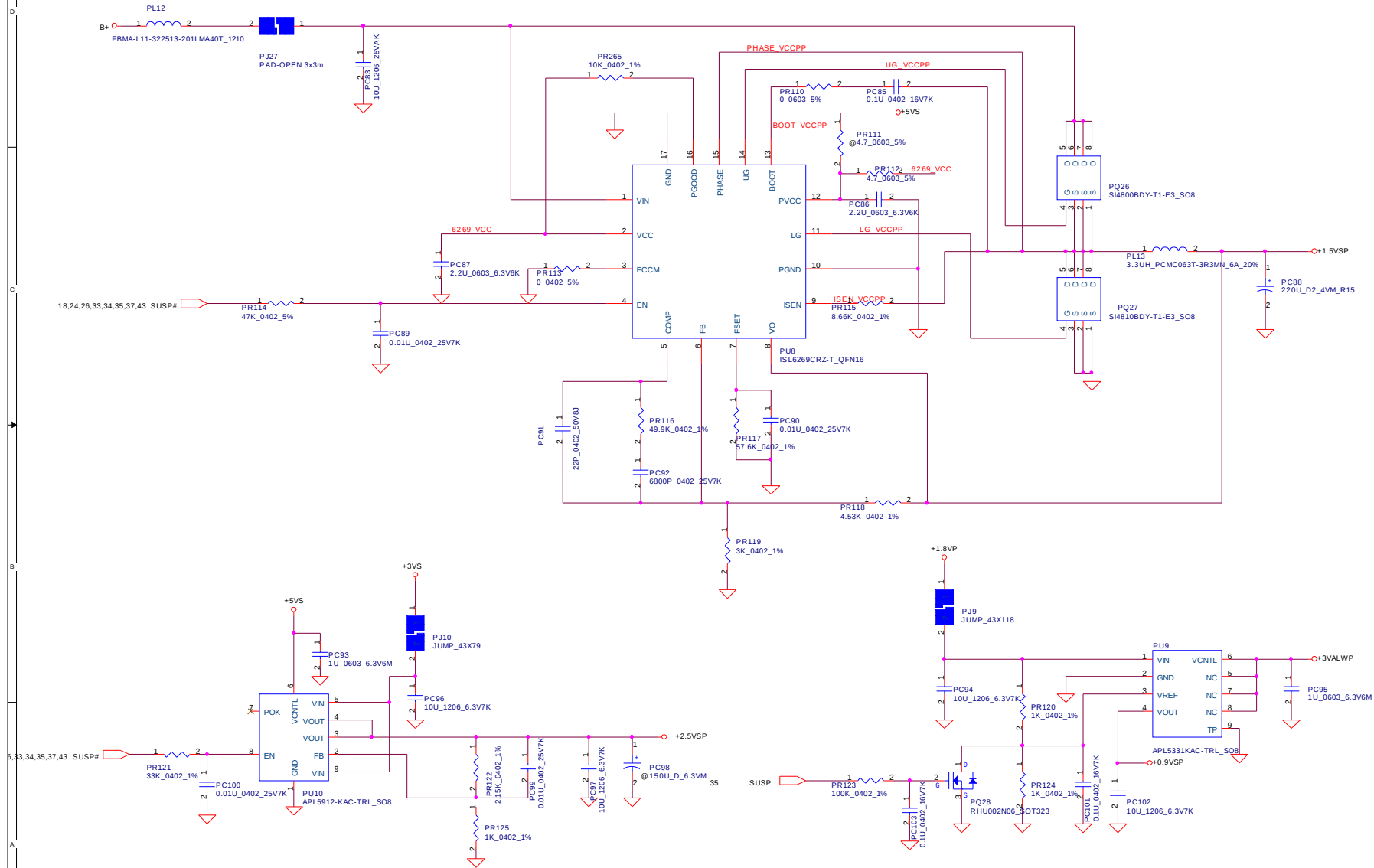
Charge voltage
3S CC-CV MODE : 12.6V
SEL is L

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Issued Date	2005/08/01	Deciphered Date	2006/08/01	Title		
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				Size B	Document Number	Rev 0.1
Date: 星期日, 六月 08, 2006				Sheet 41 of 48		

+1.05VSP Ilimit=6.33A~10.03A



+1.5VSP Ilimit = 9.38A-12.5A



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2005/08/01	Deciphered Date	2006/08/01	Title +VCCPP/+2.5VSP/0.9VSP	
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				Date 星期日 六月 08, 2006	Sheet 44 of 48

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

Item	Fixed Issue	Reason for change	Rev.	PG #	Modify List	VER	Phase
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
8							
9							

Item	Fixed Issue	Rev.	PG #	Modify List	B.Ver #	Phase
1					0.2	DVT
2					0.2	DVT
3					0.2	DVT
4					0.2	DVT
5					0.2	DVT
6					0.2	DVT
7					0.2	DVT
8					0.2	DVT
9					0.2	DVT
10					0.2	DVT
11					0.2	DVT

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Compal Electronics, Inc.			
Title			
PIR			
Size	Document Number		Rev
	HGT30/31 LA-3061		0.0
Date:	日期 1, 六月 08, 2006		Sheet 47 of 48

Item	Fixed Issue	Rev.	PG #	Modify List	B.Ver #	Phase
12					0.3	PVT
13					0.3	PVT
14					0.3	PVT
15					0.3	PVT
16					0.3	PVT

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Compal Electronics, Inc.		
Title		
PIR		
Size	Document Number	Rev
	HGT30/31 LA-3061	0.0
Date:	日期 1, 六月 08, 2006	Sheet 48 of 48