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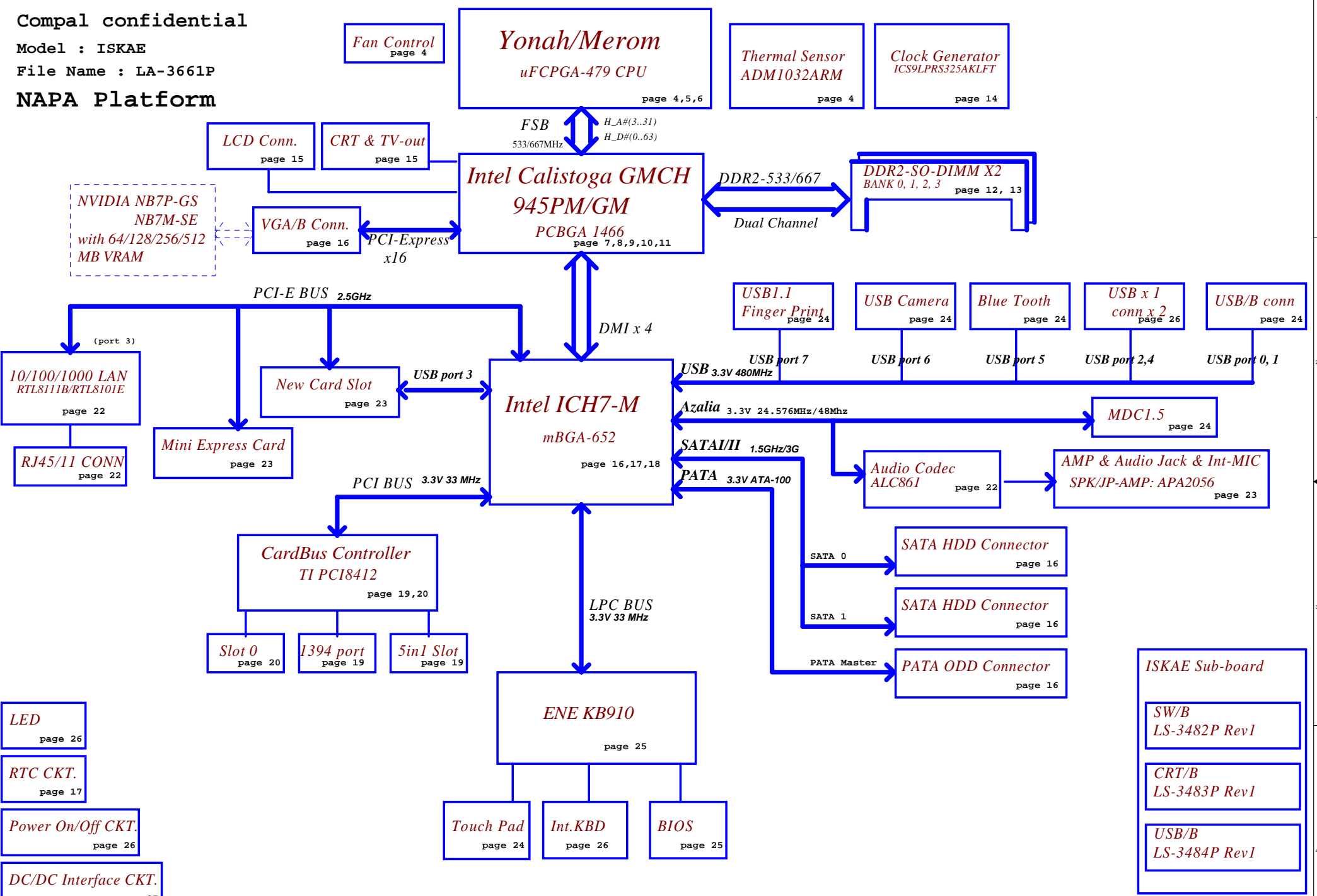
ISKAE LA-3661P Schematics Document

Intel Yonah/Merom with 945GM/943GML/940GML+ DDRII + ICH7M

2006-12-22

REV: 0.1

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- RTC CKT.** page 17
- Power On/Off CKT.** page 26
- DC/DC Interface CKT.** page 27
- Power Circuit DC/DC** Page 28-34

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Compal Electronics, Inc.		
Title		
Block Diagram		
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Voltage Rails

Power Plane	Description	S1	S3	S5
VIN	Adapter power supply (19V)	NA	NA	NA
B+	AC or battery power rail for power circuit.	NA	NA	NA
+CPU_CORE	Core voltage for CPU	ON	OFF	OFF
+0.9VS	0.9V switched power rail for DDR terminator	ON	OFF	OFF
+VCCP	1.05V switched power rail	ON	OFF	OFF
+1.5VS	1.5V switched power rail	ON	OFF	OFF
+1.8V	1.8V power rail for DDR	ON	ON	OFF
+1.8VS	1.8V switched power rail	ON	OFF	OFF
+2.5VS	2.5V switched power rail	ON	OFF	OFF
+3VALW	3.3V always on power rail	ON	ON	ON*
+3VS	3.3V switched power rail	ON	OFF	OFF
+5VALW	5V always on power rail	ON	ON	ON*
+5VS	5V switched power rail	ON	OFF	OFF
+VSB	+VSB always on power rail	ON	ON	ON*
+RTCVCC	RTC power	ON	ON	ON

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

External PCI Devices

DEVICE	PCI Device ID	IDSEL #	REQ/GNT #	PIRQ
1394	D0	AD20	2	A,B,C
CARD BUS	D4	AD20	2	A,B,C
5IN1	D4	AD20	2	A,B,C

KB910 I2C / SMBUS ADDRESSING

DEVICE	HEX	ADDRESS
SM1 24C16	A0H	1 0 1 0 0 0 0 X b
SM1 SMART BATTERY	16H	0 0 1 0 1 1 X b
SM2 ADM0132	98H	1 0 1 1 0 0 X b
CPU THERMAL MONITOR		

ICH7-M SM Bus address

DEVICE	HEX	ADDRESS
DDR SO-DIMM 0	A0	1 0 1 0 0 0 0
DDR SO-DIMM 1	A4	1 0 1 0 0 1 0
CLOCK GENERATOR (EXT.)	D2	1 1 0 1 0 0 1 0

Board ID / SKU ID Table for AD channel

Vcc	3.3V +/- 5%			
Ra	100K +/- 5%			
Board ID	Rb	V _{AD_BID min}	V _{AD_BID typ}	V _{AD_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	
2	
3	
4	
5	
6	
7	

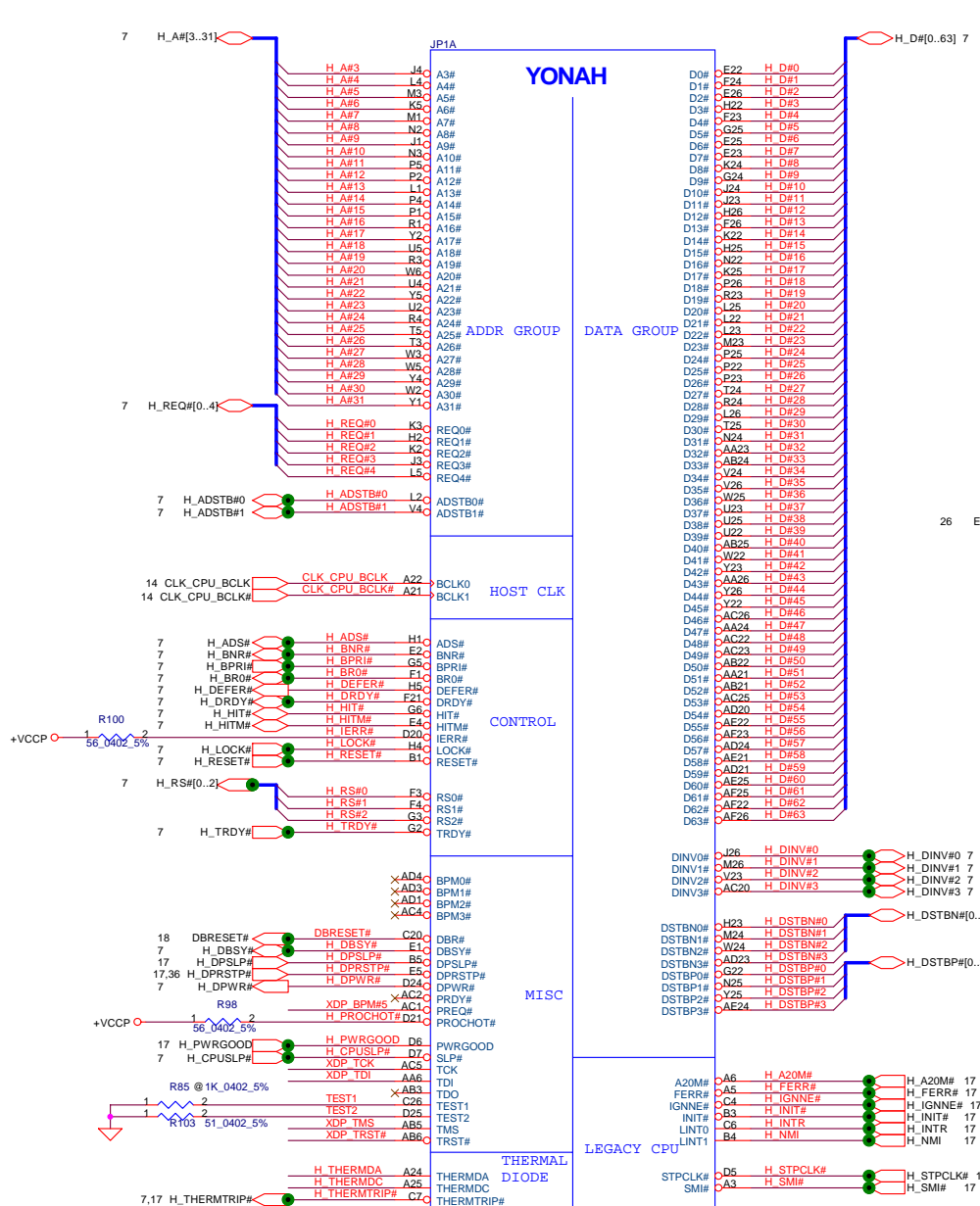
SKU ID Table

SKU ID	SKU
0	10 (10E)
1	10C
2	10G
3	10GC
4	10J (10EJ)
5	10CJ
6	10GJ
7	10GCJ

BTO Option Table

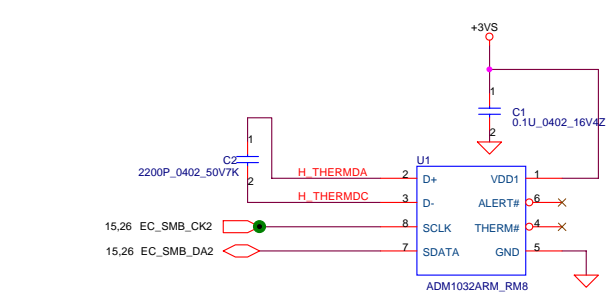
BTO Item	BOM Structure
NEW CARD	NEWCARD@
LAN	100M@ 1000M@
WLAN	KS@
NB	GM@ PM@
BT	BT@
MIC	MIC@
CIR	CIR@
FINGER PRINT	FP@
5IN1	5IN1@
CAMERA	CAMERA@
PCMCIA	PCMCIA@
MDC	MDC@

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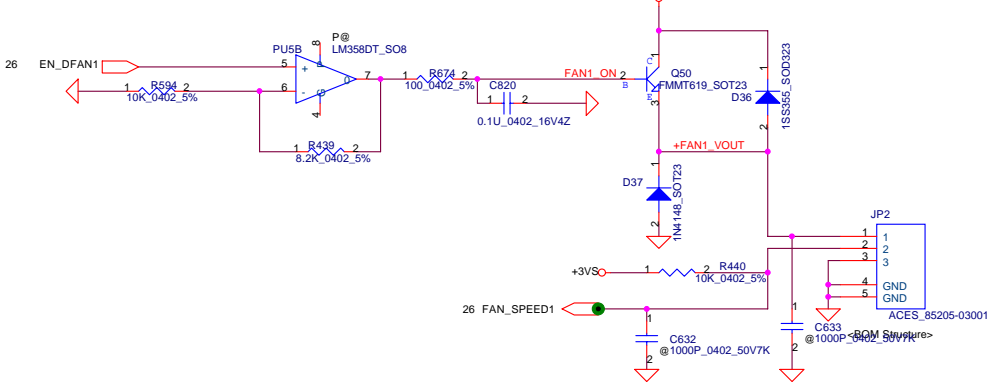
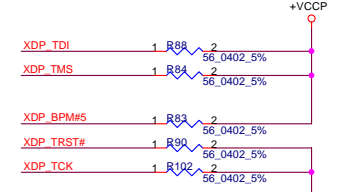


H_THERMDA, H_THERMDC routing together.
Trace width / Spacing = 10 / 10 mil

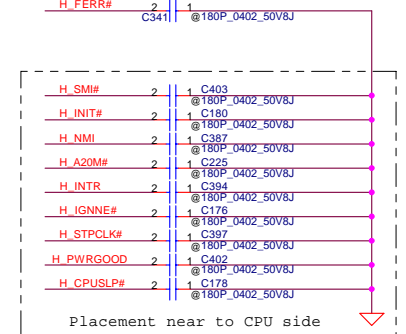
Thermal Sensor ADM1032ARM



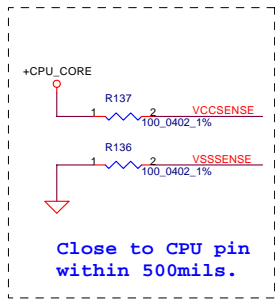
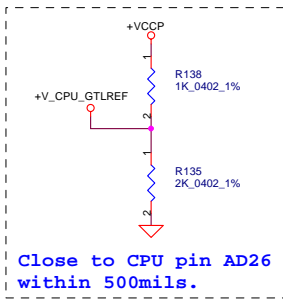
Place close to CPU within 500mil



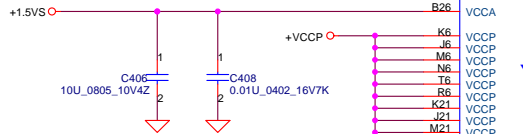
Placement near to ICH7



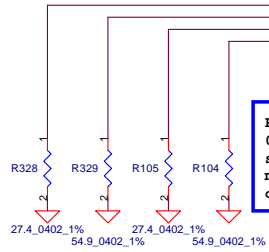
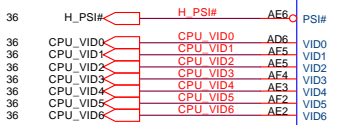
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Compal Electronics, Inc. Yonah CPU in mFCPGA479			Rev 0.1
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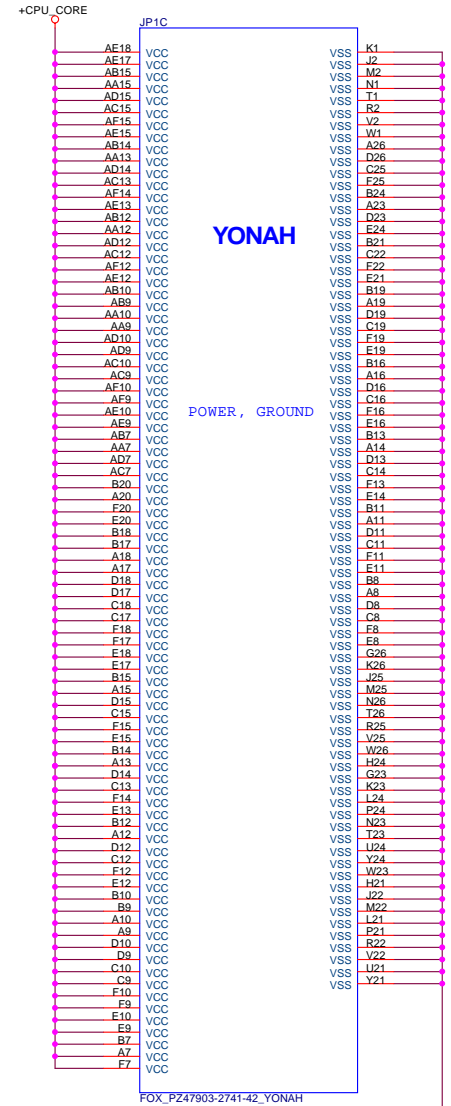
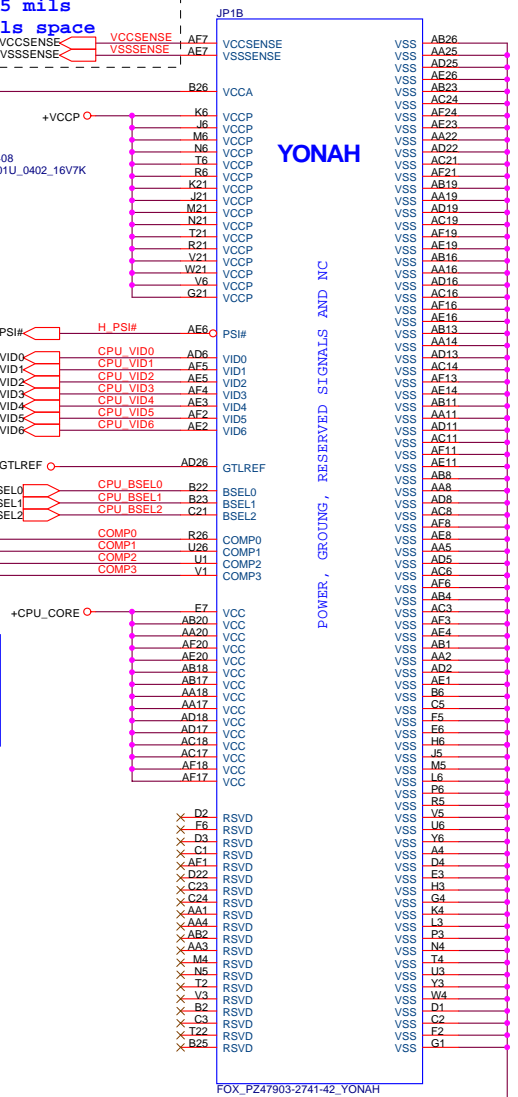
Length match within 25 mils
The trace width 18 mils space
7 mils

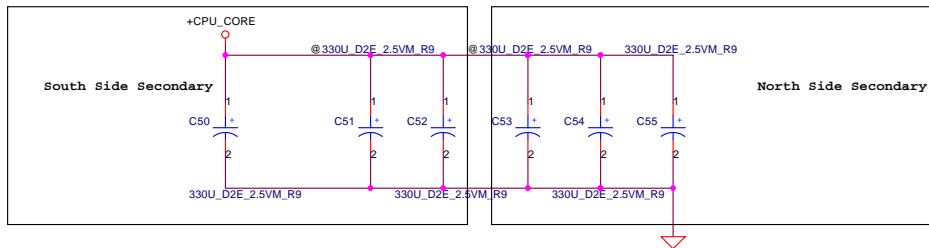
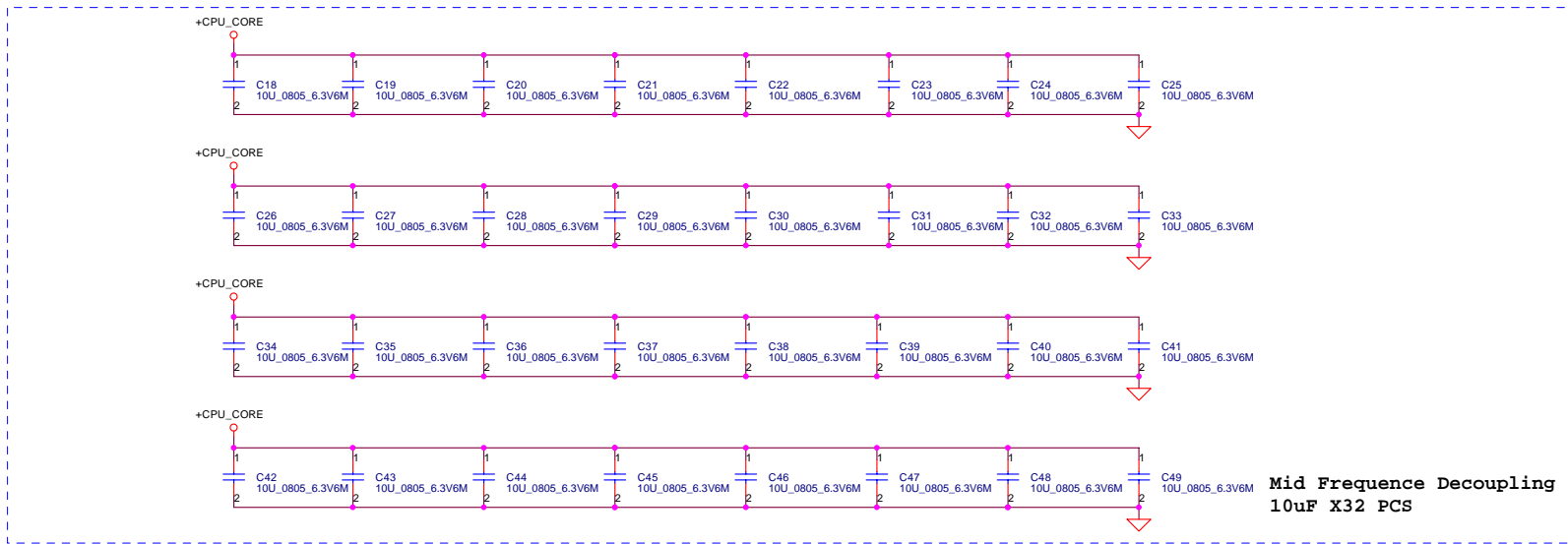


CPU_BSEL	CPU_BSEL2	CPU_BSEL1	CPU_BSEL0
133	0	0	1
166	0	1	1

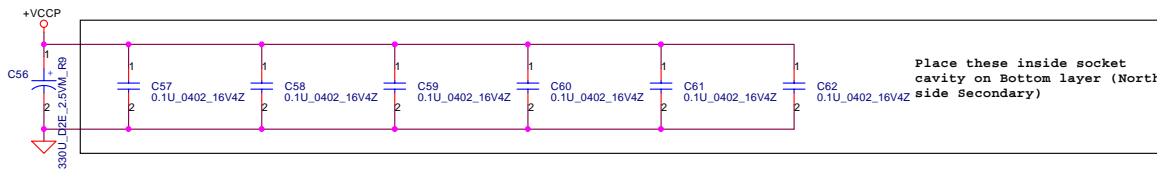


Resistor placed within 0.5" of CPU pin. Trace should be at least 25 mils away from any other toggling signal.

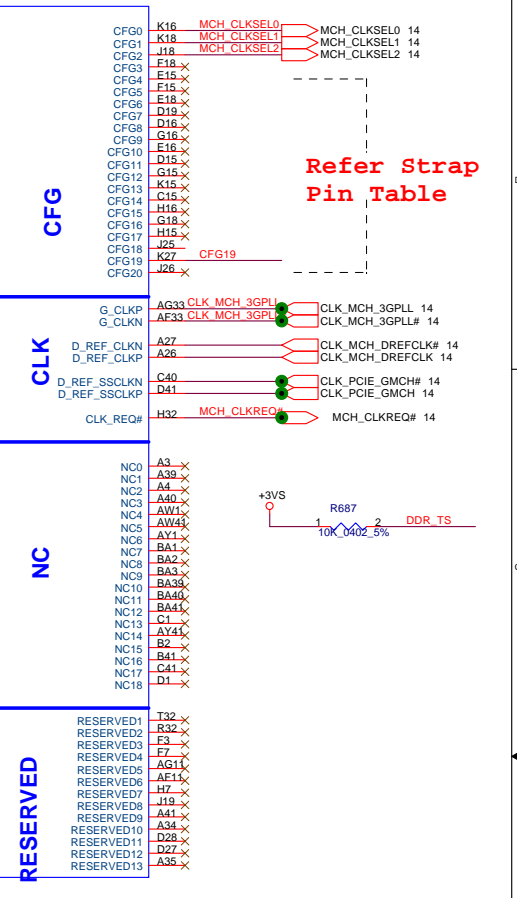
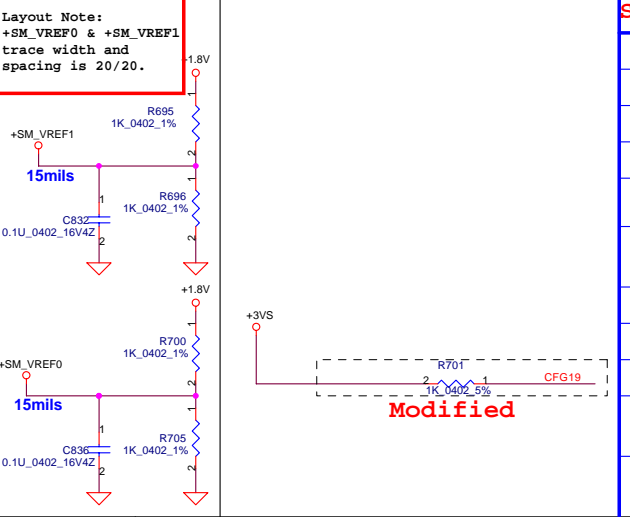
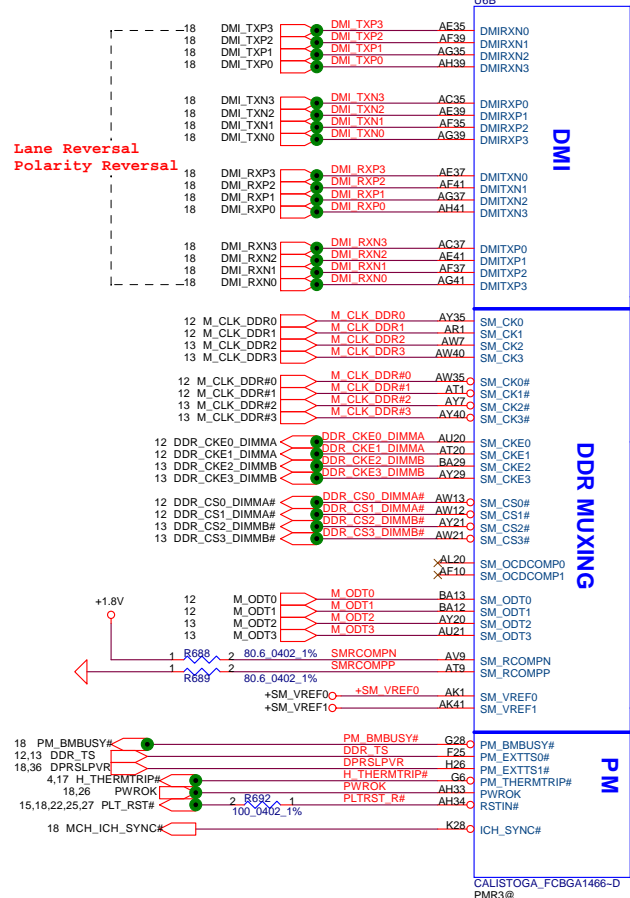
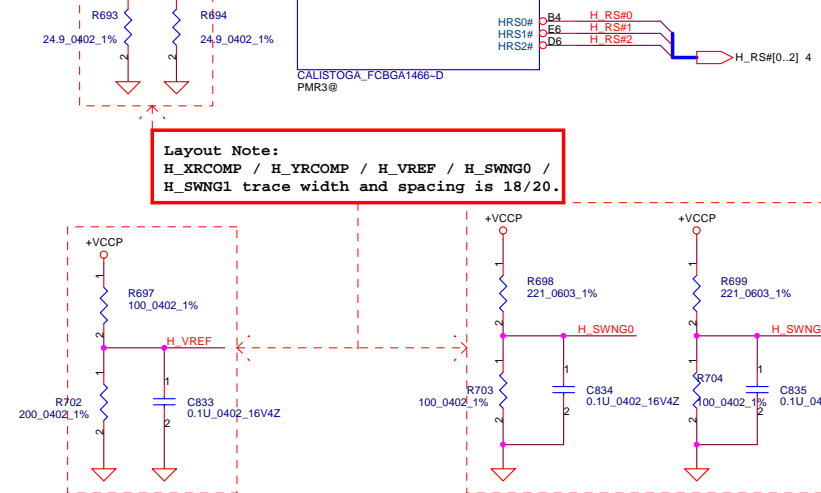
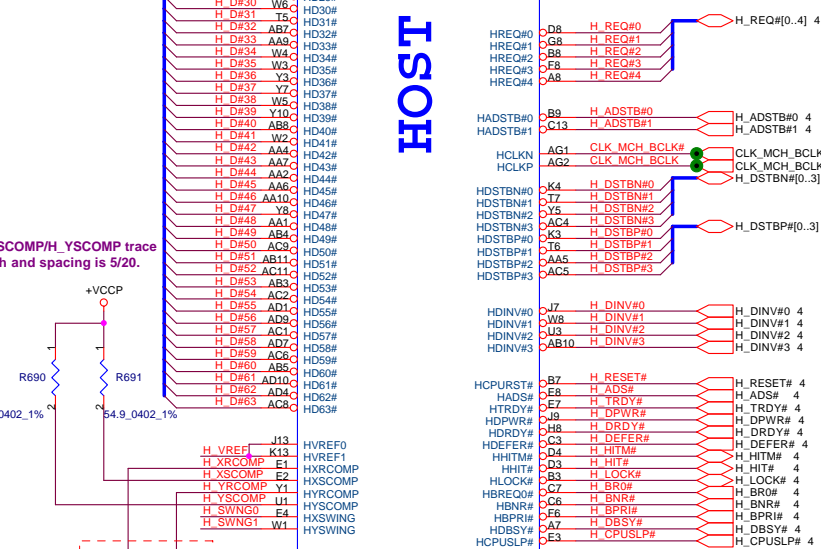
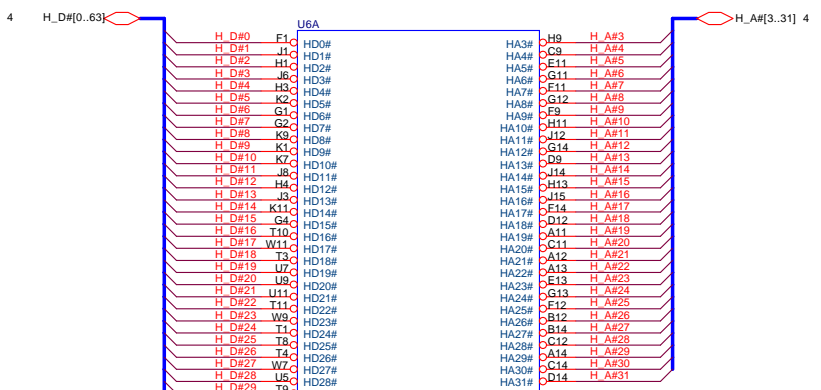




ESR <= 1.5m ohm
Capacitor > 1980uF
330uF ESR 9m ohm X 6 PCS



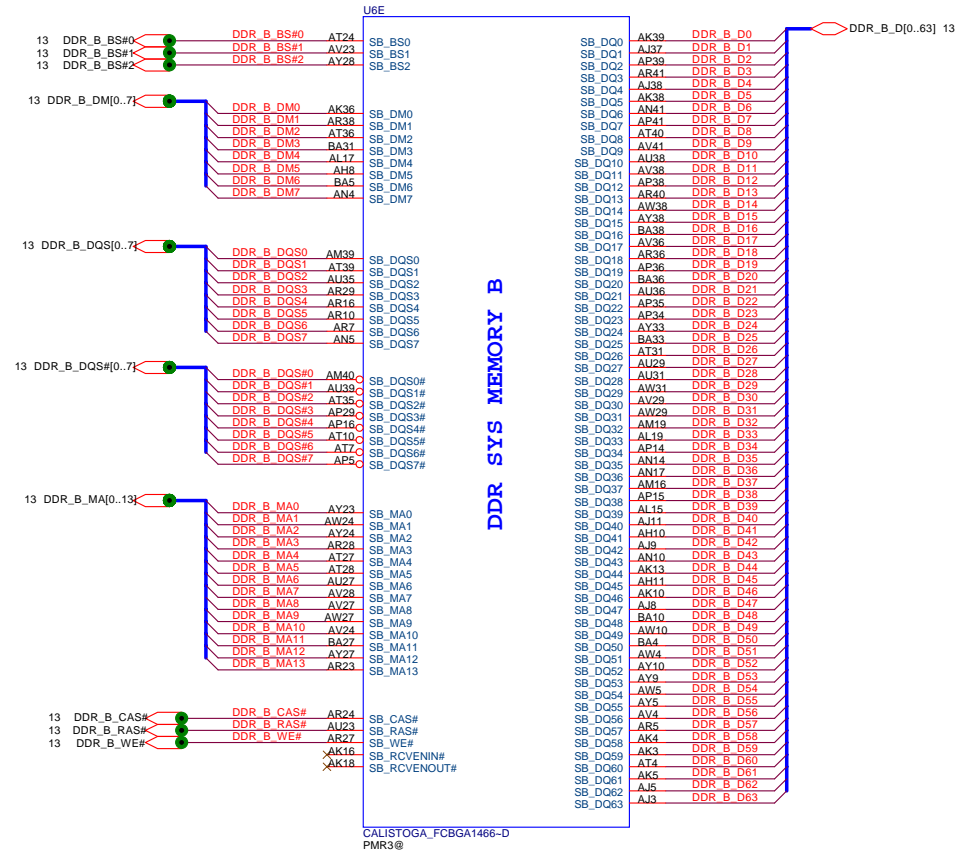
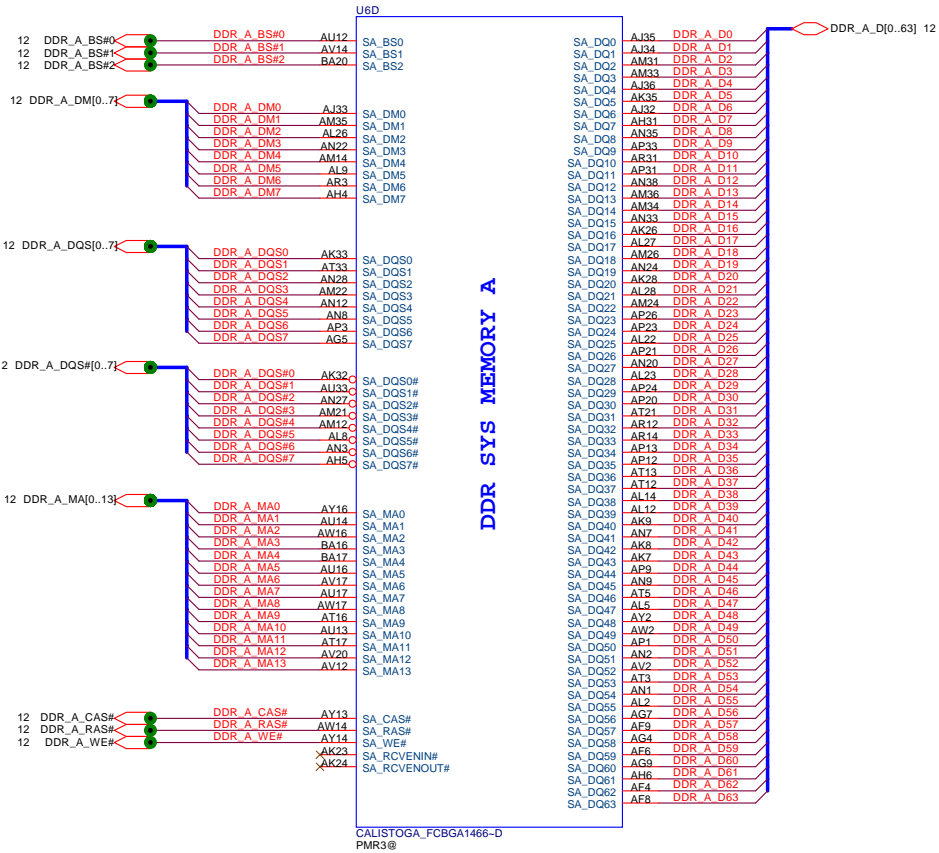
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CFG[Pin]	CFG[3:17] have internal pull up	CFG[19:18] have internal pull down
CFG[2:0]	011 = 667MT/s FSB 001 = 533MT/s FSB	
CFG5	0 = DMI x 2 *1 = DMI x 4 (Default)	
CFG7	0 = Reserved *1 = Mobile Yonah CPU (Default)	
CFG9	0 = Lane Reversal Enable *1 = Normal Operation (Default)	
CFG11	0 = Reserved *1 = Calistoga (Default)	
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)	
CFG18	*0 = 1.05V (Default) 1 = 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	*0 = Only PCIE or SDVO is operational. (Default) 1 = PCIE/SDVO are operating simu.	

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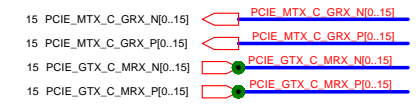
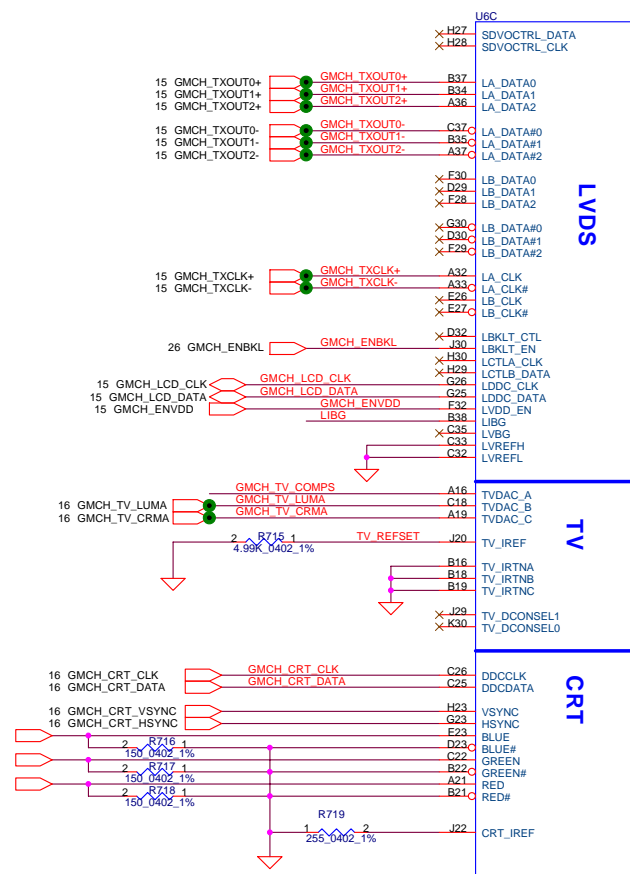
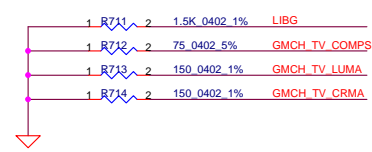
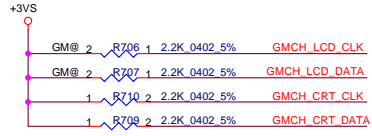
CALISTOGA_FCBGA1466-D
PMR3@

CALISTOGA_FCBGA1466-D
PMR3@

DDR SYS MEMORY A

DDR SYS MEMORY B

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PEGCOMP trace width and spacing is 18/25 mils.



EXP_COMP0	D40	EXP_COMP0	D38	F34	PCIE GTX C MRX N0
EXP_RXN0	G38	PCIE GTX C MRX N1			
EXP_RXN1	H34	PCIE GTX C MRX N2			
EXP_RXN2	J38	PCIE GTX C MRX N3			
EXP_RXN3	L34	PCIE GTX C MRX N4			
EXP_RXN4	M38	PCIE GTX C MRX N5			
EXP_RXN5	N34	PCIE GTX C MRX N6			
EXP_RXN6	P38	PCIE GTX C MRX N7			
EXP_RXN7	R34	PCIE GTX C MRX N8			
EXP_RXN8	T38	PCIE GTX C MRX N9			
EXP_RXN9	V34	PCIE GTX C MRX N10			
EXP_RXN10	W38	PCIE GTX C MRX N11			
EXP_RXN11	Y34	PCIE GTX C MRX N12			
EXP_RXN12	AA38	PCIE GTX C MRX N13			
EXP_RXN13	AB34	PCIE GTX C MRX N14			
EXP_RXN14	AC38	PCIE GTX C MRX N15			
EXP_RXN15					
EXP_RXP0	D34	PCIE GTX C MRX P0			
EXP_RXP1	F38	PCIE GTX C MRX P1			
EXP_RXP2	G34	PCIE GTX C MRX P2			
EXP_RXP3	H38	PCIE GTX C MRX P3			
EXP_RXP4	J34	PCIE GTX C MRX P4			
EXP_RXP5	L38	PCIE GTX C MRX P5			
EXP_RXP6	M34	PCIE GTX C MRX P6			
EXP_RXP7	N38	PCIE GTX C MRX P7			
EXP_RXP8	P34	PCIE GTX C MRX P8			
EXP_RXP9	R38	PCIE GTX C MRX P9			
EXP_RXP10	T34	PCIE GTX C MRX P10			
EXP_RXP11	V38	PCIE GTX C MRX P11			
EXP_RXP12	W34	PCIE GTX C MRX P12			
EXP_RXP13	Y38	PCIE GTX C MRX P13			
EXP_RXP14	AA34	PCIE GTX C MRX P14			
EXP_RXP15	AB38	PCIE GTX C MRX P15			

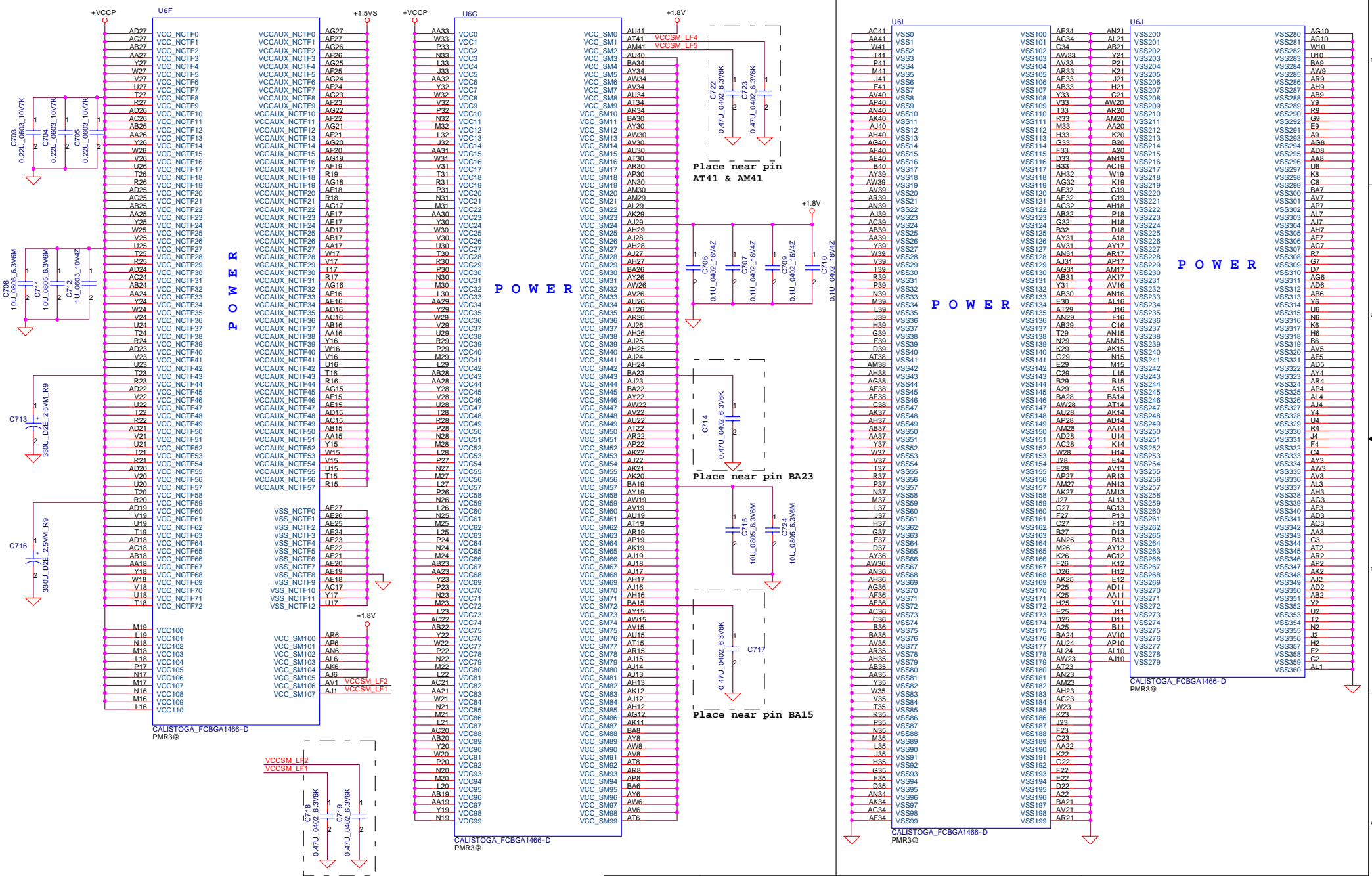
EXP_TXN0 <th>F36</th> <th>PCIE MTX GRX N0</th> <th>C553</th> <th>PM@</th> <th>0.1U</th> <th>0.402</th> <th>16V7K</th> <th>PCIE MTX C GRX N0</th>	F36	PCIE MTX GRX N0	C553	PM@	0.1U	0.402	16V7K	PCIE MTX C GRX N0
EXP_TXN1	G40	PCIE MTX GRX N1	C461	PM@	0.1U	0.402	16V7K	PCIE MTX C GRX N1
EXP_TXN2	H36	PCIE MTX GRX N2	C549	PM@	0.1U	0.402	16V7K	PCIE MTX C GRX N2
EXP_TXN3	J40	PCIE MTX GRX N3	C548	PM@	0.1U	0.402	16V7K	PCIE MTX C GRX N3
EXP_TXN4	L36	PCIE MTX GRX N4	C537	PM@	0.1U	0.402	16V7K	PCIE MTX C GRX N4
EXP_TXN5	M40	PCIE MTX GRX N5	C579	PM@	0.1U	0.402	16V7K	PCIE MTX C GRX N5
EXP_TXN6	N36	PCIE MTX GRX N6	C577	PM@	0.1U	0.402	16V7K	PCIE MTX C GRX N6
EXP_TXN7	P40	PCIE MTX GRX N7	C516	PM@	0.1U	0.402	16V7K	PCIE MTX C GRX N7
EXP_TXN8	R36	PCIE MTX GRX N8	C555	PM@	0.1U	0.402	16V7K	PCIE MTX C GRX N8
EXP_TXN9	T40	PCIE MTX GRX N9	C426	PM@	0.1U	0.402	16V7K	PCIE MTX C GRX N9
EXP_TXN10	V36	PCIE MTX GRX N10	C554	PM@	0.1U	0.402	16V7K	PCIE MTX C GRX N10
EXP_TXN11	W40	PCIE MTX GRX N11	C518	PM@	0.1U	0.402	16V7K	PCIE MTX C GRX N11
EXP_TXN12	Y36	PCIE MTX GRX N12	C560	PM@	0.1U	0.402	16V7K	PCIE MTX C GRX N12
EXP_TXN13	AA40	PCIE MTX GRX N13	C551	PM@	0.1U	0.402	16V7K	PCIE MTX C GRX N13
EXP_TXN14	AB36	PCIE MTX GRX N14	C576	PM@	0.1U	0.402	16V7K	PCIE MTX C GRX N14
EXP_TXN15	AC40	PCIE MTX GRX N15	C570	PM@	0.1U	0.402	16V7K	PCIE MTX C GRX N15
EXP_TXP0	D36	PCIE MTX GRX P0	C568	PM@	0.1U	0.402	16V7K	PCIE MTX C GRX P0
EXP_TXP1	F40	PCIE MTX GRX P1	C574	PM@	0.1U	0.402	16V7K	PCIE MTX C GRX P1
EXP_TXP2	G36	PCIE MTX GRX P2	C567	PM@	0.1U	0.402	16V7K	PCIE MTX C GRX P2
EXP_TXP3	H40	PCIE MTX GRX P3	C536	PM@	0.1U	0.402	16V7K	PCIE MTX C GRX P3
EXP_TXP4	J36	PCIE MTX GRX P4	C575	PM@	0.1U	0.402	16V7K	PCIE MTX C GRX P4
EXP_TXP5	L40	PCIE MTX GRX P5	C578	PM@	0.1U	0.402	16V7K	PCIE MTX C GRX P5
EXP_TXP6	M36	PCIE MTX GRX P6	C560	PM@	0.1U	0.402	16V7K	PCIE MTX C GRX P6
EXP_TXP7	N40	PCIE MTX GRX P7	C545	PM@	0.1U	0.402	16V7K	PCIE MTX C GRX P7
EXP_TXP8	P36	PCIE MTX GRX P8	C552	PM@	0.1U	0.402	16V7K	PCIE MTX C GRX P8
EXP_TXP9	R40	PCIE MTX GRX P9	C515	PM@	0.1U	0.402	16V7K	PCIE MTX C GRX P9
EXP_TXP10	T36	PCIE MTX GRX P10	C517	PM@	0.1U	0.402	16V7K	PCIE MTX C GRX P10
EXP_TXP11	V40	PCIE MTX GRX P11	C569	PM@	0.1U	0.402	16V7K	PCIE MTX C GRX P11
EXP_TXP12	W36	PCIE MTX GRX P12	C547	PM@	0.1U	0.402	16V7K	PCIE MTX C GRX P12
EXP_TXP13	Y40	PCIE MTX GRX P13	C559	PM@	0.1U	0.402	16V7K	PCIE MTX C GRX P13
EXP_TXP14	AA36	PCIE MTX GRX P14	C541	PM@	0.1U	0.402	16V7K	PCIE MTX C GRX P14
EXP_TXP15	AB40	PCIE MTX GRX P15	C422	PM@	0.1U	0.402	16V7K	PCIE MTX C GRX P15

CALISTOGA_FCBGA1466-D
PMR3@

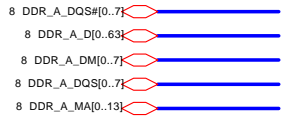
Security Classification	Compal Secret Data			Title	
Issued Date	2006/11/05	Deciphered Date	2009/11/05	Compal Electronics, Inc.	
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					ISKAA M/B LA-3661P
				Date:	Tuesday, December 26, 2006
				Sheet	9 of 37
				Rev	0.1

POWER

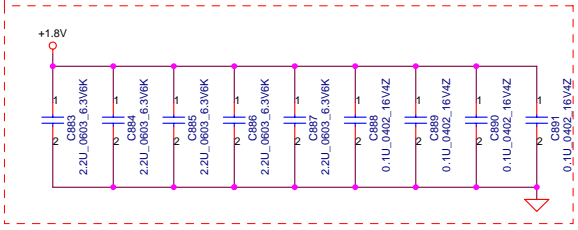
GND



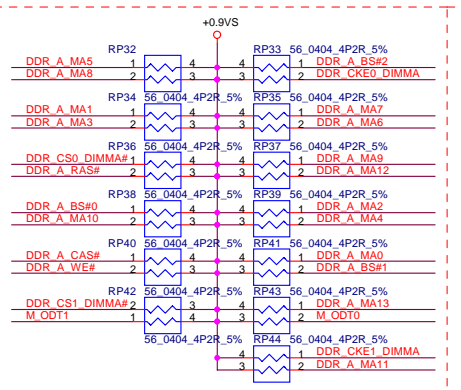
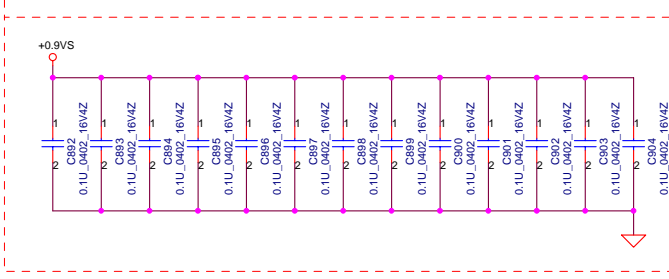
Security Classification		Compal Secret Data		Title	
Issued Date	2006/11/05	Deciphered Date	2009/11/05	Calistoga (5/5)	
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				ISKAA M/B LA-366IP	
				Date:	Tuesday, December 26, 2006
				Sheet	11 of 37
				Rev	0.1



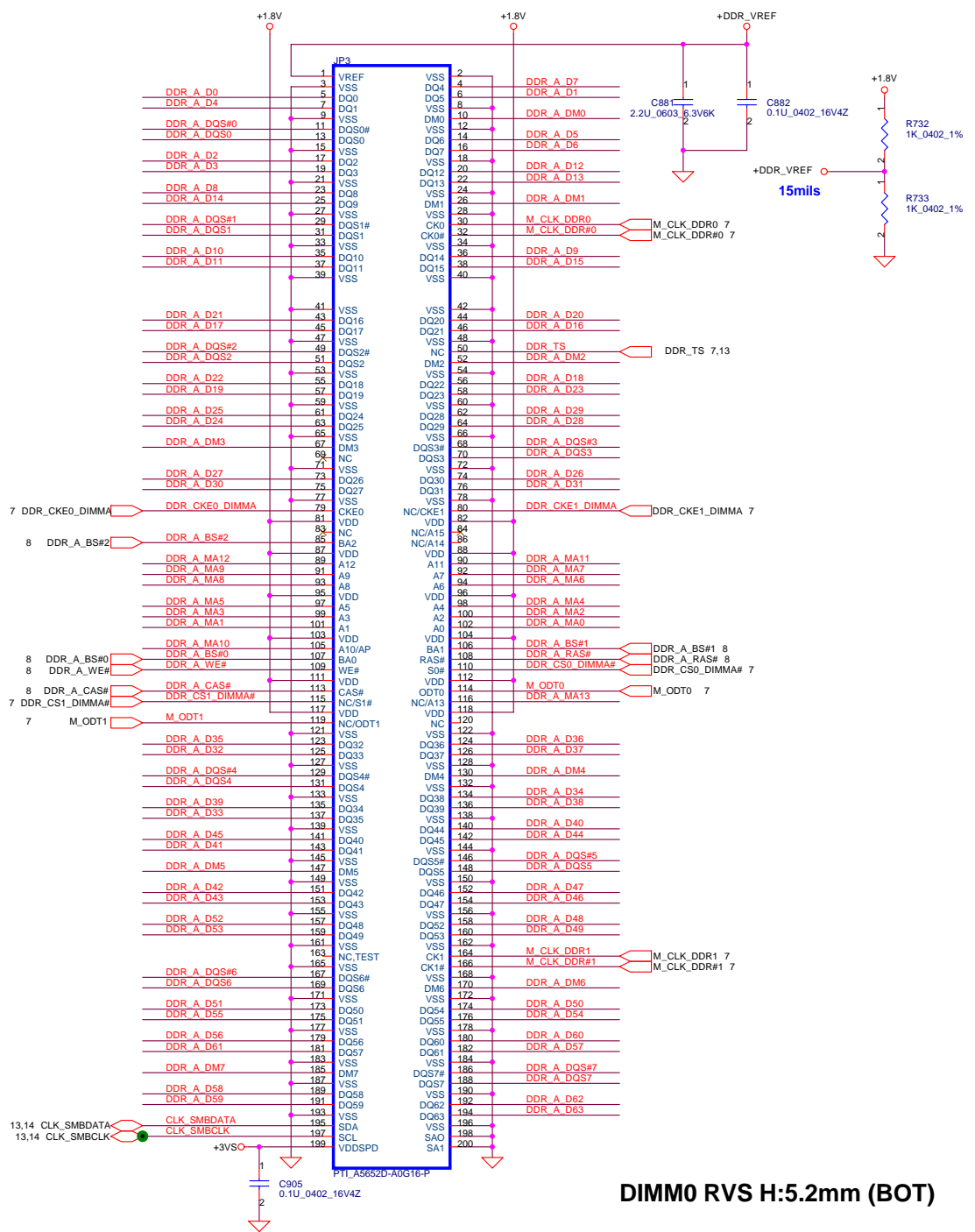
Layout Note:
Place near JP27



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



Layout Note:
Place these resistor closely JP27, all trace length Max=1.5"

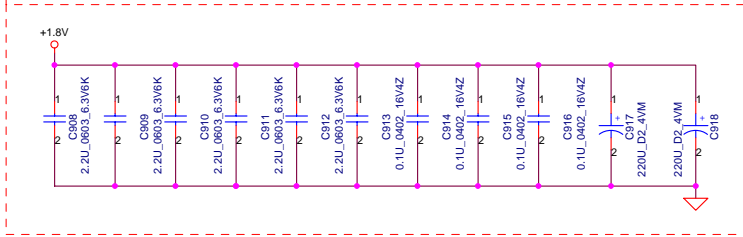


DIMM0 RVS H:5.2mm (BOT)

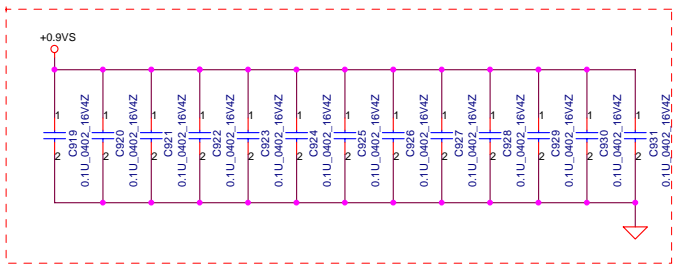
Security Classification	Compal Secret Data		Title	Compal Electronics, Inc.	
Issued Date	2006/11/05	Deciphered Date	2009/11/05	DDRII-SODIMM SLOT1	
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Size	Document Number	Date		Rev	
	ISKAA MB LA-366IP	Tuesday, December 26, 2006		0.1	
		Sheet	12	of	37



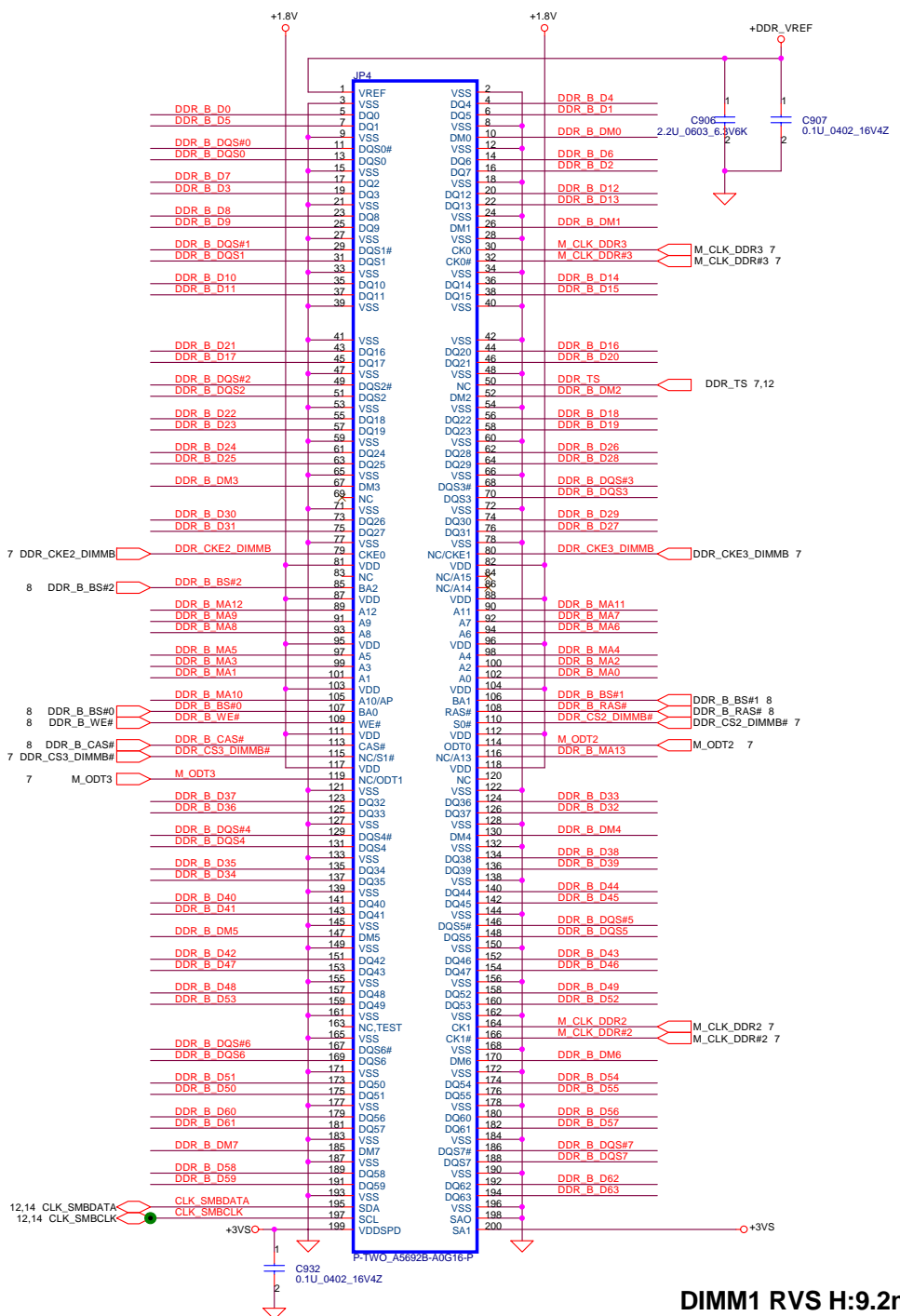
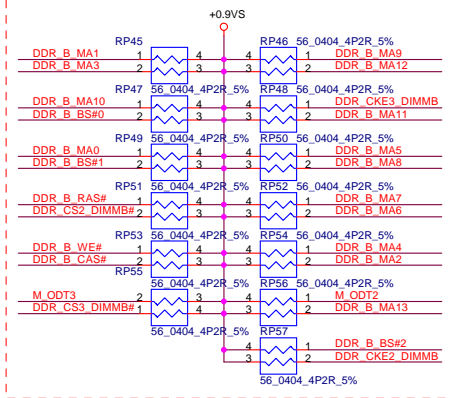
Layout Note:
Place near JP26



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

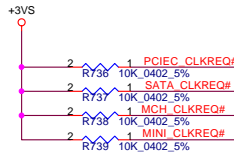


Layout Note:
Place these resistor closely JP26, all trace length Max=1.5"



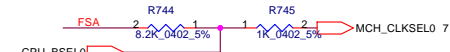
DIMM1 RVS H:9.2mm (BOT)

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Issued Date	2006/11/05	Deciphered Date	2009/11/05	Compal Electronics, Inc.	
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				ISKAA MB LA-366IP	
				Date:	Tuesday, December 26, 2006
				Sheet	13 of 37

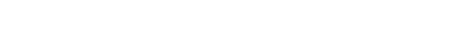


FSLC CLKSEL2	FSLB CLKSEL1	FSLA CLKSEL0	CPU MHz	SRC MHz	PCI MHz
0	0	1	133	100	33.3
0	1	1	166	100	33.3

FSA

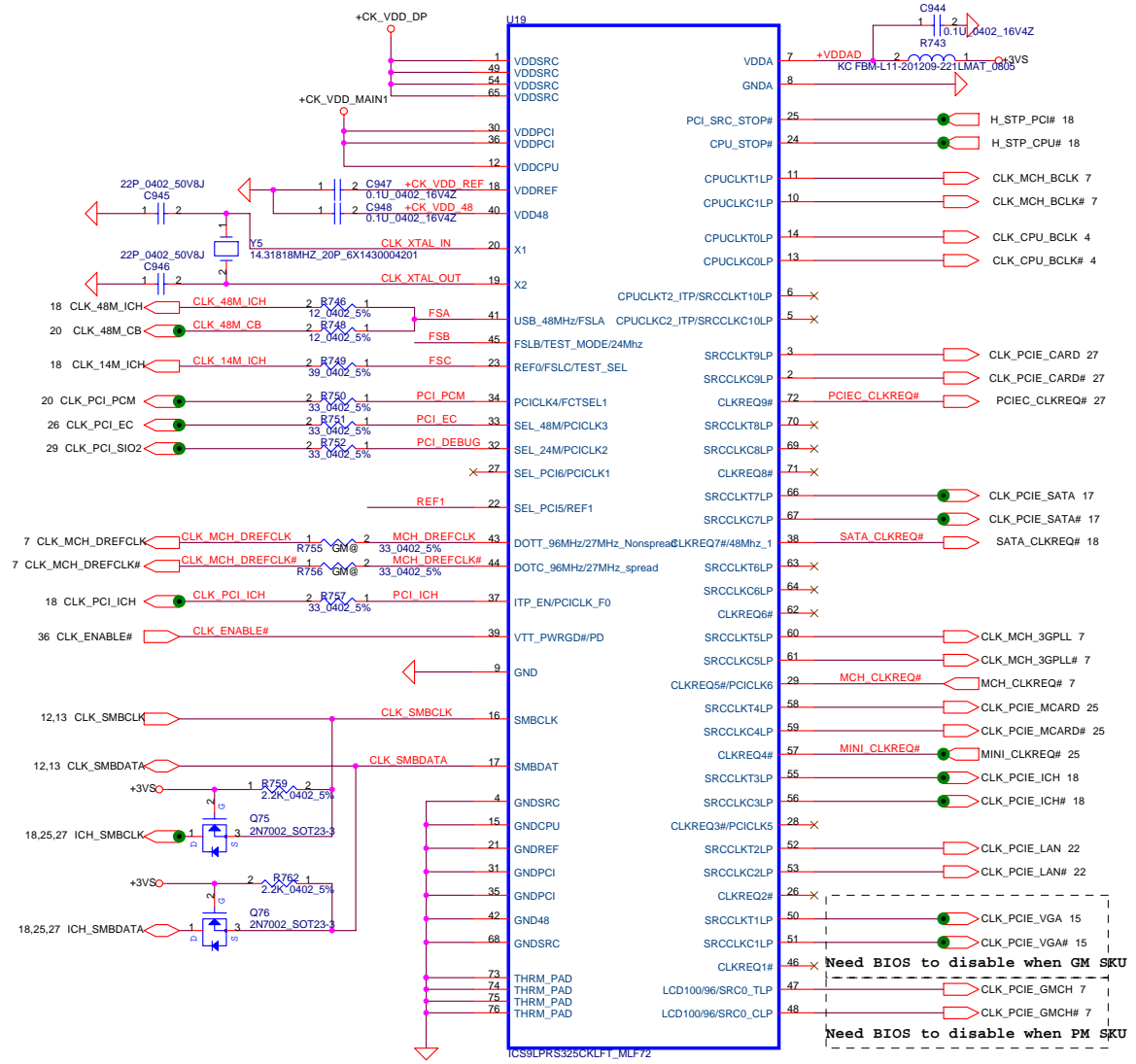
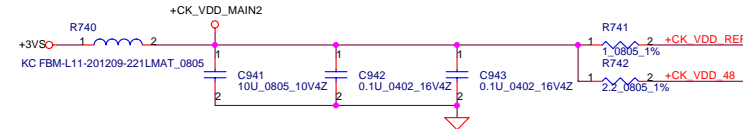
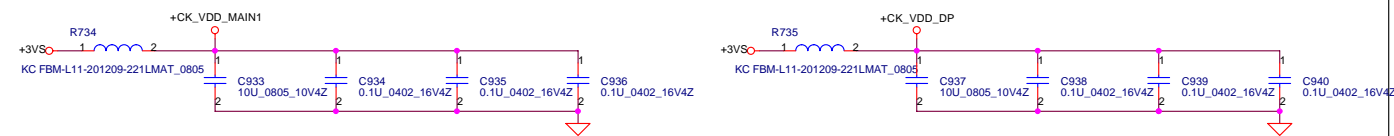
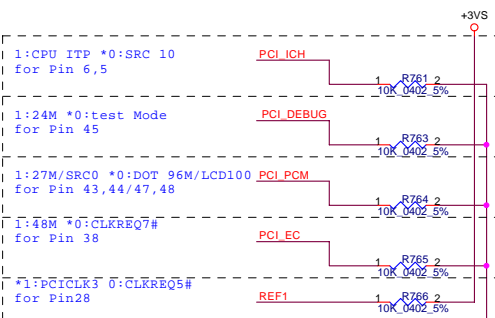
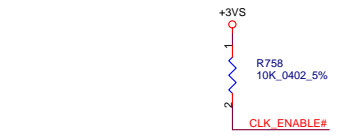


FSB



FSC

(Fixed at low)

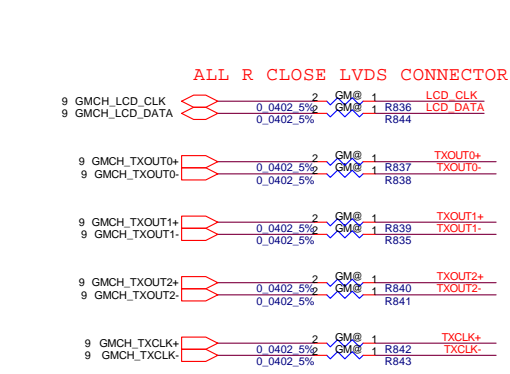
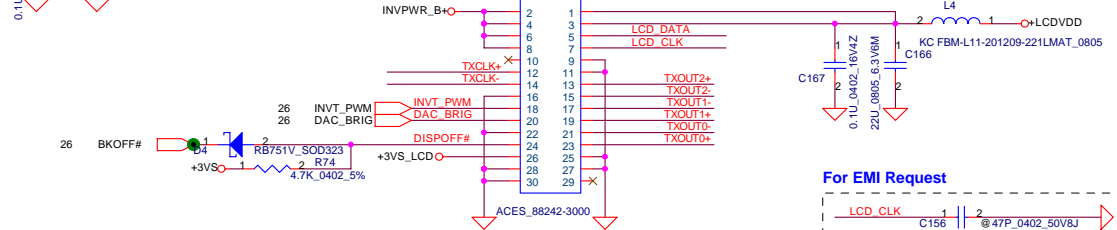
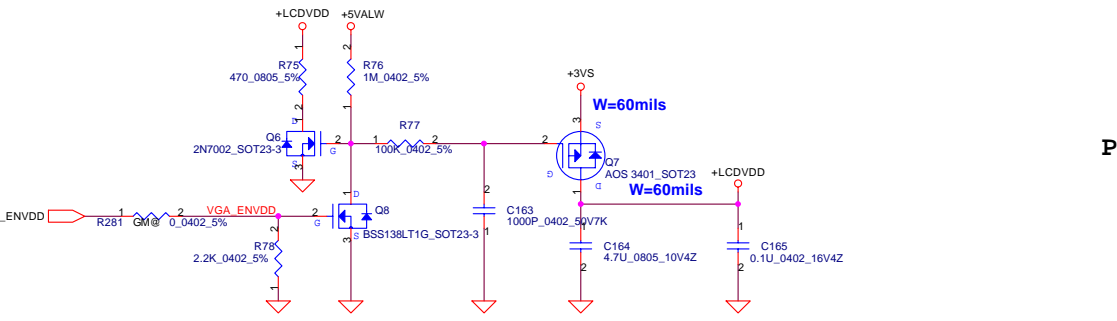


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Issued Date	2006/11/05	Deciphered Date	2009/11/05
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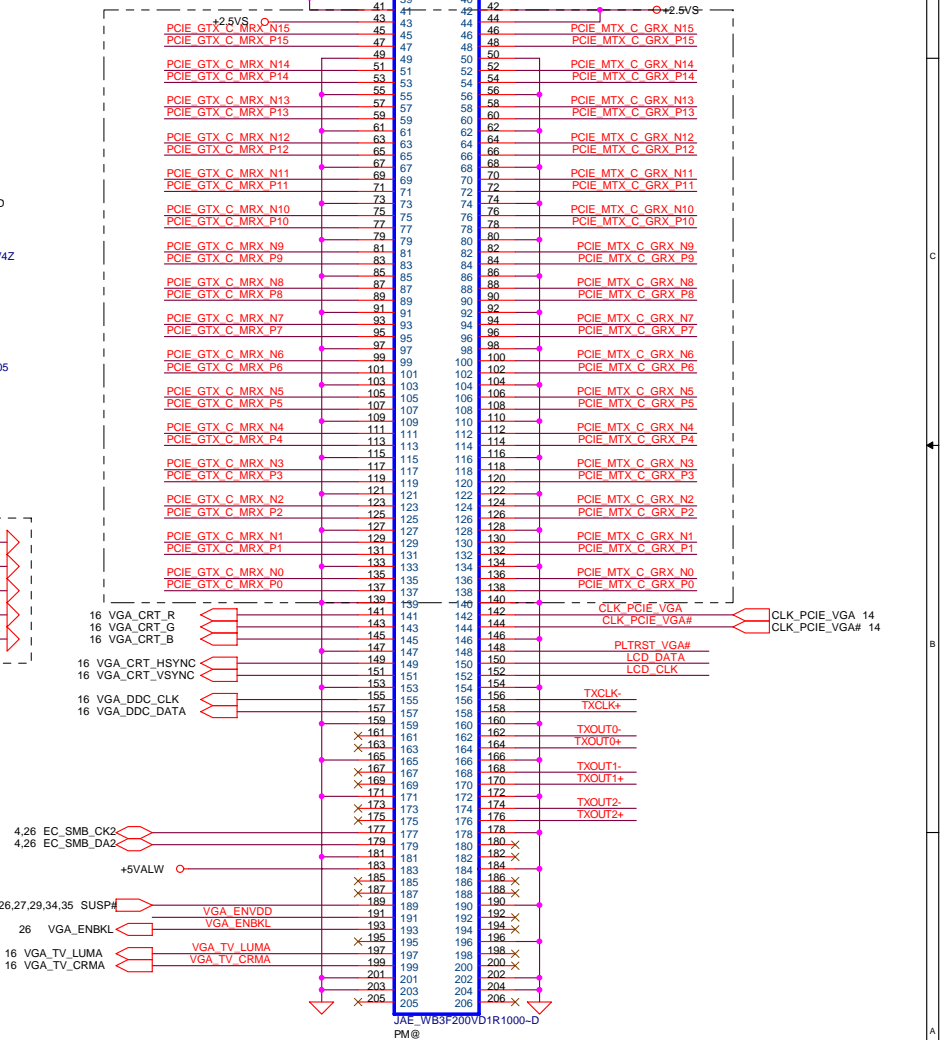
Title			
Compal Electronics, Inc.			
Clock generator			
Size	Document Number	Rev	
	ISKAA MB/LA-3661P	0.1	
Date:	Thursday, December 28, 2006	Sheet	14 of 37

LCD POWER CIRCUIT

- 9 PCIE_MTX_C_GRX_N0..15
- 9 PCIE_MTX_C_GRX_P0..15
- 9 PCIE_GTX_C_MRX_N0..15
- 9 PCIE_GTX_C_MRX_P0..15



Polarity Reversal



For EMI Request

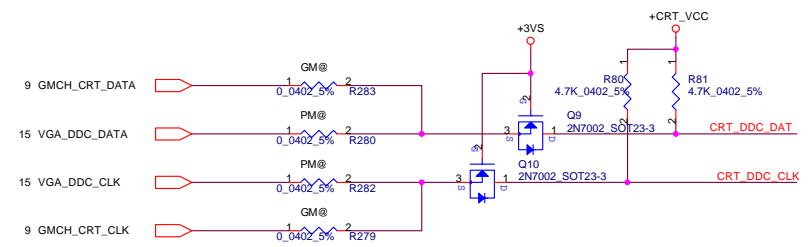
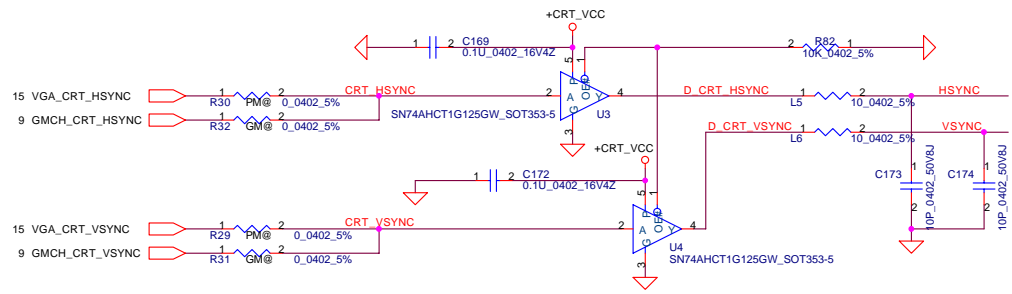
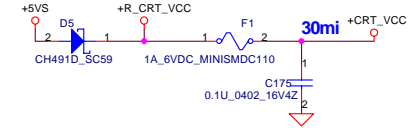
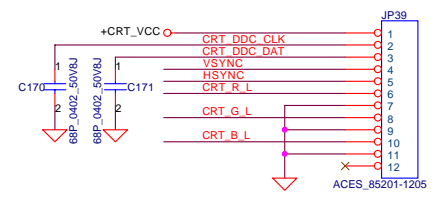
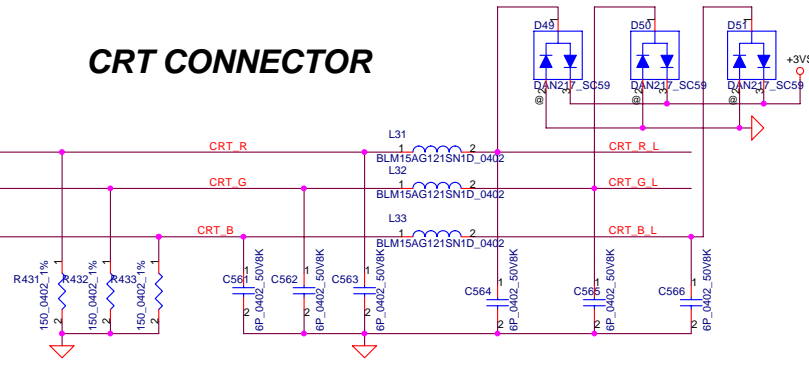
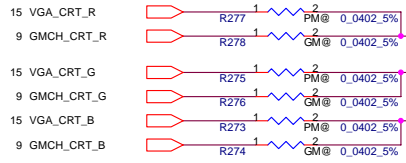
LCD_CLK	1	2
LCD_DATA	C156	@47P_0402_50V8J
LCD_DATA	C157	@47P_0402_50V8J
INVT_PWM	C158	@220P_0402_50V7K
DISPOFF#	C159	@220P_0402_50V7K
DISPOFF#	C160	@220P_0402_50V7K

Security Classification	Compal Secret Data	
Issued Date	2006/08/05	Deciphered Date
		2007/08/05

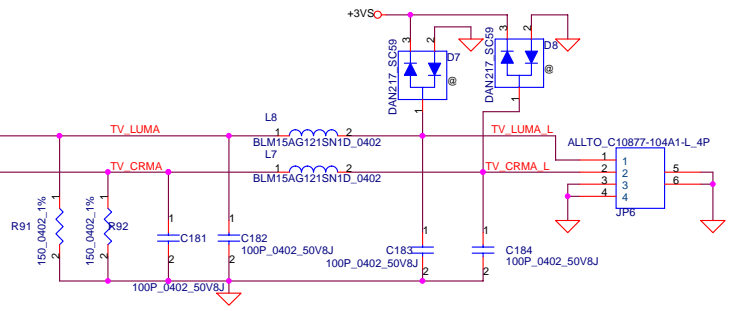
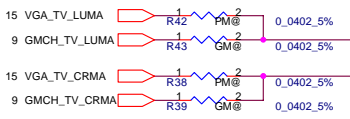
Title		
VGA CONN		
Size	Document Number	Rev
	LA-3481P	0.2
Date:	Thursday, December 28, 2006	Sheet 15 of 37

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CRT CONNECTOR

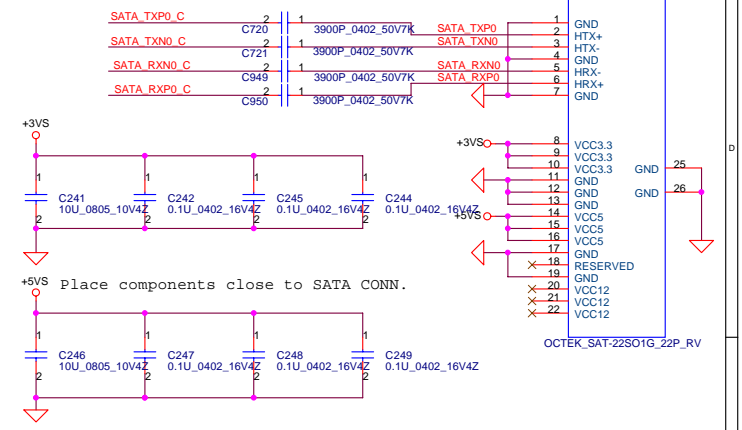


TV-OUT Conn.

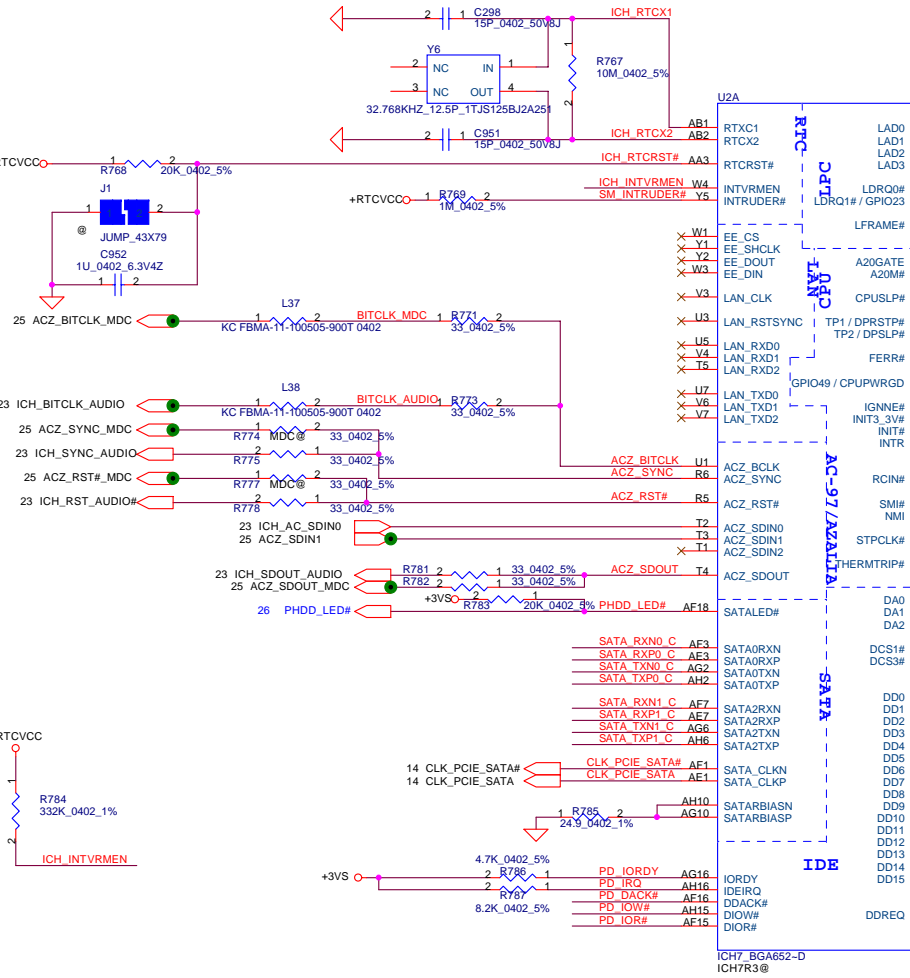
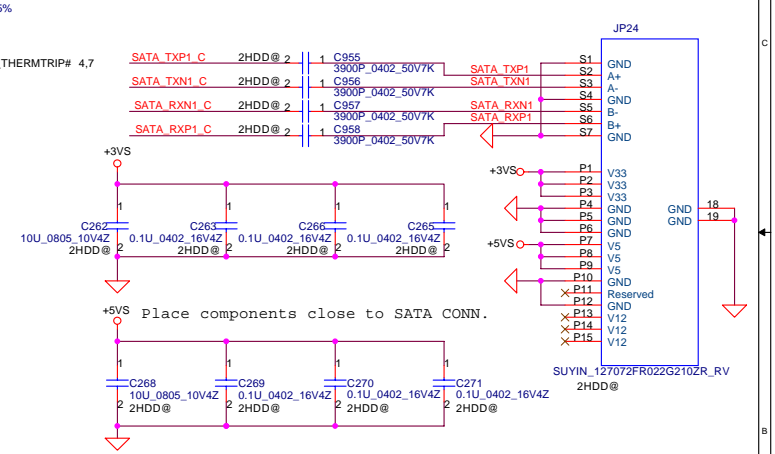


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Size	Document Number	Rev		0.1	
Date: Thursday, December 28, 2006		Sheet 16 of 37			

1st SATA HDD CONN

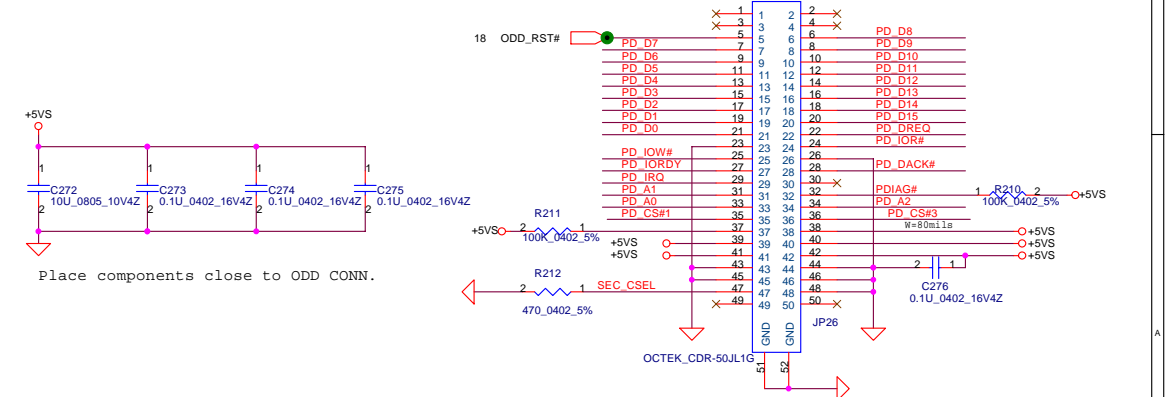
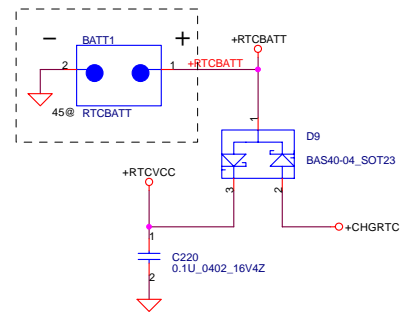


2nd SATA HDD CONN

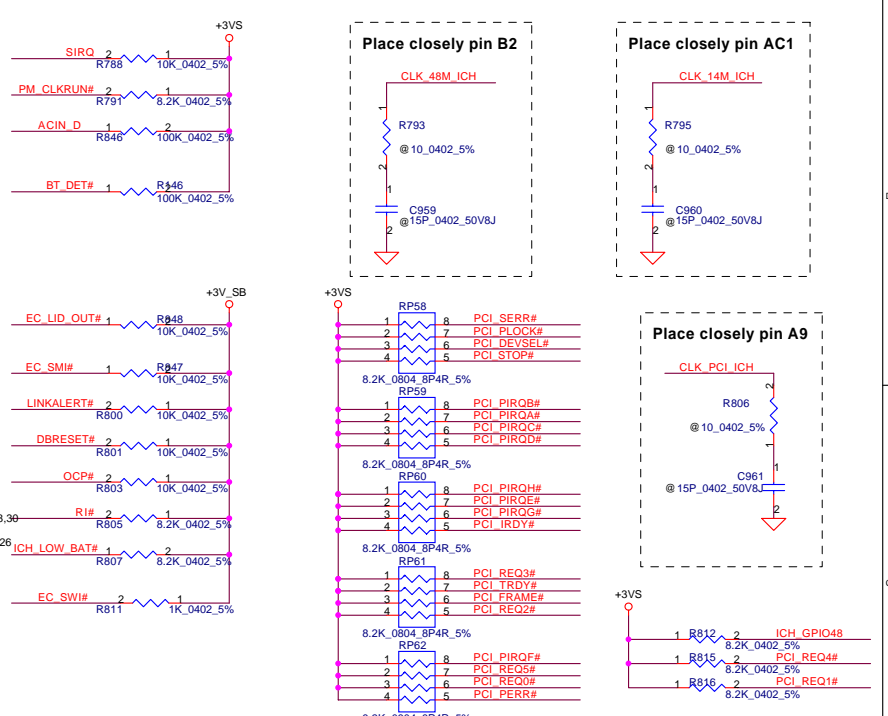
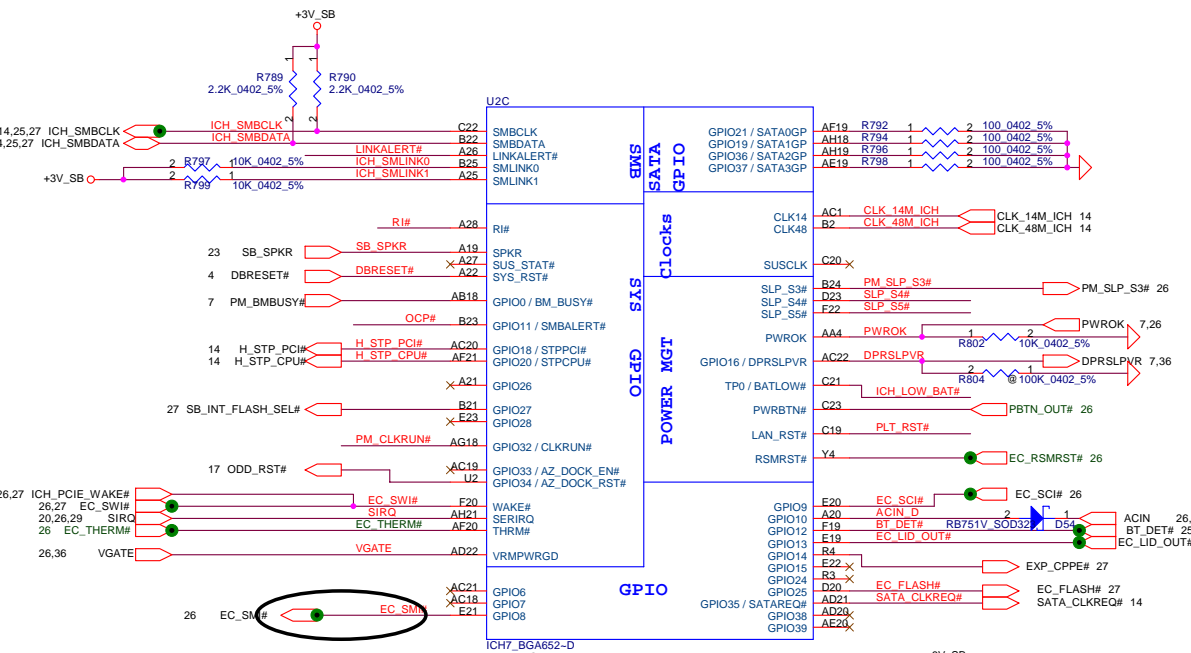


RTC Battery

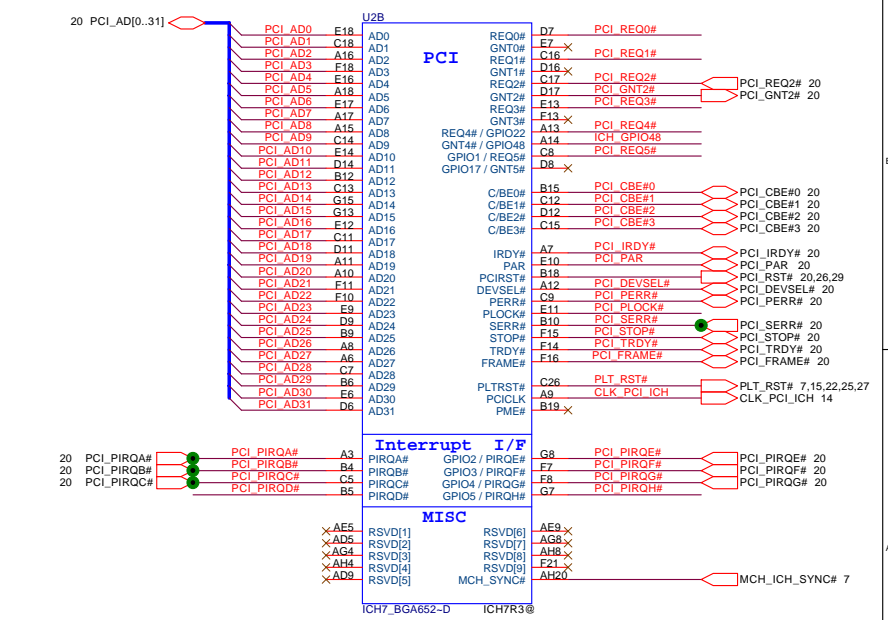
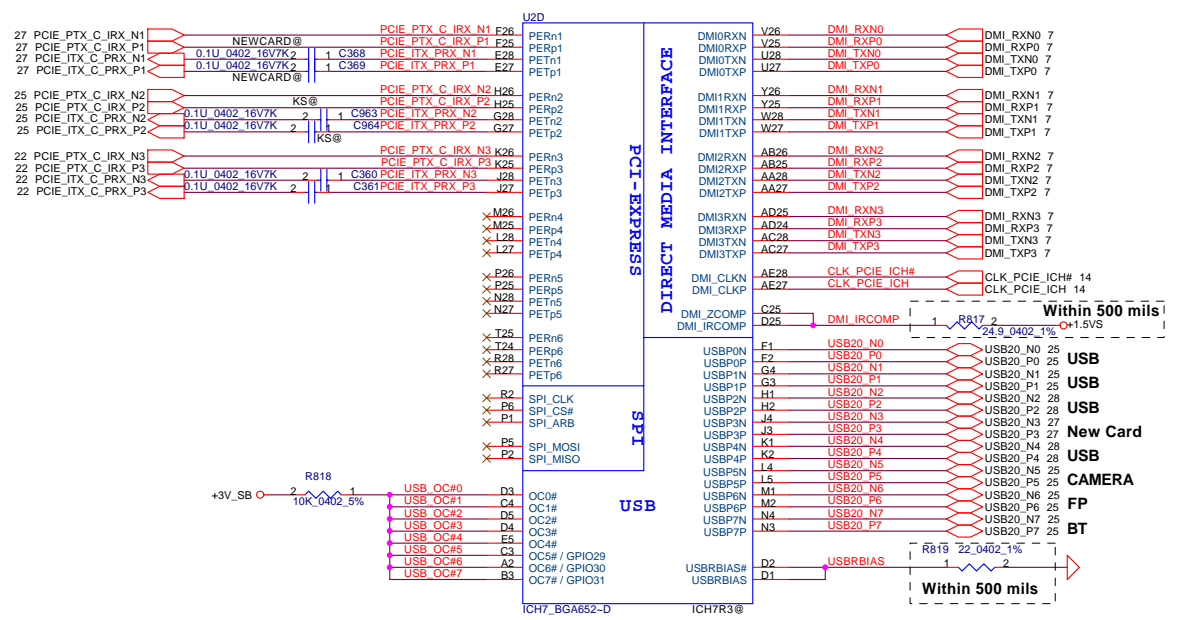
- Layout Note:**
- Under BATT1 battery Body, no Trace no Via
 - BATT1 +- PIN keep out 80mil from other component ,trace and via



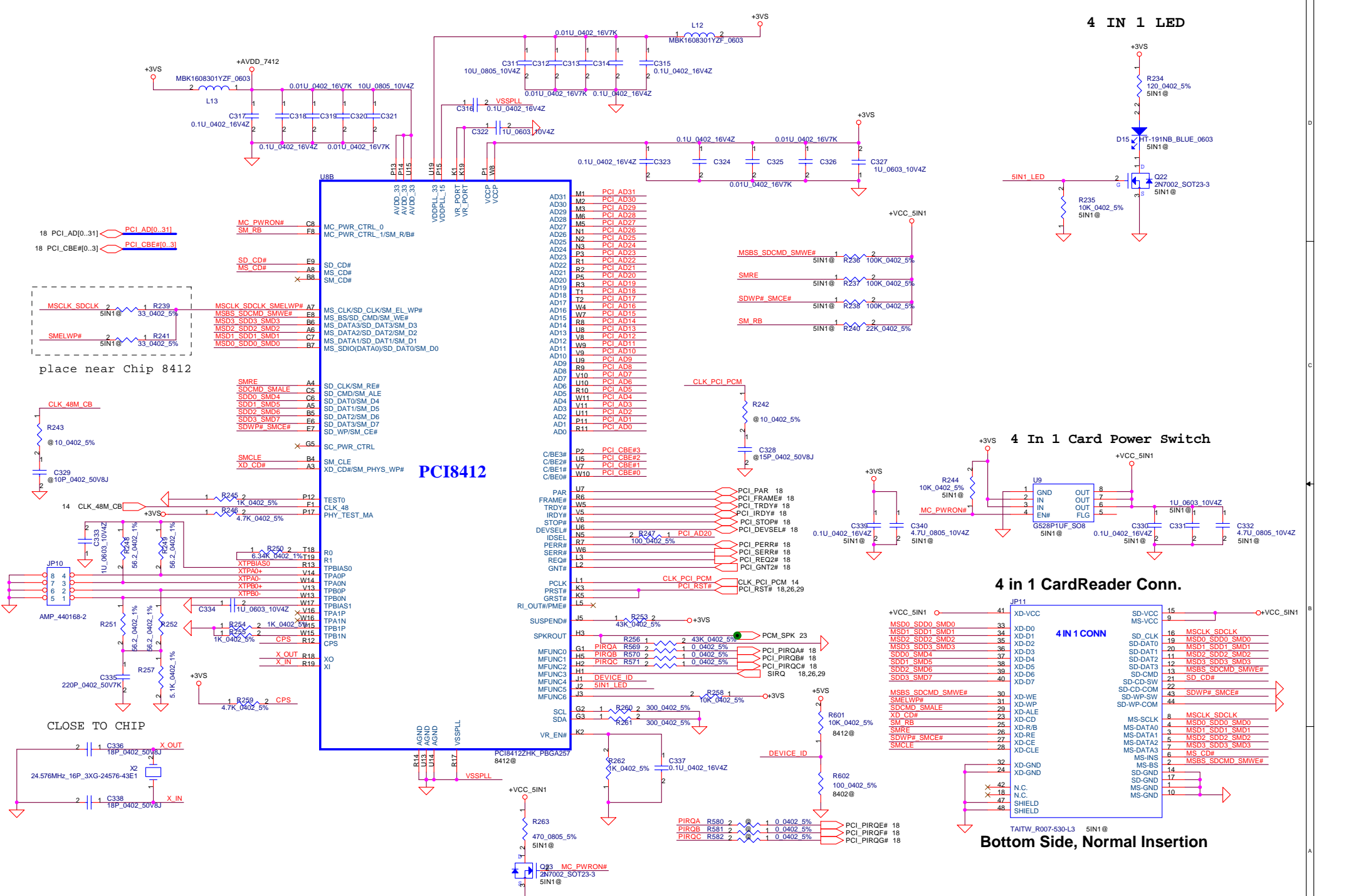
Security Classification	Compal Secret Data		Title	Compal Electronics, Inc.	
Issued Date	2006/11/05	Deciphered Date	2009/11/05	Size Document Number	
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				Date: Tuesday, December 26, 2006 Sheet 17 of 37	



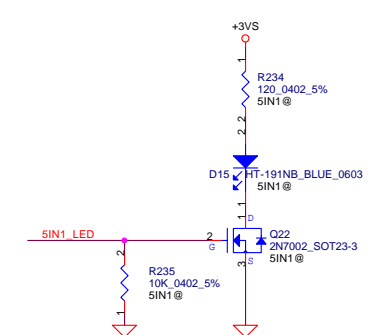
EC need tri-state or set as GPI when no driving above signal



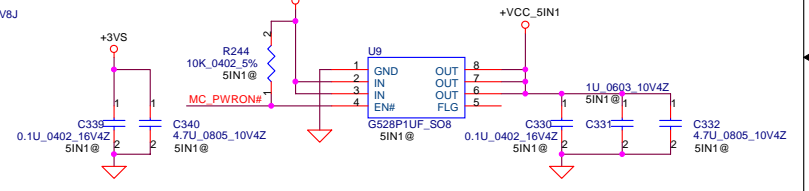
Security Classification		Compal Secret Data		Title	
Issued Date	2006/11/05	Deciphered Date	2009/11/05	Compal Electronics, Inc.	
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				ISKAE MB LA-366IP	
Date:	Tuesday, December 26, 2006	Sheet	18	of	37



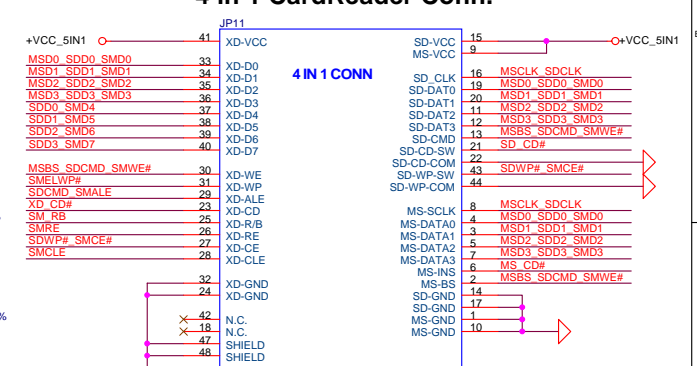
4 IN 1 LED



4 In 1 Card Power Switch



4 in 1 CardReader Conn.



Bottom Side, Normal Insertion

PCI8412

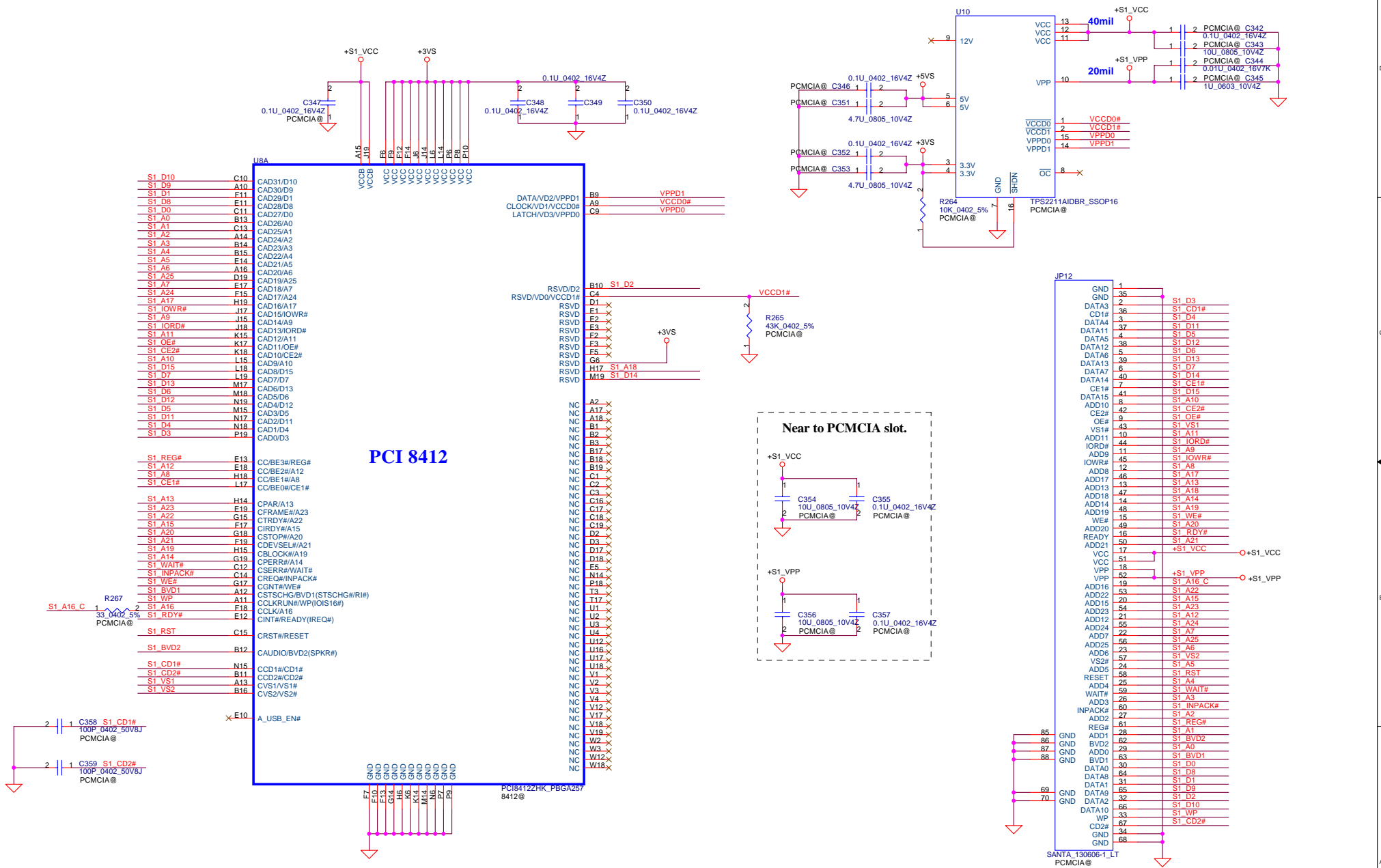
AD31	M1	PCI AD31	AD30	M2	PCI AD30
AD29	M6	PCI AD29	AD28	M5	PCI AD28
AD27	M5	PCI AD27	AD26	N1	PCI AD26
AD25	N2	PCI AD25	AD24	N3	PCI AD24
AD23	P3	PCI AD23	AD22	R1	PCI AD22
AD21	R2	PCI AD21	AD20	P5	PCI AD20
AD19	R3	PCI AD19	AD18	T1	PCI AD18
AD17	T2	PCI AD17	AD16	W4	PCI AD16
AD15	W7	PCI AD15	AD14	R8	PCI AD14
AD14	L8	PCI AD14	AD13	V8	PCI AD13
AD13	V8	PCI AD13	AD12	W9	PCI AD12
AD12	W9	PCI AD12	AD11	V9	PCI AD11
AD11	V9	PCI AD11	AD10	L9	PCI AD10
AD10	L9	PCI AD10	AD9	R9	PCI AD9
AD8	R9	PCI AD8	AD7	V10	PCI AD7
AD7	V10	PCI AD7	AD6	L10	PCI AD6
AD6	L10	PCI AD6	AD5	R10	PCI AD5
AD5	R10	PCI AD5	AD4	W11	PCI AD4
AD4	W11	PCI AD4	AD3	V11	PCI AD3
AD3	V11	PCI AD3	AD2	L11	PCI AD2
AD2	L11	PCI AD2	AD1	P11	PCI AD1
AD1	P11	PCI AD1	AD0	R11	PCI AD0
AD0	R11	PCI AD0			

Security Classification	Compal Secret Data
Issued Date	2006/10/31
Deciphered Date	2009/11/13

Title		Compal Electronics, Inc.	
Size		PCI8412/PCI1394 CONN/CARD SLOT	
Customer	Document Number	Date	Rev
ISKAE M/B LA-3661P		Thursday, December 28, 2006	0.1
Date:		Thursday, December 28, 2006	
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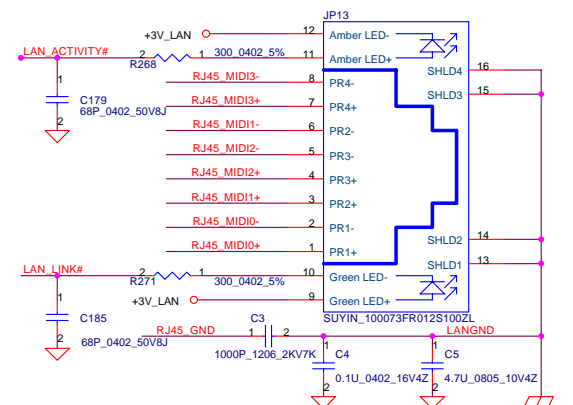
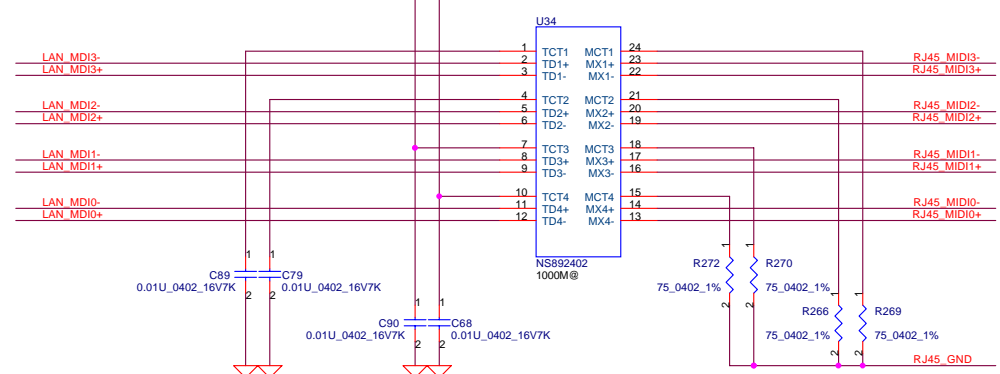
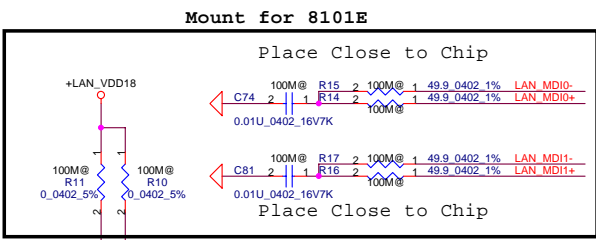
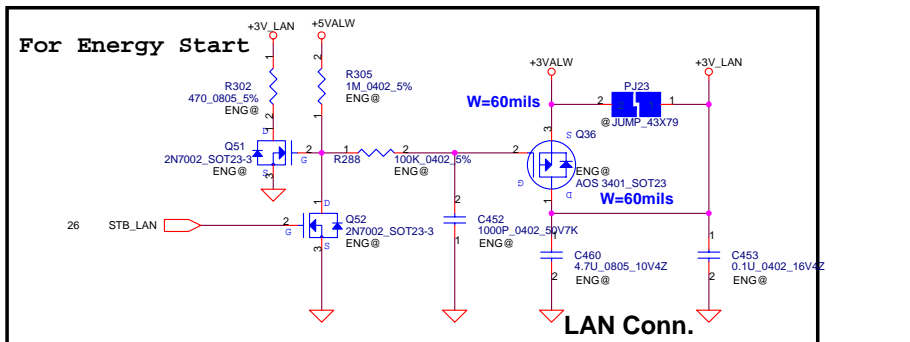
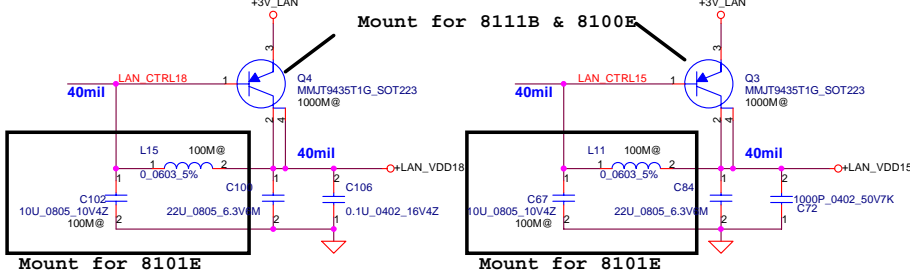
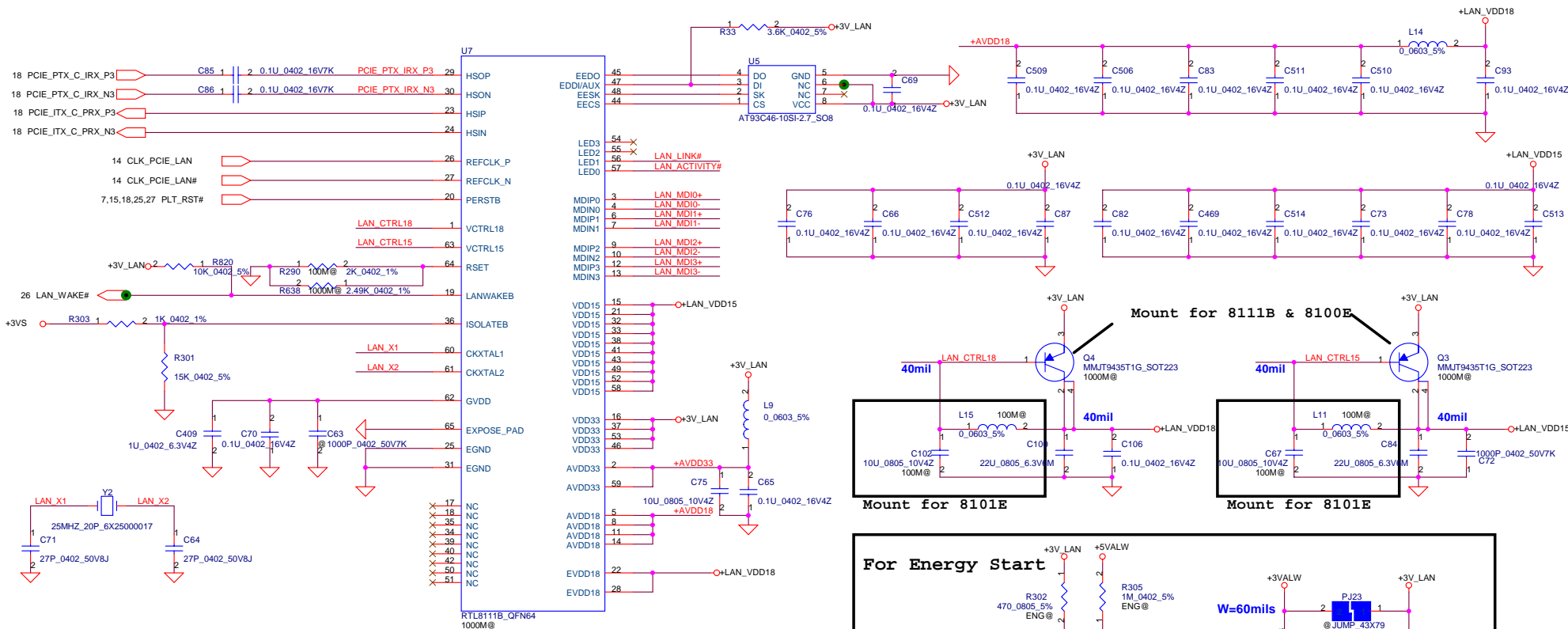
CardBus Power Switch



Security Classification	Compal Secret Data	
Issued Date	2006/10/31	Deciphered Date
		2009/11/13

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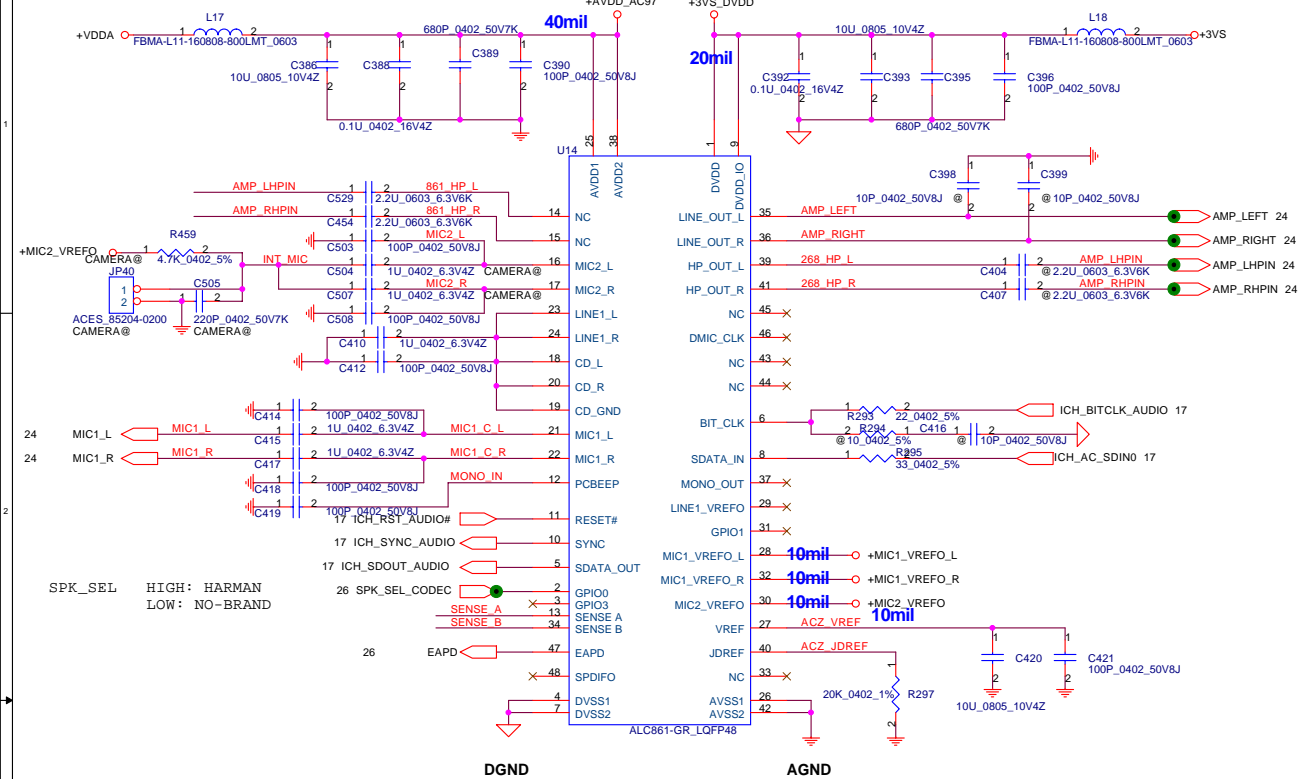
Compal Electronics, Inc.	
PCI7412/CB/CB SLOT	
Size	Document Number
Custom	ISKA E/MB LA-3661P
Date:	Tuesday, December 26, 2006
Sheet	21 of 37



Security Classification			Compal Secret Data		
Issued Date	2006/10/31	Deciphered Date	2009/11/13	Title	RTL8100CL
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Size	Document Number	Customer	SKAE M/B LA-3661P	Rev	0.1
Date:	Thursday, December 28, 2006	Sheet	22	of	37

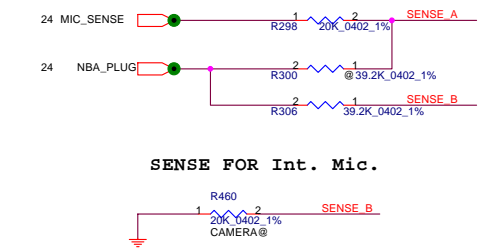
HD Audio Codec

+AVDD_AC97 +3VS_DVDD



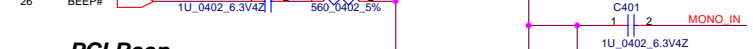
DGND

AGND



Sense Pin	Impedance	Codec Signals
SENSE A	39.2K	PORT-A (PIN 39, 41)
	20K	PORT-B (PIN 21, 22)
	10K	PORT-C (PIN 23, 24)
	5.1K	PORT-D (PIN 35, 36)
SENSE B	39.2K	PORT-E (PIN 14, 15)
	20K	PORT-F (PIN 16, 17)
	10K	PORT-G (PIN 43, 44)
	5.1K	PORT-H (PIN 45, 46)

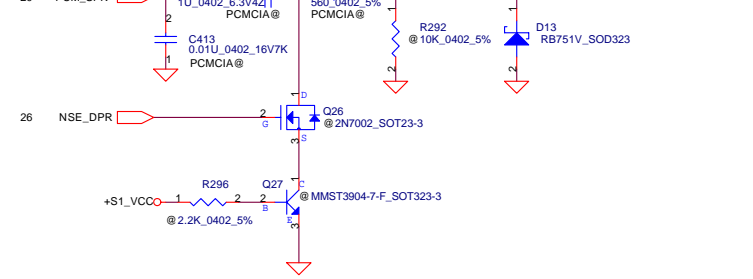
EC Bleep



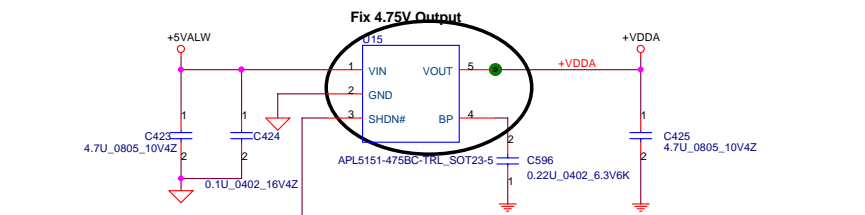
PCI Bleep



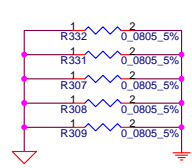
CardBus Bleep



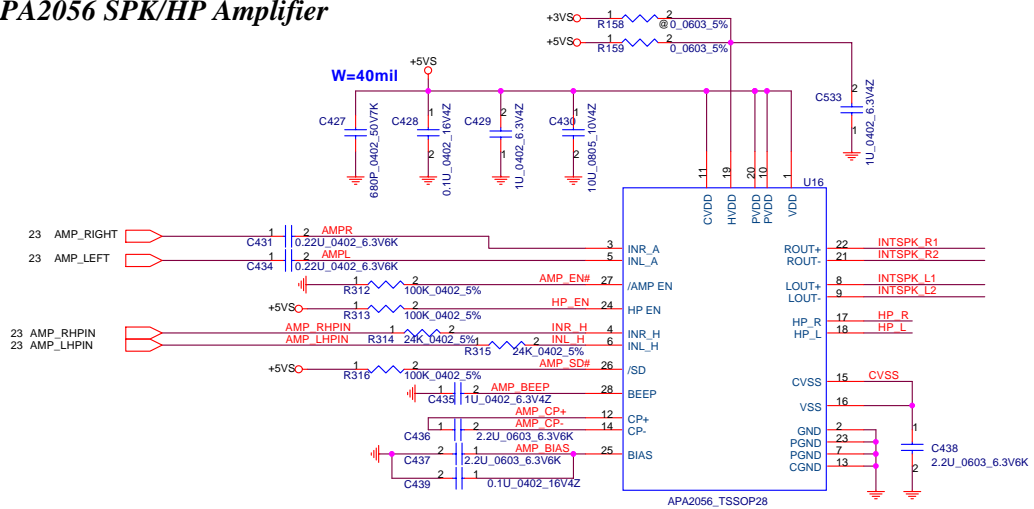
Regulator for CODEC



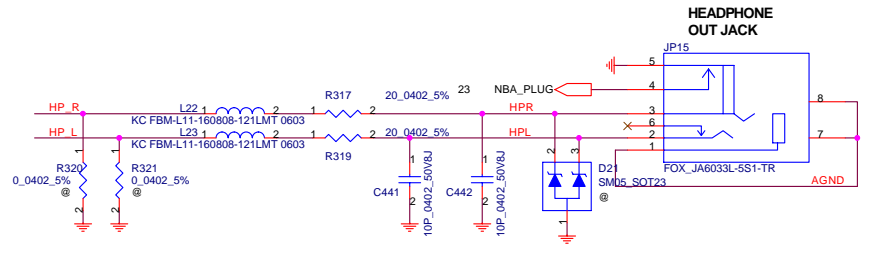
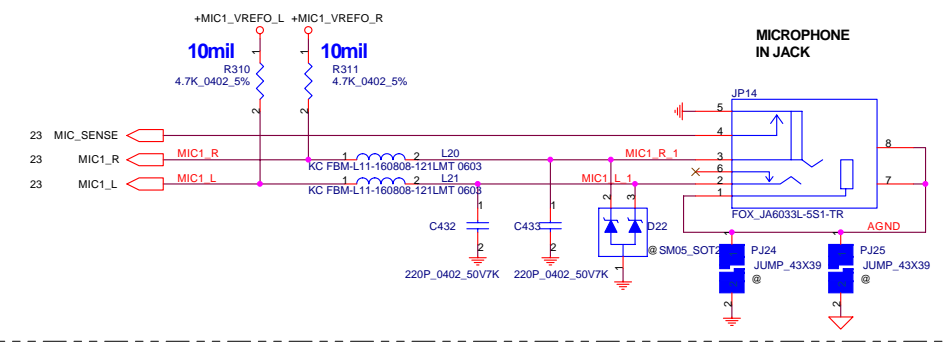
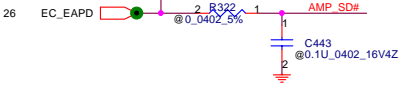
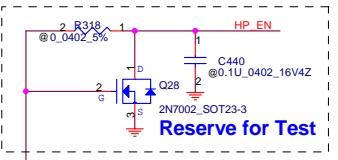
Moat Bridge



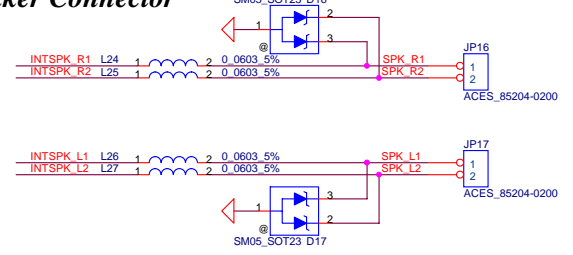
APA2056 SPK/HP Amplifier



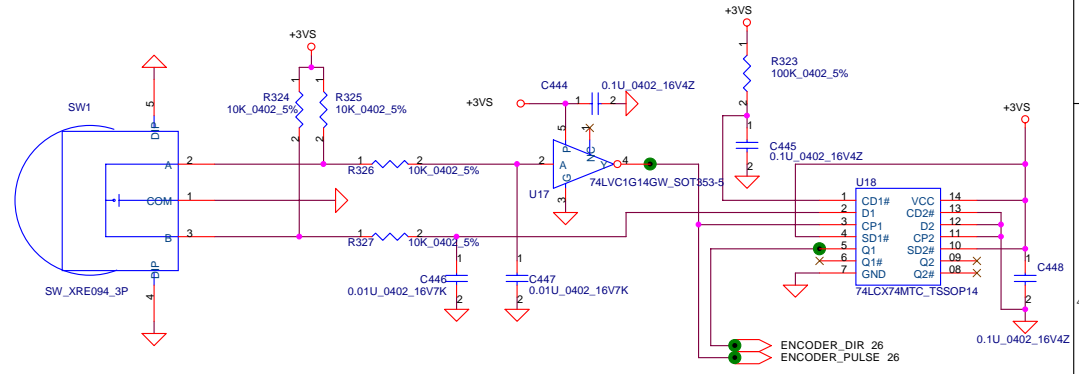
IN_A Gain = 10dB (Internal Speaker)
IN_H Gain = 0dB (Headphone)



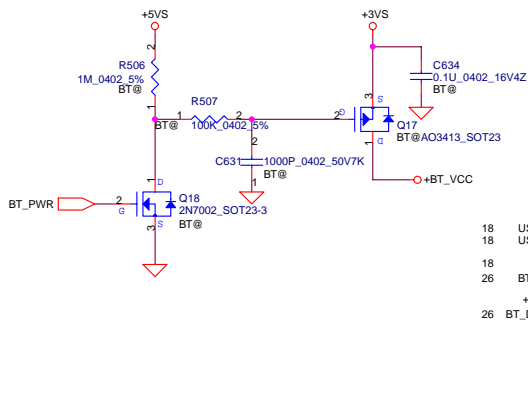
Right Speaker Connector



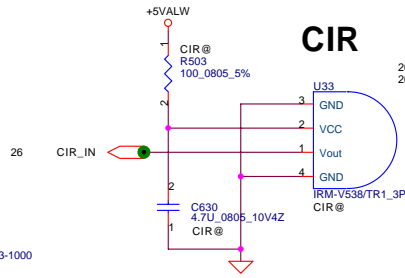
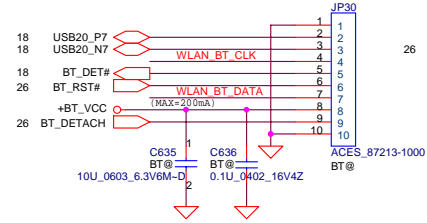
Volume Control



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Issued Date	2006/10/31	Deciphered Date	2009/11/13	AMP/Volume Encoder/Audio Jack/MIC
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Custom	ISKAE MB LA-3661P	Thursday, December 28, 2006		0.1
		Sheet	24	of 37

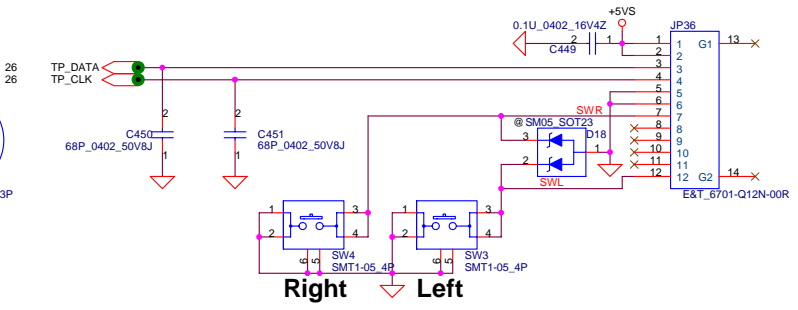


Blue Tooth

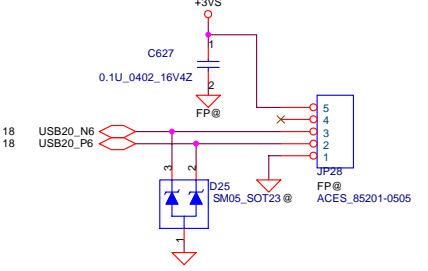


CIR

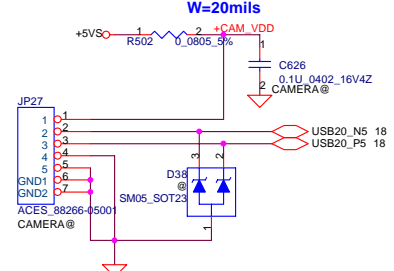
TP CONN.



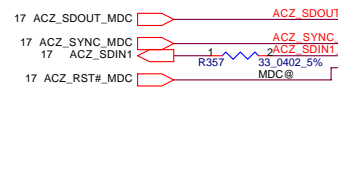
Fingerprint Conn



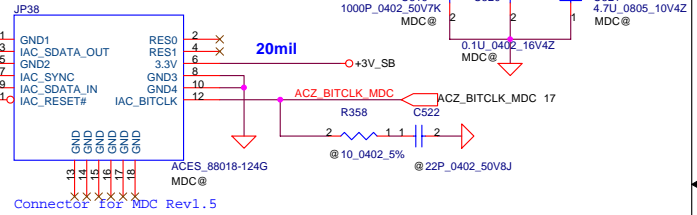
Int. Camera Conn



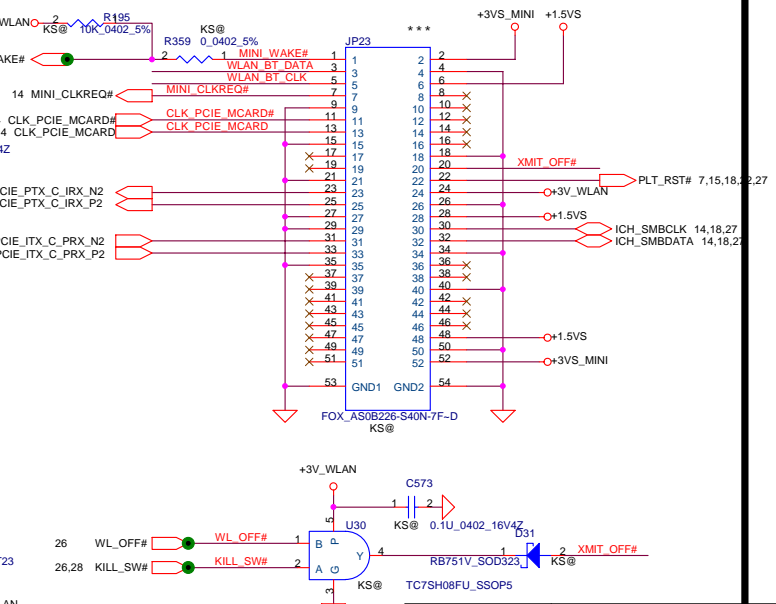
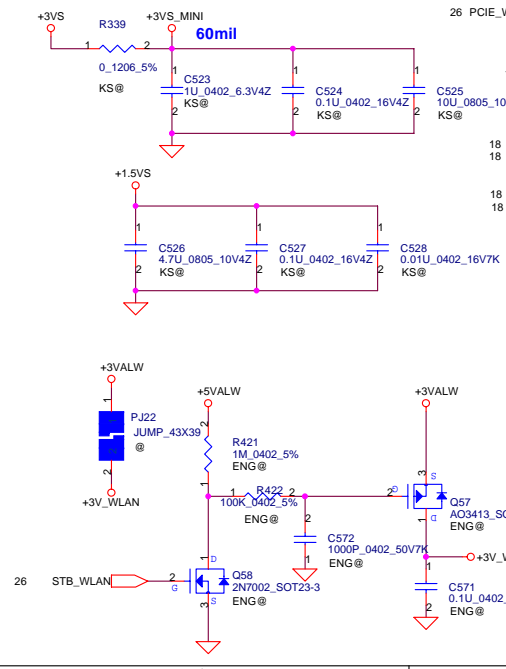
MDC



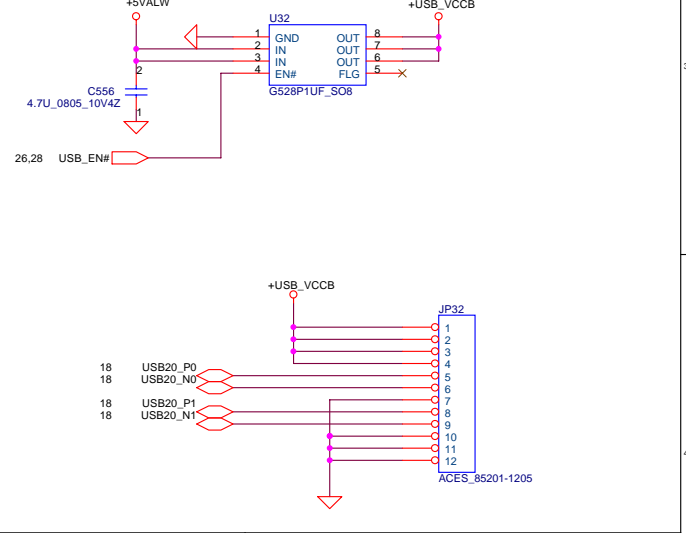
MDC Conn.



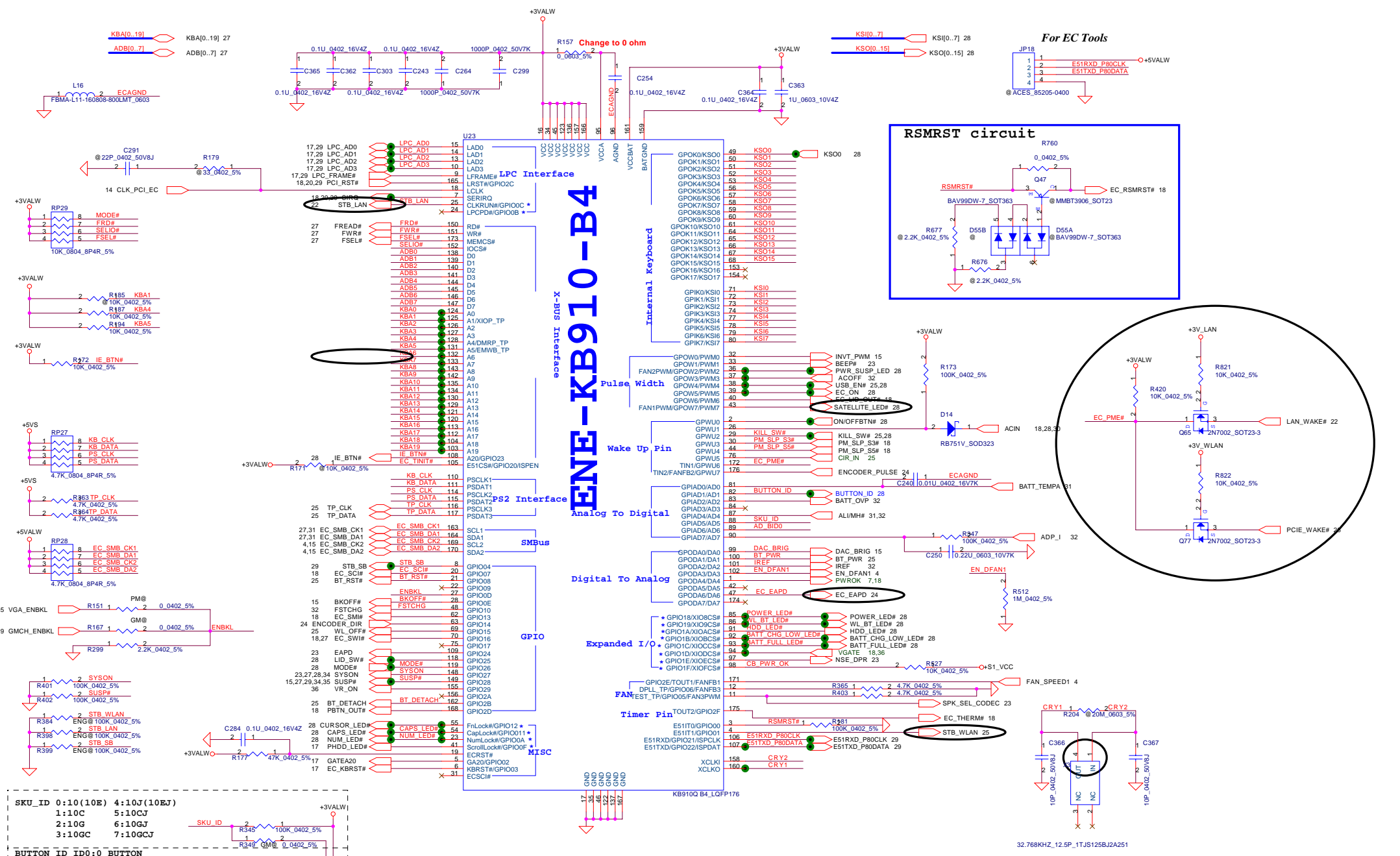
MINI CARD



USB Board Connector



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Date				Sheet	37



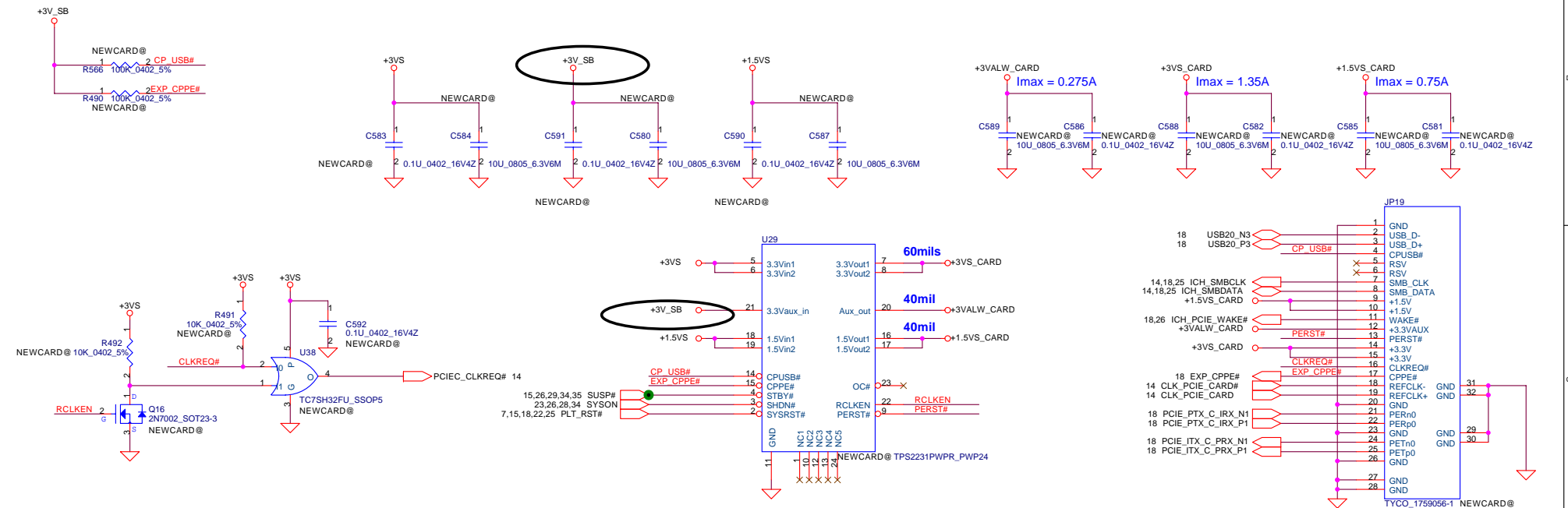
SKU_ID	0:10(10E)	4:10J(10EJ)
	1:10C	5:10CJ
	2:10G	6:10GJ
	3:10GC	7:10GCJ

BUTTON_ID	ID:0	BUTTON
	ID:2	BUTTON
	ID:4	BUTTON

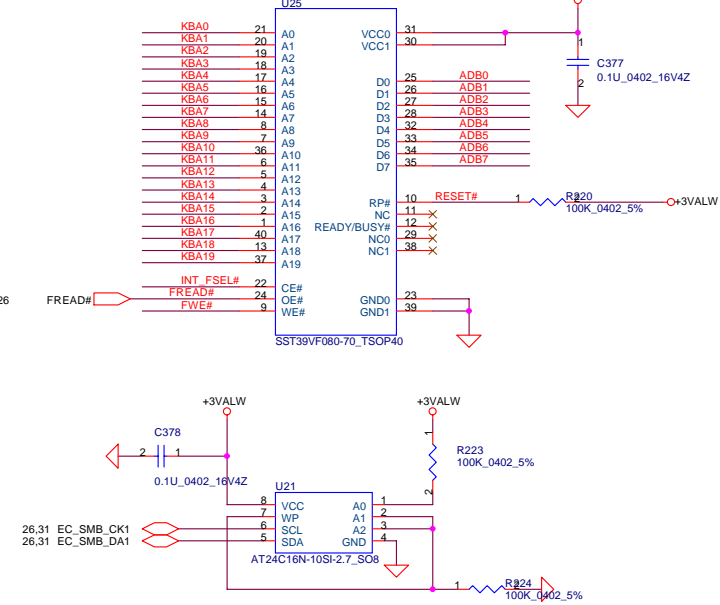
AD_BID:0	Board ID
ID = 0	(PCB REV 1)

Security Classification	Compal Secret Data		Title	Compal Electronics, Inc.
Issued Date	2006/10/31	Deciphered Date		
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Size	Document Number	Date		Rev
	ISKAEM/LA-3661P	Thursday, December 28, 2006		0.1
		Sheet	26	of
		38		

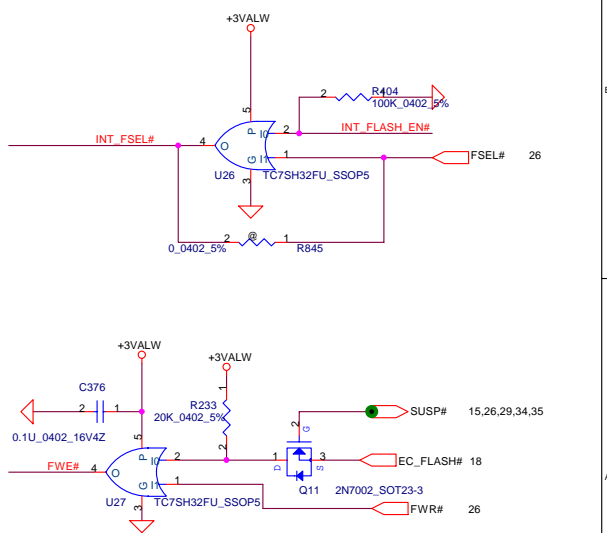
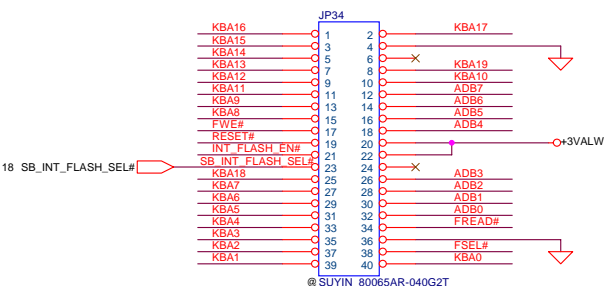
New Card



1MB Flash ROM

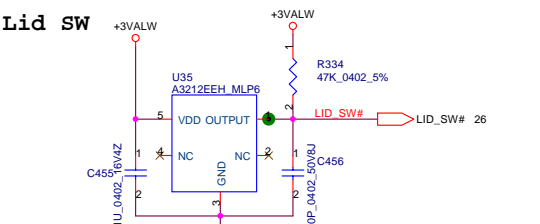


1MB ROM Socket

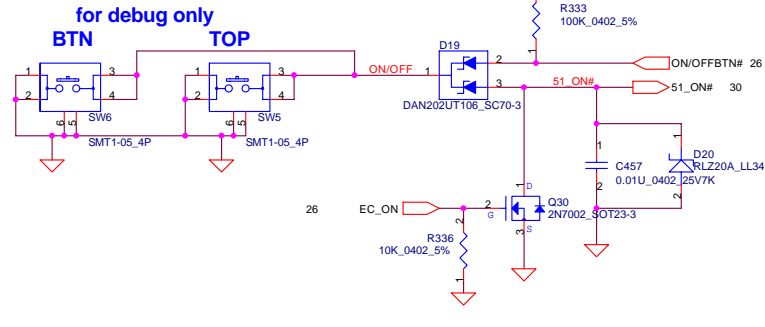


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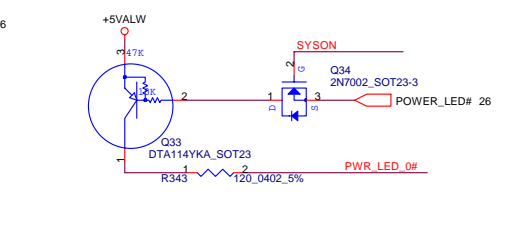
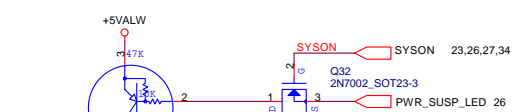
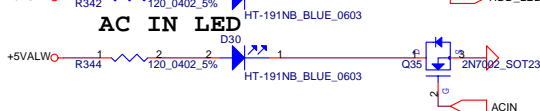
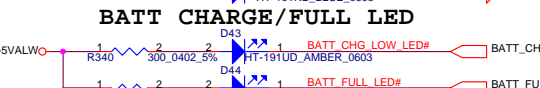
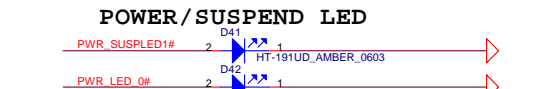
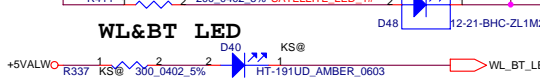
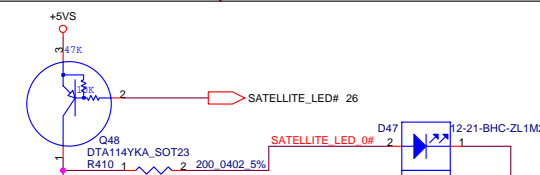
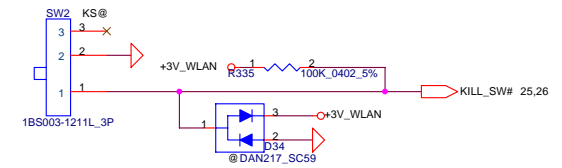
Compal Electronics, Inc.			
Title: BIOS/TP-PAD/BT			
Size	Document Number	Rev	
	ISKAE MB LA-3661P	1.0	
Date:	Thursday, December 25, 2006	Sheet	27 of 38



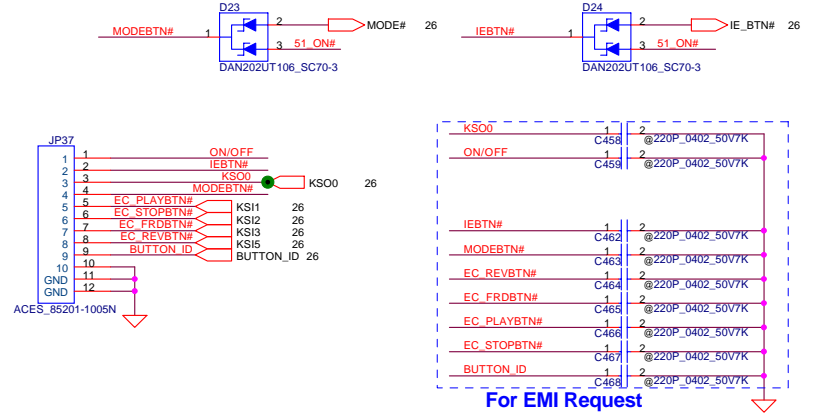
ON/OFF BUTTON



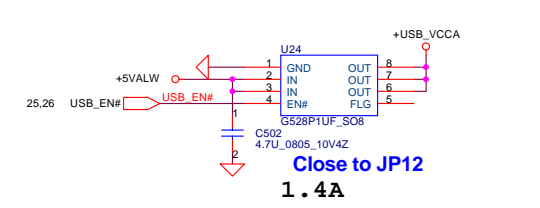
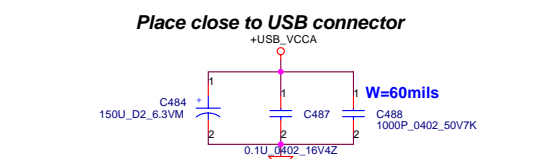
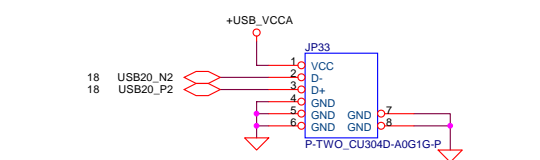
Kill SWITCH



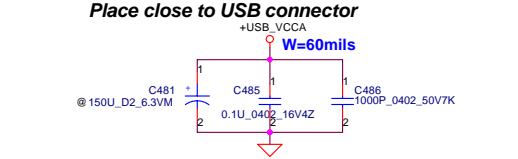
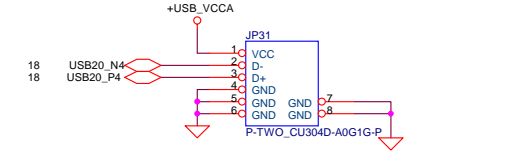
SW/LED Connector



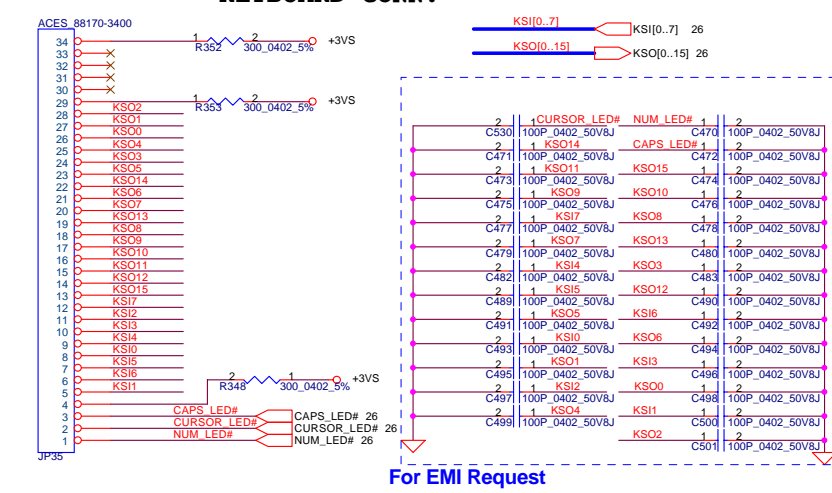
USB CONN. 1 (In Left From Side)



USB CONN. 2 (In Left Back Side)

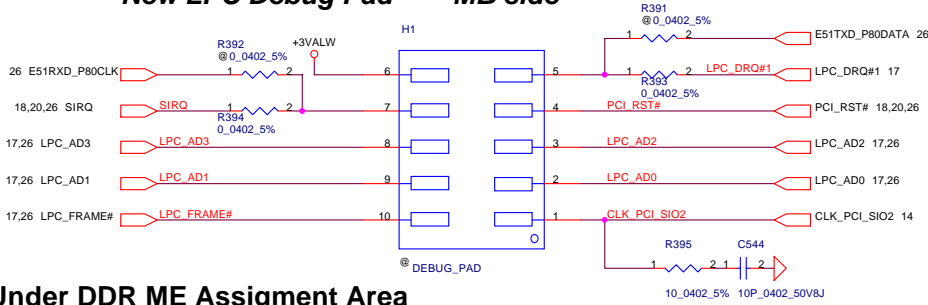


KEYBOARD CONN.



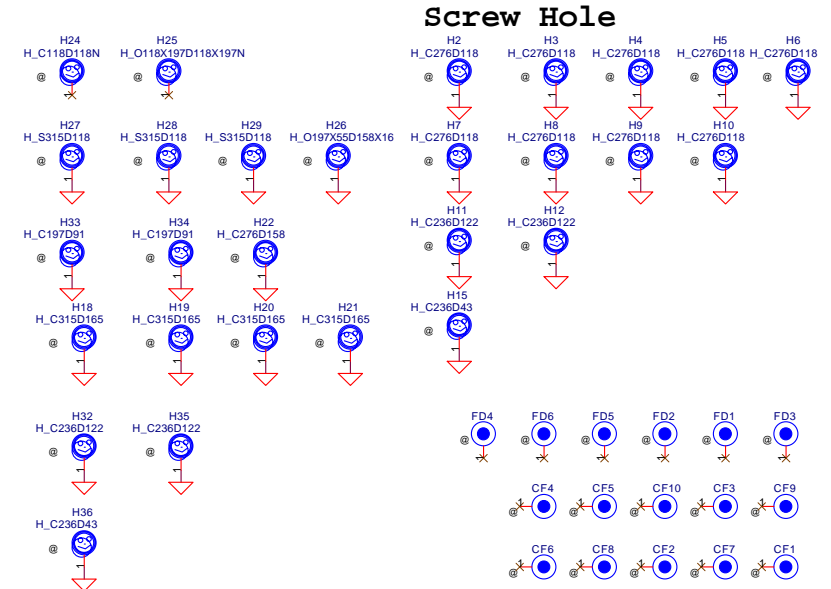
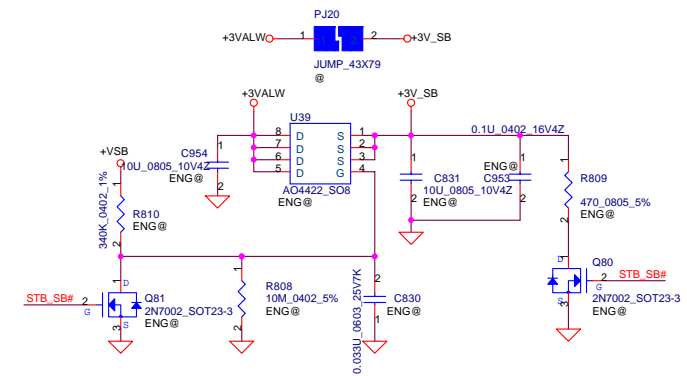
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New LPC Debug Pad ---- MB side

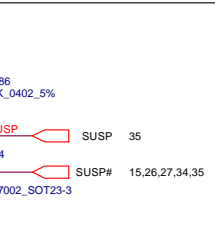
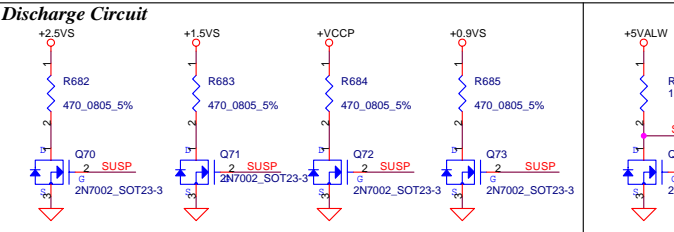
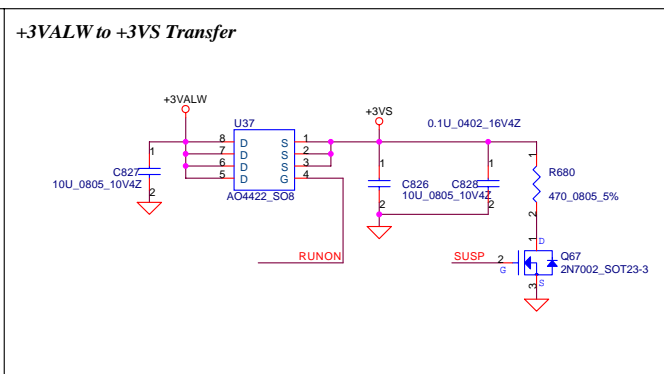
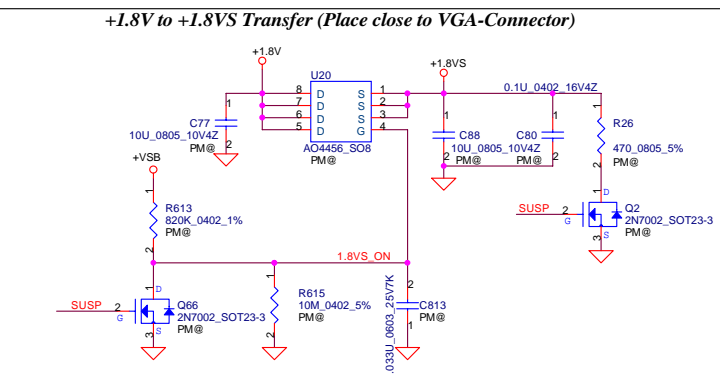
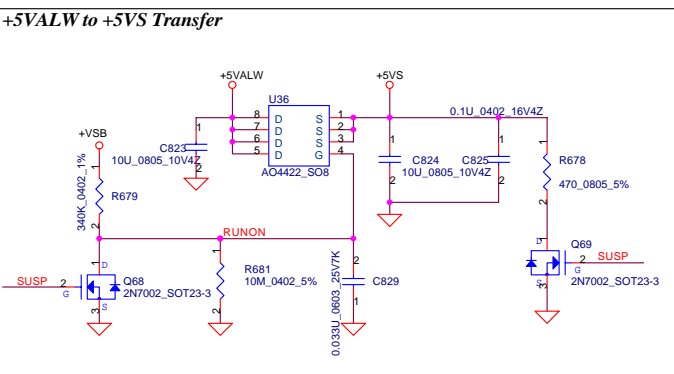


Under DDR ME Assignment Area

Keep Resistor near Debug Pad and in the same side
Reverse side DIMM ---- Pin 1 keep away DIMM

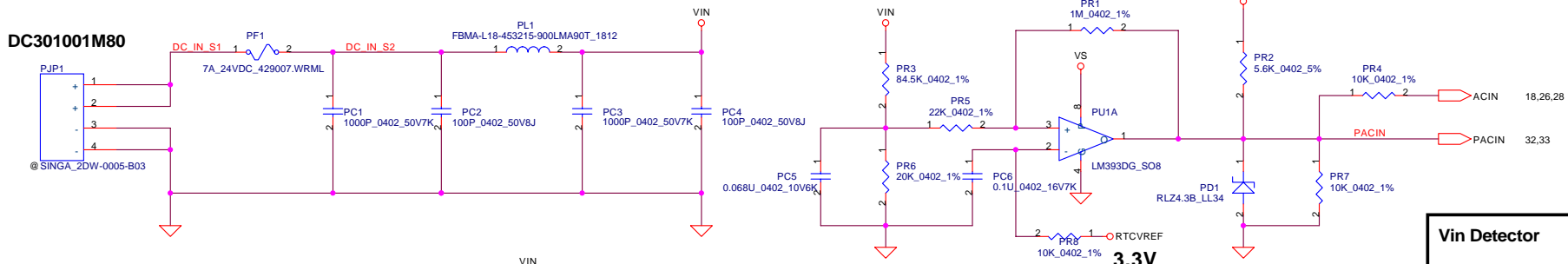


Screw Hole

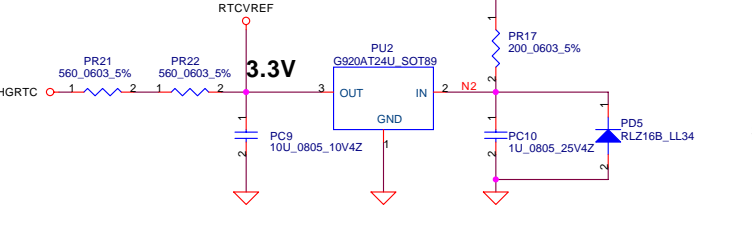
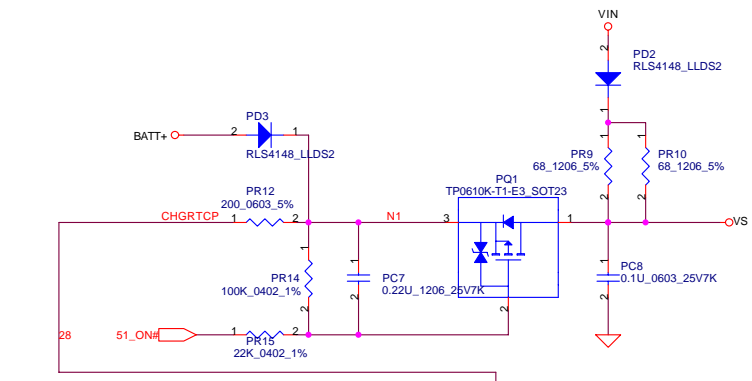


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Date:	Thursday, December 28, 2006	Sheet	29 of 38

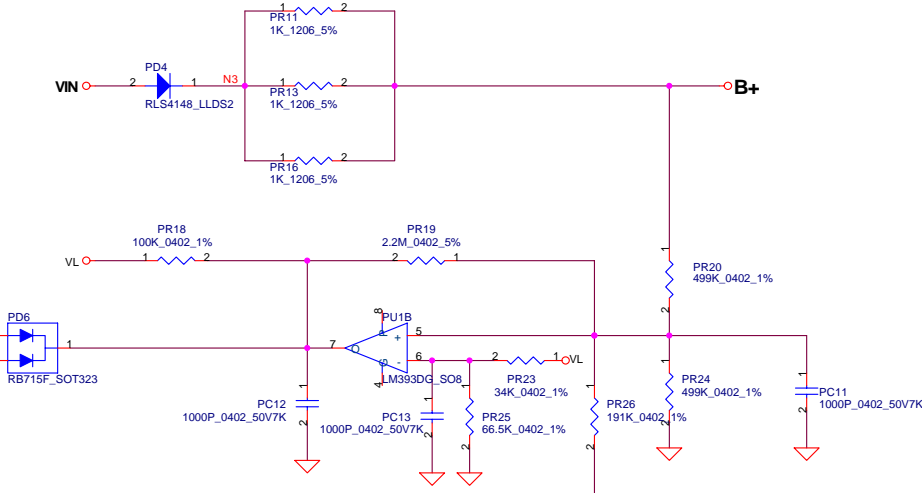
DC301001M80



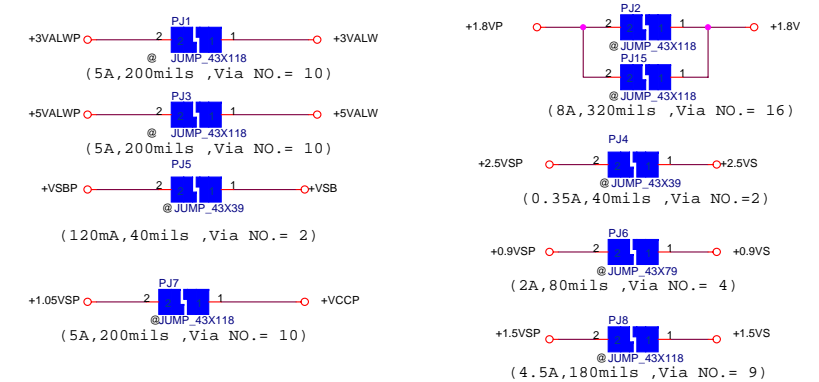
Vin Detector
 High 18.384 17.901 17.430
 Low 17.728 17.257 16.976



31.33 MAINPWON
32 ACON



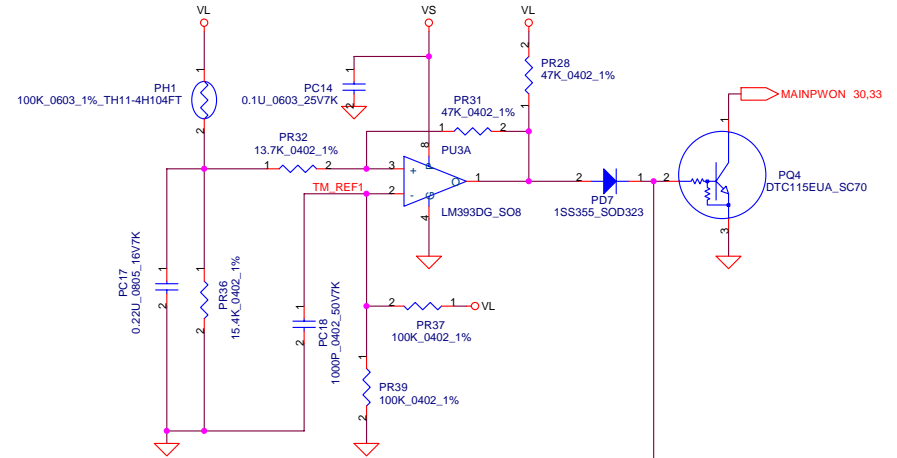
Precharge detector
15.97V/14.84V FOR
ADAPTOR



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Size	Document Number				Rev
					0.0
Date:	Tuesday, December 26, 2006	Sheet	30	of	38

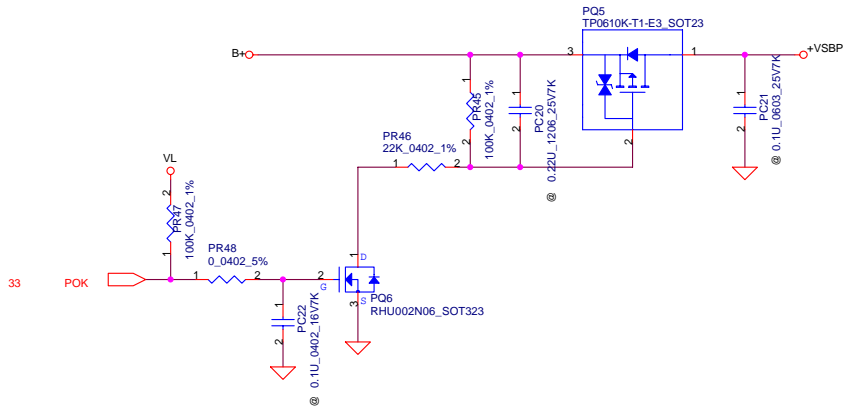
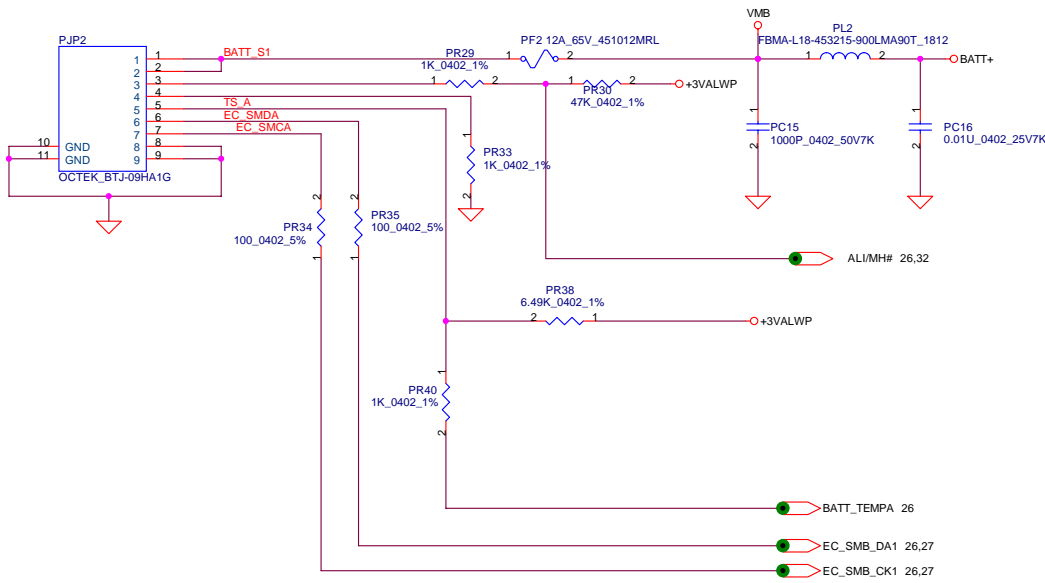
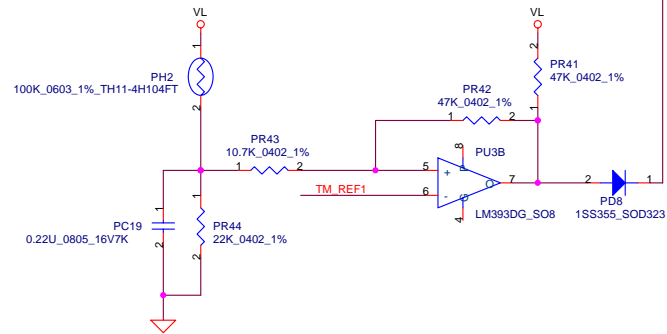
PH1 under CPU botten side :

CPU thermal protection at 87 degree C
Recovery at 48 degree C

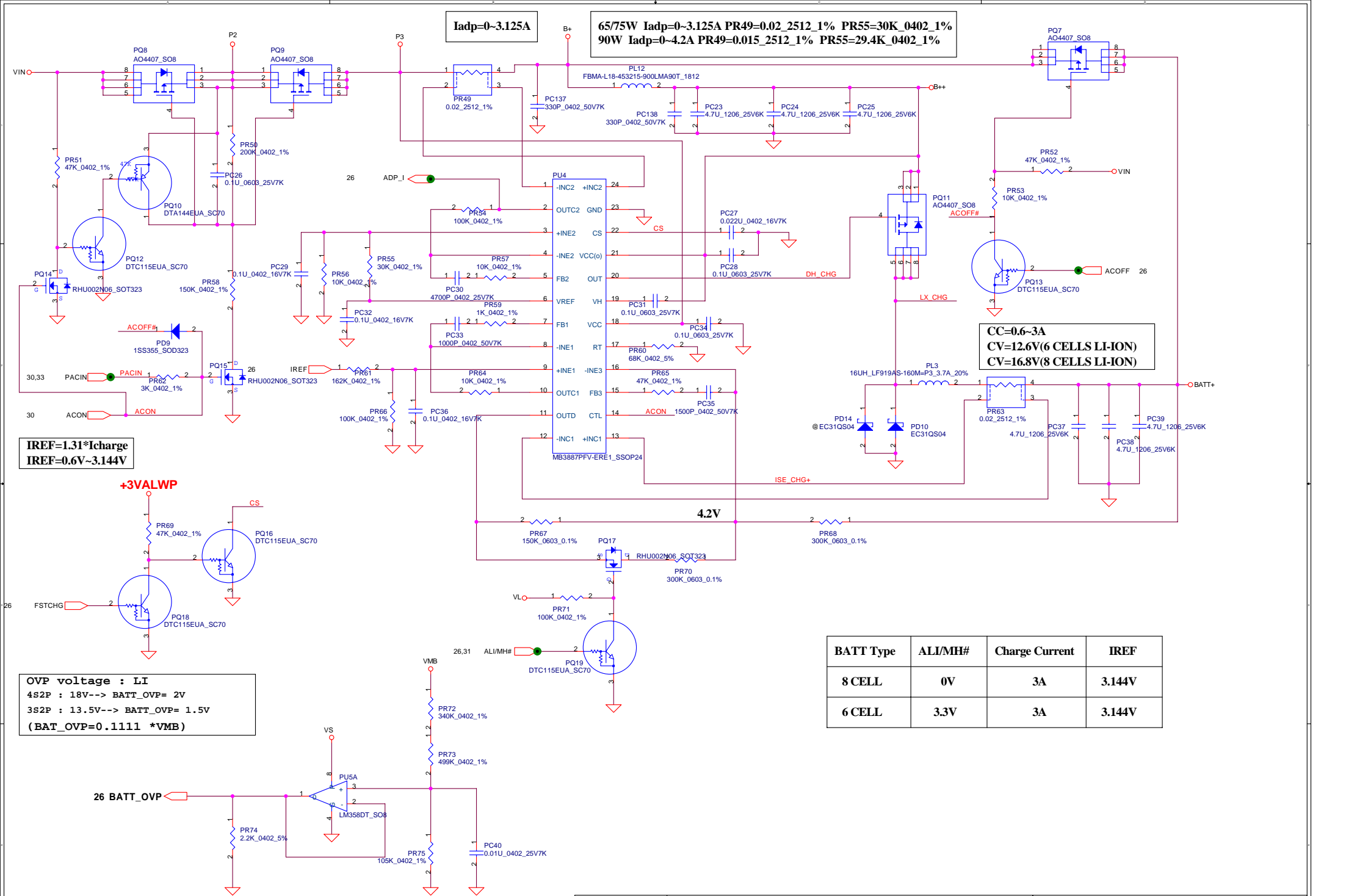


PH2 near main Battery CONN :

BAT. thermal protection at 79 degree C
Recovery at 45 degree C



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Size	Document Number				Rev
					0.0
Date:	Tuesday, December 26, 2006	Sheet	31	of	38



Iadp=0~3.125A

65/75W Iadp=0~3.125A PR49=0.02_2512_1% PR55=30K_0402_1%
 90W Iadp=0~4.2A PR49=0.015_2512_1% PR55=29.4K_0402_1%

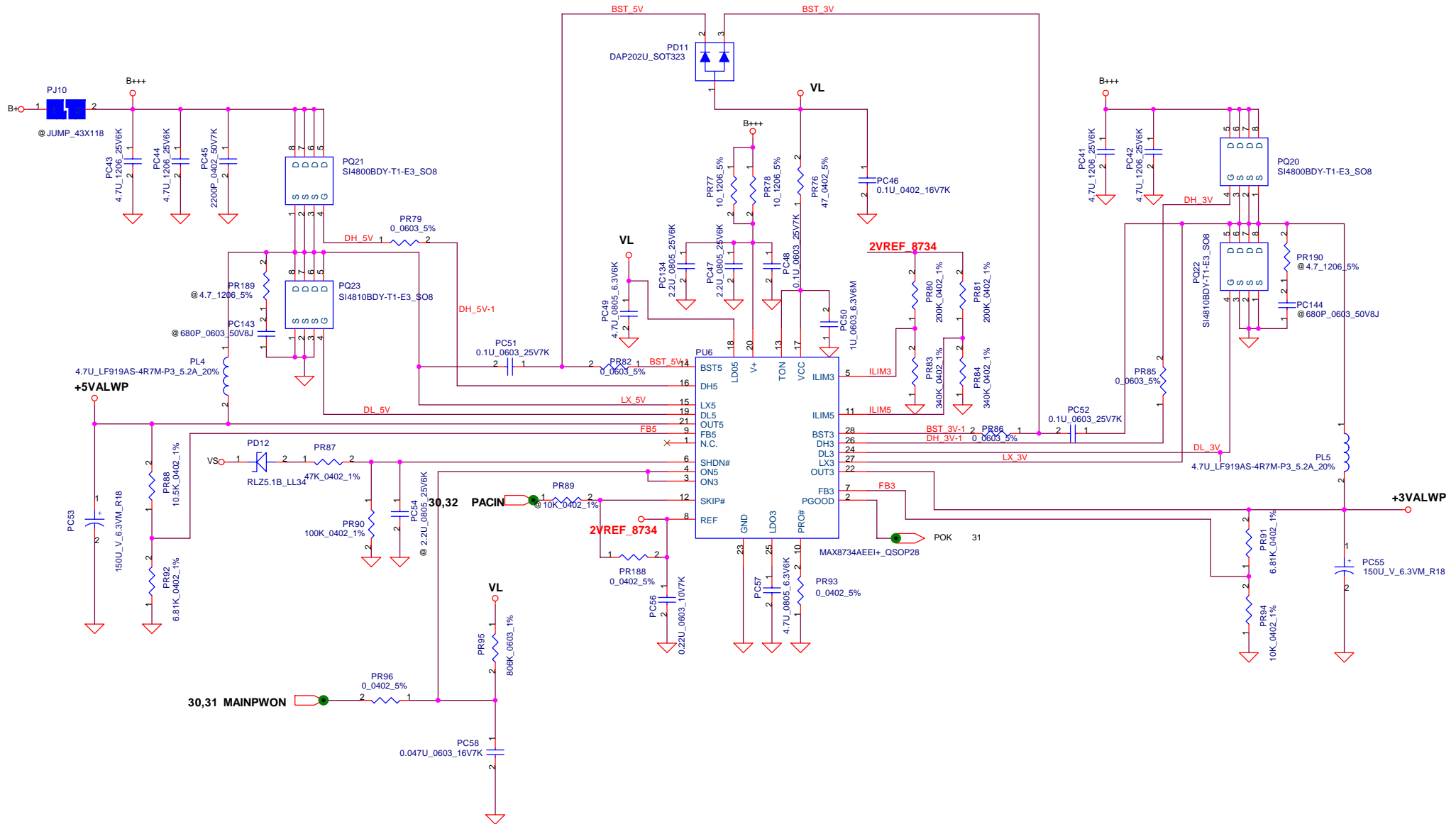
IREF=1.31*Icharge
 IREF=0.6V~3.144V

OVP voltage : LI
 4S2P : 18V--> BATT_OVP= 2V
 3S2P : 13.5V--> BATT_OVP= 1.5V
 (BATT_OVP=0.1111 *VMB)

CC=0.6~3A
 CV=12.6V(6 CELLS LI-ION)
 CV=16.8V(8 CELLS LI-ION)

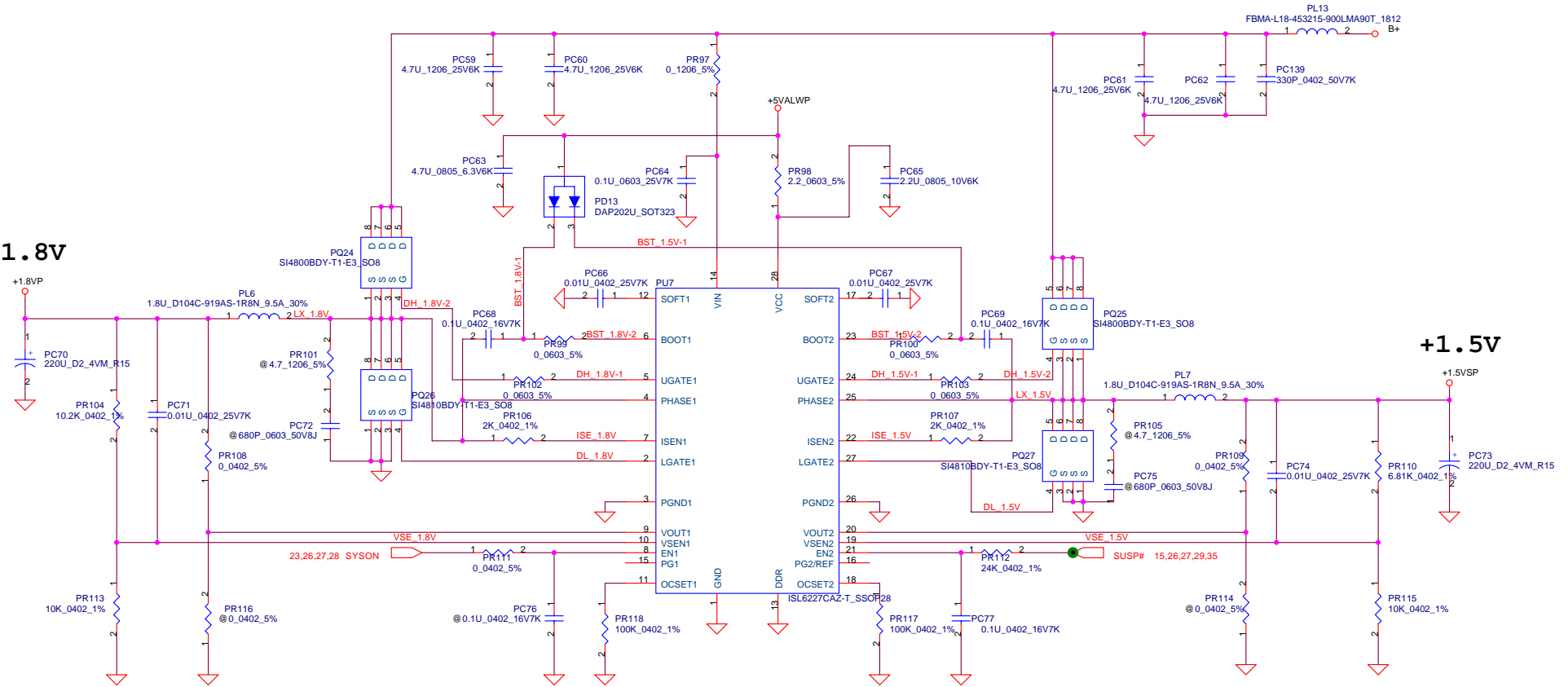
BATT Type	ALI/MH#	Charge Current	IREF
8 CELL	0V	3A	3.144V
6 CELL	3.3V	3A	3.144V

+3.3VALWP/+5VALWP



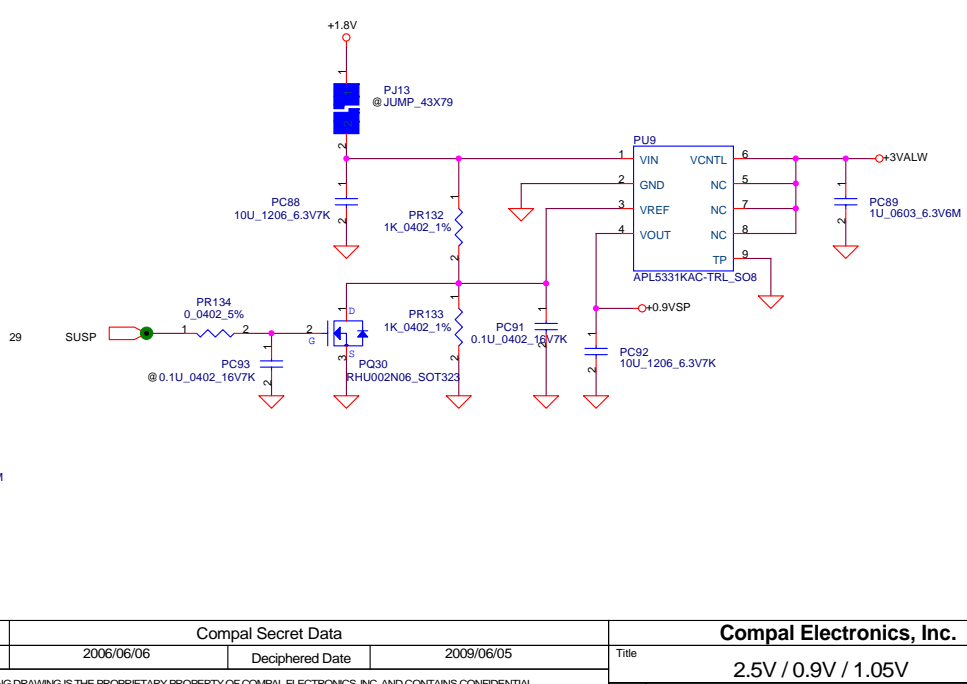
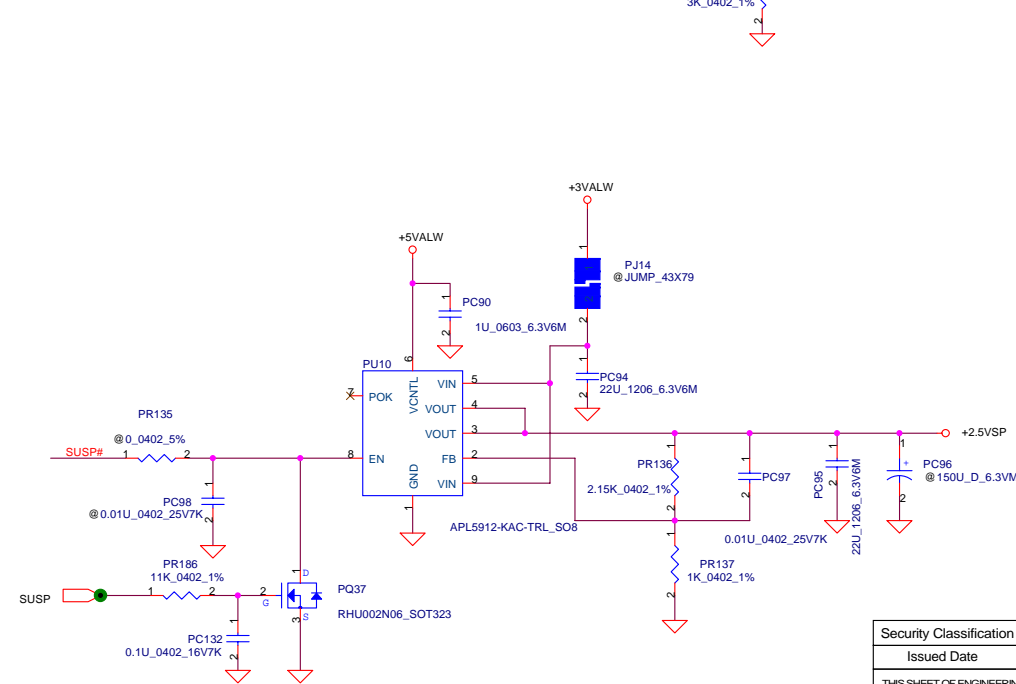
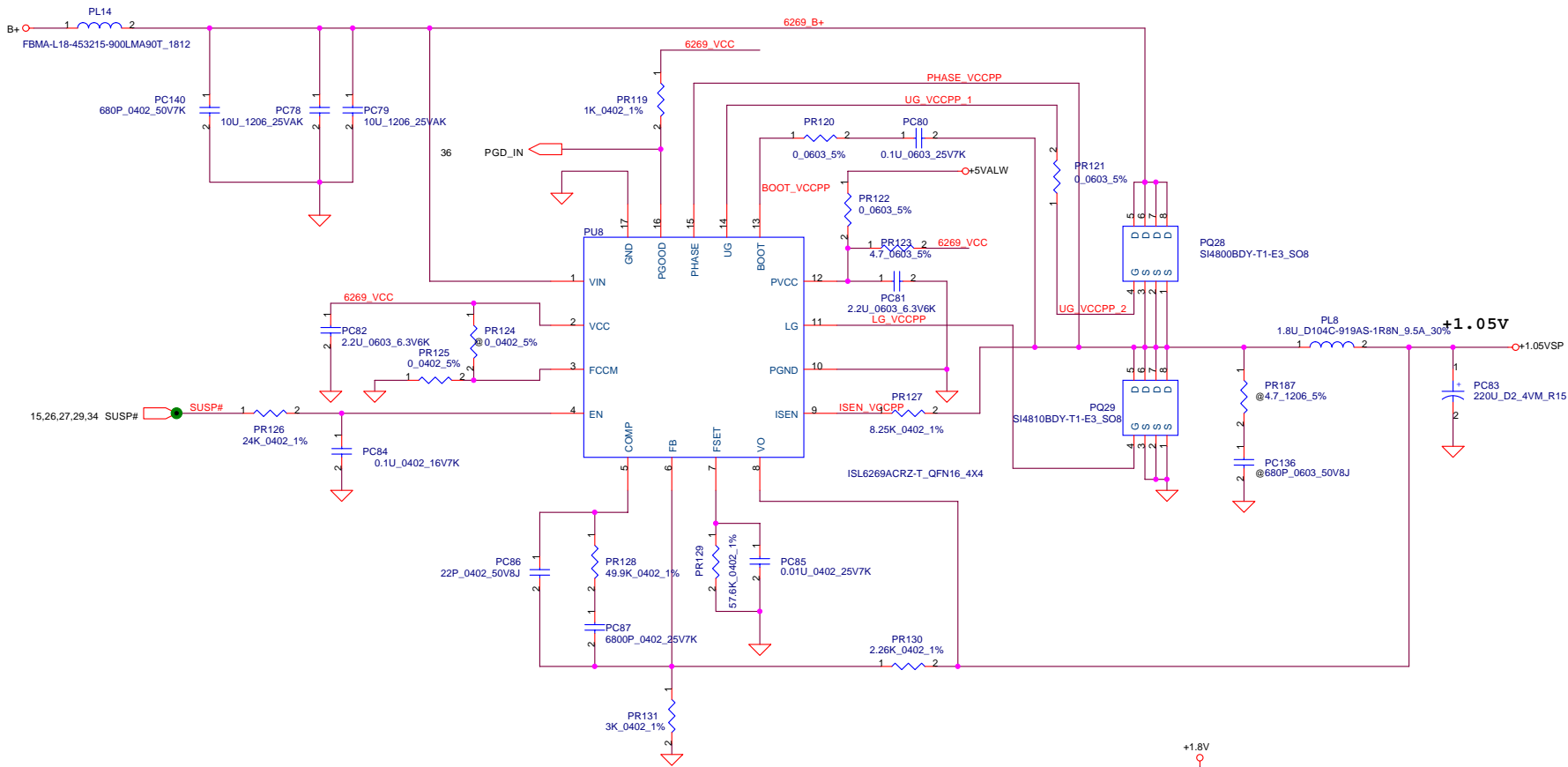
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+1.8V

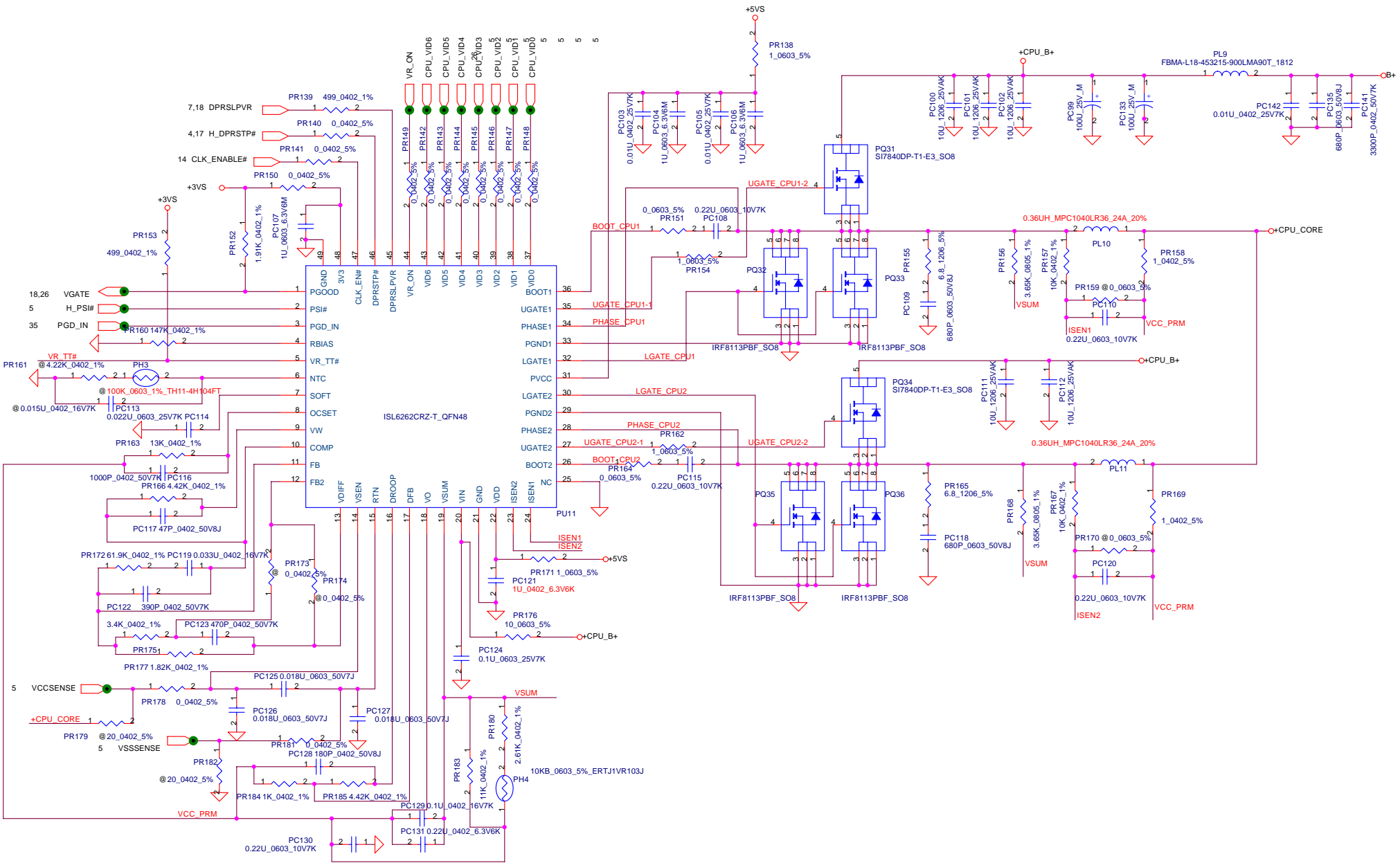


+1.5V

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Compal Electronics, Inc.
+CPU_CORE

POWER PIR LIST

page Reason for change

Modify list

DVT	35	Change +1.05V PWM IC	Change PU8 to ISL6269A(SA00000GU80), add PR122 (0ohm, SD013000080)
	36	For EMI team request to add snubber and gate resistor Modify the CUP CORE load line and compensation	Add snuber PR155,PR165(6.8ohm_SD011680B80), PC109,PC118(680p_SE024681J80) and gate resistor PR154,PR162(1ohm_SD013100B80) Change PC103 to 0.022u(SE076223K80), PC104 to 2.2u(SE107225K80), PR185 to 4.42K(SD000004J80), PC129 to 0.1u(SE076104K80, add PC126 (0.018U_SE025183J80), delete PC105 and PC106
	31	Modify the CPU OTP point from 84 degC to 87 degC for thermal team request	Change PR36 from 22K to 20K(SD034200280)
PVT	32,34, 35,36	For EMI team request to add bead to reduce board band	Add PL12,PL13,PL14(SM010020720);PC137,PC138,PC139(330p_SE074331K80);PC140(680p_SE074681K80);PC141(3300p_SE074332K80)
	33	Reduce the power consumption on S3/S4	Add PR188(0_0402_5%) and unpop PR89
	36	Solve the high frequency noise.	Change PC99 from 100U to 220U(SF22004M210)
Pre-MP	36	For EMI solution	Add PC142 (0.01u_0402)
	36	PC99 was interfere with logic low so change to small size	Change PC99 from 220U to 100U and add PC143,PC144(68U_25V).

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				Custom		0.1
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PIR (Product Improve Record)

FOR ISPD

LAN

U13
 RTL8101E
 100M@

TRANSFORMER

U34
 NS892404
 100M@

PCB

ZZZ1
 PCB ZKU LA-3661P REV0

Card BUS

U8
 8402
 8402@

U8
 4512
 4512@

SB

U2
 ICH7
 ICH7R1@

U6
 943GML
 GMLR3@

U6
 943GML
 GMLR1@

NB

U6
 945GM
 GMR3@

U6
 945GM
 GMR1@

U6
 945PM
 PMR1@

SKU ID

R349
 18K_0402_5%
 PM@

DC-JACK

PJP1
 SINGA_2DW-0005-B03
 45@

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