

**Page Index**  
=====

- P01-Cover Page
- P02-Block Diagram
- P03-Notes List
- P04-Dothan(1/2)
- P05-Dothan(2/2)
- P06-Alviso HOST(1/5)
- P07-Alviso DDR(2/5)
- P08-Alviso PCI-E(3/5)
- P09-Alviso POWER(4/5)
- P10-Alviso POWER(5/5)
- P11-DDRI-SODIMMO
- P12-DDRI-SODIMM1
- P13-DDR Decoupling
- P14-Clock Generator
- P15-CRT Conn.
- P16-VGA / LCD Conn.
- P17-ICH6(1/4)\_HUB,PCI,HOST
- P18-ICH6(2/4)\_CPU,AC97,IDE,LPC
- P19-ICH6(3/4)\_USB,PM,LAN,GPIO
- P20-ICH6(4/4)\_POWER&GND
- P21-HDD/CDROM
- P22-DVI / TV\_Out Conn
- P23-PCMCIA ENE CB1410 & CB714
- P24-PCMCIA SOCKET
- P25-TI 1394A TSB43AB21A
- P26-LAN BCM5788M
- P27-LAN Magnetic & RJ45/RJ11
- P28-Mimi-PCI Slot
- P29-AC97 Codec\_ALC250D
- P30-Audio Line in Switch
- P31-AMP & Audio Jack
- P32-Super IO SMC217
- P33-ENE-KB910
- P34-MDC / BT / KBD / TP Conn.
- P35-BIOS & I/O Port & SATA HDD
- P36-RJ11/LID Switch / Fan / FIR
- P37-USB2.0 Conn
- P38-Docking Conn.
- P39-PWR\_OK / RTC
- P40-DC INTERFACE
- P41-Screws
- P42-PWR-DCIN / Precharge
- P43-PWR-Charger
- P44-PWR-Battery Select
- P45-PWR-3V/5V/12V
- P46-PWR-GMCH\_CORE/1.8V/0.9V
- P47-PWR-1.5V/2.5V
- P48-PWR-CPU\_CORE
- P49-PWR-OTP
- P50-PWR-PIR

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## EFL50/ EFT51 Schematics Document

Intel Dothan/ Celeron M/ Alviso GM(PM) / DDR-2 / ICH6-M

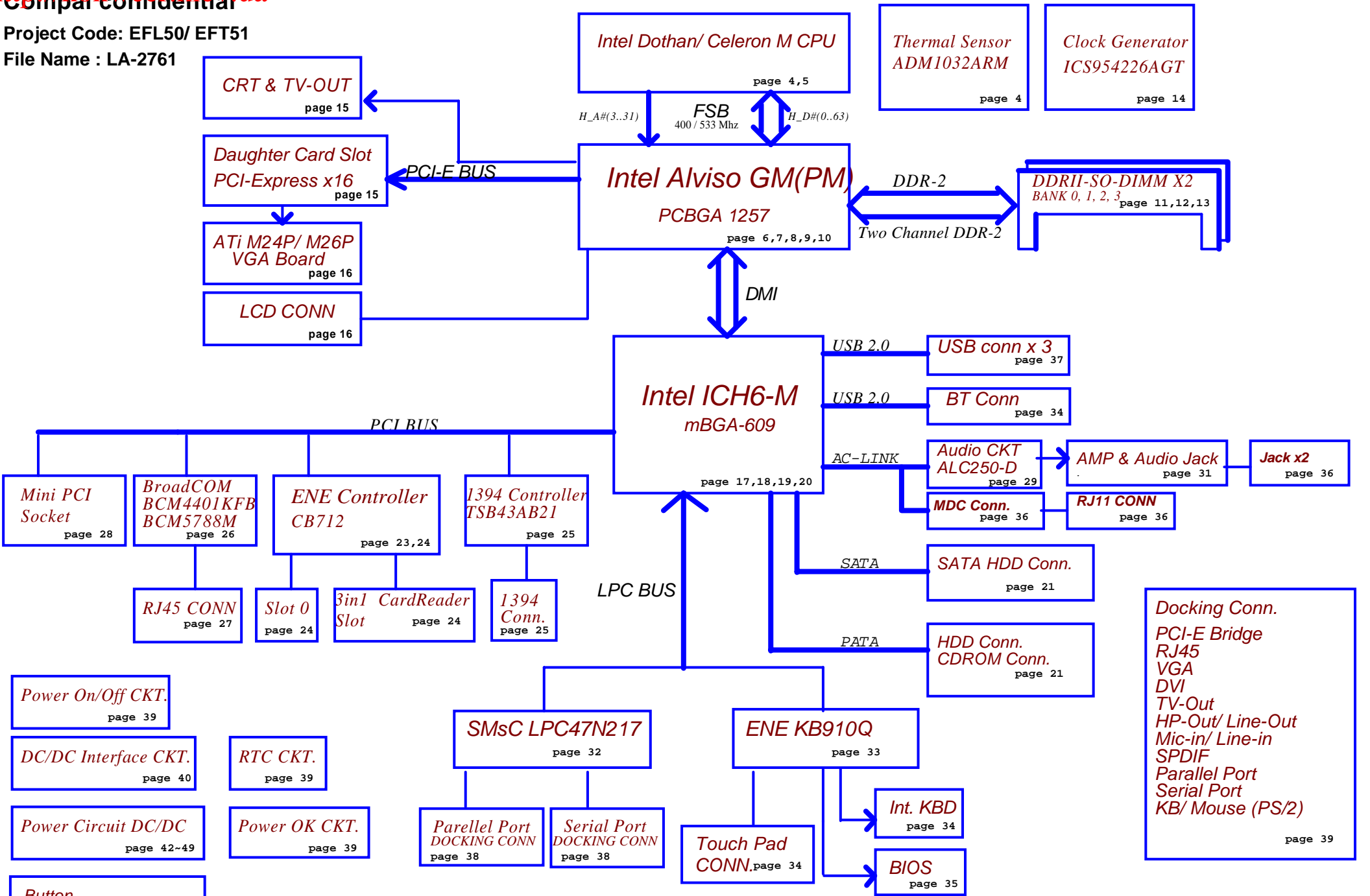
(Daughter Card: ATi M24P/ M26P)

2005 / 03 / 08 (B-Test EVT)

Rev:0.2

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				Date: Wednesday, April 20, 2005	Rev 0.2
				Sheet 1 of 51	

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Custom	EFL50 LA-2761	0.2		
Date:	Wednesday, April 20, 2005	Sheet	2 of 51	

### Voltage Rails

Power Plane	Description	S1	S3	S4/ S5
VIN	Adapter power supply (19V)	N/A	N/A	N/A
B+	AC or battery power rail for power circuit.	N/A	N/A	N/A
+CPU_CORE	Core voltage for CPU	ON	OFF	OFF
+1.05VS	1.05V switched power rail	ON	OFF	OFF
+DDRVTT	0.9V switched power rail for DDR terminator	ON	OFF	OFF
+1.5VALW	1.5V always on power rail	ON	ON	ON*
+1.5VS	1.5V switched power rail	ON	OFF	OFF
+1.8VS	1.8V switched power rail	ON	OFF	OFF
+DDRCC	1.8V power rail for DDR	ON	ON	OFF
+2.5VS	2.5V switched power rail	ON	OFF	OFF
+3VALW	3.3V always on power rail	ON	ON	ON*
+3V	3.3V power rail	ON	ON	OFF
+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
+5VMOD	5V switched power rail for Module Bay	ON	OFF	OFF
+12VALW	12V always on power rail	ON	ON	ON*
+RTCACC	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	IDSEL#	REQ#/GNT#	Interrupts
CardBus	AD20	2	PIRQA/PIRQB
1394	AD16	0	PIRQE
SD	AD20	2	PIRQA/PIRQB
Mini-PCI	AD18	1	PIRQG/PIRQH
LAN	AD17	3	PIRQF

### EC SM Bus1 address

Device	Address	Device	Address
Smart Battery	0001 011X b	ADM1032	1001 110X b
EEPROM(24C16/02)	1010 000X b		
(24C04)	1011 000Xb		

### EC SM Bus2 address

### ICH6M SM Bus address

Device	Address
Clock Generator (ICS 954226AGT)	1101 001Xb
DDR# DIMM0	1001 000Xb
DDR# DIMM2	1001 010Xb

STATE	SIGNAL	SLP_S1#	SLP_S3#	SLP_S4#	SLP_S5#	+VALW	+V	+VS	Clock
Full ON		HIGH	HIGH	HIGH	HIGH	ON	ON	ON	ON
S1 (Power On Suspend)		LOW	HIGH	HIGH	HIGH	ON	ON	ON	LOW
S3 (Suspend to RAM)		LOW	LOW	HIGH	HIGH	ON	ON	OFF	OFF
S4 (Suspend to Disk)		LOW	LOW	LOW	HIGH	ON	OFF	OFF	OFF
S5 (Soft OFF)		LOW	LOW	LOW	LOW	ON	OFF	OFF	OFF

### Board ID / SKU ID Table for AD channel

Vcc	3.3V +/- 5%			
Ra / Rc	100K +/- 5%			
Board ID	Rb / Rd	V <sub>AD_BID</sub> min	V <sub>AD_BID</sub> typ	V <sub>AD_BID</sub> max
0	0	0 V	0 V	0 V
1	8.2K +/- 5%	0.216 V	0.250 V	0.289 V
2	18K +/- 5%	0.436 V	0.503 V	0.538 V
3	33K +/- 5%	0.712 V	0.819 V	0.875 V
4	56K +/- 5%	1.036 V	1.185 V	1.264 V
5	100K +/- 5%	1.453 V	1.650 V	1.759 V
6	200K +/- 5%	1.935 V	2.200 V	2.341 V
7	NC	2.500 V	3.300 V	3.300 V

### BOARD ID Table

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

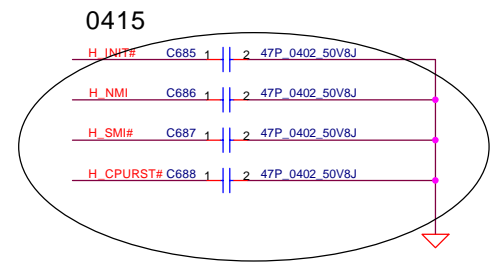
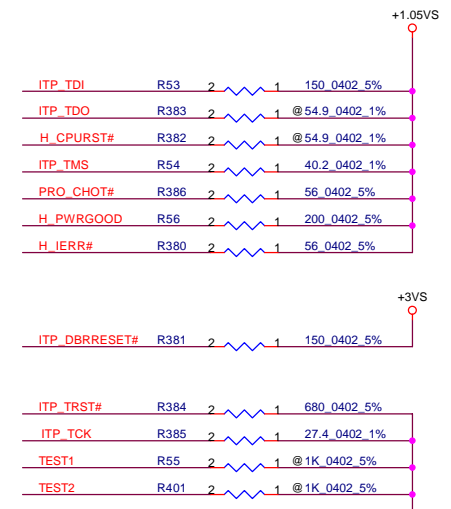
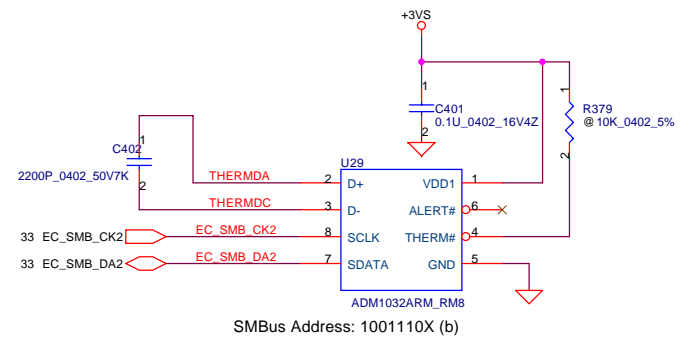
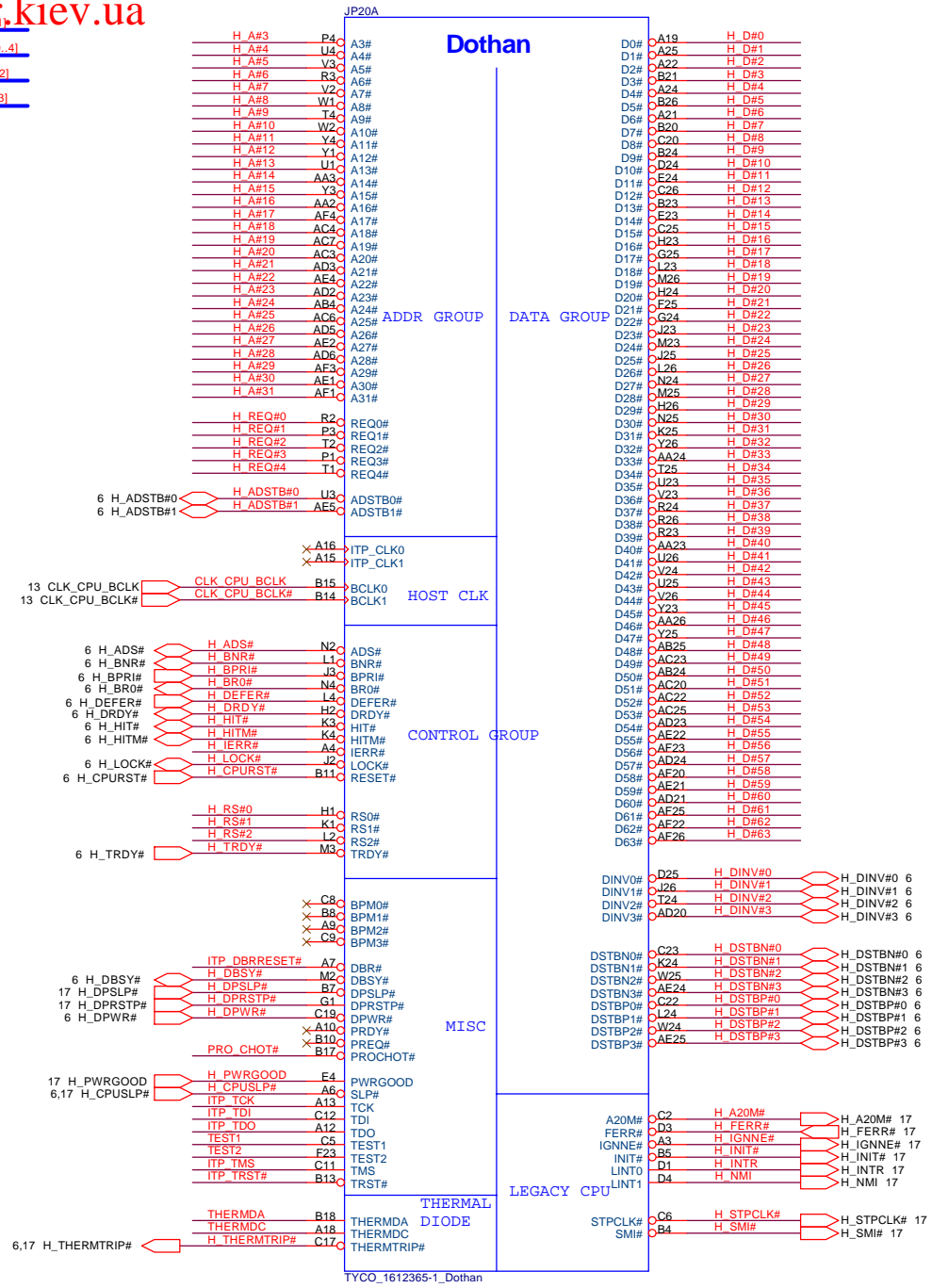
### SKU ID Table

SKU ID	SKU
0	
1	
2	
3	
4	
5	
6	
7	

### BTO Option Table

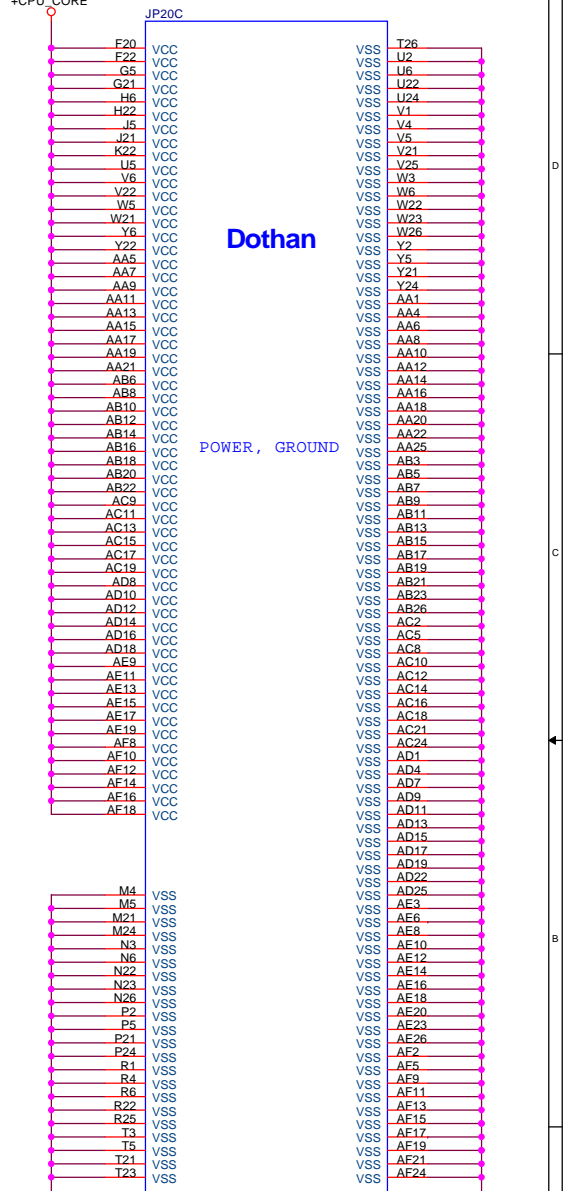
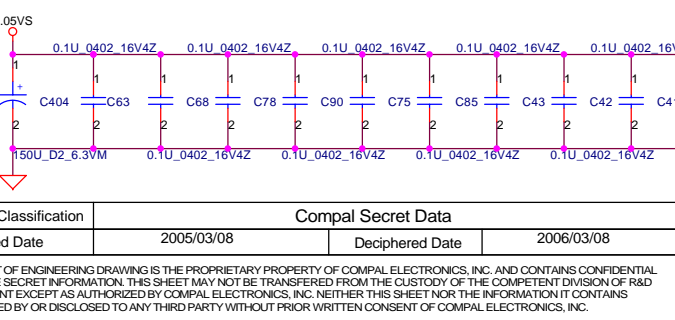
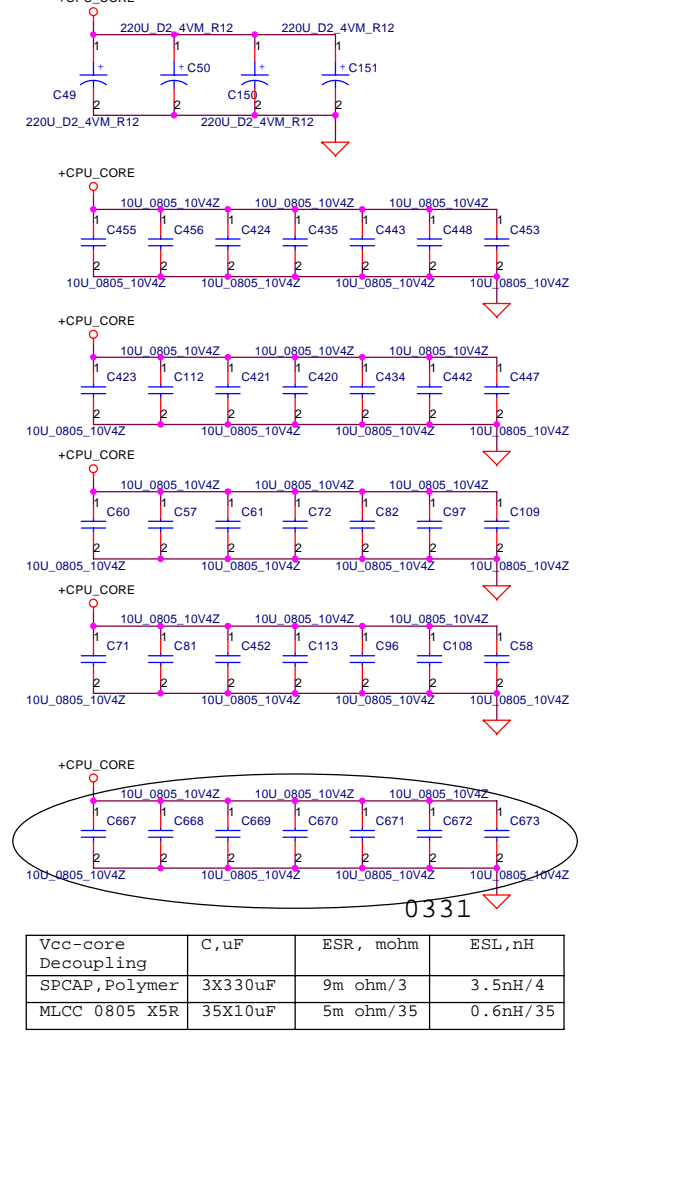
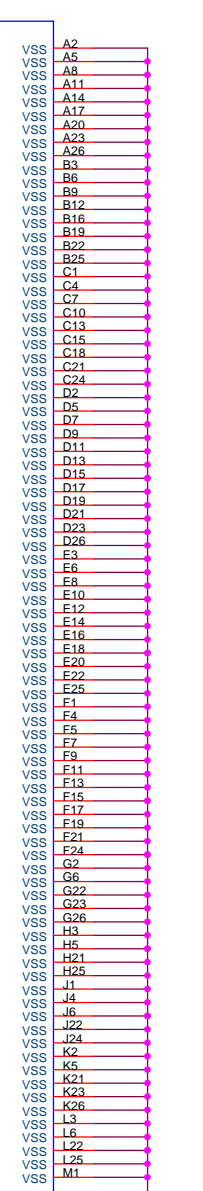
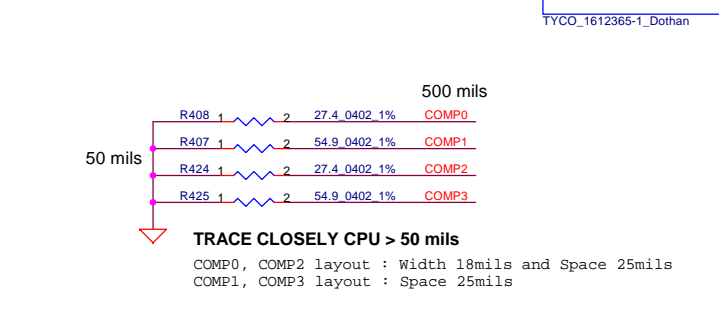
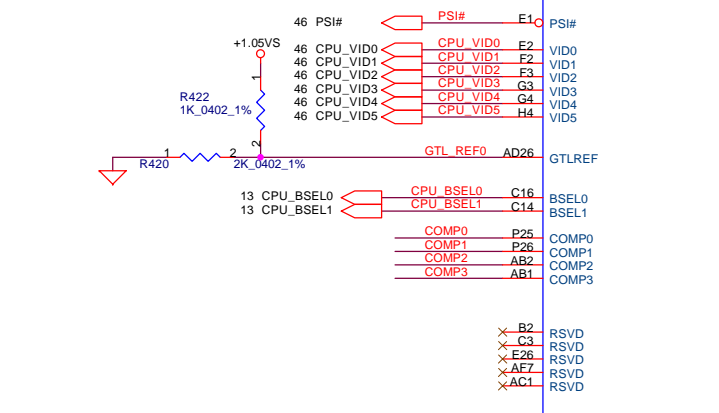
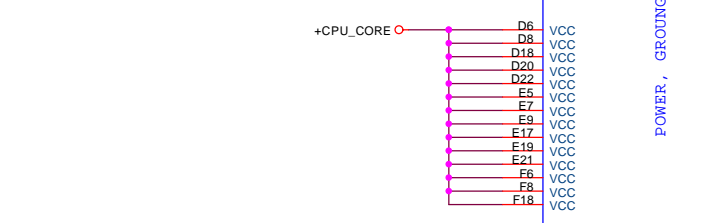
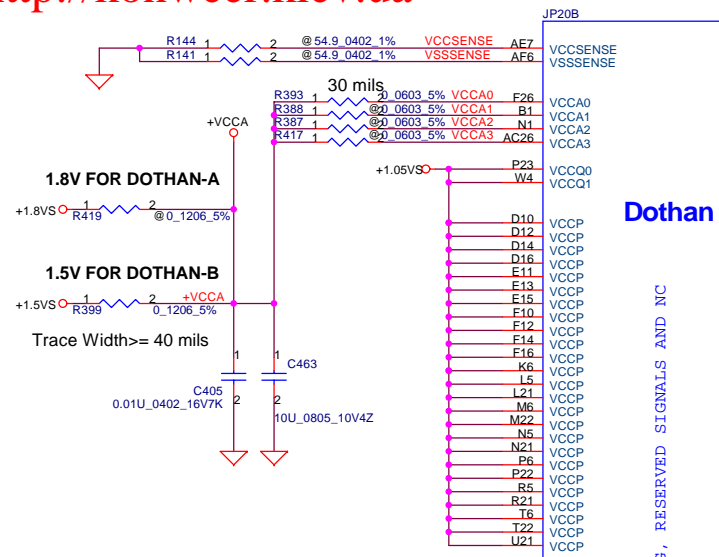
BTO Item	BOM Structure
UMA	GM@
Discrete	PM@
LAN 10/100	4401@
LAN GIGA	5788@
1 Spindle	1S@
2 Spindle	2S@
2 Spindle with SATA	2SS@
2 Spindle with PATA	2SP@
1 Spindle with SATA	1SS@
1 Spindle with PATA	1SP@
With Docking	WD@
Without Docking	ND@
With 1394	1394@
With 1394 4pin	1394<4>@
With 1394 6pin	1394<6>@

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Date:	Wednesday, April 20, 2005	Sheet	3 of 51



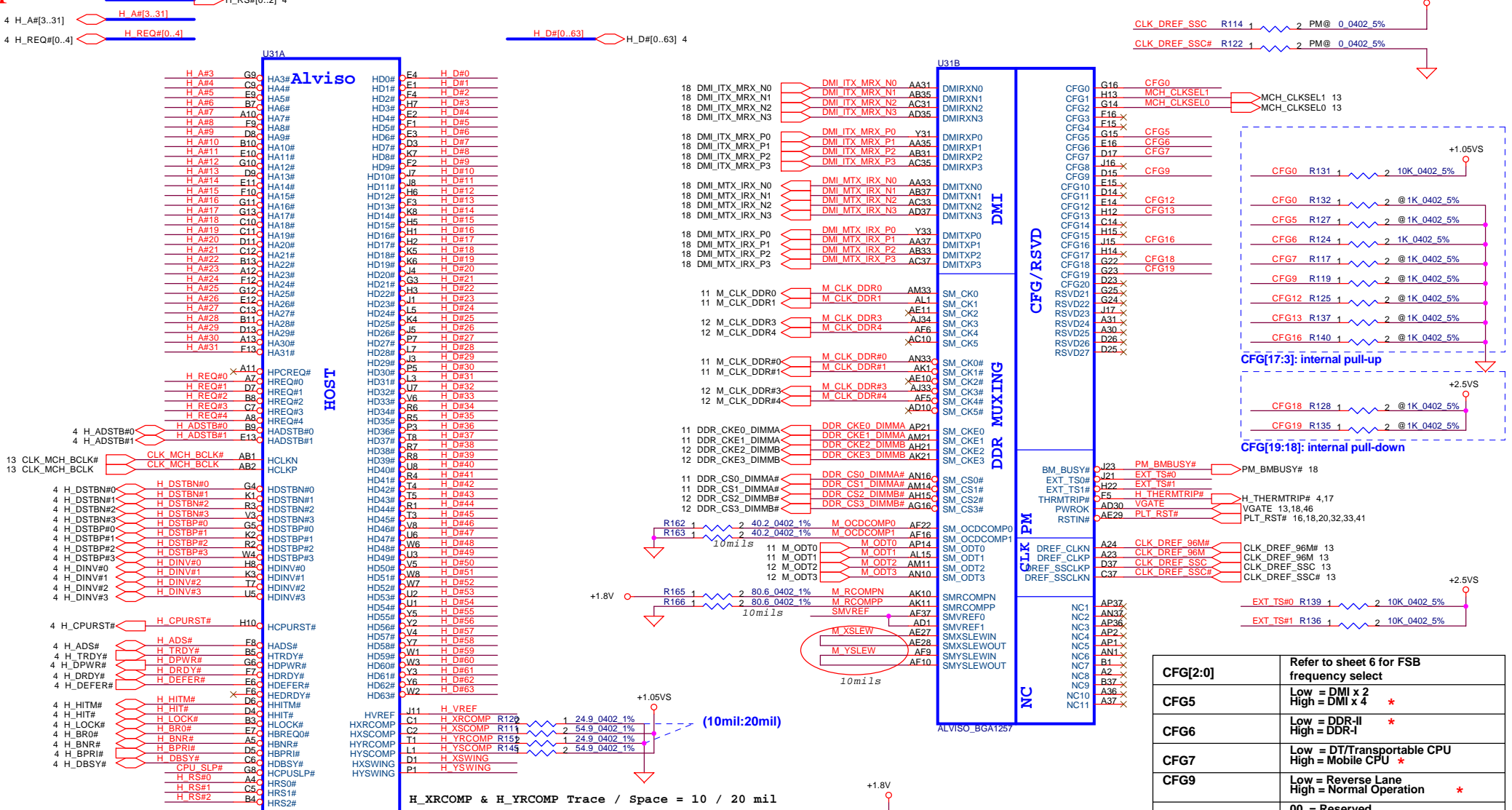
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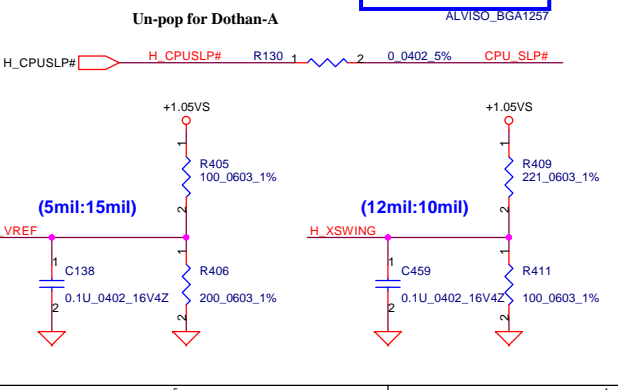


Vcc-core Decoupling	C, uF	ESR, mohm	ESL, nH
SPCAP, Polymer	3X330uF	9m ohm/3	3.5nH/4
MLCC 0805 X5R	35X10uF	5m ohm/35	0.6nH/35

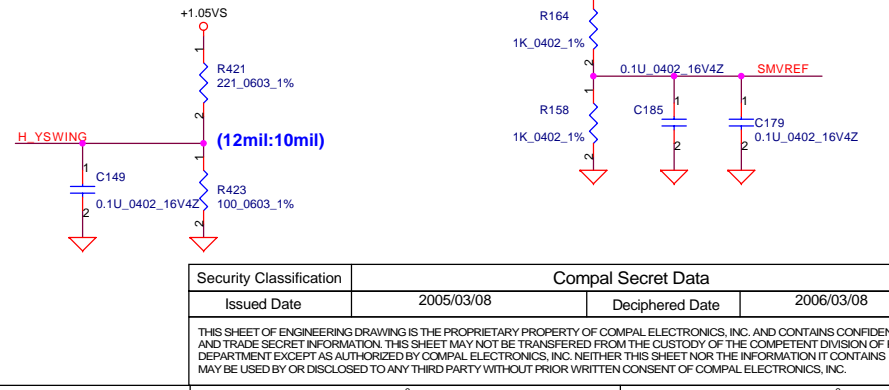
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Size Custom	Document Number EFL50 LA-2761	Date: Wednesday, April 20, 2005	Sheet 5 of 51	Rev 0.2	



CFG2:0	Refer to sheet 6 for FSB frequency select
CFG5	Low = DMI x 2 High = DMI x 4 *
CFG6	Low = DDR-II High = DDR-I *
CFG7	Low = DT/Transportable CPU High = Mobile CPU *
CFG9	Low = Reverse Lane High = Normal Operation *
CFG[13:12]	00 = Reserved 01 = XOR Mode Enabled 10 = All Z Mode Enabled 11 = Normal Operation (Default) *
CFG16 (FSB Dynamic ODT)	Low = Enabled High = Disabled *
CFG18 (VCC Select)	Low = 1.05V (Default) * High = 1.5V
CFG19 (VTT Select)	Low = 1.05V (Default) * High = 1.2V



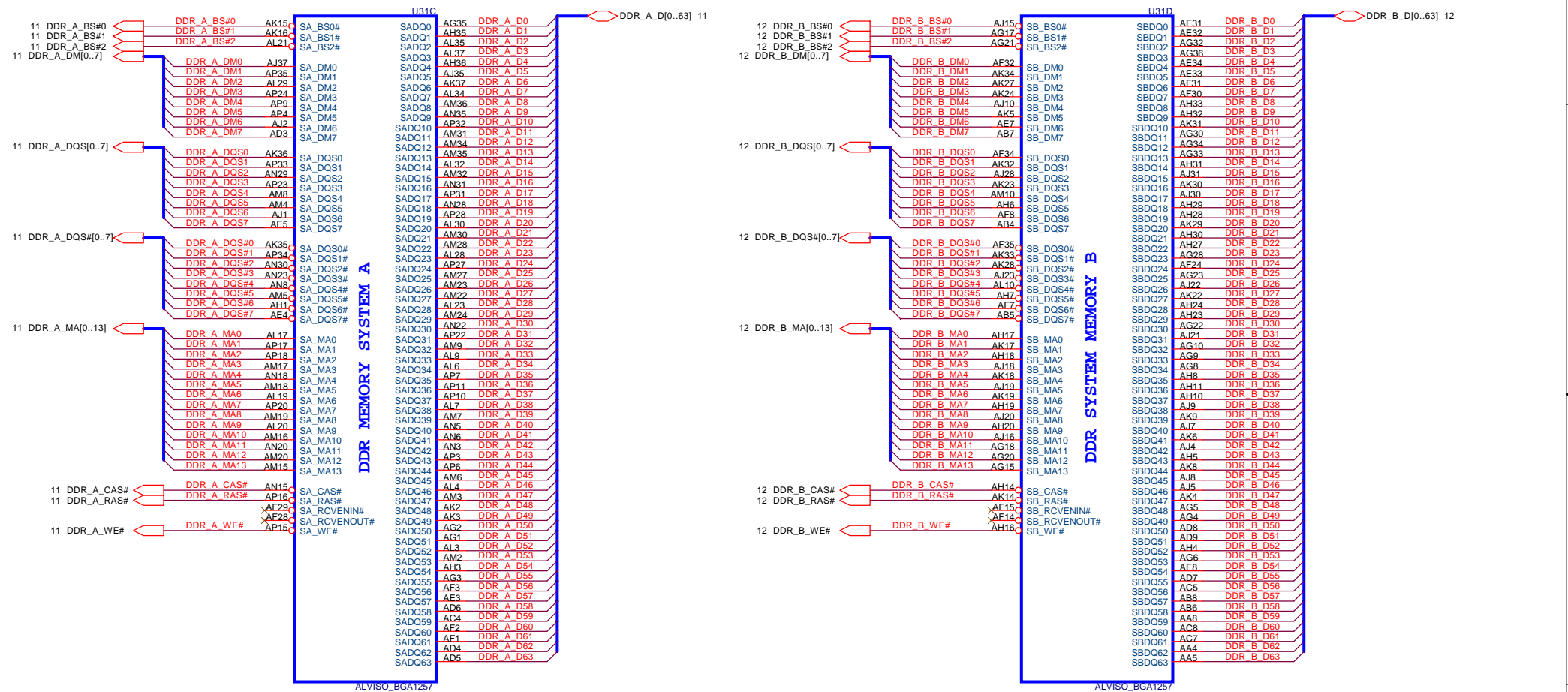
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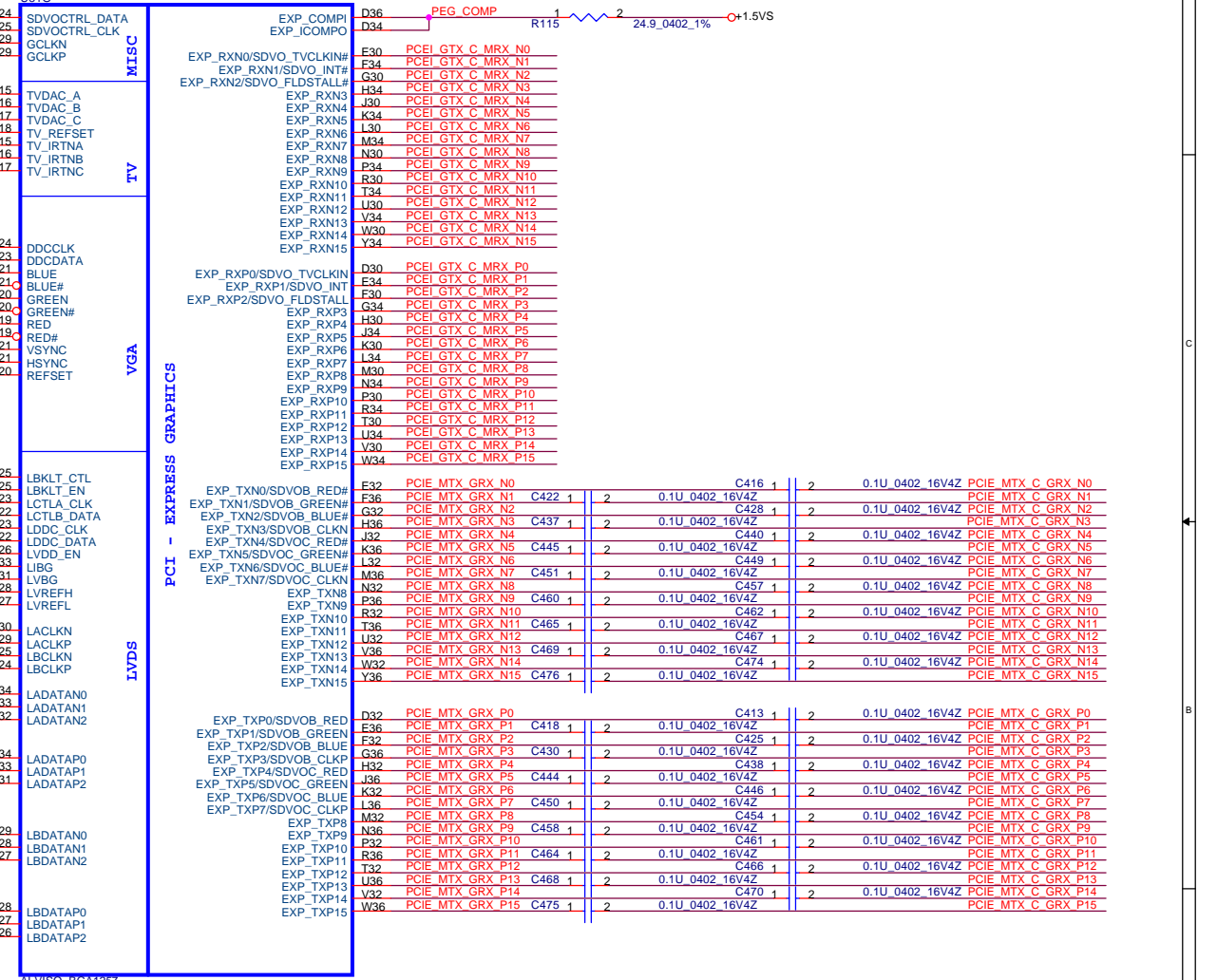
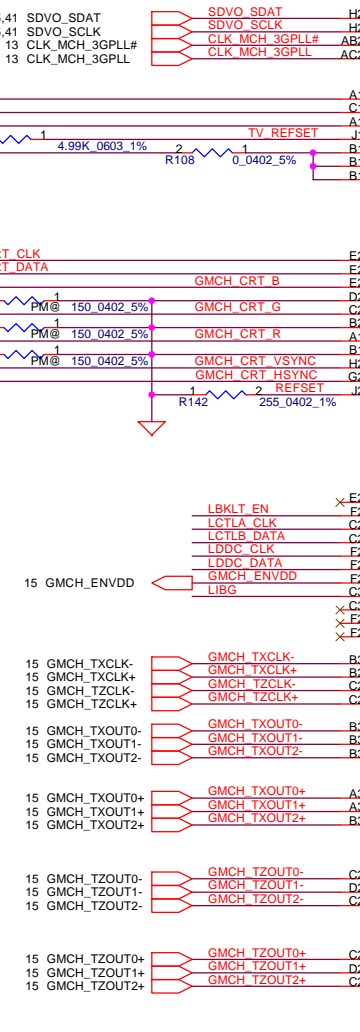
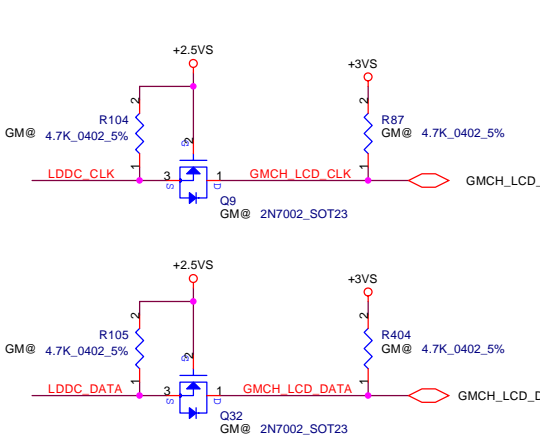
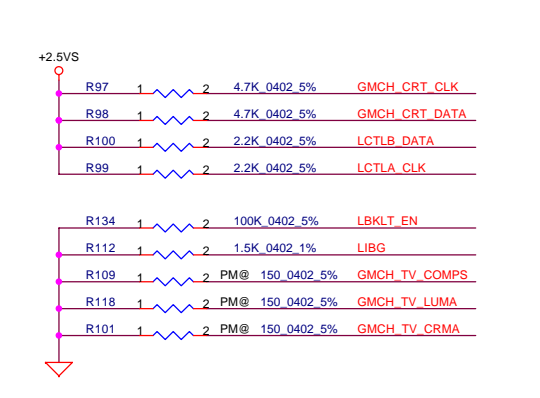
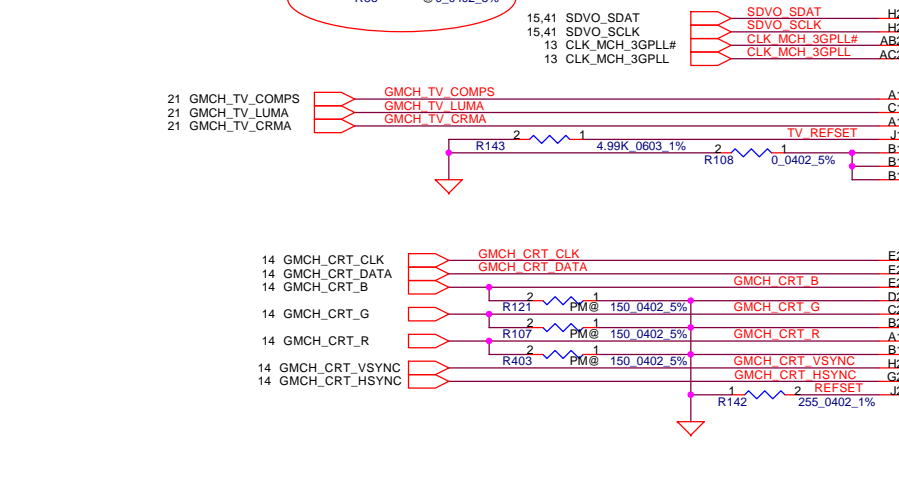
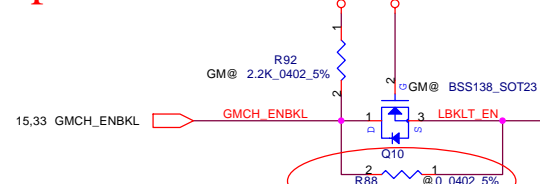
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Date:	Wednesday, April 20, 2005	Sheet	6	of	51

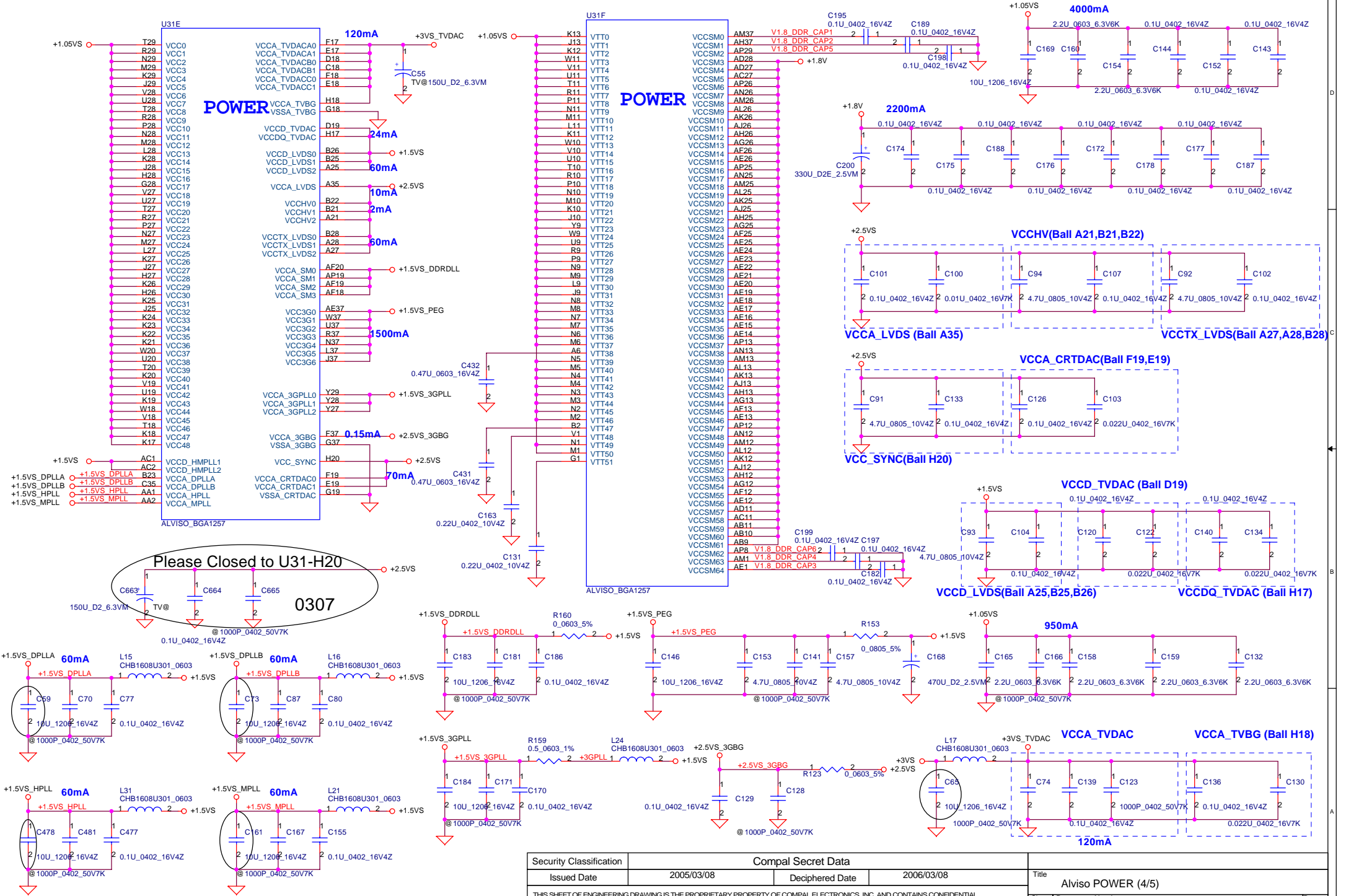


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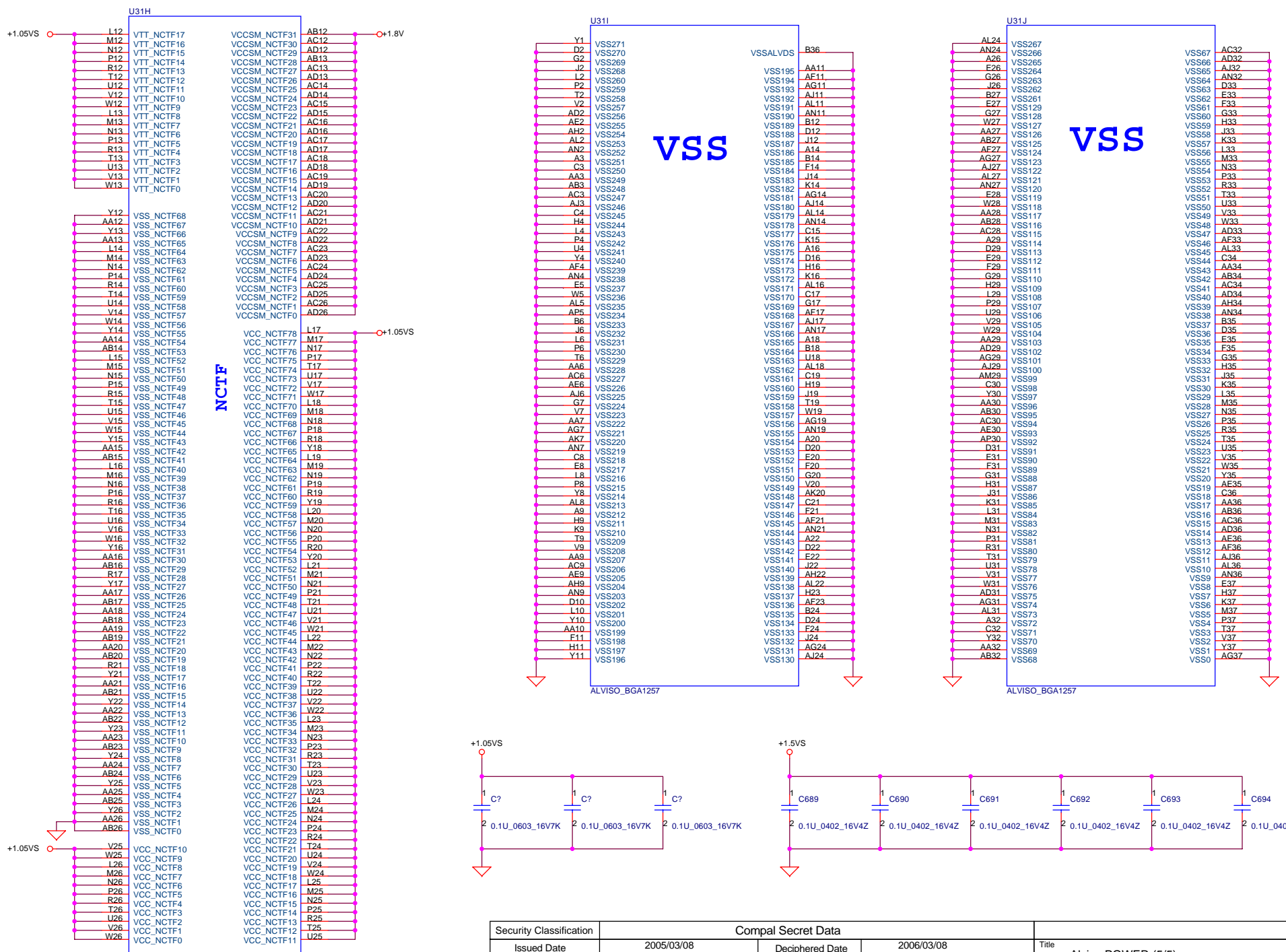


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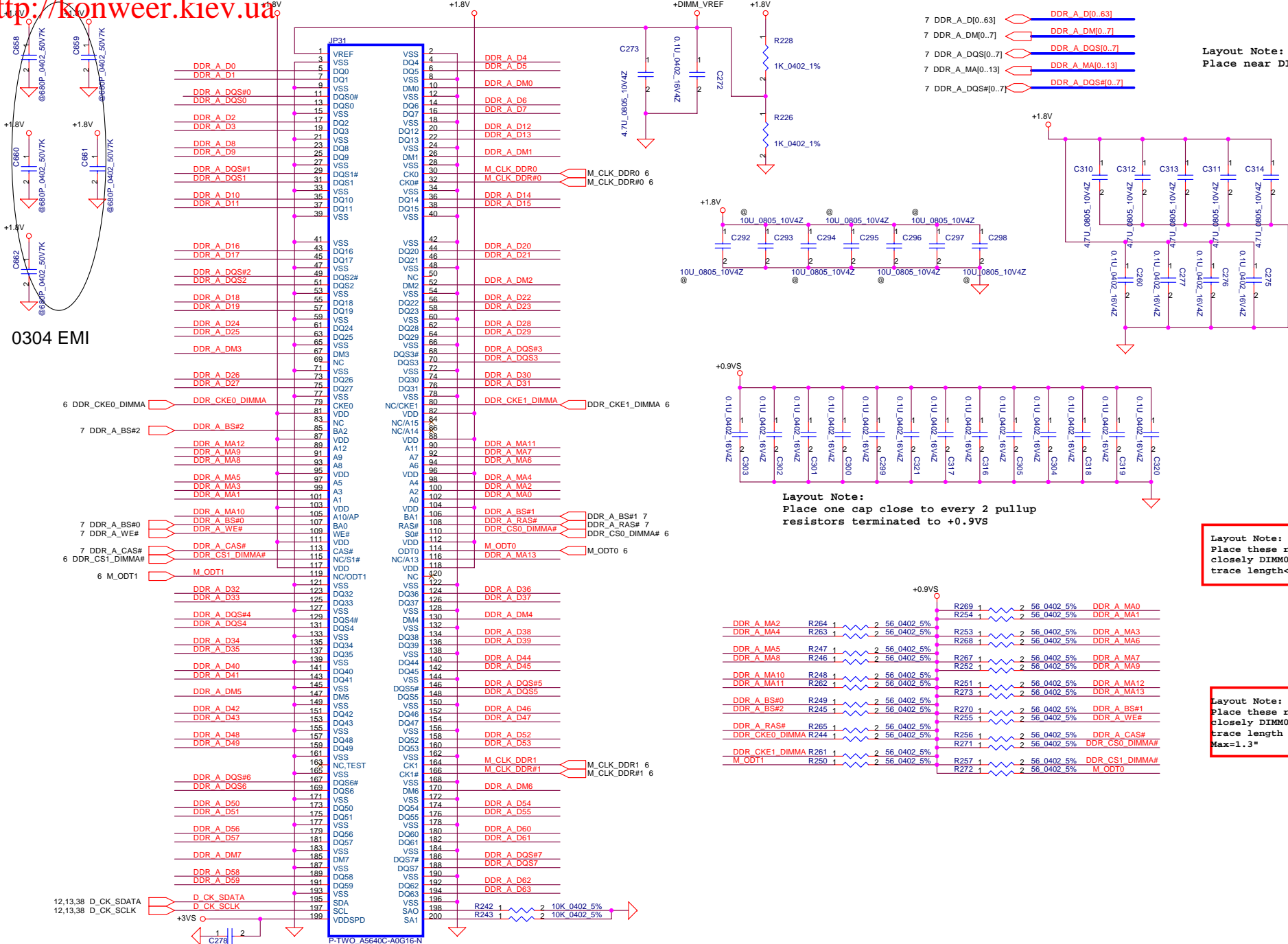
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Date:	Wednesday, April 20, 2005	Sheet	8	of	51



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Size	Document Number				Rev
Custom	EFL50 LA-2761				0.2
Date:	Wednesday, April 20, 2005	Sheet	9	of	51



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Date:	Wednesday, April 20, 2005		Sheet	10	of 51



Layout Note:  
Place near DIMM

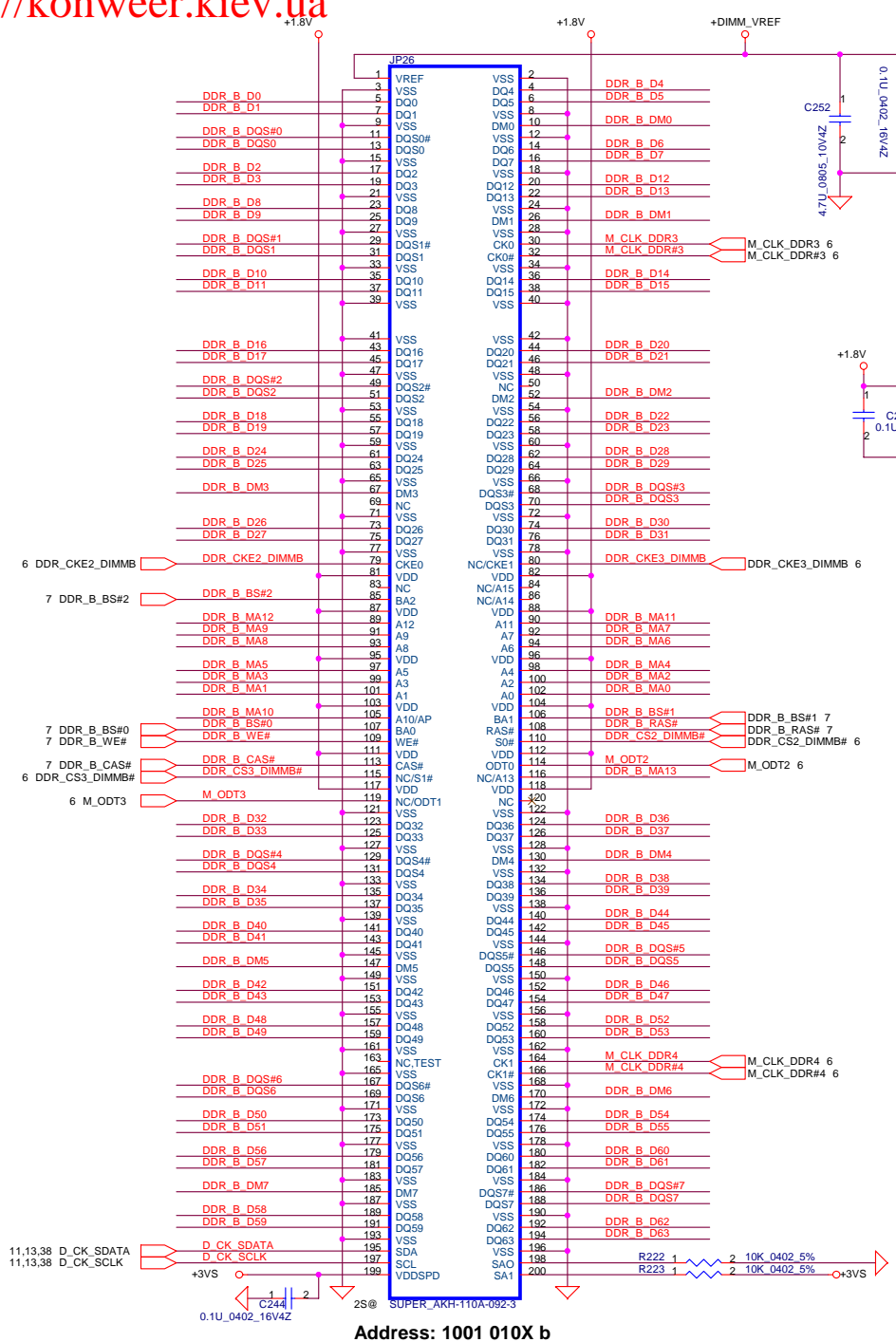
Layout Note:  
Place one cap close to every 2 pullup resistors terminated to +0.9VS

Layout Note:  
Place these resistor closely DIMM0, all trace length < 750 mil

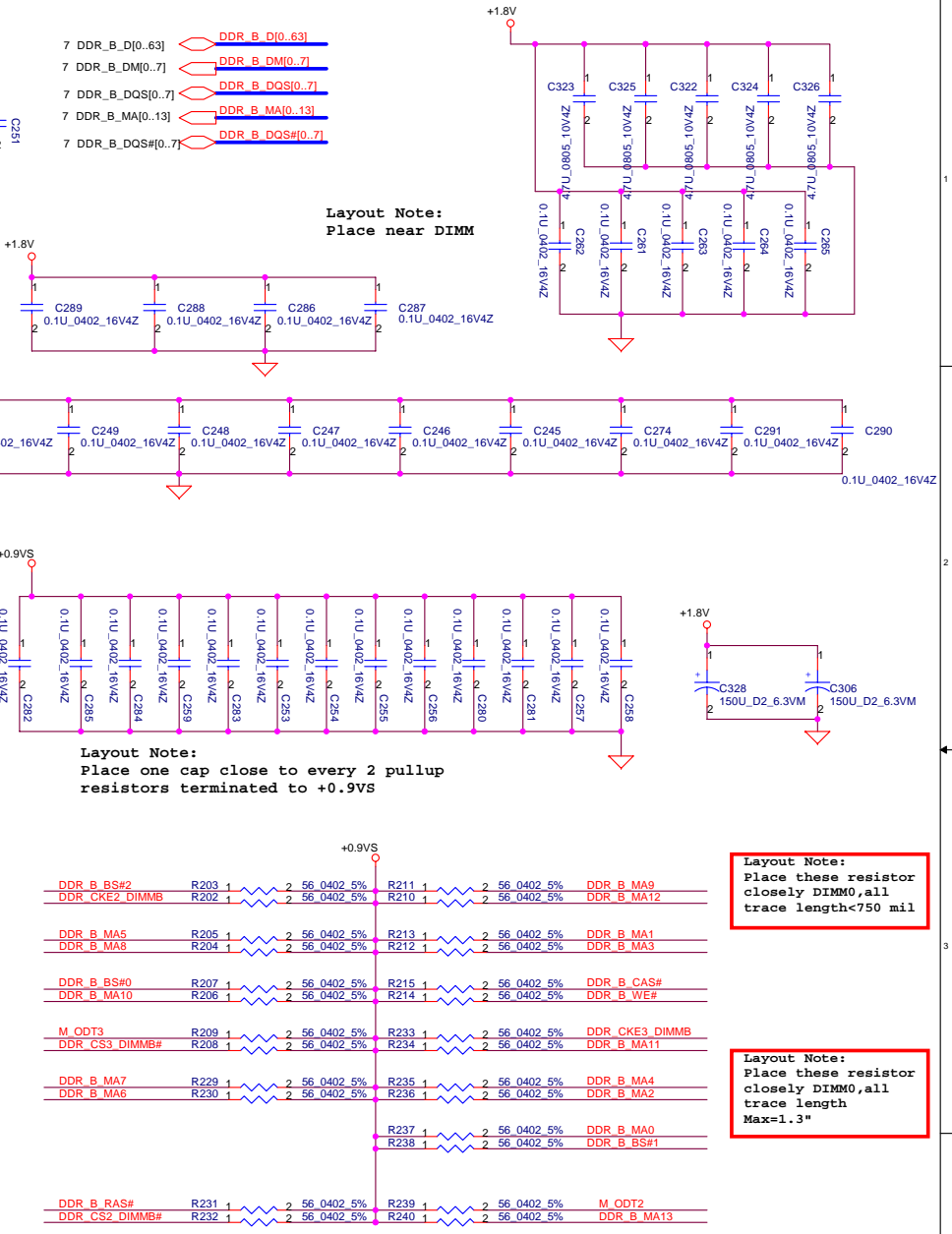
Layout Note:  
Place these resistor closely DIMM0, all trace length Max=1.3"

Address: 1001 000X b

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				EFL50 LA-2761	0.2	
Date:	Wednesday, April 20, 2005	Sheet	11	of 51		



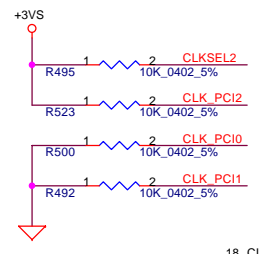
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Date:	Wednesday, April 20, 2005	Sheet	12 of 51

FSC	FSB	FSA	CPU	SRC	PCI
CLKSEL0	CLKSEL1	CLKSEL2	MHz	MHz	MHz
1	0	1	100	100	33.3
0	0	1	133	100	33.3
0	1	1	166	100	33.3
0	1	0	200	100	33.3

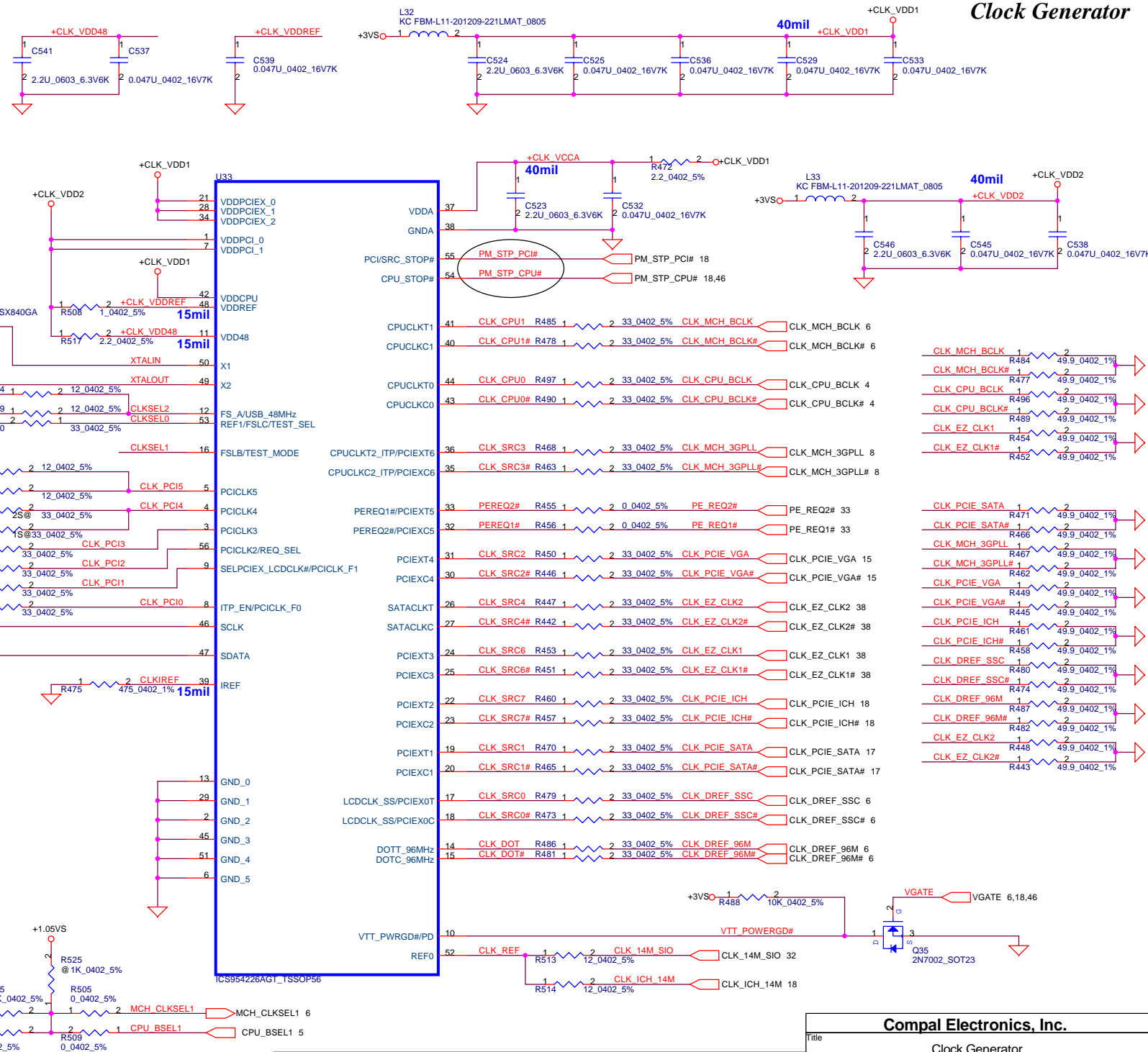
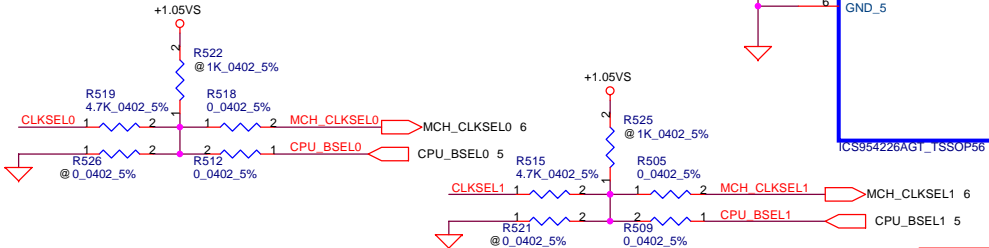
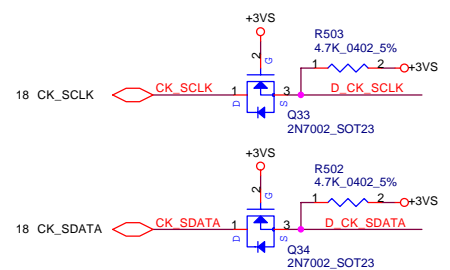
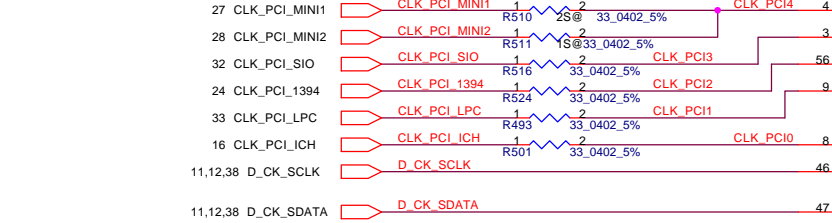
Table : ICS 954206B



CLK\_PCI2 = 1, Pin 32,33 are PEREQ# pin

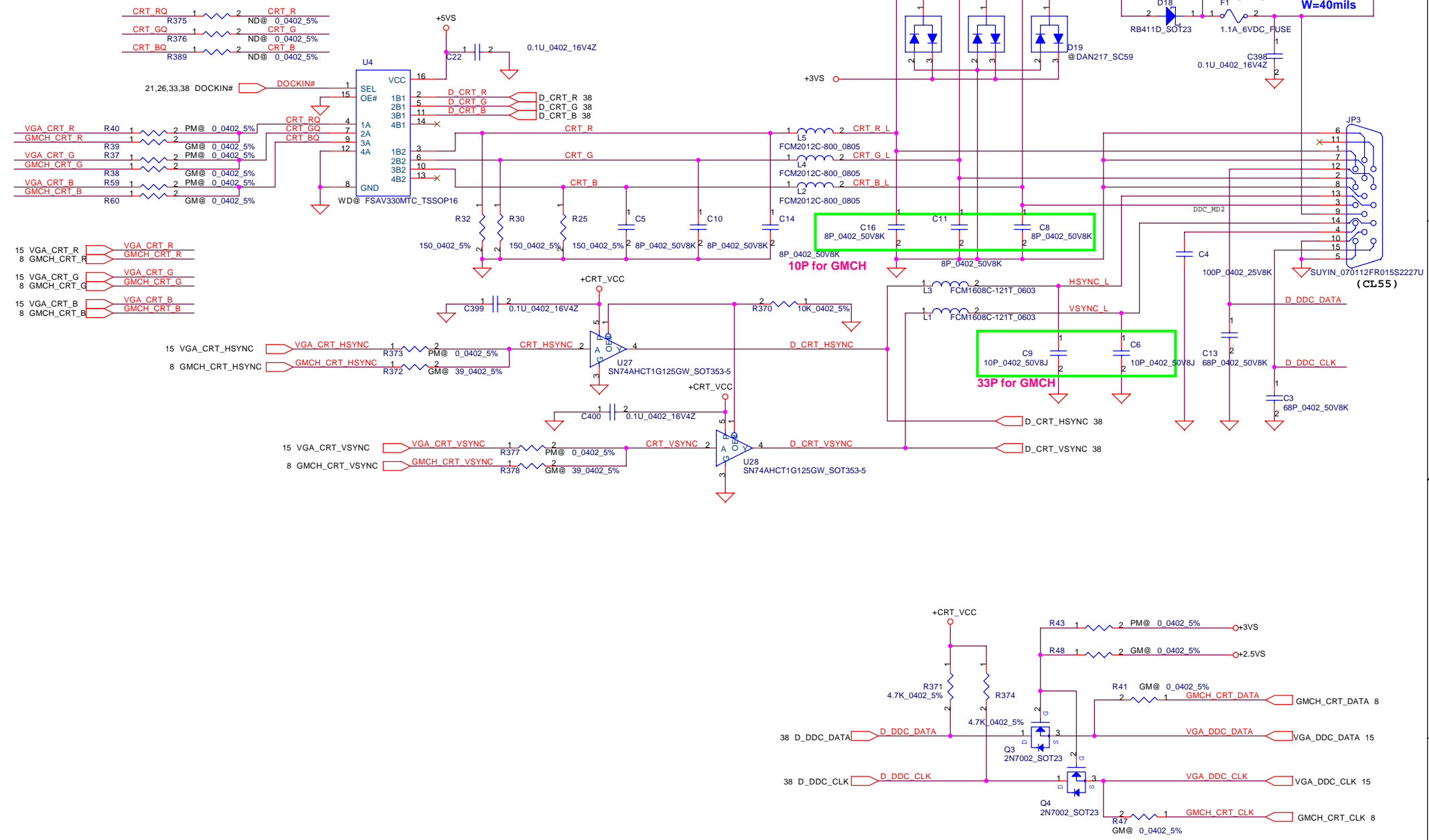
CLK\_PCI0 = 0, Pin 35,36 are PCIe CLK pair

CLK\_PCI1 = 0, Pin 17,18 are 96MHz



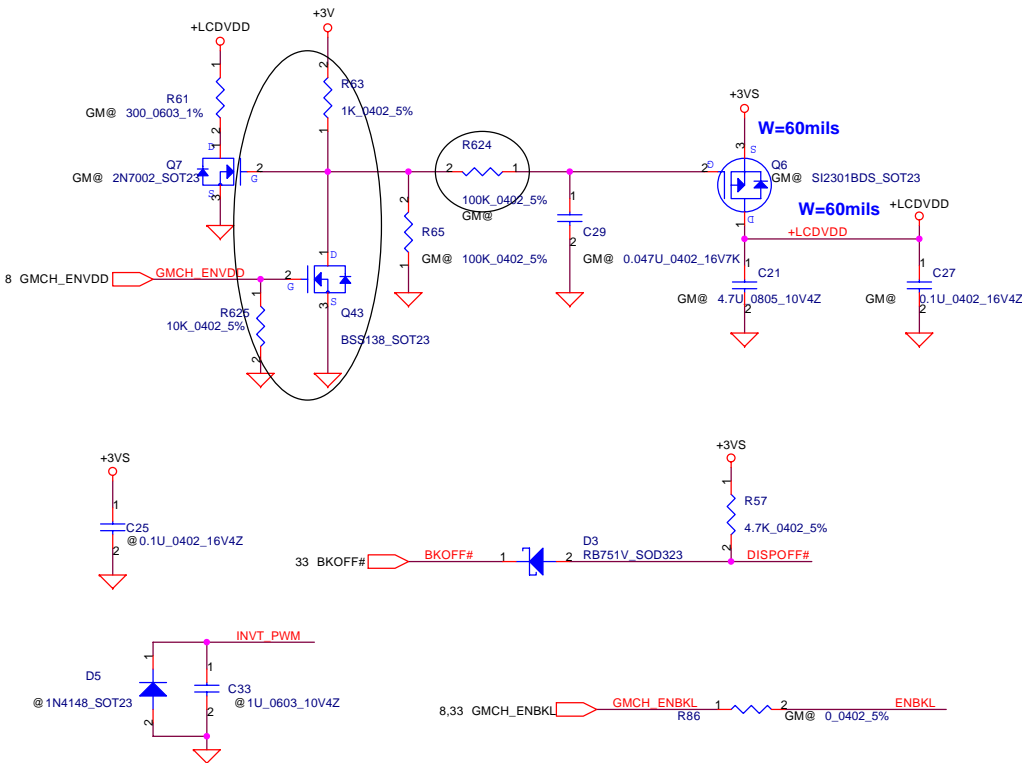
<b>Compal Electronics, Inc.</b>		
Title: Clock Generator		
Size	Document Number	Rev
	EFL50 LA-2761	0.2
Date:	Wednesday, April 20, 2005	Sheet 13 of 51

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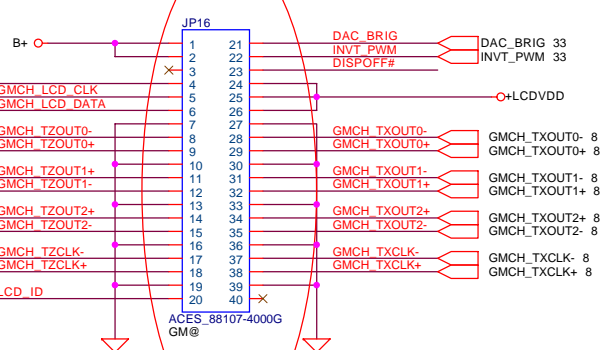


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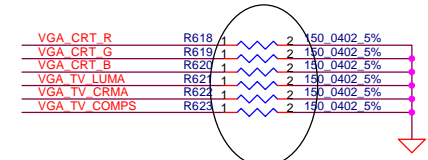
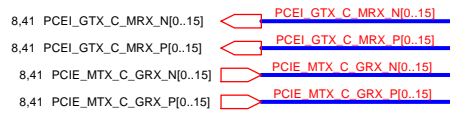
### LCD POWER CIRCUIT



### LCD/PANEL BD. Conn.

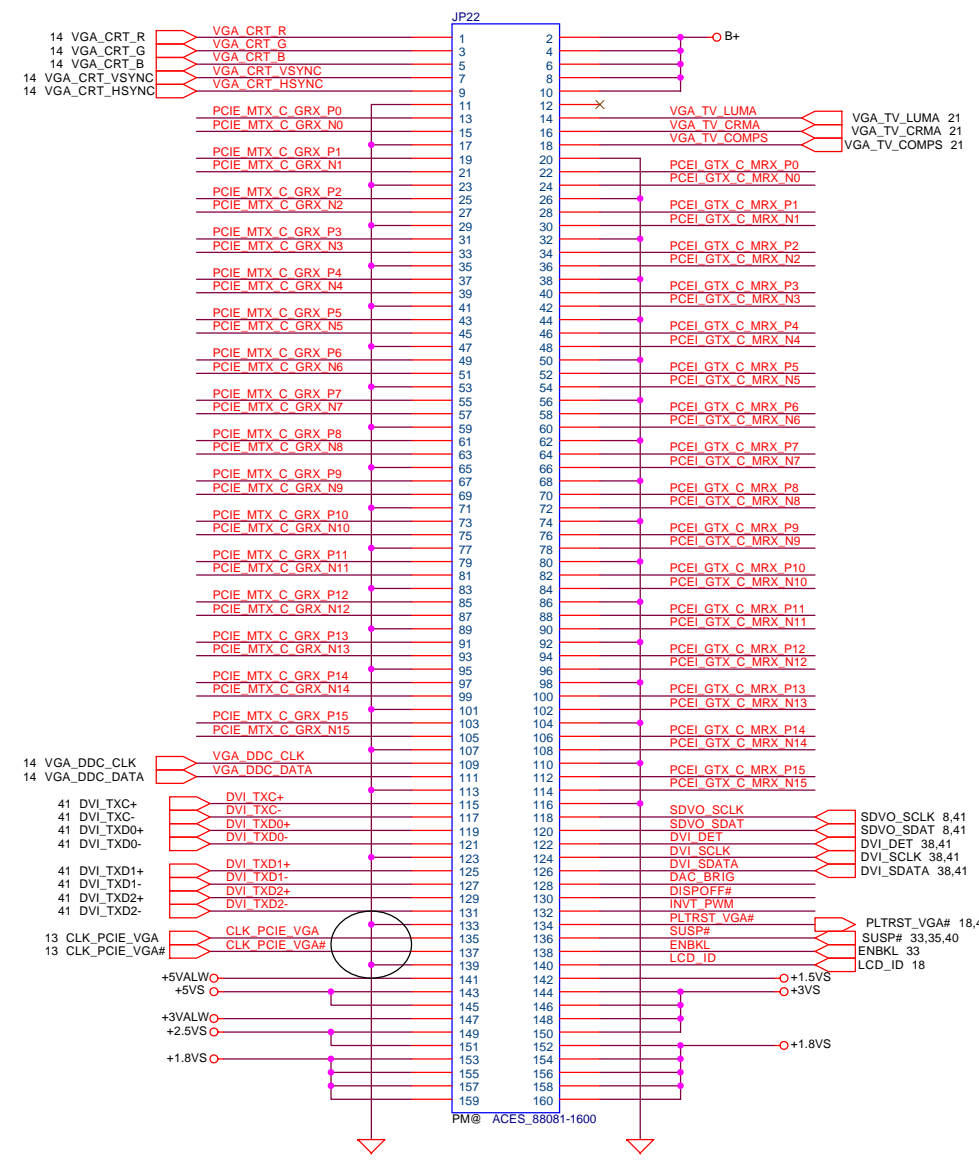


Reverse for Layout



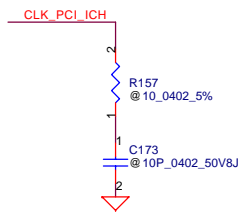
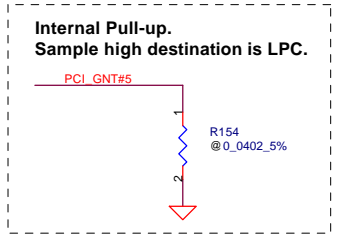
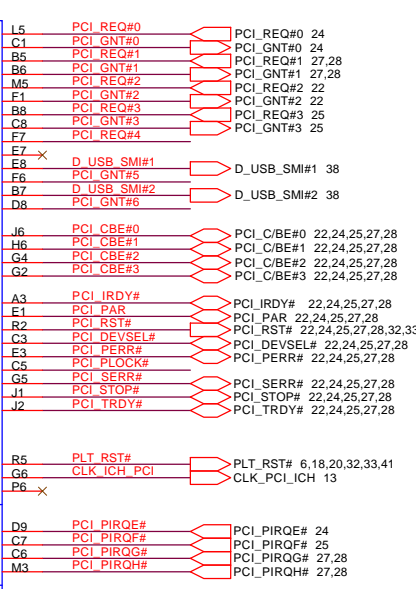
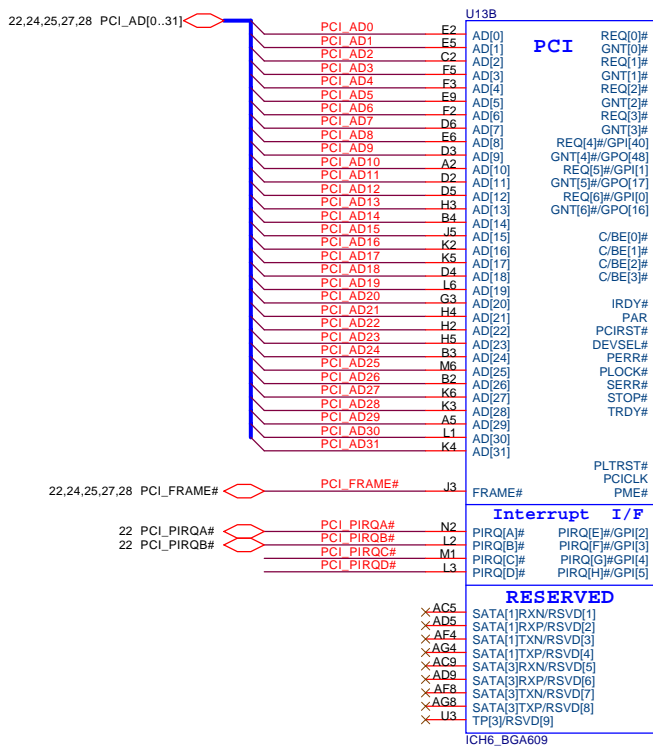
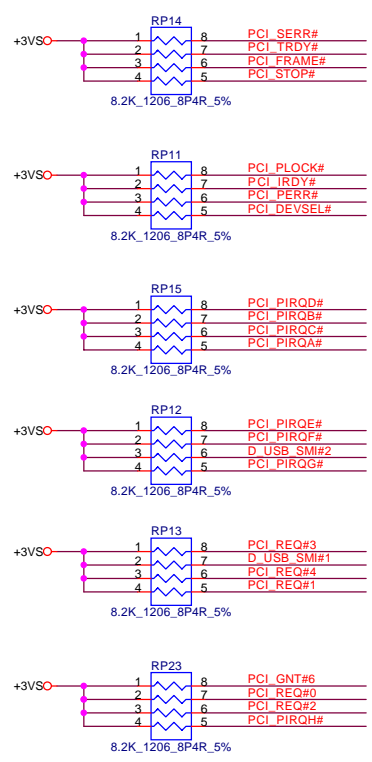
2005/01/24

### VGA BOARD Conn.

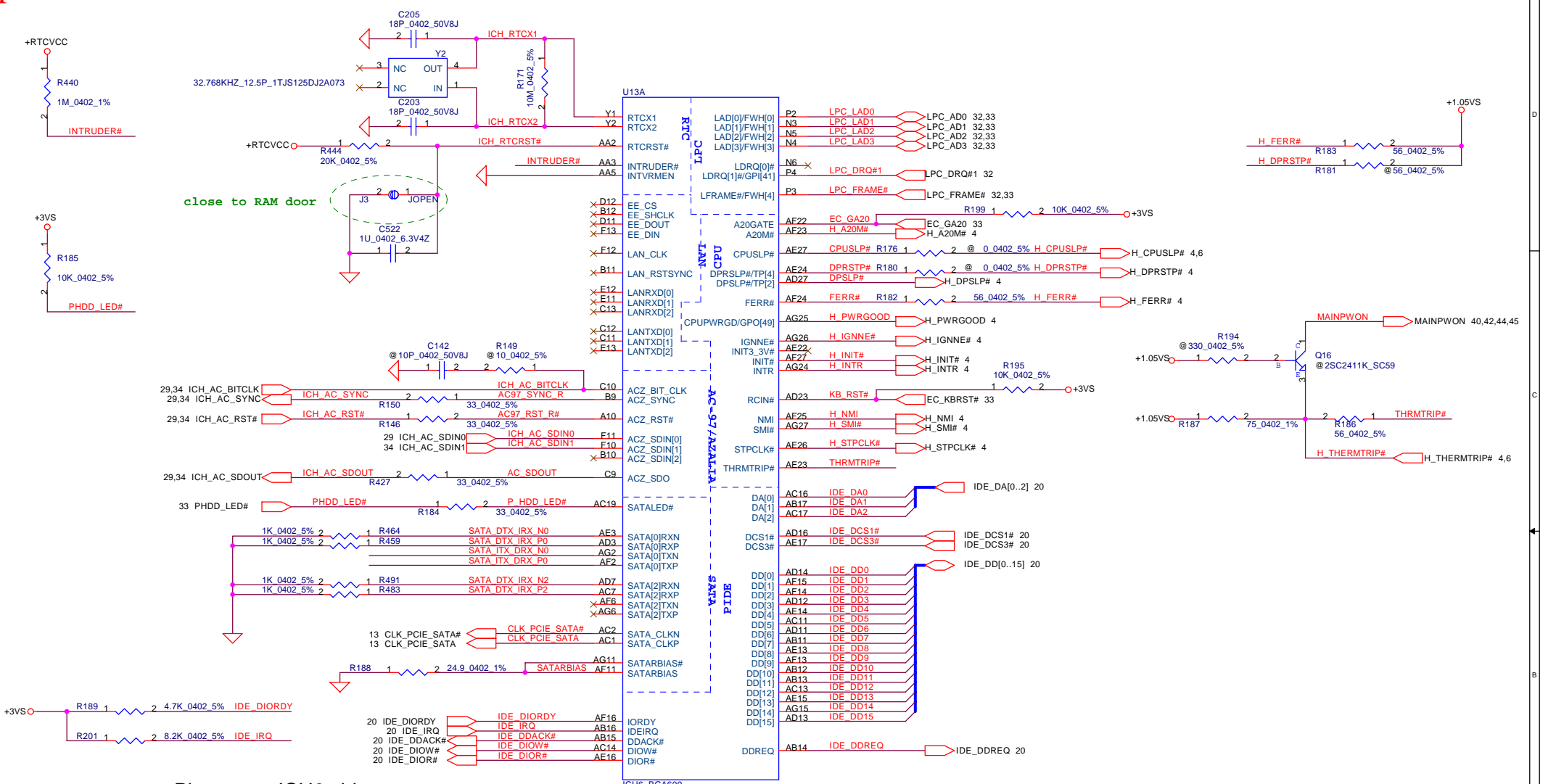


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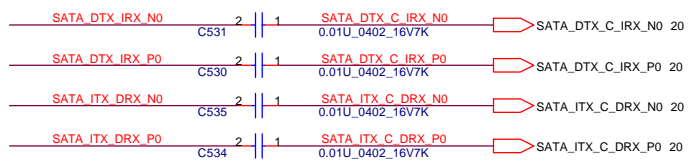
<b>Compal Electronics, Inc.</b>		
Title	VGA / LCD CONN.	
Size	Document Number	Rev
	EFL50 LA-2761	0.2
Date:	Wednesday, April 20, 2005	Sheet 15 of 51



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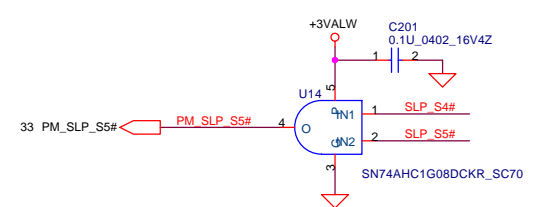
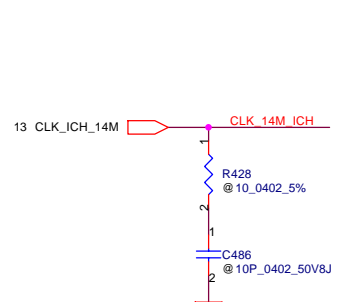
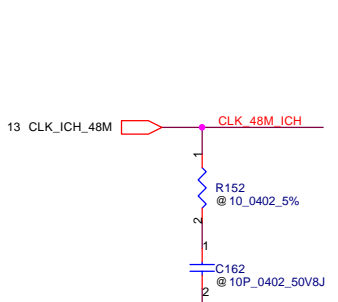
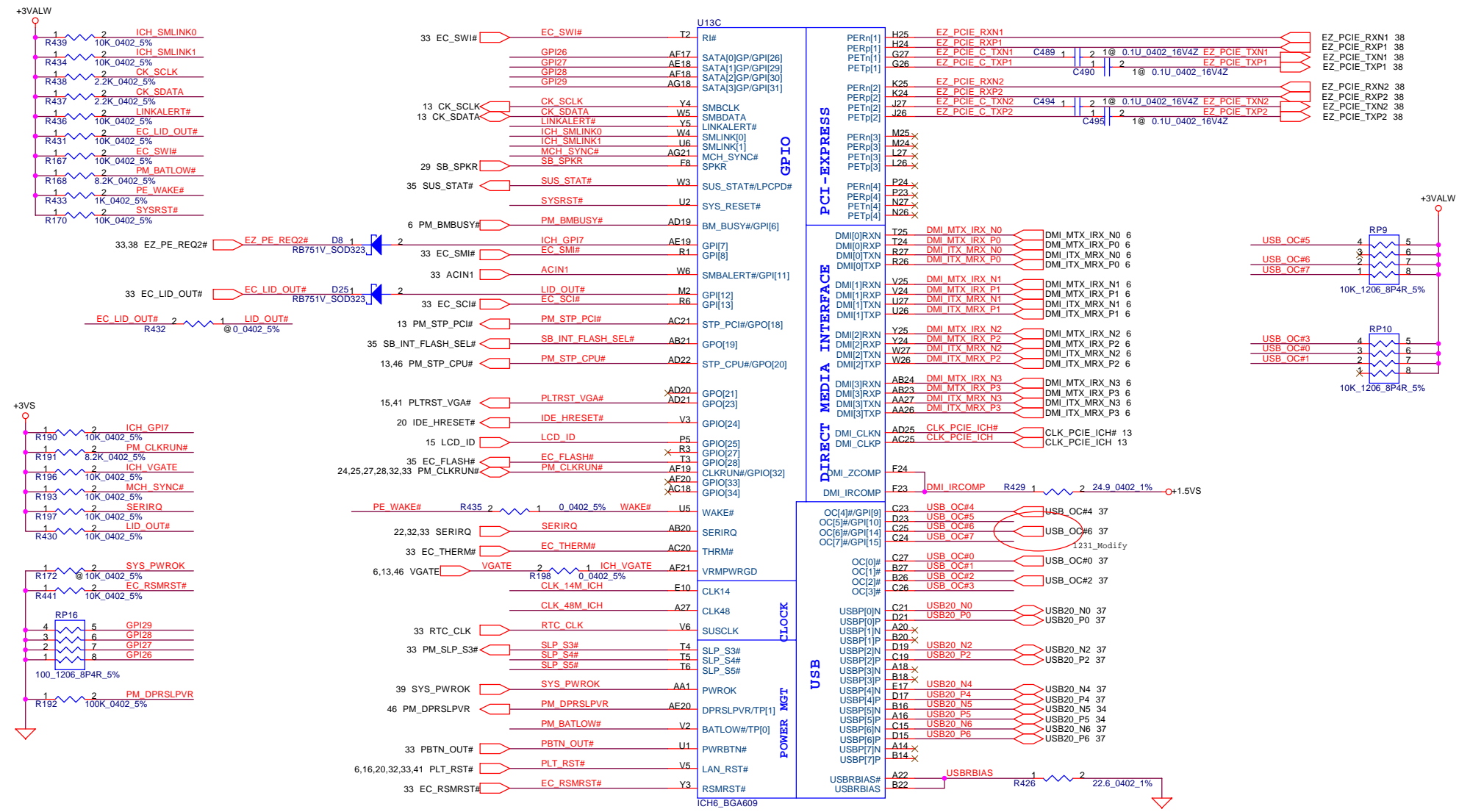


Place near ICH6 side.



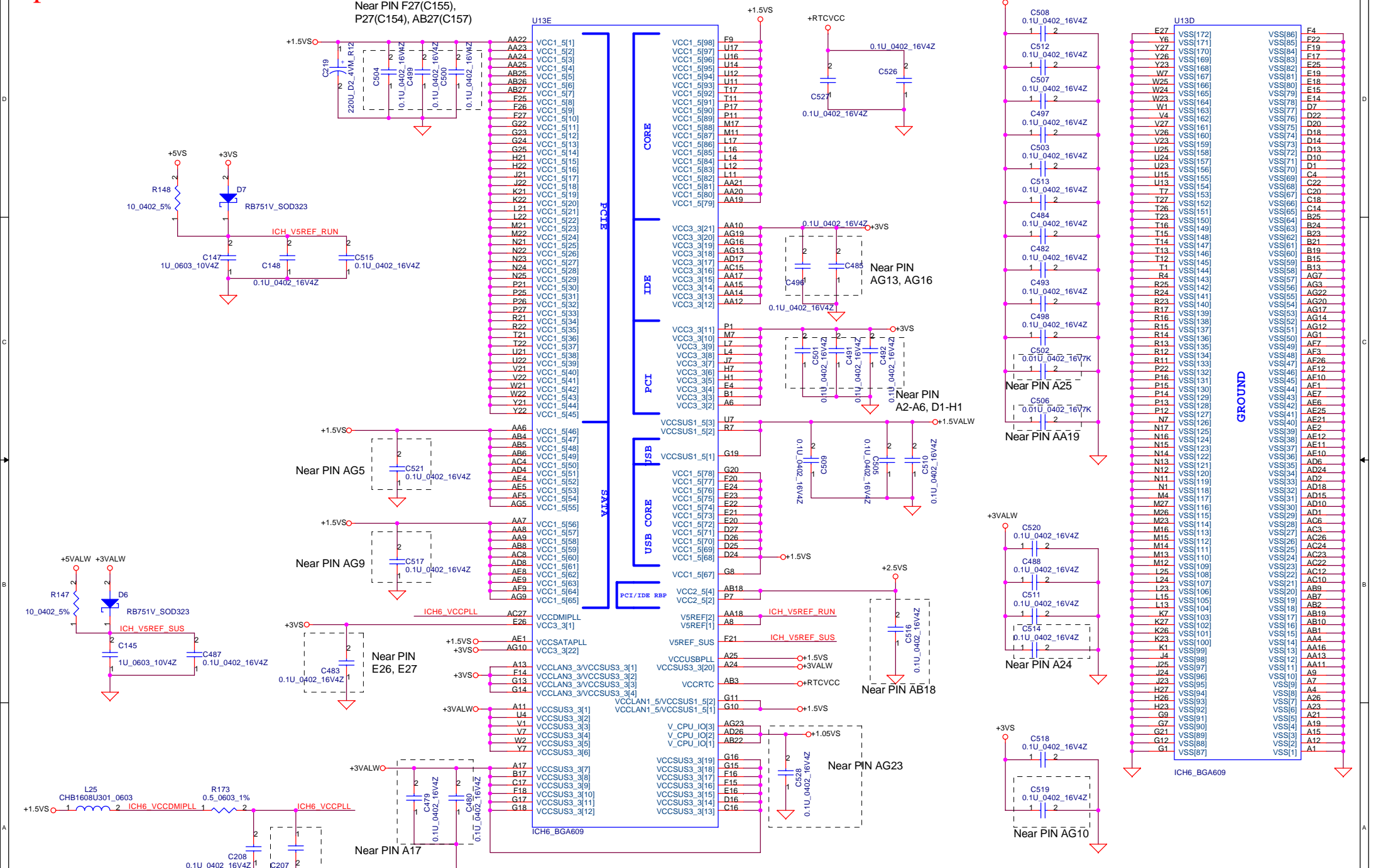
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

<b>Compal Electronics, Inc.</b>			
Title		ICH6(2/4)	
Size	Document Number	Rev	
	EFL50 LA-2761	0.2	
Date:	Wednesday, April 20, 2005	Sheet	17 of 51



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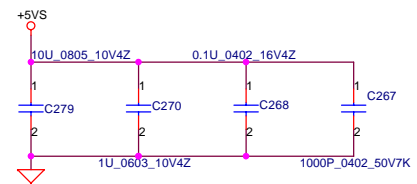
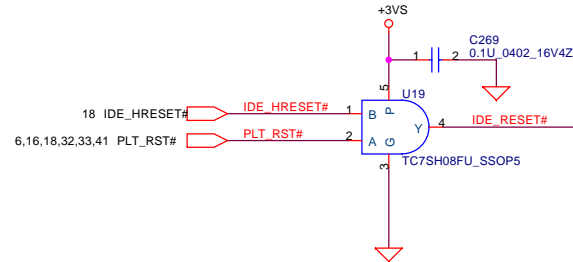
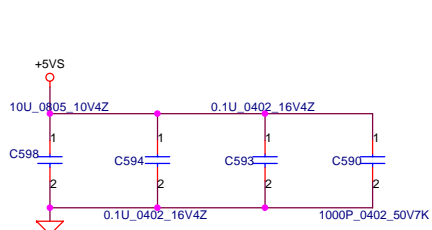
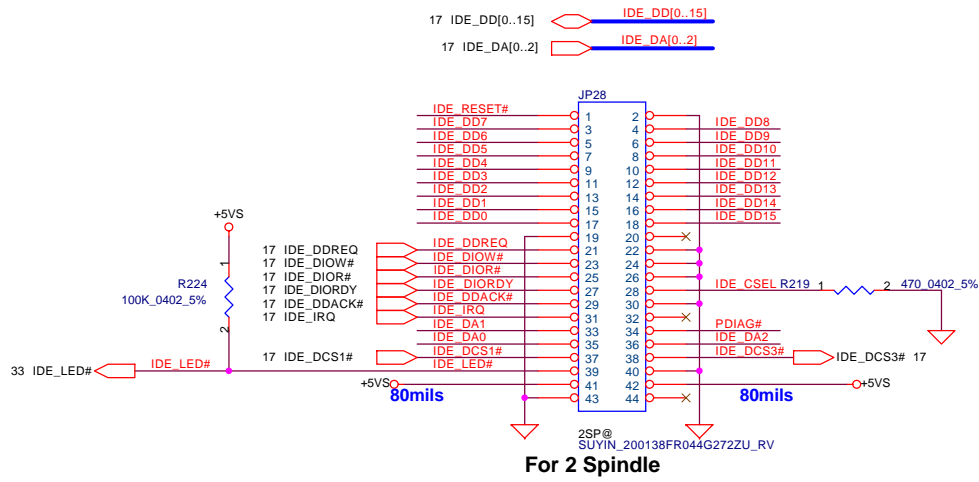
<b>Compal Electronics, Inc.</b>		
Title: ICH6(3/4)		
Size	Document Number	Rev
	EFL50 LA-2761	0.2
Date:	Wednesday, April 20, 2005	Sheet 18 of 51



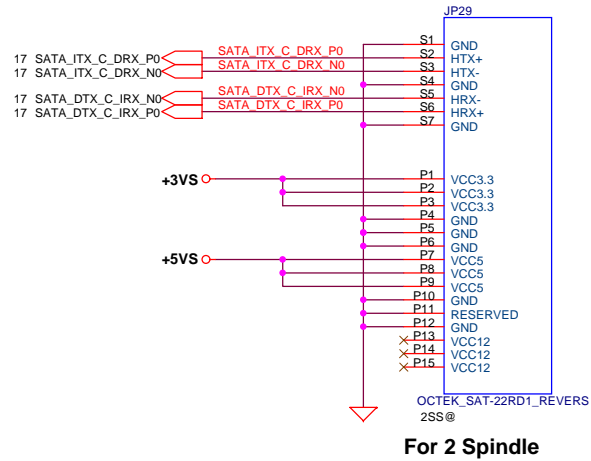
<b>Compal Electronics, Inc.</b>		
Title	ICH6(4/4)	
Size	Document Number	Rev
	EFL50 LA-2761	0.2
Date:	Wednesday, April 20, 2005	Sheet 19 of 51

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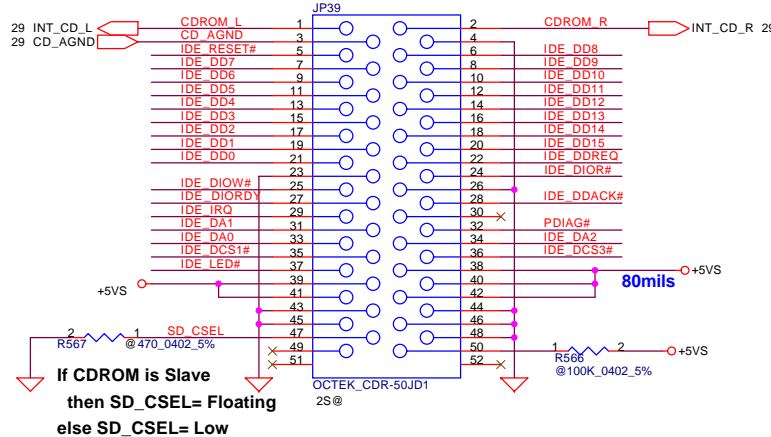
### HDD CONN



### SATA HDD CONN



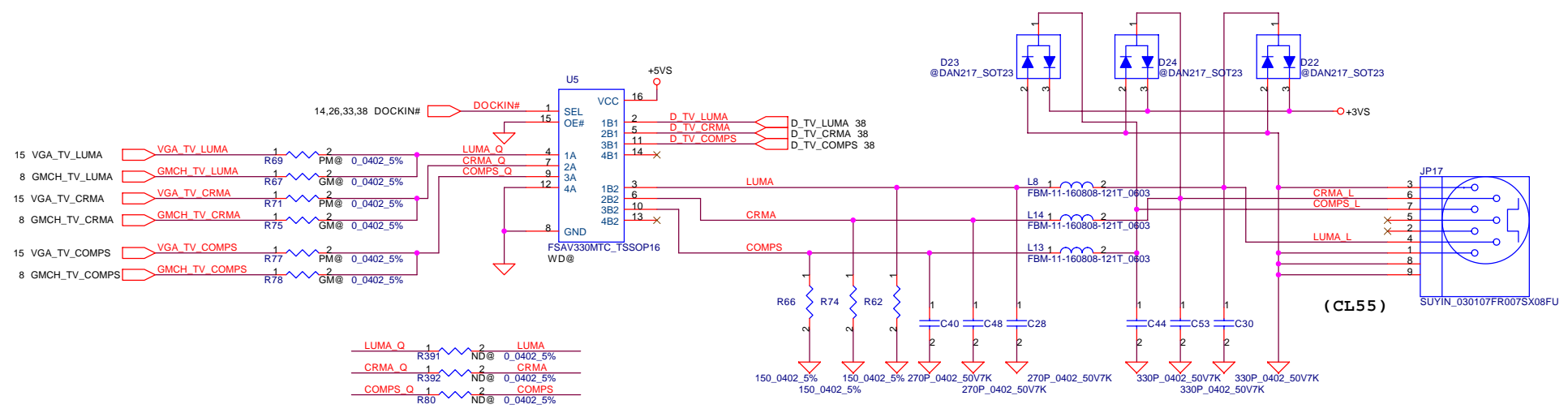
### CDROM CONN



If CDROM is Slave  
then SD\_CSEL= Floating  
else SD\_CSEL= Low

<b>Compal Electronics, Inc.</b>		
Title HDD & CDROM Connector		
Size	Document Number EFL50 LA-2761	Rev 0.2
Date:	Wednesday, April 20, 2005	Sheet 20 of 51

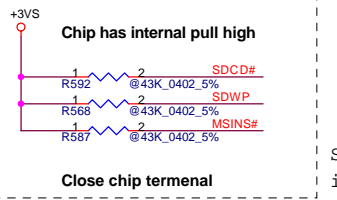
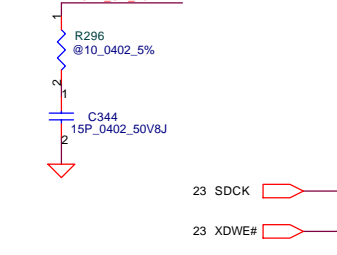
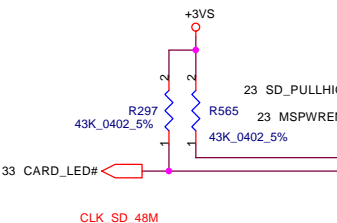
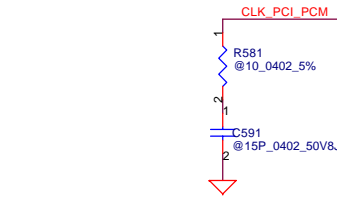
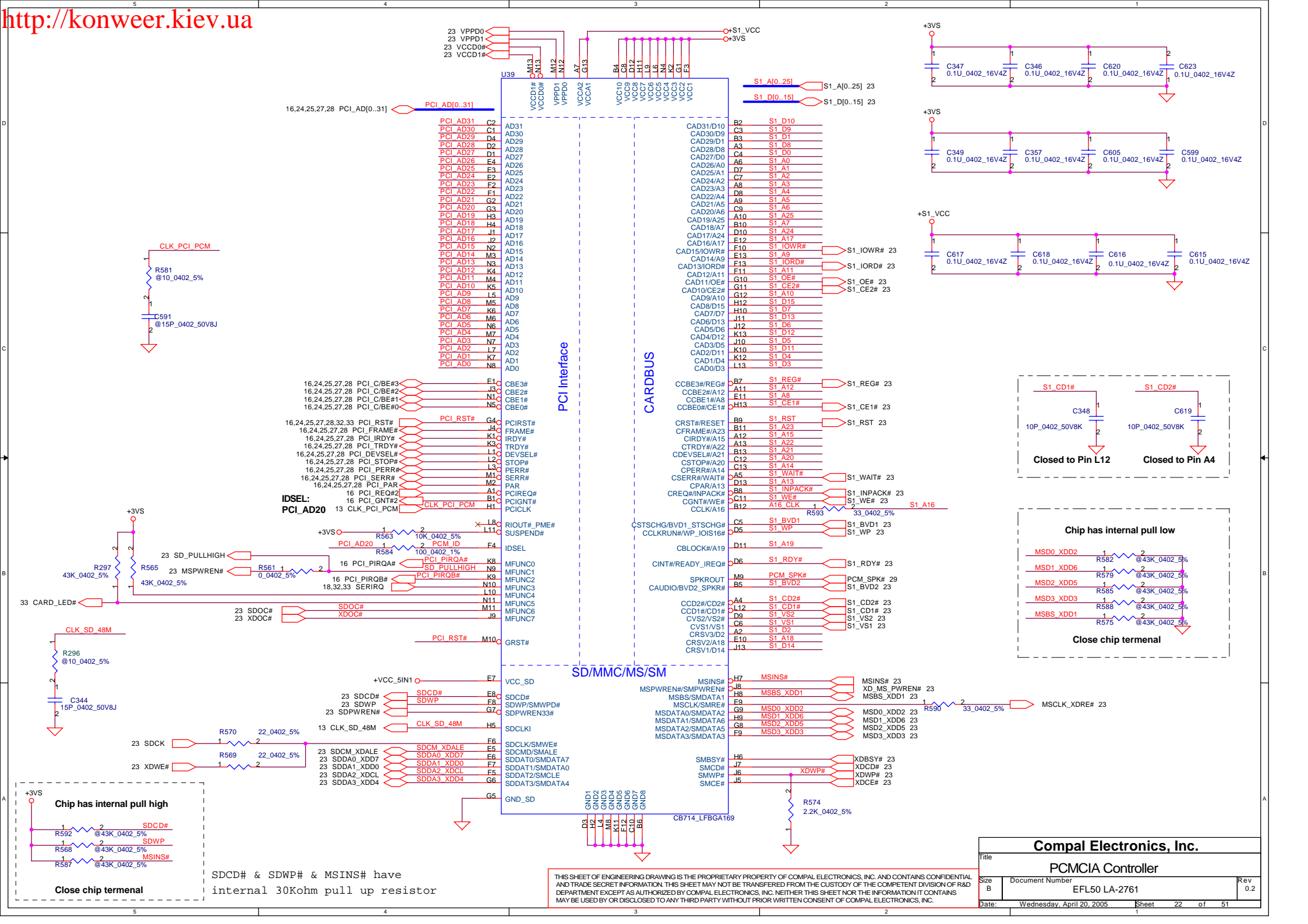
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LUMA_Q	1	2	LUMA
R391	1	ND@	0.0402_5%
CRMA_Q	1	2	CRMA
R392	1	ND@	0.0402_5%
COMPS_Q	1	2	COMPS
R80	1	ND@	0.0402_5%

<b>Compal Electronics, Inc.</b>			
Title PATA / SATA HDD Connector			
Size	Document Number	Rev	
	EFL50 LA-2761	0.2	
Date:	Wednesday, April 20, 2005	Sheet	21 of 51

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SDCD# & SDWP# & MSINS# have internal 30Kohm pull up resistor

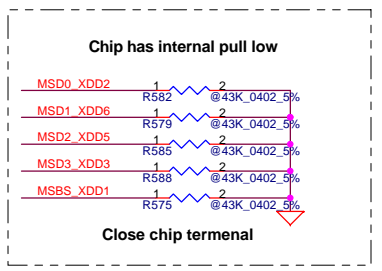
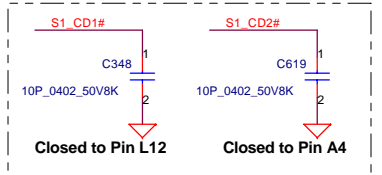
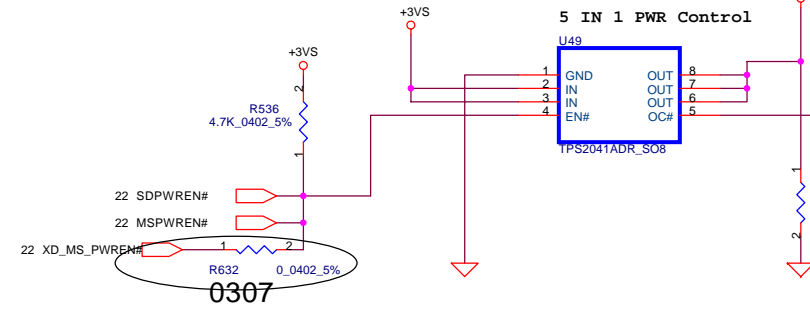
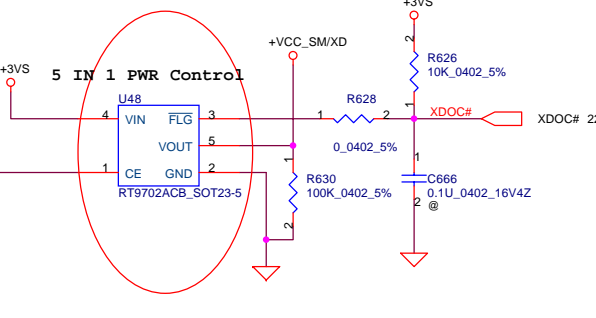
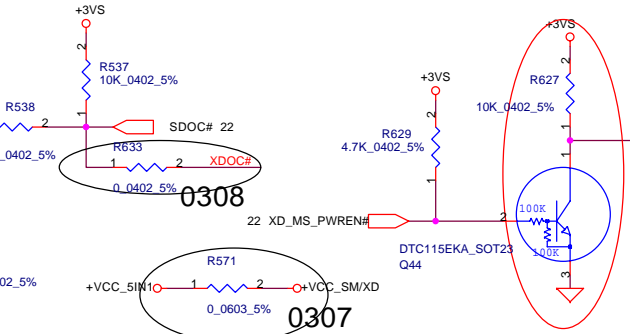
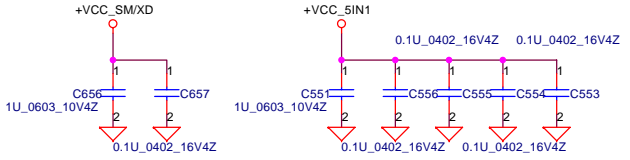
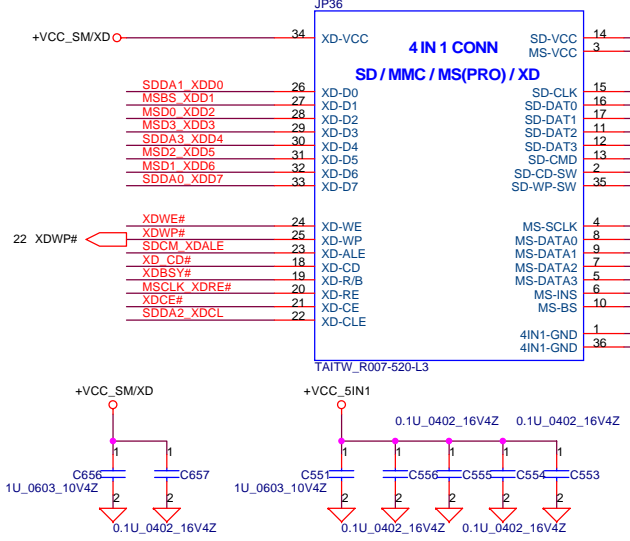
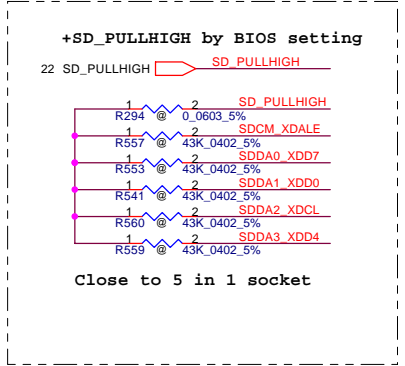
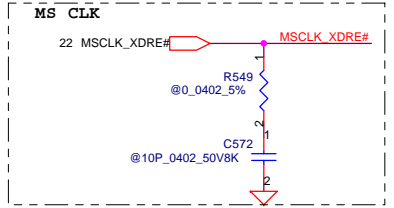
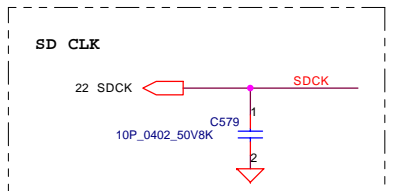
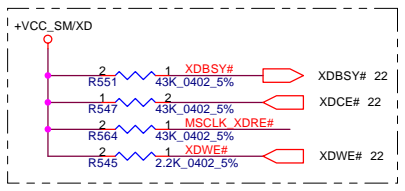
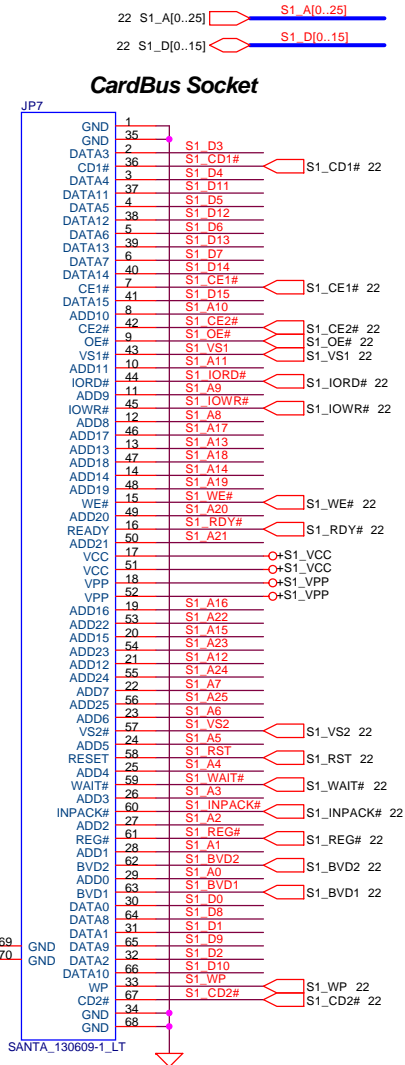
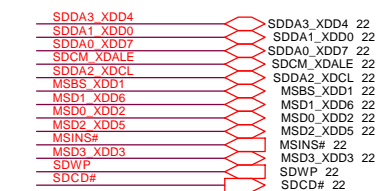
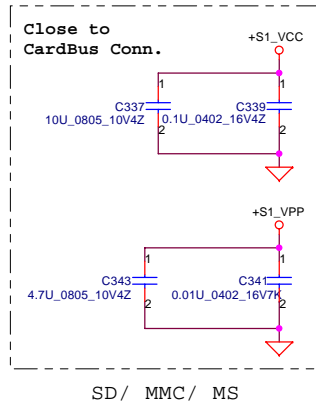
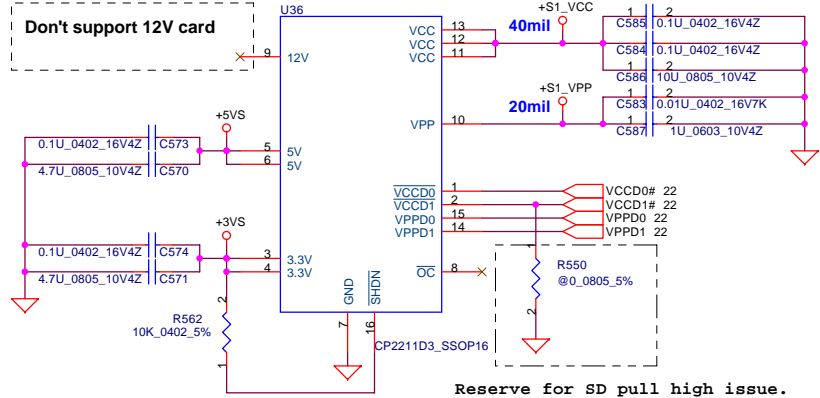
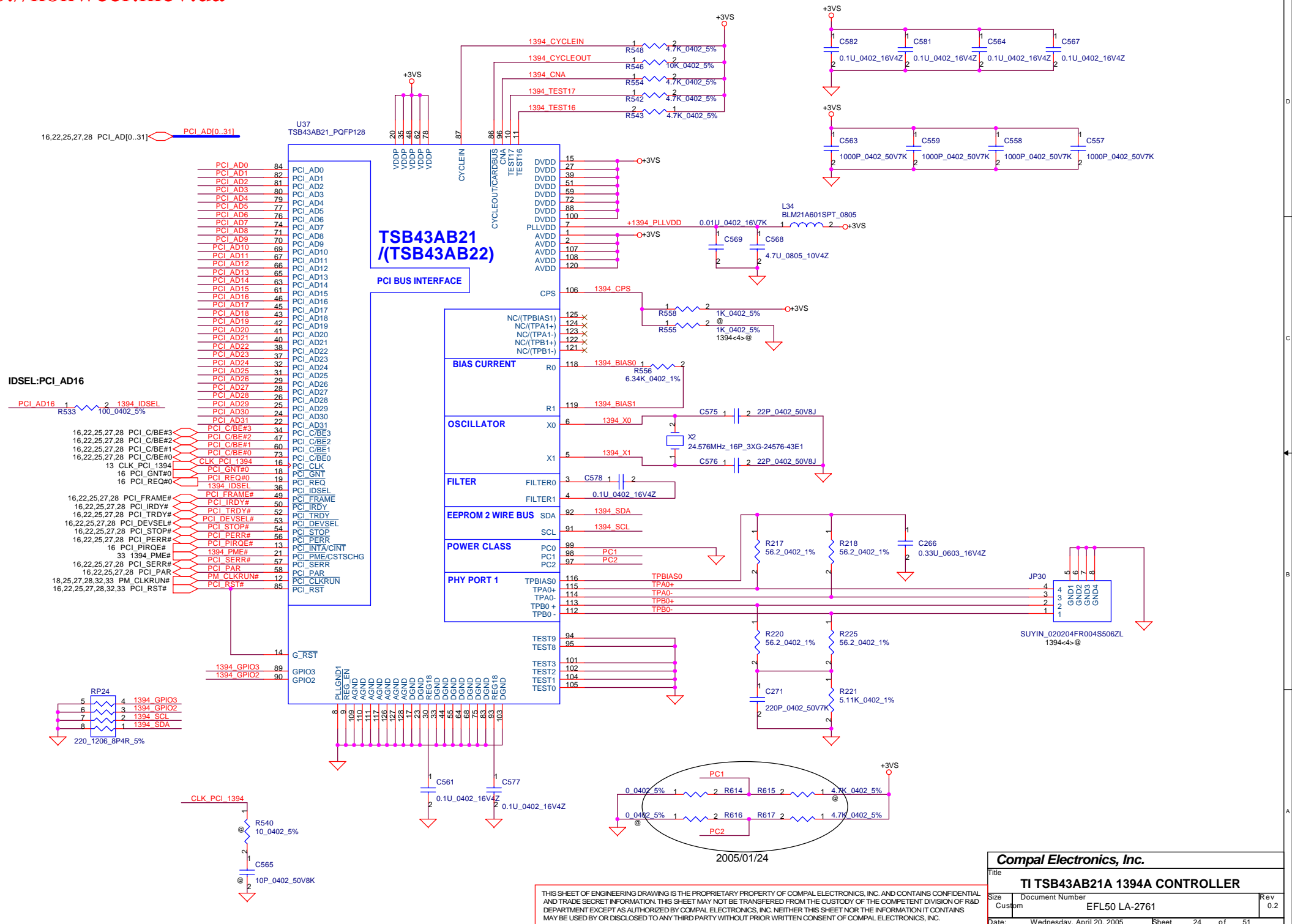


Table with 4 columns: Title (Compal Electronics, Inc.), Document Number (PCMCIA Controller), Date (Wednesday, April 20, 2005), and Sheet (22 of 51).

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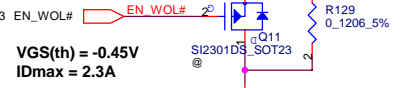




<b>Compal Electronics, Inc.</b>			
Title: <b>TI TSB43AB21A 1394A CONTROLLER</b>			
Size: Custom	Document Number: EFL50 LA-2761	Rev: 0.2	
Date: Wednesday, April 20, 2005	Sheet: 24	of 51	

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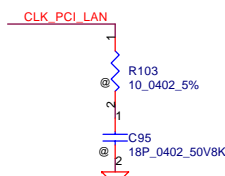
EN\_WOL# = Low,  
System can wake on LAN  
( keep Low when Power On)



**+3VS for BCM5788**  
**+3V\_LAN for BCM4401**

16,22,24,27,28 PCI\_AD[0..31]

U8A	Pin	Signal
PCI_AD31	B8	AD31
PCI_AD30	A8	AD30
PCI_AD29	C7	AD29
PCI_AD28	C6	AD28
PCI_AD27	B6	AD27
PCI_AD26	B5	AD26
PCI_AD25	A5	AD25
PCI_AD24	B4	AD24
PCI_AD23	B4	AD23
PCI_AD22	B2	AD22
PCI_AD21	C1	AD21
PCI_AD20	D1	AD20
PCI_AD19	D1	AD19
PCI_AD18	D2	AD18
PCI_AD17	E3	AD17
PCI_AD16	K1	AD16
PCI_AD15	L2	AD15
PCI_AD14	L1	AD14
PCI_AD13	M3	AD13
PCI_AD12	M2	AD12
PCI_AD11	M1	AD11
PCI_AD10	N2	AD10
PCI_AD9	N3	AD9
PCI_AD8	P4	AD8
PCI_AD7	N4	AD7
PCI_AD6	P4	AD6
PCI_AD5	M5	AD5
PCI_AD4	P5	AD4
PCI_AD3	N5	AD3
PCI_AD2	M6	AD2
PCI_AD1	P6	AD1
PCI_AD0	N7	AD0

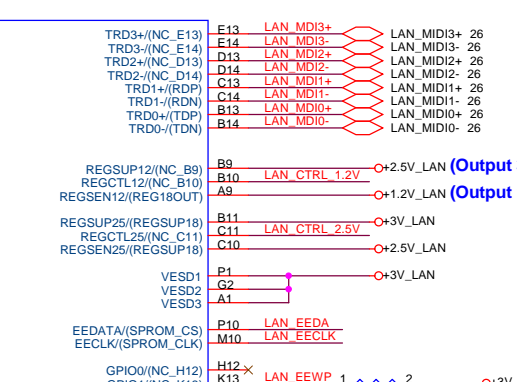
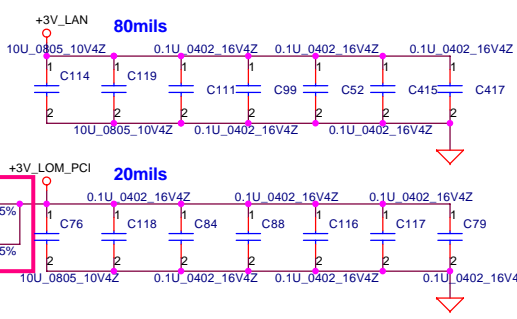
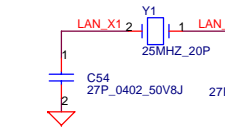


16,22,24,27,28 PCI\_C/BE#3 C4  
16,22,24,27,28 PCI\_C/BE#2 F3  
16,22,24,27,28 PCI\_C/BE#1 L3  
16,22,24,27,28 PCI\_C/BE#0 M4

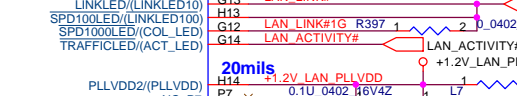
100\_0402\_5%  
PCI\_AD17 R96 1 2 LAN\_IDSEL A4  
16,22,24,27,28 PCI\_FRAME# F2  
16,22,24,27,28 PCI\_IRDY# F1  
16,22,24,27,28 PCI\_TRDY# H3  
16,22,24,27,28 PCI\_DEVSEL# G3  
16,22,24,27,28 PCI\_STOP# J1  
16,22,24,27,28 PCI\_PERR# A2  
16,22,24,27,28 PCI\_SERR# J2  
16,22,24,27,28 PCI\_PAR J1  
16,22,24,27,28 CLK\_PCI\_LAN A3  
13 CLK\_PCI\_LAN PCI\_CLK

16 PCI\_PIRQF# C2  
16 PCI\_RST# H2  
16 PCI\_GNT#3 J3  
16 PCI\_REQ#3 C3

+3V\_LAN 1 2 LAN\_AUXPWR J12  
33 ONBD\_LAN\_PME# ONBD\_LAN\_PME# F4  
PME

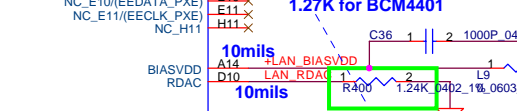


**BCM5788M**  
**/(BCM4401)**

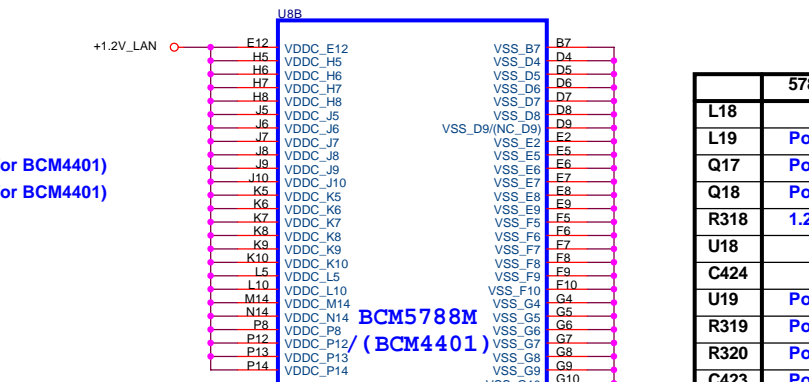
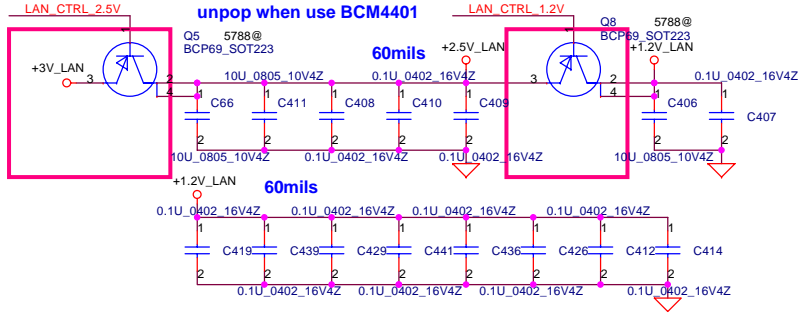


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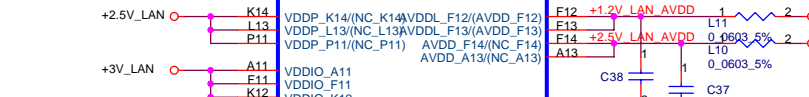
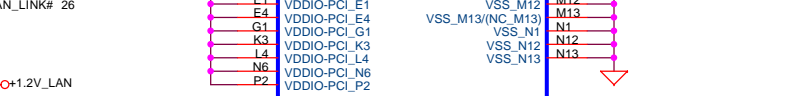
XTALVDD XTAL0 XTAL1  
NC\_G11  
NC\_E10/(EEDATA\_PXE)  
NC\_E11/(EECLK\_PXE)  
NC\_H11



NC\_A10  
NC\_C9

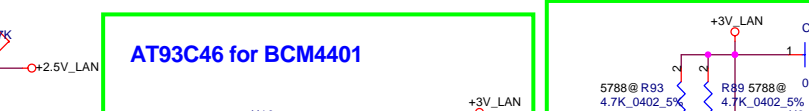


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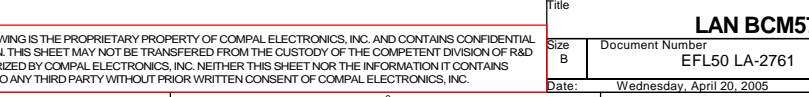


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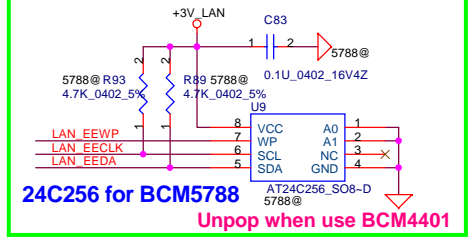
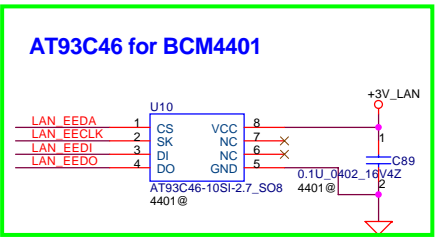
XTALVDD XTAL0 XTAL1  
NC\_G11  
NC\_E10/(EEDATA\_PXE)  
NC\_E11/(EECLK\_PXE)  
NC\_H11



NC\_A10  
NC\_C9

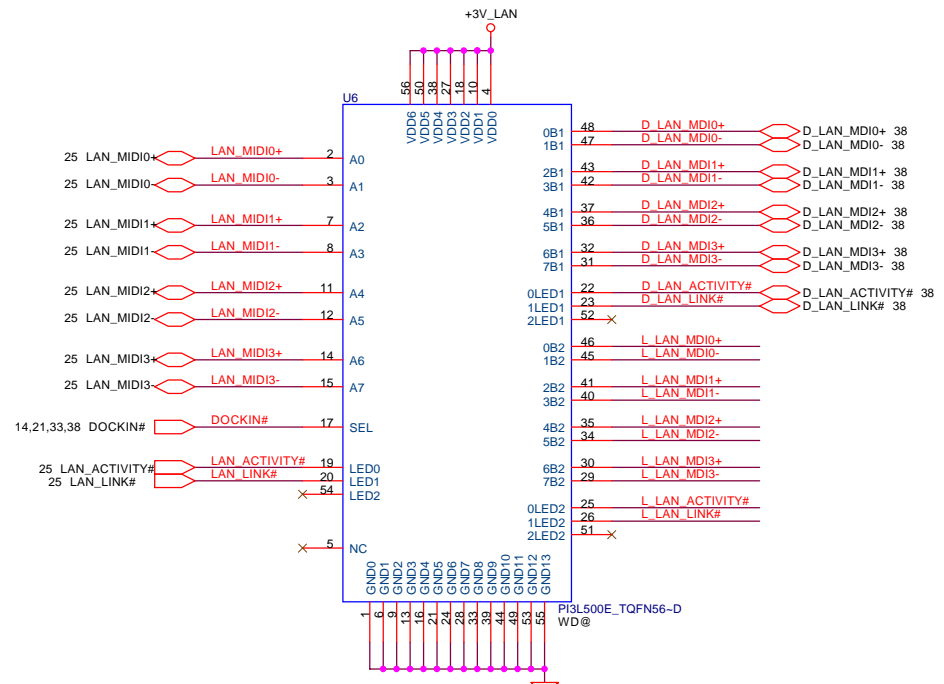
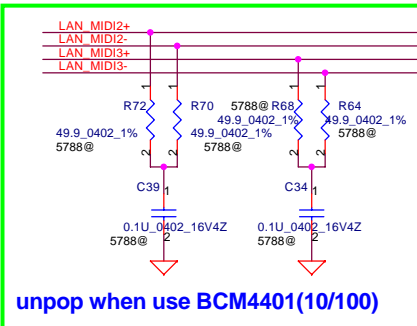
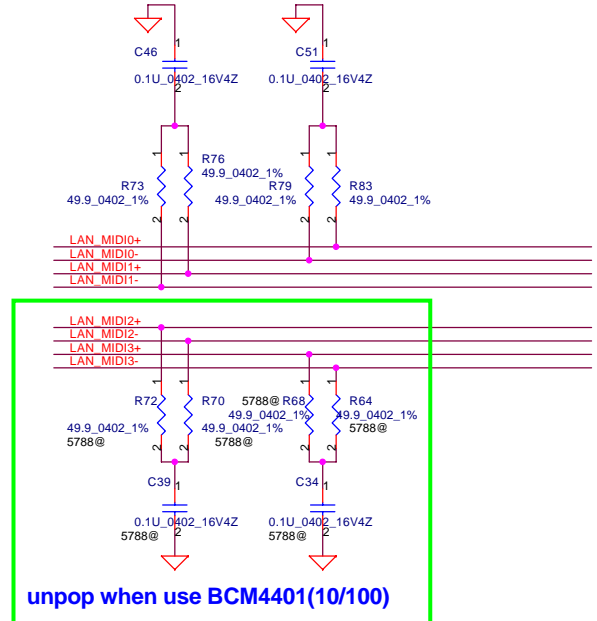
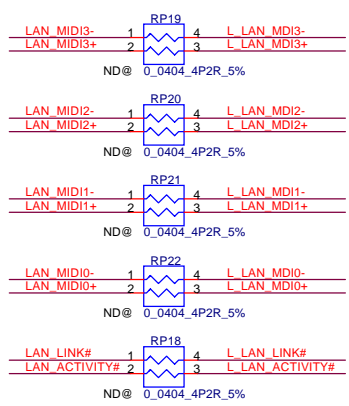


	5788	4401
L18		Pop
L19	Pop	
Q17	Pop	
Q18	Pop	
R318	1.24K	1.27K
U18		Pop
C424		Pop
U19	Pop	
R319	Pop	
R320	Pop	
C423	Pop	



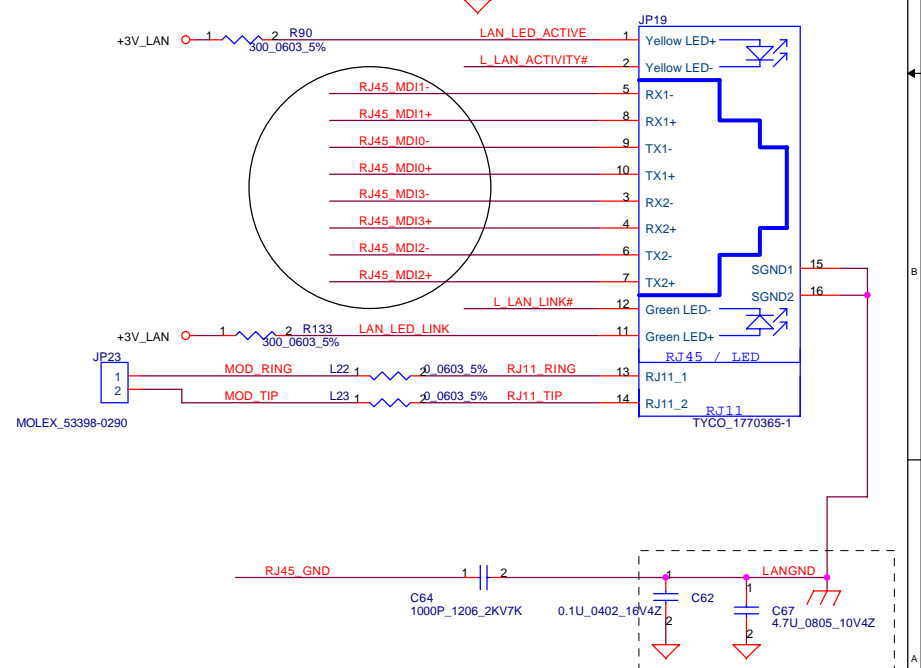
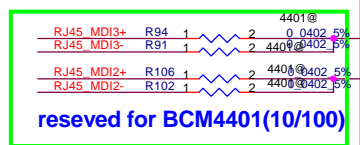
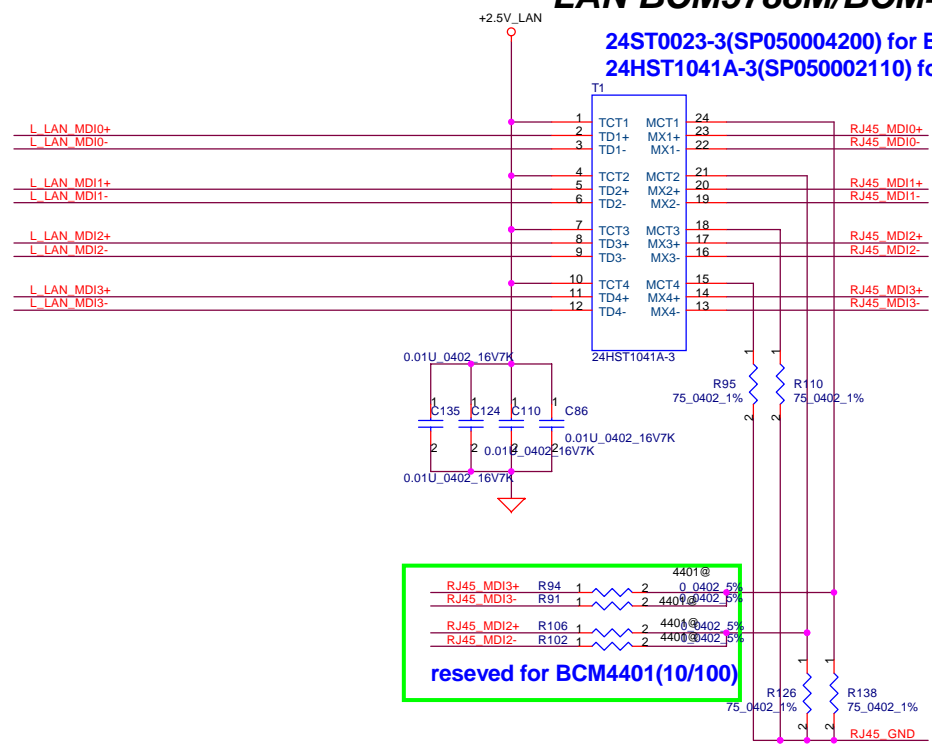
Compal Electronics, Inc.		
Title		
LAN BCM5788M		
Size	Document Number	Rev
B	EFL50 LA-2761	0.2
Date:	Wednesday, April 20, 2005	Sheet 25 of 51

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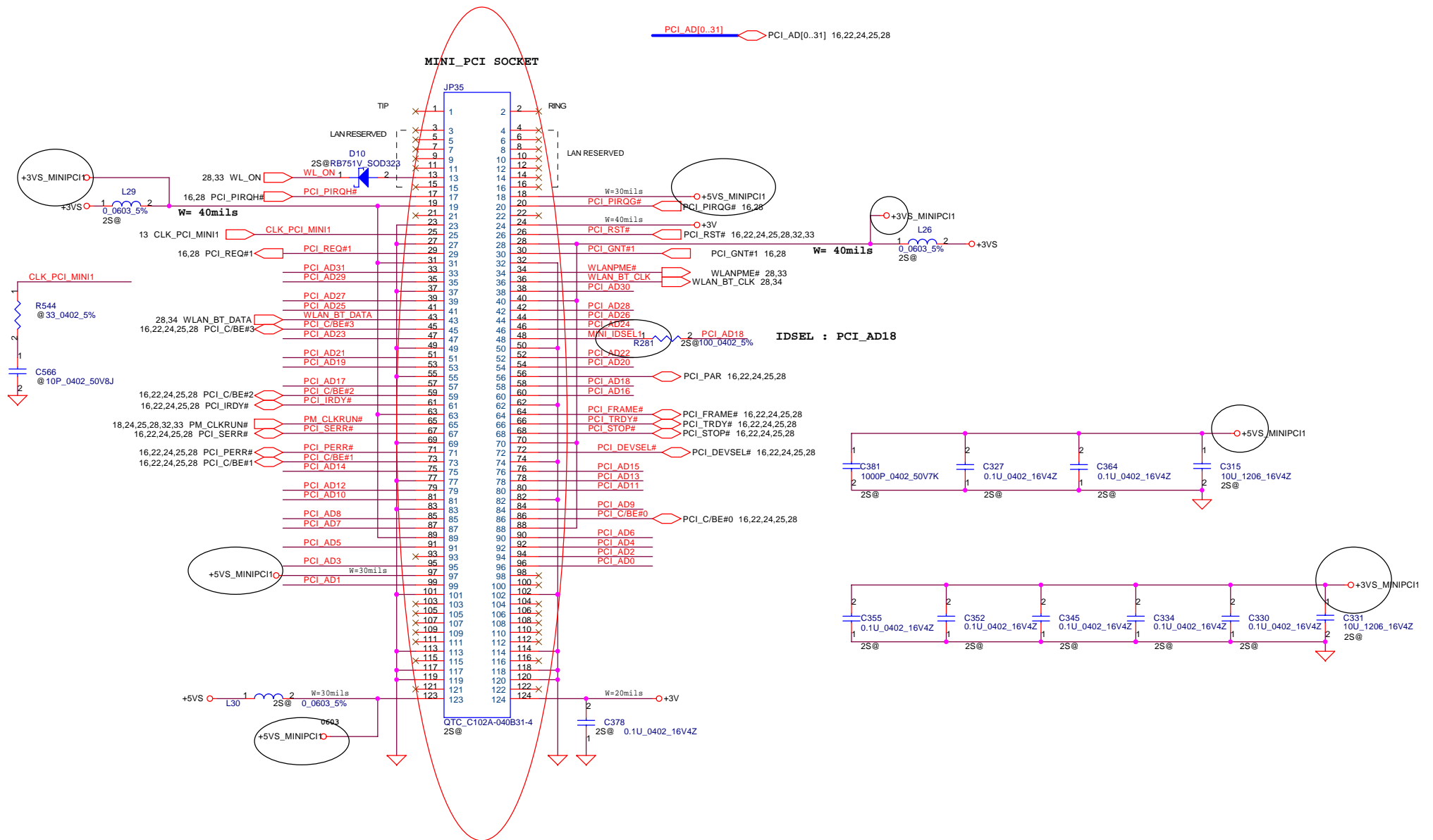
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24ST0023-3(SP050004200) for BCM4401(10/100)  
 24HST1041A-3(SP050002110) for BCM5788M(GbE)



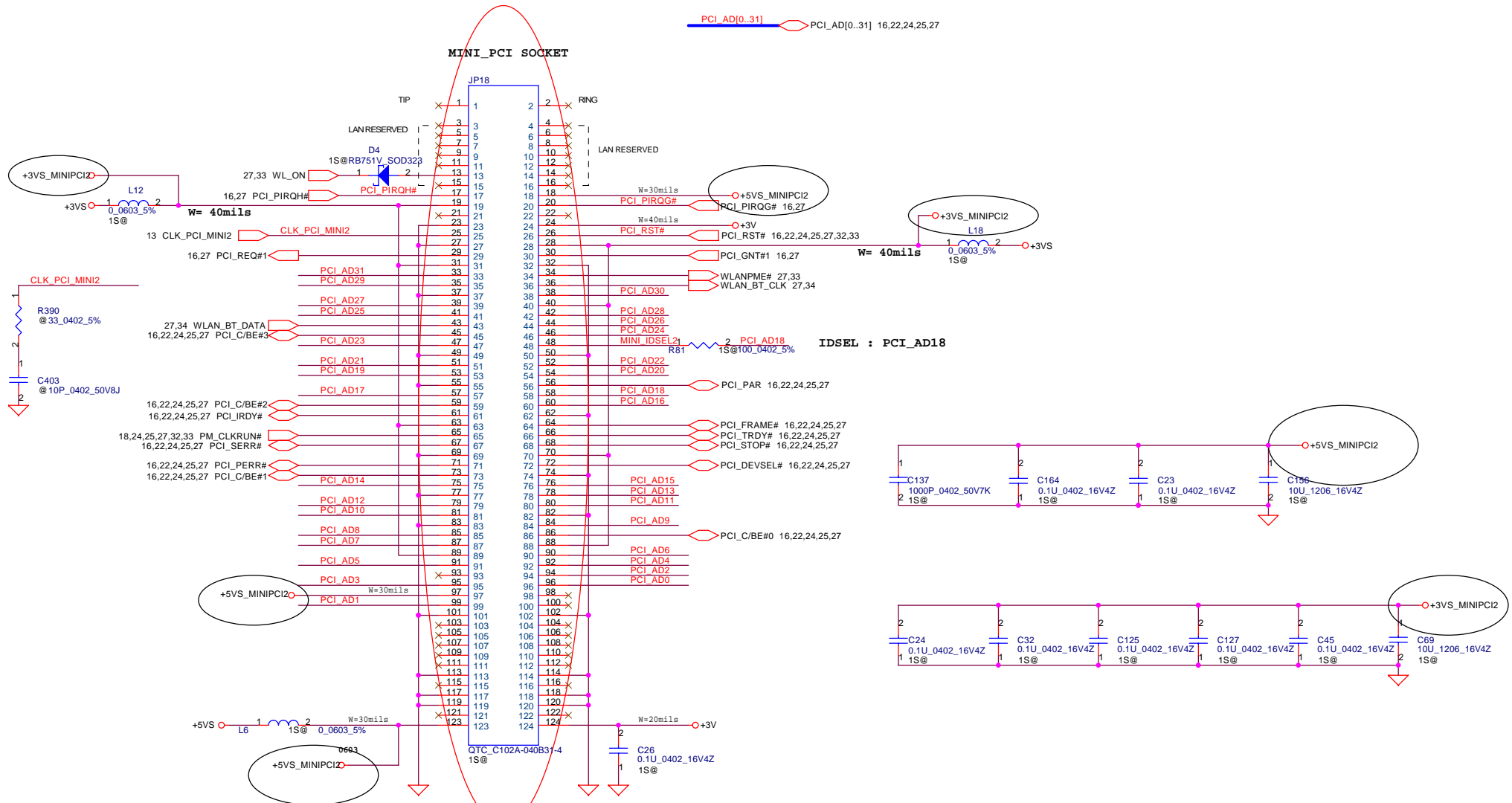
Compal Electronics, Inc.			
Title: LAN Magnetic & RJ45/RJ11			
Size B	Document Number: EFL50 LA-2761	Rev: 0.2	
Date: Wednesday, April 20, 2005	Sheet: 26	of 51	

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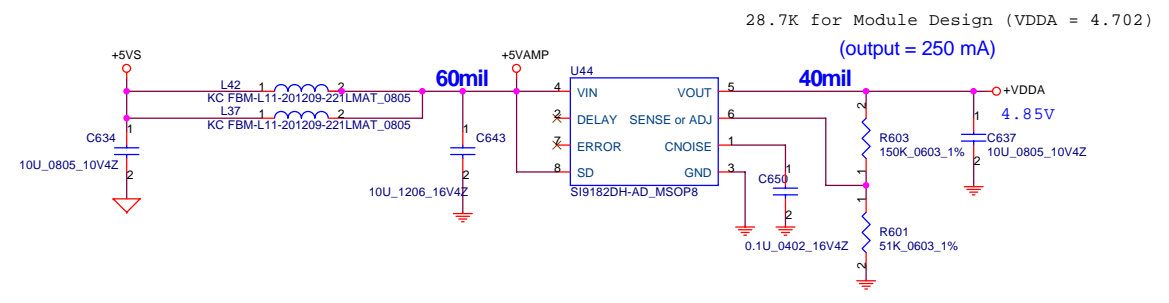
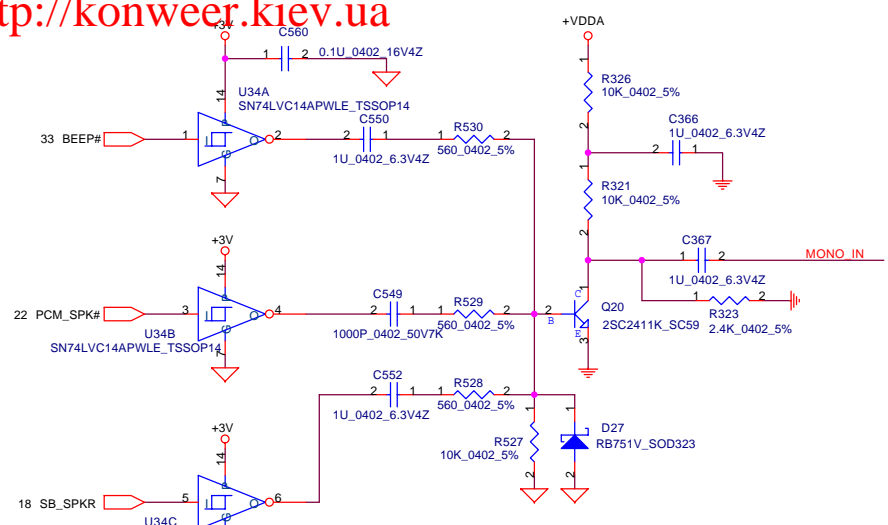
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<b>Compal Electronics, Inc.</b>			
Title			
<b>Mini PCI Slot</b>			
Size	Document Number	Rev	
	EFL50 LA-2761	0.2	
Date:	Wednesday, April 20, 2005	Sheet	27 of 51

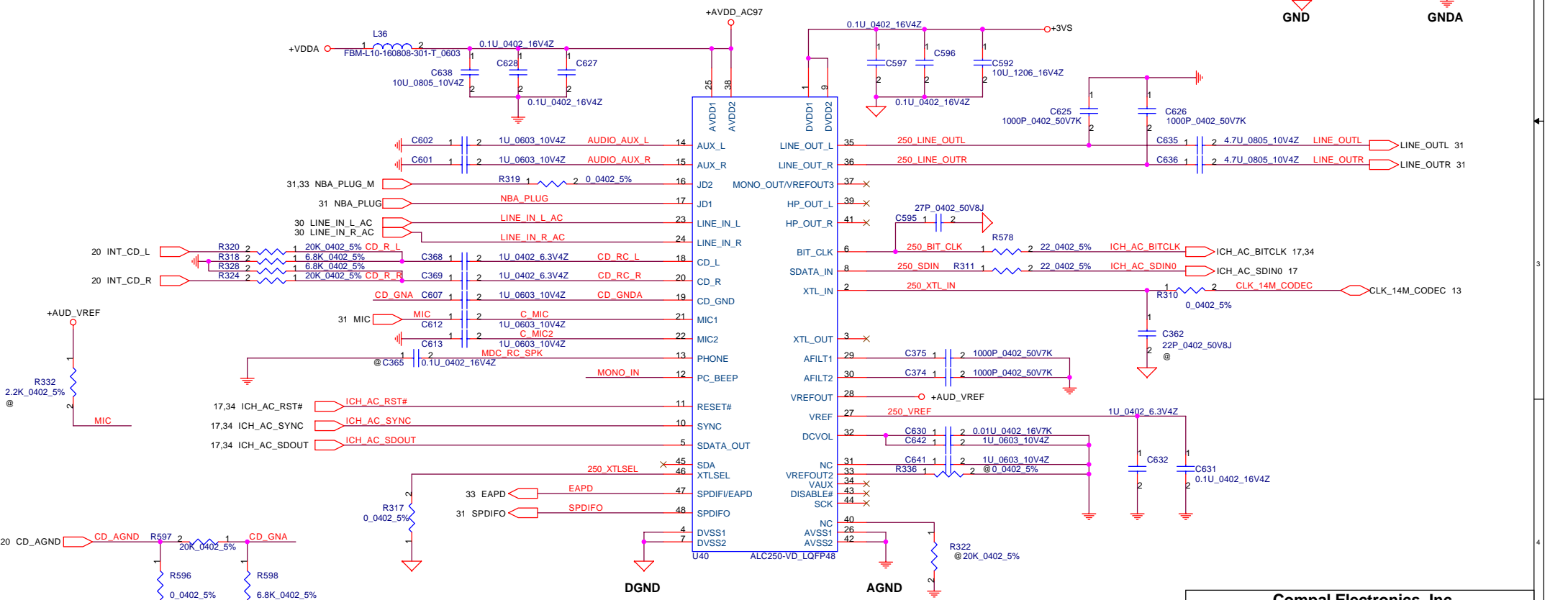


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<b>Compal Electronics, Inc.</b>			
Title			
<b>Mini PCI Slot</b>			
Size	Document Number	Rev	
	EFL50 LA2761	0.2	
Date:	Wednesday, April 20, 2005	Sheet	28 of 51



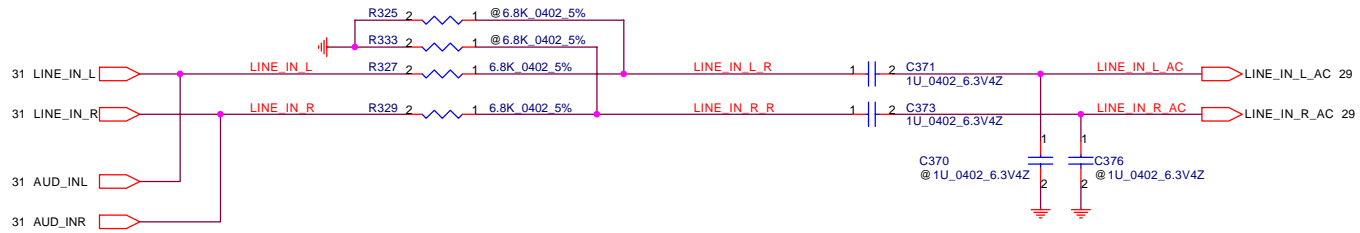
### AC97 Codec



With 14.318Mhz : R321 POP  
 With 24.576Mhz : R321 DEPOP

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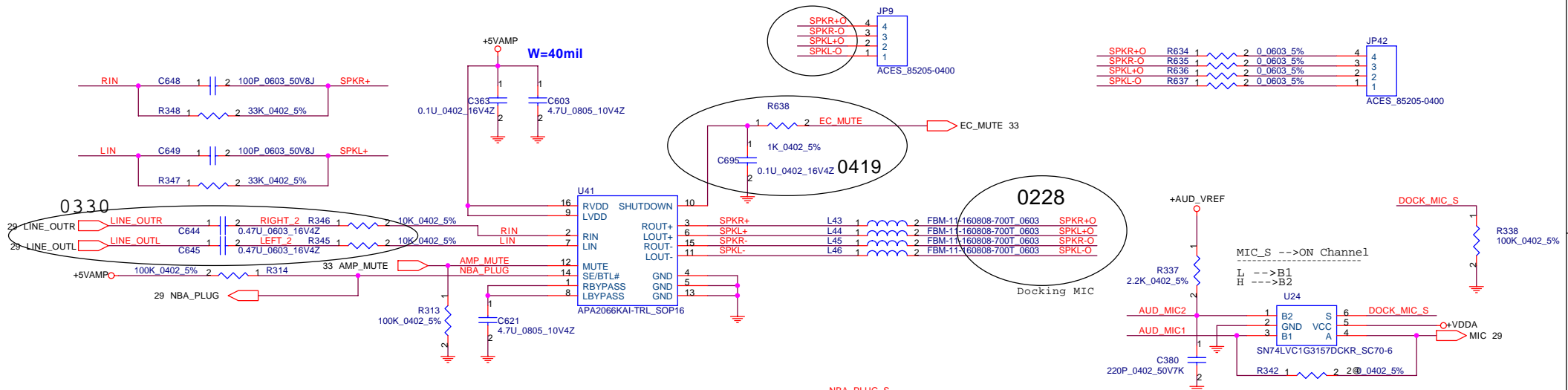
Compal Electronics, Inc.			
Title: <b>AC97 CODEC</b>			
Size	Document Number	EFL50 LA2761	Rev 0.2
Date:	Wednesday, April 20, 2005	Sheet 29	of 51



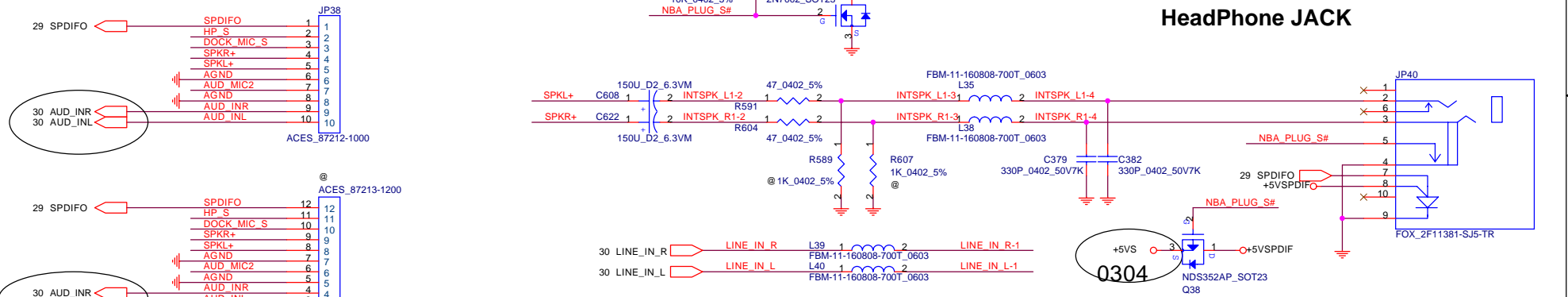
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<b>Compal Electronics, Inc.</b>			
Title			
<b>Audio Line Switch</b>			
Size	Document Number	EFL50 LA-2761	Rev 0.2
Date:	Wednesday, April 20, 2005	Sheet 30 of 51	

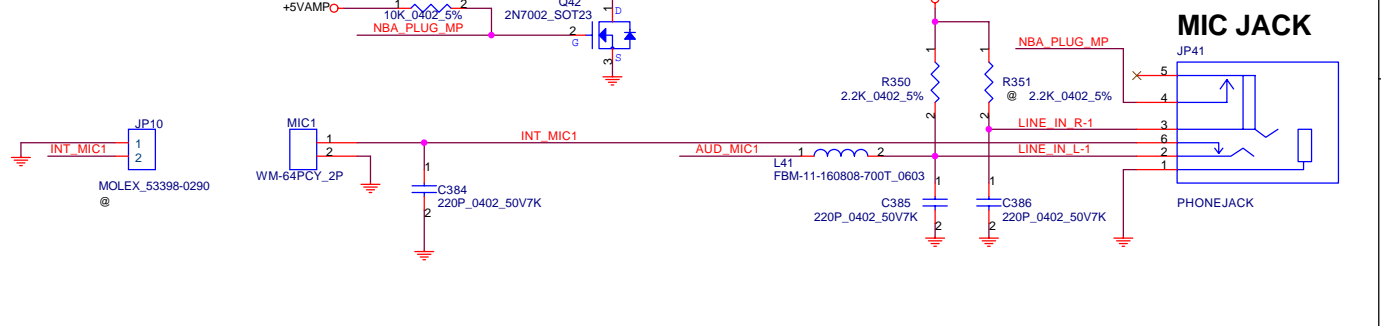
### Speaker Conn.



### HeadPhone JACK

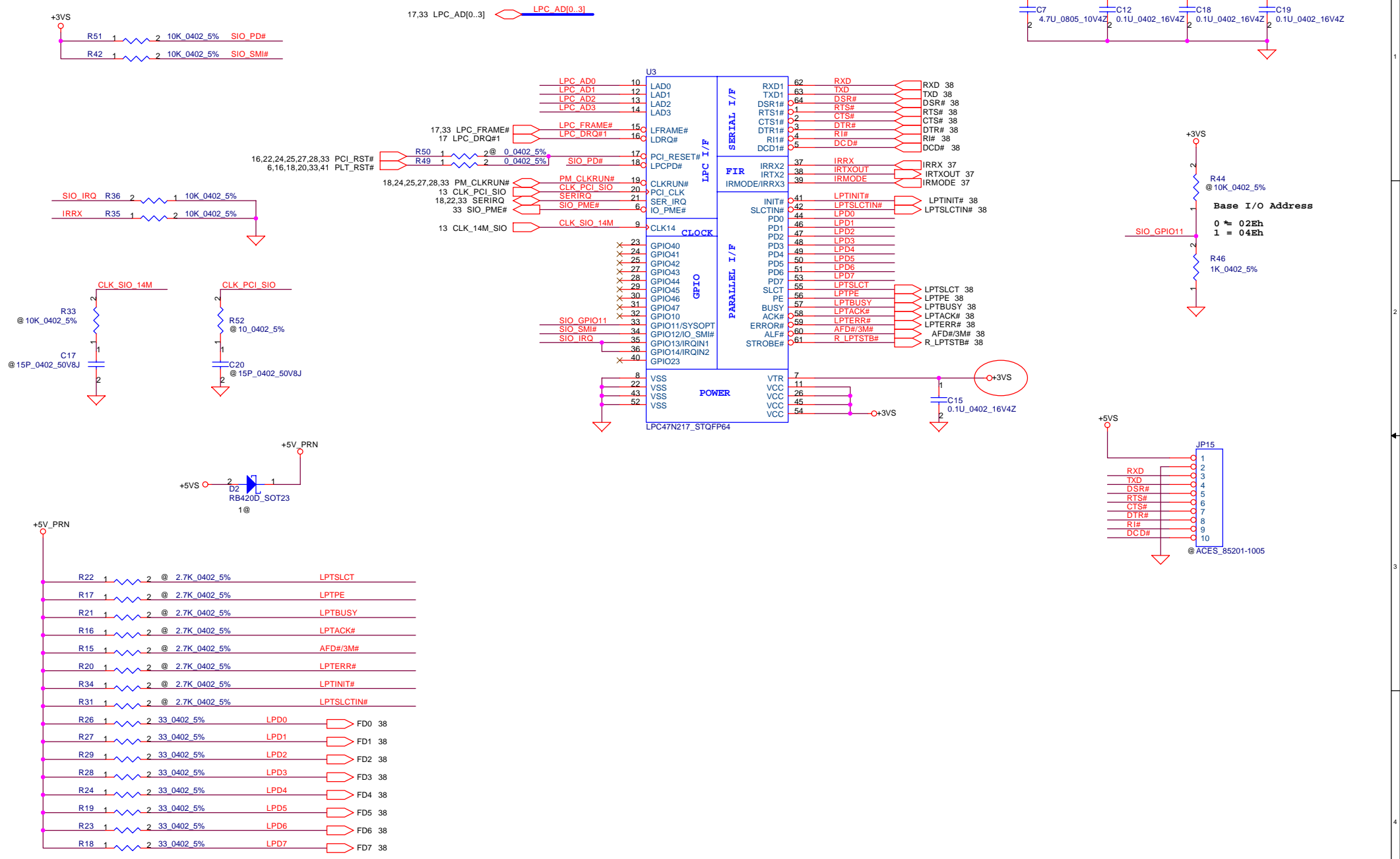


### MIC JACK



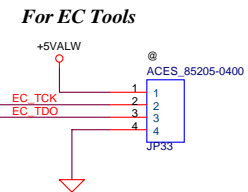
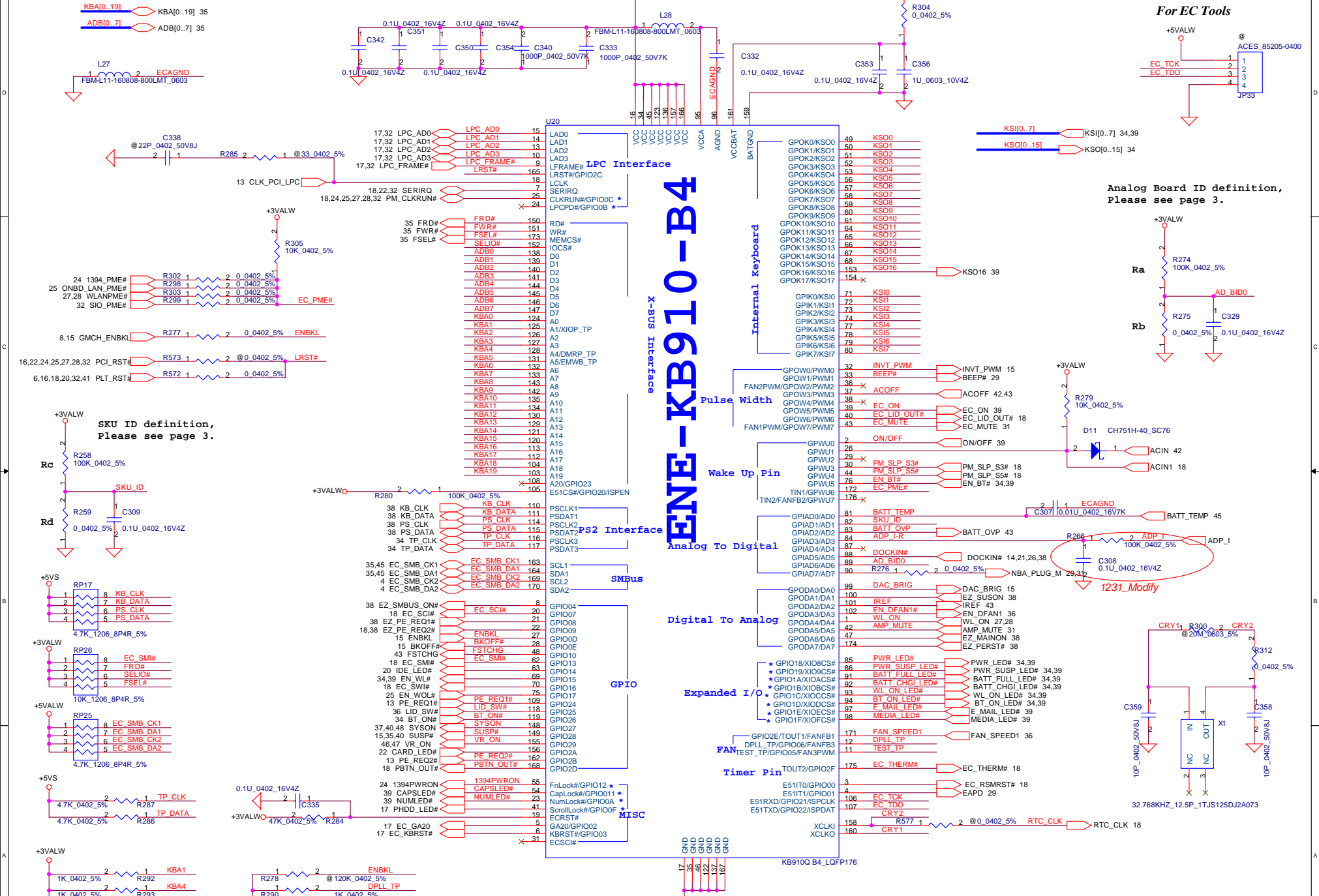
Compal Electronics, Inc.		
Title: AMP & Audio Jack		
Size	Document Number	Rev
	EFL50 LA-2761	0.2
Date:	Wednesday, April 20, 2005	Sheet 31 of 51

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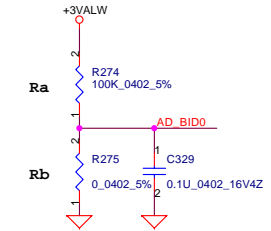


<b>Compal Electronics, Ltd.</b>		
<b>LPC-Super I/O 217</b>		
Size	Document Number	Rev
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Date:	Wednesday, April 20, 2005	Sheet 32 of 51

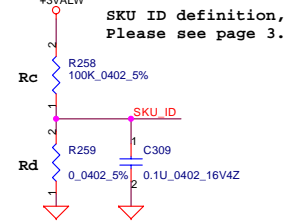
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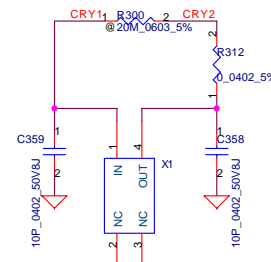
Analog Board ID definition, please see page 3.



SKU ID definition, please see page 3.

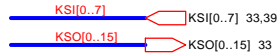
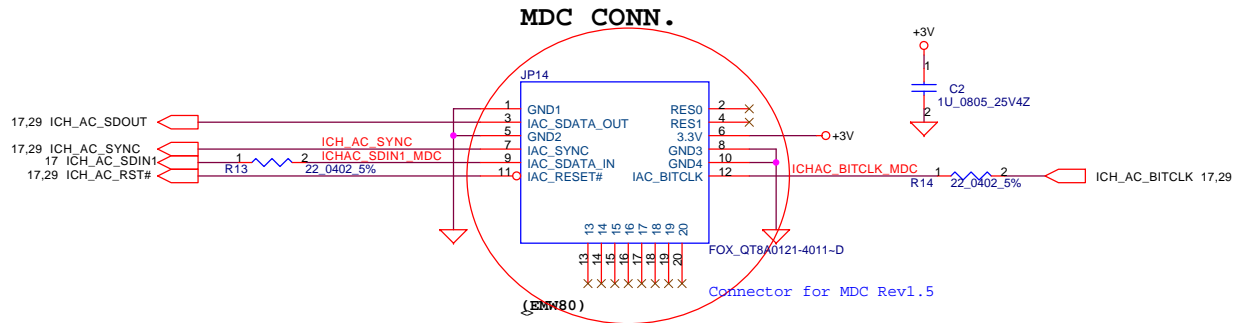


1231\_Modify

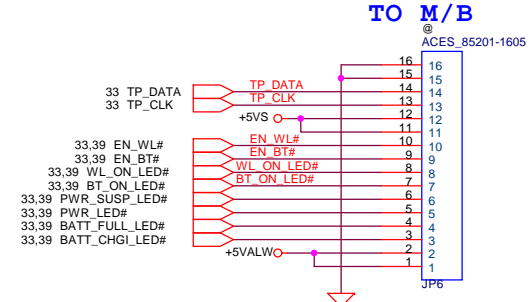
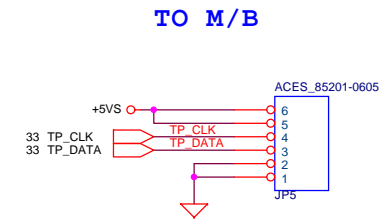
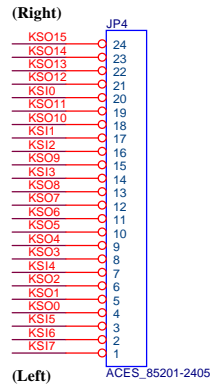


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Size	Document Number	Rev	
	EFL50 LA2761	0.2	
Date:	Wednesday, April 20, 2005	Sheet	33 of 51

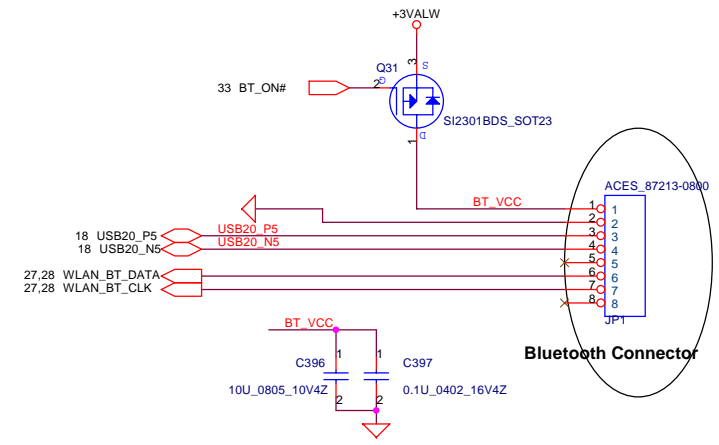
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### INT\_KBD CONN.



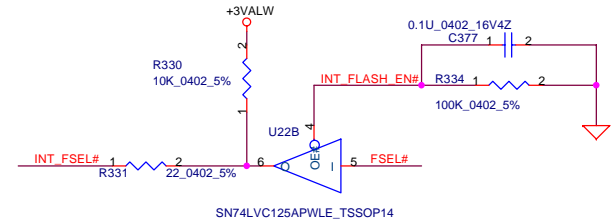
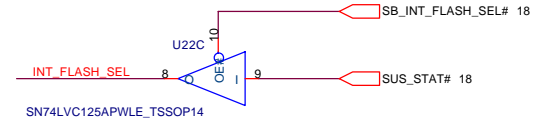
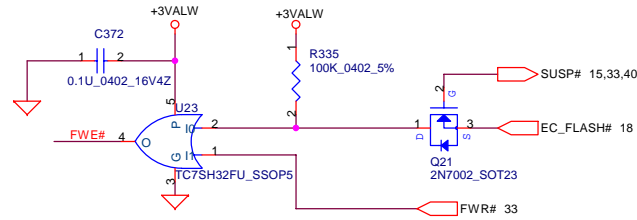
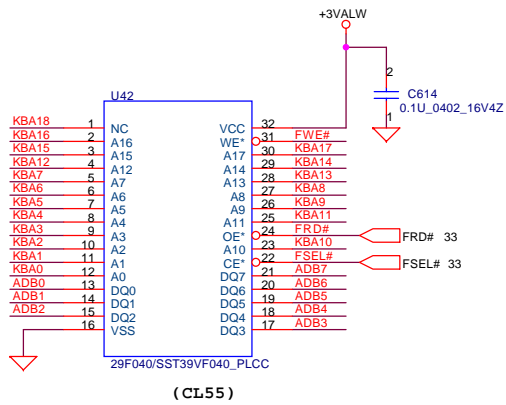
### BlueTooth Interface



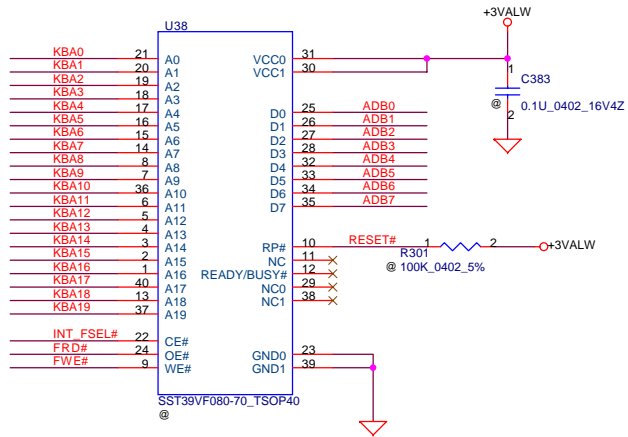
<b>Compal Electronics, Inc.</b>			
Title: MDC / BT / KBD / TP			
Size	Document Number	EFL50 LA2761	
Date:	Wednesday, April 20, 2005	Sheet	34 of 51
		Rev	0.2

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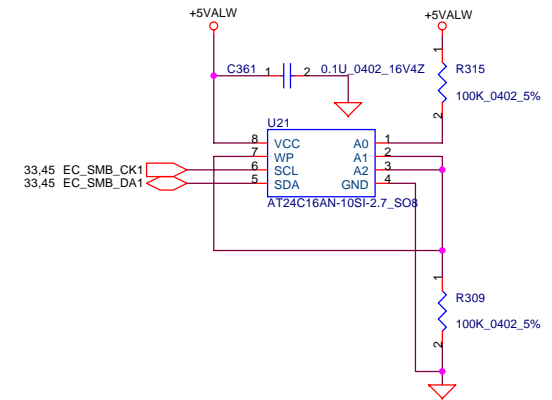
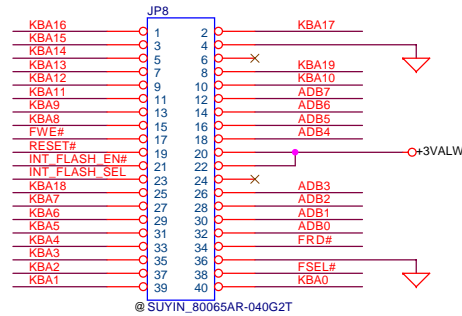
33 KBA[0..19] KBA[0..19]  
 33 ADB[0..7] ADB[0..7]



### 1MB Flash ROM



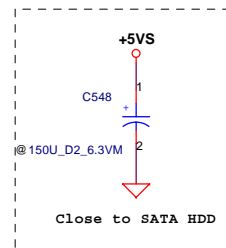
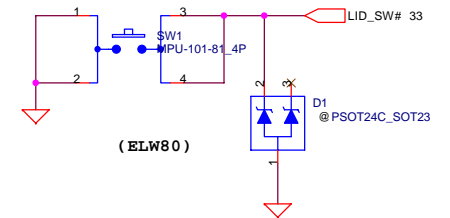
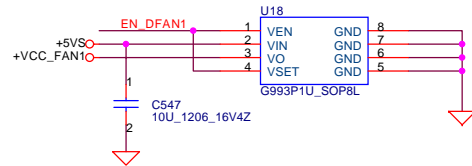
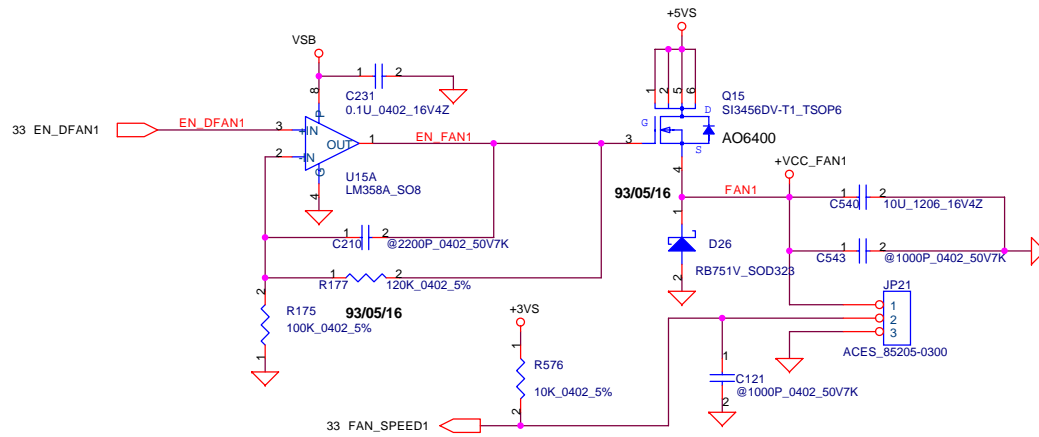
### 1MB ROM Socket



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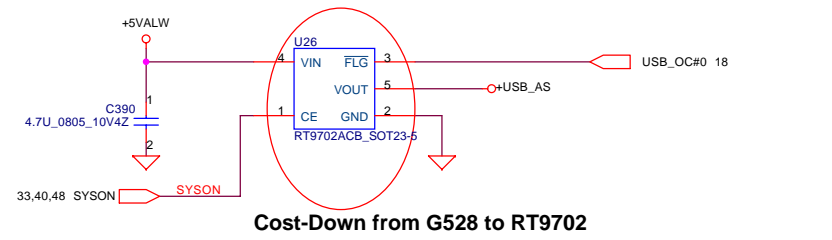
<b>Compal Electronics, Inc.</b>			
<b>BIOS &amp; EXT. I/O PORT &amp; SATA HDD</b>			
Title			
Size	Document Number	EFL50 LA-2761	Rev 0.2
Date:	Wednesday, April 20, 2005	Sheet 35	of 51

### FAN Conn

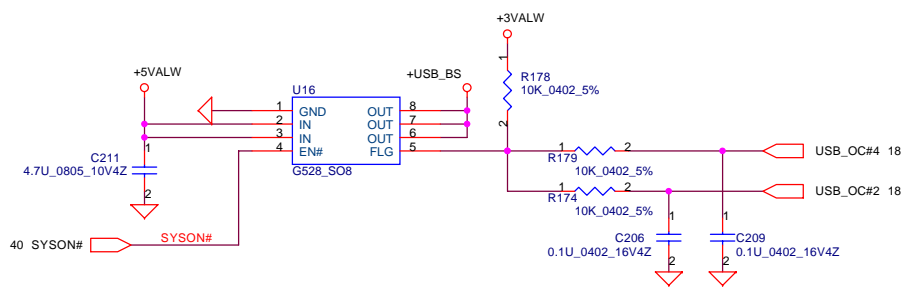


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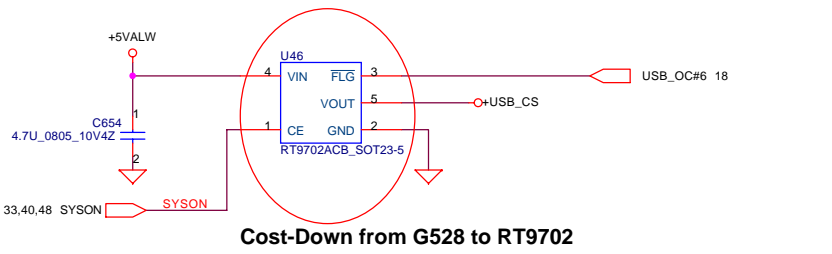
<b>Compal Electronics, Inc.</b>			
Title			
<b>FAN / FIR / RJ11/Lid Switch</b>			
Size	Document Number	Rev	
	EFL50 LA-2761	0.2	
Date:	Wednesday, April 20, 2005	Sheet	36 of 51



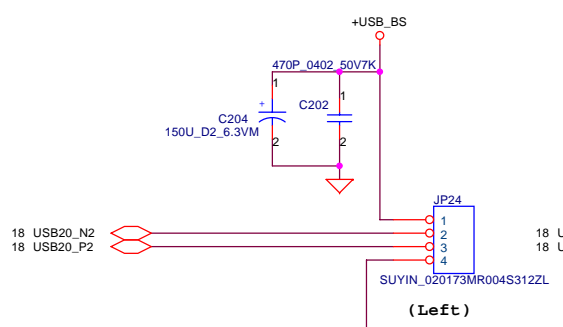
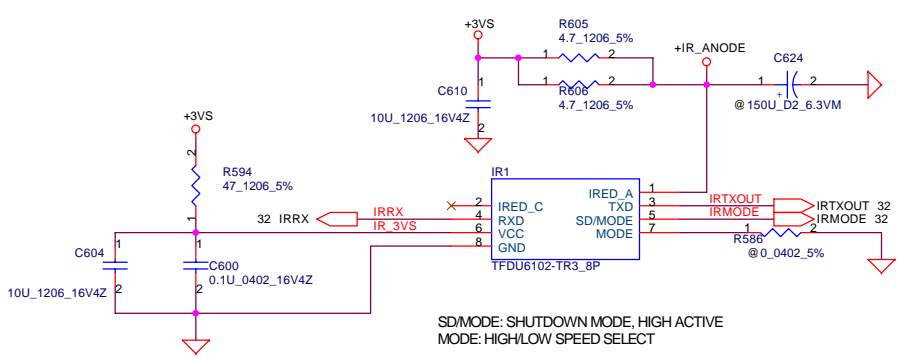
Cost-Down from G528 to RT9702



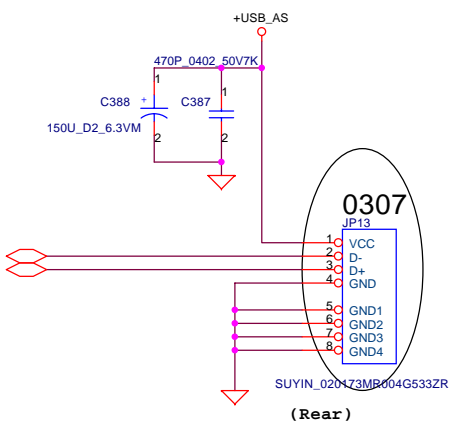
Cost-Down from G528 to RT9702



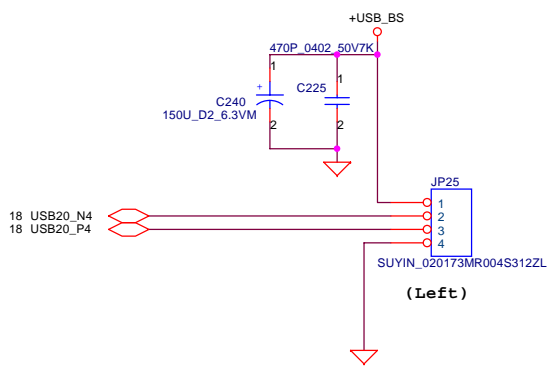
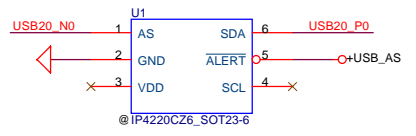
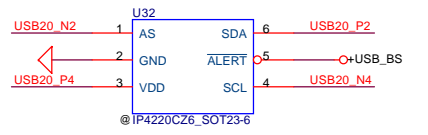
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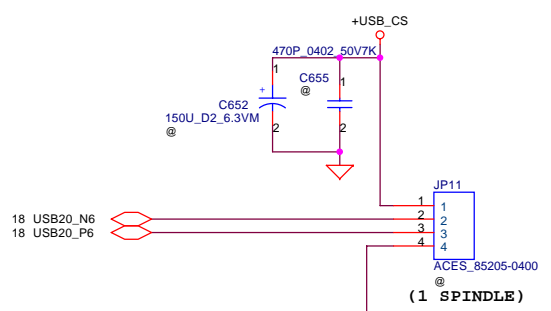
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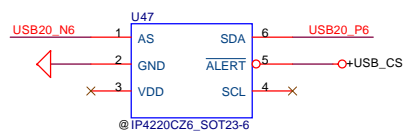
(Rear)



(Left)



(1 SPINDLE)

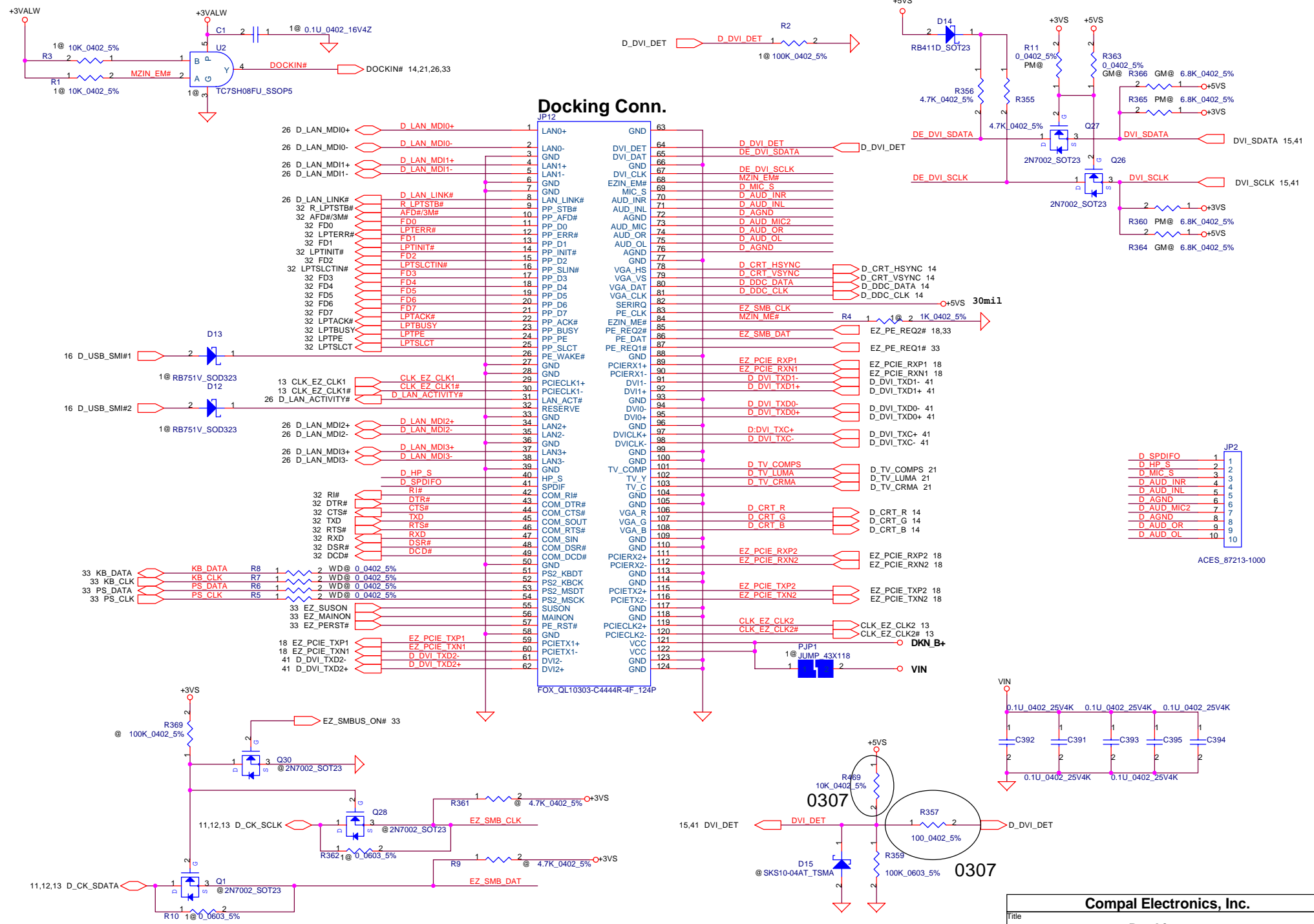


Compal Electronics, Inc.

### USB Conn

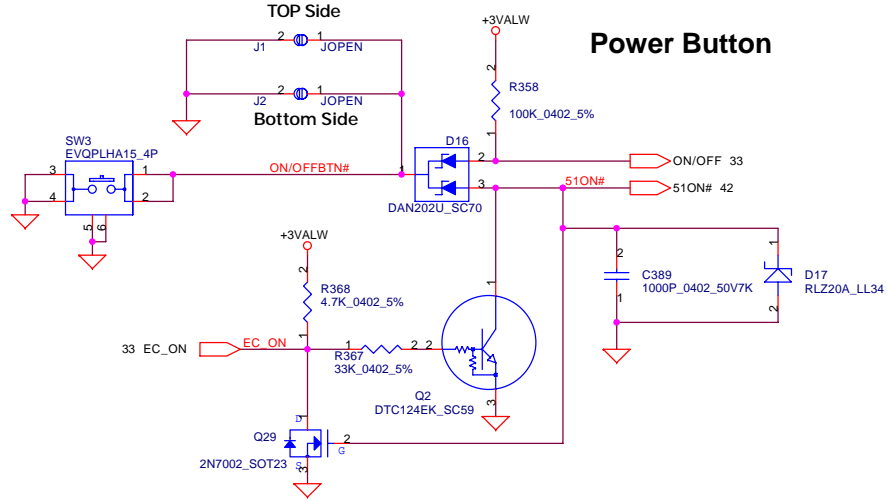
Title		
EFL50 LA-2761		
Size	Document Number	Rev
		0.2
Date:	Wednesday, April 20, 2005	Sheet 37 of 51

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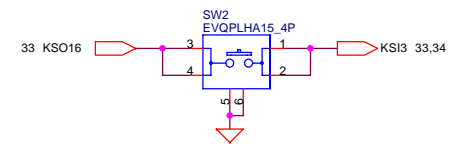


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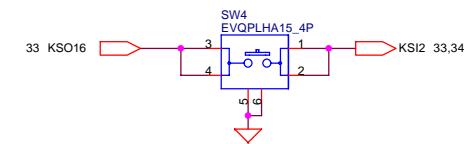
Compal Electronics, Inc.			
Title: <b>Docking</b>			
Size	Document Number	Rev 0.2	
EFL50 LA-2761			
Date:	Wednesday, April 20, 2005	Sheet	38 of 51



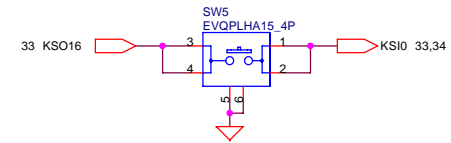
**E-Mail\_BTN**



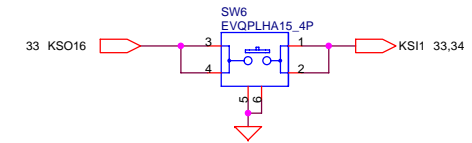
**Internet\_BTN**



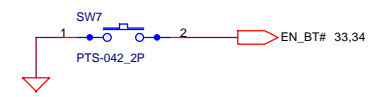
**e/eManager\_BTN**



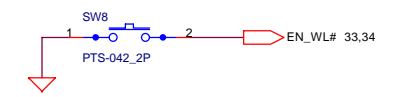
**Launch Manager\_BTN**



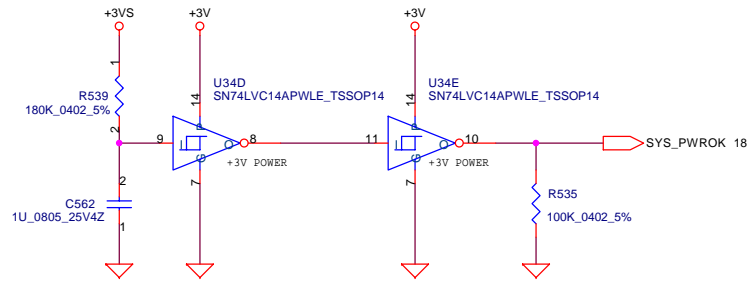
**BlueTooth\_BTN**



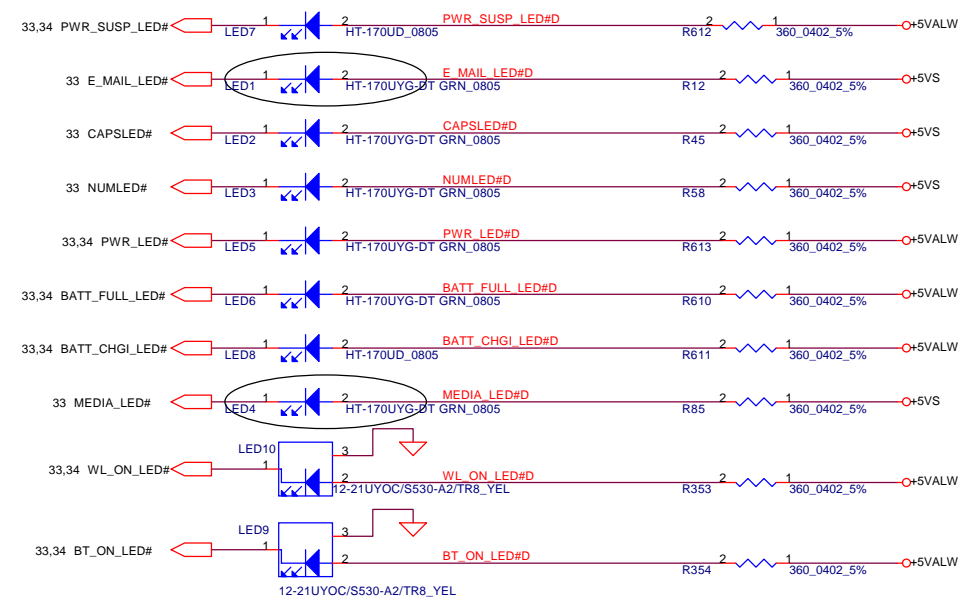
**Wireless\_BTN**



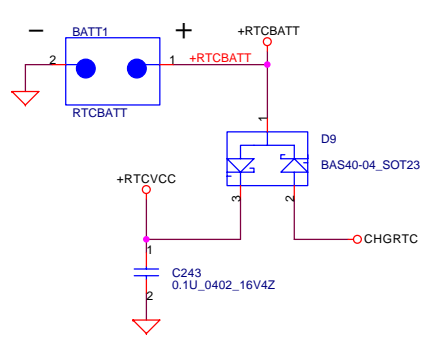
**Power ON Circuit**



**LED Indicator**



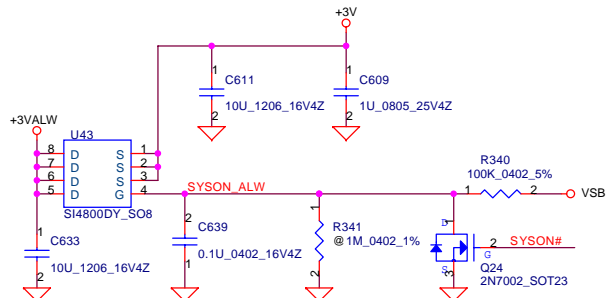
**RTC Battery**



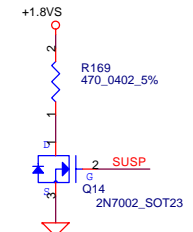
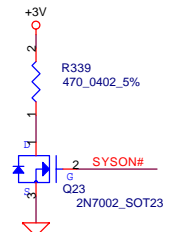
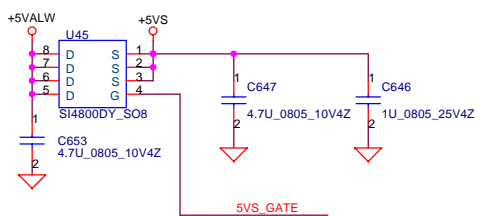
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Compal Electronics, Inc.			
Title Power OK/Reset/RTC battery			
Size	Document Number	EFL50 LA-2761	Rev 0.2
Date:	Wednesday, April 20, 2005	Sheet 39 of 51	

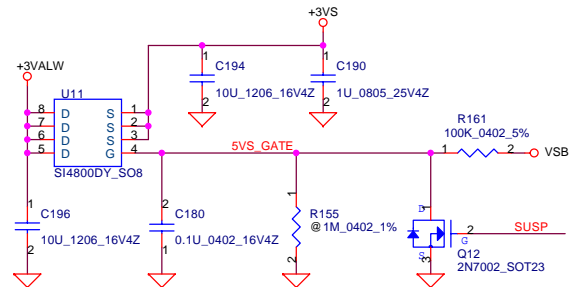
**+3VALW TO +3V**



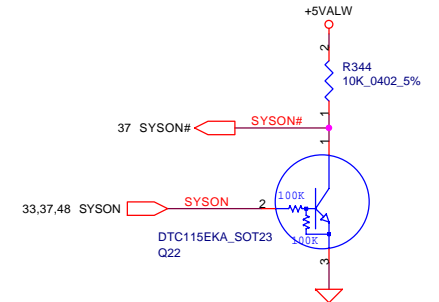
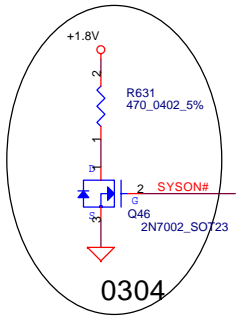
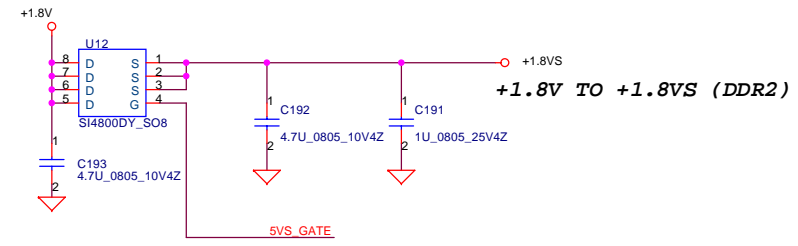
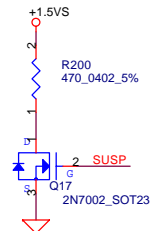
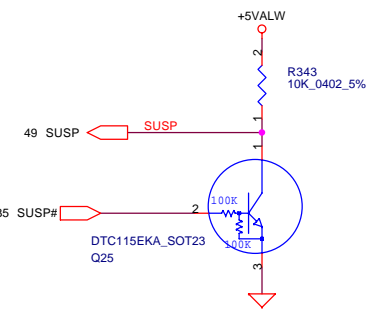
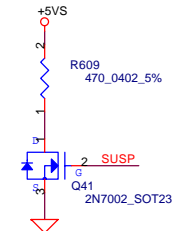
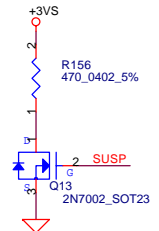
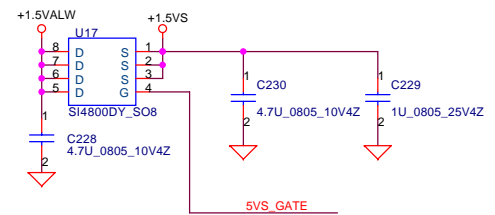
**+5VALW TO +5VS**



**+3VALW TO +3VS**



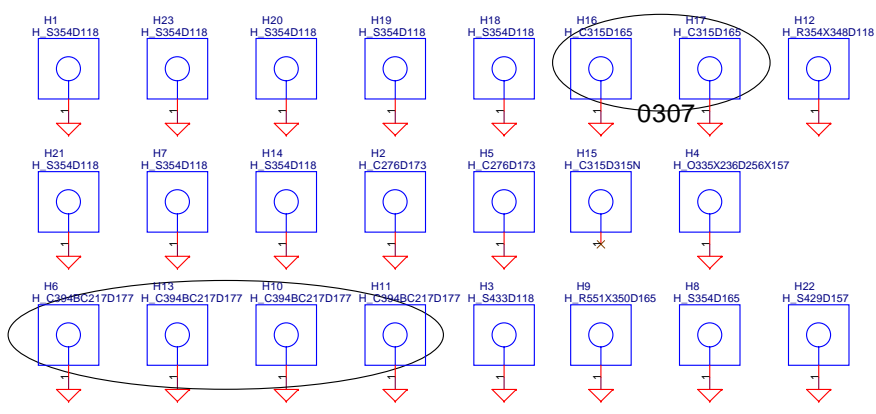
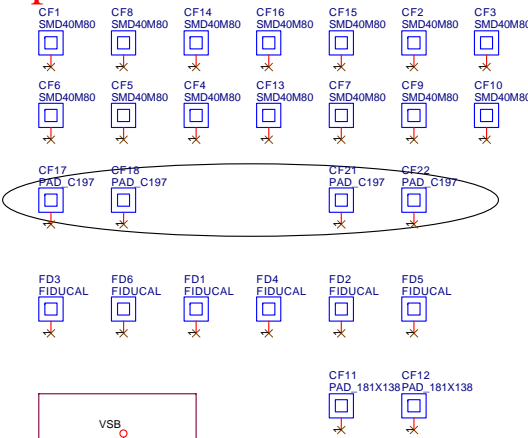
**+1.5VALW TO +1.5VS**



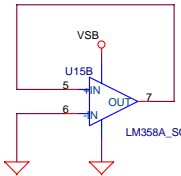
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<b>Compal Electronics, Inc.</b>			
<b>POWER CONTROL CKT</b>			
Size B	Document Number	Rev	
	EFL50 LA-2761	0.2	
Date:	Wednesday, April 20, 2005	Sheet	40 of 51

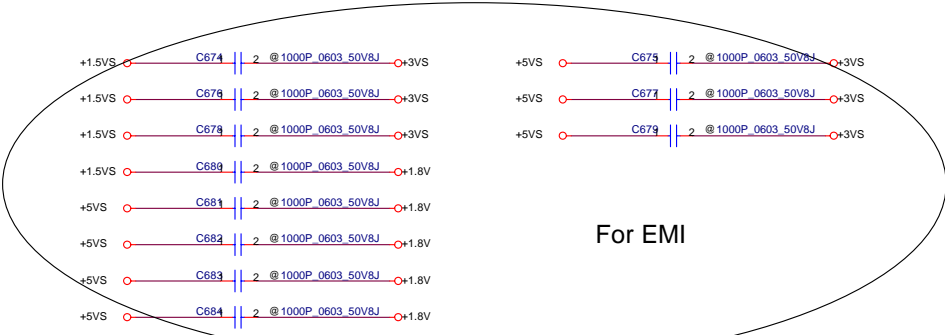
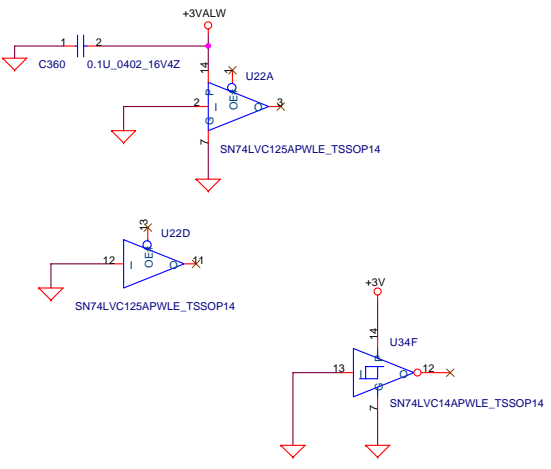
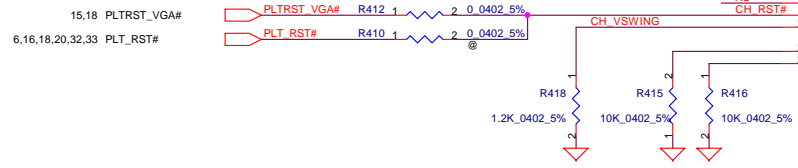
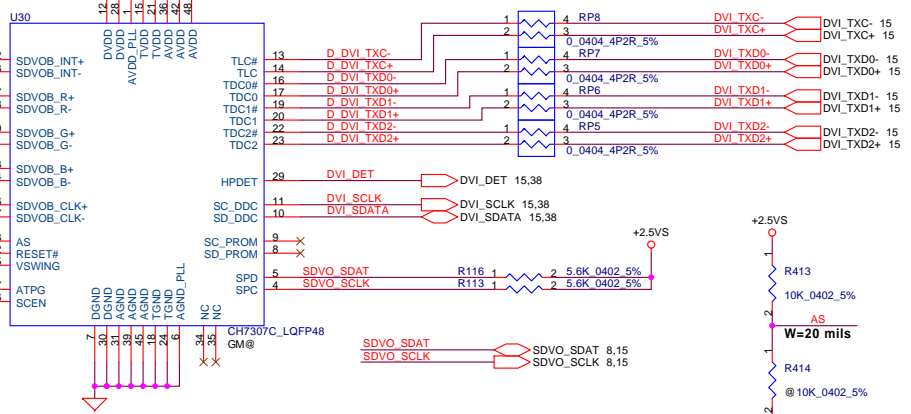
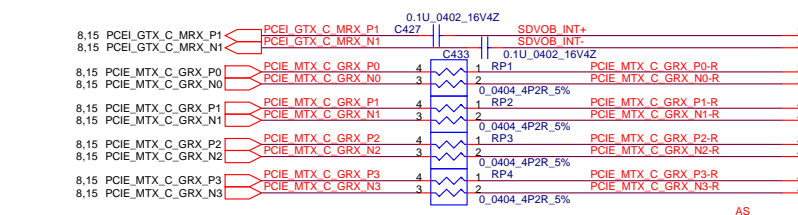
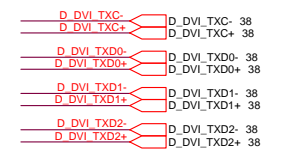
0304



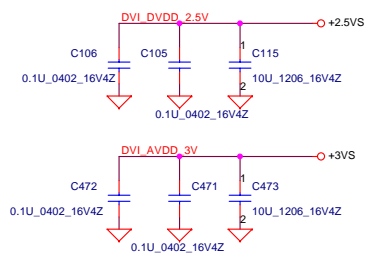
Chip_Name	Label_Name
EXP_TXP0/SDVOB_RED	PCIE_MTX_C_GRX_P0
EXP_TXN0/SDVOB_RED#	PCIE_MTX_C_GRX_N0
EXP_TXP1/SDVOB_GREEN	PCIE_MTX_C_GRX_P1
EXP_TXN1/SDVOB_GREEN#	PCIE_MTX_C_GRX_N1
EXP_TXP2/SDVOB_BLUE	PCIE_MTX_C_GRX_P2
EXP_TXN2/SDVOB_BLUE#	PCIE_MTX_C_GRX_N2
EXP_TXP3/SDVOB_CLKP	PCIE_MTX_C_GRX_P3
EXP_TXN3/SDVOB_CLKN	PCIE_MTX_C_GRX_N3
EXP_RXP1/SDVO_INT	PCEI_GTX_C_MRX_P1
EXP_RXN1/SDVO_INT#	PCEI_GTX_C_MRX_N1



### DVI CONTROLLER

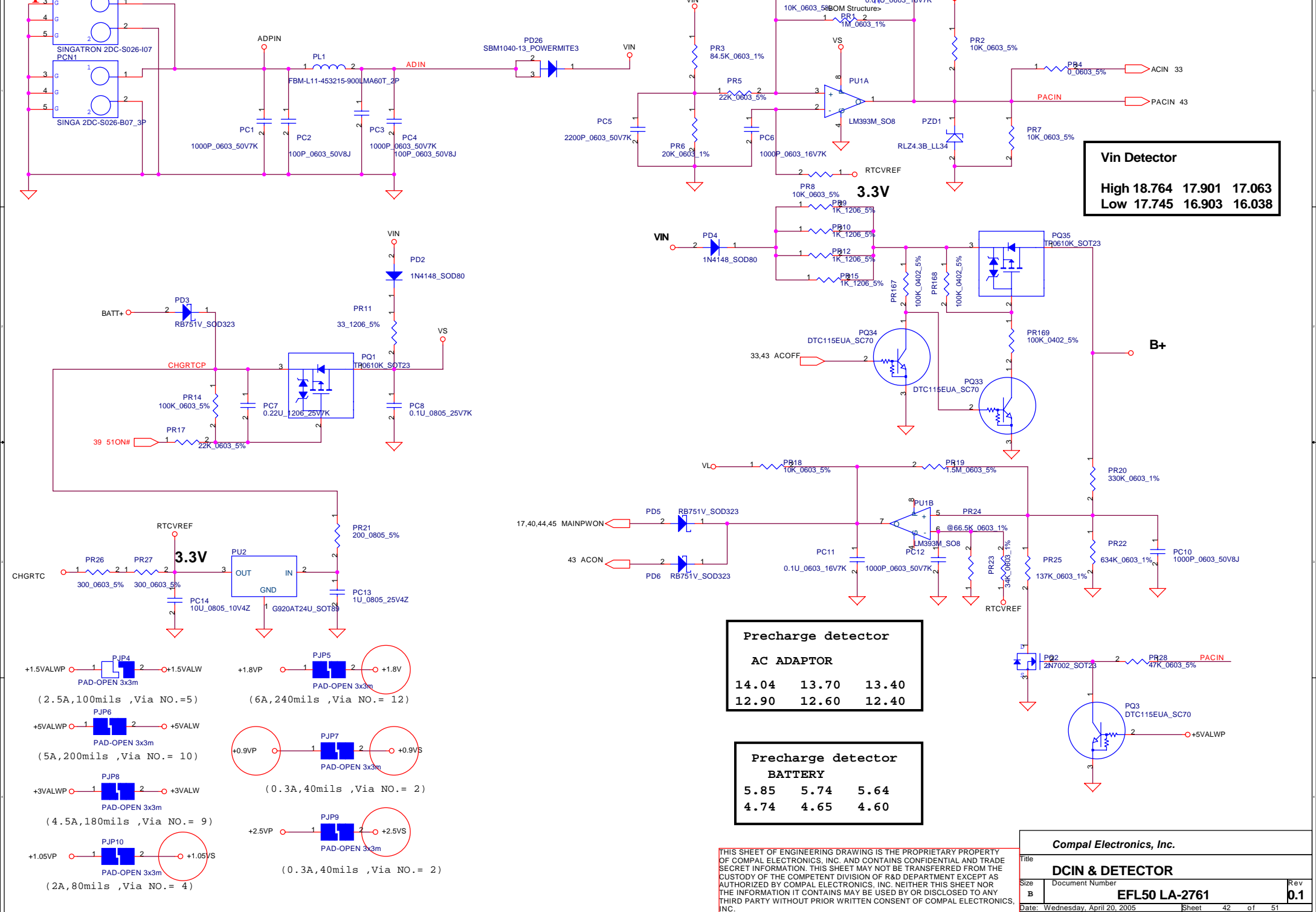


For EMI



Compal Electronics, Inc.		
Title: Screws and CH7307		
Size: Document Number	EFL50 LA-2761	
Date: Wednesday, April 20, 2005	Sheet: 41	of 51
		Rev: 0.2

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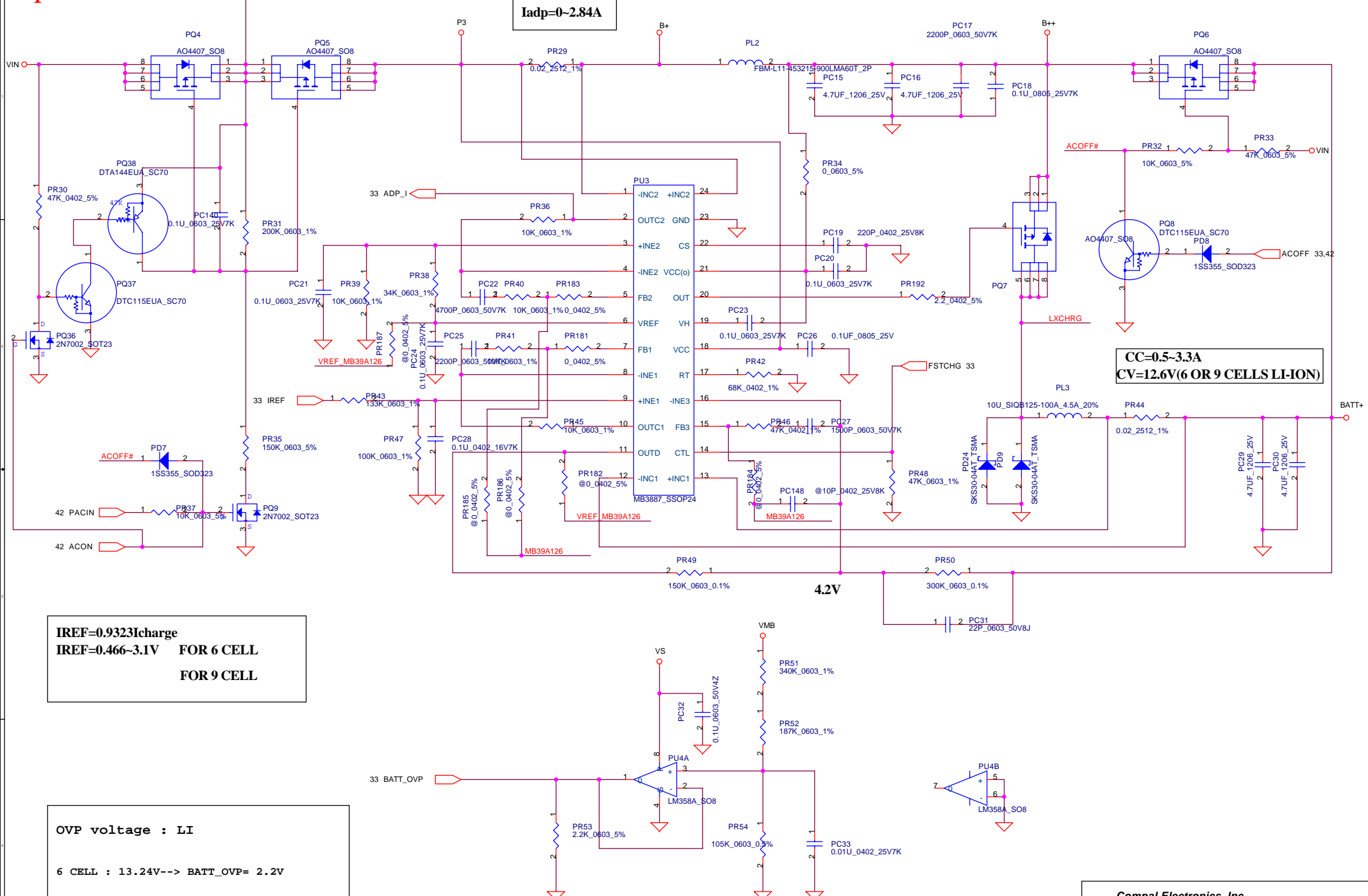
Vin Detector		
High	18.764	17.901 17.063
Low	17.745	16.903 16.038

Precharge detector AC ADAPTOR		
14.04	13.70	13.40
12.90	12.60	12.40

Precharge detector BATTERY		
5.85	5.74	5.64
4.74	4.65	4.60

Compal Electronics, Inc.		
Title: DCIN & DETECTOR		
Size: B	Document Number: EFL50 LA-2761	Rev: 0.1
Date: Wednesday, April 20, 2005	Sheet: 42	of 51

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Iadp=0-2.84A

CC=0.5-3.3A  
CV=12.6V(6 OR 9 CELLS LI-ION)

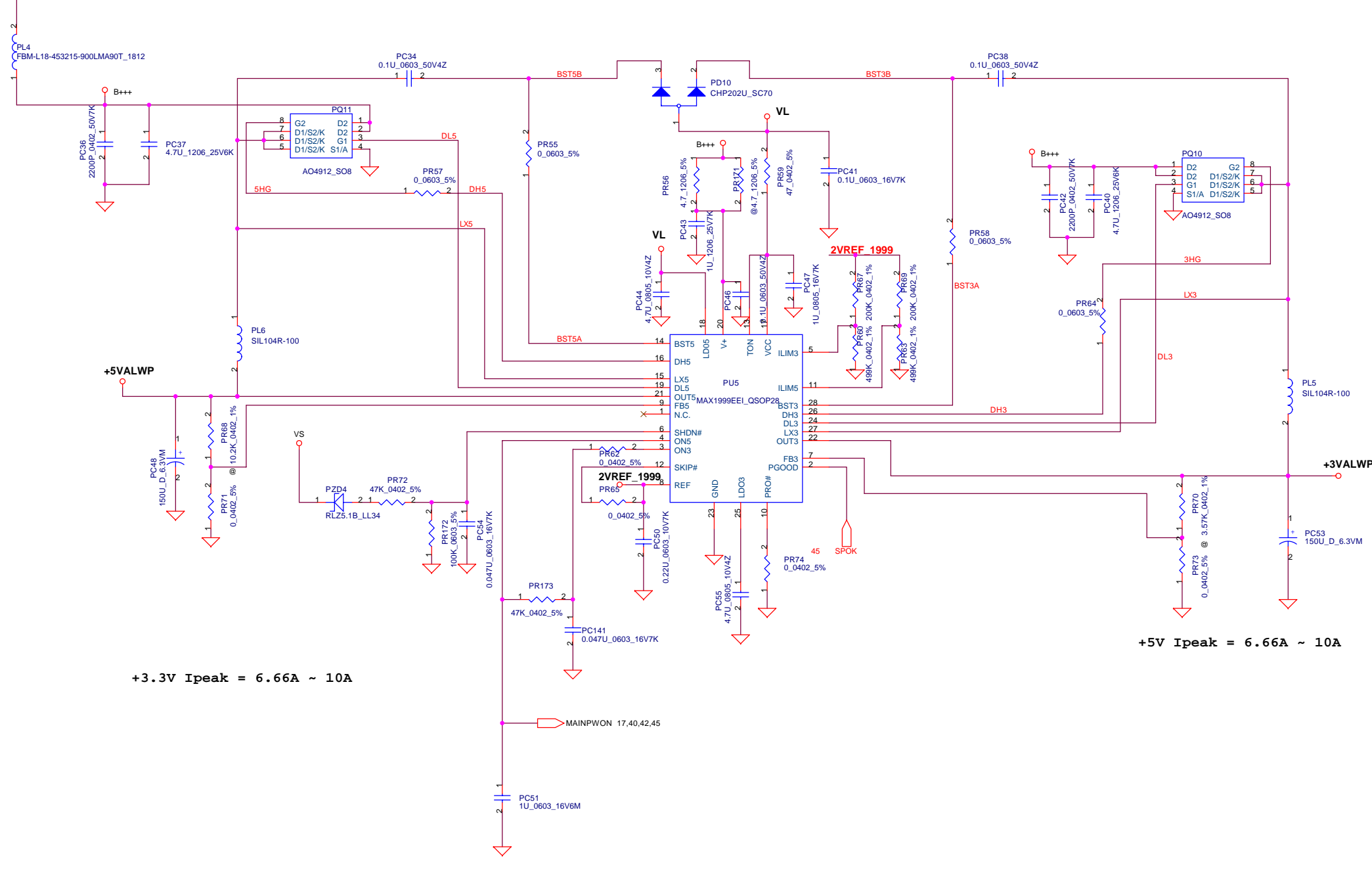
4.2V

IREF=0.9323Icharge  
IREF=0.466~3.1V FOR 6 CELL  
FOR 9 CELL

OVP voltage : LI  
6 CELL : 13.24V--> BATT\_OVP= 2.2V  
(BAT\_OVP=0.124 \*VMB)

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Compal Electronics, Inc.		
Title <b>CHARGER</b>		
Size <b>B</b>	Document Number <b>EFL50 LA-2761</b>	Rev <b>0.1</b>
Date: Wednesday, April 20, 2005	Sheet 43	of 51

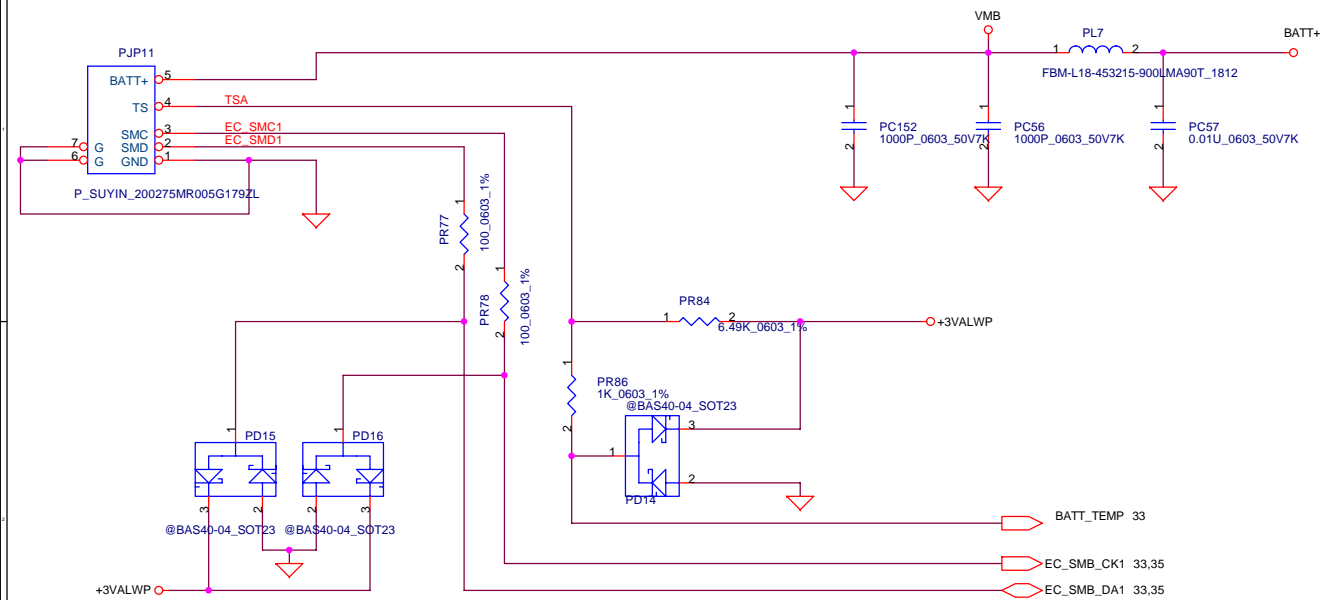


+3.3V Ipeak = 6.66A ~ 10A

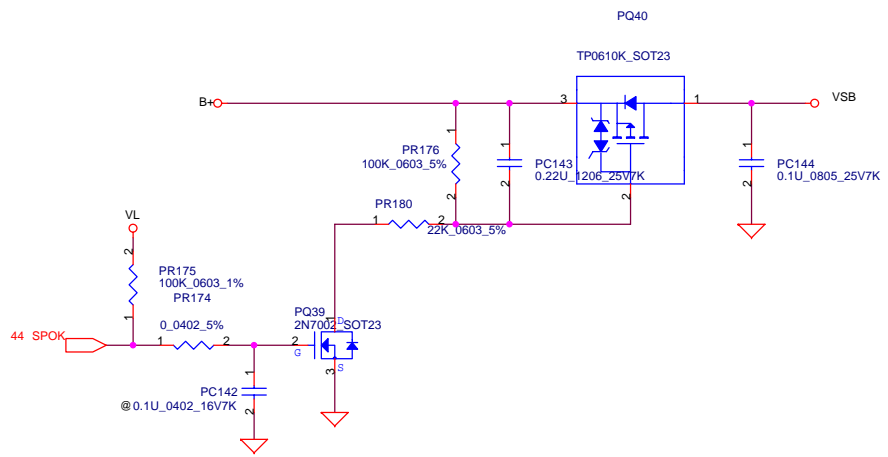
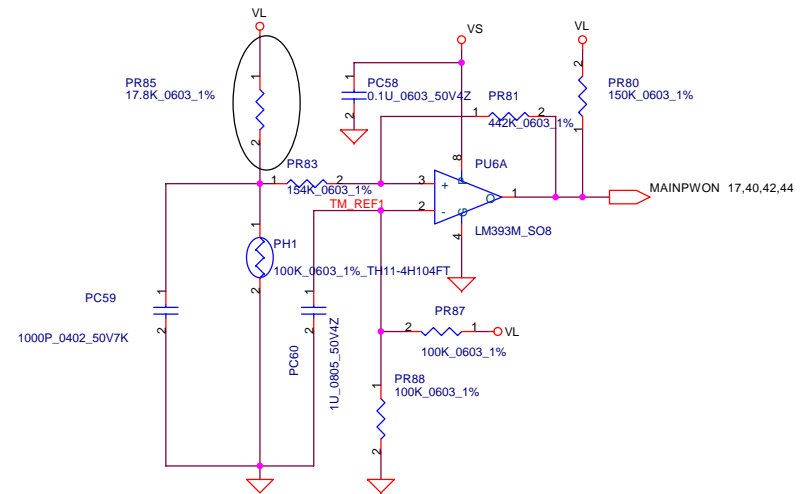
+5V Ipeak = 6.66A ~ 10A

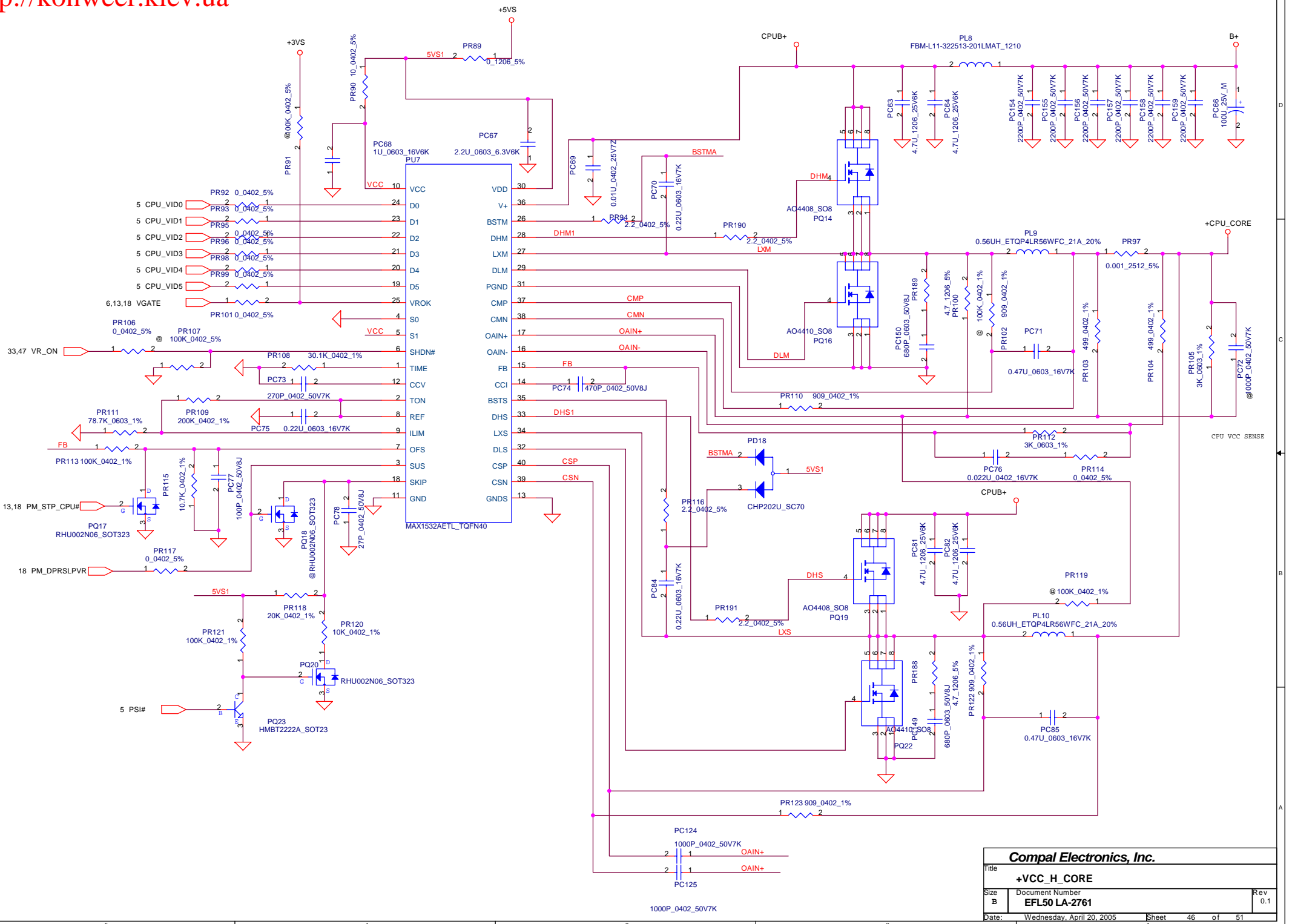
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<b>Compal Electronics, Inc.</b>		
Title		
<b>5V/3.3V/12V</b>		
Size	Document Number	Rev
	<b>EFL50 LA-2761</b>	<b>0.1</b>
Date: Wednesday, April 20, 2005	Sheet	44 of 51

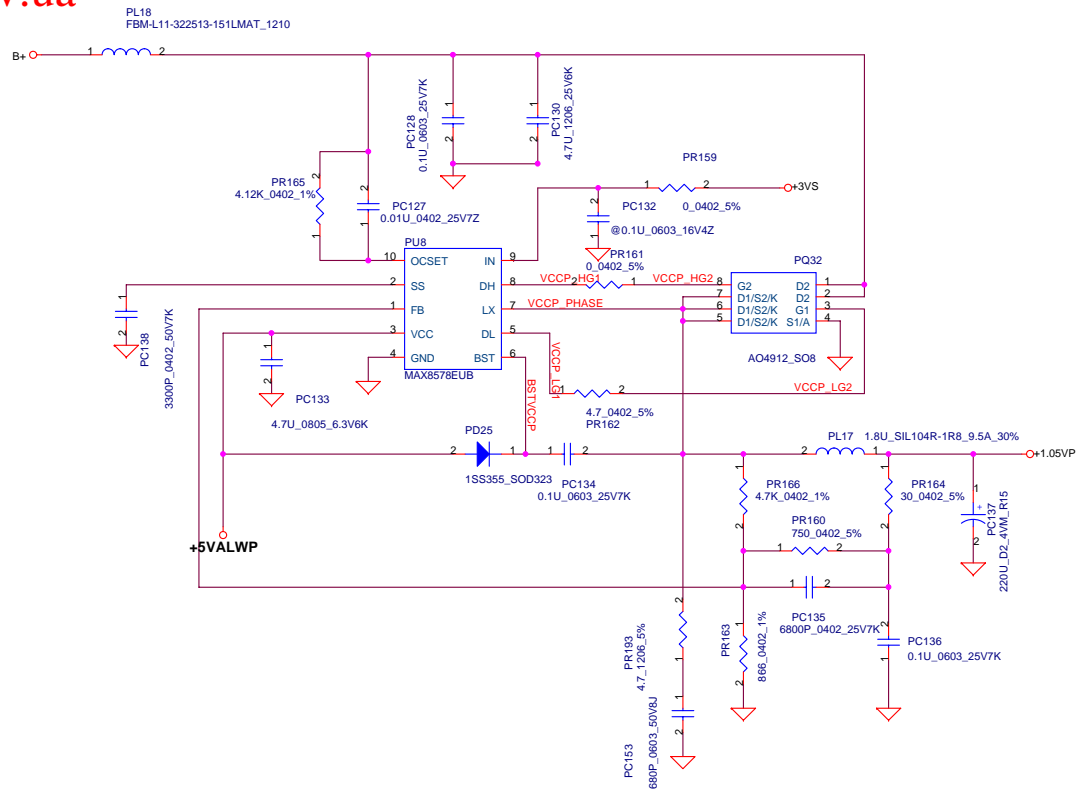


PH1 under CPU botten side :  
CPU thermal protection at 80 degree C  
Recovery at 44(45) degree C





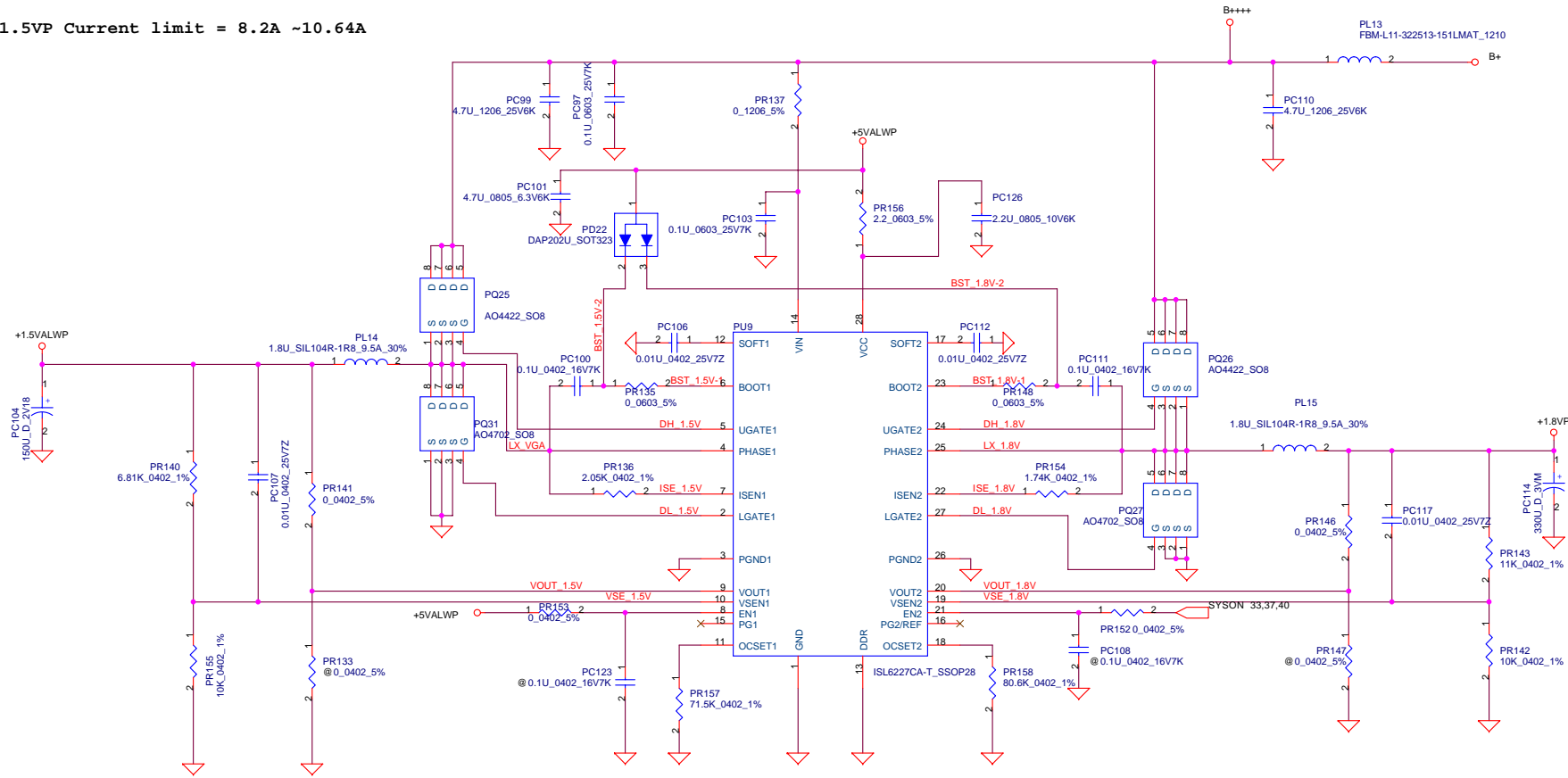
<b>Compal Electronics, Inc.</b>		
Title	<b>+VCC_H_CORE</b>	
Size	Document Number	Rev
B	<b>EFL50 LA-2761</b>	0.1
Date:	Wednesday, April 20, 2005	Sheet 46 of 51



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<b>Compal Electronics, Inc.</b>		
Title		
<b>1.5V &amp; 1.8V</b>		
Size	Document Number	Rev
<b>B</b>	<b>EFL50 LA-2761</b>	<b>0.1</b>
Date:	Wednesday, April 20, 2005	Sheet 47 of 51

+1.5VP Current limit = 8.2A ~10.64A



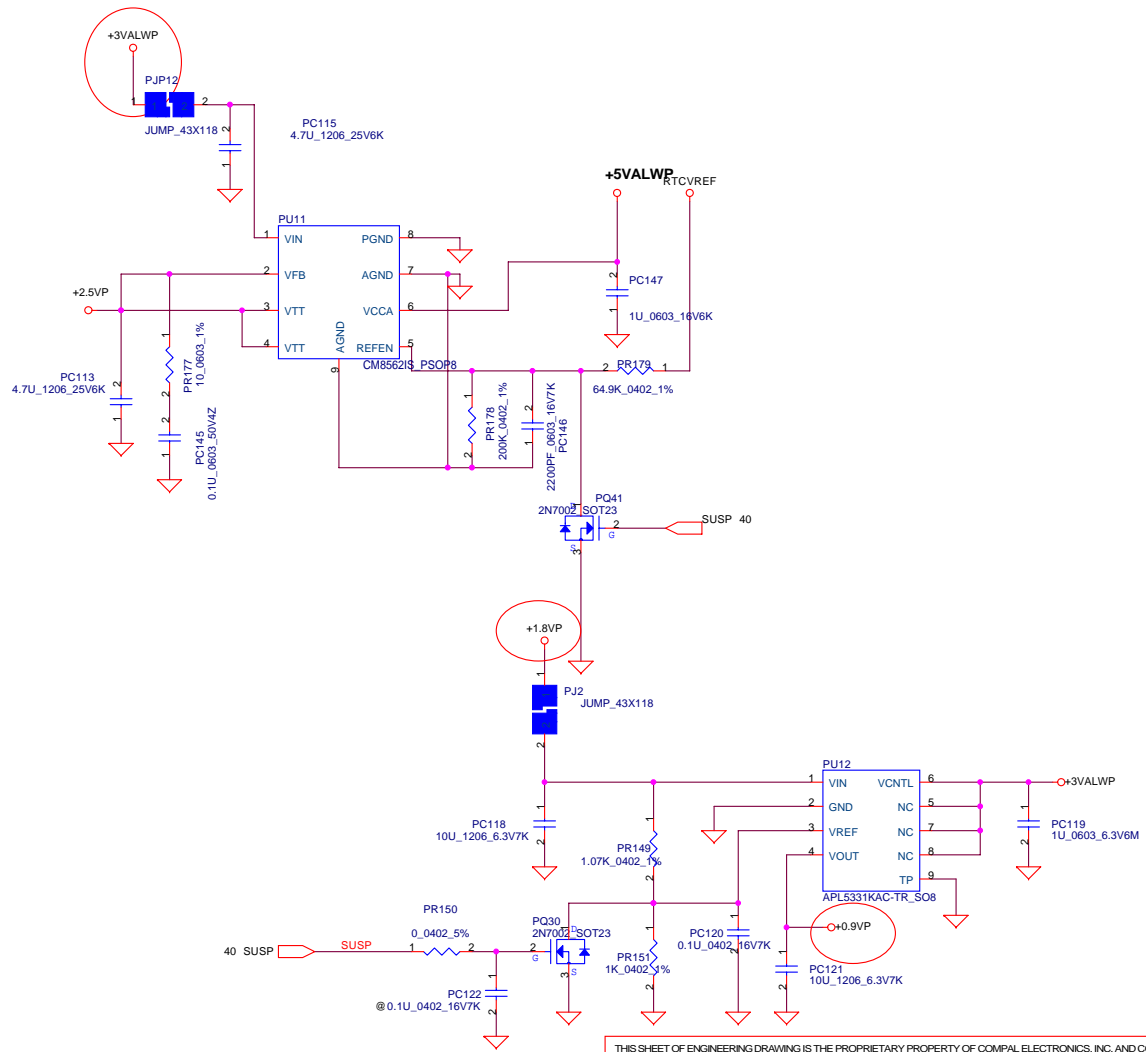
<b>915PM(DISCRETE)</b>	<b>PR143=11K 1.8VP=1.867V</b>
<b>915GM (UMA)</b>	<b>PR143=10.5K 1.8VP=1.8V</b>

**Compal Electronics, Inc.**

Title: **1.5VP**

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Size: B Document Number: EFL50 LA-2761 Rev: U.1



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<b>Compal Electronics, Inc.</b>		
Title		
<b>1.8VP/0.9VP/2.5VP</b>		
Size	Document Number	Rev
<b>B</b>	<b>EFL50 LA-2761</b>	<b>0.1</b>
Date: Wednesday, April 20, 2005		
Sheet 49 of 51		

Item	Fixed Issue	Reason for change	Rev.	PG#	Modify List	VER	Phase
1	Add C663, C664, C665	For +2.5V (VCC_SYNC)	0.2	9			
2	Add C658, C659, C660, C661, C662	For EMI Solution	0.2	11			
3	Change L43, L44, L45, L46 Net	Improve Audio	0.2	31			
4							
5							
6							
7							
8							
9							

Security Classification		Compal Secret Data		Title	
Issued Date	2005/03/08	Deciphered Date	2006/03/08	PIR (HW)	
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				Date:	Wednesday, April 20, 2005
				Sheet	50 of 51
				Rev	0.2

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

Item	Fixed Issue	Reason for change	Rev.	PG#	Modify List	VER	Phase
1		Modify PU8 IC		47	1. change PU8 from MAX8576 to MAX8578 2.delete PC132		DVT
2		Modify 1.05VP voltage level		47	1. change PR166 from 7.15k to 4.7k , PC135 from 6800P to 0.047u 0603		DVT
3		change precharge detect point		42	1. change PR20 from 412k to 330k		DVT
4		Modify disable precharge respond time		42	1. change PR167/PR168/PR169 from 470k to 100k		DVT
5		PD16 PIN2 AND PIN3 are wrong		45	1. modify PD16 schematic,and delete PD16(only reserve)		DVT
6		for decrease BATT connector EMI		45	1. add PC151/PC152/PC153 :680PF		DVT
7		for decrease CPU CORE switching ring effect and add EMI solution : snubber		46	1. change PR94/PR116 from 0 to 2.2 add PR189//PR188 4.7 1206 ,add PC150/PC149 680P		DVT
8		for decreaseVCCP ripple		47	1. change PC137 from 150u 35m to 220u 15m		DVT2
9		add EMI solution		45 46 43	1. add PC152 1. add PR190/191:2.2 1. add PR192:2.2		DVT2
10		add EMI solution		47	1. add PL18 FBM L11		PVT
11		add EMI solution in 1.05VP power regulator		47	1. add PC153=680PF ,PR193=4.7		PVT
8							
9							