

Compal Confidential

DAT20 Schematics Document

Banias uFCPGA Package with 855PM(Odem) + ICH4-M

2003-09-25

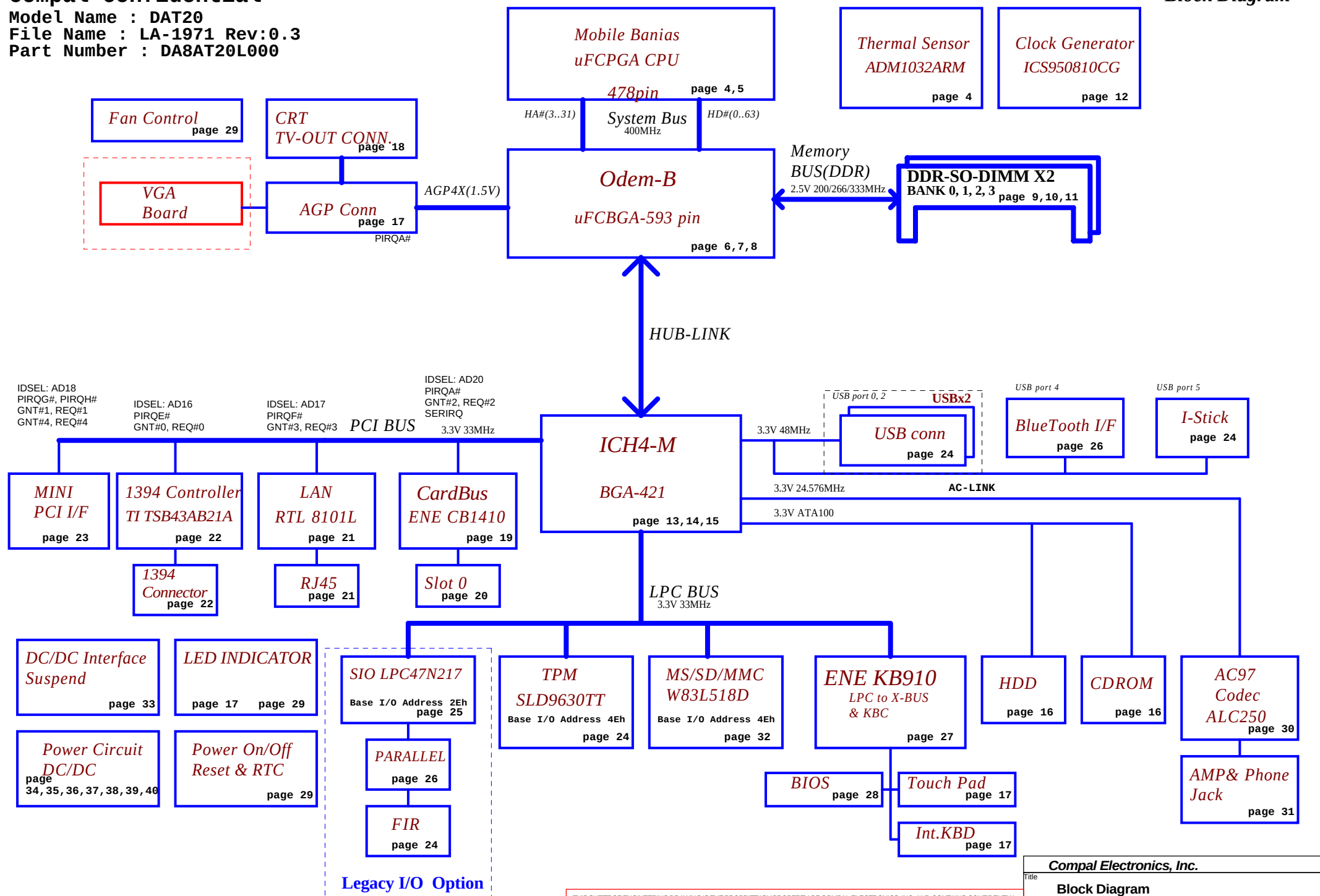
REV: 0.3

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Title			
Compal Electronics, Inc.			
Cover Sheet			
Size	Document Number		Rev
Custom	DAT20 LA-1971		0.3
Date:	Friday, September 26, 2003	Sheet	1 of 42

Model Name : DAT20
File Name : LA-1971 Rev:0.3
Part Number : DA8AT20L000

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Voltage Rails

Power Plane	Description	S0-S1	S3	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
+VCCP	1.05V rail for Processor I/O	ON	OFF	OFF
+1.2VS	1.2VS switched power rail for MCH	ON	OFF	OFF
+1.25VS	1.25V switched power rail	ON	OFF	OFF
+1.5VALW	1.5V power rail	ON	ON	ON
+1.5VS	AGP 4X	ON	OFF	OFF
+1.8VS	1.8V switched power rail	ON	OFF	OFF
+2.5V	2.5V power rail	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*
+5V	5V power rail	ON	ON	OFF
+5VS	5V switched power rail	ON	OFF	OFF
+12VALW	12V 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	IDSEL#	REQ#GNT#	Interrupts
VGA			PIRQA
CardBus	AD20	2	PIRQA
LAN	AD17	3	PIRQF
Mini-PCI	AD18,AD22	1/4	PIRQG/PIRQH
1394	AD16	0	PIRQE

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		

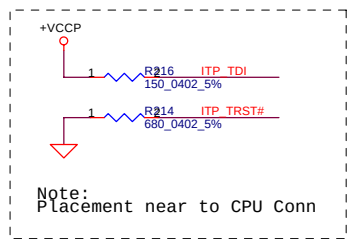
ICH4-M SM Bus address

Device	Address
Clock Generator (ICS950810C6)	1101 001Xb
DDR DIMM0	1010 000Xb
DDR DIMM1	1010 001Xb

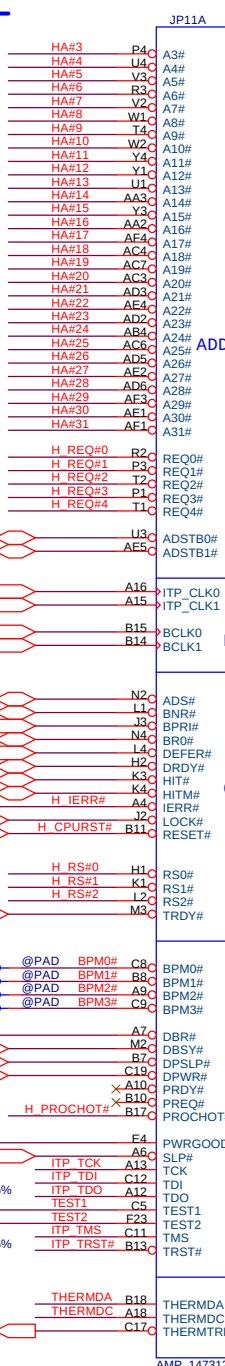
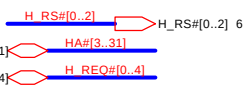
Board ID Table for AD channel

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

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



Note:
Placément near to CPU Conn



Banias

ADDR GROUP

DATA GROUP

HOST CLK

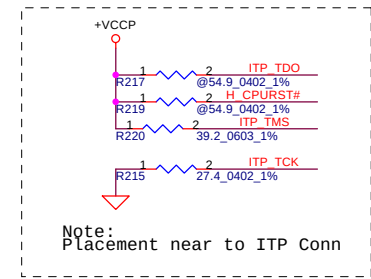
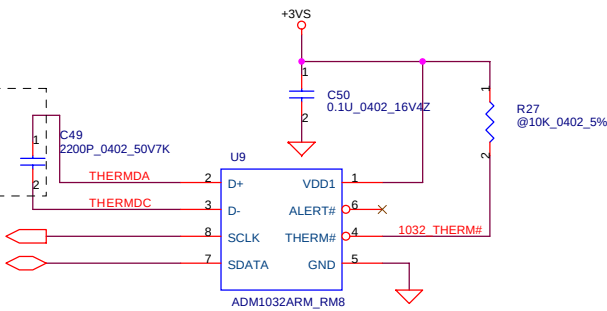
CONTROL GROUP

MISC

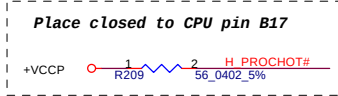
LEGACY CPU

THERMAL DIODE

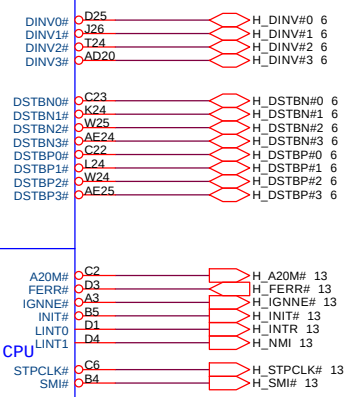
Place closed to
CPU related Pin
A18 / B18



Note:
Placément near to ITP Conn

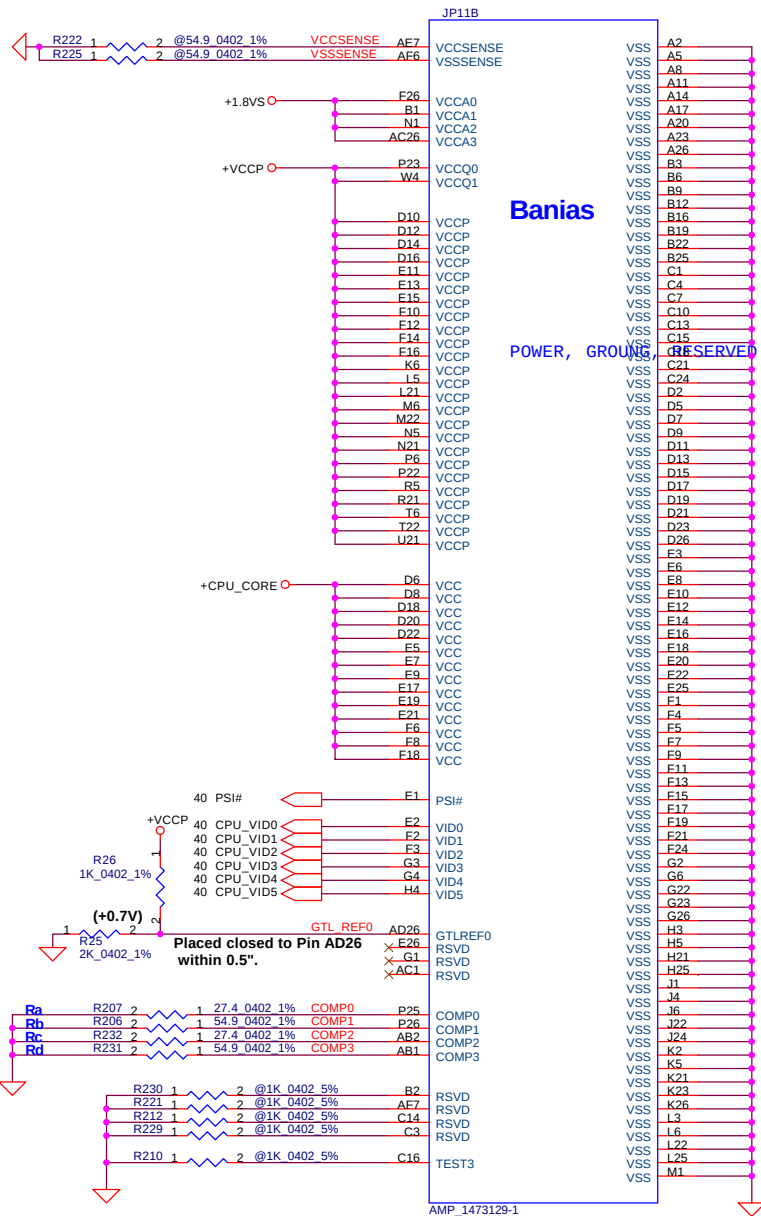


Place closed to CPU pin B17

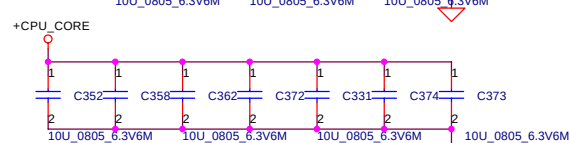
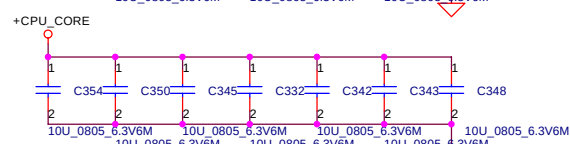
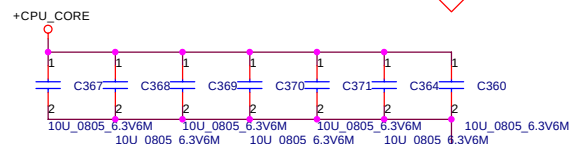
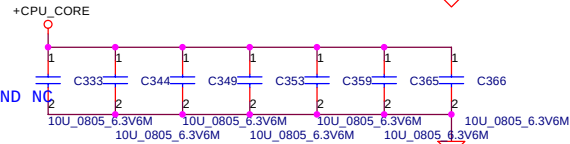
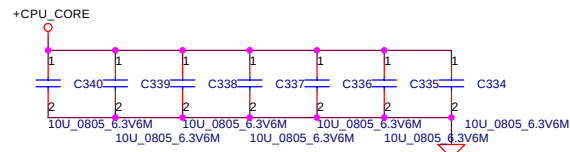
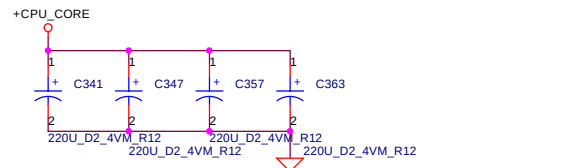


Compal Electronics, Inc.			
Banias Processor in mFCPGA479 (1/2)			
Size	Document Number	Rev	
Custom	DAT20 LA-1971	0.3	
Date:	Friday, September 26, 2003	Sheet	4 of 42

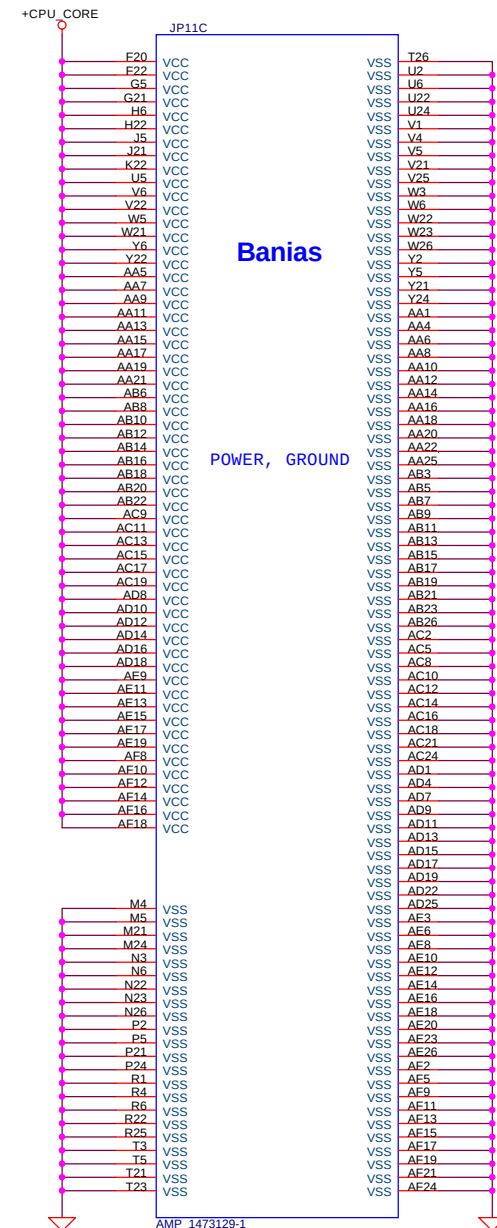
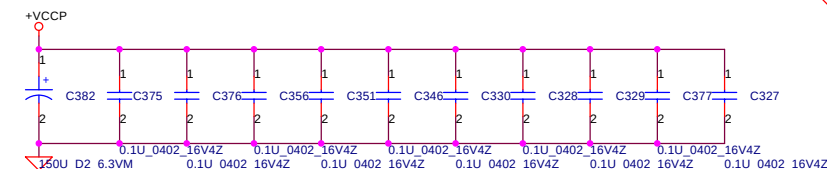
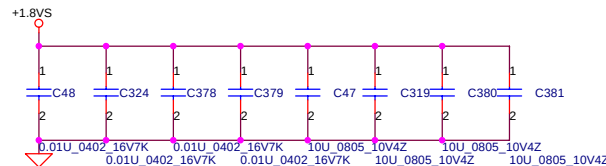
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Ra, Rb, Rc, Rd placed close to related pin within 0.5".
COMP0/1/2/3 Trace should 25mil away from any other toggling signal.



Vcc-core Decoupling	C, uF	ESR, mohm	ESL, nH
SPCAP, Polymer	4X220uF	12m ohm/4	3.5nH/4
MLCC 0805 X5R	35X10uF	5m ohm/35	0.6nH/35



4 H_RS#[0..2] H_RS#[0..2]
4 HA#[3..31] HA#[3..31]
4 H_REQ#[0..4] H_REQ#[0..4]

HD#[0..63] HD#[0..63] 4

17 AGP_AD[0..31] AGP_AD[0..31]
17 AGP_C/BE#[0..3] AGP_C/BE#[0..3]
17 AGP_SBA[0..7] AGP_SBA[0..7]

AGP AD0 R27
AGP AD1 R28
AGP AD2 T25
AGP AD3 R25
AGP AD4 T26
AGP AD5 T27
AGP AD6 U27
AGP AD7 U28
AGP AD8 V26
AGP AD9 V27
AGP AD10 T23
AGP AD11 U23
AGP AD12 T24
AGP AD13 U24
AGP AD14 U25
AGP AD15 V24
AGP AD16 V27
AGP AD17 V26
AGP AD18 AA28
AGP AD19 AB25
AGP AD20 AB27
AGP AD21 AB27
AGP AD22 AB26
AGP AD23 Y23
AGP AD24 AB23
AGP AD25 AA24
AGP AD26 AA25
AGP AD27 AB24
AGP AD28 AC25
AGP AD29 AC24
AGP AD30 AC22
AGP AD31 AC24

AGP C/BE#0 V25
AGP C/BE#1 V23
AGP C/BE#2 Y25
AGP C/BE#3 AA23

17 AGP_FRAME# Y24
17 AGP_DEVSEL# W28
17 AGP_IRDY# W27
17 AGP_TRDY# W24
17 AGP_STOP# W23
17 AGP_PAR W25
17 AGP_REQ# AG24
17 AGP_GNT# AH25

17 AGP_ADSTB0 R24
17 AGP_ADSTB0# R23
17 AGP_ADSTB1 AC27
17 AGP_ADSTB1# AC28

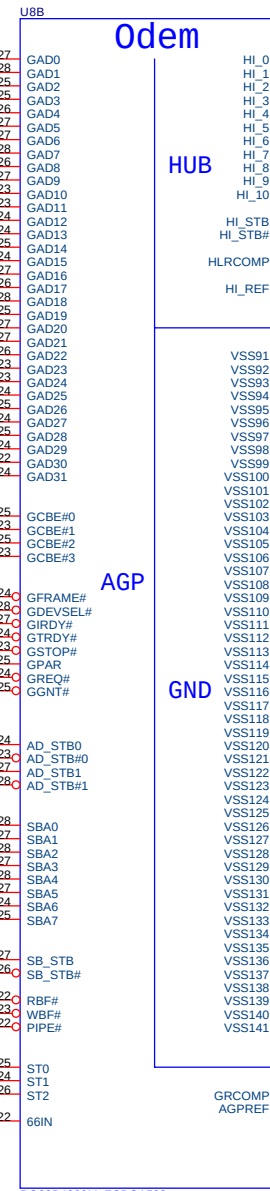
AGP SBA0 AH28
AGP SBA1 AH27
AGP SBA2 AG28
AGP SBA3 AG27
AGP SBA4 AE28
AGP SBA5 AE27
AGP SBA6 AE24
AGP SBA7 AE25

17 AGP_SBSTB AE27
17 AGP_SBSTB# AE26
17 AGP_RBF# AE22
17 AGP_WBF# AE23
17 AGP_PIPE# AE22

17 AGP_ST0 AG25
17 AGP_ST1 AG24
17 AGP_ST2 AG26

12 CLK_MCH_66M CLK MCH 66M P22

CLK MCH 66M
R197 @22_0402_5%
C294 @10P_0402_50V8K



ST1	ST2	MCH	STRAP
X	1	DDR	
0	X	TEST MODE	
1	X	400 Mhz PSB	

Note:
Ra & Rb placed at
center of MCH and AGP

Compal Electronics, Inc.

DDR_SMA[0..12] DDR_SMA[0..12] 9

9 DDR_SDQ[0..63] DDR_SDQ[0..63]

9 DDR_SDQS[0..8] DDR_SDQS[0..8]

9 DDR_CB[0..7] DDR_CB[0..7]

U8C

Odem

MEMORY

DDR SMA0 E12
DDR SMA1 E17
DDR SMA2 E16
DDR SMA3 G17
DDR SMA4 G18
DDR SMA5 E18
DDR SMA6 F19
DDR SMA7 G20
DDR SMA8 G19
DDR SMA9 F21
DDR SMA10 F13
DDR SMA11 F20
DDR SMA12 G21
XG22

DDR SDQS0 F26
DDR SDQS1 C26
DDR SDQS2 C23
DDR SDQS3 B19
DDR SDQS4 D12
DDR SDQS5 C18
DDR SDQS6 C5
DDR SDQS7 F3
DDR SDQS8 F15

9 DDR_SWE#
9 DDR_SRASH#
9 DDR_SCASH#

9 DDR_CLK0
9 DDR_CLK0#
9 DDR_CLK1
9 DDR_CLK1#
9 DDR_CLK2
9 DDR_CLK2#
10 DDR_CLK3
10 DDR_CLK3#
10 DDR_CLK4
10 DDR_CLK4#
10 DDR_CLK5
10 DDR_CLK5#

9,10 DDR_CKE0
9,10 DDR_CKE1
10 DDR_CKE2
10 DDR_CKE3

9,10 DDR_SCS#0
9,10 DDR_SCS#1
10 DDR_SCS#2
10 DDR_SCS#3

9 DDR_SBS0
9 DDR_SBS1

G11
F11
G8

J25
K25
G5
F5
G24
F24
G25
J24
G6
G7
K23
J23

G23
E22
H23
F23

E9
F7
F9
F7

G12
G13

SMVREF0
SMVREF1

SMRCOMP

RCVENIN#

RCVENOUT#

DPSP#
DPWR#
NC0
NC1

AD26
AD27

RG82P4300M_FCBGA593

SDQ0
SDQ1
SDQ2
SDQ3
SDQ4
SDQ5
SDQ6
SDQ7
SDQ8
SDQ9
SDQ10
SDQ11
SDQ12
SDQ13
SDQ14
SDQ15
SDQ16
SDQ17
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SDQ60
SDQ61
SDQ62
SDQ63
SDQ64
SDQ65
SDQ66
SDQ67
SDQ68
SDQ69
SDQ70
SDQ71

RSTIN#
RSVD1
TESTIN#

PCIRST# 13,19,20,21,23,24,25

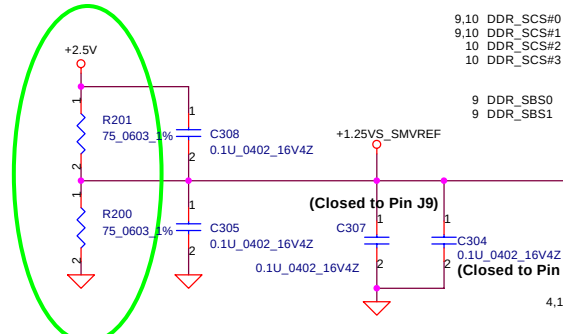
MCH TEST# 1

R205 @4.7K_0402_5%

+1.5VS

DDR CB0
DDR CB1
DDR CB2
DDR CB3
DDR CB4
DDR CB5
DDR CB6
DDR CB7

DDR CB0 9
DDR CB1 9
DDR CB2 9
DDR CB3 9
DDR CB4 9
DDR CB5 9
DDR CB6 9
DDR CB7 9



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Title

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Date:

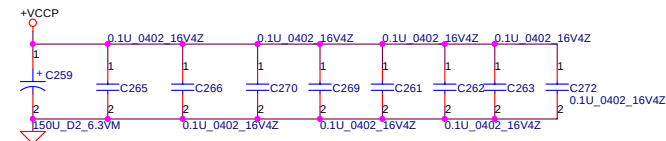
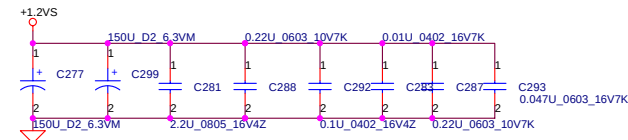
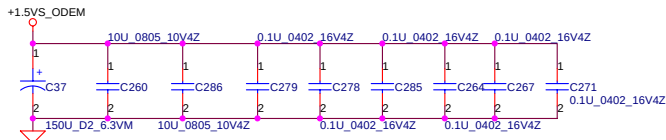
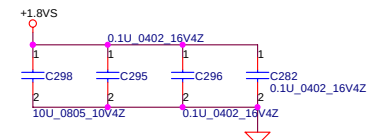
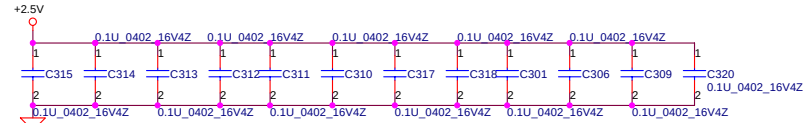
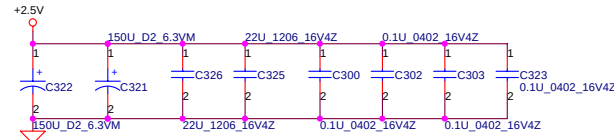
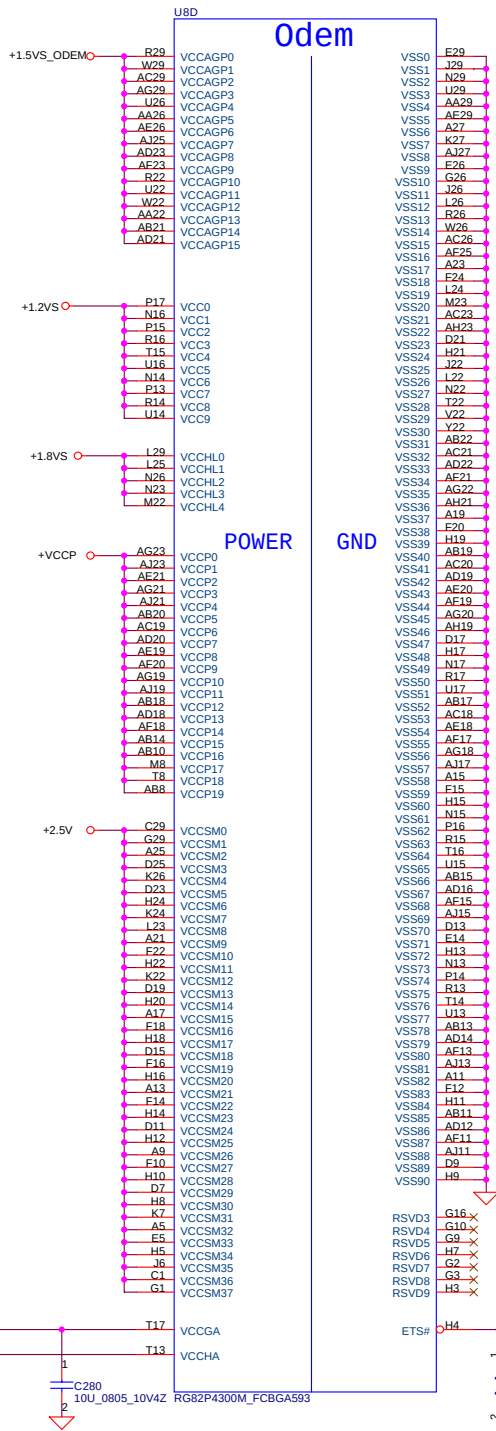
Friday, September 26, 2003

Sheet

7 of 42

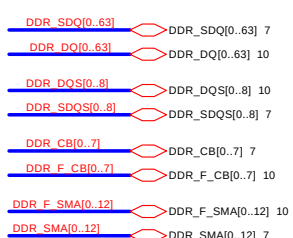
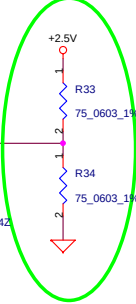
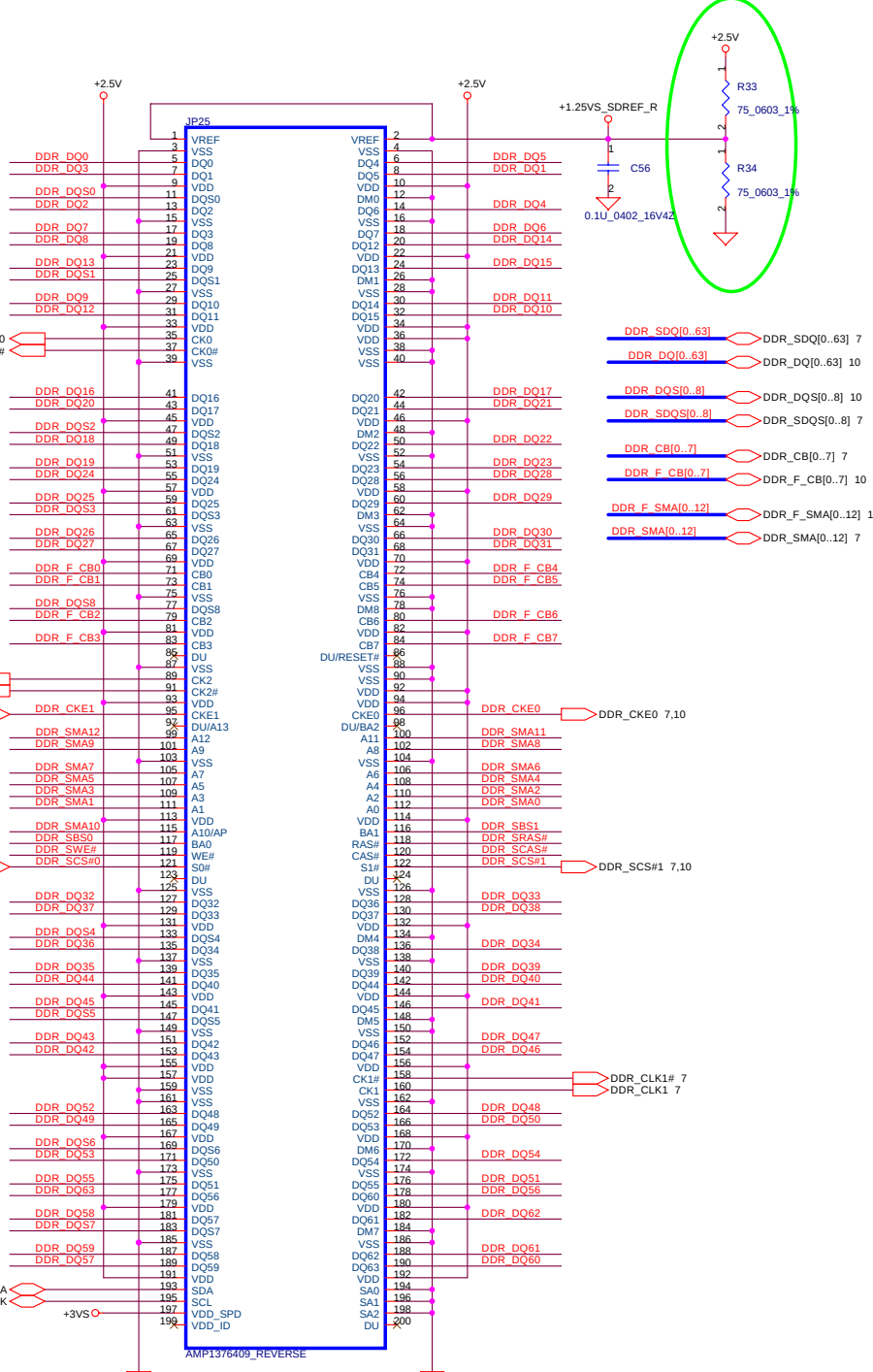
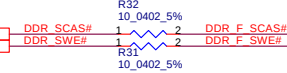
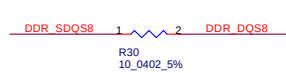
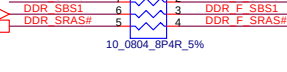
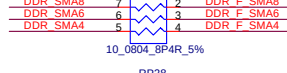
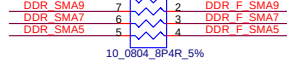
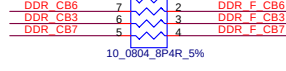
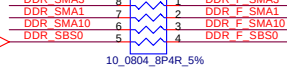
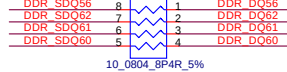
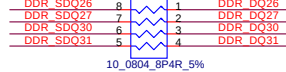
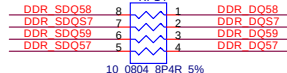
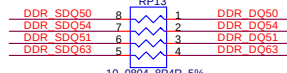
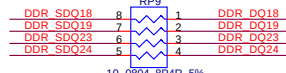
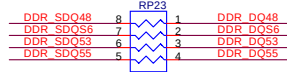
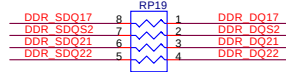
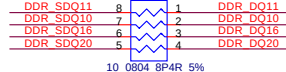
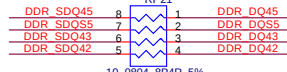
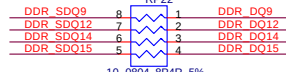
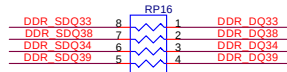
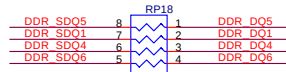
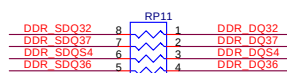
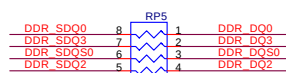
Rev

0.3



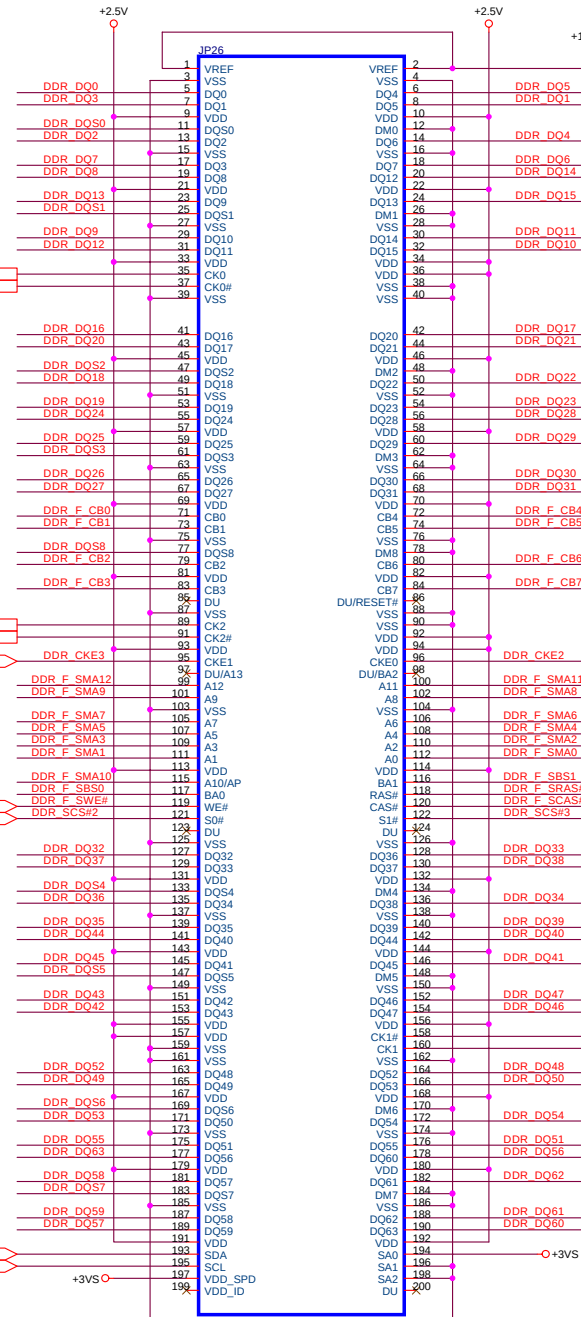
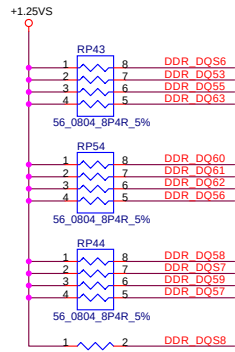
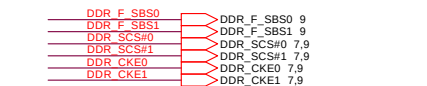
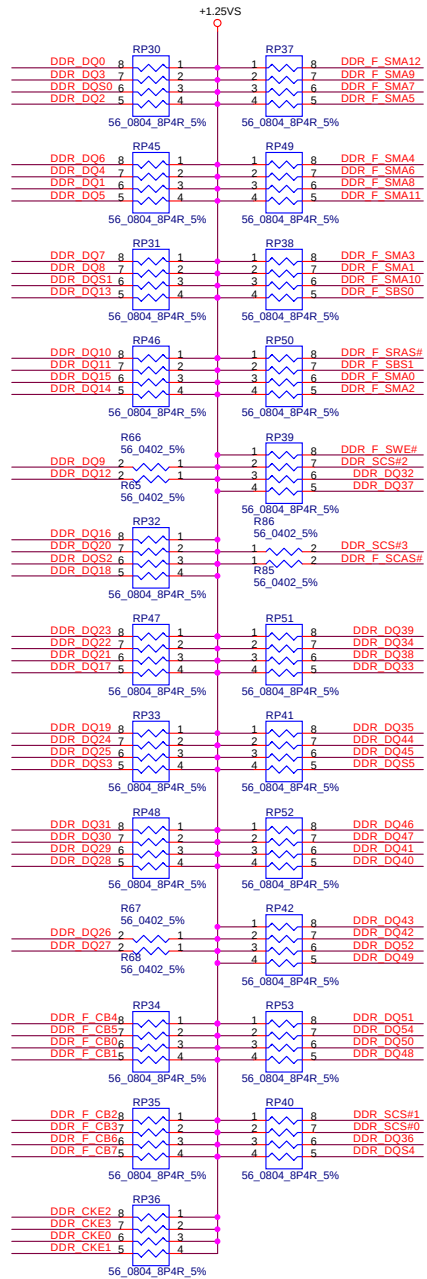
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Title			
DDR-SODIMM SLOT0			
Size	Document Number	Rev	
Custom	DAT20 LA-1971	0.3	
Date:	Friday, September 26, 2003	Sheet	9 of 42

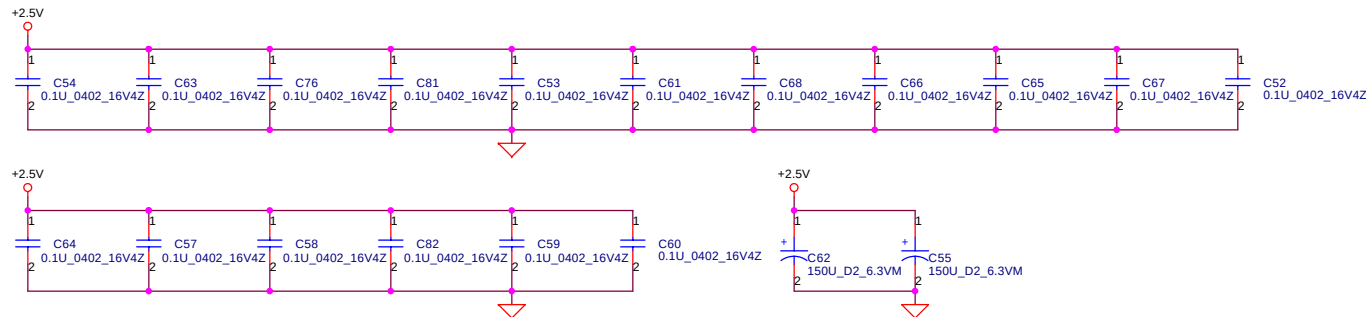


DIMM1

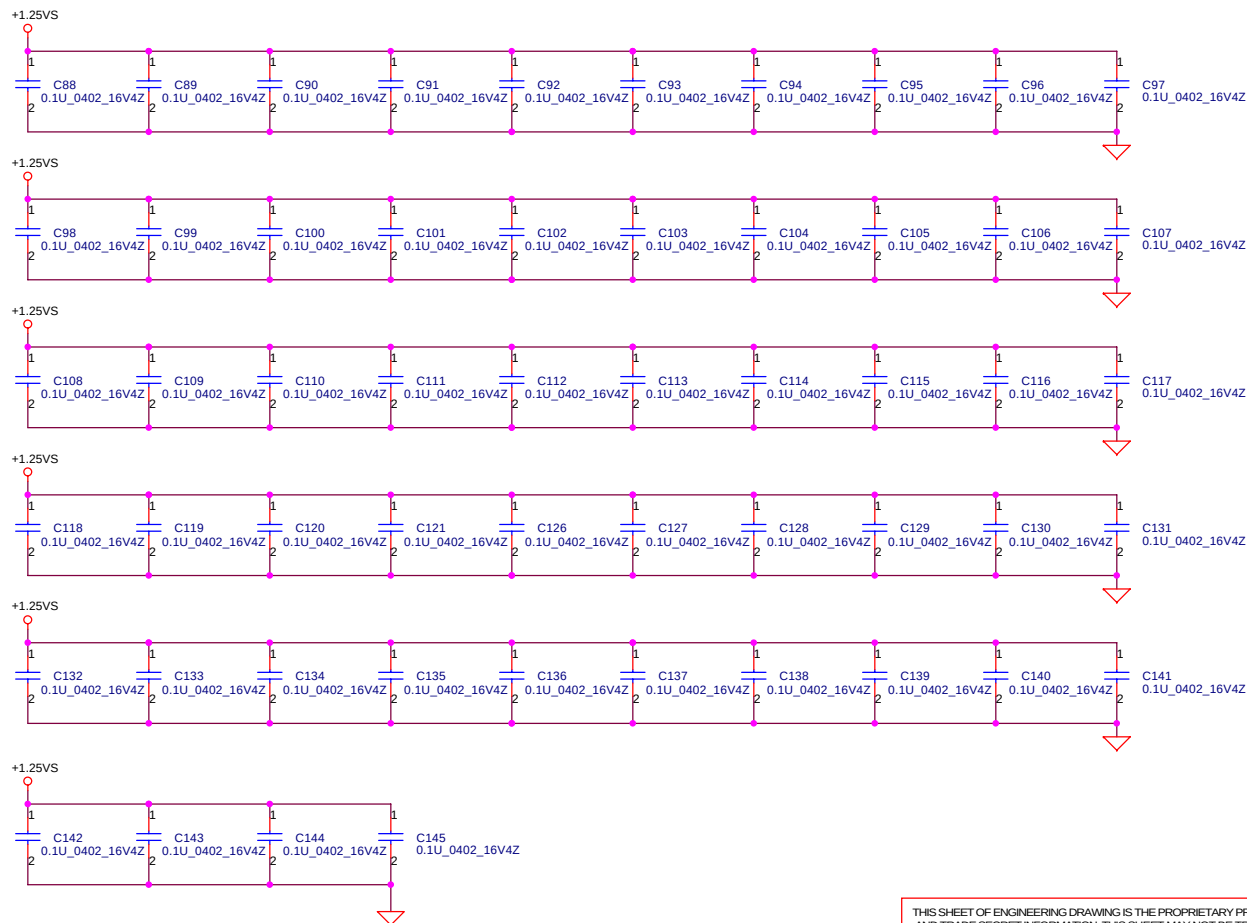
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Compal Electronics, Inc.			
DDR-SODIMM SLOT1			
Title	Document Number	Rev	
Size	Cuspm	DAT20 LA-1971	
Date:	Friday, September 26, 2003	Sheet	10 of 42

Layout note :
Distribute as close as possible
to DDR-SODIMM.



Layout note :
Place one cap close to every 2 pull up resistors termination to
+1.25V

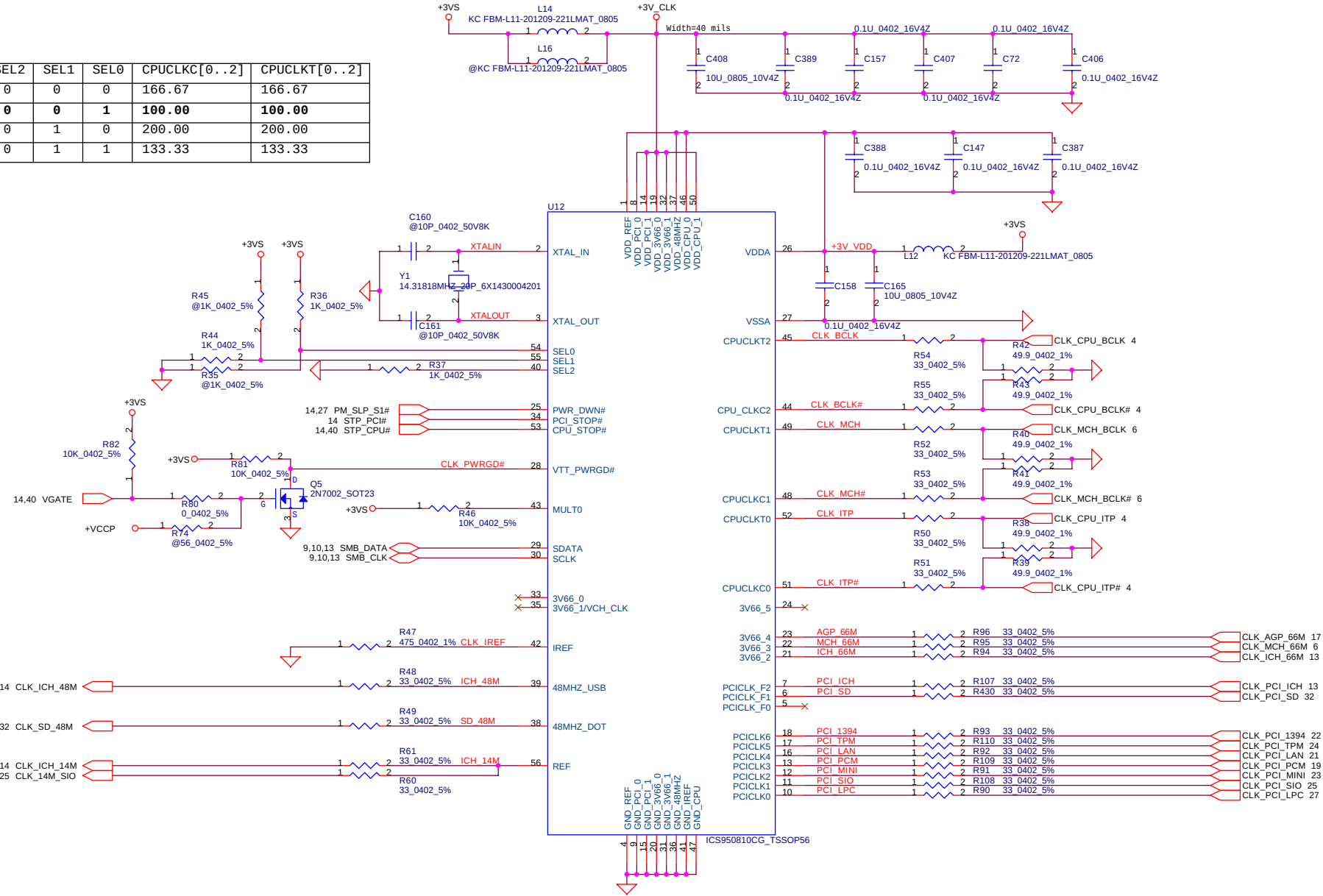


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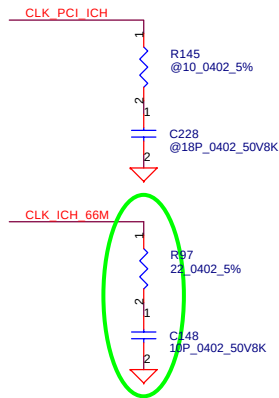
Compal Electronics, Inc.			
Title			
DDR SODIMM Decoupling			
Size	Document Number		Rev
Custom	DAT20 LA-1971		0.3
Date:	Friday, September 26, 2003	Sheet	11 of 42

Clock Generator

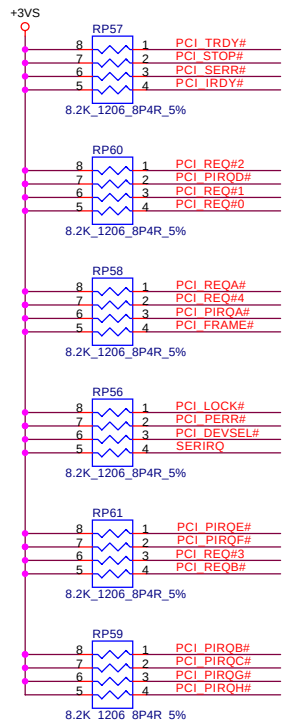
SEL2	SEL1	SEL0	CPUCLKC[0..2]	CPUCLKT[0..2]
0	0	0	166.67	166.67
0	0	1	100.00	100.00
0	1	0	200.00	200.00
0	1	1	133.33	133.33



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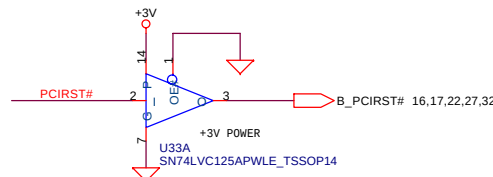
PCI Pullups



19,21,22,23 PCI_AD[0..31] PCI_AD[0..31]

PCI AD0	H5	AD0
PCI AD1	J3	AD1
PCI AD2	H3	AD2
PCI AD3	K1	AD3
PCI AD4	G5	AD4
PCI AD5	J4	AD5
PCI AD6	H4	AD6
PCI AD7	J5	AD7
PCI AD8	K2	AD8
PCI AD9	G2	AD9
PCI AD10	L1	AD10
PCI AD11	G4	AD11
PCI AD12	L2	AD12
PCI AD13	H2	AD13
PCI AD14	L3	AD14
PCI AD15	F5	AD15
PCI AD16	F4	AD16
PCI AD17	N1	AD17
PCI AD18	E5	AD18
PCI AD19	N2	AD19
PCI AD20	E3	AD20
PCI AD21	N3	AD21
PCI AD22	E4	AD22
PCI AD23	E2	AD23
PCI AD24	E2	AD24
PCI AD25	P1	AD25
PCI AD26	E1	AD26
PCI AD27	P2	AD27
PCI AD28	D3	AD28
PCI AD29	R1	AD29
PCI AD30	D2	AD30
PCI AD31	P4	AD31

19,21,22,23 PCI_C/BE#0	PCI_C/BE#0	J2	C/BE#0
19,21,22,23 PCI_C/BE#1	PCI_C/BE#1	K4	C/BE#1
19,21,22,23 PCI_C/BE#2	PCI_C/BE#2	M4	C/BE#2
19,21,22,23 PCI_C/BE#3	PCI_C/BE#3	N4	C/BE#3
22 PCI_REQ#0	PCI_REQ#0	B1	REQ#0
23 PCI_REQ#1	PCI_REQ#1	A2	REQ#1
19 PCI_REQ#2	PCI_REQ#2	B3	REQ#2
21 PCI_REQ#3	PCI_REQ#3	C7	REQ#3
23 PCI_REQ#4	PCI_REQ#4	B6	REQ#4
22 PCI_GNT#0	PCI_GNT#0	C1	GNT#0
23 PCI_GNT#1	PCI_GNT#1	E6	GNT#1
19 PCI_GNT#2	PCI_GNT#2	A7	GNT#2
21 PCI_GNT#3	PCI_GNT#3	B7	GNT#3
23 PCI_GNT#4	PCI_GNT#4	D6	GNT#4
12 CLK_PCI_ICH	CLK_PCI_ICH	P5	PCICLK
19,21,22,23 PCI_FRAME#	PCI_FRAME#	F1	FRAME#
19,21,22,23 PCI_DEVSEL#	PCI_DEVSEL#	M3	DEVSEL#
19,21,22,23 PCI_IRDY#	PCI_IRDY#	L5	IRDY#
19,21,22,23 PCI_PAR	PCI_PAR	G1	PAR
19,21,22,23 PCI_PERR#	PCI_PERR#	L4	PERR#
19,21,22,23 PCI_LOCK#	PCI_LOCK#	M2	LOCK#
7,19,20,21,23,24,25 PCIRST#	PCIRST#	W2	PME#
19,21,22,23 PCI_SERR#	PCI_SERR#	K5	SERR#
19,21,22,23 PCI_STOP#	PCI_STOP#	F3	STOP#
19,21,22,23 PCI_TRDY#	PCI_TRDY#	F2	TRDY#
16 SIDERST#	SIDERST#	B5	REOA#/GPI0
		A6	REQB#/GPI1/REQ#5
		E8	GNTA#/GPO16
		C5	GNTB#/GPO17/GNT#5



ICH4

SM I/F

INTRUDER#	W6	INTRUDER#	R143	10K_0402_5%	+RTCVCC
SMLINK0	AC3	SMLINK0			
SMLINK1	AB1	SMLINK1			
SMB_CLK	AC4	SMB_CLK			
SMB_DATA	AB4	SMB_DATA			
SMB_ALERT#/GPI11	AA5	ACIN			

CPU I/F

A20GATE	Y22	AB23	EC_GA20	27
A20M#	U23	U23	H_A20M#	4
DPSLP#	AA21	W1	H_DPSLP#	4,7
IGNNE#	V22	W2	H_IGNNE#	4
INTR	AB22	Y22	H_INTR	4
NMI	Y21	Y21	H_NMI	4
CPU_PWRGOOD	Y23	Y23	H_PWRGD	4
RCIN#	U21	U21	EC_KBRST#	27
SLP#	U22	U22	H_CPUSLP#	4
SMI#	U23	U23	H_SMI#	4
STPCLK#	U23	U23	H_STPCLK#	4

HUB I/F

HI0	L19	HUB_PD0	HUB_PD[0..10]	6
HI1	L20	HUB_PD1		
HI2	M19	HUB_PD2		
HI3	M21	HUB_PD3		
HI4	P19	HUB_PD4		
HI5	R19	HUB_PD5		
HI6	T20	HUB_PD6		
HI7	R20	HUB_PD7		
HI8	P23	HUB_PD8		
HI9	L22	HUB_PD9		
HI10	N22	HUB_PD10		
HI11	K21			
CLK66	T21	CLK_ICH_66M	CLK_ICH_66M	12
HI_STB	P21		HUB_PSTRB	6
HI_STB#	N20		HUB_PSTRB#	6
HICOMP	R23	HUB_RCOMP_ICH		
HUB_VREF	U23			
HUB_VSWING	R22			

Interrupt I/F

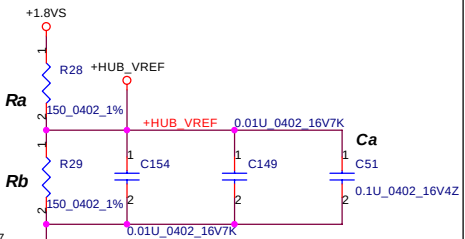
APICCLK	J19	APICCLK		
APICD0	H19	APICD0		
APICD1	K20	APICD1		
PIRQA#	D5	PCI_PIRQA#	PCI_PIRQA#	17,19
PIRQB#	C2	PCI_PIRQB#		
PIRQC#	B4	PCI_PIRQC#		
PIRQD#	A3	PCI_PIRQD#		
PIRQE#/GPI2	C8	PCI_PIRQE#	PCI_PIRQE#	22
PIRQF#/GPI3	D7	PCI_PIRQF#	PCI_PIRQF#	21
PIRQG#/GPI4	C3	PCI_PIRQG#	PCI_PIRQG#	23
PIRQH#/GPI5	C4	PCI_PIRQH#	PCI_PIRQH#	23
IRQ14	AC13	IRQ14	IRQ14	16
IRQ15	AA19	IRQ15	IRQ15	16
SERIRQ	J22	SERIRQ	SERIRQ	19,24,25,27,32

EEPROM I/F

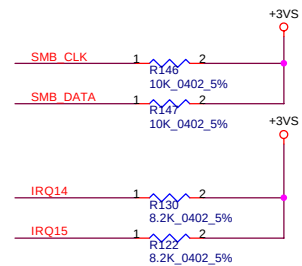
EE_CS	D10			
EE_IN	D11			
EE_OUT	A8			
EE_SHCLK	C12			

LAN I/F

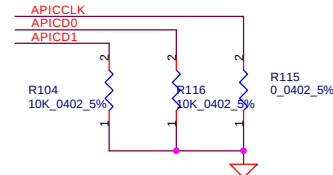
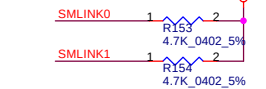
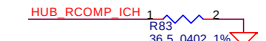
LAN_RXD0	A10			
LAN_RXD1	A9			
LAN_RXD2	A11			
LAN_TXD0	B10			
LAN_TXD1	C10			
LAN_TXD2	C11			
LAN_CLK	R11			
LAN_RST#	Y5			



Note: Ra, Rb, Ca placement center of MCH and ICH4M



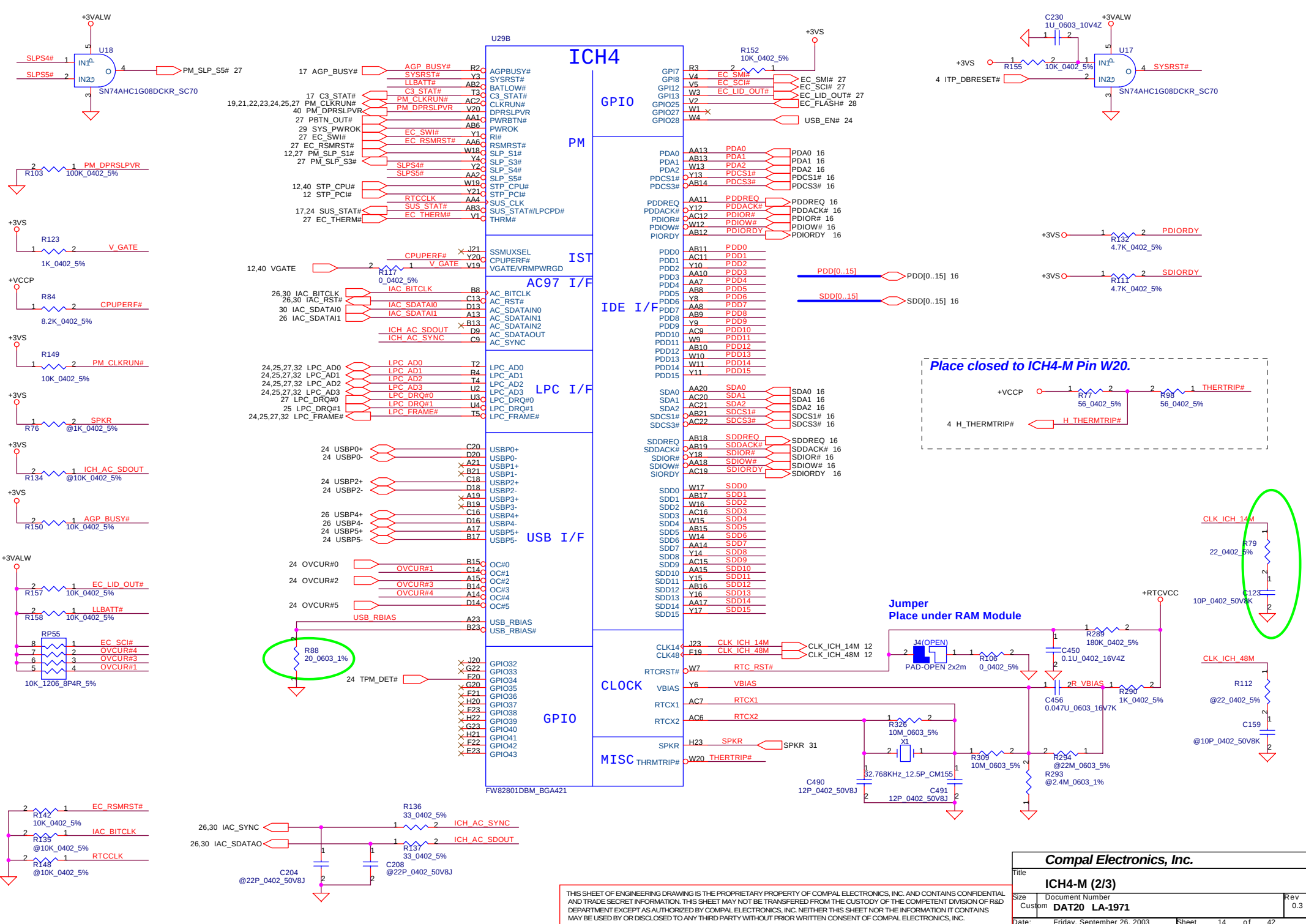
Place closed to Pin AA21



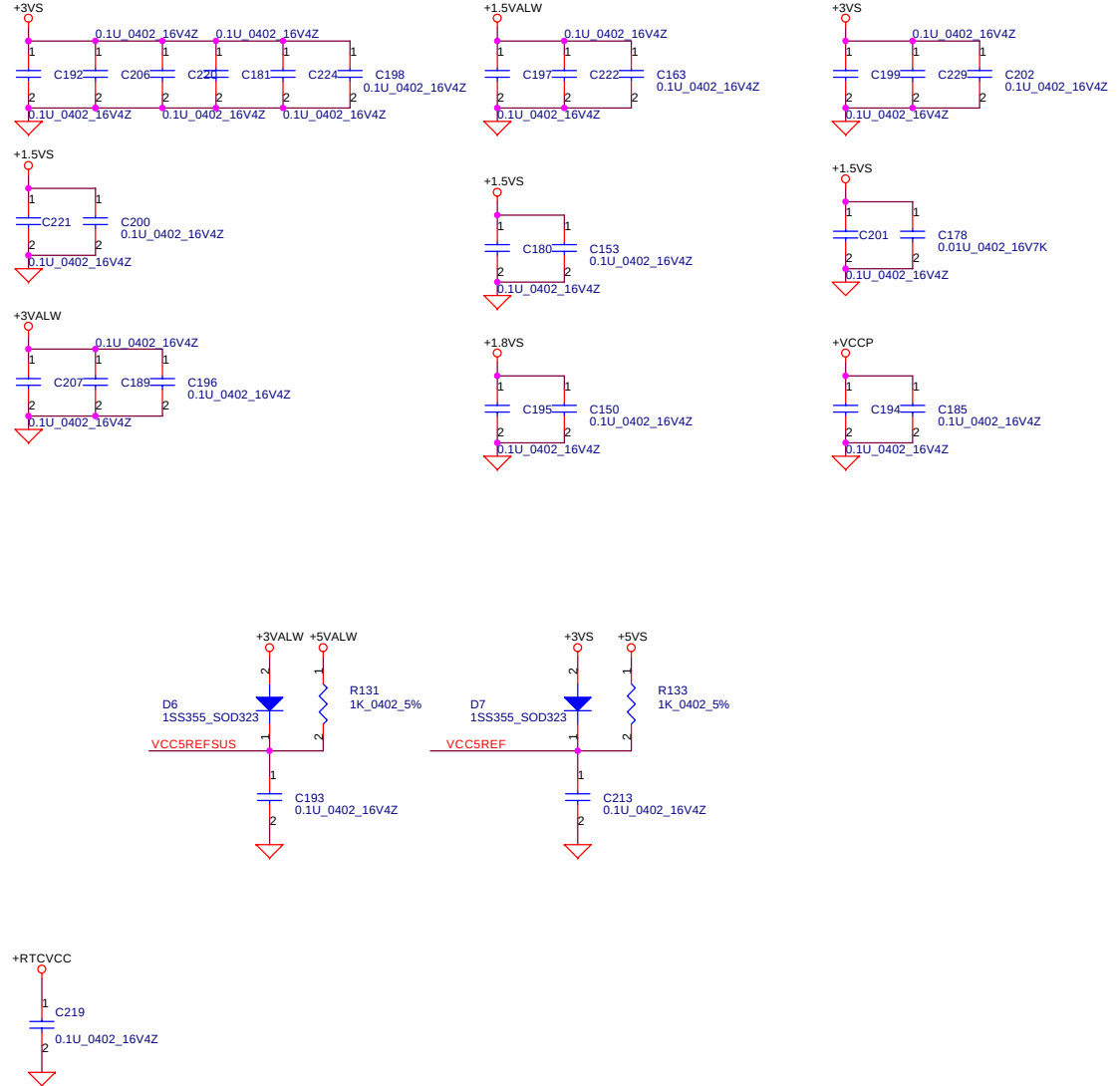
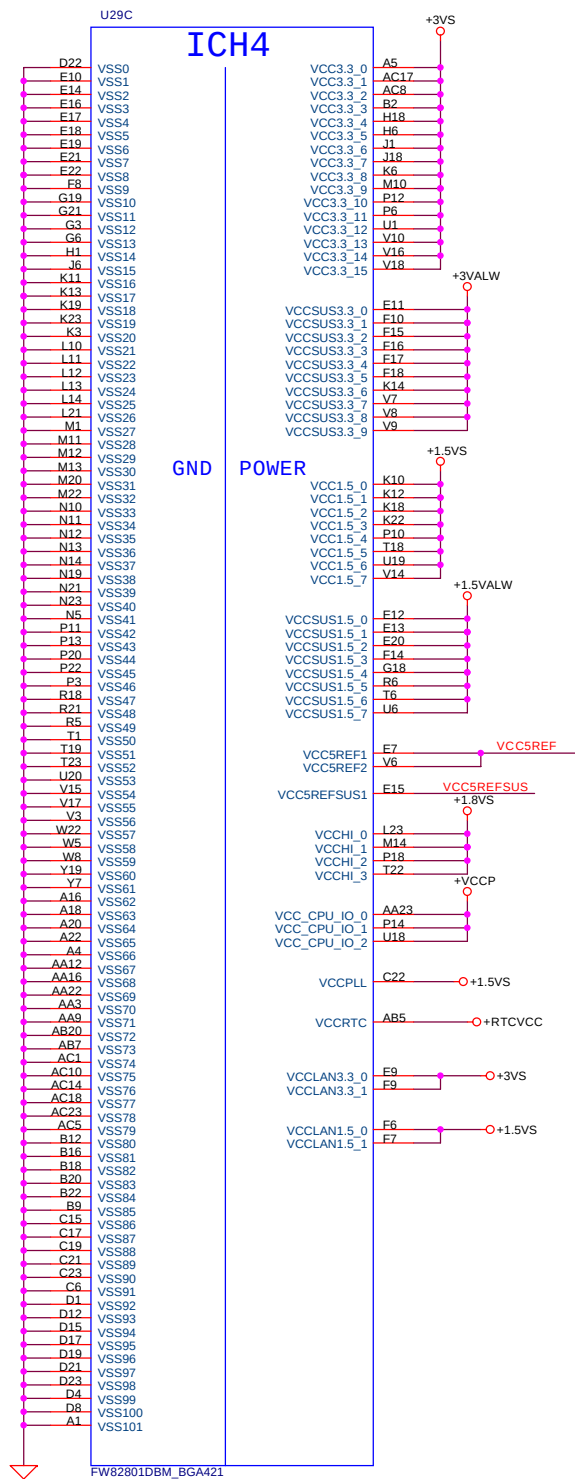
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Date:	Friday, September 26, 2003	Sheet	13	of	42

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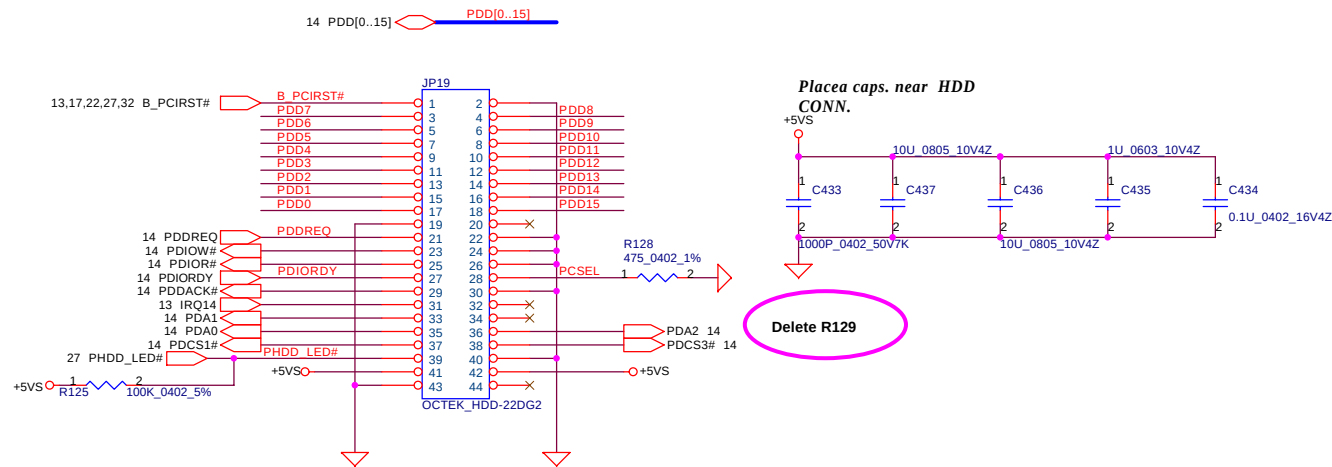
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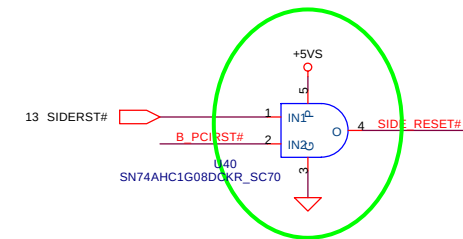
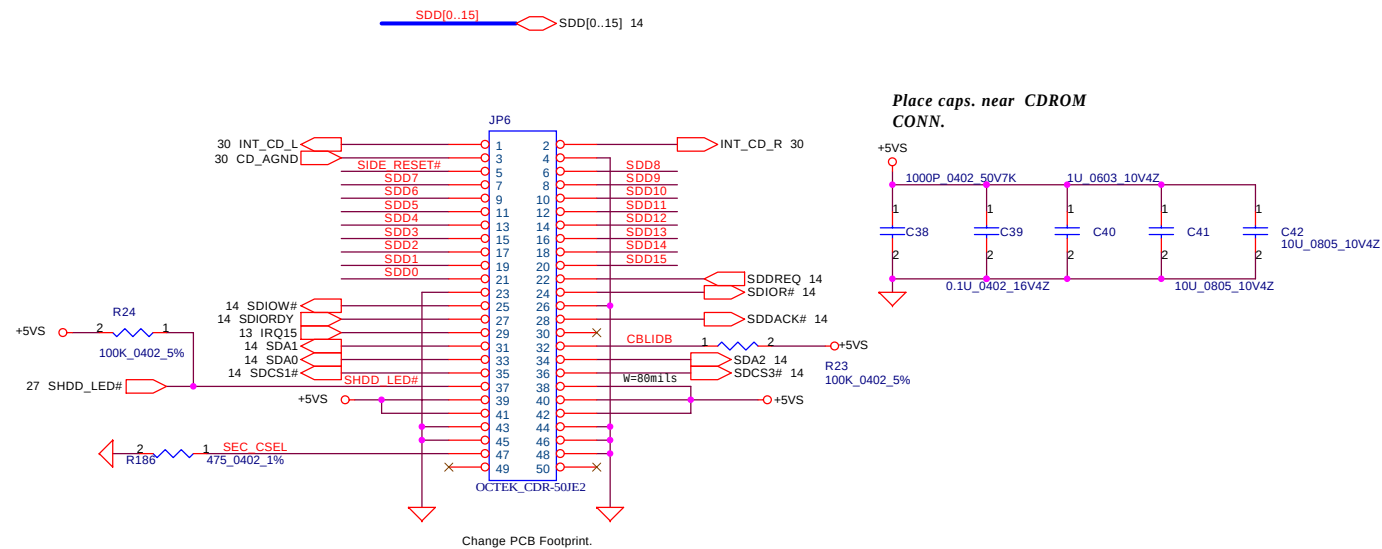
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Date:	Friday, September 26, 2003	Sheet	15 of 42

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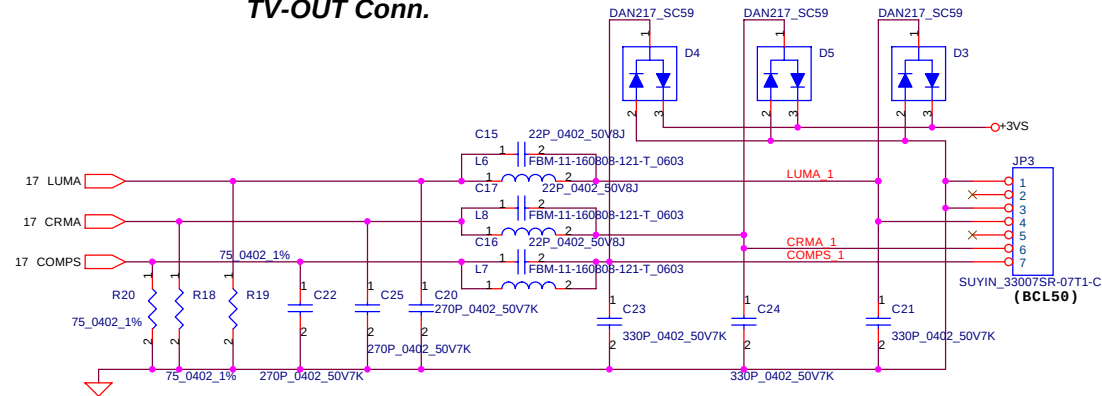
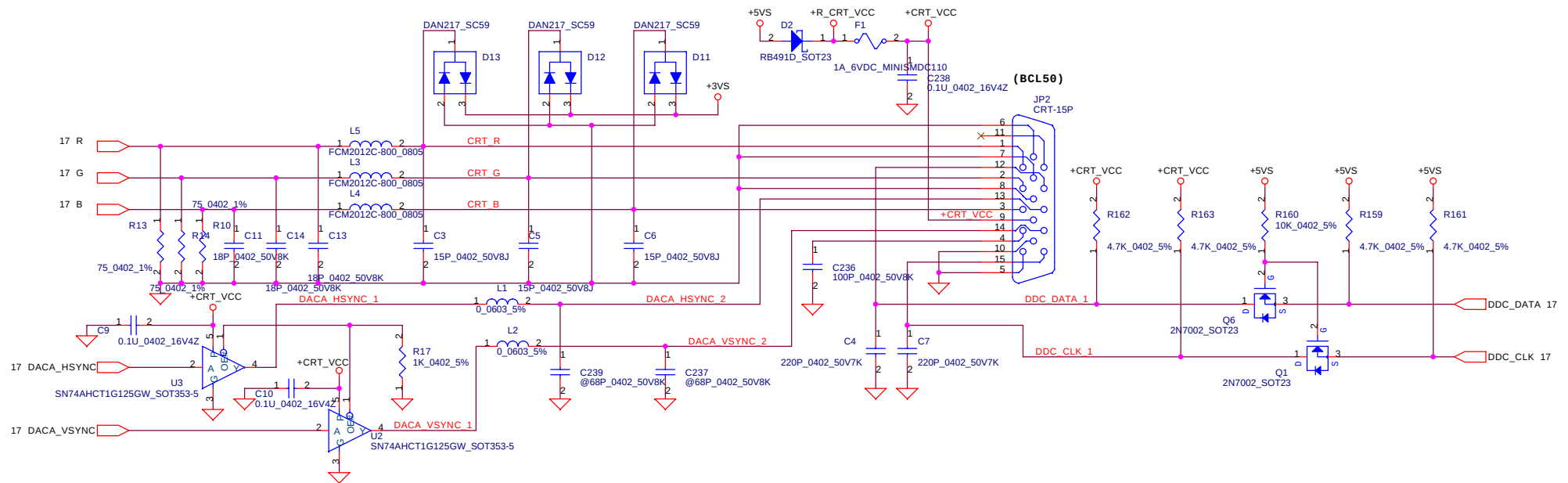
HDD Connector



CD-ROM Connector



CRT, TV-OUT CONNECTOR

TV-OUT Conn.**CRT Conn.**

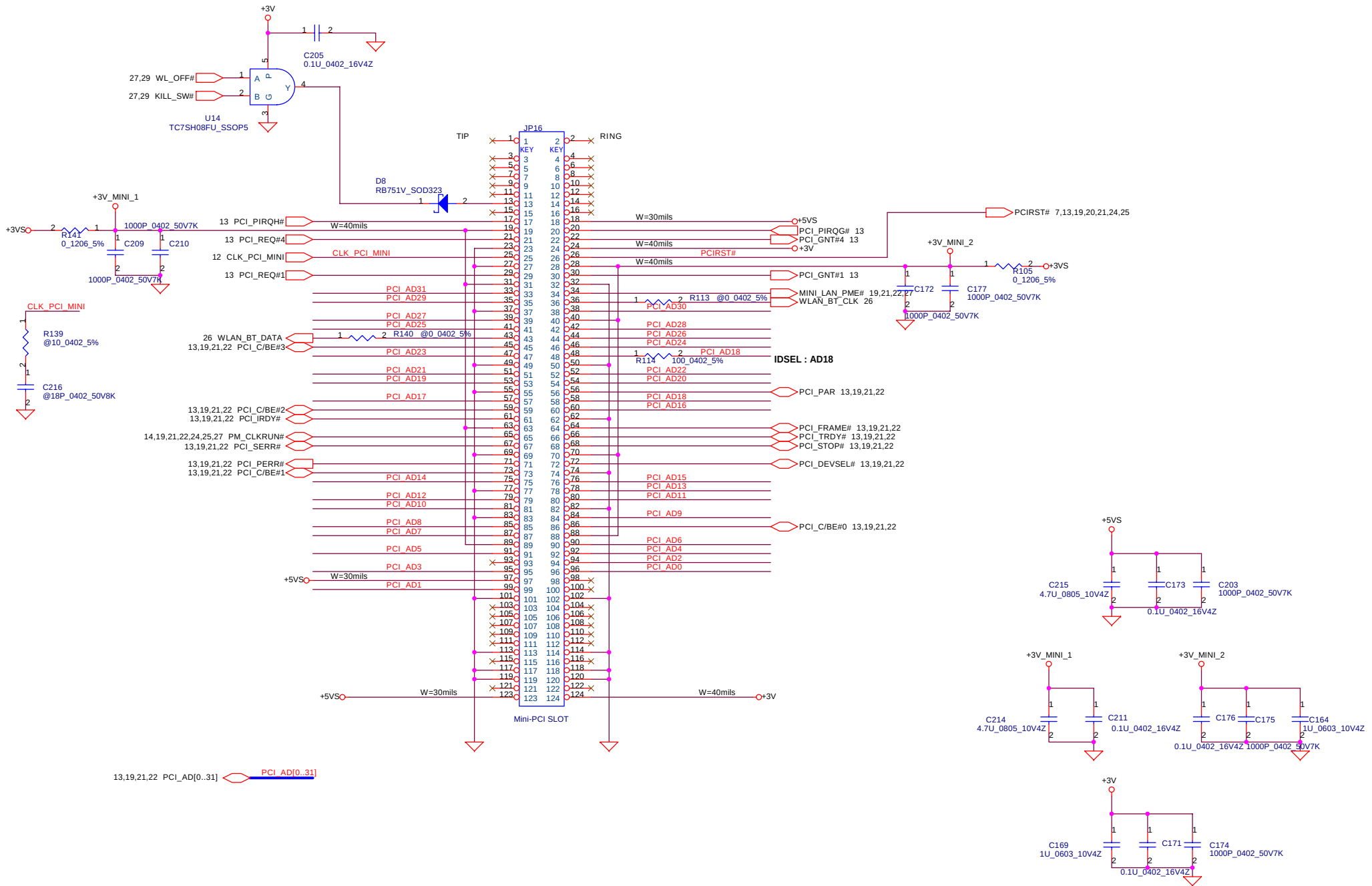
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Title	CRT,TV-OUT CONNECTOR
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Size	Document Number	Rev
Custom	DAT20 LA-1971	0.3

Date: Friday, September 26, 2003 Sheet 18 of 42

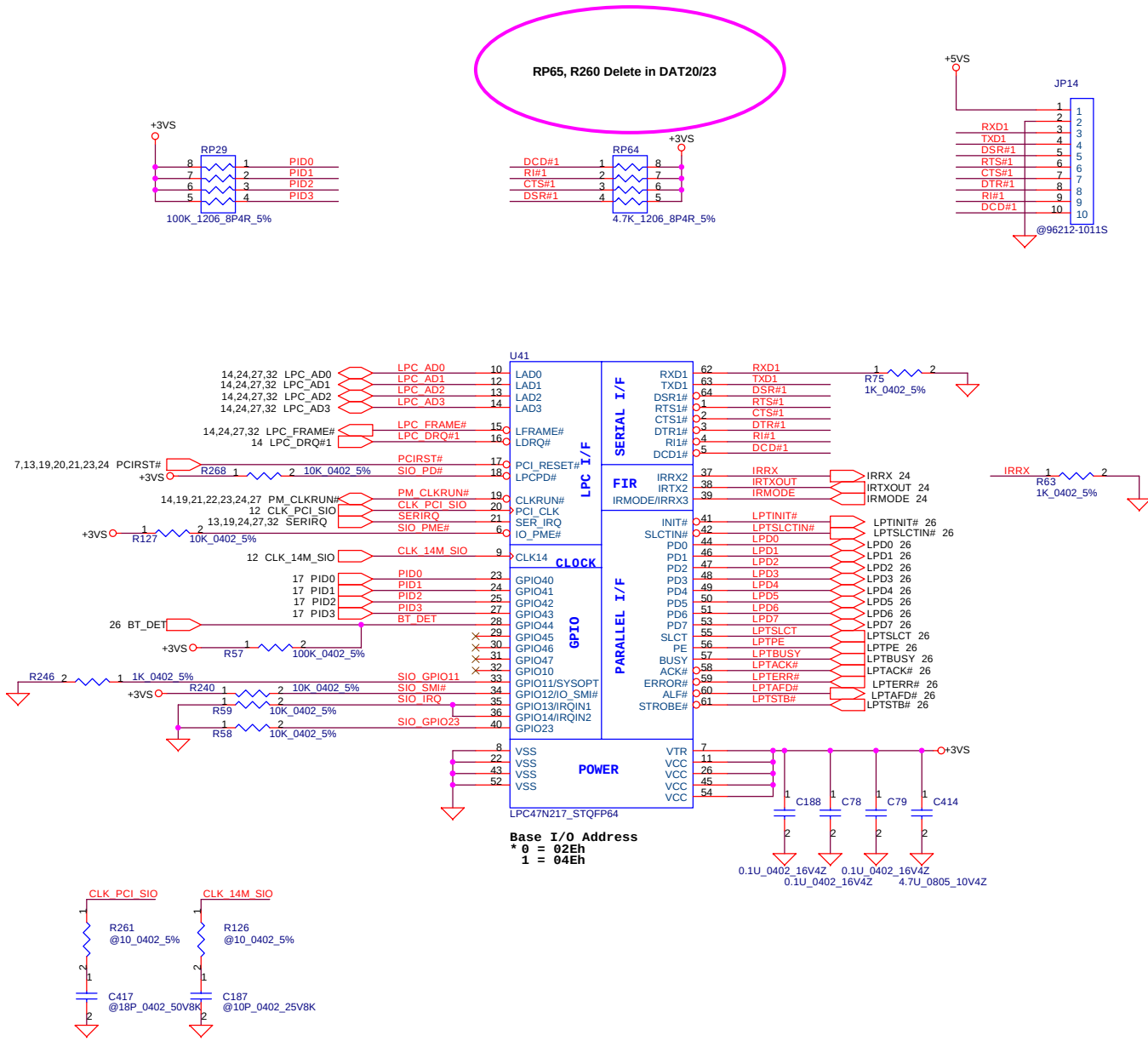
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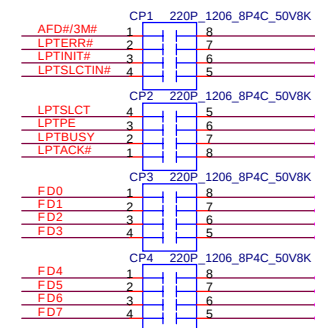


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Title			
Mini PCI Slot			
Size	Document Number		Rev
Custom	DAT20 LA-1971		0.3
Date:	Friday, September 26, 2003		Sheet 23 of 42

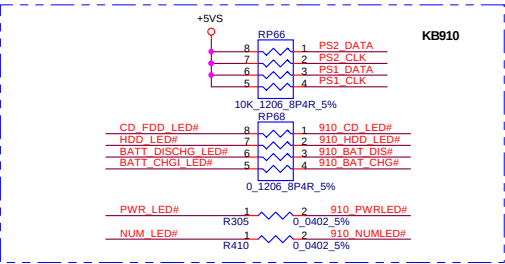
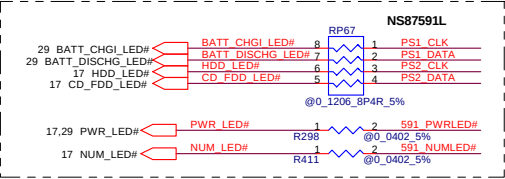
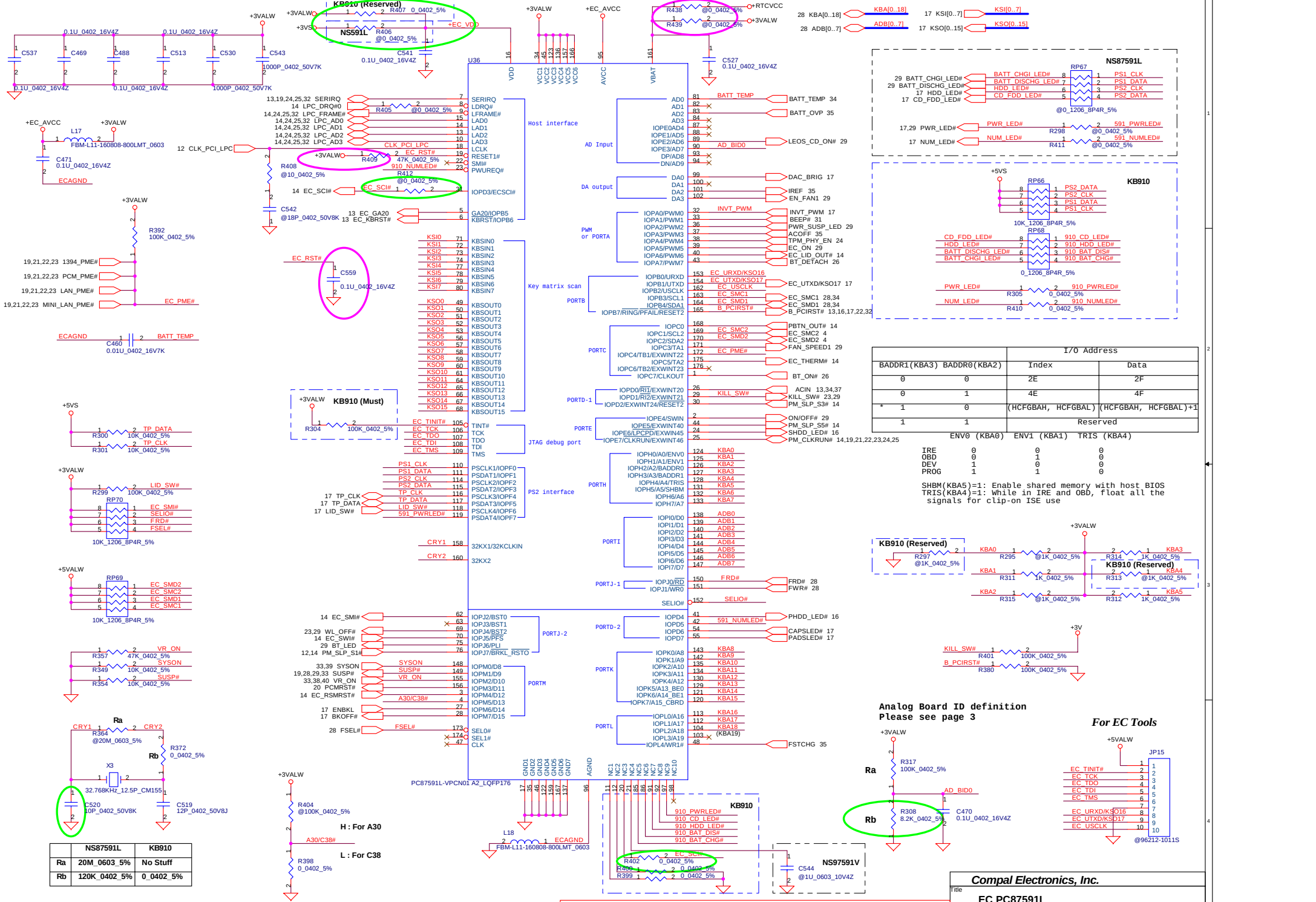
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SUPER I/O SMC LPC47N217





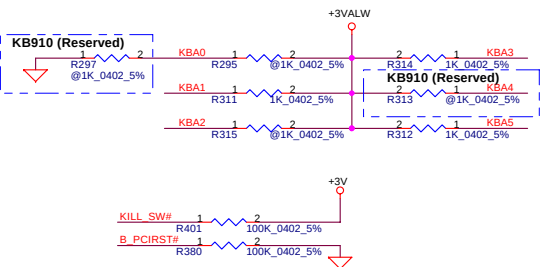
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Title			
PARALLEL / MDC PORT			
Size	Document Number		Rev
Custom	DAT20 LA-1971		0.3
Date:	Friday, September 26, 2003	Sheet 26 of 42	



I/O Address			
BADDR1 (KBA3)	BADDR0 (KBA2)	Index	Data
0	0	2E	2F
0	1	4E	4F
* 1	0	(HCFGBAH, HCFGBAL)	(HCFGBAH, HCFGBAL)+1
1	1	Reserved	

ENV0 (KBA0)	ENV1 (KBA1)	TRIS (KBA4)
IRE	0	0
OBD	1	0
DEV	1	0
PROG	1	0

SHBM(KBA5)=1: Enable shared memory with host BIOS
TRIS(KBA4)=1: While in IRE and OBD, float all the signals for clip-on ISE use



Analog Board ID definition
Please see page 3

For EC Tools

Compal Electronics, Inc.

EC PC87591L

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Rev: 0.3

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CF2 CF4 CF1 CF3 CF8
SMDC40M80 SMDC40M80 SMDC40M80 SMDC40M80 SMDC40M80

CF15 CF5 CF6 CF9 CF12
SMDC40M80 SMDC40M80 SMDC40M80 SMDC40M80 SMDC40M80

CF11 CF14 CF13 CF16
SMDC40M80 SMDC40M80 SMDC40M80 SMDC40M80

FD1 FD2 FD3
FIDUCAL FIDUCAL FIDUCAL

FD4 FD5 FD6
FIDUCAL FIDUCAL FIDUCAL

H4 H3 H9 H22 H19
H_S315D138 H_S315D138 H_S315D138 H_S315D138 H_S315D138

H17 H21 H15 H14
H_S315D138 H_S315D138 H_S315D138 H_C315D138

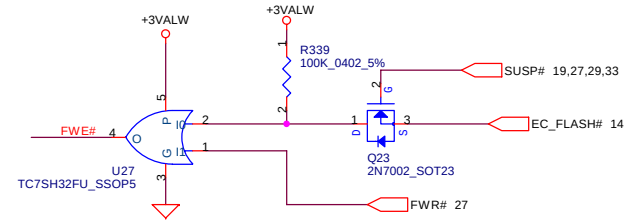
H1 H2 H8 H10
H_S315D165 H_S315D165 H_S315D165 H_S315D165

H6 H7 H11 H12
H_C354D165 H_C354D165 H_C354D165 H_C354D165

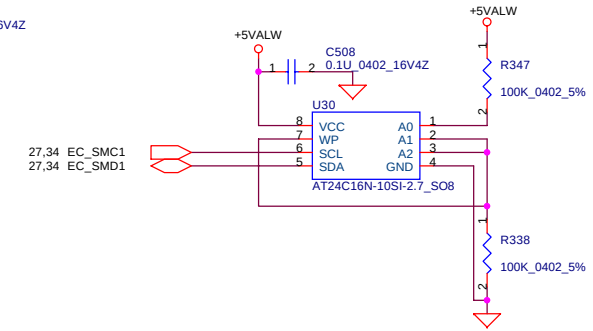
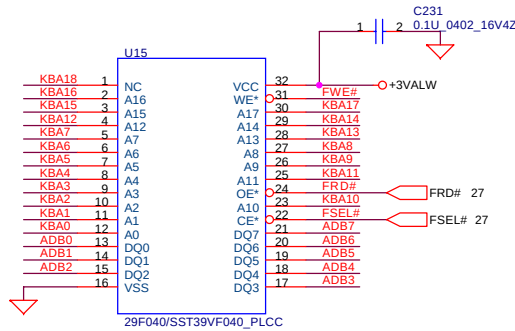
H18 H16 H20
H_C276D142 H_C256D165 H_R386X189D307X110

H13 H5
H_S315D138 H_S394D165

H24 H23
H_O292X55D272X35 H_O174X55D154X35



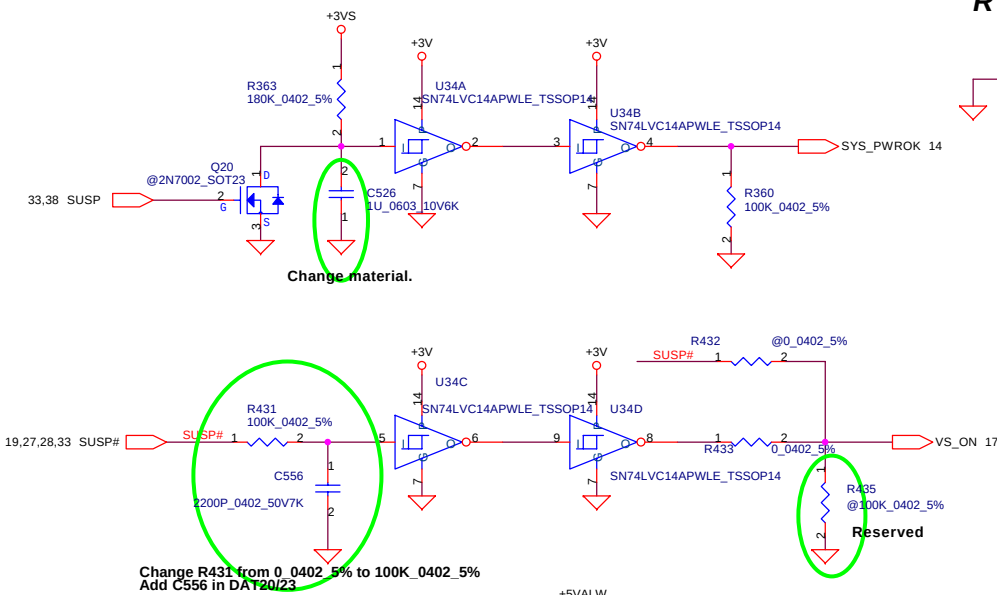
27 KBA[0..18] KBA[0..18]
27 ADB[0..7] ADB[0..7]



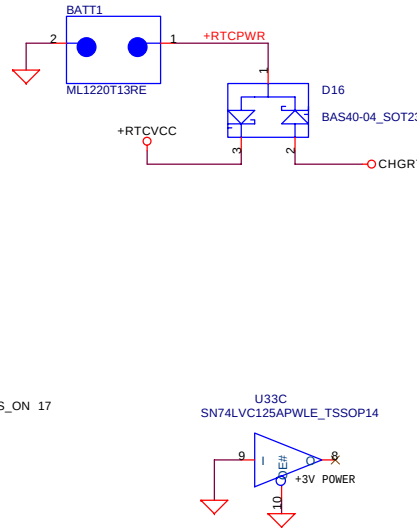
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Title			
BIOS & EXT. I/O PORT			
Size	Document Number	Rev	
Custom	DAT20 LA-1971	0.3	
Date:	Friday, September 26, 2003	Sheet	28 of 42

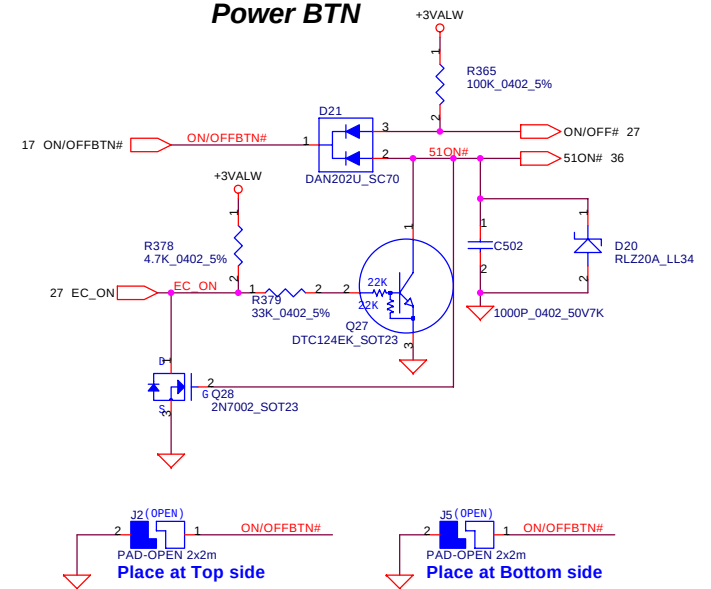
Power ON Circuit



RTC Battery

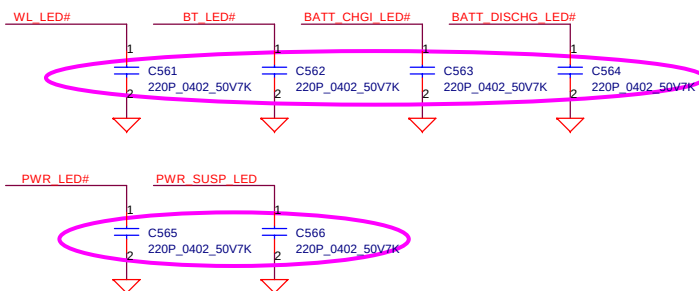
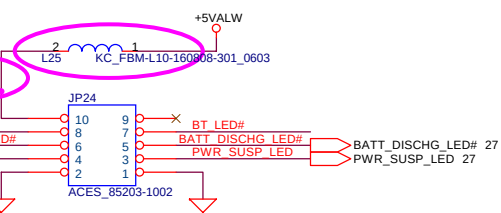


Power BTN

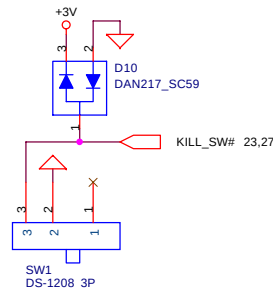


LED INDICATOR	C38	30
PWR	Blue	Green
PWR_SUSP	AMB	AMB
BATT_CHGI	Blue	Green
BATT_DISCHG	AMB	AMB
WL_LED	Blue	Green
BT_LED	AMB	AMB
SD_LED	None	Green

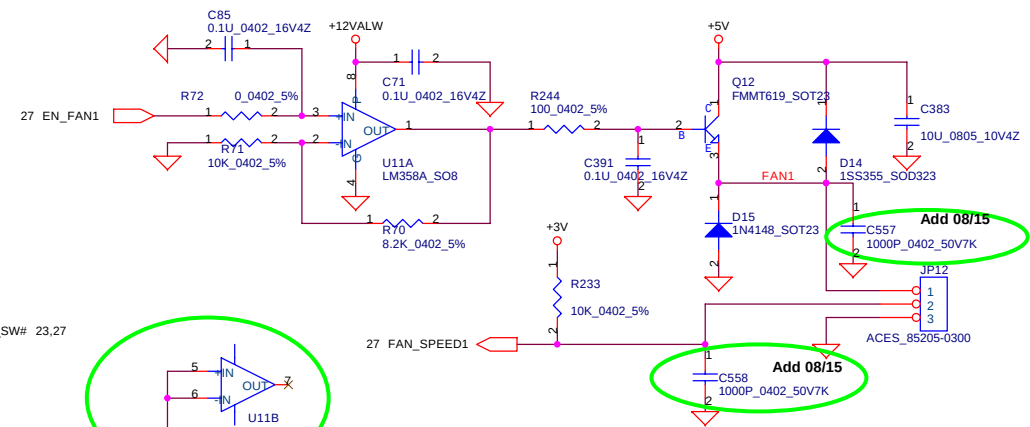
LED/B Connector



KILL Switch



Fan Control circuit

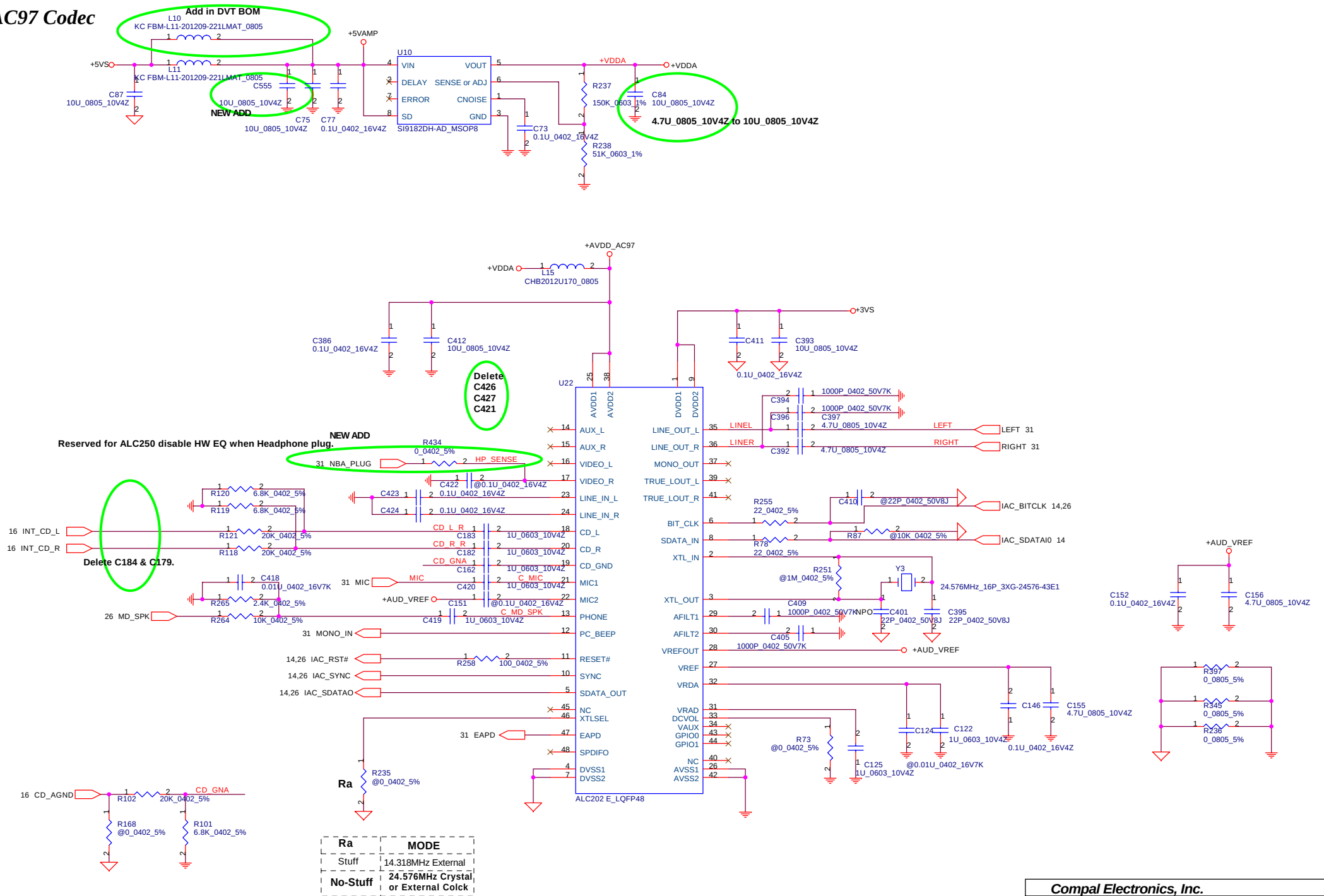


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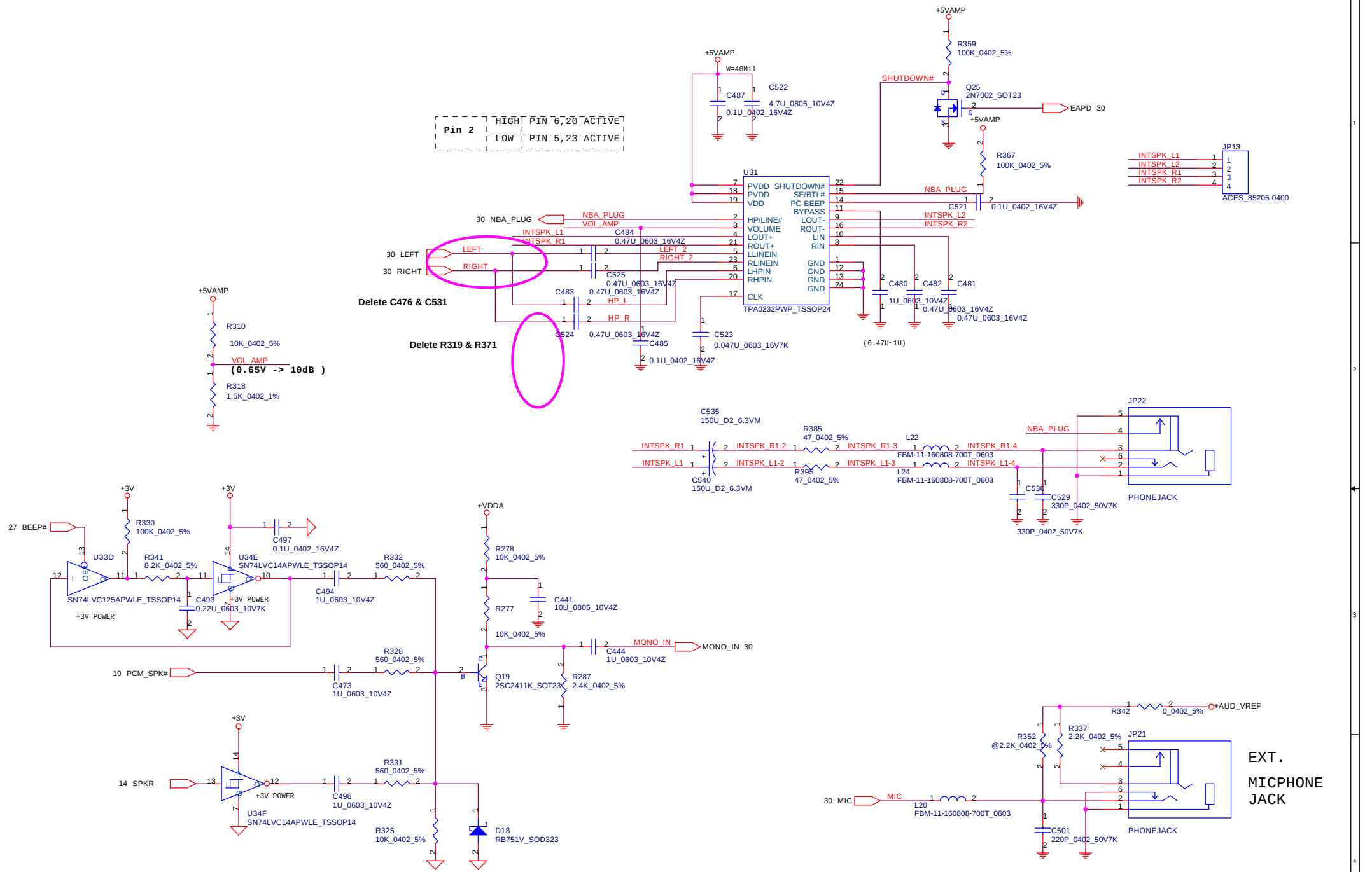
Title	Power OK/Reset/RTC battery	Rev	0.3
Size	Document Number		
Custom	DAT20 LA-1971		
Date:	Friday, September 26, 2003	Sheet	29 of 42

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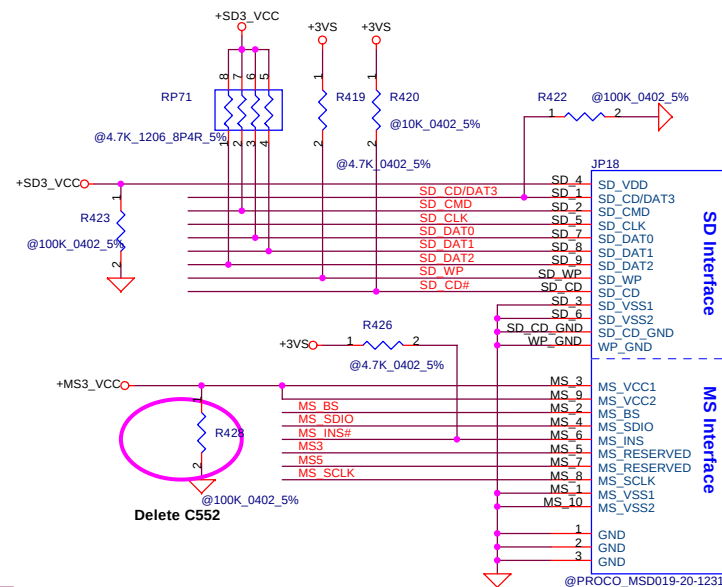
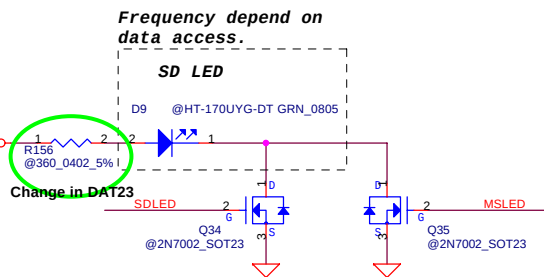
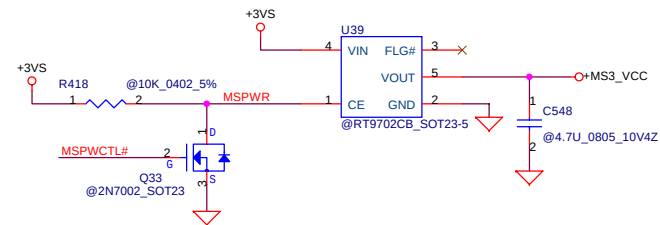
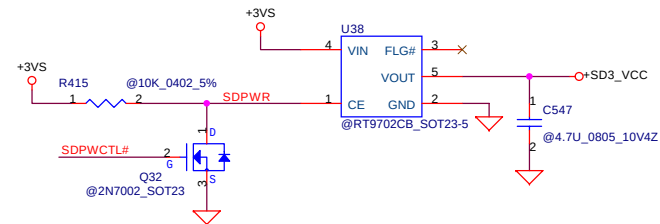
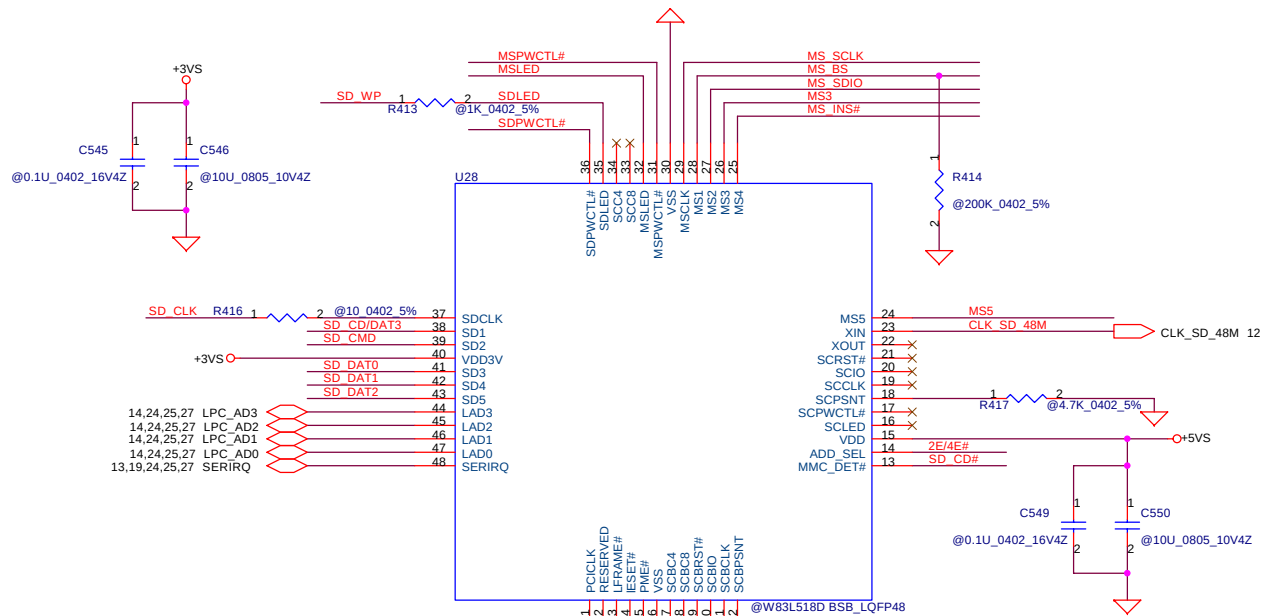
AC97 Codec



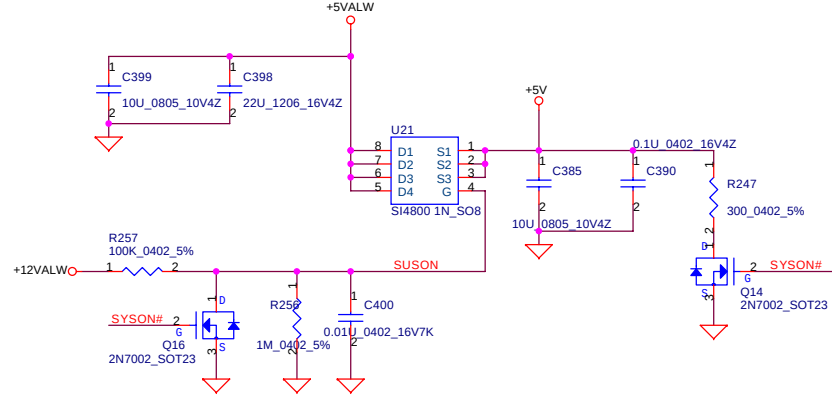
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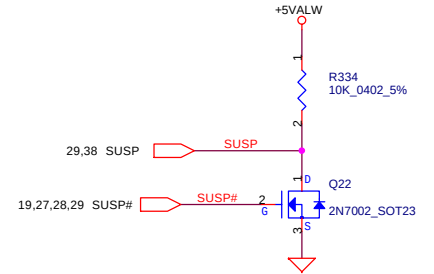
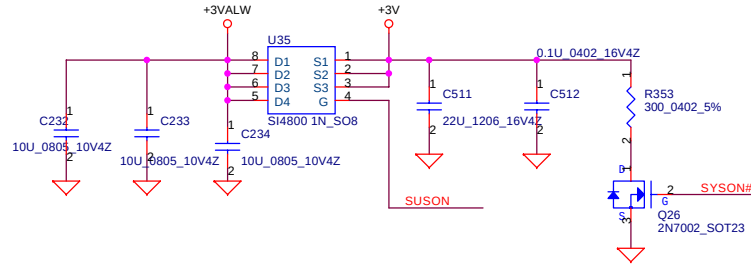
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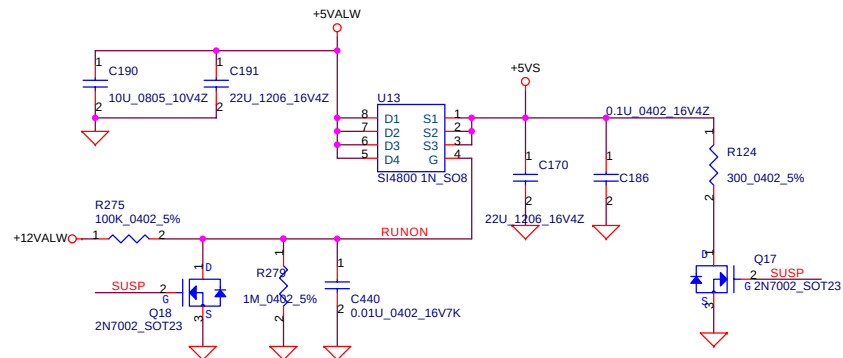
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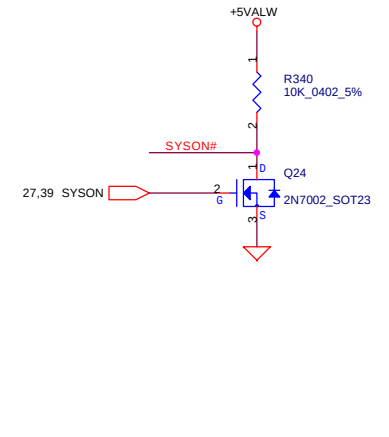
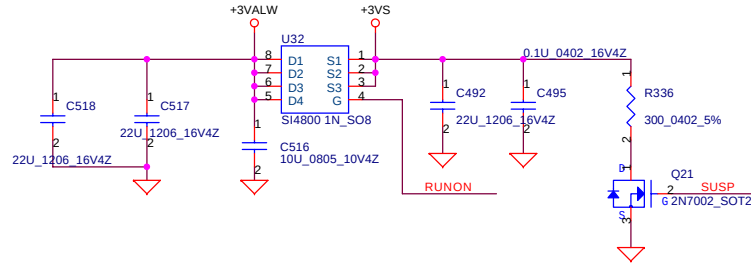
+3VALW to +3V Transfer



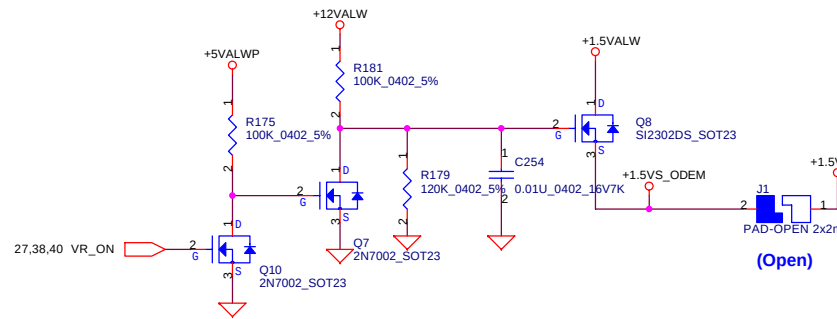
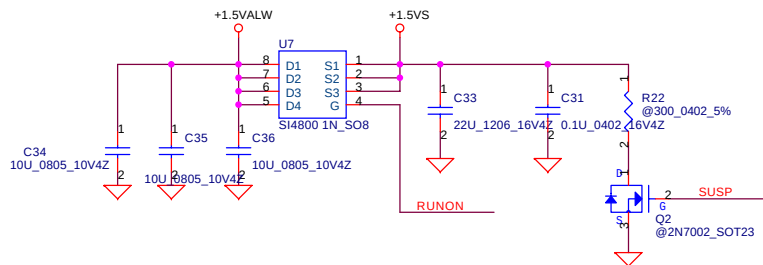
+5VALW to +5VS Transfer



+3VALW to +3VS Transfer



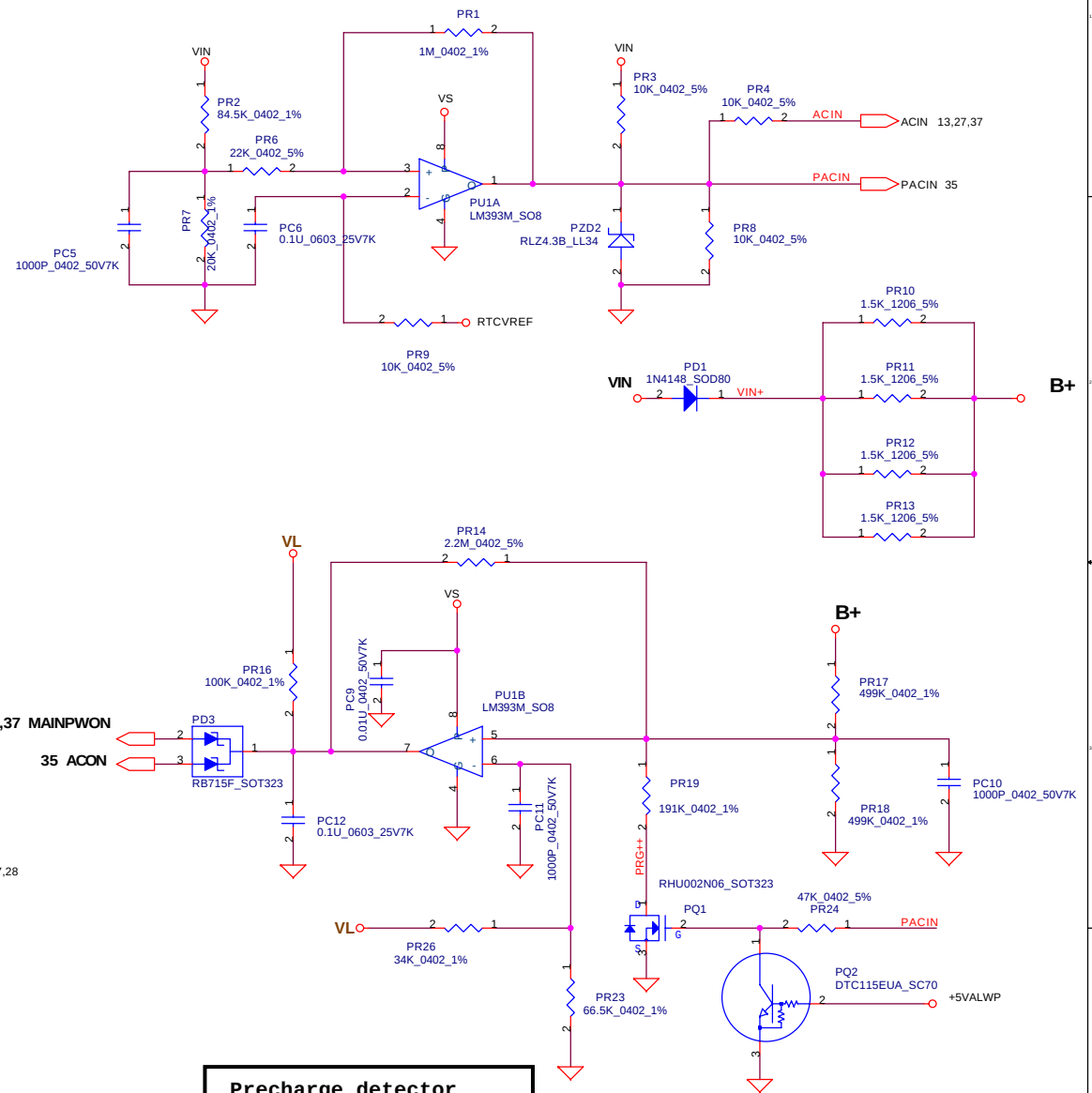
+1.5VALW to +1.5VS Transfer



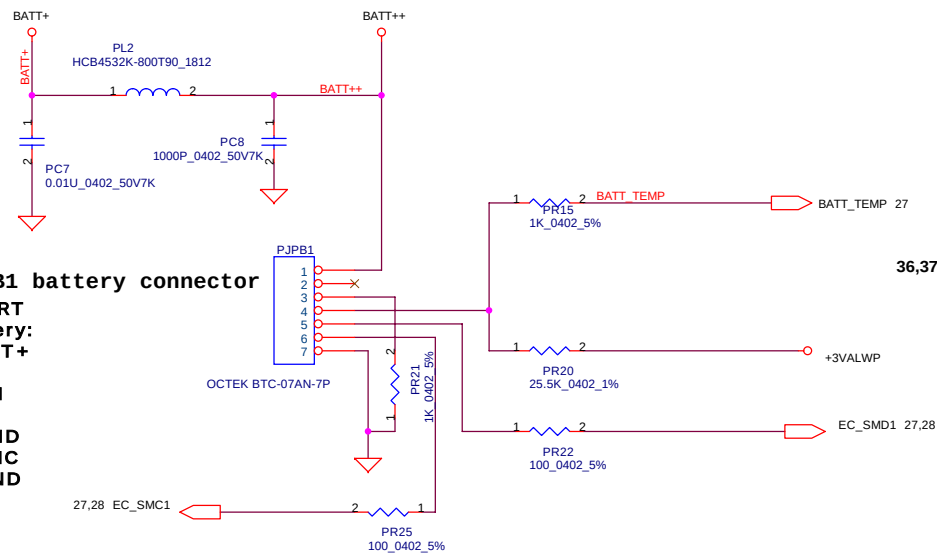
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Title			DC/DC Circuit Interface
Size	Document Number	Rev	
Custom	DAT20 LA-1971	0.3	
Date:	Friday, September 26, 2003	Sheet	33 of 42

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- 1.BAT+
- 2.ID
- 3.B/I
- 4.TS
- 5.SMD
- 6.SMC
- 7.GND



Precharge detector
15.97V14.84V For ADAPTOR

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DCIN & DETECTOR & Precharge

Size	Document Number	Rev
Custom	DAT20 LA-1971	0.3
Date:	Friday, September 26, 2003	Sheet 34 of 42

**Iadp=0~2.9A(60W)
Iadp=0~2.9A(75W)**

**IREF=1*Icharge
IREF=0~3.3V**

**2P3S:3800mAH/cell
0.7C=3.0A**

OVP voltage :

LI-3S :12.9V----BATT-OVP=2.84V

BATT-OVP=0.2206*BATT+

Charge voltage

3S CC-CV MODE : 12.6V

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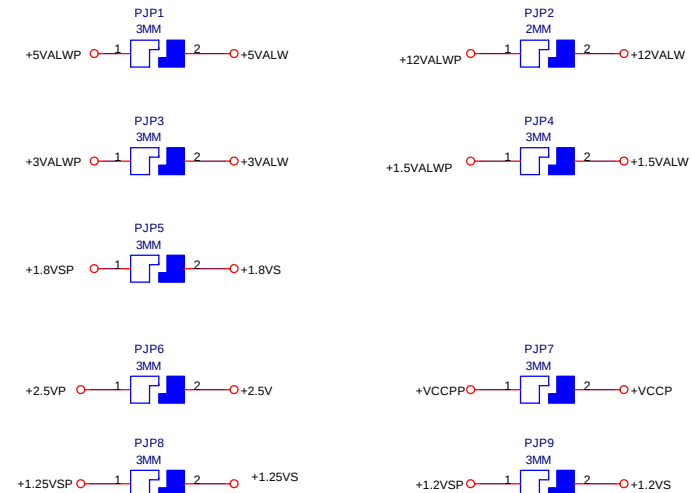
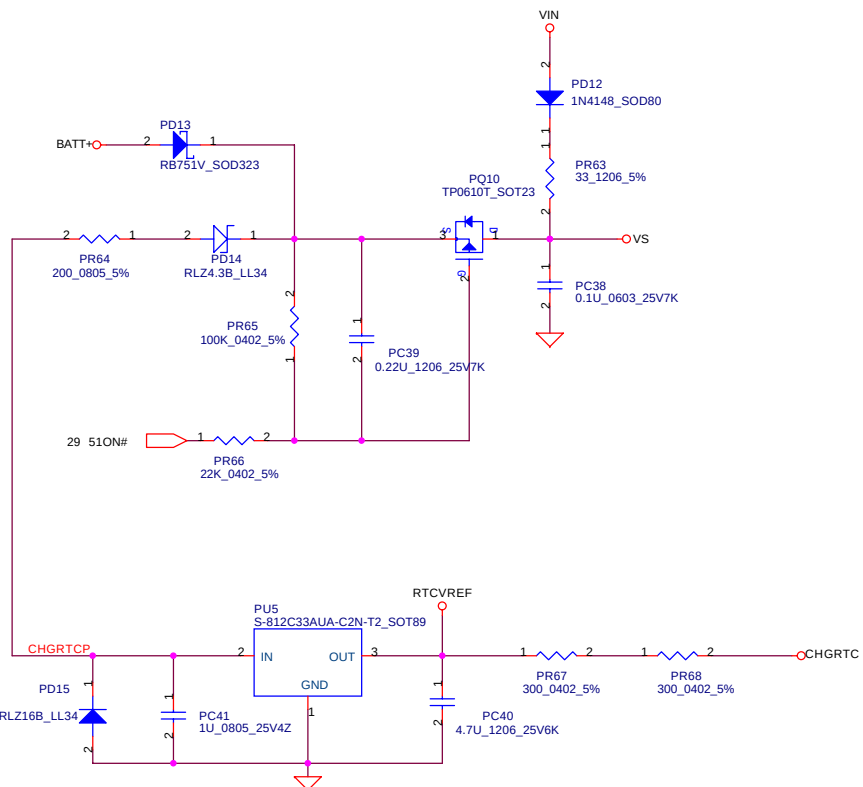
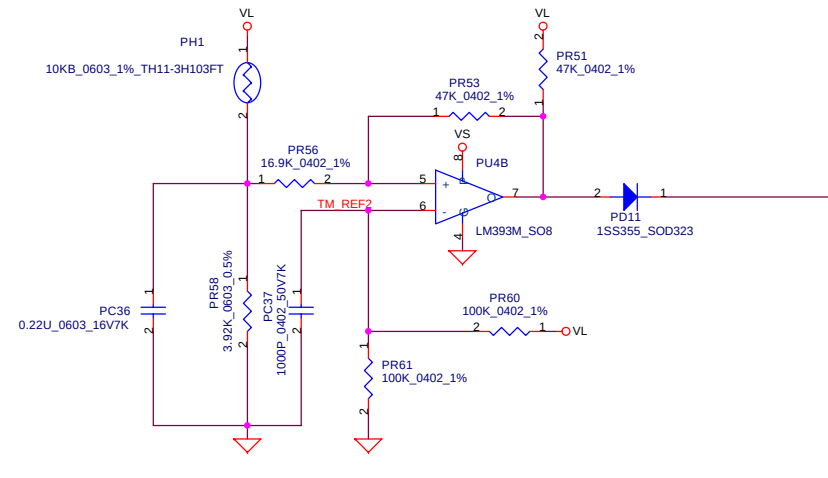
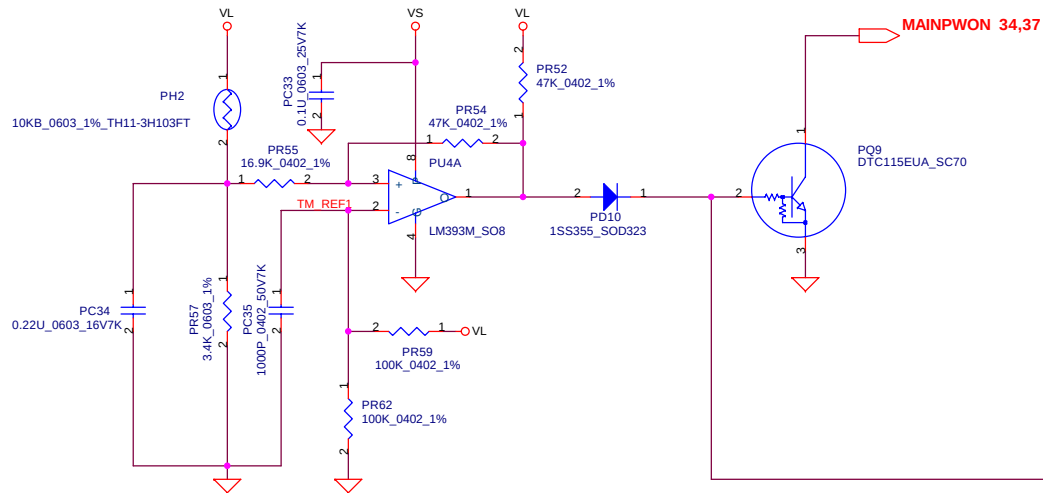
Compal Electronics, Inc.

Charger

Size B	Document Number	Rev
	DAT20 LA-1971	0.3
Date:	Friday, September 26, 2003	Sheet 35 of 42

PH1 under CPU botten side :
CPU thermal protection at 85 degree C
Recovery at 44(45) degree C

PH2 near main Battery CONN :
BAT. thermal protection at 78 degree C
Recovery at 39(40) degree C

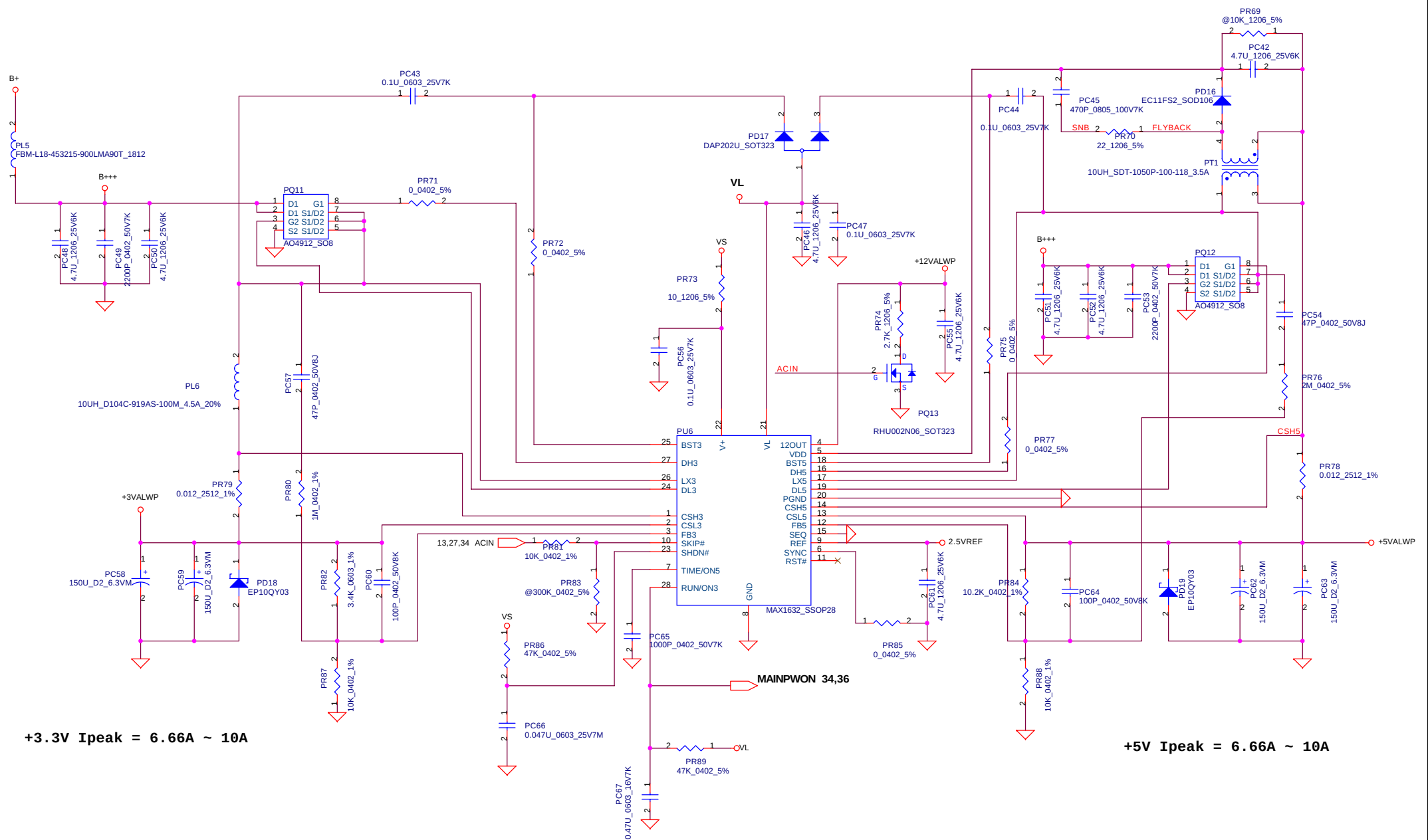


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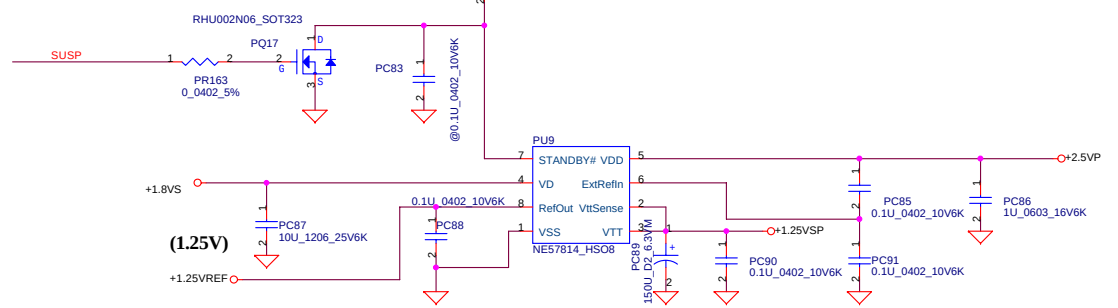
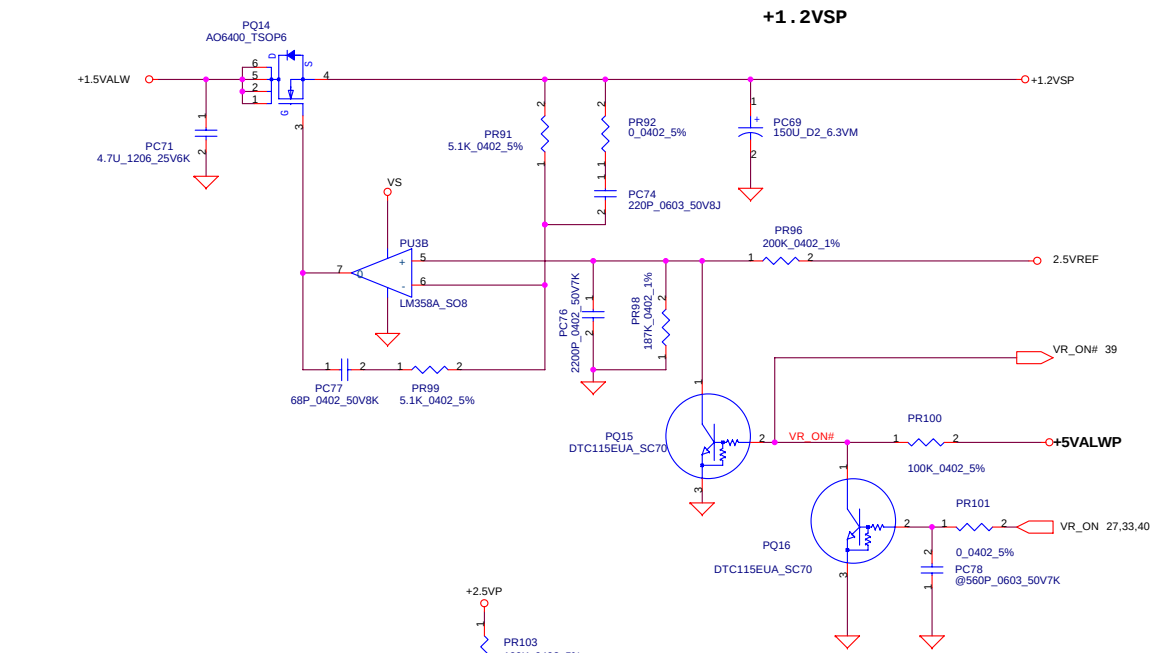
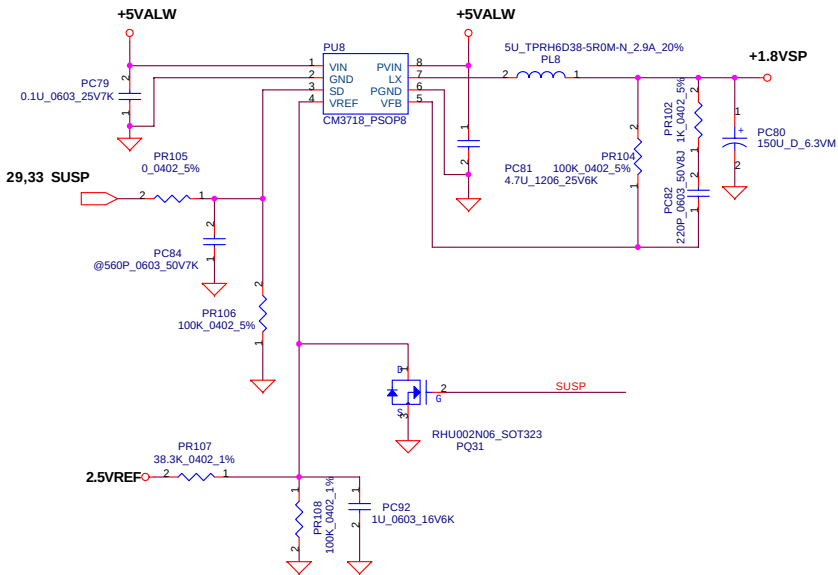
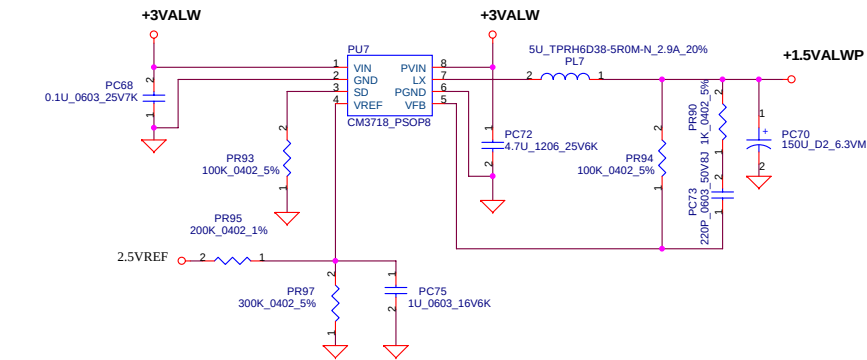
Title	RTC Battery & OTP
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Size B	Document Number DAT20 LA-1971	Rev 0.3
Date:	Friday, September 26, 2003	Sheet 36 of 42



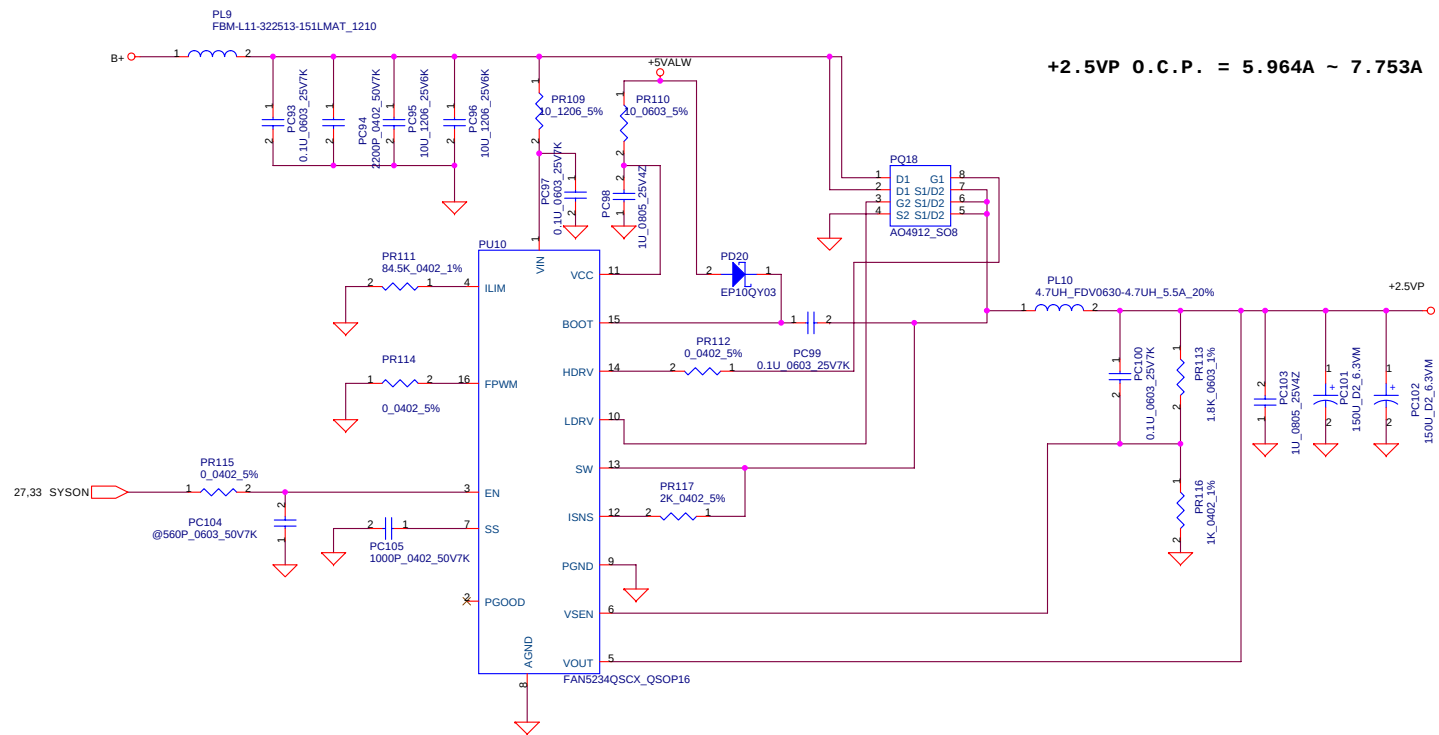
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Compal Electronics, Inc.			
Title			
+5VALWP / +3VALWP / +12VALWP			
Size	Document Number		
Custom	DAT20 LA-1971		
Date:	Friday, September 26, 2003	Sheet	37 of 42
			Rev 0.3

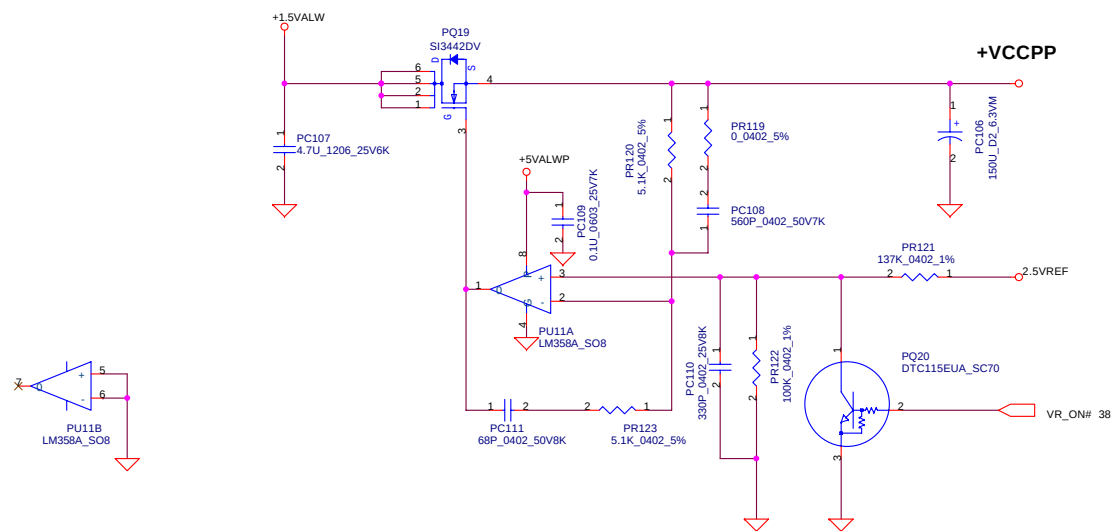


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Compal Electronics, Inc.			
Title	+1.8VSP & +1.25VSP &1.5VALWP & +1.2VSP		
Size	Custom	Document Number	Rev
Date:	Friday, September 26, 2003	Sheet	38 of 42



+2.5VP O.C.P. = 5.964A ~ 7.753A



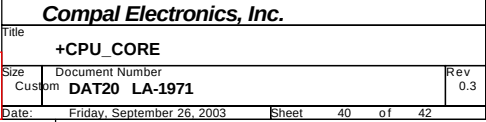
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File
DDR +2.5VP & VCCPP

Size
Custom
Document Number
DAT20 LA-1971

Date: Friday, September 26, 2003 Sheet 39 of 42 Rev 0.3



DAT20 PIR LIST

HW PIR LIST

EVT -> DVT

- [Page 7 & 9] Change Material R33, R34, R200, R201 (75_0603_1%)
- [Page 14] Change Material R38 (20_0603_1%)
- [Page 16] Change Material U40
- [Page 24] Modify R374 connected from +3VALW to +3V & delete R384 (Remove TPM detect function)
- [Page 25] Delete RP65 & R260 which reserved for LPC47N227
- [Page 26] Change SLCTIN# connection.
- [Page 27] Change R308 from 0_0402_5% to 8.2K_0402_5% for DVT test AD_BID0
- [Page 29] Change material for C526 from 1U_0603_10V4Z to 1U_0603_10V6K
 - Add C556 2200P_0402_50V7K
 - Add C557, C558 1000P_0402_50V7K
- [Page 30] Add L10
 - Change C84 from 4.7U_0805_10V4Z to 10U_0805_10V4Z
 - Add C555 10U_0805_10V4Z
 - Delete C184, C179 1U_0603_10V4Z
- [Page 32] R156 from 390_0402_5% to 360_0402_5%
- [Page 27] R409 from 10K_0402_5% to 47K_0402_5% & add C559 0.1U_0402_16V4Z

DVT -> PVT

- [Page 12] Delete C70, C80, C166, C167, C168
- [Page 24] Delete R2 (Reserved for FIR)
- [Page 31] Delete C476, C531, R319, R371 AudiooHigh pass filter.

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Compal Electronics, Inc.			
Title			
DAT20 PIR LIST			
Size	Document Number		Rev
Custom	DAT20 LA-1971		0.3
Date:	Friday, September 26, 2003	Sheet	41 of 42
E			

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

Page 1 of 1

Item	Fixed Issue	Reason for change	Rev.	PG #	Modify List	B.Ver #	Phase
1	M/B cannot power on.	RC delay time is not enough of Max1632 on3 pin.	0.2	34	1.Change PC67 from 0.047U_0805_10V6K to 0.47U _16V K X7R 0603.	0.2	DVT
2	Layout symbol error.	Layout symbol error.	0.2	37	1.Change PR26 PCB footprint from R_0603 to R_0402.	0.2	DVT
3	Layout symbol error.	Layout symbol error.	0.2	40	1.Change PD22 from EP10QY03 to EP31QS04.	0.2	DVT
4	System cannot re-start and Windows fail when into C4.	The CPU cannot into skip mode,happen the OVP when C4.	0.2	40	Swap the PR154 and PR155.	0.2	DVT
5	Rating not enough.	Rating not enough.	0.2	34	1.Change PC66 from 0.047U_00603_16V7K to 0.047U_00603_25V7M.	0.2	DVT
6.	Rating is not enough.	Surge power rating concerned.	0.2	39	1.Change PR109 from 10_0603 to 10_1206.	0.2	DVT
7.	Change size.	Change size.	0.2		1.Change PR149,PR44,PR48,PR82,PR36,PR107,PR39,PR121,PR140,PR145 and PR146 from 0603 to 0402.	0.2	DVT
8.	Change size.	Change size.	0.2		1.Change PC114,PC131,PC49,PC21,PC53,PC128,PC126,PC124,PC31,PC7 and PC9 from 0603 to 0402.	0.2	DVT
9.	Change size.	Change size.	0.2		1.Change PC56,PC24,0C38,PC100,PC16 and PC19 from 0805 to 0603.	0.2	DVT
10.	Choke rating is not enough.	Charge current power rating concerned.	0.2	35	1.Change PL4 from 22UH to 16UH.	0.2	DVT
11.	Appication of CM3718 has overshoot issue during system on.	Charge control signal SHDN# to reference.	0.2	38	1.Add PQ31.	0.2	DVT
12.	EMI issue of charger.	EMI issue of charger.	0.3	35	1.Change PQ6 from A04407 to FDS6679. Add the PR164 on GATE pin of PQ6.	0.3	PVT
13.	EMI issue of CPU_CORE.	EMI issue of CPU_CORE.	0.3	40	1.Change PQ21 and PQ25 from IRF7821 to IRF7811A. Add the 2200P on PC134 and PC135.	0.3	PVT
14.							

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Title			
PWR-PIR			
Size	Document Number		
Custom	DAT20 LA-1971		
Date:	Friday, September 26, 2003	Sheet	42 of 42
		E	
			Rev 0.3