

Compal confidential

Schematics Document Mobile Dothan uFCPGA with Intel Alviso_GM+ICH6-M core logic

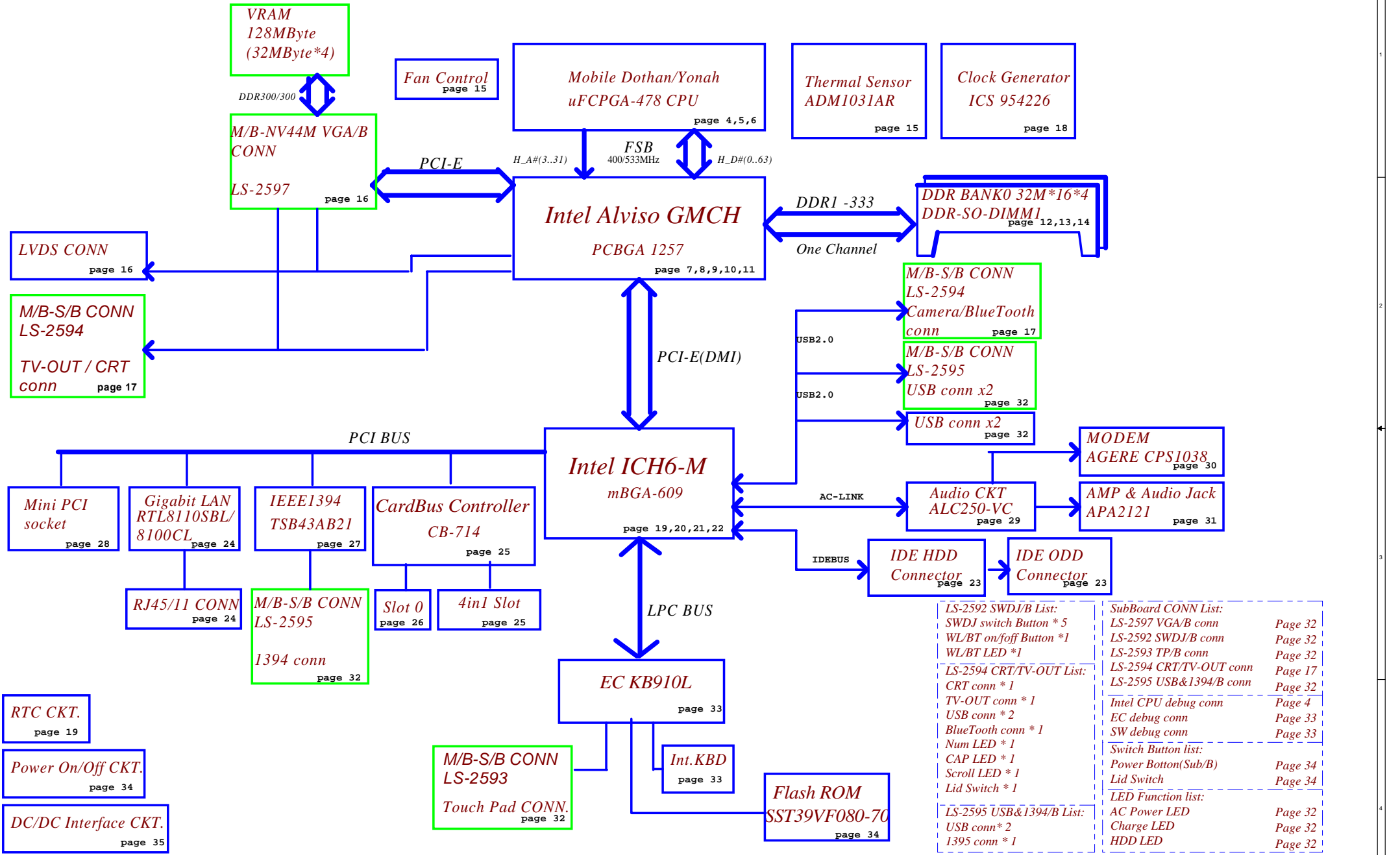
2005-02-15

LA-2592

REV:0.3

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Cover Sheet			
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- | | |
|---|---|
| LS-2592 SWDJ/B List:
SWDJ switch Button * 5
WL/BT on/off Button *1
WL/BT LED *1 | SubBoard CONN List:
LS-2592 VGA/B conn Page 32
LS-2592 SWDJ/B conn Page 32
LS-2593 TP/B conn Page 32
LS-2594 CRT/TV-OUT conn Page 17
LS-2595 USB&1394/B conn Page 32 |
| LS-2594 CRT/TV-OUT List:
CRT conn * 1
TV-OUT conn * 1
USB conn * 2
BlueTooth conn * 1
Num LED * 1
CAP LED * 1
Scroll LED * 1
Lid Switch * 1 | Intel CPU debug conn Page 4
EC debug conn Page 33
SW debug conn Page 33 |
| LS-2595 USB&1394/B List:
USB conn * 2
1395 conn * 1 | Switch Button list:
Power Botton(Sub/B) Page 34
Lid Switch Page 34 |
| | LED Function list:
AC Power LED Page 32
Charge LED Page 32
HDD LED Page 32 |

I2C / SMBUS ADDRESSING

External PCI Devices

DEVICE	IDSEL #	REQ/GNT #	PIRQ
LAN	AD17	0	F
CARD BUS	AD20	1	A
Cardreader			B
1394	AD16	2	E
Wireless LAN(MINI PCI)	AD18	3	G,H

Power Managment table

Signal / State	+12VALW +3VALW +5VALW	+3V +2.5V	+CPU_CORE +VCCF(1.05v) +5VS +3VS +2.5VS +1.5VS +1.25VS +1.1VS (VGA/B) +1.2VS (VGA/B) +1.8VS (VGA/B)
s0	ON	ON	ON
s1	ON	ON	ON
s3	ON	ON	OFF
s5 S4/AC	ON	OFF	OFF
s5 S4/AC don't exist	OFF	OFF	OFF

SMBUS Control Table

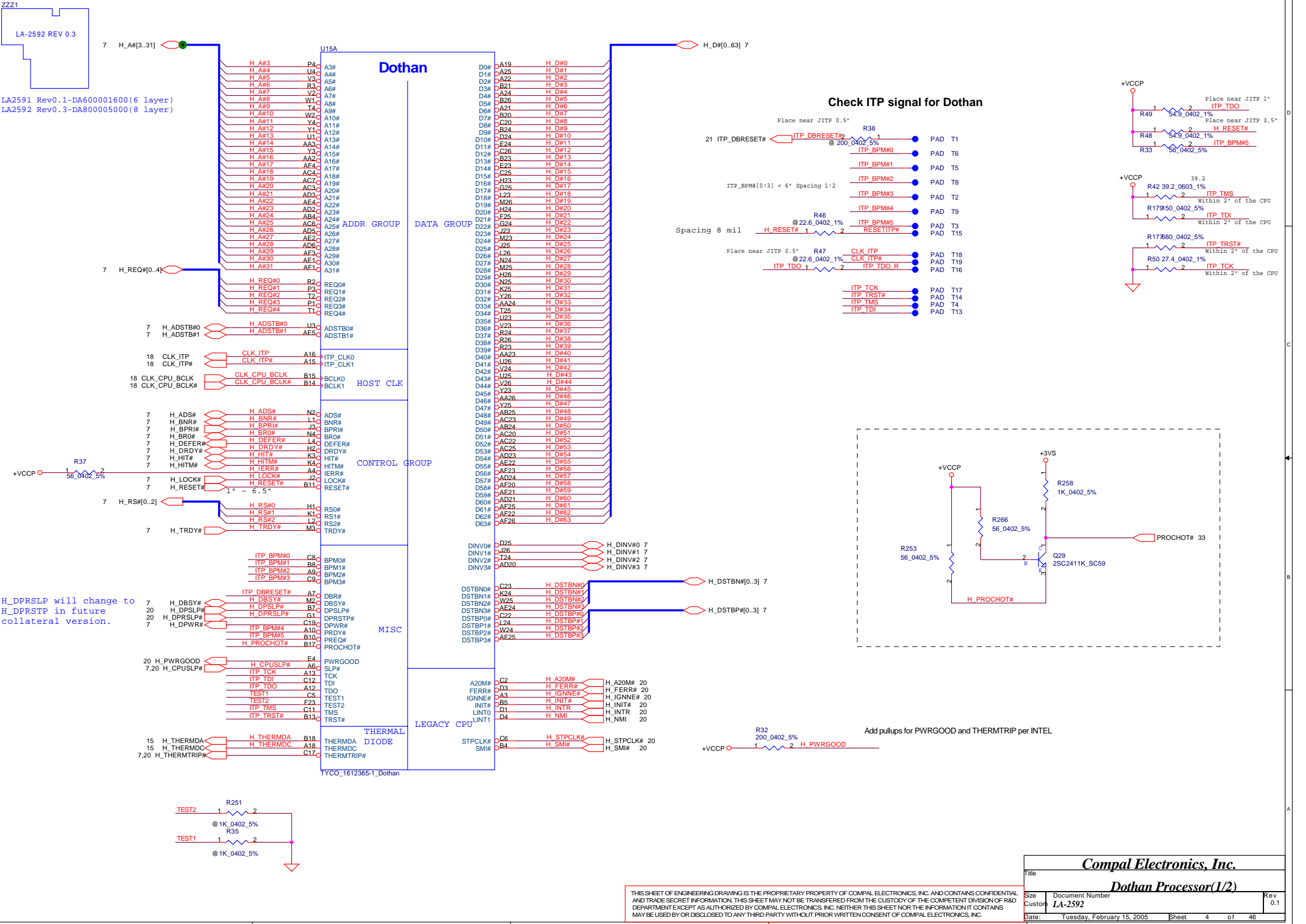
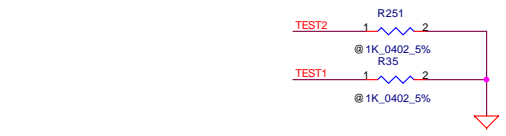
	SOURCE	INVERTER	BATT	SERIAL EEPROM	THERMAL SENSOR (CPU) ADM1032	SODIMM	CLK CHIP	MINI PCI	LCD
SMB_EC_CK1 SMB_EC_DA1	KB910L	×	✓	×	×	×	×	×	×
SMB_EC_CK2 SMB_EC_DA2	KB910L	×	×	×	✓	×	×	×	×
ICH_SMBCLK ICH_SMBDATA	ICH6-M	×	×	×	×	✓	✓	×	×
LCD_DDCCLK LCD_DDCCDATA	Alviso GM-GP	×	×	×	×	×	×	×	✓
I2CC_SCL I2CC_SDA	NV44M	×	×	×	×	×	×	×	✓

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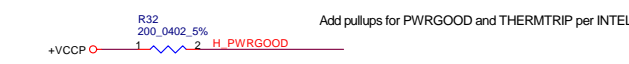
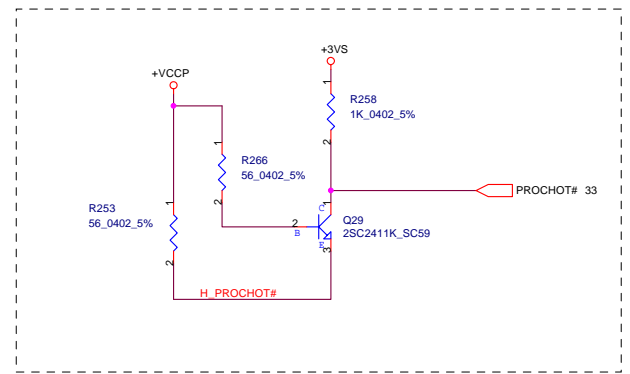
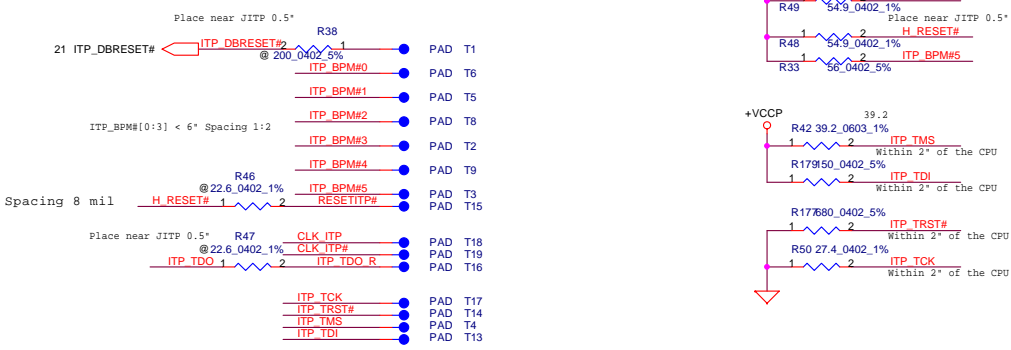
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LA2591 Rev0.1-DA600001600(6 layer)
LA2592 Rev0.3-DA800005000(8 layer)

H_DPRSLP will change to
H_DPRSTP in future
collateral version.

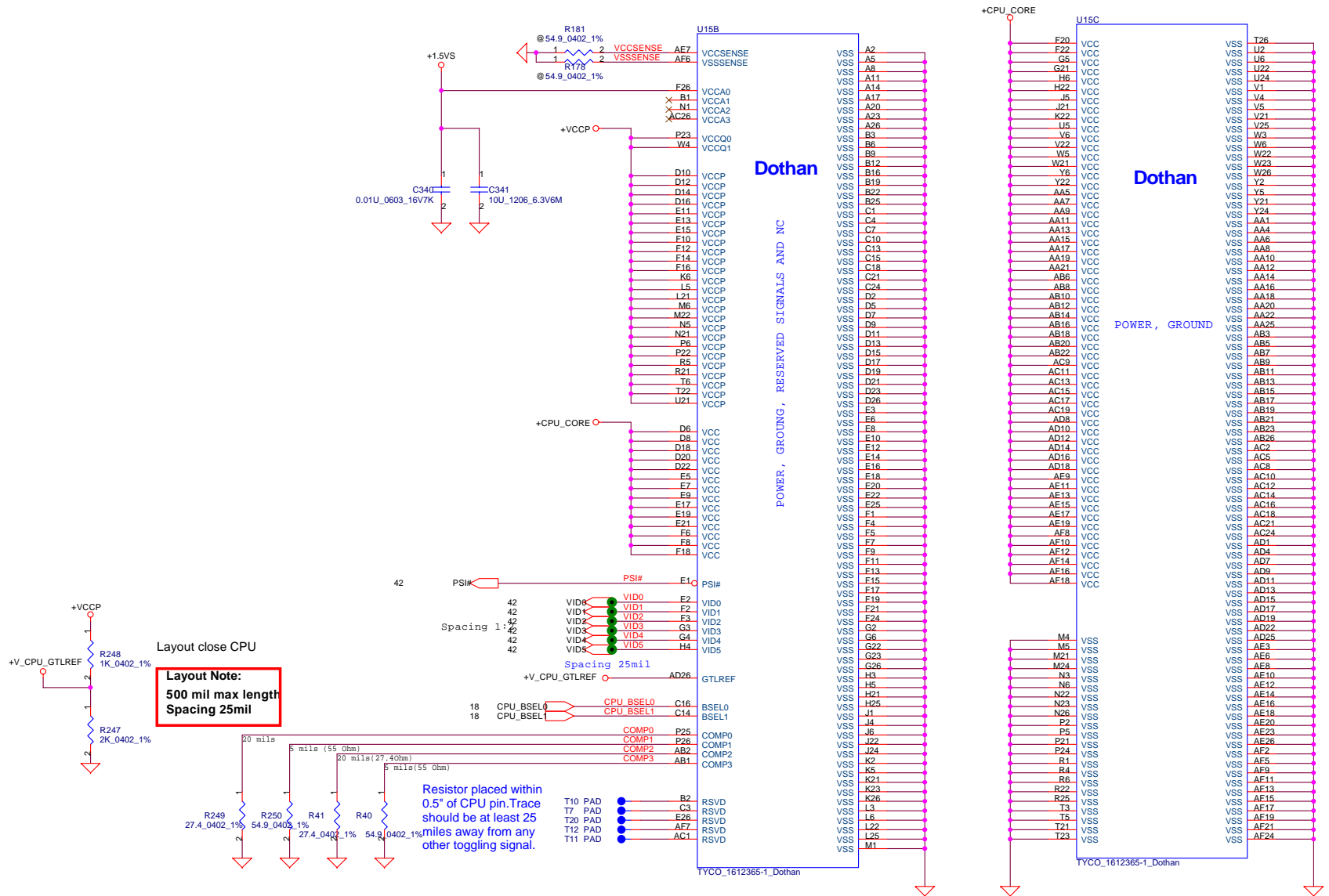


Check ITP signal for Dothan



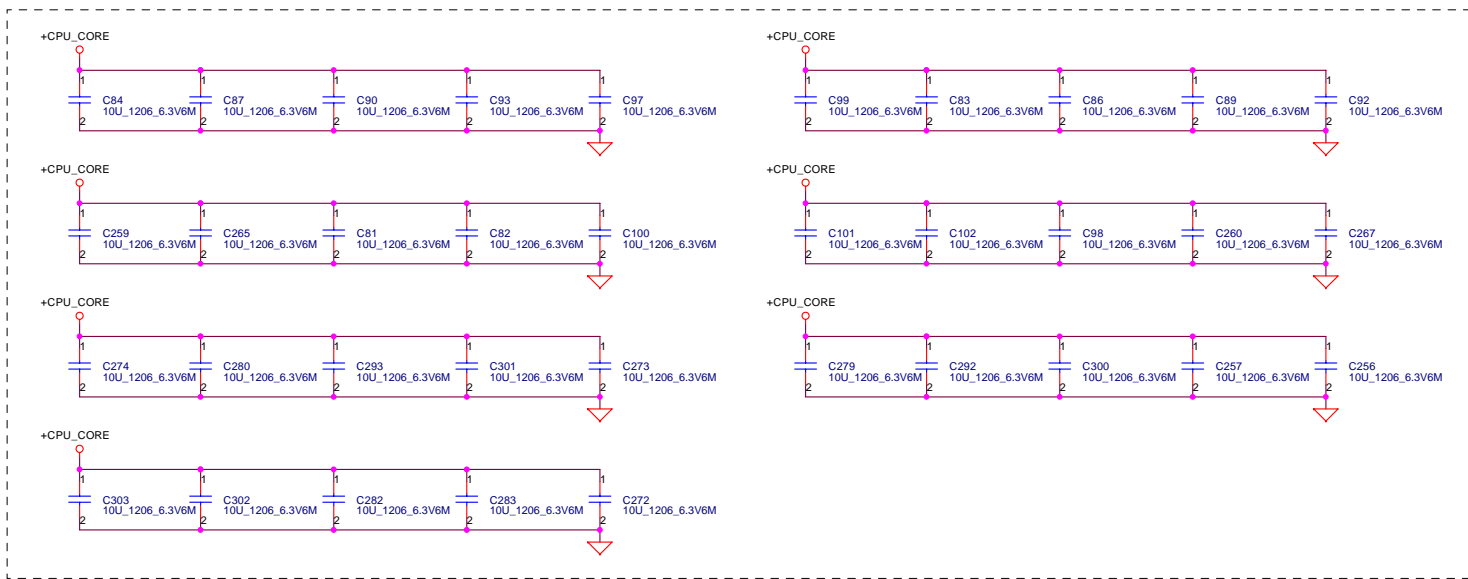
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Dothan Processor(U2)			
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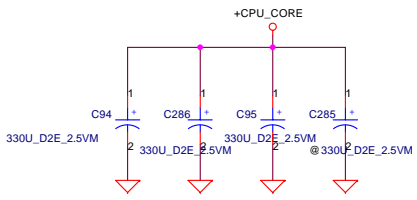


Layout Note:
500 mil max length
Spacing 25mil

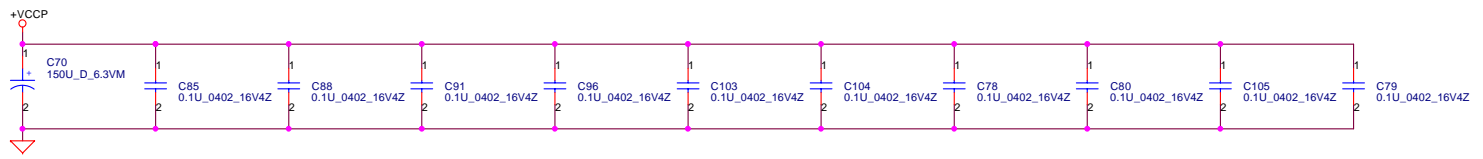
Resistor placed within 0.5" of CPU pin. Trace should be at least 25 mils away from any other toggling signal.



Near VCORE regulator.

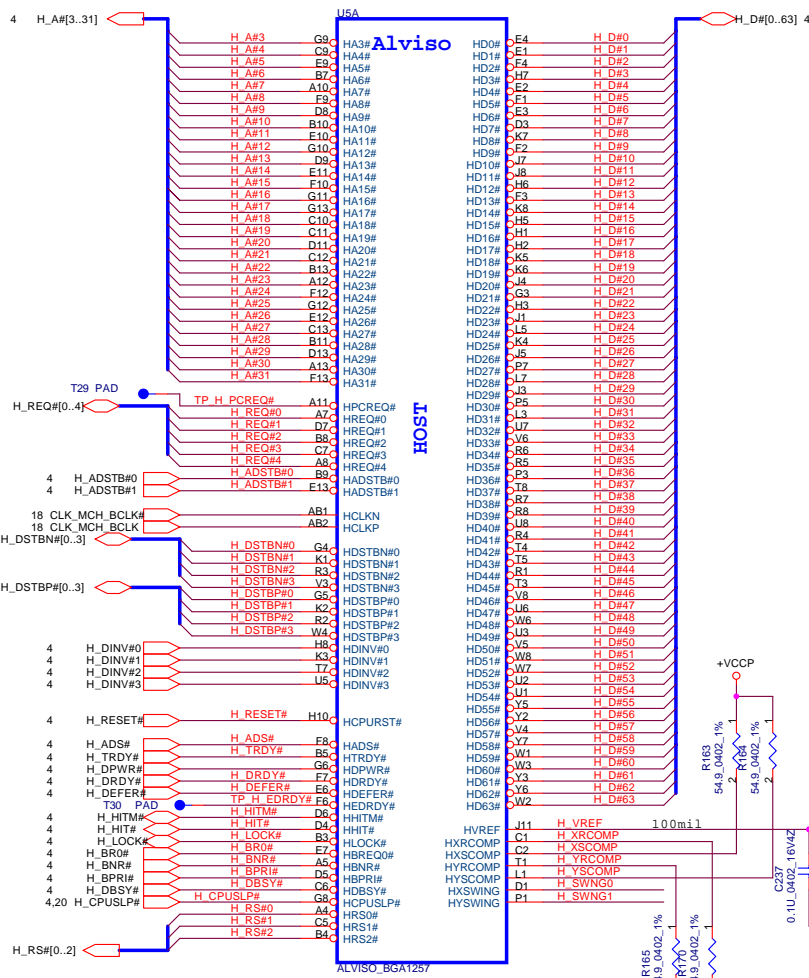


ESR <= 3m ohm
Capacitor > 880 uF

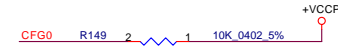
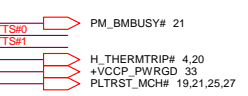
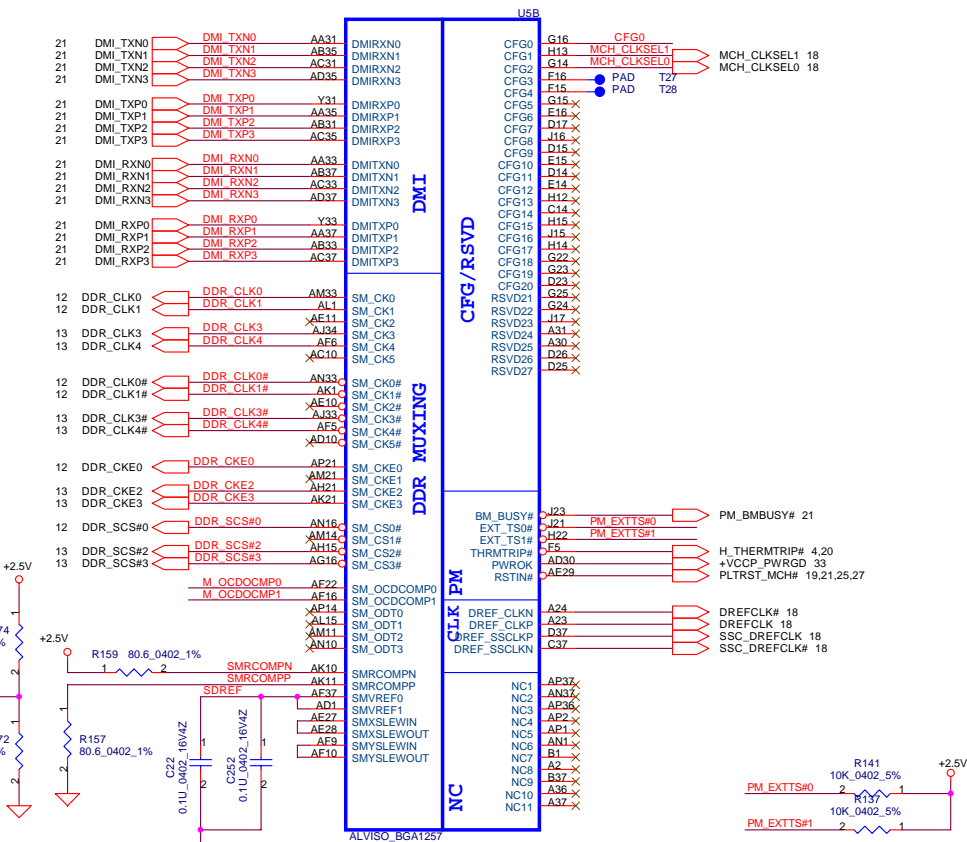


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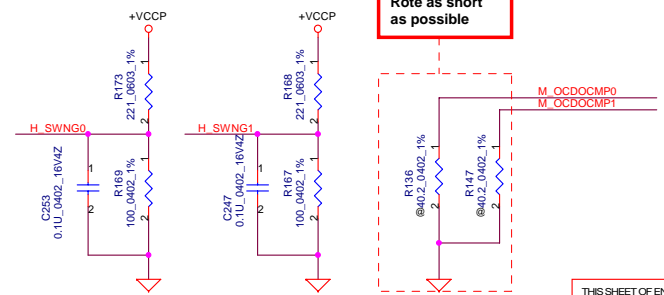
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Dothan Bypass		
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PM-C0-SA0091501D0 (R3)&SA0091501E0 (R1)
GM-B1-SA0091500A0 (R3)&SA009150070 (R1)

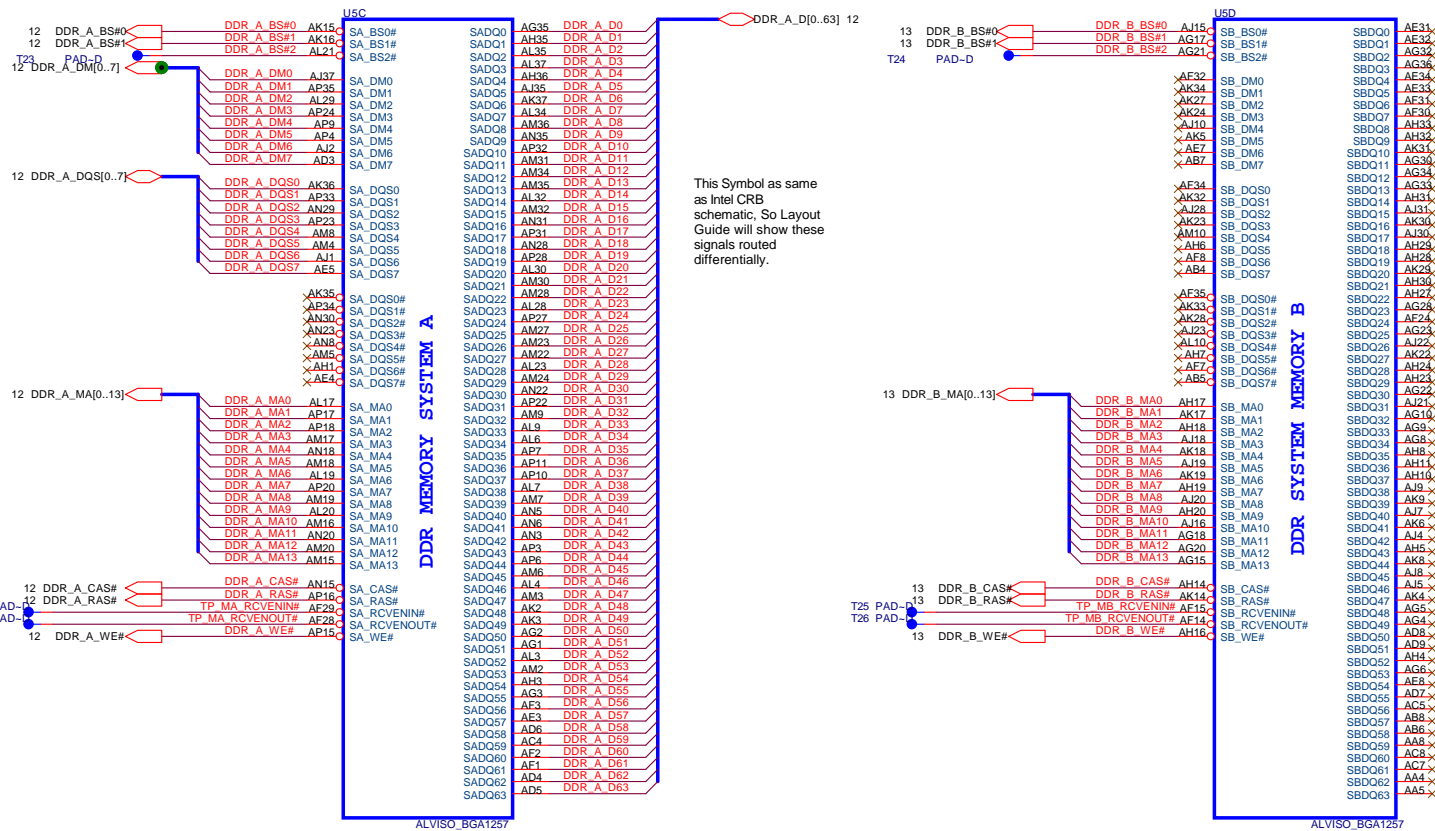


Layout Note:
Rote as short as possible



CFG[2:0]	Refer to sheet 19 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 = Disabled High = Enabled *
CFG18 (VCC Select)	Low = 1.05V (Default) * High = 1.5V
CFG19 (VTT Select)	Low = 1.05V (Default) * High = 1.2V

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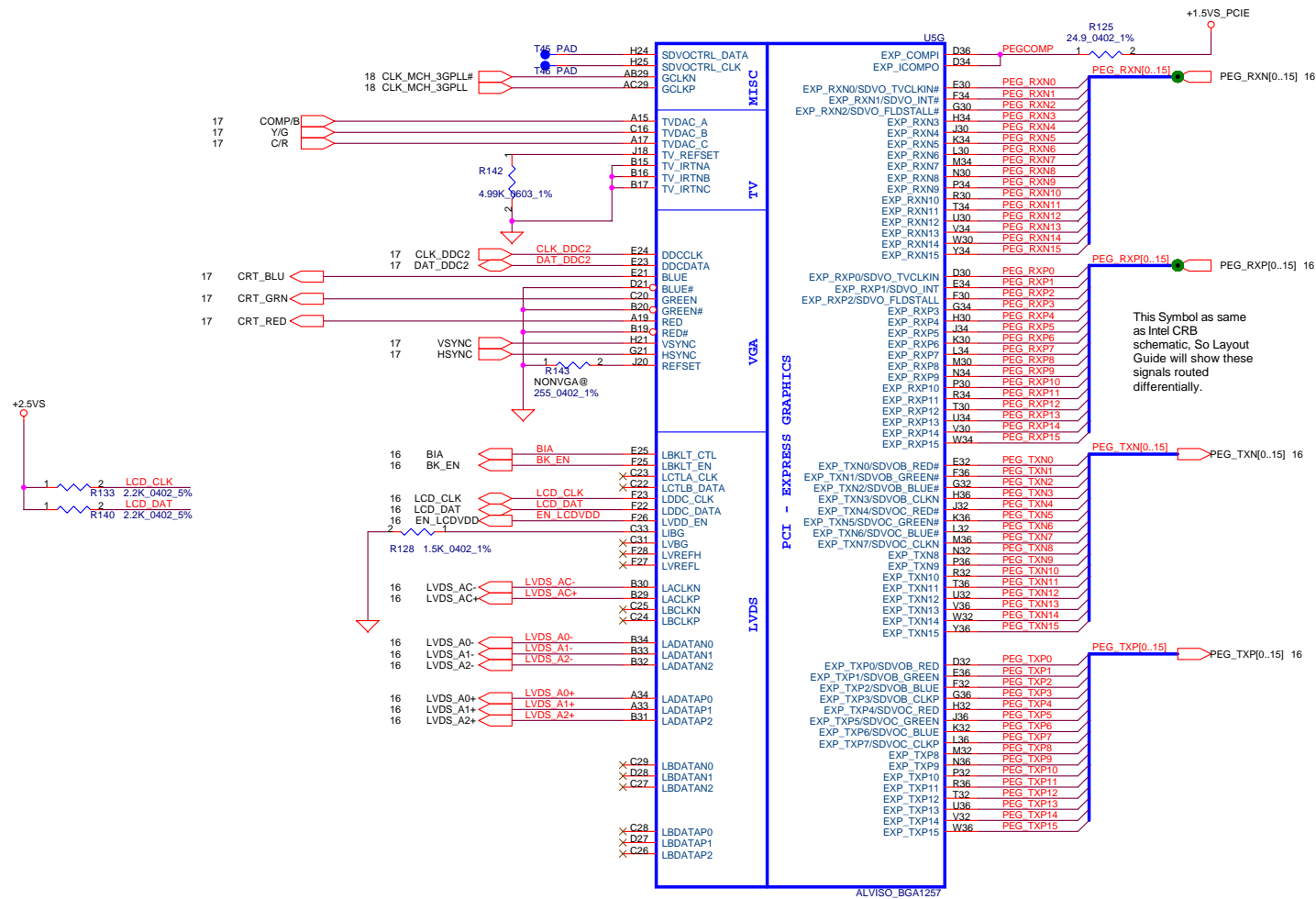


ALVISO_BGA1257

ALVISO_BGA1257

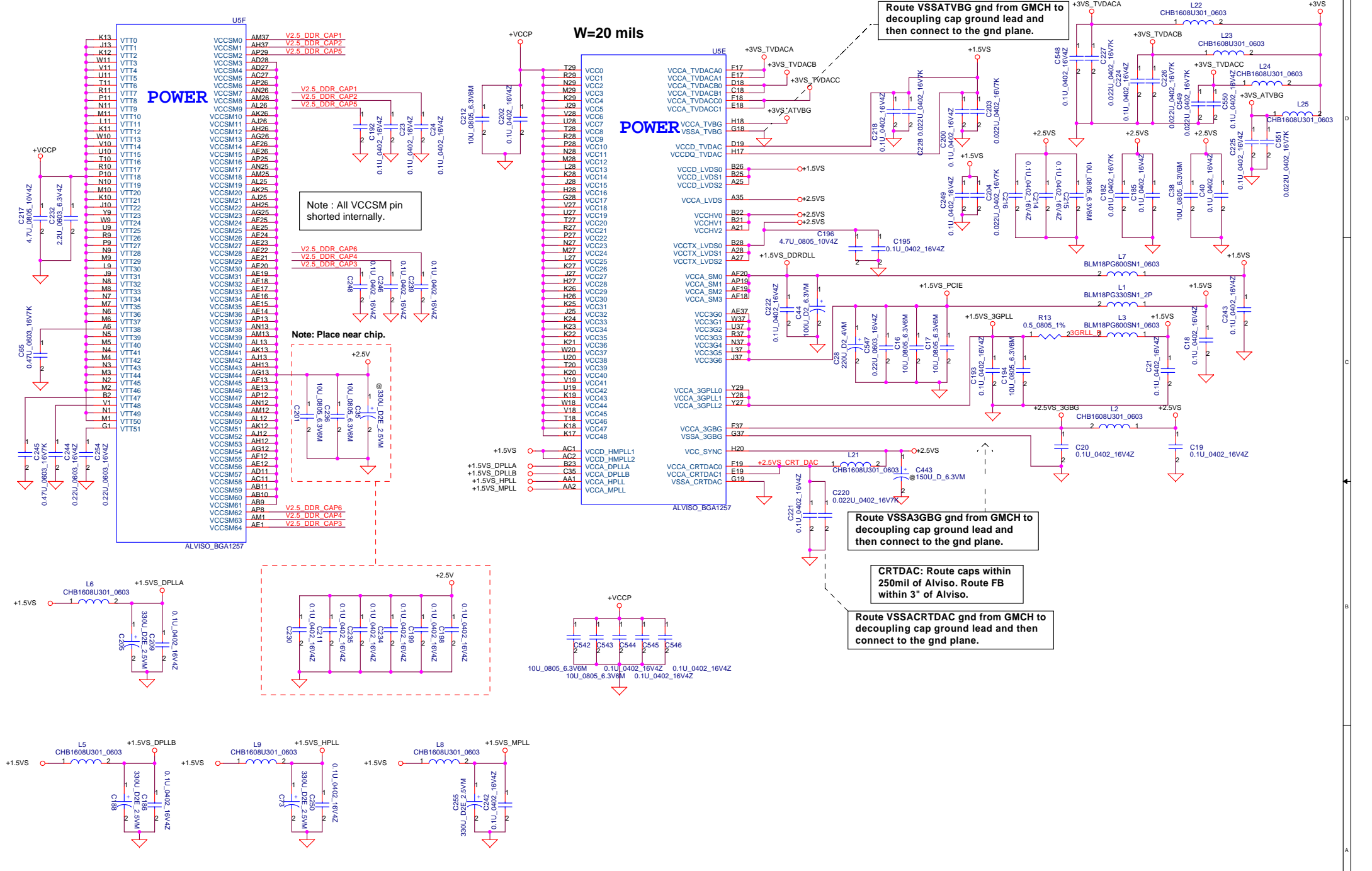
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<i>Alviso(2 of 5)</i>			
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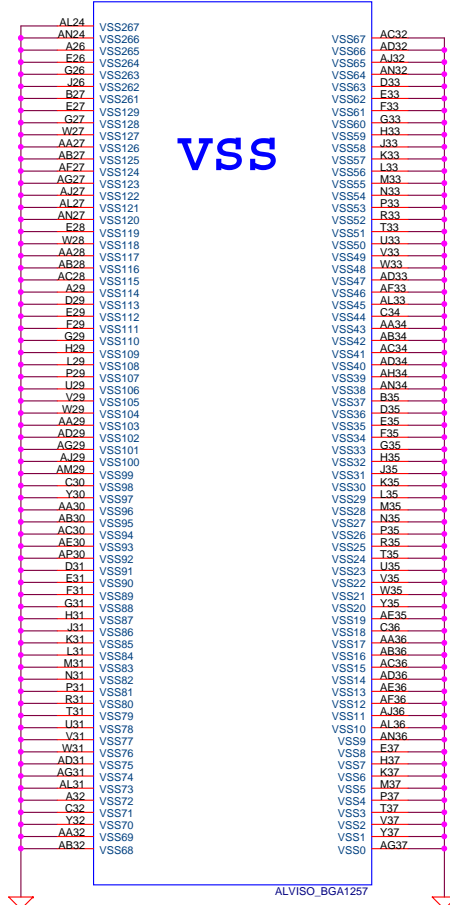
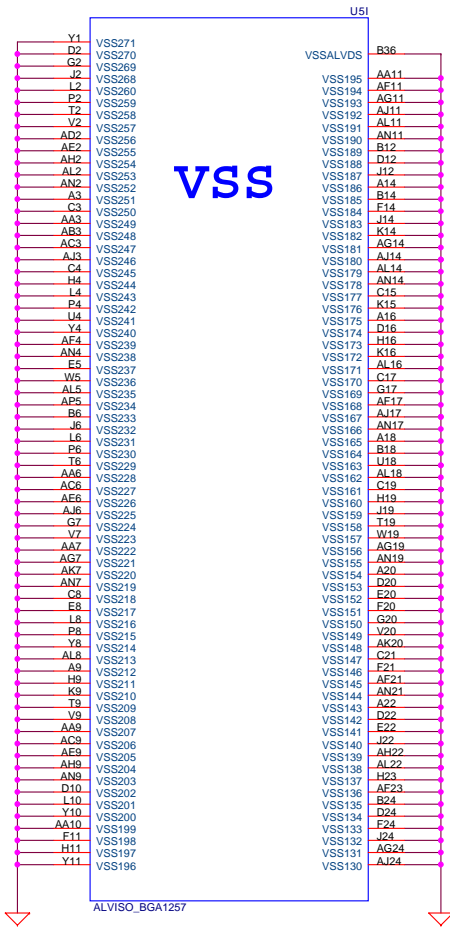
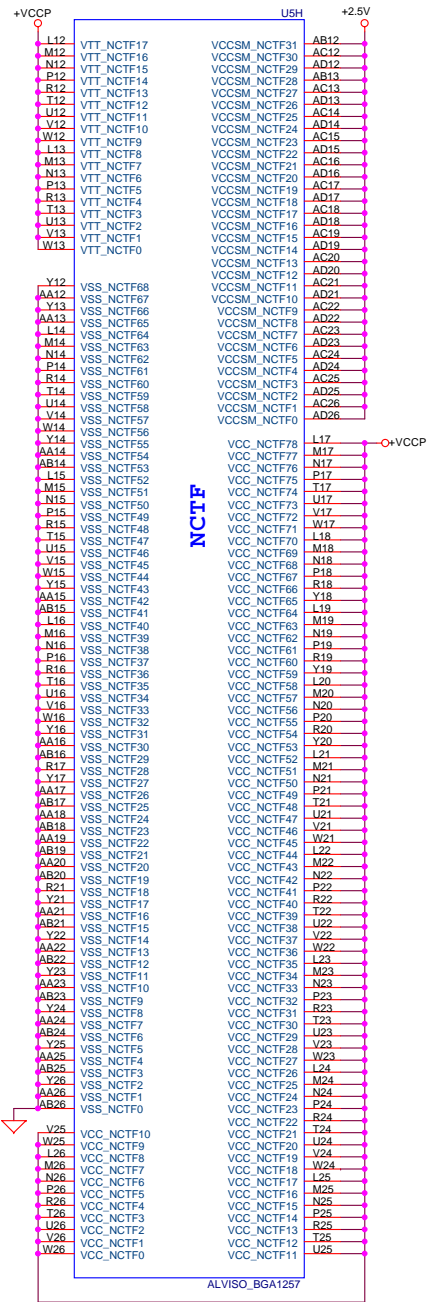


This Symbol as same as Intel CRB schematic, So Layout Guide will show these signals routed differentially.

ALVISO_BGA1257



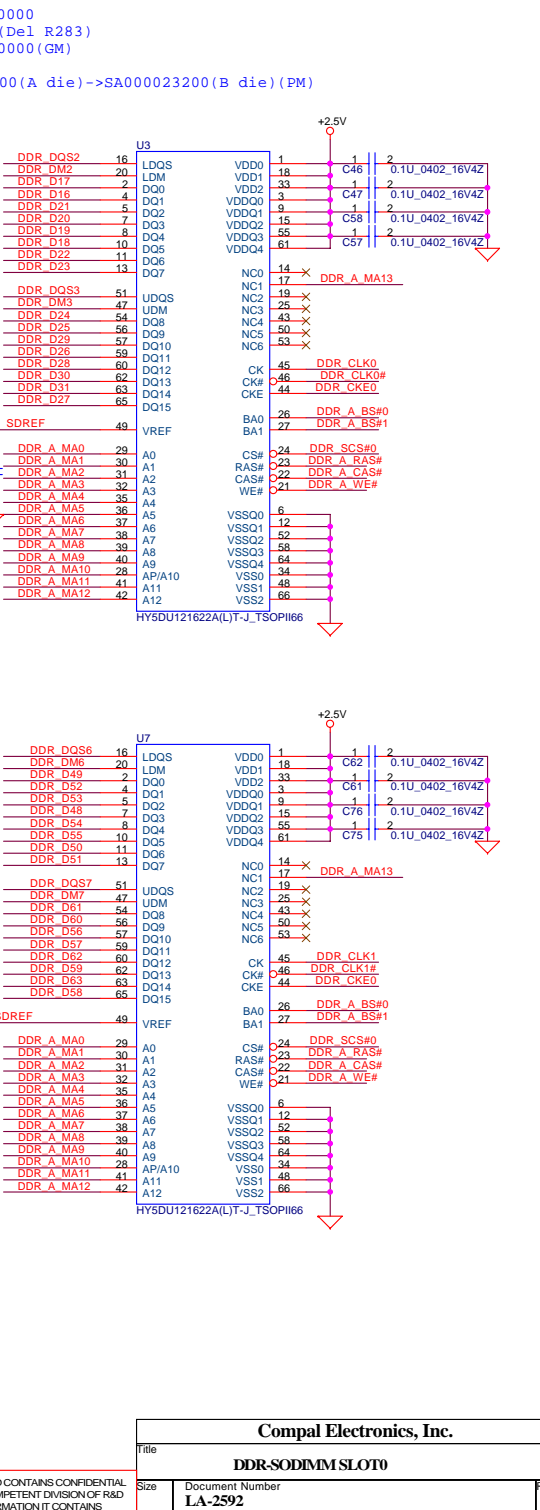
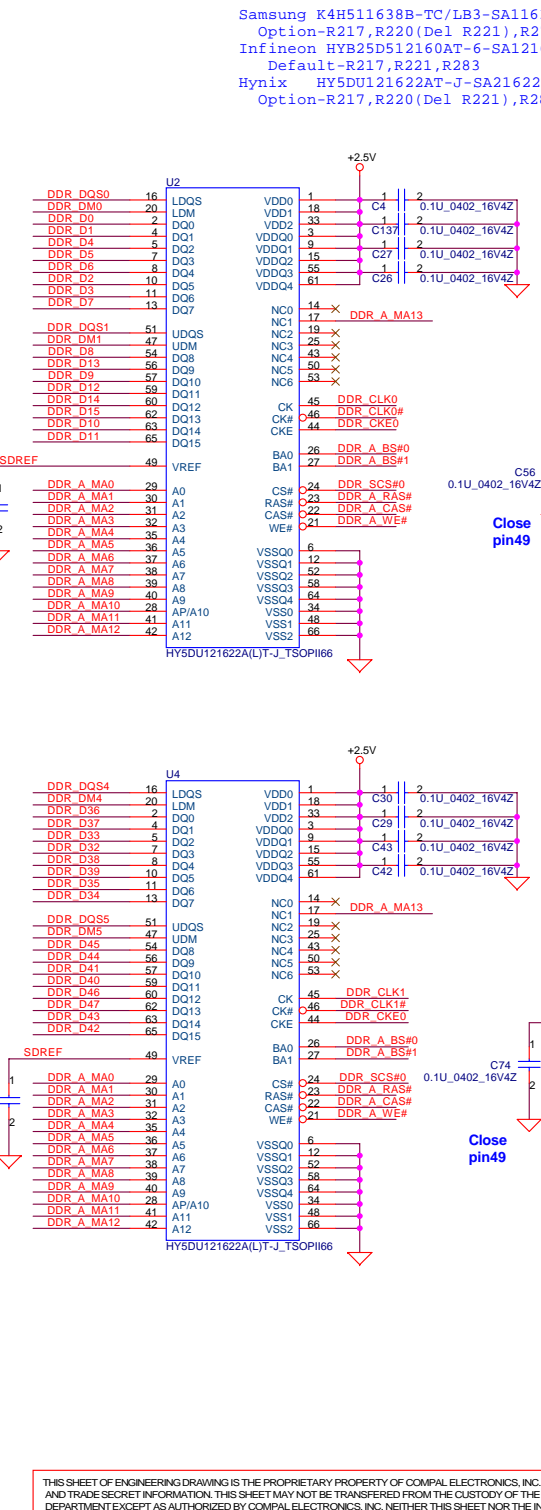
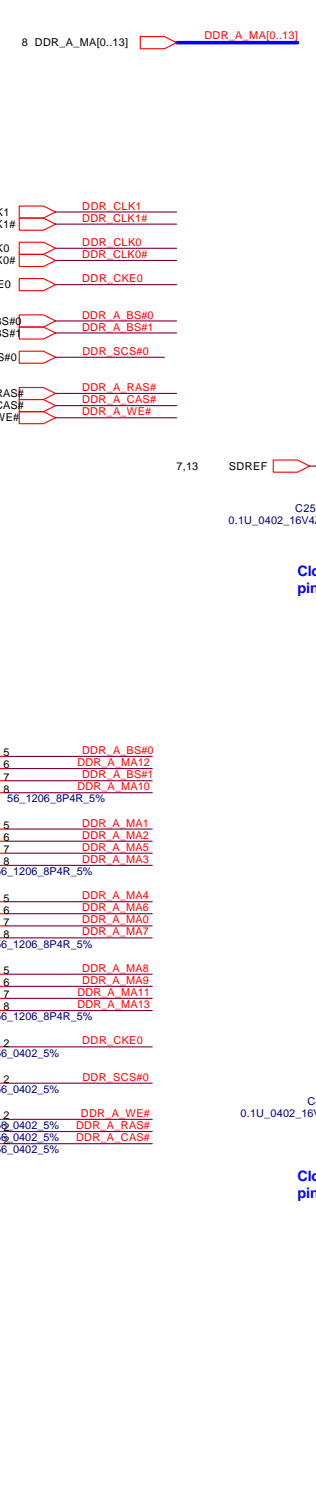
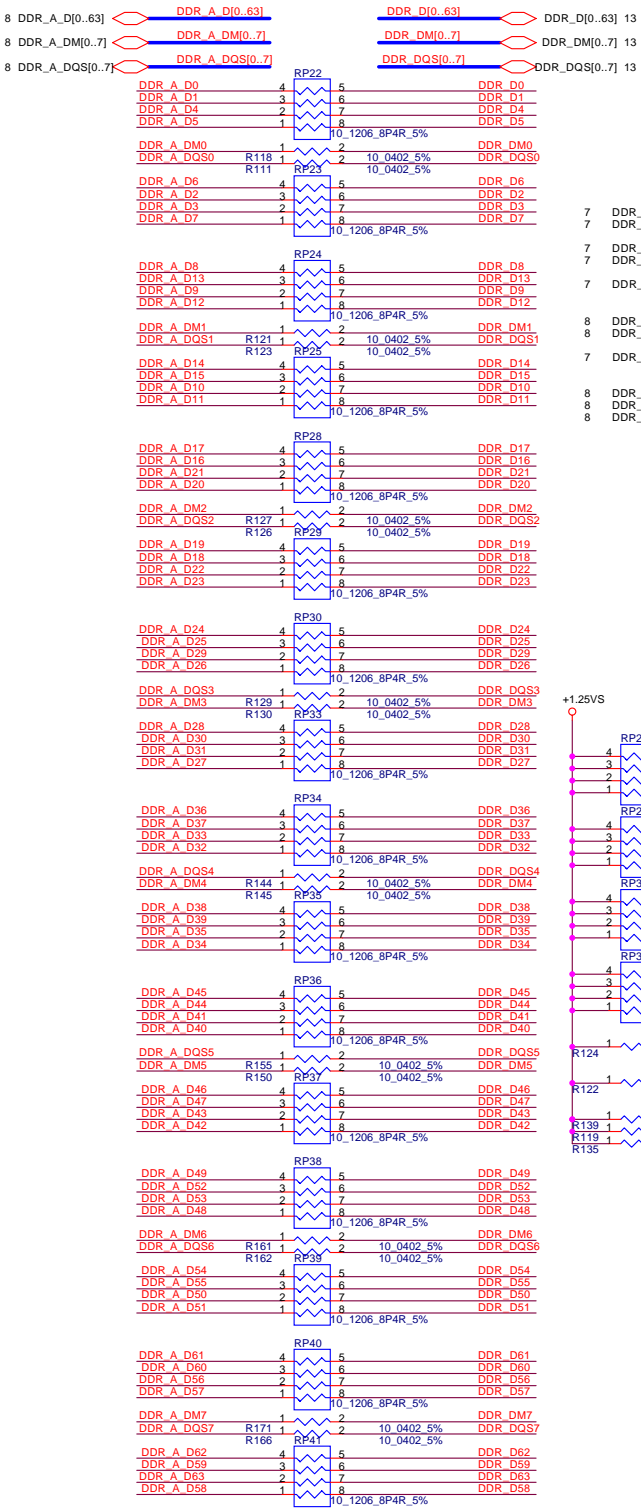
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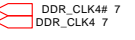
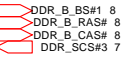
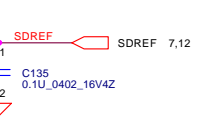
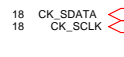
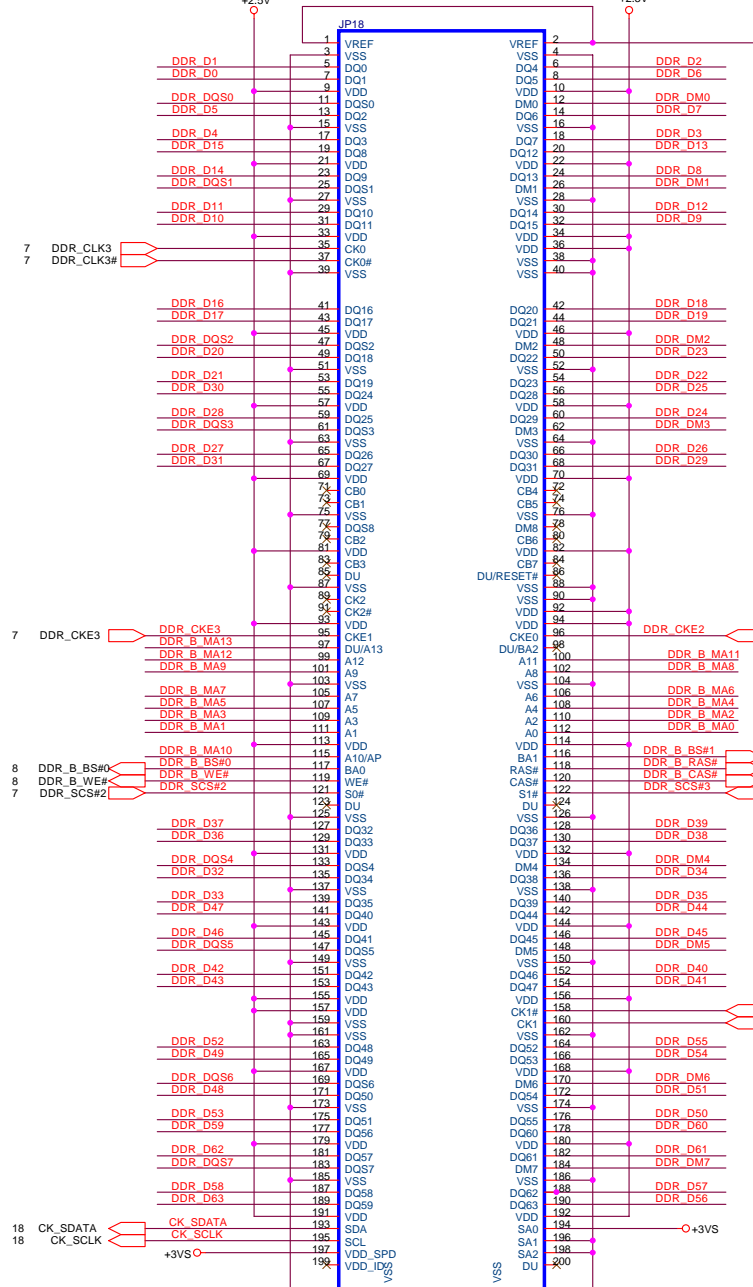
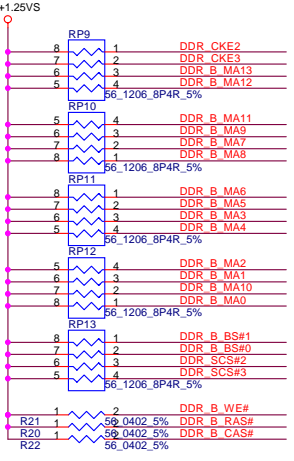
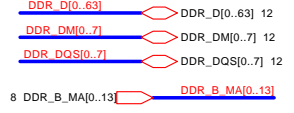
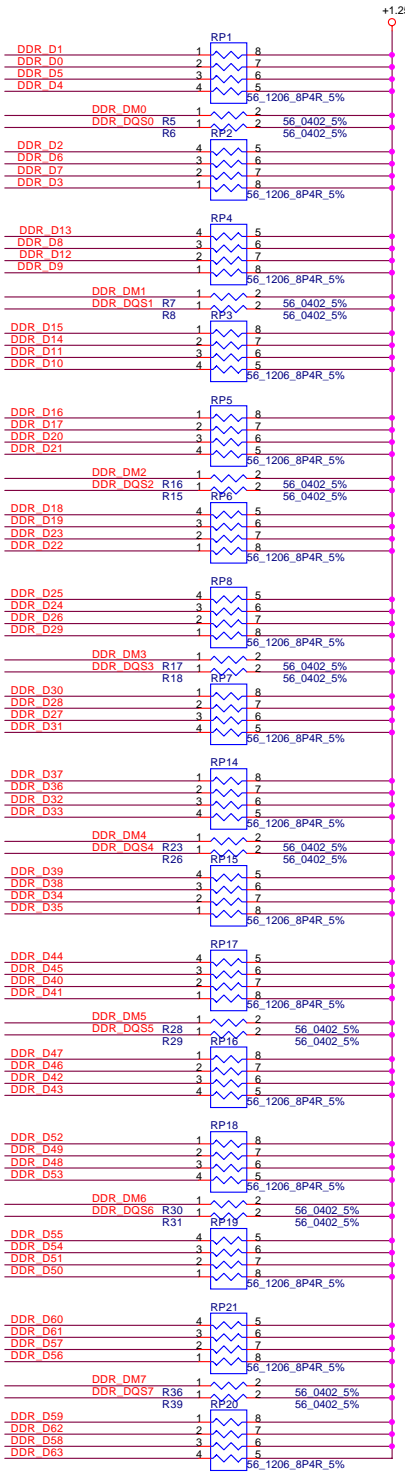
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Samsung K4H511638B-TC/LB3-SA116380000
 Option-R217,R220(Del R221),R277(Del R283)
 Infineon HYB25D512160AT-6-SA12160000(GM)
 Default-R217,R221,R283
 Hynix HY5DU121622AT-J-SA216220000(A die)->SA000023200(B die)(PM)
 Option-R217,R220(Del R221),R283

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Title DDR-SODIMM SLOT0			
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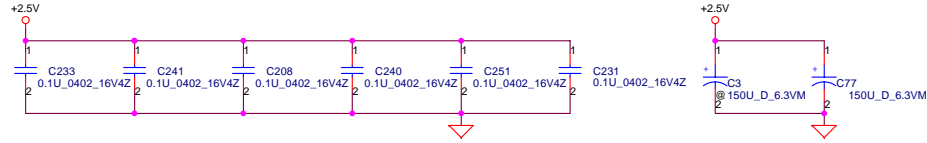
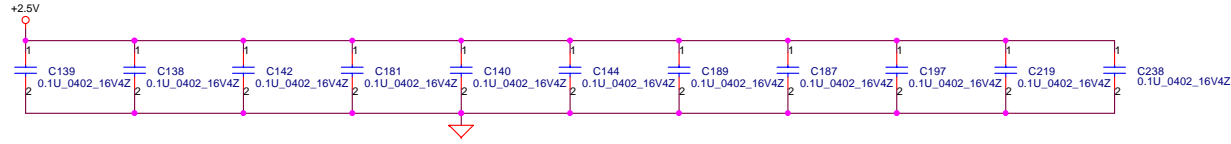
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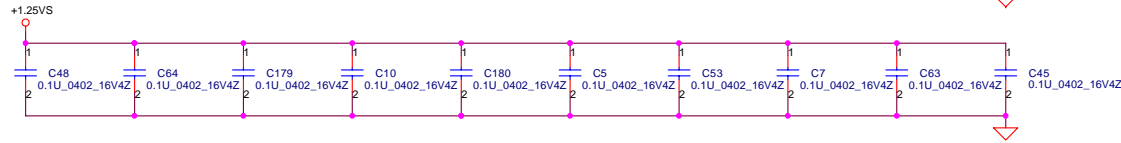
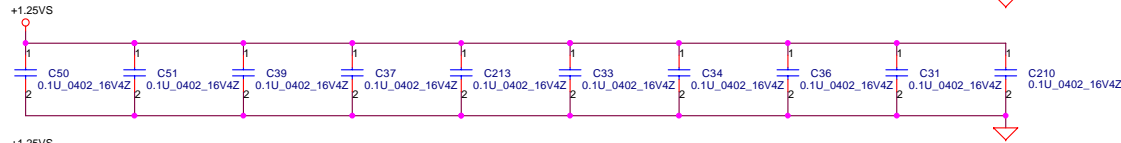
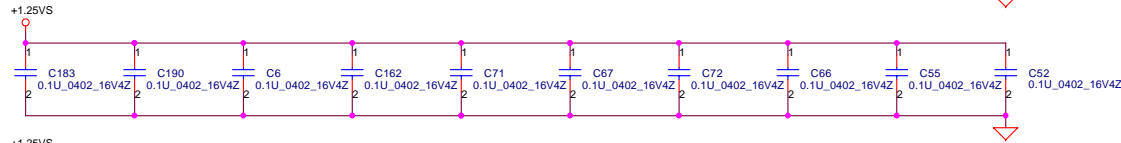
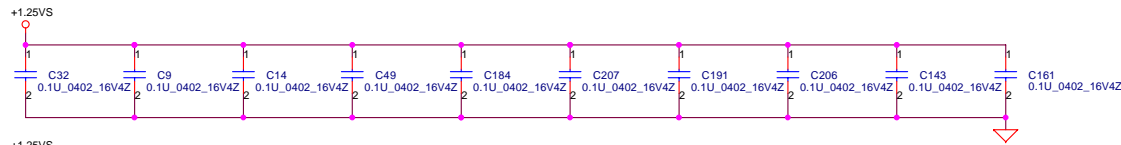
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DDR-SODIMM SLOT1			
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Layout note :
Distribute as close as possible to DDR-SODIMM.

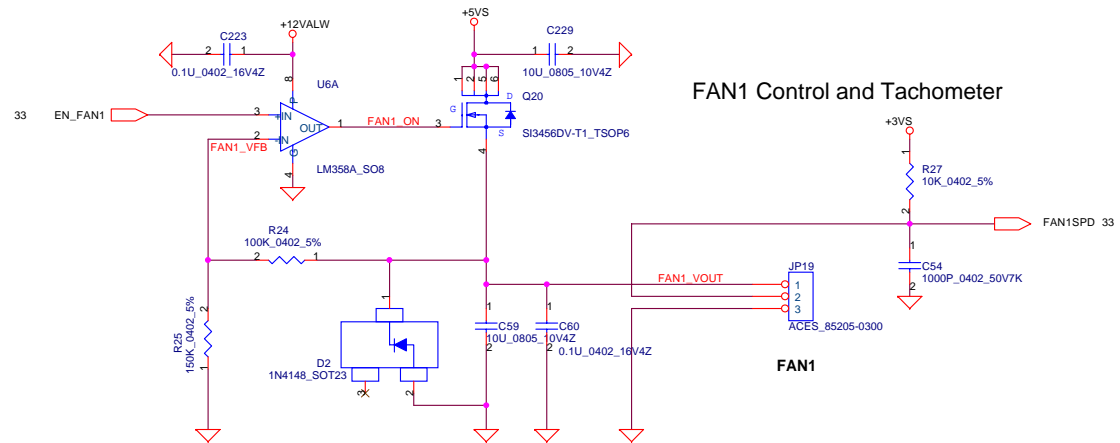
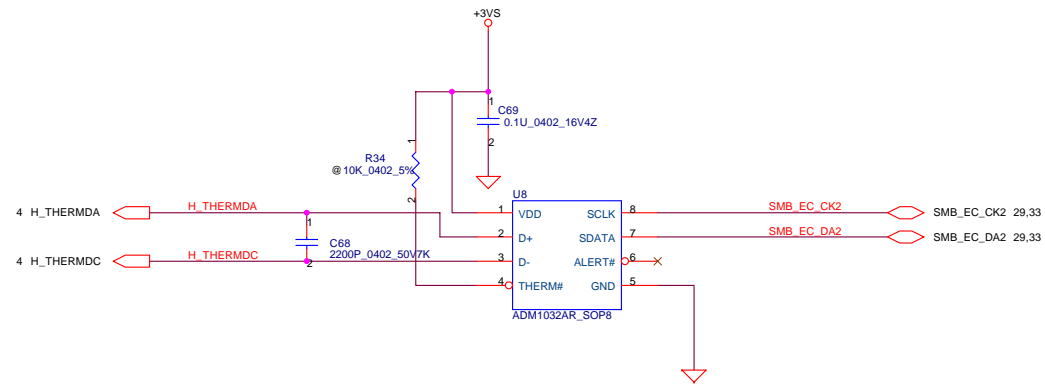
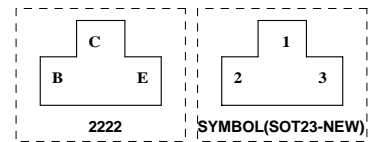


Layout note :
Place one cap close to every 2 pull up resistors termination to +1.25V



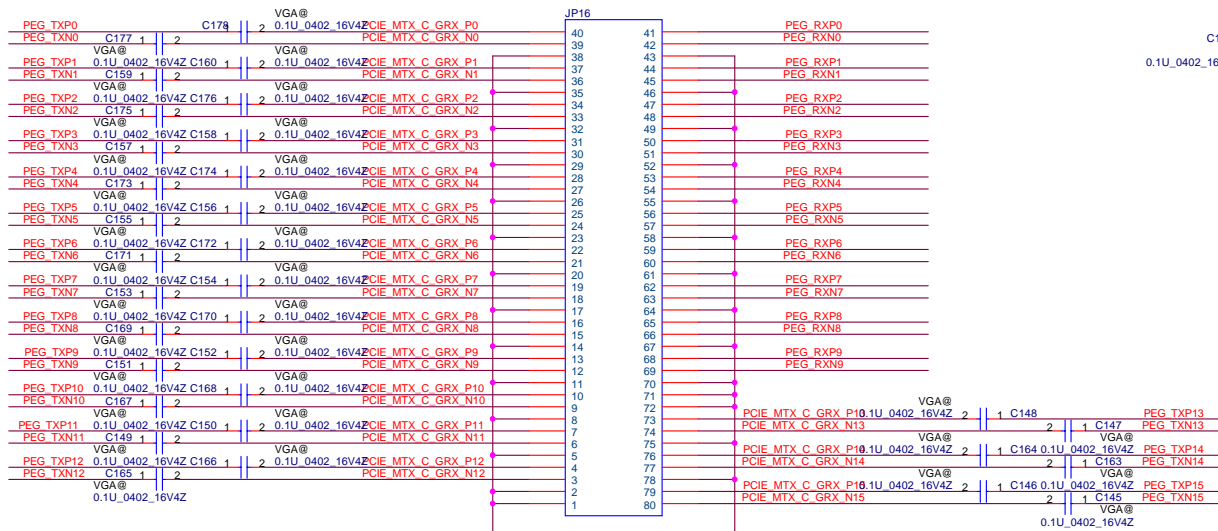
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Title			
DDR SODIMM Decoupling			
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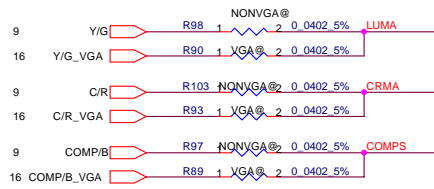


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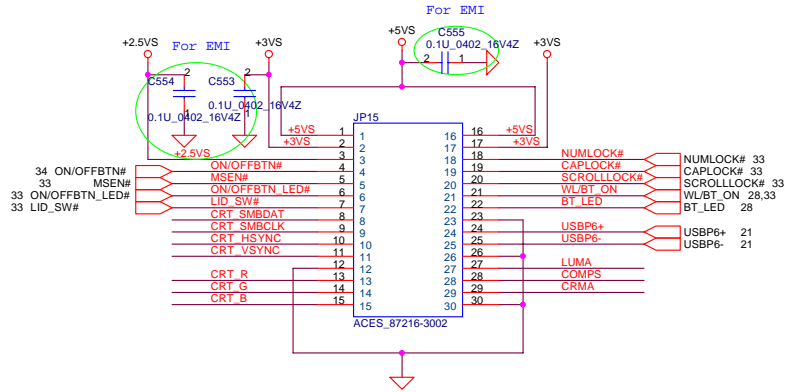
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Thermal sensor and Fan			
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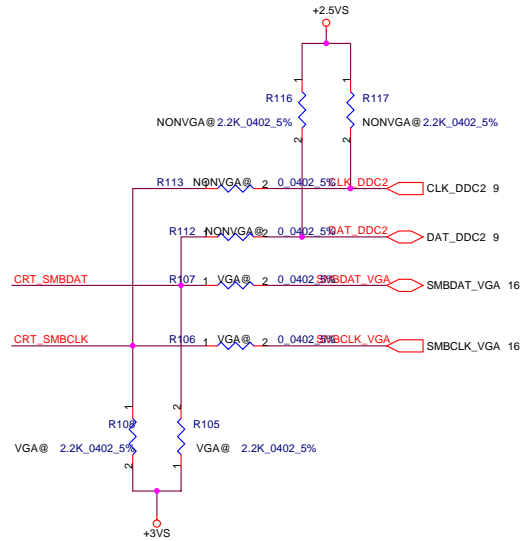
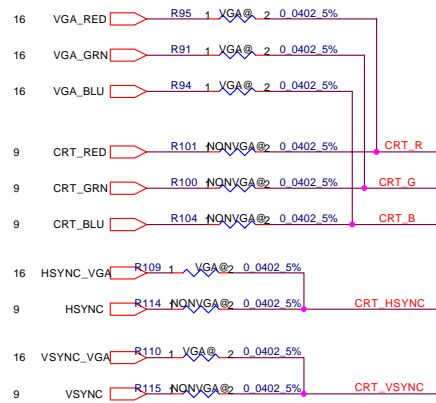
TV-Out Connector



VGA I/O PORT Connector

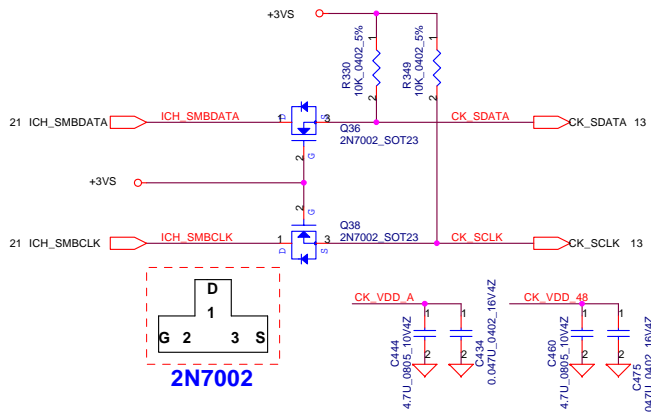


CRT CONNECTOR



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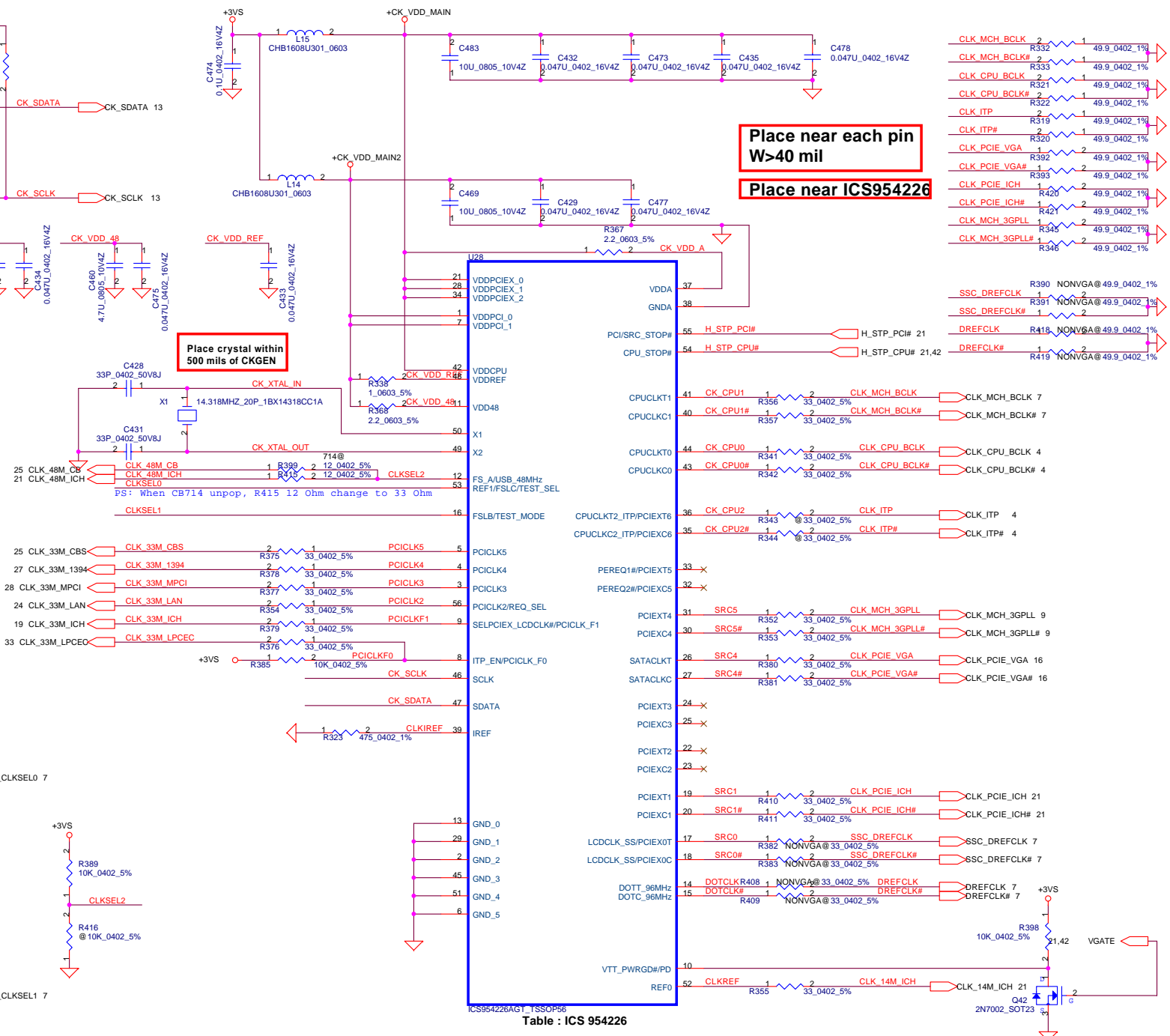
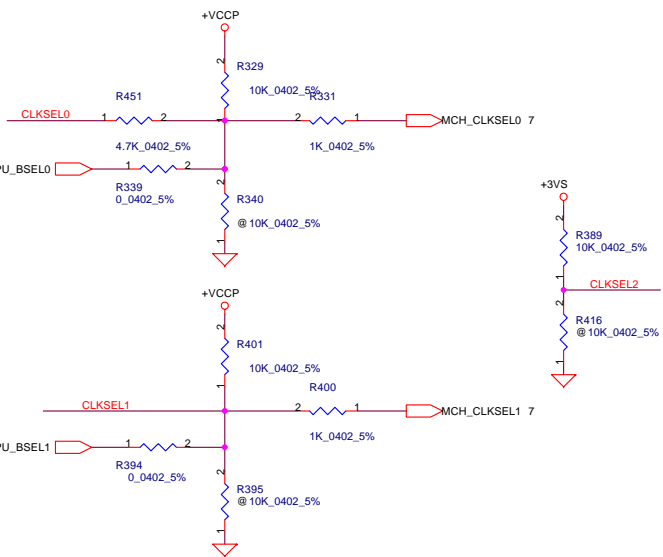
Compal Electronics, Inc.			
TV_OUT and DVI connector			
Title			
Size	Document Number	Rev	
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0 0 1 for Dothan-B 533Mhz
1 0 1 for Dothan-B 400Mhz

FSC CLKSEL0	FSB CLKSEL1	FSA CLKSEL2	CPU MHz	SRC MHz	PCI MHz
0	0	0	266	100	33.3
0	0	1	133	100	33.3
0	1	0	200	100	33.3
0	1	1	166	100	33.3
1	0	0	333	100	33.3
1	0	1	100	100	33.3
1	1	0	400	100	33.3
1	1	0	RESERVED		

Table : ICS 954226

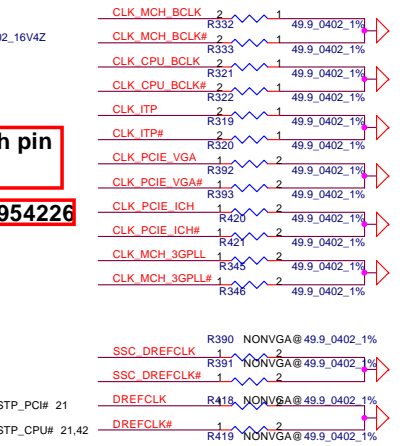


Place near each pin
W>40 mil

Place near ICS954226

Place crystal within
500 mils of CKGEN

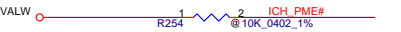
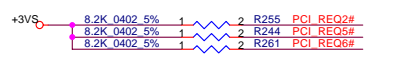
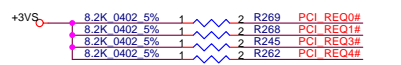
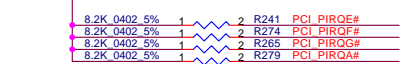
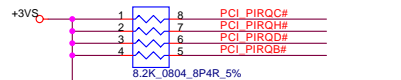
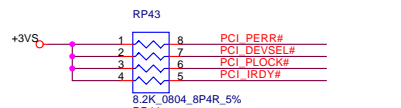
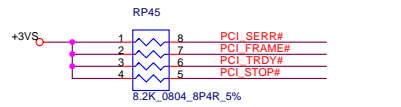
Table : ICS 954226



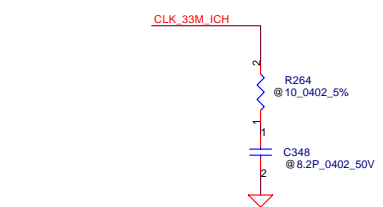
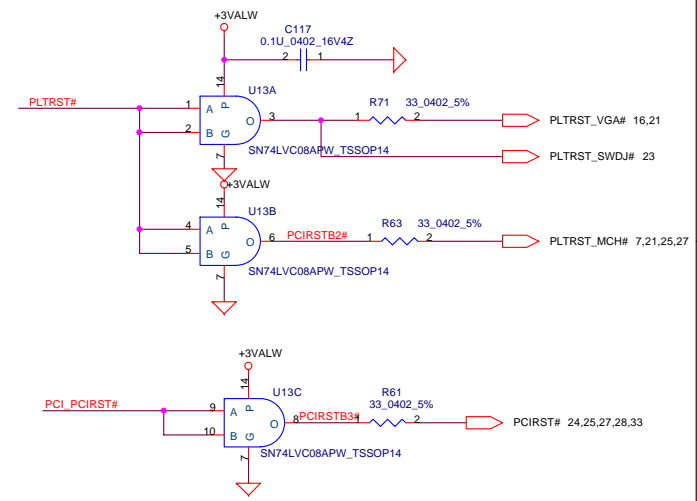
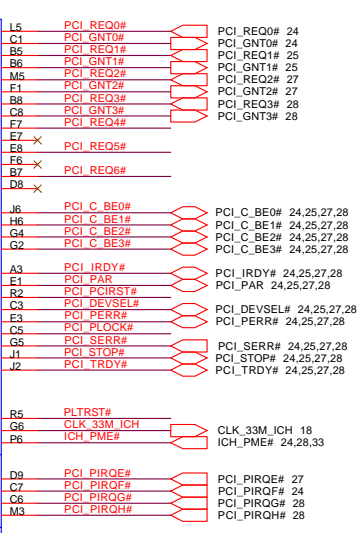
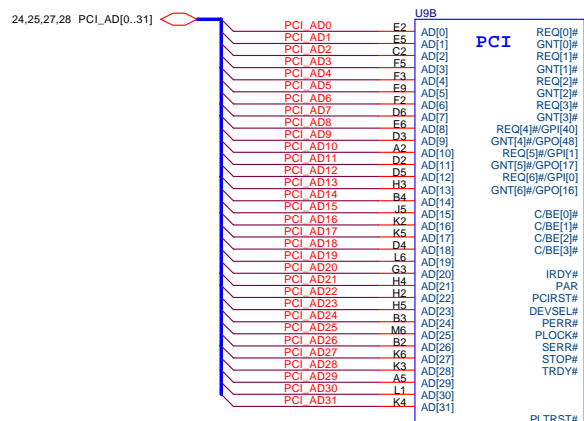
Compal Electronics, Inc.
Clock Generator

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Size	Document Number			
Customer	LA-2592			
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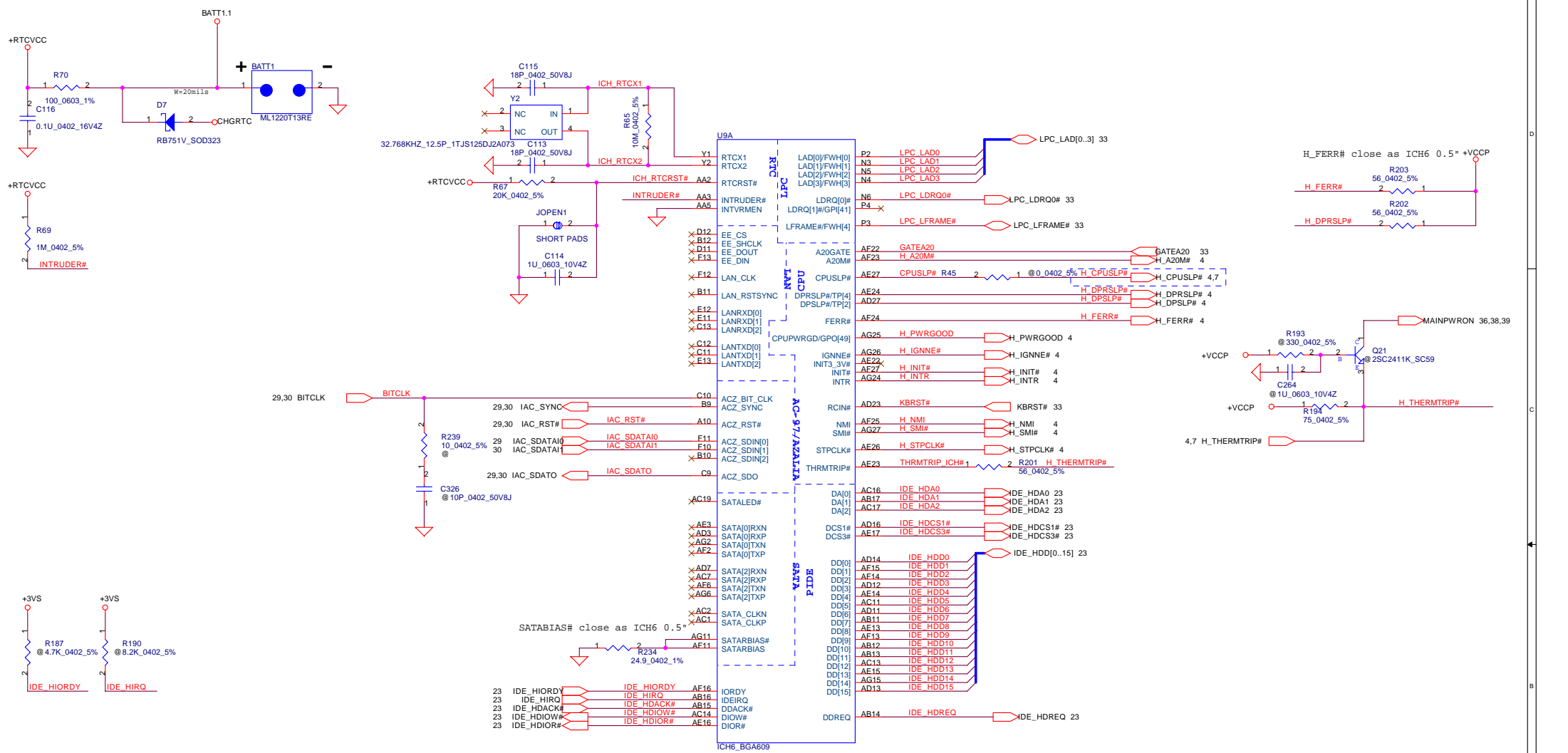
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PME# signal has an integrated pull-up of 18 k to 42 k

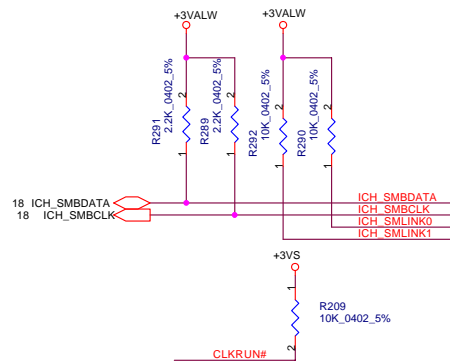


SA8280108G0 S IC 030 FW82801FBM B2 BGA 609P ICH6-M ->
SA8280108E0(R3)/SA8280108D0(R1) S IC 030 FW82801FBM QS ICH6-M BGA 609P

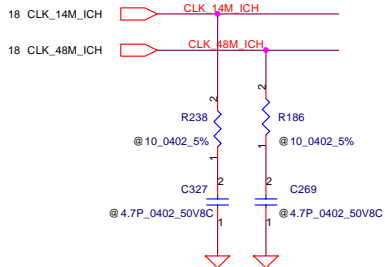


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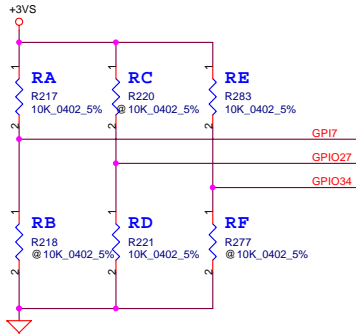
Compal Electronics, Inc.			
Title			
ICH6(2/4)			
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Requires a PU Resistor to Vcc3_3 (CRB uses 8.2K to Vcc3_3)
CLK RUN no work to pull down

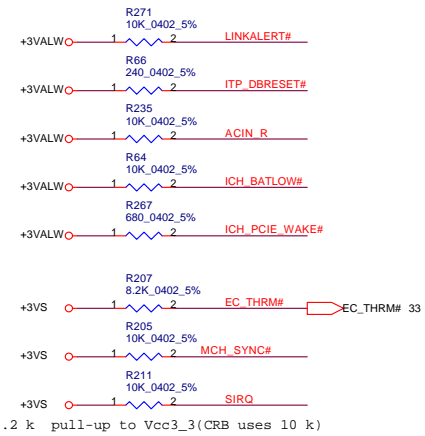


ICH6 VER1.5 GPIO12 +3VS plan

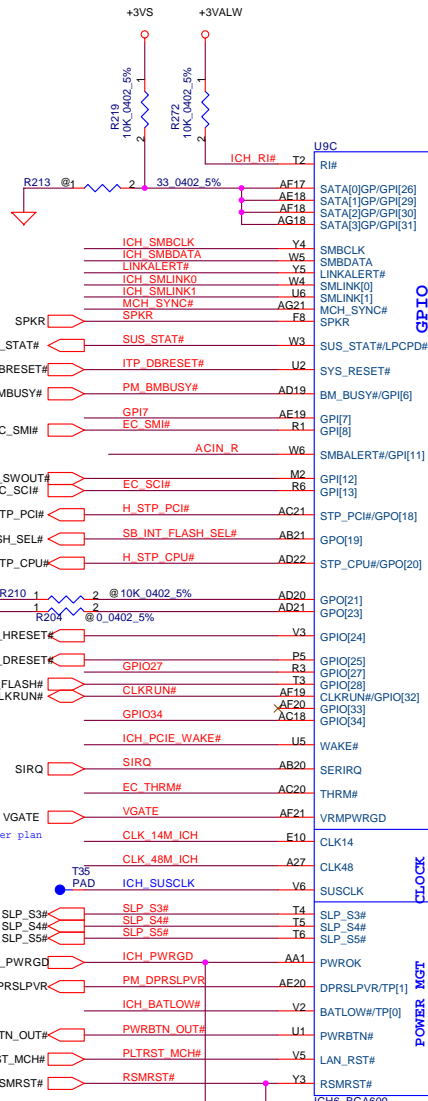
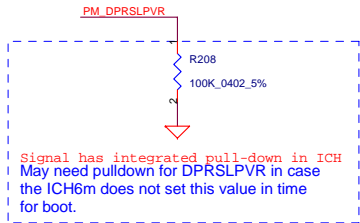


DDR RAM 32Mb*16*4 Vendor ID

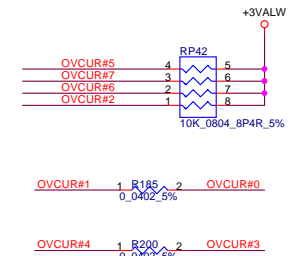
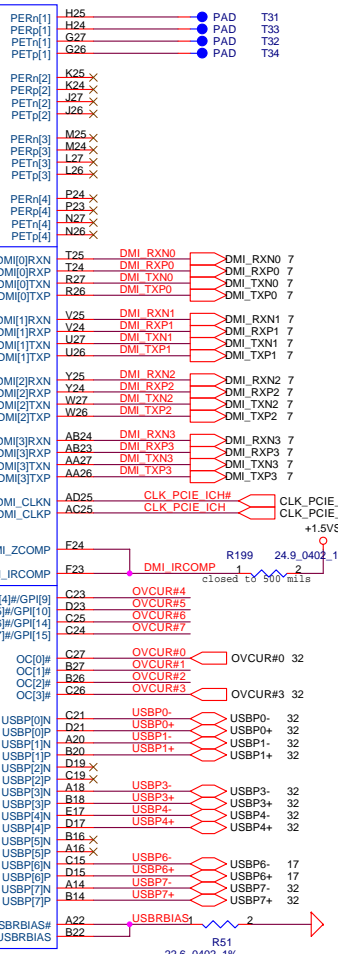
GPIO7/GPIO27/GPIO34	Vendor
0 0 0	Reserved
0 0 1	Reserved
0 1 0	Reserved
0 1 1	Reserved
1 0 0	Reserved
1 0 1	Infineon
1 1 0	Samsung
1 1 1	Hynix



8.2 k pull-up to Vcc3_3 (CRB uses 10 k)



GPIO
PCI-EXPRESS
DIRECT MEDIA INTERFACE
CLOCK
POWER MGT
USB



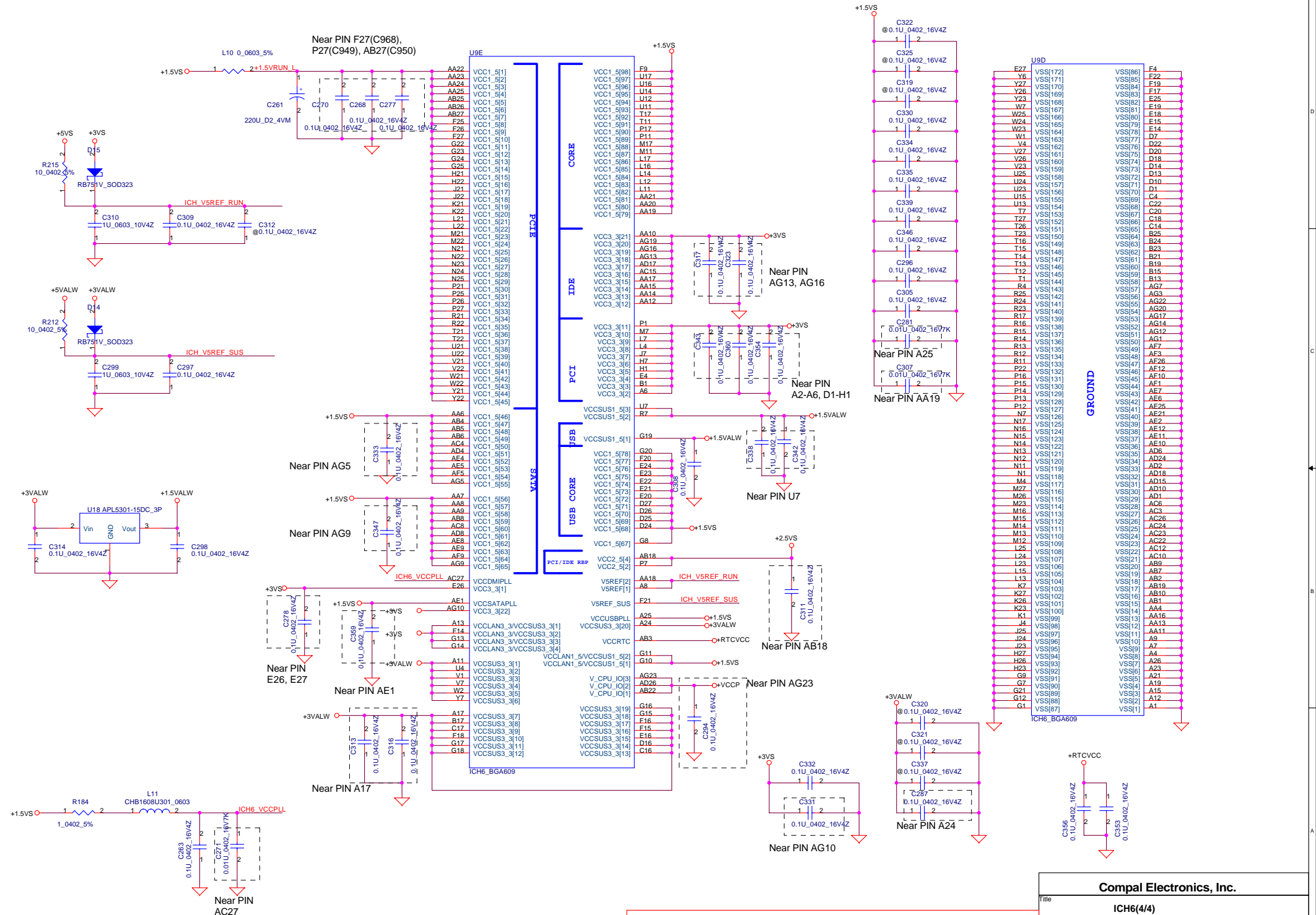
USBPN/USBP impedance 45 Ohm

Compal Electronics, Inc.

ICH6(3/4)

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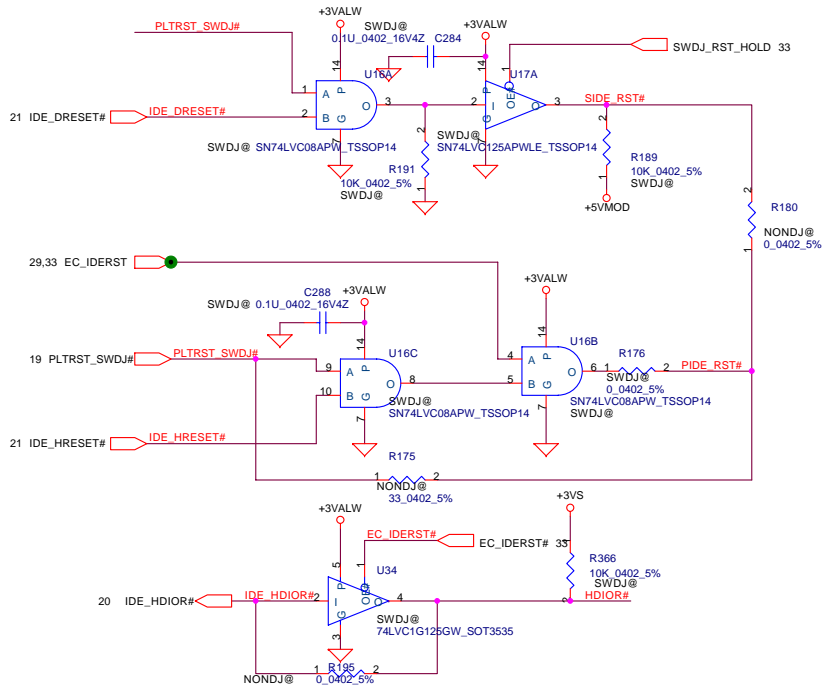
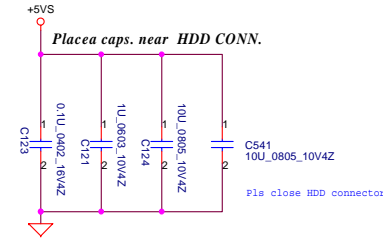
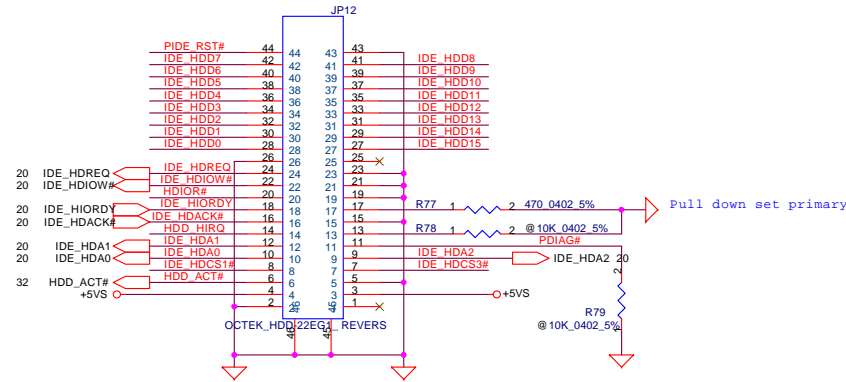
Compal Electronics, Inc.

ICH6(4/4)

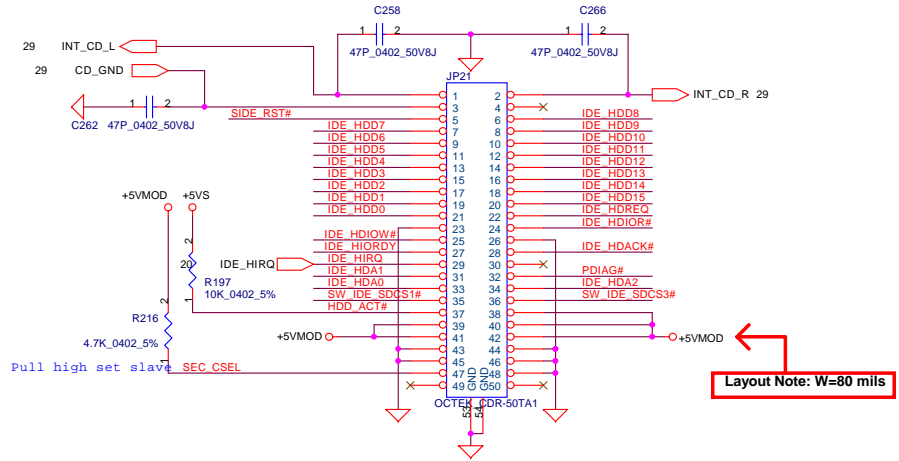
Title	Rev 0.1
Size	Document Number
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Date: Tuesday, February 15, 2005	Sheet 22 of 46

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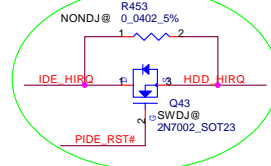
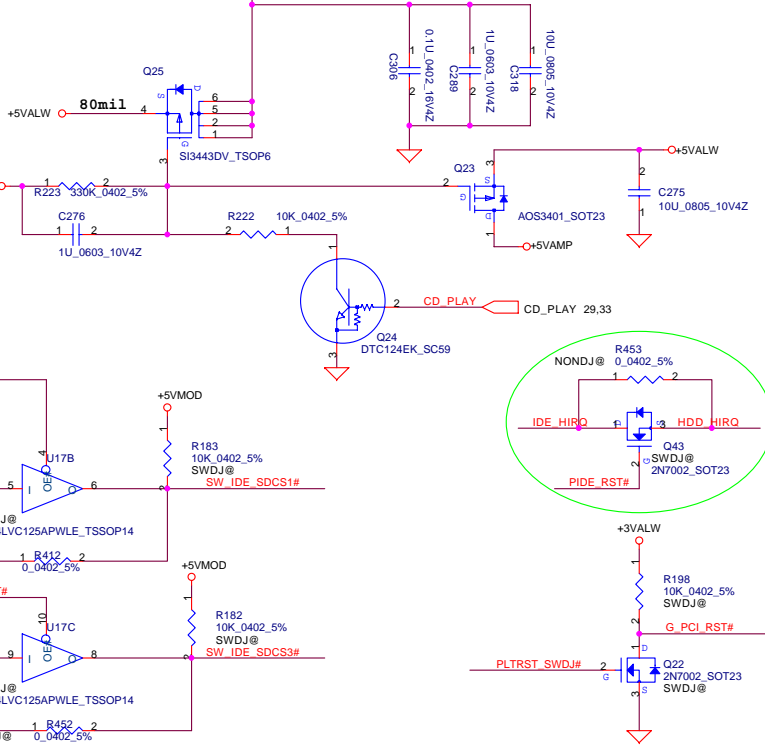
HDD Connector



CD-ROM Connector

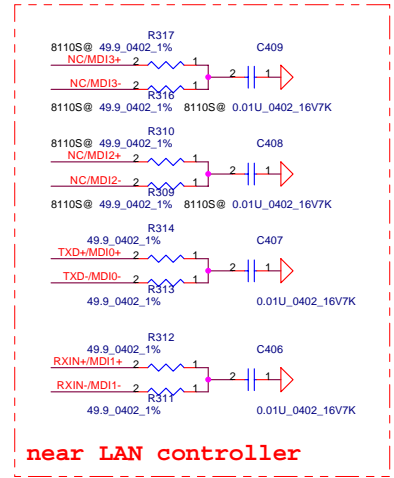
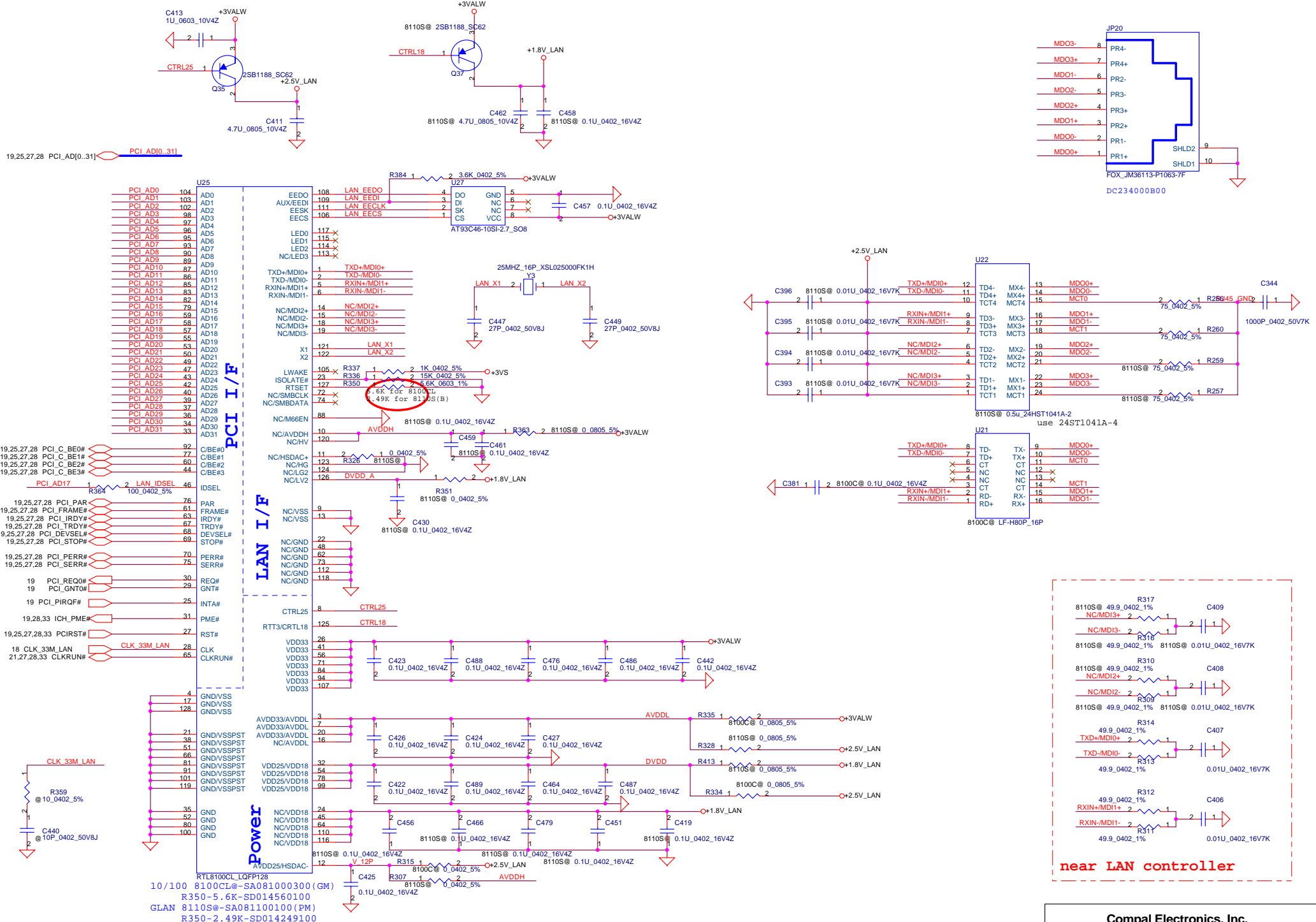


+5VMOD Source



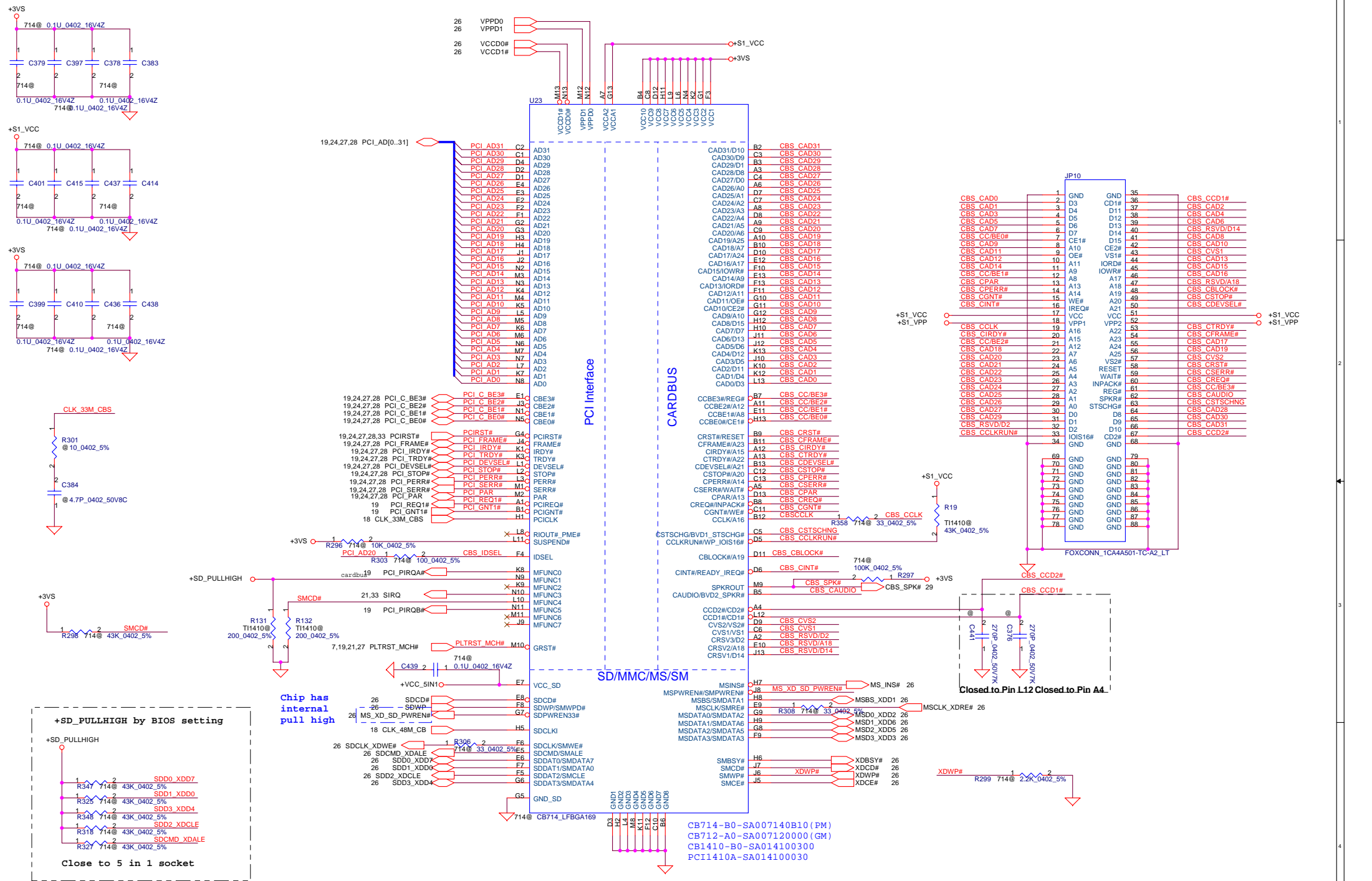
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Compal Electronics, Inc.			
HDD & CD-ROM CONN.			
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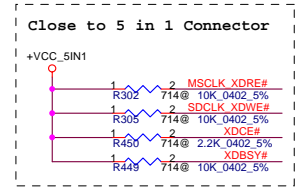
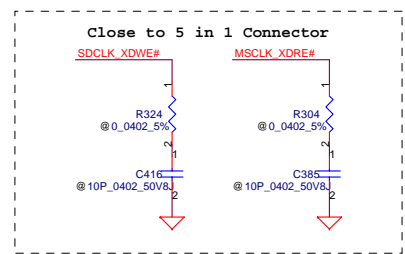
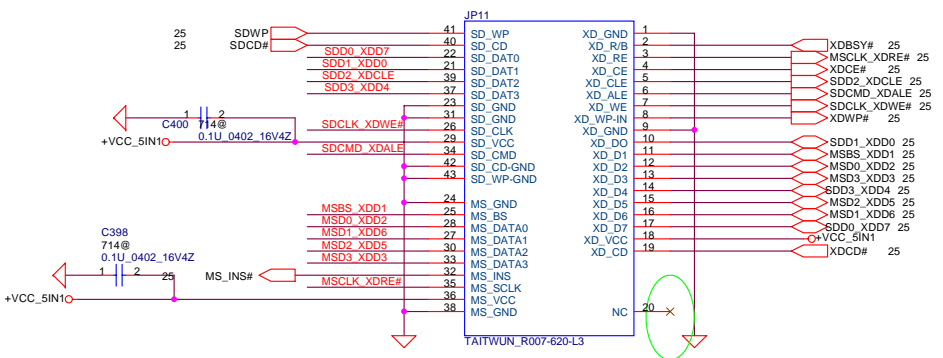
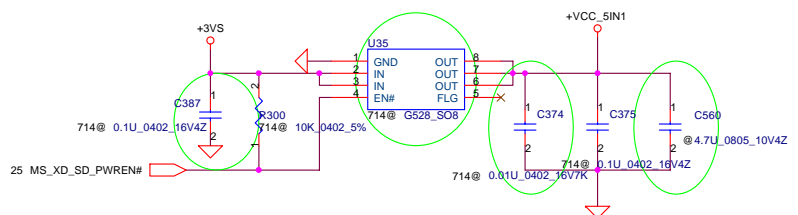
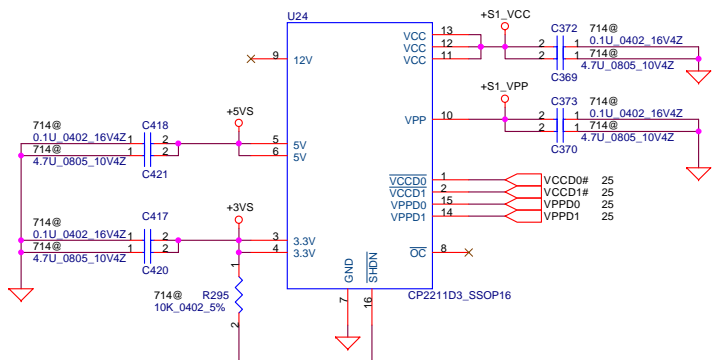
Compal Electronics, Inc.			
LAN CONTROLLER			
Title	Size	Document Number	Rev
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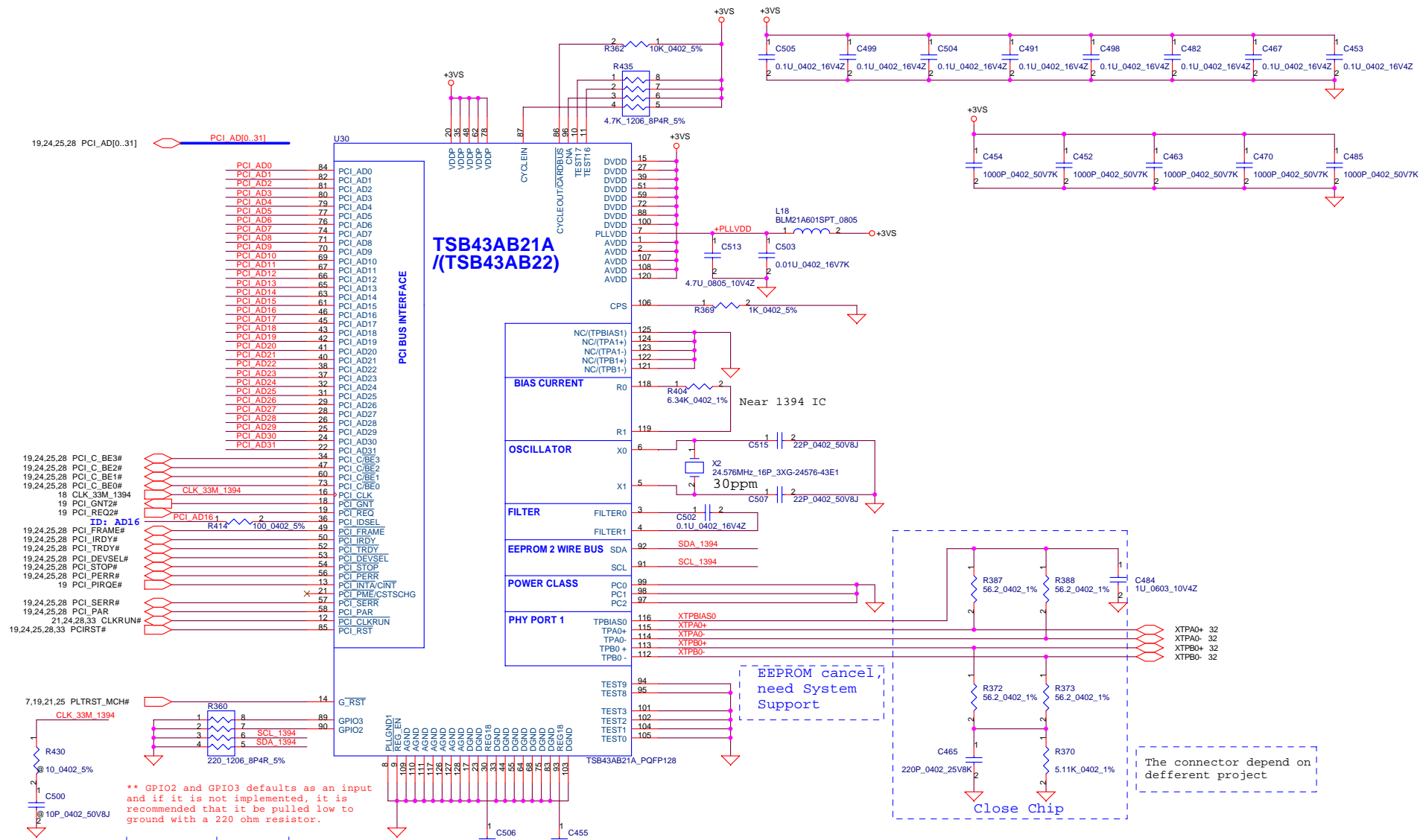
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Compal Electronics, Inc.			
CardBus CTRL CB714			
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Compal Electronics, Inc.		
Title CARD BUS SOCKET		
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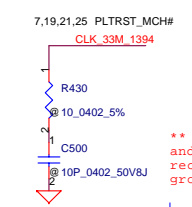
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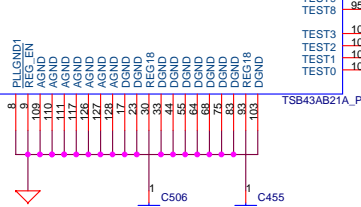
PCI BUS INTERFACE

PCI AD0	84	PCI_AD0
PCI AD1	82	PCI_AD1
PCI AD2	81	PCI_AD2
PCI AD3	80	PCI_AD3
PCI AD4	79	PCI_AD4
PCI AD5	77	PCI_AD5
PCI AD6	74	PCI_AD6
PCI AD7	71	PCI_AD7
PCI AD8	70	PCI_AD8
PCI AD9	69	PCI_AD9
PCI AD10	67	PCI_AD10
PCI AD11	66	PCI_AD11
PCI AD12	65	PCI_AD12
PCI AD13	63	PCI_AD13
PCI AD14	61	PCI_AD14
PCI AD15	46	PCI_AD15
PCI AD16	45	PCI_AD16
PCI AD17	43	PCI_AD17
PCI AD18	42	PCI_AD18
PCI AD19	41	PCI_AD19
PCI AD20	40	PCI_AD20
PCI AD21	38	PCI_AD21
PCI AD22	37	PCI_AD22
PCI AD23	32	PCI_AD23
PCI AD24	31	PCI_AD24
PCI AD25	29	PCI_AD25
PCI AD26	28	PCI_AD26
PCI AD27	26	PCI_AD27
PCI AD28	25	PCI_AD28
PCI AD29	24	PCI_AD29
PCI AD30	22	PCI_AD30
PCI AD31	22	PCI_AD31
PCI C_BE3#	47	PCI_CBE3
PCI C_BE2#	60	PCI_CBE2
PCI C_BE1#	73	PCI_CBE1
PCI C_BE0#	16	PCI_CBE0
PCI IRDY#	18	PCI_IRDY
PCI TRDY#	19	PCI_TRDY
PCI DEVSEL#	53	PCI_DEVSEL
PCI STOP#	54	PCI_STOP
PCI PERR#	56	PCI_PERR
PCI PIRQE#	13	PCI_PIRQE
PCI SERR#	57	PCI_SERR
PCI PAR	58	PCI_PAR
CLKRUN#	12	PCI_CLKRUN
PCIRST#	85	PCI_RST

19.24.25.28 PCI_AD[0..31]
 19.24.25.28 PCI_C_BE3#
 19.24.25.28 PCI_C_BE2#
 19.24.25.28 PCI_C_BE1#
 19.24.25.28 PCI_C_BE0#
 18 CLK 33M_1394
 19 PCI_GNT2#
 19 PCI_REQ2#
 ID: AD16
 19.24.25.28 PCI_FRAME#
 19.24.25.28 PCI_IRDY#
 19.24.25.28 PCI_TRDY#
 19.24.25.28 PCI_DEVSEL#
 19.24.25.28 PCI_STOP#
 19.24.25.28 PCI_PERR#
 19 PCI_PIRQE#
 19.24.25.28 PCI_SERR#
 19.24.25.28 PCI_PAR
 21.24.28.33 CLKRUN#
 19.24.25.28.33 PCIRST#



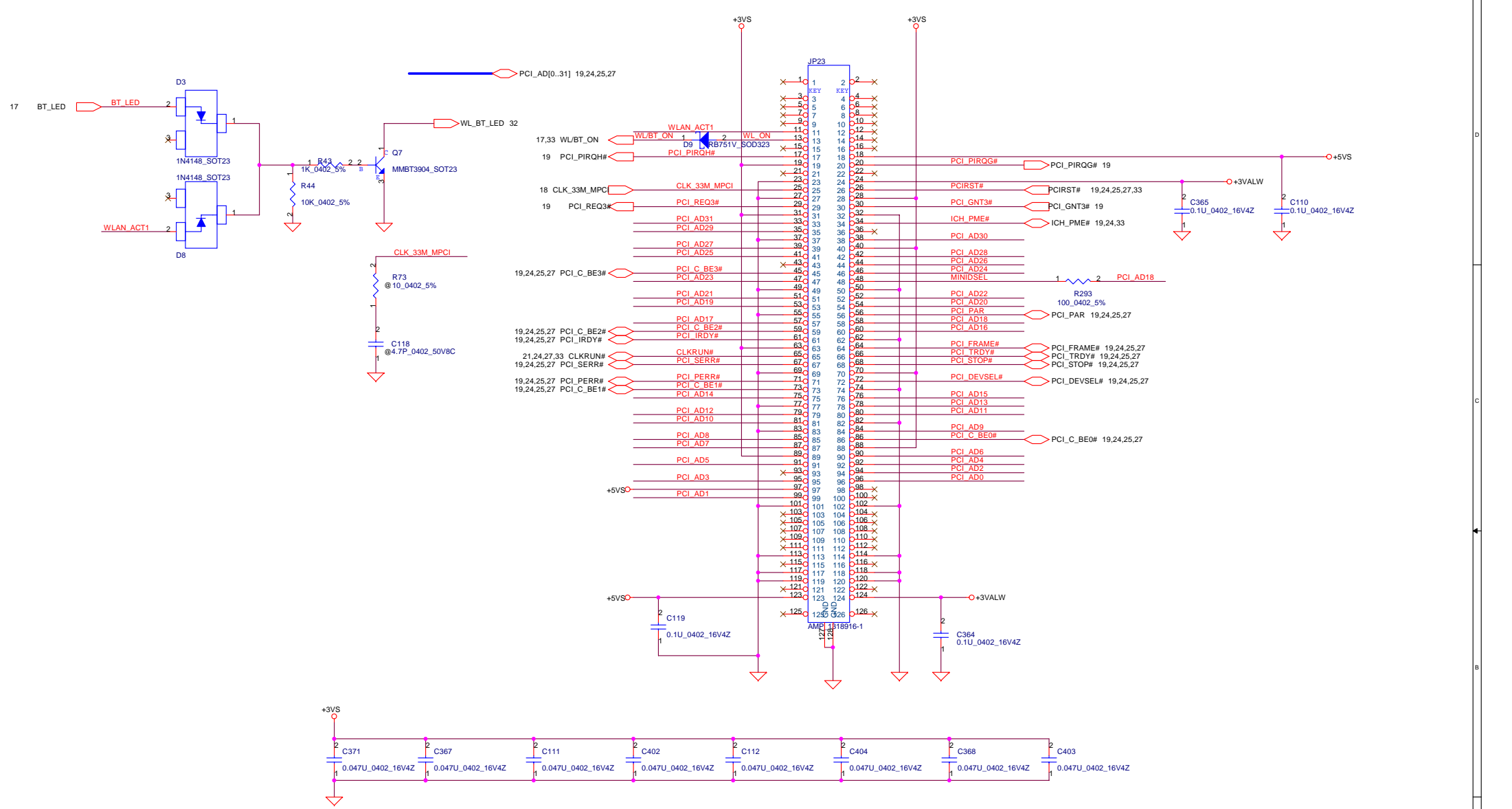
** GPIO2 and GPIO3 defaults as an input and if it is not implemented, it is recommended that it be pulled low to ground with a 220 ohm resistor.



EEPROM cancel, need System Support

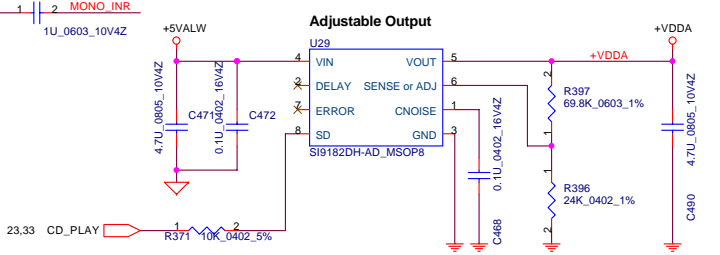
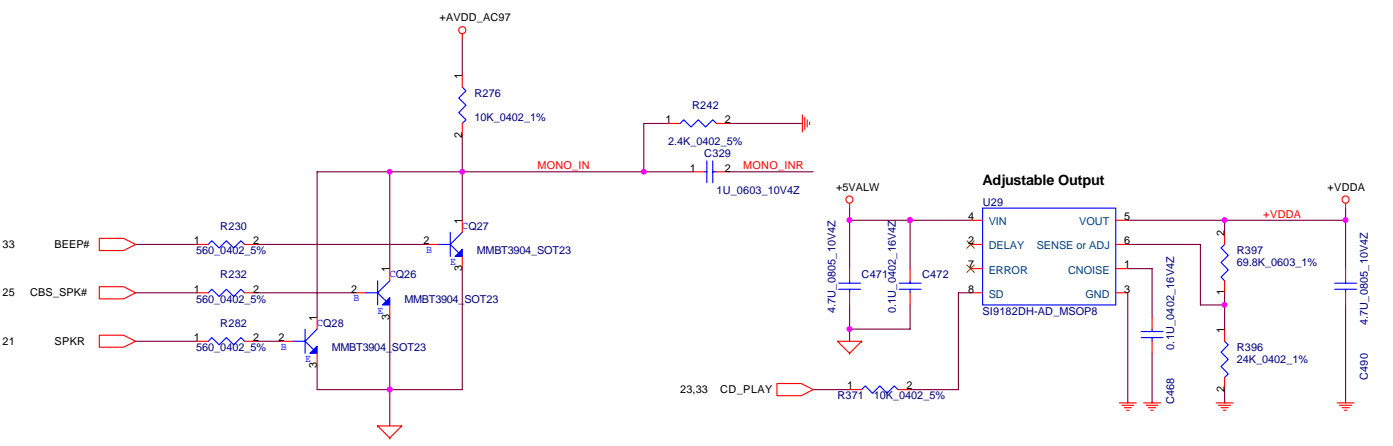
Close Chip

The connector depend on defferent project

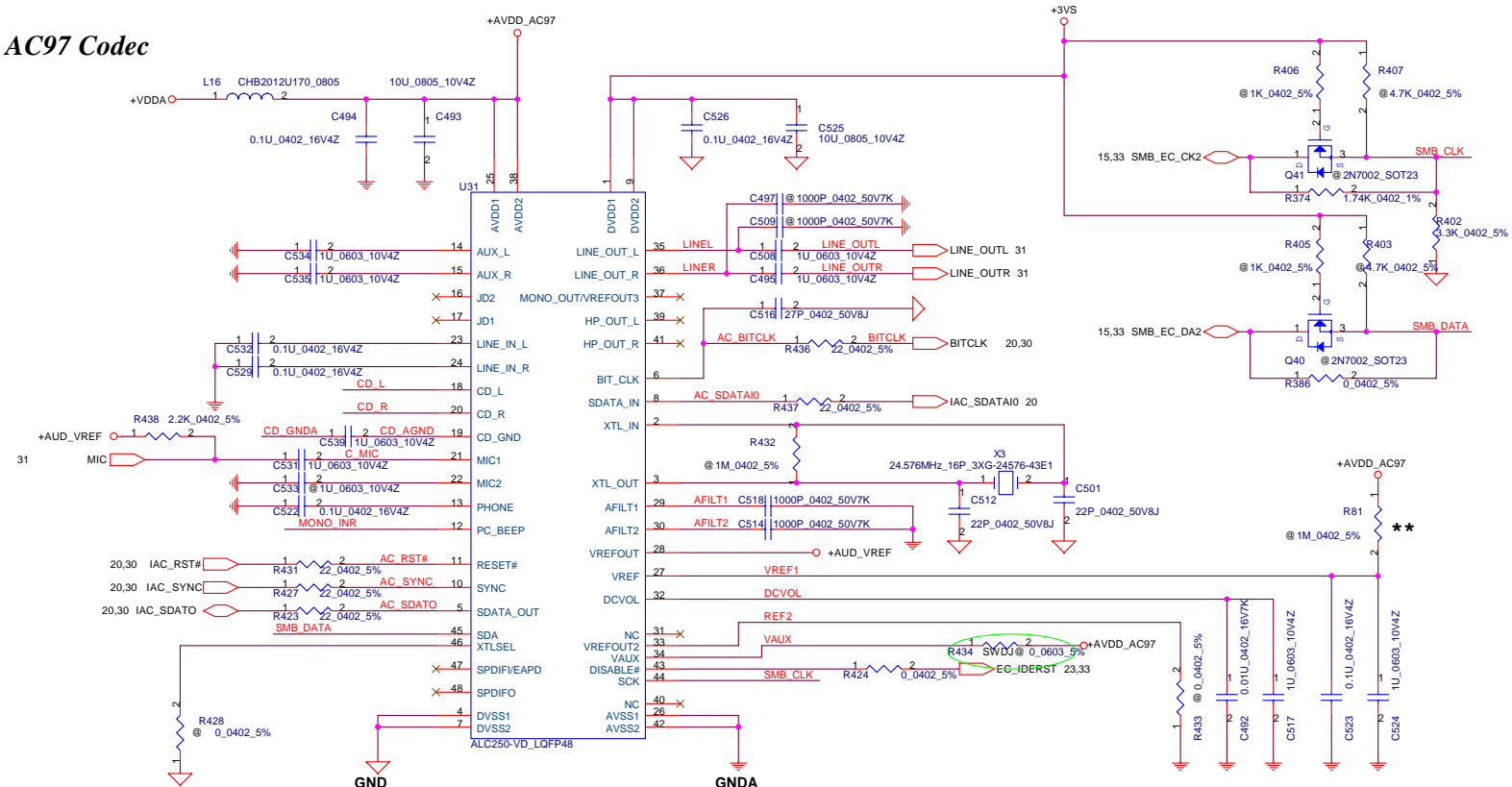


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Compal Electronics, Inc.		
Title		
MINPCI		
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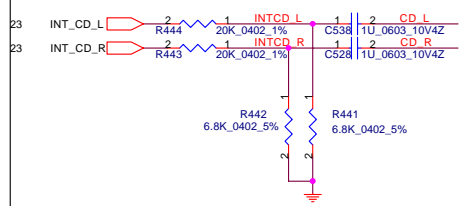


AC97 Codec

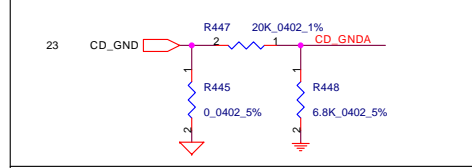


WITH 14.318MHz : Rxxx POP
WITH 24.576MHz : Rxxx DEPOP

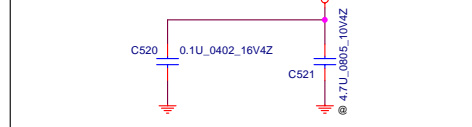
Audio Signal Bias Circuit



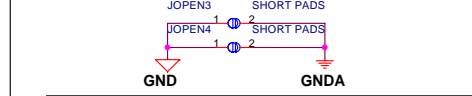
CD_GND To CD_GNDA Bypass



Analog Reference V



GND To GNDA Bypass

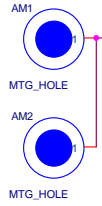
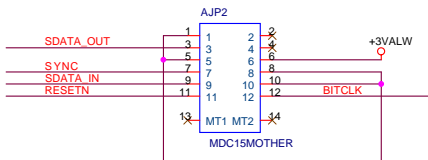
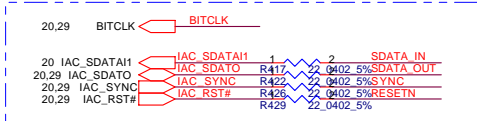


Compal Electronics, Inc.

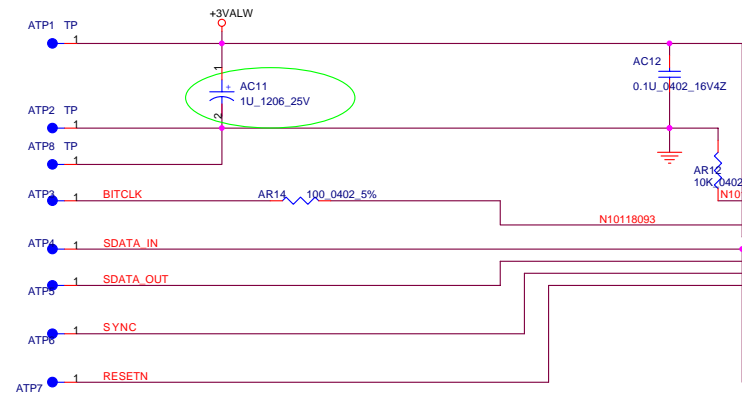
Codec ALC250

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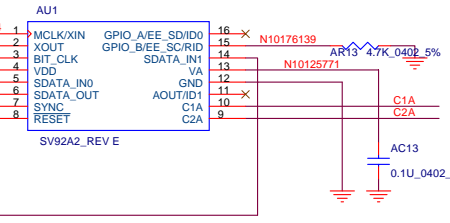
Agere Systems Proprietary
DRAFT COPY - FOR REVIEW ONLY
SUBJECT TO CHANGE



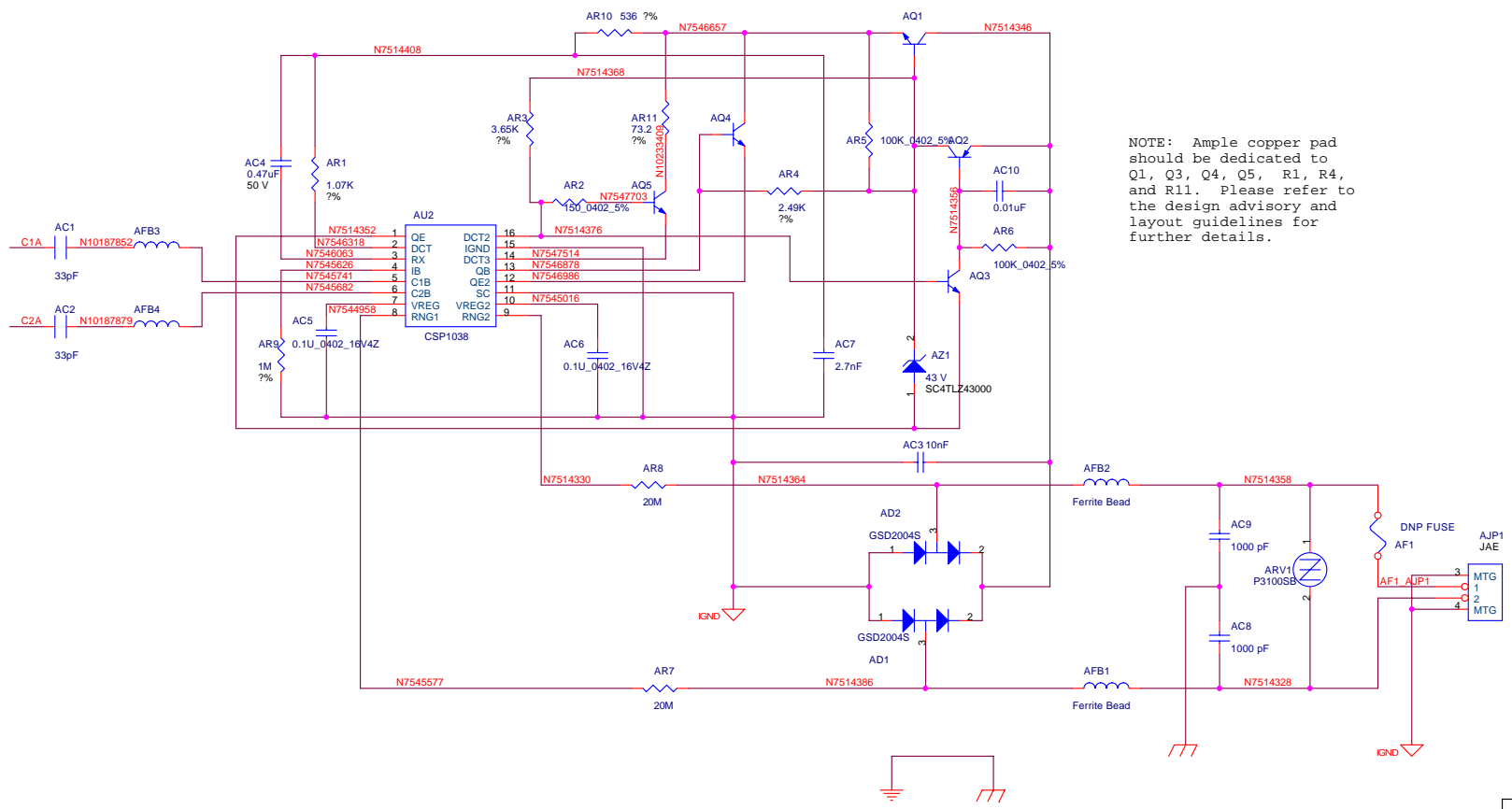
SV92A2 Codec ID Selection Table

	ID1	ID0	Output on:
Primary Line 1	1	0	SDATA_IN0
Secondary Line 1	0	0	SDATA_IN0
Secondary Line 1	1	1	SDATA_IN1
Secondary Line 2	0	1	SDATA_IN1

Operates as Secodary, line 1 modem in AC-97 systems and when populated with SV92A2 device based on internal pull ups on ID pins.

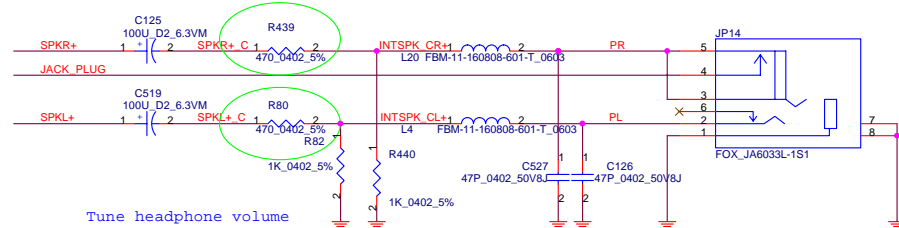
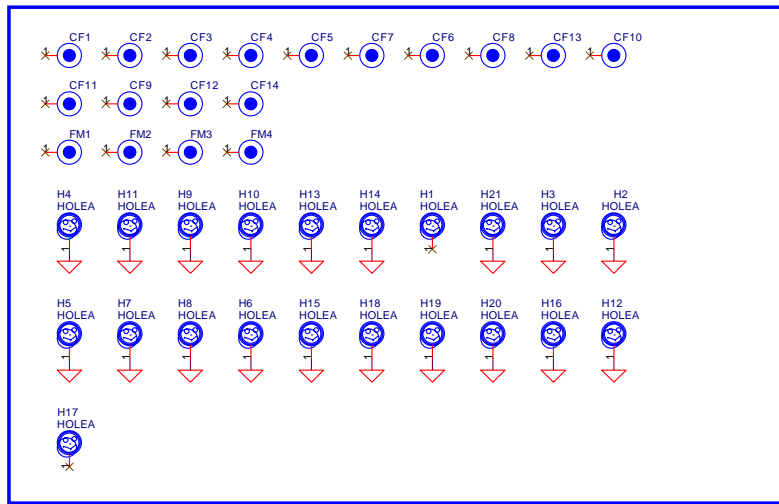
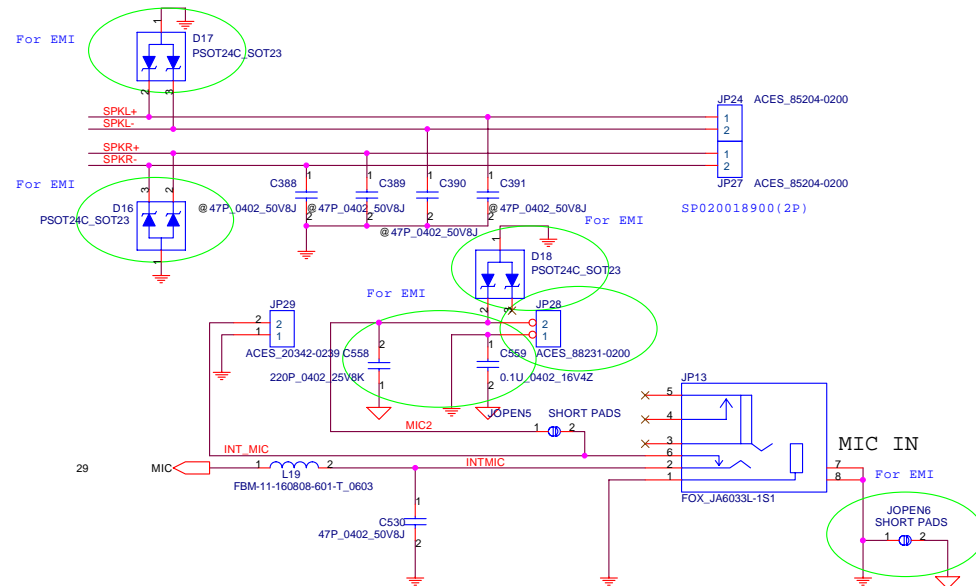
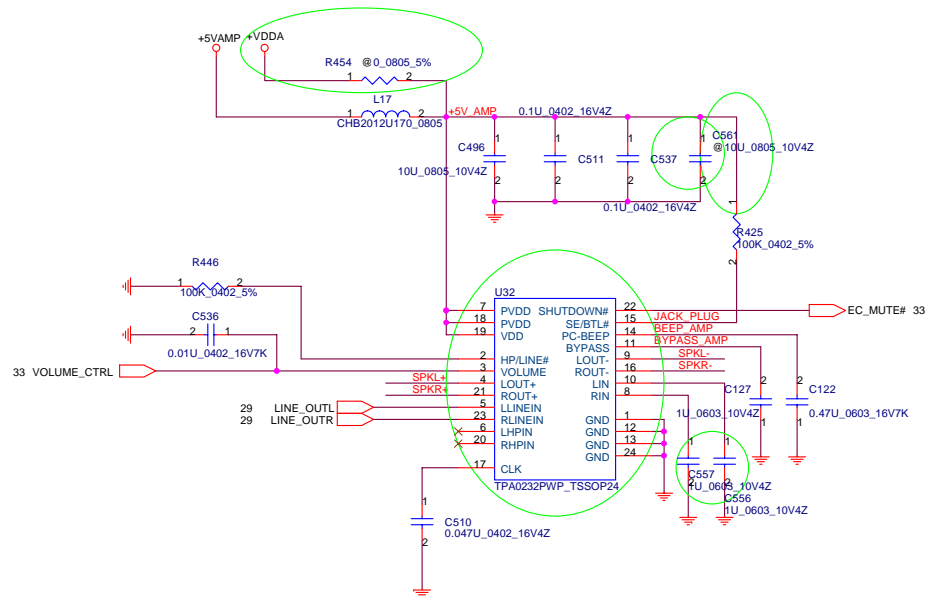


No Ground Plane In DAA Section



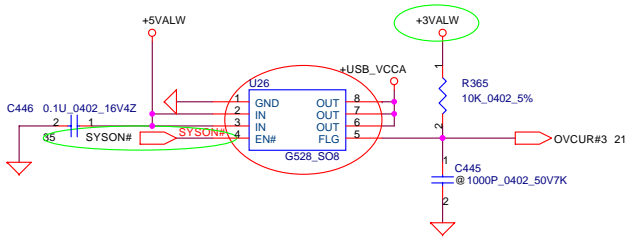
NOTE: Ample copper pad should be dedicated to Q1, Q3, Q4, Q5, R1, R4, and R11. Please refer to the design advisory and layout guidelines for further details.

CSP1038A Line Side DAA
Agere Systems Proprietary
DRAFT COPY - FOR REVIEW ONLY
SUBJECT TO CHANGE

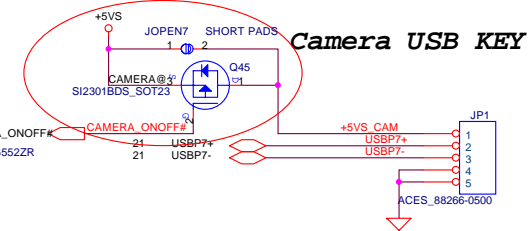
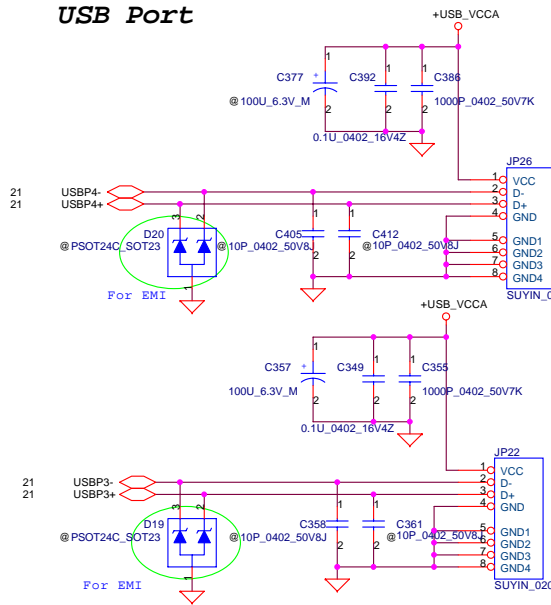


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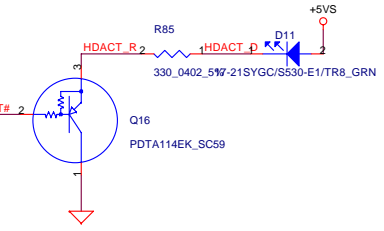
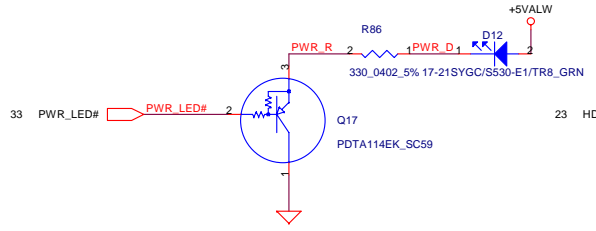
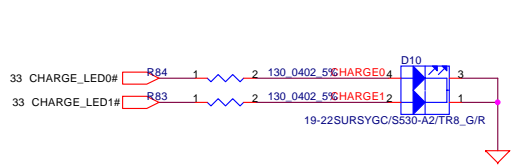
Compal Electronics, Inc.			
AMP & Audio Jack			
Title			
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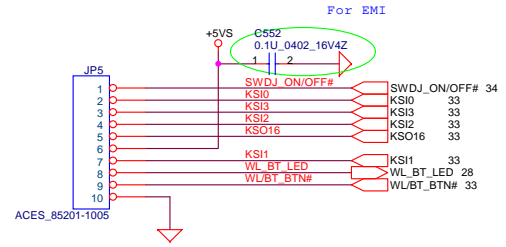
USB Port



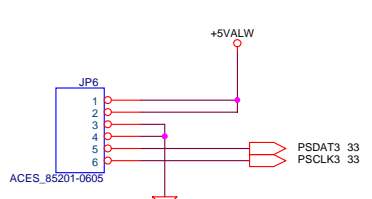
LED Function



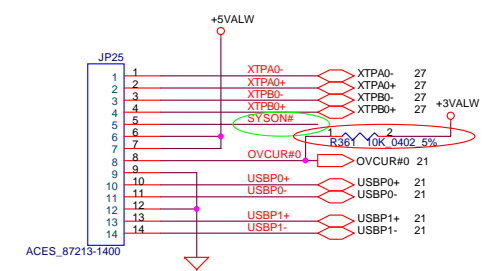
SWDJ Board



T/P Board



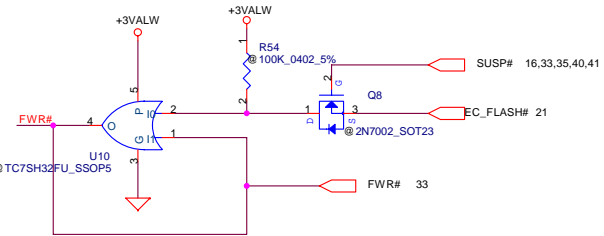
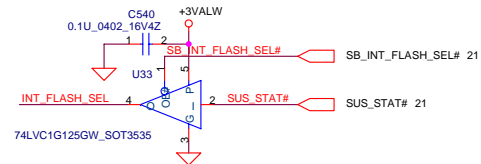
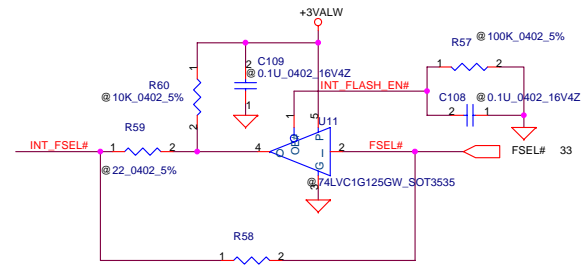
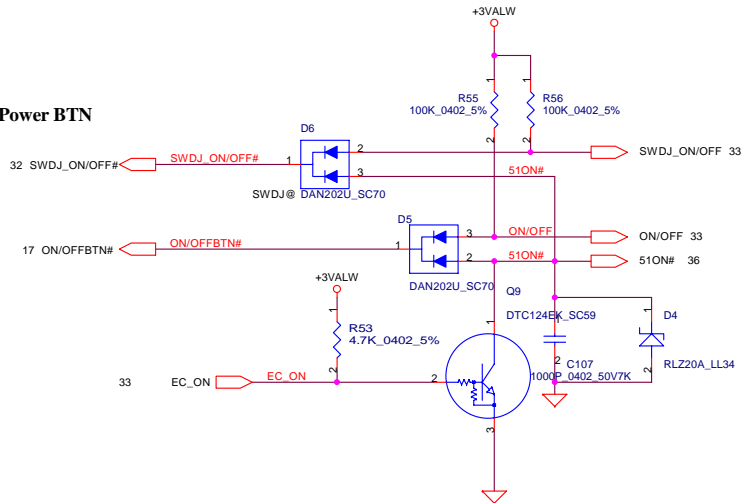
1394/USB Board



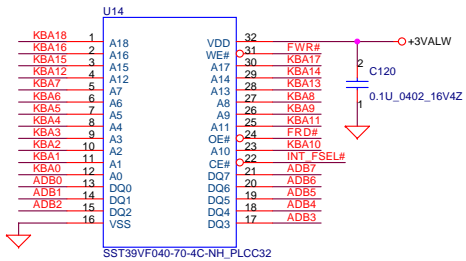
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Compal Electronics, Inc.			
USB Port			
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Power BTN

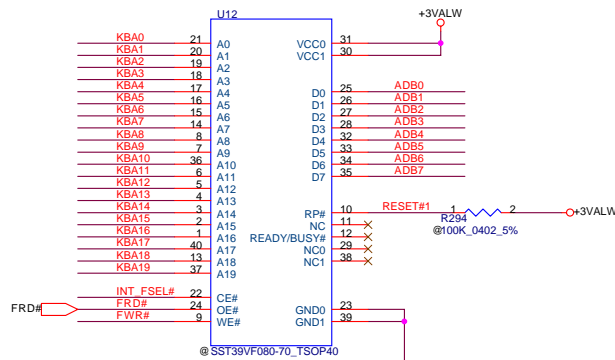


512K FLASH ROM

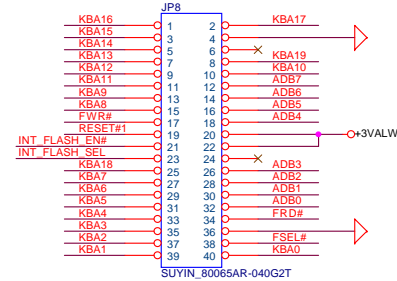


1MB FLASH ROM

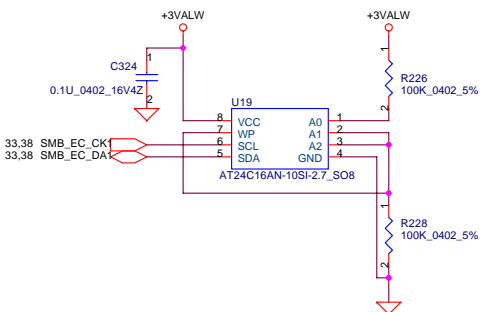
Alternative SA290080100



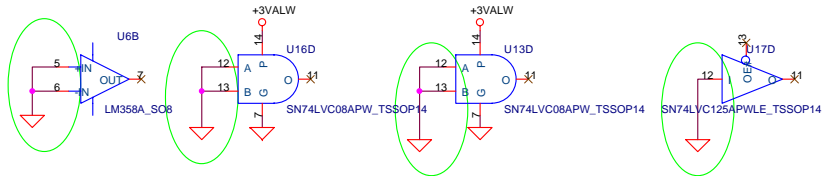
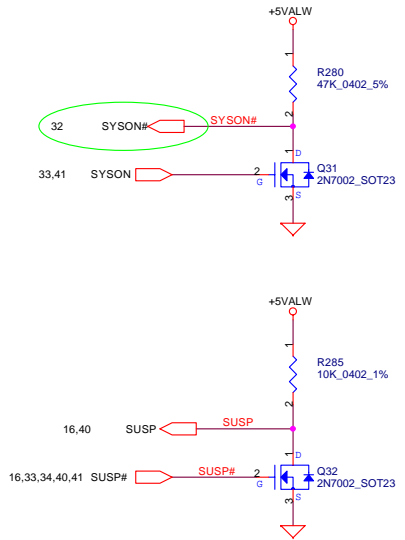
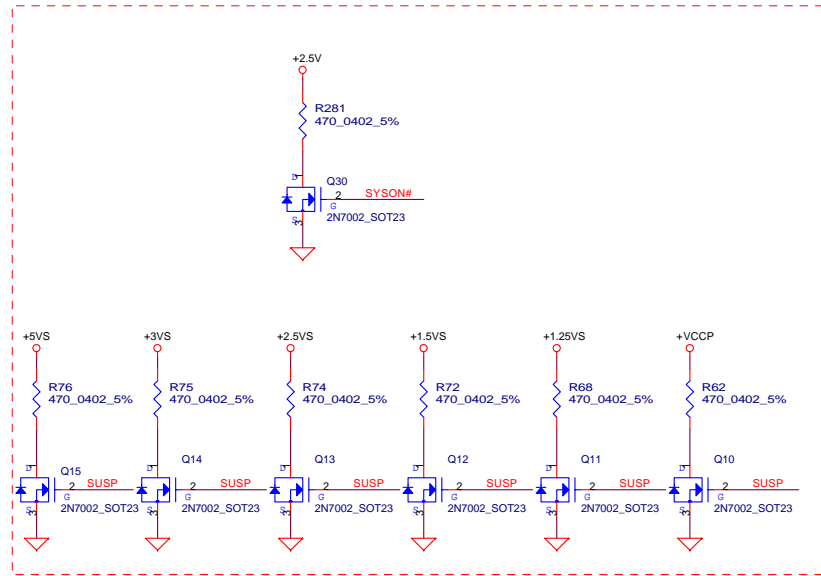
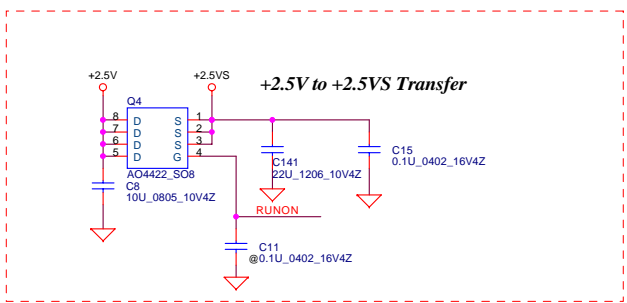
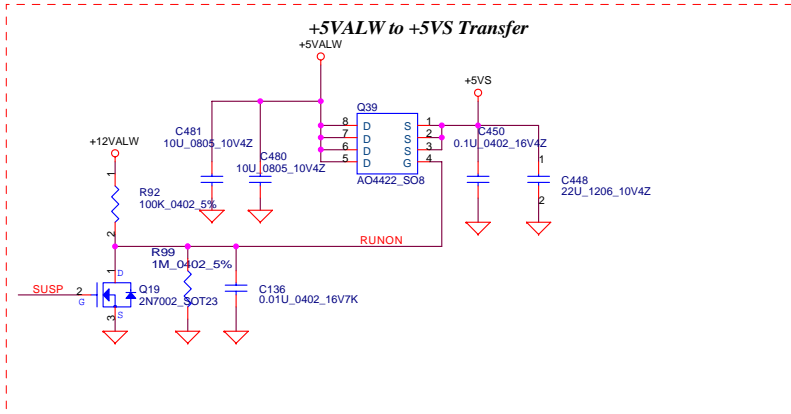
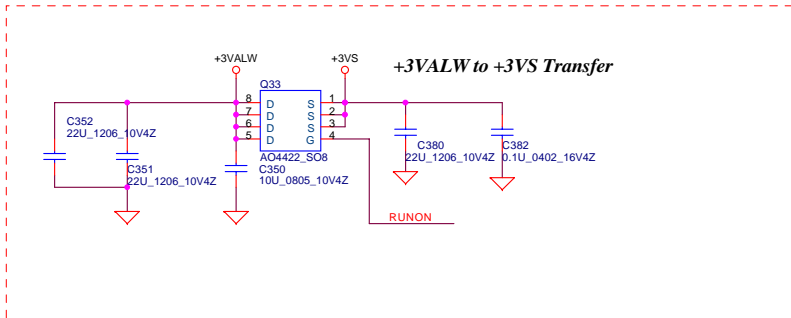
1MB ROM SOCKET



BIOS SOCKET-DC040043905

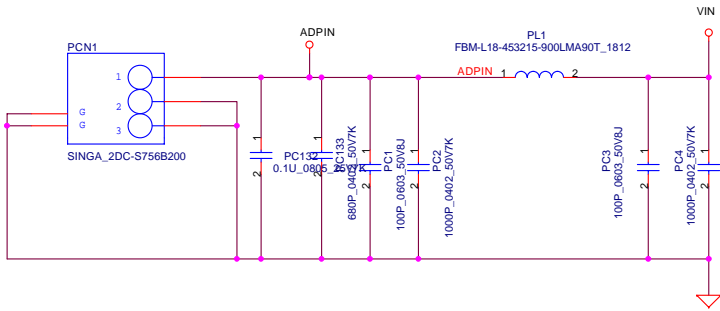


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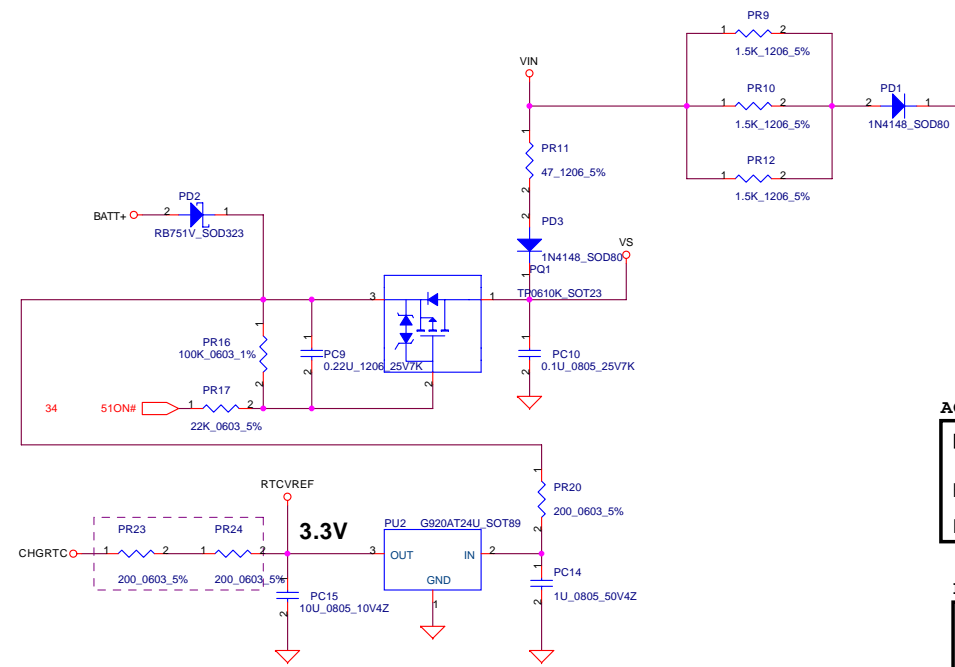
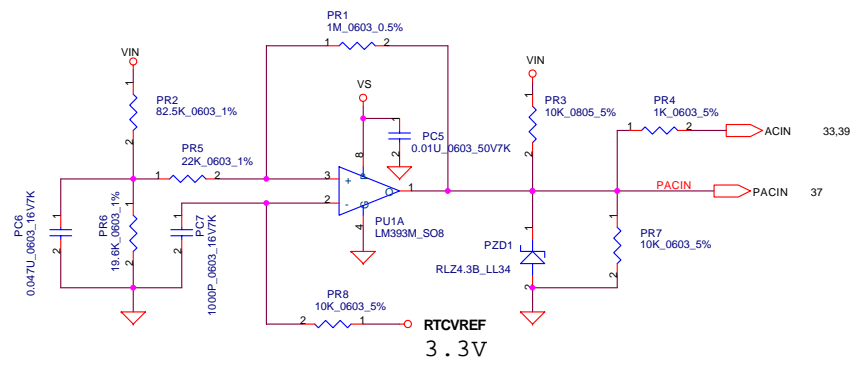
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Compal Electronics, Inc.			
POWER CONTROL			
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Vin Detector

18.234	17.841	17.449
17.597	17.210	16.813

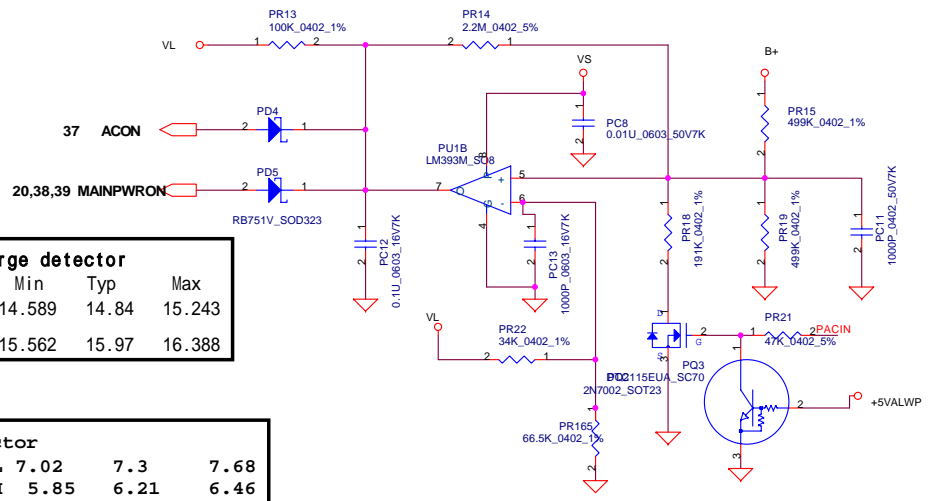


ACIN

	Min	Typ	Max
H->L	14.589	14.84	15.243
L->H	15.562	15.97	16.388

BATT

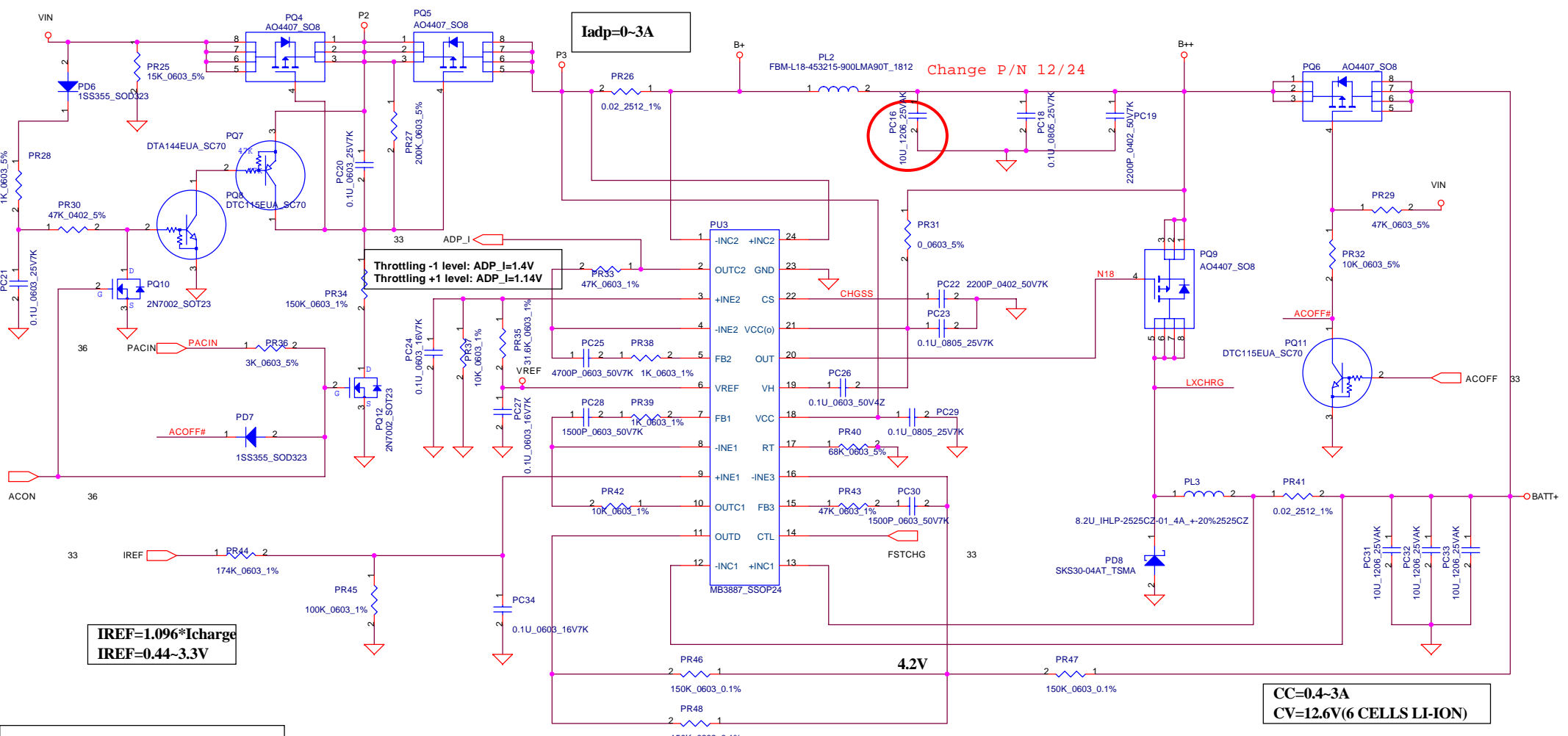
Detector	Min	Typ	Max
H->L	7.02	7.3	7.68
L->H	5.85	6.21	6.46



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Detector		
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Iadp=0-3A

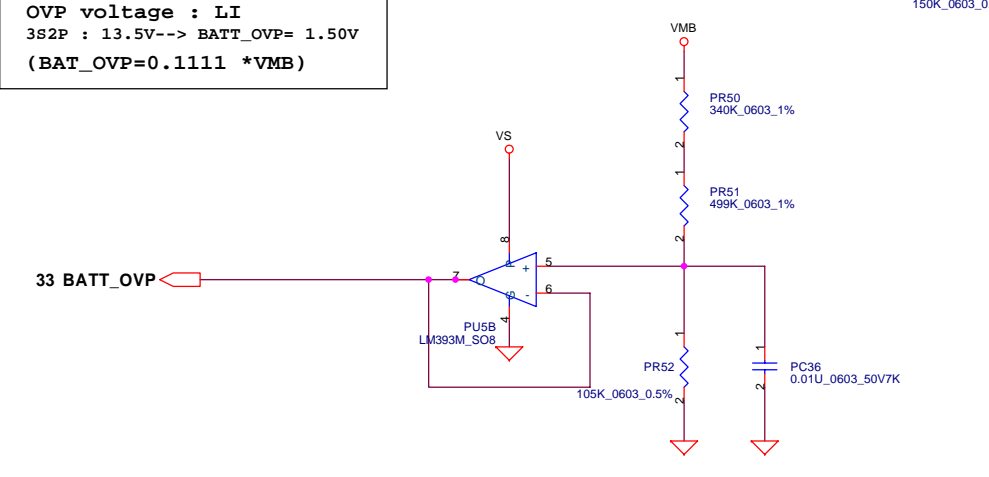
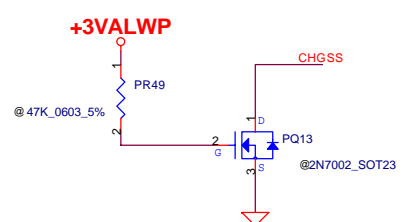
Change P/N 12/24

Throttling -1 level: ADP_I=1.4V
Throttling +1 level: ADP_I=1.14V

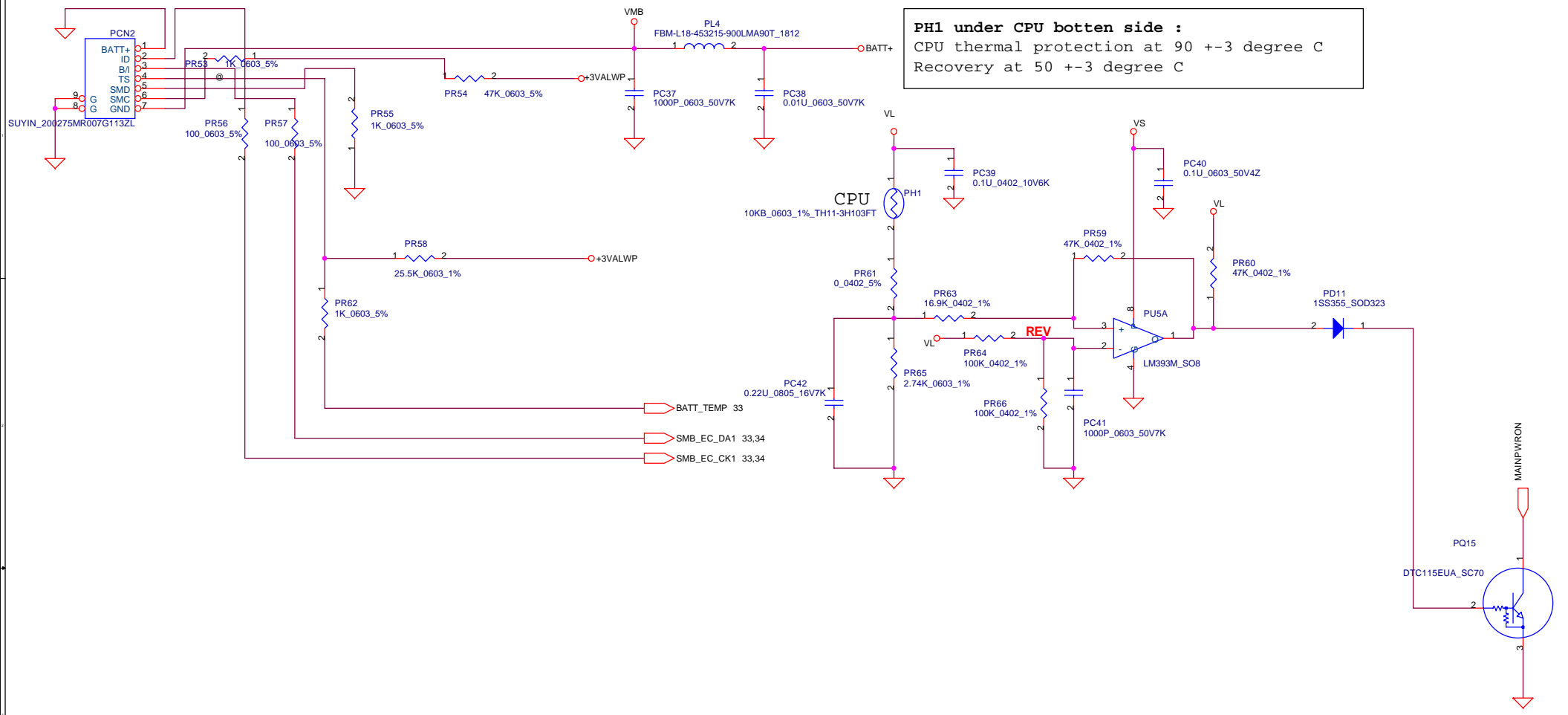
IREF=1.096*Icharge
IREF=0.44-3.3V

CC=0.4-3A
CV=12.6V(6 CELLS LI-ION)

OVP voltage : LI
3S2P : 13.5V--> BATT_OVP= 1.50V
(BATT_OVP=0.1111 *VMB)



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

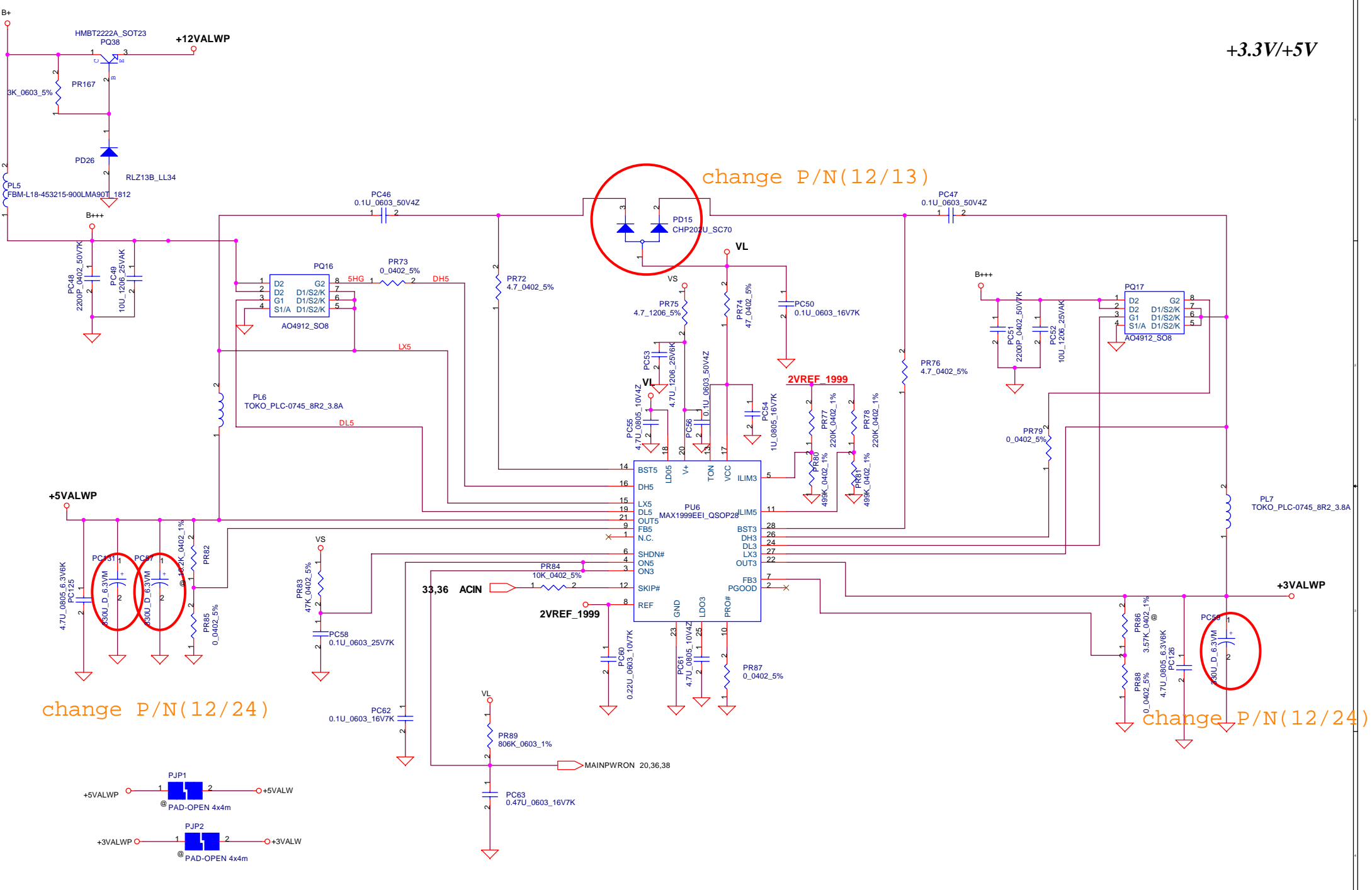


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Title		
BATTERY CONN		
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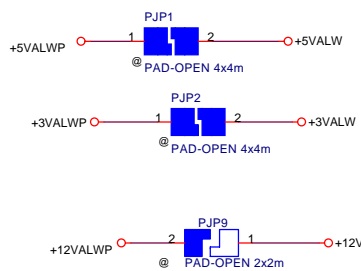
20.36.39

+3.3V/+5V



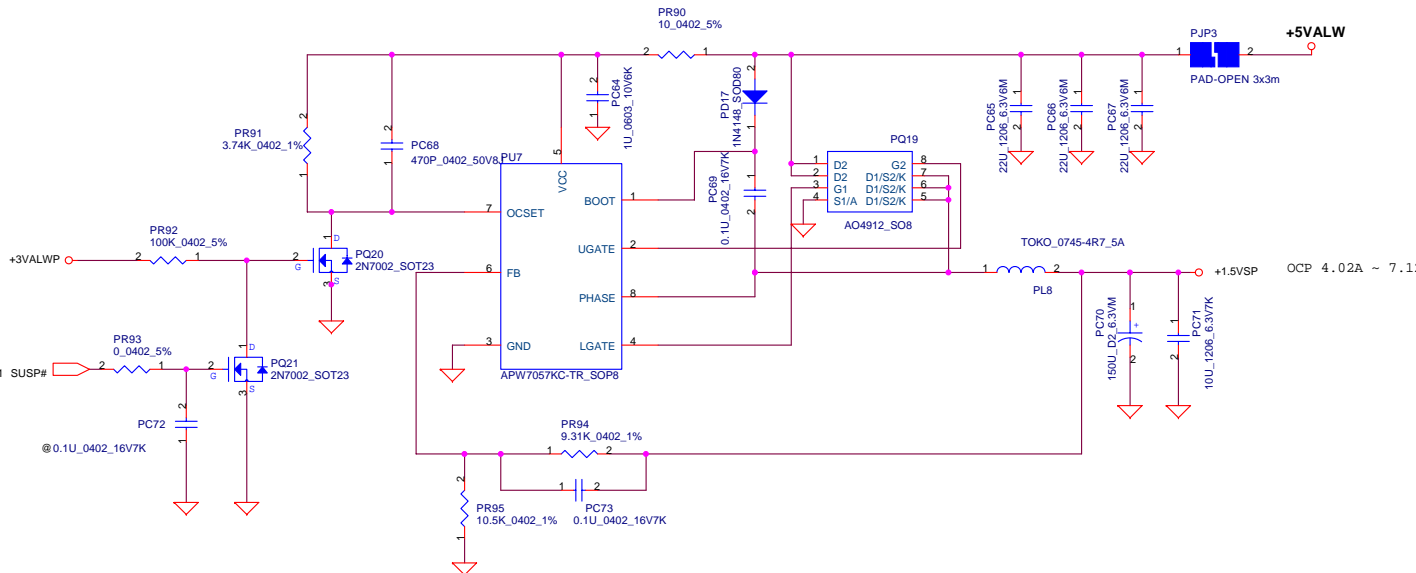
change P/N(12/24)

change P/N(12/24)

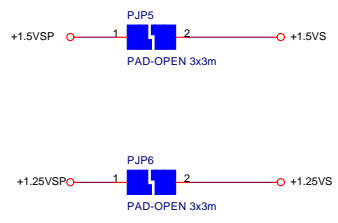
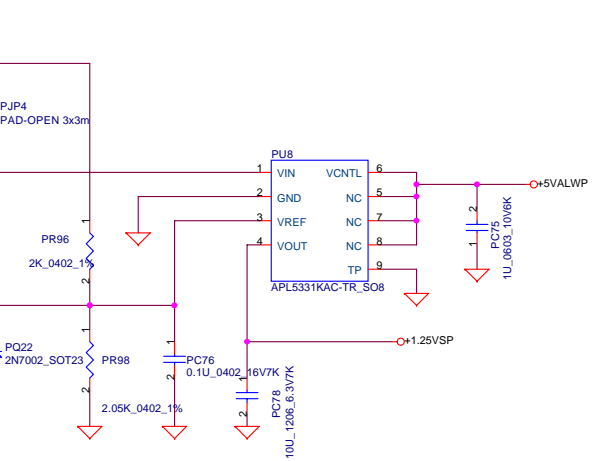


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Compal Electronics, Inc.		
file		
5V/3.3V		
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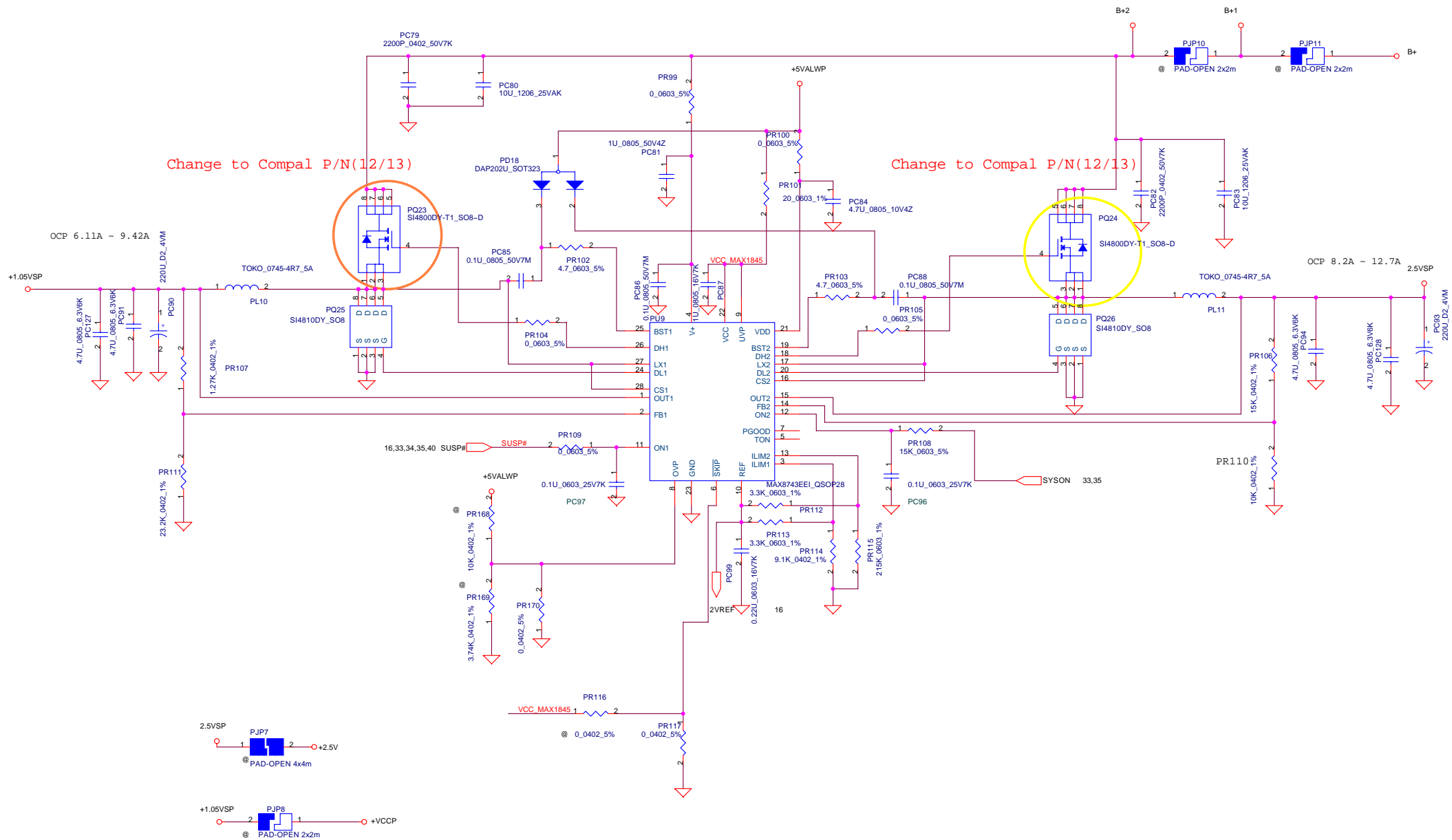


+1.5VSP/+1.25VSP



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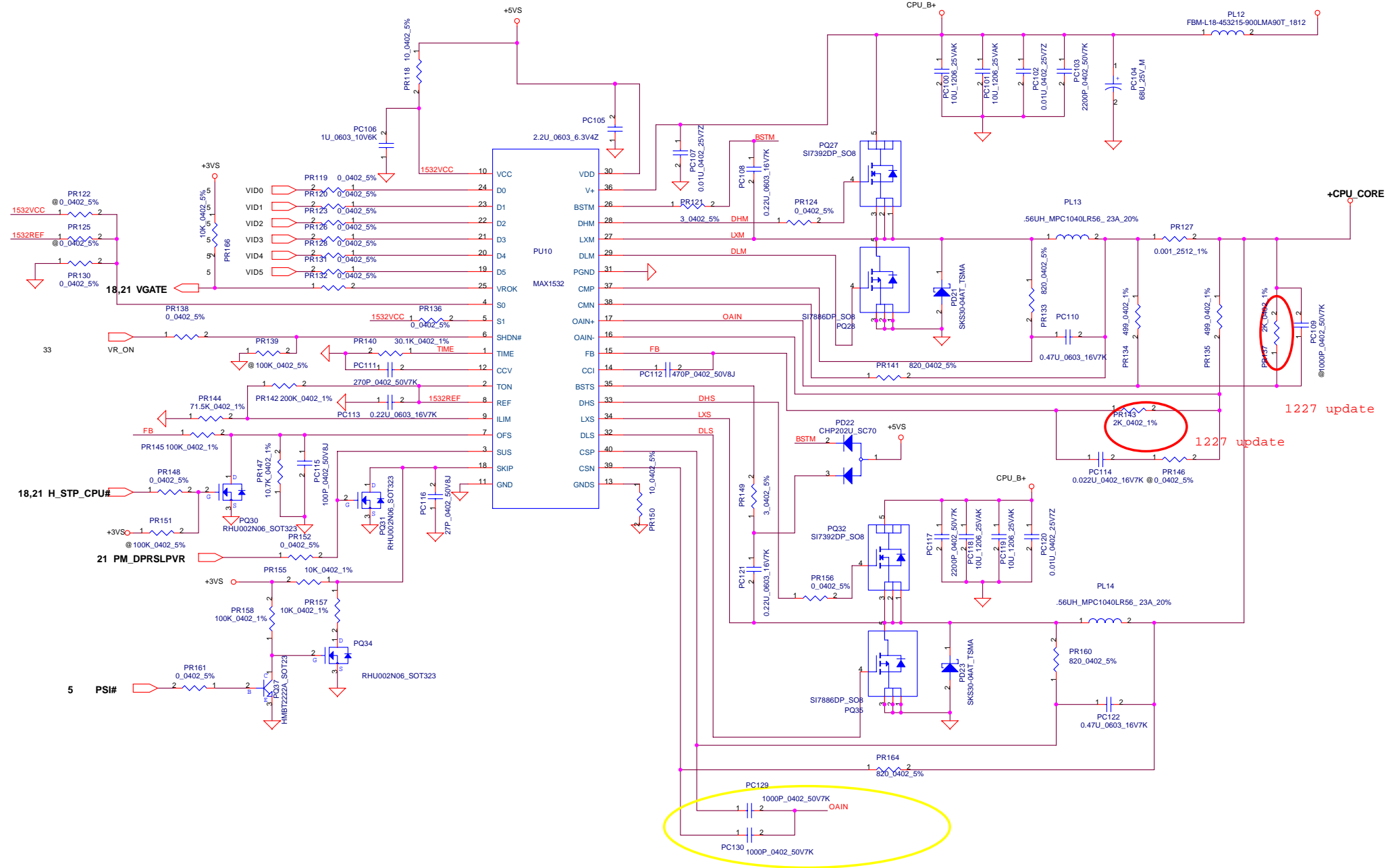
COMPAL ELECTRONICS, INC			
Title			
+12VP/+2.5VSP			
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Title		
+2.5VP / +1.05VP		
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CPU CORE



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Compal Electronics, Inc.			
Title CPU_CORE			
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Version change list (P.I.R. List)

Item	Fixed Issue	Reason for change	Rev.	PG#	Modify List	B.Ver#	Phase
1	Change USB Power MOS form AATI4610AIGV-T1_SOT23-5 to RT9702ACB_SOT23-5 SA097020100	Cost down	Rev0.2	P31			
2	Add new part U33 74LVCL125GW_SOTF3535 SA411250200 & C540 0.1U_0402_16V4Z SE070104200 & R366 10K_0402_5% SD028100200	HDD IOR# issue	Rev0.2	P31			
3	Add new part C541 10U_0805_10V4Z SE053106200	HDD Power ripple	Rev0.2	P31			
4	Del R412 0_0402_5% SD028000000	BITCLK 0 ohm passthought	Rev0.2	P31			
5	Del R192(DPRSLP#)/R195(FERR#) 0_0402_5% SD028000000	Passthought Dothan B signal	Rev0.2	P31			
6	BOM Del R136/R147 40.2_0402_1% SD034402A00	Intel recommand	Rev0.2	P31			
7	Add new part C542/C543 10U_0805_6.3V6M SE093106K00	NB +VCCP Power ripple	Rev0.2	P31			
8	Add new part R192 0_0402_5% SD028000000	Passthought FWR# to FWE#	Rev0.2	P31			
9	BOM del C377 100U_6.3V_M SF10001M100	USB Power 100UF * 2 -> 100UF *1	Rev0.2	P32			
10	Del R412 0_0402_5% SD028000000	Del MODEM AC97 BITCLK 0 Ohm	Rev0.2	P30			
11	BOM add C35 330U_D2E_2.5VM SGA19331D00	NB +2.5V Power ripple	Rev0.2	P10			
12	BOM add C77 150U_D_6.3VM SGA020151330	+2.5V Power ripple	Rev0.2	P14			
13	BOM add C285 330U_D2E_2.5VM SGA19331D00	+CPU_CORE Power ripple	Rev0.2	P6			
14	CRT LUMA/COMPS/CRMA & USBP6-/USBP6+ swap	layout swap avoid power noise cover	Rev0.2	P17			
15	1394 PCI BUS swap PCI_AD[0..31]	1394 PCI BUS Layout update	Rev0.2	P27			
16	Add new part R192 10K_0402_5% SD028100200	Lid SW# M/B pull high.	Rev0.2	P33			
17	RTC BATT1 pin swap	RTC Battery pin define error	Rev0.2	P20			
18	Del part R19 BOM part change R19 0_0603_5% to L21 BLM18PG600SN1_0603 SM010022000	CRT power filter noise NB power plan R19 -> L21	Rev0.2	P10			
19	BOM change part 10 to 56: RP1, RP2, RP3,RP4,RP5,RP6,RP7,RP8,RP14,RP15,RP16,RP17,RP18,RP19,RP20,RP21 -> 56_1206_8P4R_5% SD302560A00	Rev0.1 BOM error	Rev0.2	P13			
20	BOM change part 10 to 56: R5,R6,R7,R8,R15,R16,R17,R18,23,R26,R28,R29,R30,R31,R36,R39 -> 56_0402_5% SD028560A00	Rev0.1 BOM error	Rev0.2	P13			
21	Add new part C544,C545,C546,C548,C550 0.1U_0402_16V4Z SE070104200	NB Power plan filter	Rev0.2	P10			
22	Add new part C549,C551,C547 0.22U_0603_16V4Z SE027224NT5	NB Power plan filter	Rev0.2	P10			
23	Add new part L21,L22,L23,L24,L25 CHB1608U301_0603 SM010012500	NB Power plan filter	Rev0.2	P10			
24	U20Pin93 - Del ON/OFFBTN_LED# JP15.Pin6 - chagne ON/OFFBTN_LED# to GND	ON/OFFBTN_LED# need EC control, LED direct pull +3VS	Rev0.2	P17,P33			
25	BOM D6 change 1N4148_SOT23 to DAN202U_SC70 SC2N202U0T4	SWDF ON/OFF# no function	Rev0.2	P34			
26	JOPEN1,JOPEN3,JOPEN4 follow JOPEN2 footprint	DFX review recommand	Rev0.2	P20,P29			
27	JOPEN5,JOPEN6,JOPEN7 reserve MIC second rounting	For ME recommand	Rev0.2	P31			
28	Pin73 - EC_IDERST Move to Pin19 Pin19 - ADP_I Move to Pin73	For EC Swap signal	Rev0.2	P33			

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Item	Fixed Issue	Reason for change	Rev.	PG#	Modify List	B.Ver#	Phase
29	Del C443 0.47U_0603_16V7K SE026474KT6 Del BOM C445 1000P_0402_50V7K SE074102K00	Del +USB_VCCA CAF	Rev0.2	P32			
30	Add BOM R208 100K_0402_5% SD028100300	PM_DPRSPLPVR stuff on resistor	Rev0.2	P21			
31	Add new part R19 43K_0402_5% SD028430200	Option ENE1410 & TI1410 resistor	Rev0.2	P25			
32	Add new part C443 150U_D_6.3VM SG020151330	NB power +2.5VS BOM non-stuff	Rev0.2	P10			
33	Change BOM part U11 74AHCT1G125GW to 74LVC1G125GW_S0T3535 SA411250200	BIOS block schematic part change	Rev0.2	P34			
34	Change BOM part L1 BLM18PG600SN1_0603 to 74BLM18PG330SN1_2P SM010019400	NB power +1.5VS ripple	Rev0.2	P10			
35	Add net U20.pin93 EC_IDERST# for gating HD_IOR#	Gating HD_IOR#	Rev0.2	P33			
36	Add BOM part R27 10K_0402_5% SD028100200 & C54 1000P_0402_50V7K SE074102K00	FAN schematic FAN1SPD stuff on pull high & CAF	Rev0.2	P15			
37	Add new part R195,R412,R452 0_0402_5% SD028000000	Option SWDJ@ & NONSWDJ@	Rev0.2	P23			
38	Del part R151,R152,R153,R154,R146,R158,R148,R138,R134	NB pin name CFG part change to test point.	Rev0.2	P07			
39	Del part R131,R132	NB pin name SDVCTRL change to test point.	Rev0.2	P09			
40	ME change connector for LVDS/HDD/Keyboard/VGA B-B/Speaker/USB/RJ45/INT MIC		Rev0.2				
41	Del RJ45 LED function part R188, R224(10/100), R225(GLAN)	RJ45 connector no LED function	Rev0.2	P24	A2 MEMO		
42	BOM AC10 0.01UF NPO SE069103K00 change to 0.01UF X7R SE000000H00	Short part	Rev0.2	P30	A2 MEMO		
43	BOM AC11 SE168103M00 01U 250V M X7R 0805 change to SE093106K00 10U 6.3V M X5R 0805	BOM error	Rev0.2	P30	A2 MEMO		
44	BOM U23 CB714 A revision change to B0 SA007140B10	Change revision and all BOM's CB712 change to CB714.	Rev0.2	P25	A2 MEMO		
45	BOM U20 KB910L A0 revision change to A1 revision SA009100110	Change revision	Rev0.2	P33	A2 MEMO		
46	Add new part U34 74LVC1G125GW SA411250200	IDE_HDIOR# gating.	Rev0.2	P23	A2 MEMO		
47	Add new part R131,R132 200 ohm 0402 SD028200000	For PCI-1410 BOM	Rev0.2	P27	A2 MEMO		
48	Del part U11,R57,R59,R60,C108,C109 Add part R58 0 0402 +-5% SD028000000	FSEL# pass-through INT_FSEL#	Rev0.2	P34	A2 MEMO		
49	Del part R206,C304	Signal M/B_ID	Rev0.2	P33	A2 MEMO		
50	SMT JP29 un-marked		Rev0.2	P31	A2 MEMO		
51	Del part C3, Add part C77	DDR +2.5V Cap change	Rev0.2	P14	A2 MEMO		
52	BOM AR7,AR8 SD010200500 20M Ohm +-1% change to SD015200500 20M Ohm +-5%	Short part	Rev0.2	P21	A2 MEMO		
53	BOM AC5,AC6,AC12,AC13 SE070104K00 0.1U 25V +-10% Y5V change to SE070104Z00 0.1U 16V +-10% Y5V	Short part	Rev0.2	P30	A2 MEMO		
54	Del part R237	Del SB's AC_IN	Rev0.3	P30	B MEMO		
55	Change part DDR Hynix A die SA216220000 --> B die SA000023200	Chagne Hynix DDR version	Rev0.3	P12	B MEMO		
56	NB's signal COMP/B & Y/G swap	Schematic pindefine error.	Rev0.3	P09			

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Item	Fixed Issue	Reason for change	Rev.	PG#	Modify List	B.Ver#	Phase
57	Change BOM part Q5,Q6 2N7002 to BSS138	LVDS EDID Vih, Vil no match spec	Rev0.3	P16			
58	Net GMCH_ENBR1 connect to EC_U20.p90 Add new part R134 100K pull down. Del part R11 0 ohm.	PM panel white back light issue.	Rev0.3	P21			
59	Add new part C552,C553,C554,C555,C558,C559,D16,D17,D18,D19,D20.	EMI issue.	Rev0.3	P17,P31,P32			
60	Add new part R453,Q43.	For SWDJ geting RIQ.	Rev0.3	P23			
61	Pop part R434.	For SWDJ A-A issue.	Rev0.3	P29			
62	Change BOM part AC11 10U_0805 to 1U_1206	ME issue.	Rev0.3	P30			
63	Add part C557,C558.	Boost audio "BO" sound issue.	Rev0.3	P31			
64	Change BOM part R439,R80 0_0402 to 470_0402.	Ear phone sound too big issue.	Rev0.3	P31			
65	Change BOM part JP28 footprint no match spec.	layout spec issue.	Rev0.3	P31			
66	U6, U13, U16, U17 nc pin connect to GND.		Rev0.3	P35			
67	Add jumper JOPEN5	EMI issue.	Rev0.3	P31			
68	Add part C560 SE053475205 4.7U 10V Z Y5V 0805	Change Card Reader power MOS for MS card conn issue	Rev0.3	P26			
69	Del BOM part Q34 SB923010010 SI2301BDS	Change Card Reader power MOS for MS card conn issue	Rev0.3	P26			
70	Add part U34 SA005280100 G528	Change Card Reader power MOS for MS card conn issue	Rev0.3	P26			
71	Change BOM part C374 SE076103K00 .01U 16V K X7R 0402 to SE070104200 1U 16V Z Y5V 0402	Change Card Reader power MOS for MS card conn issue	Rev0.3	P26			
72	Add part R454, C357. net EC_MUTE# pull high chanGe to +5V_AMP	For audio CD-L/R noise option +VDDA & +5VAMP.	Rev0.3	P31			
73	Change BOM part R361 20K Ohm to 10K Ohm	For camera power switch.	Rev0.3	P32		C TEST BOM MEMO.	
74	Add part R455, Q45, Q44, JOPEN7. Add net CAMERA_ONOFF&+5VS_CAM	For camera power switch.	Rev0.3	P33,32		C TEST BOM MEMO.	
75	Change BOM part U26 to G528 for USB power MOS. Change Net U26.4 to SYSON# & OVCUR#3 pull high +3VALW	For camera power switch.	Rev0.3	P32		C TEST BOM MEMO.	
76	Change BOM part U32 Change SA021210000 S IC APA2121RI_TR TSSOP-24 AUDIO AMP to SA002320300 S IC TPA0232PWP TSSOP-24 AUDIO AMP	For APA AMP audio power up "bo" sound	Rev0.3	P31		C TEST BOM MEMO.	
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Item	Reason for change	PG#	Modify List	Date	B.Ver#
1	Update 1.05V, 2.5V, 1.5V, 3.3V and 5V CHOKE for cost down	38	PL7, PL6, PL10, PL11, PL8 update to TOKIN 4.5mm(High) from VISHAY(3mm High)	Nov/12	A.Ver#
2	Add Capacity 4.7UF 2 pcs for reduce ripple voltage	38	Add 4.7U in PC?	Nov/12	A.Ver#
3	Update BST Resistor to 4.7 ohm 2 pcs for reduce switching node noise	38	PR72, PR76 update to 4.7 ohm from 0 ohm	Nov/12	A.Ver#
4	Update 12VALWP 16V Zener to 12V Zener	38	Update PD26 to 12V Zener from 16V Zener	Nov/12	A.Ver#
5	Add CPU Thermal protect circuit	37	Add PR61, PR65, PC42, PR63, PR64, PR66, PC41, PR59, PU5, PC40, PR60 PD11, PQ15	Nov/12	A.Ver#
6	Delete Battery Thermal Protect circuit	37	Delete PH2, PC43, PR68, PC45, PR70, PR71, PR67, PR69, PR14	Nov/12	A.Ver#
7	Update Output Voltage to 1.26V from 1.25V	39	Update PR96 to 2K from 1K Update PR98 to 2.05K from 1K	Nov/12	A.Ver#
8	Reduce Ripple Voltage for 1.05V and 2.5V	40	Add 4.7U Capacity in PC128, PC127	Nov/12	A.Ver#
9	Update Output Voltage to 1.054V from 1.05V	40	Update PR111 to 23.2K from 25.5K	Nov/12	A.Ver#
10	Reduce switching node noise	40	Update PR102, PR103 to 4.7 ohm from 0 ohm	Nov/12	A.Ver#
11	Reduce noise for SUSP#	40	Update PR1092, PR103 to 4. to 27 ohm from 0 ohm	Nov/12	A.Ver#
12	Reduce CPU noise for Vgate	41	Update PR166 to 10K from 100K	Nov/12	A.Ver#
13	Reduce CPU noise	41	Update PL12 to 13A from 8A	Nov/12	A.Ver#
14	Reduce CPU switching node noise	41	Update PR121, PR149 to 3 ohm from 0 ohm	Nov/12	A.Ver#
15	Reduce CPU noise for input side	41	Add 68UF Capacity in PC 129, PC104	Nov/12	A.Ver#
16	Adjust load line	41	Update PR137, PR143 to 2K from 3K	Nov/12	A.Ver#
	Delete shocket Diode for Maxium 8743 and Maxium 1999 solution	40 38	Delete PD24, PD25, PD19, PD20	Nov/12	A.Ver#

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