Compal Confidential

Tampa Bay NPVAA

LA-5841P Schematics Document

Intel PineView Processor/ Tiger point

2009-10-21

REV: 1.0

Security Classification	Compal Secret Data		
Issued Date	2009/10/21	Deciphered Date	2012/10/21

Compal Electronics,Inc		
Title: SCHEMATICS,MB A5841		
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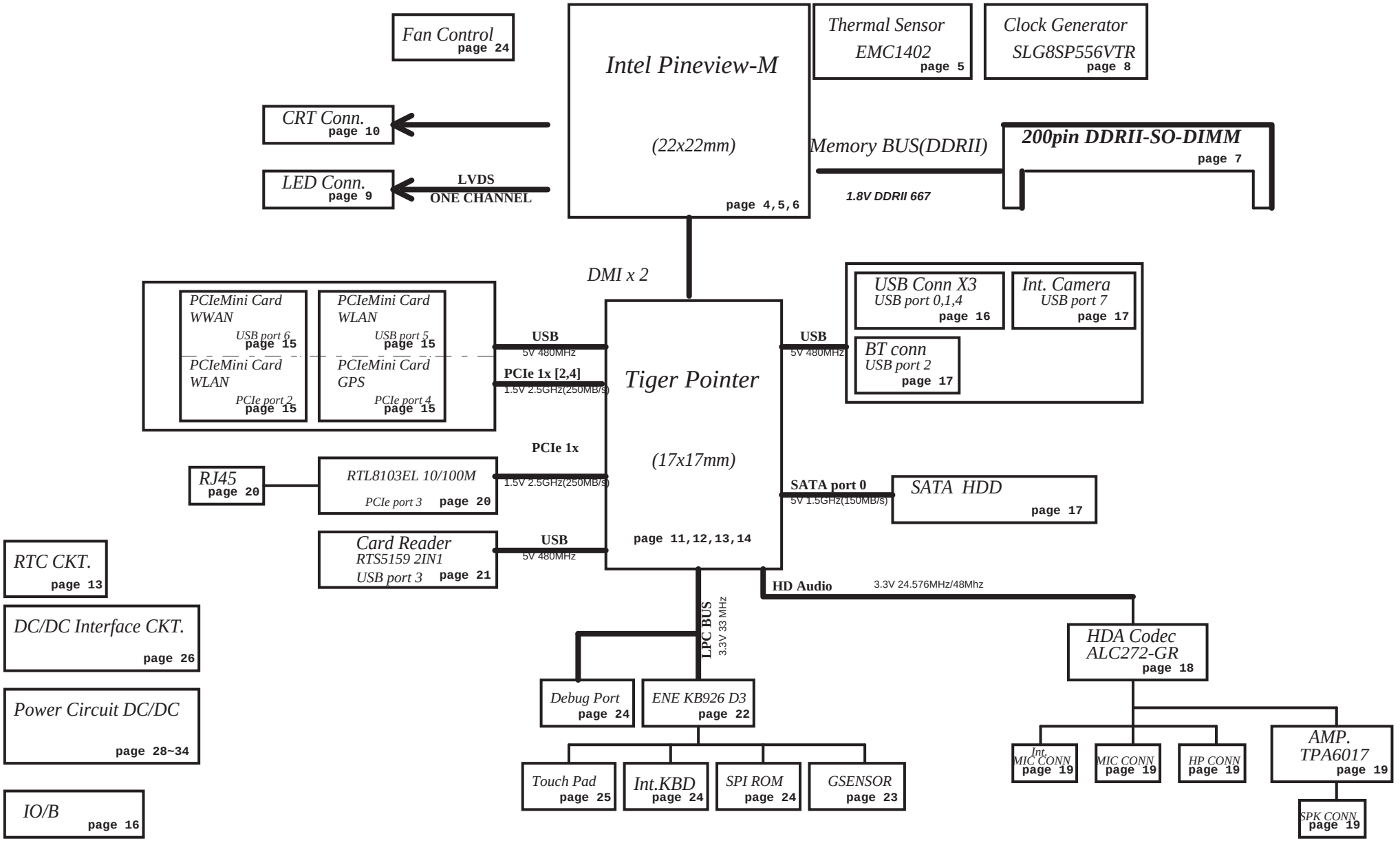
Model Name : NPVAA

File Name : LA-5841P



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Voltage Rails

Power Plane	Description	S1	S3	S5	G3
VIN	Adapter power supply (19V)	ON	ON	ON	OFF
B+	AC or battery power rail for power circuit.	ON	ON	ON	ON
+CPU_CORE	Core voltage for CPU	ON	OFF	OFF	OFF
+0.89VS	0.89VS GFX support voltage	ON	OFF	OFF	OFF
+0.9VS	0.9V switched power rail for DDR terminator	ON	OFF	OFF	OFF
+1.05VS	VCCP switched power rail	ON	OFF	OFF	OFF
+1.5VS	1.5V switched power rail	ON	OFF	OFF	OFF
+1.8V	1.8V power rail for DDR	ON	ON	OFF	OFF
+1.8VS	1.8VS switched power rail	ON	OFF	OFF	OFF
+3VALW	3.3V always on power rail	ON	ON	ON	OFF
+3V_SB	3.3V power rail for LAN	ON	ON	OFF	OFF
+3V_LAN	3.3V power rail for LAN	ON	ON	OFF	OFF
+3V_WLAN	3.3V power rail for LAN	ON	ON	OFF	OFF
+3VS	3.3V switched power rail	ON	OFF	OFF	OFF
+5VALW	5V always on power rail	ON	ON	ON	OFF
+5V_SB	5V power rail for SB	ON	ON	OFF	OFF
+5VS	5V switched power rail	ON	OFF	OFF	OFF
+VSB	VSB always on power rail	ON	ON	ON	OFF
+RTCVCC	RTC power	ON	ON	ON	ON

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

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

BTO Option Table

Function	Mini PCI-E SLOT				STAR			
description								
explain	Wi-Fi	WiMax	3GGPS	3G	POWER SAVING			
BTO	WLAN@	WIMAX@	3GGPS@	3G@	STAR@			

Function			
description			
explain			
BTO			

EC SM Bus1 address

Device	Address
Smart Battery	0001 011X b

EC SM Bus2 address

Device	Address
EMC1402	1001 010X b

Tiger point SM Bus address

Device	Address
Clock Generator (SLG8SP556VTR)	1101 001Xb
DDR DIMMA	1010 000Xb

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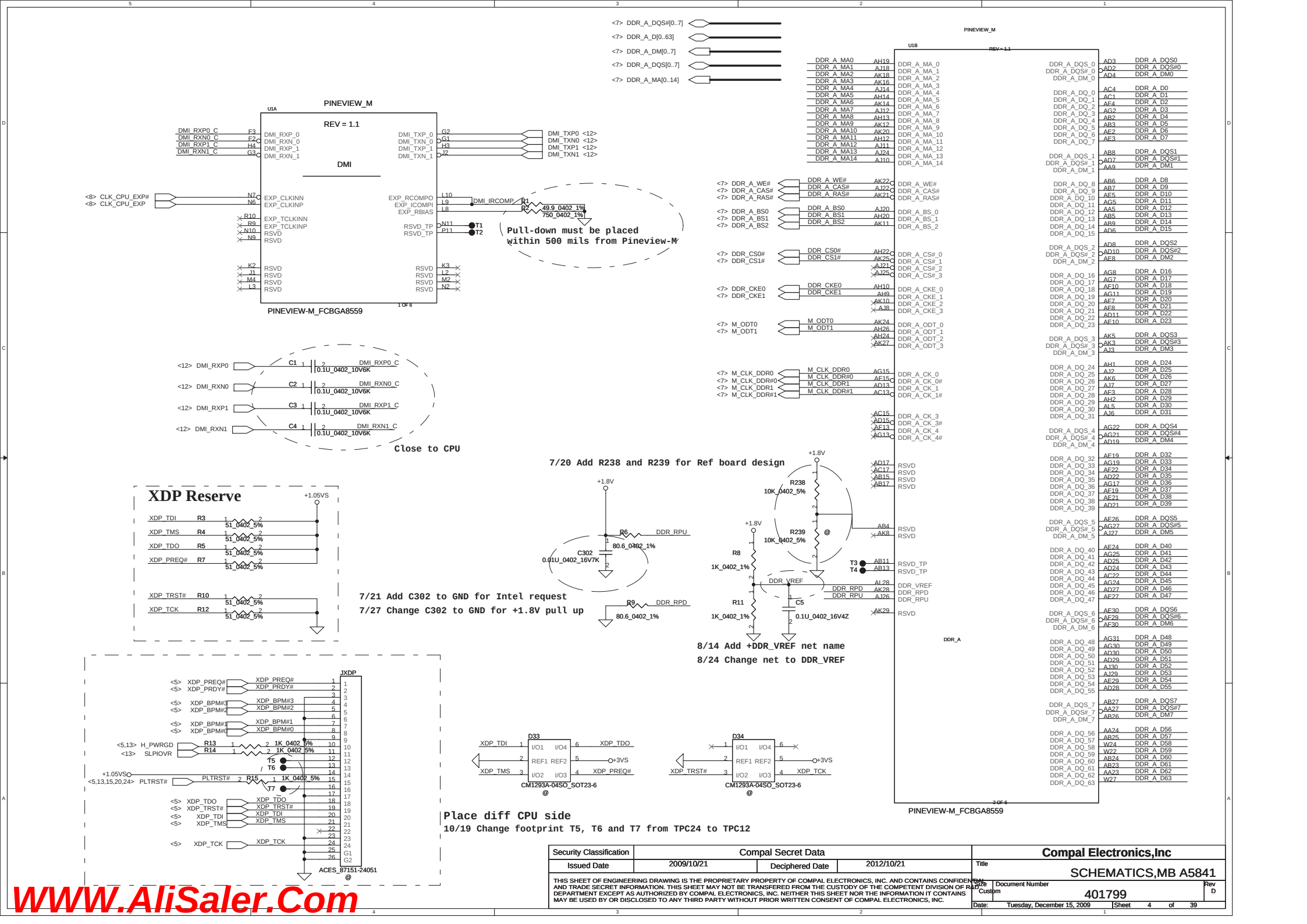

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8/14 Add CRT_IRTN net name

8/24 Det CRT_IRTN net name

R17 be placed <500 mils to U1.P28

R16 be placed U1.R22

8/14 Add DAC_IREF net name

Close to Processor pin

To be placed <250 mils to U1 ball

To be placed <500 mils to U1 ball

7/21 Pull down 1K to GND for Intel request

8/14 Change net name to +H_GTLREF

8/24 Change net name to H_GTLREF

8/14 Change net name to +H_EXTBGREF

8/24 Change net name to H_EXTBGREF

Close to CPU

ESD request

placed within 0.5" of processor pin.

placed within 0.5" of processor pin and 5 mils spacing

7/20 Reserve C336 for Ref board design

7/20 Add C335 for Ref board design

CPU THERMAL SENSOR

EMC1402-1-ACZL-TR_MSOP8

Address:0100_1100 EMC1402-1

Address:0100_1101 EMC1402-2

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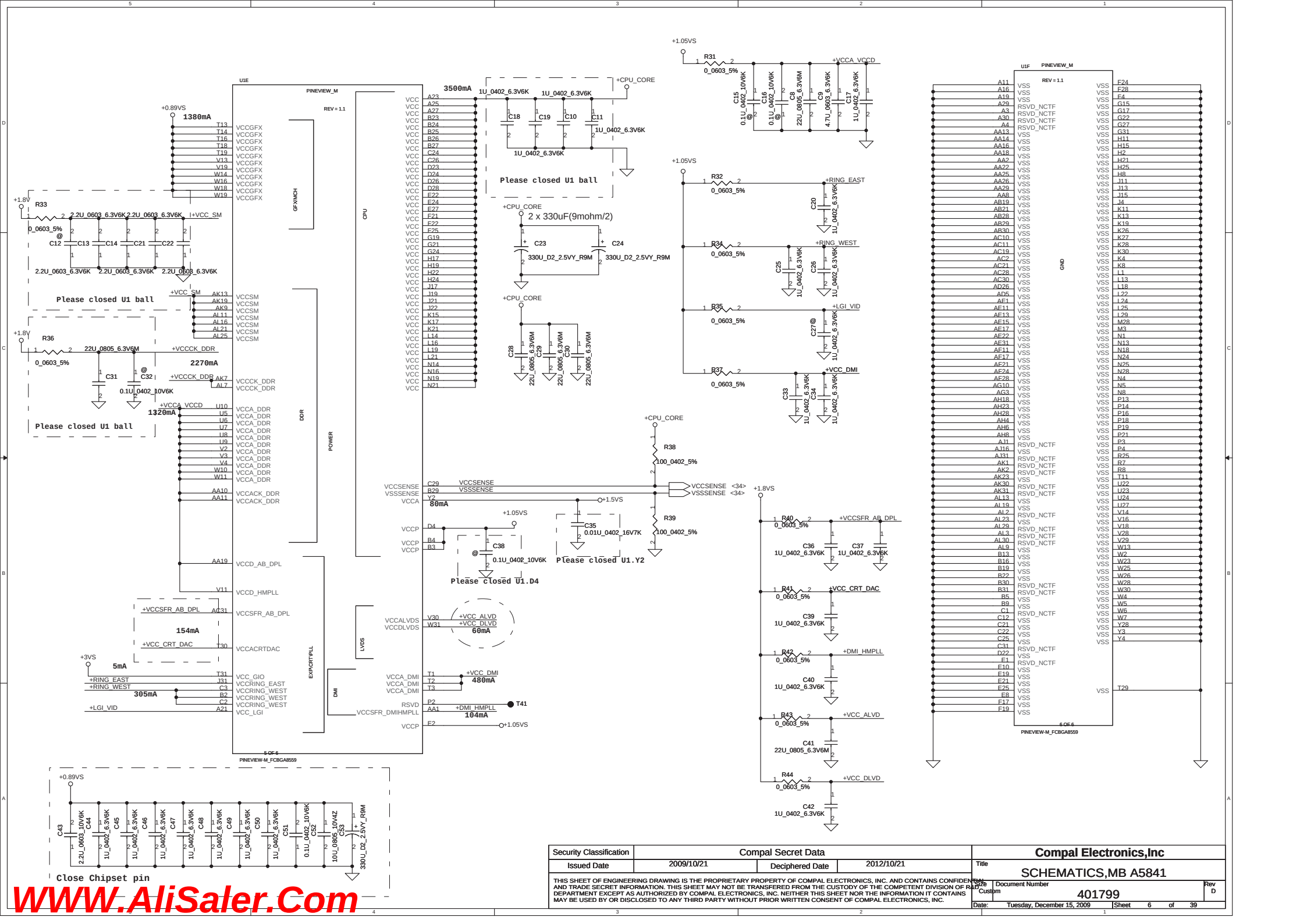

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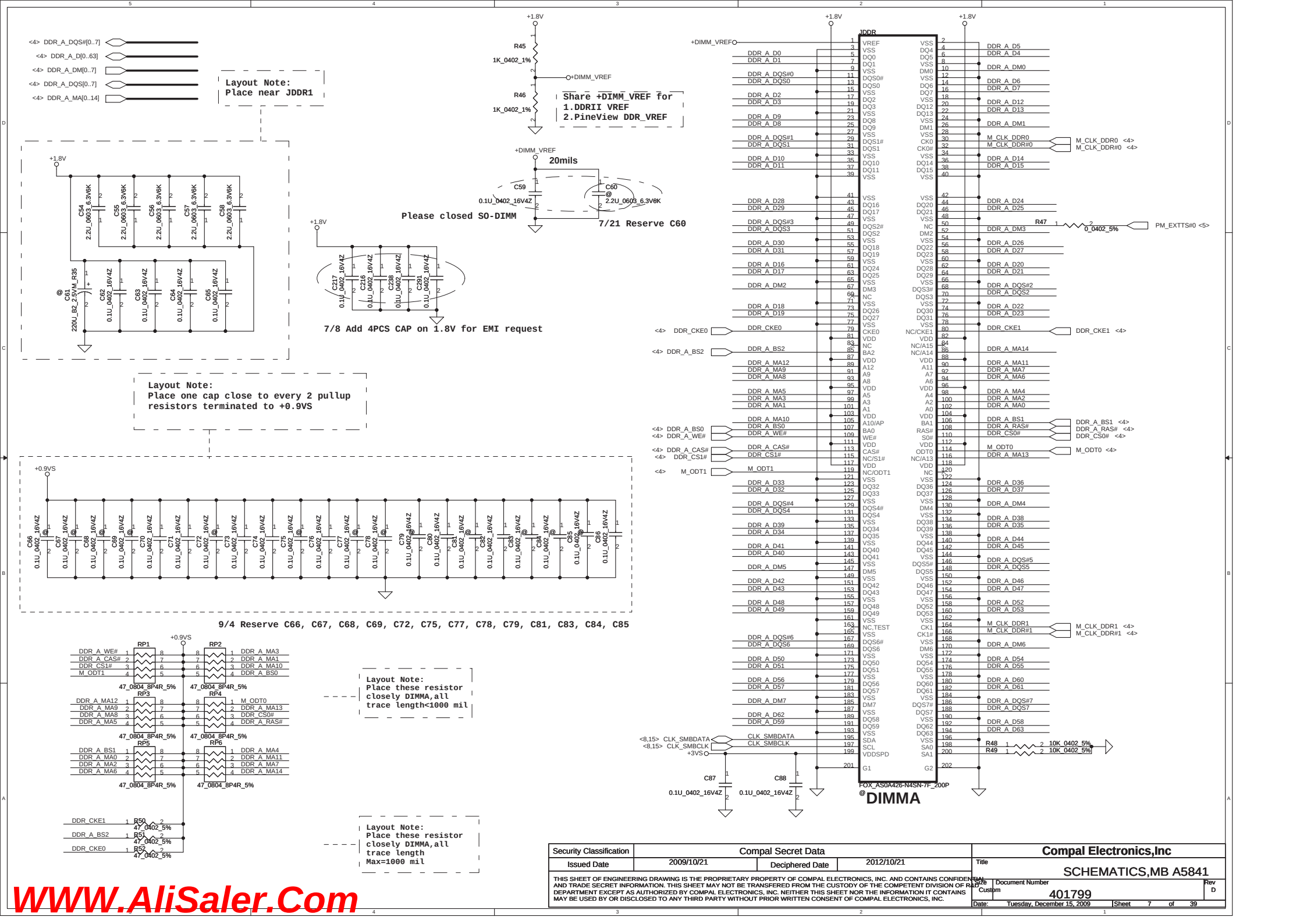

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FSC CLKSEL2	FSB CLKSEL1	FSA CLKSEL0	CPU MHz	SRC MHz	PCI MHz	REF MHz	DOT_96 MHz	USB MHz
0	0	0	266	100	33.3	14.318	96.0	48.0
0	0	1	133	100	33.3	14.318	96.0	48.0
0	1	0	200	100	33.3	14.318	96.0	48.0
0	1	1	166	100	33.3	14.318	96.0	48.0
1	0	0	333	100	33.3	14.318	96.0	48.0
1	0	1	100	100	33.3	14.318	96.0	48.0
1	1	0	400	100	33.3	14.318	96.0	48.0
1	1	1	Reserved					

SA000020K00 (Silego : SLG8SP556VTR)

7/13 For RF request

8/27 Delete C93, C94, C95, C102 for low power CLK GEN

7/13 Add 33pFfor RF request

7/21 Reserve 33pFfor RF request

7/21 Delete C296, C297 for RF request

7/13 Add 22pF to gnd and close to U3 for RF request

7/21 Reserve 22pF to gnd and close to U3 for RF request

8/24 Change net name to FSB for U3.2

7/13 Add 33pF to GND for RF request

7/21 Reserve 33pF to GND for RF request

8/27 C303, C324, C325, C326, C327 to GND for RF request

7/22 Add R241 pull up to +3VS for RF Intel request

8/14 Add R250 pull up for Intel request

7/22 Add R242 to R253 for Intel request

7/13 Add 33pF to GND for RF request

For ITP_EN, 0 =SRC8/SRC8#; 1 = ITP/ITP#

For PCI4_SEL, 0 = Pin24/25 : DOT96 / DOT96#
Pin28/29 : LCDCLK / LCDCLK#
1 = Pin24/25 : SRC_0 / SRC_0#
Pin28/29 : 27M/27M_SS

For PCI2_TME:0=Overclocking of CPU and SRC allowed
(ICS only) 1=Overclocking of CPU and SRC NOT allowed

Routing the trace at least 10mil

7/21 Change WWAN_CLKREQ# from REQ4 to REQ11

SRC PORT LIST

PORT	DEVICE
SRC0	CPU_DREFCLK
SRC2	CPU_EXP
SRC3	
SRC4	PCIE_SATA
SRC6	PCIE_WLAN
SRC7	
SRC8	
SRC9	PCIE_LAN
SRC10	PCIE_PCH
SRC11	PCIE_WWAN

REQ PORT LIST

PORT	DEVICE
REQ_3#	
REQ_4#	
REQ_6#	PEIC_WLAN
REQ_7#	
REQ_9#	PCIE_LAN
REQ_10#	
REQ_11#	PEIC_WWAN
REQ_A#	

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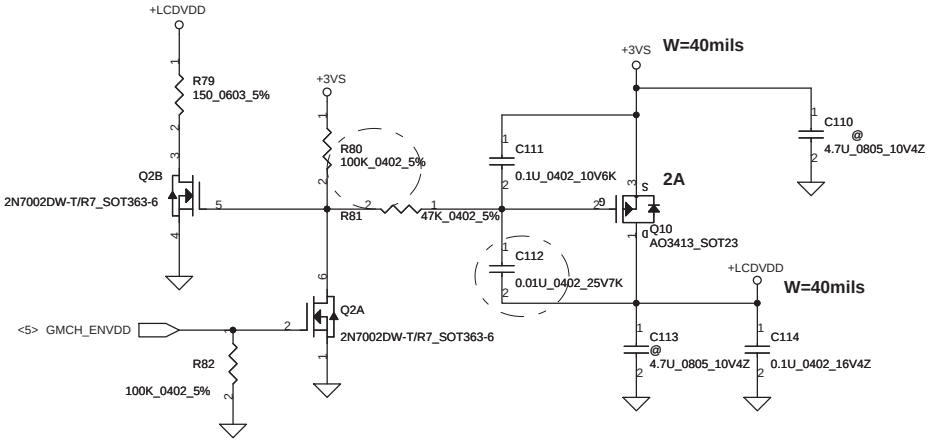
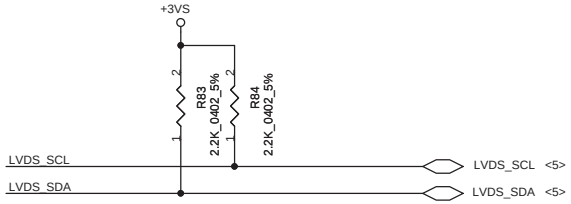
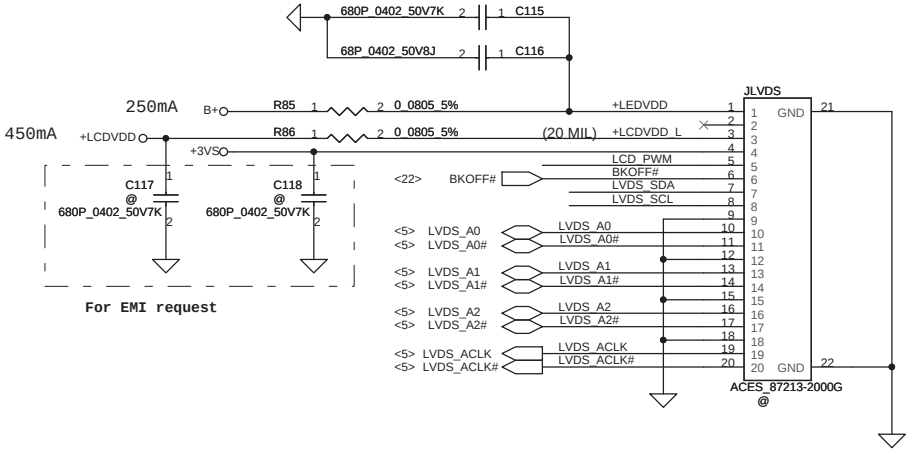
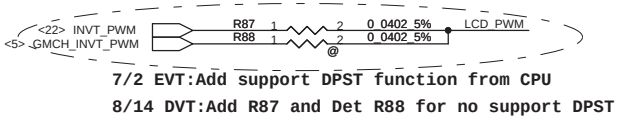
LCD POWER CIRCUIT





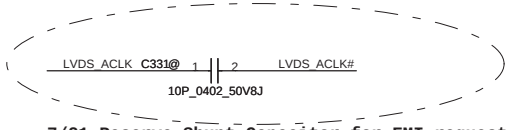
LED/PANEL BD. Conn.





7/2 EVT:Add support DPST function from CPU

8/14 DVT:Add R87 and Det R88 for no support DPST



7/21 Reserve Shunt Capacitor for EMI request

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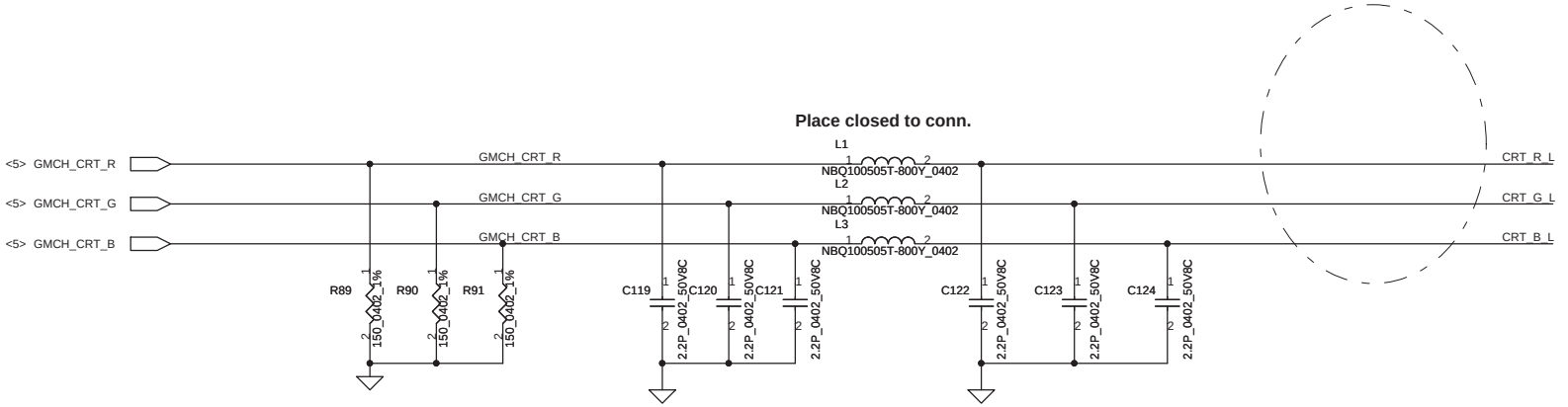
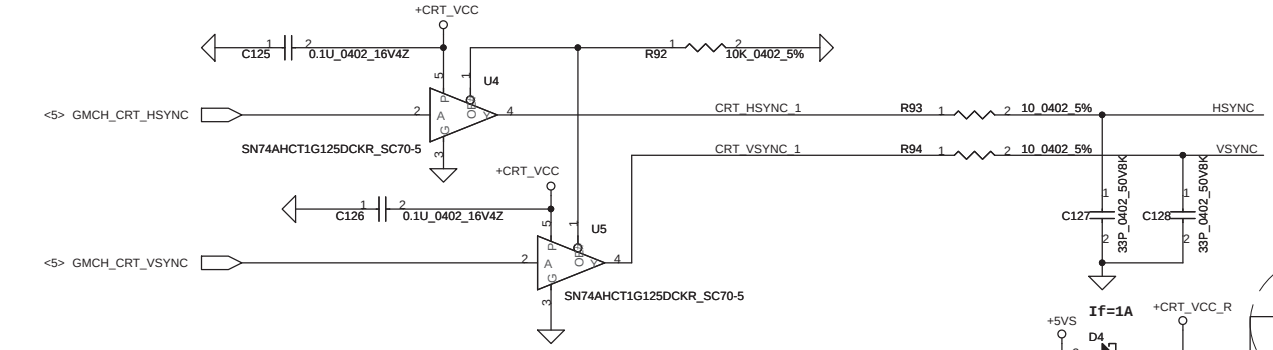
CRT CONNECTOR

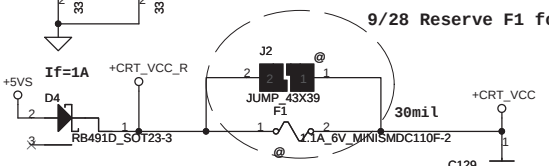
8/24 Det D1, D2, D3 for ESD request

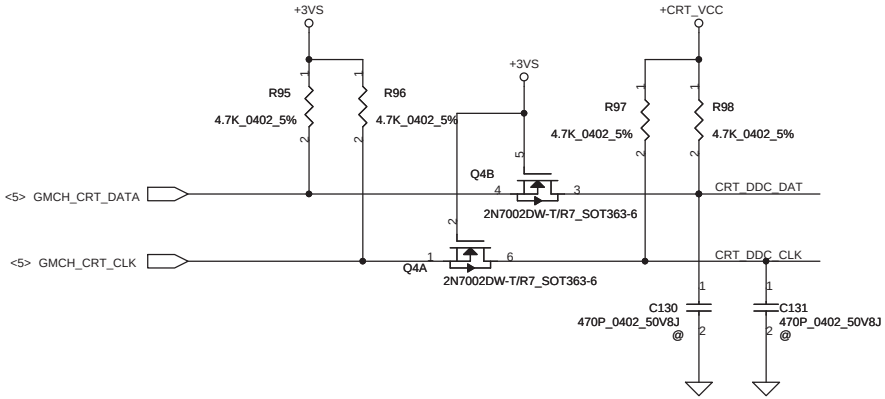
Place closed to conn.

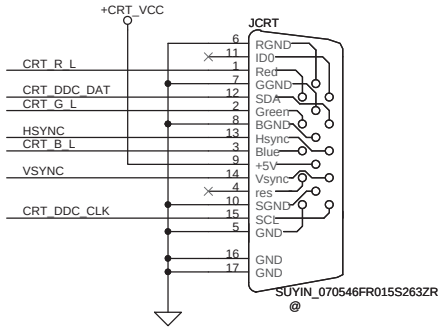




7/10 Add J2 for cost down PolySwitch
9/28 Reserve F1 for cost down PolySwitch







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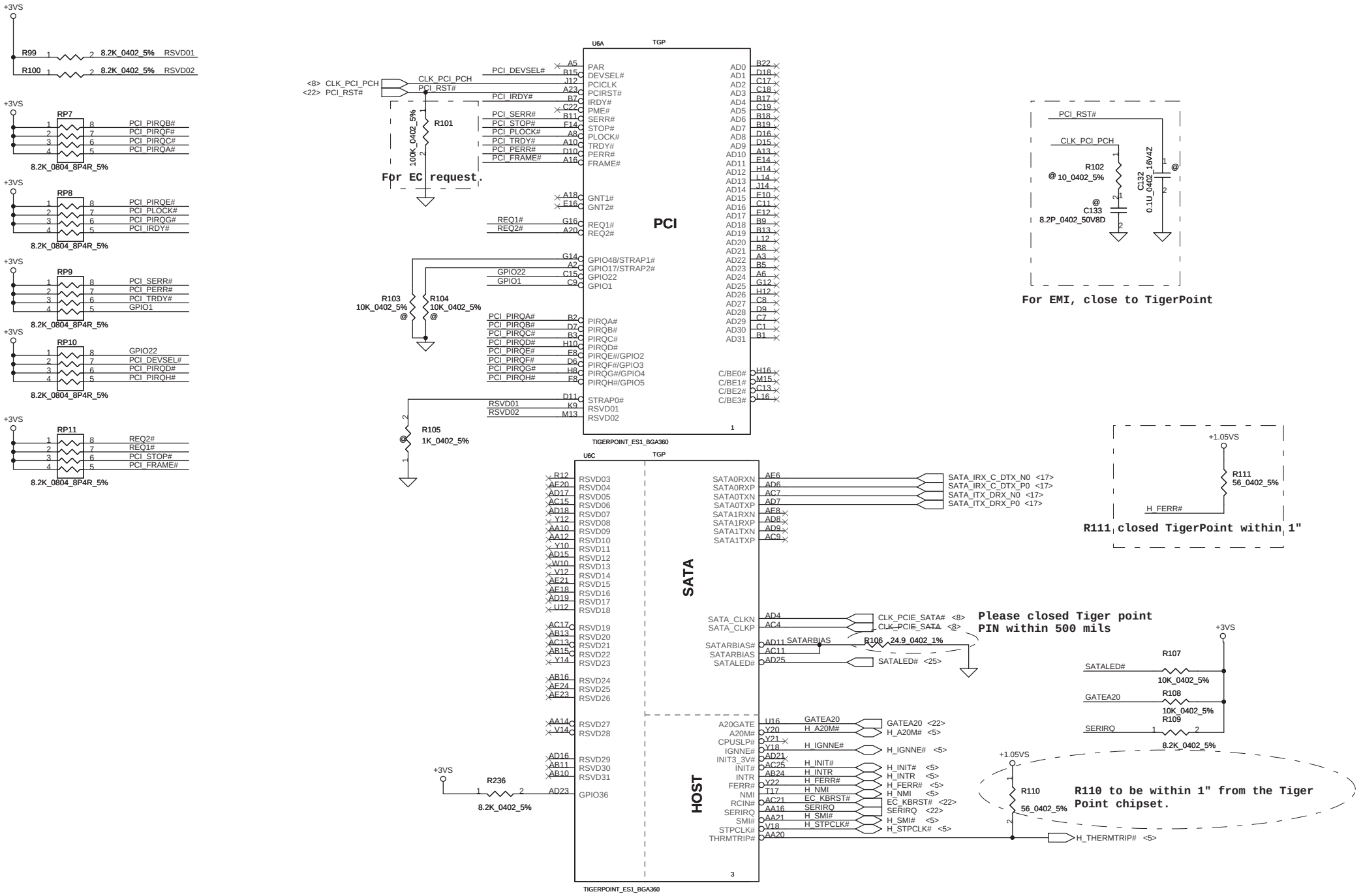

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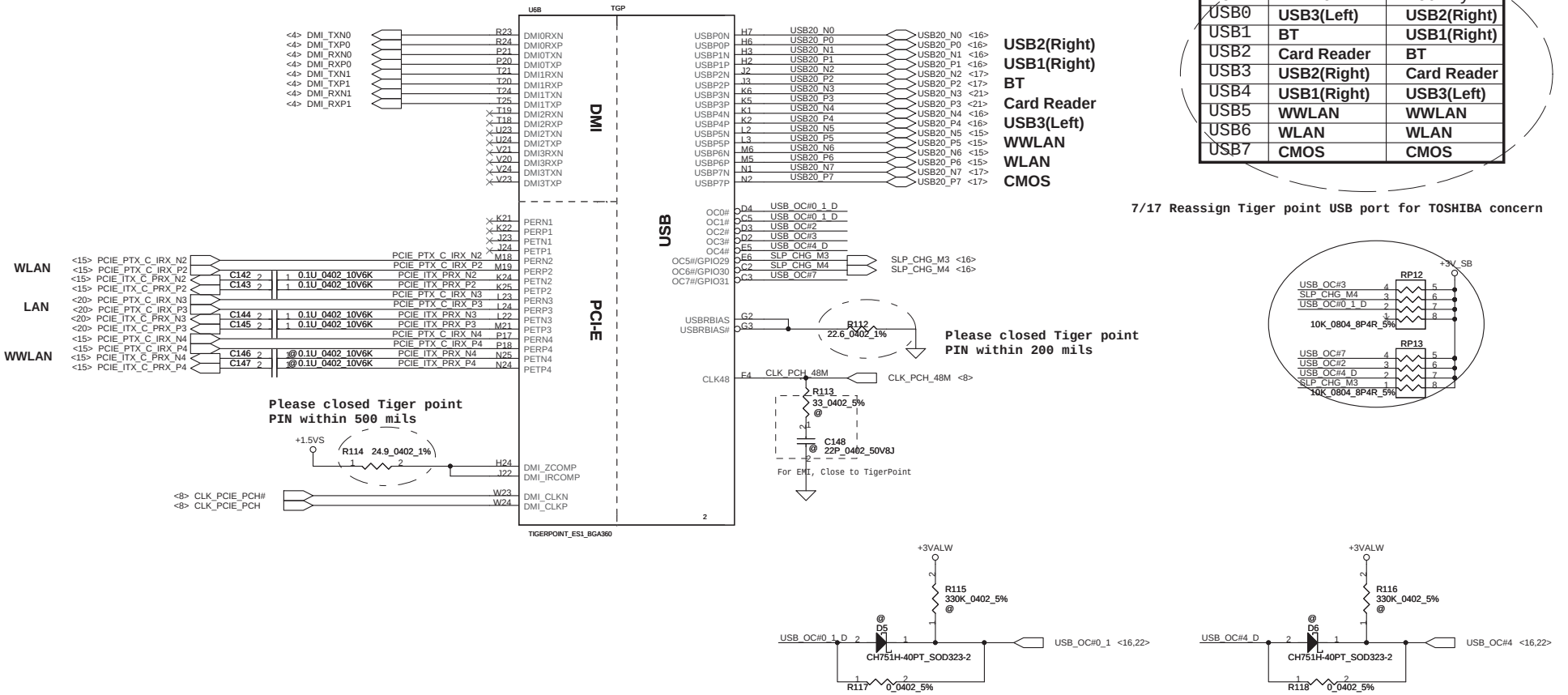
USB PORT LIST

PORT	DEVICE	Modify
USB0	USB3(Left)	USB2(Right)
USB1	BT	USB1(Right)
USB2	Card Reader	BT
USB3	USB2(Right)	Card Reader
USB4	USB1(Right)	USB3(Left)
USB5	WWLAN	WWLAN
USB6	WLAN	WLAN
USB7	CMOS	CMOS

7/17 Reassign Tiger point USB port for TOSHIBA concern



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7/2 For EMI, Close to TigerPoint

9/1 C207 change to SE071100J80 for EMI request

9/1 R125 change to SM010027780 for EMI request

For EMI, Close to TigerPoint

7/20 Add SLPIOVR pull up 8.2k to +3vs

9/23 Change RP17 to R256, R257, R258 for layout request

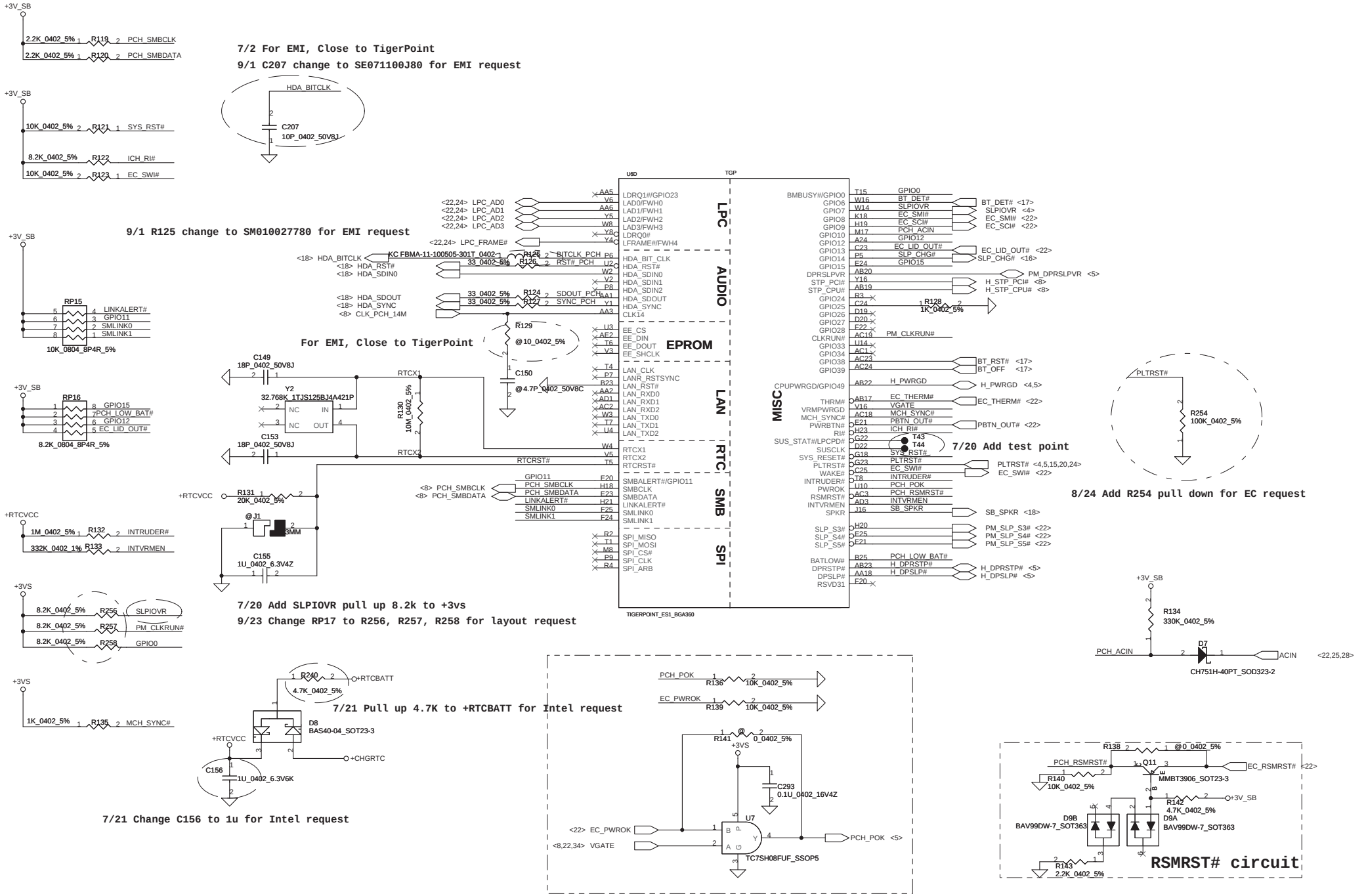
7/21 Pull up 4.7K to +RTCBATT for Intel request

7/21 Change C156 to 1u for Intel request

7/20 Add test point

8/24 Add R254 pull down for EC request

RSMRST# circuit



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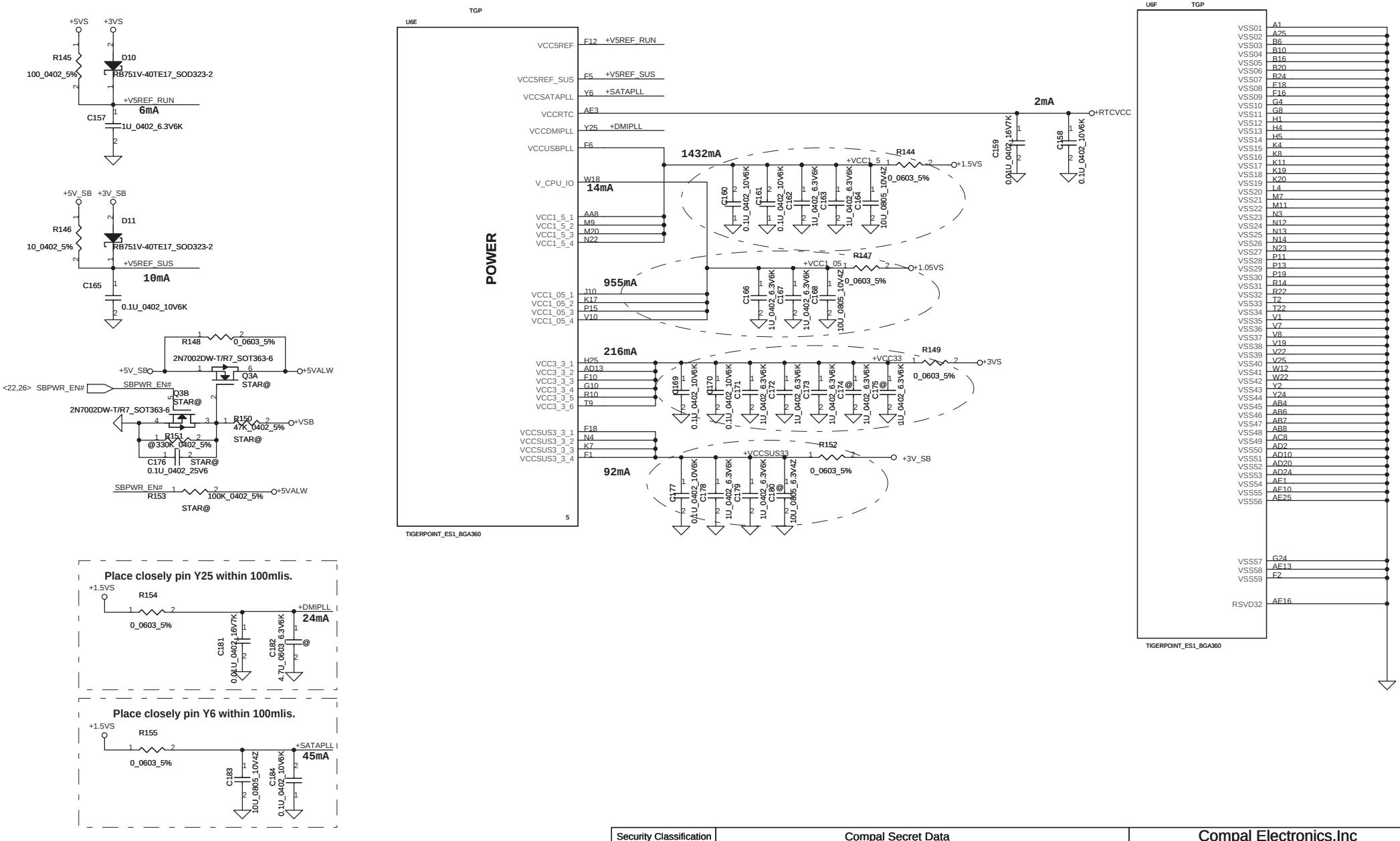

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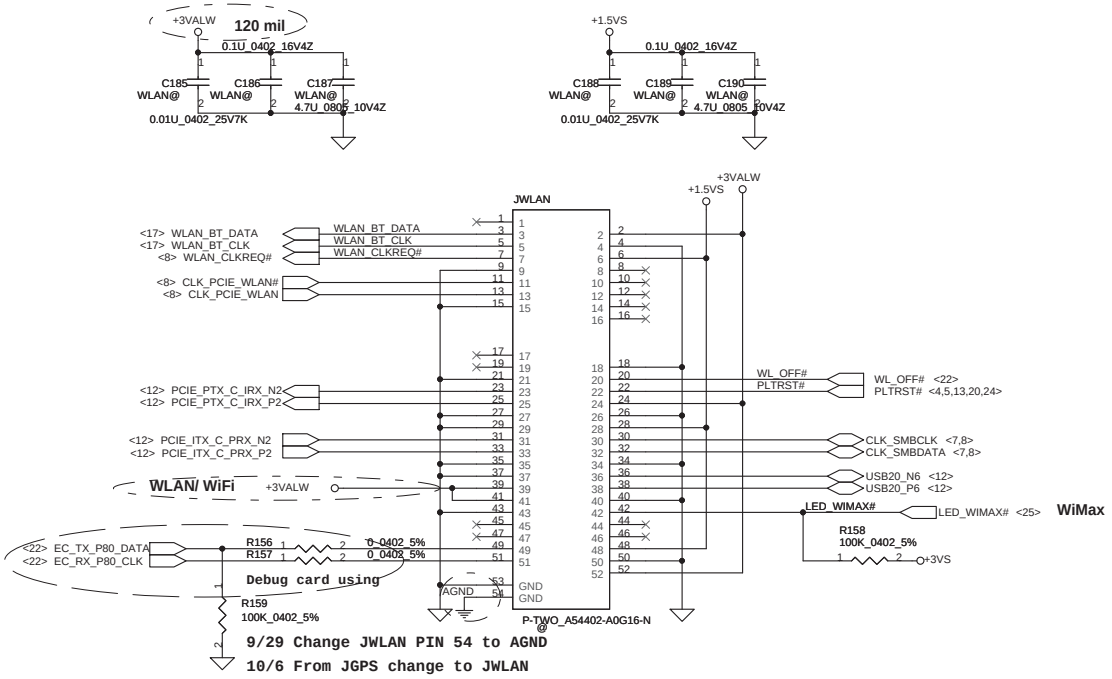
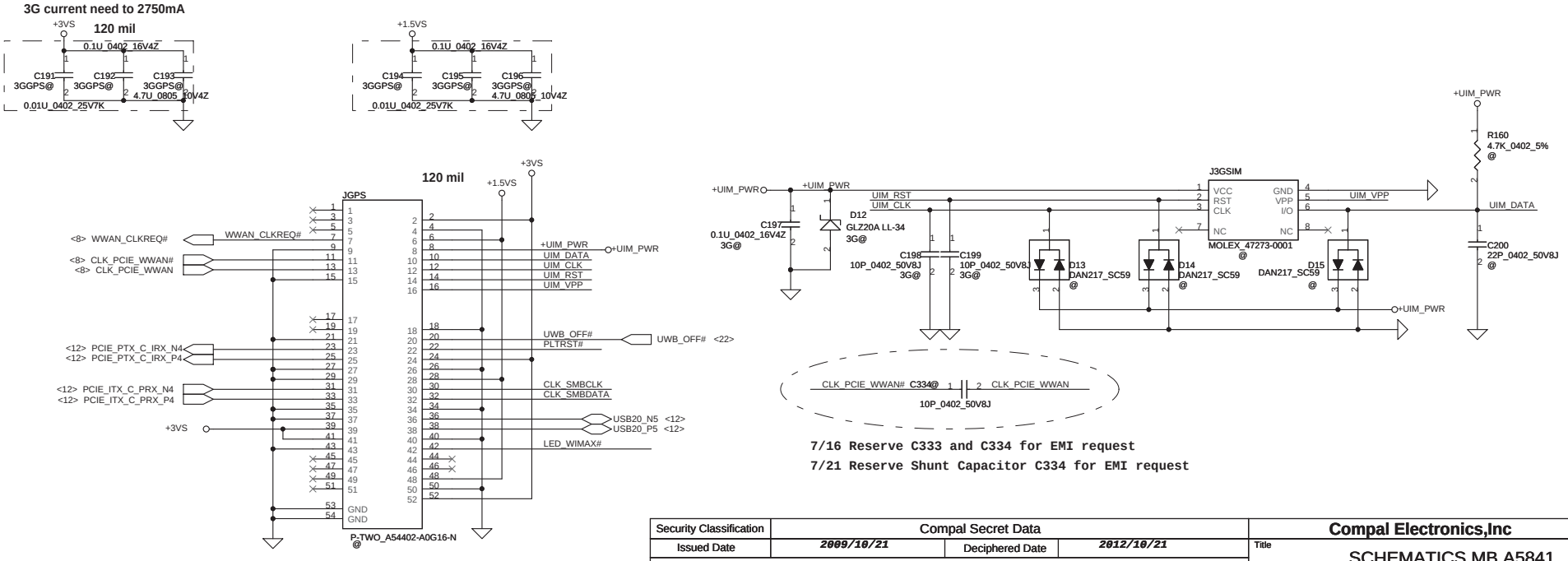
Mini-Express Card for WLAN/WiMax



Mini-Express Card for 3G/GPS



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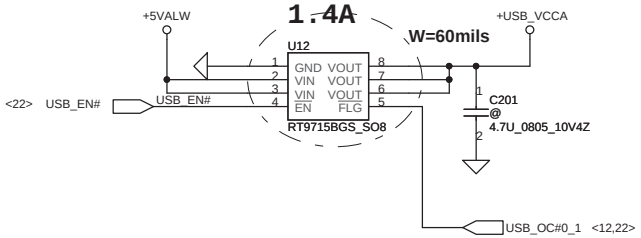
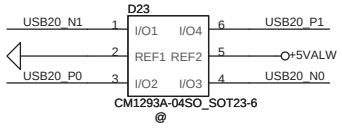
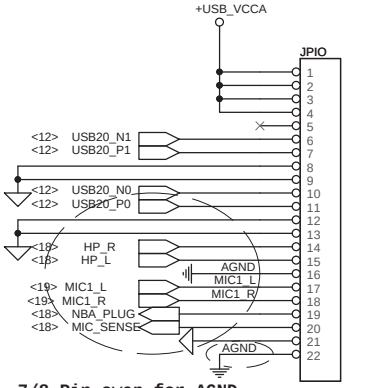
USB CONN--Right



8/24 Change U12 to SA00002XX00 for discharge +USB_VCCA

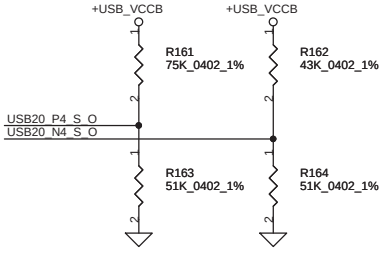


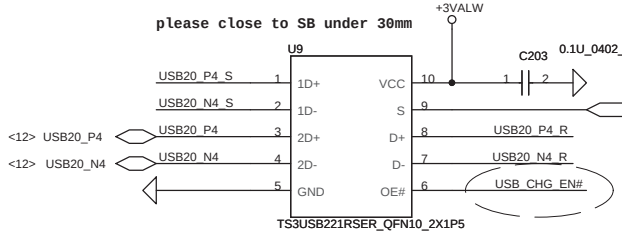


7/8 Pin swap for AGND
9/3 Add PIN 21, PIN 22 for GND pad
9/3 Change JPIO PIN 22 to AGND

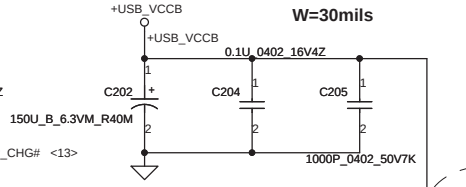
7/8 ESD diode change location from Sub board to M/B
9/28 D36 for ESD request

USB Board--Left

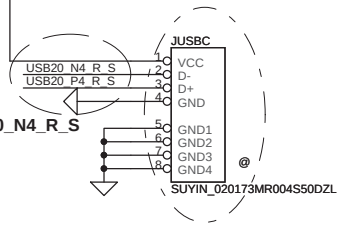




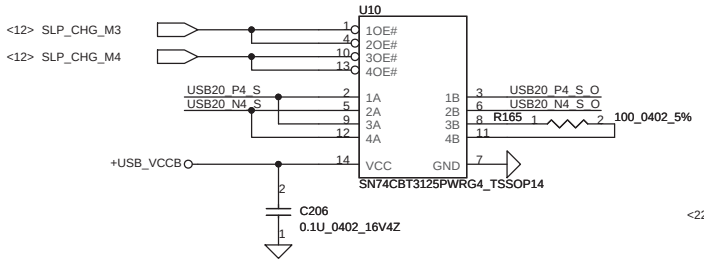
8/21 USB_CHG_EN# has to be connected to OE# pin for SPEC REV 0.5



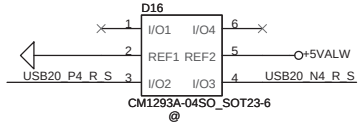
7/27 Swap USB20_P4_R_S and USB20_N4_R_S

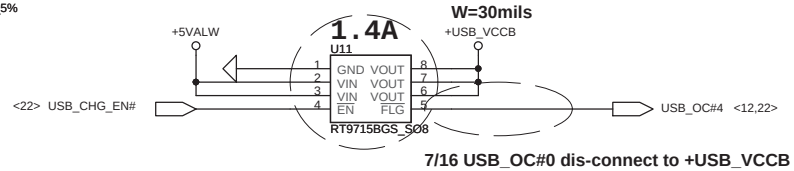


8/19 Change JUSBC to DC233004W00 for ME request



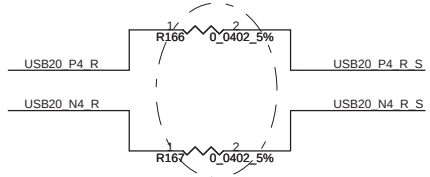
SLP_CHG	FUNCTION
LOW	D=1D
HIGH	D=2D





7/16 USB_OC#0 dis-connect to +USB_VCCB

7/17 Change U11 to SA00002XX00 for discharge +USB_VCCB



7/2 For EMI request and change to SM070001310
10/20 Delete L4 for EMI request

	SLP_CHG_M3	SLP_CHG_M4
Mode 3	HIGH	LOW
Mode 4	LOW	HIGH

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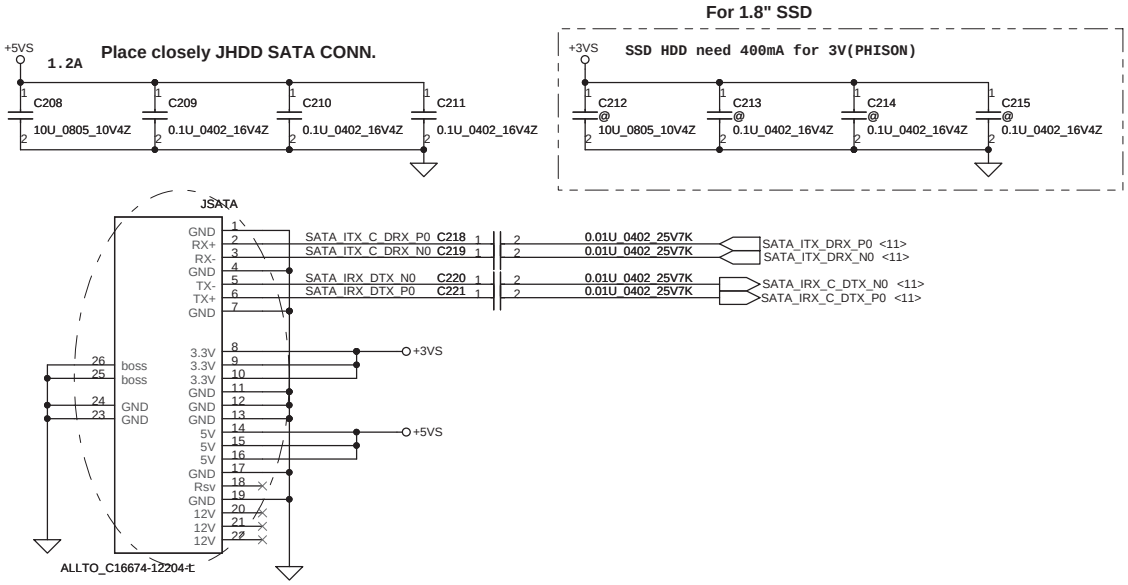
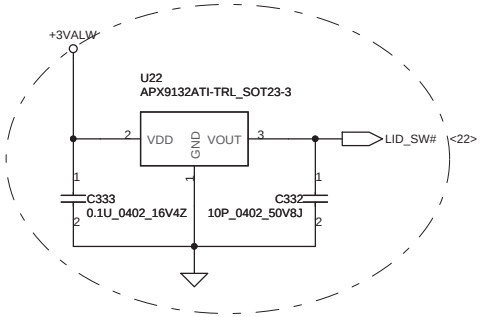
SATA Conn.

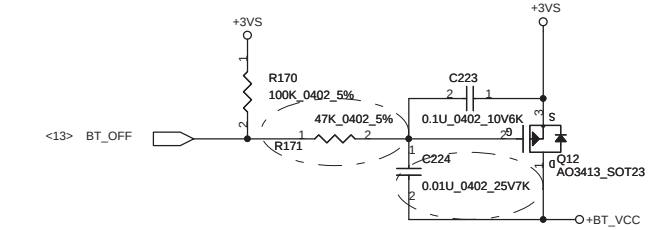


8/24 Change JSATA for ME request

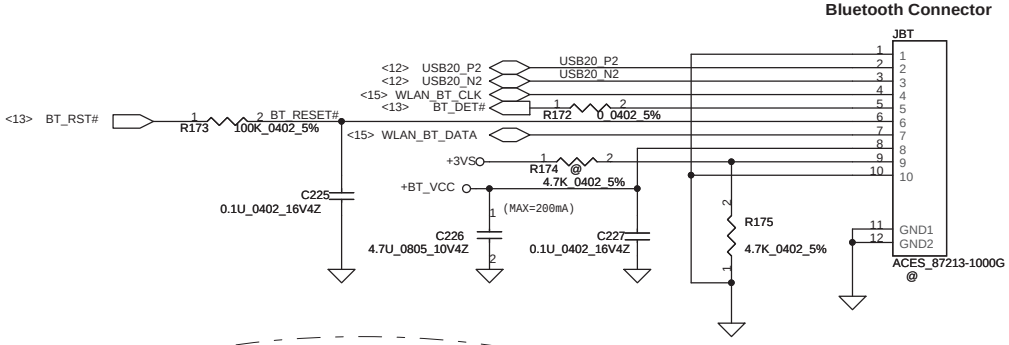


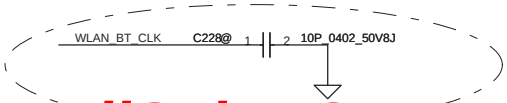
8/19 Add Lid switch function on M/B for ME request

BlueTooth Interface



Bluetooth Connector



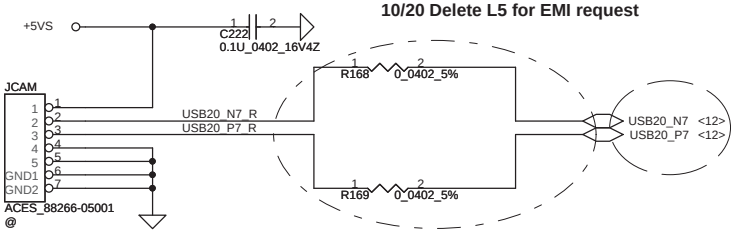


Camera Conn.

Int. Camera

W=20mils

7/21 Swap USB20_P7, USB20_N7 for layout request
8/14 Swap USB20_P7, USB20_N7 for layout request
10/20 Delete L5 for EMI request



For EMI request

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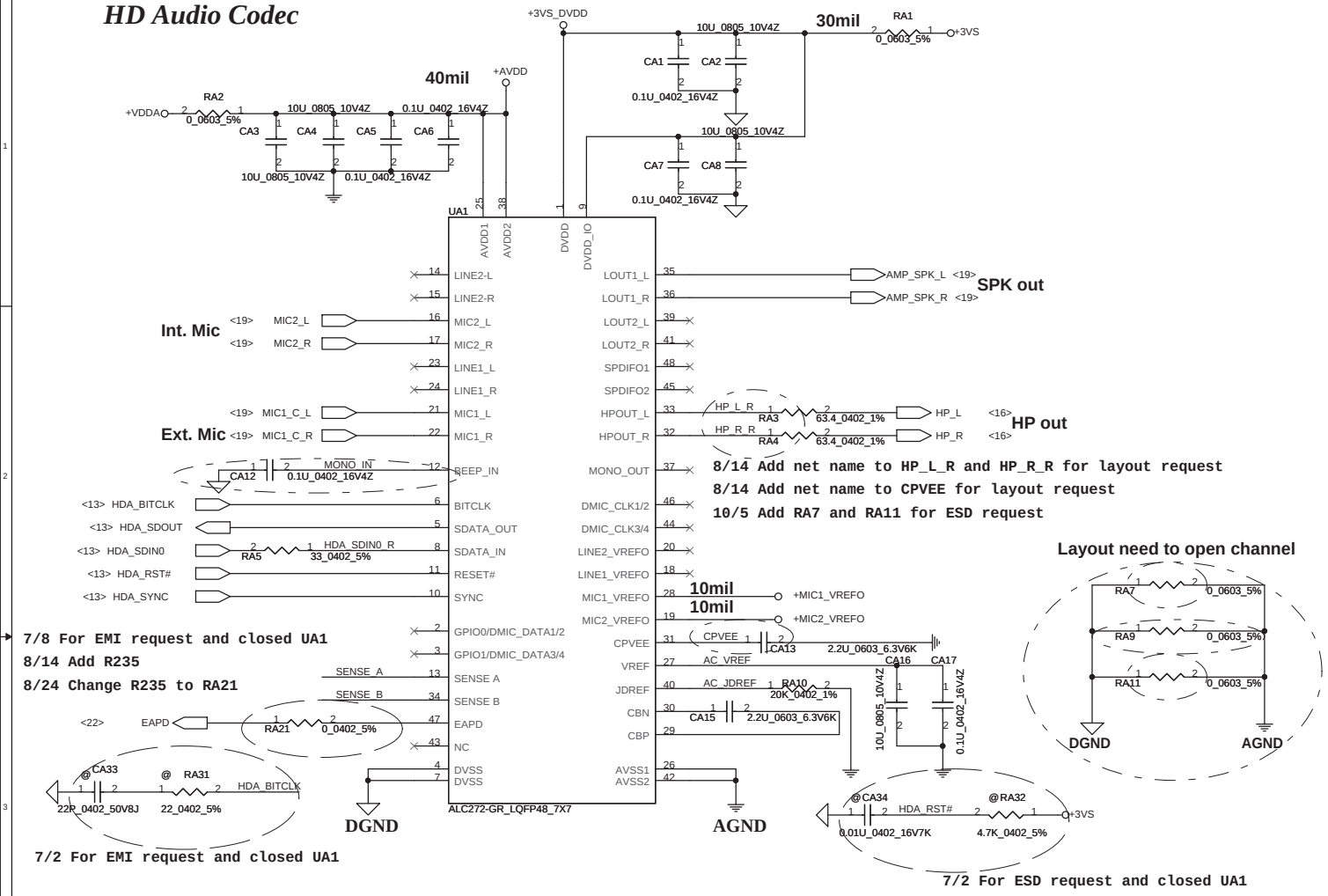
HD Audio Codec



7/8 For EMI request and closed UA1
8/14 Add R235
8/24 Change R235 to RA21

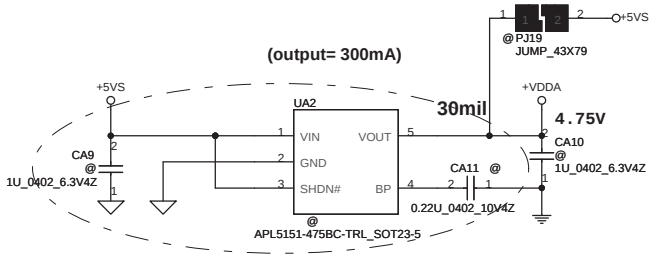
7/2 For EMI request and closed UA1

8/14 Add net name to HP_L_R and HP_R_R for layout request
8/14 Add net name to CPVEE for layout request
10/5 Add RA7 and RA11 for ESD request

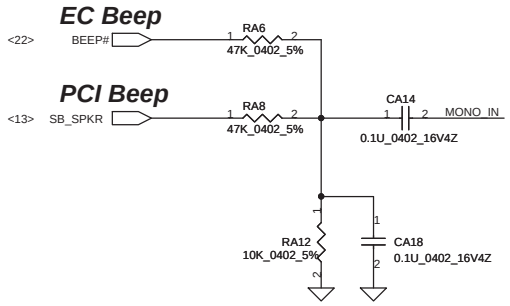
Layout need to open channel

7/2 For ESD request and closed UA1

Audio regulator

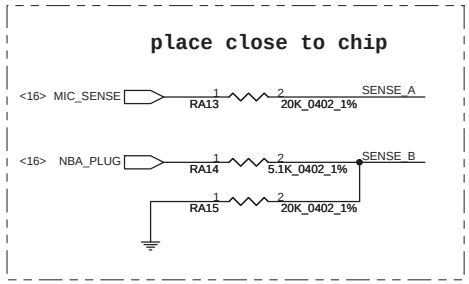


Beep sound



Sense Pin	Impedance	Codec Signals	Function
SENSE A	39.2K	PORT-A (PIN 39, 41)	
	20K	PORT-B (PIN 21, 22)	Ext. MIC
	10K	PORT-C (PIN 23, 24)	
	5.1K	PORT-D (PIN 35, 36)	SPK out
SENSE B	39.2K	PORT-E (PIN 14, 15)	
	20K	PORT-F (PIN 16, 17)	Int. MIC
	10K	PORT-H (PIN 37)	
	5.1K	PORT-I (PIN 32, 33)	Headphone out

place close to chip



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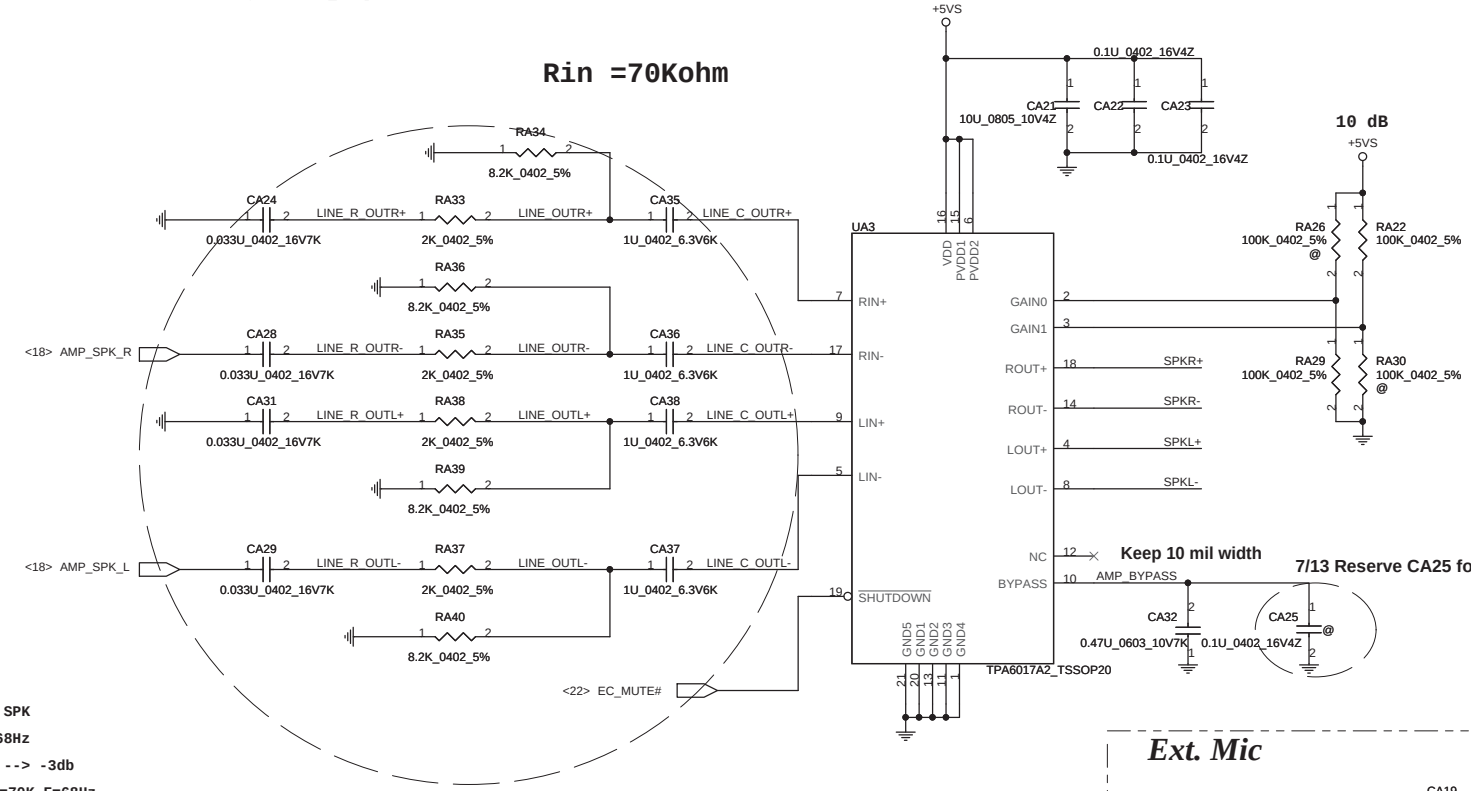
TPA6017 Medium Range Amplifier



Use mono SPK
setting 68Hz
F=1/2πRC --> -3db
C=0.033U,R=70K,F=68Hz

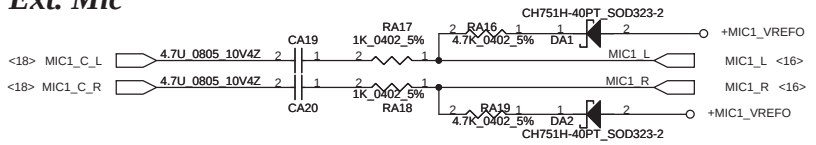
GAIN0	GAIN1	Av(db)	Rin(ohm)
0	0	6	90K
0	1	10	70K
1	0	15.6	45K
1	1	21.6	25K

Keep 10 mil width

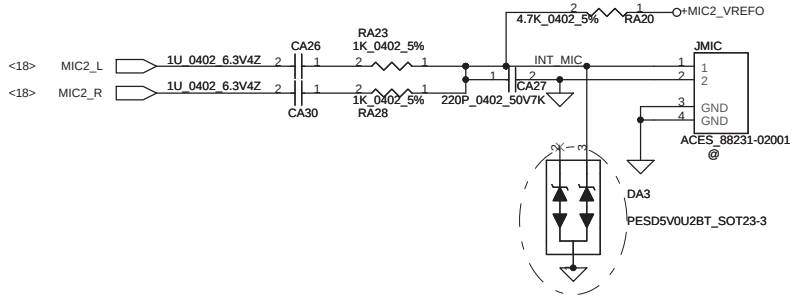
7/13 Reserve CA25 for RF request

7/21 Add RA33~RA40, CA35~CA38 for AMP gain

Ext. Mic

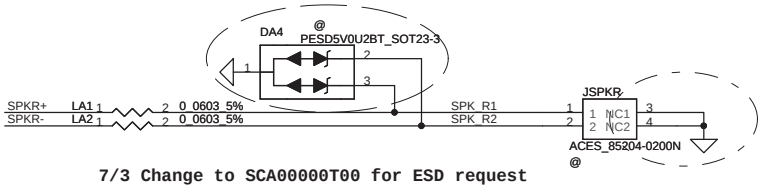


Int. Mic



7/3 Change to SCA00000T00 for ESD request

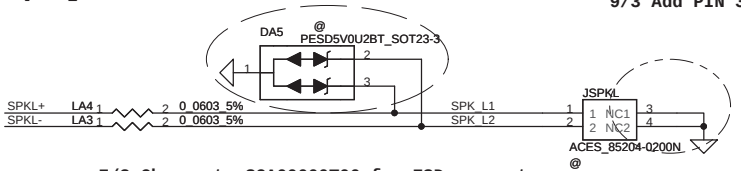
Right Speaker Connector



7/3 Change to SCA00000T00 for ESD request

Left Speaker Connector

9/3 Add PIN 3, PIN 4 for GND pad



7/3 Change to SCA00000T00 for ESD request

10/27 Delete DA4 and DA5 for ESD request

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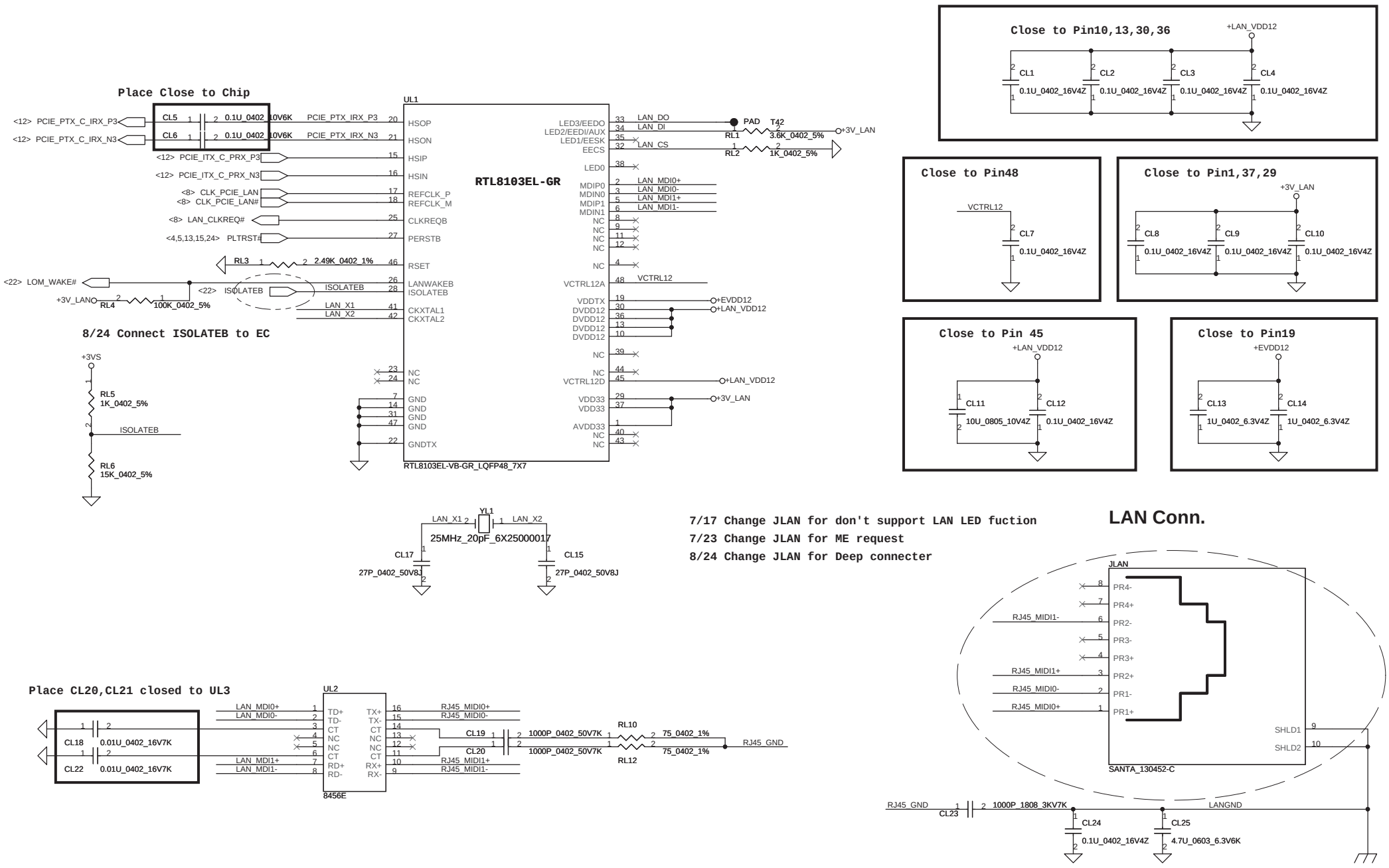

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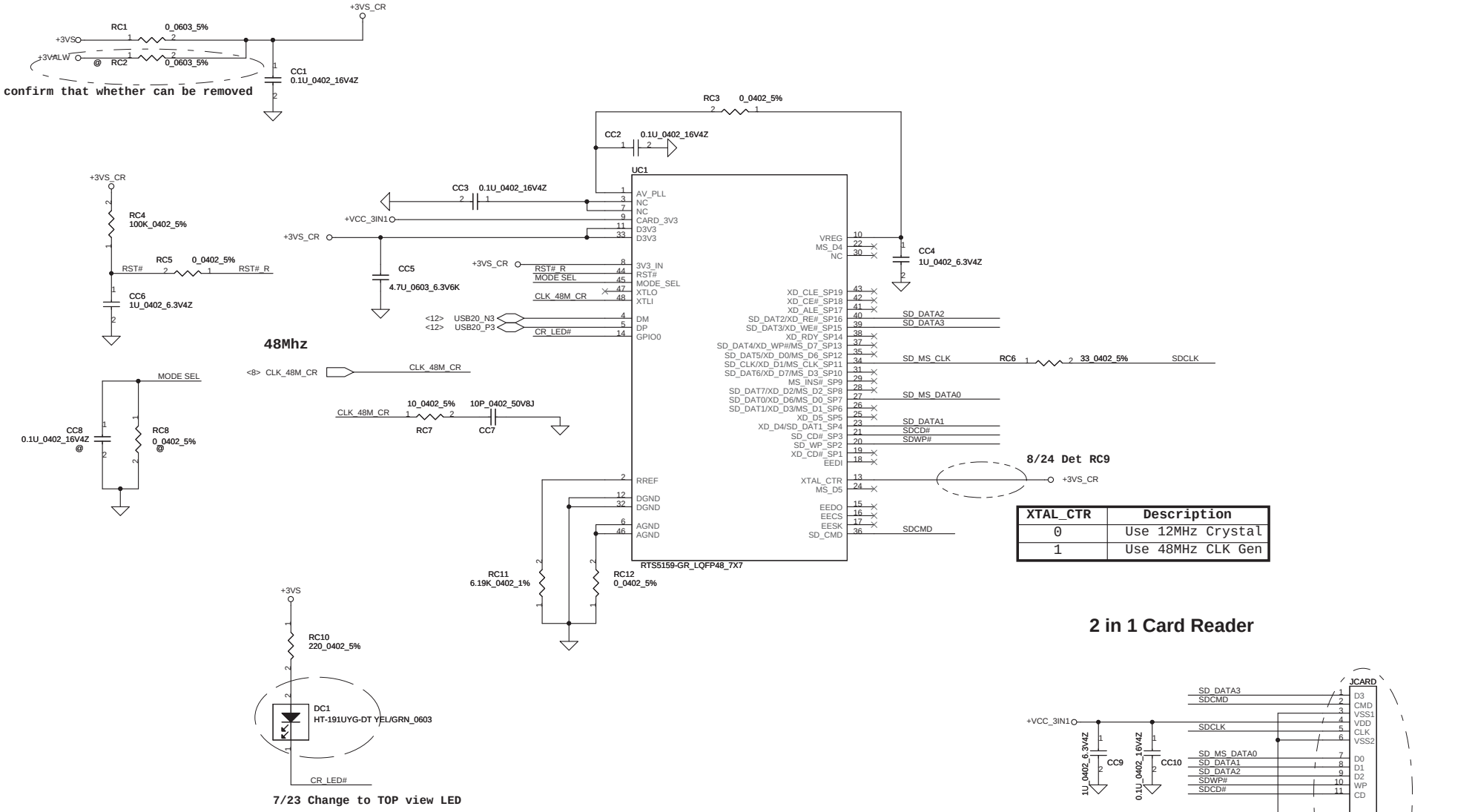

XTAL_CTR	Description
0	Use 12MHz Crystal
1	Use 48MHz CLK Gen

R	C	USB AUTO DE-LINK	MS FORMATTER	Description
0	NC	YES		Recommended
NC	47P	YES	YES	
NC	NC			Compatible with RTS5158E
NC	680P	YES		LED ON
10K	180P			LED ON
10K	680P		YES	

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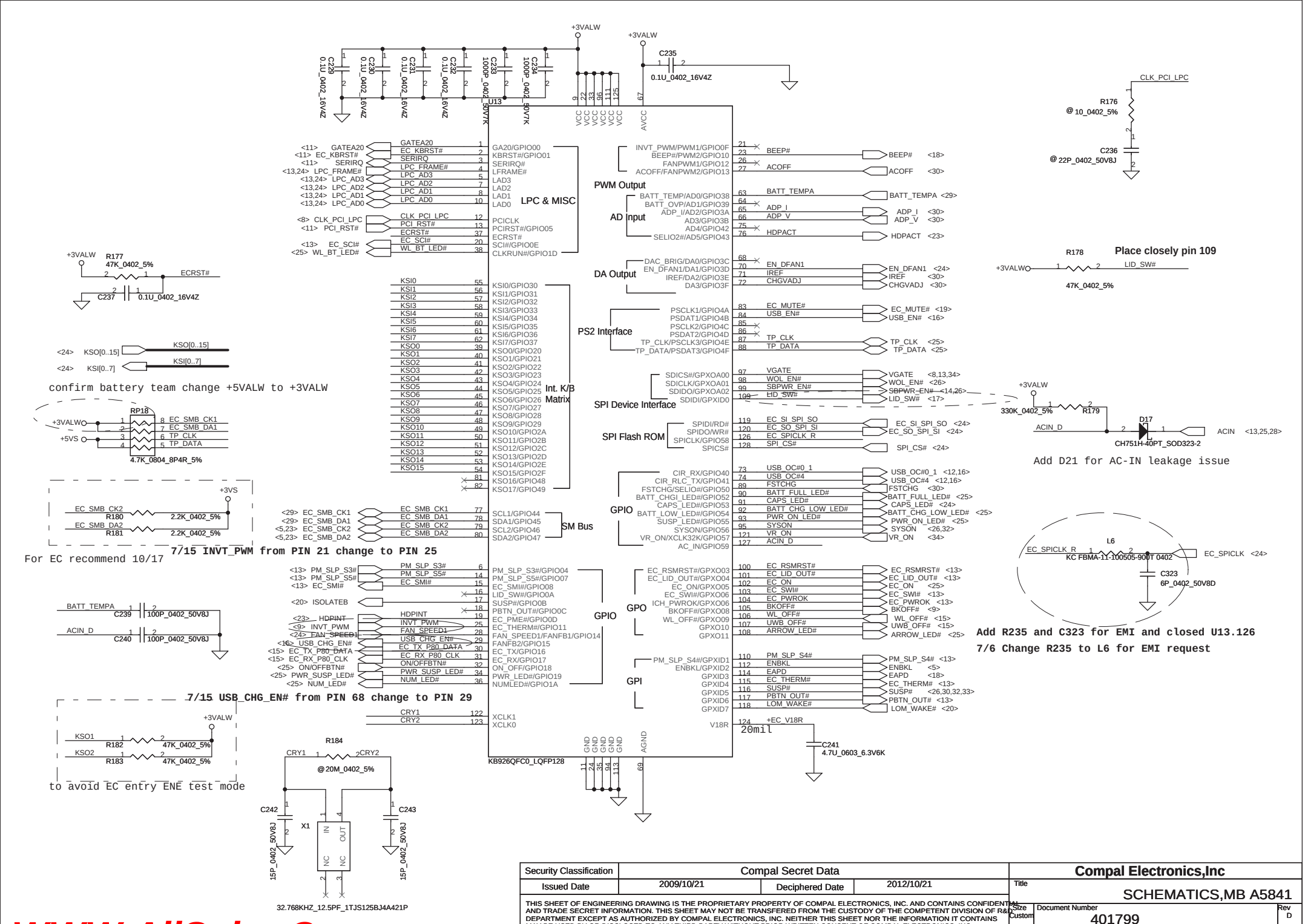

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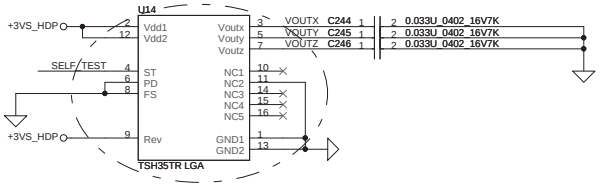
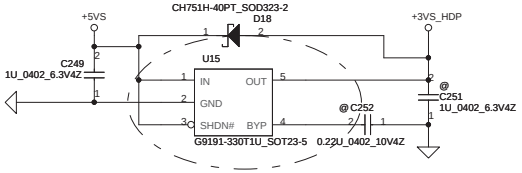
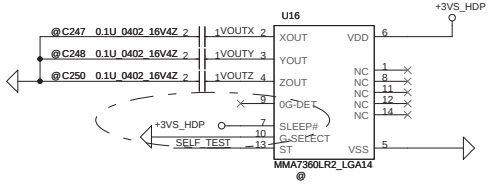
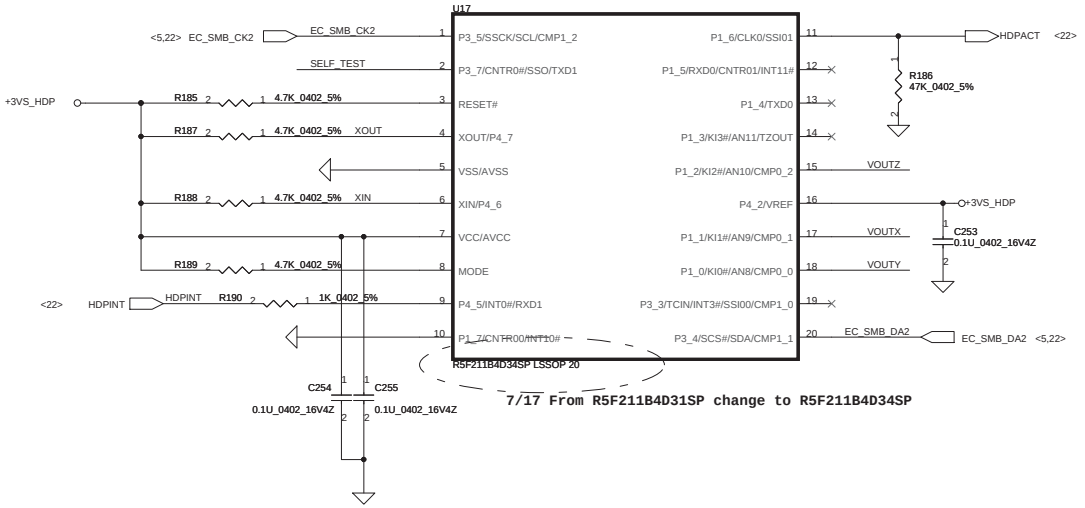
G-Sensor









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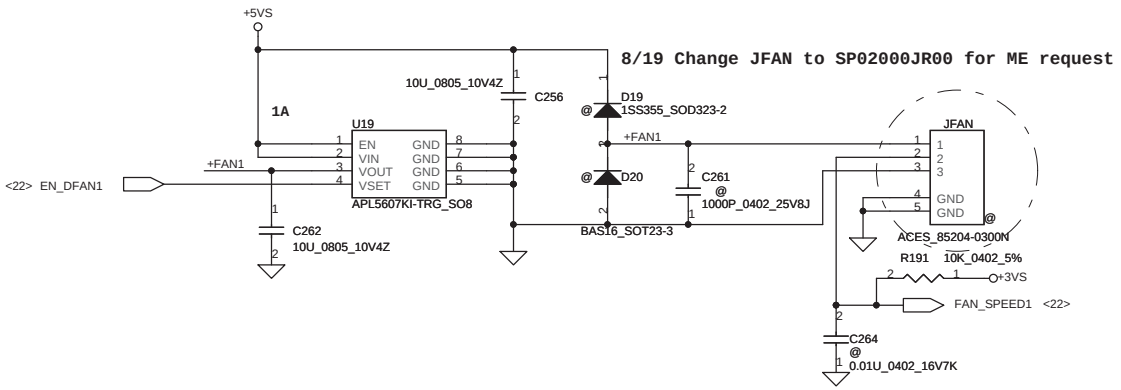
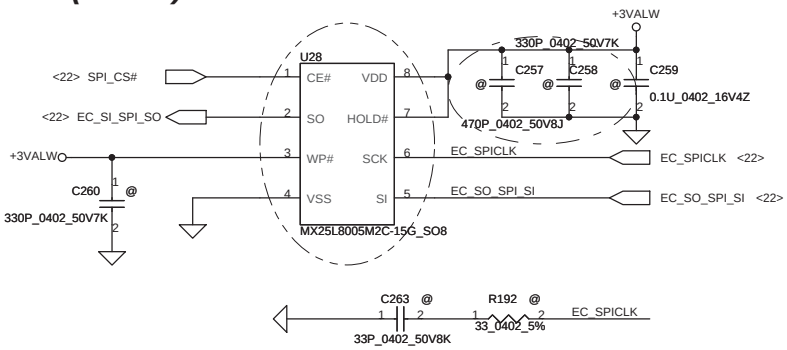
FAN Control Circuit



8/19 Change JFAN to SP02000JR00 for ME request

SPI Flash (8Mb*1)

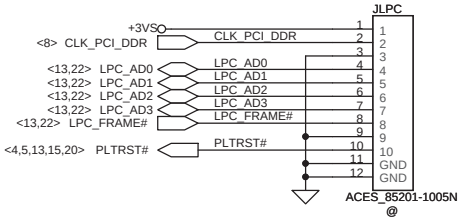


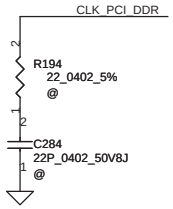
8/14 Change U28 from SA00000XT00 to SA00002TO00 for BIOS ROM size

11/12 Change U28 from SA000002T00 to SA0000XTO00 for BIOS ROM size

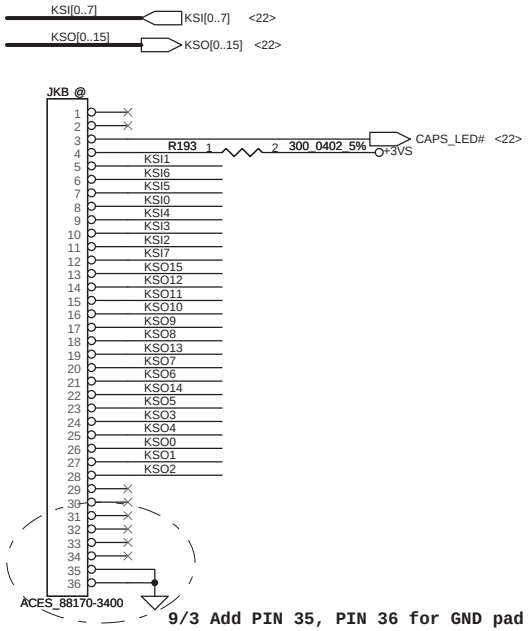
LPC Debug Port

Please place the connector neer to DDR door

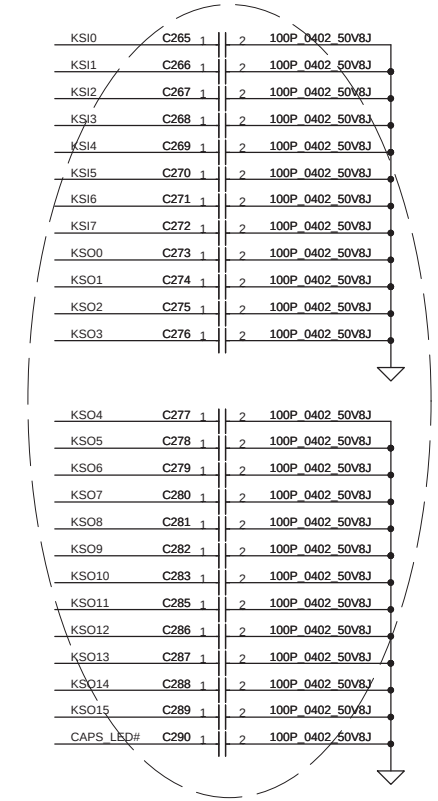




KEYBOARD CONN.



9/3 Add PIN 35, PIN 36 for GND pad



7/8 Add C265 to C290 for EMI request

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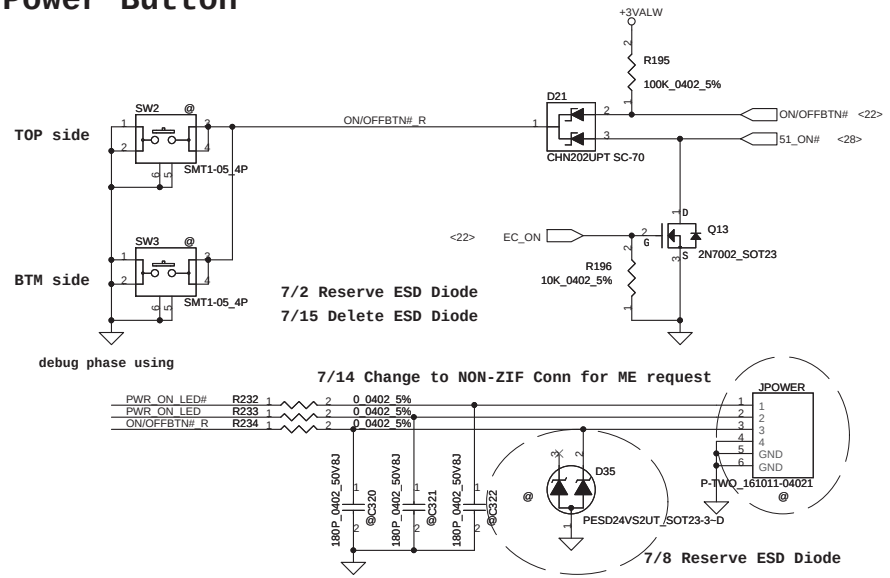
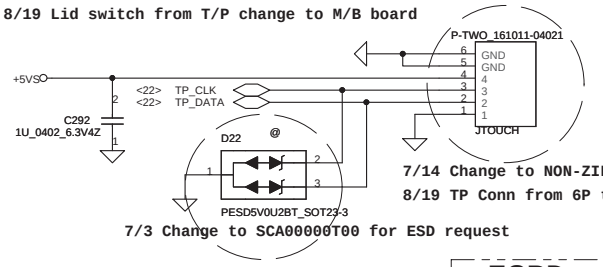
Power Button



Touch/B Connector

7/3 Lid switch from M/B change to T/P board
8/19 Lid switch from T/P change to M/B board



ISPD

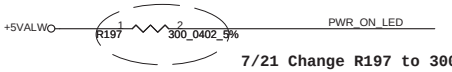
PCB — ZZZ — PCB LA-5841PR01 BOM
10/27 MP PCB P/N Change to DAZ0BH00100

DC-IN — PJP1 — PJP1 45@

CPU — U1 — CPU N470 N470@

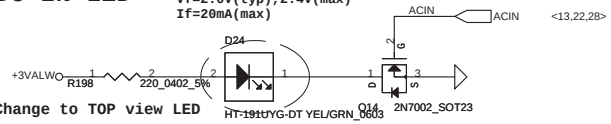
LED Conn

POWER LED



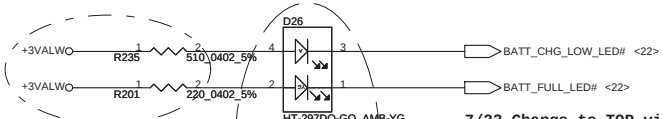
DC-IN LED

Vf=2.0V(typ),2.4V(max)
If=20mA(max)

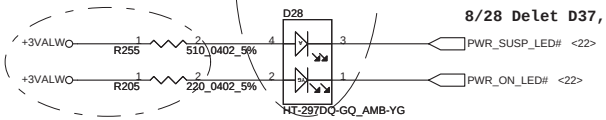


BATT CHARGE/FULL LED

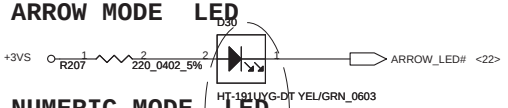
Vf=2.1V(typ),2.4V(max) for amber
Vf=2.2V(typ),2.4V(max) for green
If=25mA(max)



POWER/SUSPEND LED

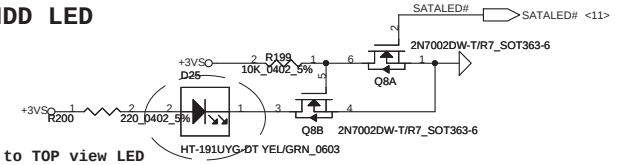


ARROW MODE LED

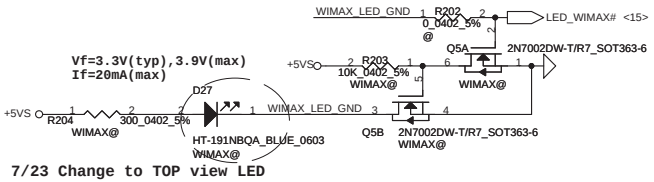


NUMERIC MODE LED

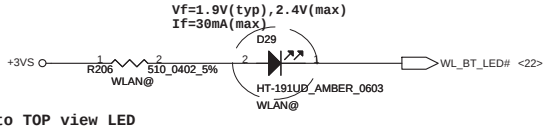
HDD LED



WiMAX&3G LED



WL&BT LED



7/23 Change to TOP view LED
8/28 Change to SC5191UD000 and SC591UYG000 for HW design
9/23 Change R235, R255 to SD028220080 and +5VALW to +3VALW for HW design
8/28 Delet D37, D38 and Change D26 and D28 to SC500001900 for ME request

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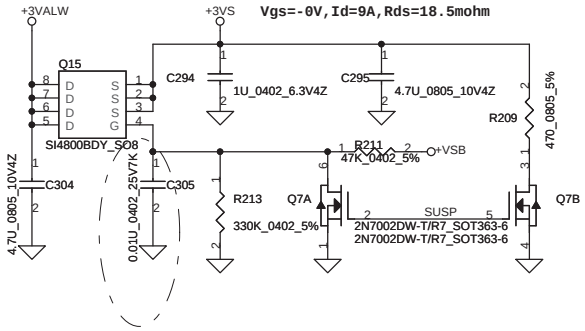
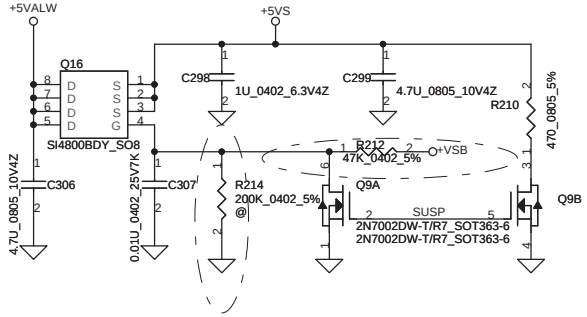
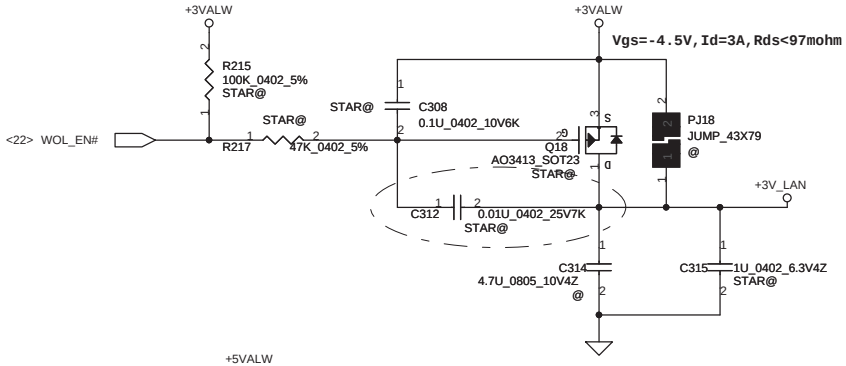
+3VALW TO +3VS



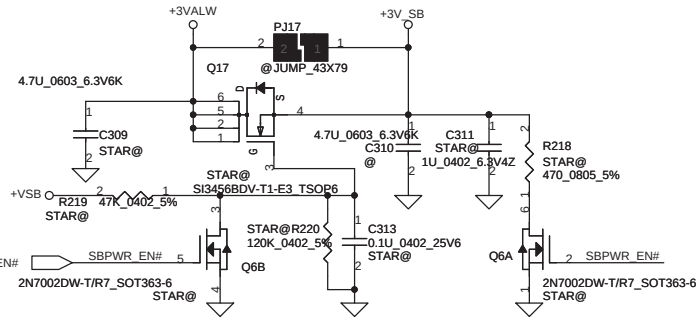
+5VALW TO +5VS

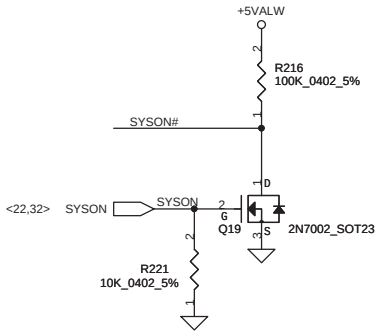


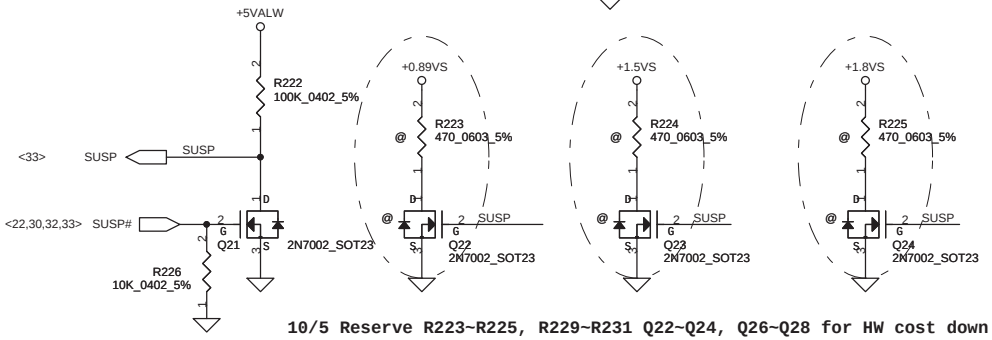
+3VALW TO +3V_LAN



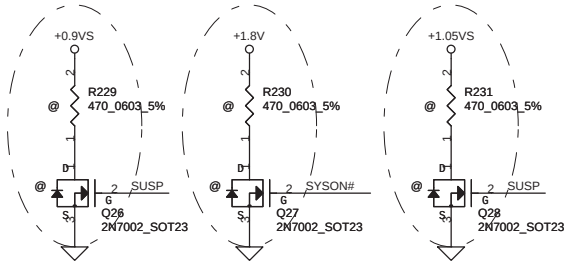
+3VALW TO +3V_SB



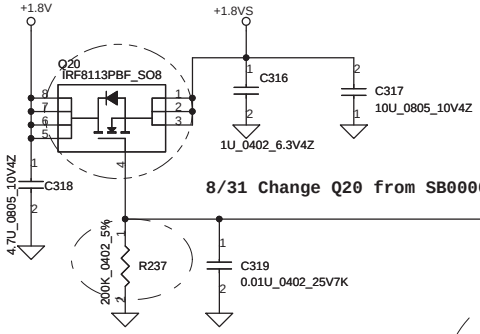




10/5 Reserve R223~R225, R229~R231 Q22~Q24, Q26~Q28 for HW cost down

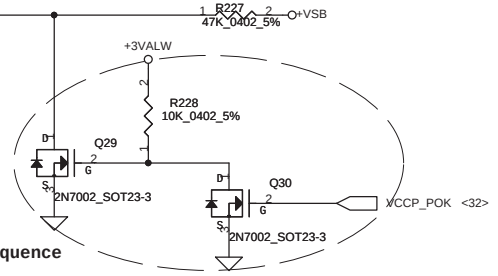


+1.8V TO +1.8VS



8/31 Change Q20 from SB000002880 to SB00000DW00 for HW design

8/14 R237 for HW design



7/9 Add Q29, Q30, R228 for Intel power sequence

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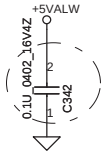
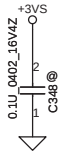
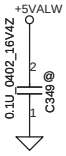
7/21 Placed closed H1

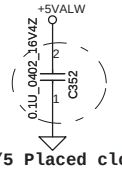


7/21 Placed closed H2

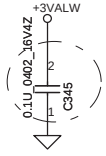


7/23 Placed closed R42

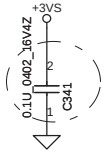




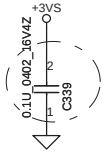
10/5 Placed closed H6



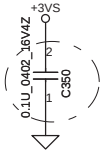
7/21 Placed closed H6



7/21 Placed closed H7

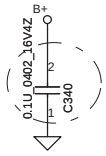


7/21 Placed closed H8

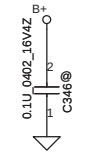


10/5 Placed closed Q2

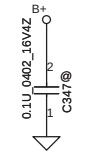
10/5 Placed closed H1



7/21 Placed closed H9

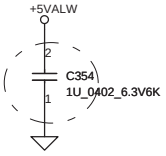


7/23 Placed closed PJ14



7/23 Placed closed PJ9

10/5 Placed closed H4



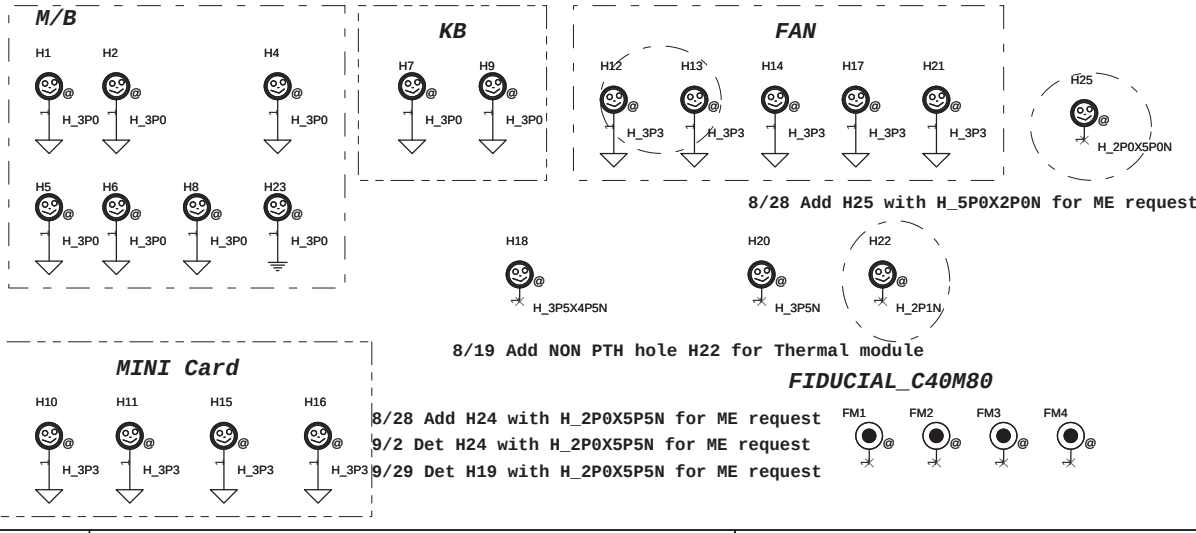
10/5 Placed closed H2

7/21 These cap for ESD request

10/5 Add C339, C340~C342, C345, C350~C354 for ESD request
10/5 Change C343 to SE000000K80 for ESD request
10/6 Change C354 to SE000000K80 for ESD request

Screw Hole

9/23 Change H12, H13 to 3P3 for ME request



8/28 Add H25 with H_5P0X2P0N for ME request

8/19 Add NON PTH hole H22 for Thermal module

FIDUCIAL_C40M80

8/28 Add H24 with H_2P0X5P5N for ME request
9/2 Det H24 with H_2P0X5P5N for ME request
9/29 Det H19 with H_2P0X5P5N for ME request

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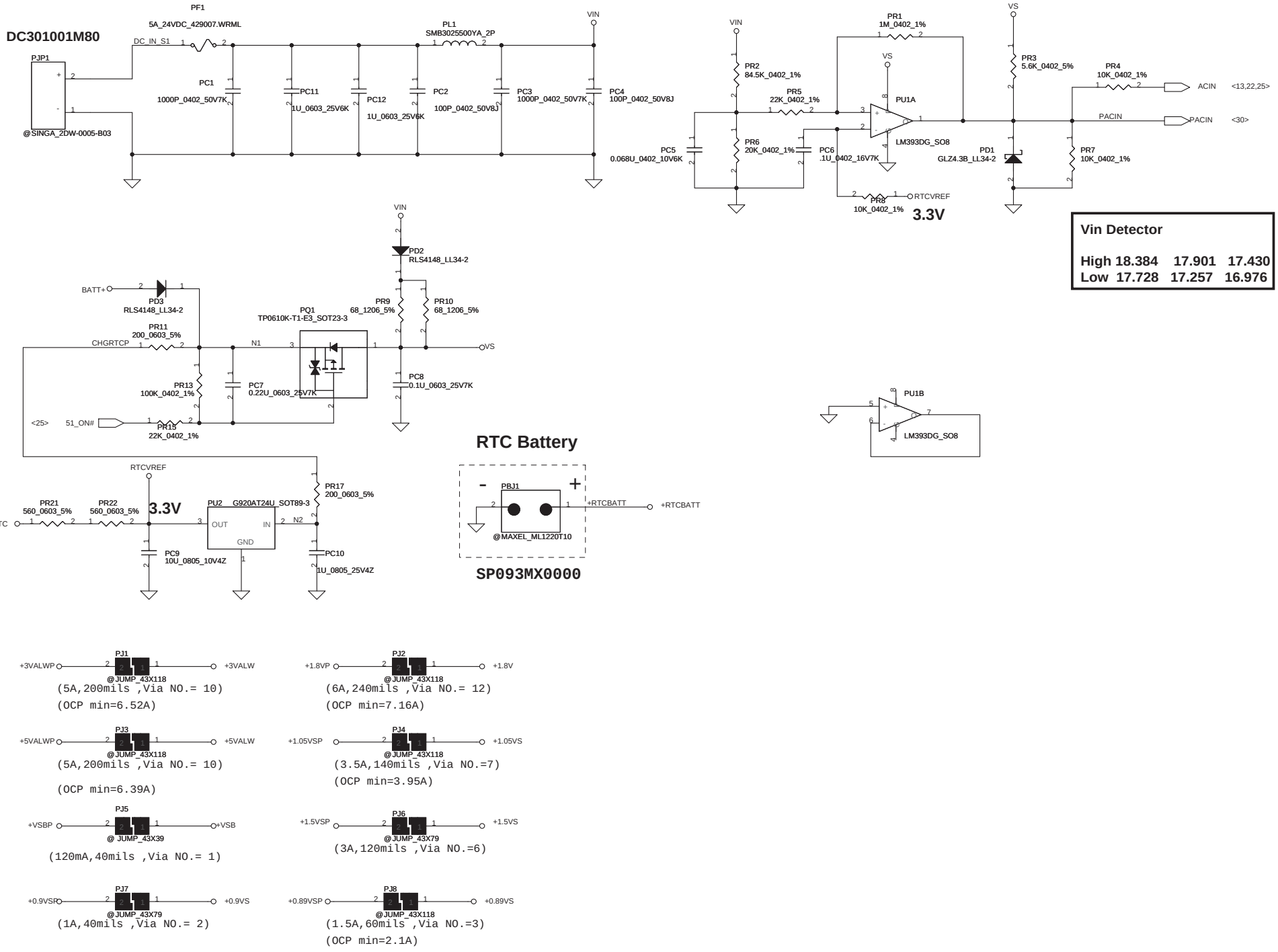

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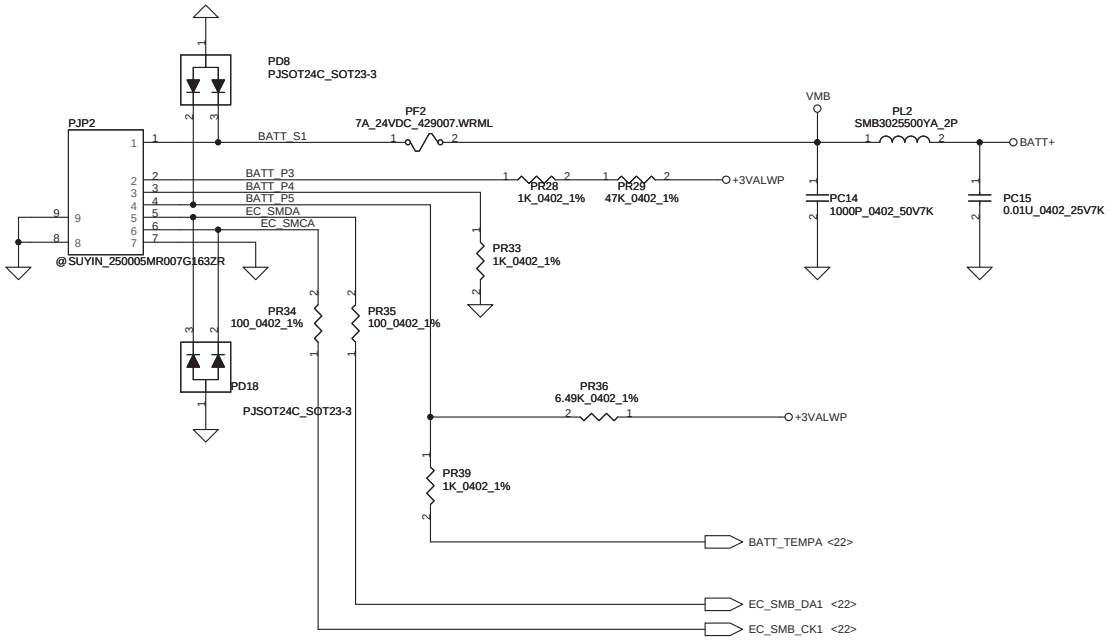
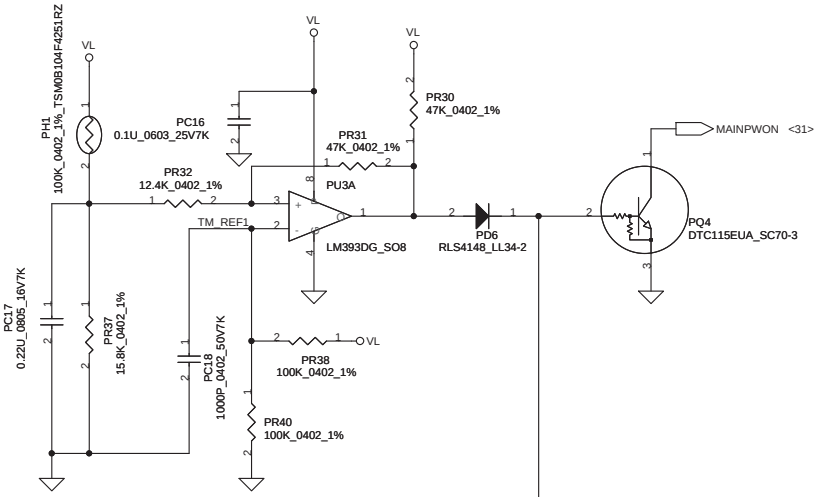
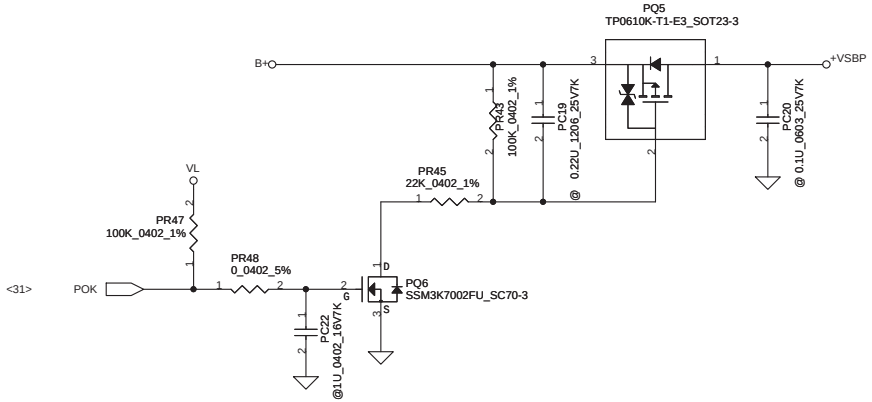
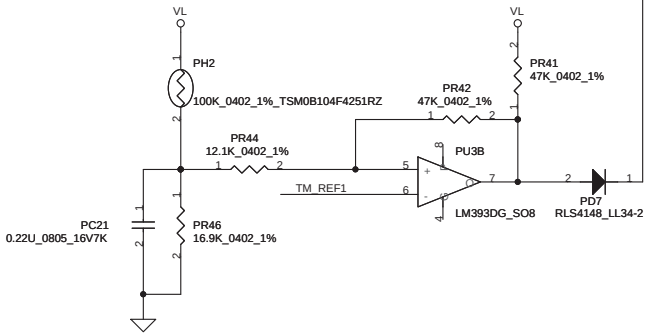
PH1 under CPU botten side :
CPU thermal protection at 92 degree C
Recovery at 56 degree C





PH2 near main Battery CONN :
BAT. thermal protection at 92 degree C
Recovery at 53 degree C





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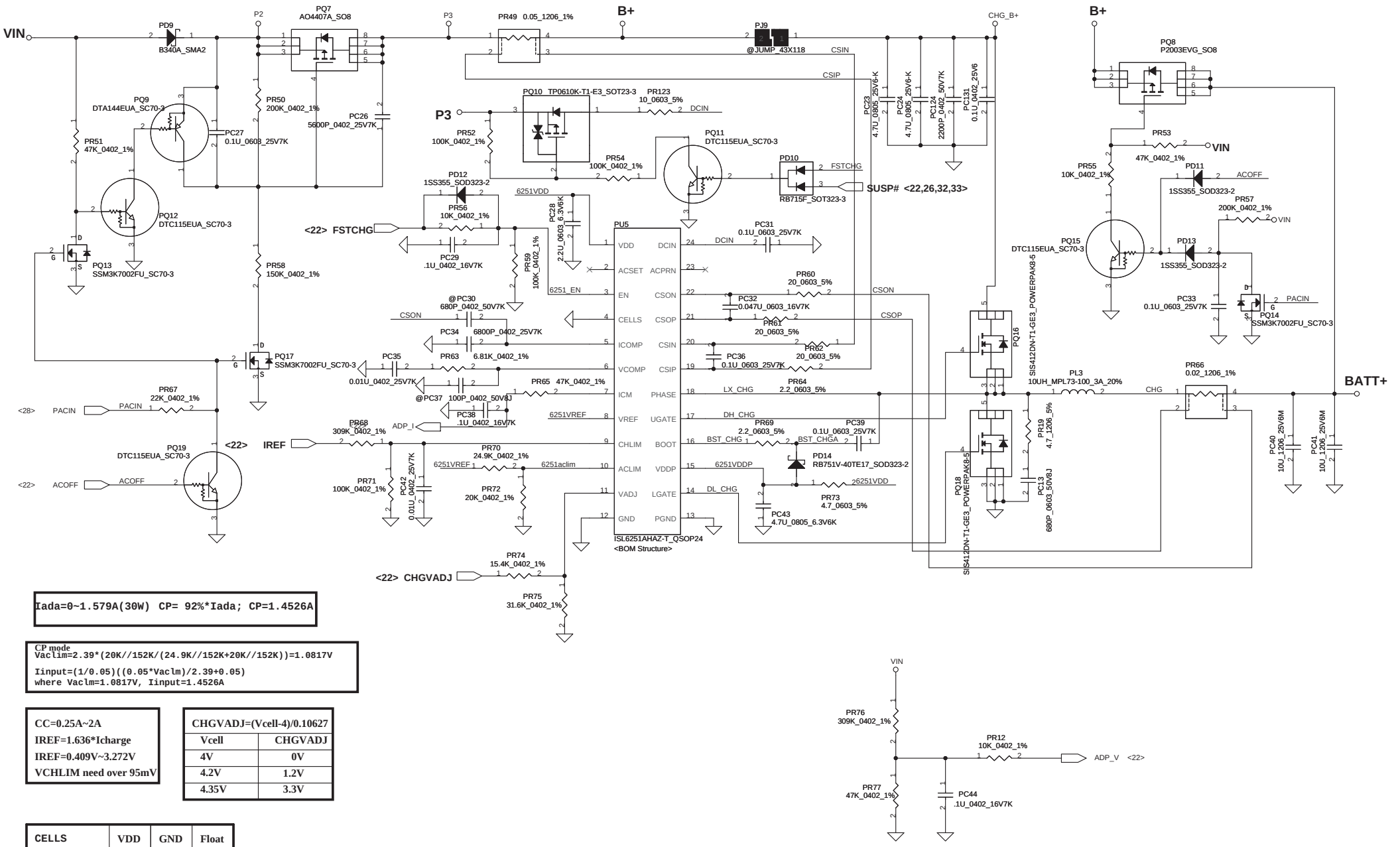

Iada=0~1.579A(30W) CP= 92%*Iada; CP=1.4526A

CP mode
Vaclim=2.39*(20K//152K/(24.9K//152K+20K//152K))=1.0817V

Iinput=(1/0.05)((0.05*Vaclm)/2.39+0.05)
where Vaclm=1.0817V, Iinput=1.4526A

CC=0.25A~2A
IREF=1.636*Icharge
IREF=0.409V~3.272V
VCHLIM need over 95mV

CHGVADJ=(Vcell-4)/0.10627

Vcell	CHGVADJ
4V	0V
4.2V	1.2V
4.35V	3.3V

CELLS	VDD	GND	Float
CELL number	4	3	2

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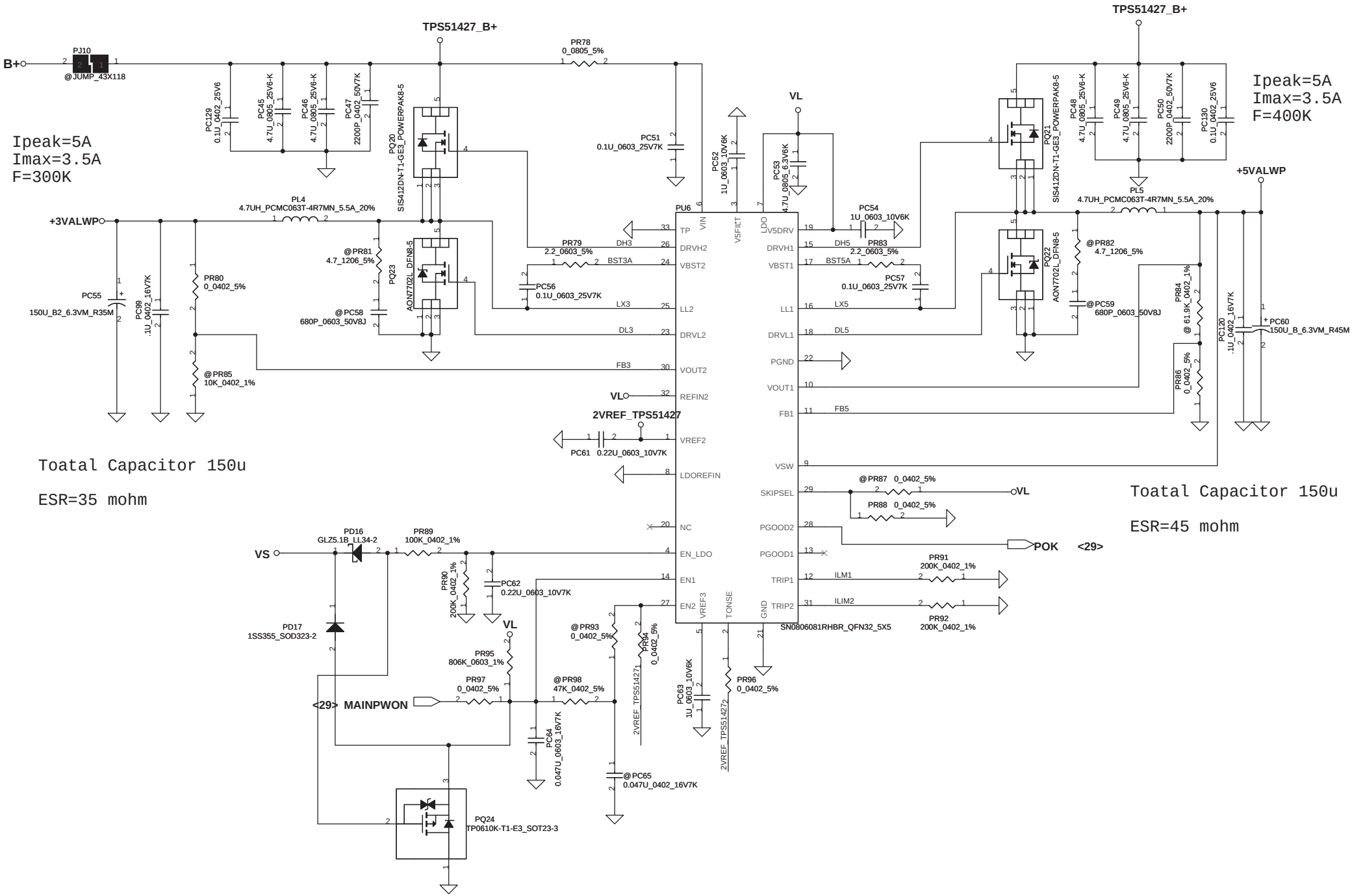

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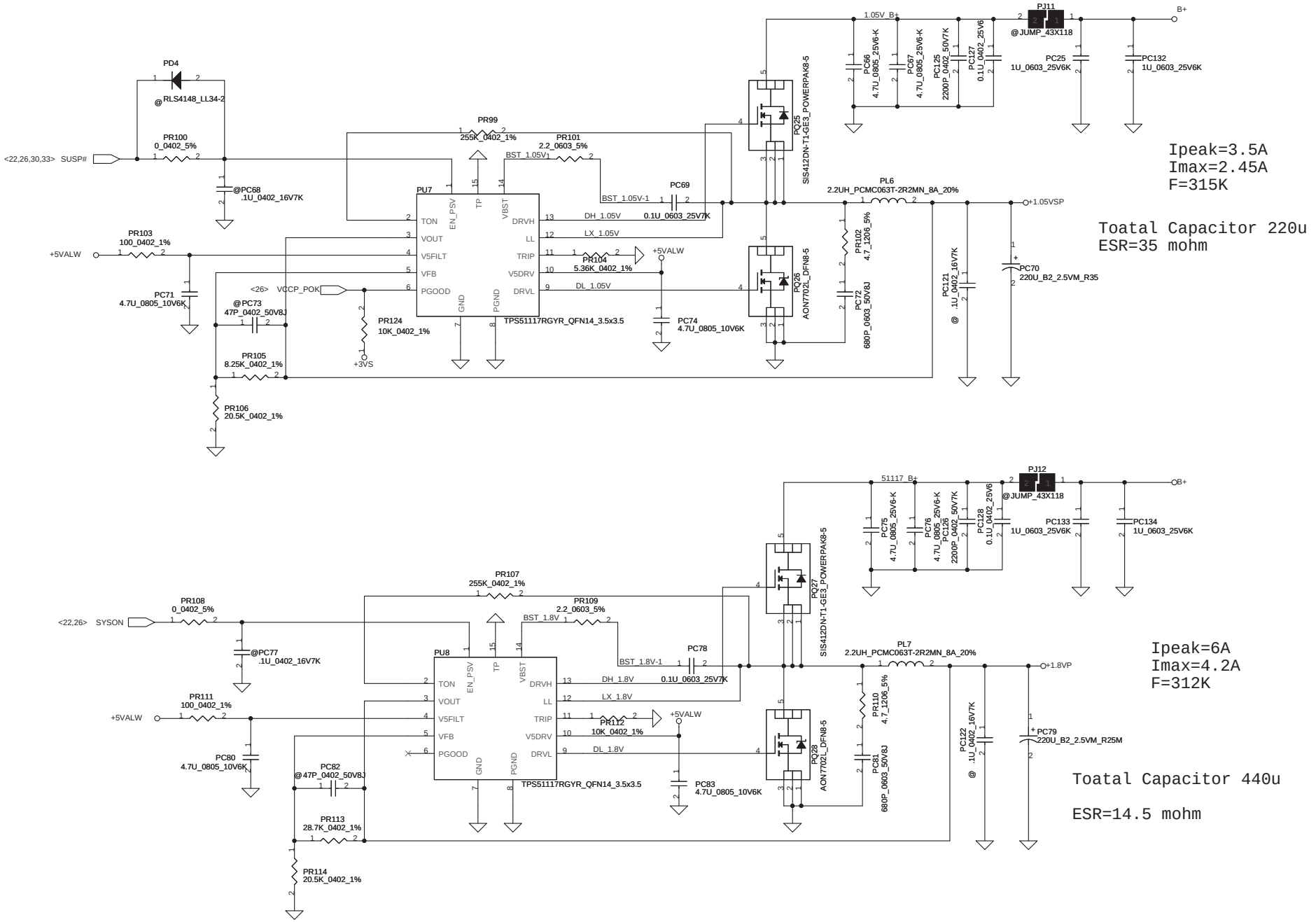

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Issued Date	2009/10/21	Deciphered Date	2012/10/19

Compal Electronics,Inc

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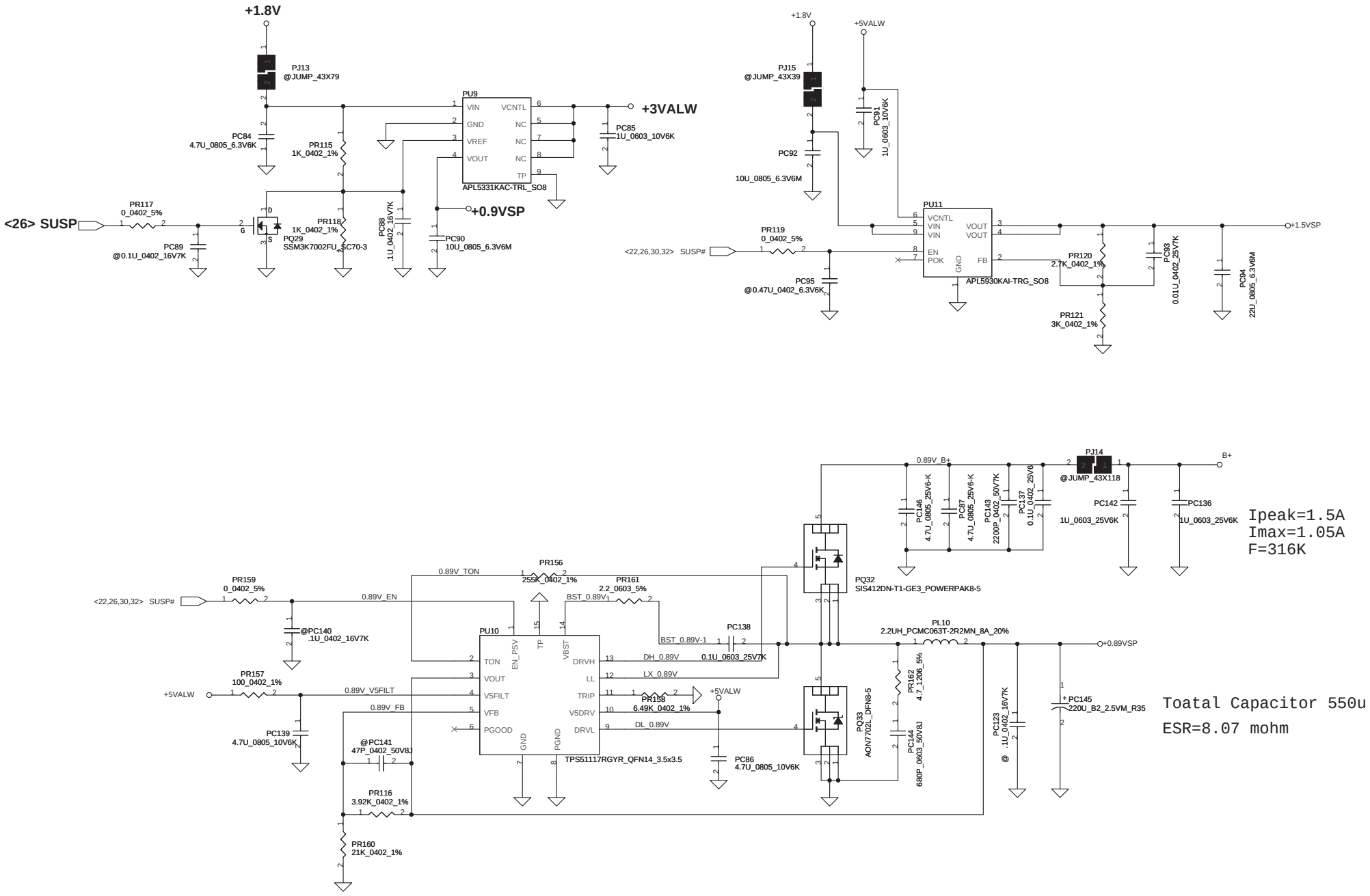

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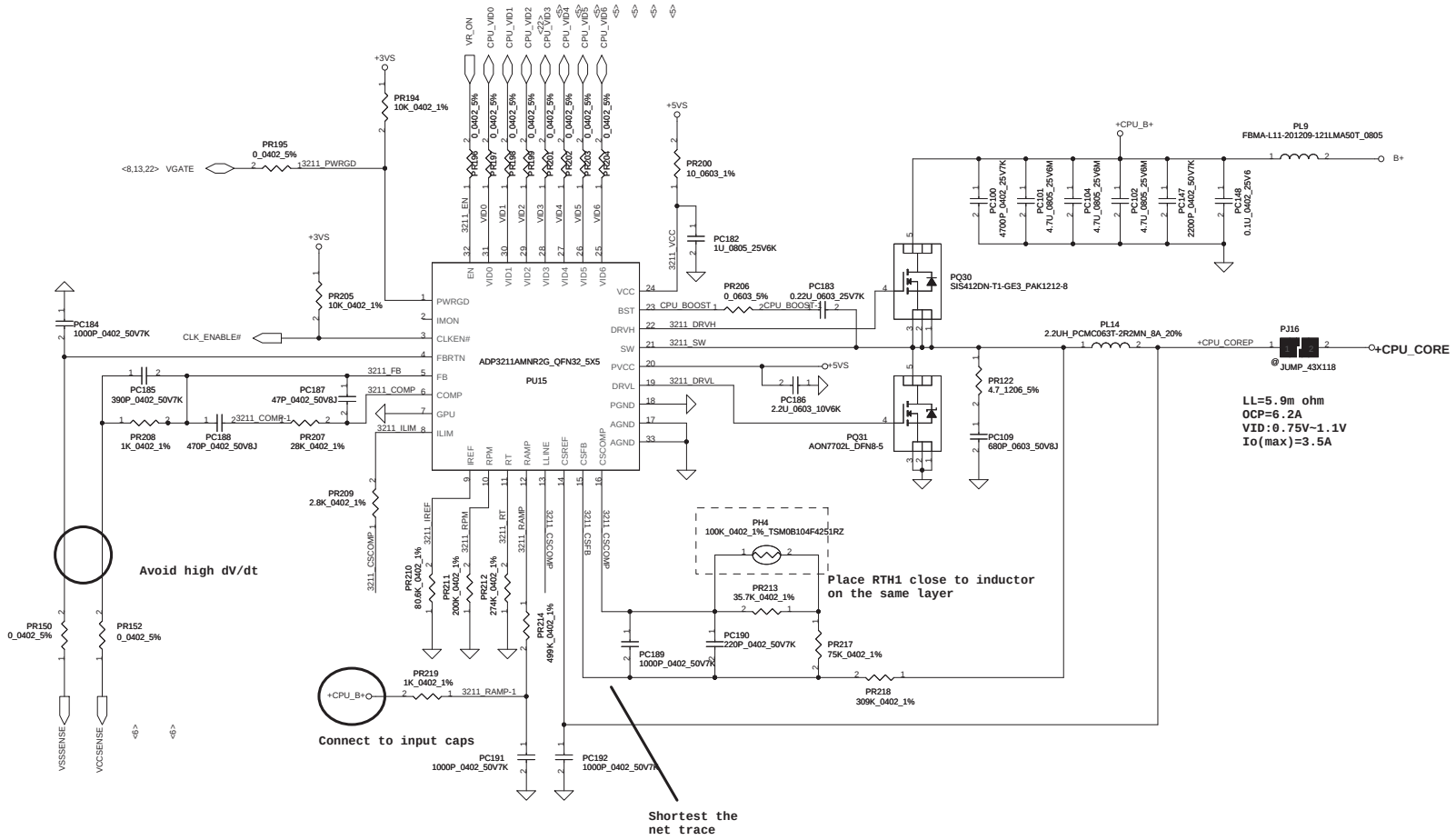

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NO	DATE	PAGE	MODIFICATION LIST	PURPOSE
EVT		P37-CPU_CORE	Change PU15 SA00003DA0L --> SA00003DA00	Choice the A51 material
EVT		P35-1.05VSP/1.8VP	Change PR124 422 ohm -->10K ohm	Deign change
DVT		P33-CHARGER	Delete PD15	Deign change(Cause layout)
DVT		P35-1.05VSP/1.8VP	Change PR104 13.7K-->5.36K	Deign change(OCP point)
DVT		P35-1.05VSP/1.8VP	Change PR124 the same part number with PR4	Deign change(Use the same part number)
DVT		P32-Battery conn/otp	Reserve the ESD diode	Deign change
PVT		P37-CPU_CORE	Change PR209 1.8K-->2.8K	Change the OCP 6A-->9A
PVT		P34-+5VALWP/+3VALWP	Reserve the sunnber PR82&PR81&PC58&PC59	EMI approvel
PVT		P28-DCIN&DECTOR	Change PC7 1206-->0603	For cost down
PVT		P32-Battery conn/otp	Add the ESD diode	EMI require
PVT		P28-DCIN&DECTOR	Change DC-IN jack DC301009G00	Design change
pre-mp		P29-Battery conn / OTP	Change PR32 -->12.4K , PR37-->15.8k,PR44-->12.1k,PR46-->16.9K	Thermal commond
pre-mp		P33-0.9VSP/1.5VSP/0.89VP	Change PR158 2.49K-->6.49K	Design change

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PIR (Product Improve Record)

KAVAA LA-5841P SCHEMATIC CHANGE LIST
REVISION CHANGE: 0.1

NO DATE PAGE MODIFICATION LIST PURPOSE

Item	Date	Page	Component	Solution	Request
1)	7/2	9	Reserve	R87 with 0 ohm	For support DPST function
2)	7/2	22	Add	R235 90 ohm bead and C323 with 6P	For EMI request
3)	7/2	13	Reserve	C207 with 22P	For EMI request
4)	7/2	18	Reserve	CA33 with 22P and RA31 with 22 ohm	For EMI request
5)	7/2	16	Change	Change L4 to SM070001310	For EMI request
6)	7/2	18	Reserve	CA34 with 0.01U to GND and RA32 with 4.7K ohm up +3VS	For ESD request
7)	7/2	25	Reserve	D32 with SCA00000R00	For ESD request
8)	7/3	25	Change	Lid switch from M/B change to T/P board	For design change
9)	7/3	19	Change	Change DA3,DA4,D22 to SCA00000T00	For ESD request
10)	7/3	4	Reserve	D33,D34 with SC300000O00	For ESD request
11)	7/3	16	Reserve	D23 with SC300000O00 from Sub board to M/B	For ESD request
12)	7/6	22	Change	Change R235 to L6 with SM010009E00	For EMI request
13)	7/8	24	ADD	Add C265~C290 with SE071101J80	For EMI request
14)	7/8	16	Swap	Pin swap for AGND	For layout
15)	7/8	18	Reserve	R235 withSD028000080	For EMI request
16)	7/8	27	Modify	Modify screw hole location	
17)	7/8	25	Reserve	D32 with SCA00000R00	For ESD request
18)	7/8	16	Reserve	D36 with SC300000O00 from Sub board to M/B	For ESD request
19)	7/8	07	Add	C216,C217,C238,C291 with SE070104Z80	For EMI request
20)	7/9	26	Add	D29, D30 with SB570020020 and R228 with SD028100280	For power sequence
21)	7/9	13	Add	C293 with SE070104Z80	
22)	7/9	25	Change	R232, R233, R234 with SD028000080	Need to EMI confirm on EVT
23)	7/9	18,19	Modify	modify 2 SPK solution	For TOSHIBA request
24)	7/10	20	Change	UL1 with SA00002XC10	For low power solution
25)	7/10	16	Change	JUSBC1 to DC233004Q00	For ME suggest
26)	7/10	16	Swap	USB20_P0_R USB20_N0_R, USB20_P0_R_S, USB20_N0_R_S	For layout request
27)	7/10	10	Add	J2	For cost down PolySwitch
28)	7/13	8	Add	C296, C297 with SE071220J80	For RF request
29)	7/13	8	Add	C300, C301 with SE068330K80	For RF request
30)	7/13	8	Add	C302, C303, C324 with SE068330K80	For RF request
31)	7/13	8	Add	C325, C326, C327 with SE068330K80	For RF request
32)	7/13	8	Change	R53, R54, R57 to SM01000B200	For RF request
33)	7/13	8	Add	C328, C329, C330 with SE071470J80	For RF request
34)	7/13	19	Reserve	CA25 with SE070104Z80	For RF request
35)	7/14	21	Delete	YC1, CC12, CC13	For cost down
36)	7/14	25	Change	JTOUCH1 to NON-ZIF	For ME suggest
37)	7/14	25	Change	JPOWER1 to NON-ZIF	For ME suggest
38)	7/15	22	Change	INVT_PWM from PIN 21 change to PIN 25	For EC suggest
39)	7/15	22	Change	USB_CHG_EN# from PIN 68 change to PIN 29	For EC suggest
40)	7/15	5	Change	SB to CPU signal to CPU side	For placement
41)	7/15	16	Swap	USB20_N3 and USB20_P4 location	For layout request
42)	7/15	25	Delete	D32	For ESD request
43)	7/16	17	Delete	BT and Camera BTO item	For BOM request
44)	7/16	19	Delete	MIC BTO item	For BOM request
45)	7/16	21	Change	For RC8 change to reserve	For realtek request
46)	7/16	23	Delete	G-senser BTO item	For BOM request
47)	7/16	16	modify	USB_OC#0 dis-connect to +USB_VCCB	For schematic error
48)	7/16	26	modify	Change Q22 pull up from 0.89V to 0.89VS	For schematic error
49)	7/16	9	Reserve	C331 and C332 with SE071100J80	For EMI request
50)	7/16	9	Reserve	C333 and C334 with SE071100J80	For EMI request
51)	7/17	23	Change	U17 from R5F211B4D31SP change to R5F211B4D34SP	For TOSHIBA request
52)	7/17	12	Change	Reassign Tiger point USB port	For TOSHIBA concern
53)	7/17	21	Delete	RC13	For cost down
54)	7/17	20	Change	JLAN from SANTA_130452-3_13P-T to Santa_130452-8_8P-T	For not support LAN LED fuction
55)	7/17	20	Delete	RL7, RL8, RL9, RL11, CL16, CL21	For not support LAN LED fuction
56)	7/17	15	Change	R156, R157 for JWLAN1 change to JGPS1	For debug
57)	7/20	4	Add	R238, R239 with SD028100280	For Ref board design
58)	7/20	5	Add	C335 with SE000000K80	For Ref board design
59)	7/20	5	Reserve	C336 with SE074221K80	For Ref board design
60)	7/20	13	Delete	EC_THERM# pull up	Follow NIM10
61)	7/20	13	Add	T43, T44	Follow NIM10
62)	7/20	13	Add	SLPIOVR pull up 8.2k to +3vs	Follow NIM10
63)	7/21	3	Swap	XDP_TRST#, XDP_TDO, XDP_TDI, XDP_TCK, XDP_TMS	For layout request
64)	7/21	7	Reserve	C60 with SE107225K80	

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REVISION CHANGE: 0.1-->0.2

NO	DATE	PAGE	MODIFICATION LIST		PURPOSE
65)	7/21	8	Reserve	C303,C324,C325,C326,C327,C296,C297,C300,C301	
66)	7/21	8	Change	WWAN_CLKREQ# from REQ4 to REQ11	For silego suggest
67)	7/21	9	Change	C331 to Shunt Capacitor	For EMI request
68)	7/21	15	Change	C334 to Shunt Capacitor	For EMI request
69)	7/21	17	Swap	USB20_N7, USB20_P7	For layout request
70)	7/21	19	Add	RA33, RA34 with SD028820180	For AMP gain
71)	7/21	25	Change	R197 to 300ohm	For common design
72)	7/21	4	Add	R137 to GND	For Intel request
73)	7/21	13	Add	R240 pull up to +RTCBATT	For Intel request
74)	7/21	13	Change	C156 with SE000000K80	For Intel request
75)	7/21	27	Add	C339~C345 with SE070104Z80	For ESD request
76)	7/22	8	Add	R241 pull up to +3VS	For Intel request
77)	7/22	19	Add	RA33~RA40, CA35~CA38	For AMP gain
78)	7/22	8	Delete	R64, R66	For Intel suggest CLK schematic
79)	7/22	8	Add	R242~R253	For Intel suggest CLK schematic
80)	7/23	20	Change	JLAN from Santa_130452-8_8P-T to SANTA_130452-6	For ME request
81)	7/23	21	Change	JCARD with TAITW_PSDAT3-09GLAS1N14N	For TOSHIBA request
82)	7/23	21	Change	DC1 for TOP view LED	For ME request
83)	7/23	25	Change	D24~D31 for TOP view LED	For ME request
84)	7/23	27	Reserve	C346~C348 with SE070104Z80	For ESD request
85)	7/27	4	Change	C302 to GND for +1.8V pull up	For schematic error
86)	7/27	16	Swap	USB20_P4_R_S and USB20_N4_R_S	For schematic error
87)	8/14	4	Add	DDR_VREF net name	For layout request
88)	8/14	5	Add	CRT_IRTN net name	For layout request
88)	8/14	5	Add	DAC_IREF net name	For layout request
89)	8/14	5	Change	Net name from H_GTLREF to +H_GTLREF	For layout request
90)	8/14	5	Change	Net name from H_EXTBGREF to +H_EXTBGREF	For layout request
91)	8/14	8	Add	R250 pull up with SD028470080	For Intel request
92)	8/14	13	Add	R254 pull down with SD028100380	For EC request
93)	8/14	17	Swap	USB20_N7, USB20_P7	For layout request
94)	8/14	18	Add	R235 with SD028000080	
95)	8/14	18	Add	Net name to HP_L_R and HP_R_R	For layout request
96)	8/14	18	Add	Net name to CPVEE	For layout request
97)	8/14	26	Add	R237 with SD028200380	For HW design
98)	8/14	9	Add	R87 with SD028000080	For not support DPST
99)	8/14	9	Det	R88 with SD028000080	For not support DPST
100)	8/14	24	Change	U28 from SA00000XT00 to SA00002TO00	For BIOS ROM size
101)	8/19	25	Det	Lid switch from T/P change to M/B board	For ME request
102)	8/19	17	Add	U22, C332, C333 for Lid function	For ME request
103)	8/19	21	Change	JCARD for push pull Conn	For ME request
104)	8/19	24	Change	JFAN to SP02000JR00	For ME request
105)	8/19	16	Change	JUSBC to DC233004W00	For ME request
106)	8/19	25	Change	JTOUCH to SP01000WX00	For ME request
107)	8/19	27	Add	H22 NON PTH hole	For Thermal module
108)	8/21	16	Add	USB_CHG_EN# has to be connected to OE# pin	For SPEC REV 0.5
109)	8/24	4	Change	+DDR_VREF to DDR_VREF	For HW schematic review
110)	8/24	5	Det	CRT_IRTN net name	For HW schematic review
111)	8/24	5	Change	+H_GTLREF to H_GTLREF	For HW schematic review
112)	8/24	5	Change	+H_EXTBGREF to H_EXTBGREF	For HW schematic review
113)	8/24	16	Change	U12 to SA00002XX00	For HW schematic review
114)	8/24	8	Change	Net name to FSB for U3.2	
115)	8/24	10	Change	D1, D2, D3	For ESD request
116)	8/24	17	Change	JSATA to ALLTO_C16674-12204-L	For ME request
117)	8/24	18	Change	R235 to RA21	
118)	8/24	20	Change	JLAN for Deep connecter	For ME request
119)	8/24	20	Add	Connect ISOLATEB to EC	
120)	8/24	21	Det	RC9	
121)	8/23	27	Reserve	C343, C342, C345, C341, C339, C340	
122)	8/27	8	Det	C93, C94, C95, C102	For low power CLK GEN
123)	8/27	8	Add	C303, C324, C325, C326, C327 to GND	For RF request
124)	8/27	8	Det	296, C297	For RF request
125)	8/28	27	Add	H24 with H_2P0X5P5N	For ME request
126)	8/28	25	Change	SC5191UD000 and SC591UYG000	For HW design
127)	8/31	27	Add	H25 with H_5P0X2P0N	For ME request
128)	8/31	26	Change	Q20 from SB000002880 to SB00000DW00	For HW design
129)	9/1	13	Change	R125 to SM010027780	For EMI request
130)	9/1	13	Add	C207 to SE071100J80	For EMI request
131)	9/2	27	Det	H24 with H_2P0X5P5N	For ME request
132)	9/3	16	Add	PIN 21, PIN 22 on JUSB	For layout request
132)	9/3	16	Add	PIN 3, PIN 4 on JSPKR, JSPKL	For layout request
132)	9/3	16	Add	PIN 35, PIN 36 on JKB	For layout request
133)	9/4	7	Reserve	C66, C67, C68, C69, C72, C75, C77, C78, C79, C81, C83, C84, C85	

Security Classification	Compal Secret Data		
Issued Date	2009/10/21	Deciphered Date	2012/10/21

Compal Electronics,Inc

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NPVAA LA-5841P SCHEMATIC CHANGE LIST
REVISION CHANGE: 0.2-->0.3

NO	DATE	PAGE	MODIFICATION LIST		PURPOSE
134)	9/23	13	Change	RP17 to R256, R257, R258	For layout request
135)	9/23	27	Change	H12, H13 to 3P3	For ME request
136)	9/23	25	Change	R235, R255 to SD028220080 and +5VALW to +3VALW	For HW design
137)	9/28	16	Det	D36 with SC300000O00	For ESD request
138)	9/28	10	Reserve	Reserve F1 for cost down PolySwitch	
140)	10/5	27	Add	C339, C340~C342, C345, C350~C354 with SE070104Z80	For ESD request
141)	10/5	27	Change	C343 to SE000000K80	For ESD request
142)	10/5	18	Add	RA7 and RA11 with SD013000080	For ESD request
143)	10/5	26	Reserve	R223~R225, R229~R231 Q22~Q24, Q26~Q28 for HW cost down	For HW cost down
144)	10/6	25	Change/Det	Delet D37, D38 and Change D26 and D28 to SC500001900	For ME request
145)	10/6	15	Change	R156, R157 for JWLAN change to JGPS	For debug
146)	10/6	27	Change	C354 to SE000000K80	For ESD request

PIR (Product Improve Record)

NPVAA LA-5841P SCHEMATIC CHANGE LIST
REVISION CHANGE: 0.3-->1.0

NO	DATE	PAGE	MODIFICATION LIST		PURPOSE
147)	10/19	4	Change	footprint T5, T6 and T7 from TPC24 to TPC12	For layout request
148)	10/20	16,17	Det	L4, and L5	For EMI request
149)	10/27	19	Det	DA4 and DA5	For ESD request
150)	11/12	24	Change	U28 from SA000002T00 to SA0000XTO00	For BIOS ROM size

Security Classification	Compal Secret Data		Compal Electroinc,Inc.
Issued Date	2009/10/21	Deciphered Date 2012/10/21	Title: SCHEMATICS,MB A5841

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