

LCFC Confidential


Chelsea -SKY M/B Schematics Document

INTEL SKYLAKE Mobile ULT Platform
INTEL SKY Y-series CPU + LPDDR3 Memory

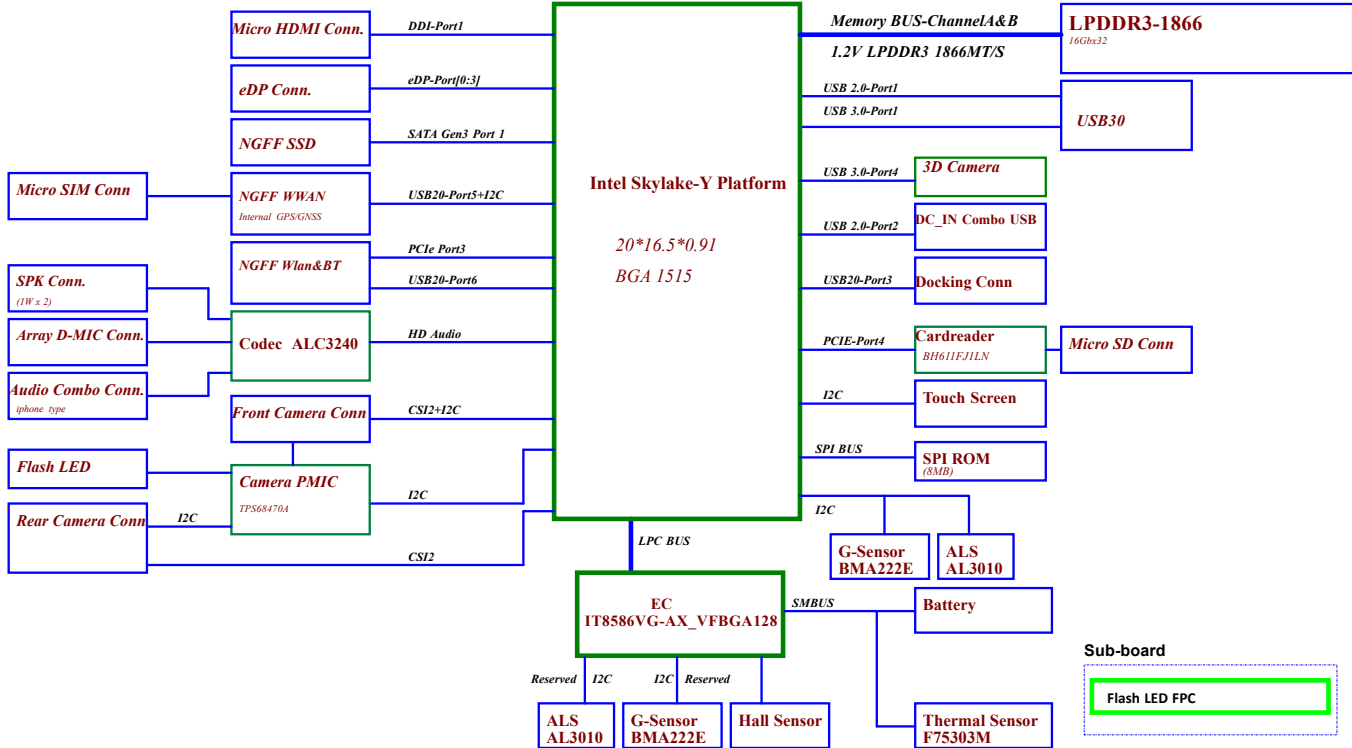
2015-08-13

REV:1.0

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LCFC-Chelsea Refresh Block diagram



Voltage Rails (O --> Means ON , X --> Means OFF)

State	Power Plane	B+	+3VALW +5VALW	+1.0VALW +1.8VALW	+3VALW_PCH	+DDR_1.2V +DDR_1.8V	+5VS	+3VS	+1.8VS	+DDR_0.6VS	+CPU_CORE	+CPU_VCCIO	+CPU_VCCGT	+CPU_VCCSA
S0		O	O	O	O	O	O							
S3		O	O	O	O	O								X
DS3		O	O	X	O	O								X
S5 S4/AC Only		O	O	O	O	X	X							X
S5 S4 Battery only		O	X	X	X	X	X							X
S5 S4 AC & Battery don't exist		X	X	X	X	X	X							X

STATE	SIGNAL	SLP_S1#	SLP_S3#	SLP_S4#	+VALW	+VALW_PCH	+V	+VS	Clock
Full ON	HIGH	HIGH	HIGH	ON	ON	ON	ON	ON	ON
S1 (Power On Suspend)	LOW	HIGH	HIGH	ON	ON	ON	ON	ON	LOW
S3 (Suspend to RAM)	LOW	LOW	HIGH	ON	ON	ON	ON	OFF	OFF
DS3 (Suspend to RAM)	LOW	LOW	HIGH	ON	LOW	ON	OFF	OFF	OFF
S4 (Suspend to Disk)	LOW	LOW	LOW	ON	ON	OFF	OFF	OFF	OFF
S5 (Soft OFF)	LOW	LOW	LOW	ON	ON	OFF	OFF	OFF	OFF

SMBUS Control Table

	SOURCE	Sensor	ALS	BATT	Thermal Sensor	charger
EC_SMB_CLK1	IT9586					
EC_SMB_DATA1	+3VALW_EC	X	X	V	X	V
EC_SMB_CLK3	IT9586	V	V			
EC_SMB_DATA3	+3VS	+3VS	+3VS	X	X	X
EC_SMB_CLK0	IT9586				V	
EC_SMB_DATA0	+3VS	X	X	X	+3VS	X

SM Bus address

Device	address
Battery	0007 01X5 B
Charger	
Sensor	
ALS	
Thermal Sensor	1001_1005b
PCH TRIM	
IP	

PCIe PORT LIST

Port	Device
1	
2	
3	WLAN
4	CR
5	

USB Port Table

USB20		USB30	
1	USB	1	USB
2	BT	2	WWAN
3	EC	3	X
4	DC in combine	4	3D camera
5	PCGO USB		
6	WWAN		

BOM Structure

BOM Structure		BOM Structure	
TI#	TI MIPI camera mount	MIRROR#	EC Mirror-code enable
TPM#	TPM module	UNMIRROR#	EC Mirror-code disable
DEBUG#	DEBUG CARD Part	DAB#	PCB
ME#	ME part(connector, hole)	UPI#	UPI MIPI camera mount
RF#	RF request		
SMC#	SMC request		
CD#	COST DOWN Part		
RESV#	RESERVE Part		

Board ID Table

Board ID	Description	PCB Revision

BOM Configuration Table

SKU	Description	BOM Config
SKU1		
SKU2		

X76&VGA Configuration Table

SKU	Description	BOM Config

PCB And LOGO Config

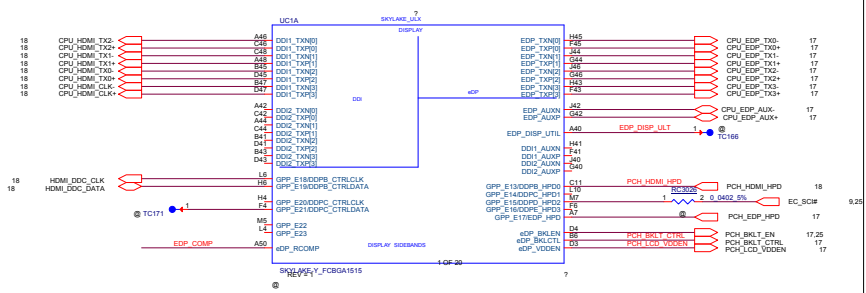
PCB	LOGO
<p>PCB 10K-NM-A641 REV03 M/B</p>	<p>LOGO</p>
<p>CPU</p>	<p>HDMI LOGO</p>
<p>VRAM</p>	

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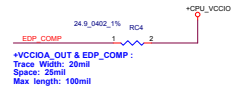




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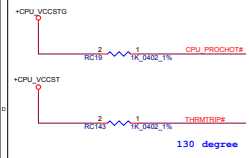


DDP_CTRLDATA
 This signal has a weak internal pull-down.
 0 = Port B is not detected.

pull up at HDMI side.

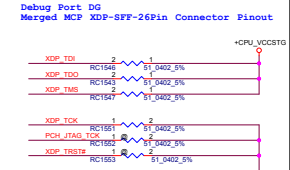
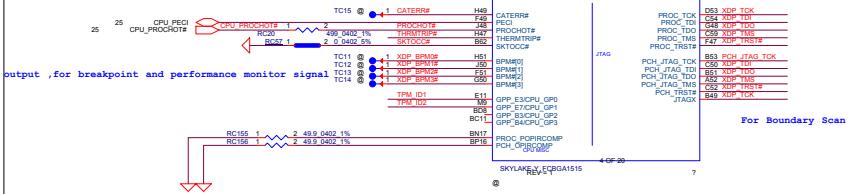
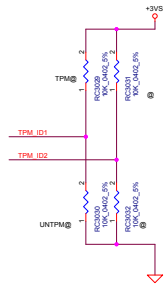


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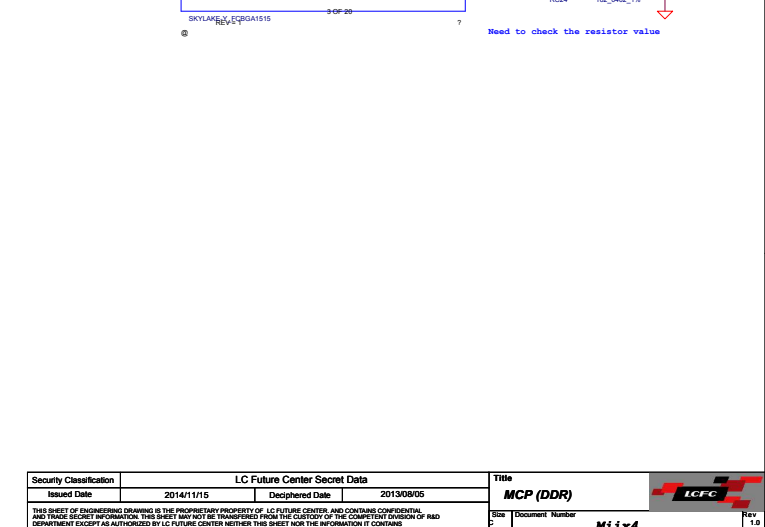
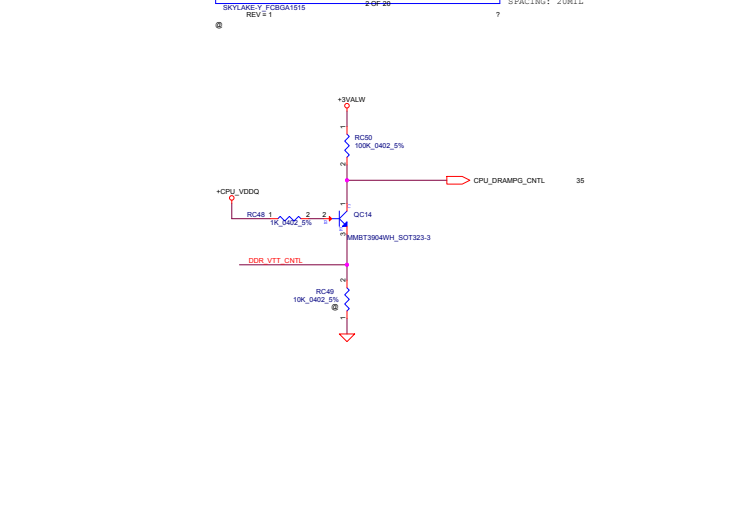
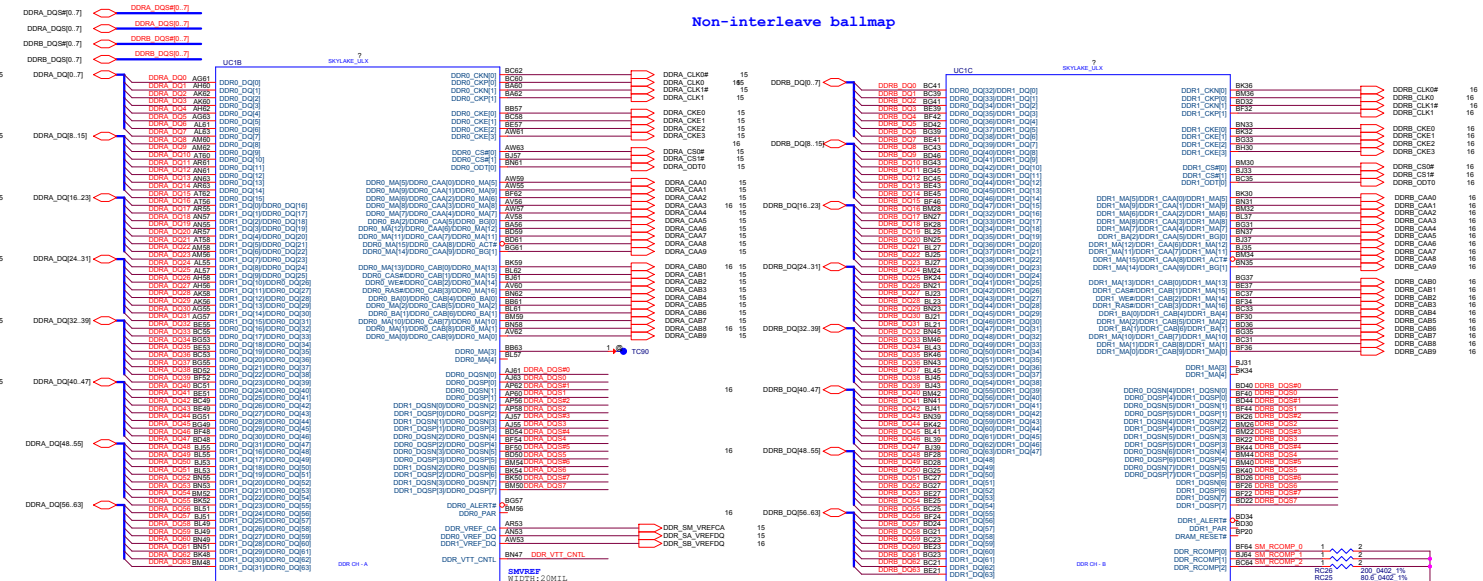
TPM_ID1	Description
0	NO physical TPM
1	physical TPM

TPM_ID2	Description
0	NATIONALE TPM
1	NUVOCTON TPM



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Non-interleave ballmap



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+VCHDA

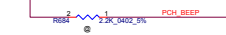


HDA_SDO This signal has a weak internal pull-down.
 0 = Enable Security measures defined in the Flash Descriptor.
 1 = Disable Flash Descriptor Security(override). This strap should only be asserted high during external pull-up in manufacturing/debug environments ONLY.

For EMI PCH_HDA_SDOM



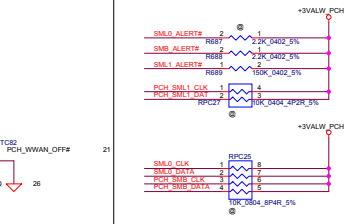
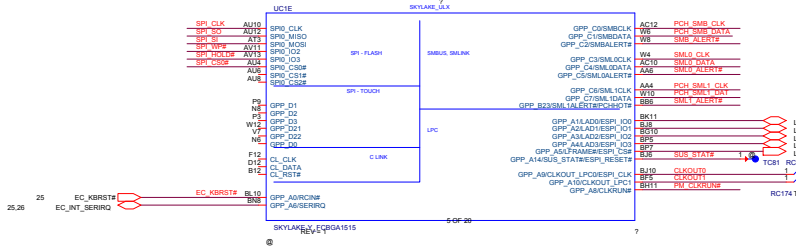
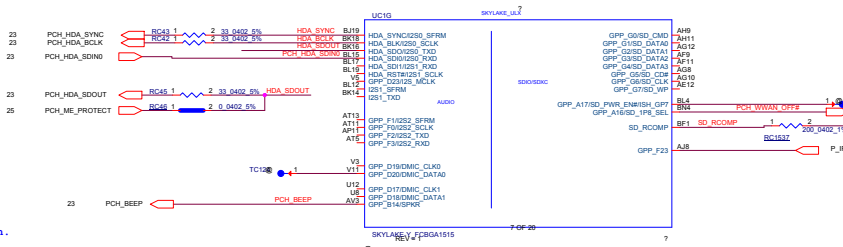
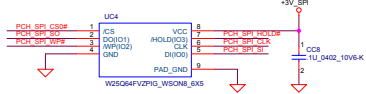
The signal has a weak internal pull-down.
 0 = Disable "Top Swap" mode. (Default)
 1 = Enable "Top Swap" mode



SPI_HOLD for SKL ES Sample
 1. 1K PD, unpop for PCU with HOLD functionality disabled
 2. 100ohm PD, 1K PU, disabled after EC_MBSTT if de-assertion



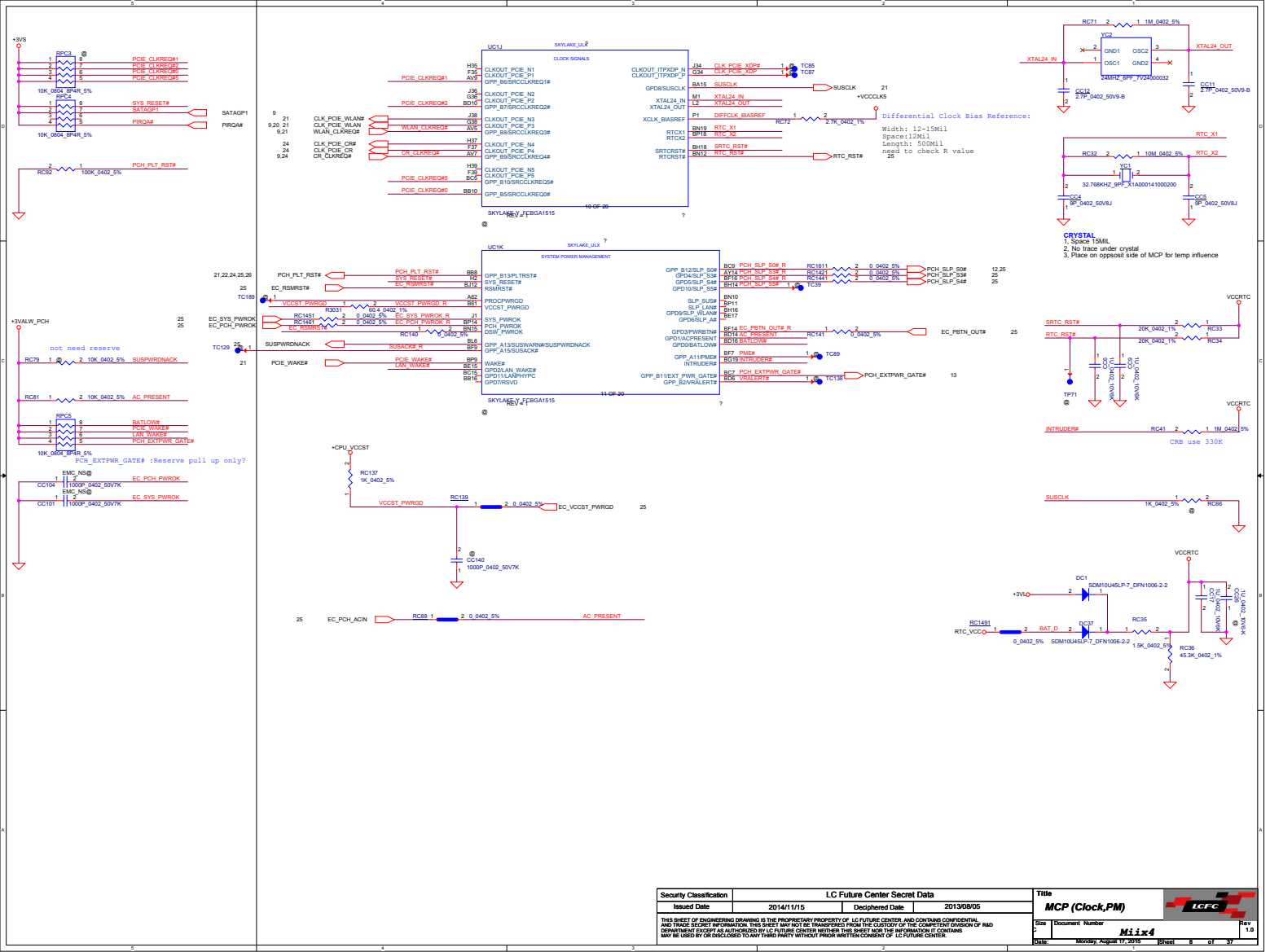
+3V_SPI
 1. If support DS3, connect to +3VS and don't support EC mirror code.
 2. If don't support DS3, connect to +3VALW_PCH and support EC mirror code.



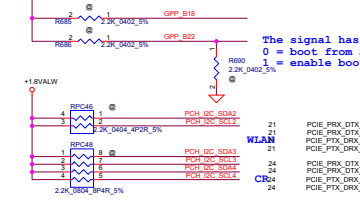
for signal **SMB_ALERT#**:
 This signal has a weak internal pull-down.
 0 = Disable Intel ME Crypto Transport Layer Security (TLS) cipher suite (no confidentiality). (Default)
 1 = Enable Intel ME Crypto Transport Layer Security (TLS) cipher suite (with confidentiality). Must be pulled up to support Intel AMT with TLS and Intel SBA (Small Business Advantage) with TLS.

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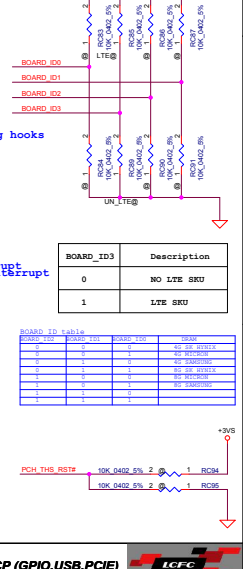
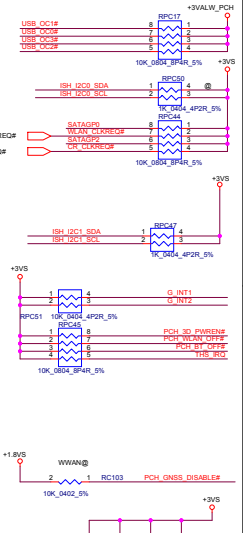
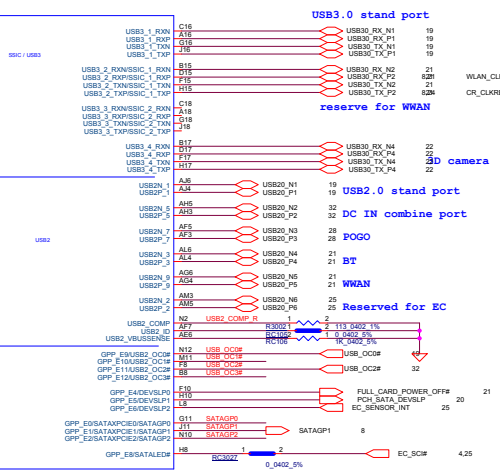
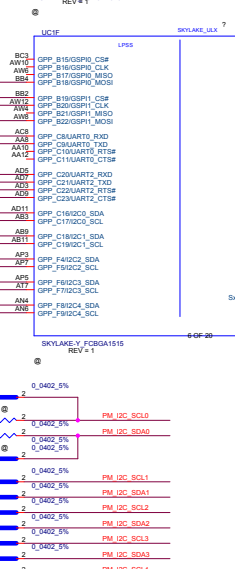
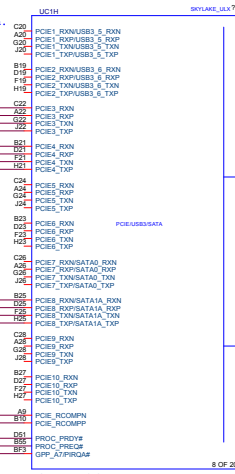
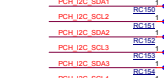
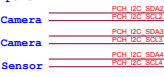
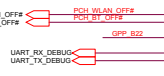
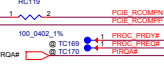
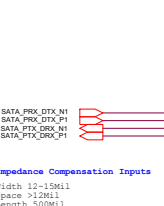
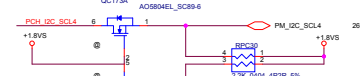
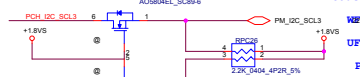
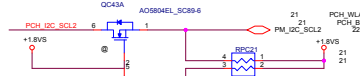
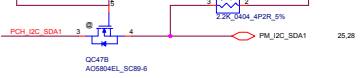
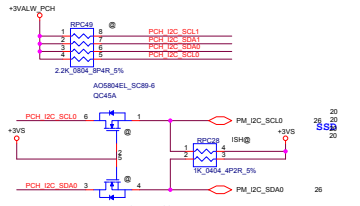
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The signal has a weak internal pull-down.
 0 = Disable "No Reboot" mode. (Default)
 1 = Enable "No Reboot" mode



The signal has a weak internal pull-down.
 0 = boot from SPI. (Default)
 1 = enable boot to LPC,



Impedance Compensation Inputs
 Width: 12-15mil
 Space: >12mil
 Length: 500mil

reserved touch panel
 WZ Camera
 UF Camera
 P Sensor

Sensor
 Light sensor
 sensor debug hooks

sensor interrupt
 light sensor interrupt

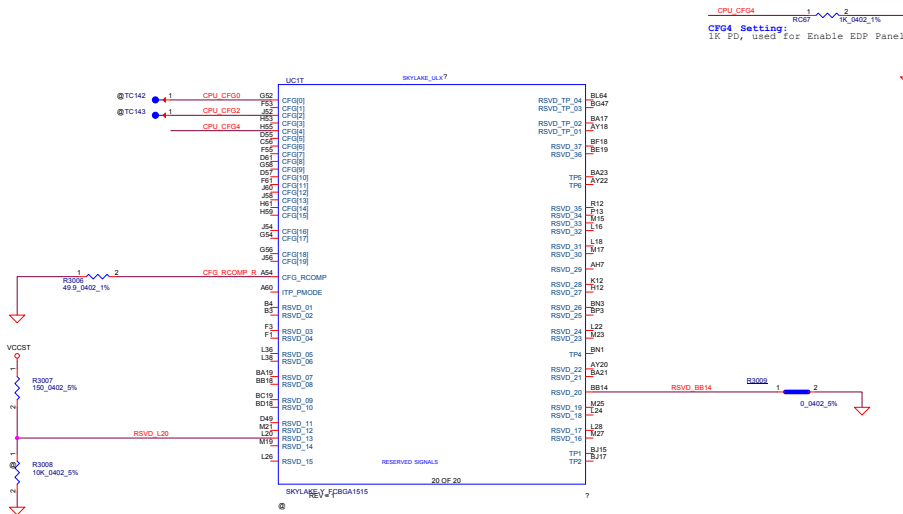
GPIO Mapping
 GroupA/B/C/D/E/G -- Used for 3.3V power plane
 GroupF--Used for 1.8V Power Plane

I2C Mapping
 GroupC -- Used for 3.3V power plane
 GroupF--Used for 1.8V Power Plane

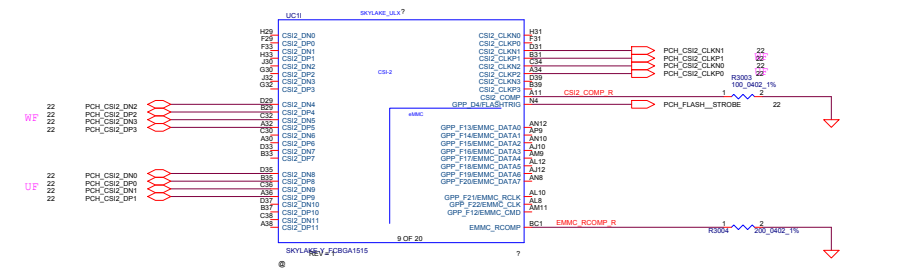
I2C Assignment
 I2C0--sensor
 I2C1--Touch panel
 I2C2--WF camera
 I2C3--UF camera
 I2C4--P sensor

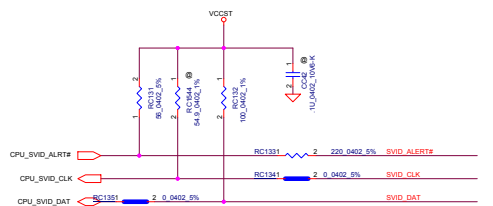
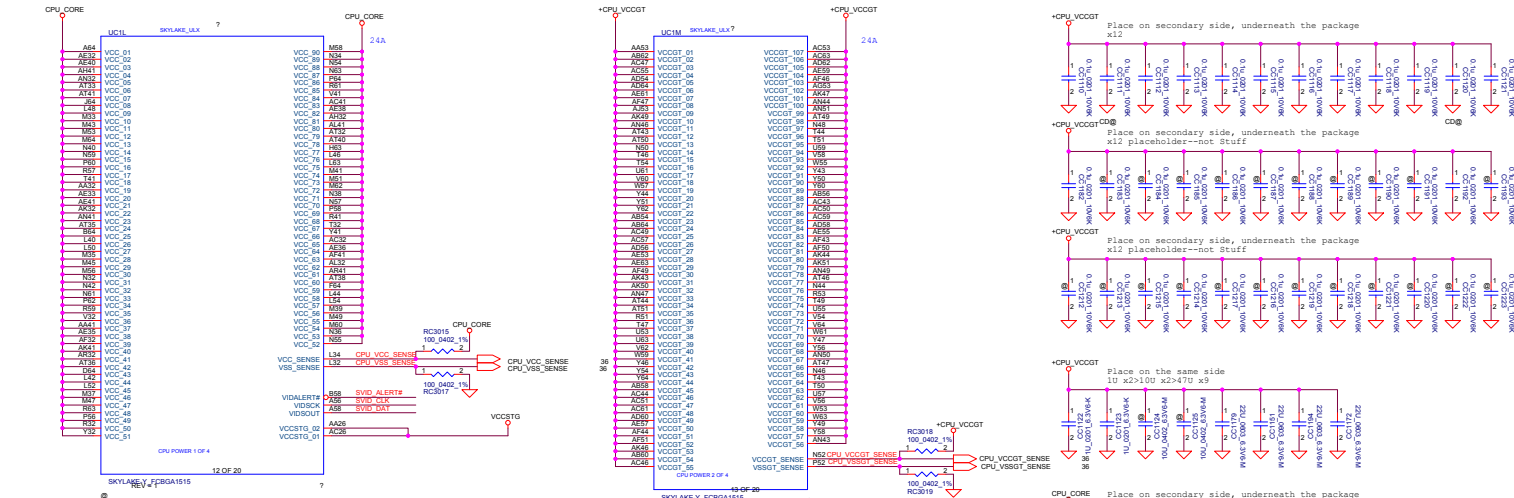
BOARD_ID	Description
0	NO LTE SKU
1	LTE SKU

BOARD_ID	BOARD_ID3	BOARD_ID0	BOARD_ID1	BOARD_ID2	BOARD_ID4
0	0	0	0	0	0
1	1	1	1	1	1

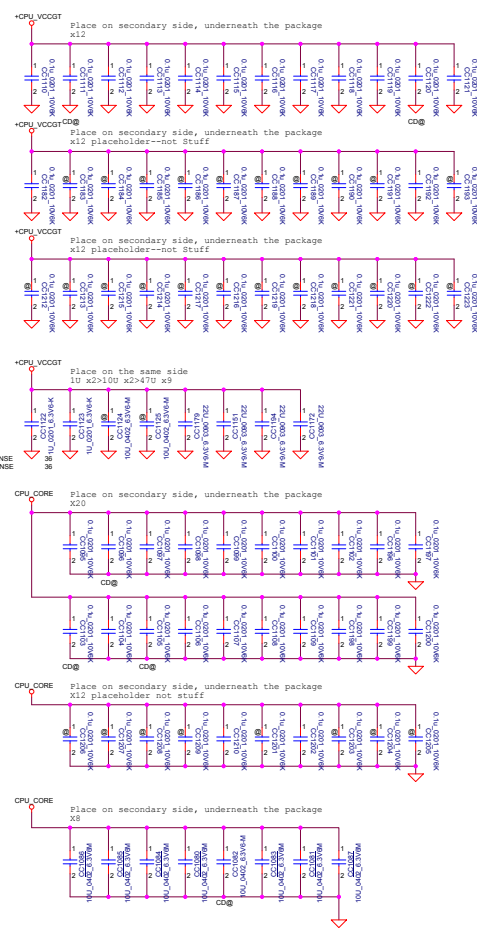


CPU_CFG4
 RCOMP RL_0402_1%
CFG4 Setting:
 IR_PD, used for Enable EDP Panel

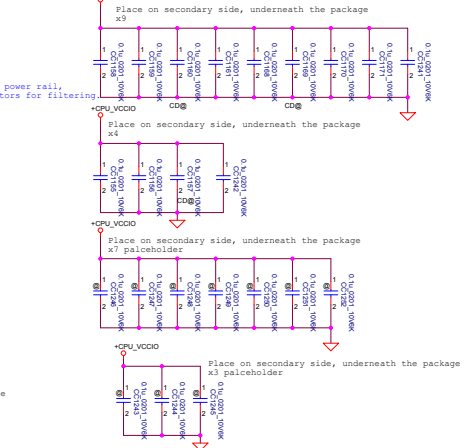
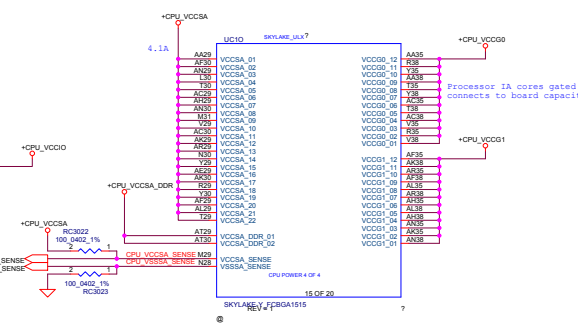
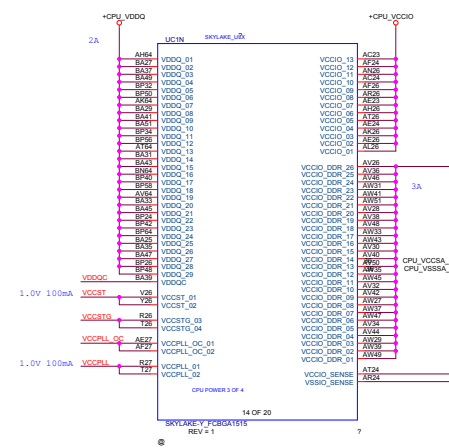




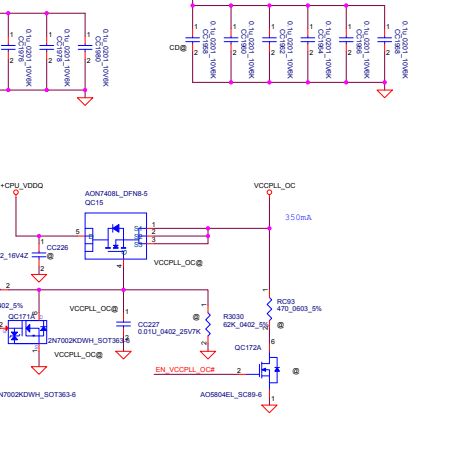
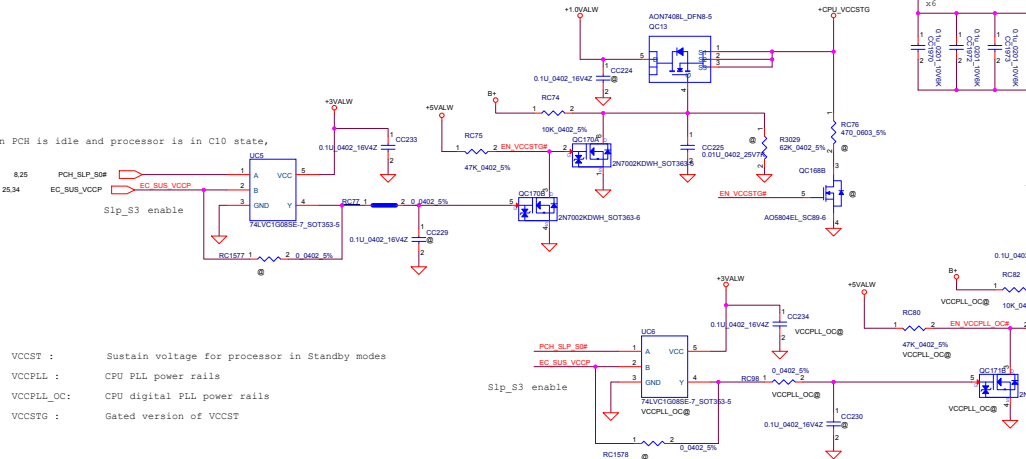
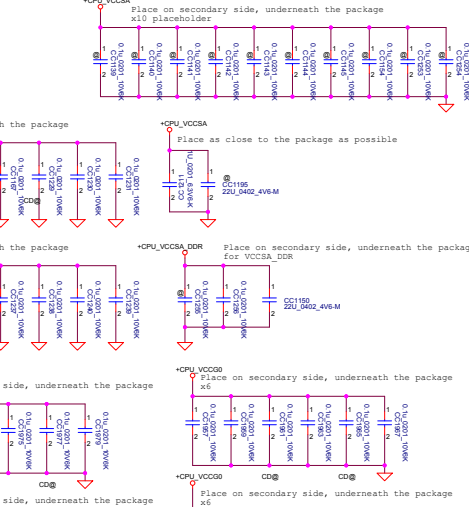
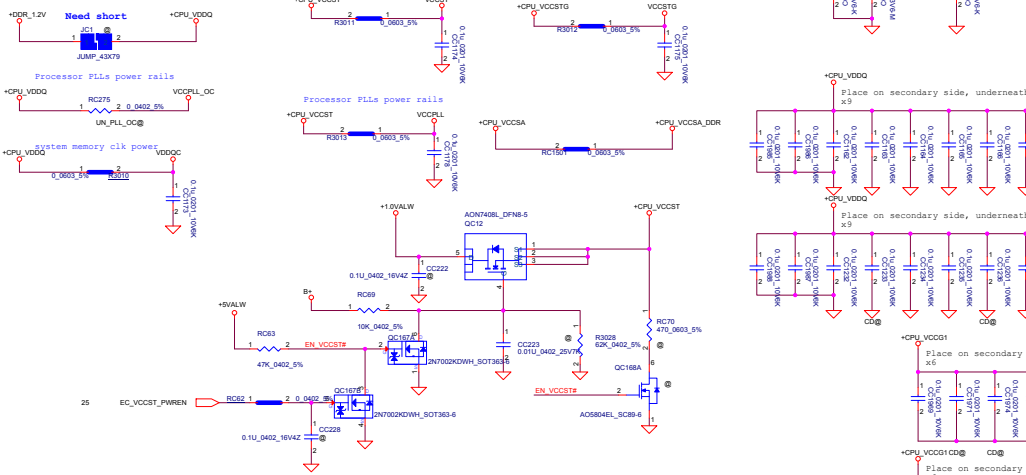
1, Alert# Route Between CLK and Data



Mix4

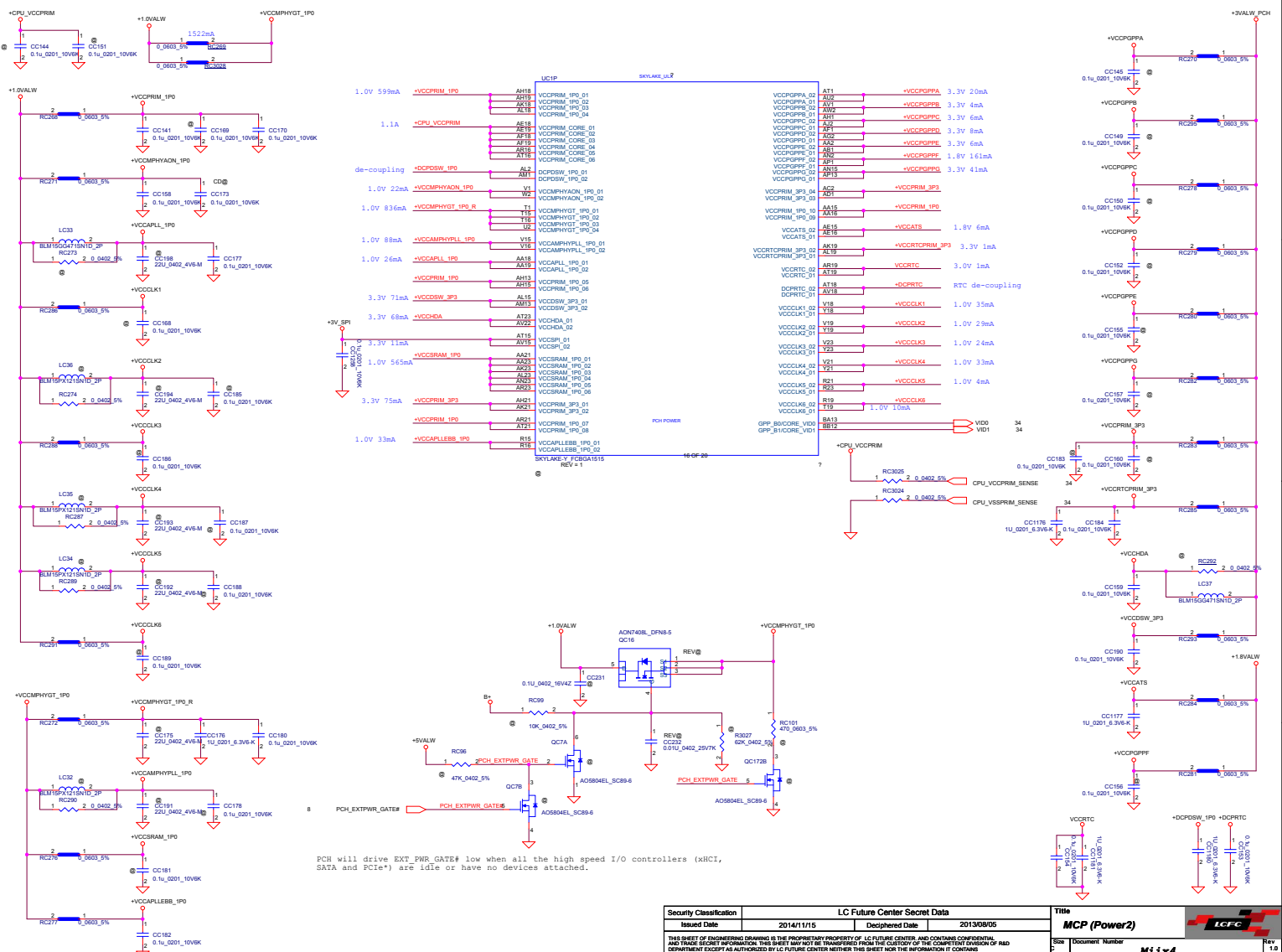


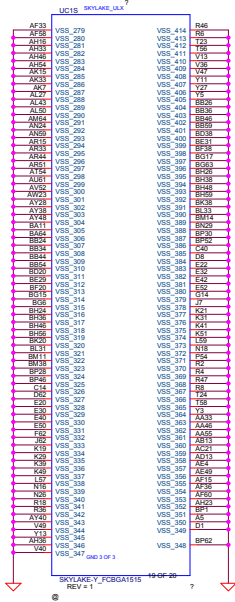
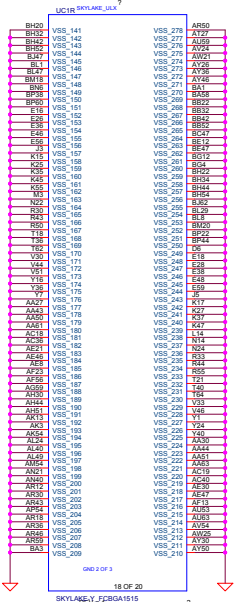
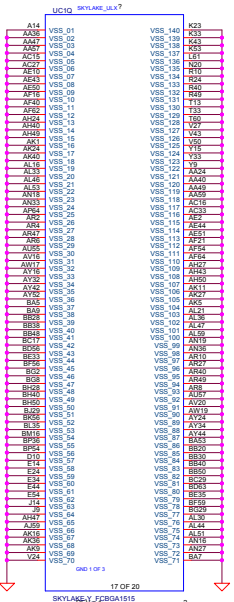
Sustain voltage for processor standby modes
Gated sustain voltage for processor standby modes

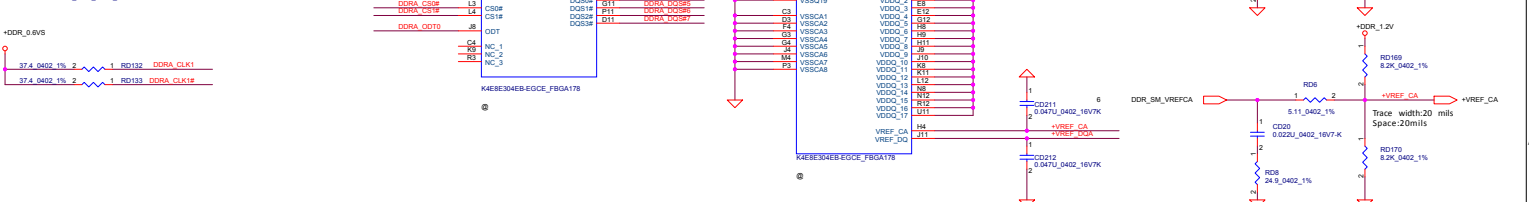
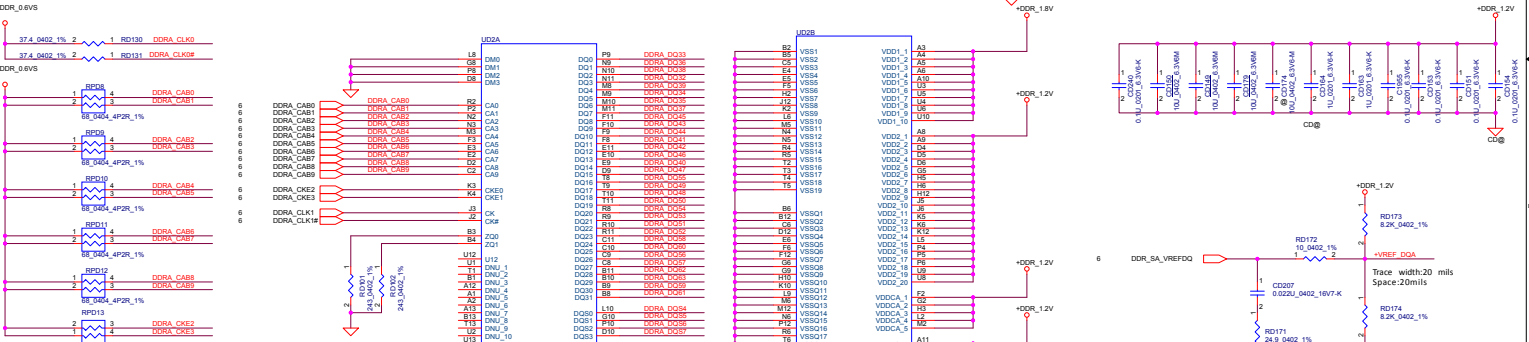
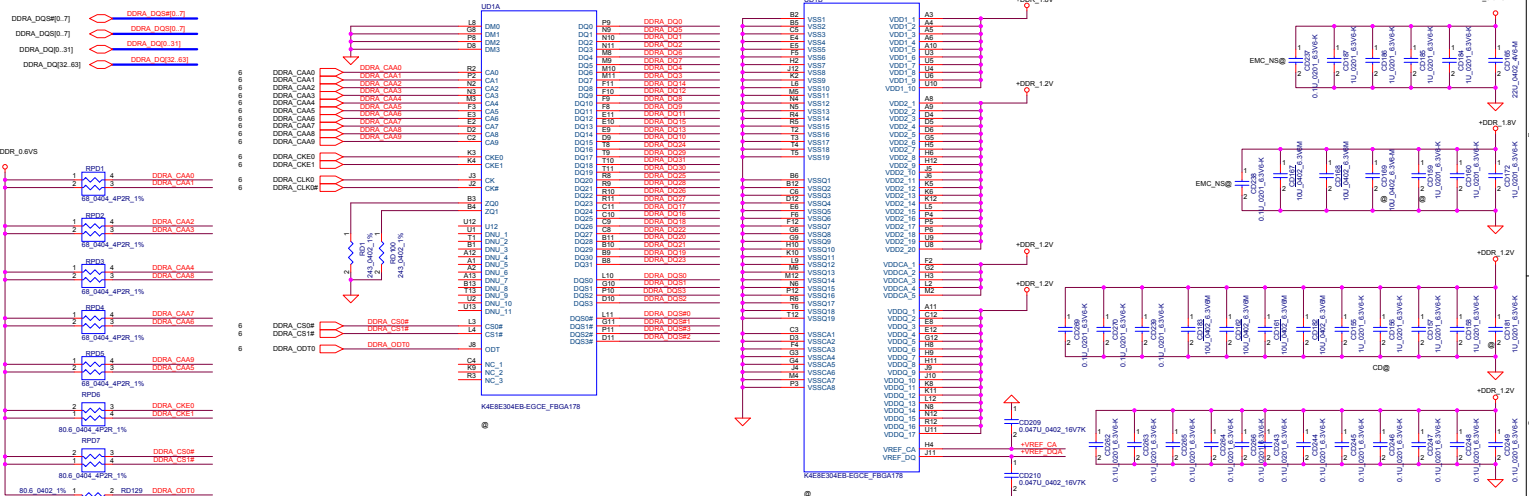


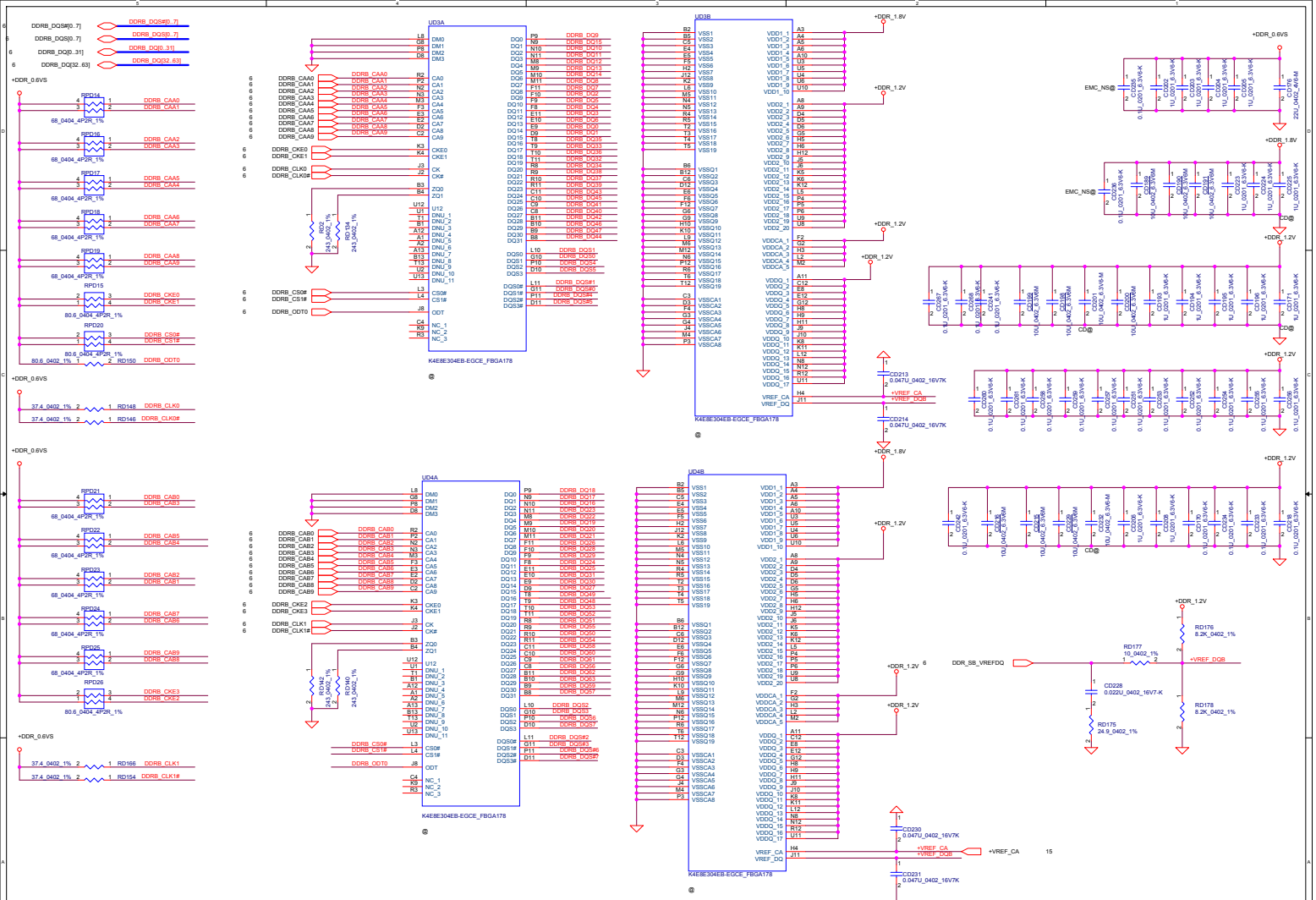
VCCST : Sustain voltage for processor in Standby modes
VCCPL : CPU PLL power rails
VCCPLL : CPU digital PLL power rails
VCCSTG : Gated version of VCCST

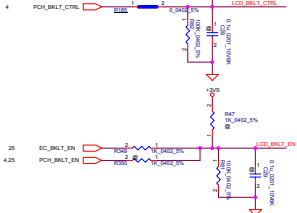
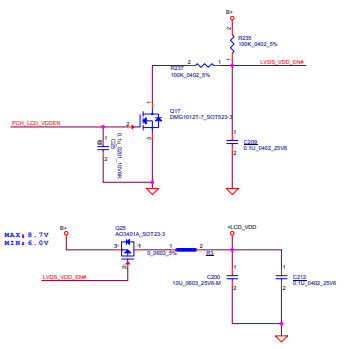
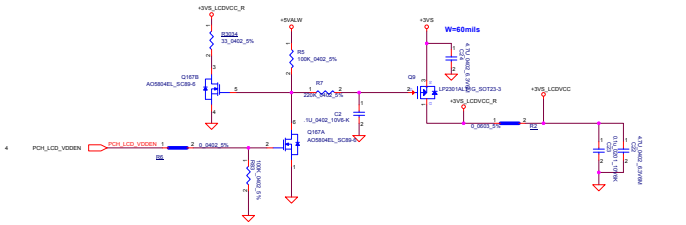
PCH_SLP_S0W
EC_SUS_VCCP
Slp_S3 enable



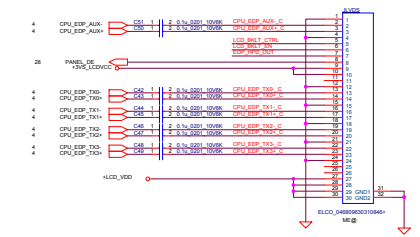
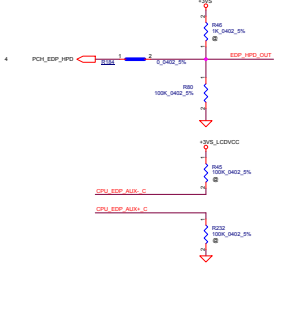








FPC:
 1. pin to pin with EDP Panel, check the panel pin definition
 2. check the HSVMC for Touch screen board

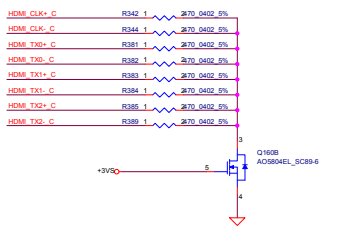
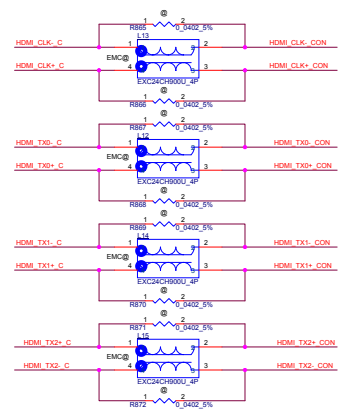


NOTE

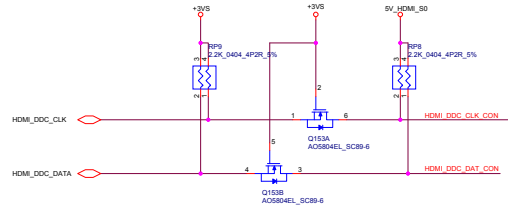
1. AC 1007DC 0.2V
2. AC6884E1 For VDD concern
3. R215, R213 For VDD concern
4. C200 For voltage compler

Reserve for other function

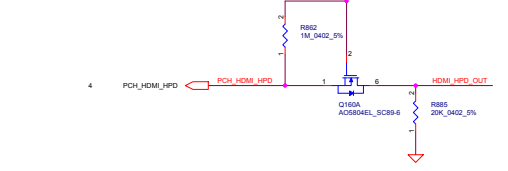
CPMU_HDMI_TX0+	CPMU_HDMI_TX0+	CV2951	2 0.1u,0201_10V8K	HDMI_TX0+_C
CPMU_HDMI_TX0- <td>CPMU_HDMI_TX0-</td> <td>CV2951</td> <td>2 0.1u,0201_10V8K</td> <td>HDMI_TX0-_C</td>	CPMU_HDMI_TX0-	CV2951	2 0.1u,0201_10V8K	HDMI_TX0-_C
CPMU_HDMI_TX1+ <td>CPMU_HDMI_TX1+</td> <td>CV2971</td> <td>2 0.1u,0201_10V8K</td> <td>HDMI_TX1+_C</td>	CPMU_HDMI_TX1+	CV2971	2 0.1u,0201_10V8K	HDMI_TX1+_C
CPMU_HDMI_TX1- <td>CPMU_HDMI_TX1-</td> <td>CV2951</td> <td>2 0.1u,0201_10V8K</td> <td>HDMI_TX1-_C</td>	CPMU_HDMI_TX1-	CV2951	2 0.1u,0201_10V8K	HDMI_TX1-_C
CPMU_HDMI_TX2+ <td>CPMU_HDMI_TX2+</td> <td>CV2991</td> <td>2 0.1u,0201_10V8K</td> <td>HDMI_TX2+_C</td>	CPMU_HDMI_TX2+	CV2991	2 0.1u,0201_10V8K	HDMI_TX2+_C
CPMU_HDMI_TX2- <td>CPMU_HDMI_TX2-</td> <td>CV2901</td> <td>2 0.1u,0201_10V8K</td> <td>HDMI_TX2-_C</td>	CPMU_HDMI_TX2-	CV2901	2 0.1u,0201_10V8K	HDMI_TX2-_C
CPMU_HDMI_CLK+ <td>CPMU_HDMI_CLK+ <td>CV2811</td> <td>2 0.1u,0201_10V8K</td> <td>HDMI_CLK+_C</td> </td>	CPMU_HDMI_CLK+ <td>CV2811</td> <td>2 0.1u,0201_10V8K</td> <td>HDMI_CLK+_C</td>	CV2811	2 0.1u,0201_10V8K	HDMI_CLK+_C
CPMU_HDMI_CLK- <td>CPMU_HDMI_CLK- <td>CV2821</td> <td>2 0.1u,0201_10V8K</td> <td>HDMI_CLK-_C</td> </td>	CPMU_HDMI_CLK- <td>CV2821</td> <td>2 0.1u,0201_10V8K</td> <td>HDMI_CLK-_C</td>	CV2821	2 0.1u,0201_10V8K	HDMI_CLK-_C



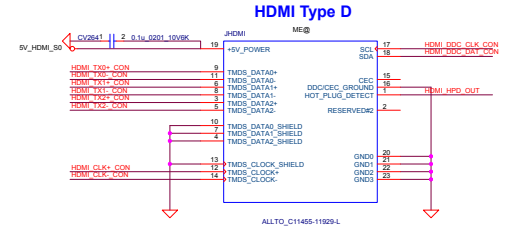
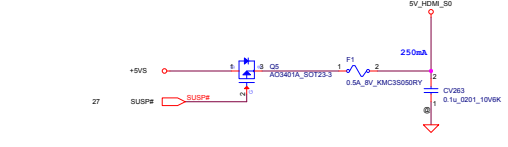
DDC



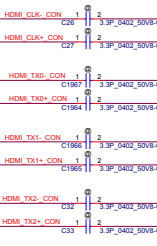
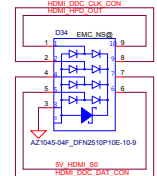
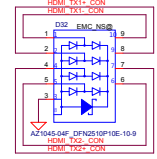
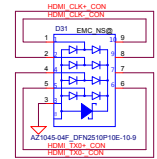
H-PLUG



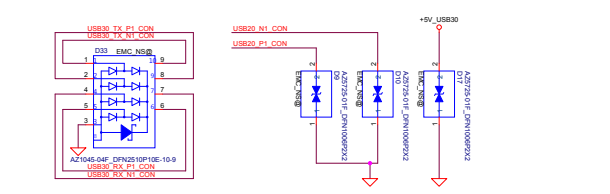
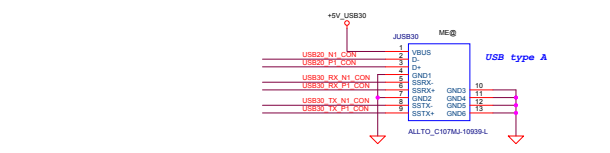
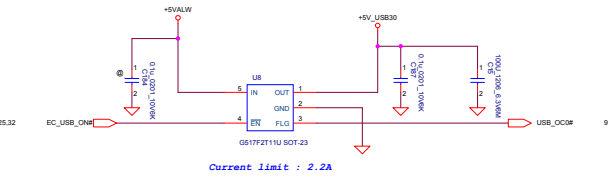
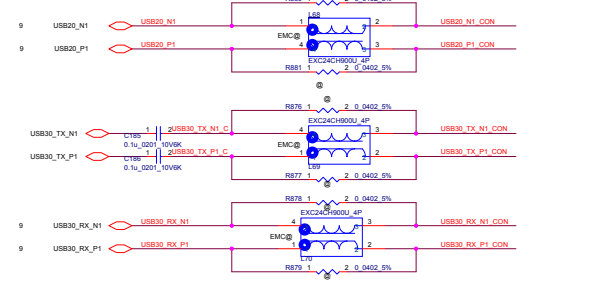
CONN



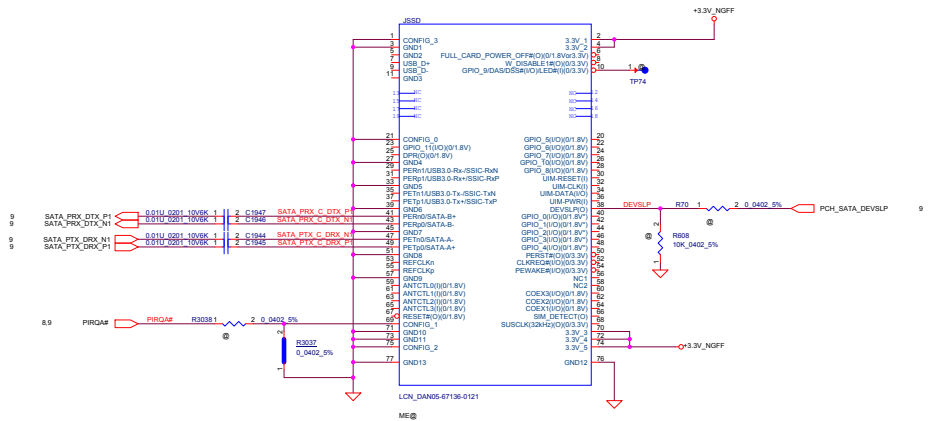
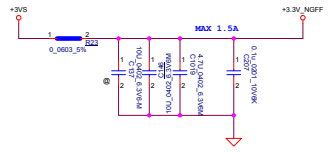
ESD



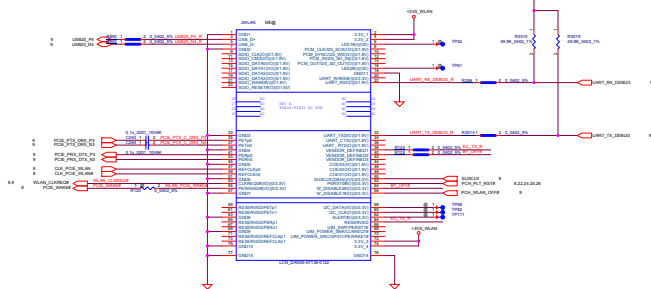
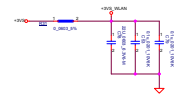
USB30



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Issued Date	2014/11/15	Deciphered Date	2013/11/08	SSD&USB30 Type C
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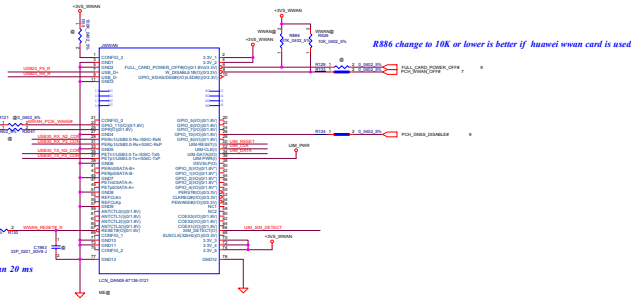
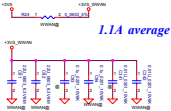
Mini Card(WLAN/WiMAX)



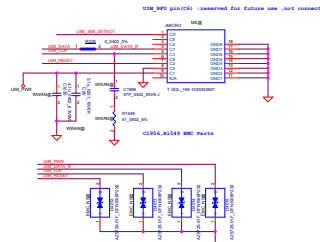
WLAN/WiMAX Combo module pinouts

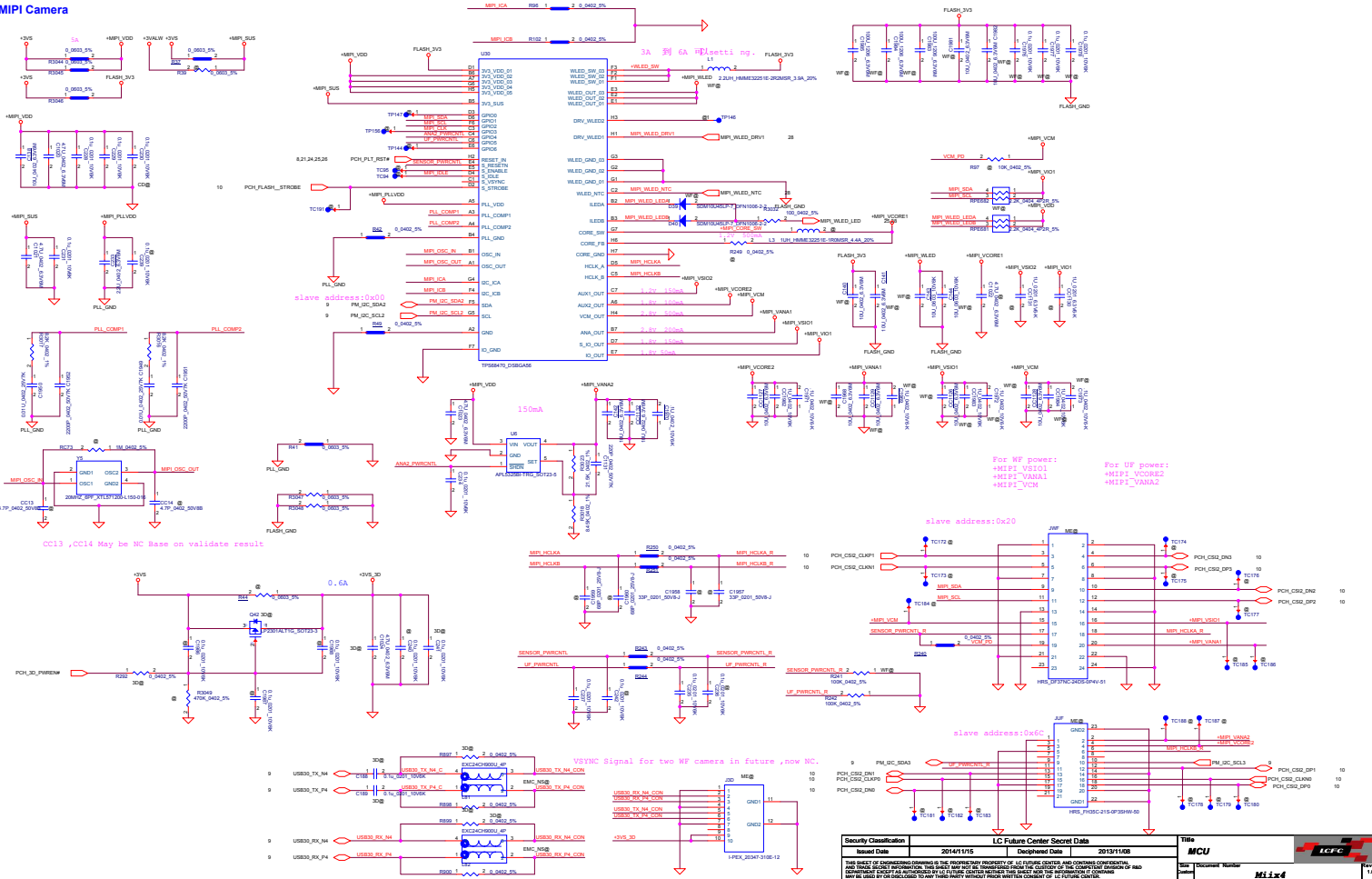
	Wi-Fi module Pinout	Wi-Fi module Pinout
Wi-Fi module Pinout	Wi-Fi module Pinout	Wi-Fi module Pinout
Wi-Fi module Pinout	Wi-Fi module Pinout	Wi-Fi module Pinout
Wi-Fi module Pinout	Wi-Fi module Pinout	Wi-Fi module Pinout

Mini Card(WWAN)



Pulling low RESET# more than 20 ms





CC13, CC14 May be NC Base on validate result

slave address:0x00

150mA

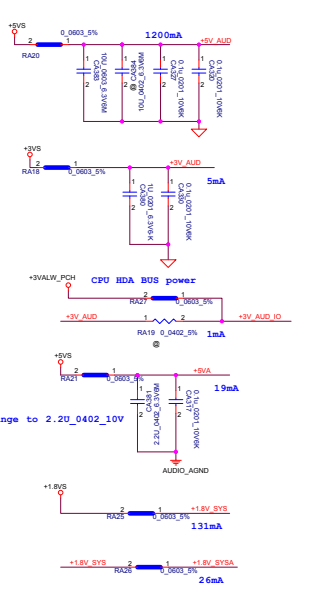
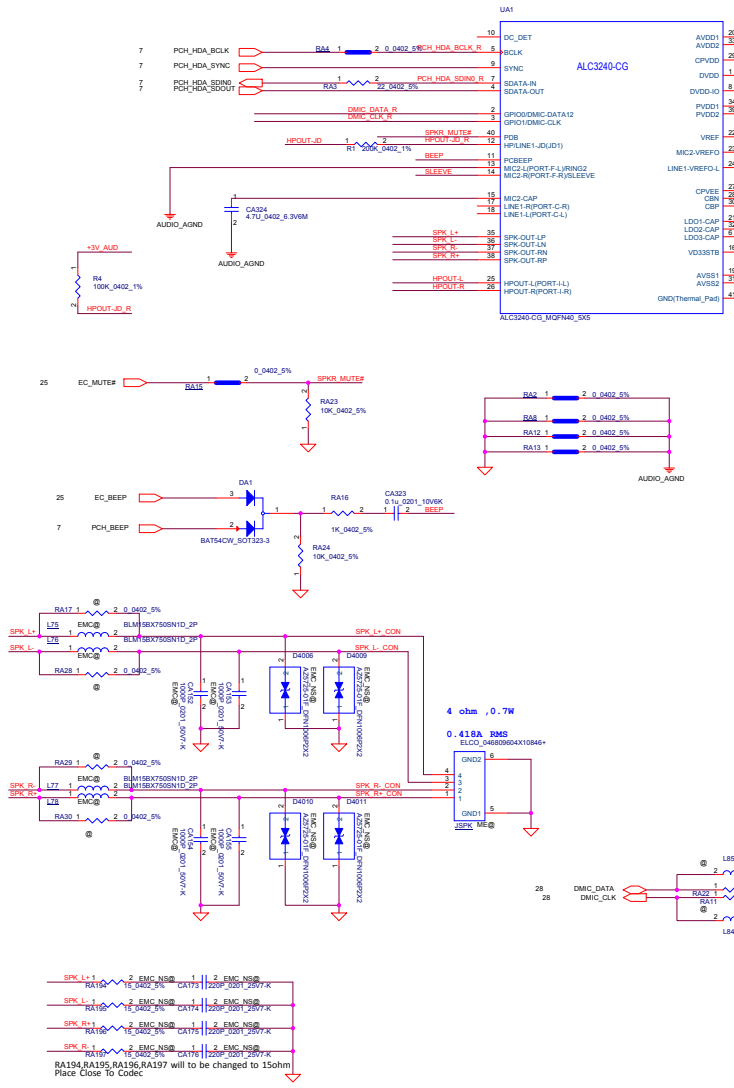
For WF power:
 +MPU_VDD10
 +MPU_VANA1
 +MPU_VDD4

For UF power:
 +MPU_VDD2
 +MPU_VANA2

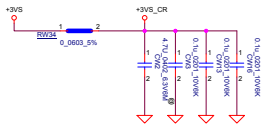
VSYNC Signal for two WF camera in future, now NC.

slave address:0x20

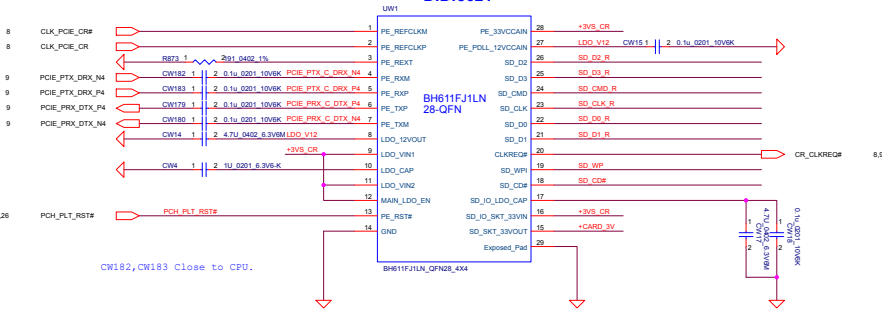
slave address:0x6C



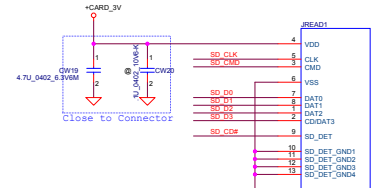
Card Reader



**VID:1217
DID:8621**



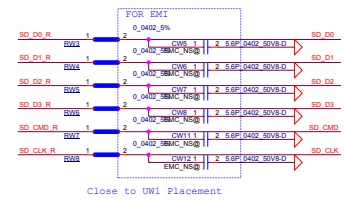
CW182, CW183 Close to CPU.

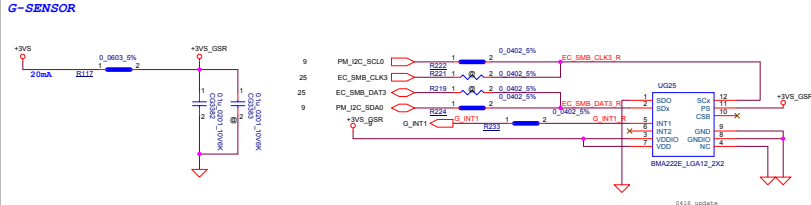
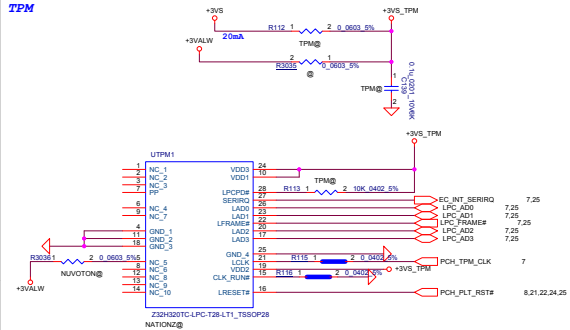


T:SOIL_158-1030902901
ME@ SD / MMC

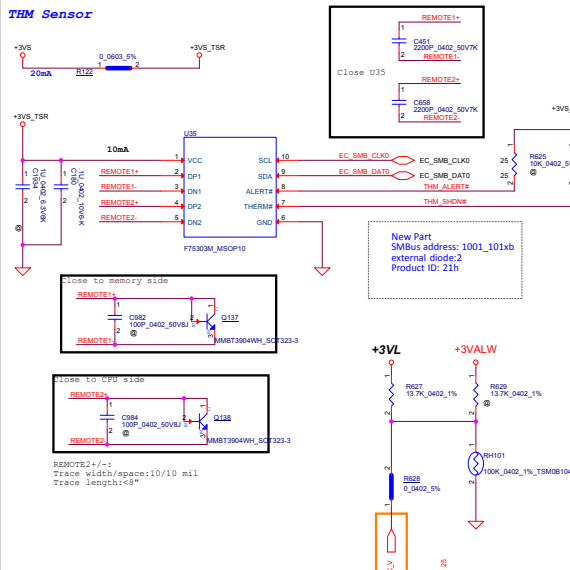


For micro SD 捕SDWP P signal

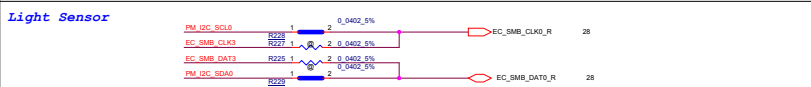




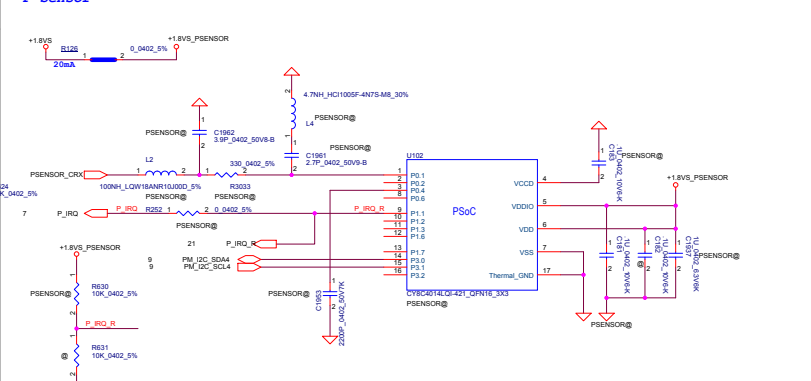
THM Sensor



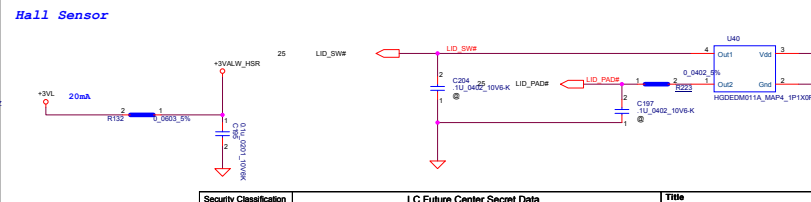
Light Sensor



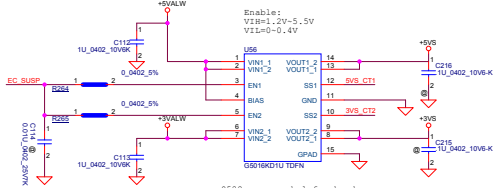
P Sensor



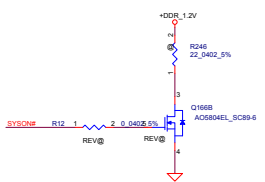
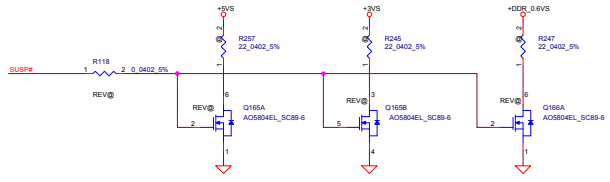
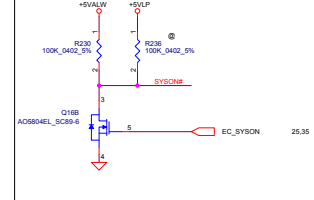
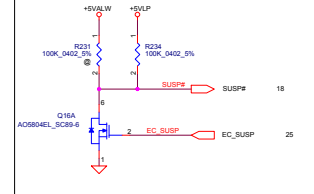
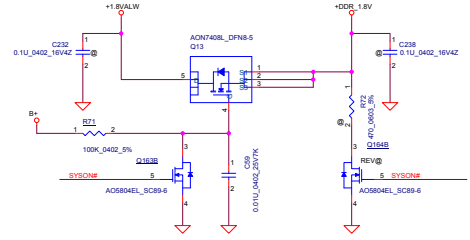
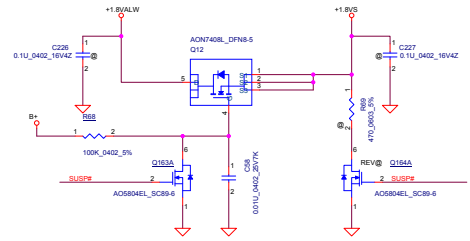
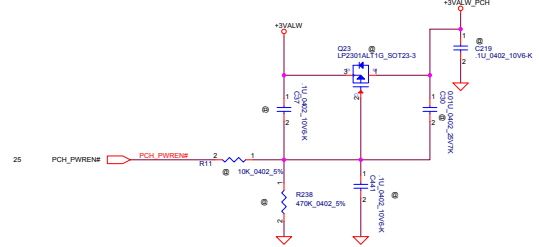
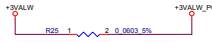
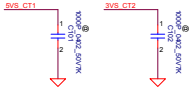
Hall Sensor



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Size	Document Number	Revision	Rev 1.0
Note	Monday, August 11, 2015		Sheet 26 of 37

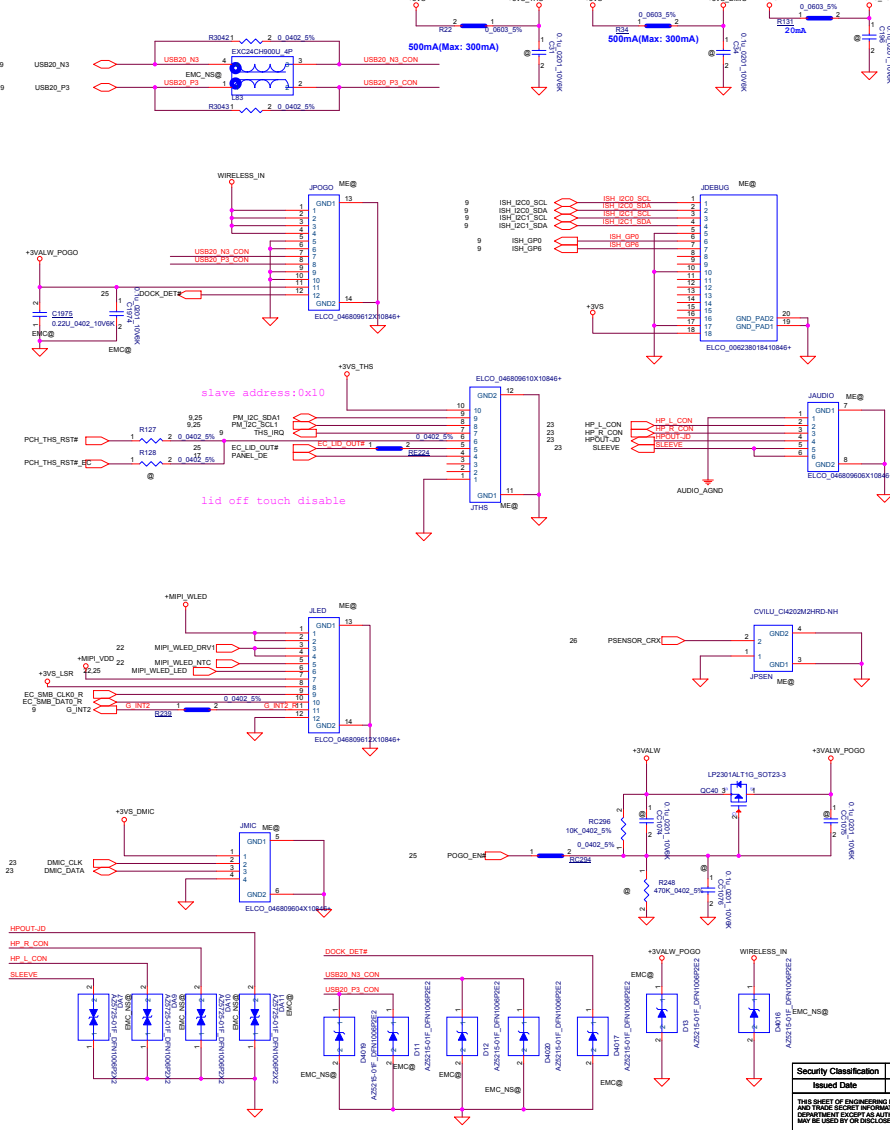


0522 new symbol for haydn .

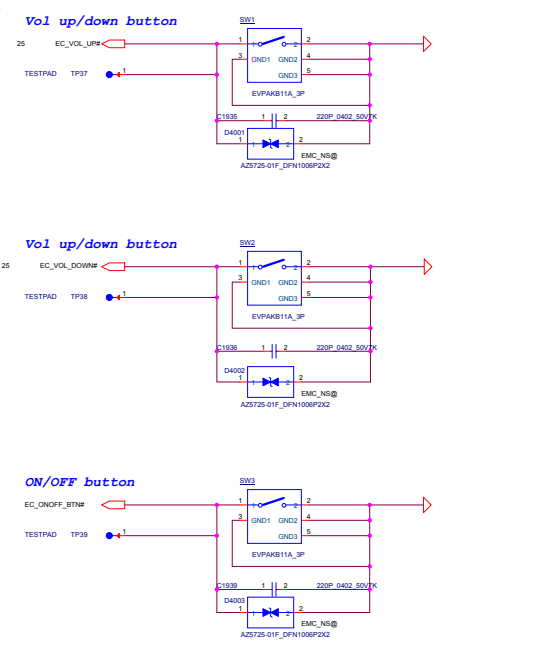


Security Classification		LC Future Center Secret Data		Title	
Issued Date	2014/11/15	Declassified Date	2013/1/08	POWER SWITCH	
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Size	Document Number	Revision		Rev 1.0	
Date: Monday, August 17, 2015				Sheet	27 of 37

IO Conn

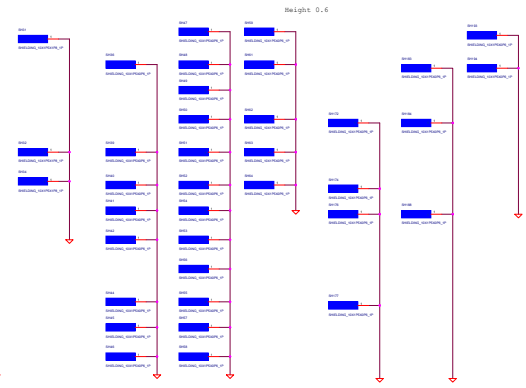
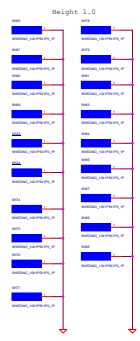


BUTTON



Configure	PU	PD	Voltage	POGO EN#	+3VALW_POGO
No docking	100K	NC	3.3V	3.3V	0V
KB and TP enable	100K	300K	2.475V	0V	3.3V
KB and TP disable(0-15 degree)	100K	300K	2.475V	3.3V	0V
KB and TP disable(345-360 degree)	100K	300K	2.475V	3.3V	0V
KB and TP disable after calculate angle	100K	150K	1.98V	0V	3.3V

Configure	PU	PD	Voltage		
No docking	100K	NC	3.3V		
10W CHG Docking	100K	50K	1.1V		
20W CHG Docking	100K	83K	1.496V		



Length 10



Length 5

01/06:
 1.Change EC to 8386
 2.Modify JPOGO pin define .
 3.Change U40 to AXP8132HA+TRG_SOT23

01/12:
 1.Change EC to 8586
 2.Change U40 to H8C8M011A_MAP4_IP1X009

01/13:
 1.Change U35 to F75303M_MBP010

01/21:
 1.Add F sensor part schematic
 2.Move light sensor to DB.

01/26:
 1.Change Codec to AL3240-CD_MQTRN40_SXS

01/30:
 1.Change J7WAM to ANGOS_NARBO-M6701-TS15 follow ME request.

2/3:
 1.Add o ohm resistor for Power manager signal.

2/9:
 1.Update UF Camera connector follow ME connector list .

2/11:
 1.Modify J3D pin define.
 2.Reserve EDP component for SIM Card interface.
 3.Swap USB2.0 port2,port3 signal for layout concern

2/12:
 1.Delete Audio jack signal RING2
 2.Swap J4VDS pin define .

2/13:
 1.Change sense resistor to R short for layout concern.
 2.Modify +CPU_VCC3EN and VCCPLA_OC enable control method
 3.Swap J7HS_JAUDIO pin define.
 4.Add hole symbol

2/14:
 1.Modify touch panel signal H5VNC .
 3.Swap J7OGO pin define.

2/25:
 1.Modify Camera part schematic.

2/26:
 1.Delete UPI Colay component.
 2.Add J7EBUG connector
 3.Combine power part schematic

2/28:
 1.Swap J7OGO, J7HS pin define
 2. Modify Hole size .

3/2:
 1.Update RPC28 to 1K_0404_4P2R_5#
 2.Add I/O height clip.
 3.Modify Camera part schematic.
 4.Combine power part schematic
 5.Change CCI150 to 22U_0402_4V6-M

3/3:
 1.Change J7EBUG to ELC0_006238018410846#
 2.Change F sensor to Cypress solution (C78C401141QL-421_DPM16_3X3)

3/4:
 1.Add R3015,R3019 for debug function
 2.Change L15,L16,L17,L18 to BSM15PFR1218N1D_2P

3/5:
 1.Change U30 to SA00007AT10
 2.reserve I2C interface for 8396 EC.

3/6:
 1.Reserve CU35,CU236,CU237,CU238 Follow EMC suggestion.
 2.reserve EC debug connector J7EBUG
 3.Combine power part schematic .

3/7:
 1.Change CQ7 to 2N7002KHWI_bot363-6

3/9:
 1.Change CA384 to 10U_0402_6_3V4M for ME height concern.
 2.Change CQ1, CQ2, CQ3, CQ4, CQ191, CCI198, CCI175, CD165, CD176 to 22U_0402_4V6-M for ME height concern.
 3.Change CQ7 to A055042L1_RCS9-6
 4.Change C200 to 10U_0603_25V6-M for ME height concern.

3/9:
 1.Change JAUDIO to ELC0_046809606X10846# follow ME Connector list
 2.Change JMJC to ELC0_06809604X10846# follow ME Connector list
 3.Change J7HS to ELC0_046809606X10846# follow ME Connector list
 4.Change J7OGO, J7ED to ELC0_046809612X10846# follow ME Connector list
 5.Change signal MIP1_SMI_pull up power plane to +MIP1_VDD1
 6.Add U4, colay with U3 for ME height concern.
 7.Reserve pull down for signal F_IRQ
 8.Add pull down resistor for GPF_E2
 9.Change L69,L70,L81,L82 to EXC24CH9000_4P
 10.Change L32,L33,L34,L35,L36 to BSM15PFR1218N1D_2P For ME height concern.

3/10:
 1.Change J7CMST to TP71
 2.Change EDP power switch to MOS for ME Height concern.
 3.Change DC2,DC1 to UES,UC6 (74LV10088B+T_SOT23-5) For leakage issue.
 4.Change R22,R112,RA18,RA20,RA21,RA29,RA26 to R short for ME height concern
 5.Pull up to +3VALM_EC for signal EC_ON, POGO_EN#
 6.Add resistor RE245
 7.Combine power part schematic
 8.Modify EDP pin define.

3/11:
 1.Change L4 to 180M_HCI1005F-18M-M8 5# follow vendor suggestion.
 2.pull up +3VALM_EC for signal EC_WC_EN

3/12:
 1.Delete CA386,CA387
 2.Mount RE207
 3.Combine power part schematic

3/13:
 1.Modify J7OGO pin define.
 2.Modify Jmic pin define.
 3.Combine power part schematic

3/16:
 1.Change SW1,SW2,SW3 to IPFG14K-Q-T-R_5P follow ME suggestion.
 2.set signal VDD0 pull up to +3VALM.

SIV

4/13:
 1.unmount C193,CW3,C215,C216,CV263
 CCI197,CCI105,CCI196,CCI103,CCI192,
 CCI111,CCI120
 CCI157,CCI160,CCI169
 CCI123,CCL129,CCI123
 CCI195B,CCI196S,CCI196I,CCI197I,CCI197A,CCI197T
 CCI154,CCI156,CCI164,CCI225,CCI232,CCI171,CCI203
 CCI173,CCI132,C230 for components quantity down
 2.Change EDP Part diff signal name.

4/14:
 1.move signal EC_SENSOR_INT to GPF5
 2.move signal EC_SPS to GPF_5#

4/16:
 1.Change R3034 to 33 ohm for LCDVCC full time fail.
 2.Change +3P9 to ELC0_046809606X10846# follow ME connector list
 3.Change L68,L12,L13,L14,L15 to EXC24CH9000_4P
 4.Change SW1,SW2,SW3 to EVFAR811A_5P follow ME request.

4/20:
 1.Change signal EC_VOL_U# and EC_VOL_DOWN# pull up power plane to +3VALM.

4/23:
 1.Reserve GPF_E15 for SCI function
 2.Add test point for signal PCM_FLASH_STROBE
 3.Change XCI to XIA000141000200,,CC4 to 8P_0402_50V8J,CC5 to 8P_0402_50V8J follow vendor suggestion
 4.Add ohm resistor for SMD pin69.
 5.Change D11,D12,D13 to A2515-01F_DPM106P2E2 follow EMC suggestion
 6.Reserve D4016 follow EMC suggestion
 7.Reserve C25,C27,C1967,C1964,C1966,C1965,C32,C33 follow EMC suggestion.
 8.Add D4017 follow EMC suggestion
 9.Change RL05 to EXC24CH9000_4P follow EMC suggestion

4/25:
 1.Change R887,R888,RW10,RC46,RC57,R96,R102,RC105,R184,R185,RE188,RA2,RA8,R124,R125,R890,R892,RE23 to R short for components quantity down.

SIT

6/8:
 1.Reserve Q168 For wwan reset#
 2.Change R3002 to SD0001R00D
 3.Change U56 to SA00007600
 4.Reserve LED schematic

6/17:
 1.Change D11,D12,D13,D4016,D4017 to A25423-01F_R7GR_DPM106P2E2 follow EMC suggestion.
 2.Change CC4 to 9P_0402_50V8J follow crystal vendor suggestion.
 3.Change RW829,RW826 to 100K_0402_5#
 4.Change RW12 to 100K_0402_5#

6/19:
 1.Add CAP CC1981,CC239,CC240,CC241,CC242

SVT

7/17:
 1.Mount C237 and C235 for signal UP_PWCNTL qty4.
 2.Change C145,C144 to SE0000X000#
 3.Change C138,C140,C146,CCI49,CCI50,CCI61,CCI62,CCI67,CCI68,CCI79,CCI82,CCI83,CCI89,CCI90,CCI91,CCI98,CCI99,CCI200,CCI215,CCI216,CCI239,CCI280,CCI081,CCI089,CCI104,CCI088,CCI086,CCI087 to SE0000X000#

7/30:
 1.Add IC1968 and IC1969 to solve MF camera garbage issue..

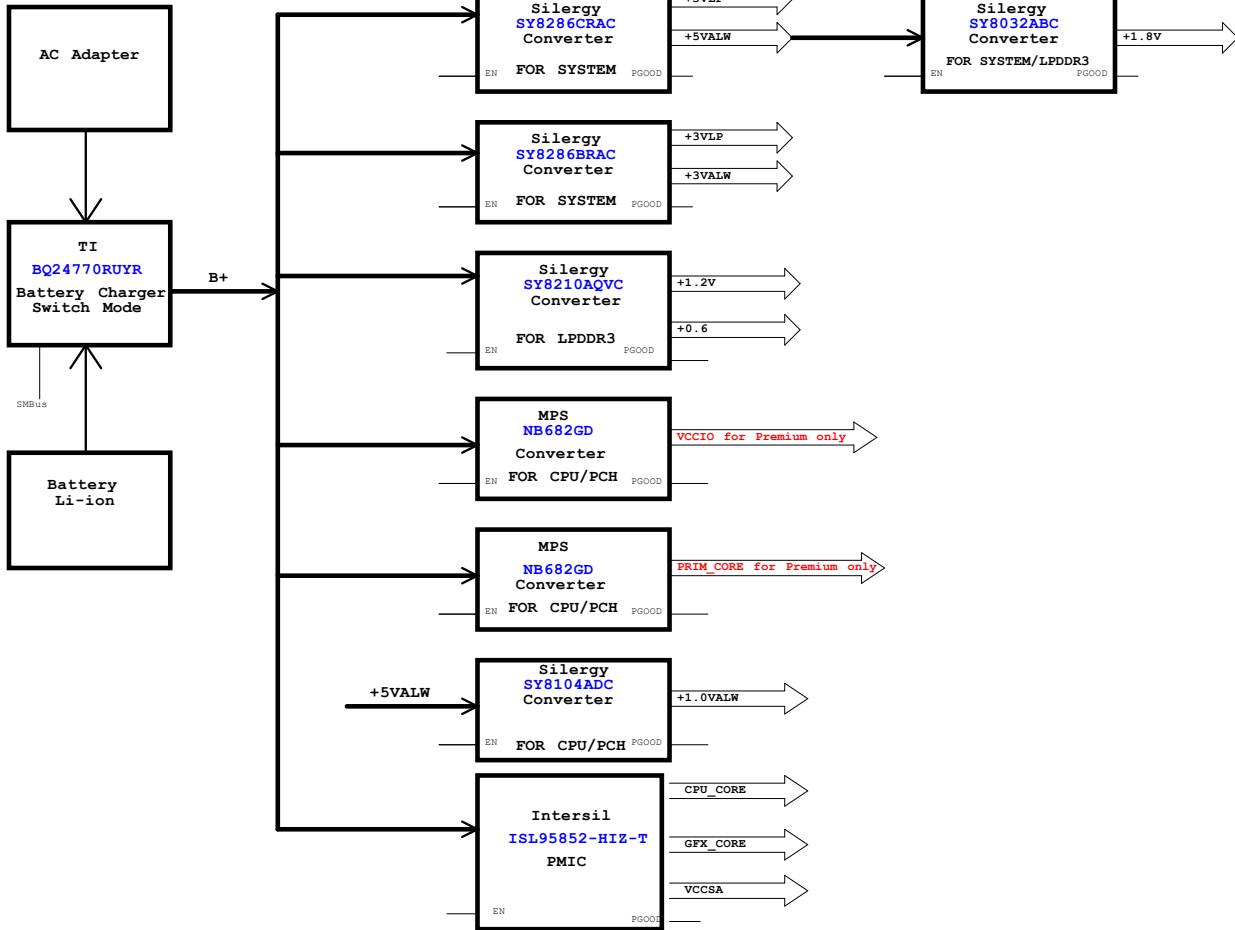
8/2:
 1.Change Y5 to 20MHE_GPF_XTL571200-1150-016 follow vendor suggestion.
 2.Reserve 0.1uF cap for power MIP1_VDD10
 3.Change RC92 to 0402 size o ohm FResistor .
 4.Add IuF and 0.1uF caps for mipi camera power.

8/3:
 1.Change JLVDS to ELC0_046809630310846# follow ME request .

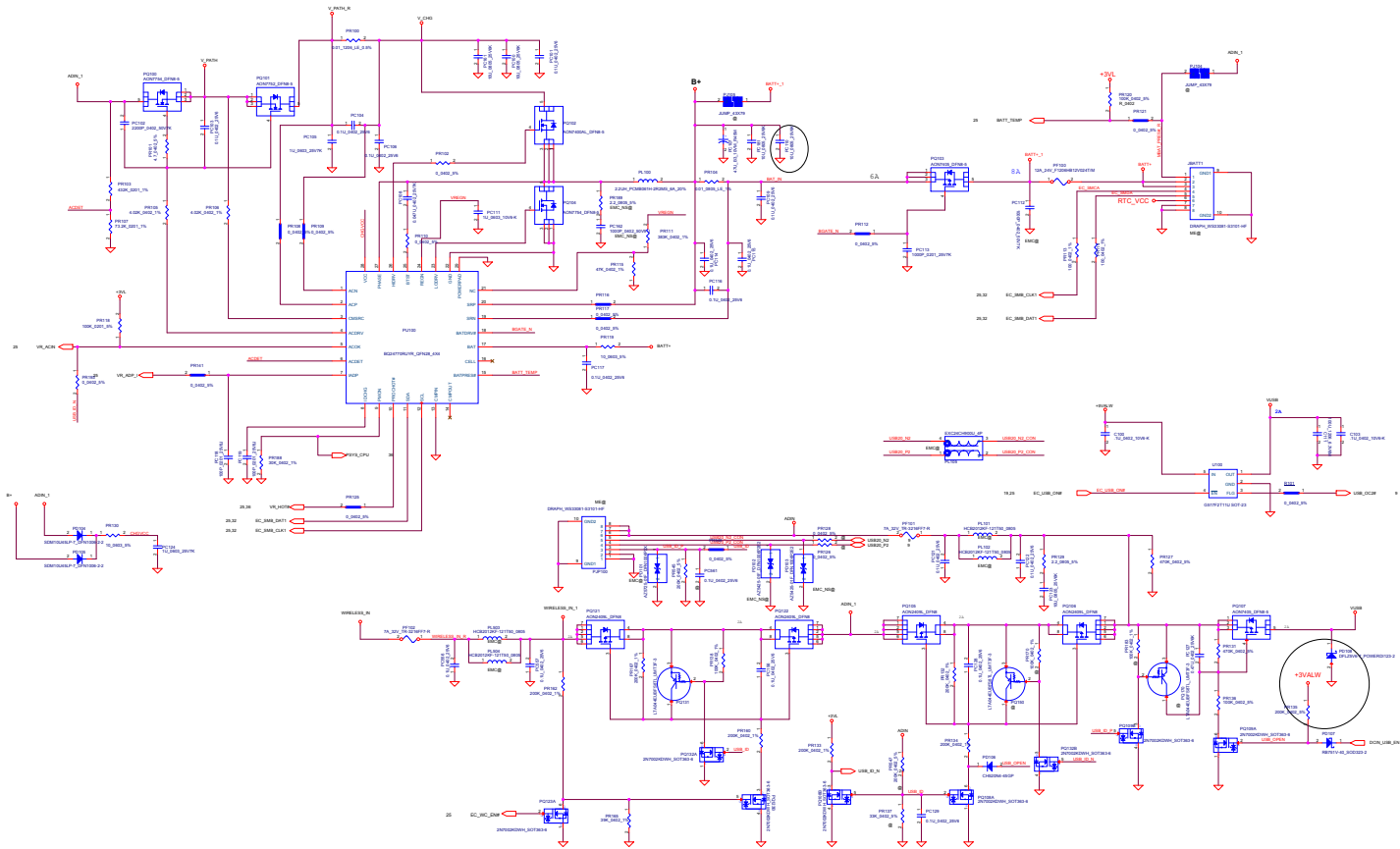
8/4:
 1.Mount LC37 For SKL 5.67GHz signal noise issue
 2.Add C1974 and C1975 follow EMC suggestion.
 3.Mount Q168 For wwan reset signal.
 4.Add TPM_ID1 and TPM_ID2 Signal to identify TPM Woot or not .
 5.Change -R115,R116,R133,R134,RE26,RE40,RE43,RE51,RE2,RE3,R31,RW34,R34,R37,R117,R120,R131,RC269 ,R3010,RC3028,RC159,RC160,R220,RC24,R228,R229,R233,R239,R126,RW3,RW4,RW5,RW6,RW7,RW8,RE13,RE15,RA15,RE16,RE17,RE19,RE20,RC64,RC89,RC134,RC135,RC139,RC149,RC150,RC151,RC152,RC153,RC154,RE200,RE216,RE17 ,R223,RC224,RC244,RC251,RC294,RC26,RC1491,RC3027,RA4,RE,RA2,RA4,RC62,RC77,RC171,RC256,R3014,RE262,RE264,RE265,R3037 to R short .

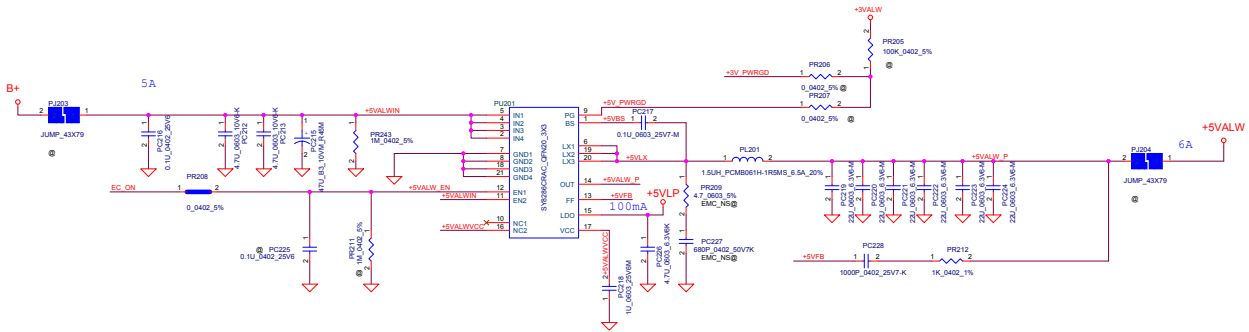
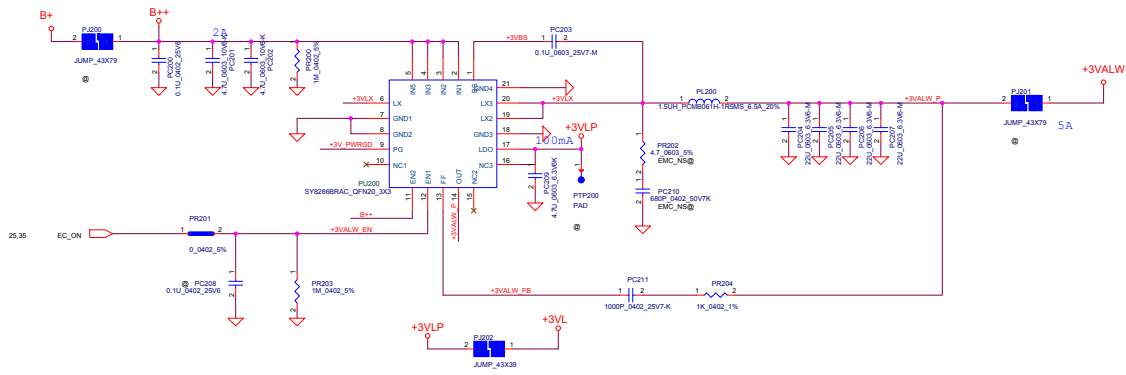
8/5:
 1.Reserve head L83 follow EMC request .
 2.Reserve head L84,L85 follow RF request .
 3.Combine power part schematic.

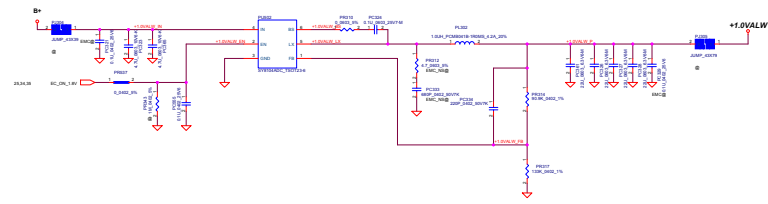
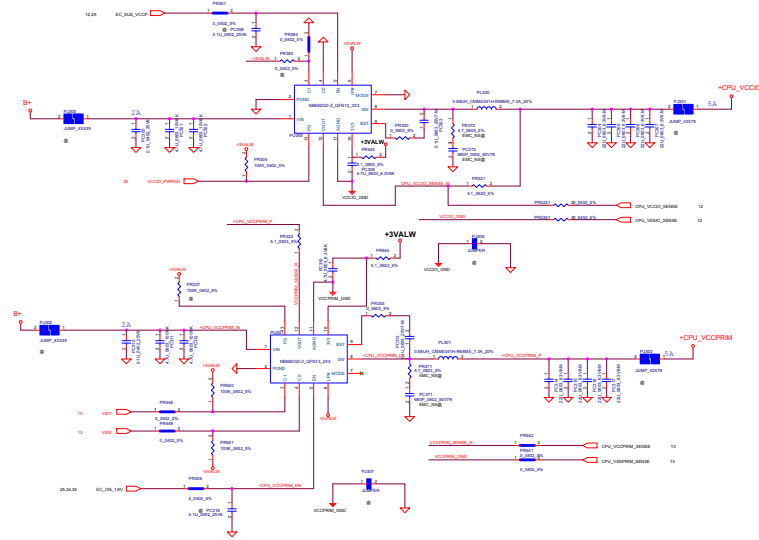
8/8:
 1.Modify mipi camera schematic.

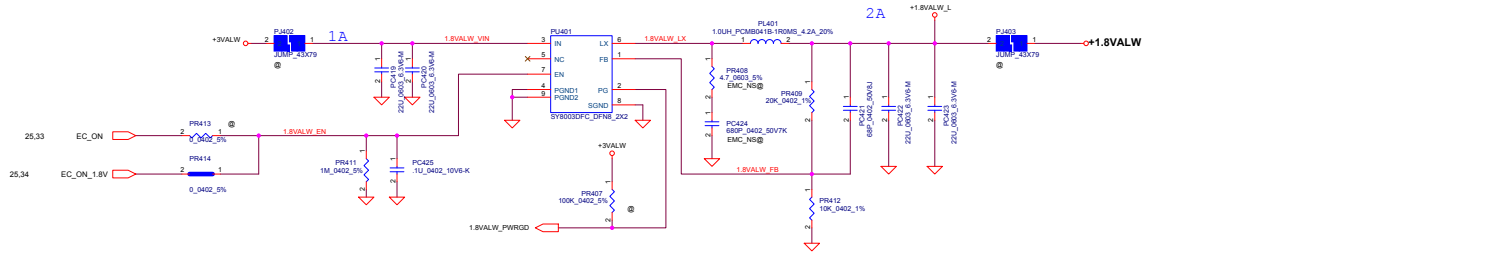
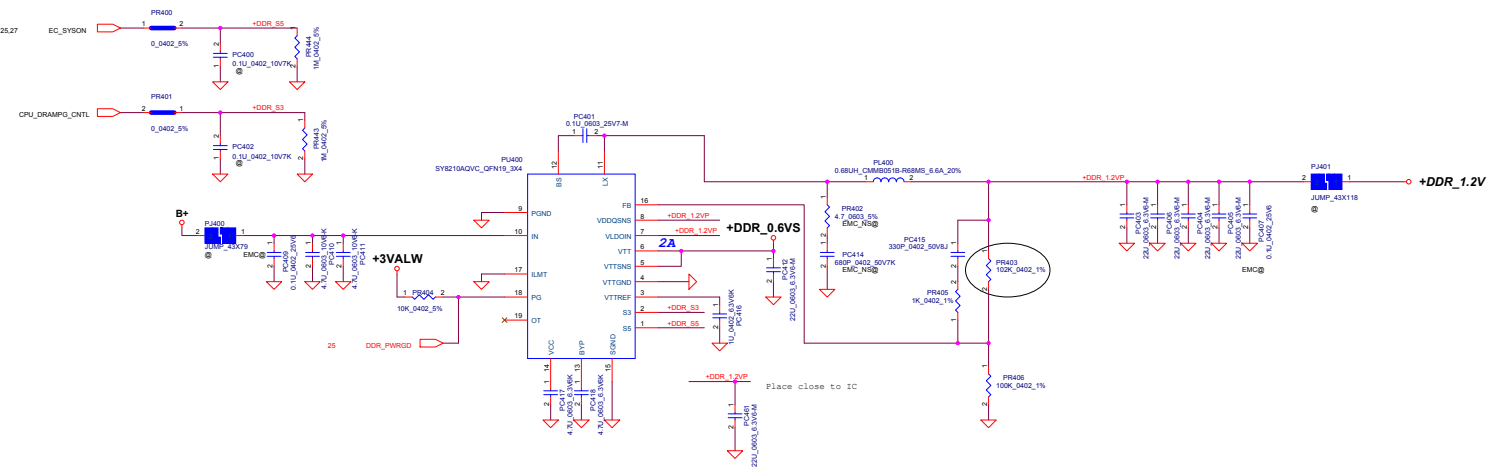


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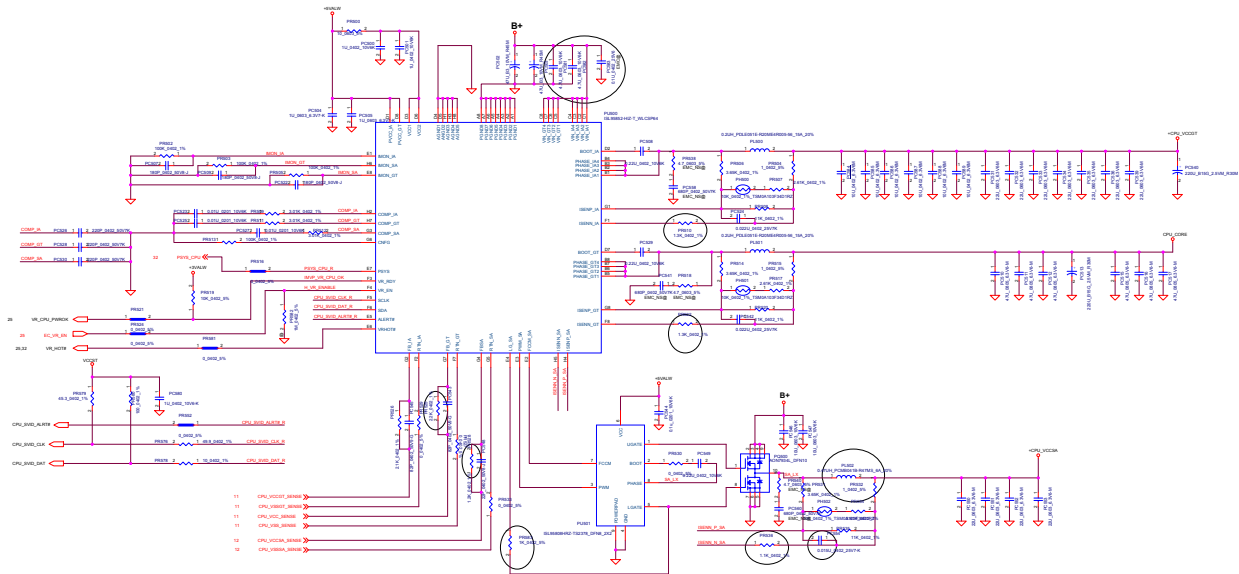









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