

R2 UMA(11.6")

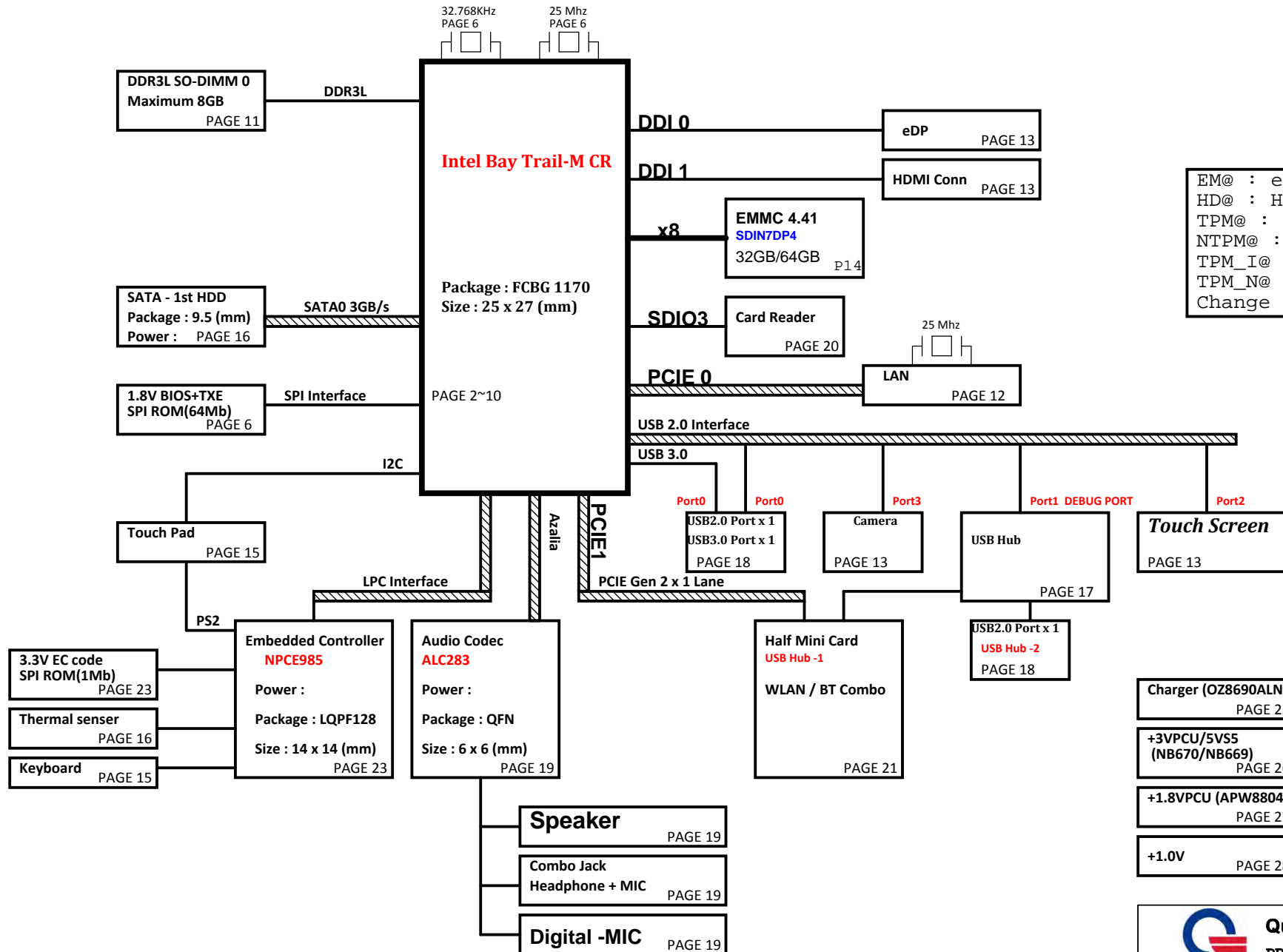
01

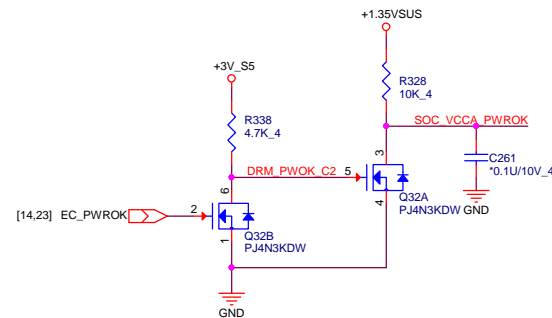
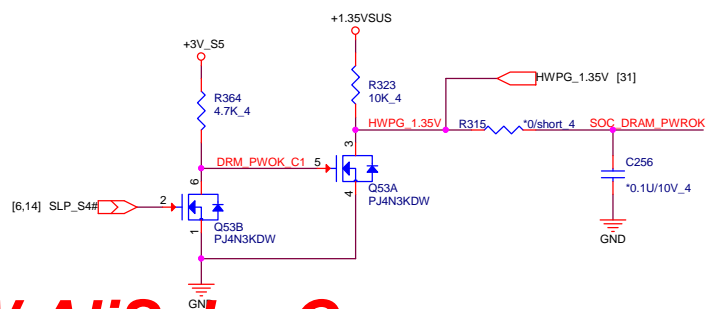
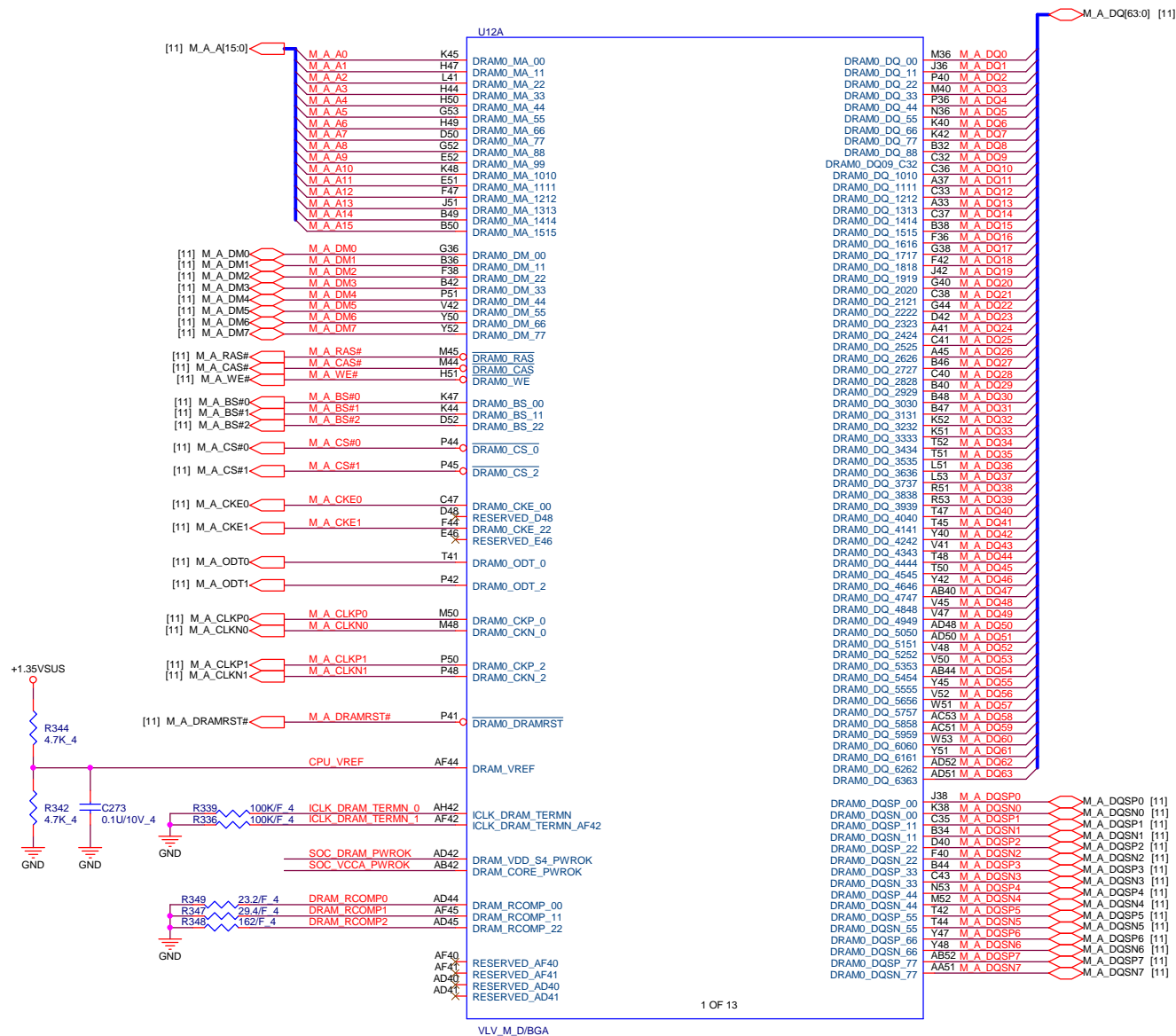
# Intel Bay Trail-M Platform Block Diagram

PCB 6L STACK UP

LAYER 1 : TOP  
LAYER 2 : SGND  
LAYER 3 : IN1(High)  
LAYER 4 : IN2  
LAYER 5 : SVCC  
LAYER 6 : BOT

EM@ : eMMC  
HD@ : HDD  
TPM@ : TPM  
NTPM@ : Non-TPM  
TPM\_I@ : 新唐  
TPM\_N@ : 英飛凌  
Change CPU & Emmc P/N





U12B


AY45  
BB47  
AW41  
BB44  
BB50  
BC53  
BB49  
BF50  
BC52  
BE52  
AY48  
BE51  
BD47  
BA51  
BH49  
BH50  
BD38  
BH36  
BC36  
BH42  
AT51  
AM42  
AK50  
AK52  
AV45  
AV44  
BB50  
AY47  
AY44  
BF52  
AT44  
AT45  
BG47  
BE46  
BD44  
BF48  
AP41  
AT42  
AV50  
AV48  
AT50  
AT48  
AT41

DRAM1\_MA\_00  
DRAM1\_MA\_11  
DRAM1\_MA\_22  
DRAM1\_MA\_33  
DRAM1\_MA\_44  
DRAM1\_MA\_55  
DRAM1\_MA\_66  
DRAM1\_MA\_77  
DRAM1\_MA\_88  
DRAM1\_MA\_99  
DRAM1\_MA\_1010  
DRAM1\_MA\_1111  
DRAM1\_MA\_1212  
DRAM1\_MA\_1313  
DRAM1\_MA\_1414  
DRAM1\_MA\_1515  
DRAM1\_DM\_00  
DRAM1\_DM\_11  
DRAM1\_DM\_22  
DRAM1\_DM\_33  
DRAM1\_DM\_44  
DRAM1\_DM\_55  
DRAM1\_DM\_66  
DRAM1\_DM\_77  
DRAM1\_RAS  
DRAM1\_CAS  
DRAM1\_WE  
DRAM1\_BS\_00  
DRAM1\_BS\_11  
DRAM1\_BS\_22  
DRAM1\_CS\_0  
DRAM1\_CS\_2  
DRAM1\_CKE\_00  
RESERVED\_BE46  
DRAM1\_CKE\_22  
RESERVED\_BF48  
DRAM1\_ODT\_0  
DRAM1\_ODT\_2  
DRAM1\_CKP\_0  
DRAM1\_CKN\_0  
DRAM1\_CKP\_2  
DRAM1\_CKN\_2  
DRAM1\_DRAMRST

DRAM1\_DQ\_00  
DRAM1\_DQ\_11  
DRAM1\_DQ\_22  
DRAM1\_DQ\_33  
DRAM1\_DQ\_44  
DRAM1\_DQ\_55  
DRAM1\_DQ\_66  
DRAM1\_DQ\_77  
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DRAM1\_DQ\_1010  
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DRAM1\_DQ\_1616  
DRAM1\_DQ\_1717  
DRAM1\_DQ\_1818  
DRAM1\_DQ\_1919  
DRAM1\_DQ\_2020  
DRAM1\_DQ\_2121  
DRAM1\_DQ\_2222  
DRAM1\_DQ\_2323  
DRAM1\_DQ\_2424  
DRAM1\_DQ\_2525  
DRAM1\_DQ\_2626  
DRAM1\_DQ\_2727  
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DRAM1\_DQ\_3030  
DRAM1\_DQ\_3131  
DRAM1\_DQ\_3232  
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DRAM1\_DQSN\_66  
DRAM1\_DQSP\_77  
DRAM1\_DQSN\_77

BG38  
BC40  
BA42  
BD42  
BC38  
BD36  
BF42  
BC44  
BH32  
BG32  
BG36  
BJ37  
BG33  
BJ33  
BG37  
BH38  
AU36  
AT36  
AV40  
AT40  
BA36  
AV36  
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AY40  
BJ41  
BG41  
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BG40  
BH40  
BH48  
BH47  
AY52  
AY51  
AP52  
AP51  
AV51  
AV53  
AR51  
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AP47  
AP45  
AK40  
AM41  
AP48  
AP50  
AK42  
AH40  
AM45  
AM47  
AF48  
AF50  
AM48  
AM50  
AH44  
AK45  
AM52  
AL51  
AG53  
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AL53  
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BG35  
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AK48  
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AJ51

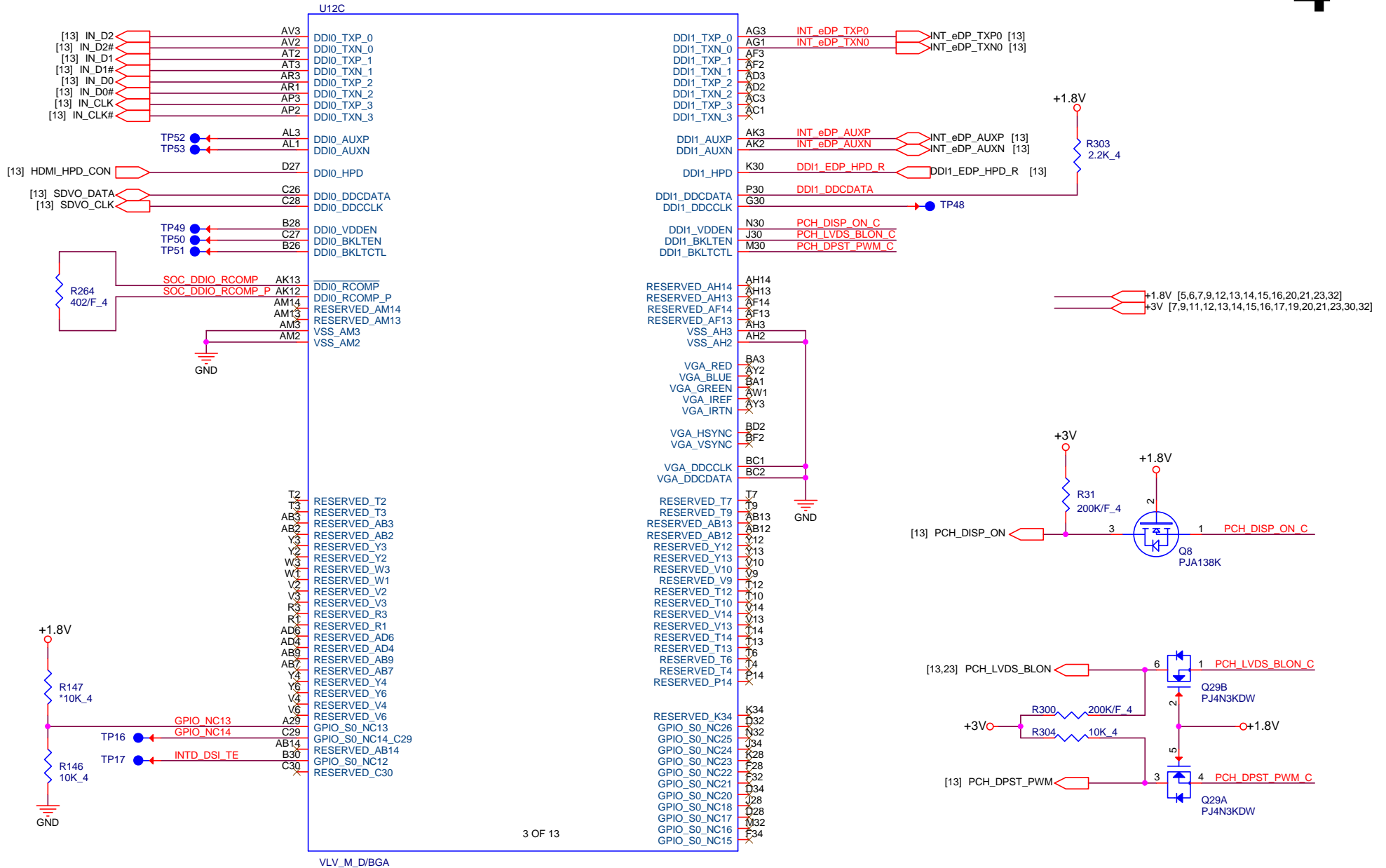
VLV\_M\_D/BGA

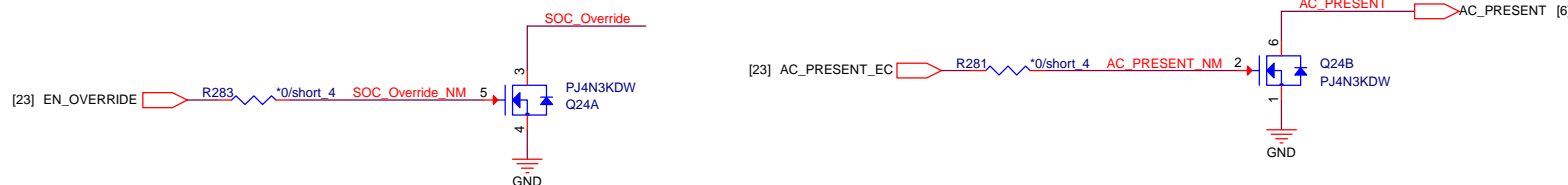


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PROJECT : ZHK

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	Valley 2/9 (DDR8)	1A
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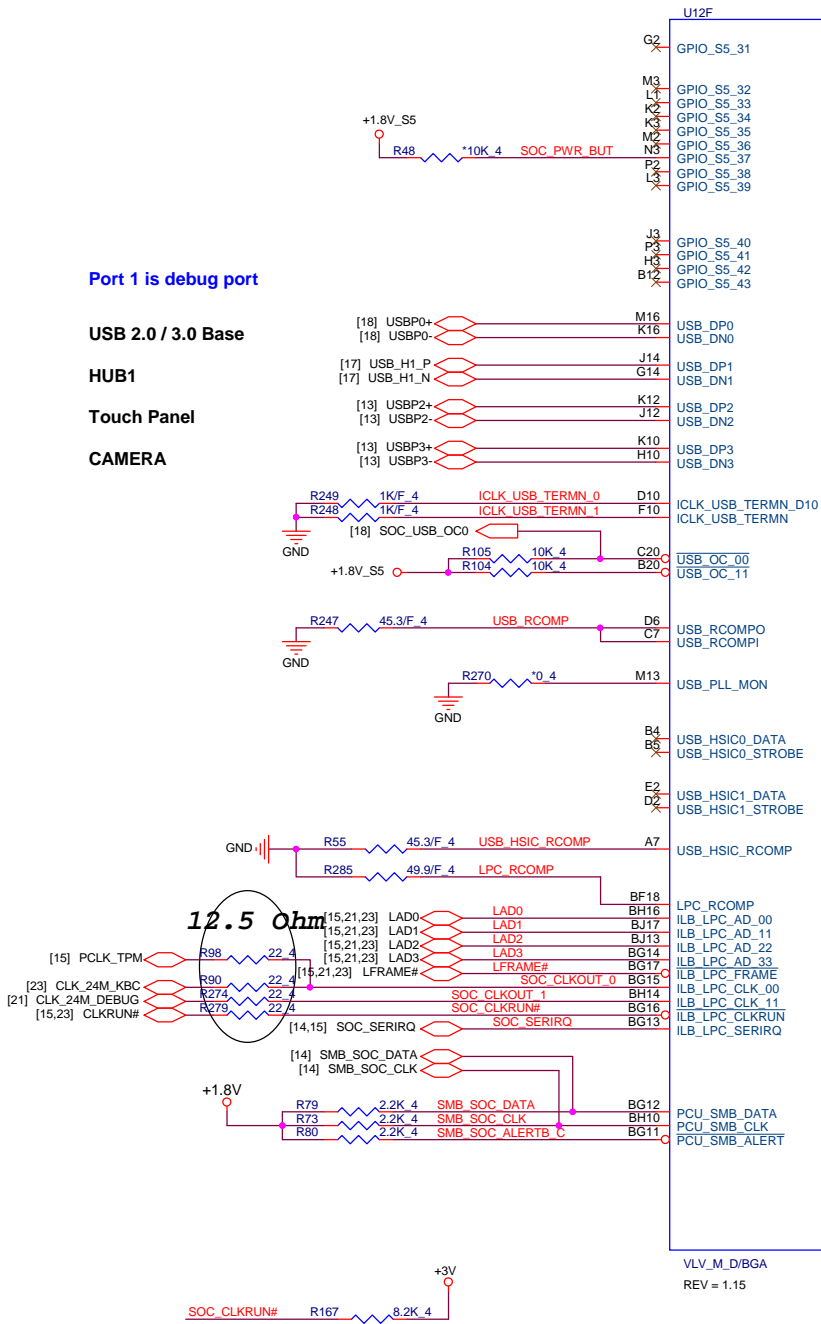
Port 1 is debug port

USB 2.0 / 3.0 Base

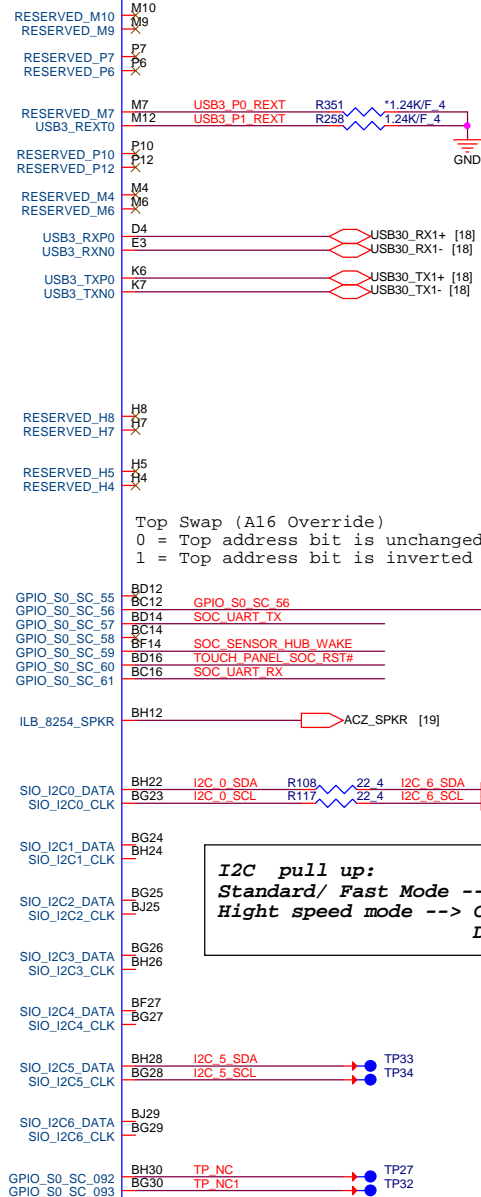
HUB1

Touch Panel

CAMERA



6 OF 13



+1.8V\_S5 [6,9,14,32]  
+1.8V [4,5,6,9,12,13,14,15,16,20,21,23,32]  
+3V [4,9,11,12,13,14,15,16,17,19,20,21,23,30,32]

TOUCH PANEL SOC\_RST# R269 \*10K 4  
SOC\_SENSOR HUB\_WAKE R265 \*10K 4

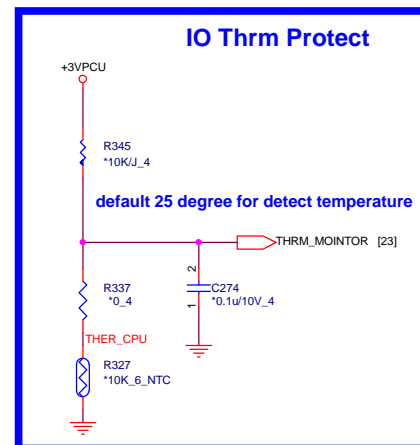
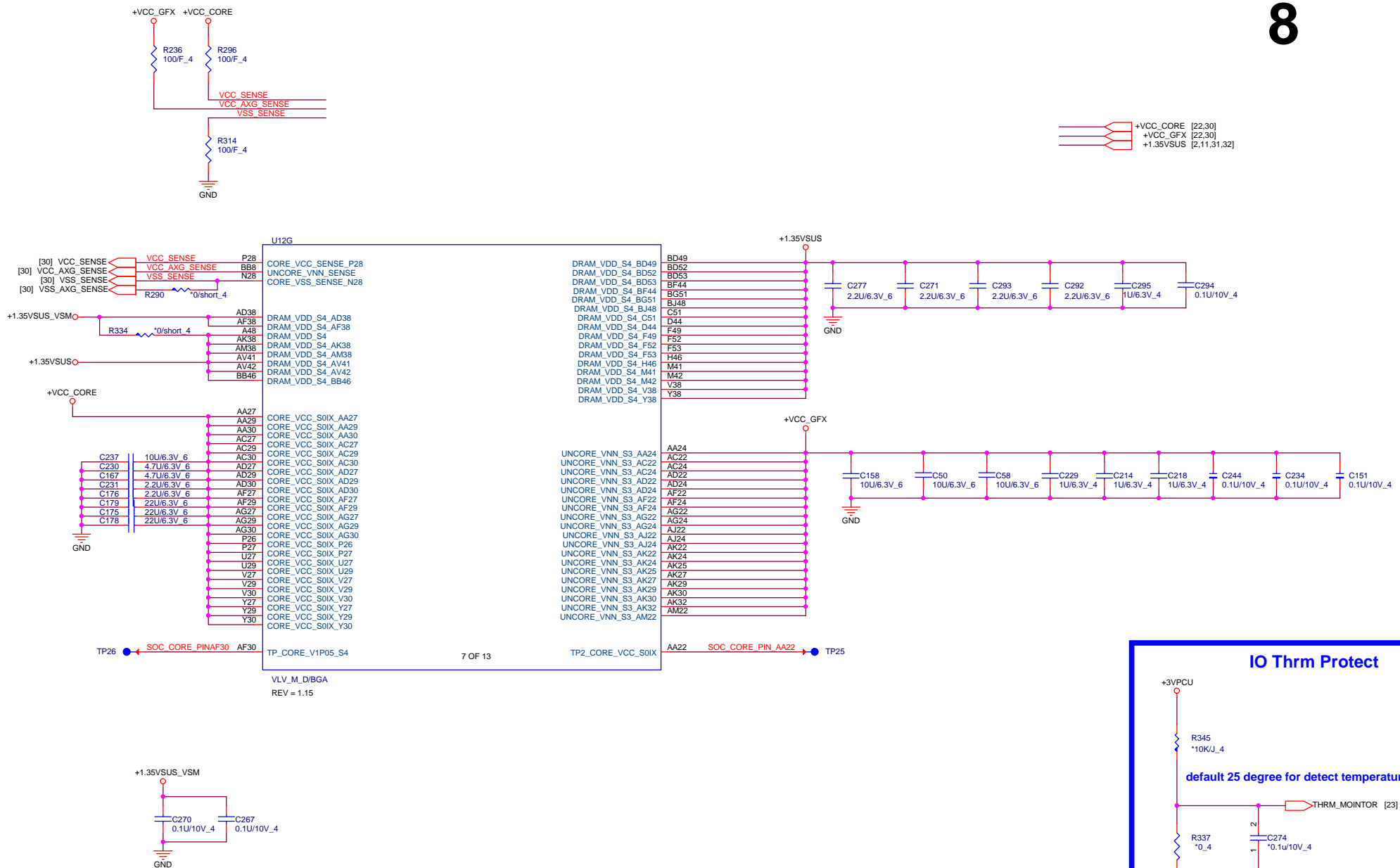
Top Swap (A16 Override)  
0 = Top address bit is unchanged  
1 = Top address bit is inverted

SOC\_UART\_TX R273 \*0.4 SOC\_UART\_RX  
Un-Stuff for Test Only

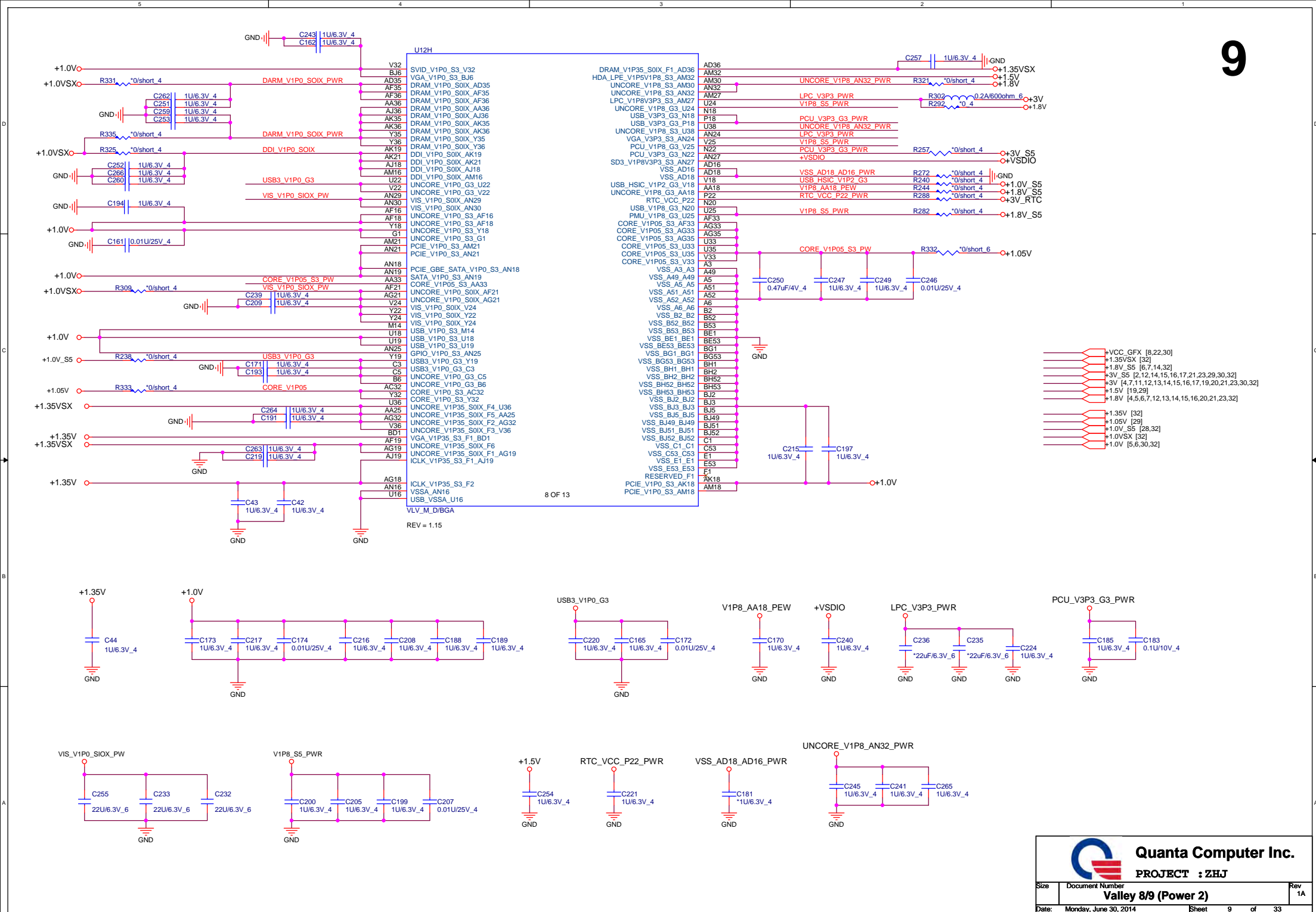
I2C pull up:  
Standard/ Fast Mode ---> 560 ohm  
High speed mode ---> CLK- 560 ohm;  
DATA- 910 ohm

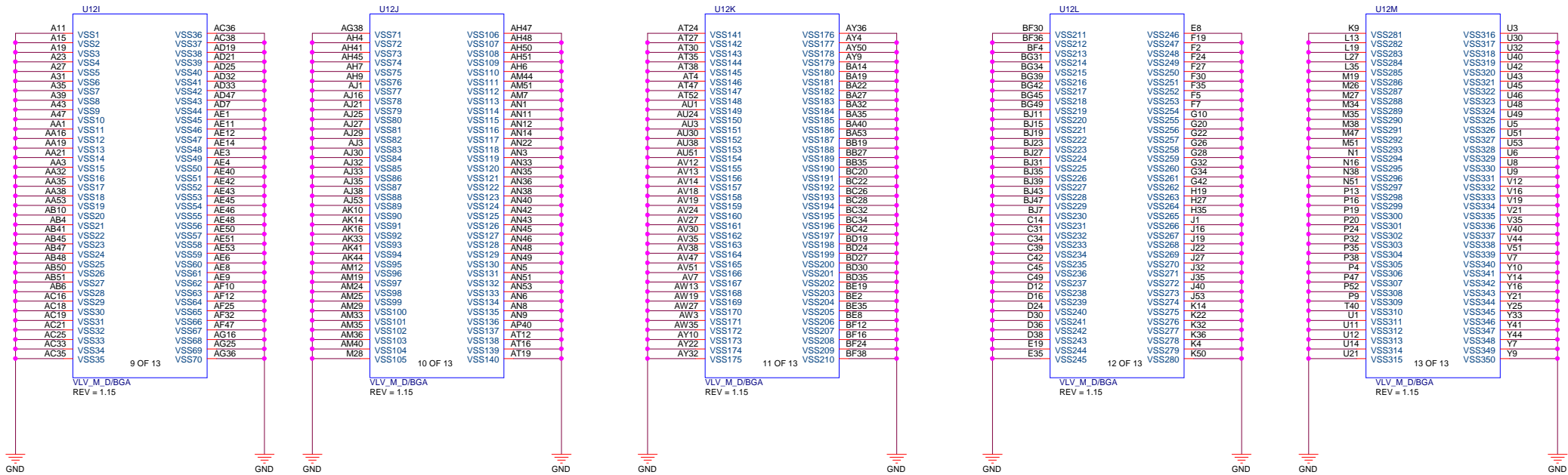
I2C\_6\_SDA R118 560 4  
I2C\_6\_SCL R119 560 4  
I2C\_5\_SDA R140 2.2K 4  
I2C\_5\_SCL R145 2.2K 4  
TP\_NC R155 2.2K 4  
TP\_NC1 R156 2.2K 4













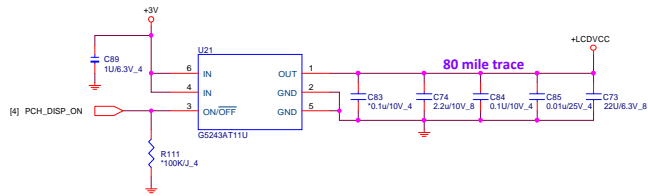
+VDDQ\_VTT



A10	107	A9
		A10/AD

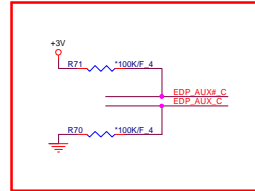
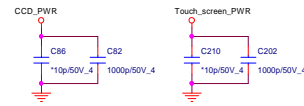
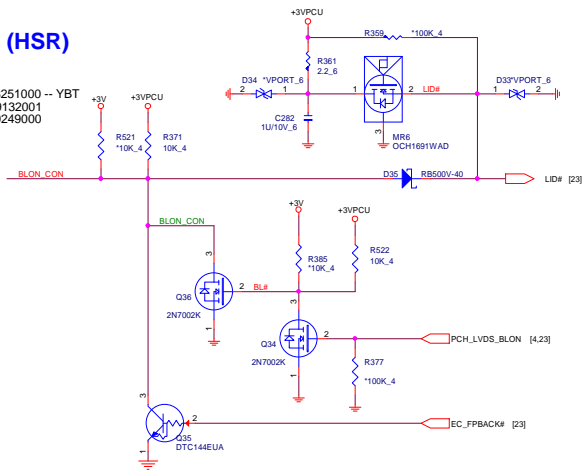


## LVDS Conn.



## HALL IC (HSR)

1st source : EOD  
2nd source : AL008251000 -- YBT  
3rd source : AL009132001  
4th source : AL009249000



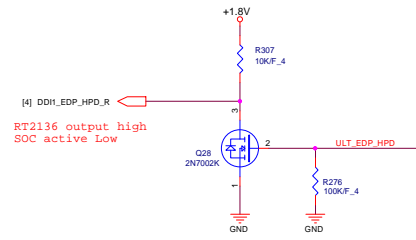
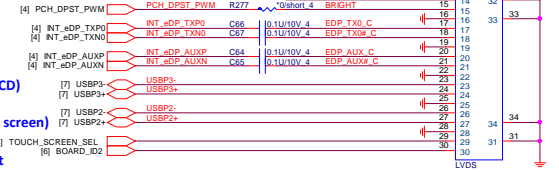
For ANGEL panel

USB to Connector (CCD)

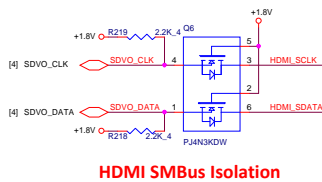
USB to Connector (Touch screen)

Touch screen SEL.  
Auto enable/disable touch panel USB port

Touch screen ON/OFF

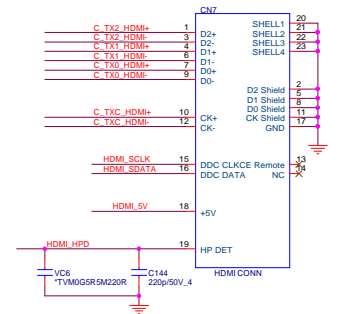
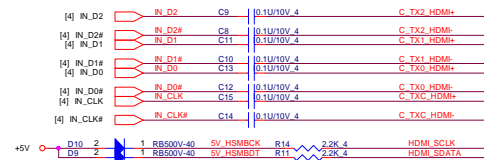
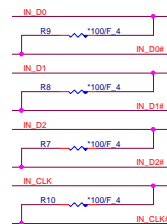


## HDMI Conn.

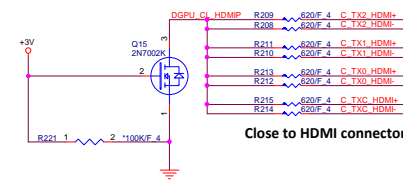
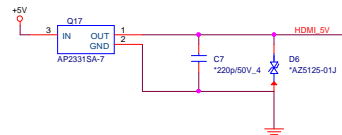
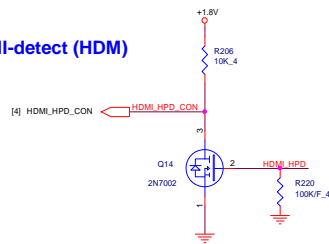


HDMI SMBus Isolation

## EMI (EMC)

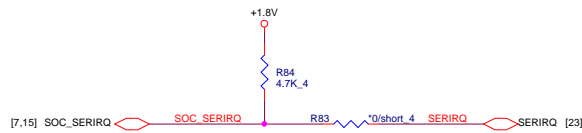


## HDMI-detect (HDM)

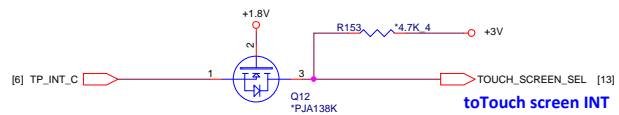
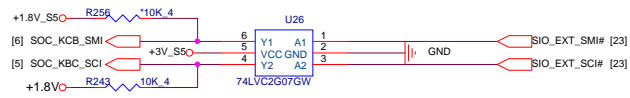
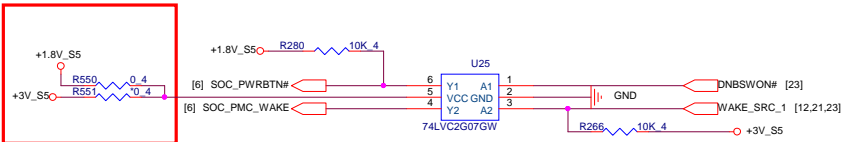
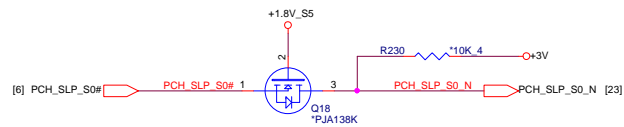


Close to HDMI connector

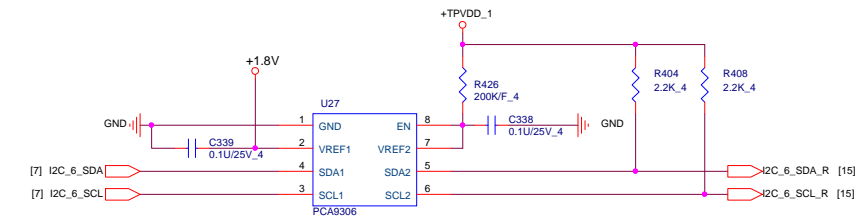
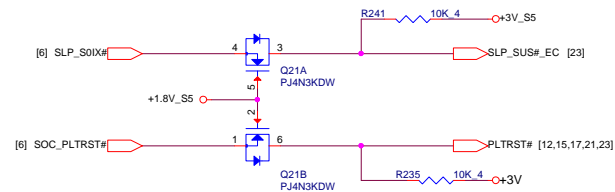
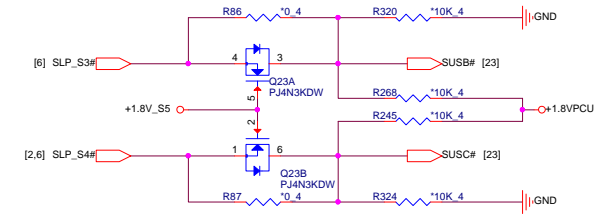
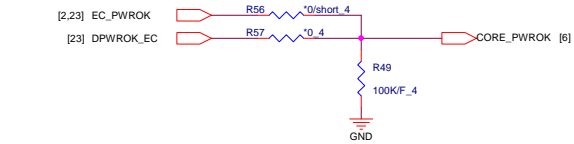
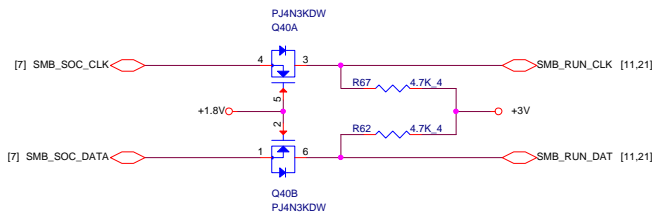
[6,7,9,32] +1.8V\_S5  
 [2,9,12,15,16,17,21,23,29,30,32] +3V\_S5  
 [4,5,6,7,9,12,13,15,16,20,21,23,32] +1.8V  
 [4,7,9,11,12,13,15,16,17,19,20,21,23,30,32] +3V



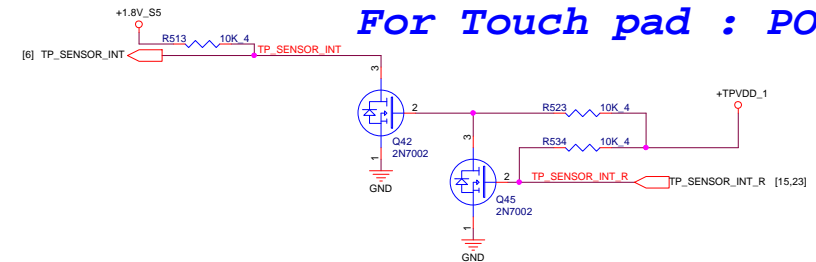
**Reserve for +1.8V new EC**



**toTouch screen INT**



**For Touch pad : POWER-A**



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**PROJECT : ZHK**

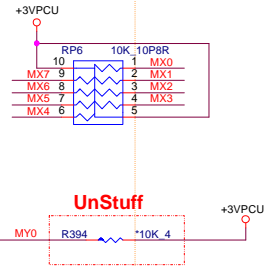
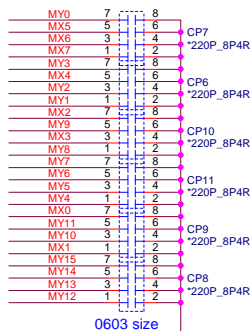
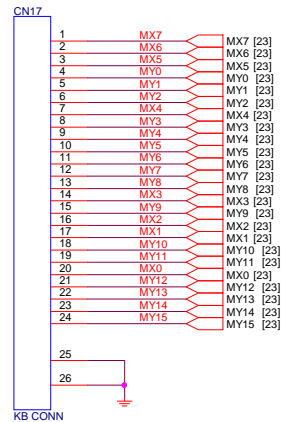
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	Level Shifter	1A
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## KEYBOARD (KBC)

<20110214(E1A)>  
Change CP1-CP6 footprint from  
8p4r-0402-smt to 8P4R, for SMT open issue.

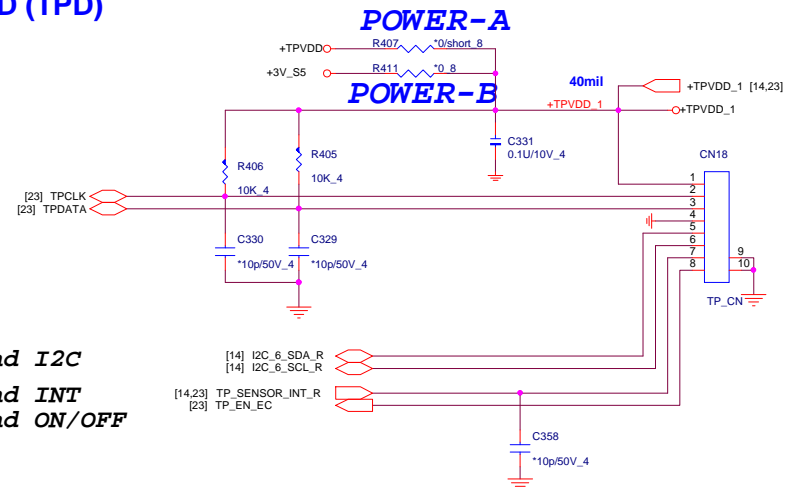
<EMI>

### INTERNAL KEYBOARD STRIP SET (KBC)



Rev: B (C-test) CN17 change ACS P/N from DFFC24FR000 to DFFC24FR110

## TOUCH PAD (TPD)

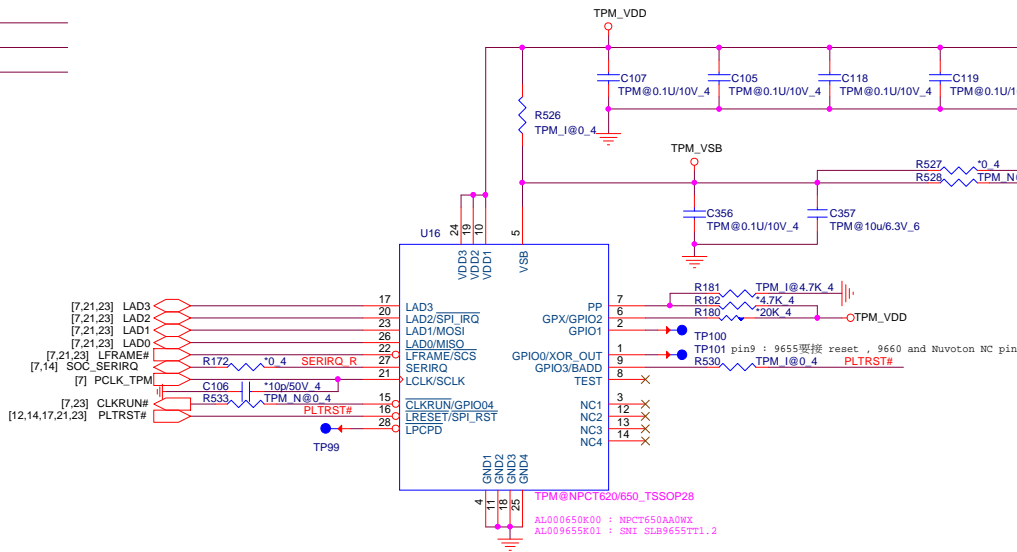


Touch pad I2C  
Touch pad INT  
Touch pad ON/OFF

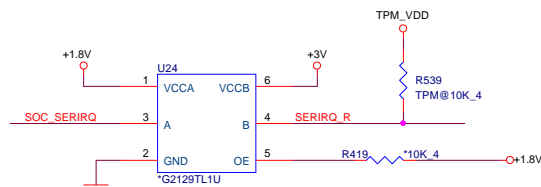
15

ACER DEFINE  
VDD  
PS2-CLK  
PS2-DATA  
GND  
I2C-DATA  
I2C-CLK  
ATTN (INT)  
SER-OFF.

## TPM (TPM)



TPM\_N for 新唐  
TPM\_I for 英飛凌--- default



note: serie need to add level shift



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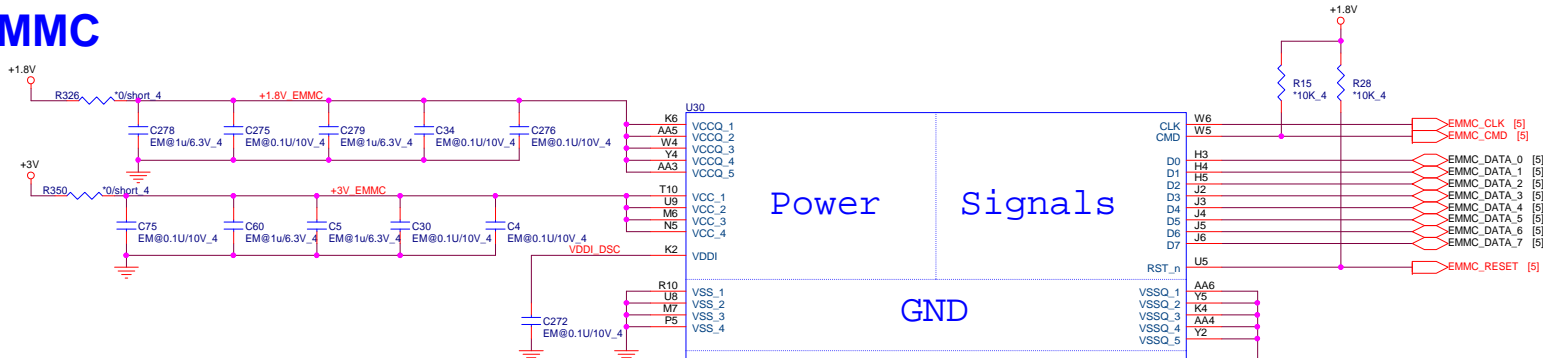
Size	Document Number	Rev
	KB/BT/TP	1A

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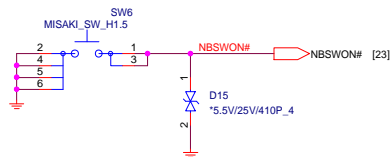
# eMMC

16

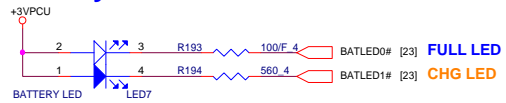


+5V [13,19,32]  
+3VPCU [6,8,13,15,19,23,25,26,27,32]  
+3V [4,7,9,11,12,13,14,15,17,19,20,21,23,30,32]  
+3V\_SS [2,9,12,14,15,17,21,23,29,30,32]

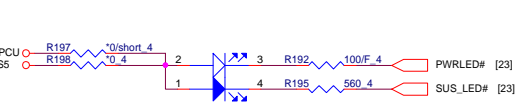
## PWR button



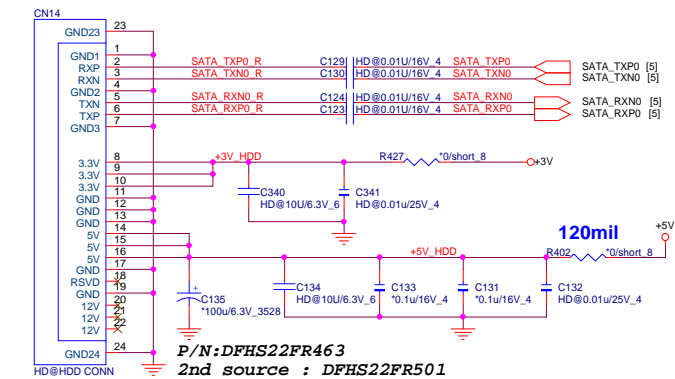
## Battery indicator



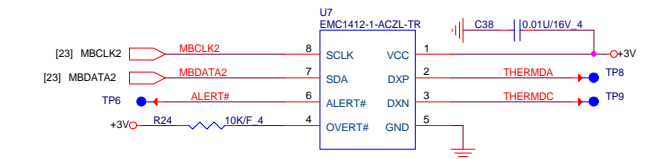
## PWR indicator



## SATA HDD



## CPU Thermal sensor(THS) / MB Local TEMP



Main:AL001412003 EMC1412-1-ACZL-TR(98h)  
2nd:AL000431014 TMP431ADGKR(98h)




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HDD/HaiVeMMC/LED  
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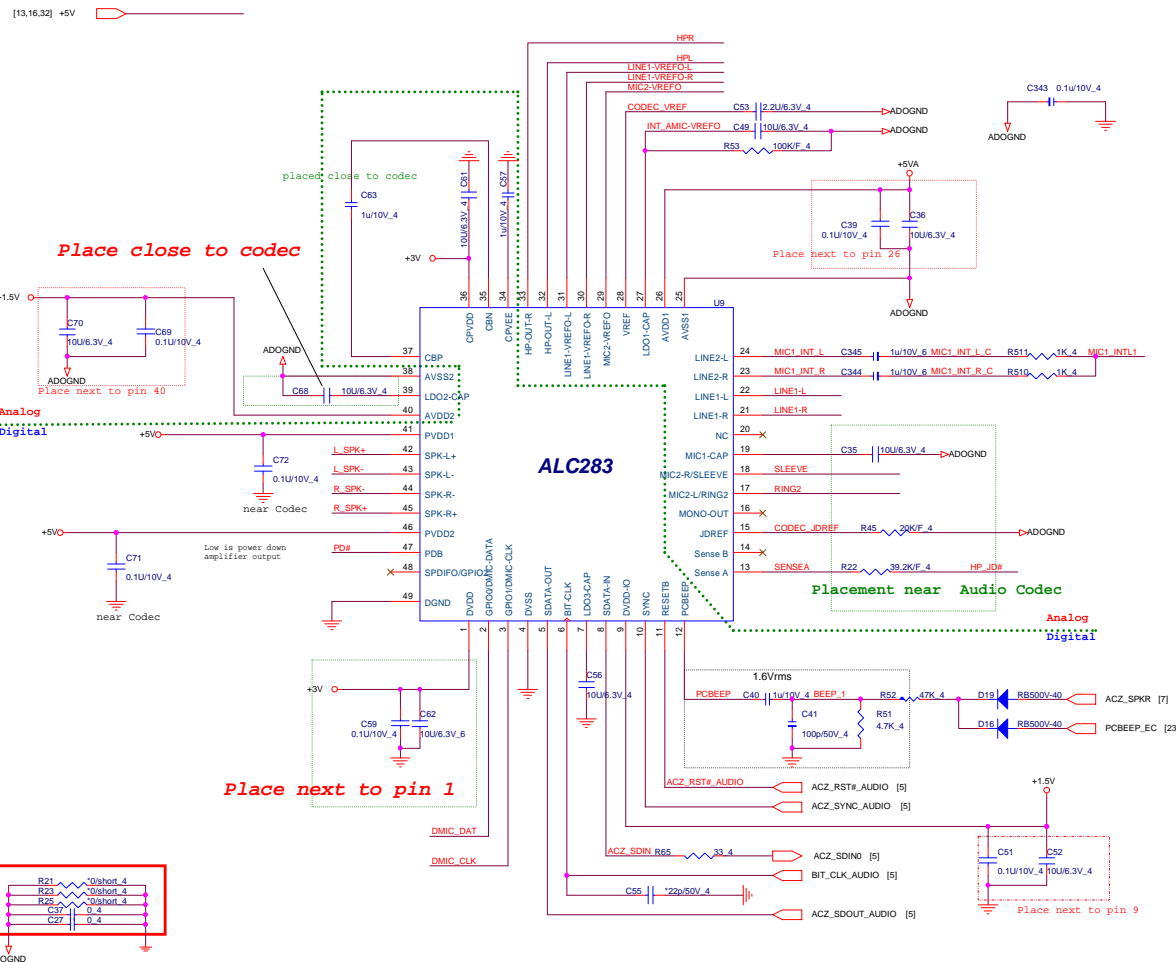
Rev 1A



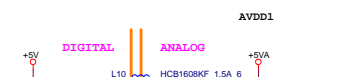


 <b>Quanta Computer Inc.</b> <b>PROJECT : ZHK</b>		
Size	Document Number	Rev
	<b>USB / eMMC CONN</b>	<b>1A</b>
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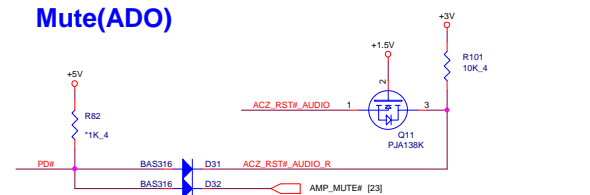
## Codec(ADO)



### Codec PWR 5V(ADO)

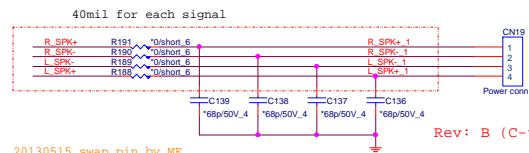


## Mute(ADO)



## Internal Speaker

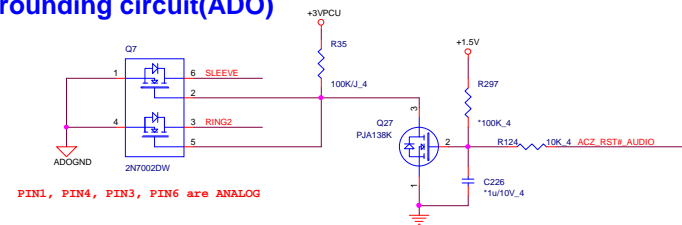
footprint 88266-040xx-xxx-4p-1



20130515 swap pin by ME.

Rev: B (C-test) CN19 change ACS P/N from DFHD04MRA75 to DFHD04MR211

## Grounding circuit(ADO)



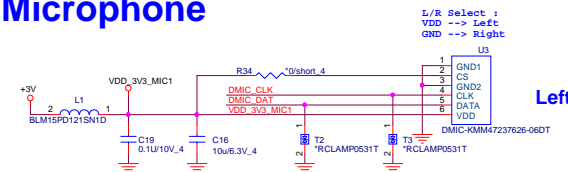
PIN1, PIN4, PIN3, PIN6 are ANALOG

INT MIC array

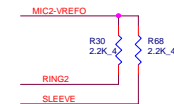


cap place close to MIC-connector

## Microphone

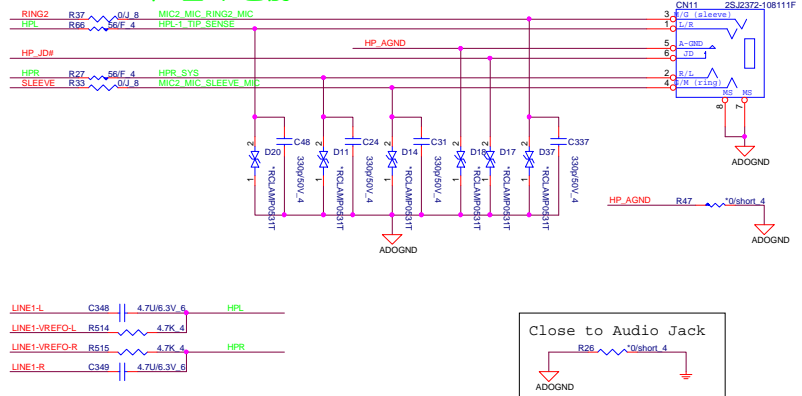


Left

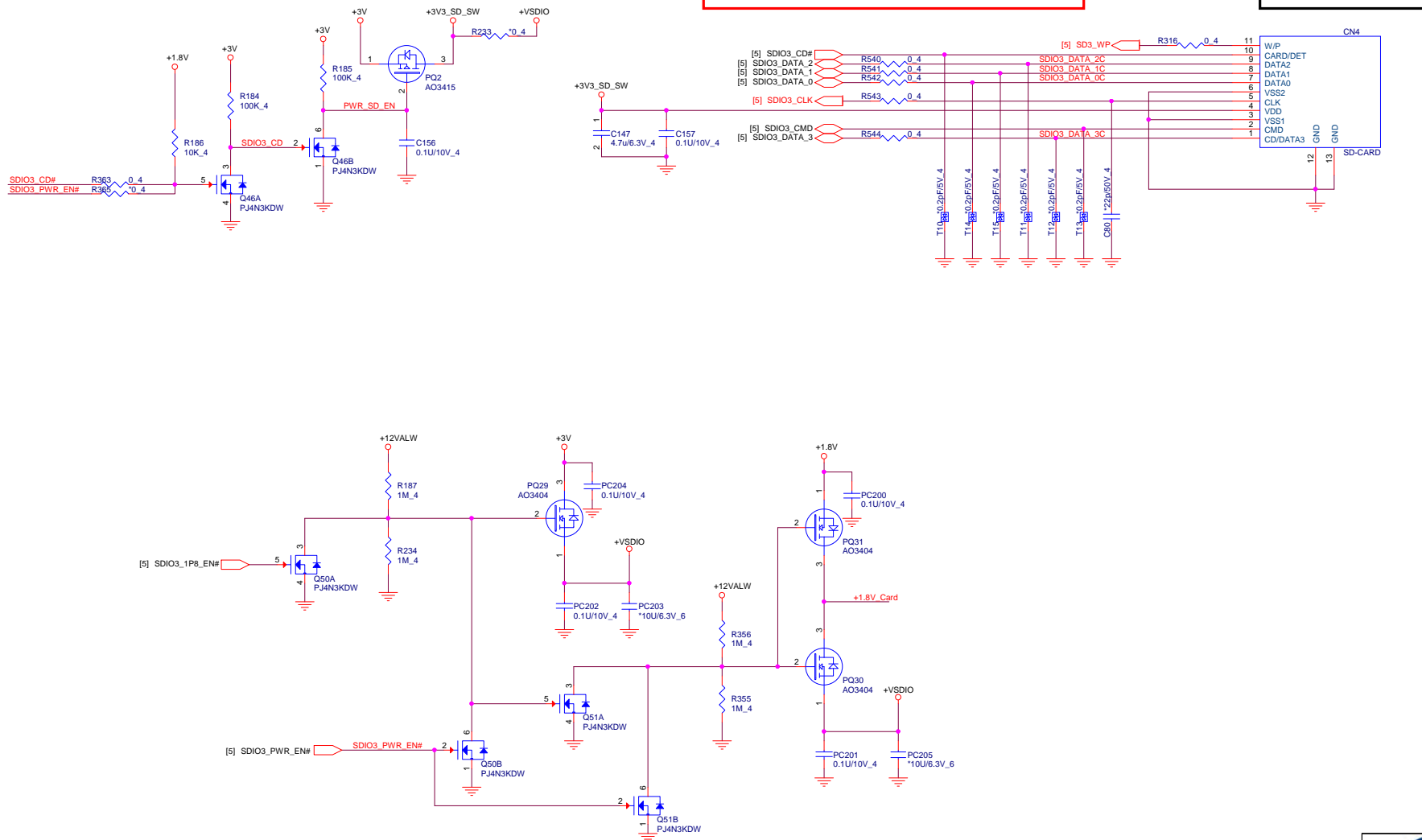


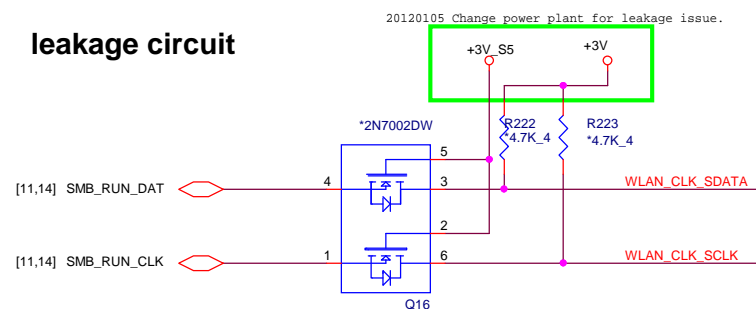
note : change next P/N: DFTJ06FR653  
CONN DIP PHONE JACK 6P FR(H4.5)  
foot print: phjk-2sj3072-108111f-6p


HP\_MIC 上/下/左/右包覆AGND

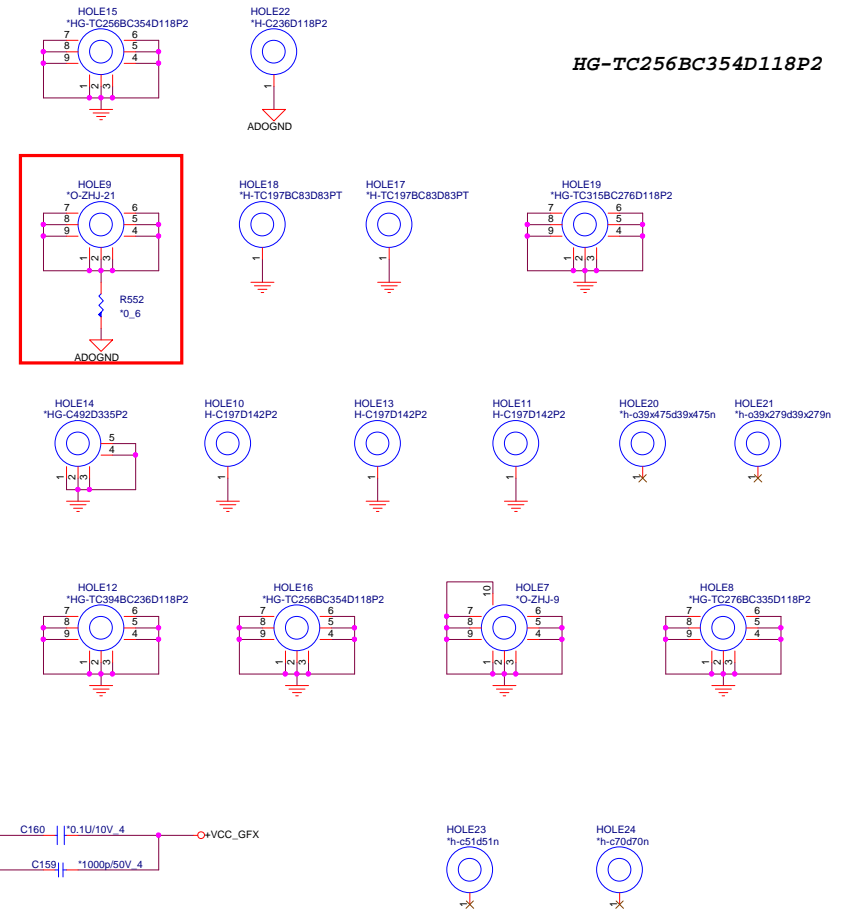


Close to Audio Jack






 <b>Quanta Computer Inc.</b> <b>PROJECT : ZHK</b>		
Size	Document Number <b>WiFi &amp; BT</b>	Rev <b>1A</b>
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For EC control thermal protection (output 3.3V)

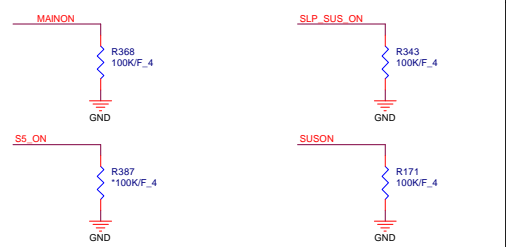
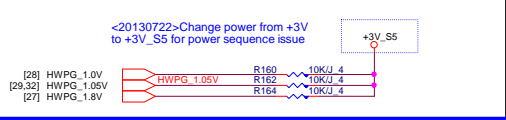
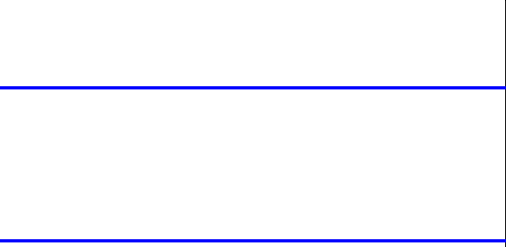
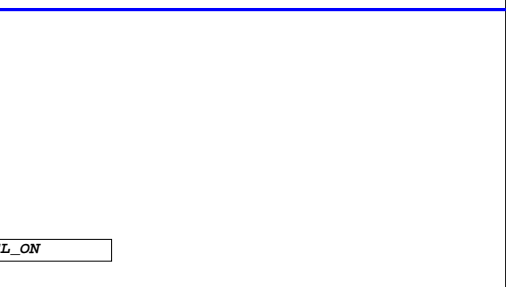
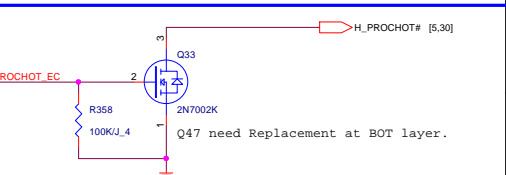
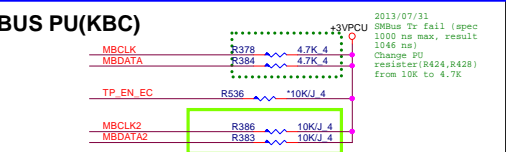
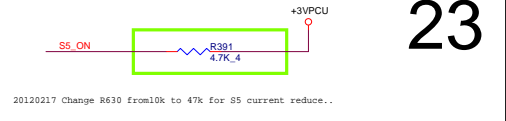
note: PR173 change to 1.5k/F  
CS21502FB14 RES CHIP 1.5K +-1% 1/16W(0402)

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<b>Thermal / Hole</b>		
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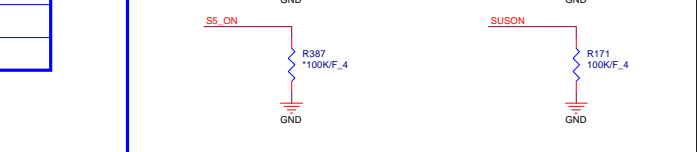
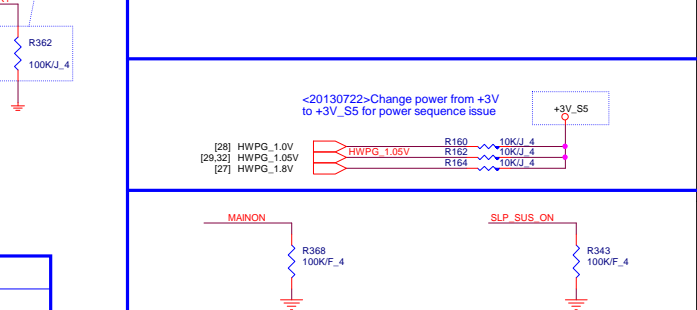
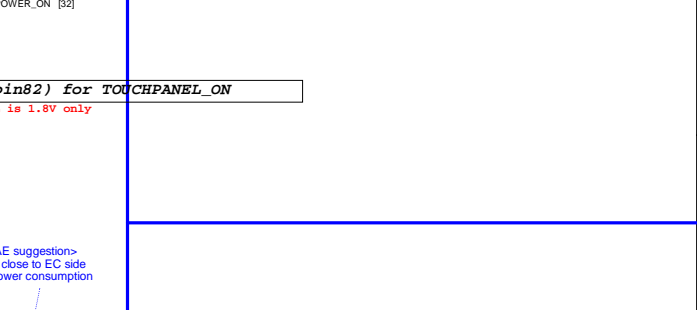
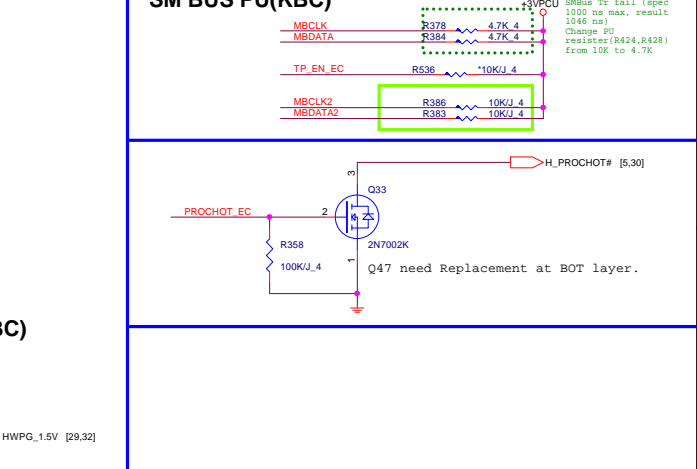
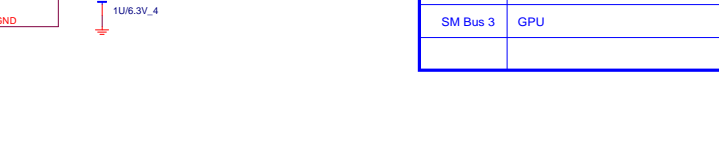
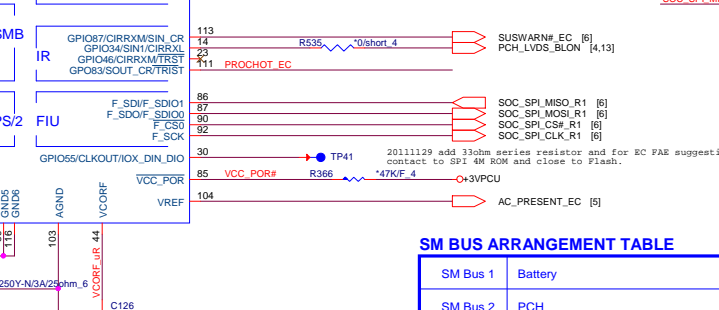
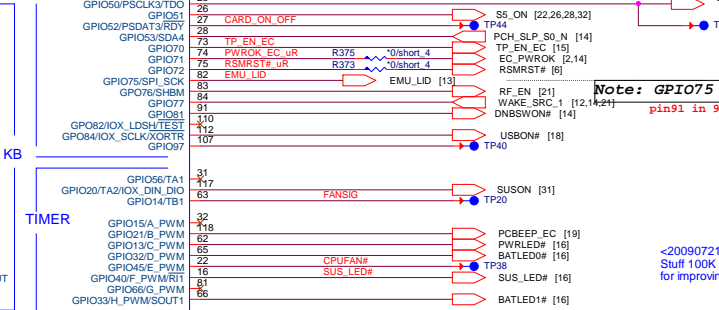
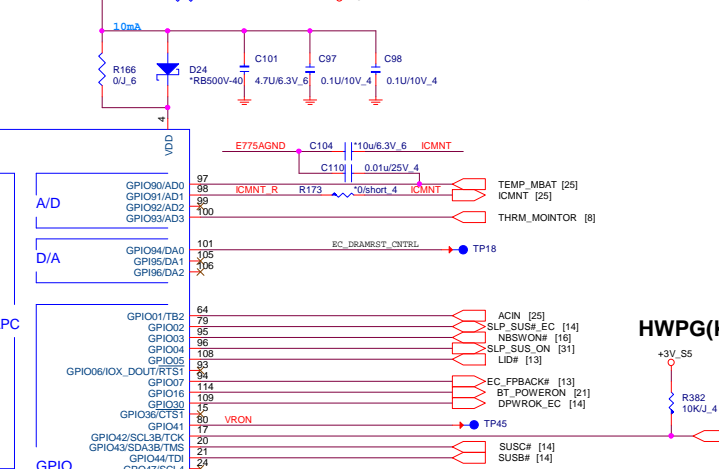
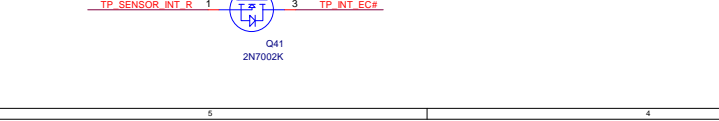
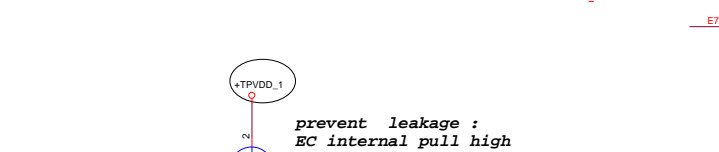
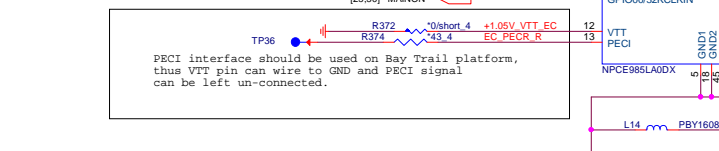
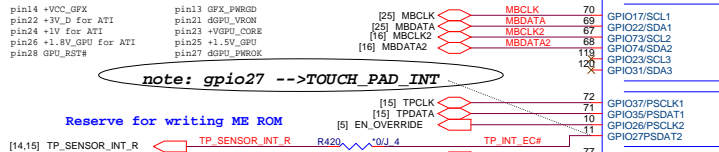
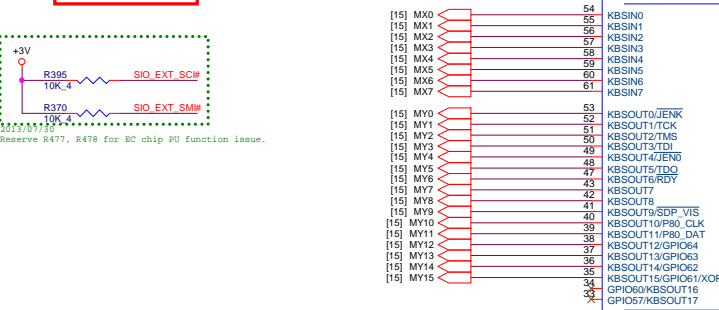
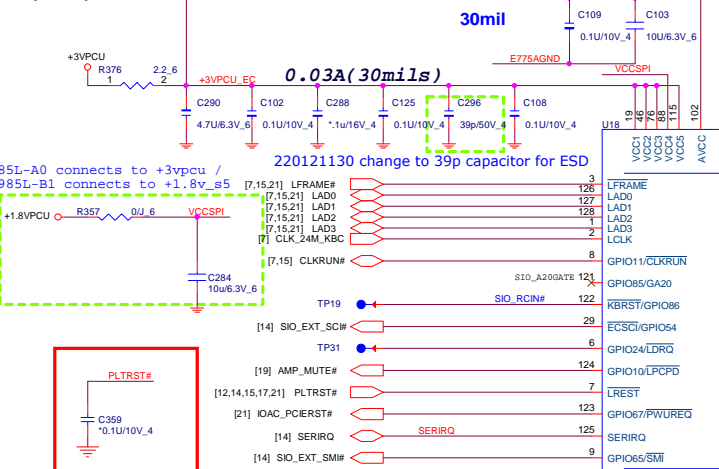


1.8V p/n: AJ009850F02  
Discription: IC CONTROLLER( 128P)NPCE985LB1DX( LQFP)

Note:  
GPIO75 EMU\_LIDTouch panel enable/disable#Follow Z&A -->ZHJ None  
GPIO70 TP\_EN\_EC Touch pad enable/disable# -->ok  
GPIO27 TP\_INT\_EC Touch pad interrupt



EC(KBC)




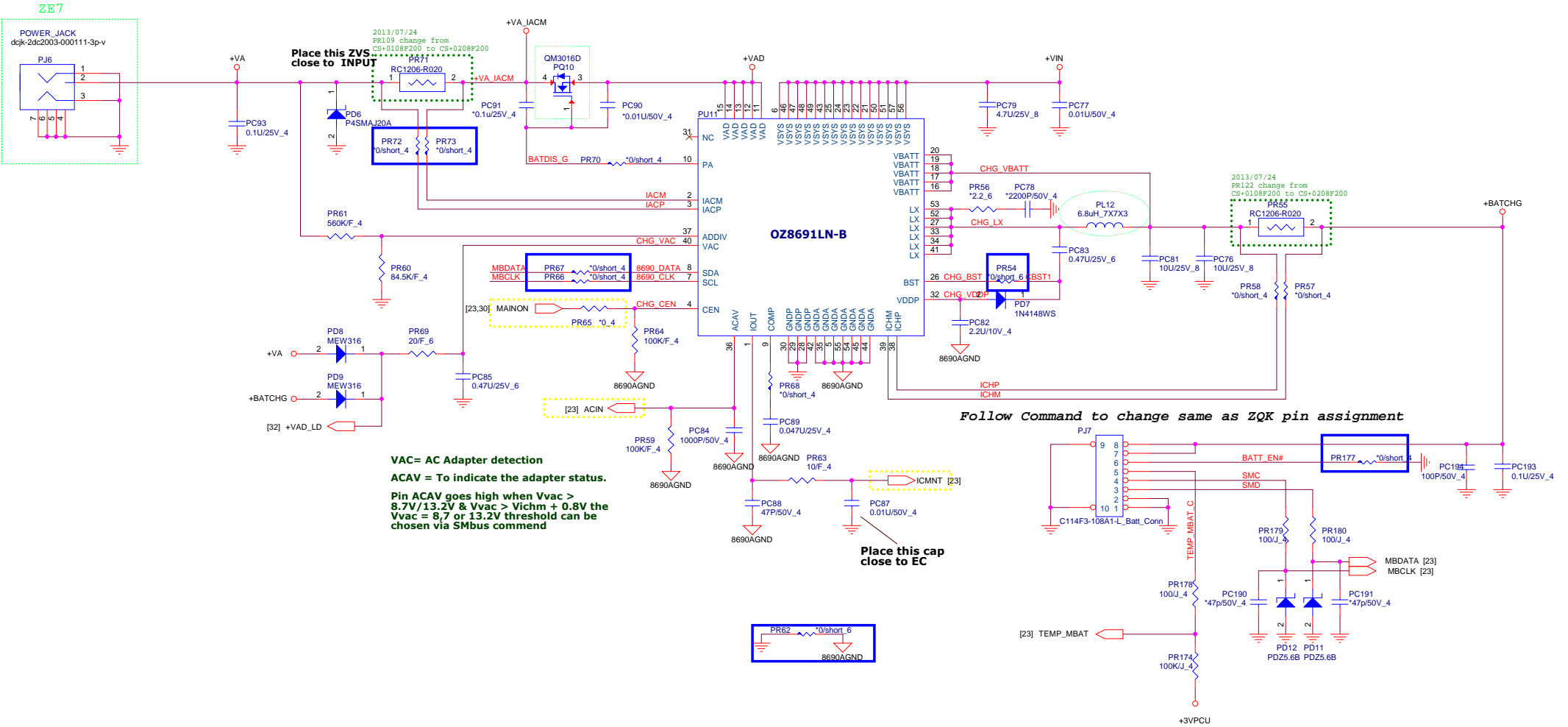
SM BUS ARRANGEMENT TABLE	
SM Bus 1	Battery
SM Bus 2	PCH
SM Bus 3	GPU

Bay Trail-M S4/S5 to S0 (Power Up) Sequence

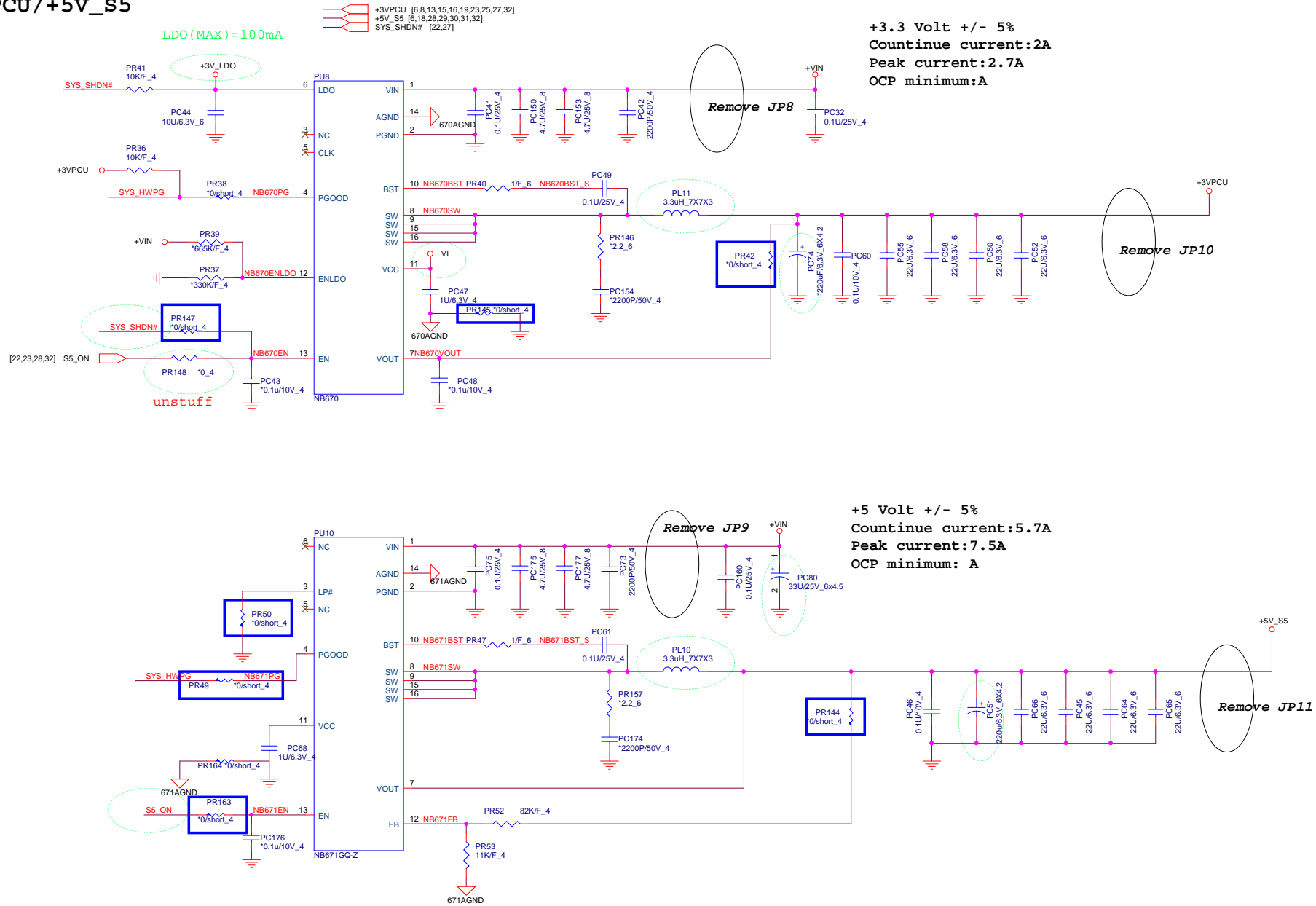
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		<b>Quanta Computer Inc.</b>	
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<b>Power sequence</b>			
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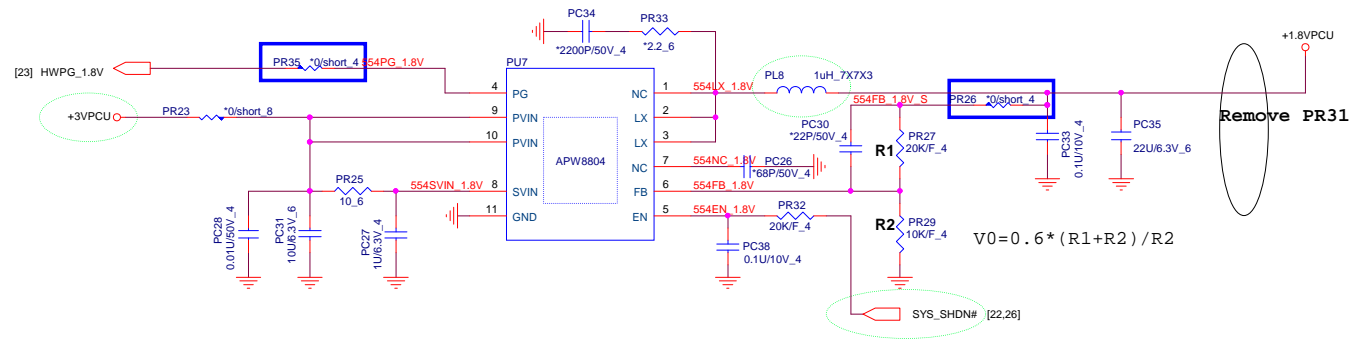


## DC/DC +3VPCU/+5V\_S5



[14,23,32] +1.8VPCU  
[6,8,13,15,16,19,23,25,26,32] +3VPCU

+1.8V Volt +/- 5%  
Countinue current:0.08A  
Peak current:0.11A  
OCP minimum:A



Quanta Computer Inc.

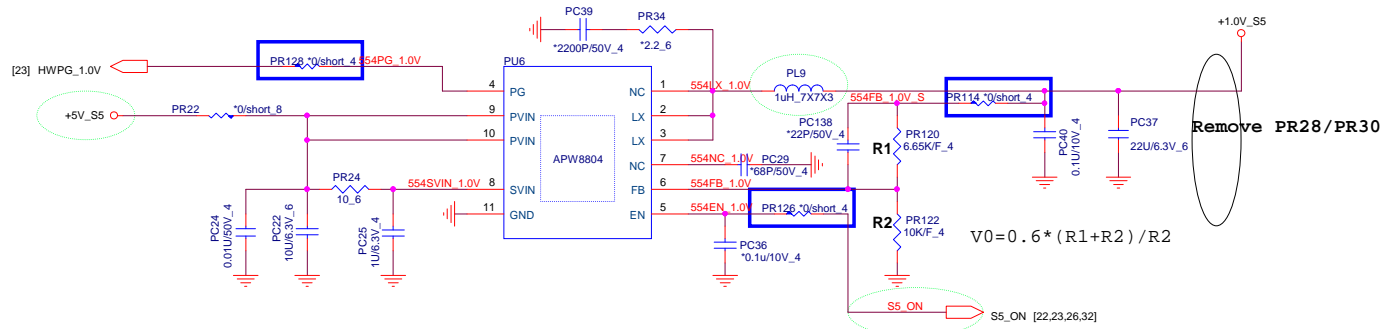
PROJECT : ZHJ

Size	Document Number	Rev
	<b>+1.8VPCU</b>	1A

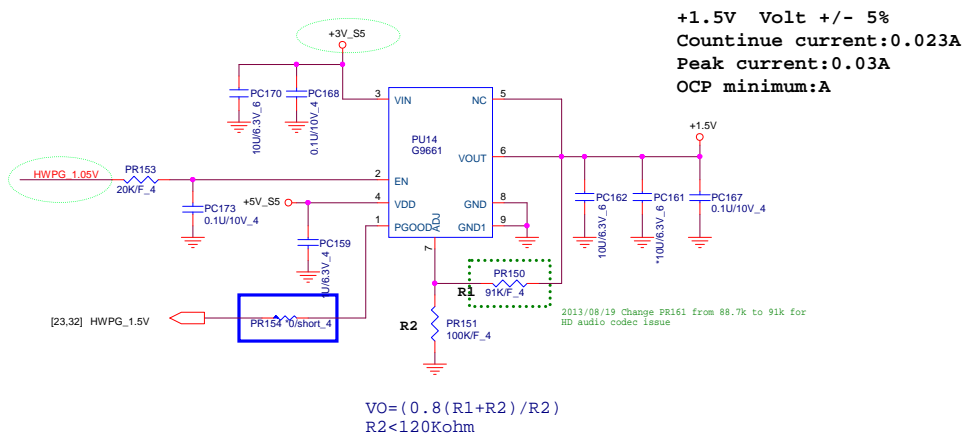
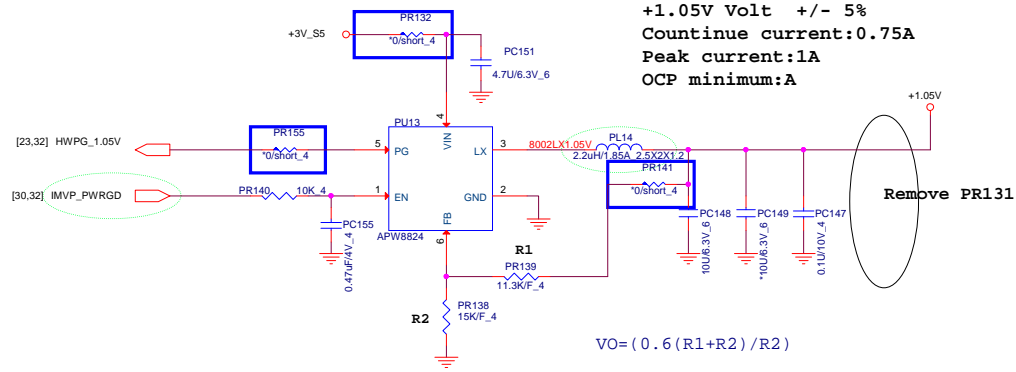
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+1.0V Volt +/- 5%  
 Countinue current:2.4A  
 Peak current:3.2A  
 OCP minimum:A

[9,32] +1.0V\_S5  
 [6,18,26,29,30,31,32] +5V\_S5



[2,9,12,14,15,16,17,21,23,30,32] +3V\_S5  
 [9] +1.05V  
 [9,19] +1.5V

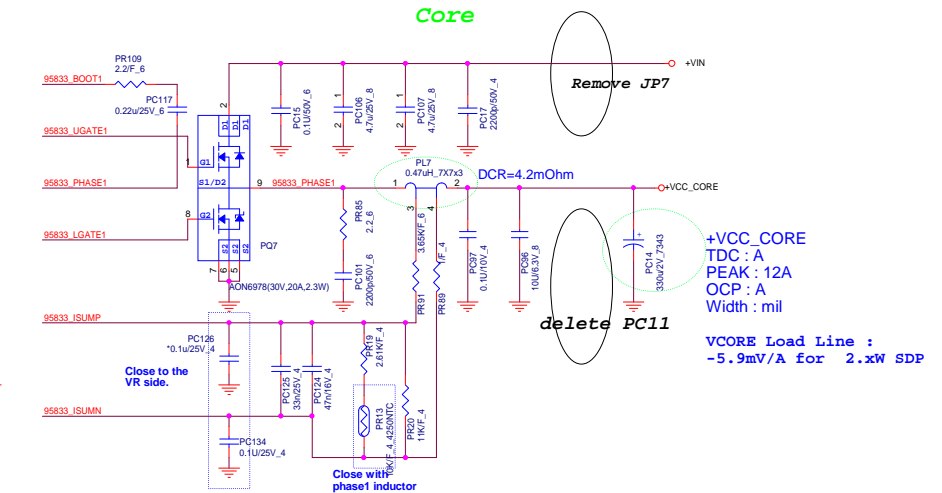
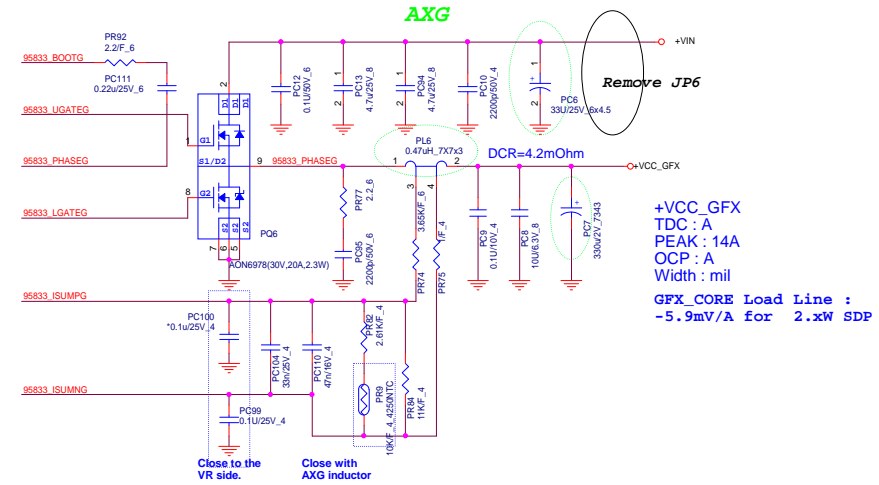
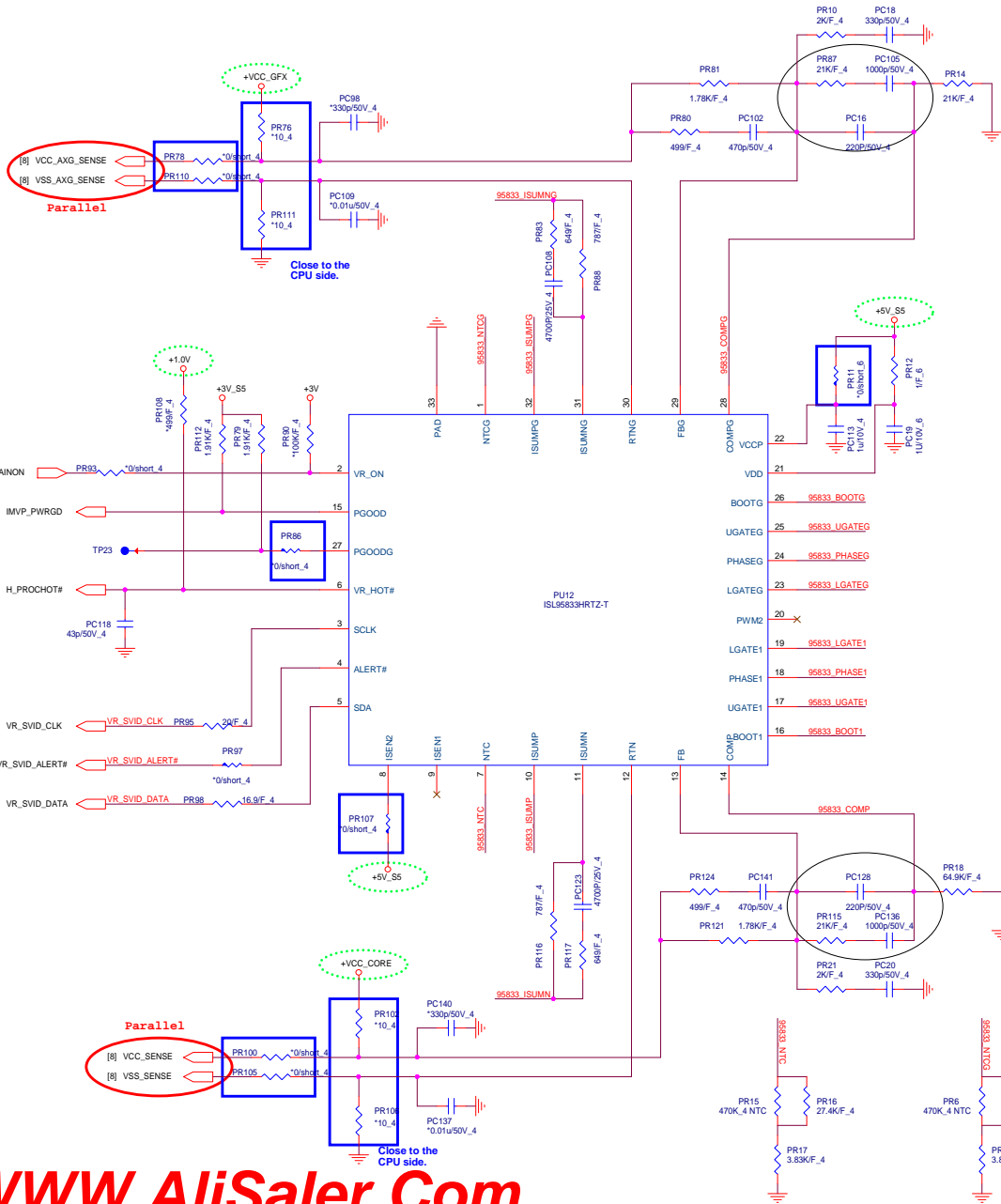
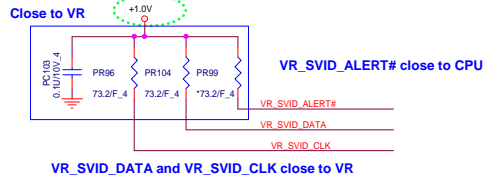


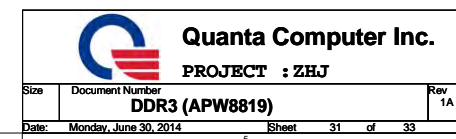
**Quanta Computer Inc.**  
**PROJECT : ZHJ**

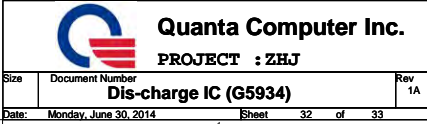
Size	Document Number	Rev
	<b>+1.05V/1.5V</b>	<b>1A</b>
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20130617 Change +1.05V to +1.0V







Model	Version	CHANGE LIST			
ZHK	3A	1. Stuff C27 & C37 for ESD. (page19) 2. Reserve C209 for EMI (page23) 3. EMI Change 0 EMI to 2.2 ohm for ESD(page13) 4. Reserve R545 ,R546 ,R547 ,R548 & R549 for Cardread function(page20) 5. Reserve R552 for ESD (page23) 6. Reserve R70 & R71 for cDP AUX (page13) 7. Add PQ33 for cardread function.			

DOC NO.	PROJECT MODEL :	ZHK	APPROVED BY:		DATE:		 <b>Quanta Computer Inc.</b> PROJECT : ZHK Change list-1
	PART NUMBER:		DRAWING BY:		REVISION:		