

# ZHKD UMA(11.6")

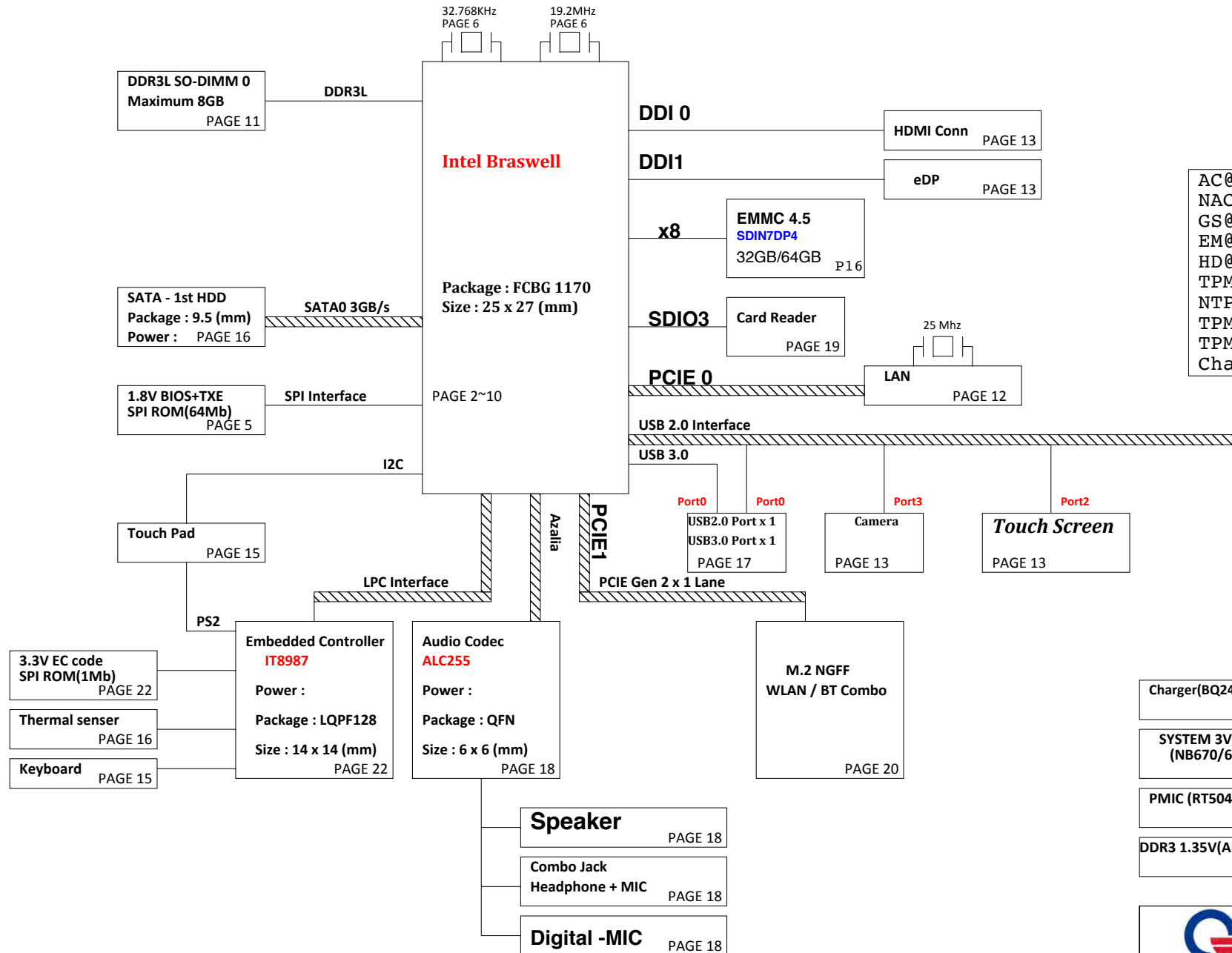
## Intel Braswell Platform Block Diagram


1

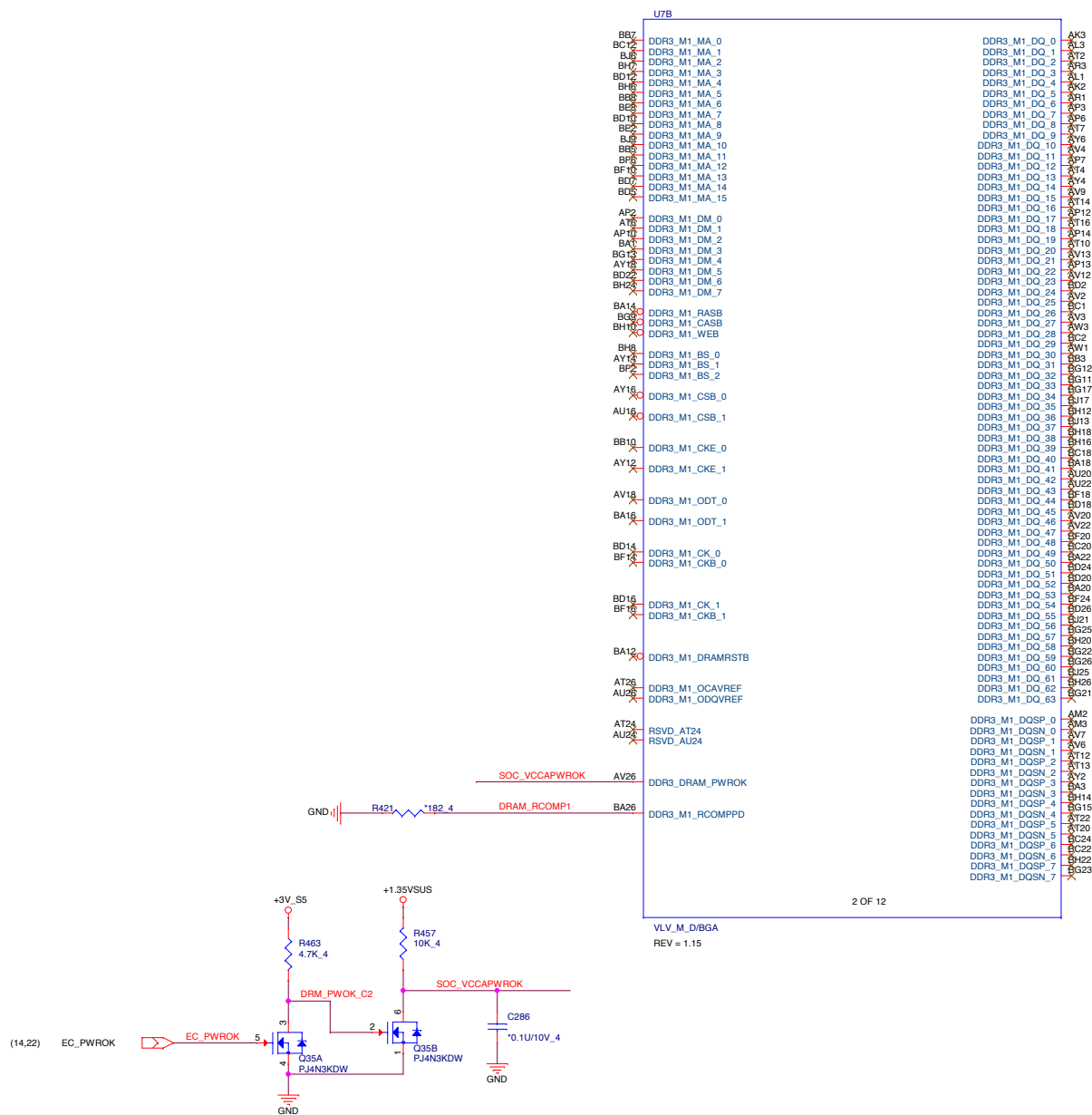
PCB 6L STACK UP

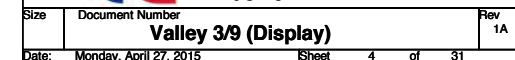
LAYER 1 : TOP  
LAYER 2 : SGND  
LAYER 3 : IN1(High)  
LAYER 4 : IN2  
LAYER 5 : SVCC  
LAYER 6 : BOT

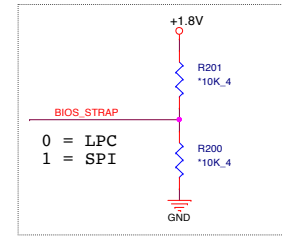
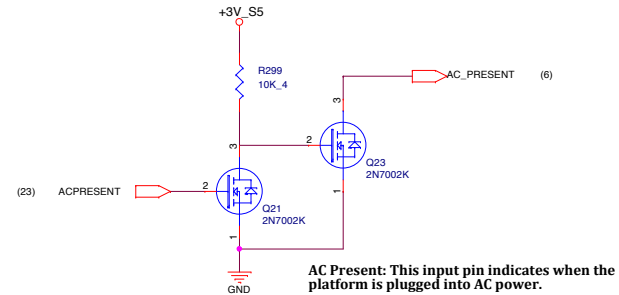
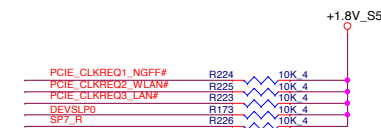
AC@ : IOAC  
NAC@ : Non-IOAC  
GS@ : G sensor  
EM@ : eMMC  
HD@ : HDD  
TPM@ : TPM  
NTPM@ : Non-TPM  
TPM\_I@ : 英飛凌  
TPM\_N@ : 新唐  
Change CPU & EMMC P/N

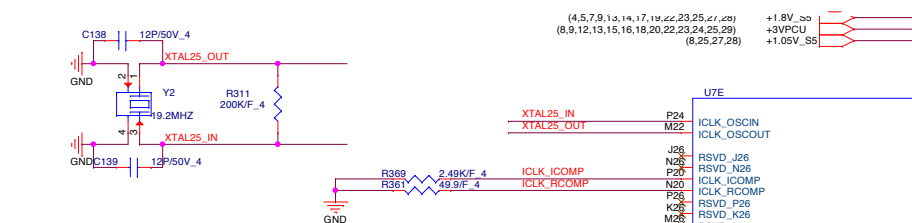


 <b>Quanta Computer Inc.</b> <b>PROJECT : ZHKD</b>	
Size	Document Number <b>Valley 1/9 (DDRA)</b>
Date:	Monday, April 27, 2015 Sheet 2 of 31







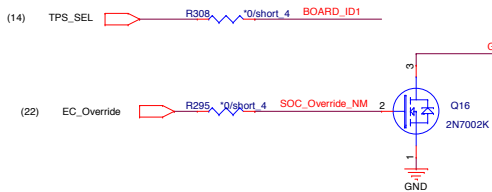
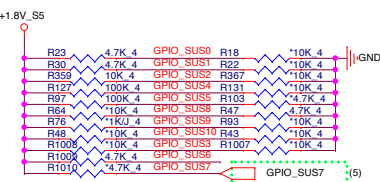


NGFF

WLAN

LAN

Hardware Strap	Strap Description
GPIO_SUS[0]	0 = DD10 not detected 1 = DD10 detected
GPIO_SUS[1]	0 = DD11 not detected 1 = DD11 detected
GPIO_SUS[2]	Top Swap(A16 Override) 0 = Change Boot Loader address 1 = Normal Operation
GPIO_SUS[4]	BIOS Boot Selection 0 = No SPI 1 = SPI
GPIO_SUS[5]	Security Flash Descriptors 0 = Override 1 = Normal Operation
GPIO_SUS[8]	ICLK_USB 2.0,DD1 SFR supply select 0 = Supply is 1.25V 1 = Supply is 1.05V
GPIO_SUS[9]	ICLK_USB 2.0,DD1 SFR Bypass 0 = No bypass 1 = Bypass with 1.05V (internal PU)
GPIO_SUS[10]	PMW Select 0 = Fuse controller 1 = PMW (internal PU)

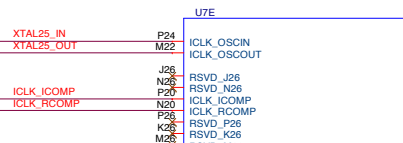


BOARD ID

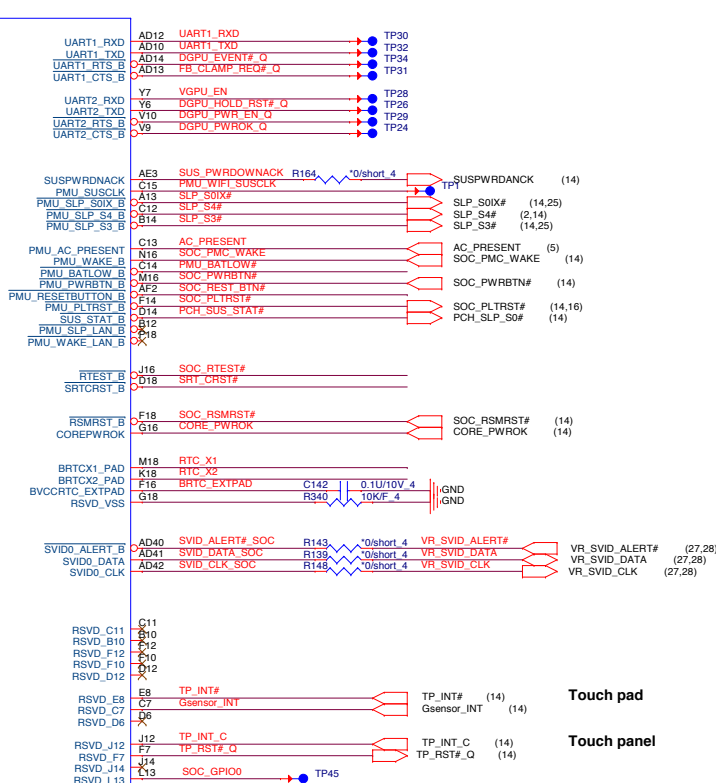
BOARD\_ID0 : "H" W/ G-Sensor; "Low" W/O G-Sensor  
 BOARD\_ID1 : "H" W/ touch panel; "Low" W/O touch panel  
 BOARD\_ID2 : "H" is UMA; "Low" is Dis  
 BOARD\_ID3 : TPM; HIGH=TPM; LOW=W/O TPM  
 BOARD\_ID4 : "Low" is for ZHKD,MB ID  
 BOARD\_ID5 : IOAC; High=IOAC,Low=non-IOAC

(4,5,7,9,13,14,17,19,22,23,25,27,28)  
 (8,9,12,13,15,16,18,20,22,23,24,25,28)  
 (8,25,27,28)

+1.8V\_S5  
 +3VPCU  
 +1.05V\_S5



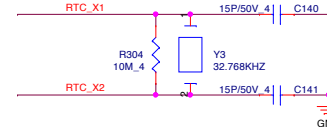
5 OF 12



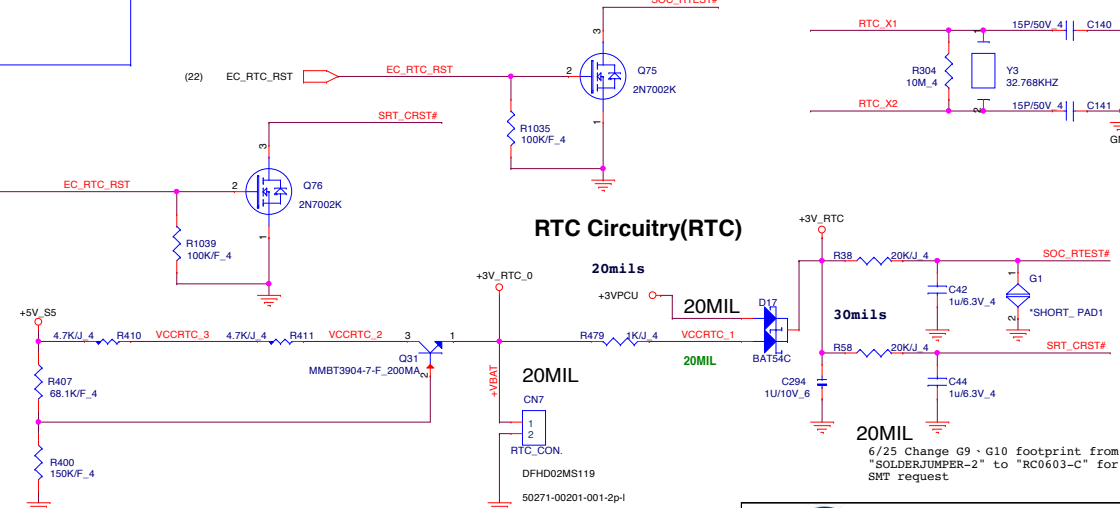
Touch pad

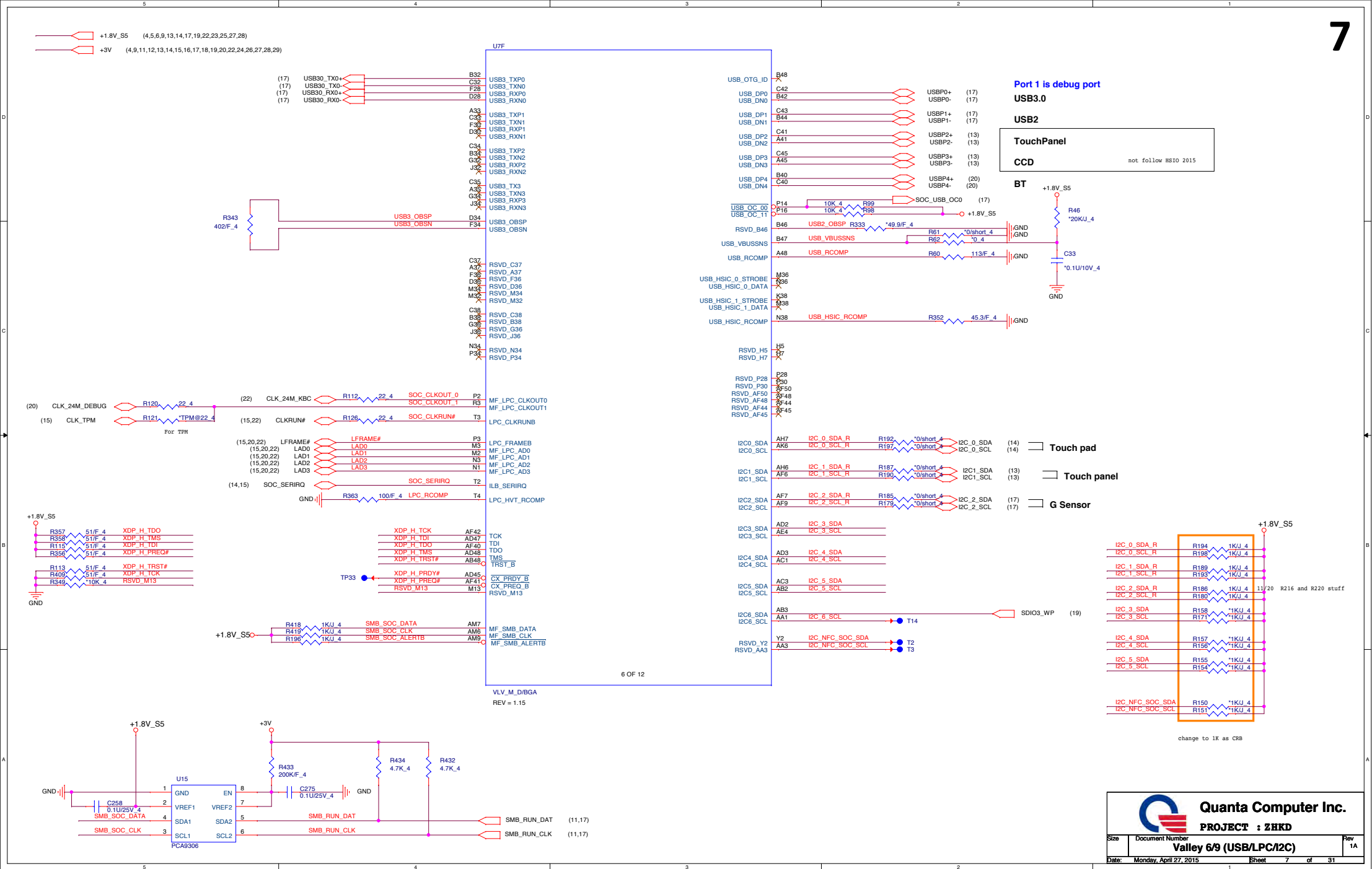
Touch panel

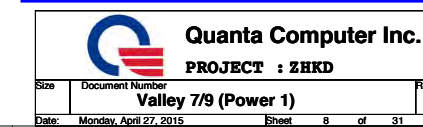
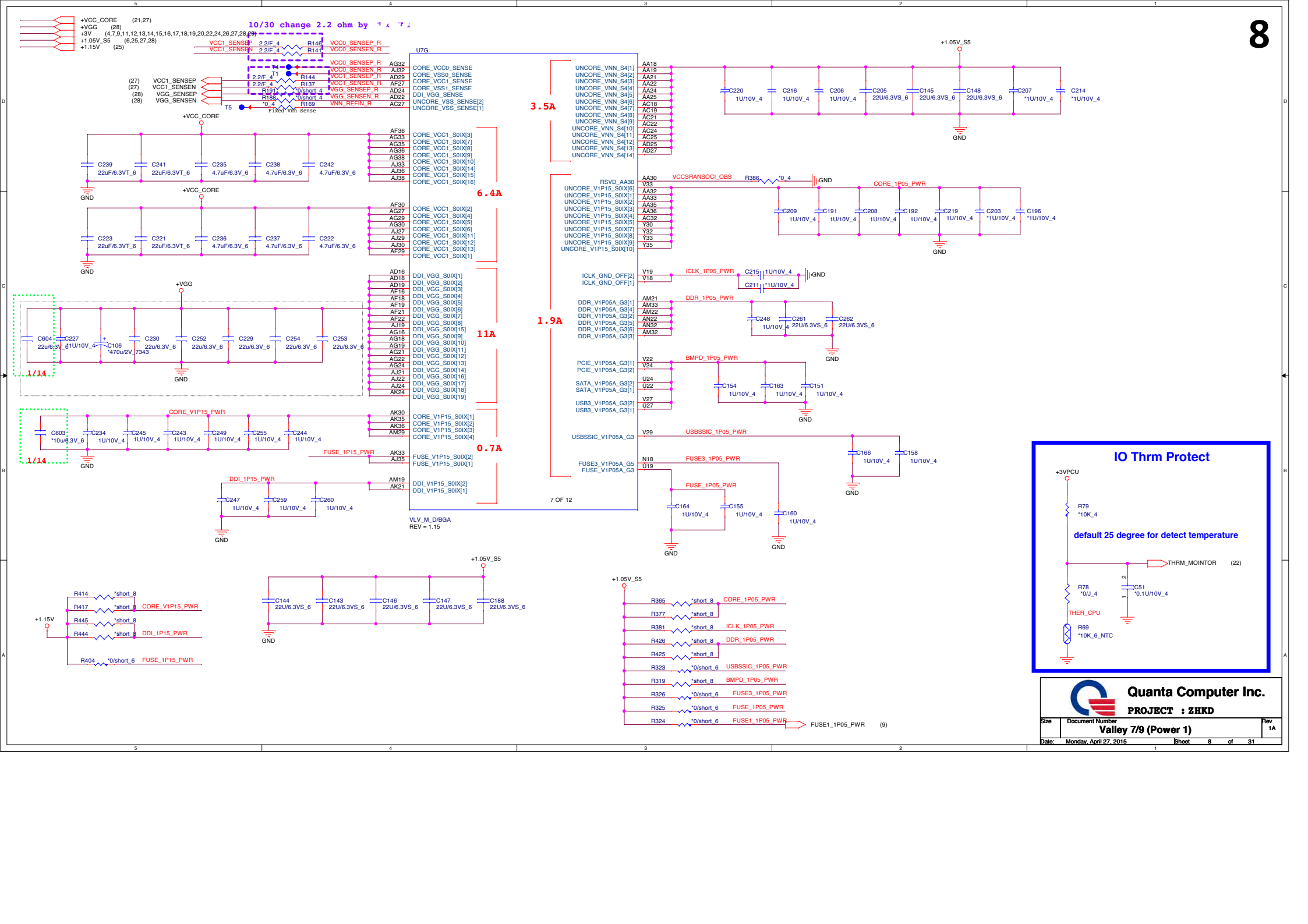
RTC Clock 32.768KHz

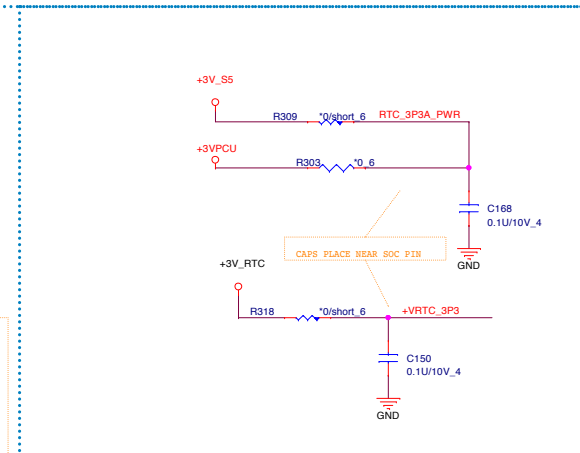
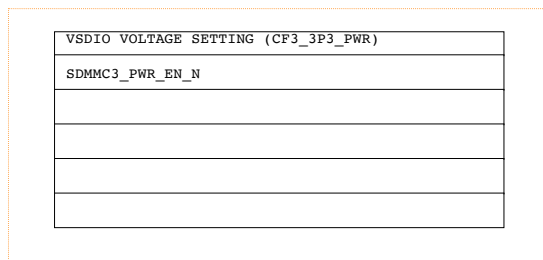
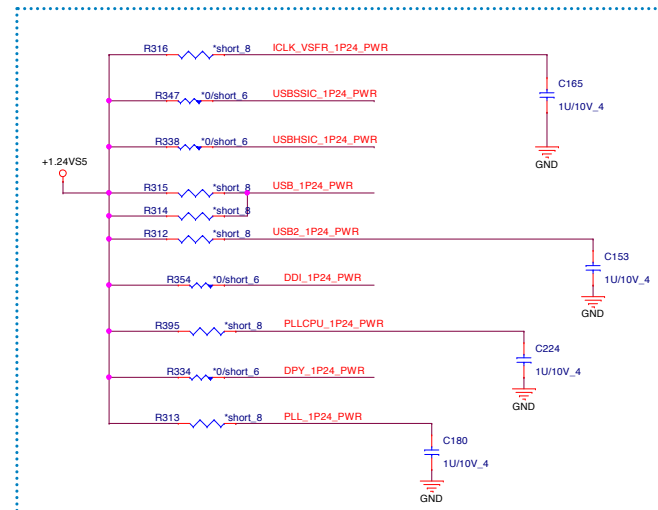


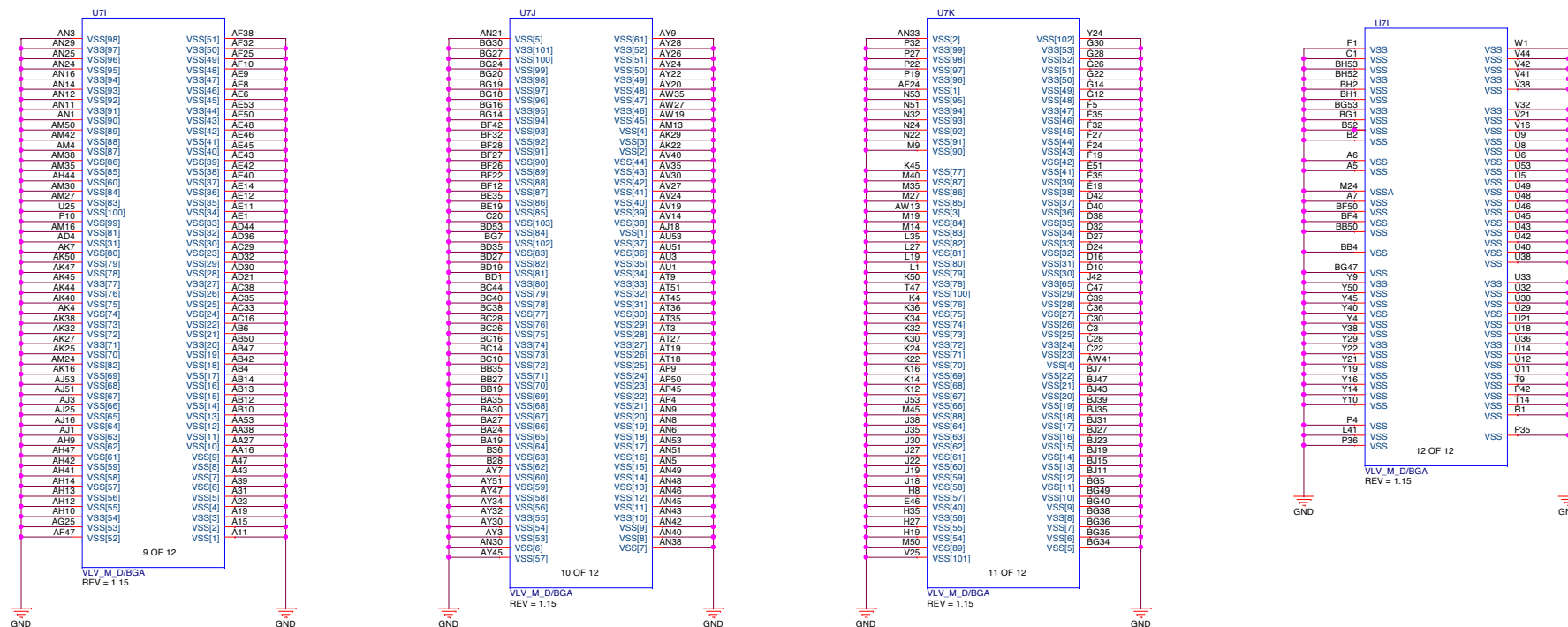
RTC Circuitry(RTC)

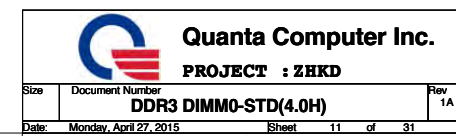
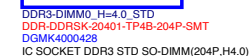




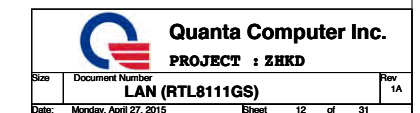
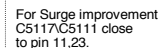




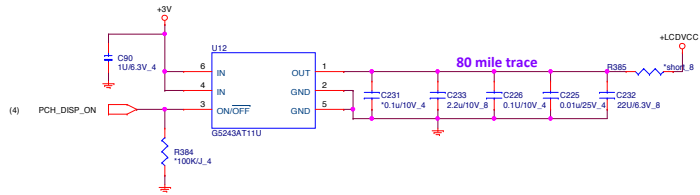




## Transformer

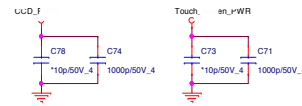
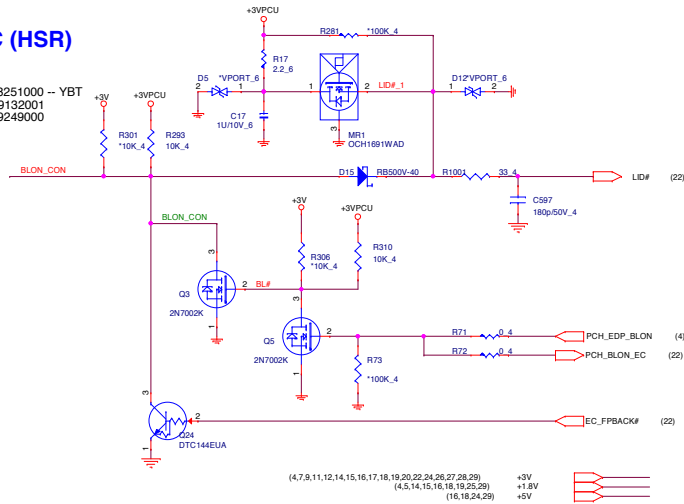


## LVDS Conn.



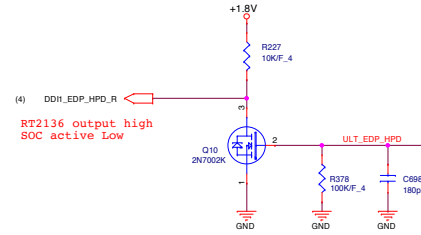
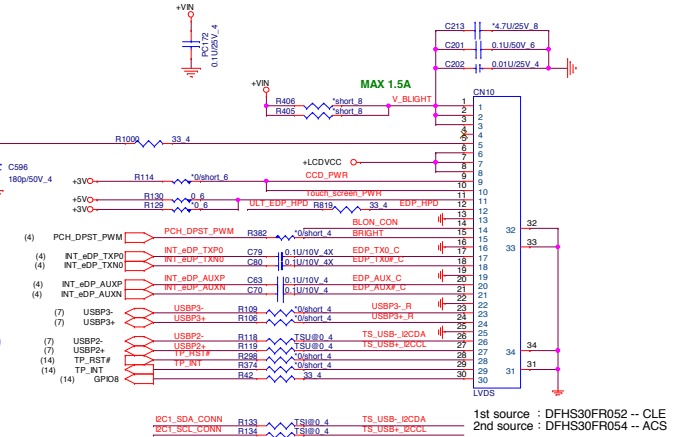
## HALL IC (HSR)

1st source : EOD  
2nd source : AL008251000 -- YBT  
3rd source : AL009132001  
4th source : AL009248000

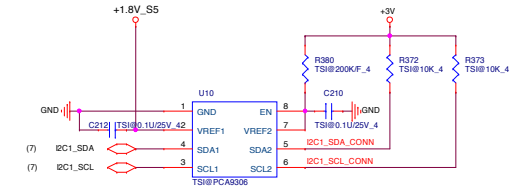


Touch screen ON/OFF

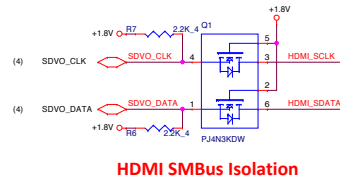
USB to Connector (CCD)  
USB to Connector (Touch screen)  
Touch screen SEL.



Touch screen level shift I2C(reserve)

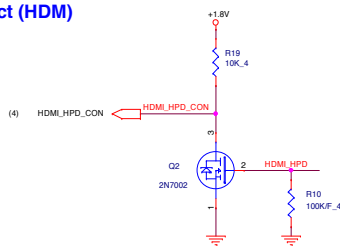


## HDMI Conn.

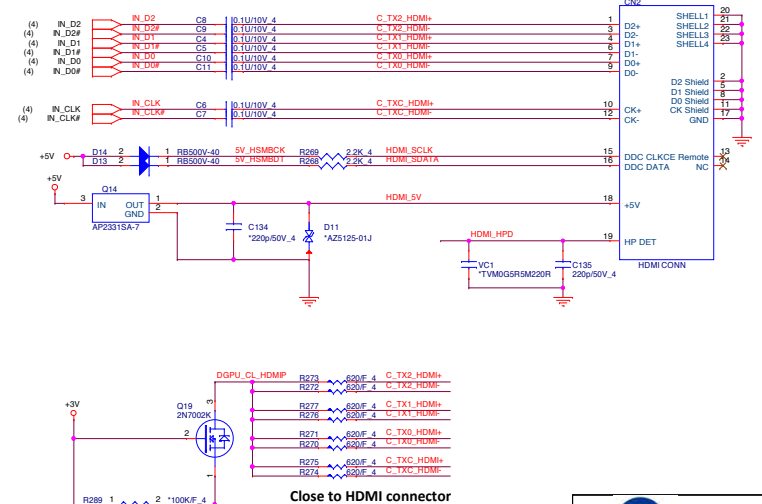
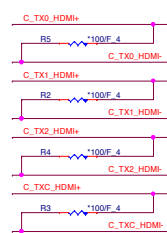


HDMI SMBus Isolation

## HDMI-detect (HDM)

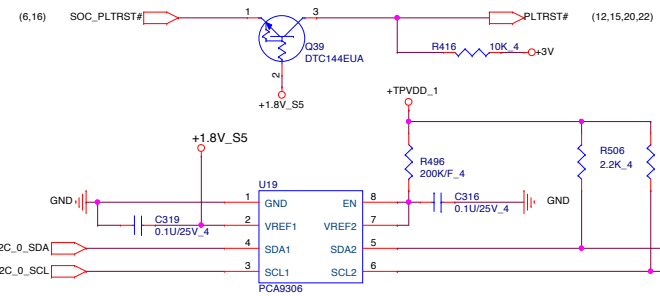
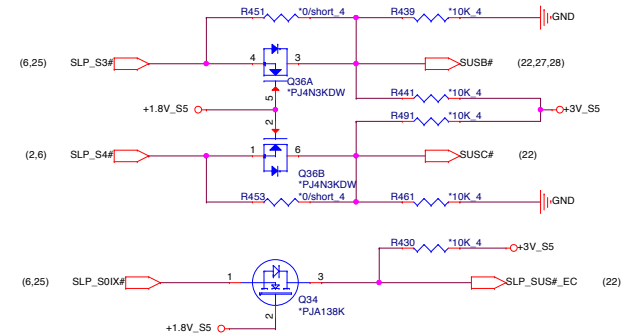
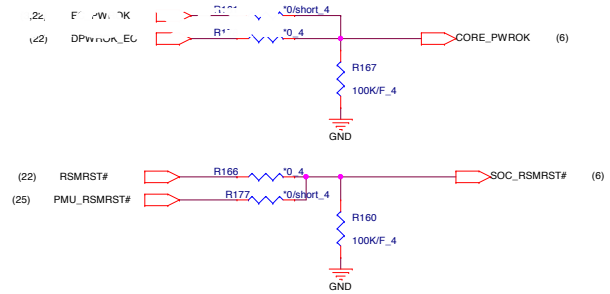
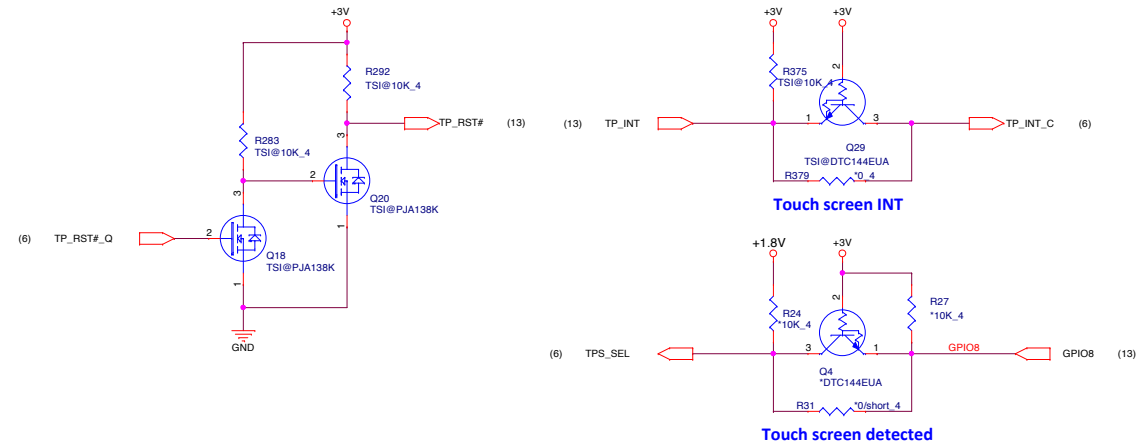
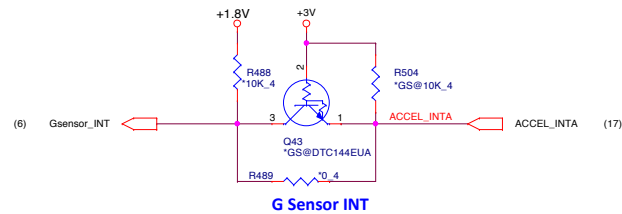
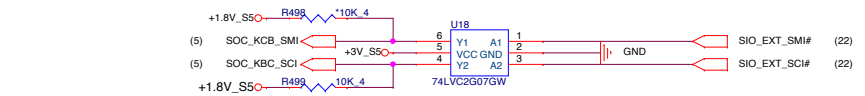
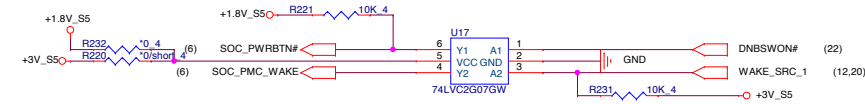
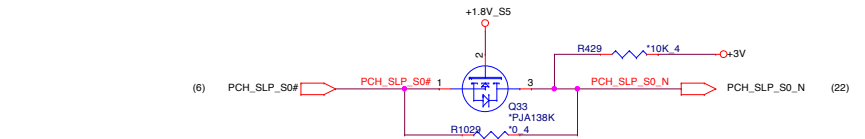
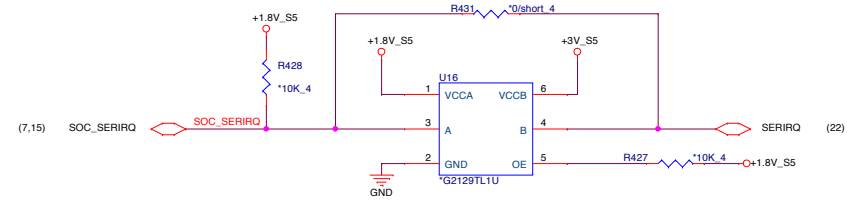


## EMI (EMC)

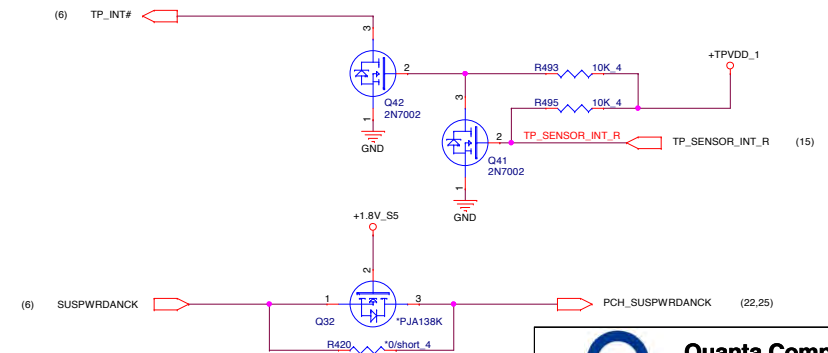


Close to HDMI connector

+1.8V\_S5 (4,5,6,7,9,13,17,19,22,23,25,27,28)  
 +3V\_S5 (2,3,5,9,12,15,16,19,22,25)  
 +1.8V (4,5,13,15,16,18,19,25,29)  
 +3V (4,7,9,11,12,13,15,16,17,18,19,20,22,24,26,27,28,29)



**For Touch pad : POWER-A**



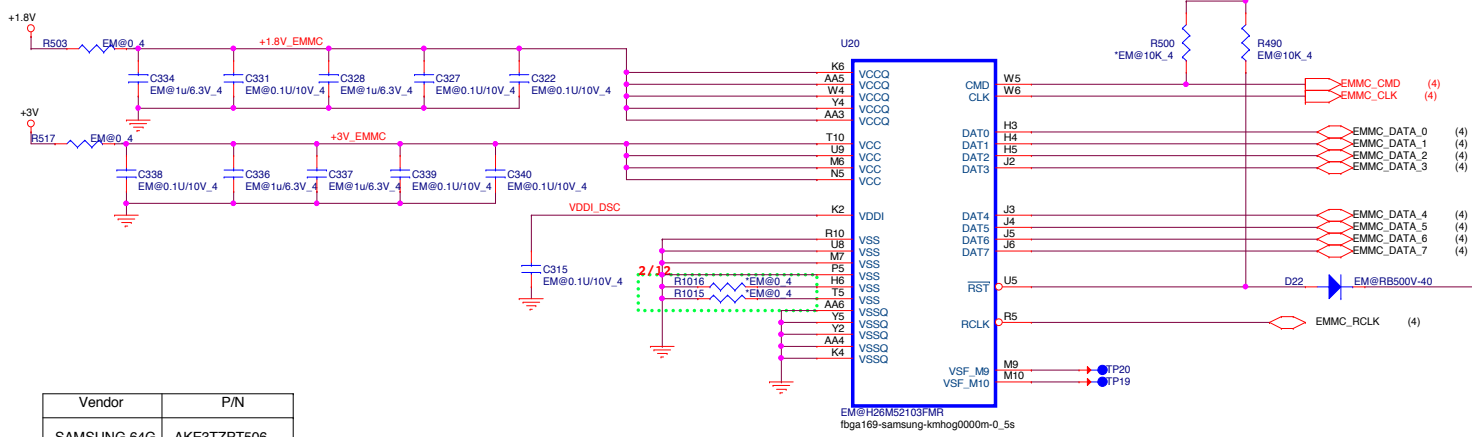
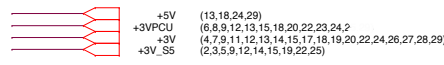
<20110214(E1A)>  
Change CP1~CP6 footprint from  
8p4r-0402-smt to 8P4R, for SMT open issue.



7c uc ad I2C

15

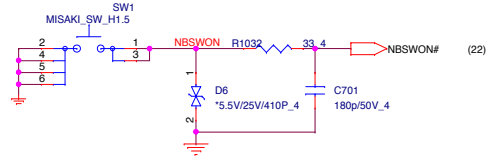
# eMMC



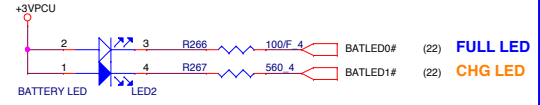
Vendor	P/N
SAMSUNG 64G	AKE3TZPT506
Samsung 32G	AKE5SZ0T501
HYNIX 64G	AKE34GPTW00
HYNIX 32G	AKE34ZPTW00
Sandisk 32G	AKE3SZ-T105

EM@H26M52103FMR  
fbga169-samsung-kmhog0000m-0\_5s

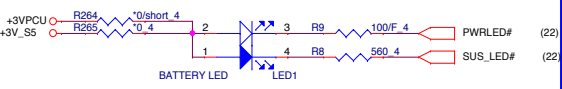
## PWR button



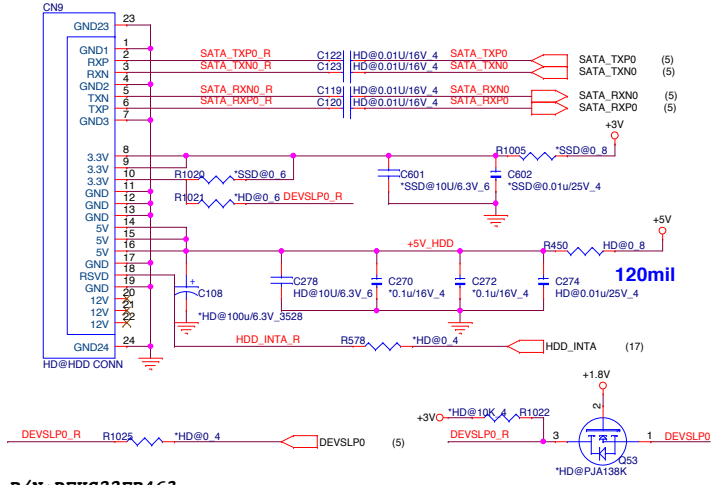
## Battery indicator



## PWR indicator

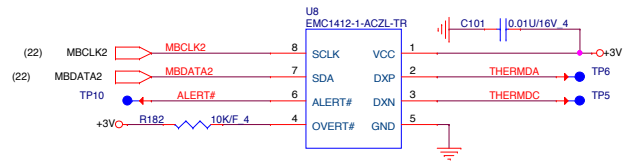


## SATA HDD



P/N:DFHS22FR463  
2nd source : DFHS22FR501

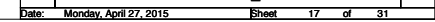
## CPU Thermal sensor(THS) / MB Local TEMP



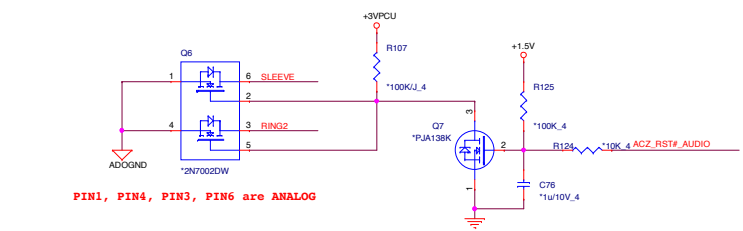
Main:AL001412003 EMC1412-1-ACZL-TR(98h)  
2nd:AL000431014 TMP431ADGKR(98h)



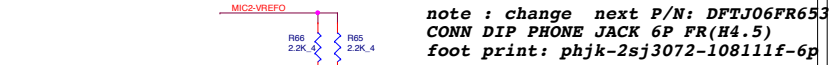
**Quanta Computer Inc.**  
**PROJECT : ZHKD**



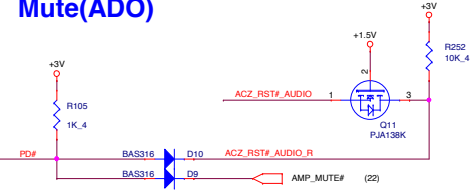
(13,16,24,29) +5V 



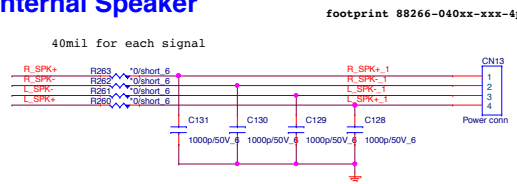
# Microphone

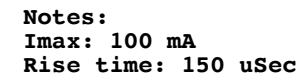


## Mute(ADO)

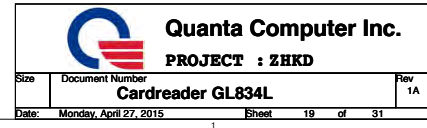


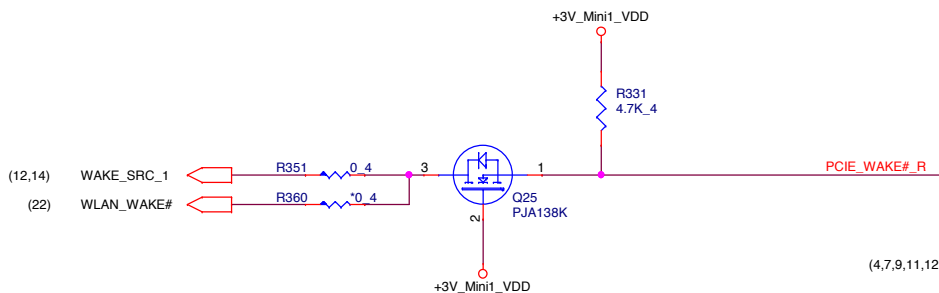
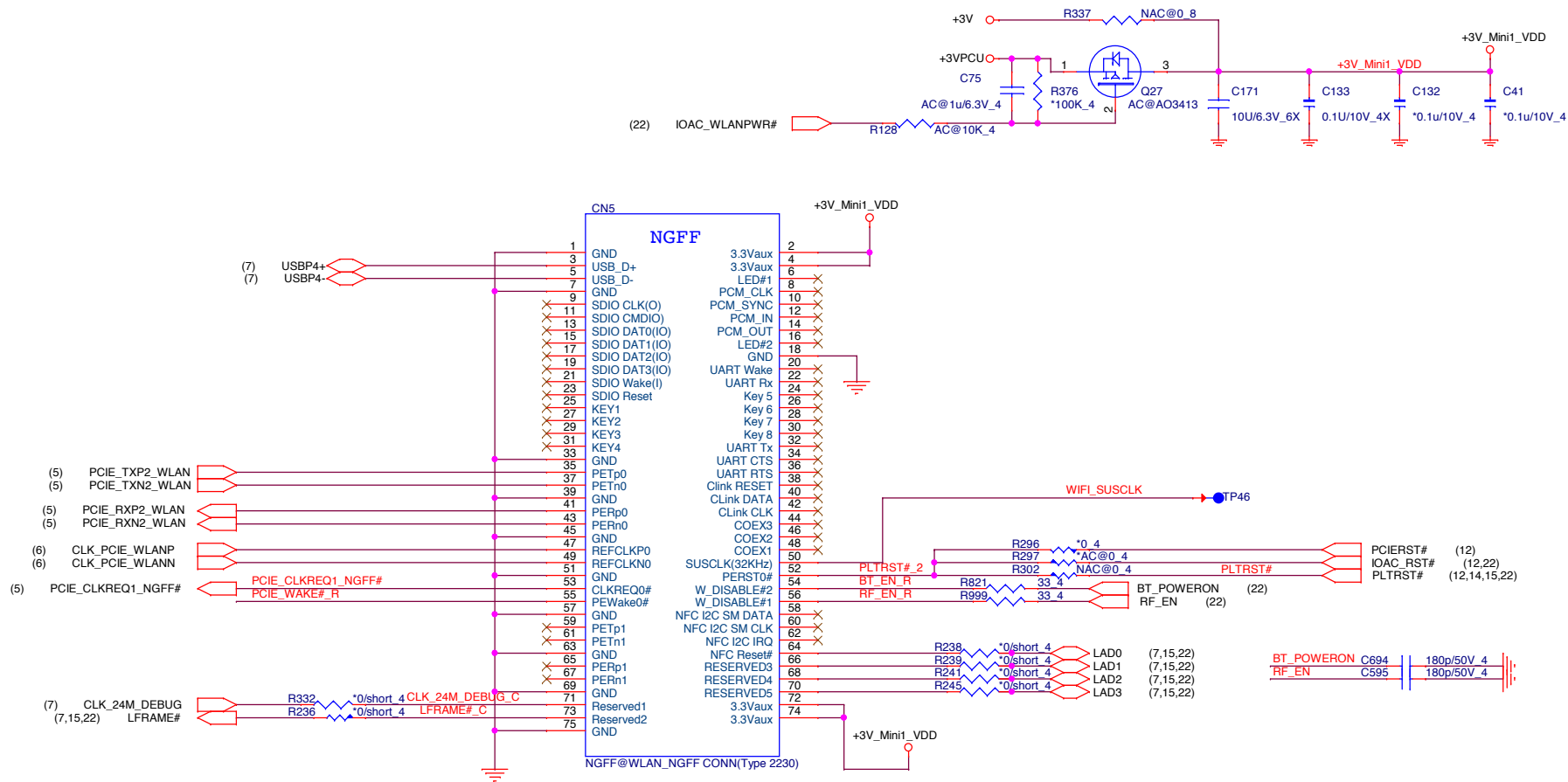
## Internal Speaker





## Power control table





(4,5,13,14,15,16,18,19,25,29)

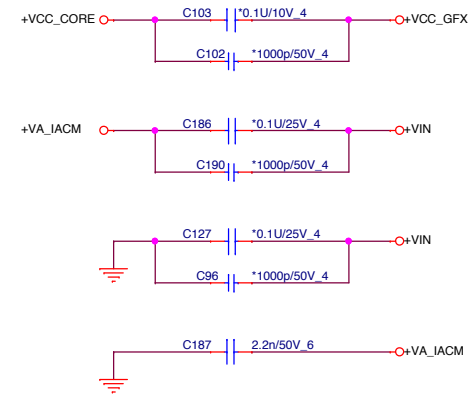
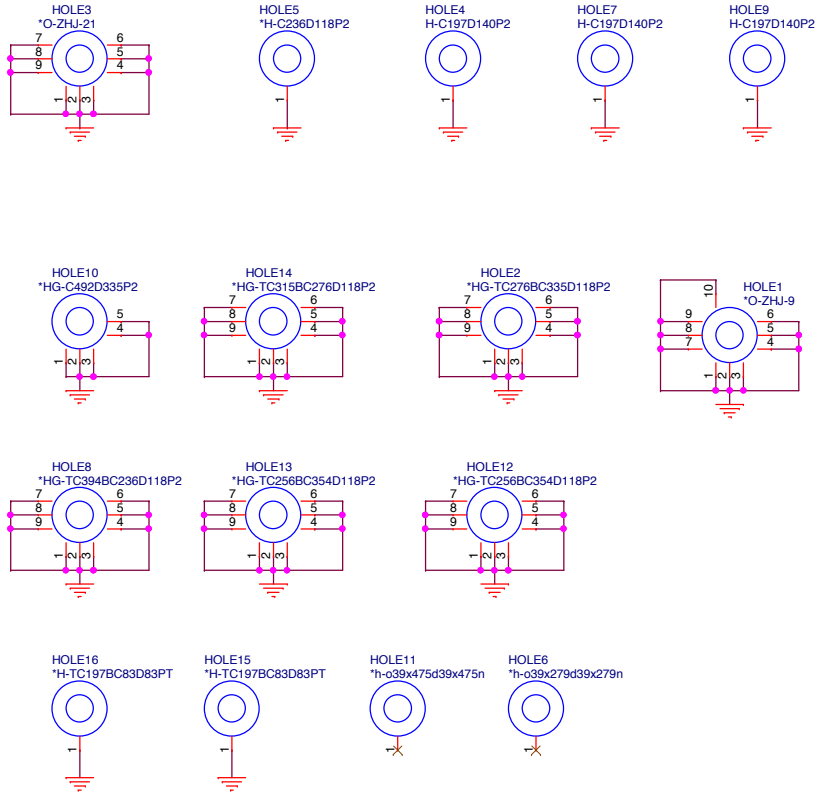
+1.8V

(4,7,9,11,12,13,14,15,16,17,18,19,22,24,26,27,28,29)

+3V

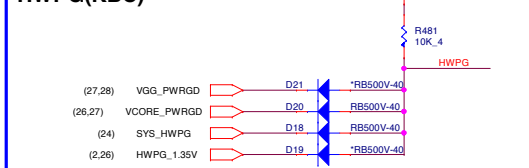
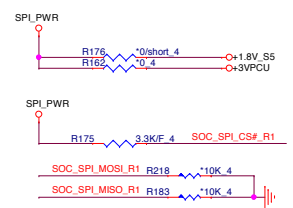
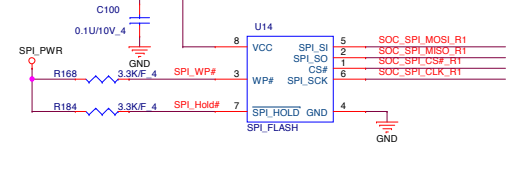
(2,3,5,9,12,14,15,16,19,22,25)

+3V\_S5

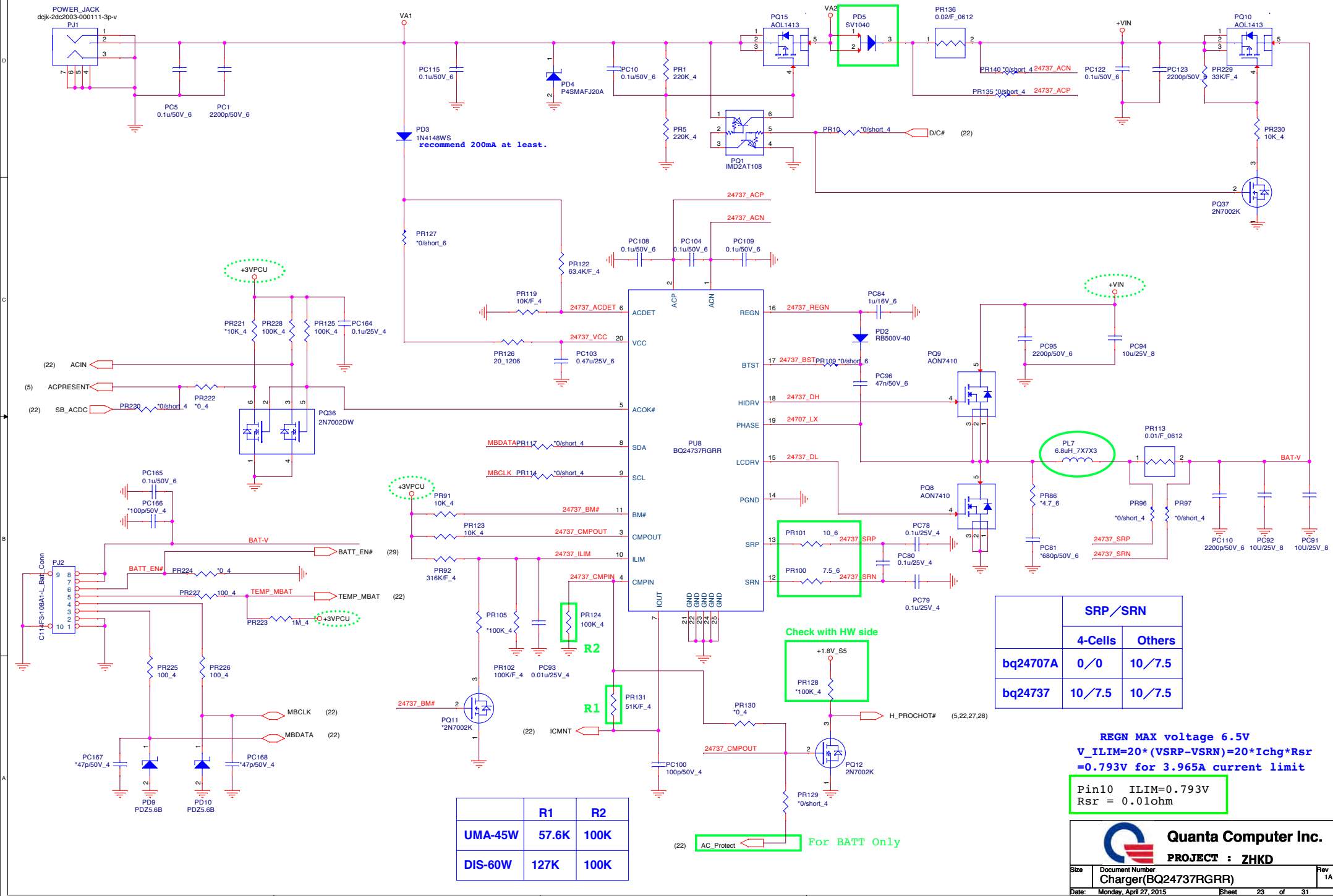


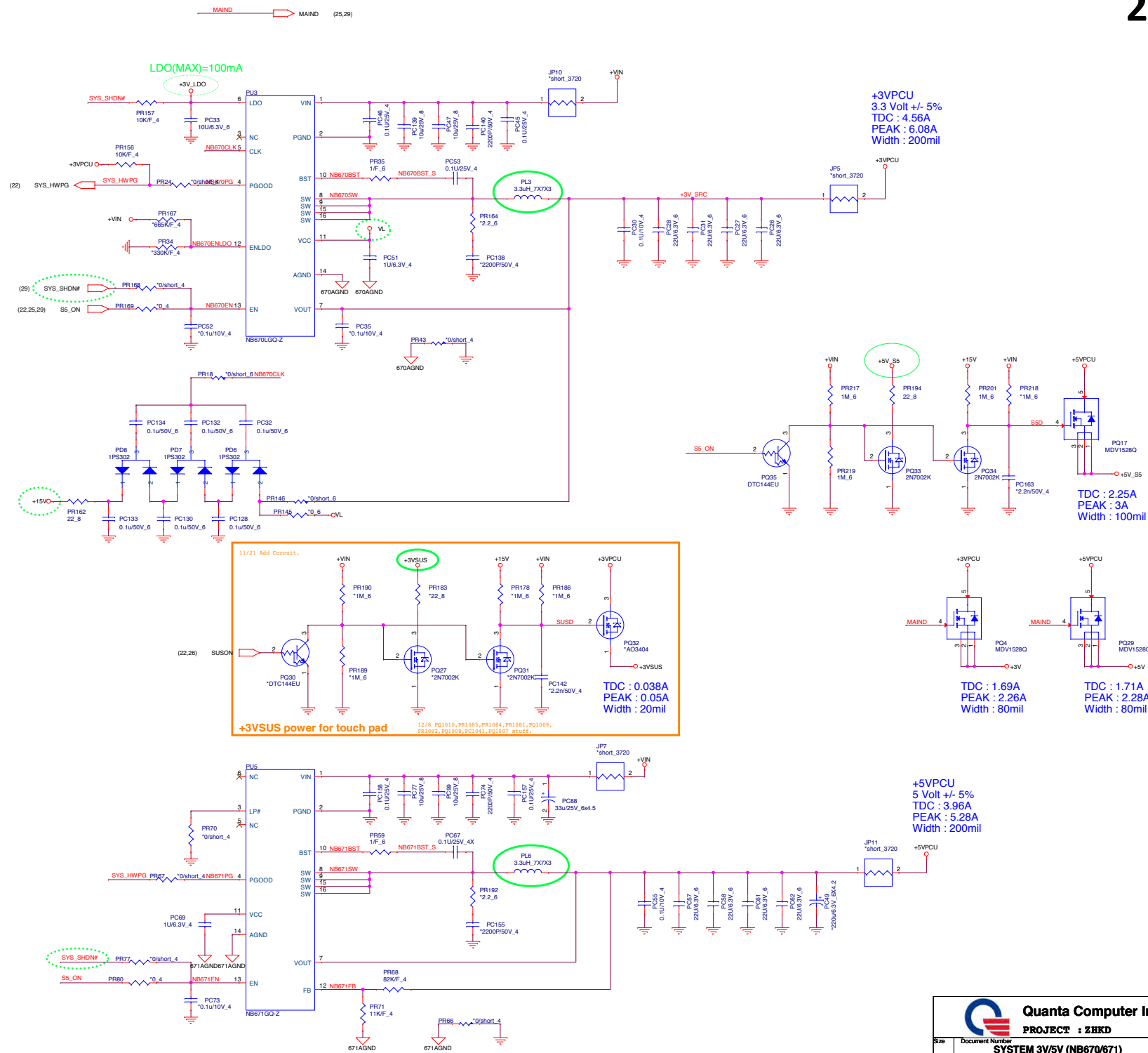


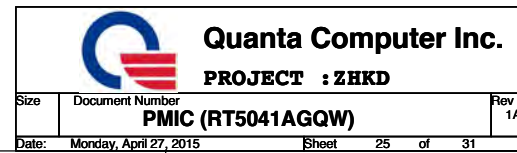
**SPI NOR FLASH**

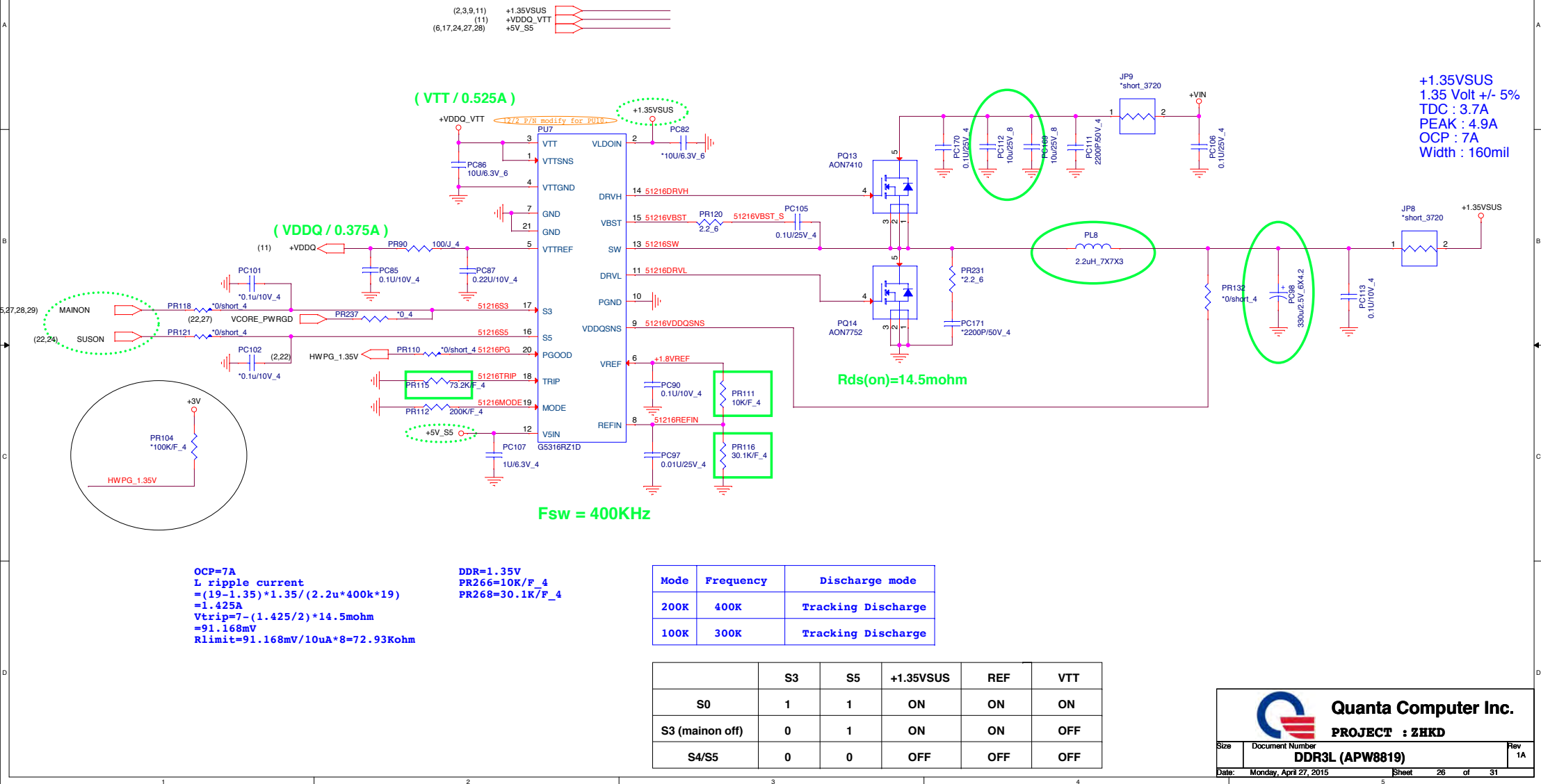


SM Bus 1	Battery
SM Bus 2	PCH/VGA
SM Bus 3	
SM Bus 4	









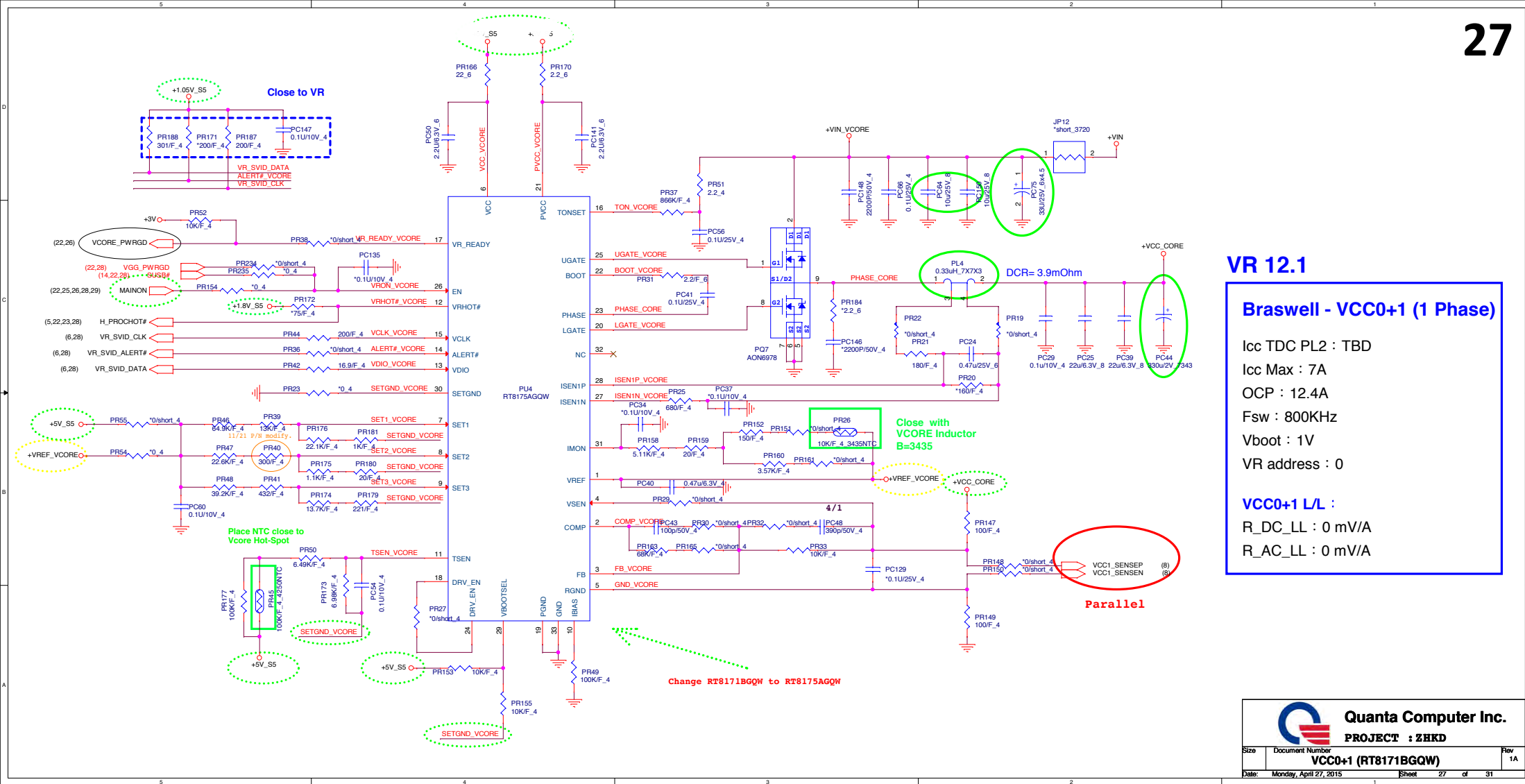
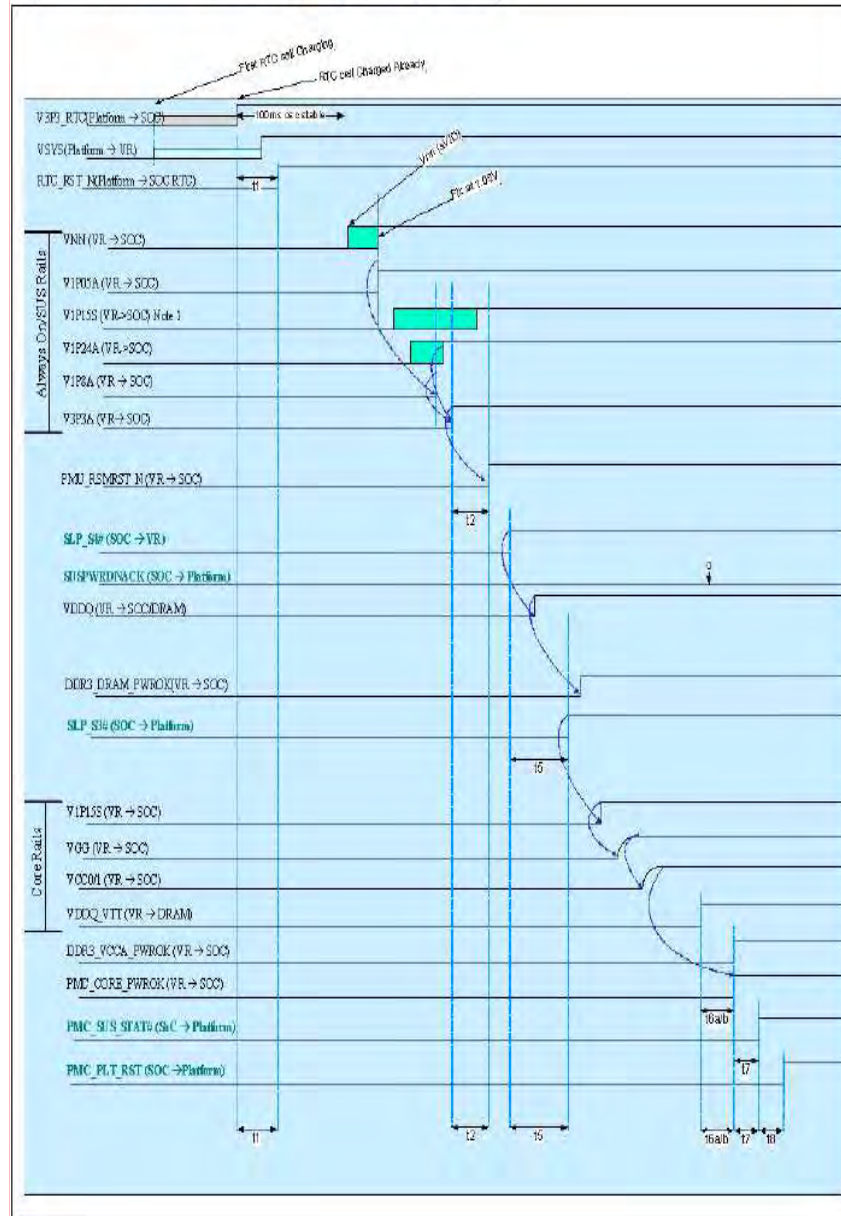







Figure 5-2. Platform Power Up Sequence (G3 to S0)



Model	Rev.	CHANGE LIST				
ZHKD	1A	2014/12/11 First Release				

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