

## PCB STACK UP

6L

LAYER 1 : TOP  
LAYER 2 : SGND  
LAYER 3 : IN1  
LAYER 4 : IN2  
LAYER 5 : VCC  
LAYER 6 : BOT

10.1" LCD Panel  
Page 16

CRT  
Page 12

Intel Pineview-M  
Micro-FCBGA8  
22 x 22 mm  
TDP~5.5W  
Page 3~5

DDR3 667MT/s  
Single Channel

DDR3 SO-DIMM  
2GB Max.  
Page 11

XDP  
Page 31

ITP\_CLK,ITP\_CLK#

CLOCK GEN  
9LRS3165  
Page 2

14.318MHz

CLK\_PCIE\_ICH,CLK\_PCIE\_ICH#

SATA

2.5"HDD/SSD  
Page 19

Intel  
Tigerpoint  
17 x 17 mm  
MMAP 360 Balls  
TDP~1.5W  
Page 6~10

USB 2.0

0,1,2  
USB2.0  
Port x3  
Page 21

4  
Card  
Reader  
Page 13  
12MHz  
Card Reader  
Socket  
Page 13

5  
Bluetooth  
/WLAN  
Page 20

6  
Touch Screen  
Page 22

7  
WWAN  
Page 20  
SIM Card Socket  
Page 20

8  
Webcam  
Page 16

PCI-Express

X1  
WWAN  
Page 20  
SIM Card  
Page 20

X1  
LAN  
Realtek  
RTL8103EL-VB  
10/100  
Page 15  
25MHz  
RJ 45  
Page 15

X1  
WLAN  
Page 20

X1  
HD Decoder  
Page 18  
27MHz  
DDR II  
64MByte  
Page 18

SYSTEM POWER  
+3VPCU/+5VPCU(RT8206) PAGE 24

DDR 3 SMDDR\_VTERM  
+0.75VSMVREF/+1.5VSUS(RT8207) PAGE 25

CPU CORE RT8152D PAGE 26

SYSTEM CHARGER ISL6251AHAZ-T PAGE 27

GFX CORE(RT9025) PAGE 28  
+1.2V(RT9025) PAGE 29  
+1.5V(RT9025) PAGE 30

VCCP 1.05V(RT8209A) PAGE 29

Touch Pad  
Keyboard  
Page 22

Power SW  
Page 14

ENC KBC  
KB3926D2  
Page 23

BIOS  
SPI Flash  
Page 23

FAN  
G991  
Page 22

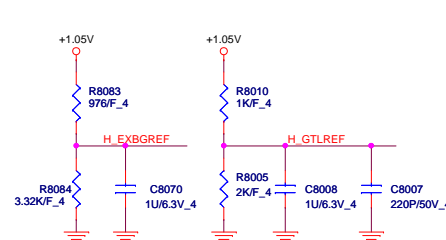
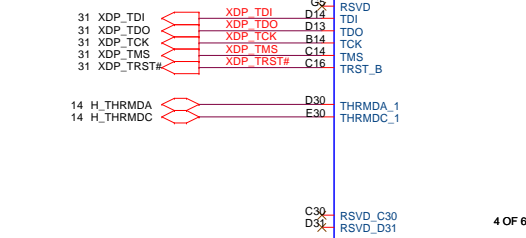
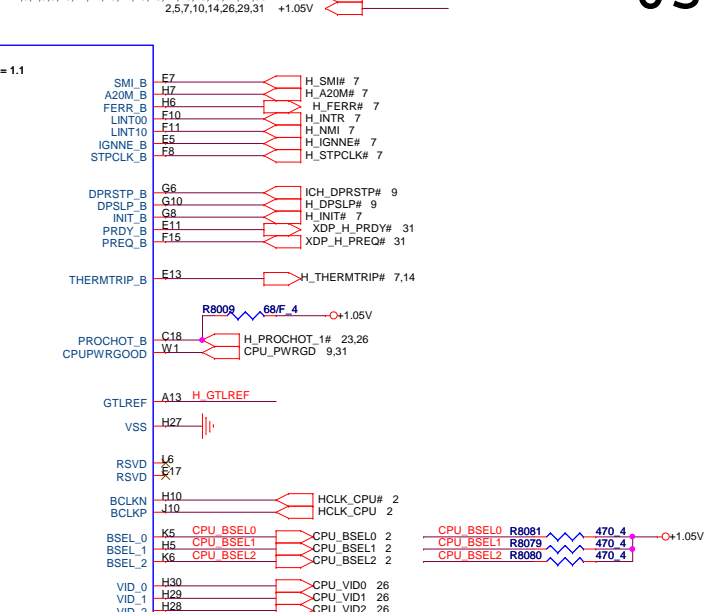
AUDIO CODEC  
92HD80BX  
Page 17

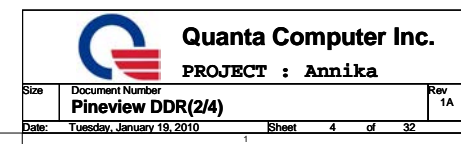
Int SPK  
Page 17

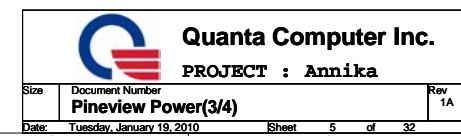
Digital MIC  
Page 17

HP/MIC  
COMBO JACK  
Page 17









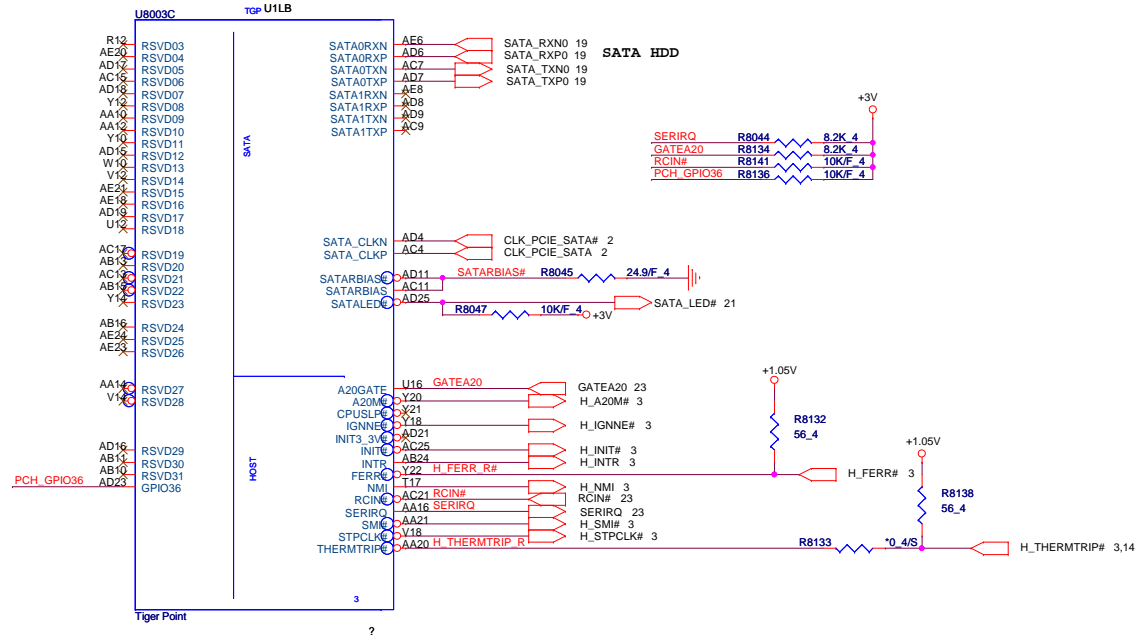
USB OC pins connection

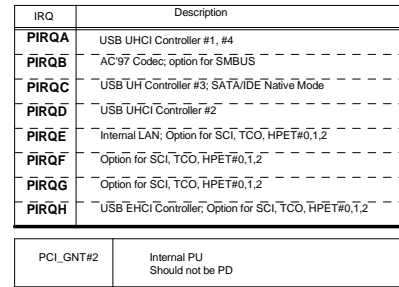
Pin	Signal	Connection
1	USB OC4#	8.2KX4
2	USB OC4#	+3V_S
3	USB OC4#	4
4	USB OC4#	6
5	USB OC4#	8
6	USB OC4#	7
7	USB OC4#	
8	USB OC4#	

Pin	Signal	Connection
1	USB OC6#	8.2KX4
2	USB OC6#	4
3	USB OC6#	6
4	USB OC6#	8
5	USB OC6#	7
6	USB OC6#	5
7	USB OC6#	
8	USB OC6#	

+3V 2,3,5,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,30  
+1.05V 2,3,5,10,14,26,29,31



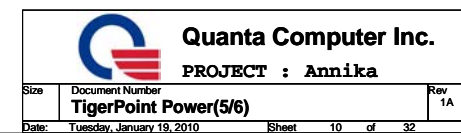


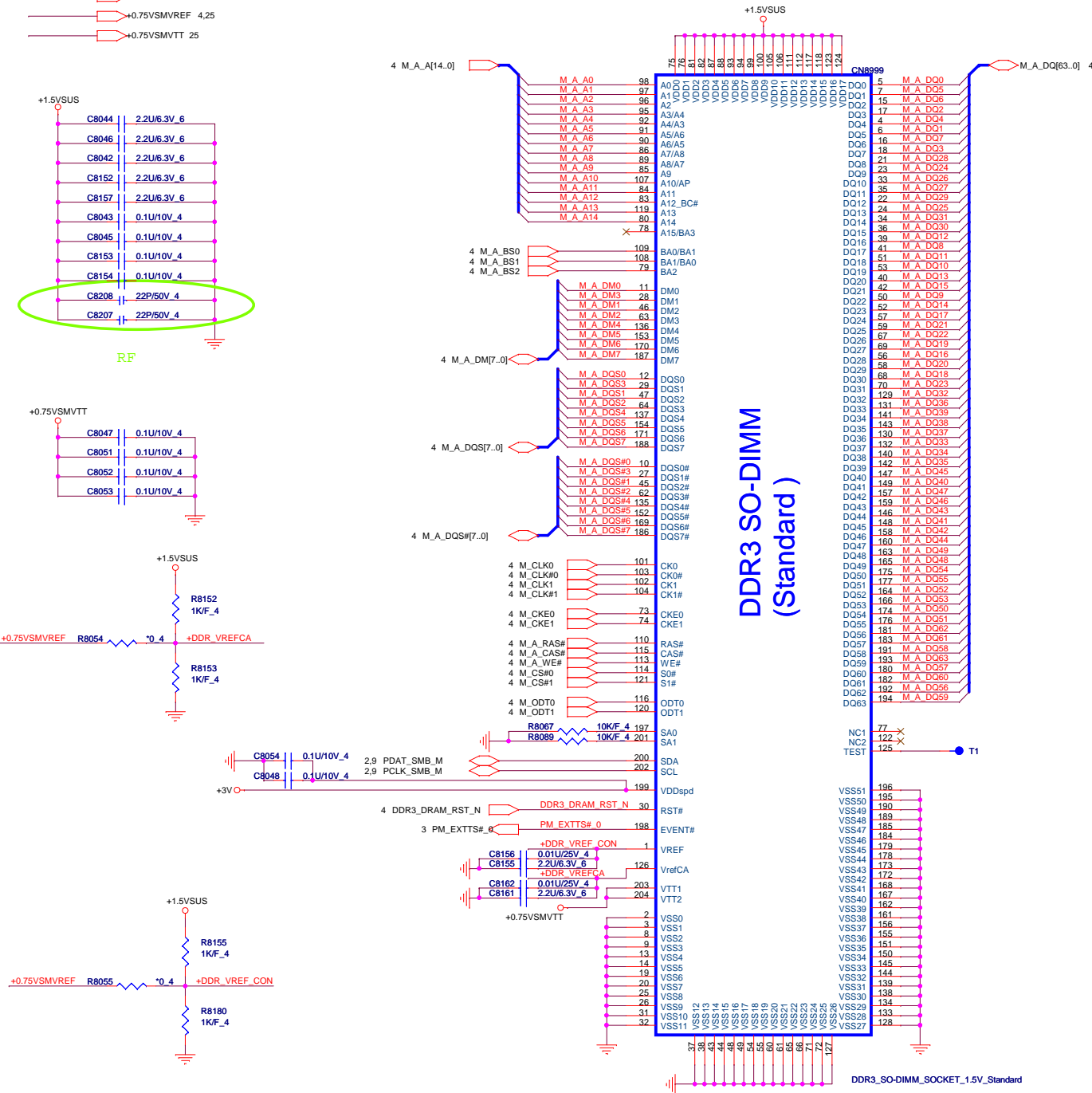
PCH_GPIO17 (INT PU)	PCH_GPIO48 (INT PU)	Boot BIOS Location
0	1	SPI
1	0	PCI
1	1	LPIC (Default)

PCH_A16WP (INT PU)	<b>Low = A16 swap override enabled</b> <b>High = Default</b>
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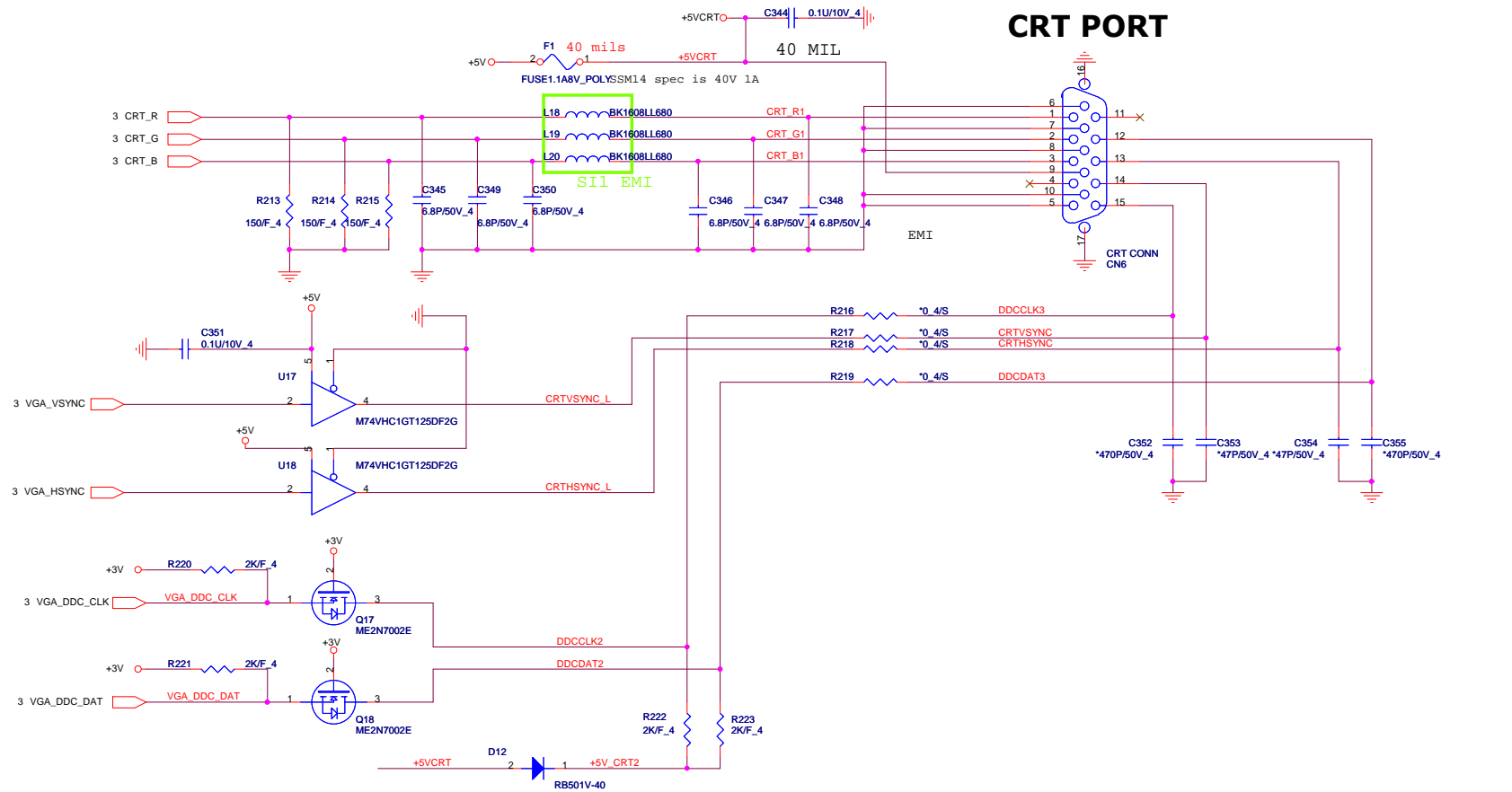








2,3,5,7,8,9,10,11,13,14,15,16,17,18,19,20,21,22,30 +3V  
2,3,5,7,10,14,26,29,31 +1.05V



PU for internal CLK input  
Unstuff for external XTAL(12MHZ)

+3V R261 10K/F\_4 XTAL\_CTR

13 XTAL\_CTR  
14 GPIO0  
15 EED0  
16 EEC5  
17 EESK  
18 EEDI  
19 SD\_WP  
20 SD\_CD#  
21 SD\_CD#  
22 MS\_D4  
23 SD\_DAT1/XD\_D4  
24 MS\_D5

2 RREF  
4 DM  
5 DP

6 USBP4-  
6 USBP4+

2 CLK\_CR\_48  
R266 0\_4/S XTLO  
C398 10p50V\_4  
R268 270K\_4  
Y4 12MHz  
C399 18p/50V/COG\_4  
XTLO  
XTLI

MODE\_SEL  
R9031 0\_4/S

44 RST#

+3V R271 100K/F\_4 5158\_RST#

Internal have pull Hi 200K  
C406 1u/6.3V\_4

Realtek RTS5159

44 RST#

44 RST#

44 RST#

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44 RST#

44 RST#

# 5 IN1 CARD-READER (PUSH-PUSH)

Support SD/SD PRO/MMC/MS/MS PRO/xD Cards

U21

43 SP19  
42 SP18  
41 SP17

40 SP16  
39 SP15  
38 SP14  
37 SP13

36 SD\_CMD\_R  
35 SP12  
34 SP11  
33 SP10

32 MS\_CD#  
29 SP8  
28 SP7  
27 SP6  
26 SP5

25 SP5

AV\_PLL\_IN  
C396 0.1u/10V\_4  
C397 1u/6.3V\_4

VREG\_OUT  
5V\_IN  
3 NC  
33 D3V3\_IN

11 D3V3\_IN  
C400 0.1u/10V\_4  
C403 0.1u/10V\_4  
C404 4.7u/6.3V\_6

NC  
7 NC  
9 CARD\_3V3\_OUT

AG33  
AG\_PLL  
DGND2  
DGND1

C405 1u/6.3V\_4

RTS5159 max output current for  
XD card 250mA  
SD/MMC 250mA  
MS/MSPRO 250mA

RTS5159 max output current for

RTS5159 max output current for

RTS5159 max output current for

RTS5159 max output current for

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RTS5159 max output current for

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RTS5159 max output current for

RTS5159 max output current for

RTS5159 max output current for

RTS5159 max output current for

RTS5159 max output current for

Close to Chipset

SD\_CLK MS\_CLK

C395 10p50V\_4

SI1 EMI

SI1 EMI

SI1 EMI

SI1 EMI

SI1 EMI

SI1 EMI

SI1 EMI

SI1 EMI

SI1 EMI

SI1 EMI

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SI1 EMI

XTLO

R8103 10F\_4

C8049 10p50V\_4

C8049 10p50V\_4

C8049 10p50V\_4

C8049 10p50V\_4

C8049 10p50V\_4

C8049 10p50V\_4

C8049 10p50V\_4

C8049 10p50V\_4

C8049 10p50V\_4

C8049 10p50V\_4

C8049 10p50V\_4

C8049 10p50V\_4

C8049 10p50V\_4

C8049 10p50V\_4

C8049 10p50V\_4

CLOSE to CONN

+3VCARD

C411 4.7u/6.3V\_6

R274 150K/F\_4

C412 0.1u/10V\_4

C413 0.1u/10V\_4

C414 0.1u/10V\_4

C414 0.1u/10V\_4

C414 0.1u/10V\_4

C414 0.1u/10V\_4

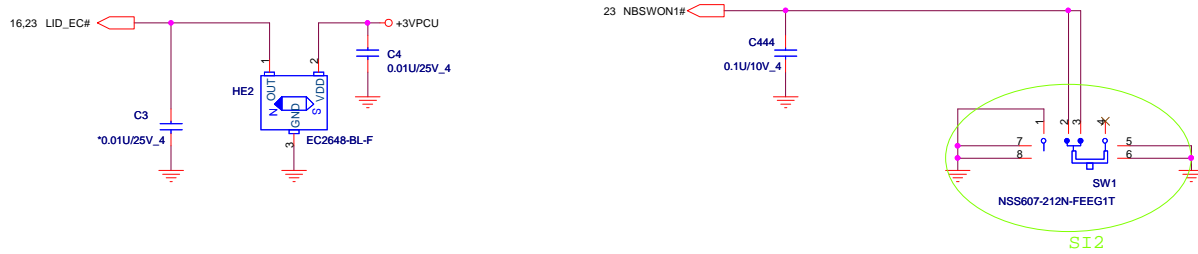
C414 0.1u/10V\_4

To Cardreader Connector

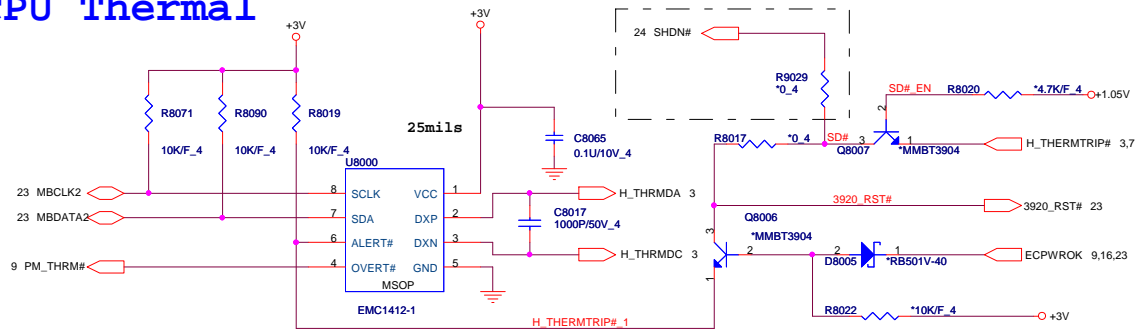
Note:

SD/MMC	MS	XD
SP0		XD_CD#
SP1	SD_WP	
SP2	SD_CD#	
SP3	SD_DAT1	XD_D4
SP4	MS_BS	XD_D5
SP5	MS_D1	XD_D3
SP6	SD_DAT0	MS_D0
SP7	SD_DAT7	MS_D2
SP8	SD_DAT6	MS_D3
SP9	SD_DAT5	MS_D4
SP10	SD_DAT4	MS_D5
SP11	SD_DAT3	MS_D6
SP12	SD_DAT2	MS_D7
SP13	SD_DAT1	MS_D8
SP14	SD_DAT0	MS_D9
SP15	SD_CMD	MS_CMD
SP16	SD_CMD#	
SP17	SD_CMD#	
SP18	SD_CMD#	
SP19	SD_CMD#	

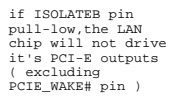
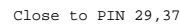
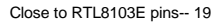
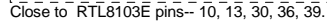
# LID Switch



## CPU Thermal



1.Level 1 Environment-related Substances Should NEVER be Used.  
2.Purchase ink, paint, wire rods, and Molding resins only from the business Partners that Sony approves as Green Partners.



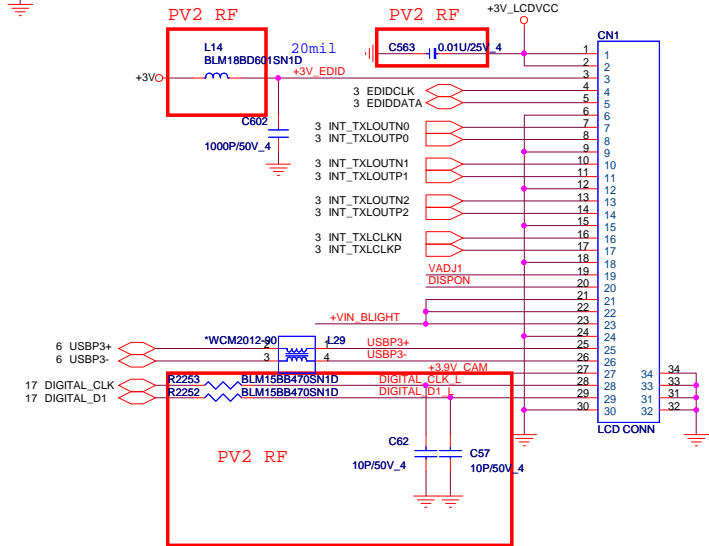
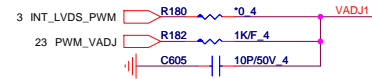
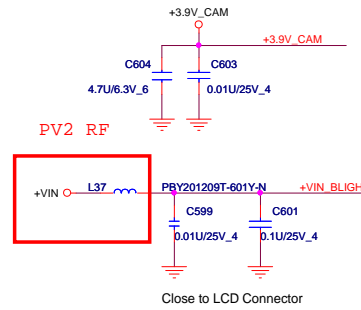
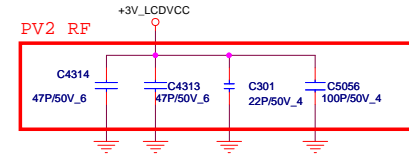
LEDS1:0	00	01	10	11
LED0	Tx/Rx	Tx/Rx	Tx	Tx
LED1	LNK100	LNK	LNK	LNK100
LED2	LNK10	FULL	Rx	LNK10
LED3	NA	NA	NA	NA



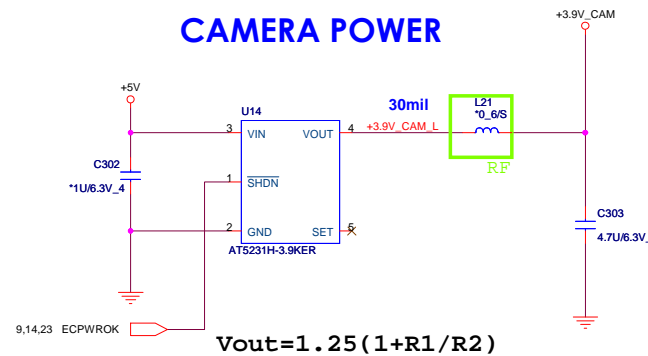
2,3,5,7,8,9,10,11,12,13,14,15,17,18,19,20,21,22,30 +3V  
9,14,20,21,22,23,24,26,27,30 +3VPCU  
10,12,17,19,20,22,30 +5V  
24,25,26,27,29,30 +VIN

## LED Panel(LDS)

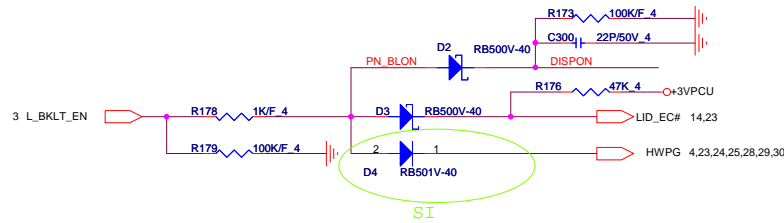
Request by HP RF(47Px2)



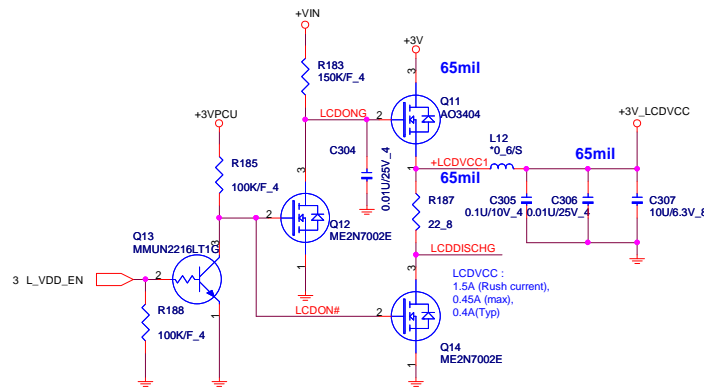
## CAMERA POWER



## Backlight Control(LDS)

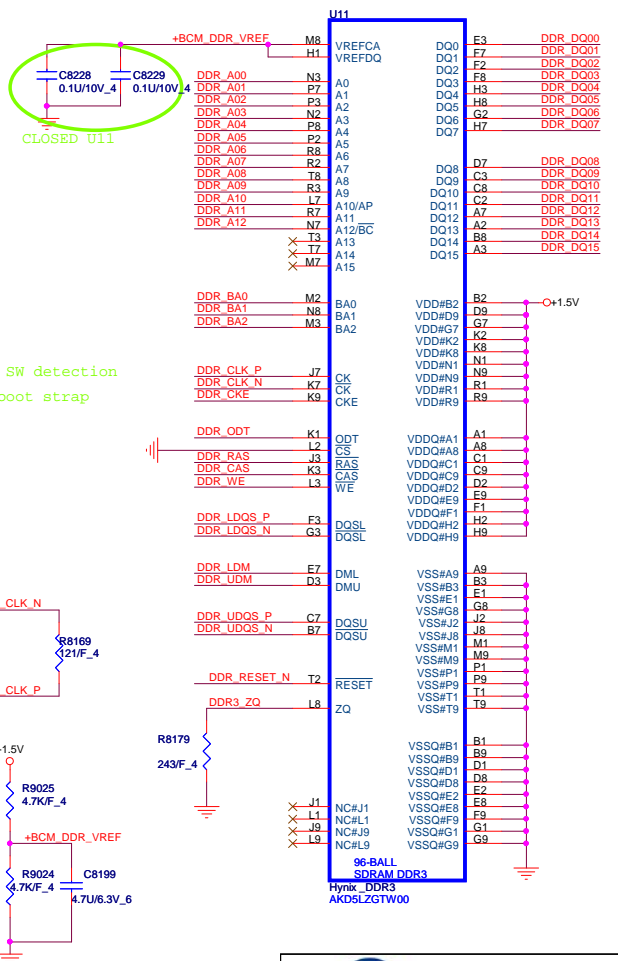
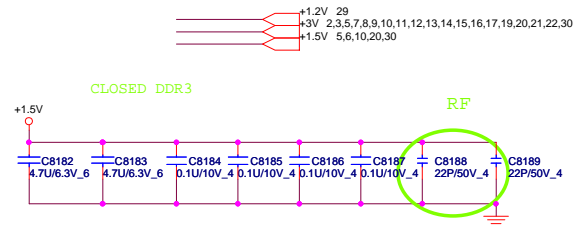


## LCD POWER SWITCH









DESCRIPTION		Vendor	Vendor P/N	QCI P/N
DDR3 64Mx16, 128bit	800MHZ	HYNIX	H5TQ1G63BFR-12C	AKD5LZGTW00
DDR3 64Mx16, 128bit	800MHZ	SAMSUNG	K4W1G1646E-HC12	AKD5LGGT502

DESCRIPTION		Vendor	Vendor P/N	QCI P/N
DDR3 64Mx16, 128bit	800MHZ	HYNIX	H5TQ1G63BFR-12C	AKD5LZGTW00
DDR3 64Mx16, 128bit	800MHZ	SAMSUNG	K4W1G1646E-EC12	AKD5LGGT502

**PROJECT : Annika**

## DFHD20MR008

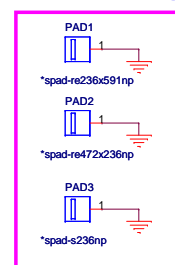
DC Current rating: 0.5 A

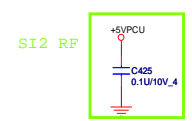


**EMI spring**

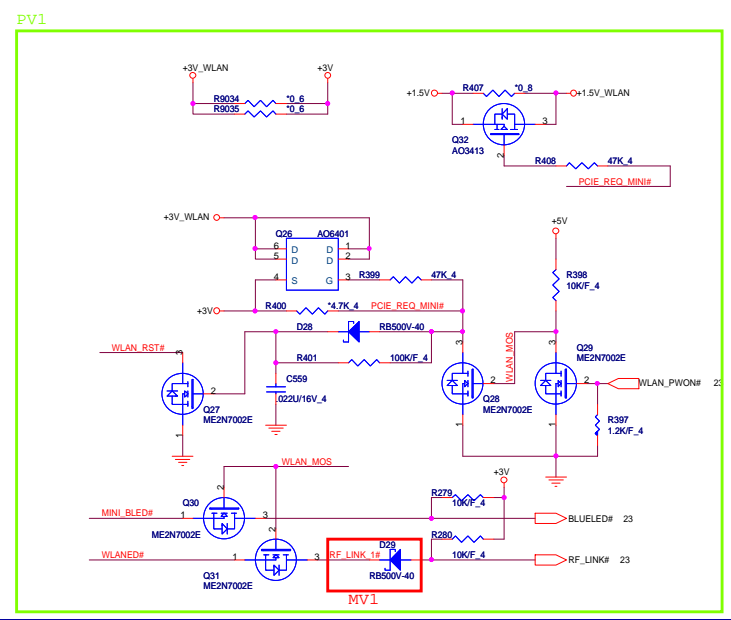
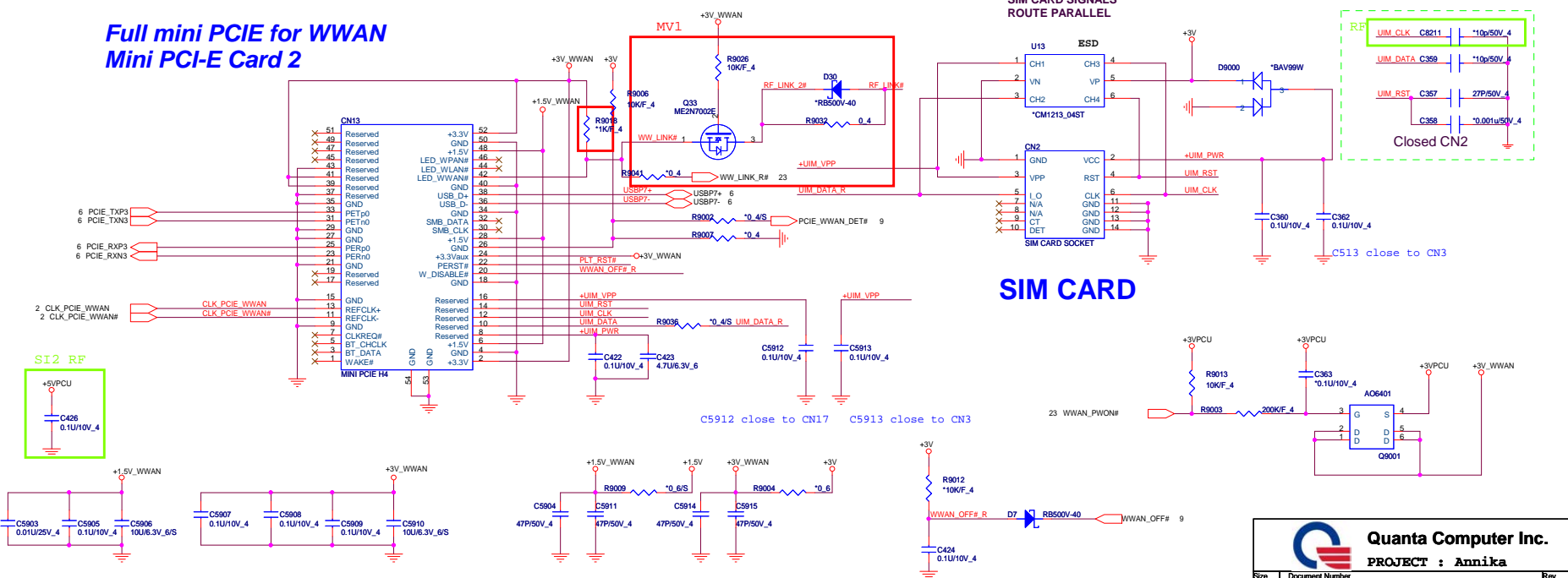


FAN固定螺絲  
H16要上件





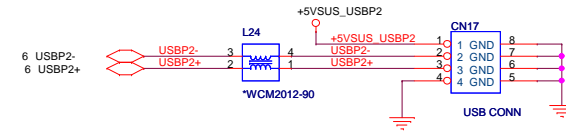
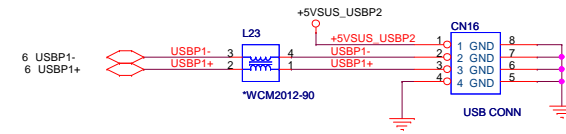
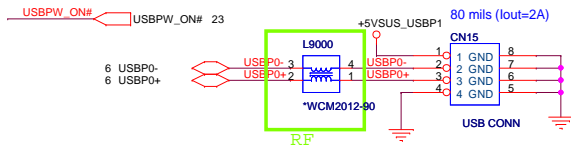
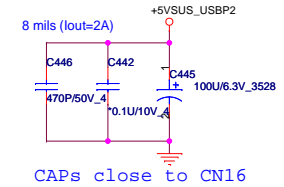
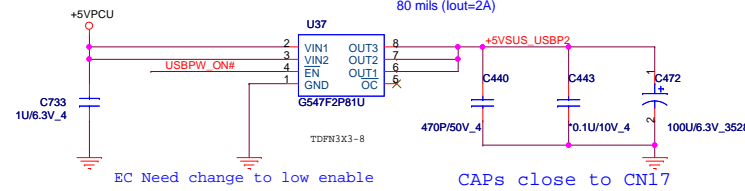
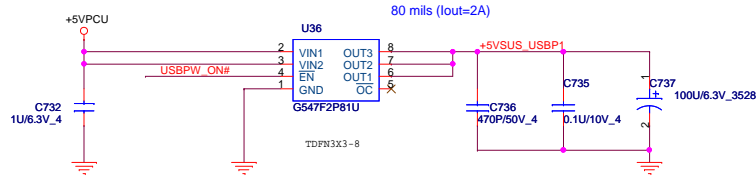
The value of the capacitor is suggest by Siemens HQ expert.  
For against 900MHz RF interference. The value of capacitor is 27pF.  
For against 1800MHz RF interference. The value of capacitor is 10pF.  
1nF/10nF value capacitor use for against ESD purpose.

SIM CARD SIGNALS  
ROUTE PARALLEL

# 1x Left side USB port supports Keyed USB.

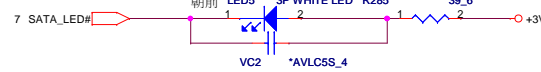
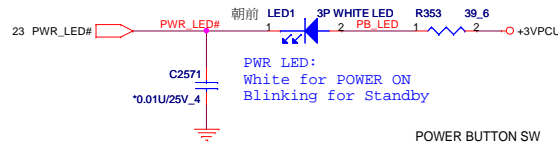
# For Right 2xUSB Ports PWR

21

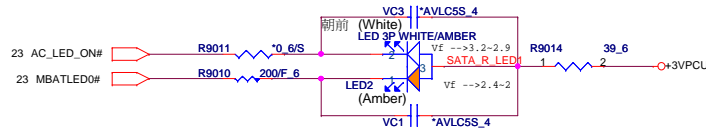


## PWR Button/LED

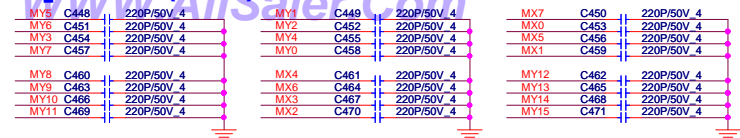
## SATA/LED



## Charging & Discharging/LED

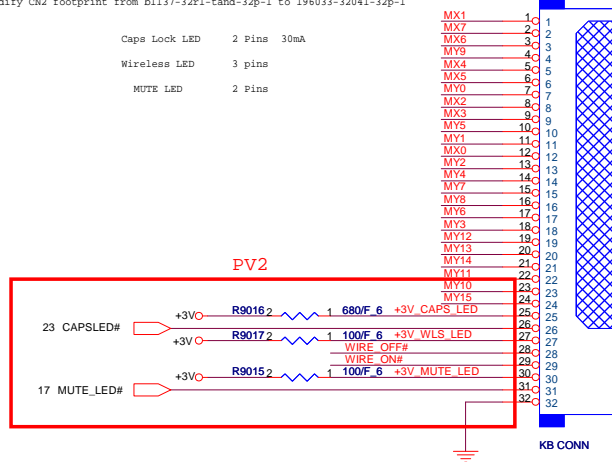
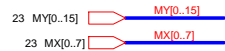
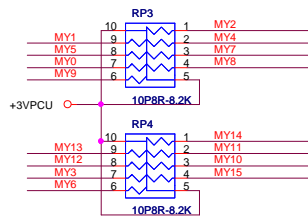


## Keyboard (KBC)

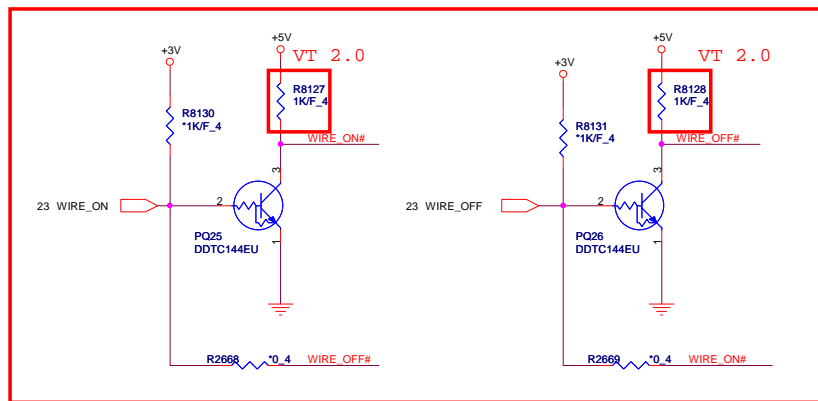


Modify CN2 footprint from bl137-32r1-tand-32p-1 to 196033-32041-32p-1

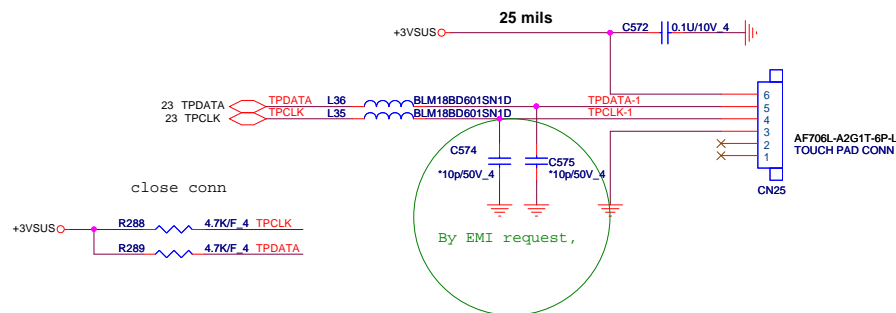
## KEYBOARD PULL-UP



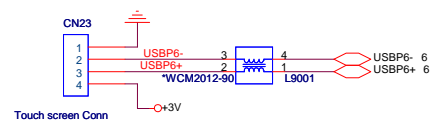
PV2



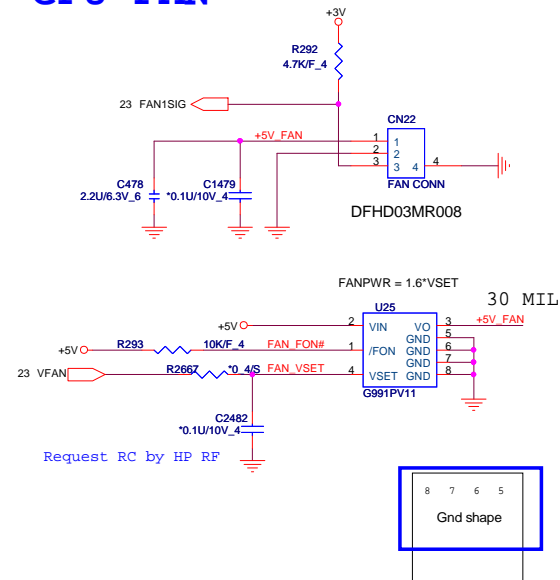
## TOUCH PAD CONNECTOR



## TOUCH SCREEN



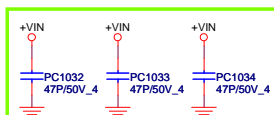
**CPU FAN**



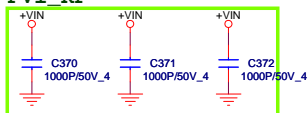


DC/DC +3V\_ALW/+5V\_ALW/+5V\_ALW2 /+15V\_ALW

## SI2\_RF

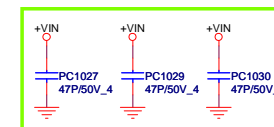


## PV1\_RF

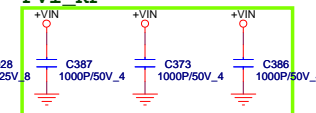


+5VPCU Volt +/- 5%  
 Countinue current:4A  
 Peak current:5.5A  
 OCP minimum 6A

## SI2\_RF

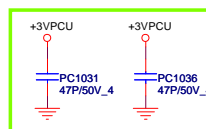


## PV1\_RF

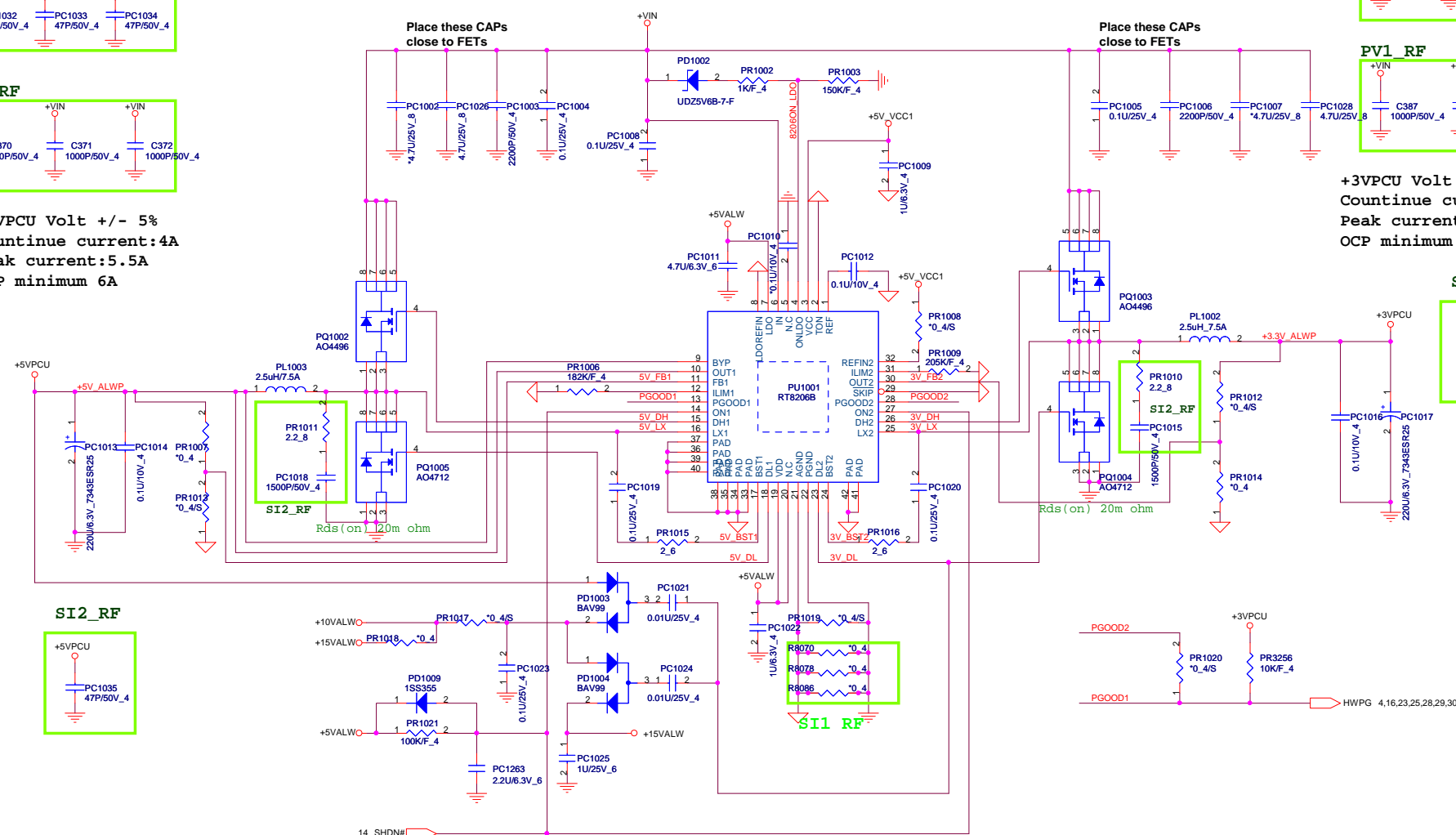
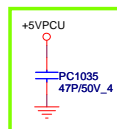


+3VPCU Volt +/- 5%  
 Countinue current:4A  
 Peak current:5.5A  
 OCP minimum 6A

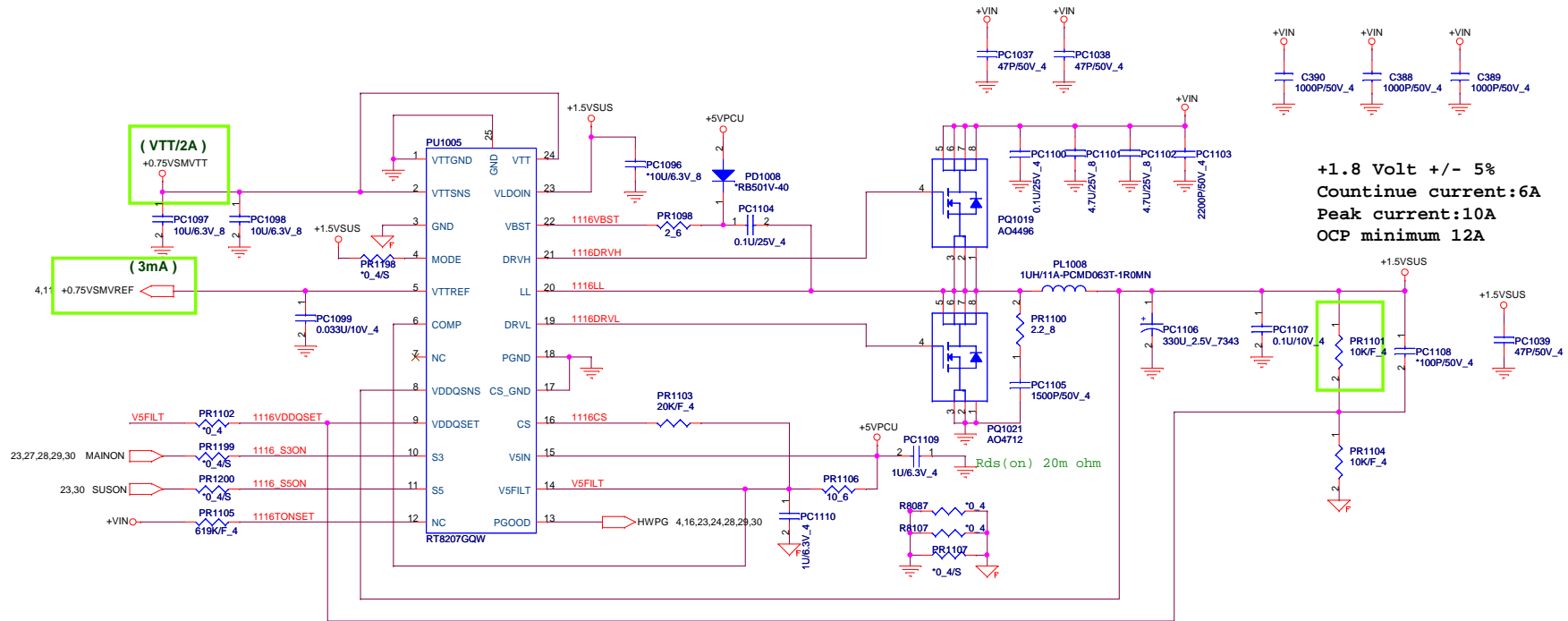
## SI2\_RF

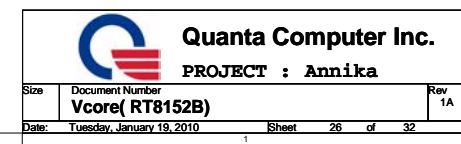


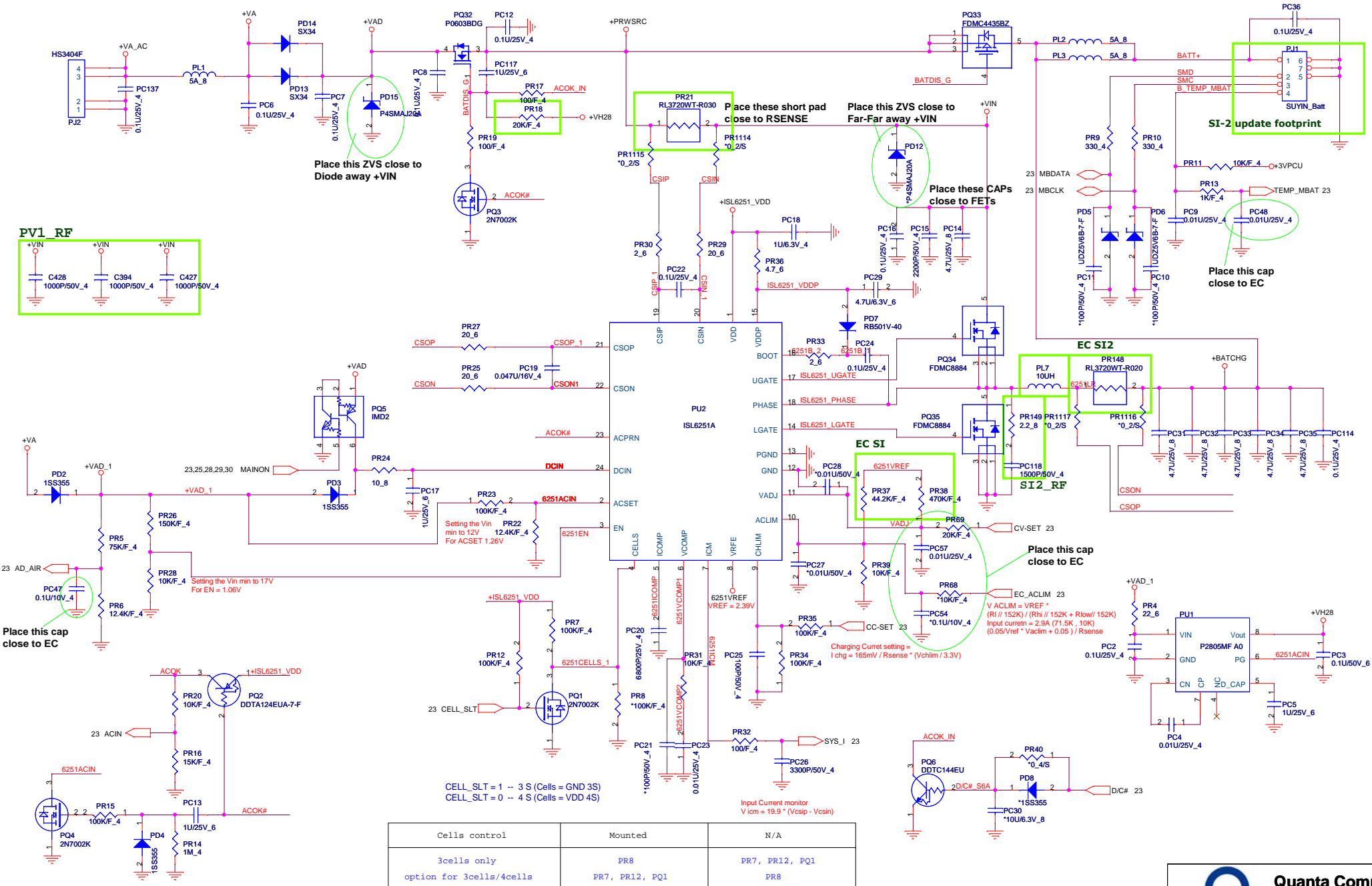
## SI2\_RF











Cells control	Mounted	N/A
3cells only	PR8	PR7, PR12, PQ1
option for 3cells/4cells	PR7, PR12, PQ1	PR8

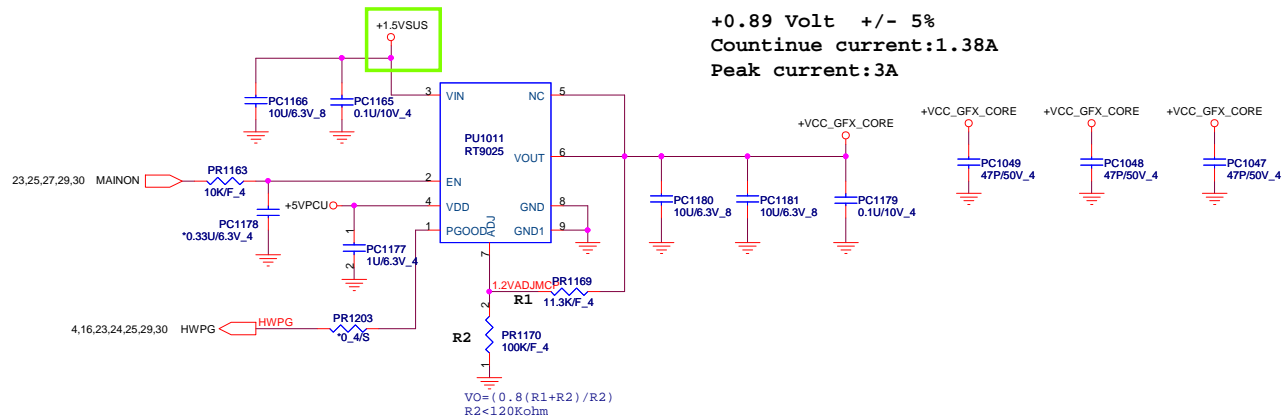
**Quanta Computer Inc.**

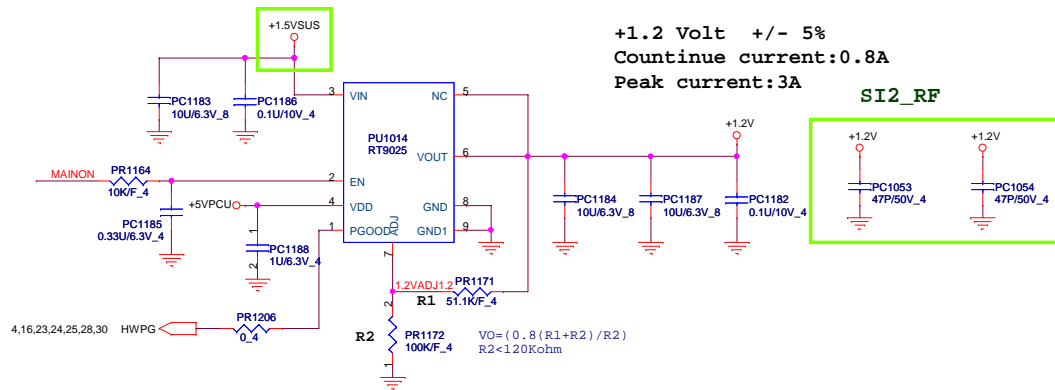
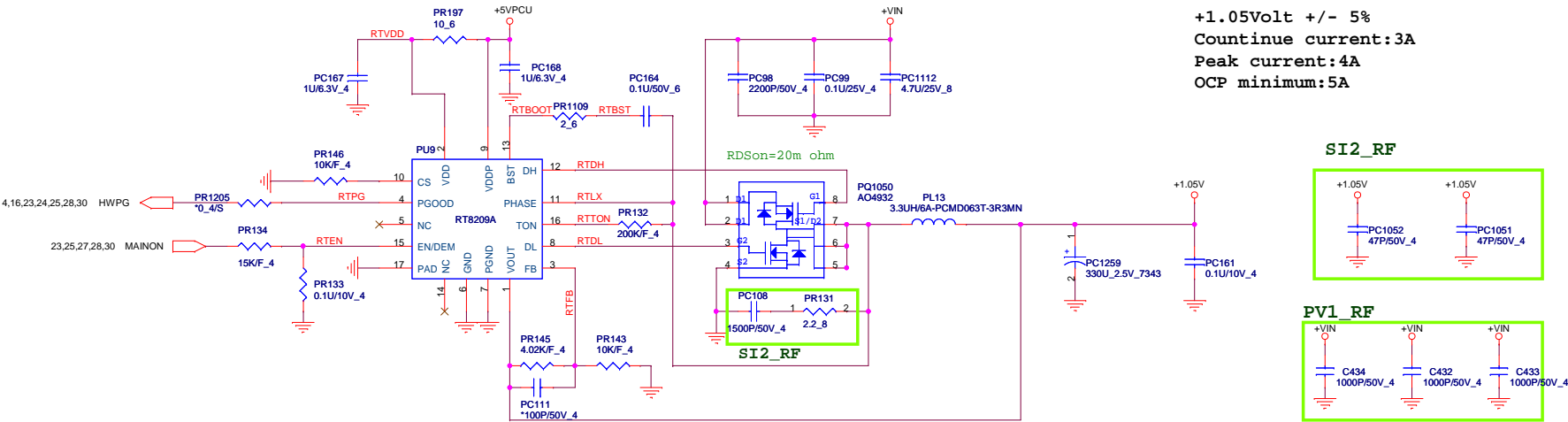
**PROJECT : Annika**

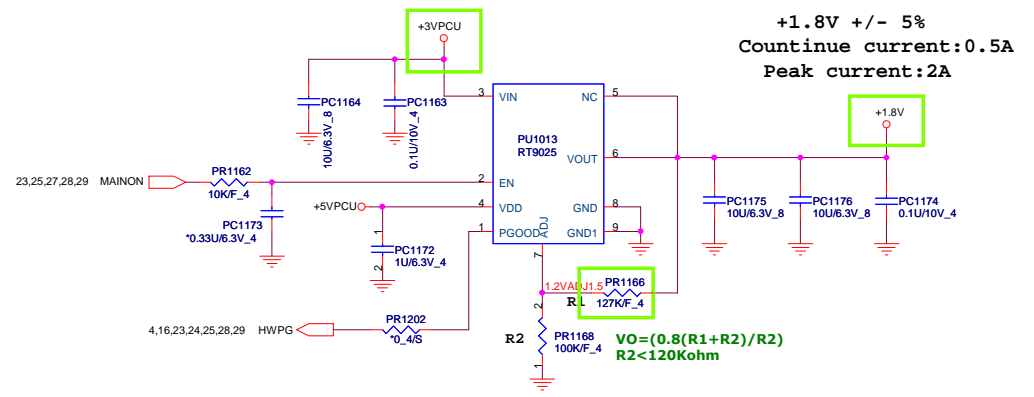
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+VCC\_GFX\_CORE





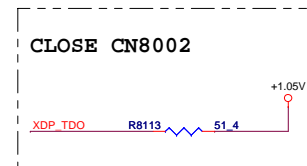
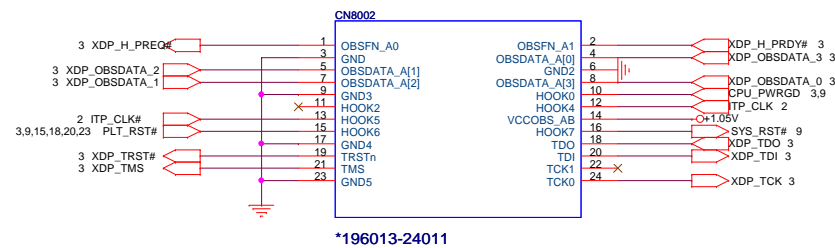


+1.8V +/- 5%  
Continue current:0.5A  
Peak current:2A

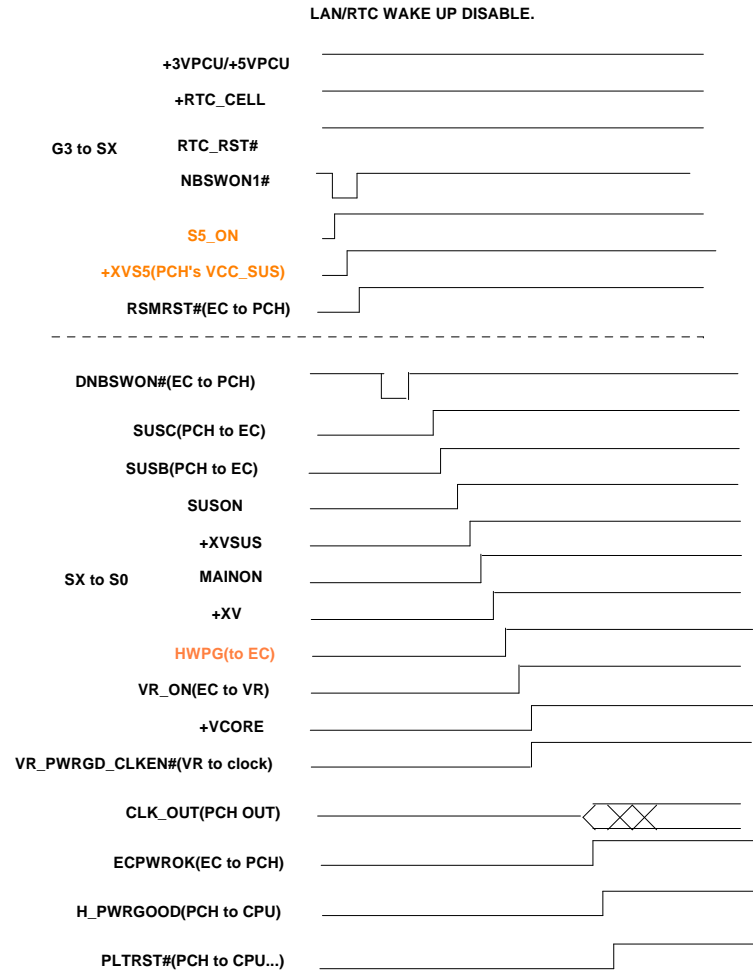
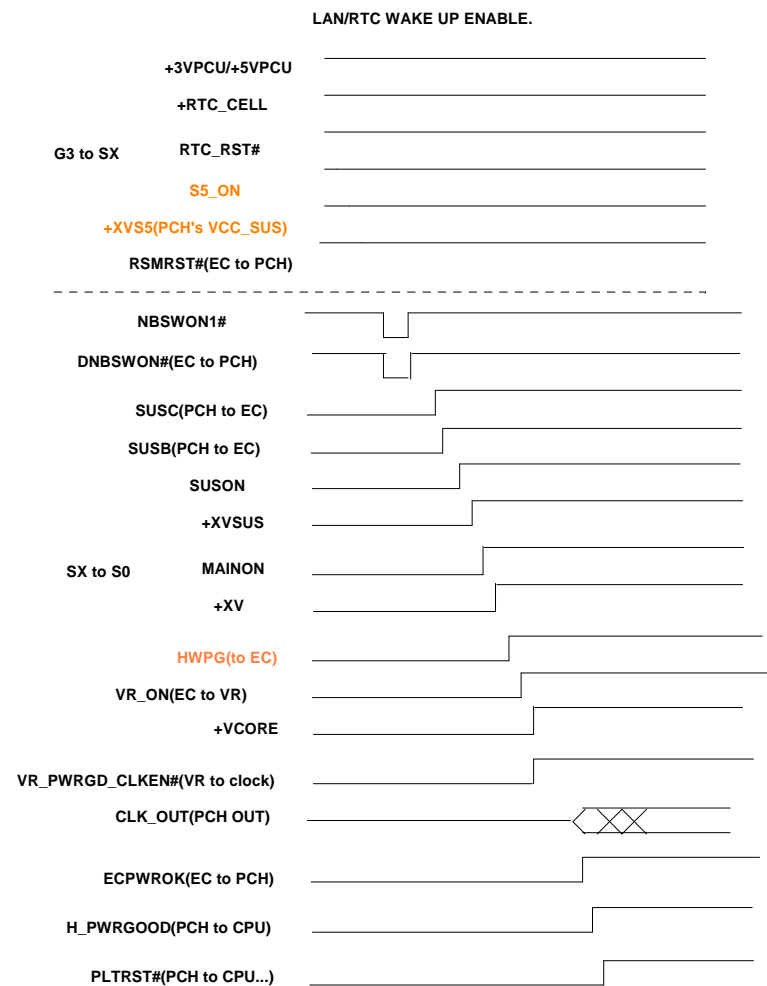
# CPU XDP

2,3,5,7,10,14,26,29 +1.05V

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## Power up sequence



Quanta Computer Inc.

PROJECT : Annika

Size Document Number  
Power Sequence

Date: Saturday, October 17, 2009

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1A