Annika 1.1 Block Diagram

01

PCB STACK UP

6L

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

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

10.1" LCD Panel — Page 16 — LVDS

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#

32.768KHz

DMI x2

HCLK_CPU,HCLK_CPU#; HCLK_MCH,HCLK_MCH#
DREFSSCLK,DREFSSCLK#; DREFCLK,DREFCLK#
CLK_PCIE_ICH,CLK_PCIE_ICH#

CLOCK GEN
9LRS3165
Page 2
14.318MHz

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	4	5	6	7	8
USB2.0 Port x3 — Page 21	Card Reader — Page 13 (12MHz)	Bluetooth /WLAN — Page 20	Touch Screen — Page 22	WWAN — Page 20	Webcam — Page 16
	Card Reader Socket — Page 13			SIM Card Socket — Page 20	

PCI-Express

X1	X1	X1	X1
WWAN — Page 20	LAN Realtek RTL8103EL-VB 10/100 — Page 15 (25MHz)	WLAN — Page 20	HD Decoder — Page 18 (27MHz)
SIM Card — Page 20	RJ 45 — Page 15		DDRII 64MByte — Page 18

32.768KHz

LPC

HDA

Touch Pad Keyboard — Page 22
Power SW — Page 14

ENC KBC
KB3926D2
Page 23

AUDIO CODEC
92HD80BX
Page 17

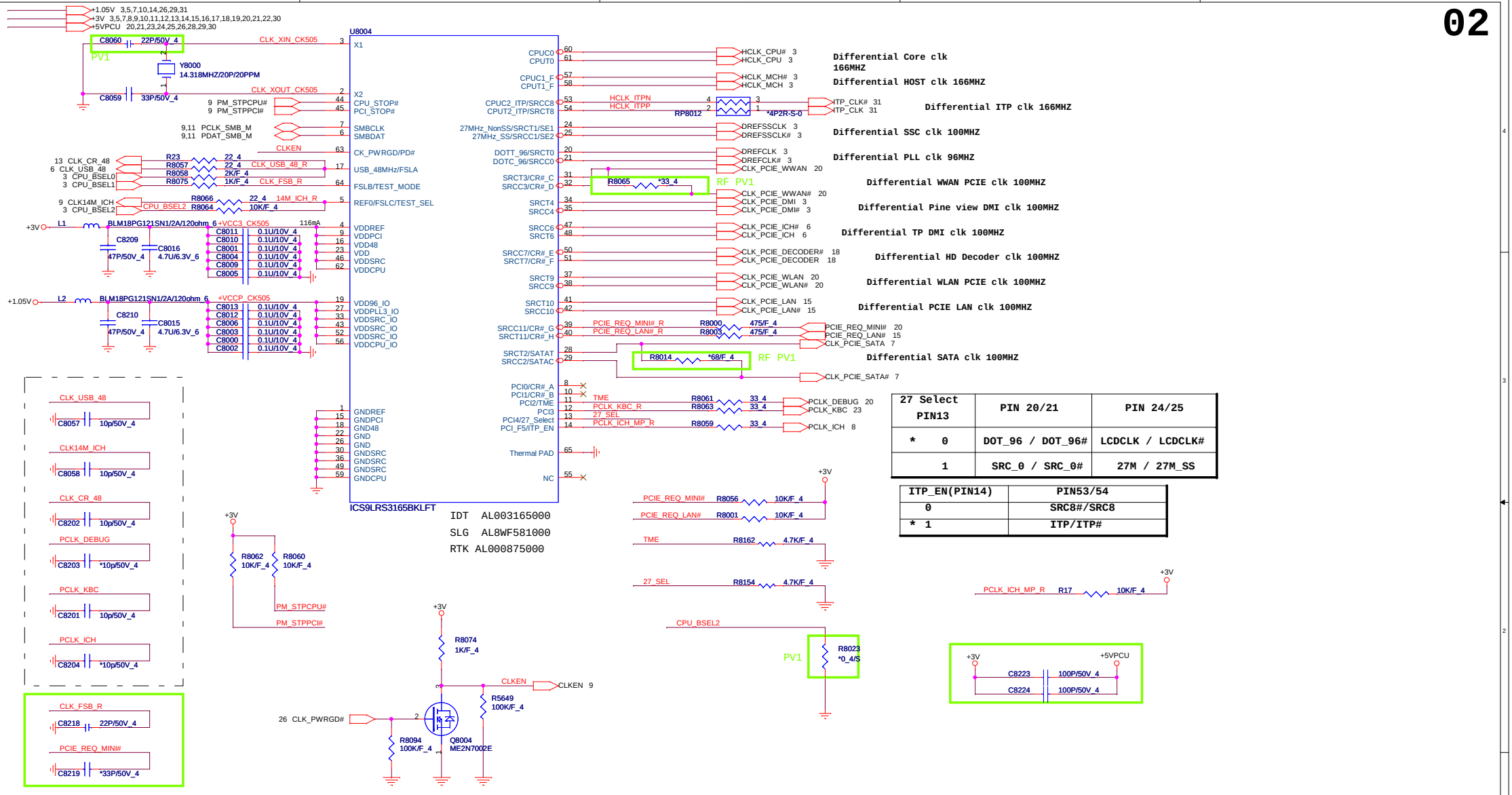
BIOS SPI Flash — Page 23	FAN G991 — Page 22	Int SPK — Page 17	Digital MIC — Page 17	HP/MIC COMBO JACK — Page 17

Quanta Computer Inc.
PROJECT : Annika

Size	Document Number	Rev
	BLOCK DIAGRAM	1A

Date: Thursday, January 21, 2010 Sheet 1 of 32

hexainf@hotmail.com



27 Select PIN13	PIN 20/21	PIN 24/25
* 0	DOT_96 / DOT_96#	LCDCLK / LCDCLK#
1	SRC_0 / SRC_0#	27M / 27M_SS

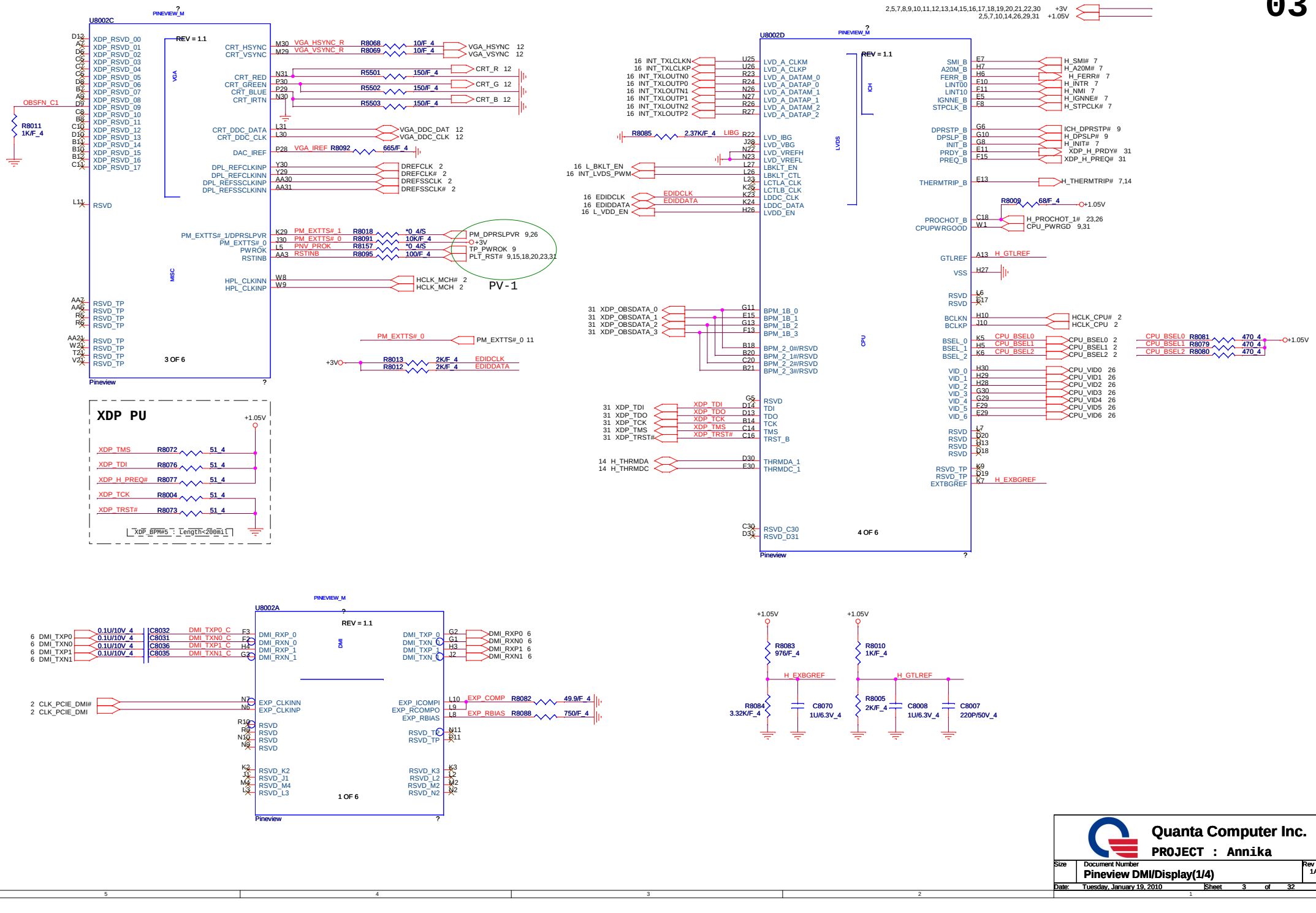
ITP_EN(PIN14)	PIN53/54
0	SRC8#/SRC8
* 1	ITP/ITP#

FSC BSEL2	FSB BSEL1	FSA BSEL0	CPU	SRC	PCI	REF	USB	DOT	Spread %
0	0	0	266.66	100	33.33	14.318	48	96	0.5 Down
0	0	1	133.33	100	33.33	14.318	48	96	0.5 Down
0	1	0	200.00	100	33.33	14.318	48	96	0.5 Down
0	1	1	**166.66**	100	33.33	14.318	48	96	0.5 Down
1	0	0	333.33	100	33.33	14.318	48	96	0.5 Down
1	0	1	100.00	100	33.33	14.318	48	96	0.5 Down
1	1	0	400.00	100	33.33	14.318	48	96	0.5 Down
1	1	1	RESERVED						

Quanta Computer Inc.
PROJECT : Annika

Size	Document Number	Rev
	Clock Gen	1A

Date: Tuesday, January 19, 2010 Sheet 2 of 32



+1.5VSUS 5,11,25,28,29,30

+0.75VSMVREF 11,25

PINEVIEW_M

U8002B

REV = 1.1

11 M_A_A[14..0]

M_A_A0 AH19 DDR_A_MA_0
M_A_A1 AJ18 DDR_A_MA_1
M_A_A2 AK18 DDR_A_MA_2
M_A_A3 AK16 DDR_A_MA_3
M_A_A4 AJ14 DDR_A_MA_4
M_A_A5 AH14 DDR_A_MA_5
M_A_A6 AK14 DDR_A_MA_6
M_A_A7 AJ12 DDR_A_MA_7
M_A_A8 AH13 DDR_A_MA_8
M_A_A9 AK12 DDR_A_MA_9
M_A_A10 AK20 DDR_A_MA_10
M_A_A11 AH12 DDR_A_MA_11
M_A_A12 AJ11 DDR_A_MA_12
M_A_A13 AJ24 DDR_A_MA_13
M_A_A14 AJ10 DDR_A_MA_14

11 M_A_WE#
11 M_A_CAS#
11 M_A_RAS#

M_A_WE# AK22 DDR_A_WEB
M_A_CAS# AJ22 DDR_A_CASB
M_A_RAS# AK21 DDR_A_RASB

11 M_A_BS0
11 M_A_BS1
11 M_A_BS2

M_A_BS0 AJ20 DDR_A_BS_0
M_A_BS1 AH20 DDR_A_BS_1
M_A_BS2 AK11 DDR_A_BS_2

11 M_CS#0
11 M_CS#1

M_CS#0 AH22 DDR_A_CSB_0
M_CS#1 AK25 DDR_A_CSB_1
AJ21 DDR_A_CSB_2
AJ25 DDR_A_CSB_3

11 M_CKE0
11 M_CKE1

M_CKE0 AH10 DDR_A_CKE_0
M_CKE1 AH9 DDR_A_CKE_1
AK10 DDR_A_CKE_2
AJ8 DDR_A_CKE_3

11 M_ODT0
11 M_ODT1

M_ODT0 AK24 DDR_A_ODT_0
M_ODT1 AH26 DDR_A_ODT_1
AH24 DDR_A_ODT_2
AK23 DDR_A_ODT_3

11 M_CLK0
11 M_CLK#0
11 M_CLK1
11 M_CLK#1

M_CLK0 AG15 DDR_A_CK_0
M_CLK#0 AF15 DDR_A_CKB_0
M_CLK1 AD13 DDR_A_CK_1
M_CLK#1 AC13 DDR_A_CKB_1

AC15 DDR_A_CK_3
AD15 DDR_A_CKB_3
AF13 DDR_A_CK_4
AG13 DDR_A_CKB_4

AD17 RSVD_AD17
AC17 RSVD_AC17
AB15 RSVD_AB15
AB17 RSVD_AB17

11 DDR3_DRAM_RST_N

DDR3_DRAM_RST_N AK8 DDR3_DRAMRSTB
DDR3_DRAM_PWROK AB4 DDR3_DRAM_PWROK

AB11 RSVD_TP
AB13 RSVD_TP

AL28 DDR_VREF
AK28 DDR_RPD
AJ26 DDR_RPU

AK29 RSVD

DDR_A_DQS_0 AD3 M_A_DQS0
DDR_A_DQSB_0 AD2 M_A_DQS#0
DDR_A_DM_0 AD4 M_A_DM0

DDR_A_DQ_0 AC4 M_A_DQ0
DDR_A_DQ_1 AC1 M_A_DQ1
DDR_A_DQ_2 AF4 M_A_DQ2
DDR_A_DQ_3 AG2 M_A_DQ3
DDR_A_DQ_4 AB2 M_A_DQ4
DDR_A_DQ_5 AB3 M_A_DQ5
DDR_A_DQ_6 AE2 M_A_DQ6
DDR_A_DQ_7 AE3 M_A_DQ7

DDR_A_DQS_1 AB8 M_A_DQS1
DDR_A_DQSB_1 AD7 M_A_DQS#1
DDR_A_DM_1 AA9 M_A_DM1

DDR_A_DQ_8 AB6 M_A_DQ8
DDR_A_DQ_9 AB7 M_A_DQ9
DDR_A_DQ_10 AE5 M_A_DQ10
DDR_A_DQ_11 AG5 M_A_DQ11
DDR_A_DQ_12 AA5 M_A_DQ12
DDR_A_DQ_13 AB5 M_A_DQ13
DDR_A_DQ_14 AB9 M_A_DQ14
DDR_A_DQ_15 AD6 M_A_DQ15

DDR_A_DQS_2 AD8 M_A_DQS2
DDR_A_DQSB_2 AD10 M_A_DQS#2
DDR_A_DM_2 AE8 M_A_DM2

DDR_A_DQ_16 AG8 M_A_DQ16
DDR_A_DQ_17 AG7 M_A_DQ17
DDR_A_DQ_18 AF10 M_A_DQ18
DDR_A_DQ_19 AG11 M_A_DQ19
DDR_A_DQ_20 AF7 M_A_DQ20
DDR_A_DQ_21 AF8 M_A_DQ21
DDR_A_DQ_22 AD11 M_A_DQ22
DDR_A_DQ_23 AE10 M_A_DQ23

DDR_A_DQS_3 AK5 M_A_DQS3
DDR_A_DQSB_3 AK3 M_A_DQS#3
DDR_A_DM_3 AJ3 M_A_DM3

DDR_A_DQ_24 AH1 M_A_DQ24
DDR_A_DQ_25 AJ2 M_A_DQ25
DDR_A_DQ_26 AK6 M_A_DQ26
DDR_A_DQ_27 AJ7 M_A_DQ27
DDR_A_DQ_28 AF3 M_A_DQ28
DDR_A_DQ_29 AH2 M_A_DQ29
DDR_A_DQ_30 AL5 M_A_DQ30
DDR_A_DQ_31 AJ6 M_A_DQ31

DDR_A_DQS_4 AG22 M_A_DQS4
DDR_A_DQSB_4 AG21 M_A_DQS#4
DDR_A_DM_4 AD19 M_A_DM4

DDR_A_DQ_32 AE19 M_A_DQ32
DDR_A_DQ_33 AG19 M_A_DQ33
DDR_A_DQ_34 AF22 M_A_DQ34
DDR_A_DQ_35 AD22 M_A_DQ35
DDR_A_DQ_36 AG17 M_A_DQ36
DDR_A_DQ_37 AE19 M_A_DQ37
DDR_A_DQ_38 AE21 M_A_DQ38
DDR_A_DQ_39 AD21 M_A_DQ39

DDR_A_DQS_5 AE26 M_A_DQS5
DDR_A_DQSB_5 AG27 M_A_DQS#5
DDR_A_DM_5 AJ27 M_A_DM5

DDR_A_DQ_40 AE24 M_A_DQ40
DDR_A_DQ_41 AG25 M_A_DQ41
DDR_A_DQ_42 AD25 M_A_DQ42
DDR_A_DQ_43 AD24 M_A_DQ43
DDR_A_DQ_44 AC22 M_A_DQ44
DDR_A_DQ_45 AG24 M_A_DQ45
DDR_A_DQ_46 AD27 M_A_DQ46
DDR_A_DQ_47 AE27 M_A_DQ47

DDR_A_DQS_6 AE30 M_A_DQS6
DDR_A_DQSB_6 AF29 M_A_DQS#6
DDR_A_DM_6 AF30 M_A_DM6

DDR_A_DQ_48 AG31 M_A_DQ48
DDR_A_DQ_49 AG30 M_A_DQ49
DDR_A_DQ_50 AD30 M_A_DQ50
DDR_A_DQ_51 AD29 M_A_DQ51
DDR_A_DQ_52 AJ30 M_A_DQ52
DDR_A_DQ_53 AJ29 M_A_DQ53
DDR_A_DQ_54 AE29 M_A_DQ54
DDR_A_DQ_55 AD28 M_A_DQ55

DDR_A_DQS_7 AB27 M_A_DQS7
DDR_A_DQSB_7 AA27 M_A_DQS#7
DDR_A_DM_7 AB26 M_A_DM7

DDR_A_DQ_56 AA24 M_A_DQ56
DDR_A_DQ_57 AB25 M_A_DQ57
DDR_A_DQ_58 W24 M_A_DQ58
DDR_A_DQ_59 W22 M_A_DQ59
DDR_A_DQ_60 AB24 M_A_DQ60
DDR_A_DQ_61 AB23 M_A_DQ61
DDR_A_DQ_62 AA23 M_A_DQ62
DDR_A_DQ_63 W27 M_A_DQ63

2 OF 6

Pineview

M_A_DQ[63..0] 11
M_A_DM[7..0] 11
M_A_DQS[7..0] 11
M_A_DQS#[7..0] 11

+1.5VSUS
R8039 1K/F_4
+0.75VSMVREF R8100 *0_4 +DDR_VREF
R8037 1K/F_4

+1.5VSUS
R8110 10K/F_4

C8033 0.01U/25V_4
+DDR_VREF
+1.5VSUS R8036 80.6/F_4 SM_RCOMP
R8040 80.6/F_4 SM_RCOMP#
C8034 0.01U/25V_4

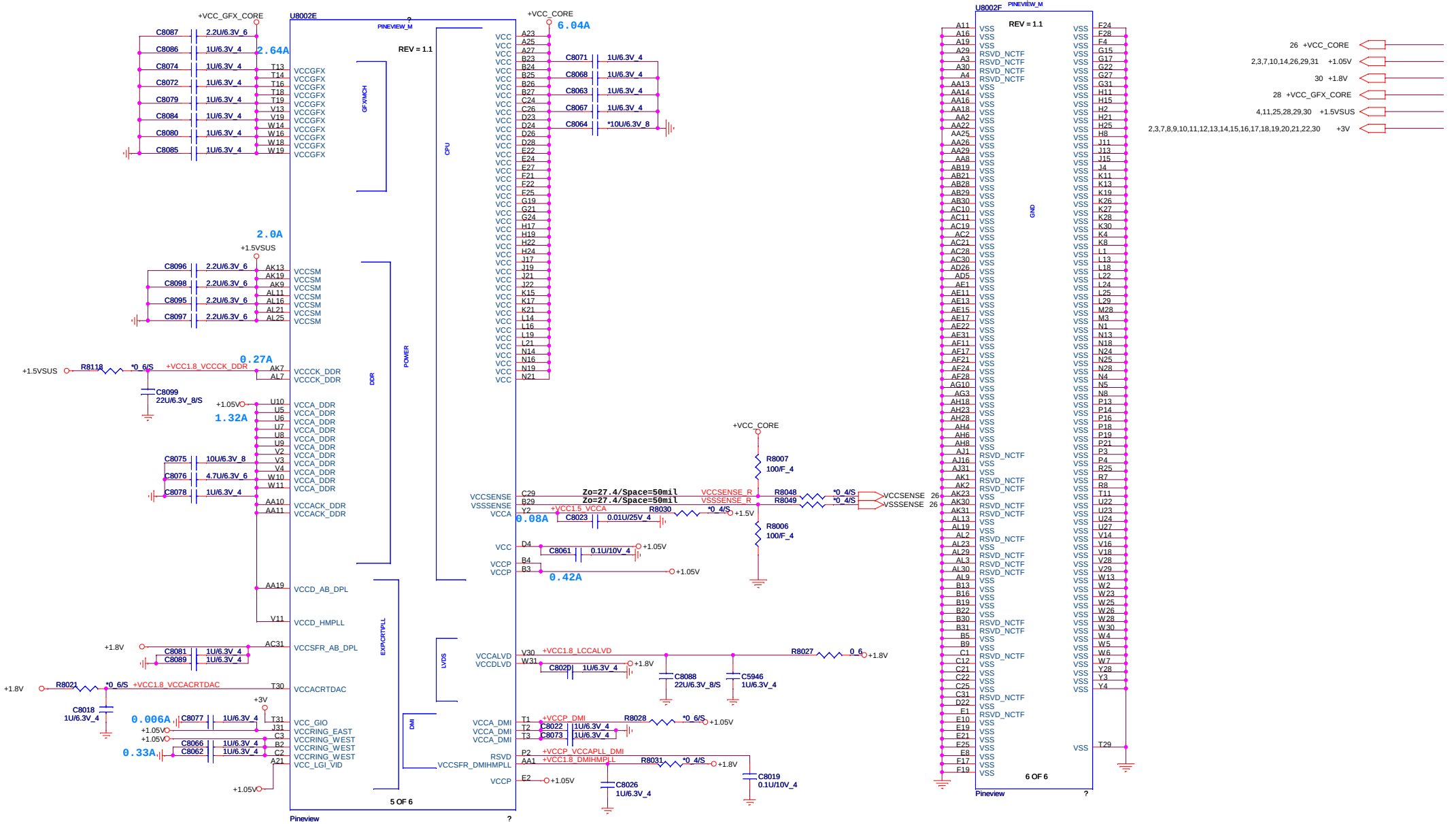
+5V_S5 +1.5VSUS
C8069 *0.1U/10V_4
R8052 *1K/F_4
R8050 *1K/F_4
DDR3_DRAM_PWROK
*MMBT3904 Q8008
C436 *1U/6.3V_4
R8051 0_4
9,23 SUSC# SUSC# R8053 *1K/F_4
*MMBT3904 Q8009
HWPG HWPG 16,23,24,25,28,29,30
DDR3_DRAM_PWROK
R8038 *0_4

Intel CRB

Quanta Computer Inc.
PROJECT : Annika

Size	Document Number	Rev
	Pineview DDR(2/4)	1A

Date: Tuesday, January 19, 2010 Sheet 4 of 32



Quanta Computer Inc.

PROJECT : Annika

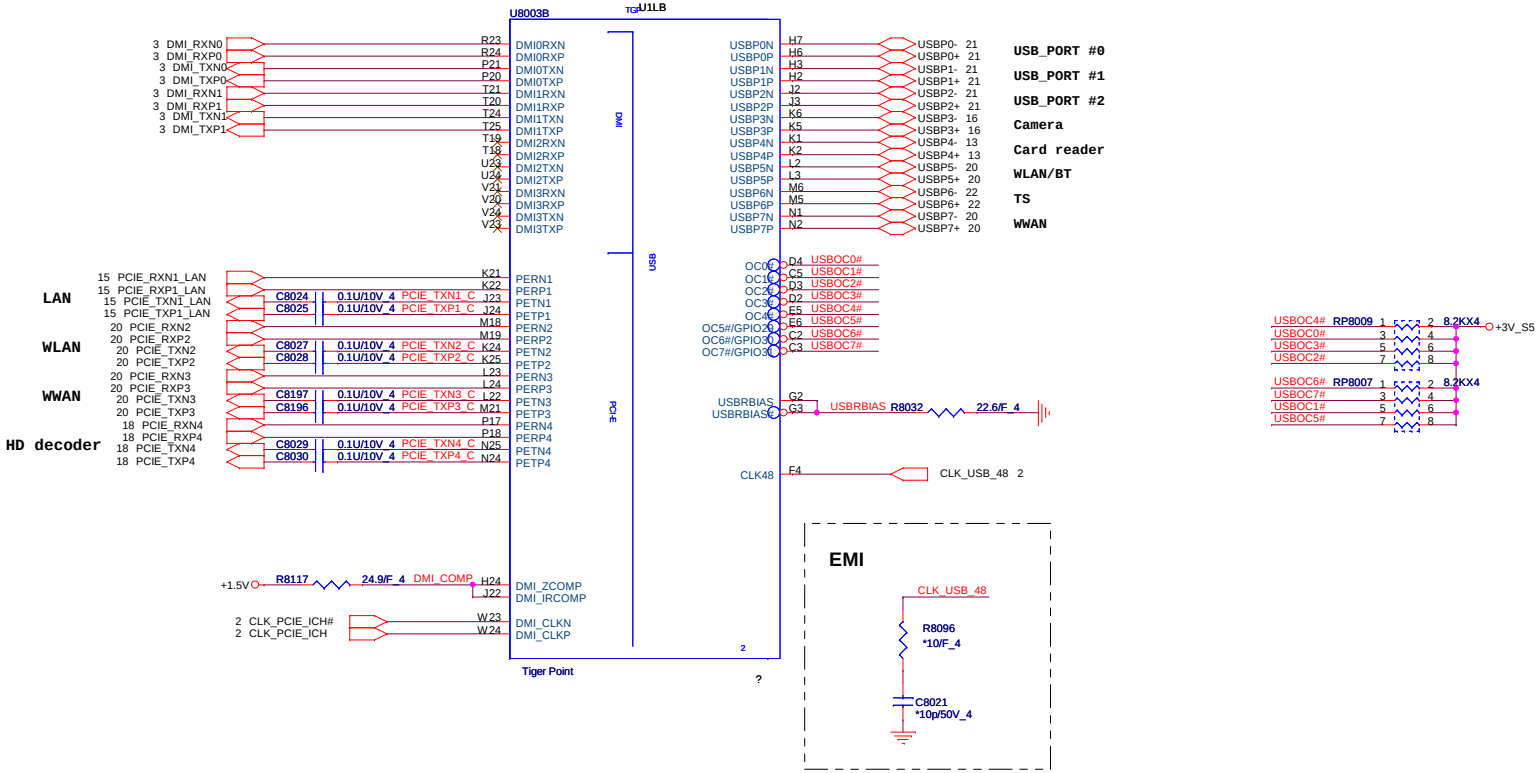
Size	Document Number	Rev
	Pineview Power(3/4)	1A

Date: Tuesday, January 19, 2010 Sheet 5 of 32

hexainf@hotmail.com

5,10,18,20,30 +1.5V

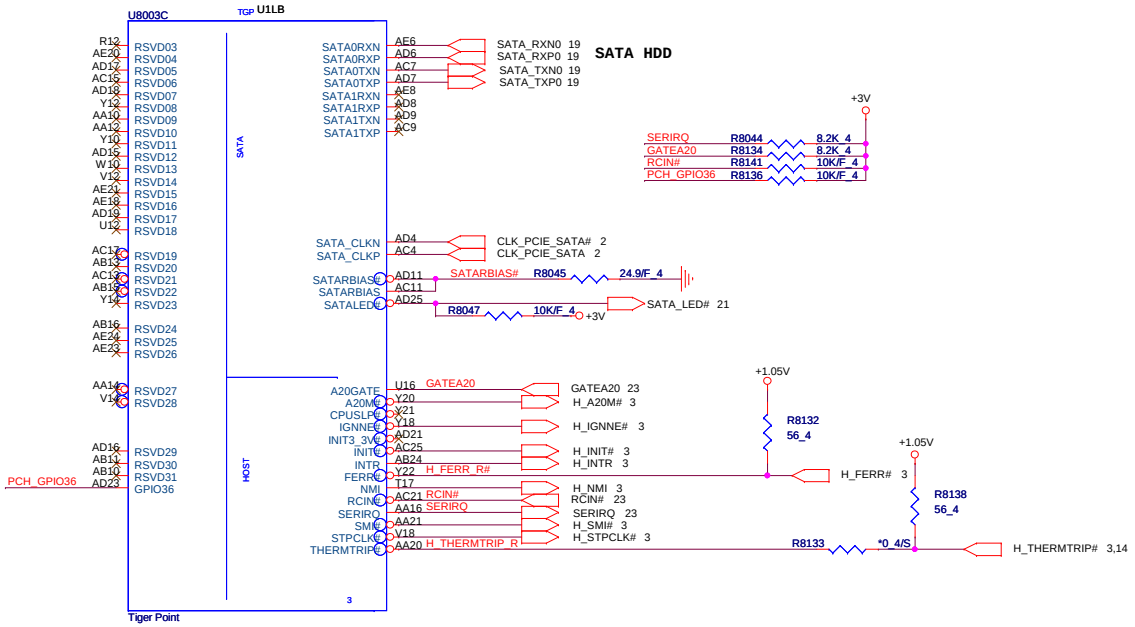
9,10,30 +3V_S5



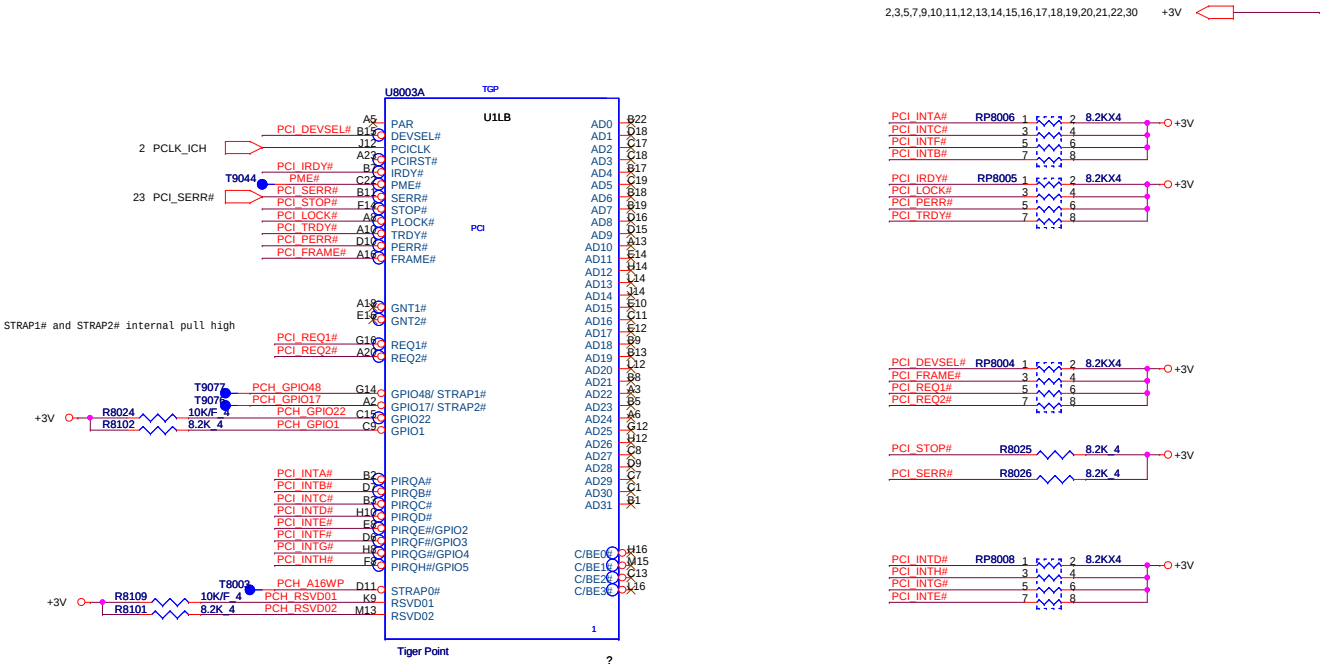
Quanta Computer Inc.		
PROJECT : Annika		
Size	Document Number: TigerPoint DMI/PCIE(1/6)	Rev: 1A
Date: Tuesday, January 19, 2010	Sheet 6 of 32	

+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



Quanta Computer Inc.		
PROJECT : Annika		
Size	Document Number: TigerPoint Sata/Host(2/6)	Rev: 1A
Date: Tuesday, January 19, 2010	Sheet 7 of 32	



ICH Boot BIOS select

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

A16 SWAP Override strap

PCH_A16WP (INT PU)	**Low = A16 swap override enabled** **High = Default**

IRQ	Description
PIRQA	USB UHCI Controller #1, #4
PIRQB	AC'97 Codec; option for SMBUS
PIRQC	USB UH Controller #3; SATA/IDE Native Mode
PIRQD	USB UHCI Controller #2
PIRQE	Internal LAN; Option for SCI, TCO, HPET#0,1,2
PIRQF	Option for SCI, TCO, HPET#0,1,2
PIRQG	Option for SCI, TCO, HPET#0,1,2
PIRQH	USB EHCI Controller; Option for SCI, TCO, HPET#0,1,2

PCI_GNT#2	Internal PU Should not be PD

Quanta Computer Inc.
PROJECT : Annika

Size	Document Number	Rev
	TigerPoint PCI(3/6)	1A

Date: Tuesday, January 19, 2010 Sheet 8 of 32

14,16,20,21,22,23,24,26,27,30 +3VPCU
2,3,5,7,8,10,11,12,13,14,15,16,17,18,19,20,21,22,30 +3V
6,10,30 +3V_S5

EMI

CLK14M_ICH R8041 22_4 EMI-14M C8037 10P/50V_4

ACZ_SDOUT
ACZ_BITCLK
C8206 *10p/50V_4
C8205 10p/50V_4

ACZ_RST#
ACZ_SYNC
C8212 *10p/50V_4
C8213 *10p/50V_4

RTC

C8118 15p/50V_4
Y8999 32.768KHZ
C8113 15p/50V_4
R8129 10M_4

+VCCRTC
+3VPCU
D8999 RB500V-40
C8130 1U/6.3V_4
D8004 RB500V-40
R8151 20K/F_4
R8142 1K/F_4
R8150 1M_4
C8129 1U/6.3V_4
J8999 *SHORTPAD
SM_INTRUDER#
+VCCRTC_2
BT8999 BAT_CONN

U8003D Tiger Point (TGP U1LB)

T8999	LDRQ1#	LDRQ1#/GPIO23
20,23 LAD0		LAD0/FWH0
20,23 LAD1		LAD1/FWH1
20,23 LAD2		LAD2/FWH2
20,23 LAD3		LAD3/FWH3
T8017	LDRQ0#	LDRQ0#
20,23 LFRAME#		LFRAME#
17 ACZ_BITCLK	R8125 33_4 ACZ_BITCLK_R	HDA_BIT_CLK
17 ACZ_RST#	R8033 33_4 ACZ_RST#_R	HDA_RST#
17 ACZ_SDIN0		HDA_SDI0
		HDA_SDIN1
		HDA_SDIN2
17 ACZ_SDOUT	R8035 33_4 ACZ_SDOUT_R	HDA_SDOUT
17 ACZ_SYNC	R8034 33_4 ACZ_SYNC_R	HDA_SYNC
2 CLK14M_ICH	CLK14M_ICH	CLK14
		EE_CS
		EE_DIN
		EE_DOUT
		EE_SHCLK
	LAN_RST#	LAN_CLK
		LANR_STSYNC
		LAN_RST#
		LAN_RXD0
		LAN_RXD1
		LAN_RXD2
		LAN_TXD0
		LAN_TXD1
		LAN_TXD2
	RTC_X1	RTCX1
	RTC_X2	RTCX2
	RTC_RST#	RTCRST#
	SMBALERT#	SMBALERT#/GPIO11
	SMB0_CLK	SMBCLK
	SMB0_DATA	SMBDATA
	SMB_LINK_ALERT#	SMLALERT#
	SMLINK0	SMLINK0
	SMLINK1	SMLINK1
T8009	SPI_MISO	SPI_MISO
T8008	SPI_MISI	SPI_MOSI
T8013	SPI_CS#	SPI_CS#
T8014	SPI_CLK	SPI_CLK
T8015	SPI_ARB	SPI_ARB

GPIO23 3.3V GPIO0 3.3V GPI

	BM_BUSY#/GPIO0	BM_BUSY#
GPIO6 3.3V GPI	GPIO6	BOARD ID0
GPIO7 3.3V GPI	GPIO7	BOARD ID1
GPIO8 3.3VSUS GPI	GPIO8	KBSMI# 23
GPIO9 3.3VSUS GPI	GPIO9	SCI# 23
GPIO10 3.3VSUS GPI	GPIO10	WWAN_OFF# 20
GPIO12 3.3VSUS GPI	GPIO12	PCH_GPIO12
GPIO13 3.3VSUS GPI	GPIO13	PCH_GPIO13
GPIO14 3.3VSUS GPI	GPIO14	PCH_GPIO14
GPIO15 3.3VSUS GPI	GPIO15	PCH_GPIO15
	DPRSLPVR	PM_DPRSLPVR 3,26
	STP_PCI#	PM_STPPCI# 2
	STP_CPU#	PM_STPCPU# 2
GPIO24 3.3VSUS GPO	GPIO24	DMI_AC_ENABLE
GPIO25 3.3VSUS GPO	GPIO25	
GPIO26 3.3VSUS GPO	GPIO26	
GPIO27 3.3VSUS GPO	GPIO27	
GPIO28 3.3VSUS GPO	GPIO28	
	CLKRUN#	CLKRUN# 23
GPIO33 3.3V GPO	GPIO33	BOARD ID2
GPIO34 3.3V GPO	GPIO34	RF_OFF# 20
GPIO38 3.3V GPI	GPIO38	PCIE_WWAN_DET# 20
GPIO39 3.3V GPI	GPIO39	BT_COMBO_EN# 20
	CPUPWRGD/GPIO49	CPU_PWRGD 3,31
	THRMC	TP_THRM# R8214 *0_4/S PM_THRM# 14
	VRMPWRGD	VRMPWRGD R8218 *0_4/S CLKEN 2
	MCH_SYNC#	MCH_SYNC#
	PWRBTN#	DNBSWON# 23
	RI#	ICH_RI#
	SUS_STAT#/LPCPD#	SUS_STAT#
	SUSCLK	SYSCLK T8011 T8016
	SYS_RESET#	SYS_RST# SYS_RST# 31
	PLTRST#	PLTRSTB# PLT_RST# 3,15,18,20,23,31
	WAKE#	PCIE_LAN_WAKE# PCIE_LAN_WAKE# 15,20
	INTRUDER#	SM_INTRUDER#
	PWROK	TP_PWROK
	RSMRST#	RSMRST# 23
	INTVRMEN	ICH_INTVRMEN
	SPKR	SPKR_L SPKR 17
	SLP_S3#	SUSB# SUSB# 23
	SLP_S4#	SUSC# SUSC# 4,23
	SLP_S5#	
	BATLOW#	PM_BATLOW#
	DPRSTP#	ICH_DPRSTP# ICH_DPRSTP# 3
	DPSLP#	H_DPSLP# H_DPSLP# 3
	RSVD31	

Tiger Point

integrated pull-up of 18 k - 42 k .check list 0.7

+3V_S5

DNBSWON#	R8111	*10K/F_4
KBSMI#	R8123	8.2K_4
SYS_RST#	R8112	10K/F_4
SMBALERT#	R8122	10K/F_4
SMB_LINK_ALERT#	R127	10K/F_4
PM_BATLOW#	R8158	8.2K_4
PCIE_LAN_WAKE#	R8159	10K/F_4
SMLINK1	R8043	10K/F_4
SMLINK0	R8098	10K/F_4
SMB0_CLK	R8106	2K/F_4
SMB0_DATA	R8105	2K/F_4
WWAN_OFF#	R8119	10K/F_4
PCH_GPIO12	R9028	8.2K_4
PCH_GPIO13	R8160	8.2K_4
PCH_GPIO14	R8126	10K/F_4
PCH_GPIO15	R8161	8.2K_4
ICH_RI#	R8135	10K/F_4
SCI#	R9027	8.2K_4

+3V

CLKRUN#	R8163	8.2K_4
TP_THRM#	R8181	10K/F_4
MCH_SYNC#	R8046	1K/F_4
BM_BUSY#	R8182	10K/F_4
PLTRSTB#	R8029	100K/F_4
LAN_RST#	R8165	8.2K_4
TP_PWROK	R8211	10K/F_4
RSMRST#	R8212	10K/F_4

10-k pull-down to GND check list 0.7

INTVRMEN	
Enable (default)	1
Disable	0

+3V R8223 8.2K_4 BOARD ID0 R8224 *8.2K_4
R8225 *8.2K_4 BOARD ID1 R8226 8.2K_4
R8227 *8.2K_4 BOARD ID2 R8228 *8.2K_4

Board ID	ID0	ID1	ID2
Annika 1.0 WO SIM	0	0	0
Annika 1.0 W/ SIM	1	0	0
Annika 1.1 WO SIM	0	1	0
Annika 1.1 W/ SIM	1	1	0

Q8005 ME2N7002E
SMB0_CLK R8099 10K/F_4 +3V PCLK_SMB_M 2,11

Q9000 ME2N7002E
SMB0_DATA R8097 10K/F_4 +3V PDAT_SMB_M 2,11

ICH_INTVRMEN R8042 332K/F_4 +VCCRTC

23 IMVP_PWRGD_EC R9037 *0_4
23,26 IMVP_PWRGD
14,16,23 ECPWROK
U8013 TC7SH08FU
TP_PWROK TP_PWROK 3

PV-1

GPIO25 This signal has a weak internal pull-up.

If the signal is sampled high, the DMI interface is strapped to operate in DC coupled mode (No coupling capacitors are required on DMI differential pairs). If the signal is sampled low, the DMI interface is strapped to operate in AC coupled mode (Coupling capacitors are required on DMI differential pairs). NOTE: Board designer must ensure that DMI implementation matches the strap selection.

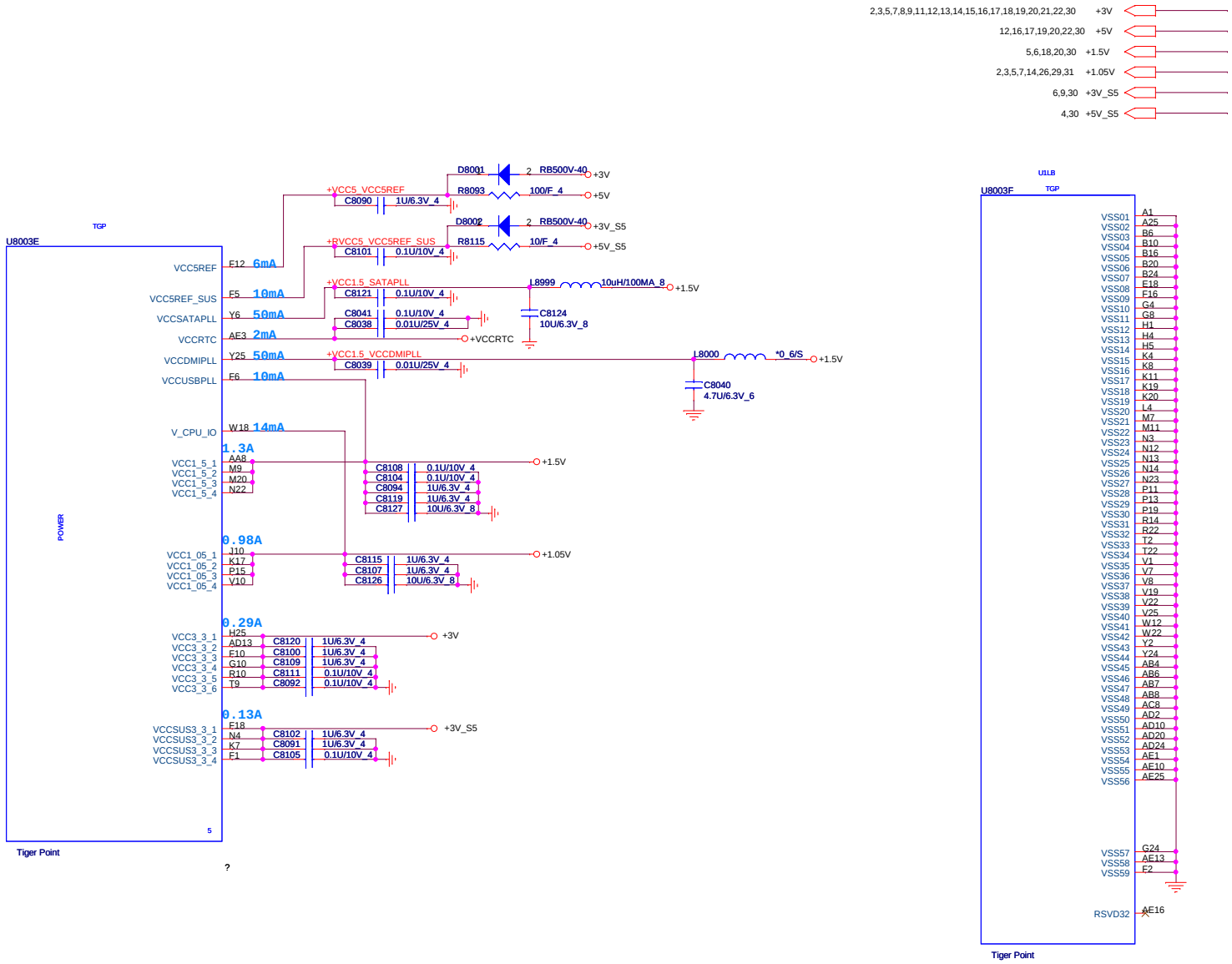
DMI_AC_ENABLE R8108 1K/F_4

ACZ_SDOUT (INT PD)	ACZ_SYNC (INT PD)	Description
0	0	* 4 x 1s
1	0	Reserved
0	1	Reserved
1	1	1 x 4s(1 port/4 lanes)

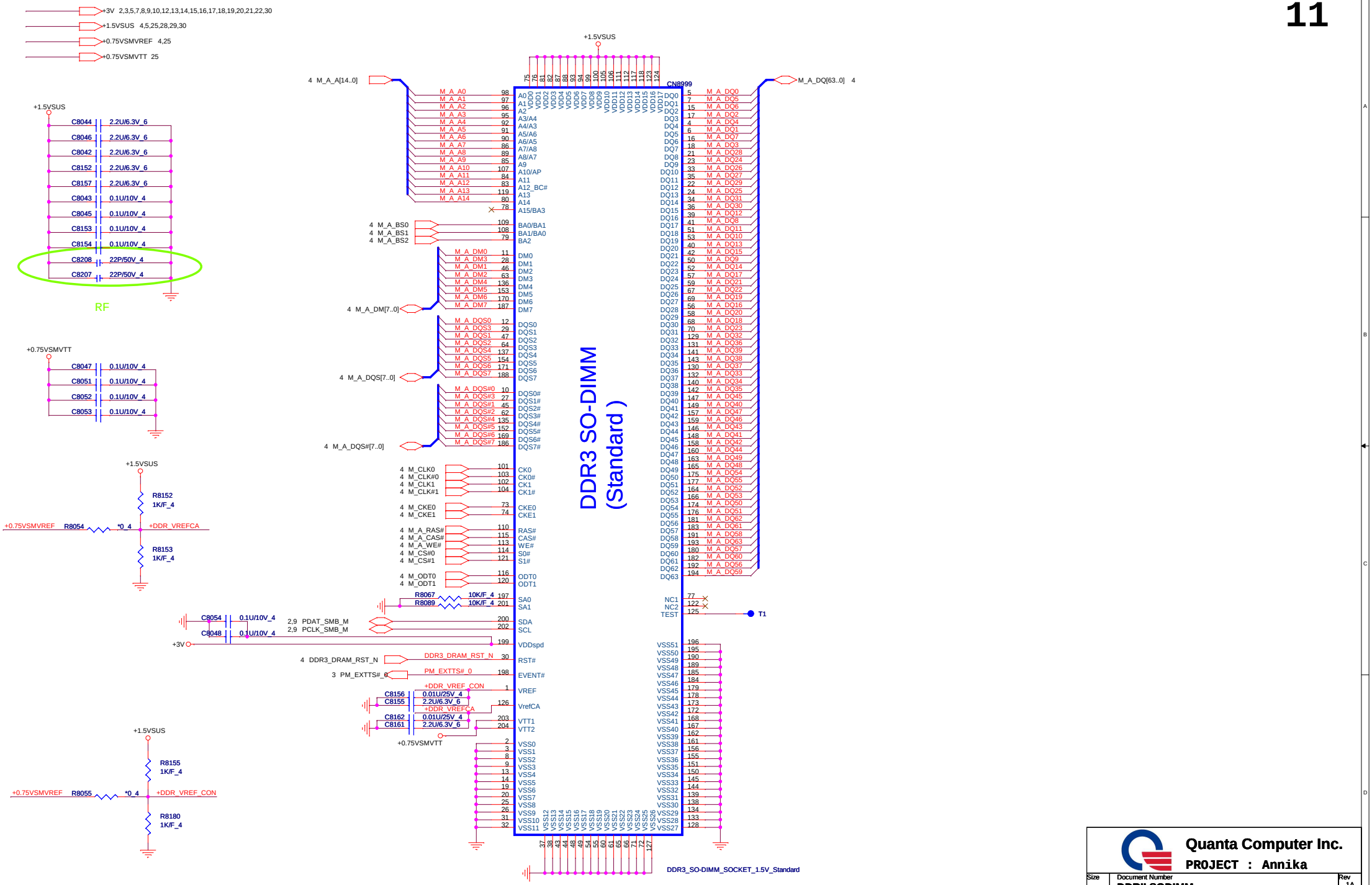
Quanta Computer Inc.
PROJECT : Annika

Size	Document Number	Rev
	TigerPoint GPIO(4/6)	1A

Date: Tuesday, January 19, 2010 Sheet 9 of 32



Quanta Computer Inc.		
PROJECT : Annika		
Size	Document Number: TigerPoint Power(5/6)	Rev: 1A
Date: Tuesday, January 19, 2010	Sheet 10 of 32	



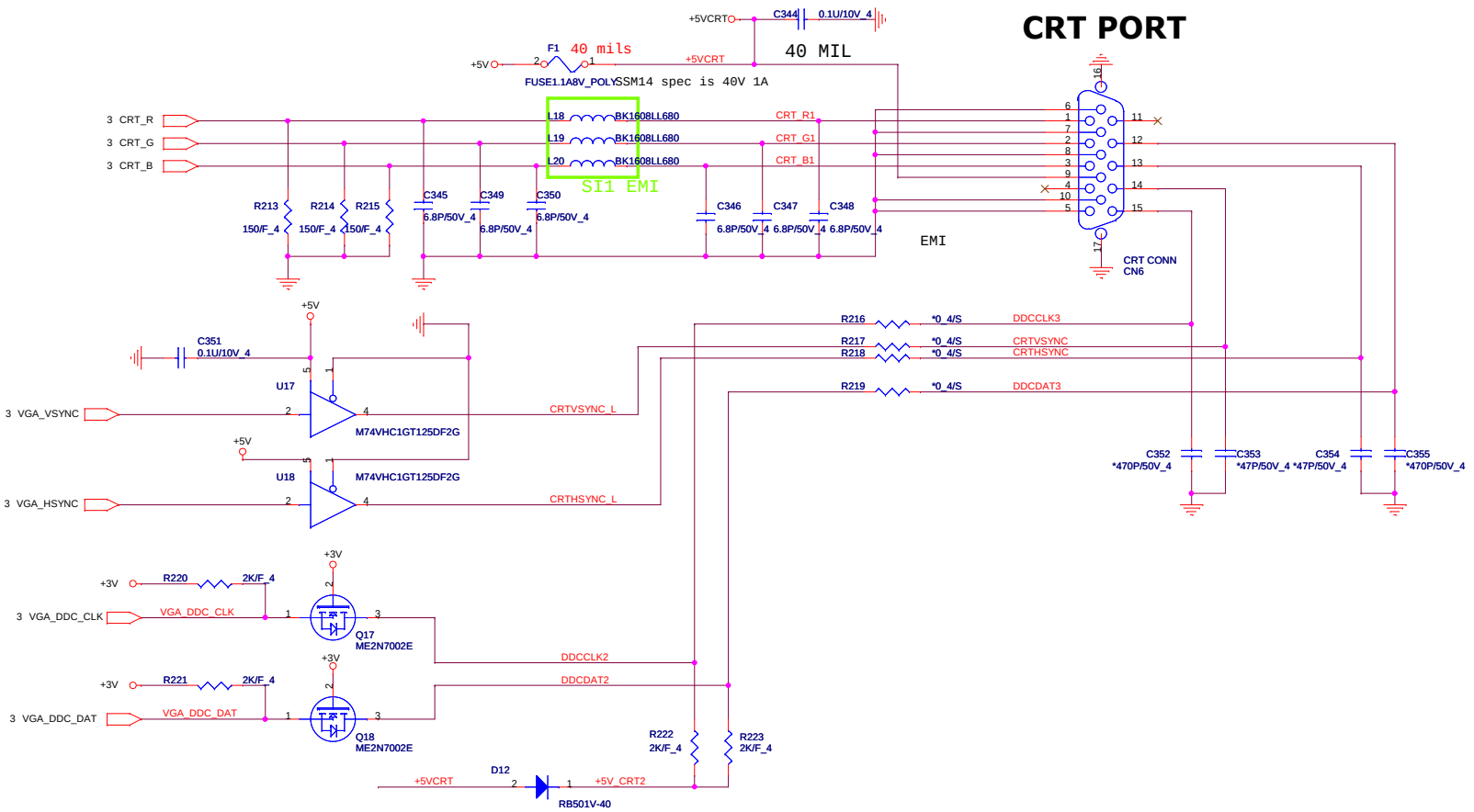
Quanta Computer Inc.		
PROJECT : Annika		
Size	Document Number: DDRII SODIMM	Rev: 1A
Date: Thursday, January 21, 2010	Sheet 11 of 32	

hexainf@hotmail.com

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

CRT PORT



Quanta Computer Inc.		
PROJECT : Annika		
Size	Document Number: CRT	Rev: 1A
Date: Tuesday, January 19, 2010	Sheet 12 of 32	

+3V 2,3,5,7,8,9,10,11,12,14,15,16,17,18,19,20,21,22,30

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

+3V R261 10K/F_4 XTAL_CTR

U21

XTAL_CTR
GPIO0
EEDO
EECS
EESK
EEDI
XD_CD#
SD_WP
SD_CD#
MS_D4
SD_DAT1/XD_D4
MS_D5

R263 6.19K/F_4 RREF

RREF
DM
DP

6 USBP4-
6 USBP4+

2 CLK_CR_48

R266 *0_4/S XTLO
C398 10p/50V_4
SI1 EMI
R268 *270K_4
Y4 12MHz
C399 *18P/50V/COG_4

XTLO
XTLI
12MHZ_XTLO
12MHZ_XTLI

MODE_SEL
R9031 *0_4/S

+3V R271 *100K/F_4 5158_RST#
C406 1U/6.3V_4
Internal have pull Hi 200K

RST#
MODE_SEL

Realtek RTS5159

XD_CLE
XD_CE#
XD_ALE
SD_DAT2/XD_RE#
SD_DAT3/XD_WE#
XD_RDY
SD_DAT4/XD_WP#/MS_D7
SD_CMD
SD_DAT5/XD_D0/MS_D6
SD_CLK/XD_D1/MS_CLK
SD_DAT6/XD_D7/MS_D3
NC
MS_INS#
SD_DAT7/XD_D2/MS_D2
SD_DAT0/XD_D6/MS_D0
XD_D3/MS_D1
XD_D5/MS_BS

AV_PLL_IN
VREG_OUT
5V_IN
NC
D3V3_IN
D3V3_IN
NC
CARD_3V3_OUT
AG33
AG_PLL
DGND2
DGND1

SD_CLK_MS_CLK R262 *0_4/S SP11

Close to Chipset
SD_CLK_MS_CLK
C395 10p/50V_4
SI1 EMI

C396 0.1U/10V_4
C397 1U/6.3V_4
VREG
+3V
C400 0.1U/10V_4
C401 0.1U/10V_4
C402 4.7U/6.3V_6
Without memory card 43mA
suspend current 350uA
C403 0.1U/10V_4
C404 4.7U/6.3V_6
+3V
+3VCARD
C405 1U/6.3V_4
RTS5159 max output current for ..
XD card 250mA
SD/MMC 250mA
MS/MSPRO 250mA
+3VCARD
C407 0.1U/10V_4
C408 0.1U/10V_4
C409 0.1U/10V_4

Note:

	SD/MMC	MS	XD
SP0			
SP1			XD_CD#
SP2	SD_WP		
SP3	SD_CD#		
SP4	SD_DAT1		XD_D4
SP5		MS_BS	XD_D5
SP6		MS_D1	XD_D3
SP7	SD_DAT0	MS_D0	XD_D6
SP8	SD_DAT7	MS_D2	XD_D2
SP9		MS_INS#	
SP10	SD_DAT6	MS_D3	XD_D7
SP11	SD_CLK	MS_SCLK	XD_D1
SP12	SD_DAT5		XD_D0
SP13	SD_DAT4		XD_WP#
SP14			XD_R/B#
SP15	SD_DAT3		XD_WE#
SP16	SD_DAT2		XD_RE#
SP17			XD_ALE
SP18			XD_CE#
SP19			XD_CLE

+3VCARD +3VCARD +3VCARD

R272 *10K/F_4
C410 *270P/25V_4

CN8001

XD-R/B
XD-RE
XD-CE
XD-CLE
XD-ALE
XD-WE
XD-WP
XD-D0
XD-D1
SD-DAT2
SD-DAT3
SD-CMD
4IN1-GND1
MS-VCC
MS-SCLK
MS-DATA3
MS-INS
MS-DATA2
MS-DATA0

MS-DATA1
MS-BS
4IN1-GND2
SD-VCC
SD-CLK
SD-DAT0
XD-D2
XD-D3
XD-D4
SD-DAT1
XD-D5
XD-D6
XD-D7
XD-VCC
XD-CD-SW
SD-WP-SW
SD-CD-SW

SHIELD1-GND
SHIELD2-GND
BOS
BOS

CARD READER SOCKET

XTLO
R8103 *10/F_4
C8049 *10p/50V_4

5 IN1 CARD-READER (PUSH-PUSH)

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

CLOSE to CONN

+3VCARD +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

To Cardreader Connector

Quanta Computer Inc.
PROJECT : Annika

Size	Document Number	Rev
	Realtek RTS5159 & Card Reader	1A

Date: Tuesday, January 19, 2010 Sheet 13 of 32

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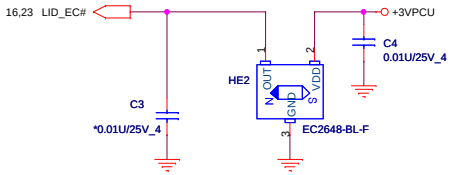
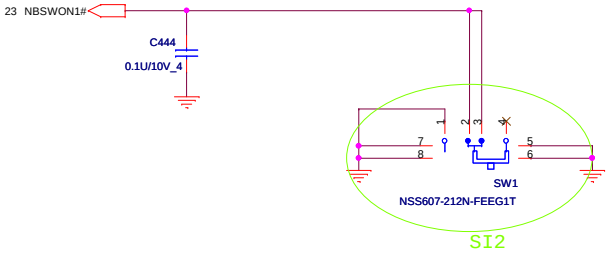
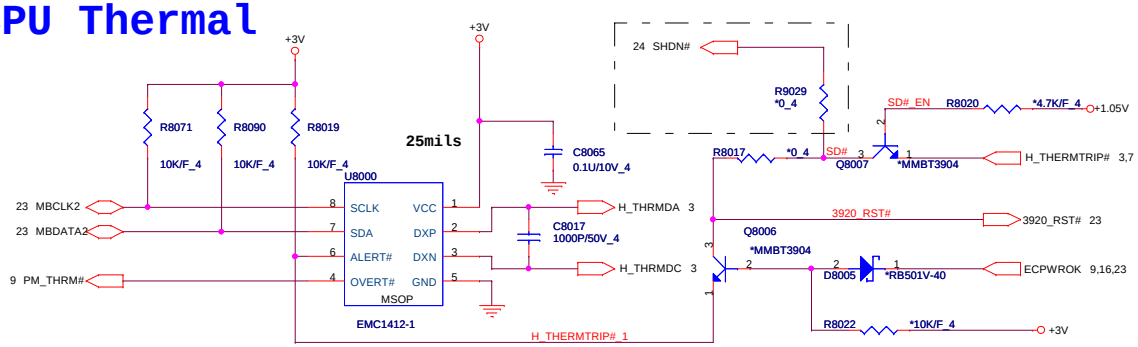
+3VPCU 9,16,20,21,22,23,24,26,27,30
+3V 2,3,5,7,8,9,10,11,12,13,15,16,17,18,19,20,21,22,30
+1.05V 2,3,5,7,10,26,29,31

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.

Quanta Computer Inc.		
PROJECT : Annika		
Size	Document Number: Power Botton	Rev: 1A
Date: Tuesday, January 19, 2010	Sheet 14 of 32	

RF PV2

+CTRL12DVDD — R5376 BLM18PG471SN1D — RF PV1 — +DVDD12_LAN

C5066 0.1U/10V_4 | C5059 100P/50V_4 | C5053 0.1U/10V_4 | C5055 100P/50V_4 | C5089 0.1U/10V_4

Close to RTL8103E pins-- 10, 13, 30, 36, 39.

+EVDD12

C5599 1U/6.3V_4 | C5600 1U/6.3V_4

Close to RTL8103E pins-- 19

Power trace Layout 寬度> 200mil

+CTRL12A

C5595 10U/6.3V_8 | C5062 0.1U/10V_4 | C435 470P/50V_4

RF VT2.0

30 +3VLANVCC
2,3,5,7,8,9,10,11,12,13,14,16,17,18,19,20,21,22,30 +3V
30 +5VLANVCC

+3VLANVCC

C5594 0.1U/10V_4 — Close to PIN 1

C5051 0.1U/10V_4 | C5087 *0.1U/10V_4 | C5071 0.1U/10V_4 — Close to PIN 29,37

RF VT2.0

+CTRL12DVDD

C366 470P/50V_4 | C5587 0.1U/10V_4 | C5591 10U/6.3V_8

close Pin 45

R5031 2.49K/F_4 LANRSET

XTAL2 | XTAL1 | Y5000 25MHZ | C5043 30P/50V_4 | C5044 30P/50V_4

LED1_AD1 | +3VLANVCC | +CTRL12A

U5001

RTL8103EL-VB-GR

1 AVDD33	MDI0+	LAN_GLINK100#	36 DVDD12B
2 MDIP0	MDI0-	LAN_GLINK10# R5039 3.6K_4 +3VLANVCC	35 LED1/EESK
3 MDIN0			34 LED2/EEDI
4 NC/FB12		EECS R5040 1K/F_4	33 LED3/EEDO
5 MDIP1	MDI1+		32 EECS
6 MDIN1	MDI1-		31 GND3
7 GND1		+DVDD12_LAN	30 DVDD12A
8 NC/MDIP2		+3VLANVCC	29 VDD33A
9 NC/MDIN2		ISOLATEB	28 ISOLATEB
10 DVDD12/AVDD12	+DVDD12_LAN	LAN_REST_R# R9000 *0_4/S PLT_RST#	27 PERSTB
11 NC/MDIP3			26 LANWAKEB
12 NC/MDIN3		PCIE_REQ_LAN# 2	25 CLKREQB

PLT_RST# 3,9,18,20,23,31
PCIE_LAN_WAKE# 9,20

C5072 *100P/50V_4

+DVDD12_LAN

PCIE_RXN1_LAN_L C5086 0.1U/10V_4 — PCIE_RXN1_LAN 6
PCIE_RXP1_LAN_L C5085 0.1U/10V_4 — PCIE_RXP1_LAN 6

+EVDD12

6 PCIE_TXP1_LAN
6 PCIE_TXN1_LAN
2 CLK_PCIE_LAN
2 CLK_PCIE_LAN#

SI2

+3V

R5391 1K/F_4 | R5386 15K/F_4

ISOLATEB R5392 *100/F_4 LAN_DISABLE# 23

*RB501V-40 D5036

if ISOLATEB pin pull-low,the LAN chip will not drive it's PCI-E outputs (excluding PCIE_WAKE# pin)

C8221 *100P/50V_4 | C8220 *100P/50V_4 | C8222 *100P/50V_4 — +DVDD12_LAN

PV1 RF

Symbol	Type	Pin No (64-Pin)	Pin No (48-Pin)	Description

LEDS1-0	00	01	10	11
LED0	Tx/Rx	Tx/Rx	Tx	Tx
LED1	LINK100	LINK	LINK	LINK100
LED2	LINK10	FULL	Rx	LINK10
LED3	NA	NA	NA	NA

Symbol	Type	Pin No (64-Pin)	Pin No (48-Pin)
LED0	O	57	38
LED1	O	56	35
LED2	O	55	34
LED3	O	54	33

VT 2.0

+3VLANVCC | +3VLANVCC | R403 *10K/F_4 | R404 *10K/F_4 | LED_WHT_N | LED0_AD0 | C600 *0.1U/10V_4 | Q34 *ME2N7002E | Q35 *ME2N7002E | LED0_AD0 R402 0_4 LED_WHT_N

VT 2.0

LAN_GLED | LED_WHT_N | VC5 AVLC5S_4

VT 2.0

+5VLANVCC R418 *330_4
+3VLANVCC R417 330_4 | C598 0.1U/10V_4
R534 *75/F_4 FOR EMI

RJ45

CN24

LAN_GLED | LED_WHT_N | LED_WHT_P | LED_WHT_N
LAN_MX1- | RX1- | RX1+ | RX0- | TX1- | TX1+
LAN_MX1+ | RX0+
LAN_MX0- | TX0-
LAN_MX0+ | TX0+
GND1 | GND
LAN_YLED | LED1_AD1 | LED_YEL_P | LED_YEL_N
RJ45_CONN

+3VLANVCC R412 330_4 LAN_YLED LED1_AD1
+5VLANVCC R413 *330_4
C584 0.1U/10V_4 FOR EMI

VT 2.0

C5588 1000P/3KV_1808

LAN_GLINK10# | LAN_GLINK100# | D5008 BAT54A

LED0_AD0 | LED1_AD1 | Link

C5039 *0.01U/25V_4 | C5084 *0.01U/25V_4

U5024

NS681684

MDI0+ 1	RD+	TX+ 16	LAN_MX0+
MDI0- 3	RD-	CT 15	LAN_MCT0 C5052 0.01U/100V_6 LAN_MCT_R0 R5034 75/F_4 LAN_MCT
V_DAC1 2	CT	RX- 14	LAN_MX0-
MDI1+ 6	TD+	TX- 9	LAN_MX1-
MDI1- 8	TD-	CMT 10	LAN_MCT1 C5060 0.01U/100V_6 LAN_MCT_R1 R5038 75/F_4
V_DAC2 7	CT	TX+ 11	LAN_MX1+

C5045 0.01U/25V_4 | C5070 0.01U/25V_4

NS681684:10/100 DB0LE6LAN20

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Quanta Computer Inc.
PROJECT : Annika

Size	Document Number	Rev
	RTL111DL/8103E RJ45	1A

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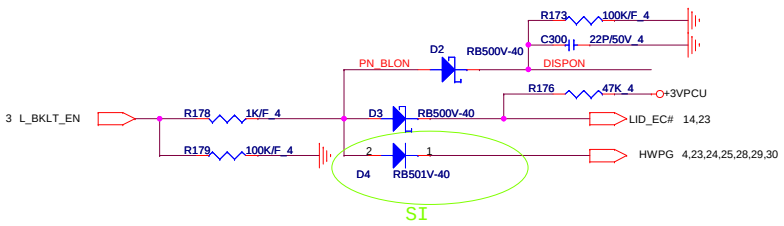
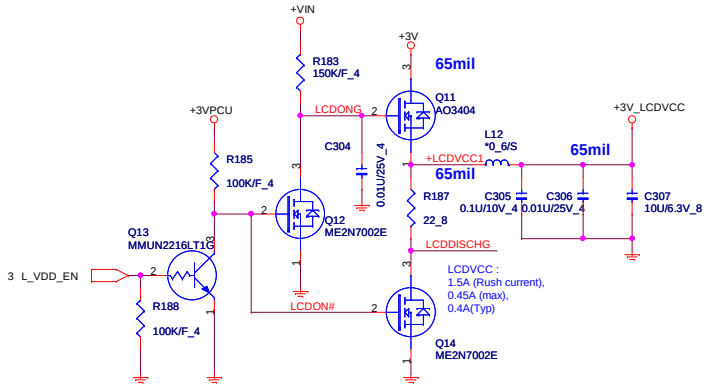
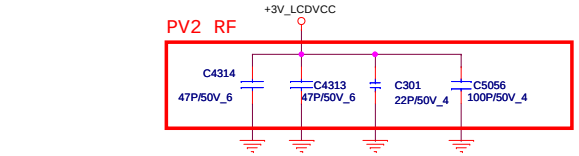
Backlight Control(LDS)

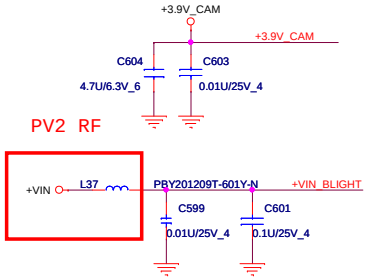


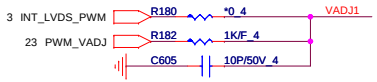
LCD POWER SWITCH



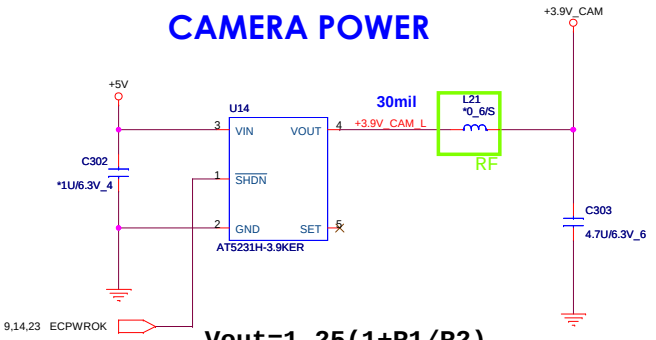
Request by HP RF(47Px2)





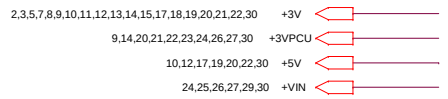


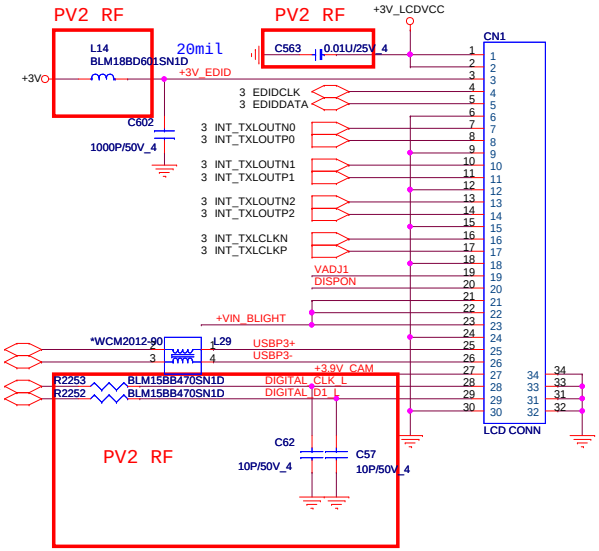
CAMERA POWER



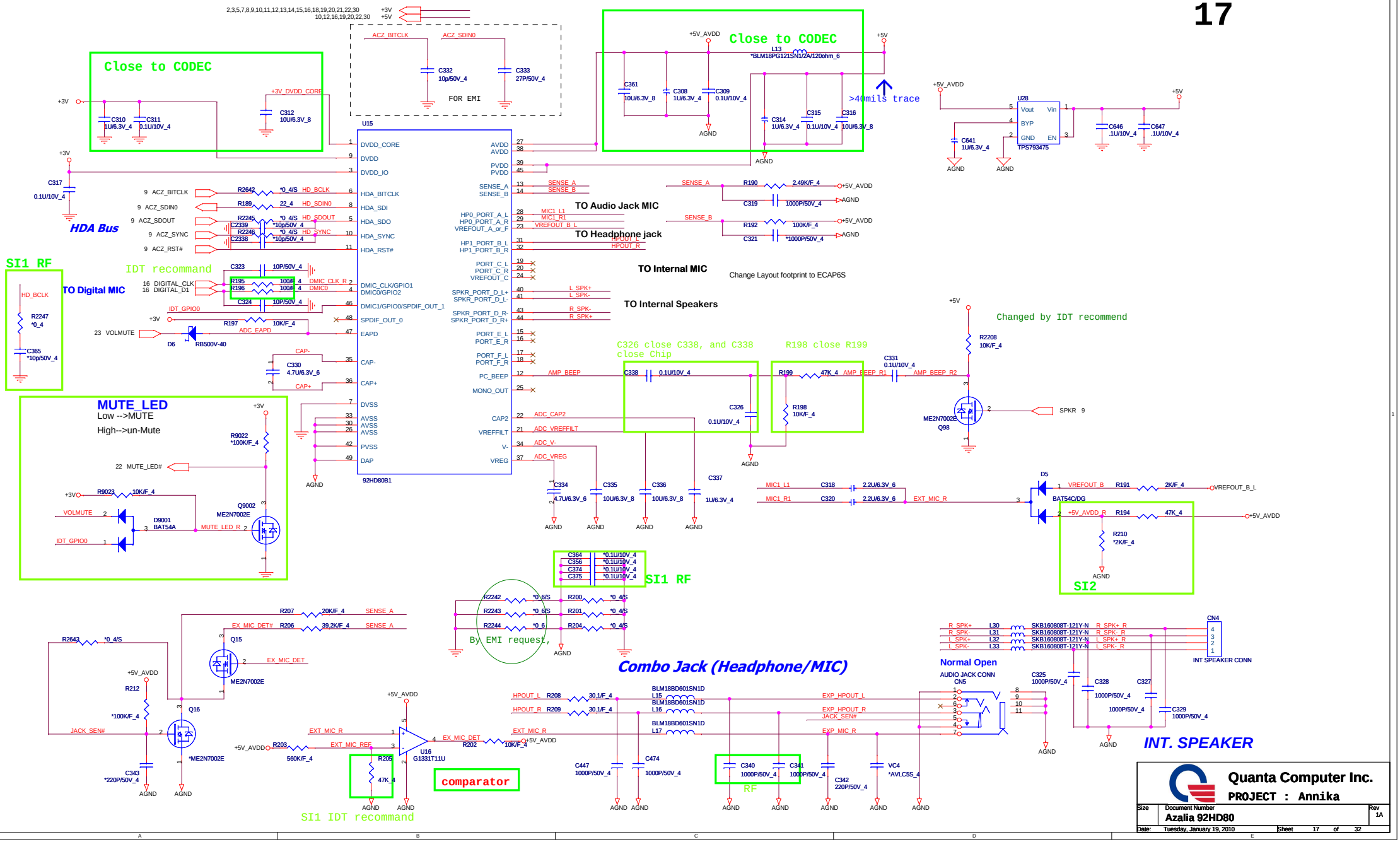
Vout=1.25(1+R1/R2)

LED Panel(LDS)





Quanta Computer Inc.		
PROJECT : Annika		
Size	Document Number: LCD PANEL/CCD MODULE	Rev: 1A
Date: Wednesday, January 20, 2010	Sheet 16 of 32	



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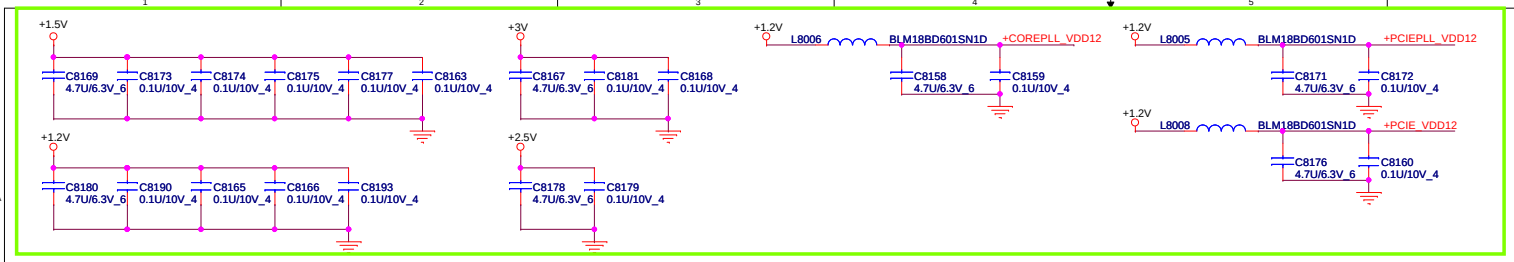
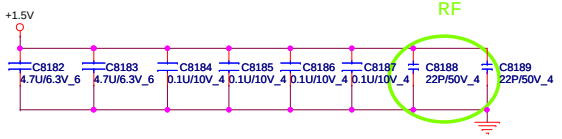


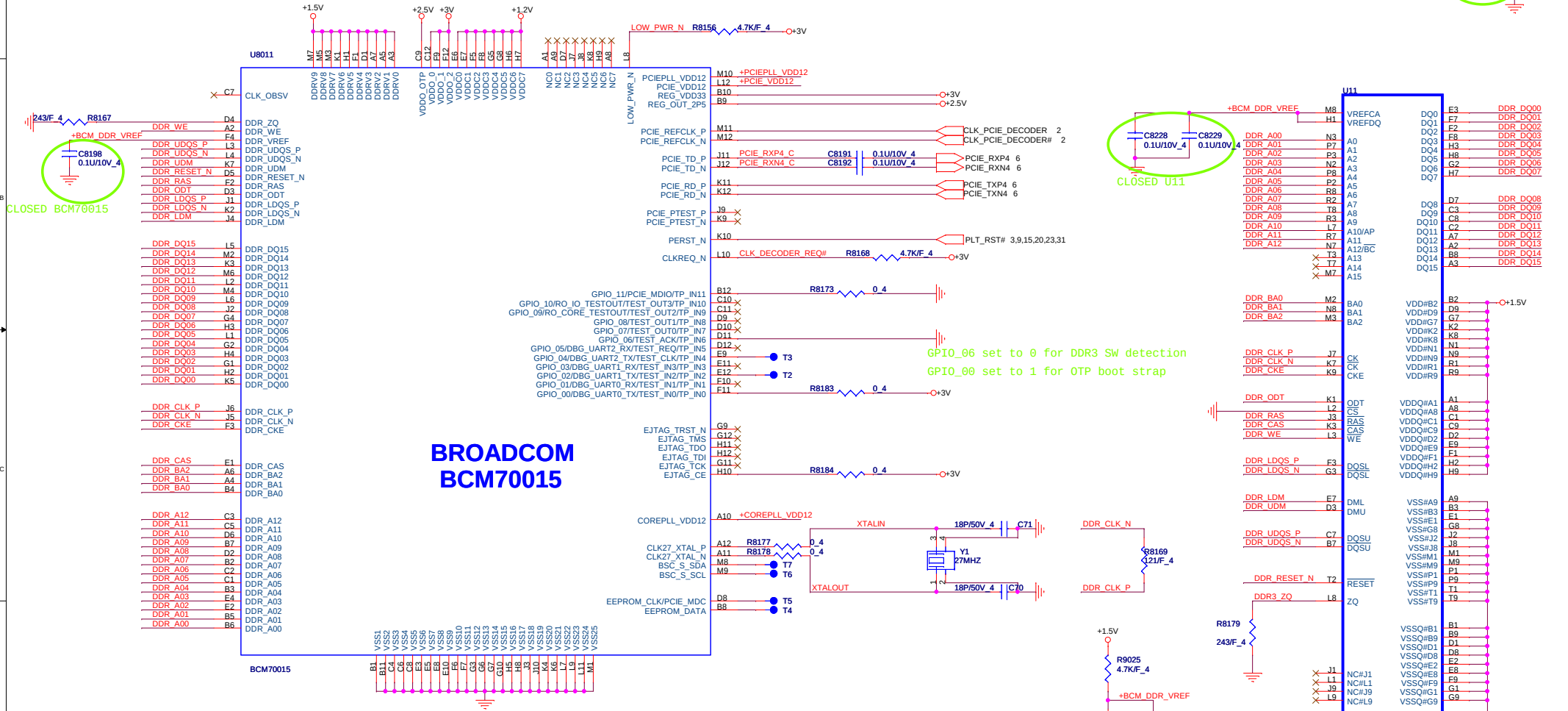
CLOSED BCM70015

+1.2V 29
+3V 2,3,5,7,8,9,10,11,12,13,14,15,16,17,19,20,21,22,30
+1.5V 5,6,10,20,30

CLOSED DDR3

RF





DDR3 RAM Configuration Table

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

BROADCOM
BCM70015

Quanta Computer Inc.
PROJECT : Annika

Size	Document Number	Rev
	BROADCOM BCM70015	1A

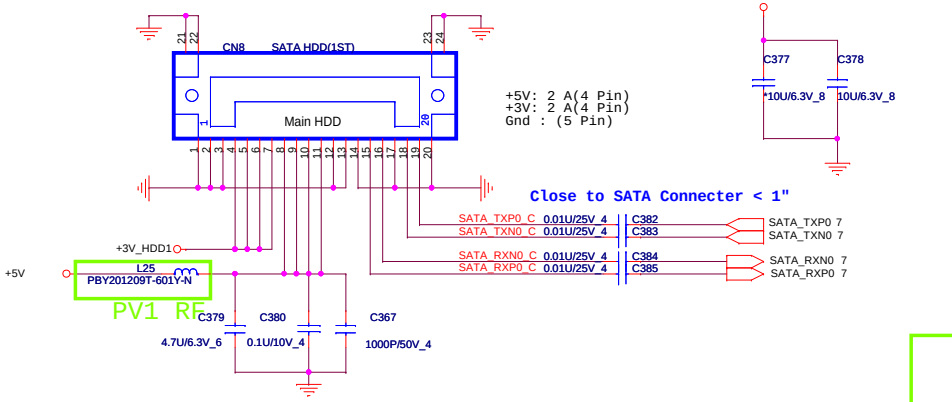
Date: Tuesday, January 19, 2010 Sheet 18 of 32

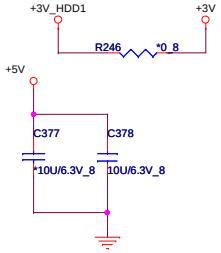
+5V 10,12,16,17,20,22,30
+3V 2,3,5,7,8,9,10,11,12,13,14,15,16,17,18,20,21,22,30

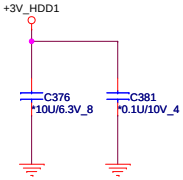
2.5" SATA HDD OR SSD(TOSHIBA)

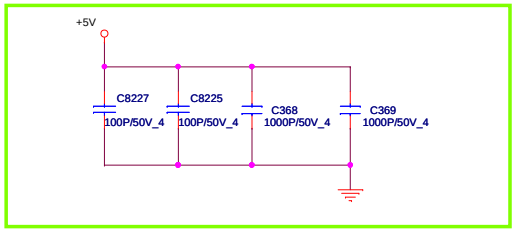
DFHD20MR008

DC Current rating: 0.5 A



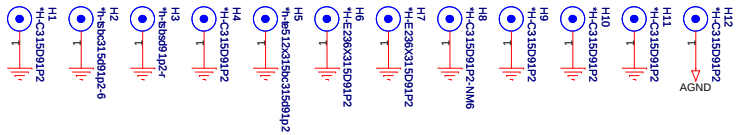


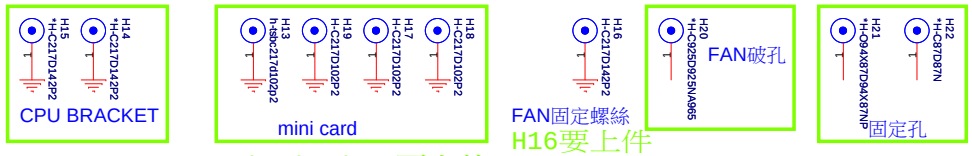




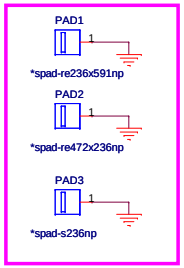
PV1 RF

M/B Screw Hole





EMI spring



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PROJECT : Annika

Size	Document Number	Rev
	SATA HDD/SCREW HOLE	1A

Date: Wednesday, January 20, 2010 Sheet 19 of 32

hexainf@hotmail.com

+3VPCU 9,14,16,21,22,23,24,26,27,30
+1.5V 5,6,10,18,30
+3V 2,3,5,7,8,9,10,11,12,13,14,15,16,17,18,19,21,22,30
+5V 10,12,16,17,19,22,30

Request by HP RF

+1.5V_WLAN
C4319 *47P/50V_6
+3V_WLAN
C4320 *47P/50V_6

+1.5V_WLAN
C415 0.01U/25V_4
C416 0.1U/10V_4
C417 *4.7U/6.3V_6
+3V_WLAN
C418 *0.1U/10V_4
C419 *0.1U/10V_4
C420 0.1U/10V_4
C421 *4.7U/6.3V_6

SI2 RF
+5VPCU
C425 0.1U/10V_4

Mini PCI-E Card 1
Half Mini PCI-E WLAN

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.

CN12
MINI PCIE H4

23 EC_DEBUG1
FOR KBC DEBUG
+3V_WLAN

6 PCIE_TXP2
6 PCIE_TXN2
6 PCIE_RXP2
6 PCIE_RXN2
2 PCLK_DEBUG
3,9,15,18,23,31 PLT_RST#
2 CLK_PCIE_WLAN
2 CLK_PCIE_WLAN#
2 PCIE_REQ_MINI#
9 BT_COMBO_EN#
9,15 PCIE_LAN_WAKE#

PV2
R9040 *0_4
R9021 *0_4/S BT_COMBO_EN_R# short0402
R9019 *0_4/S short0402

PV2
MINI_BLED# R276 *10K/F_4 +3V_WLAN
R9030 *0_4
R9033 *0_4
WLANED# R9039 *0_4 RF_LINK_1#
R275 *10K/F_4 +3V_WLAN
USBP5+ 6
USBP5- 6

WLAN_RST#
R278 10K/F_4 RF_OFF# 9
PLT_RST# 3,9,15,18,23,31
R277 *10K/F_4 +3V
SI2
LAD0 9,23
LAD1 9,23
LAD2 9,23
LAD3 9,23
LFRAME# 9,23

PV1
+3V_WLAN +3V
R9034 *0_6
R9035 *0_6

+1.5V R407 *0_8 +1.5V_WLAN
Q32 AO3413
R408 47K_4
PCIE_REQ_MINI#

+3V_WLAN
Q26 AO6401
R399 47K_4
+3V
R400 *4.7K_4 PCIE_REQ_MINI#
D28 RB500V-40
WLAN_RST#
R401 100K/F_4
C559 .022U/16V_4
Q27 ME2N7002E
Q28 ME2N7002E
WLAN_MOS
+5V
R398 10K/F_4
Q29 ME2N7002E
WLAN_PWON# 23
R397 1.2K/F_4

WLAN_MOS
Q30 ME2N7002E
MINI_BLED#
R279 10K/F_4
BLUELED# 23
WLANED#
Q31 ME2N7002E
RF_LINK_1#
D29 RB500V-40
R280 10K/F_4
RF_LINK# 23

MV1

Full mini PCIE for WWAN
Mini PCI-E Card 2

CN13
MINI PCIE H4

6 PCIE_TXP3
6 PCIE_TXN3
6 PCIE_RXP3
6 PCIE_RXN3
2 CLK_PCIE_WWAN
2 CLK_PCIE_WWAN#
CLK_PCIE_WWAN
CLK_PCIE_WWAN#

MV1
+3V_WWAN
R9026 10K/F_4
RF_LINK_2# D30 *RB500V-40 RF_LINK#
R9006 10K/F_4
Q33 ME2N7002E
R9032 0_4
R9038 *1K/F_4
WW_LINK# 1
R9041 *0_4 WW_LINK_R# 23
+UIM_VPP
UIM_DATA_R
USBP7+ 6
USBP7- 6
R9002 *0_4/S PCIE_WWAN_DET# 9
R9007 *0_4
PLT_RST#
+3V_WWAN
WWAN_OFF#_R
+UIM_VPP
UIM_RST
UIM_CLK
UIM_DATA
+UIM_PWR
R9036 *0_4/S UIM_DATA_R
C422 0.1U/10V_4
C423 4.7U/6.3V_6
C5912 0.1U/10V_4
+UIM_VPP
C5913 0.1U/10V_4

SIM CARD SIGNALS
ROUTE PARALLEL

U13 ESD
*CM1213_04ST
D9000 *BAV99W
+3V
+UIM_PWR
UIM_RST
UIM_CLK

CN2
SIM CARD SOCKET
C360 0.1U/10V_4
C362 0.1U/10V_4

RF
UIM_CLK C8211 *10p/50V_4
UIM_DATA C359 *10p/50V_4
UIM_RST C357 27P/50V_4
C358 *0.001u/50V_4
Closed CN2

C513 close to CN3

SIM CARD

SI2 RF
+5VPCU
C426 0.1U/10V_4

C5912 close to CN17 C5913 close to CN3

+1.5V_WWAN
C5903 0.01U/25V_4
C5905 0.1U/10V_4
C5906 10U/6.3V_6/S
+3V_WWAN
C5907 0.1U/10V_4
C5908 0.1U/10V_4
C5909 0.1U/10V_4
C5910 10U/6.3V_6/S

+1.5V_WWAN
R9009 *0_6/S
C5904 47P/50V_4
C5911 47P/50V_4
+1.5V
C5914 47P/50V_4
+3V_WWAN
R9004 *0_6
C5915 47P/50V_4
+3V
R9012 *10K/F_4
WWAN_OFF#_R
D7 RB500V-40
WWAN_OFF# 9
C424 0.1U/10V_4

+3VPCU
R9013 10K/F_4
23 WWAN_PWON#
R9003 200K/F_4
C363 *0.1U/10V_4
AO6401
Q9001

Quanta Computer Inc.
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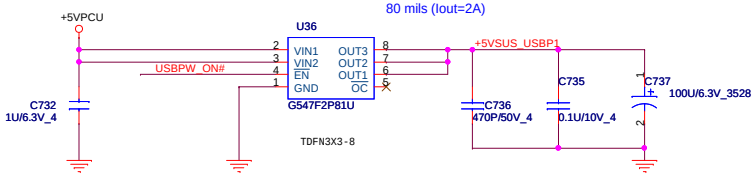
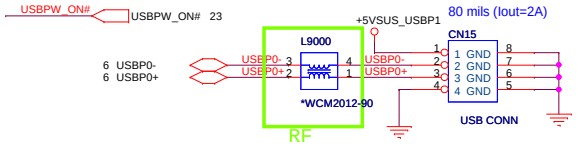
Size	Document Number	Rev
	MINI PCIE(WLAN/WWAN)	1A
Date: Wednesday, January 20, 2010	Sheet 20 of 32	

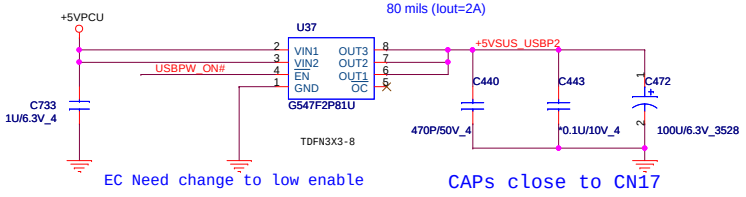
2,20,23,24,25,26,28,29,30 +5VPCU
9,14,16,20,22,23,24,26,27,30 +3VPCU
2,3,5,7,8,9,10,11,12,13,14,15,16,17,18,19,20,22,30 +3V

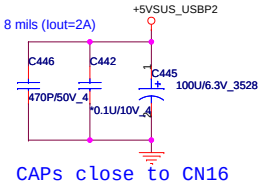
1x Left side USB port supports Keyed USB.

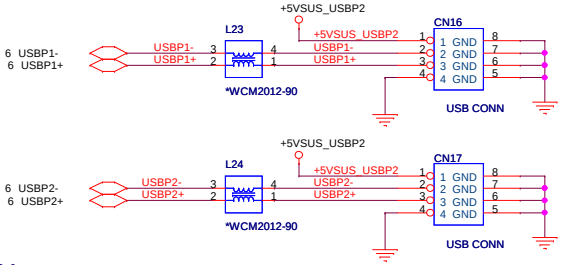




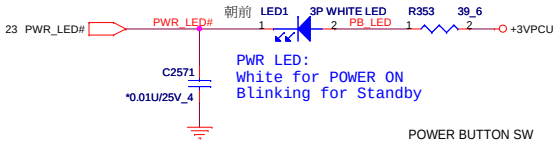
For Right 2xUSB Ports PWR



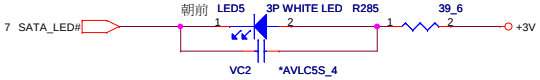




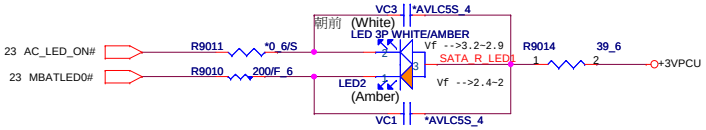
PWR Button/LED



SATA/LED



Charging & Discharging/LED



Quanta Computer Inc.
PROJECT : Annika

Size	Document Number	Rev
	USB Conn/LED/PWR BT	1A

Date: Wednesday, January 20, 2010 Sheet 21 of 32

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Keyboard(KBC)

MY5 C448 220P/50V_4
MY6 C451 220P/50V_4
MY3 C454 220P/50V_4
MY7 C457 220P/50V_4
MY8 C460 220P/50V_4
MY9 C463 220P/50V_4
MY10 C466 220P/50V_4
MY11 C469 220P/50V_4

MY1 C449 220P/50V_4
MY2 C452 220P/50V_4
MY4 C455 220P/50V_4
MY0 C458 220P/50V_4
MX4 C461 220P/50V_4
MX6 C464 220P/50V_4
MX3 C467 220P/50V_4
MX2 C470 220P/50V_4

MX7 C450 220P/50V_4
MX0 C453 220P/50V_4
MX5 C456 220P/50V_4
MX1 C459 220P/50V_4
MY12 C462 220P/50V_4
MY13 C465 220P/50V_4
MY14 C468 220P/50V_4
MY15 C471 220P/50V_4

Modify CN2 footprint from bl137-32rl-tand-32p-l to 196033-32041-32p-l

Caps Lock LED 2 Pins 30mA

Wireless LED 3 pins

MUTE LED 2 Pins

KEYBOARD PULL-UP

RP3
MY1 MY5 MY0 MY9 — MY2 MY4 MY7 MY8
+3VPCU
10P8R-8.2K

RP4
MY13 MY12 MY3 MY6 — MY14 MY11 MY10 MY15
10P8R-8.2K

23 MY[0..15] MY[0..15]
23 MX[0..7] MX[0..7]

CN20
MX1 MX7 MX6 MY9 MX4 MX5 MY0 MX2 MX3 MY5 MY1 MX0 MY2 MY4 MY7 MY8 MY6 MY3 MY12 MY13 MY14 MY11 MY10 MY15
KB CONN

PV2
23 CAPSLED# +3V R9016 680/F_6 +3V_CAPS_LED
+3V R9017 100/F_6 +3V_WLS_LED
WIRE_OFF#
WIRE_ON#
17 MUTE_LED# +3V R9015 100/F_6 +3V_MUTE_LED

PV2

VT 2.0
+3V +5V R8130 *1K/F_4 R8127 1K/F_4 WIRE_ON#
23 WIRE_ON
PQ25 DDTC144EU
R2668 *0_4 WIRE_OFF#

VT 2.0
+3V +5V R8131 *1K/F_4 R8128 1K/F_4 WIRE_OFF#
23 WIRE_OFF
PQ26 DDTC144EU
R2669 *0_4 WIRE_ON#

+3VPCU 9,14,16,20,21,23,24,26,27,30
+5V 10,12,16,17,19,20,30
+3V 2,3,5,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,30
+3VSUS 30

22

TOUCH PAD CONNECTOR

25 mils
+3VSUS C572 0.1U/10V_4
23 TPDATA TPDATA L36 BLM18BD601SN1D TPDATA-1
23 TPCLK TPCLK L35 BLM18BD601SN1D TPCLK-1
C574 *10p/50V_4
C575 *10p/50V_4
AF706L-A2G1T-6P-L TOUCH PAD CONN
CN25

close conn
+3VSUS R288 4.7K/F_4 TPCLK
R289 4.7K/F_4 TPDATA

By EMI request,

TOUCH SCREEN

CN23
USBP6- USBP6+ *WCM2012-90 L9001 USBP6- 6 USBP6+ 6
+3V
Touch screen Conn

CPU FAN

+3V R292 4.7K/F_4
23 FAN1SIG
+5V_FAN
CN22
C478 2.2U/6.3V_6
C1479 *0.1U/10V_4
FAN CONN
DFHD03MR008

FANPWR = 1.6*VSET
30 MIL

U25
+5V R293 10K/F_4 FAN_FON#
23 VFAN R2667 *0_4/S FAN_VSET
VIN VO /FON VSET GND GND GND GND
+5V_FAN
G991PV11
C2482 *0.1U/10V_4

Request RC by HP RF

8 7 6 5
Gnd shape

Charge LED 3 pins

Pin 32 Pin 1

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PROJECT : Annika

Size	Document Number	Rev
	KB/TP/BT/CPU FAN/TP SCREEN	1A
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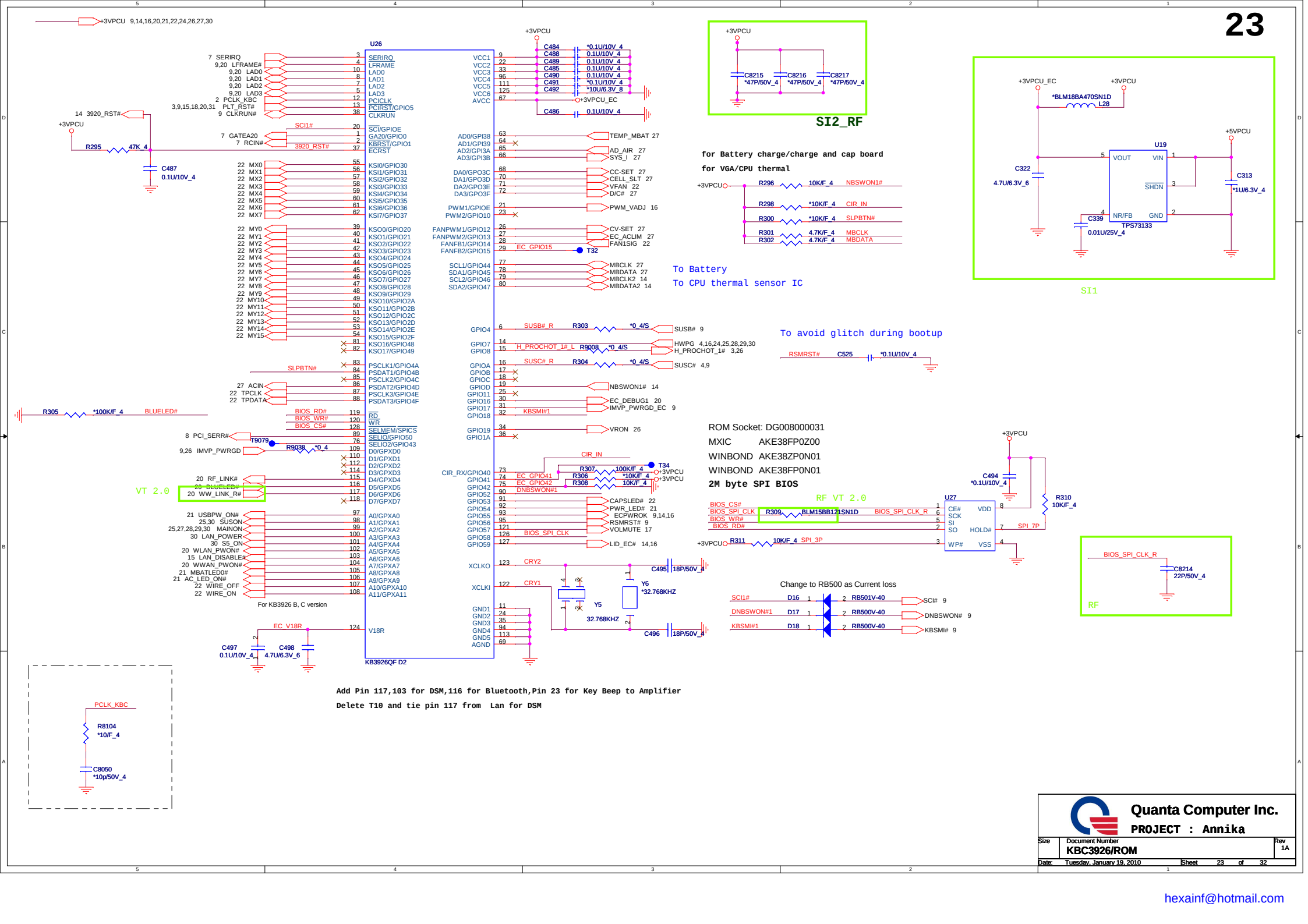

Quanta Computer Inc.		
PROJECT : Annika		
Size	Document Number: KBC3926/ROM	Rev: 1A
Date: Tuesday, January 19, 2010	Sheet 23 of 32	

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DC/DC +3V_ALW/+5V_ALW/+5V_ALW2 /+15V_ALW

SI2_RF

PC1032 47P/50V_4 PC1033 47P/50V_4 PC1034 47P/50V_4

PV1_RF

C370 1000P/50V_4 C371 1000P/50V_4 C372 1000P/50V_4

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

SI2_RF

PC1027 47P/50V_4 PC1029 47P/50V_4 PC1030 47P/50V_4

PV1_RF

C387 1000P/50V_4 C373 1000P/50V_4 C386 1000P/50V_4

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

Place these CAPs close to FETs

PC1002 *4.7U/25V_8 PC1026 4.7U/25V_8 PC1003 2200P/50V_4 PC1004 0.1U/25V_4 PC1008 0.1U/25V_4

PD1002 UDZ5V6B-7-F PR1002 1K/F_4 PR1003 150K/F_4

PC1005 0.1U/25V_4 PC1006 2200P/50V_4 PC1007 *4.7U/25V_8 PC1028 4.7U/25V_8

PC1009 1U/6.3V_4

PC1010 *0.1U/10V_4 PC1011 4.7U/6.3V_6 PC1012 0.1U/10V_4

PR1008 *0_4/S PR1009 205K/F_4

PQ1002 AO4496 PQ1003 AO4496 PQ1004 AO4712 PQ1005 AO4712

PL1003 2.5uH/7.5A PL1002 2.5uH_7.5A

PR1006 182K/F_4 PR1007 *0_4 PR1010 2.2_8 PR1011 2.2_8 PR1012 *0_4/S PR1013 *0_4/S PR1014 *0_4 PR1015 2_6 PR1016 2_6 PR1017 *0_4/S PR1018 *0_4 PR1019 *0_4/S PR1020 *0_4/S PR1021 100K/F_4 PR3256 10K/F_4

PC1013 220U/6.3V_7343ESR25 PC1014 0.1U/10V_4 PC1015 1500P/50V_4 PC1016 0.1U/10V_4 PC1017 220U/6.3V_7343ESR25 PC1018 1500P/50V_4 PC1019 0.1U/25V_4 PC1020 0.1U/25V_4 PC1021 0.01U/25V_4 PC1022 1U/6.3V_4 PC1023 0.1U/25V_4 PC1024 0.01U/25V_4 PC1025 1U/25V_6 PC1263 2.2U/6.3V_6

PU1001 RT8206B

PD1003 BAV99 PD1004 BAV99 PD1009 1SS355

R8070 *0_4 R8078 *0_4 R8086 *0_4

SI1 RF

Rds(on) 20m ohm

Rds(on) 20m ohm

SI2_RF

PC1035 47P/50V_4

SI2_RF

PC1031 47P/50V_4 PC1036 47P/50V_4

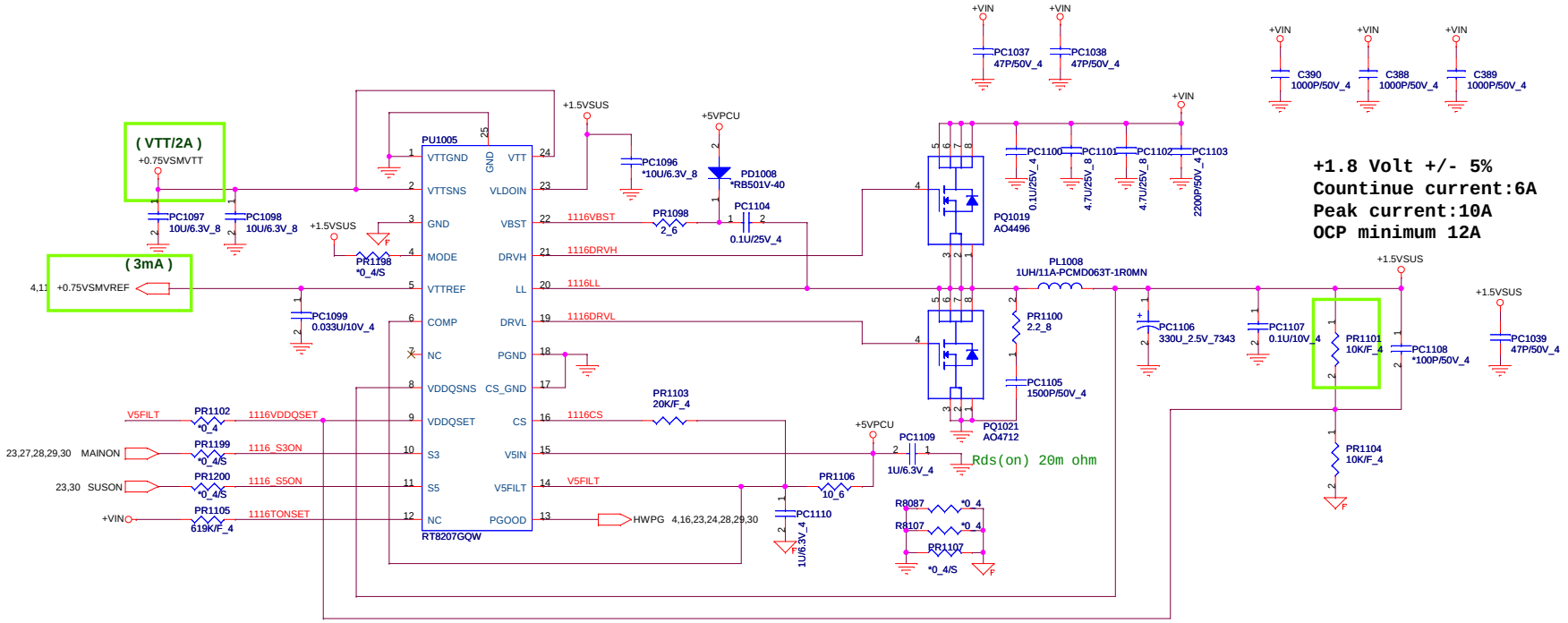
SI2_RF

PC1015

PGOOD2 PGOOD1 HWPG 4,16,23,25,28,29,30

14 SHDN#

Quanta Computer Inc.		
PROJECT : Annika		
Size	Document Number: 3VPCU/5VPCU(RT8206)	Rev: 1A
Date: Tuesday, January 19, 2010	Sheet 24 of 32	



Quanta Computer Inc.		
PROJECT : Annika		
Size	Document Number: DDR2 +1.8VSUS/+0.89V	Rev: 1A
Date: Tuesday, January 19, 2010	Sheet 25 of 32	

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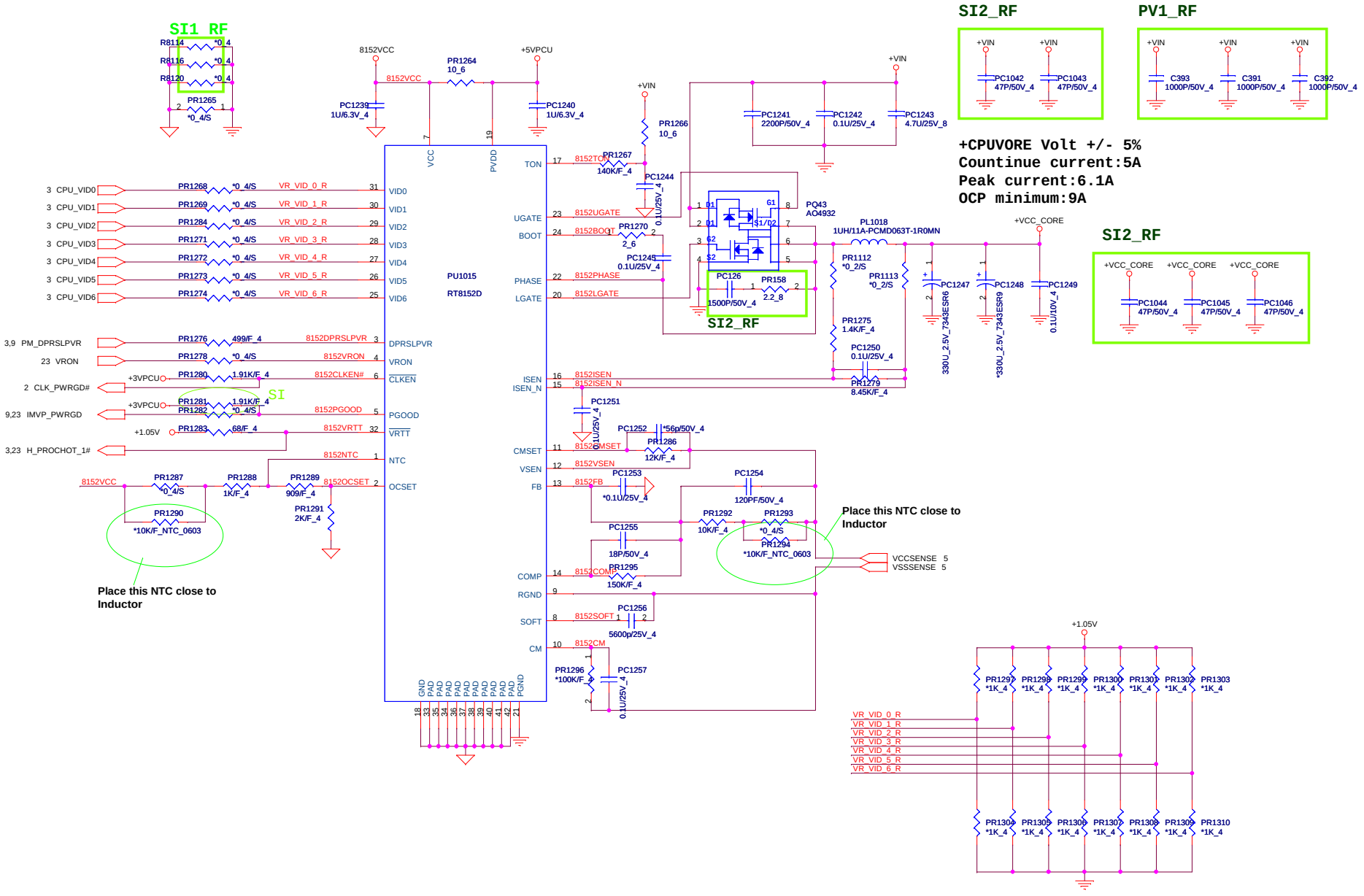
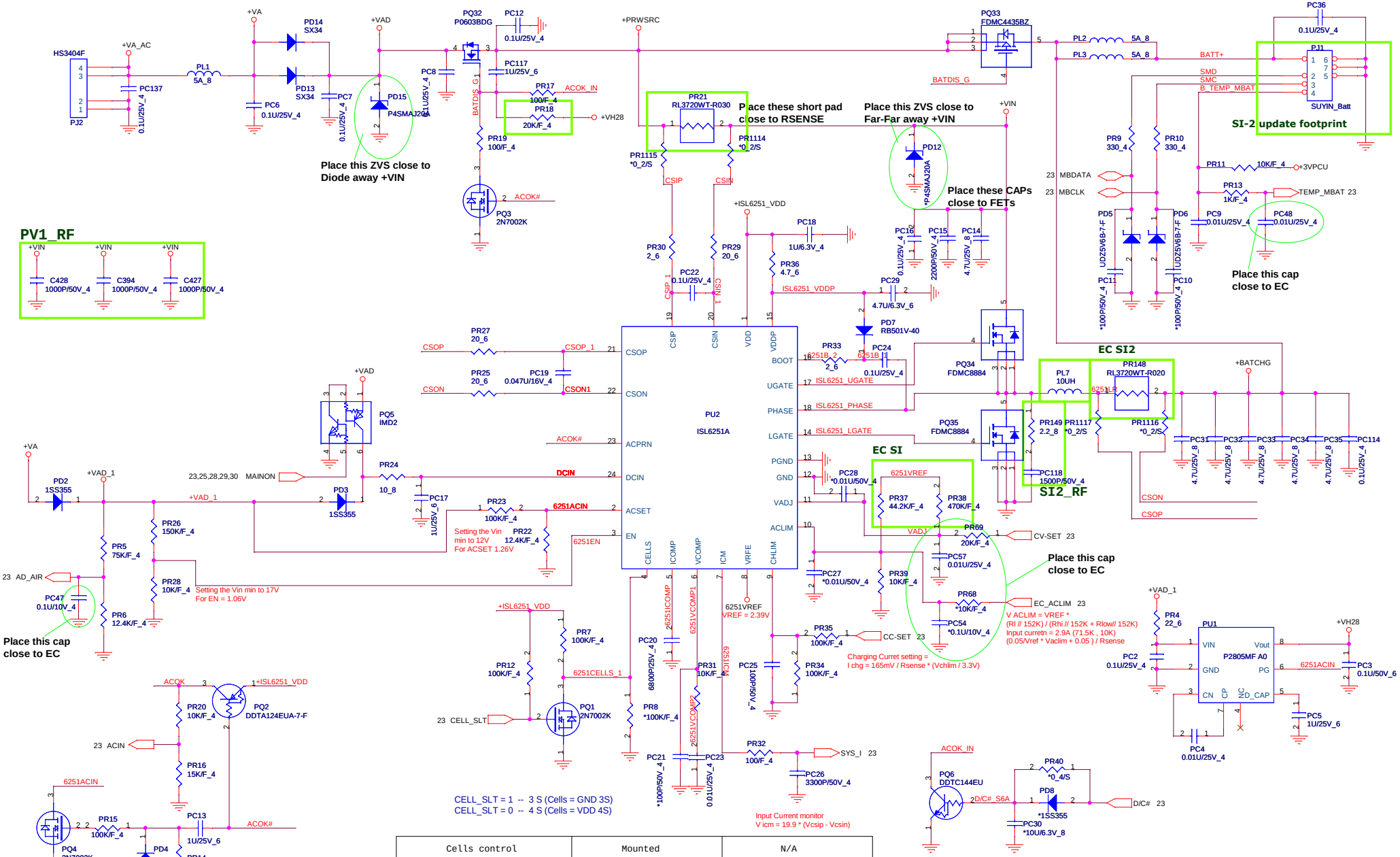


Quanta Computer Inc.			
PROJECT : Annika			
Size	Document Number		Rev
	Vcore(RT8152B)		1A
Date: Tuesday, January 19, 2010		Sheet 26 of 32	



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

Quanta Computer Inc.
PROJECT : Annika

Size	Document Number	Rev
	CHARGER (ISL6251A)	1A
Date: Wednesday, January 20, 2010	Sheet 27 of 32	

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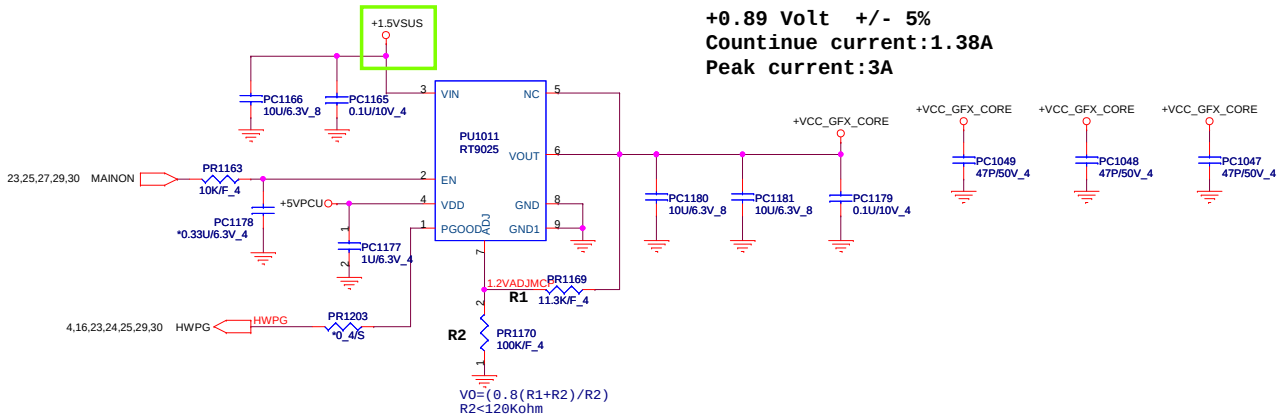
+VCC_GFX_CORE



+0.89 Volt +/- 5%
Countinue current:1.38A
Peak current:3A

Quanta Computer Inc.
PROJECT : Annika

Size	Document Number	Rev
	+1.05V/+1.5V (RT8204)	1A

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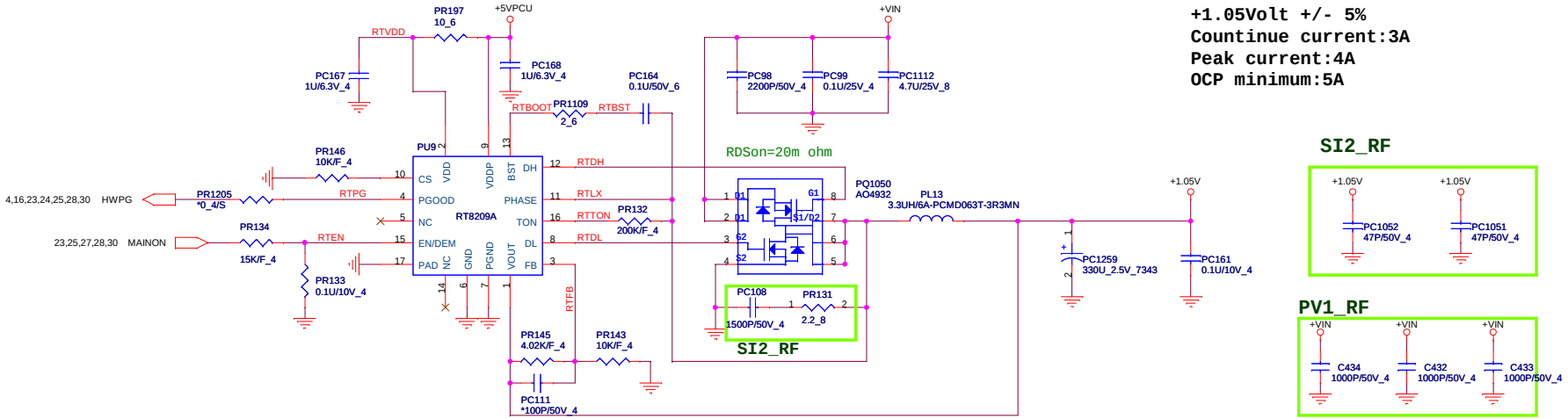
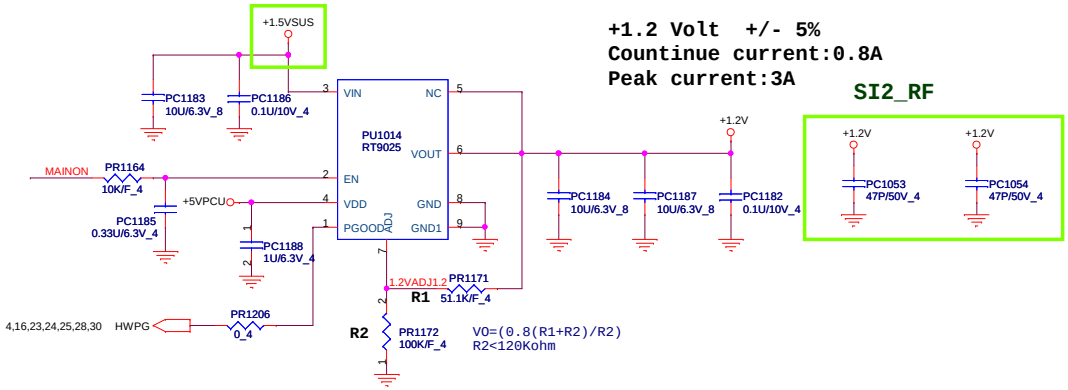
VCCP1.05V



+1.05Volt +/- 5%
Countinue current:3A
Peak current:4A
OCP minimum:5A

SI2_RF

PV1_RF



+1.2 Volt +/- 5%
Countinue current:0.8A
Peak current:3A

SI2_RF

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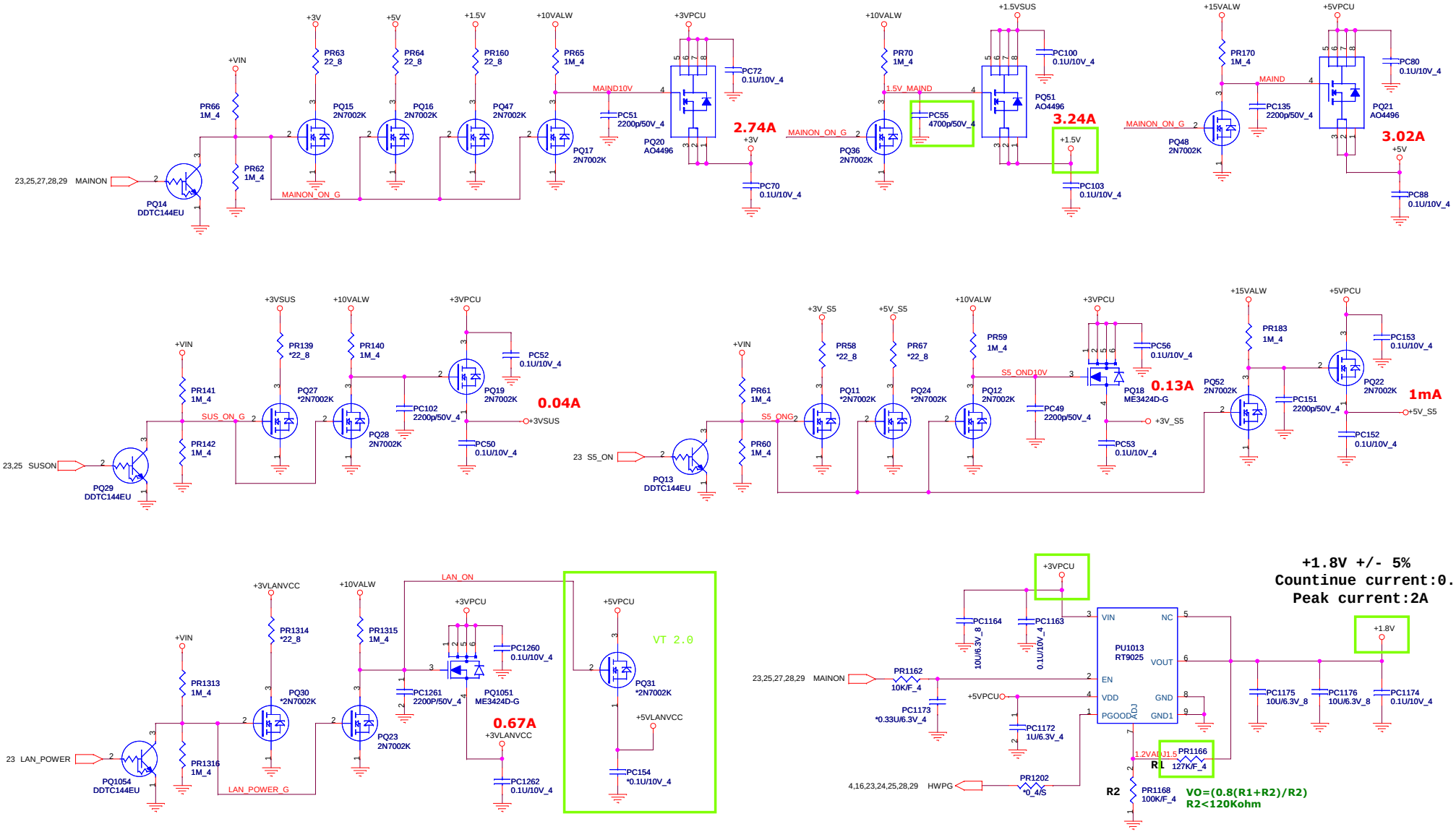
PROJECT : Annika

Size	Document Number	Rev
	+1.05V (RT8209A)	1A
Date: Tuesday, January 19, 2010	Sheet 29 of 32	



Quanta Computer Inc.

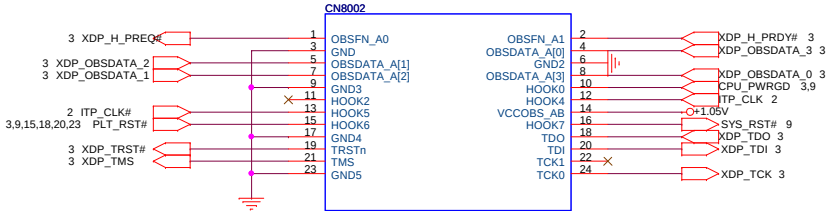
PROJECT : Annika

Size	Document Number	Rev
	Discharge/LANVCC/+1.5V	1A

Date: Tuesday, January 19, 2010 Sheet 30 of 32

CPU XDP

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



*196013-24011

CLOSE CN8002

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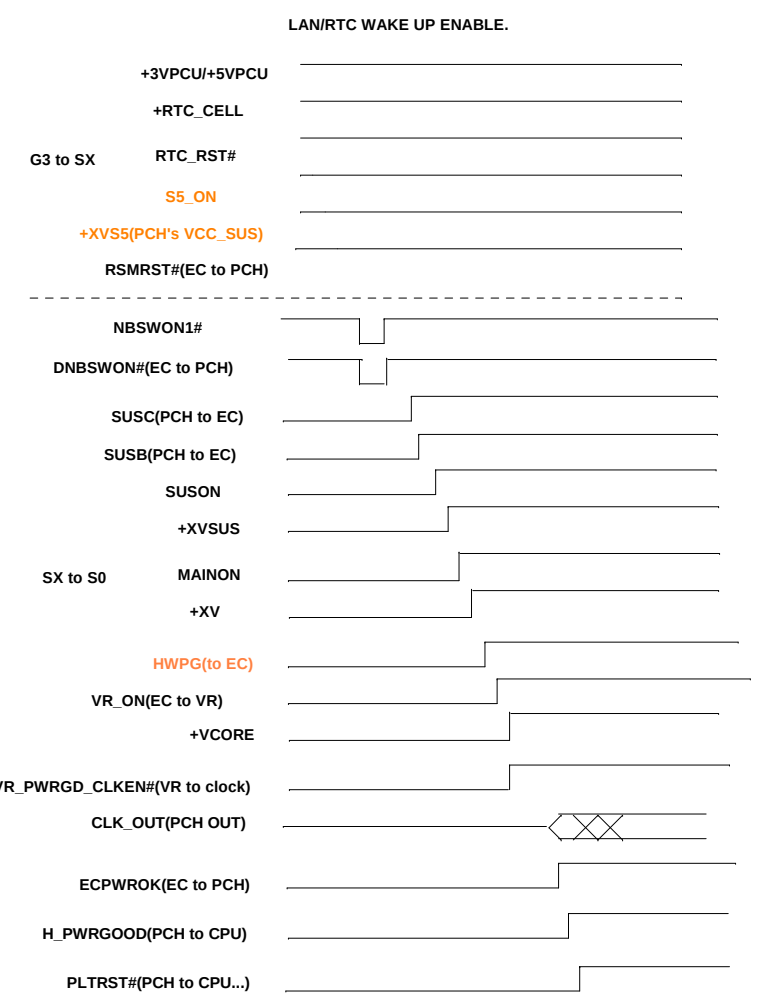
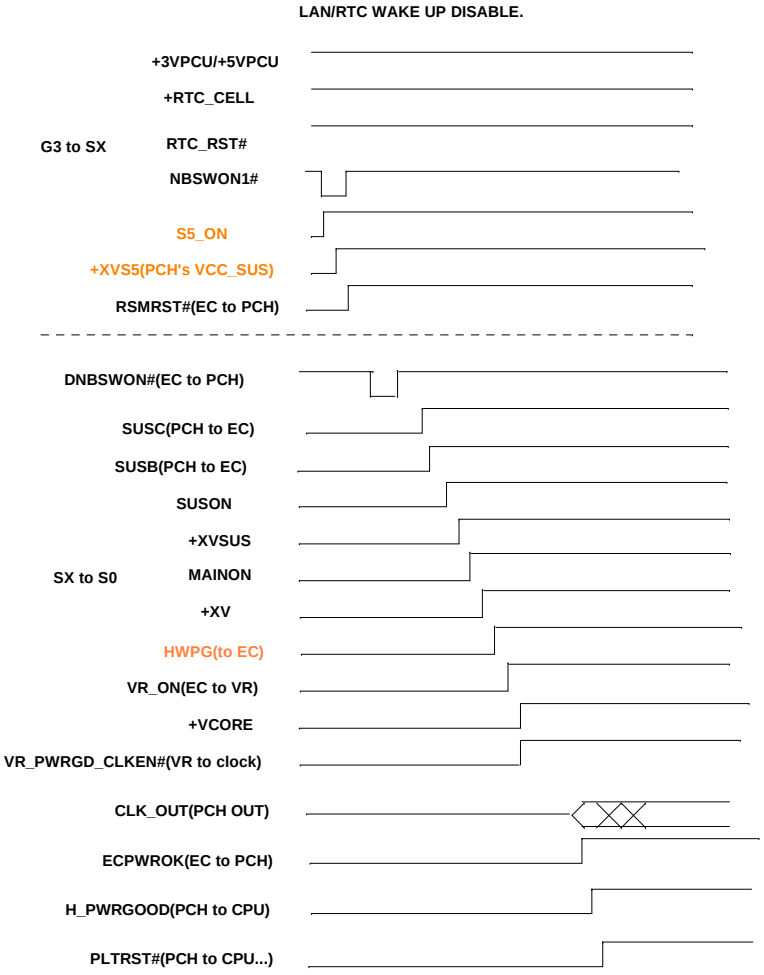
PROJECT : Annika		
Size	Document Number: XDP	Rev: 1A
Date: Tuesday, January 19, 2010	Sheet 31 of 32	

Power up sequence





Quanta Computer Inc.

PROJECT : Annika

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