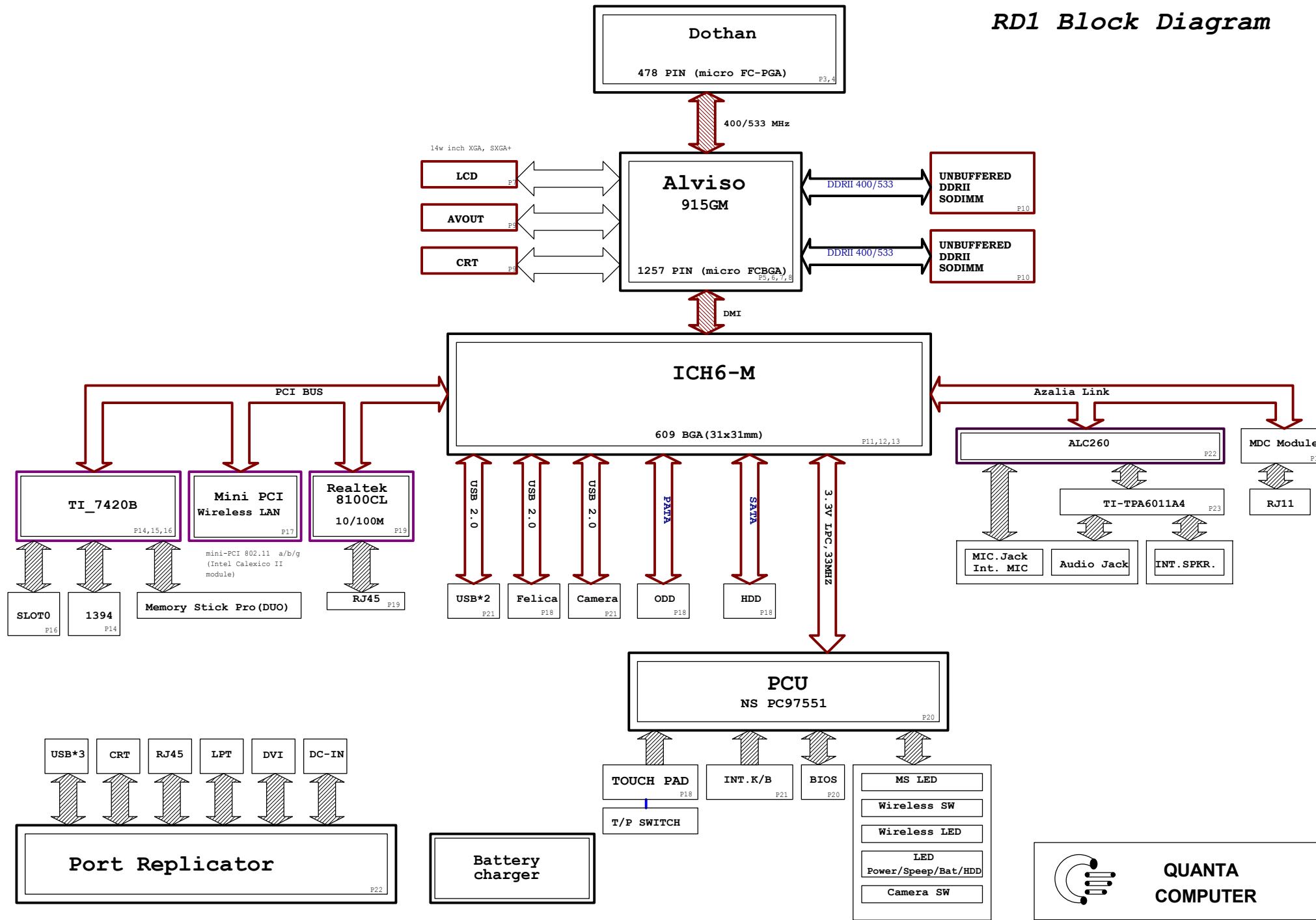
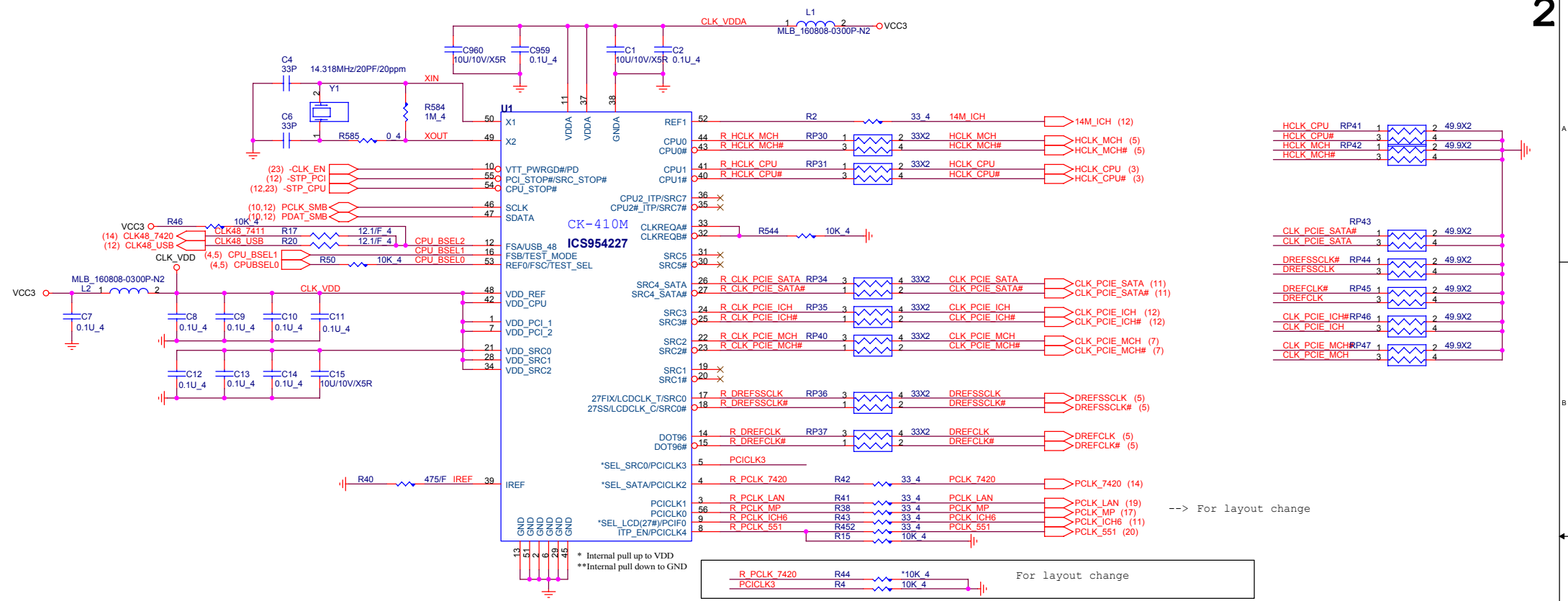


RD1 Block Diagram



QUANTA COMPUTER

Size	Document Number	Rev
	RD1 Main Board	1A
Date:	Saturday, June 25, 2005	Sheet 1 of 32



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

ICS 954227 : Include SST

ICS 954227 Function:
 Pin 53 : REF1
 Pin 17,18 : 96MHz_SST

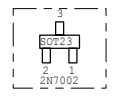
ITP_EN Function (Pin 8)
 0 : SRC_7 Pair (Pin 35,36)
 1 : CPU_2_I TP Pair (Pin 35,36)

IREF (Pin 39) :
 475_1k : Sets the IREF current to 2.32mA

R44: (Pin 26,27)
 1: Clock from SARA PLL
 0: Clock from RC PLL
 R4: (Pin 17,18)
 1: SRCCLK0 pair
 0: 17,18 pin is set by R6
 R6: (Pin 17,18)
 1: LCDCLK pair
 0: 27MHZSS/27MHZSS# pair

96MHz SST Table :

S3	S2	S1	S0	Spread	Type
0	0	0	0	0.8	Down
0	0	0	1	1	
0	0	1	0	1.25	
0	0	1	1	1.5	
0	1	0	0	1.75	
0	1	0	1	2	
0	1	1	0	2.5	Center
0	1	1	1	3	
1	0	0	0	+/-0.3	
1	0	0	1	+/-0.4	
1	0	1	0	+/-0.5	
1	0	1	1	+/-0.6	
1	1	0	0	+/-0.8	
1	1	0	1	+/-1.0	
1	1	1	0	+/-1.25	
1	1	1	1	+/-1.5	



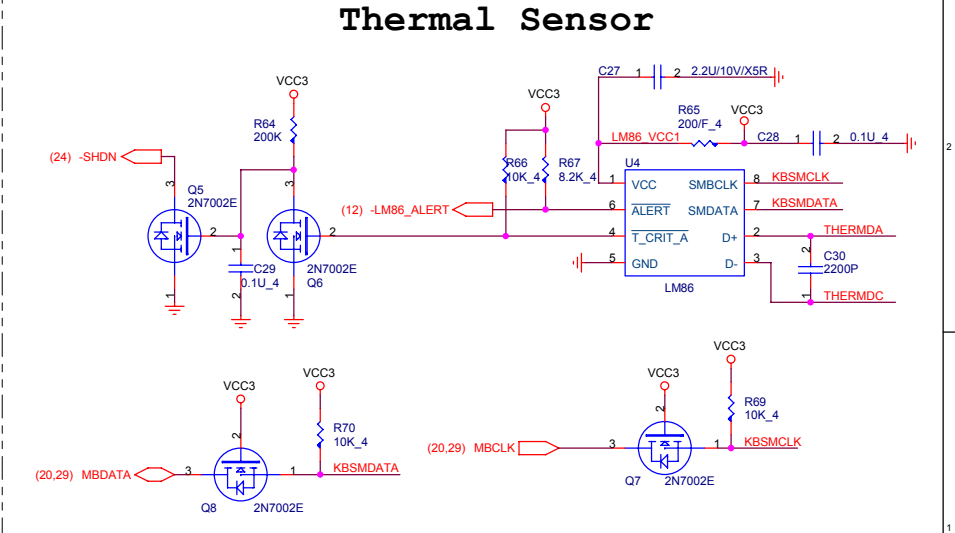
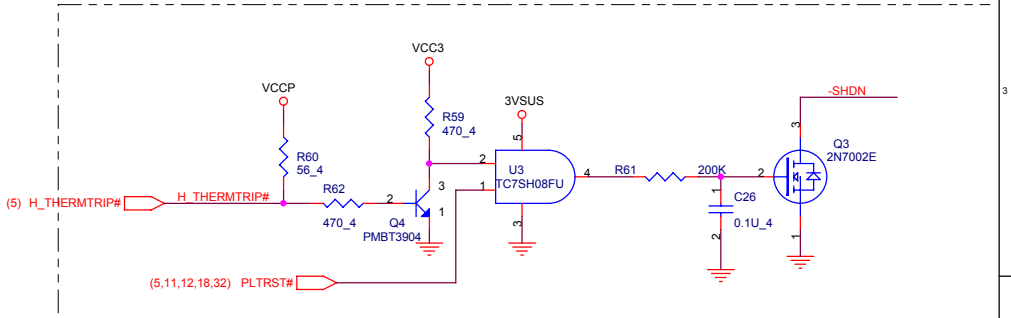
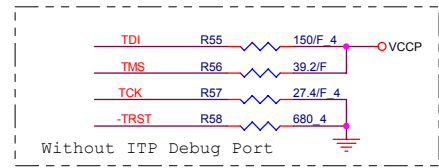
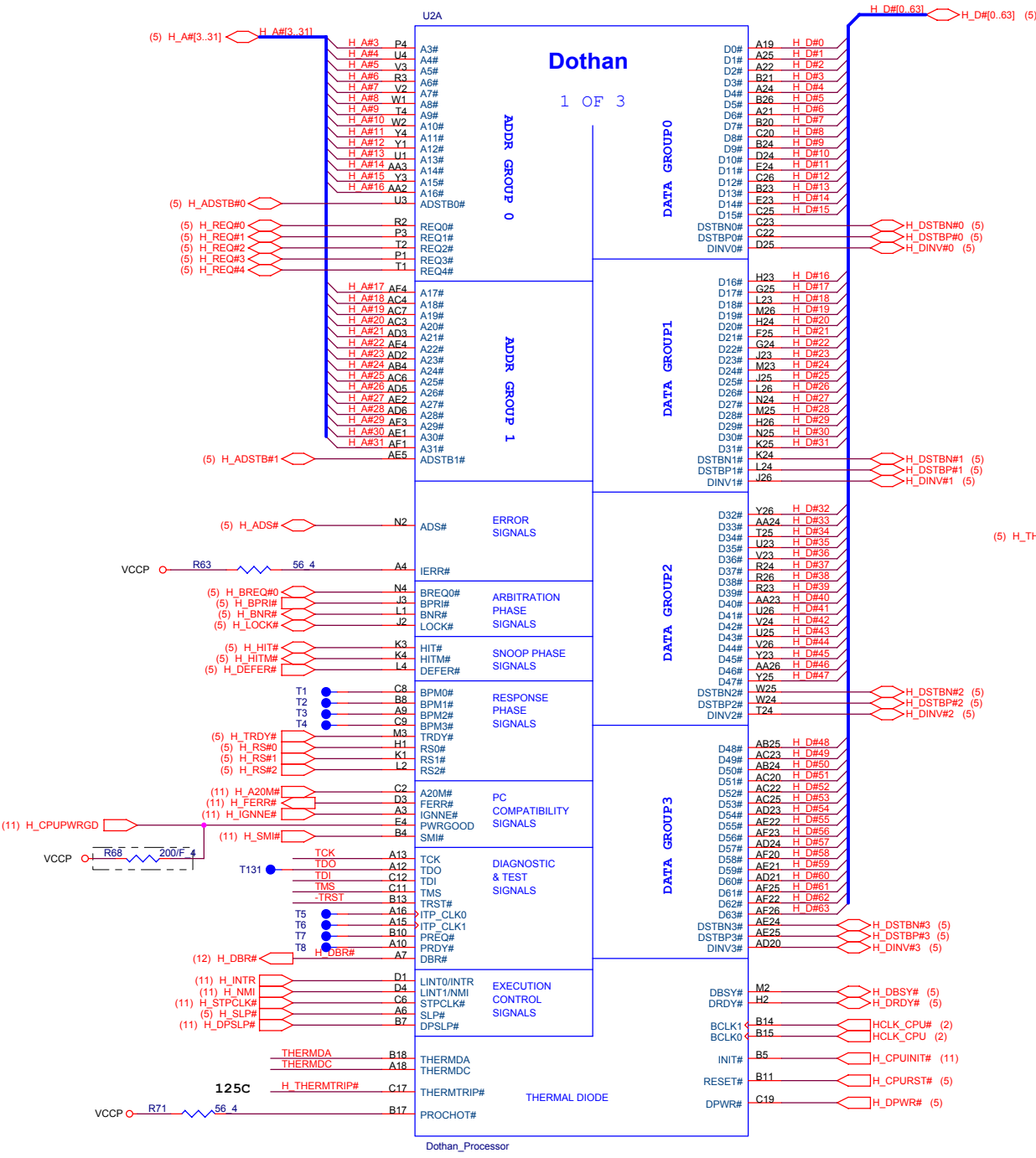
1.This part should not contain any substances which are specified in SS-00259-1
 2.Purchase ink, paint, wire rods and molding resins only from the business partners that Sony approves as Green Partners.

QUANTA COMPUTER

Title: **CLOCK GENERATOR**

Size: Custom | Document Number: **RD1 Main Board** | Rev: 1A

Date: Thursday, June 30, 2005 | Sheet: 2 of 32



QUANTA COMPUTER

Title: Dothan CPU - A

Size: Custom

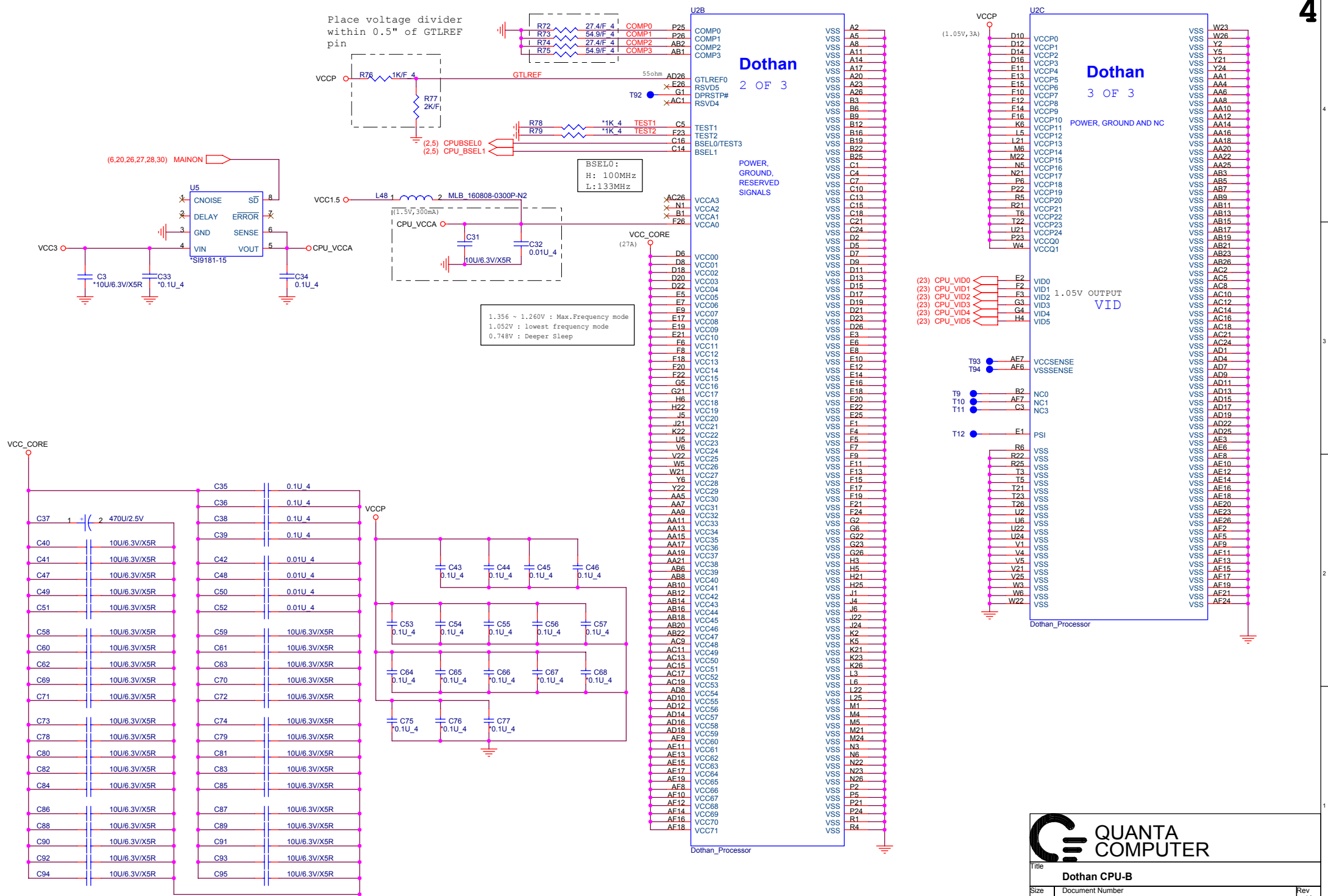
Document Number: RD1 Main Board

Date: Thursday, June 30, 2005

Sheet: 3 of 32

Rev: 1A

1.This part does not contain any substances which are specified in SS-00259-1
2.Purchase ink, paint, wire rods and molding resins only from the business partners that Sony approves as Green Partners.

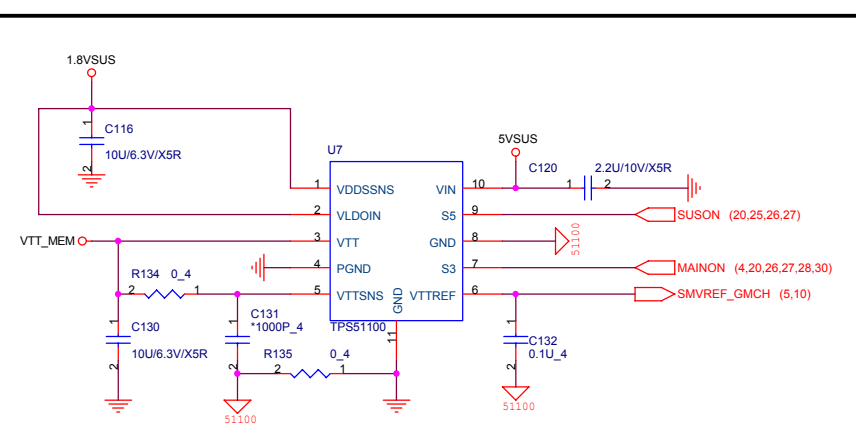
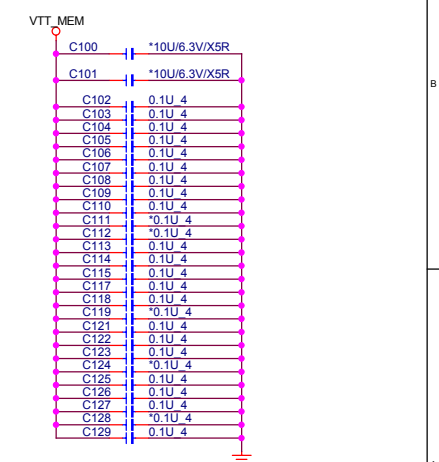
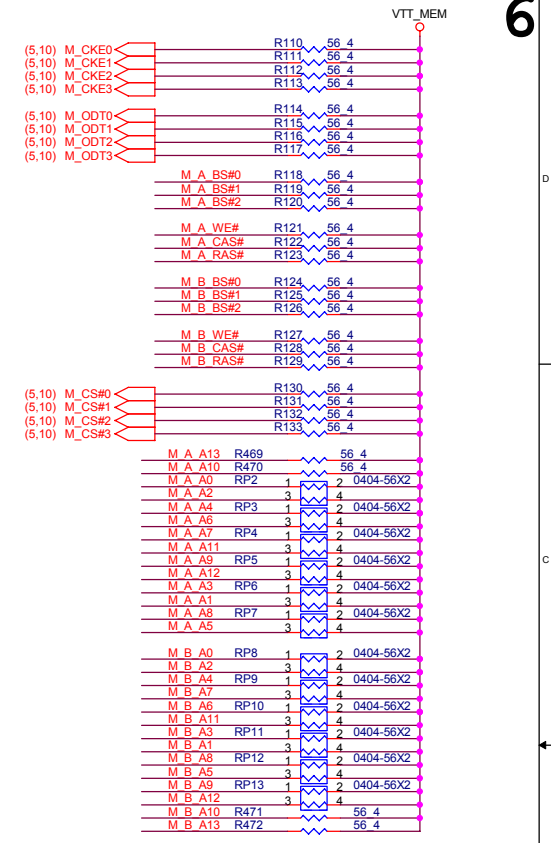
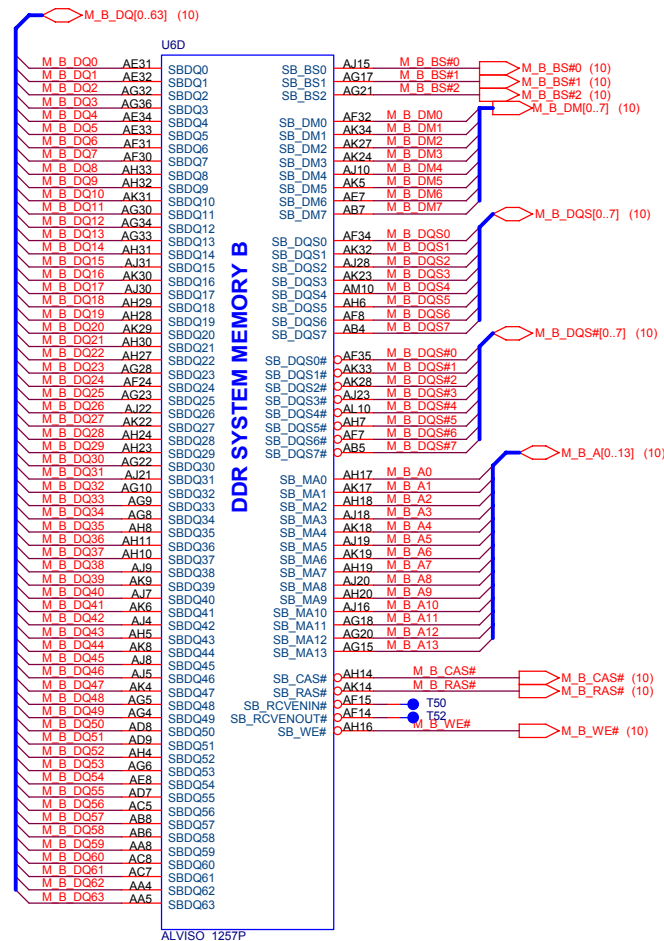
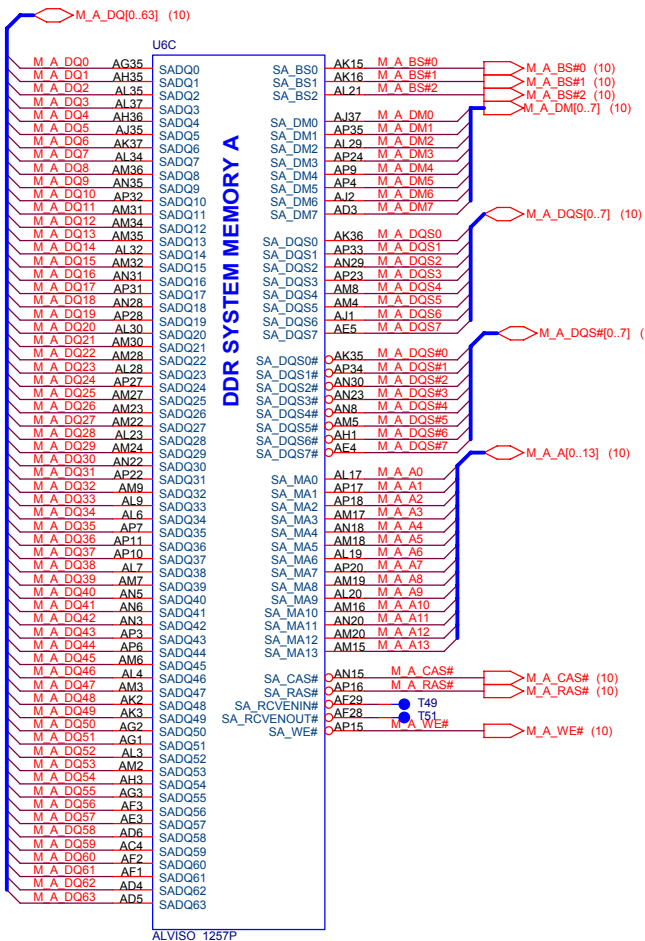


10U/6.3V/X5R(CC0805) 5 mOhm*35

1.This part should not contain any substances which are specified in SS-00259-1
 2.Purchase ink, paint, wire rods and molding resins only from the business partners that Sony approves as Green Partners.



Title Dothan CPU-B		
Size	Document Number RD1 Main Board	Rev 1A
Date	Thursday, June 30, 2005	Sheet 4 of 32



QUANTA COMPUTER

Title: **Alviso-DDRII**

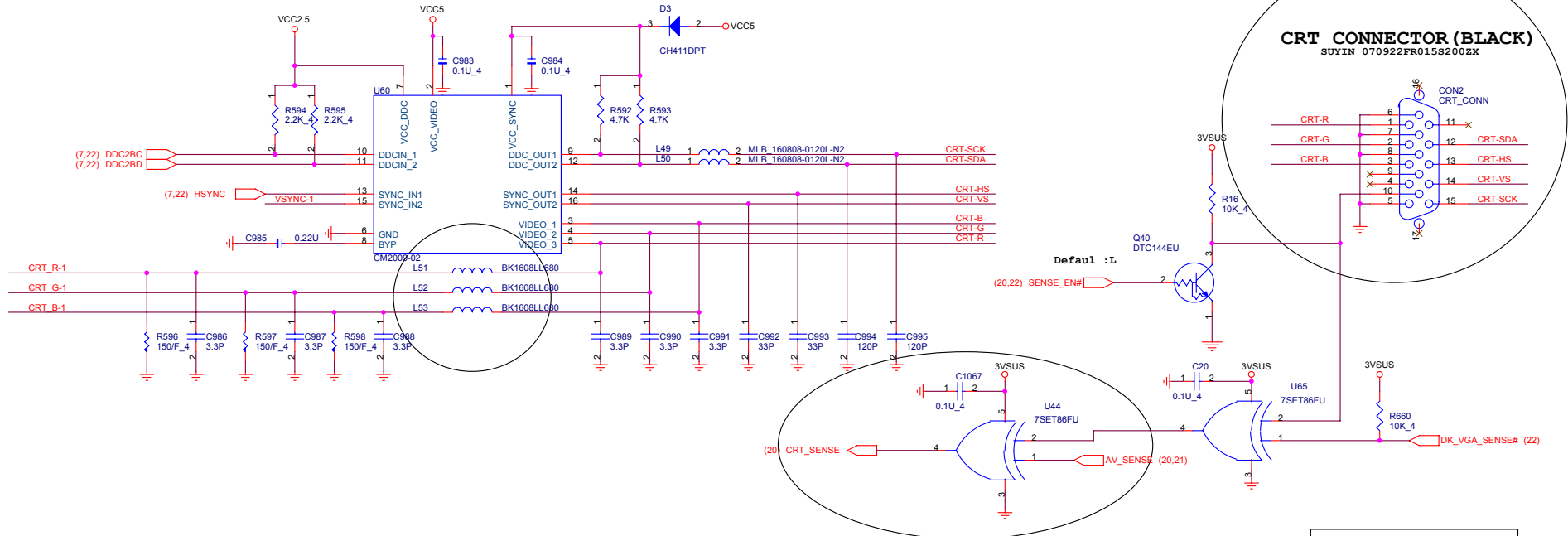
Size: **RD1 Main Board**

Rev: **1A**

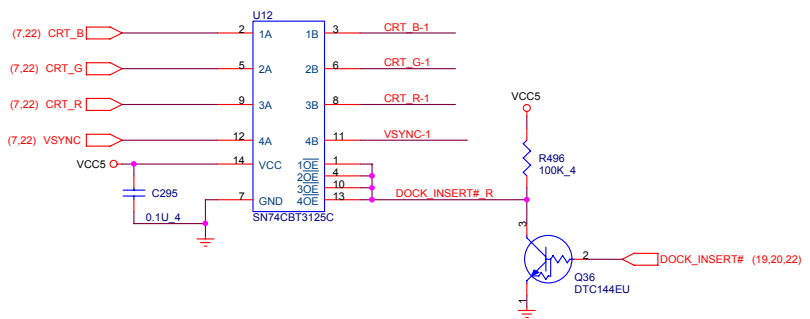
Date: Thursday, June 30, 2005

Sheet: 6 of 32

1.This part should not contain any substances which are specified in SS-00259-1
 2.Purchase ink, paint, wire rods and molding resins only from the business partners that Sony approves as Green Partners.



Close to PR-CONN



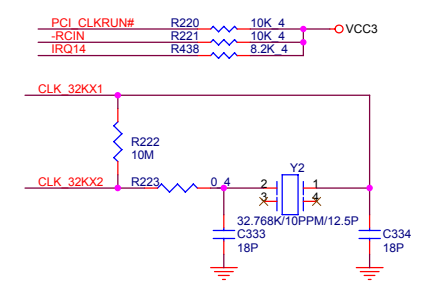
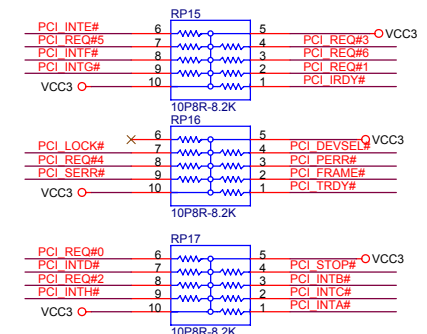
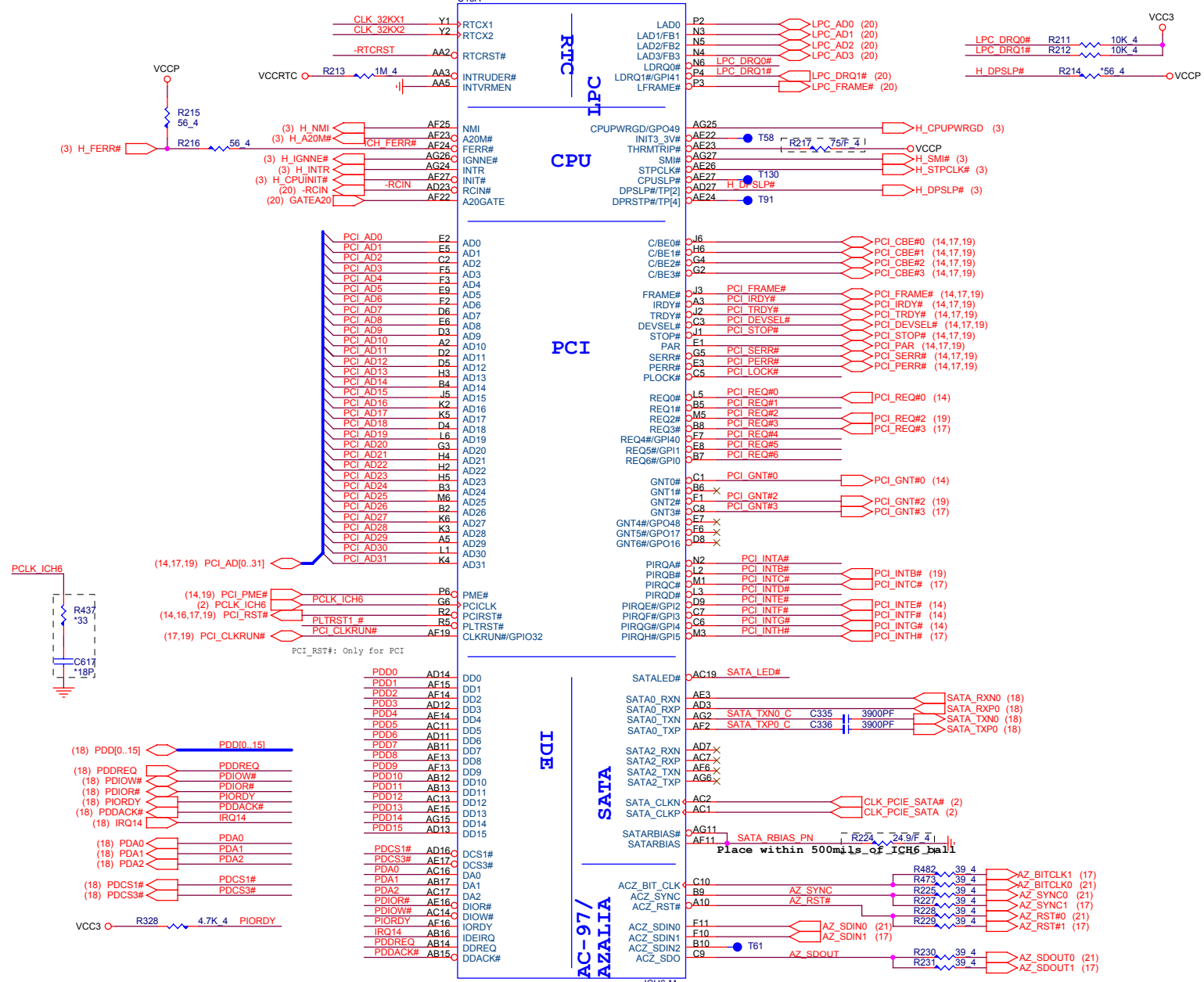
Plug Display true table

(2) XOR (1) XOR

DOCK_INSERT#	SENSE_EN#	MB CRT	DK_VGA_SENSE#	DOCK DVI	DOCK CRT	AV_SENSE	CRT_SENSE
MB no CRT/AV	H	H	H	X	X	L	L
MB CRT Plug	H	L	H	X	X	L	H
MB AV-OUT Plug	H	L	H	X	X	H	H
MB CRT/AV-OUT Plug	H	L	H	X	X	H	L
DOCK No CRT/DVI /AV	L	L	H	L	H	L	L
DOCK CRT Plug	L	L	H	L	L	L	H
DOCK DVI Plug	L	L	H	L	H	L	H
DOCK AV Plug	L	L	H	L	H	H	H
DOCK CRT/DVI Plug	L	L	H	H	L	L	L
DOCK DVI/AV Plug	L	L	H	L	H	H	L
DOCK CRT/AV Plug	L	L	H	L	L	H	L
DOCK CRT/DVI/AV Plug	L	L	H	H	L	H	H
X	H	X	X	X	X	X	L

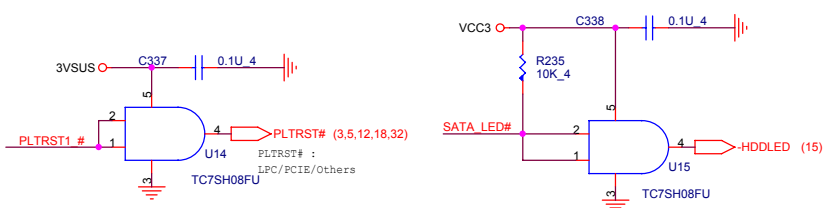
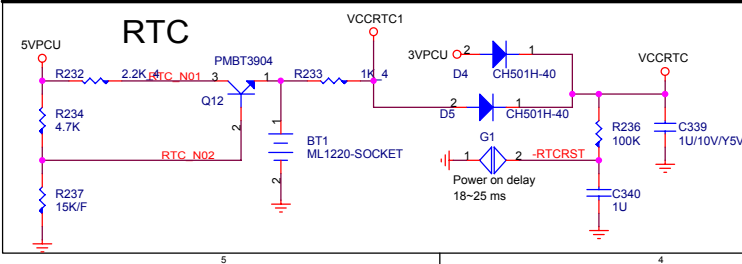


1.This part should not contain any substances which are specified in S2-00259-1
 2.Purchase ink, paint, wire rods and molding resins only from the business partners that Sony approves as Green Partners.



PCI_REQ0 : TI-7420
 PCI_REQ1 : X
 PCI_REQ2 : LAN (8100CL)
 PCI_REQ3 : MINI PCI
 PCI_REQ4 : X
 PCI_REQ5 : X
 PCI_REQ6 : X
 IDSEL: (AD16 ~ 29)
 AD24 : LAN (8100CL)
 AD25 : TI-7420
 AD26 : MINI PCI

PCI_INTA# : X
 PCI_INTB# : LAN (8100CL)
 PCI_INTC# : MINI PCI
 PCI_INTD# : X
 PCI_INTE# : TI-7420
 PCI_INTF# : TI-7420
 PCI_INTG# : TI-7420
 PCI_INTH# : MINI PCI



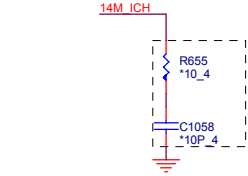
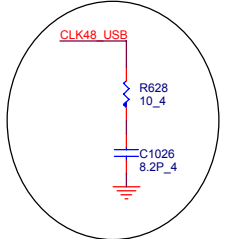
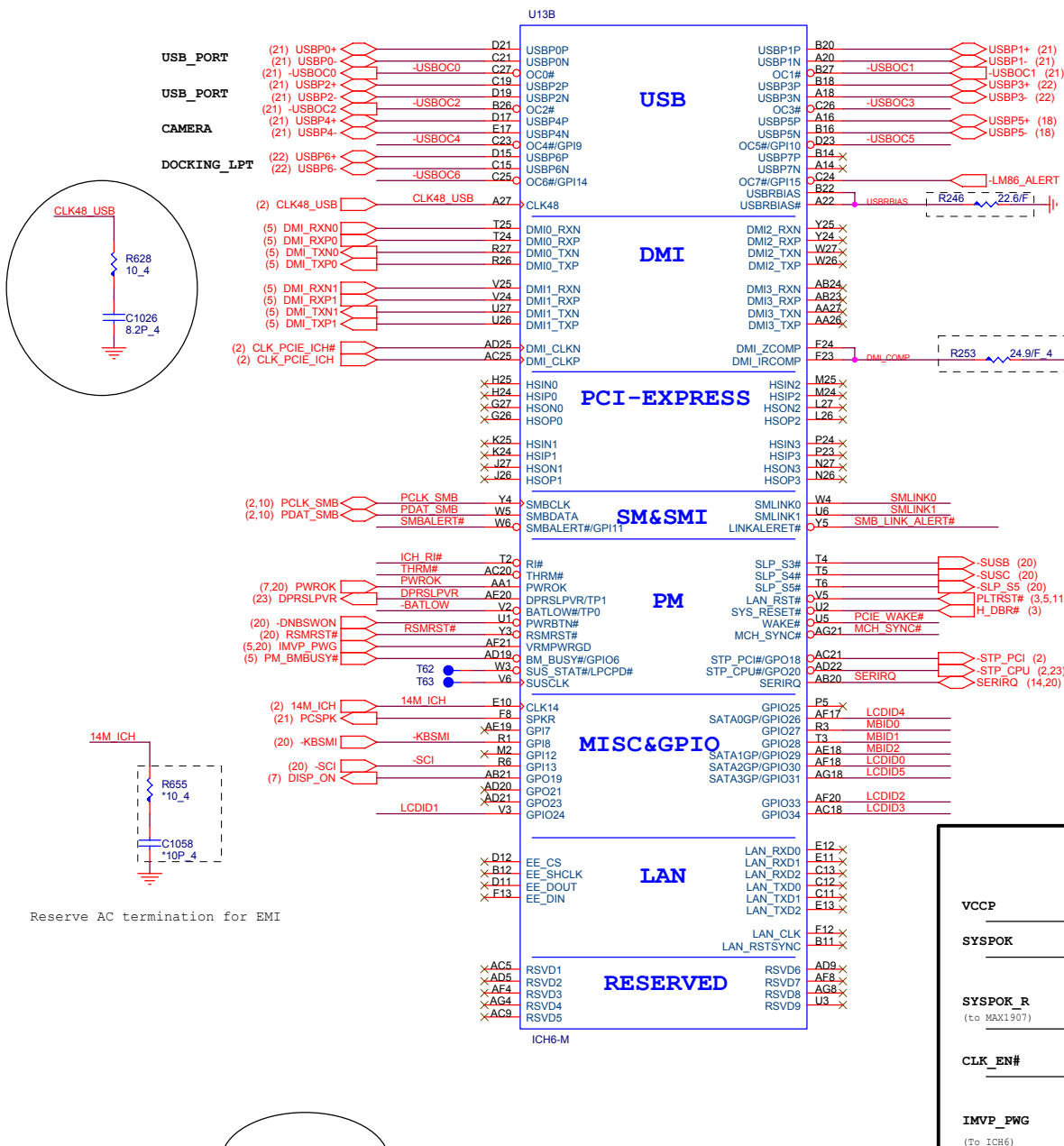
1. This part should not contain any substances which are specified in SS-00259-1
 2. Purchase ink, paint, wire rods and molding resins only from the business partners that Sony approves as Green Partners.

QUANTA COMPUTER

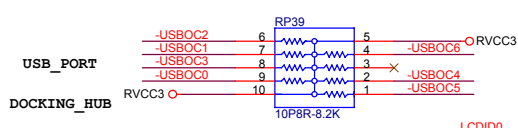
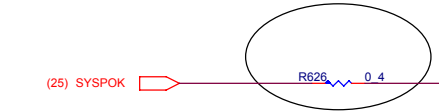
Title: **ICH6-M**

Size: _____ Document Number: **RD1 Main Board** Rev: 1A

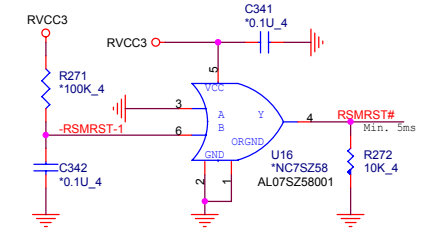
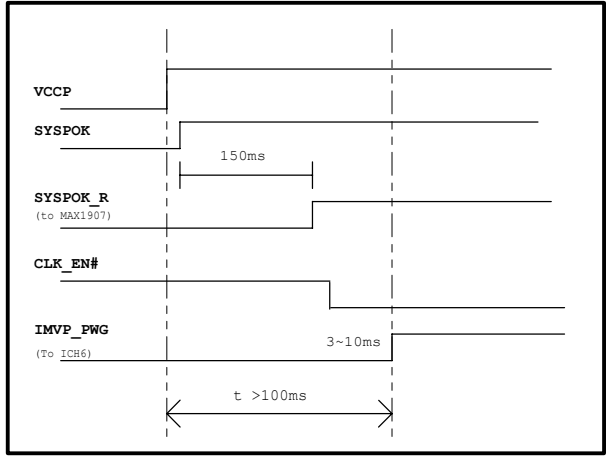
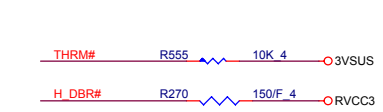
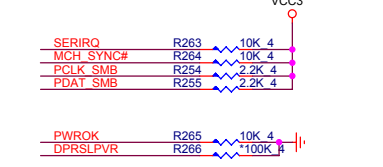
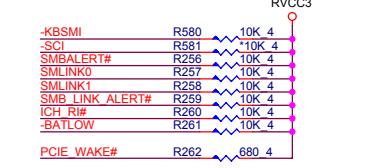
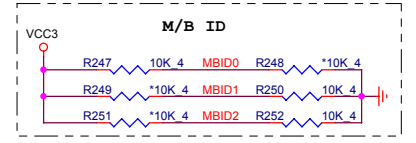
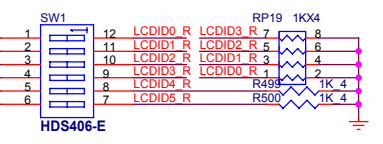
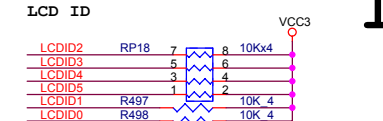
Date: Thursday, June 30, 2005 Sheet: 11 of 32



Reserve AC termination for EMI



FeliCa Reserve



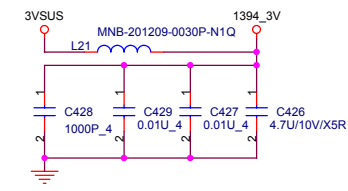
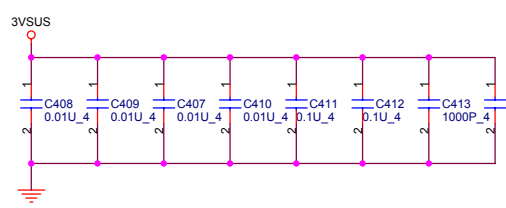
QUANTA COMPUTER

Title: ICH6-M

Size: Document Number: RD1 Main Board Rev: 1A

Date: Thursday, June 30, 2005 Sheet: 12 of 32

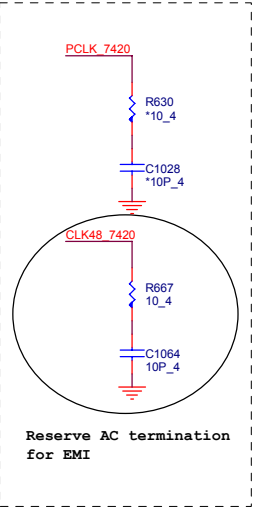
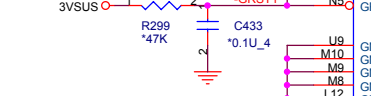
1. This part should not contain any substances which are specified in SS-00259-1
 2. Purchase ink, paint, wire rods and molding resins only from the business partners that Sony approves as Green Partners.



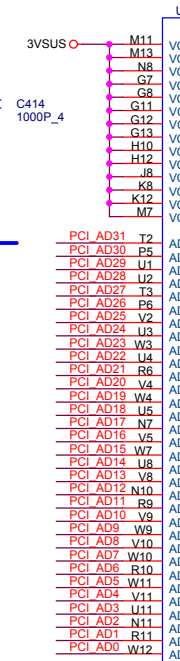
(11,17,19) PCI_AD[0..31]

- (11,17,19) PCI_CBE#3
- (11,17,19) PCI_CBE#2
- (11,17,19) PCI_CBE#1
- (11,17,19) PCI_CBE#0
- (11,17,19) PCI_PAR
- (11,17,19) PCI_AD25
- (11) PCI_RE#0
- (11) PCI_GNT#0
- (11,17,19) PCI_FRAME#
- (11,17,19) PCI_IRDY#
- (11,17,19) PCI_TRDY#
- (11,17,19) PCI_DEVSEL#
- (11,17,19) PCI_STOP#
- (11,17,19) PCI_PERR#
- (11,17,19) PCI_SERR#

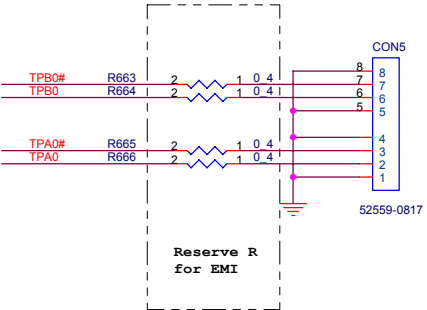
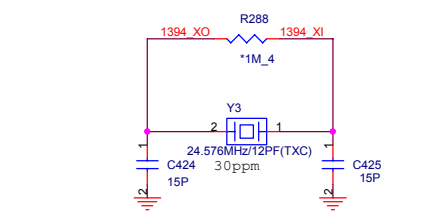
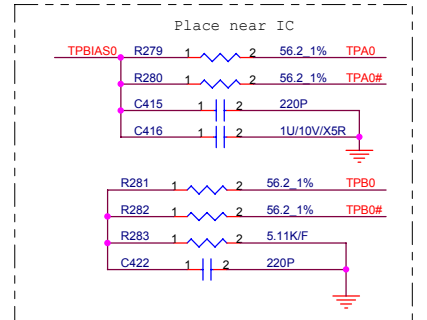
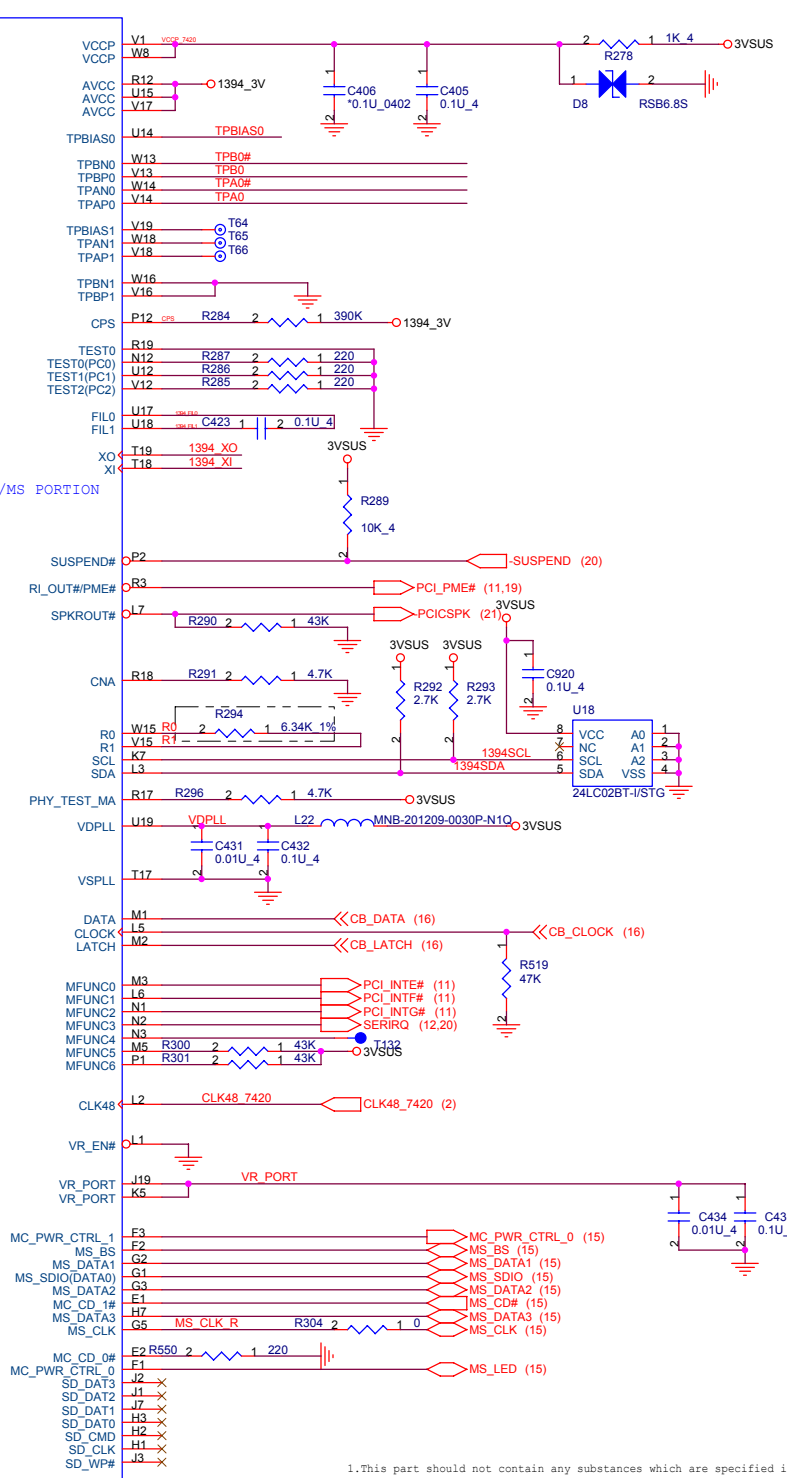
- (2) PCLK_7420
- (11,16,17,19) PCI_RST#
- (23,24,26) PGOOD



Reserve AC termination for EMI



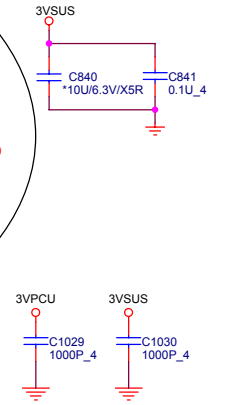
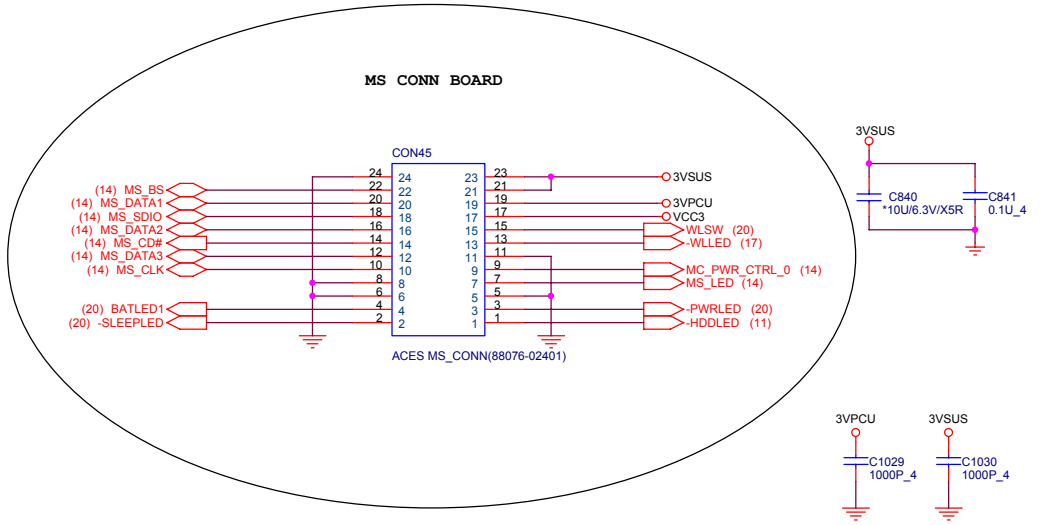
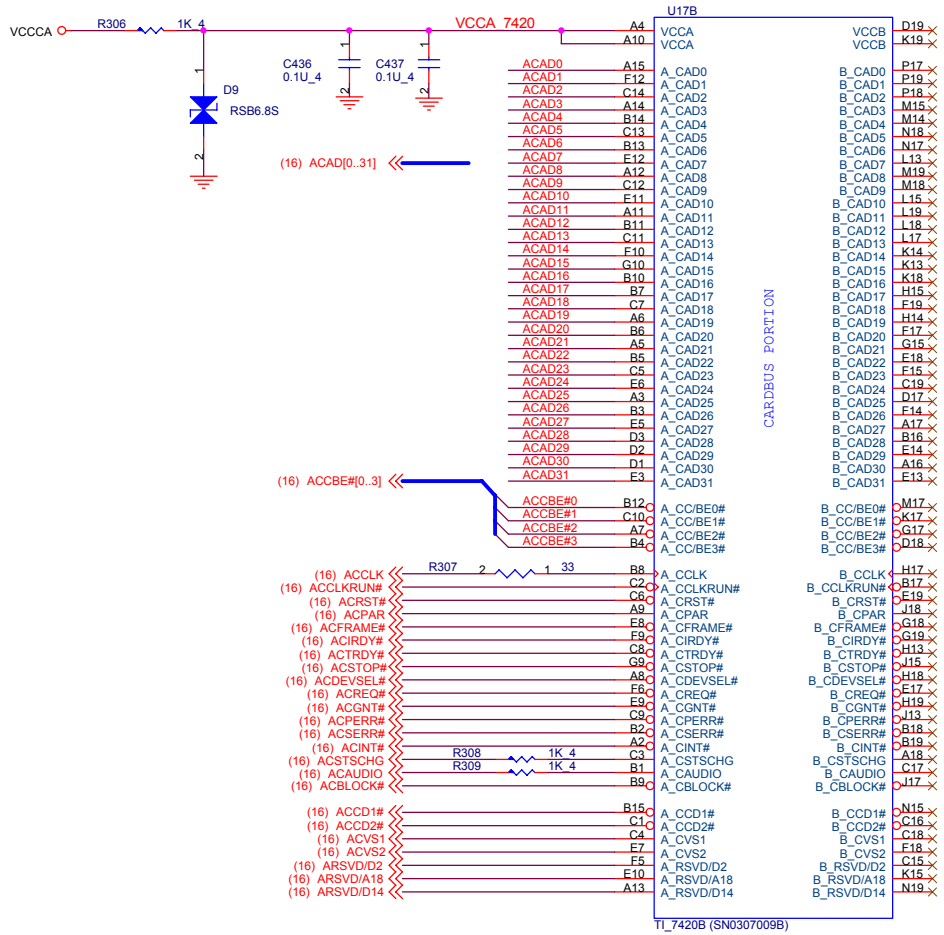
PCI/1394/MS PORTION



Title			
TI-7420 CardBus Control -- A			
Size	Document Number	Rev	
	RD1 Main Board	1A	
Date:	Saturday, July 02, 2005	Sheet	14 of 32

1. This part should not contain any substances which are specified in SS-00259-1
 2. Purchase ink, paint, wire rods and molding resins only from the business partners that Sony approves as Green Partners.

MB side : ACES 88076-02401 with boss
MS side : ACES 88066-02401 with boss
H=2.0mm



QUANTA COMPUTER

Title: **TI-7420B CardBus Control -- B**

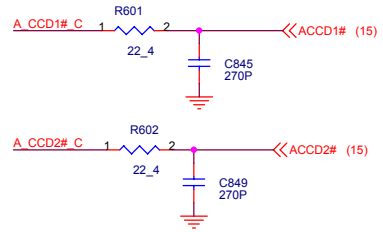
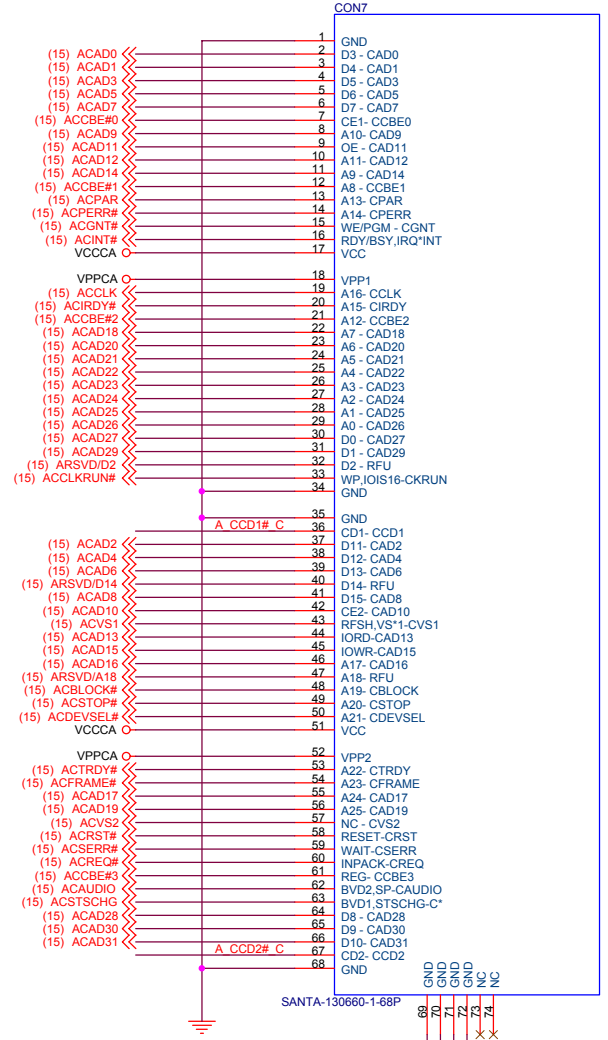
Size: Document Number **RD1 Main Board** Rev 1A

Date: Saturday, July 02, 2005 Sheet 15 of 32

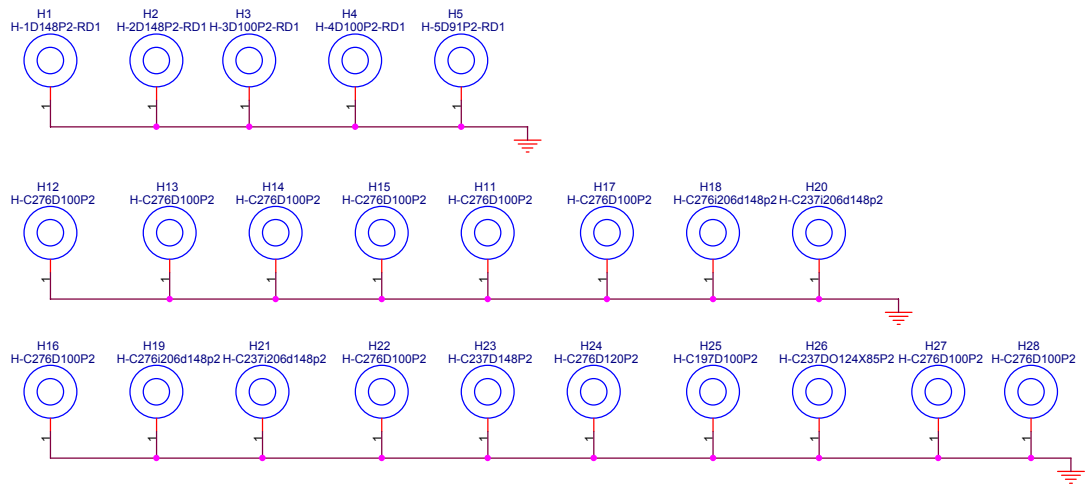
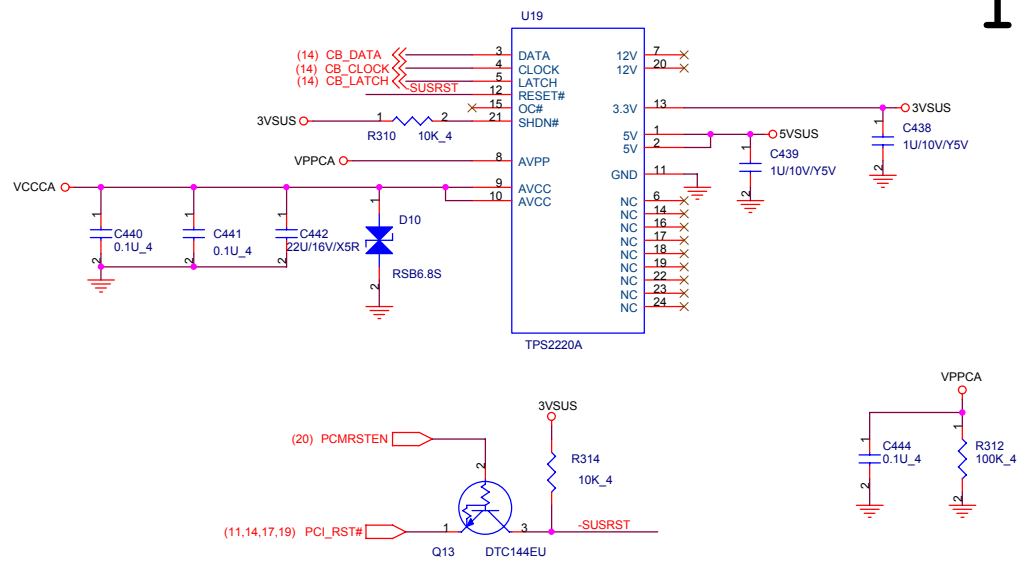
1.This part should not contain any substances which are specified in SS-00259-1
2.Purchase ink, paint, wire rods and molding resins only from the business partners that Sony approves as Green Partners.

(15) ACAD[0..31] <<<
(15) ACCBE#[0..3] <<<

PCMCIA SOCKET



CardBus inject : 130660-1 , FB0A6063017
 CardBus CONN : 130610-1



QUANTA COMPUTER

Title: **CARDBUS SLOT**

Size: Document Number **RD1 Main Board** Rev 1A

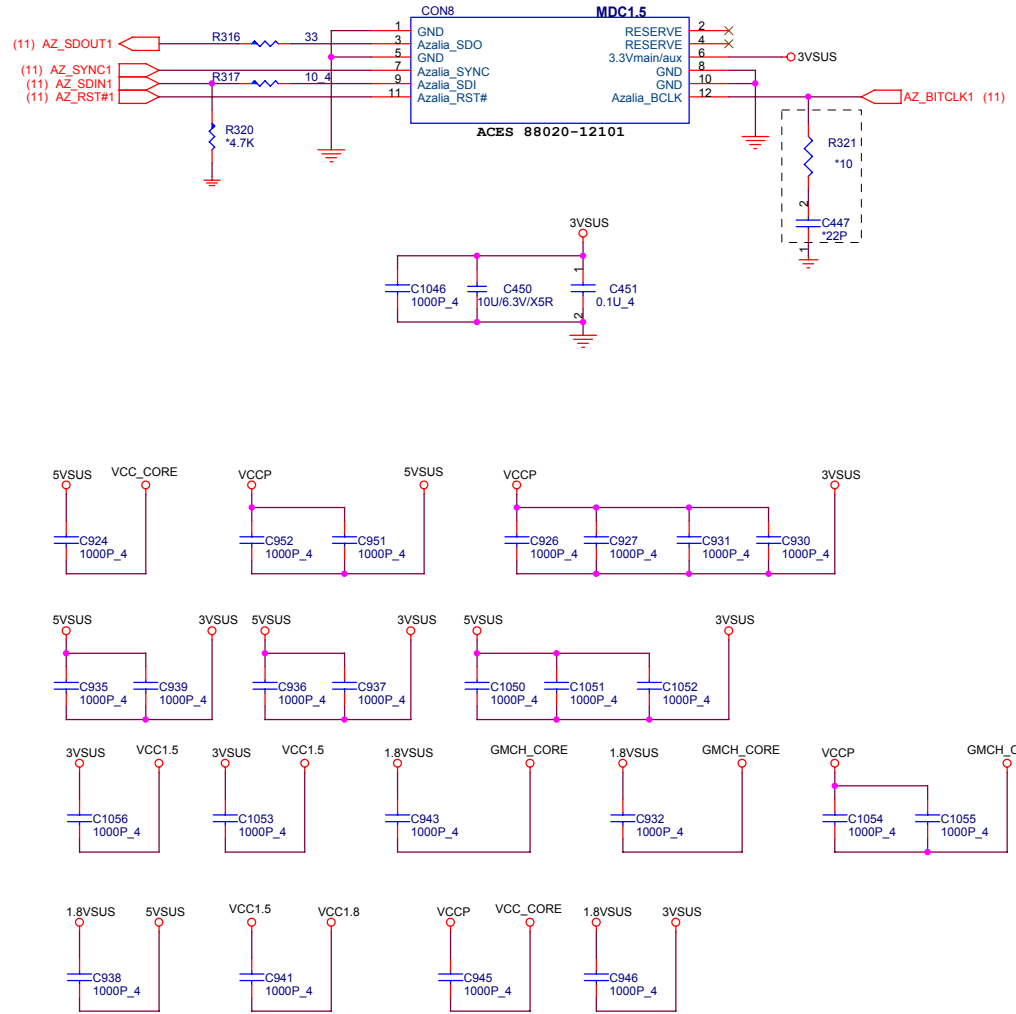
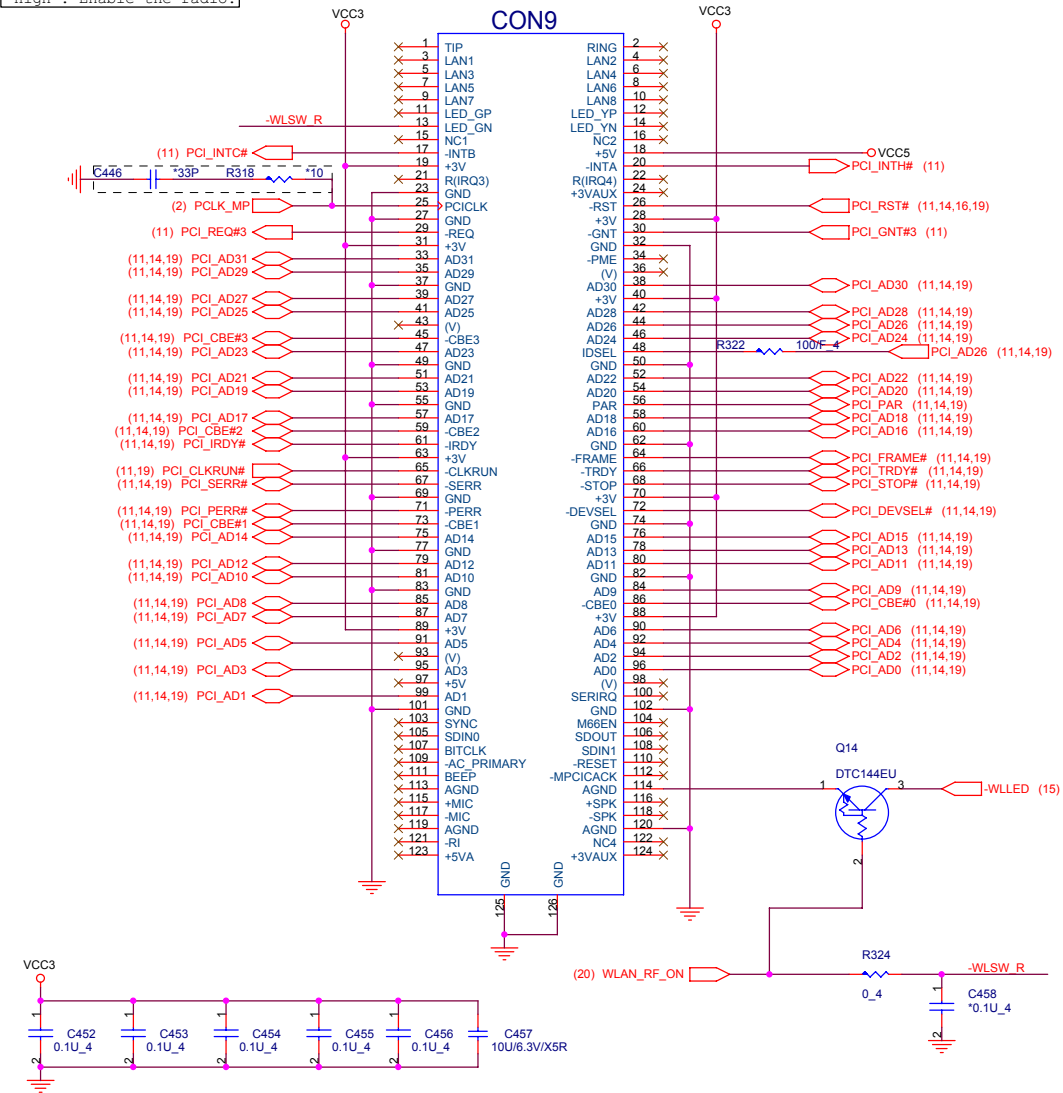
Date: Saturday, July 02, 2005 Sheet 16 of 32

1.This part should not contain any substances which are specified in SS-00259-1
 2.Purchase ink, paint, wire rods and molding resins only from the business partners that Sony approves as Green Partners.

MDC V1.5

LED_GP :LED WLEN LINK
 Output Current : 7mA
 Blink rate : 1 flash
 per every 3 sec.
 WLSW:
 Low : disable the radio.
 High : Enable the radio.

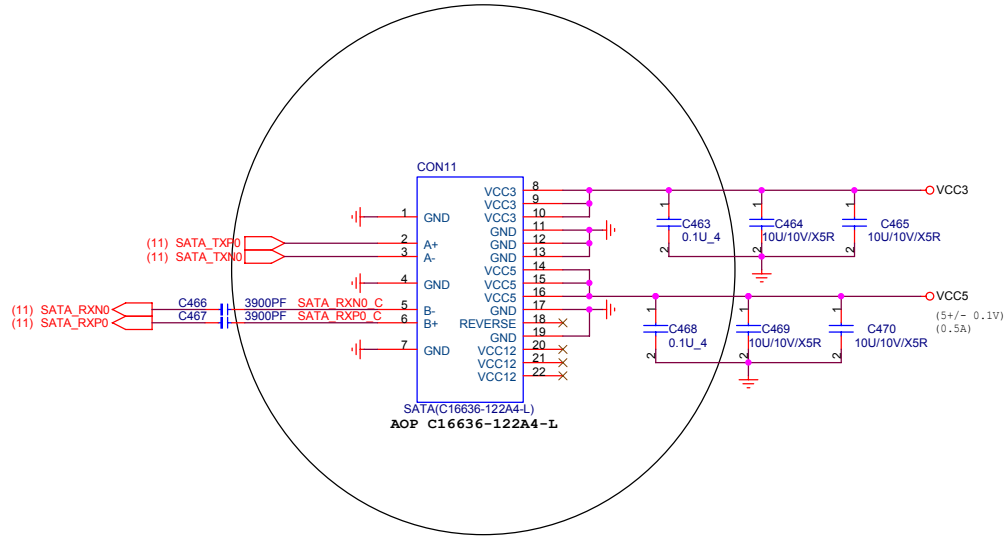
AMP 1734835-2
 MINIPCI H=6.7
 CON9



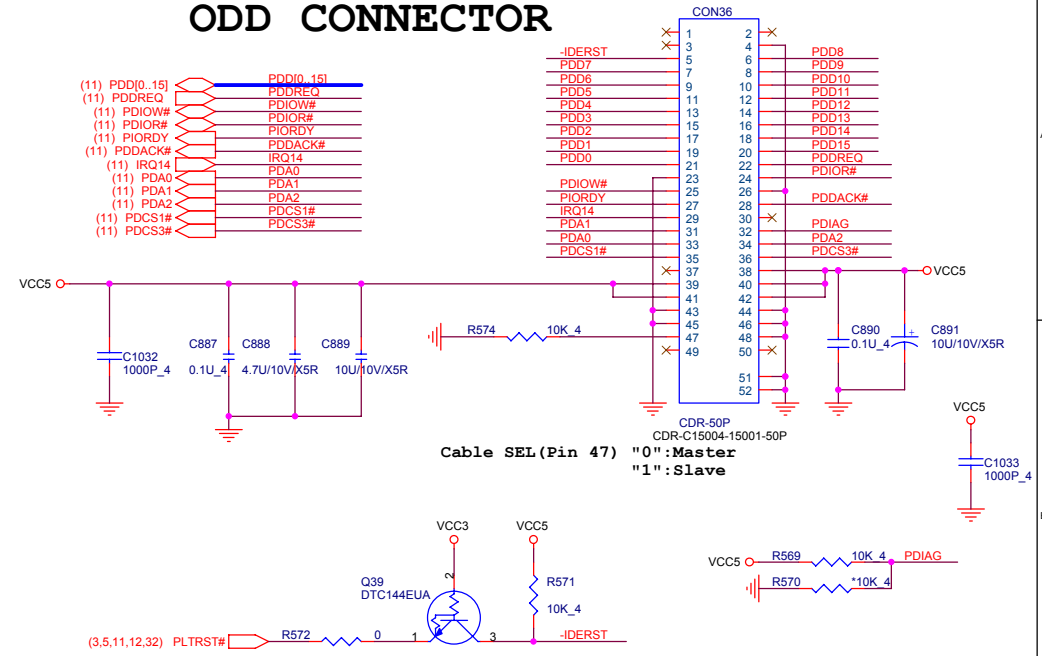
Title		MINIPCI /MDC	
Size	Document Number	RD1 Main Board	
Date:	Thursday, June 30, 2005	Sheet	17 of 32
Rev	1A		

1.This part should not contain any substances which are specified in SS-00259-1
 2.Purchase ink, paint, wire rods and molding resins only from the business partners that Sony approves as Green Partners.

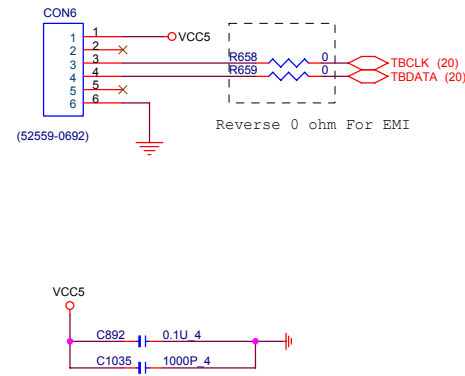
HDD CONNECTOR



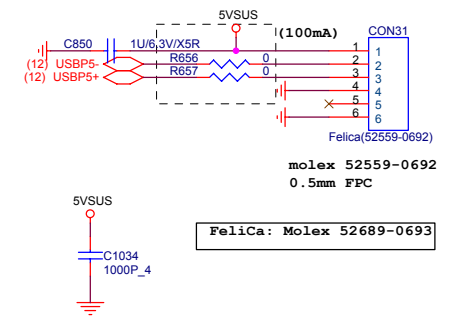
ODD CONNECTOR



TOUCH PAD CONNECTOR

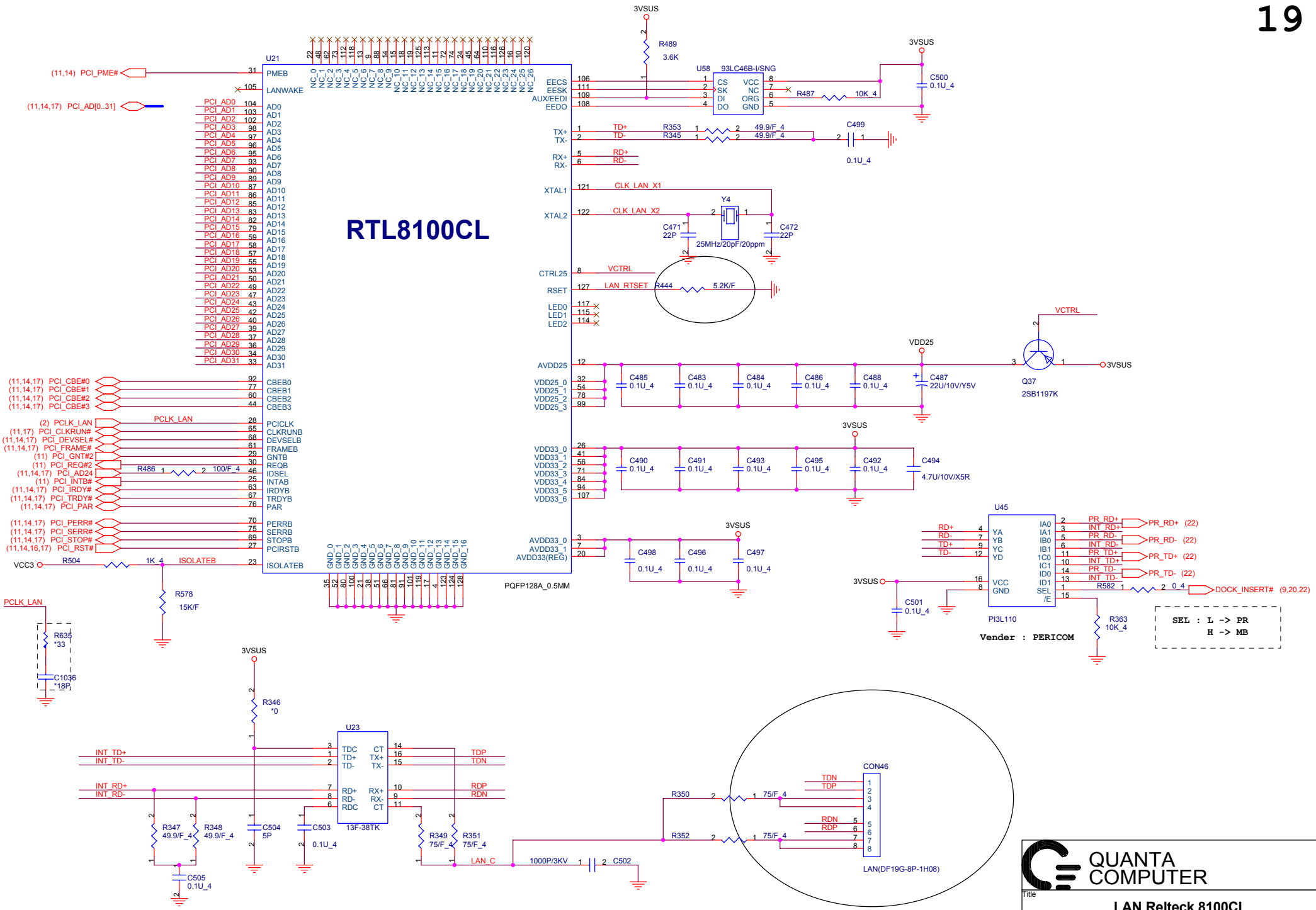


FeliCa



Title				Rev
HDD/ODD/TP/FeliCa				1A
Size	Document Number	RD1 Main Board		
Date: Saturday, July 02, 2005	Sheet	18	of	32

1.This part should not contain any substances which are specified in SS-00259-1
2.Purchase ink, paint, wire rods and molding resins only from the business partners that Sony approves as Green Partners.



1.This part should not contain any substances which are specified in SS-00259-1
 2.Purchase ink, paint, wire rods and molding resins only from the business partners that Sony approves as Green Partners.

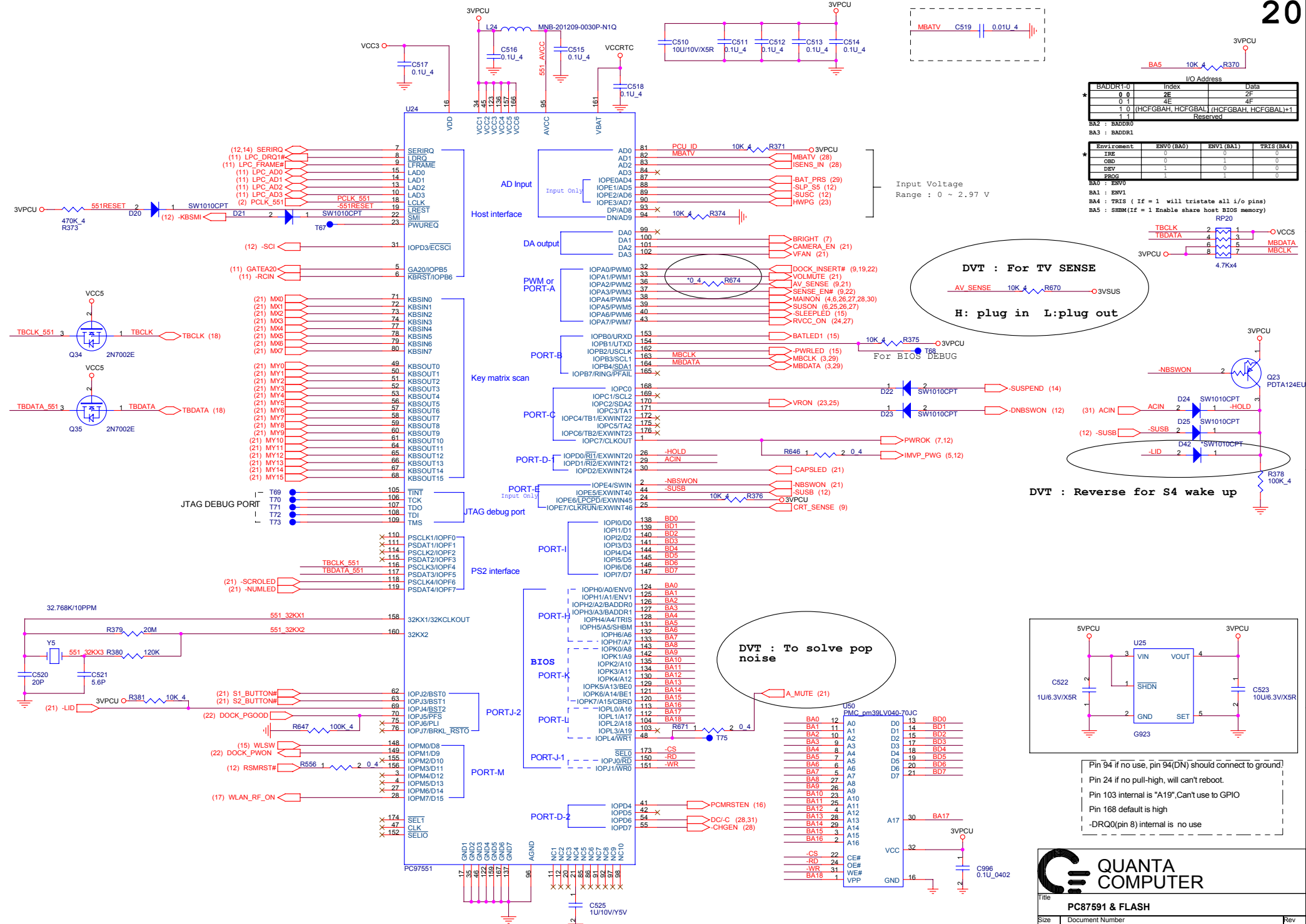
QUANTA COMPUTER

Title: **LAN Relteck 8100CL**

Size: Document Number **RD1 Main Board** Rev 1A

Date: Saturday, July 02, 2005 Sheet 19 of 32

SEL : L -> PR
 H -> MB



I/O Address		
BADDR[1:0]	Index	Data
0 0	2E	2F
0 1	4E	4F
1 0	(HCFGBA4, HCFGBAL) (HCFGBA8, HCFGBAL)+1	
1 1	Reserved	

BA2 : BADDR0
BA3 : BADDR1

Environment	ENV0 (BA0)	ENV1 (BA1)	TRIS (BA4)
OSD	0	1	0
DEV	1	0	0
PROG	1	1	0

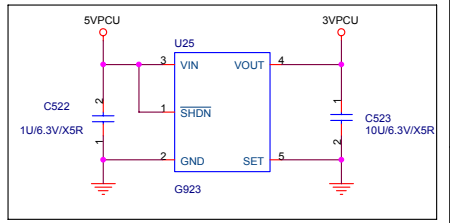
BA1 : ENV0
BA1 : ENV1
BA4 : TRIS (If = 1 will tristate all i/o pins)
BA5 : SHRM (if = 1 Enable share host BIOS memory)

Input Voltage
Range : 0 ~ 2.97 V

DVT : For TV SENSE
AV SENSE 10K Ω R670 \rightarrow 3VSUS
H: plug in L: plug out

DVT : Reverse for S4 wake up

DVT : To solve pop noise
A_MUTE (21)



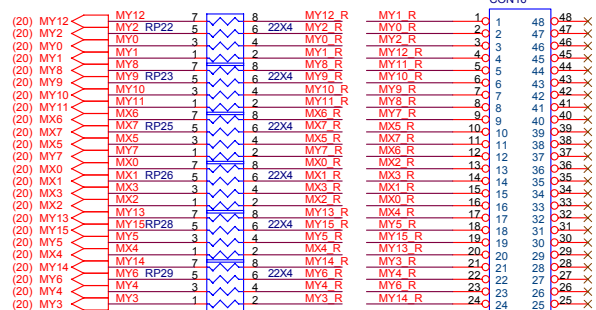
Pin 94 if no use, pin 94(DN) should connect to ground!
Pin 24 if no pull-high, will can't reboot.
Pin 103 internal is "A19", Can't use to GPIO
Pin 168 default is high
-DRQ0(pin 8) internal is no use



Title		PC87591 & FLASH	
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Rev	1A		

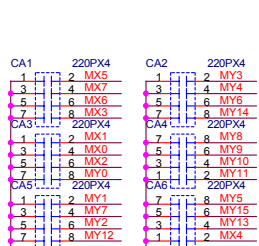
1. This part should not contain any substances which are specified in SS-00259-1
2. Purchase ink, paint, wire rods and molding resins only from the business partners that Sony approves as Green Partners.

KEYBOARD



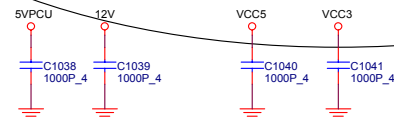
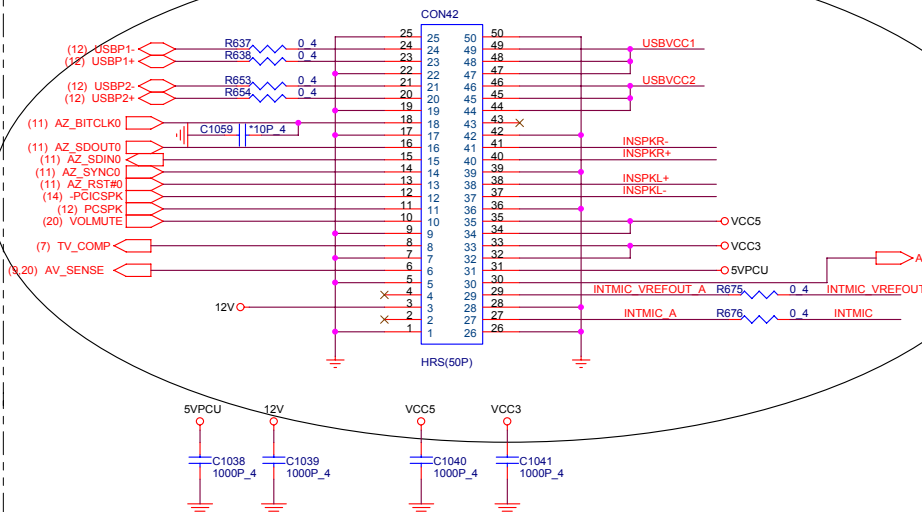
KB7641 series

Molex 52610-2490

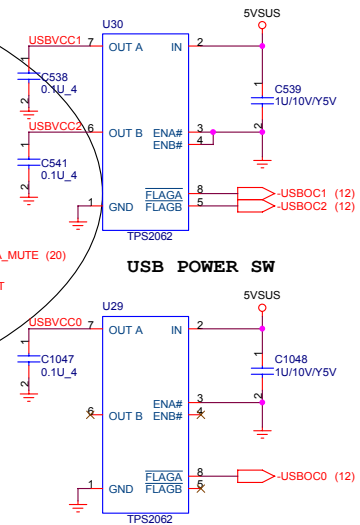


DVT : For EMI

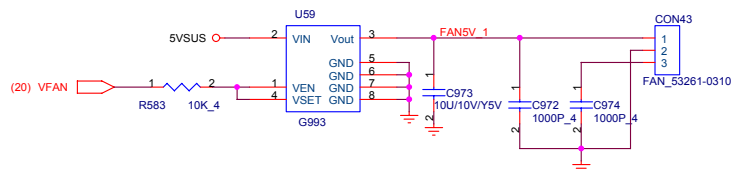
To AUDIO-USB BOARD CONN.



USB POWER SW

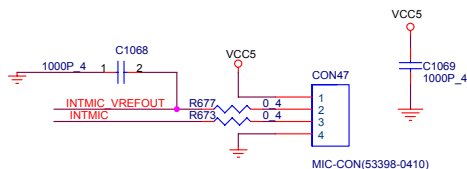


FAN

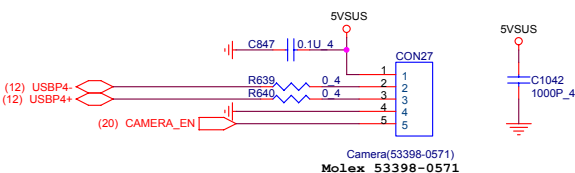


DVT : Add MIC CONN on MB

MIC CONN

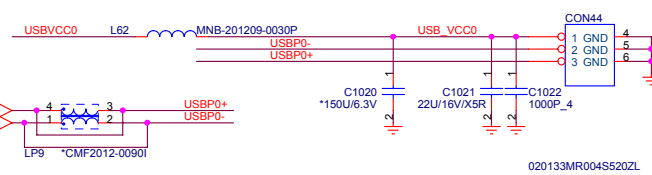


USB Camera

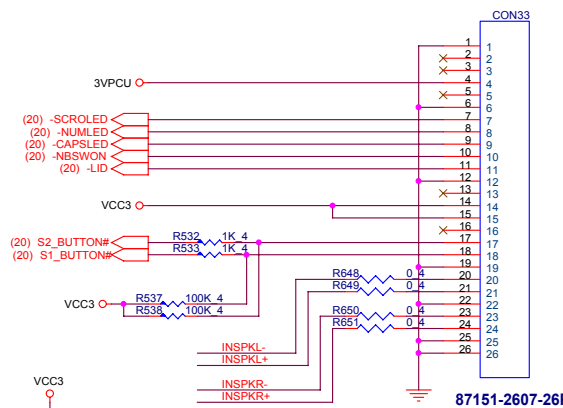


Camera(53398-0571)
Molex 53398-0571

E&T-3702Y-T004-NNN



POWER SWITCH BOARD CONNECTOR



87151-2607-26P

QUANTA COMPUTER

File: **K/B ,USB ,PS**

Size: **RD1 Main Board**

Date: Saturday, July 02, 2005

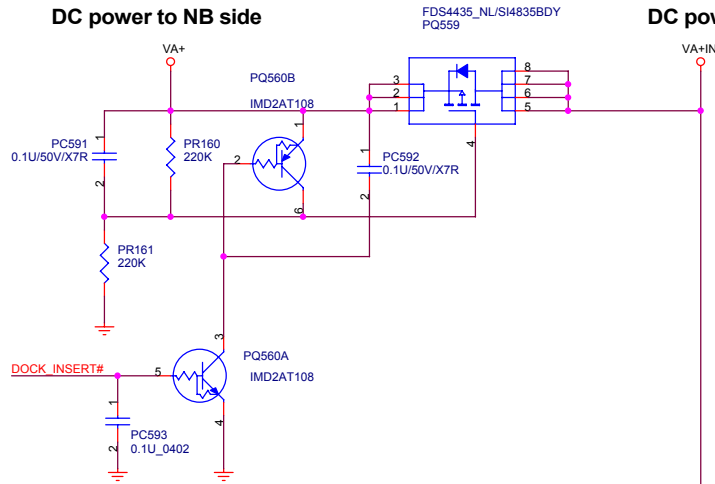
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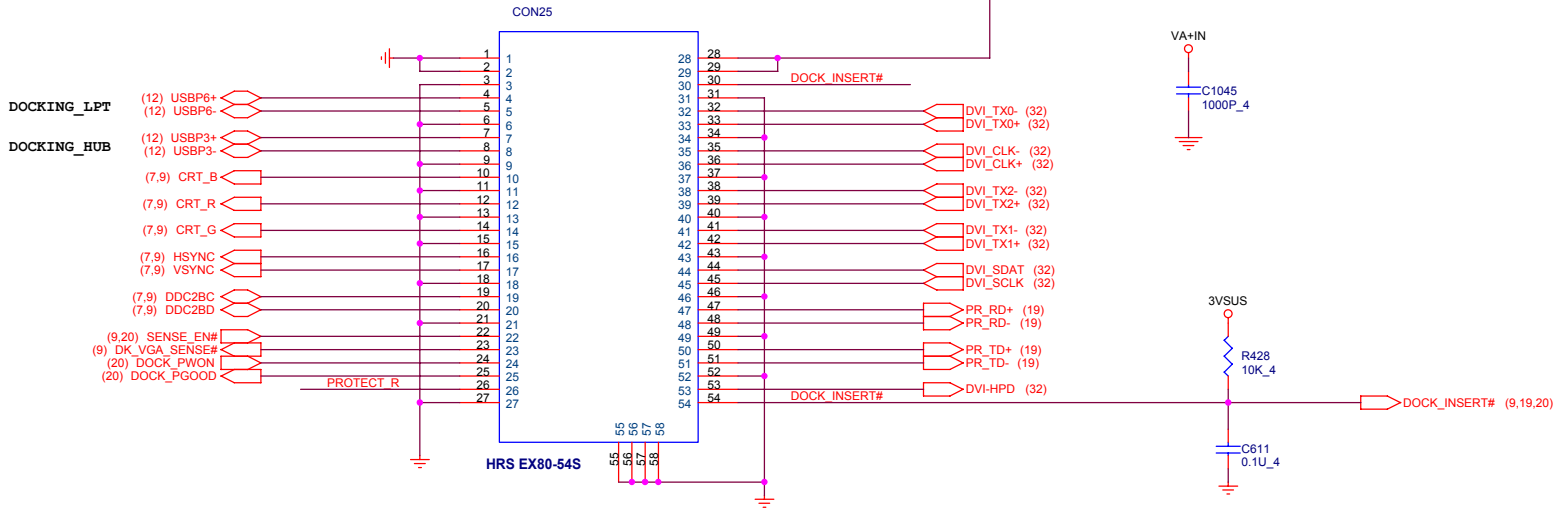
1.This part should not contain any substances which are specified in SS-00259-1
2.Purchase ink, paint, wire rods and molding resins only from the business partners that Sony approves as Green Partners.

DC power to NB side

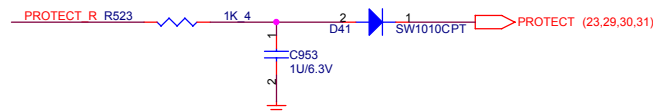
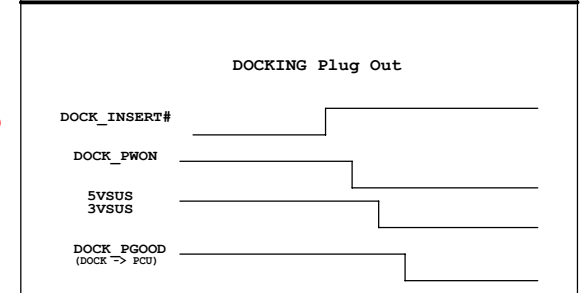
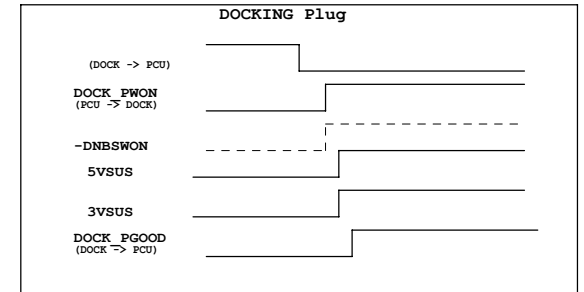
DC power from DOCKING side



Port Replicator CONN



Docking detect Pin : PIN3, PIN30 and PIN 54

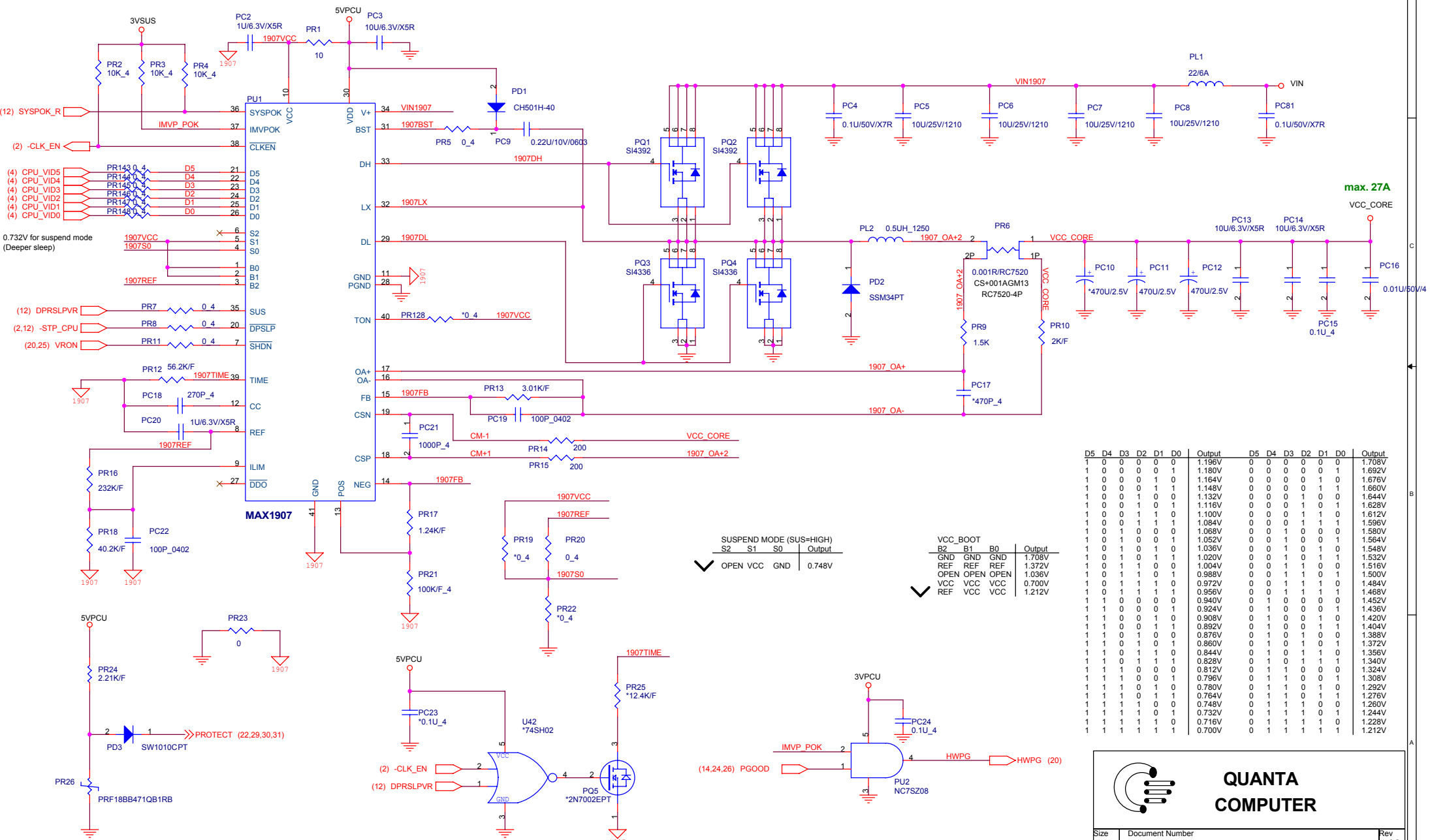


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Title Docking		
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CPU CORE



max. 27A

- (12) SYSPOK_R
- (2) -CLK_EN
- (4) CPU_VID5
- (4) CPU_VID4
- (4) CPU_VID3
- (4) CPU_VID2
- (4) CPU_VID1
- (4) CPU_VID0
- 0.732V for suspend mode (Deeper sleep)
- (12) DPRSLPVR
- (2,12) -STP_CPU
- (20,25) VRON

SUSPEND MODE (SUS=HIGH)				Output
S2	S1	S0		Output
✓	OPEN	VCC	GND	0.748V

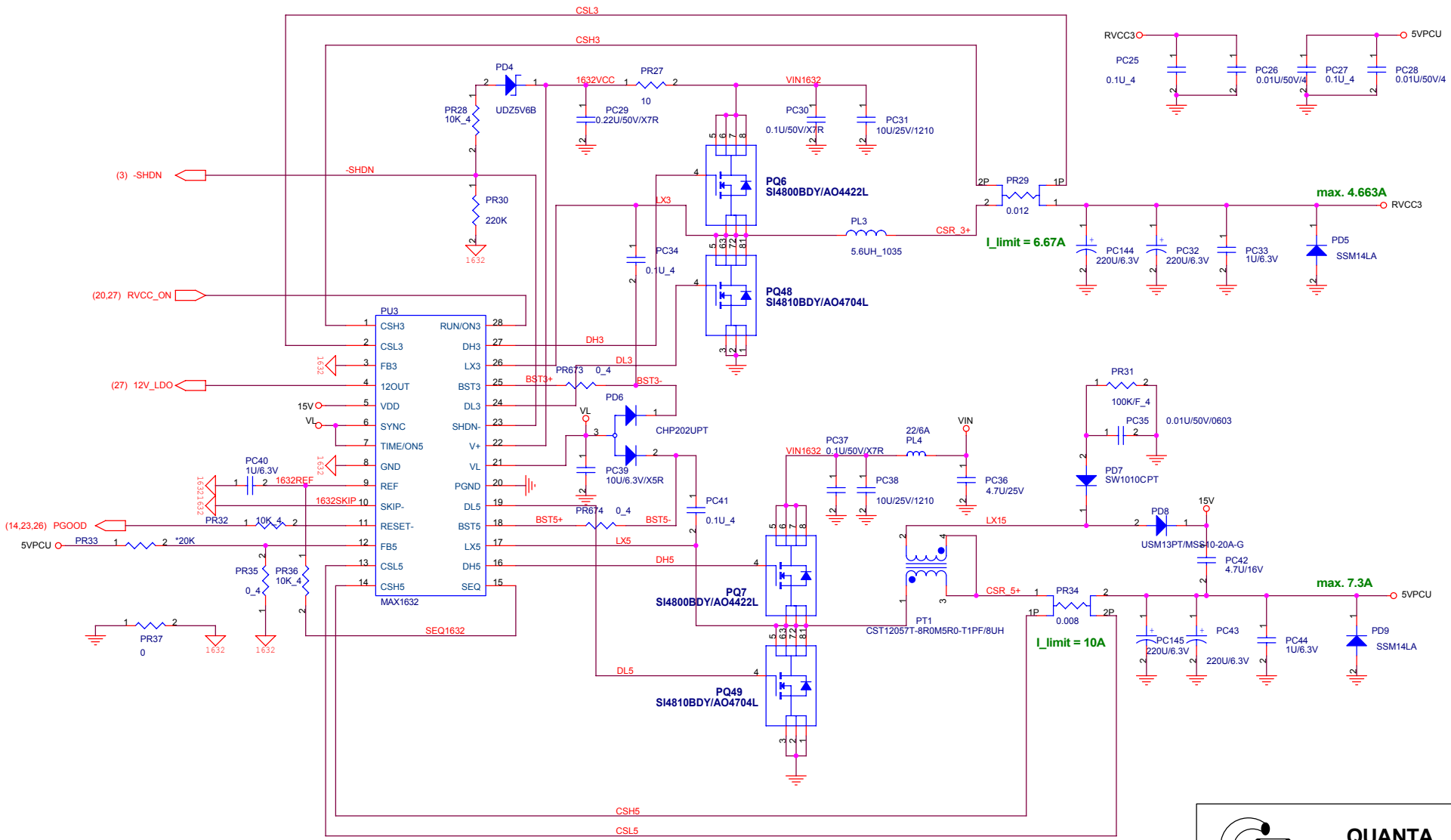
VCC_BOOT				Output
B2	B1	B0		Output
GND	GND	GND	1.708V	1.708V
REF	REF	REF	1.372V	1.004V
OPEN	OPEN	OPEN	1.036V	0.988V
VCC	VCC	VCC	0.700V	0.972V
REF	VCC	VCC	1.212V	0.956V

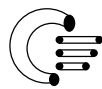
D5	D4	D3	D2	D1	D0	Output	D5	D4	D3	D2	D1	D0	Output
1	0	0	0	0	0	1.196V	0	0	0	0	0	0	1.708V
1	0	0	0	0	1	1.180V	0	0	0	0	0	1	1.692V
1	0	0	0	1	0	1.164V	0	0	0	0	1	0	1.676V
1	0	0	0	1	1	1.148V	0	0	0	0	1	1	1.660V
1	0	0	1	0	0	1.132V	0	0	0	1	0	0	1.644V
1	0	0	1	0	1	1.116V	0	0	0	1	0	1	1.628V
1	0	0	1	1	0	1.100V	0	0	1	1	0	0	1.612V
1	0	0	1	1	1	1.084V	0	0	1	1	1	1	1.596V
1	0	1	0	0	0	1.068V	0	0	1	0	0	0	1.580V
1	0	1	0	0	1	1.052V	0	0	1	0	0	1	1.564V
1	0	1	0	1	0	1.036V	0	0	1	0	1	0	1.548V
1	0	1	0	1	1	1.020V	0	0	1	0	1	1	1.532V
1	0	1	1	0	0	1.004V	0	0	1	1	0	0	1.516V
1	0	1	1	0	1	0.988V	0	0	1	1	0	1	1.500V
1	0	1	1	1	0	0.972V	0	0	1	1	1	0	1.484V
1	0	1	1	1	1	0.956V	0	0	1	1	1	1	1.468V
1	1	0	0	0	0	0.940V	0	1	0	0	0	0	1.452V
1	1	0	0	0	1	0.924V	0	1	0	0	0	1	1.436V
1	1	0	0	1	0	0.908V	0	1	0	0	1	0	1.420V
1	1	0	0	1	1	0.892V	0	1	0	0	1	1	1.404V
1	1	0	1	0	0	0.876V	0	1	0	1	0	0	1.388V
1	1	0	1	0	1	0.860V	0	1	0	1	0	1	1.372V
1	1	0	1	1	0	0.844V	0	1	0	1	1	0	1.356V
1	1	0	1	1	1	0.828V	0	1	0	1	1	1	1.340V
1	1	1	0	0	0	0.812V	0	1	1	0	0	0	1.324V
1	1	1	0	0	1	0.796V	0	1	1	0	0	1	1.308V
1	1	1	0	1	0	0.780V	0	1	1	0	1	0	1.292V
1	1	1	0	1	1	0.764V	0	1	1	0	1	1	1.276V
1	1	1	1	0	0	0.748V	0	1	1	1	0	0	1.260V
1	1	1	1	0	1	0.732V	0	1	1	1	0	1	1.244V
1	1	1	1	1	0	0.716V	0	1	1	1	1	0	1.228V
1	1	1	1	1	1	0.700V	0	1	1	1	1	1	1.212V

1.This part should not contain any substances which are specified in S8-00259-1
 2.Purchase ink, paint, wire rods and molding resins only from the business partners that Sony approves as Green Partners.

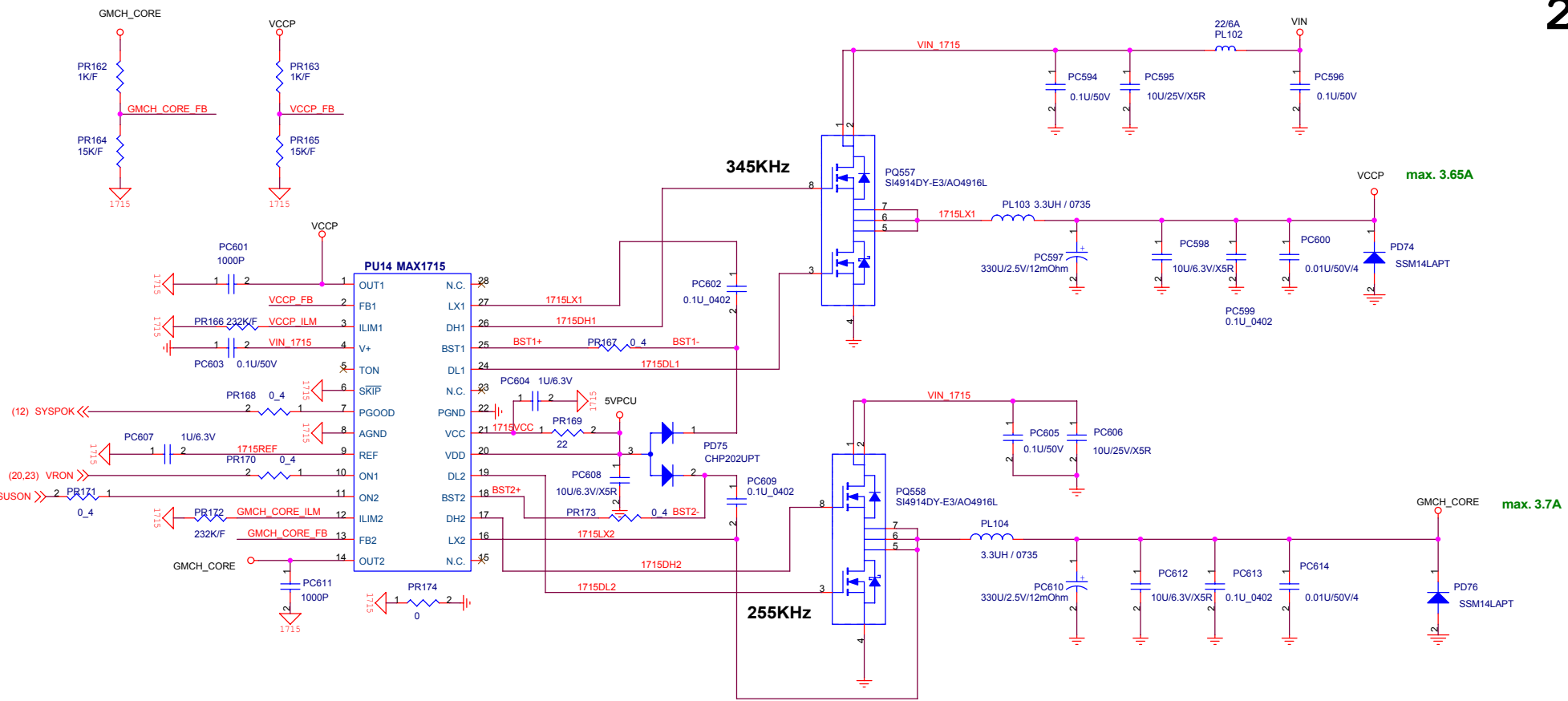
QUANTA COMPUTER

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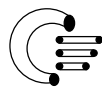


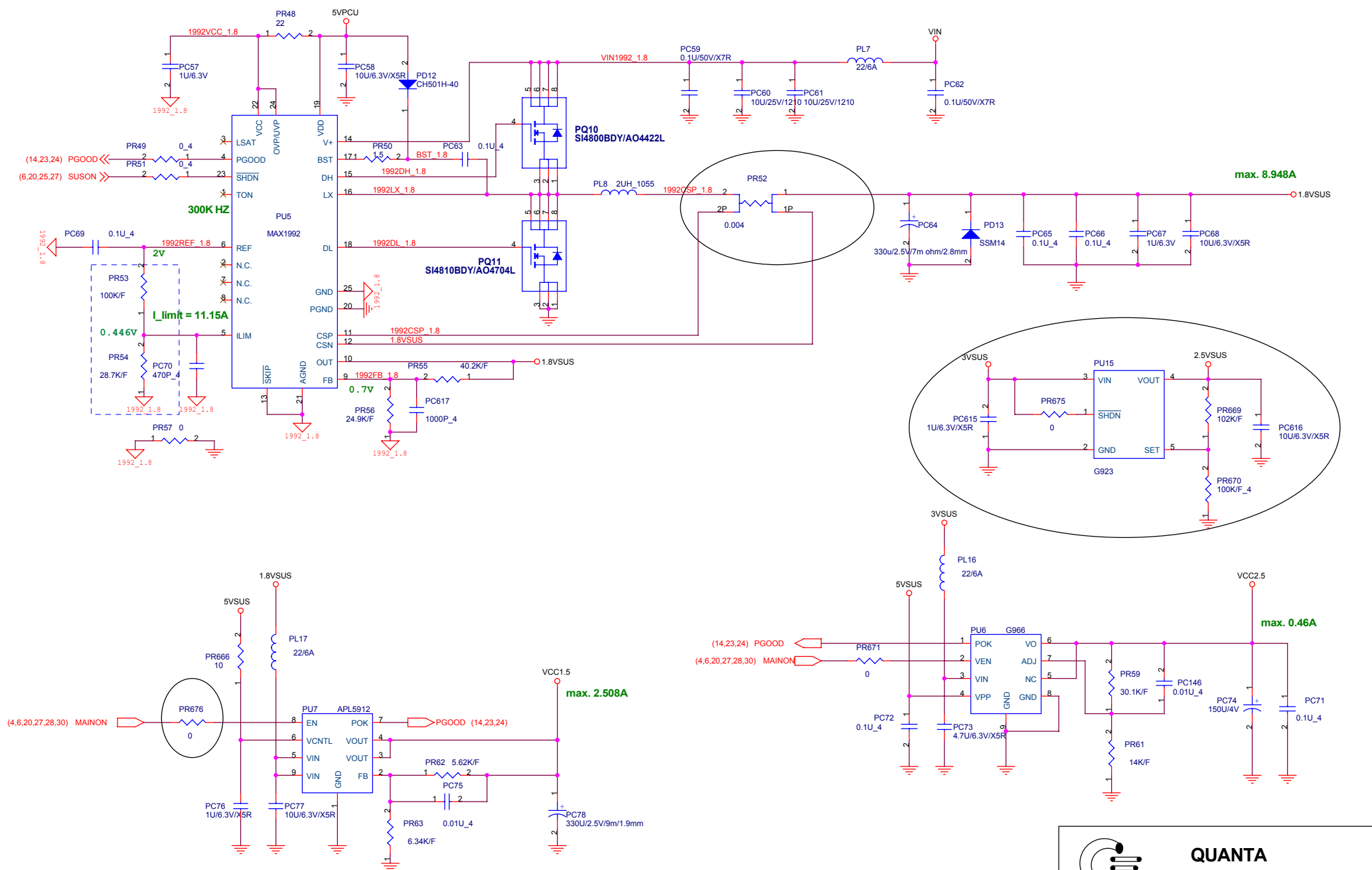
 <p>QUANTA COMPUTER</p>		Size	Document Number	Rev
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1.This part should not contain any substances which are specified in SS-00259-1
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 QUANTA COMPUTER		Size	Document Number	Rev
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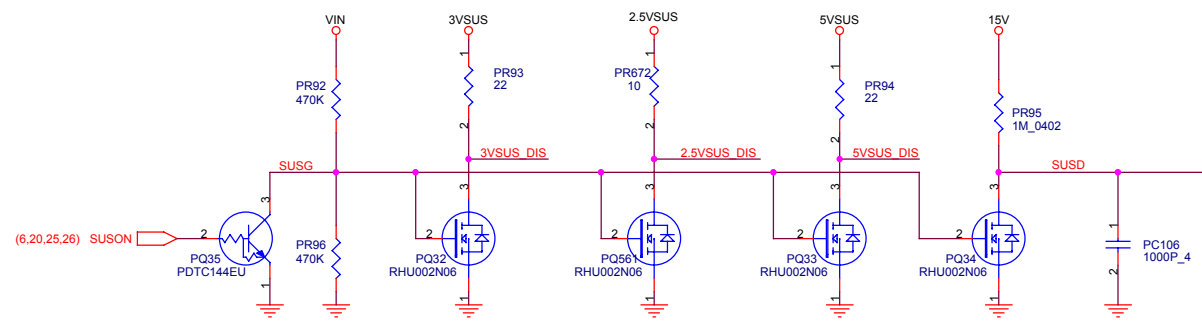
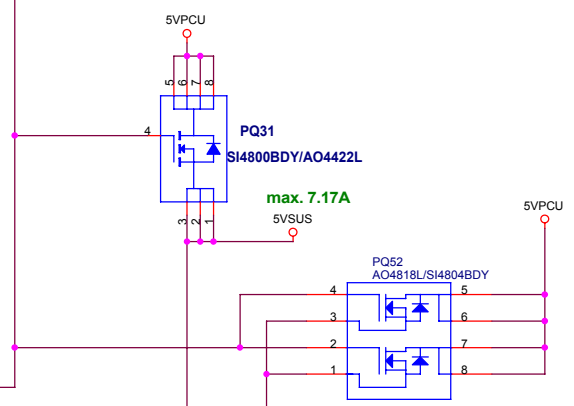
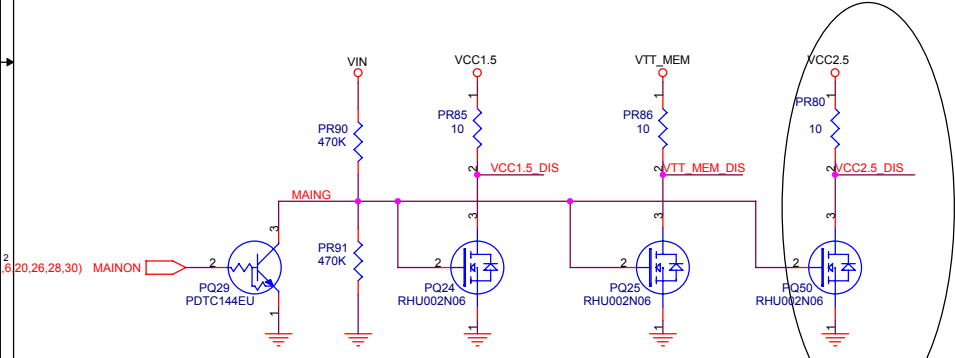
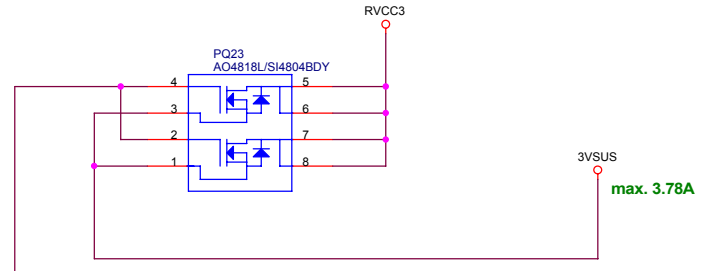
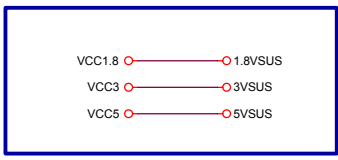
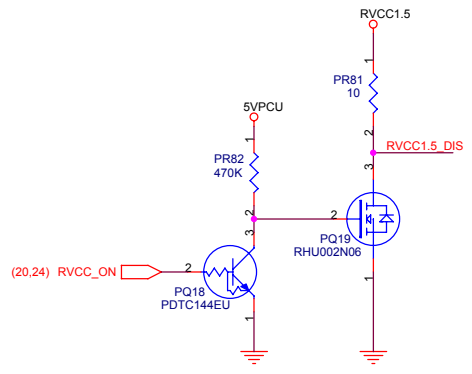
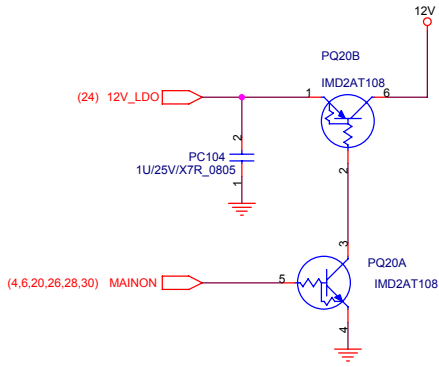


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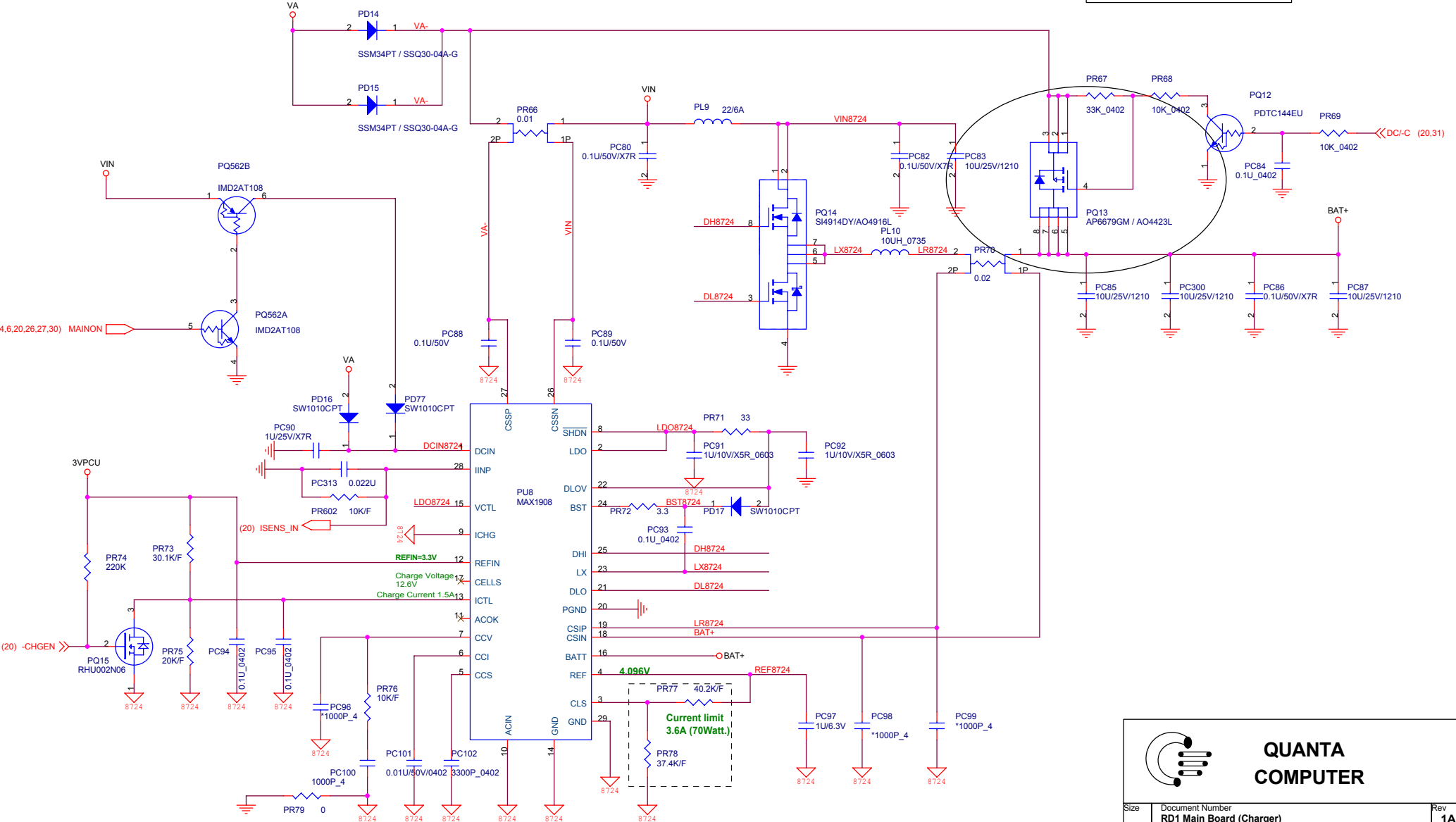
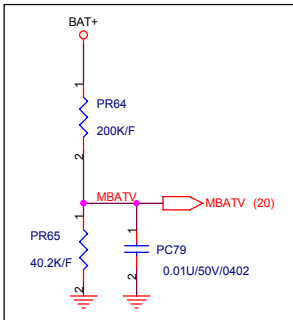
**QUANTA
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(4,6,20,26,27,30) MAINON

(20) -CHGEN

(20) ISENS_IN

REFIN=3.3V

Charge Voltage 12.6V

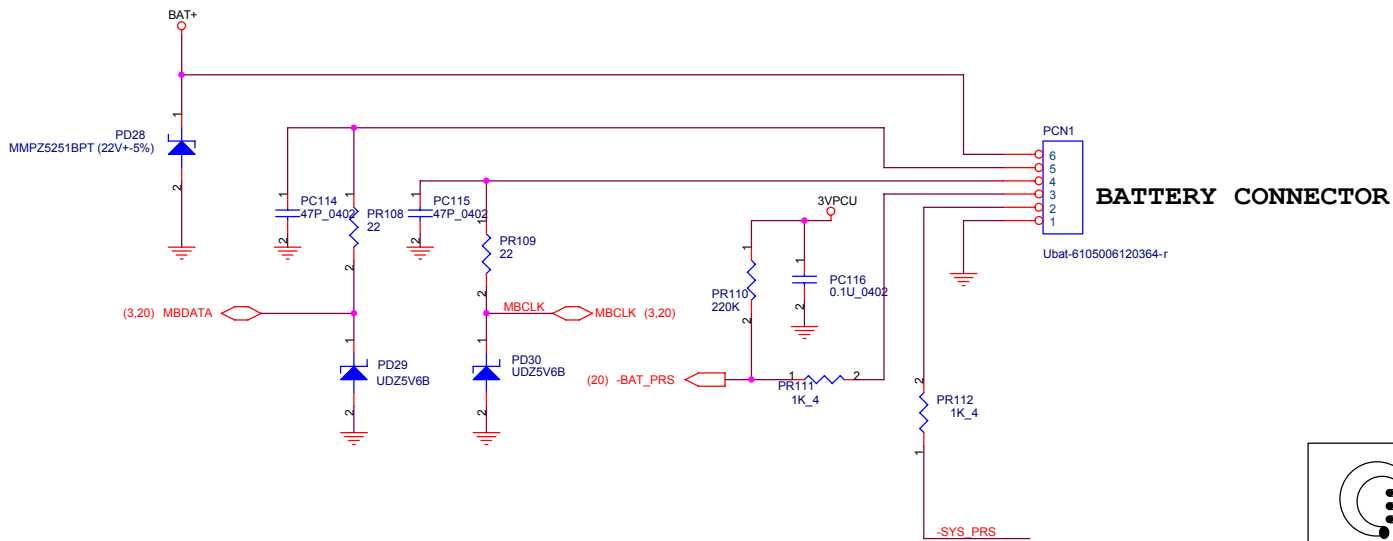
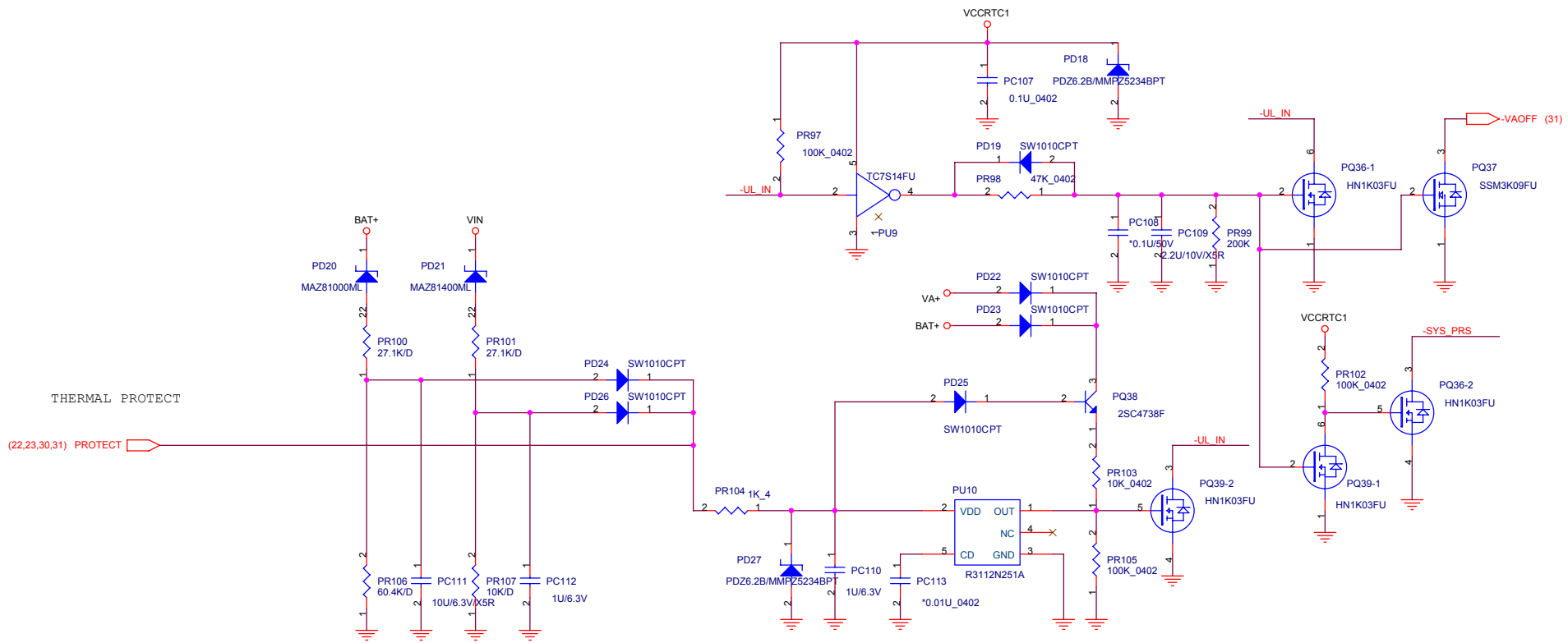
Charge Current 1.5A

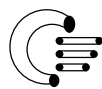
Current limit 3.6A (70Watt.)

**QUANTA
COMPUTER**

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1. This part should not contain any substances which are specified in SS-00259-1
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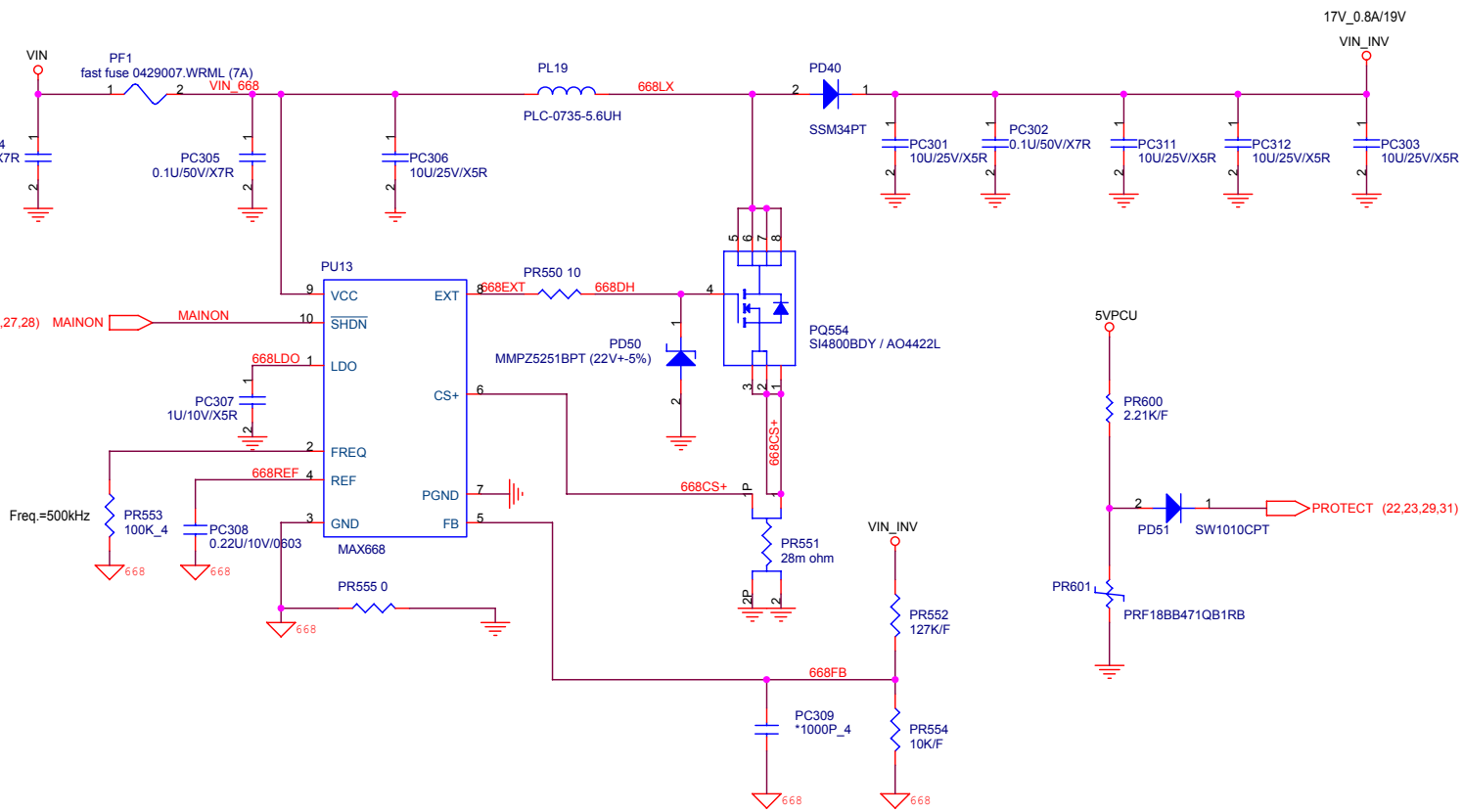




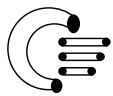
**QUANTA
COMPUTER**

Size	Document Number	Rev
	RD1 Main Board (Charger)	1A
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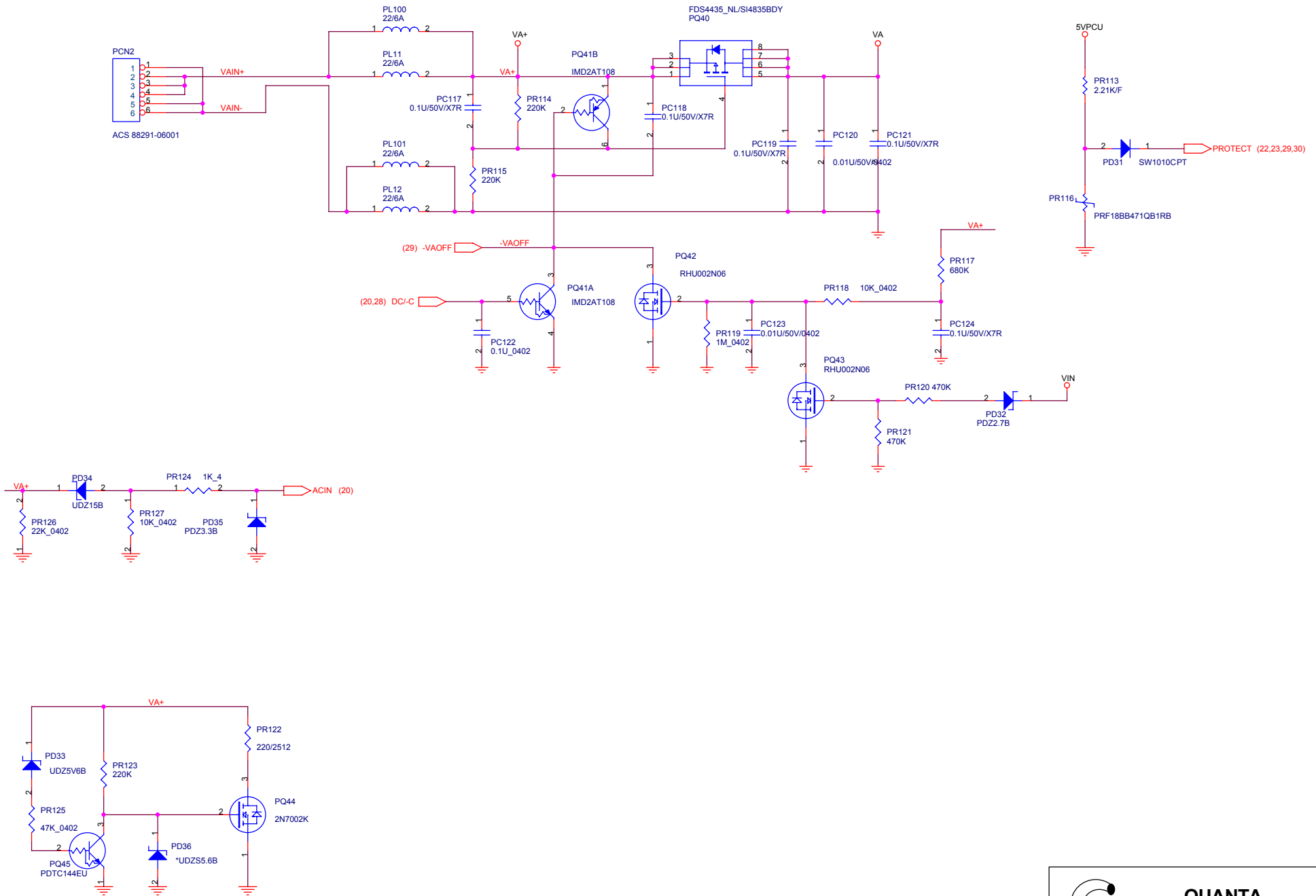


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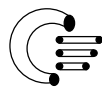


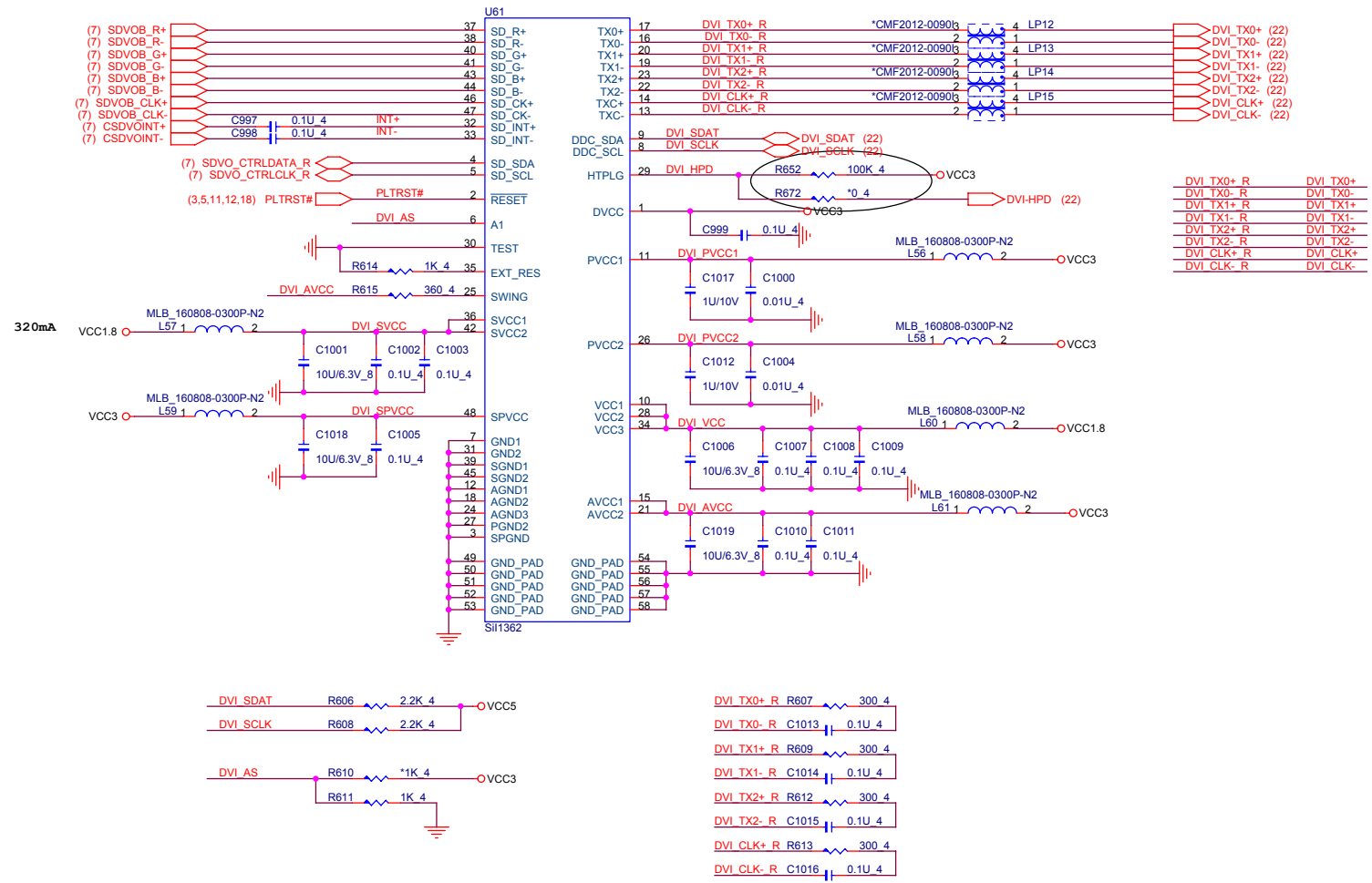
**QUANTA
COMPUTER**

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QUANTA COMPUTER

Title: **DVI**

Size	Document Number	Rev
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