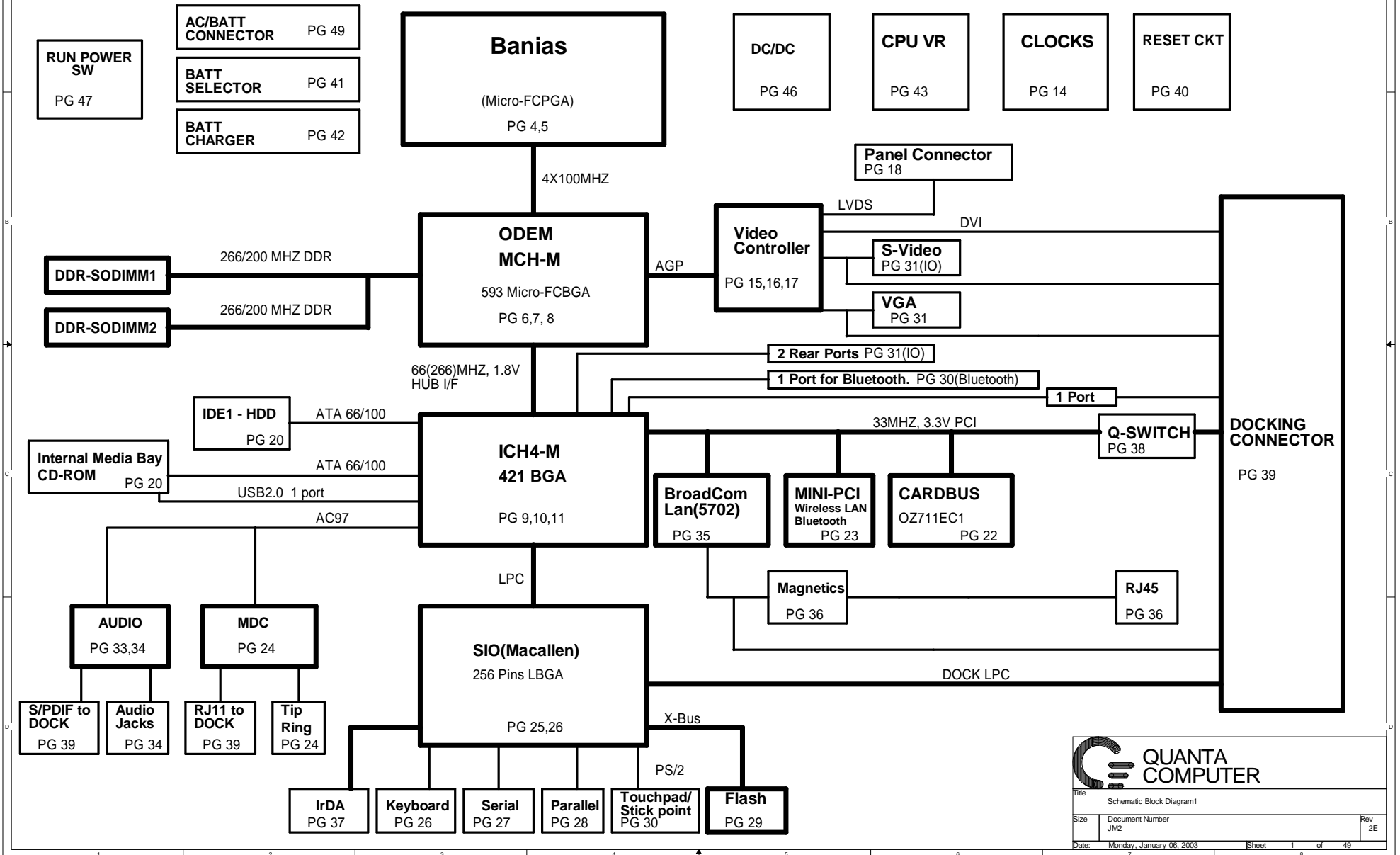


# BONDI II



**QUANTA COMPUTER**

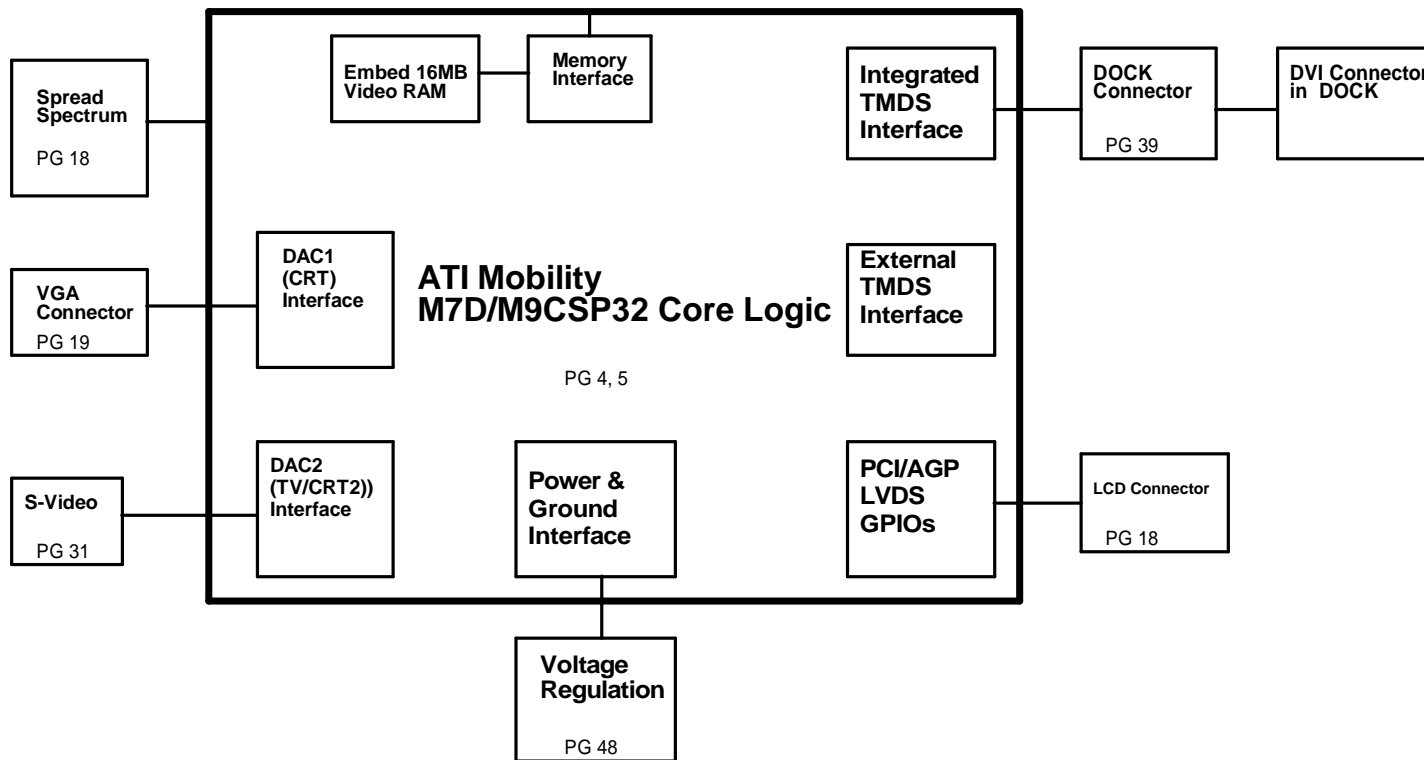
Title: Schematic Block Diagram1


Size: Document Number  
JMZ

Date: Monday, January 06, 2003

Sheet 1 of 49

Rev: 2E



		<b>QUANTA COMPUTER</b>	
Title: Schematic Block Diagram2			
Size: JM2	Document Number		Rev: 1A
Date: Monday, January 06, 2003	Sheet: 2	of 49	

INDEX

Pg#	Description	DNI LIST
1	Schematic Block Diagram 1	
2	Schematic Block Diagram 2	
3	FRONTPAGE	
4-5	Banias	
6-8	Odem MCH-M	
9-11	ICH4	
12-13	DDR SO-DIMM(200P)	
14	CLOCK GENERATOR	
15-17	M7/M9 Graphics	
18-19	LCD CONN,CY25245 & CRT CONN	
20	IDE (HDD&CD_ROM)	
21	PAD& SCREW	
22	O2_OZ711E1&CONN	
23-24	MINI-PCI & MDC CONN	
25-26	SIO	
27-28	SERIAL & PARALLEL	
29	FLASH	
30-31	TOUCH PAD & SWITCH&LED	
32	FAN & THERMAL	
33-34	AC97 CODEC & connector	
35-36	LAN(KENAI32-LAVON) & JACK	
37	FIR	
38-39	DOCKING Buffer and connector	
40	Reset circuit	
41	RTC BATTERY	
42-43	Battery Selector & Charger	
44	CPU Power	
45	1.2V,1.5V,1.8VS.2.5VS	
46	D/D Power	
47	RUN POWER SW	
48	VGA DC/DC	
49	DCIN,Batt	
50	CPU I/O Power	

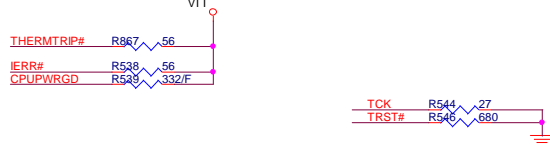
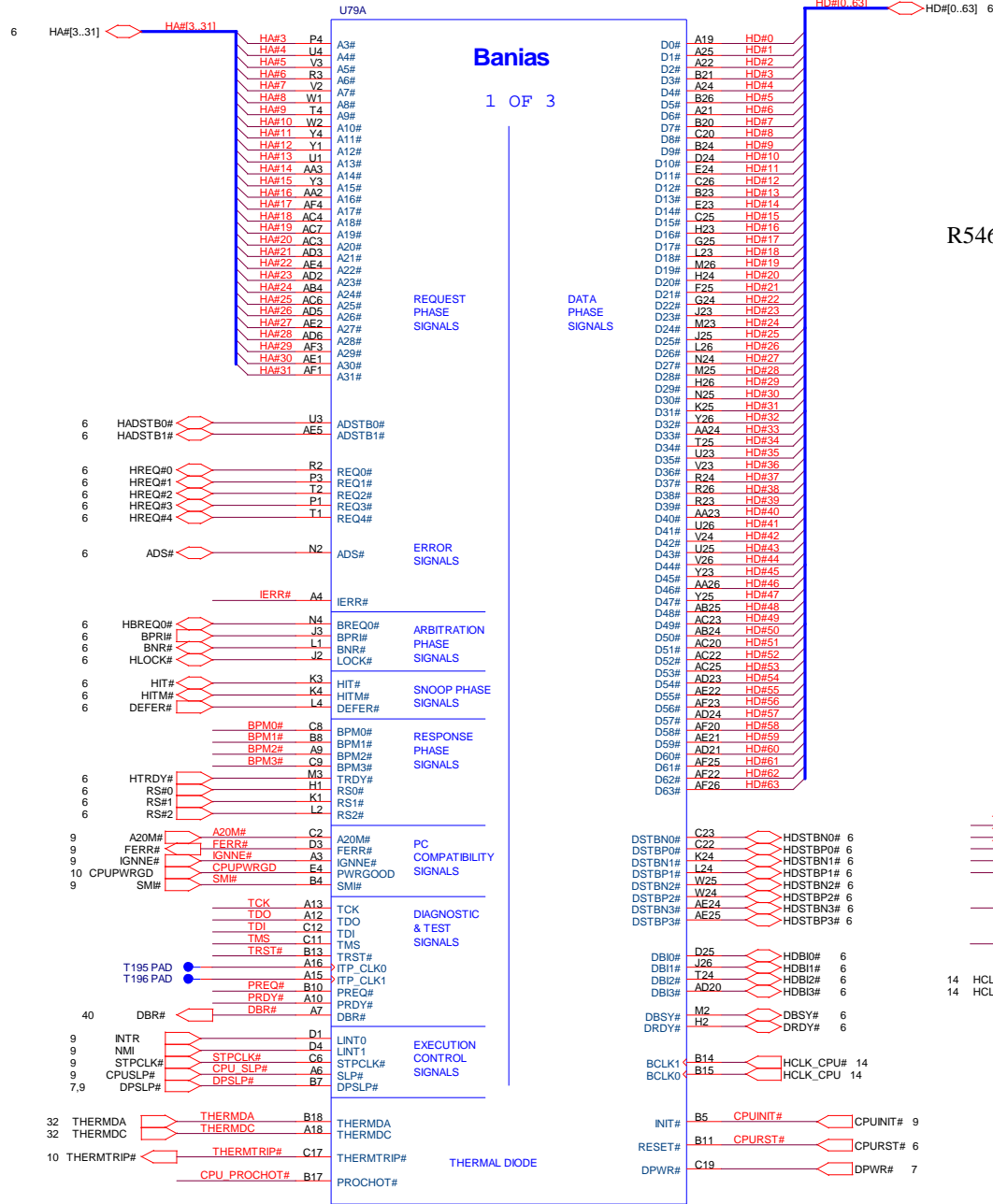
Power & Ground

Label	Pg#	Description	Control Signal
DC_IN+		AC ADAPTER (20V)	
PBATT+		MAIN BATTERY +(10-17V)	
PWR_SRC		MAIN POWER (10-20V)	
RTC_PWR3_3V		RTC & PCL POWER (3_3V)	
+12V		+12V	DRUNPWROK
VHCORE		CPU CORE POWER (1.25/1.15V)	RUNPWROK
V1_2RUN		AGTL+ POWER (1.2V)	RUNPWROK
+3VRUN		SLP_S3# CTRLD POWER	RUN_ON
+3VSUS		SLP_S5# CTRLD POWER	SUS_ON
+5VALW		8051 POWER (5V)	
+5VRUN		SLP_S3# CTRLD POWER	RUN_ON
+5VSUS		SLP_S5# CTRLD POWER	SUS_ON
+5VHDD		HDD POWER (5V)	HDDC_EN#
+5VMOD		MODULE POWER (5V)	MODC_EN#
STRB#5V		EXTERNAL FDD POWER (5V)	FDD/LPT#
+5VFAN1, +5VFAN2		FAN POWER (5V)	FAN_OFF/ON#
VDDA		AUDIO ANALOG POWER (5V)	RUN_ON
1_8VSUS		RESUME WELL IN ICH	
1_8VRUN		SLP_S3# CTRLD POWER	
+3VALW		8051 POWER (3V)	
V1_5RUN		AGP I/O POWER	
 GND	ALL PAGES	DIGITAL GROUND	
 AGND		AUDIO GND	
 GNDP		CPU POWER GND	
 CGNDP		CHARGER GND	
 DGNDP		DC/DC POWER GND	
 LANGND		COMBO CONN GND	

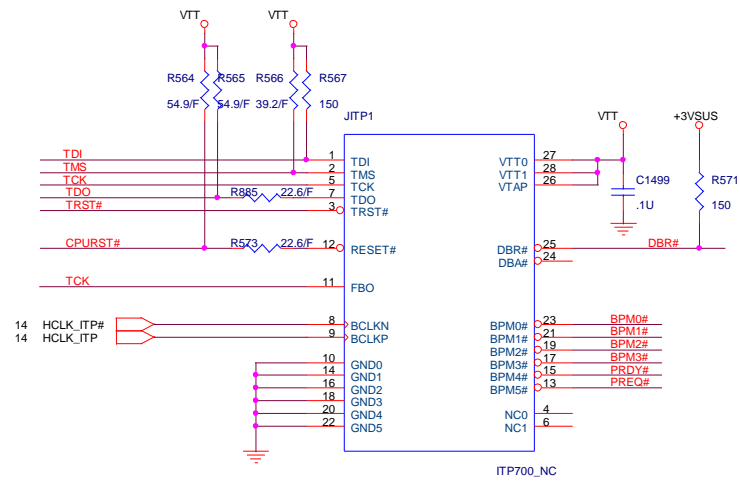
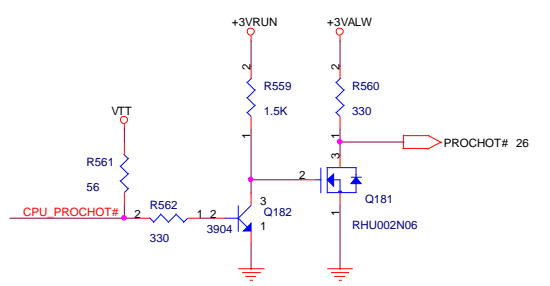


Title		Index, DNI, Power & Ground
Size	Document Number	Rev
	JM2	1A
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R867 should be close to ICH4



R546 should be place within 2" of the processor ; others place near ITP

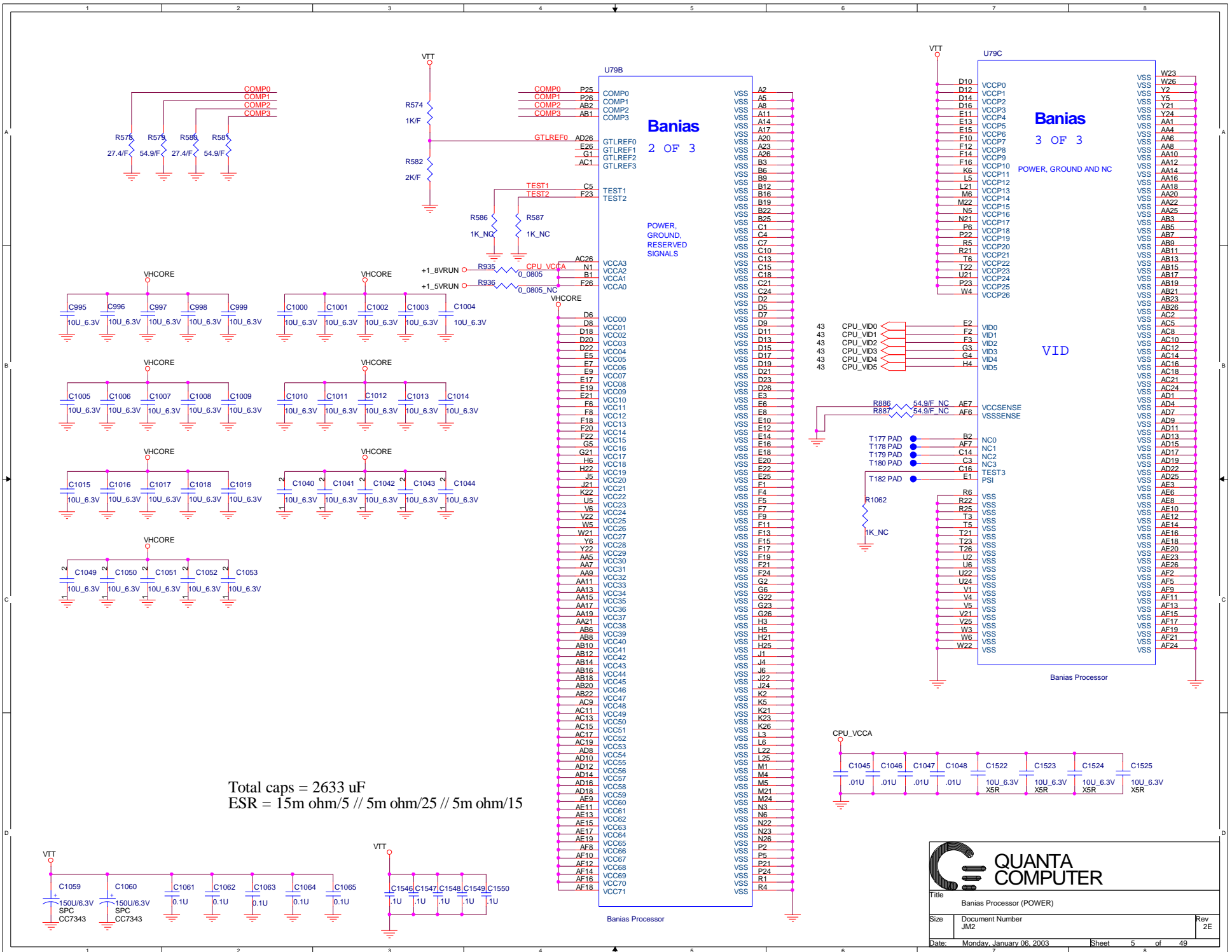


**QUANTA COMPUTER**

Title: Banias Processor (HOST)

Size: Document Number JM2 Rev 1A

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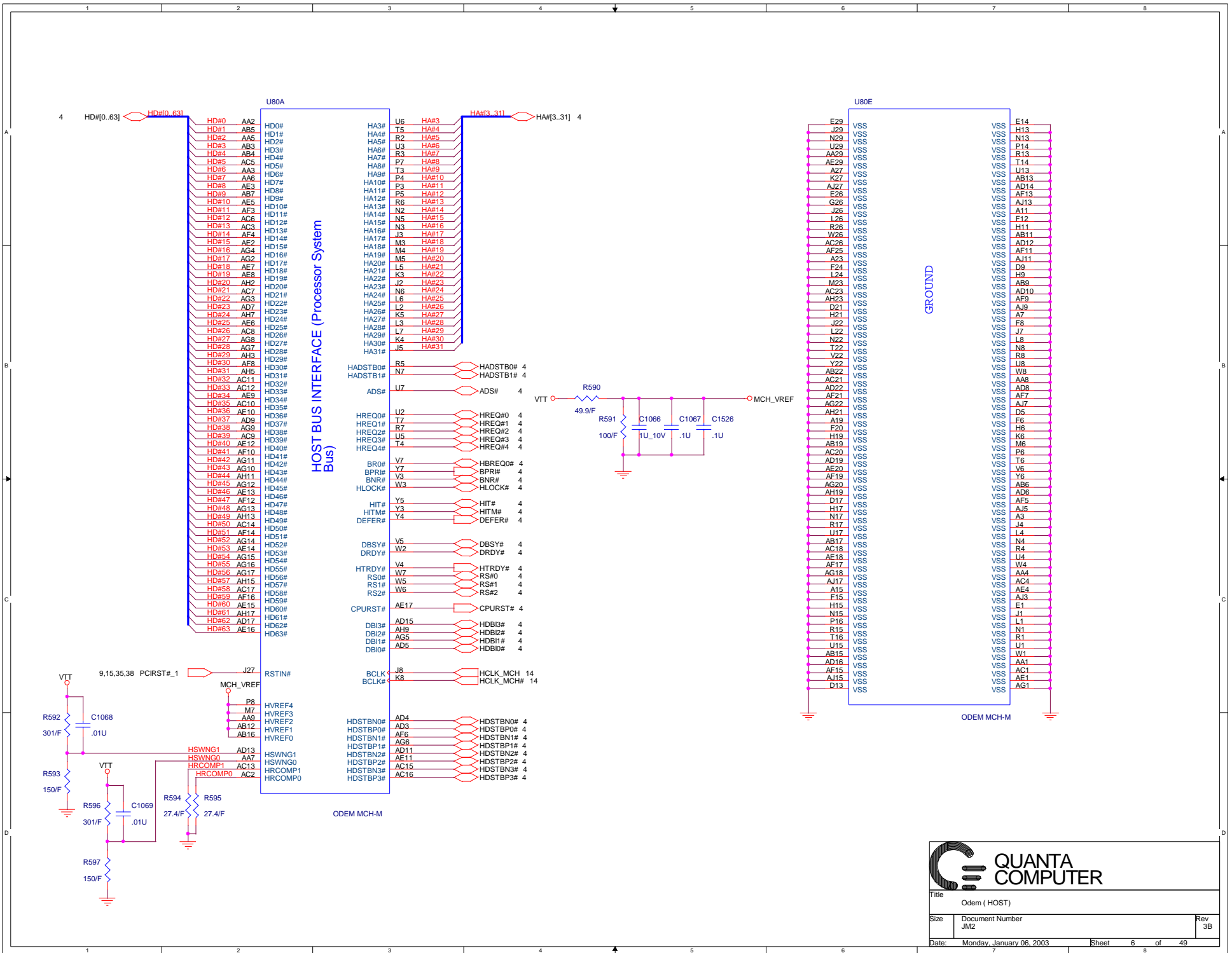


**QUANTA COMPUTER**

Title: Banias Processor (POWER)

Size: JM2	Document Number:	Rev: 2E
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Date: Monday, January 06, 2003 Sheet 5 of 49



**QUANTA COMPUTER**

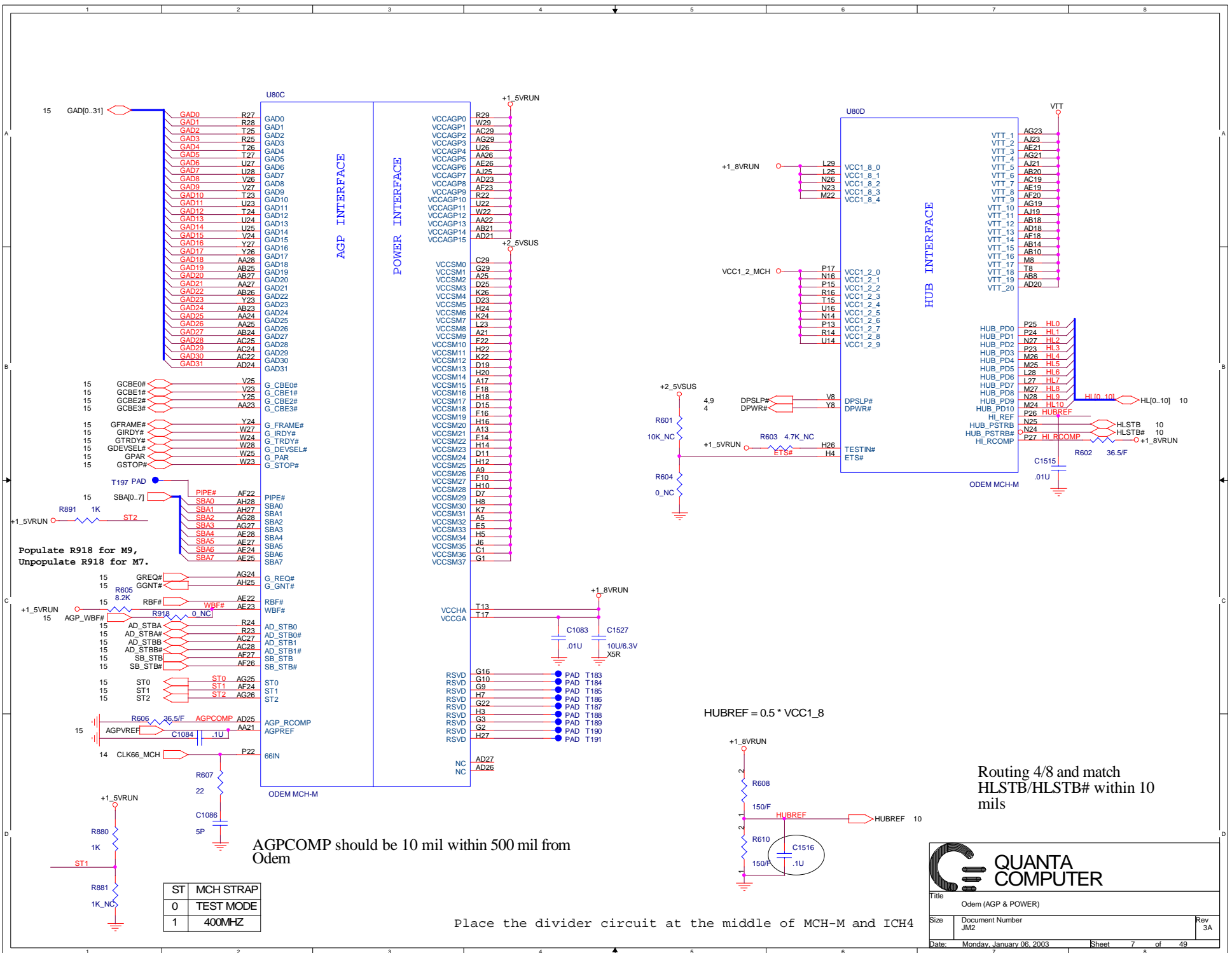
Title: Odem ( HOST )

Size: Document Number JM2

Date: Monday, January 06, 2003

Sheet: 6 of 49

Rev: 3B

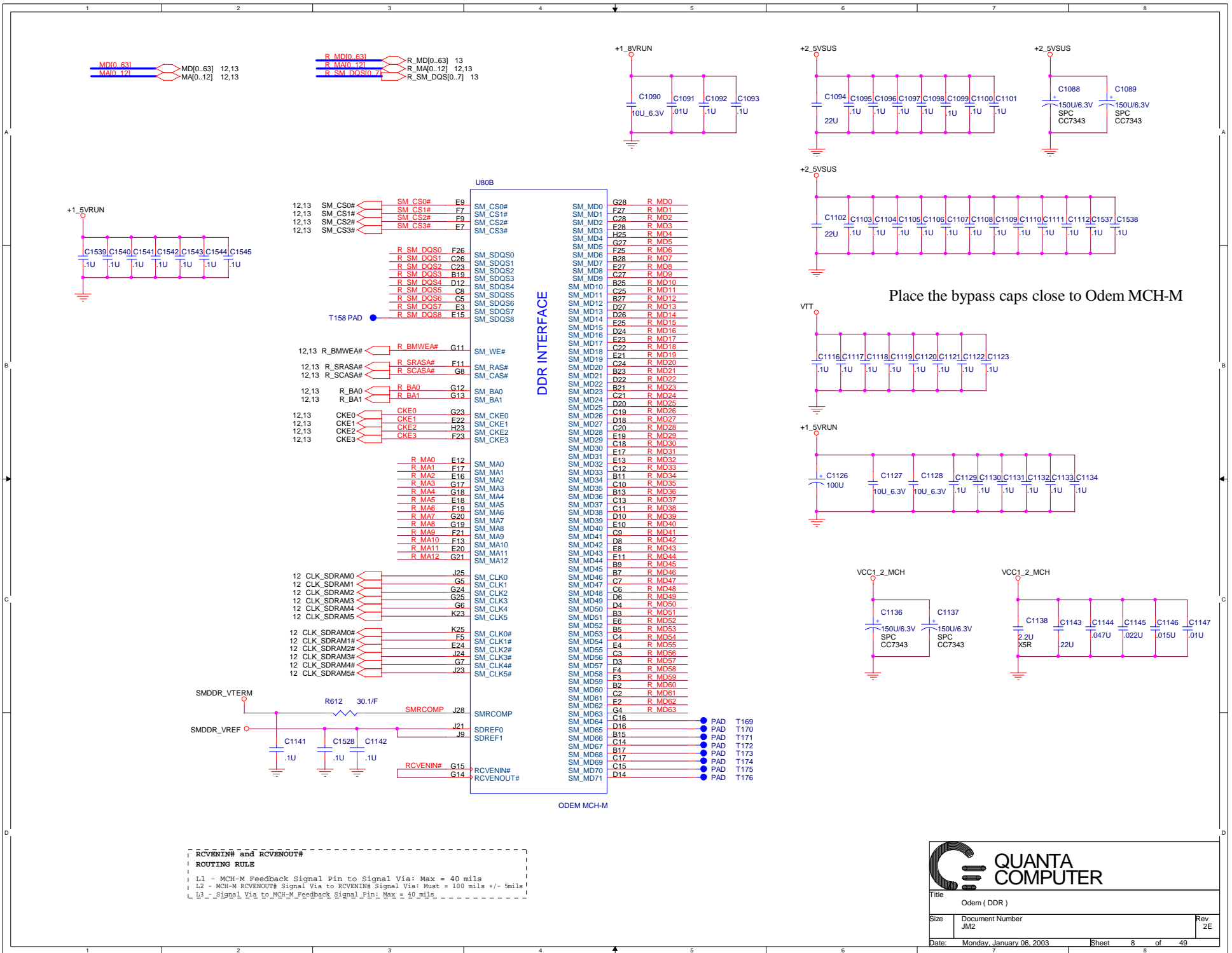


**QUANTA COMPUTER**

Title: Odem (AGP & POWER)

Size: Document Number JM2 Rev 3A

Date: Monday, January 06, 2003 Sheet 7 of 49



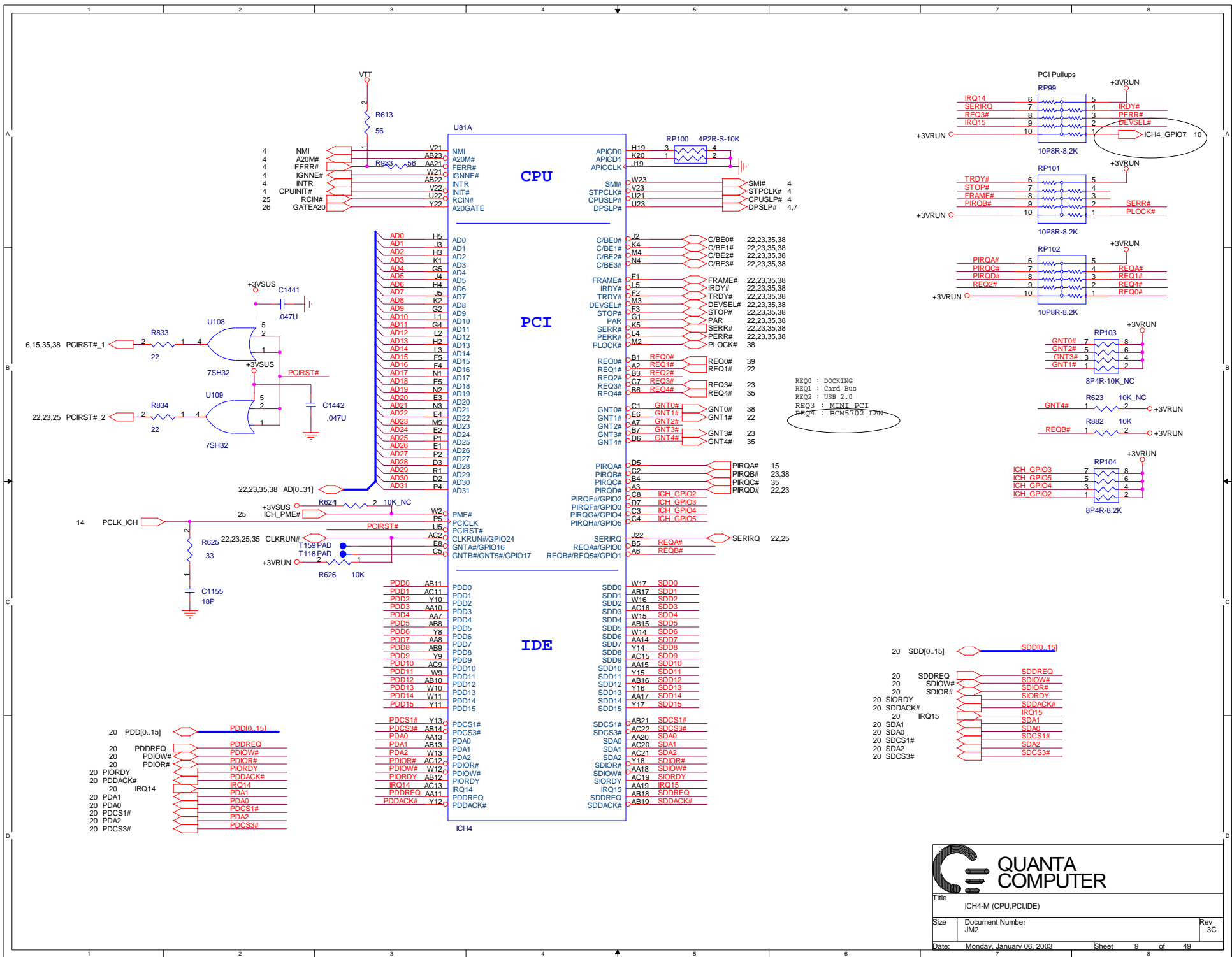
**QUANTA COMPUTER**

Title: Odem ( DDR )

Size: Document Number JM2 Rev 2E

Date: Monday, January 06, 2003 Sheet 8 of 49



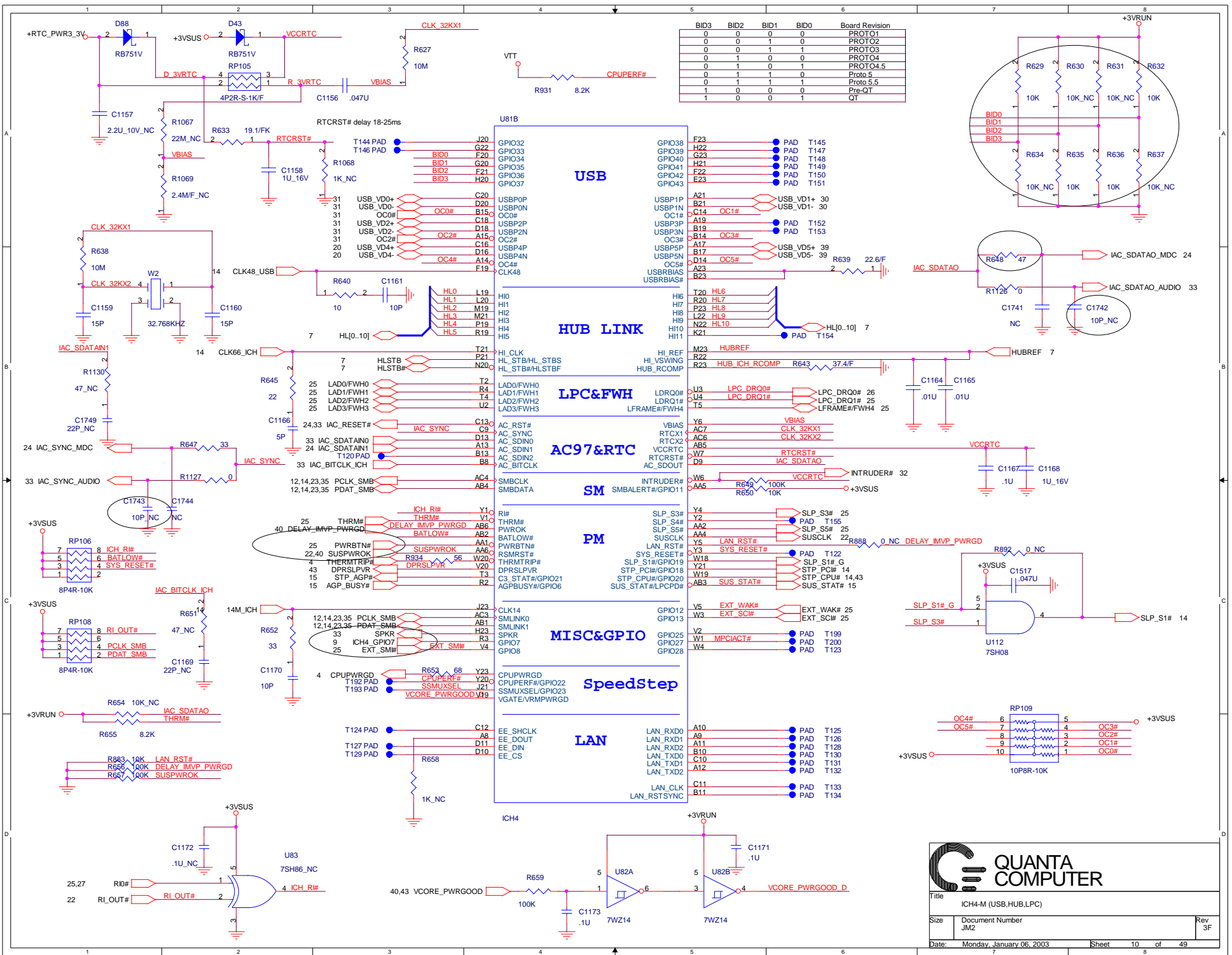


**QUANTA COMPUTER**

Title: ICH4-M (CPU,PCLIDE)

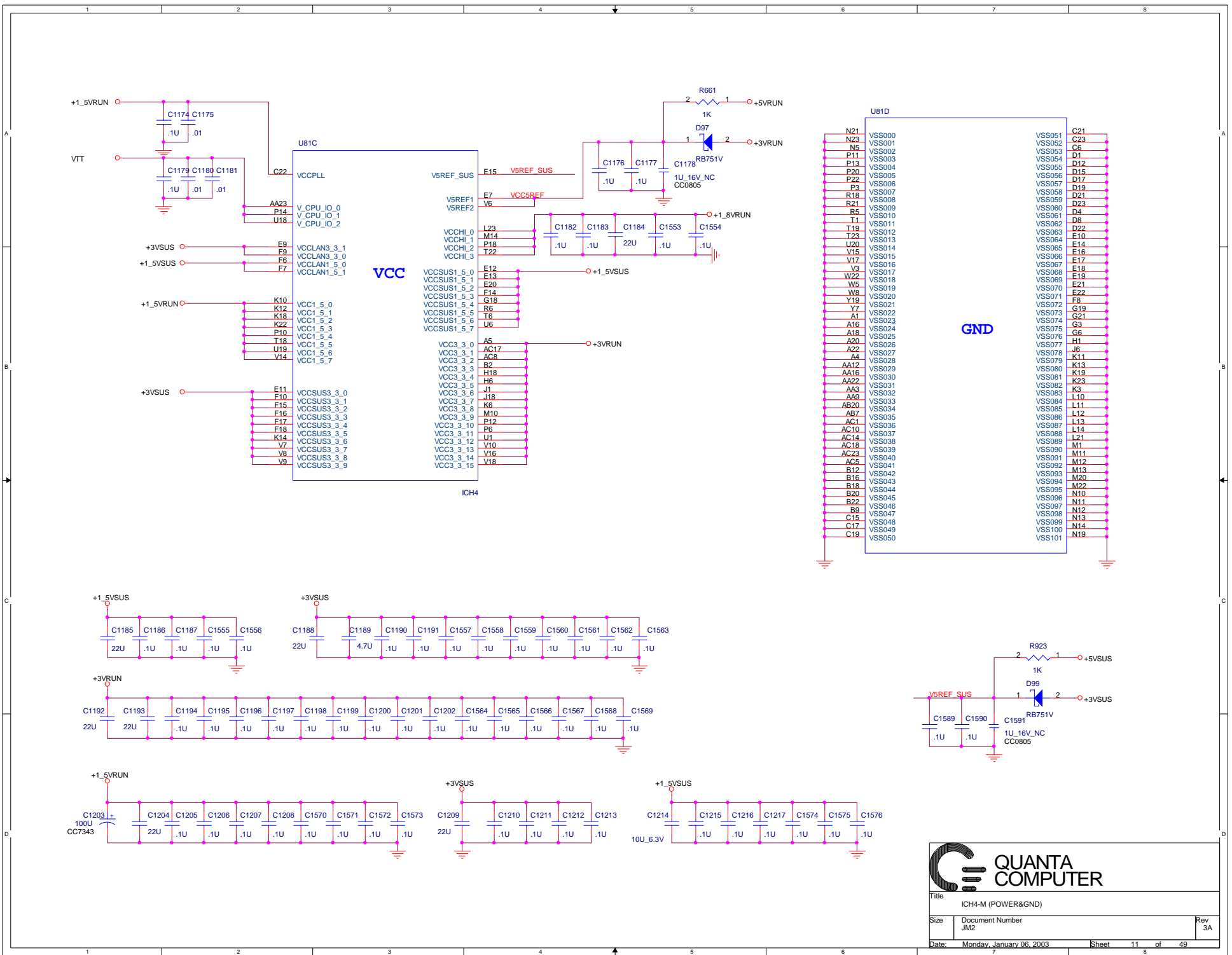
Size: Document Number JM2 Rev 3C

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**QUANTA COMPUTER**

Title	ICH4-M (USB,HUB,LPC)	
Size	Document Number	Rev
JM2		3F
Date:	Monday, January 06, 2003	Sheet 10 of 49

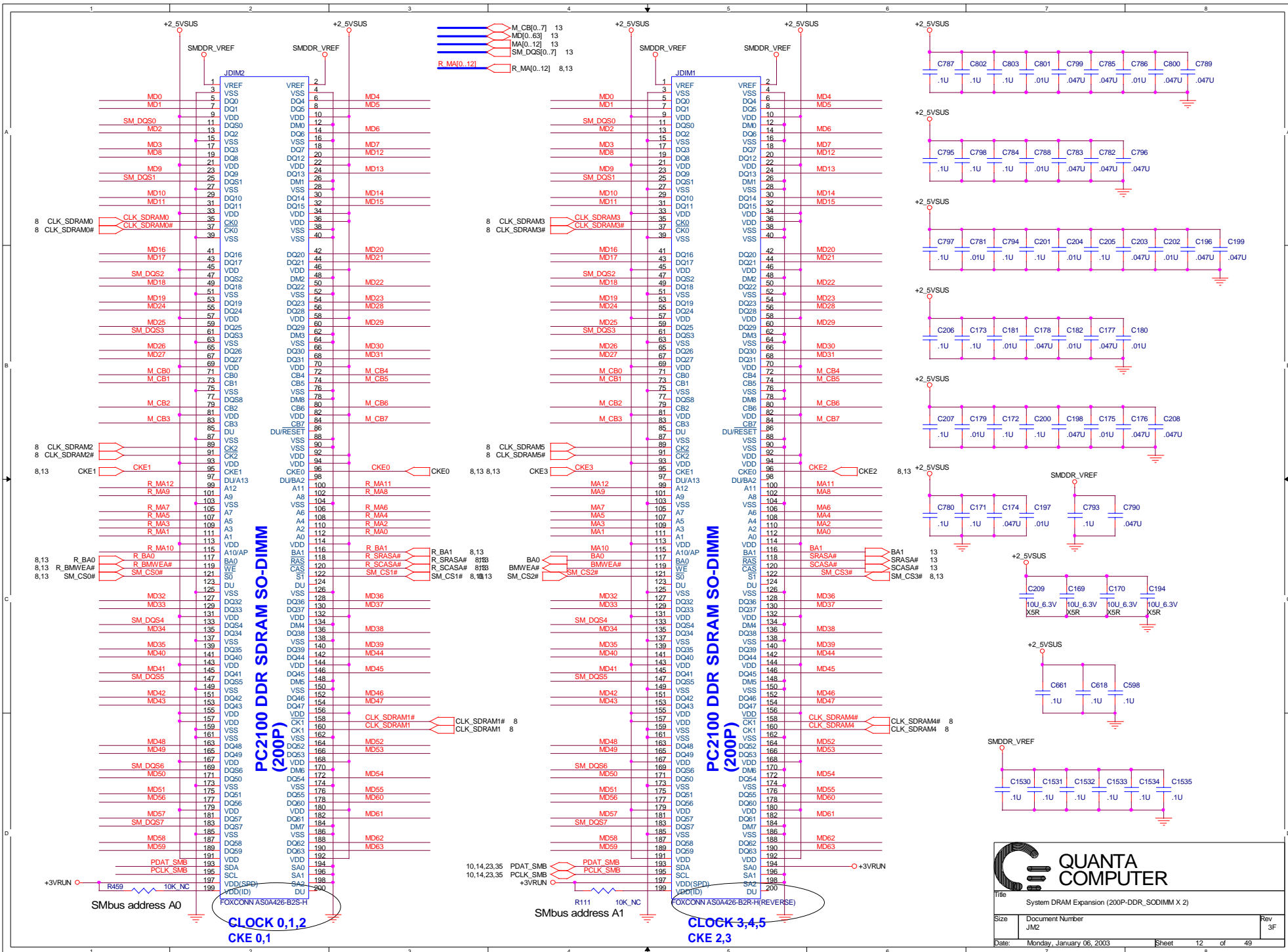


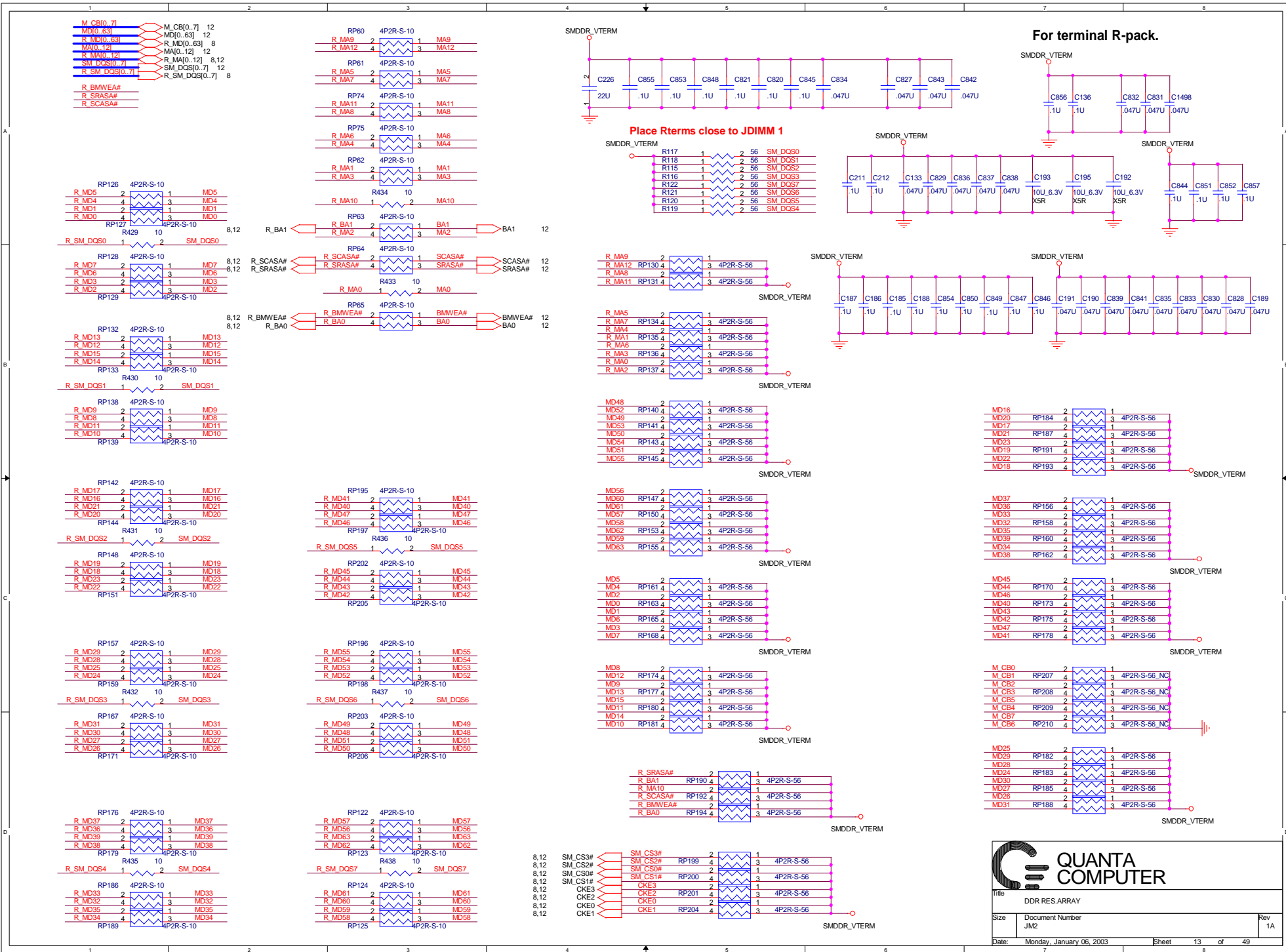
**QUANTA COMPUTER**

Title: ICH4-M (POWER&GND)

Size: Document Number JM2 Rev 3A

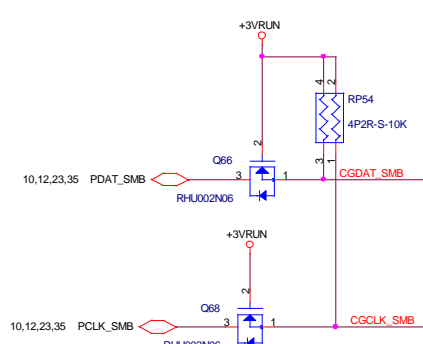
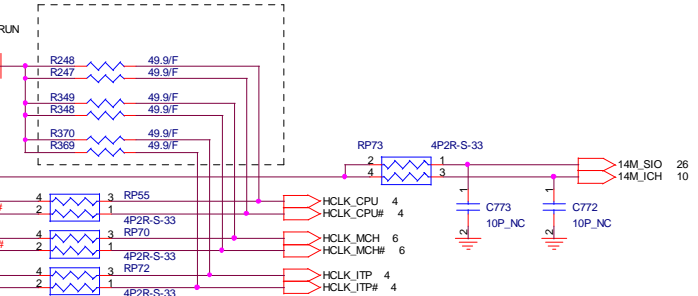
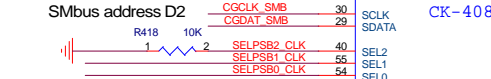
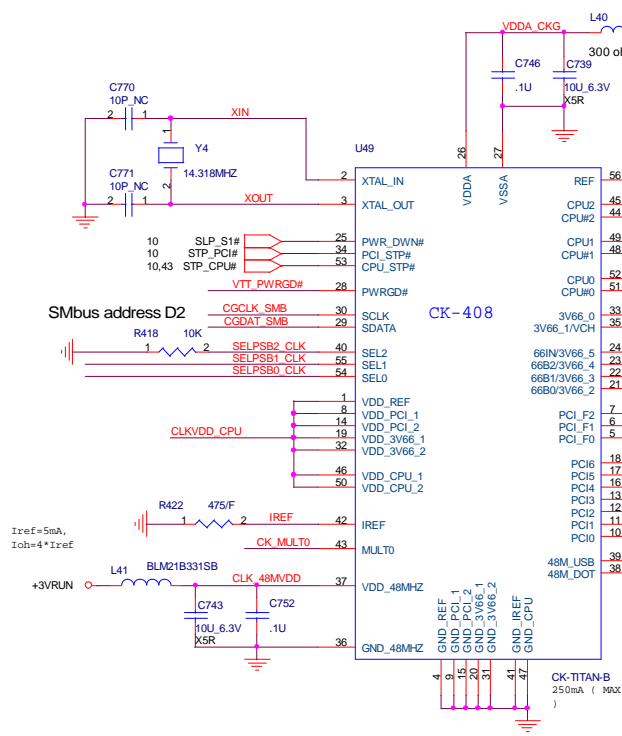
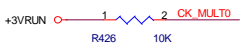
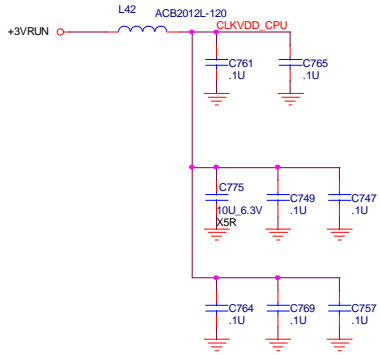
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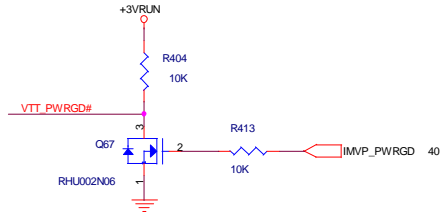


S2	S1	S0	CPU	3V66[0..4]	3V66_5/66IN
1	0	0	66	66IN	66 Input
1	0	1	100	66IN	66 Input
1	1	0	200	66IN	66 Input
1	1	1	133	66IN	66 Input
0	0	0	66	66	66 Input
0	0	1	100	66	66 Input
0	1	0	200	66	66 Input
0	1	1	133	66	66 Input

Place these termination to close CK408.



These are for backdrive issue



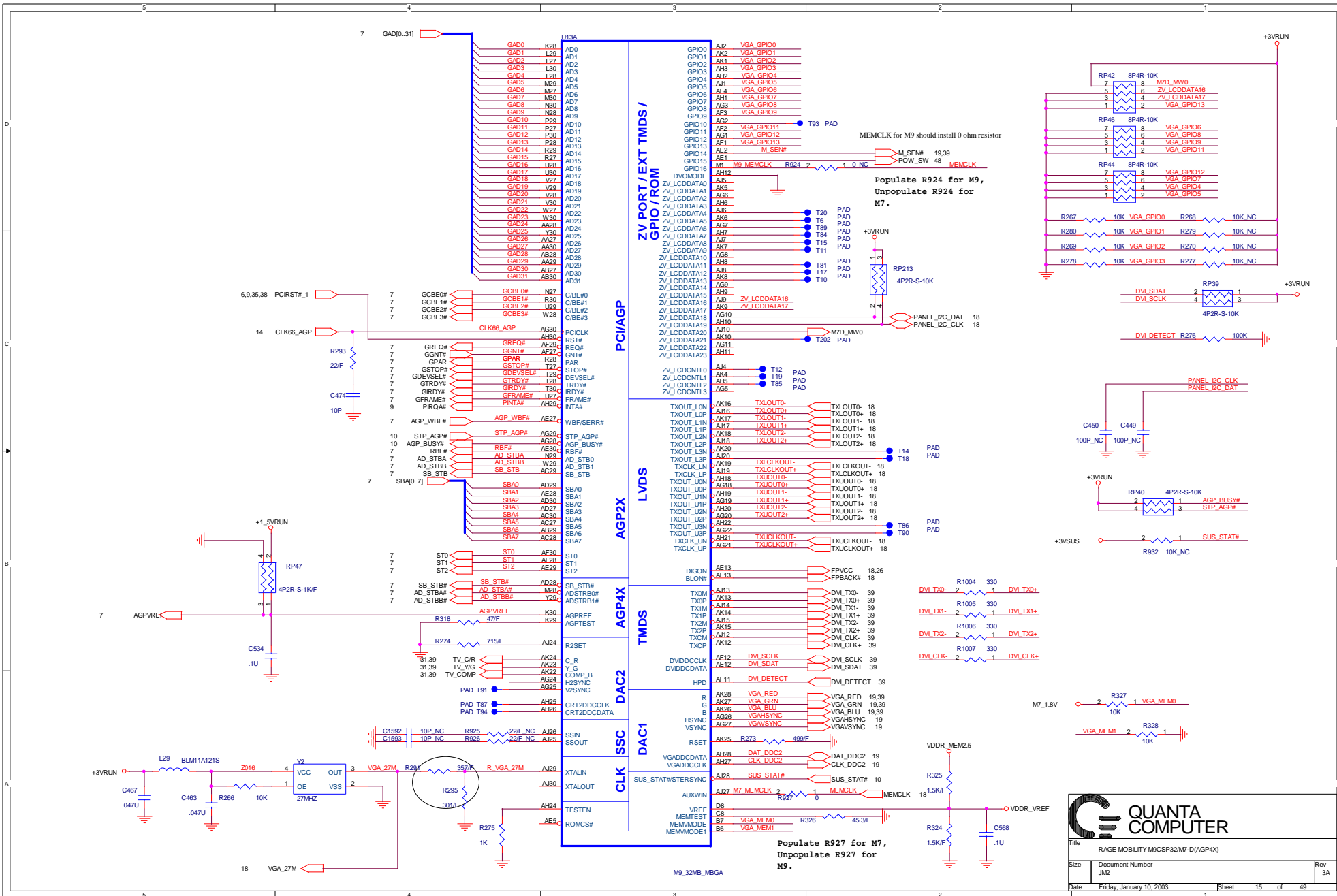
**QUANTA COMPUTER**

Title: CLOCK GENERATOR

Size: Document Number JMZ Rev 1A

Date: Monday, January 06, 2003 Sheet 14 of 49



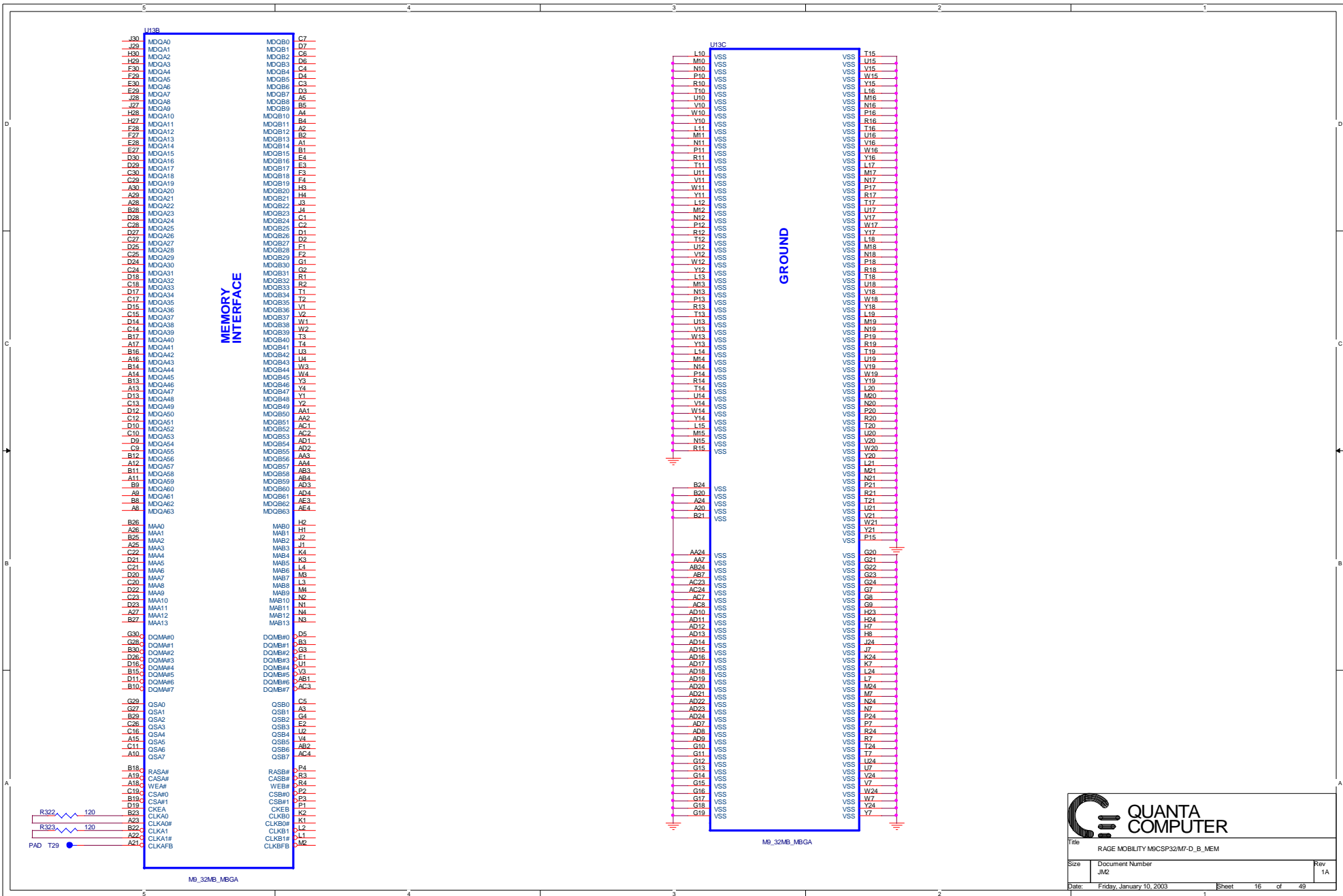


**QUANTA COMPUTER**

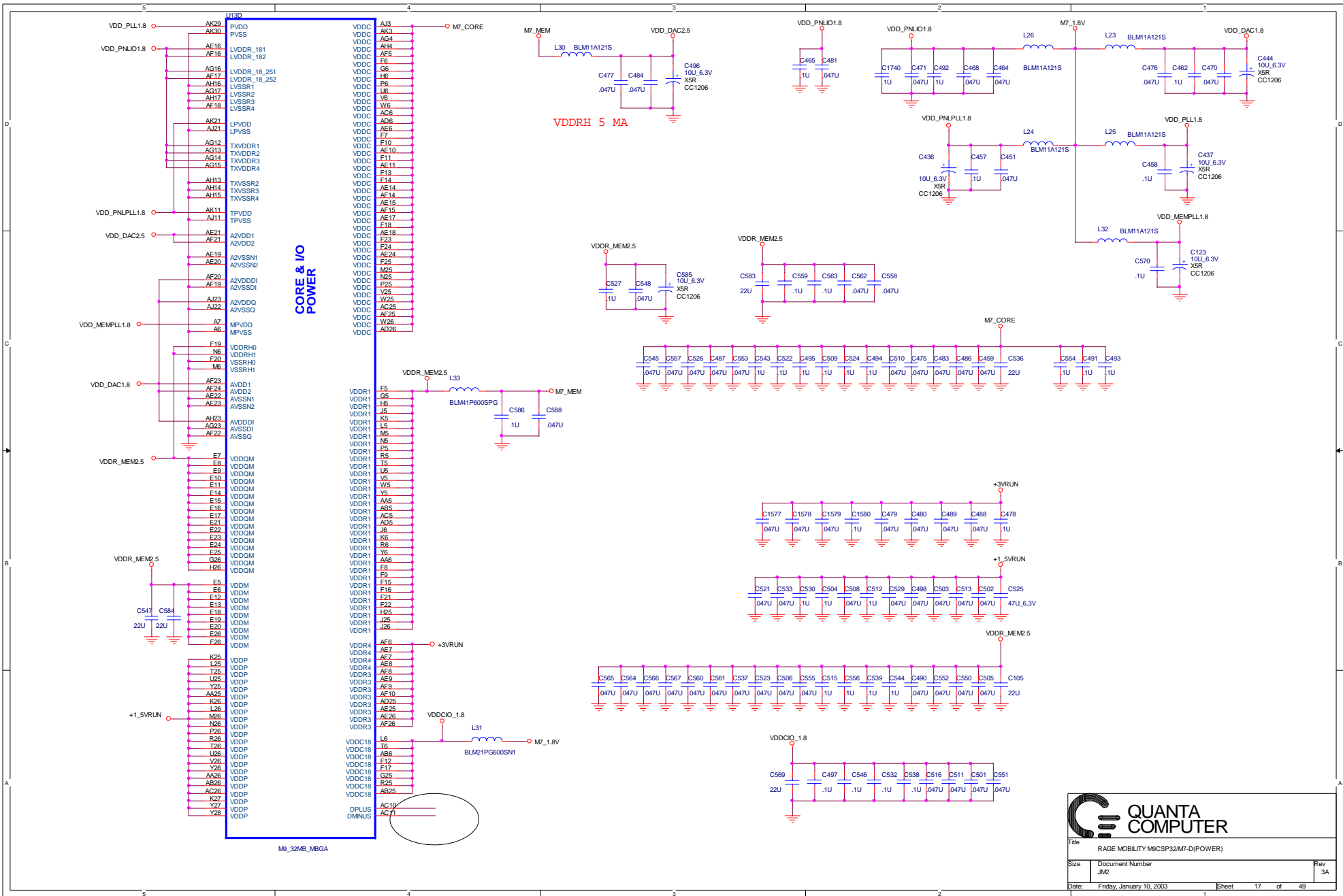
Title: RAGE MOBILITY M9SP32/M7-D(AGP4X)

Size: Document Number: Rev 3A

Date: Friday, January 10, 2003 15 of 49





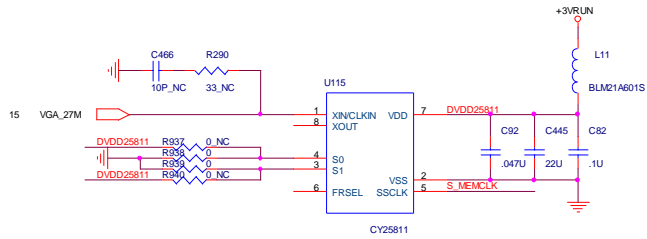
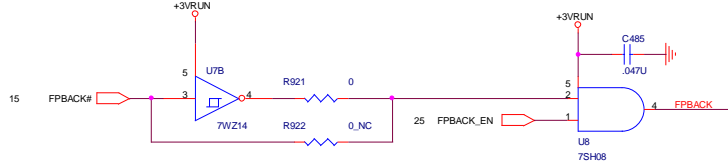
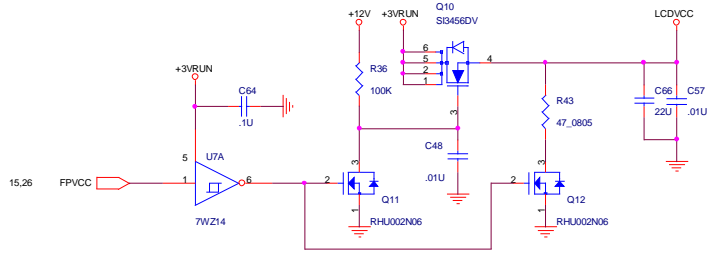


**QUANTA COMPUTER**

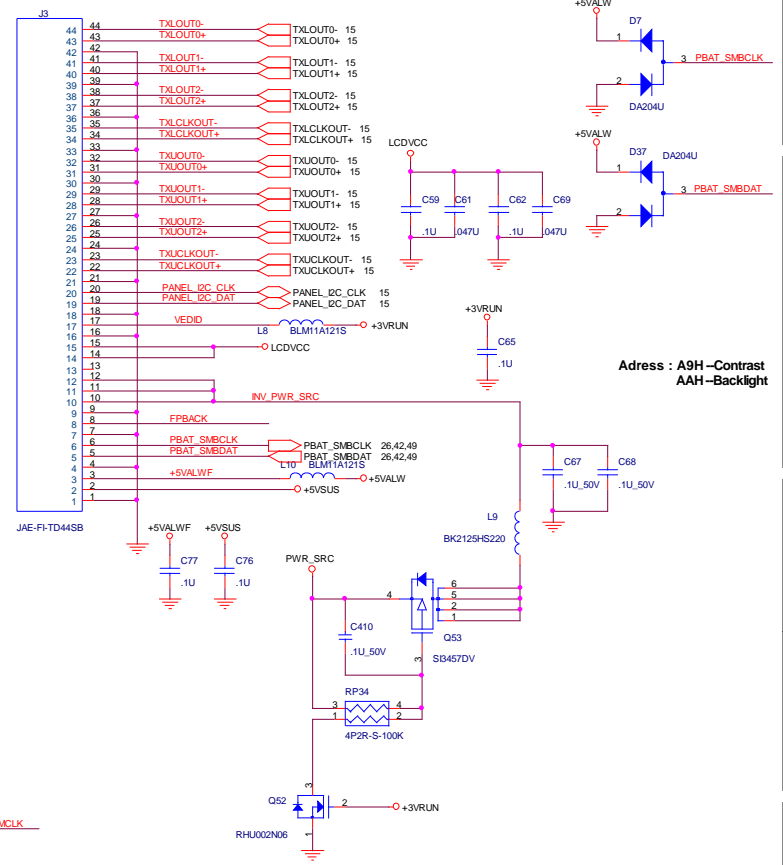
Title: RAGE MOBILITY M8CP32/M7-D(POWER)

Size: Document Number: Rev 3A

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S1	0	0	0	NC	1	1	NC	1	NC
S0	0	NC	1	0	1	0	1	NC	NC
Mode	Center	Center	Center	Center	Down	Down	Down	Down	No spread
Rate	+1.2%	+0.9%	+0.5%	+0.4%	-2.5%	-1.8%	-1.5%	-0.6%	0



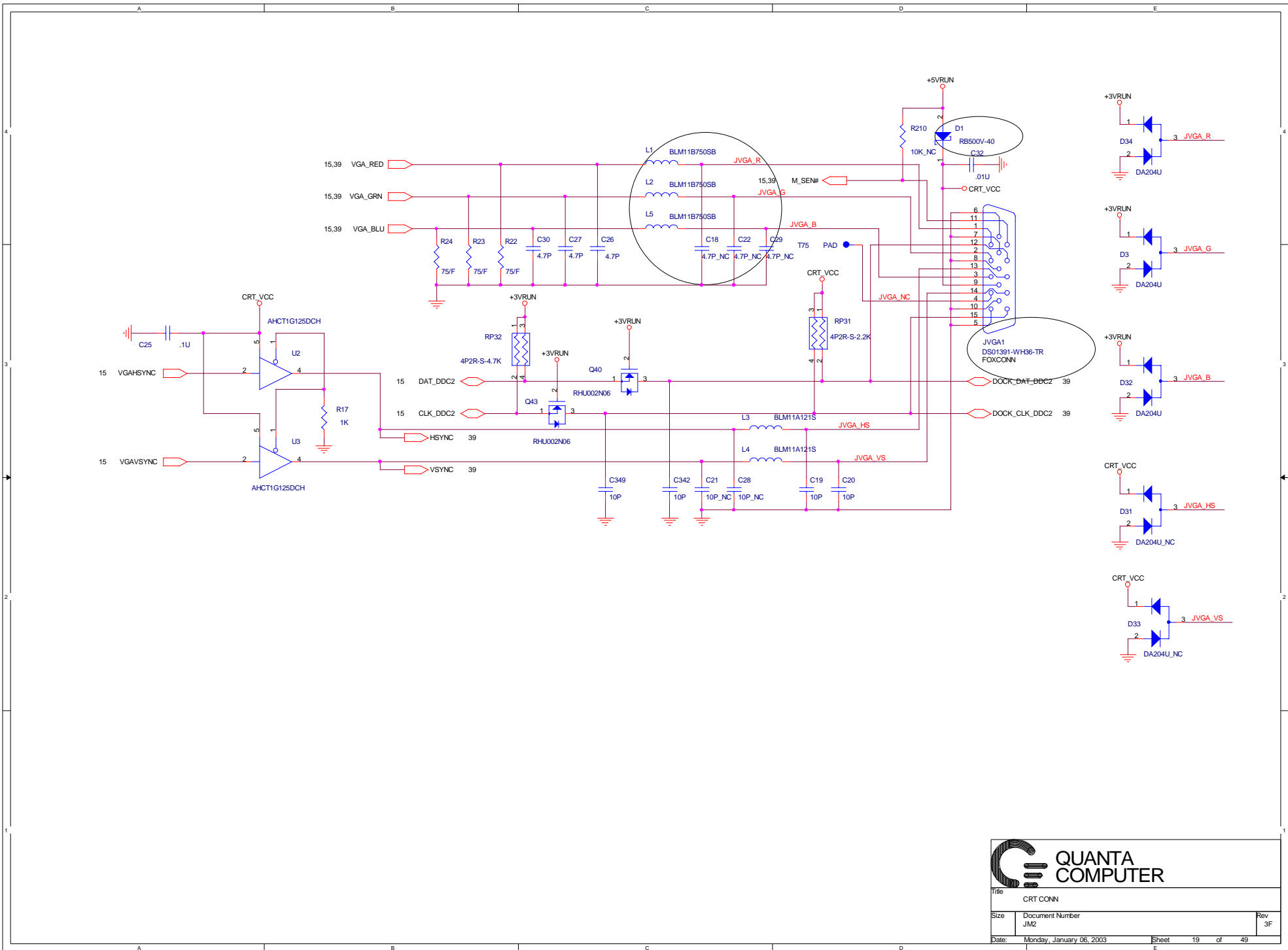
Address : A9H-Contrast  
AAH-Backlight


**QUANTA COMPUTER**

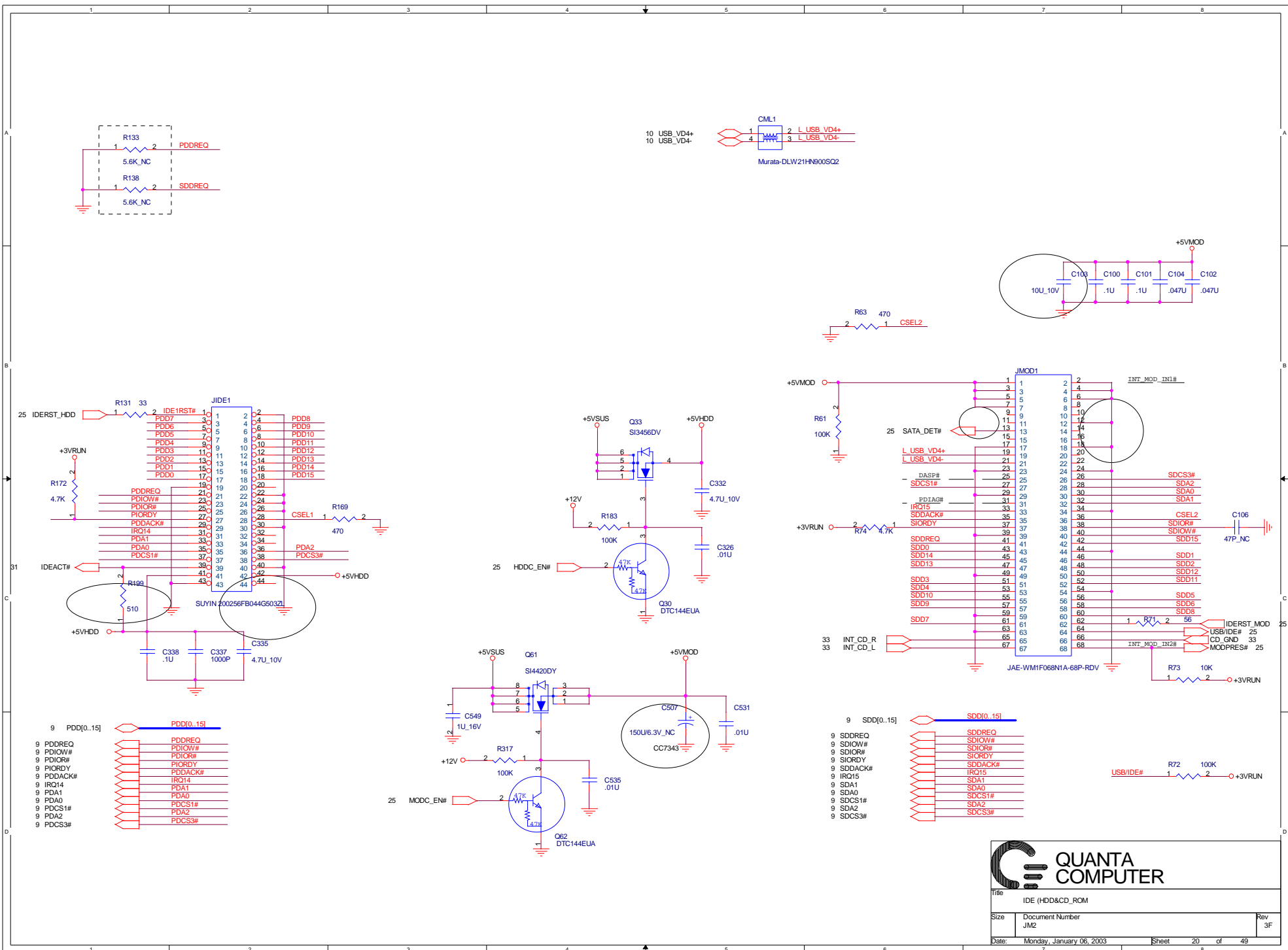
Title: LCD CONN&CY25245

Size: JMC Document Number Rev 1A

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 <b>QUANTA COMPUTER</b>		
Title: CRT CONN		
Size: JM2	Document Number:	Rev: 3F
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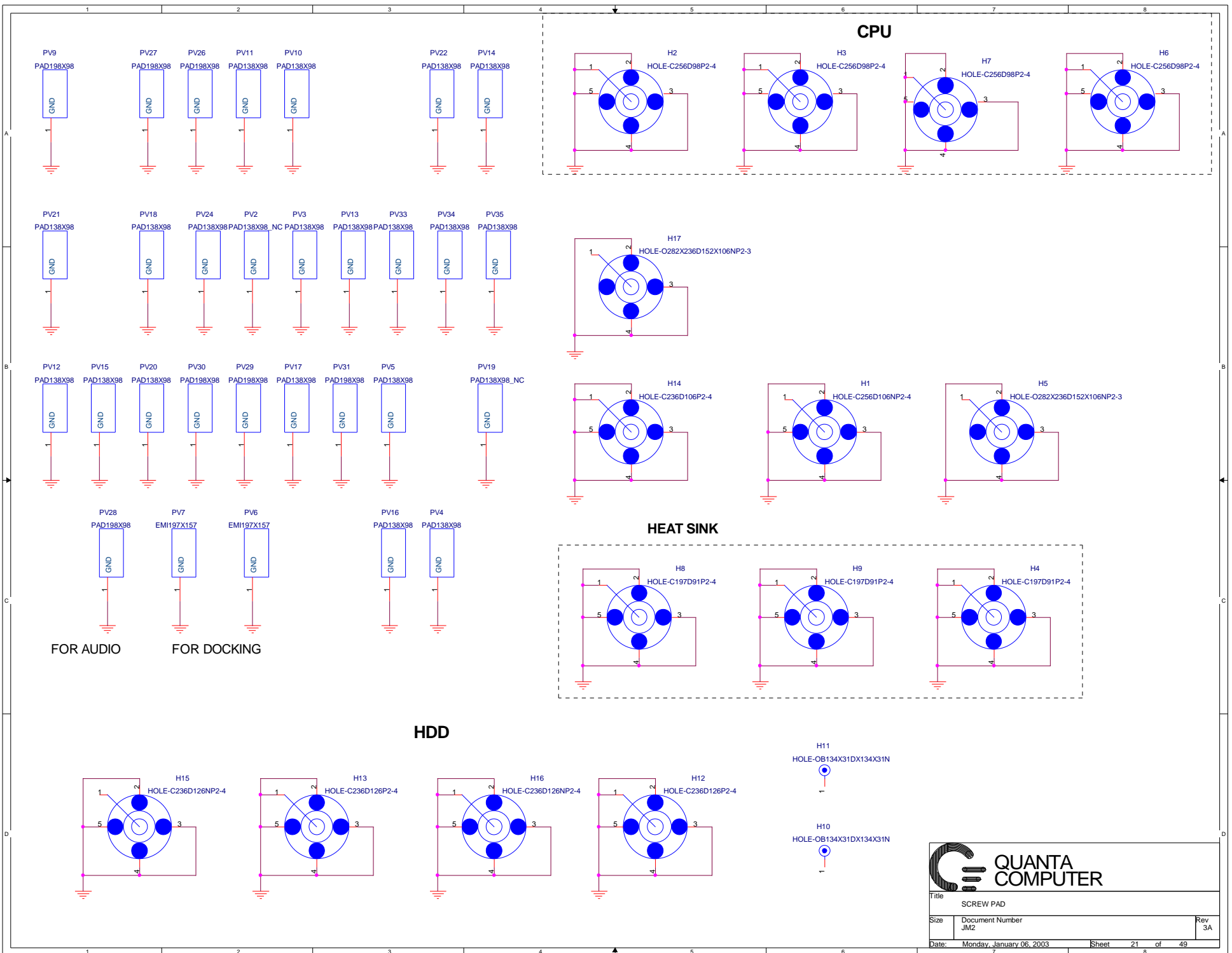


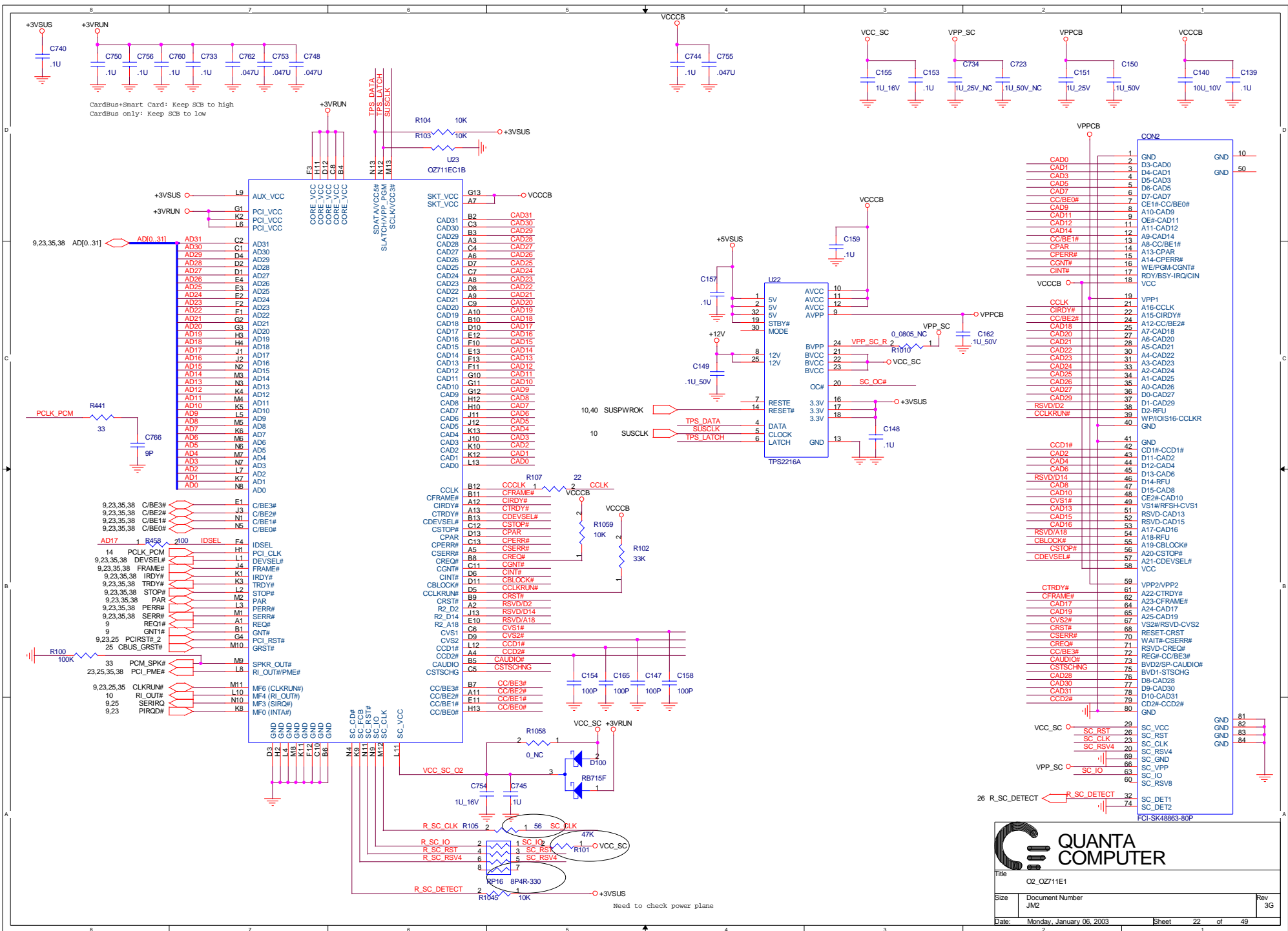
**QUANTA COMPUTER**

Title: IDE (HDD&CD\_ROM)

Size	Document Number	Rev
	JM2	3F

Date: Monday, January 06, 2003      Sheet: 20 of 49





**QUANTA COMPUTER**

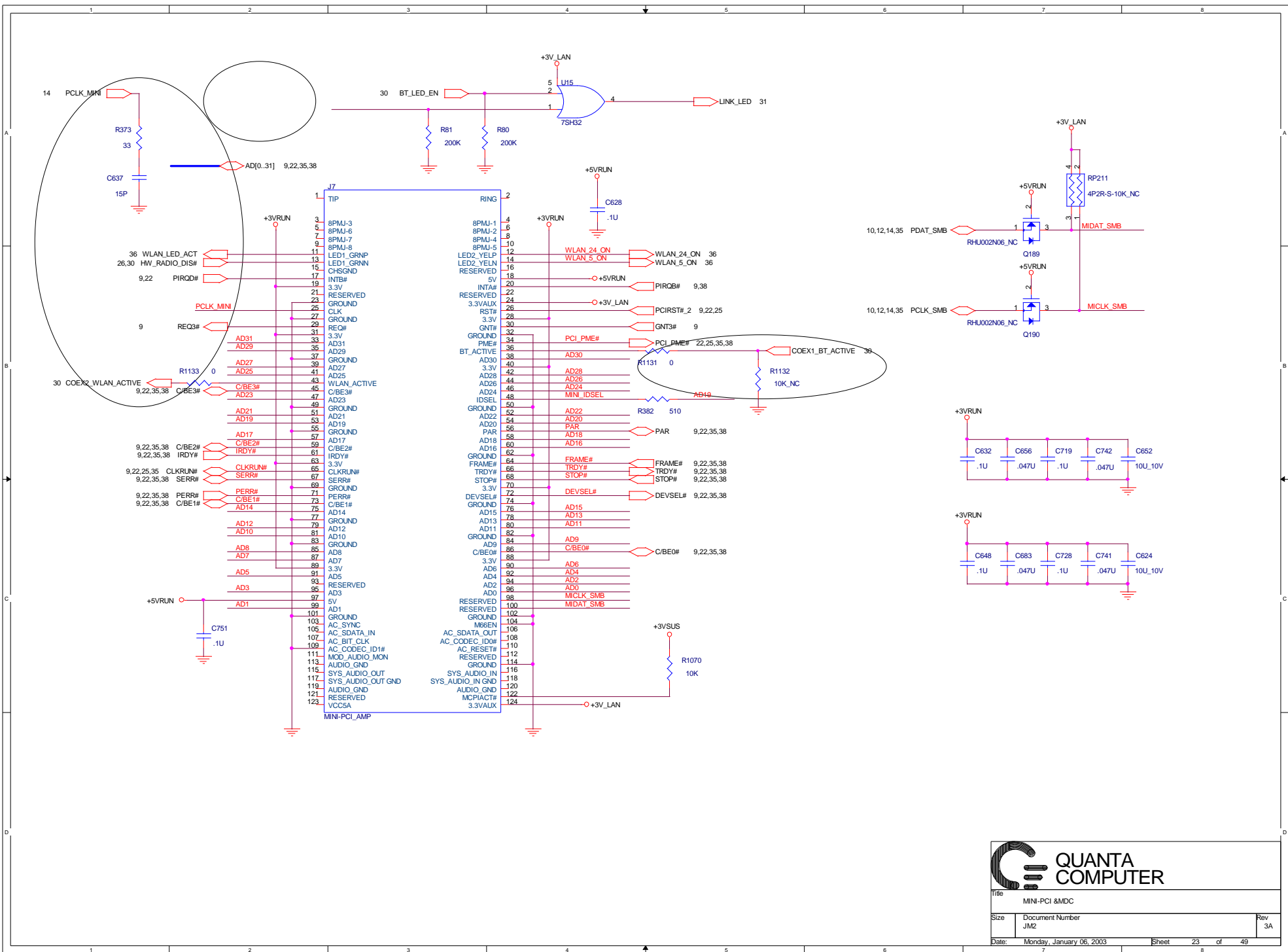
Title: Q2\_QZ711E1

Size: Document Number JM2

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Rev: 3G

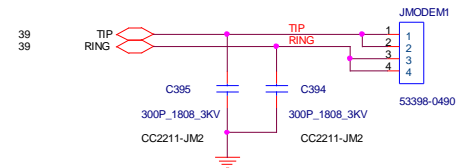
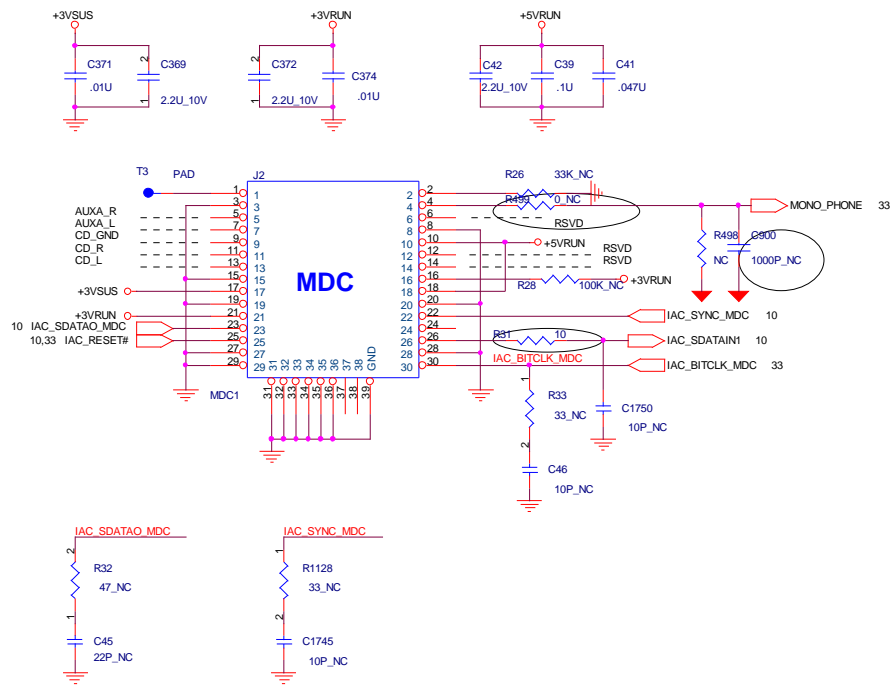


**QUANTA COMPUTER**

Title: MINI-PCI & MDC

Size	Document Number	Rev
	JM2	3A

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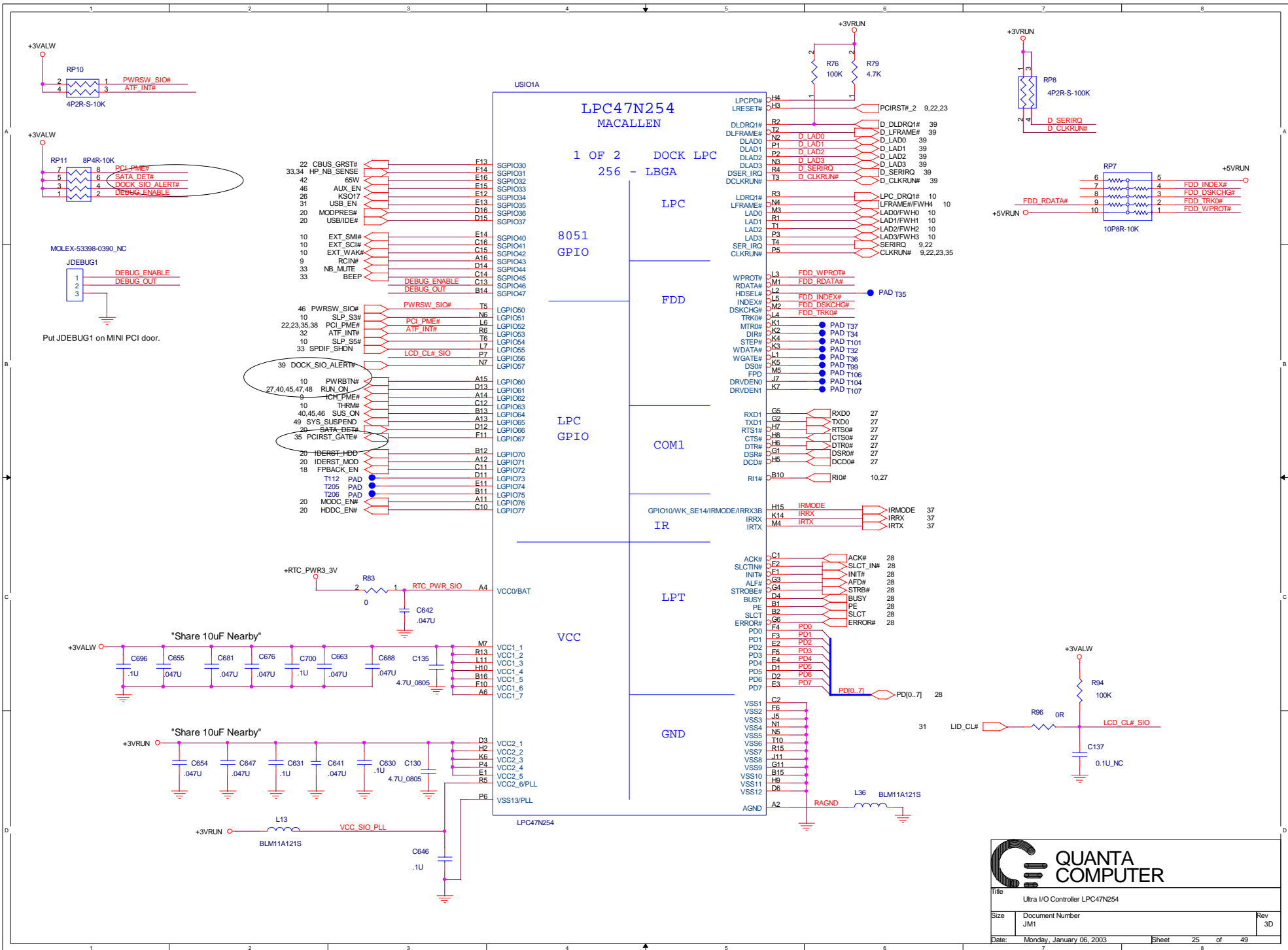
**QUANTA COMPUTER**

Title: MDC CONN.

Size	Document Number	Rev
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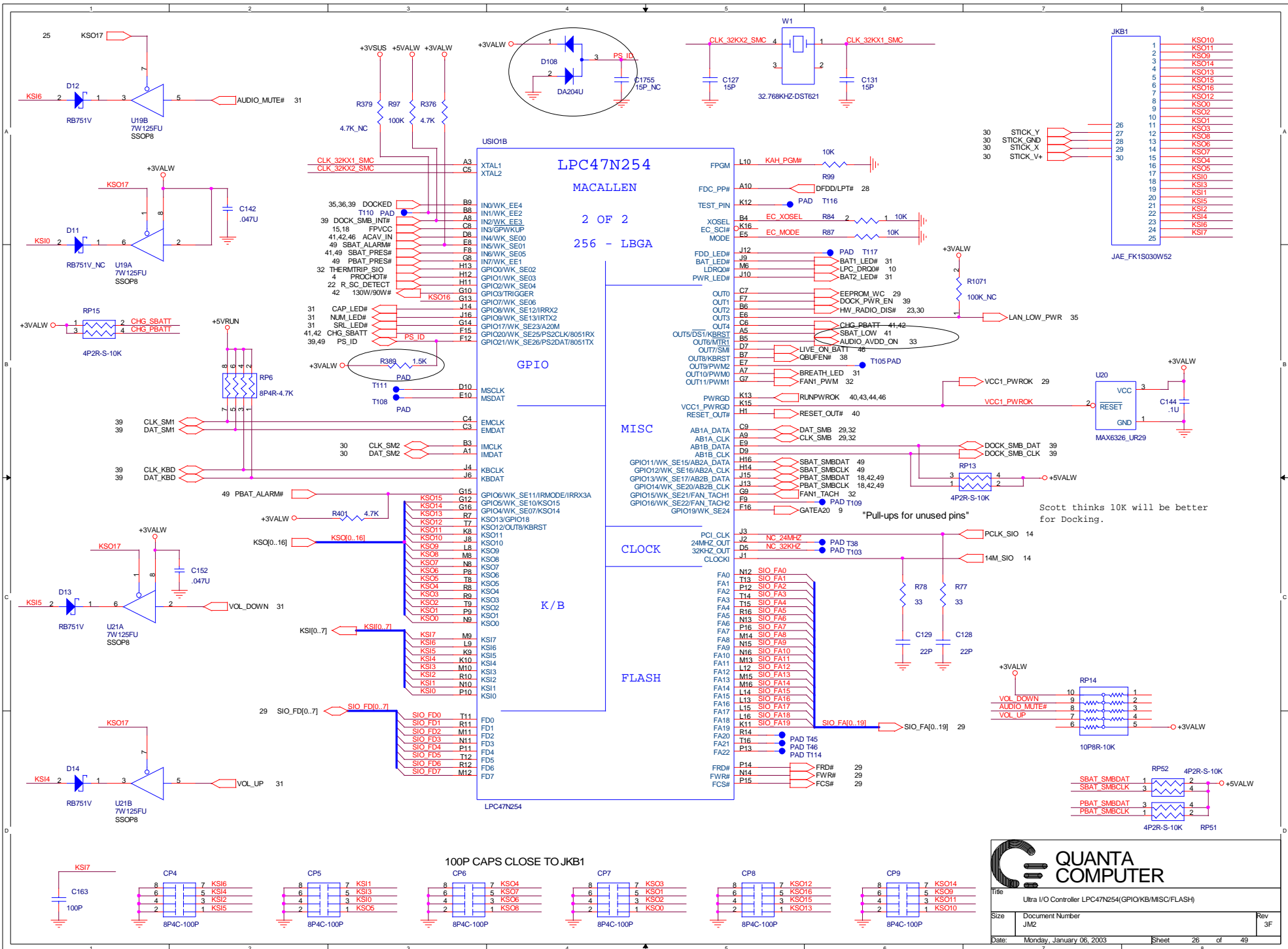


**QUANTA COMPUTER**

Title: Ultra I/O Controller LPC47N254

Size: Document Number	Rev: 3D
JM1	

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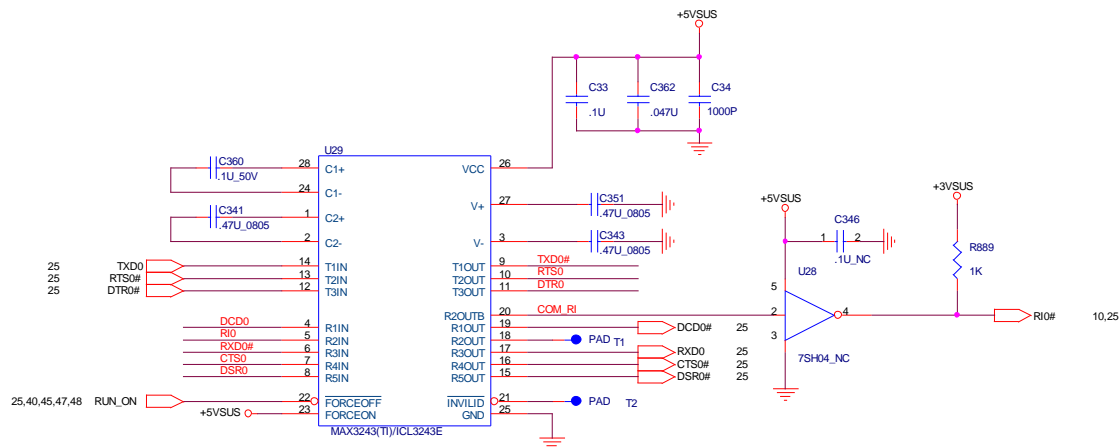


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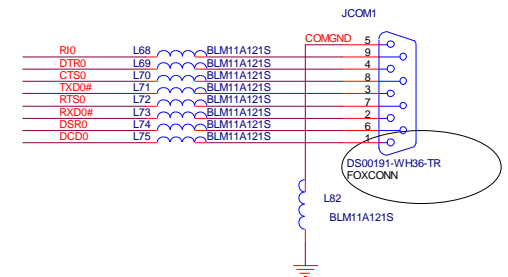
Ultra I/O Controller LPC47N254(GPIO/KB/MISC/FLASH)

Size	Document Number	Rev
	JM2	3F


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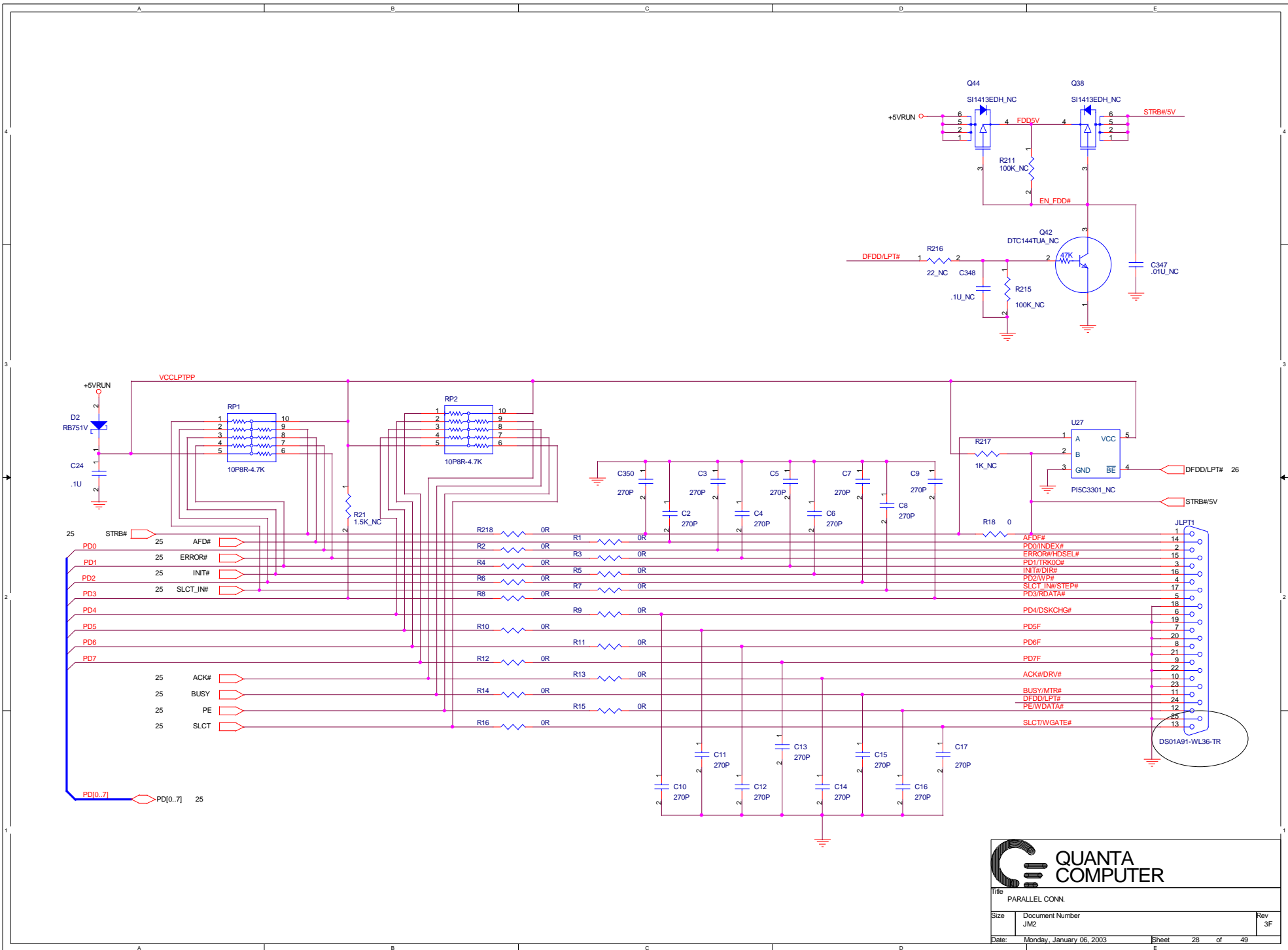


If MAX3243 pin 22 tied to RUN\_ON, then it can not support Ring Out



Place these beads close to JCOM1 as soon as possible

		Title	
		SERIAL PORT	
Size	Document Number	Rev	
	JM2	3F	
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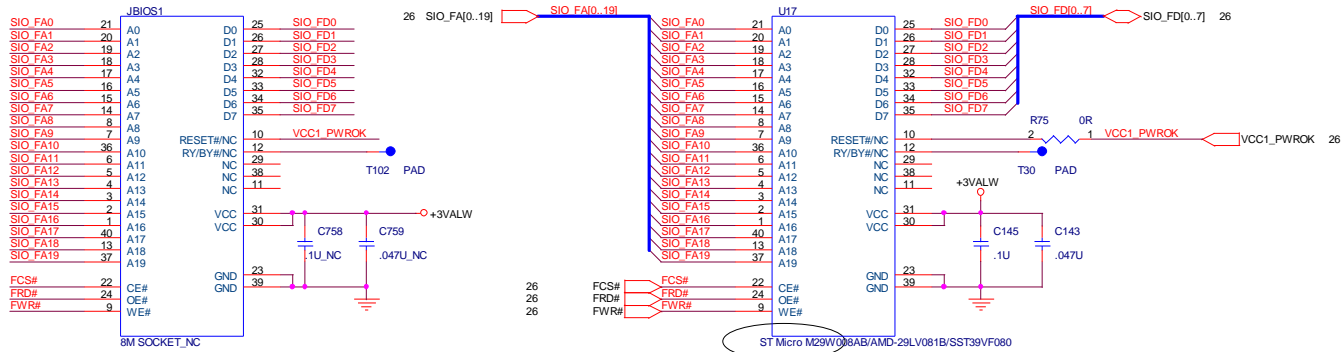


**QUANTA COMPUTER**

Title: PARALLEL CONN.

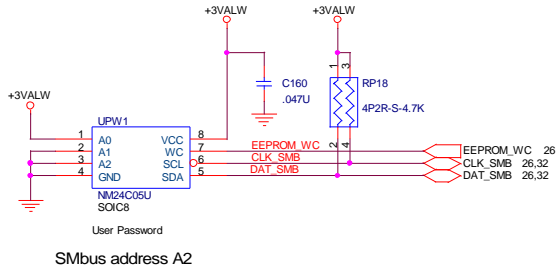
Size	Document Number	Rev
	JM2	3F
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8Mbit (1M Byte),NO PLCC TYPE



AMD :Pin 10 is RESET# ; Pin12 is RY/BY#  
SST :Pin10,12 are NC

- 1.AMD-29LV081B require MAX 500nS Tready for it's hardware reset.And MAX6326\_UR29 has >100mS reset timing.So we can tie it's reset# pin to +3VALW directly.
- 2.SIO has internal 20 mS delay of VCC1\_PWROK

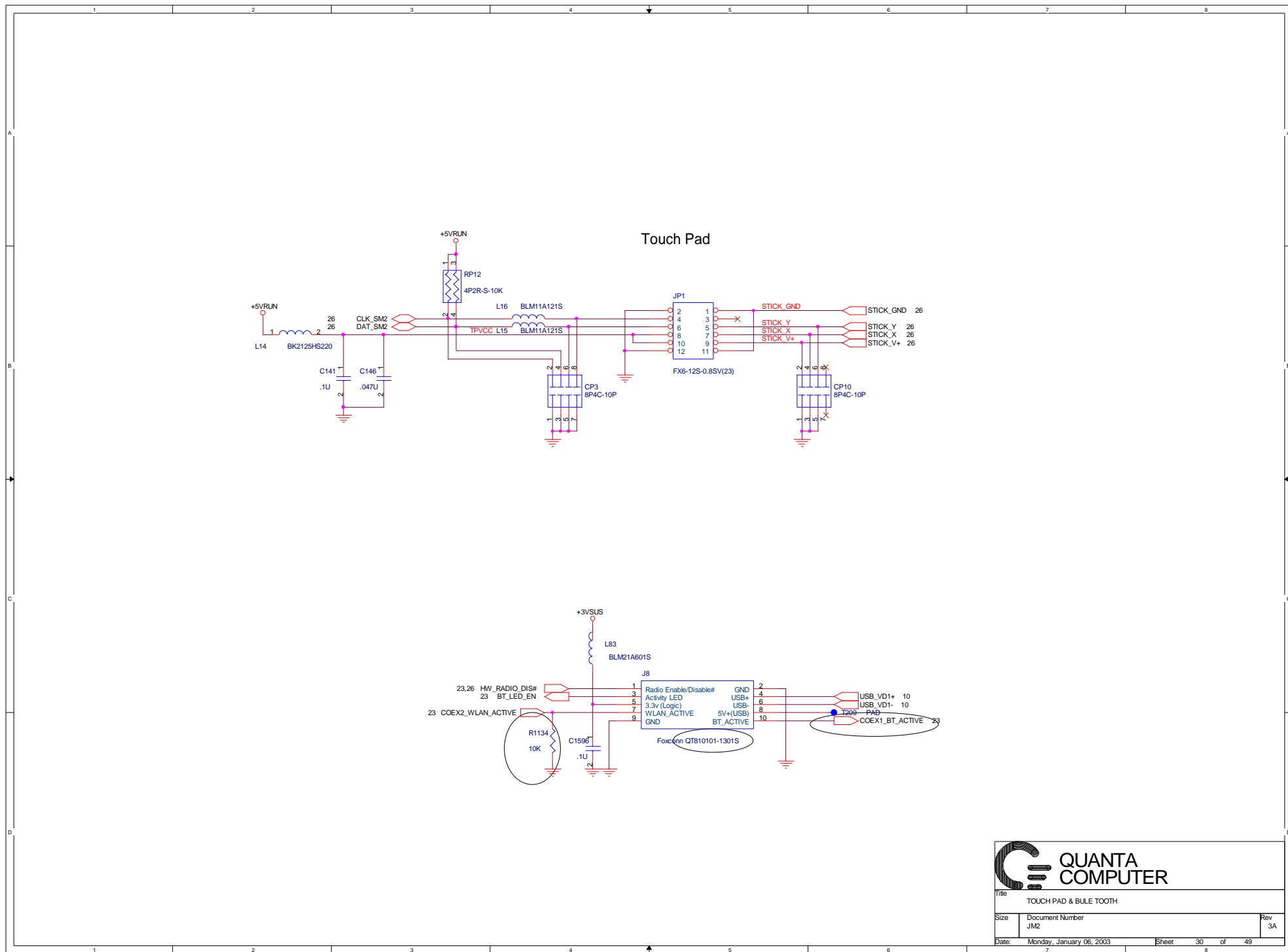



**QUANTA COMPUTER**

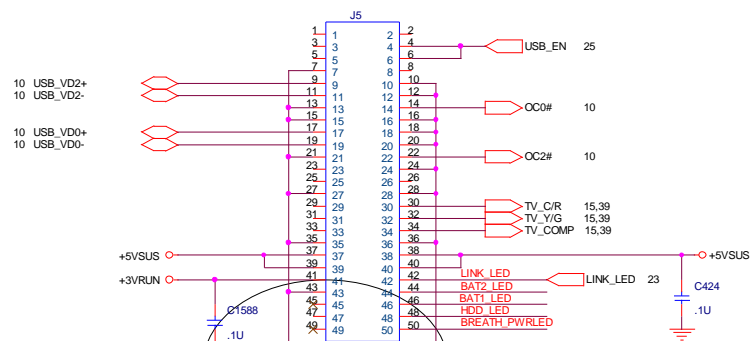
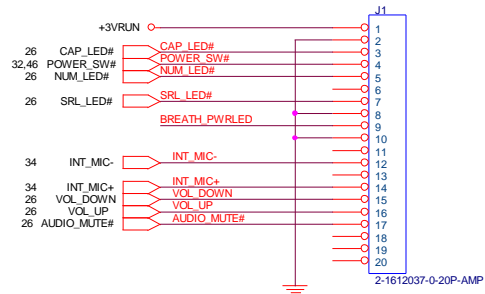
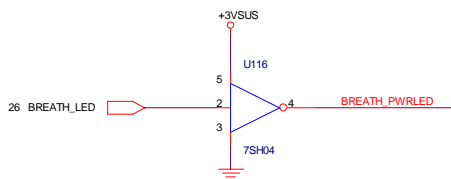
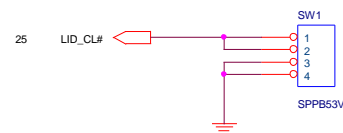
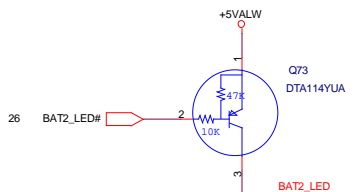
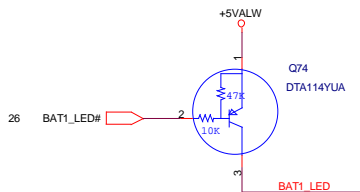
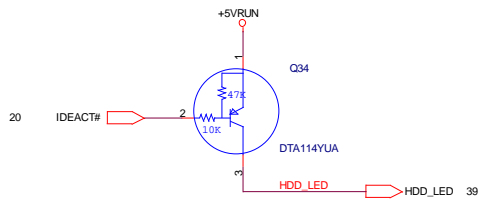
Title: FLASH

Size	Document Number	Rev
	JM2	3A

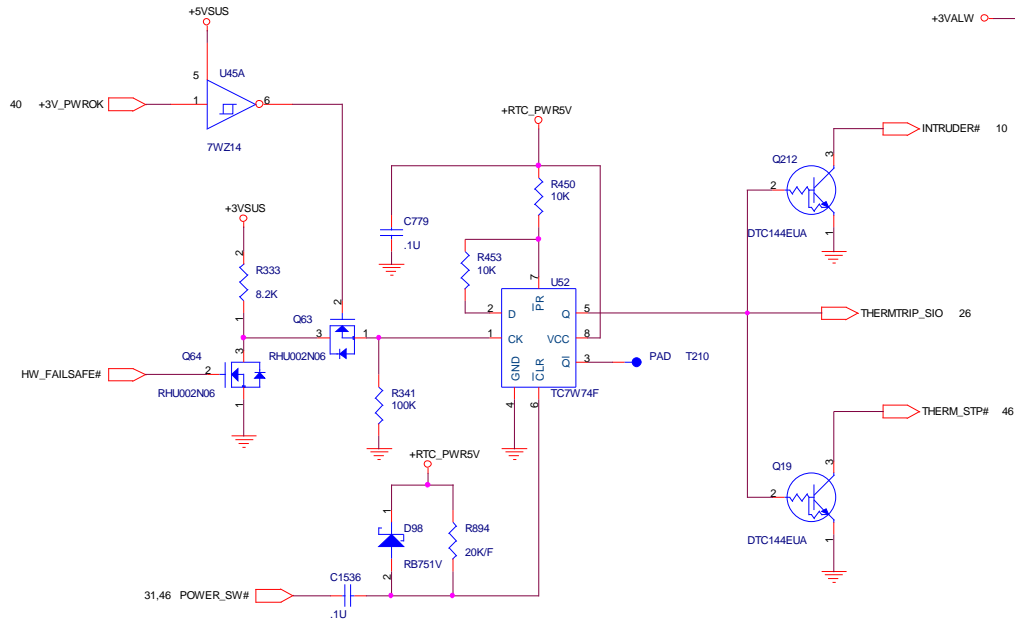
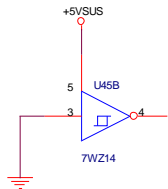
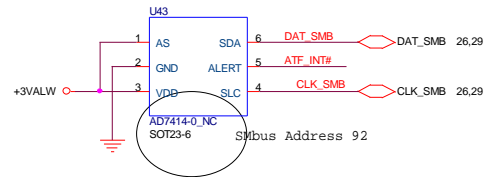
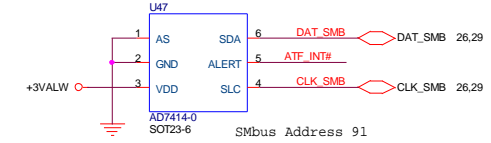
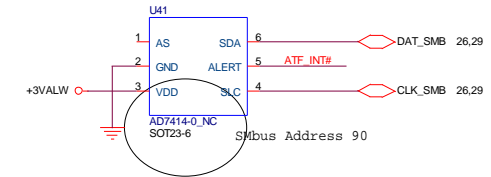
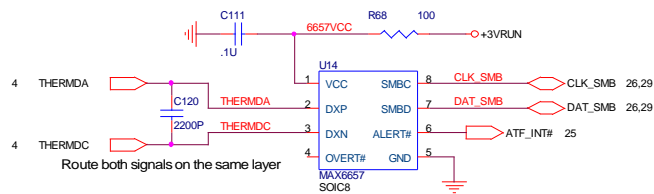
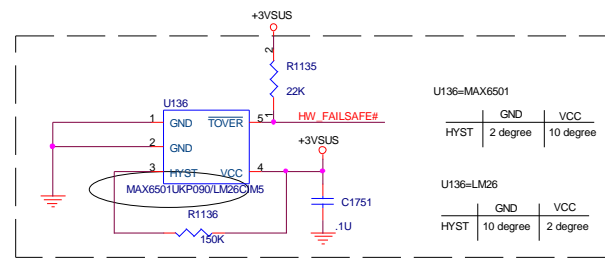
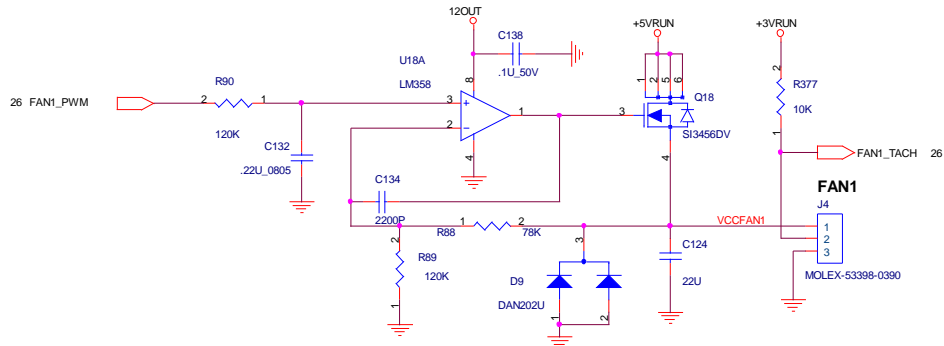
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 <b>QUANTA COMPUTER</b>		Title	
		TOUCH PAD & BLUE TOOTH	
Size	Document Number	Rev	
	JM2	3A	
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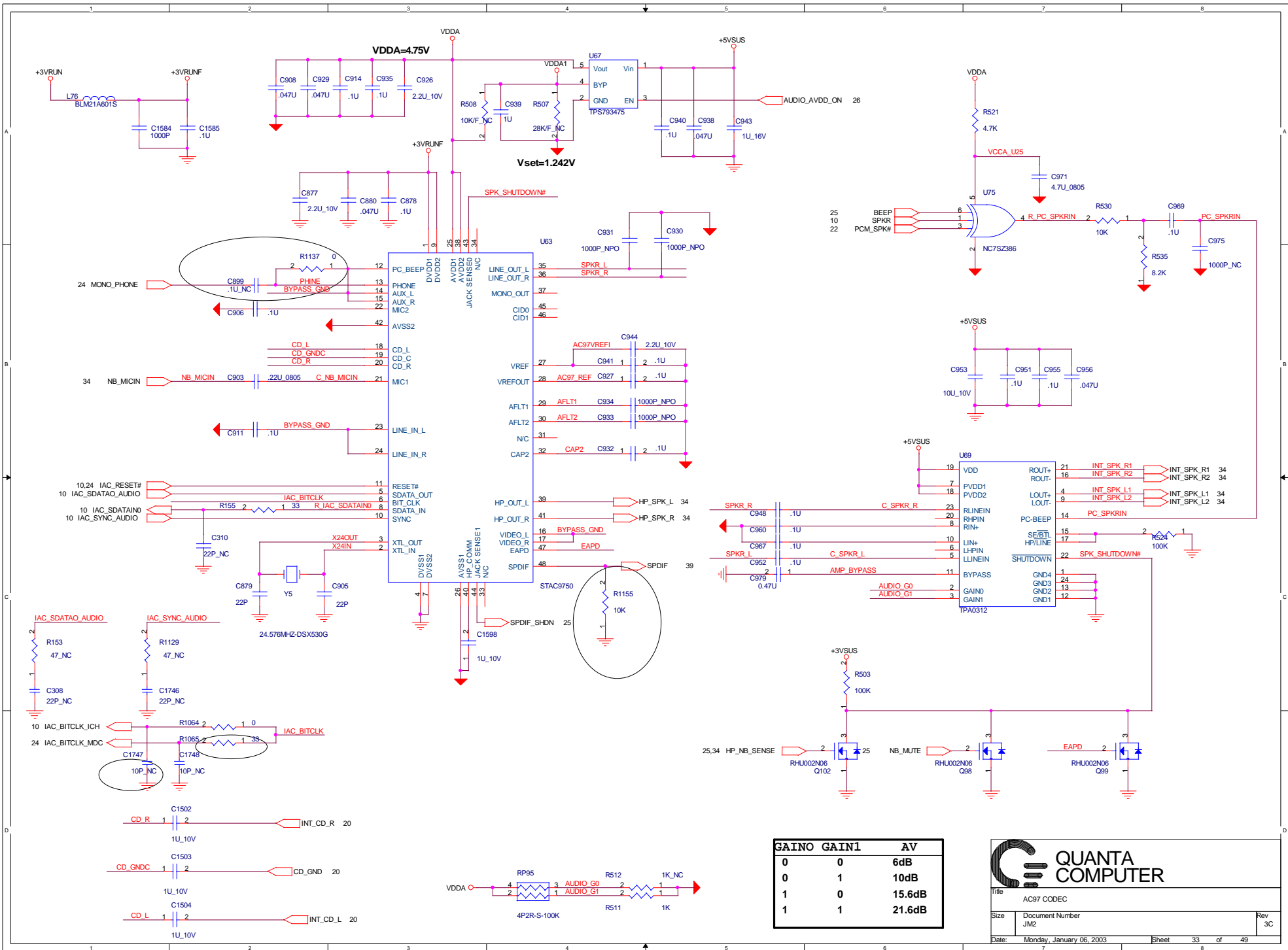


Title		
SWITCH & LED		
Size	Document Number	Rev
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Title		
FAN & THERMAL		
Size	Document Number	Rev
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GAIN0	GAIN1	AV
0	0	6dB
0	1	10dB
1	0	15.6dB
1	1	21.6dB

**QUANTA COMPUTER**

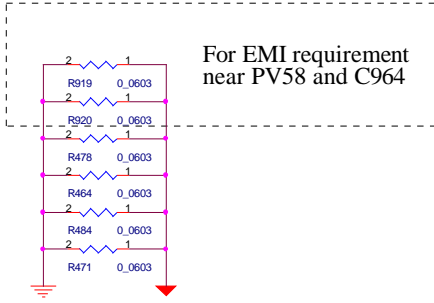
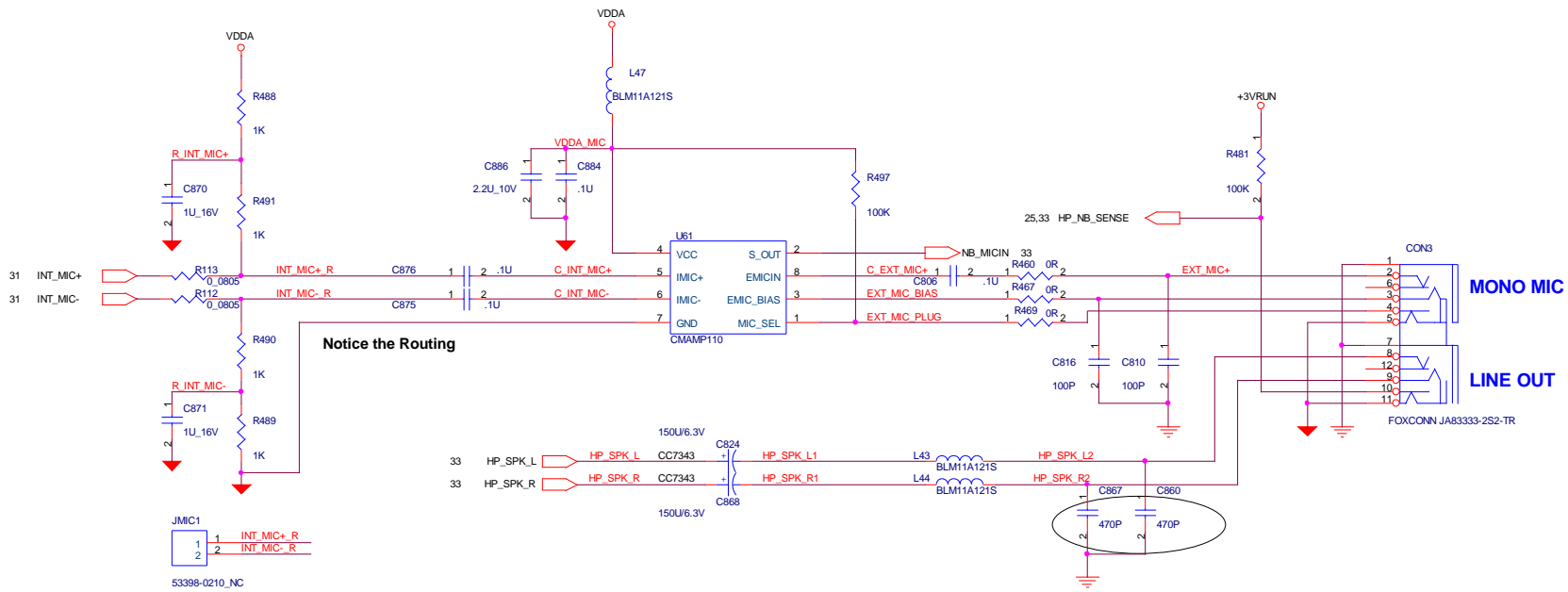
Title: AC97 CODEC

Size: Document Number JM2

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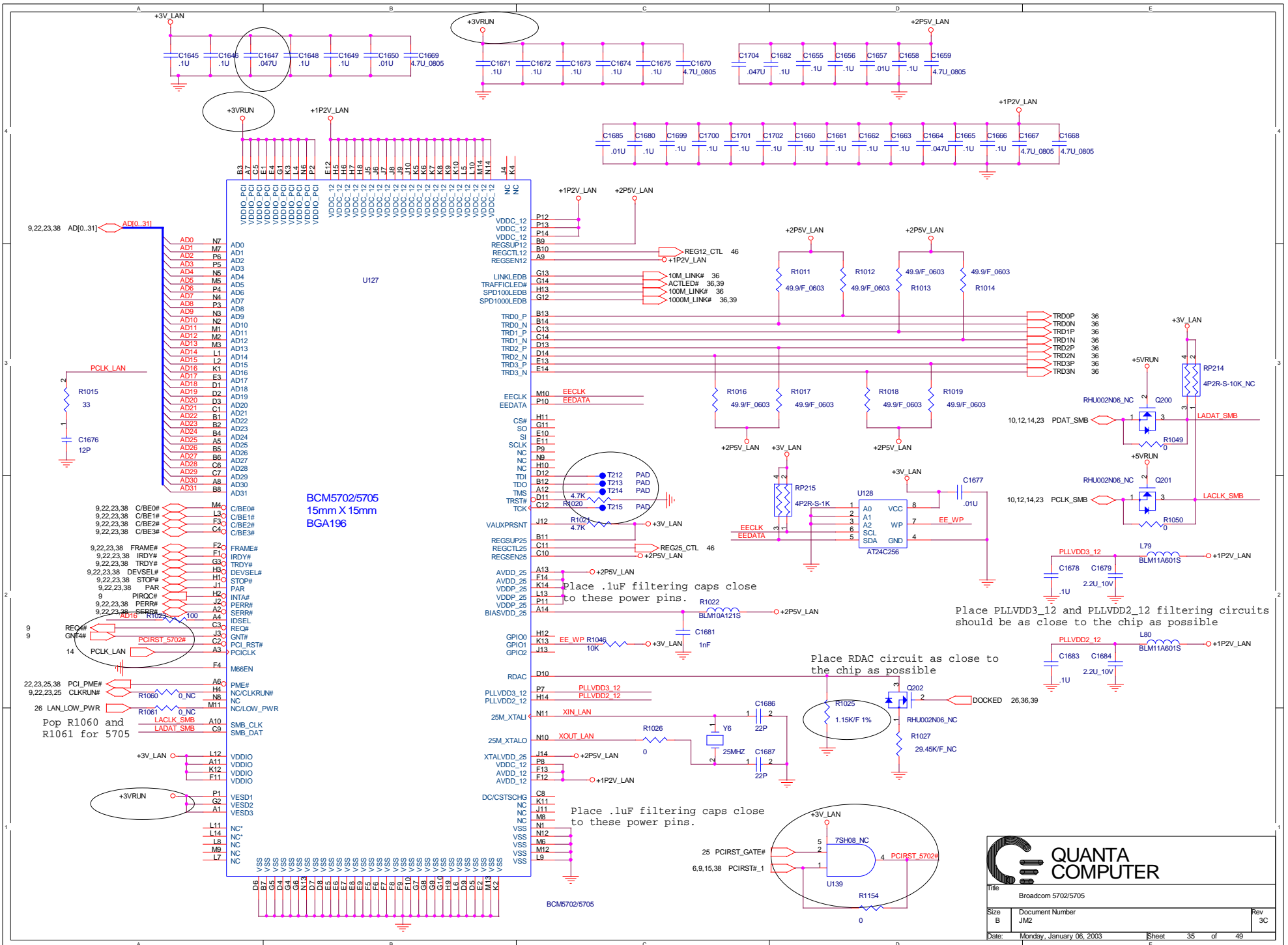


**QUANTA COMPUTER**

Title: AUDIO CONN

Size: Document Number JM2 Rev: 3F

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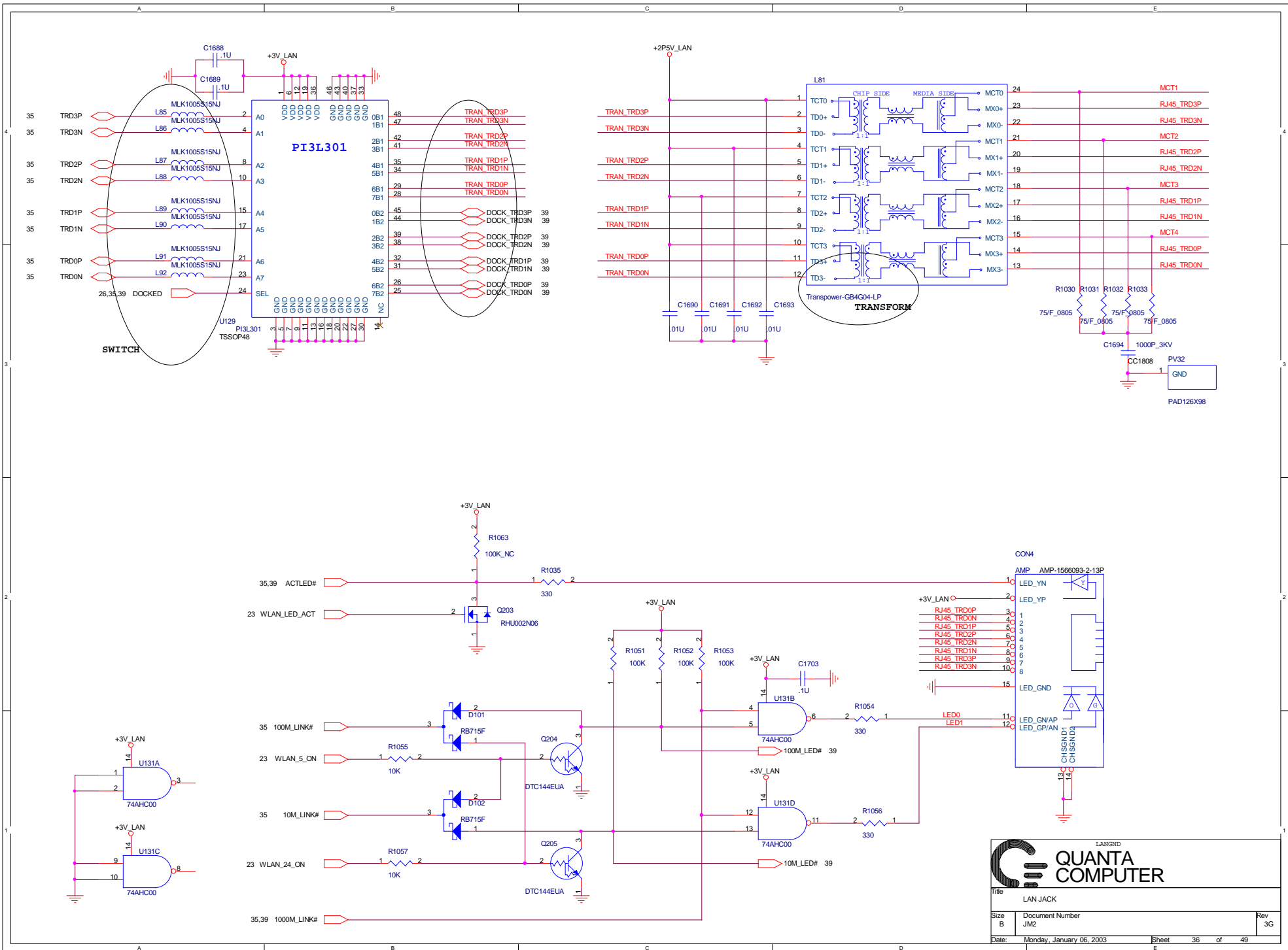


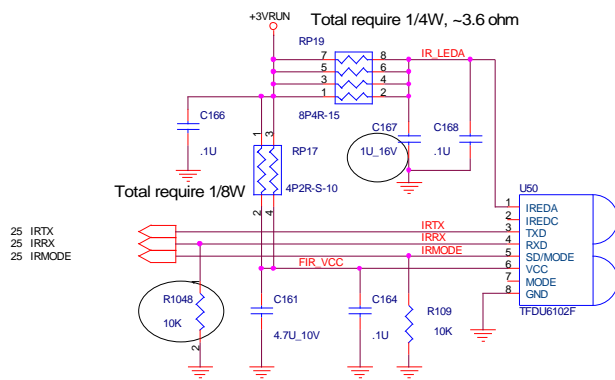
**QUANTA COMPUTER**


Title: Broadcom 5702/5705

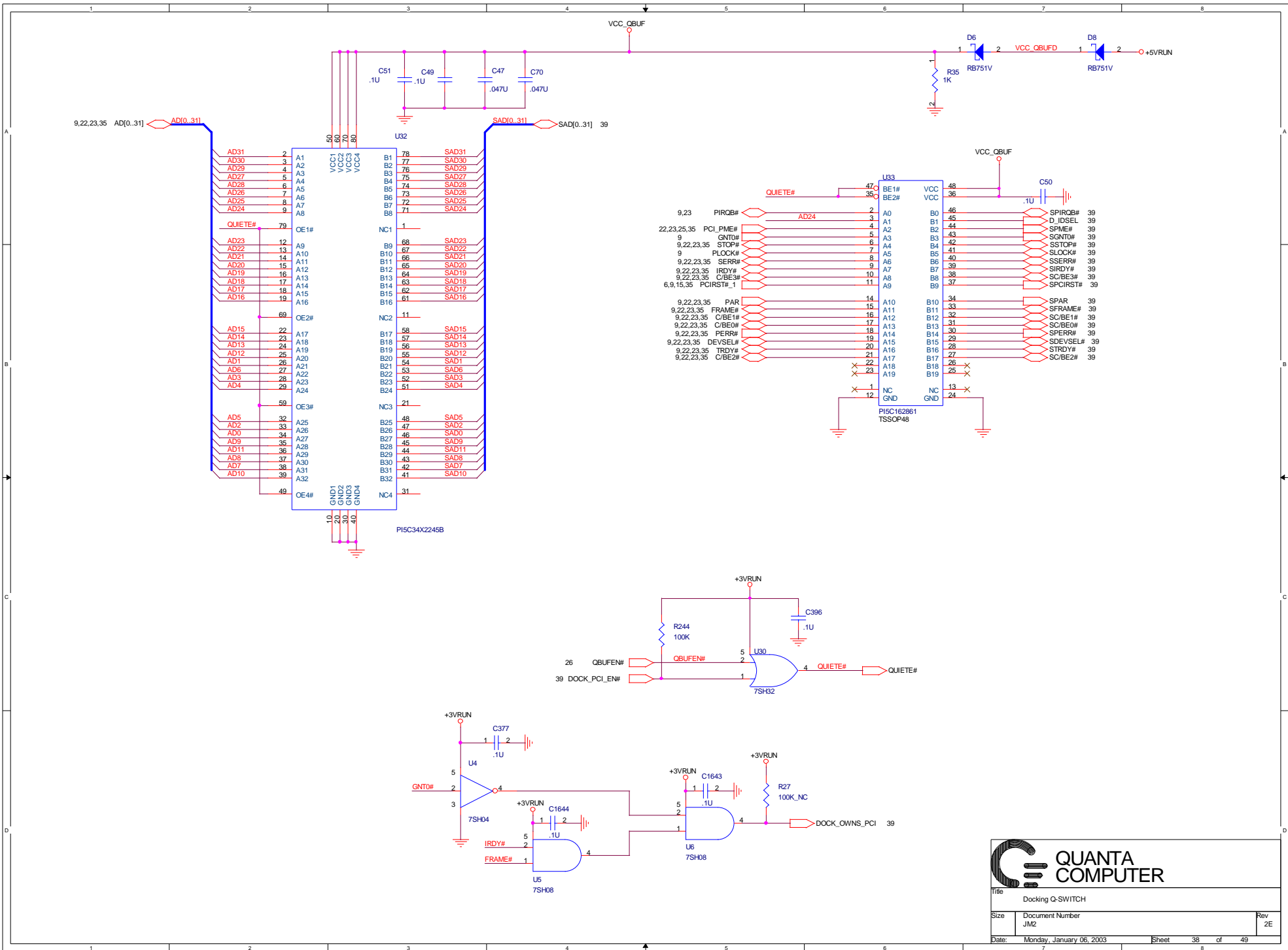
Size	Document Number	Rev
B	JM2	3C

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 <b>QUANTA COMPUTER</b>		Title	
		FIR	
Size	Document Number	Rev	
	JM2	3G	
Date:	Monday, January 06, 2003	Sheet	37 of 49
	7		8

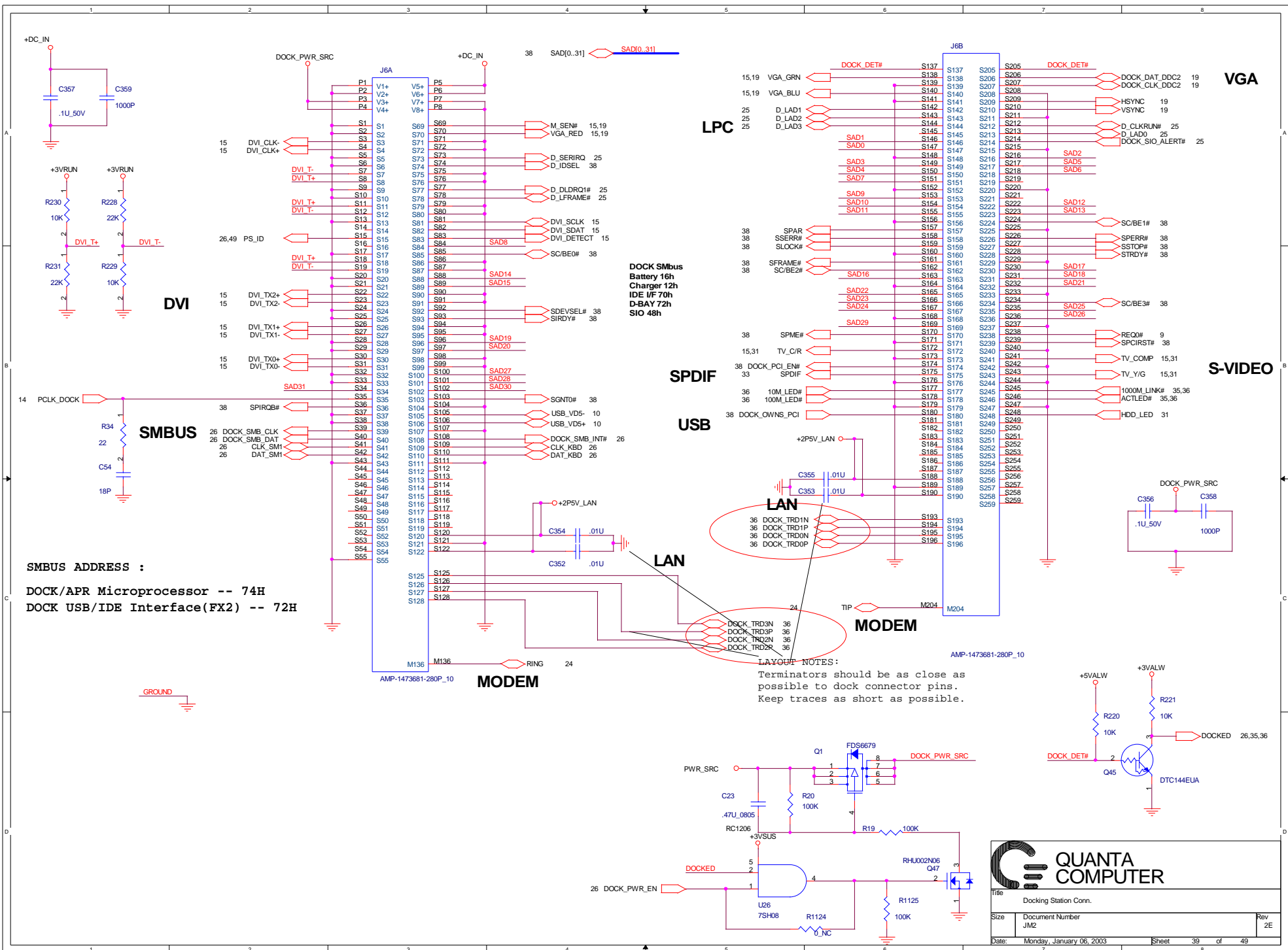


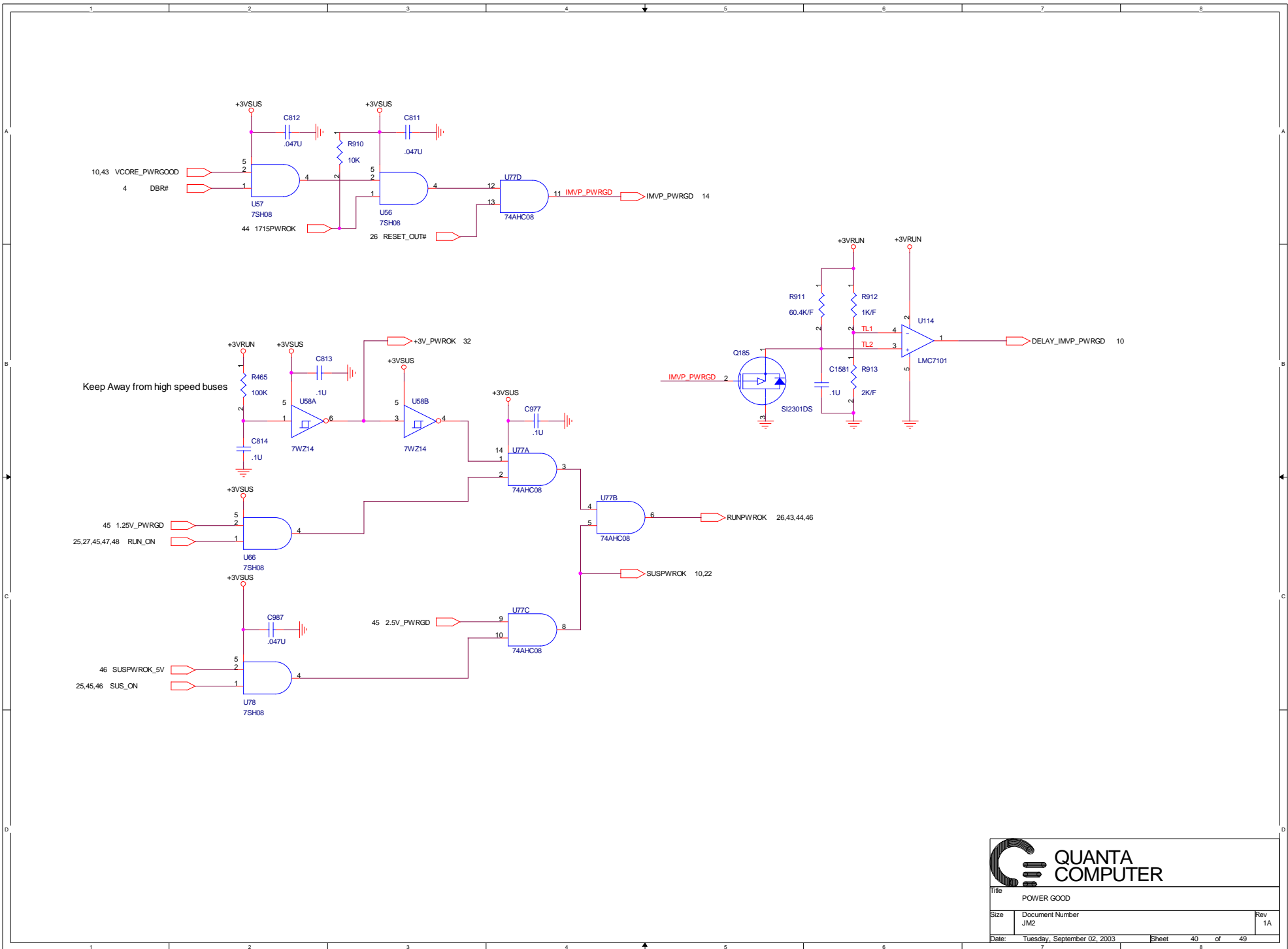
**QUANTA COMPUTER**


Title: Docking Q-SWITCH

Size	Document Number	Rev
	JM2	2E

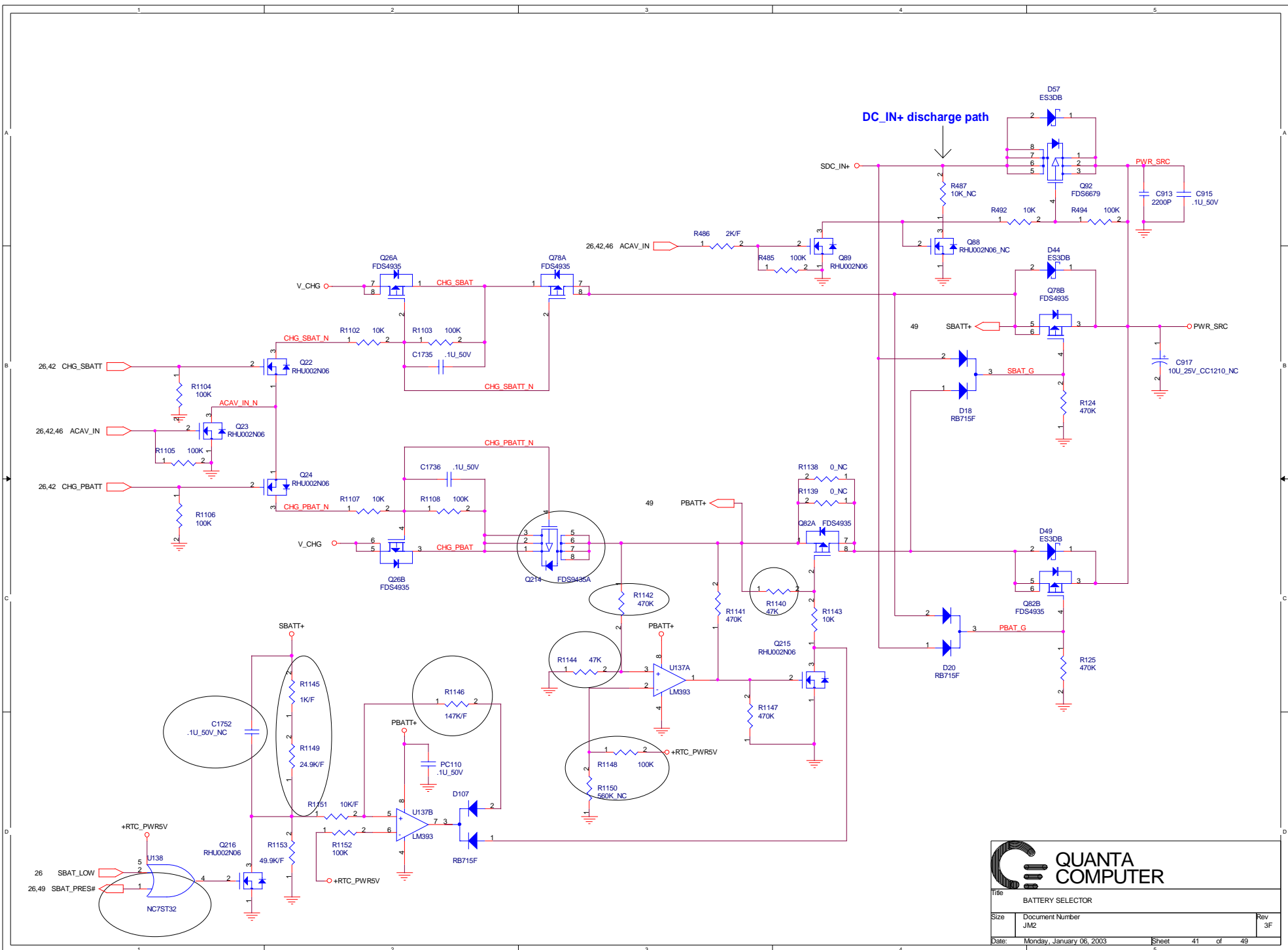
Date: Monday, January 06, 2003      Sheet 38 of 49





 <b>QUANTA COMPUTER</b>		Title	
		POWER GOOD	
Size	Document Number	Rev	
	JM2	1A	
Date:	Tuesday, September 02, 2003	Sheet	40 of 49
	7		8

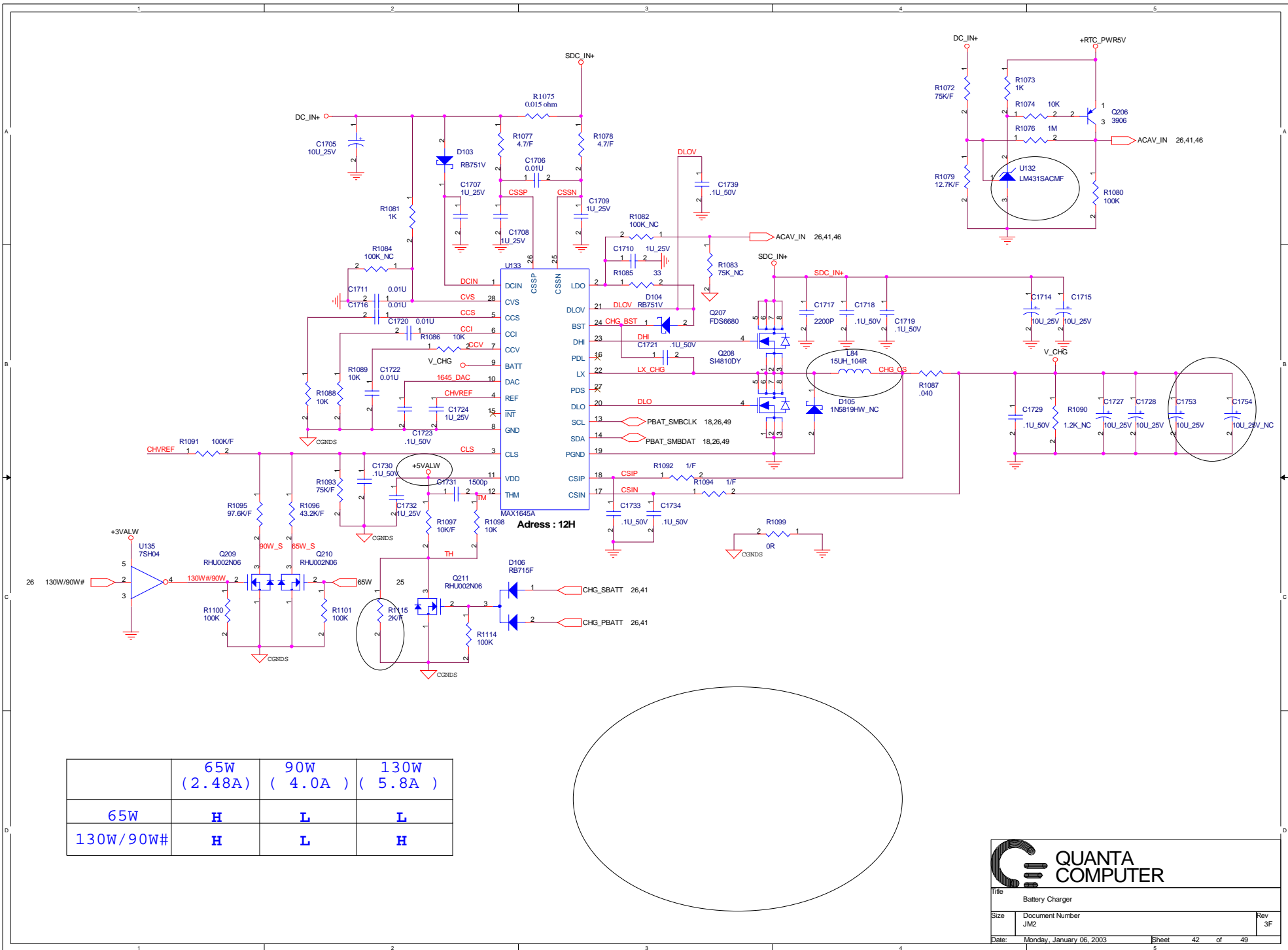




**QUANTA COMPUTER**

Title: BATTERY SELECTOR

Size: JM2	Document Number: JM2	Rev: 3F
Date: Monday, January 06, 2003	Sheet: 41	of 49

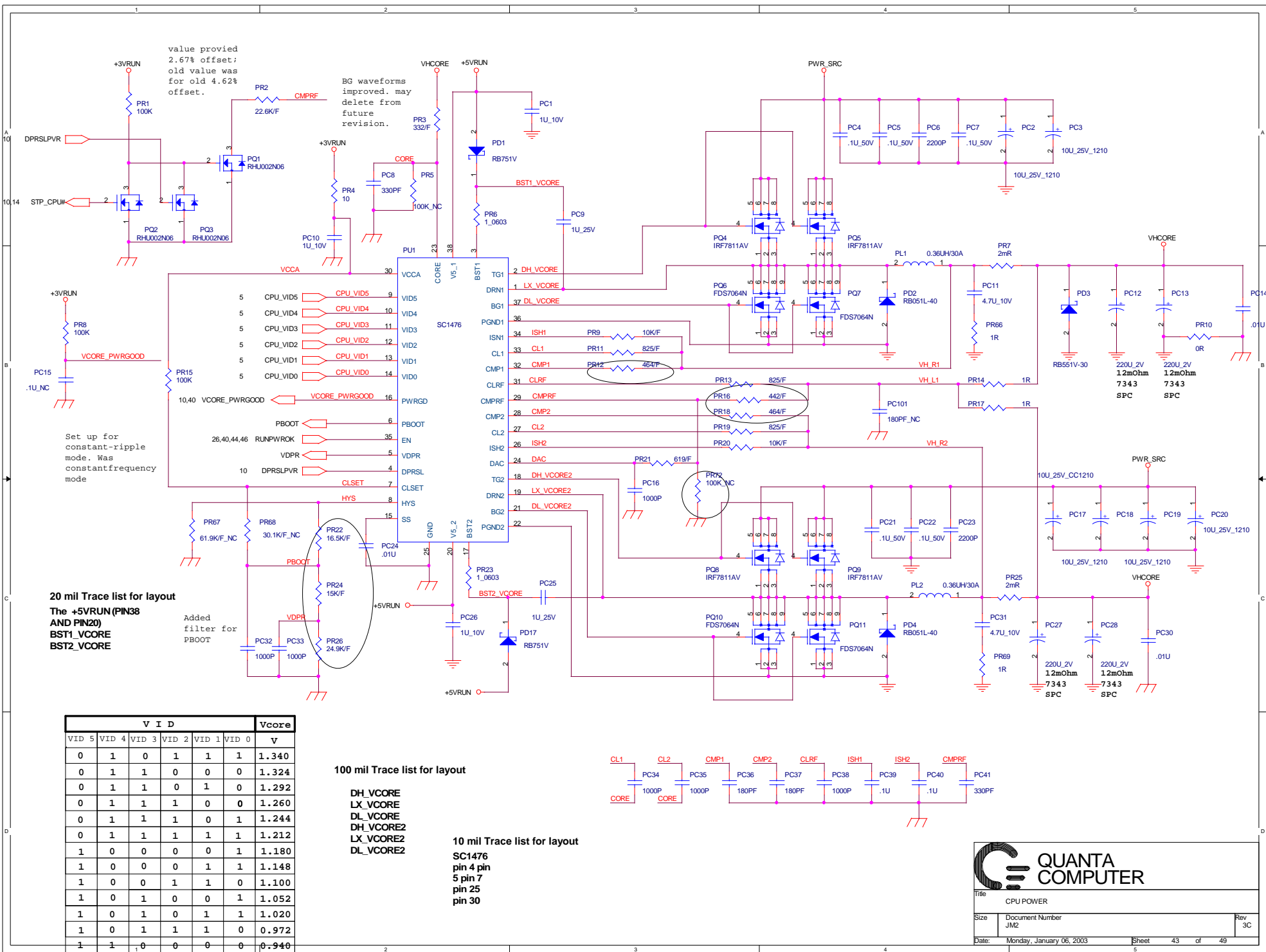


**QUANTA COMPUTER**

Title: Battery Charger

Size: Document Number JM2 Rev: 3F

Date: Monday, January 06, 2003 Sheet: 42 of 49



value provided  
2.67% offset;  
old value was  
for old 4.62%  
offset.

BG waveforms  
improved. may  
delete from  
future  
revision.

Set up for  
constant-ripple  
mode. Was  
constantfrequency  
mode

**20 mil Trace list for layout**  
The +5VRUN (PIN38  
AND PIN20)  
BST1\_VCORE  
BST2\_VCORE

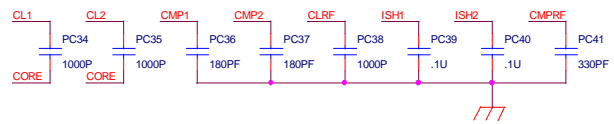
V I D							Vcore
VID 5	VID 4	VID 3	VID 2	VID 1	VID 0	v	
0	1	0	1	1	1	1.340	
0	1	1	0	0	0	1.324	
0	1	1	0	1	0	1.292	
0	1	1	1	0	0	1.260	
0	1	1	1	0	1	1.244	
0	1	1	1	1	1	1.212	
1	0	0	0	0	1	1.180	
1	0	0	0	1	1	1.148	
1	0	0	1	1	0	1.100	
1	0	1	0	0	1	1.052	
1	0	1	0	1	1	1.020	
1	0	1	1	1	0	0.972	
1	1	0	0	0	0	0.940	

**100 mil Trace list for layout**

VDH\_VCORE  
VLX\_VCORE  
VDL\_VCORE  
VDH\_VCORE2  
VLX\_VCORE2  
VDL\_VCORE2

**10 mil Trace list for layout**

SC1476  
pin 4 pin  
5 pin 7  
pin 25  
pin 30

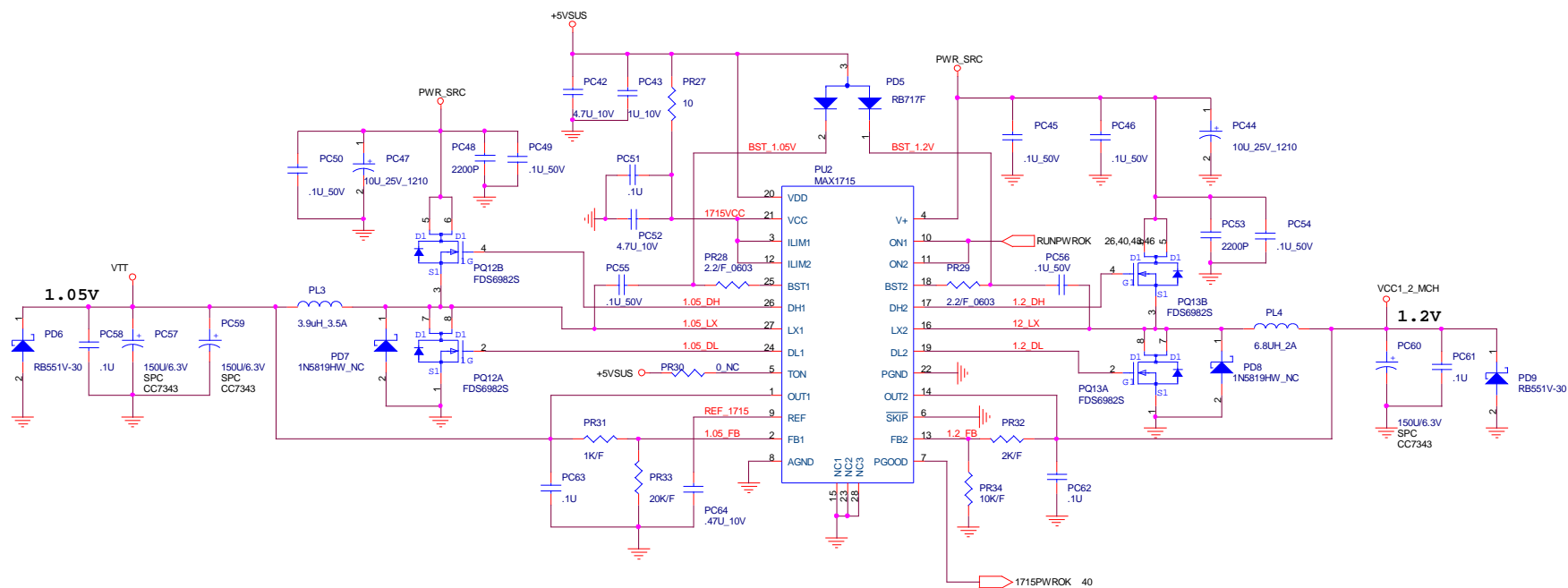


**QUANTA COMPUTER**

Title: CPU POWER

Size: Document Number JM2 Rev: 3C

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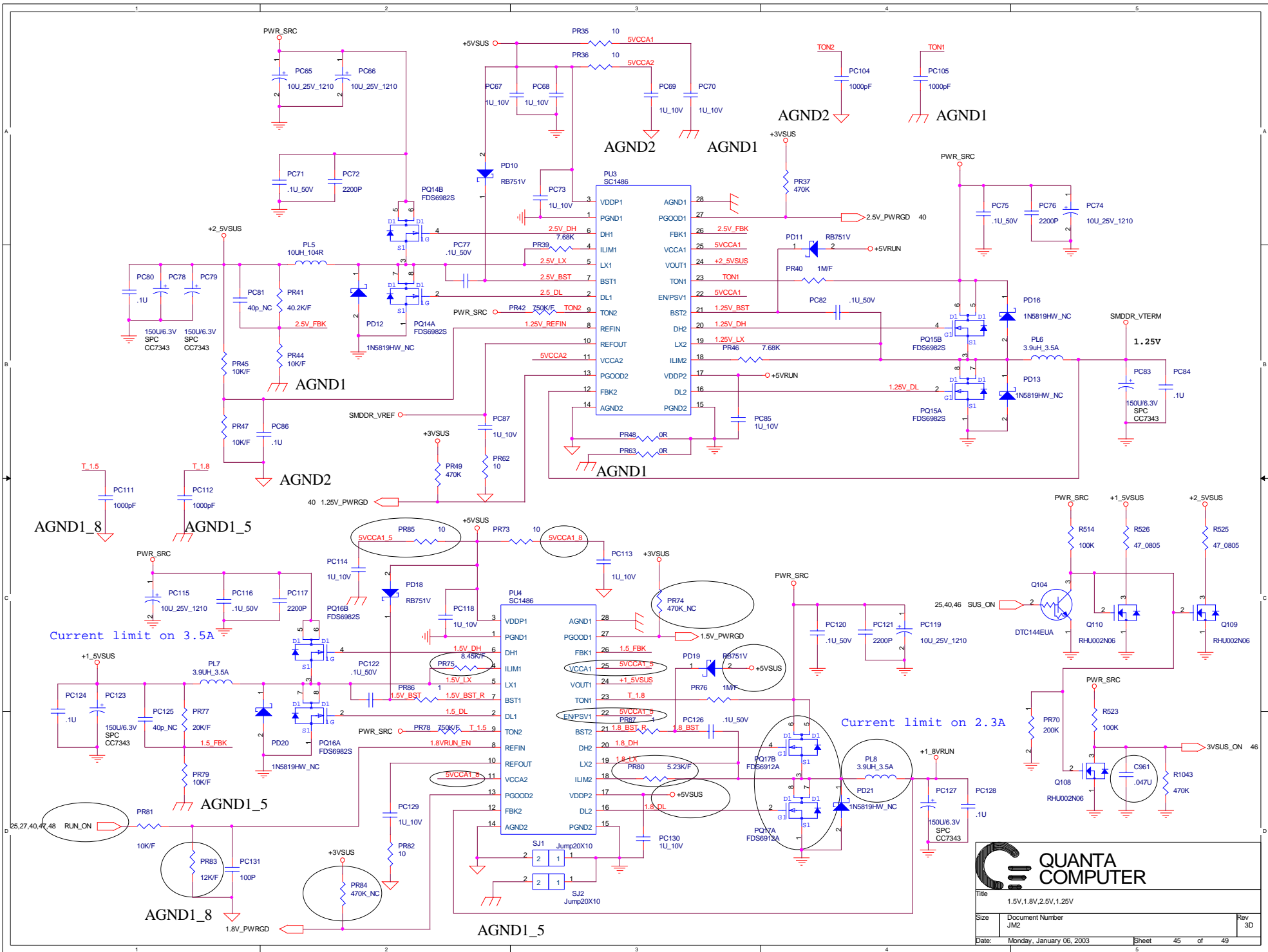


**QUANTA COMPUTER**

Title: VTT\_1.05V,VCC1\_2\_MCH

Size	Document Number	Rev
	JM2	1A

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**QUANTA COMPUTER**

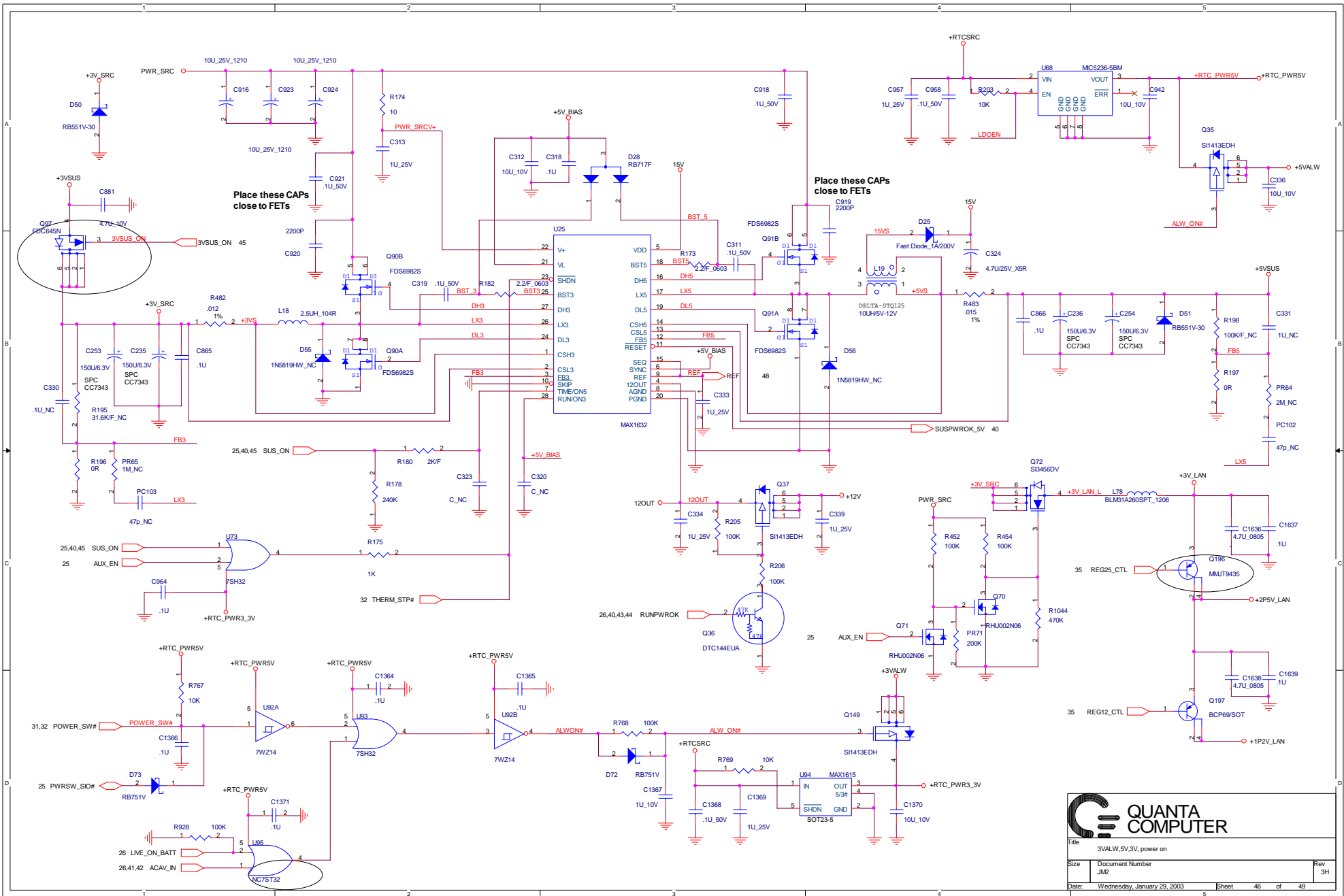
Title: 1.5V, 1.8V, 2.5V, 1.25V

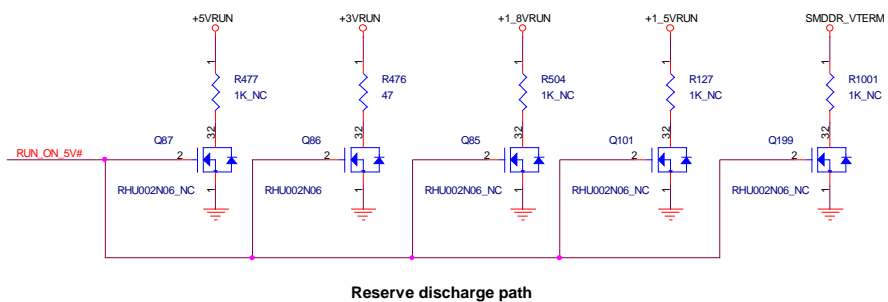
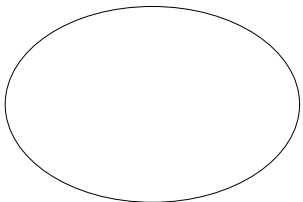
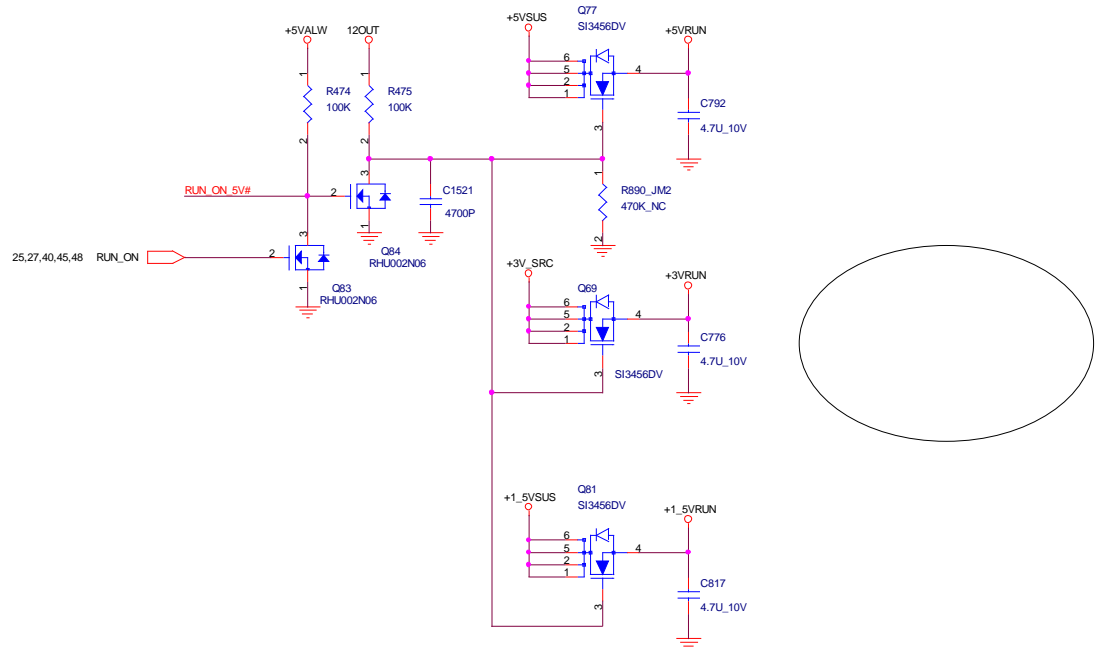
Size: Document Number JM2


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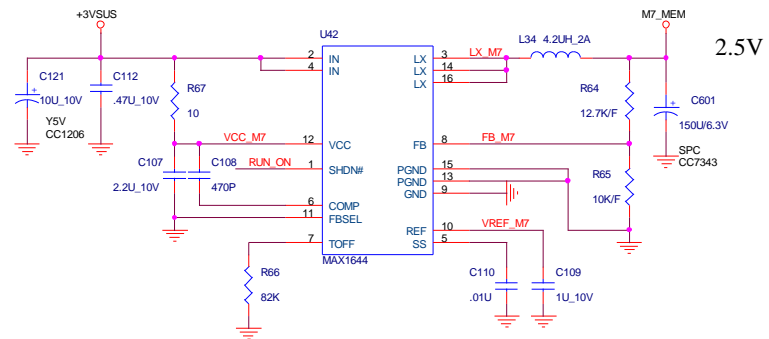
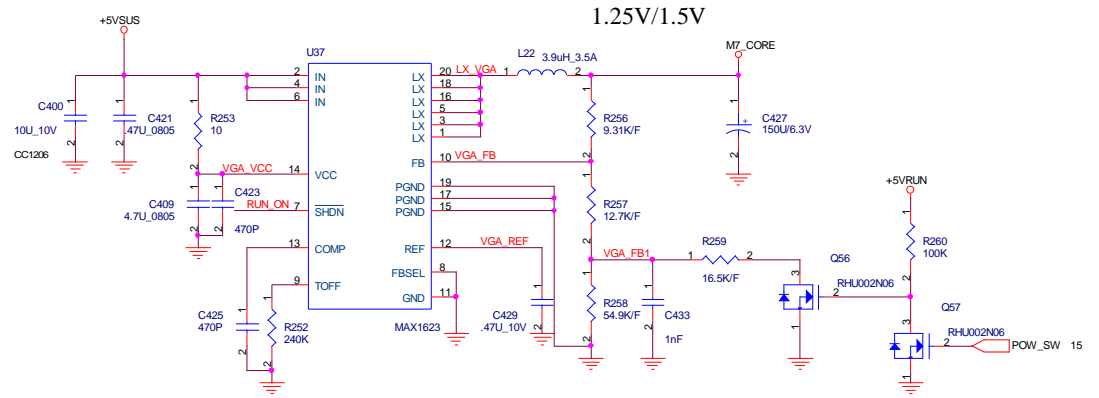
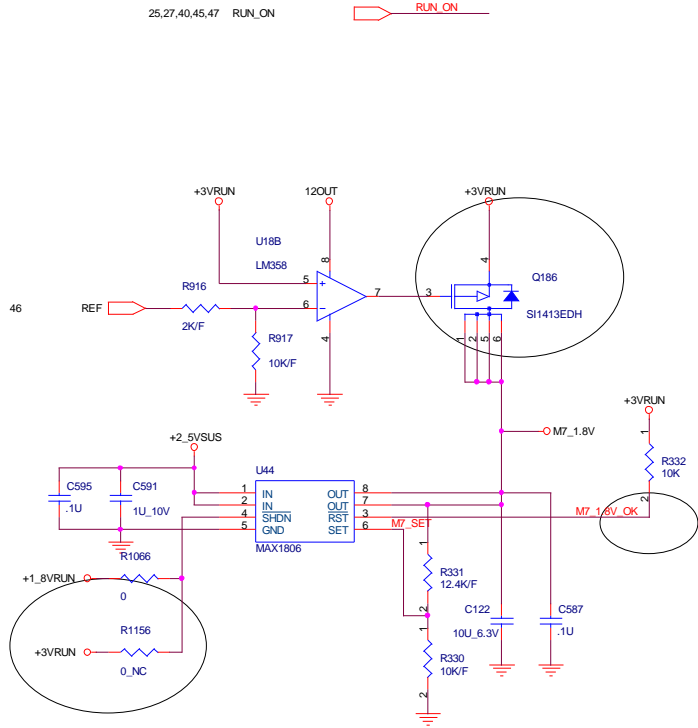
Rev: 3D





 <b>QUANTA COMPUTER</b>		
Title: RUN POWER SW		
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POW_SW	M7D/M9 CSP 16 32
0	1.5V
1	1.25V



Title		VGA DC/DC
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	JM2	3F
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