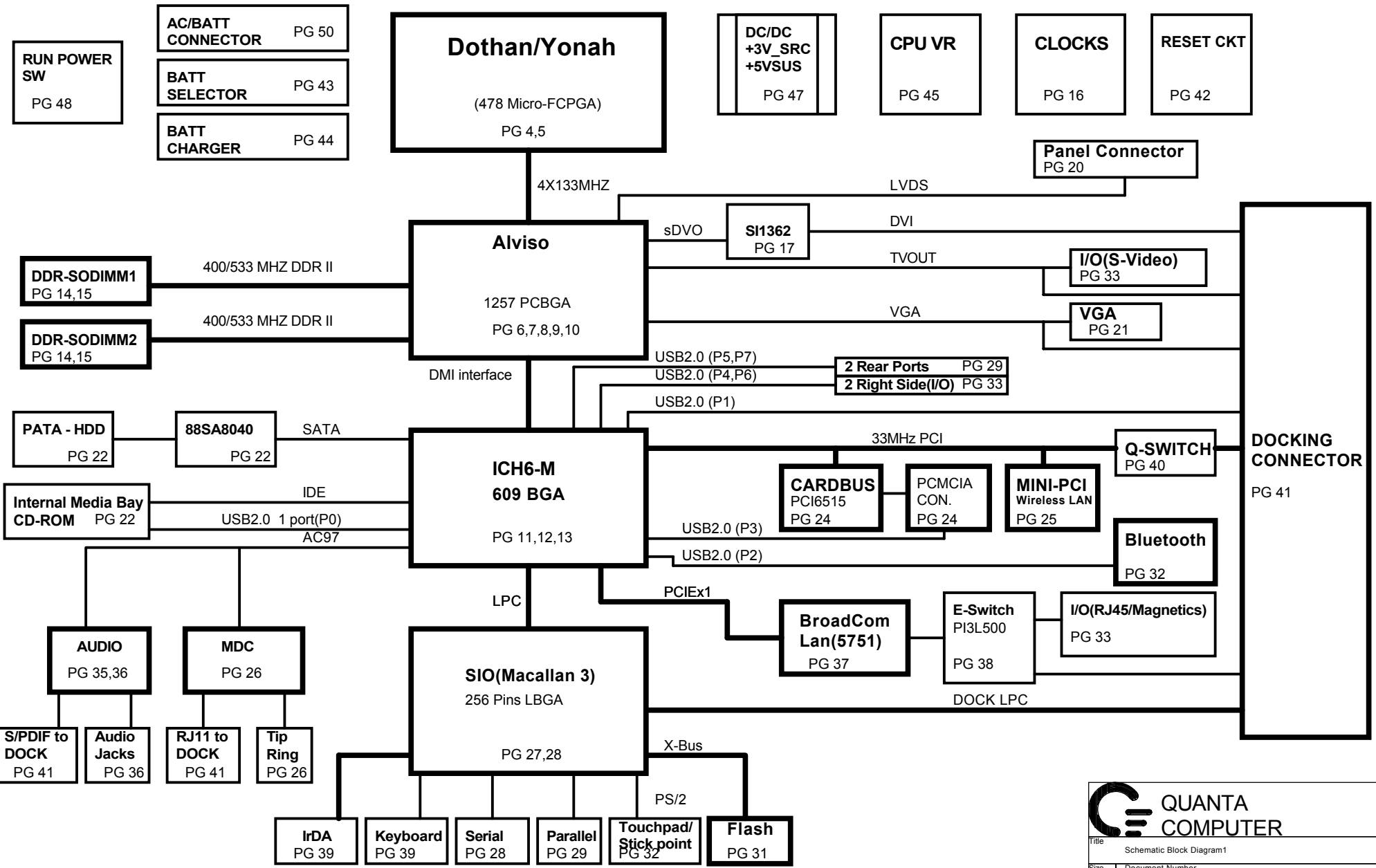


AZEDA-INTEGRATED

PWA: K3885, SCHEM: J3964
VER : 3A



Blank Page



Title		
Size	Document Number	Rev
	JMSB	1A
Date:	星期五, 十月 29, 2004	Sheet 2 of 50

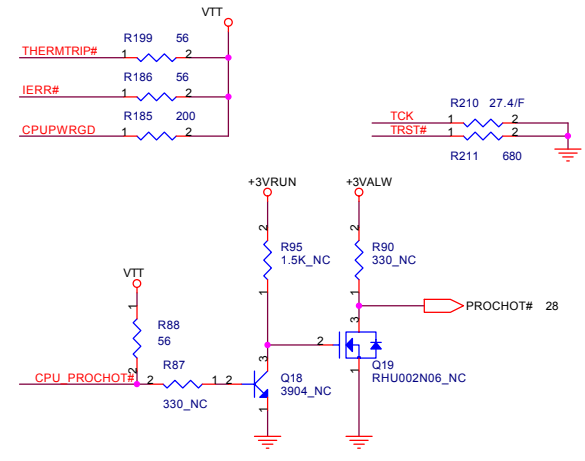
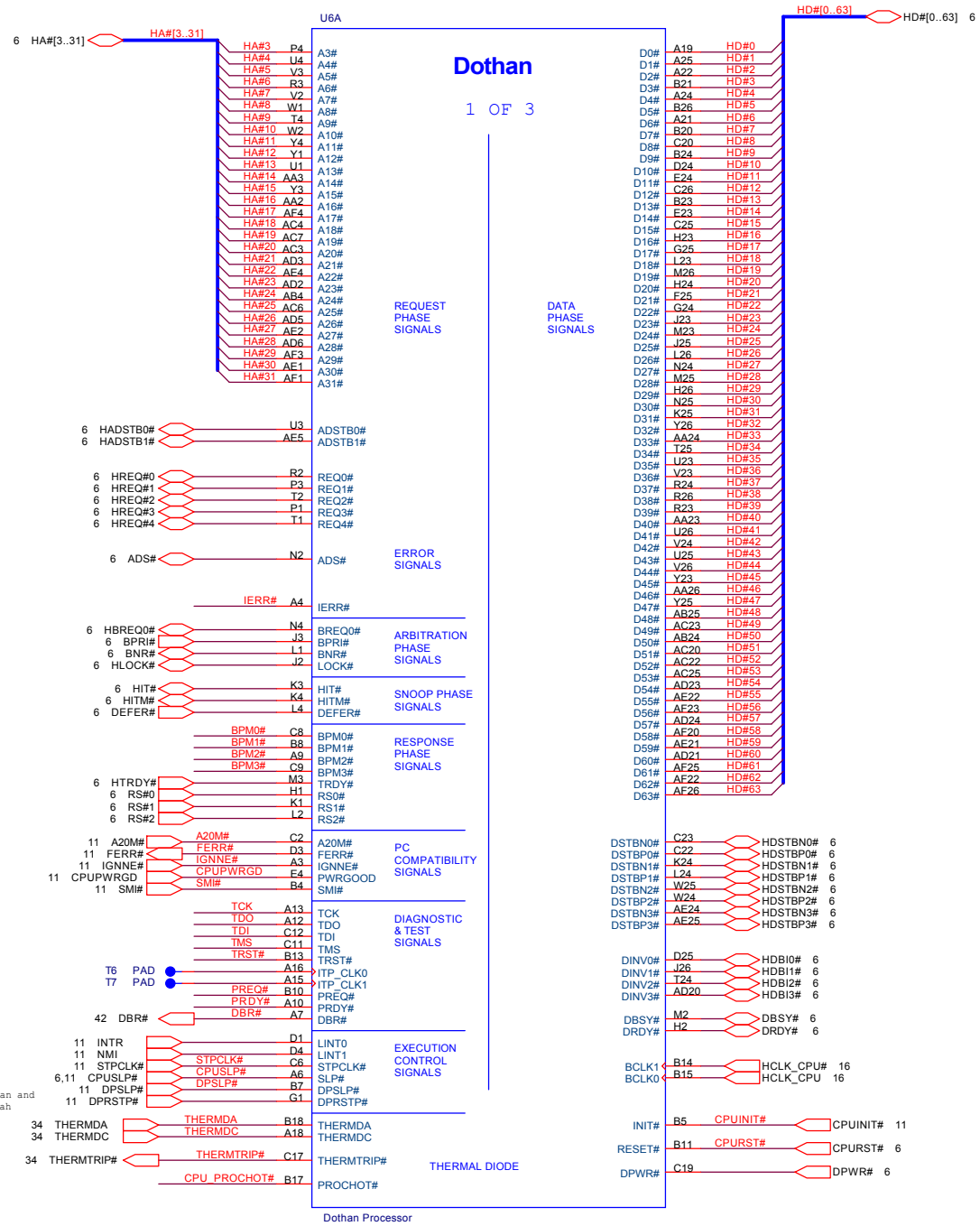
INDEX

Pg#	Description	DNI LIST
1	Schematic Block Diagram 1	
2	Blank Page	
3	Front Page	
4-5	Dothan	
6-10	Alviso	
11-13	ICH6	
14-15	DDRII SO-DIMM(200P)	
16	Clock Generator	
17	CH7306/7	
18-19	Blank Pages	
20	LCD Conn. & SSP	
21	CRT & TV Conn.	
22	SATA & IDE Conn.	
23	Screw Hole	
24	TI PIC6515	
25	Mini PCI Conn.	
26	MDC Conn.	
27-28	SIO (LPC47N354)	
29	SERIAL PORT & USB	
30	PARALLEL CONN.	
31	Flash ROM	
32	TOUCH PAD & BLUE TOOTH	
33	Switch Board Conn. & LED	
34	FAN & Thermal	
35-36	Audio CODEC (STAC9751) & Phone Jack	
37-38	LOM (BCM5751), Switch	
39	FIR	
40-41	Docking Conn. & Q-Switch	
42	Power Good	
43-44	Battery Selector & Charger	
45	CPU Power	
46	1.8V,0.9V,1.5V,1.05V	
47	3VALW/5V/3V/Power ON	
48	RUN Power Switch	
49	VGA DC/DC	
50	DCIN/Batt Conn.	

Power & Ground

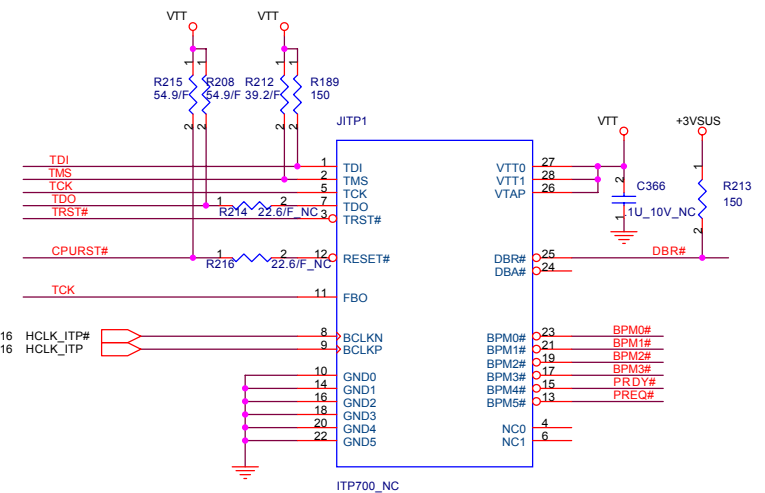
Label	Pg#	Description	Control Signal
DC_IN+		AC ADAPTER (20V)	
PBATT+		MAIN BATTERY + (10~17V)	
PWR_SRC		MAIN POWER (10~20V)	
RTC_PWR3_3V		RTC & PCL POWER (3_3V)	
+12V		+12V	DRUNPWROK
VHCORE		CPU CORE POWER (1.25/1.15V)	RUNPWROK
V1_2RUN		AGTL+ POWER (1.2V)	RUNPWROK
+3VRUN		SLP_S3# CTRLD POWER	RUN_ON
+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	
 GNDP		CPU POWER GND	
 CGNDP		CHARGER GND	
 DGNDP		DC/DC POWER GND	
 LANGND		COMBO CONN GND	

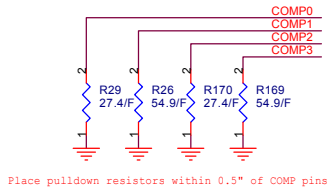




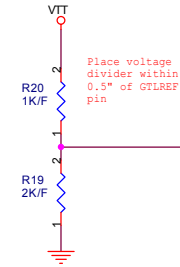
Signal	Resistor Value	Connect To	Resistor Placement
TDI	150 ohm +/- 5%	VTT	Within 2.0" of the CPU
TMS	39 ohm +/- 5%	VTT	Within 2.0" of the CPU
TRST#	680 ohm +/- 5%	GND	Within 2.0" of the CPU
TCK	27 ohm +/- 5%	GND	Within 2.0" of the CPU
TDO	Open	VTT	Within 2.0" of the CPU
ITP_EN	R268 Depop	+3VRUN	Close to CR410M Pins

Note: Populate R214, R216, C366, and R268 when ITP connector is populated.





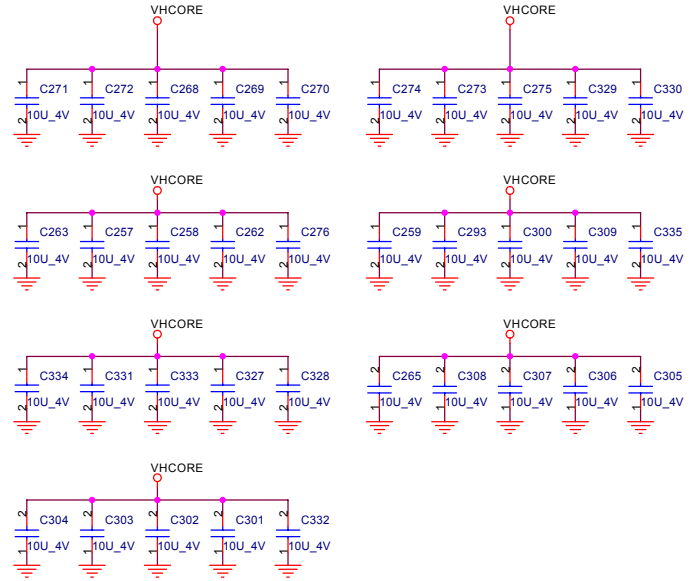
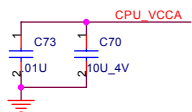
Place pulldown resistors within 0.5" of COMP pins



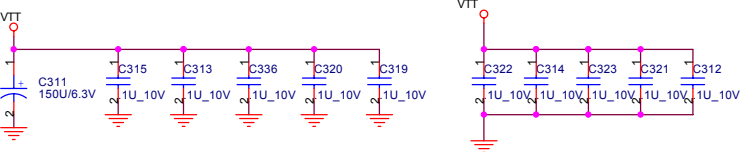
Place voltage divider within 0.5" of GTLREF pin

- COMP0 P25
- COMP1 P26
- COMP2 AB2
- COMP3 AB1

- GTLREF0 AD26
- TEST1 C5
- TEST2 F23
- NC1 B2
- RSVD2 C3
- RSVD3 AF7
- RSVD4 AC1
- RSVD5 E26



Total caps = 2633 uF
ESR = 15m ohm/5 // 5m ohm/25 // 5m ohm/15



U6B

Dothan
2 OF 3

POWER, GROUND, RESERVED SIGNALS

COMP0	P25	VSS00	A2
COMP1	P26	VSS01	A5
COMP2	AB2	VSS02	A8
COMP3	AB1	VSS03	A11
		VSS04	A14
		VSS05	A17
		VSS06	A20
		VSS07	A23
		VSS08	A26
		VSS09	B3
		VSS10	B6
		VSS11	B9
		VSS12	B12
		VSS13	B16
		VSS14	B19
		VSS15	B22
		VSS16	C1
		VSS17	C4
		VSS18	C7
		VSS19	C10
		VSS20	C13
		VSS21	C15
		VSS22	C18
		VSS23	C21
		VSS24	C24
		VSS25	D2
		VSS26	D5
		VSS27	D7
		VSS28	D9
		VSS29	D11
		VSS30	D13
		VSS31	D15
		VSS32	D17
		VSS33	D19
		VSS34	D21
		VSS35	D23
		VSS36	D26
		VSS37	D28
		VSS38	E3
		VSS39	E6
		VSS40	E8
		VSS41	E10
		VSS42	E12
		VSS43	E14
		VSS44	E16
		VSS45	E18
		VSS46	E20
		VSS47	E22
		VSS48	E25
		VSS49	F4
		VSS50	F7
		VSS51	F9
		VSS52	F11
		VSS53	F13
		VSS54	F15
		VSS55	F17
		VSS56	F19
		VSS57	F21
		VSS58	F24
		VSS59	G2
		VSS60	G6
		VSS61	G22
		VSS62	G23
		VSS63	G26
		VSS64	H3
		VSS65	H5
		VSS66	H21
		VSS67	H25
		VSS68	J1
		VSS69	J4
		VSS70	J6
		VSS71	J22
		VSS72	J24
		VSS73	K2
		VSS74	K5
		VSS75	K21
		VSS76	K23
		VSS77	K26
		VSS78	L3
		VSS79	L6
		VSS80	L22
		VSS81	L26
		VSS82	M1
		VSS83	M4
		VSS84	M5
		VSS85	M21
		VSS86	M24
		VSS87	N3
		VSS88	N6
		VSS89	N22
		VSS90	N23
		VSS91	N26
		VSS92	P2
		VSS93	P5
		VSS94	P21
		VSS95	P24
		VSS96	R1
		VSS97	R4
		VSS98	
		VSS99	

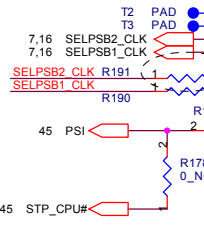
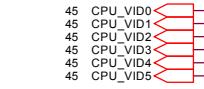
U6C

Dothan
3 OF 3

POWER, GROUND AND NC

VID

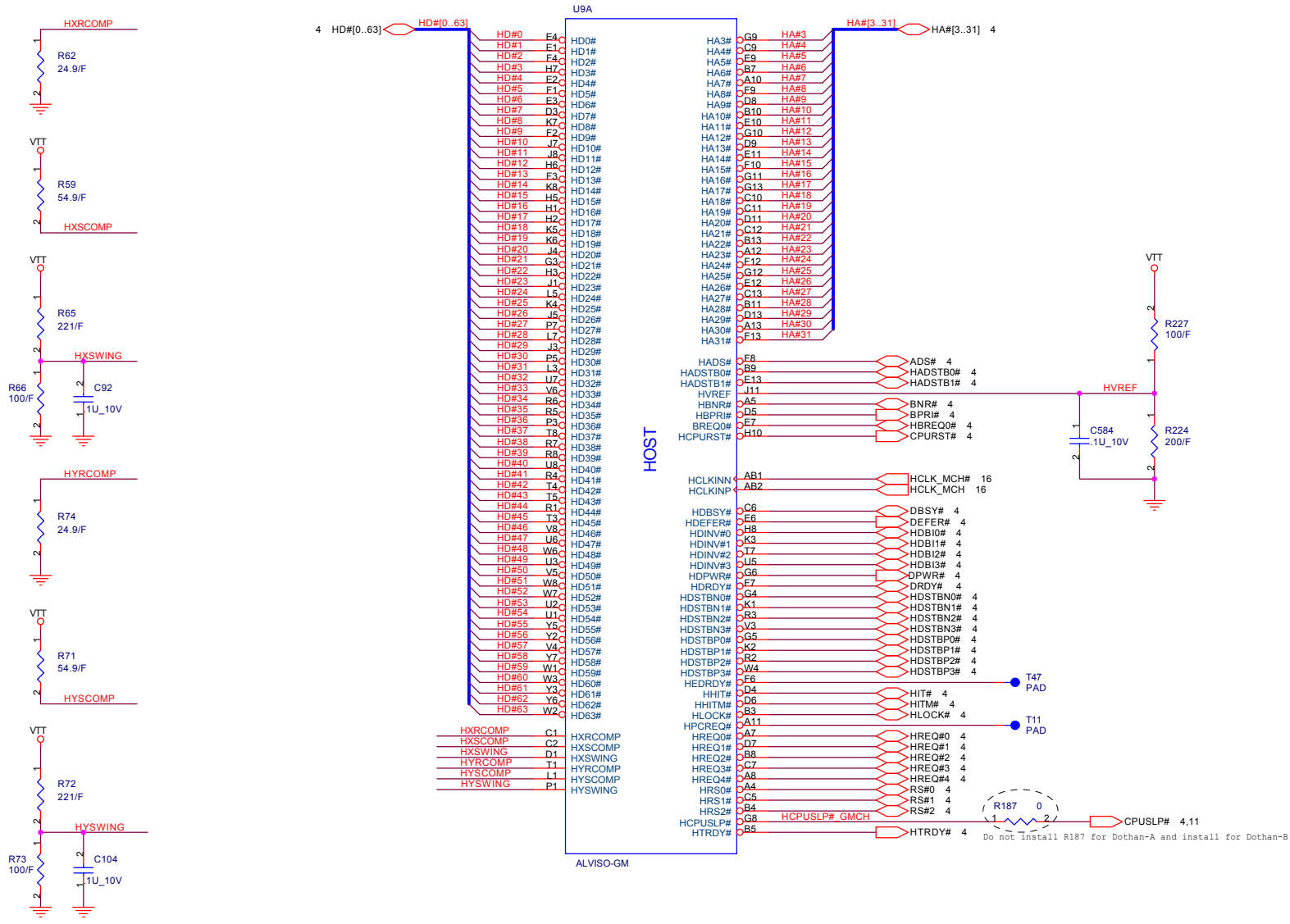
D10	VCCP0	VSS120	W23
D12	VCCP1	VSS121	W26
D14	VCCP2	VSS122	Y2
D16	VCCP3	VSS123	Y5
E11	VCCP4	VSS124	Y21
E13	VCCP5	VSS125	Y24
E15	VCCP6	VSS126	AA1
F10	VCCP7	VSS127	AA4
F12	VCCP8	VSS128	AA6
F14	VCCP9	VSS129	AA8
F16	VCCP10	VSS130	AA10
K6	VCCP11	VSS131	AA12
L5	VCCP12	VSS132	AA14
L21	VCCP13	VSS133	AA16
M2	VCCP14	VSS134	AA18
M22	VCCP15	VSS135	AA20
N5	VCCP16	VSS136	AA22
N21	VCCP17	VSS137	AA25
P6	VCCP18	VSS138	AB3
P22	VCCP19	VSS139	AB5
R5	VCCP20	VSS140	AB7
R21	VCCP21	VSS141	AB9
T6	VCCP22	VSS142	AB11
T22	VCCP23	VSS143	AB13
U21	VCCP24	VSS144	AB15
		VSS145	AB17
P23	VCCQ0	VSS146	AB19
W4	VCCQ1	VSS147	AB21
		VSS148	AB23
		VSS149	AB26
		VSS150	AC2
		VSS151	AC5
		VSS152	AC8
		VSS153	AC10
		VSS154	AC12
		VSS155	AC14
		VSS156	AC16
		VSS157	AC18
		VSS158	AC21
		VSS159	AC24
		VSS160	AD1
		VSS161	AD4
		VSS162	AD7
		VSS163	AD9
		VSS164	AD11
		VSS165	AD13
		VSS166	AD15
		VSS167	AD17
		VSS168	AD19
		VSS169	AD22
		VSS170	AD25
		VSS171	AE3
		VSS172	AE6
		VSS173	AE8
		VSS174	AE10
		VSS175	AE12
		VSS176	AE14
		VSS177	AE16
		VSS178	AE18
		VSS179	AE20
		VSS180	AE23
		VSS181	AE26
		VSS182	AF5
		VSS183	AF9
		VSS184	AF11
		VSS185	AF13
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		VSS191	

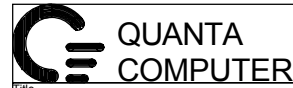
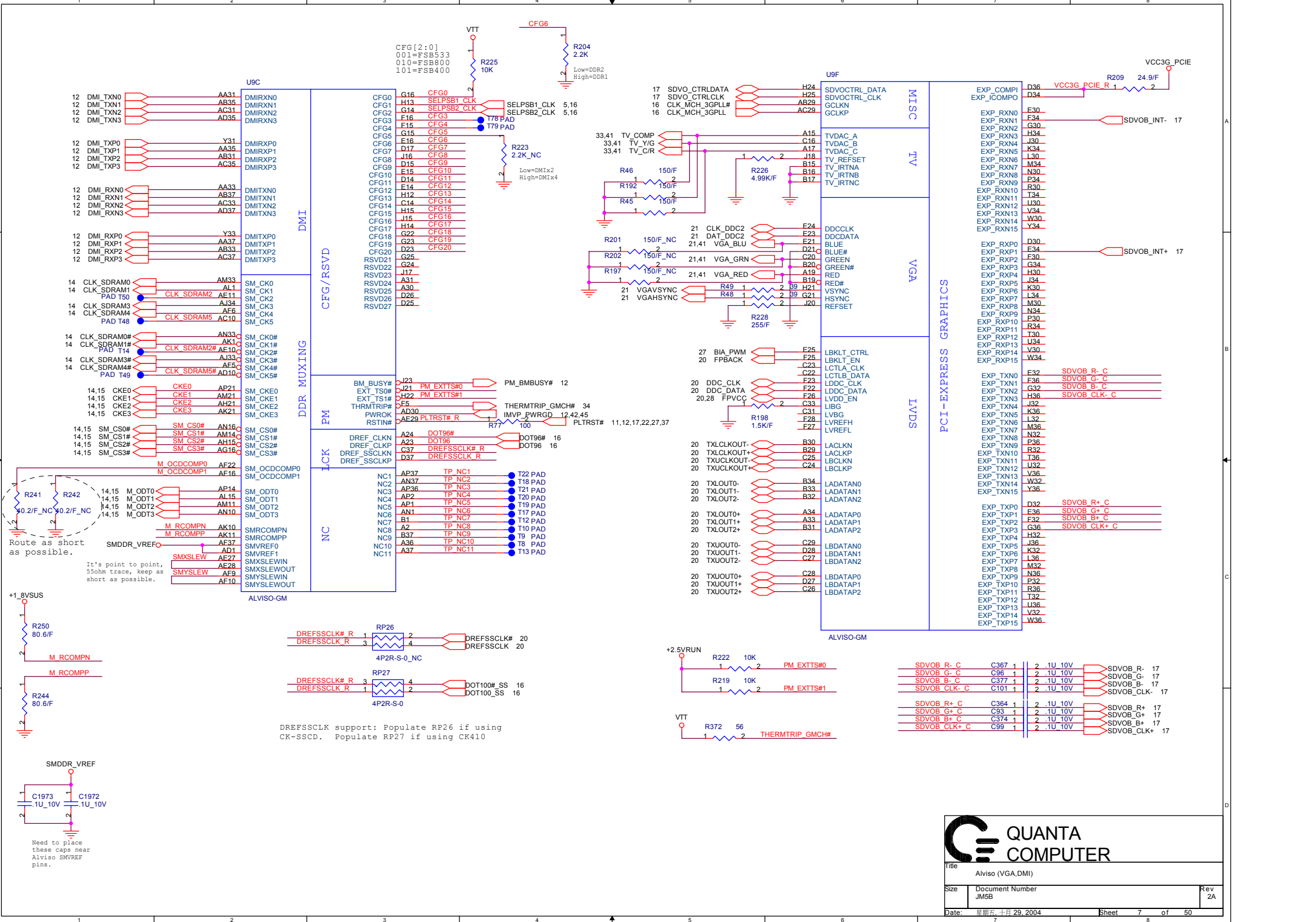


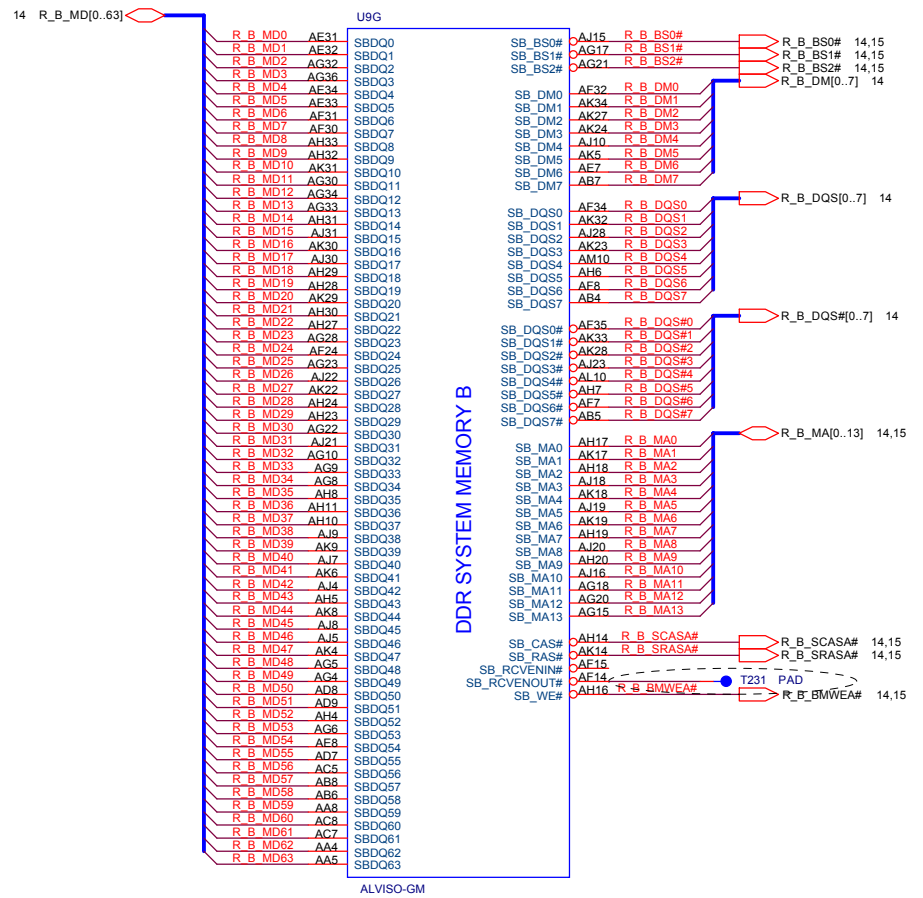
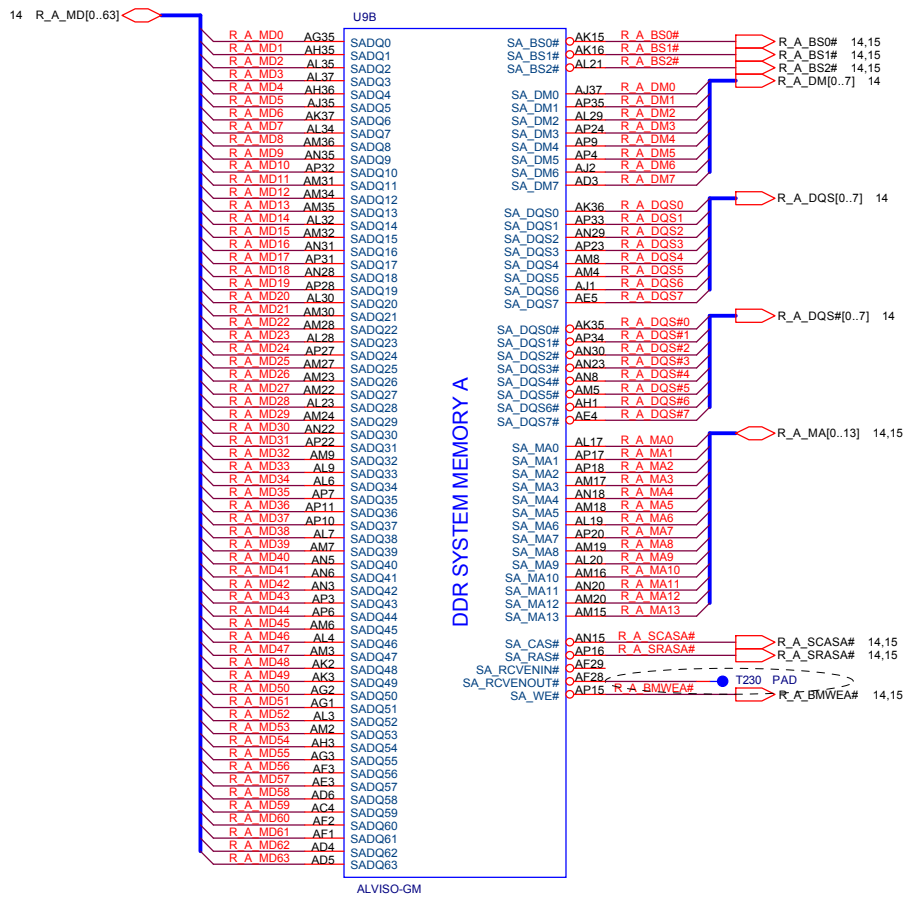
Do not install R191 for Dothan-A and install for Dothan-B

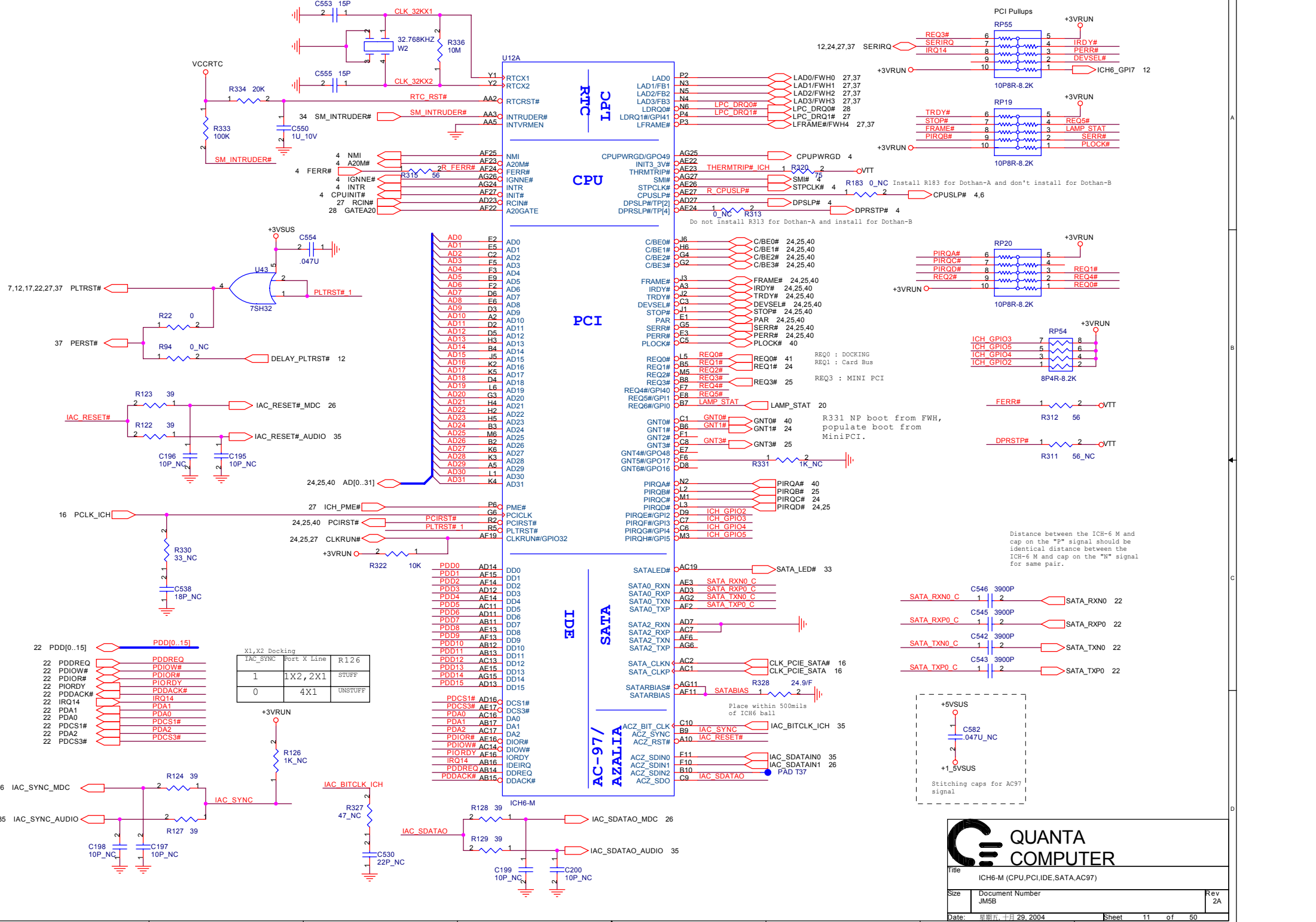


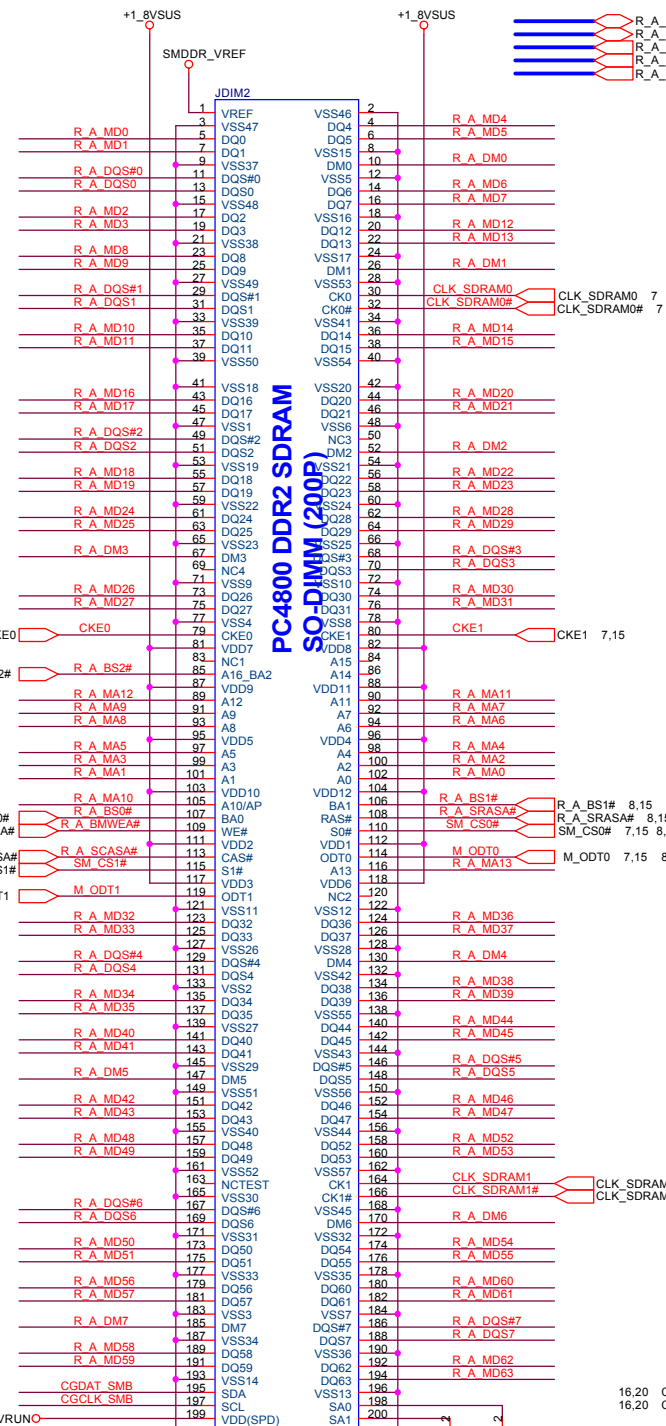
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Dothan Processor (POWER)		
Size	Document Number JMSB	Rev 2A
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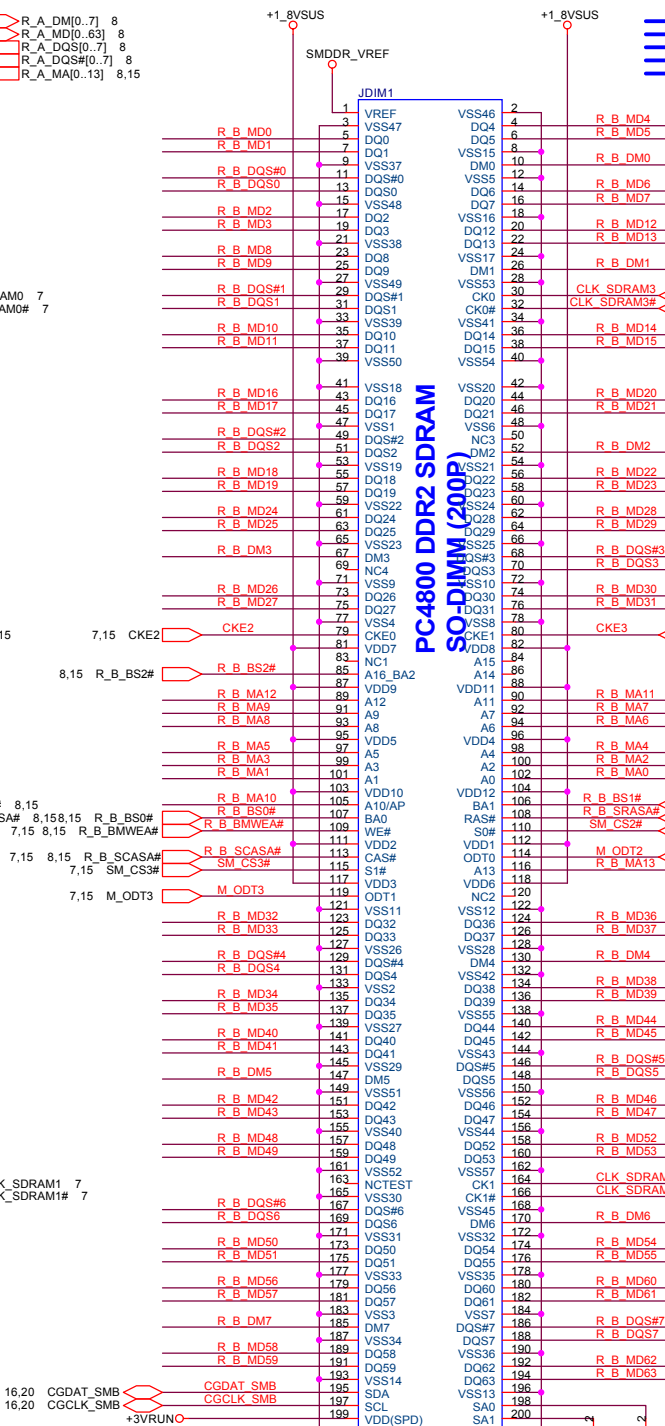






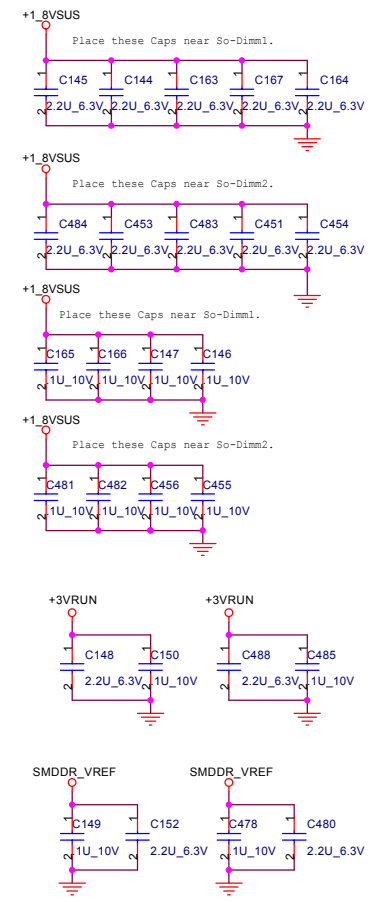
**PC4800 DDR2 SDRAM
SO-DIMM (200P)**

**CLOCK 0,1,2
CKE 0,1**



**PC4800 DDR2 SDRAM
SO-DIMM (200P)**

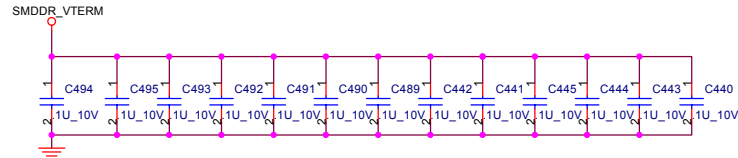
**CLOCK 3,4,5
CKE 2,3**



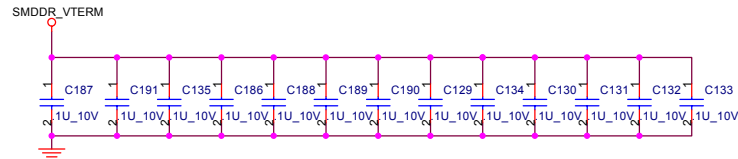
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System DRAM Expansion (200P-DDR_SODIMM X 2)		
Size	Document Number	Rev
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R_A_MA[0..13] 8,14

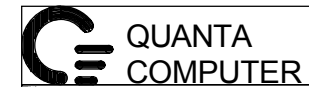
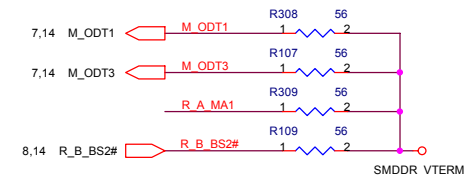
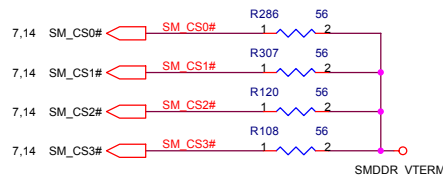
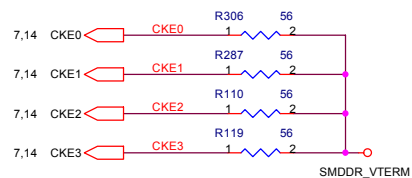
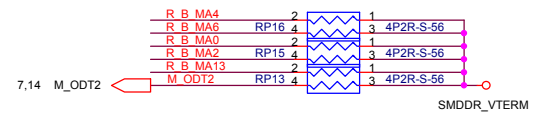
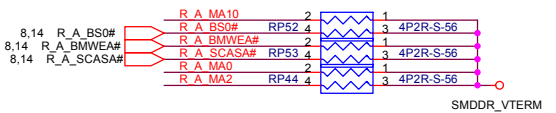
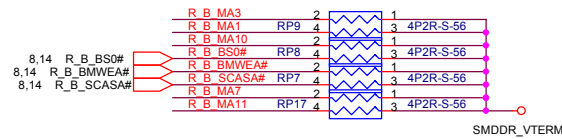
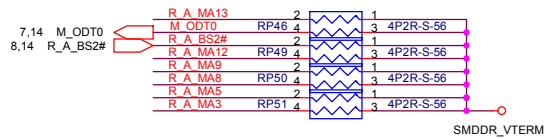
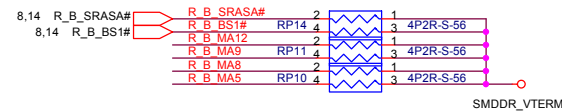
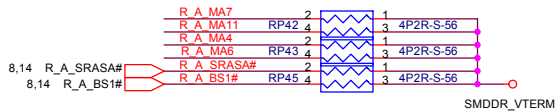
R_B_MA[0..13] 8,14



Layout note: Place 1 cap close to every 1 R-pack terminated to SMDDR_VTERM.

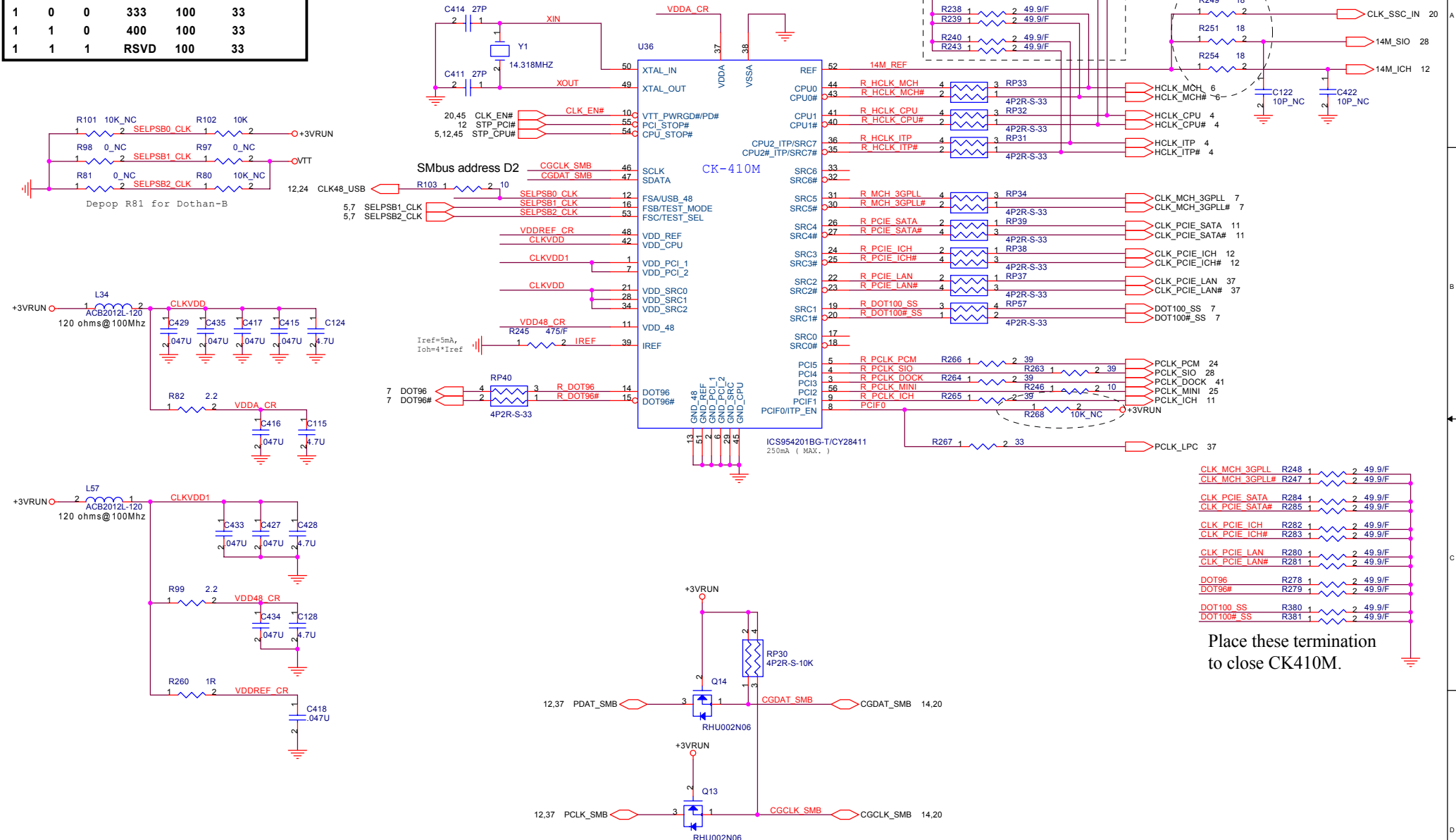


Layout note: Place 1 cap close to every 1 R-pack terminated to SMDDR_VTERM.



FSC	FSB	FSA	CPU	SRC	PCI
1	0	1	100	100	33
0	0	1	133	100	33
0	1	1	166	100	33
0	1	0	200	100	33
0	0	0	266	100	33
1	0	0	333	100	33
1	1	0	400	100	33
1	1	1	RSVD	100	33

Place these termination to close CK410M.



Place these termination to close CK410M.

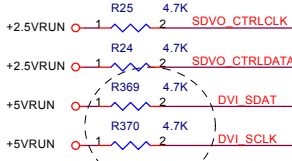
These are for backdrive issue

QUANTA COMPUTER

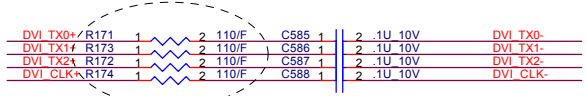
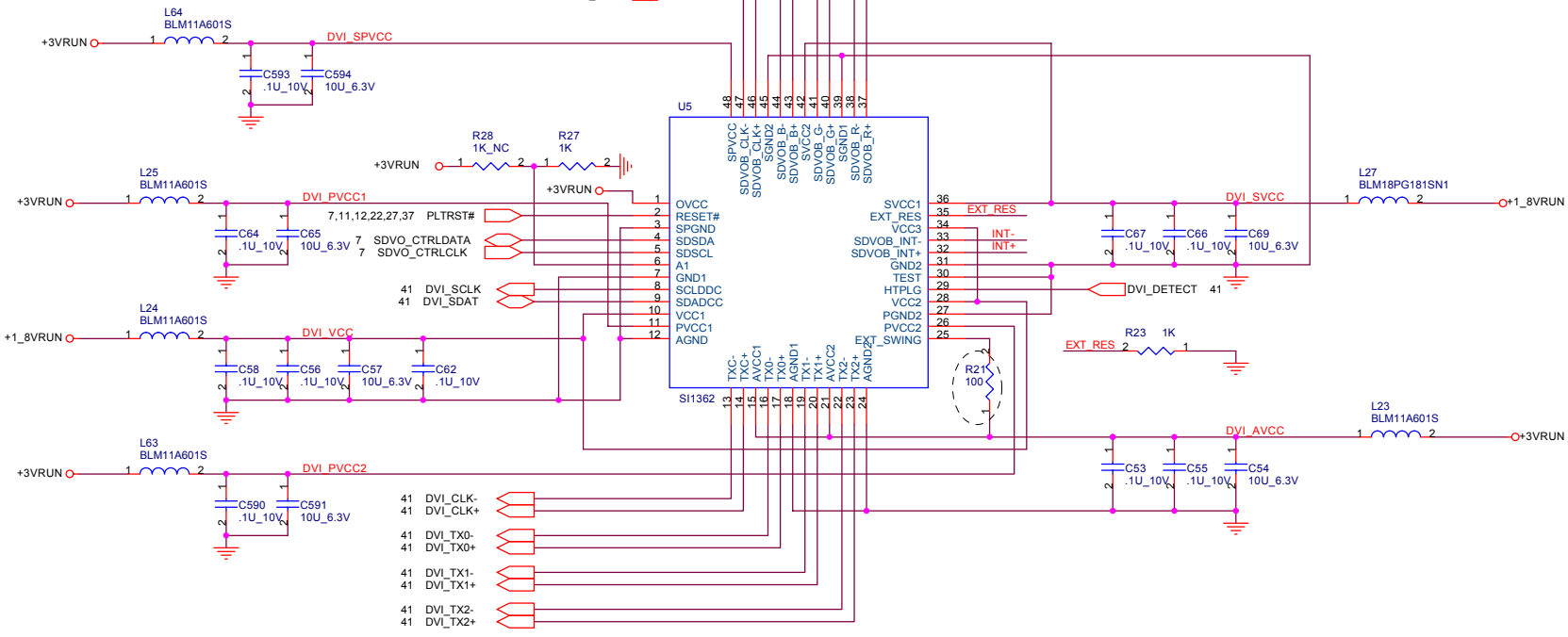
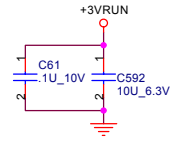
Title: CLOCK GENERATOR

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Placed this capacitor close to OVCC.




Put these 4 Resistors and 4 Capacitors close to the TX pin of SDVO device




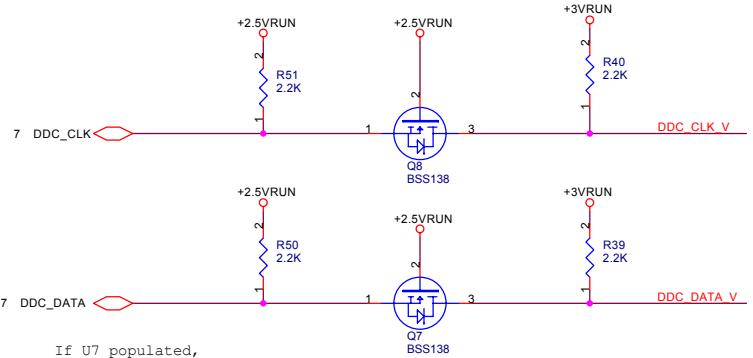
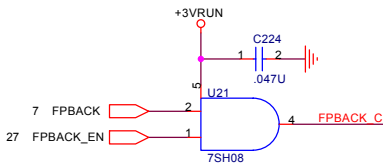
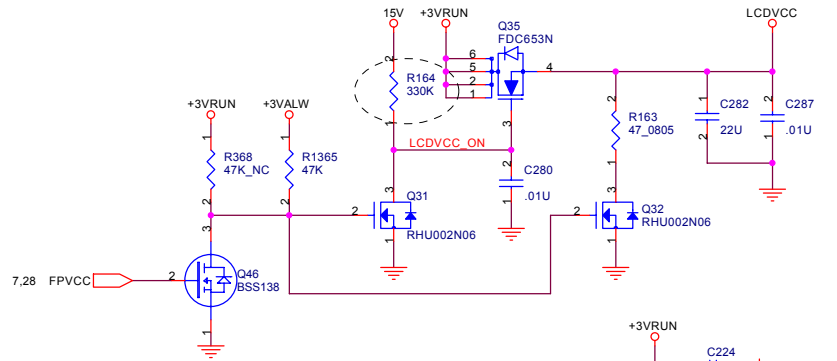
Title		
Sii 1362		
Size	Document Number	Rev
	JMSB	2A
Date:	星期五, 十月 29, 2004	Sheet 17 of 50

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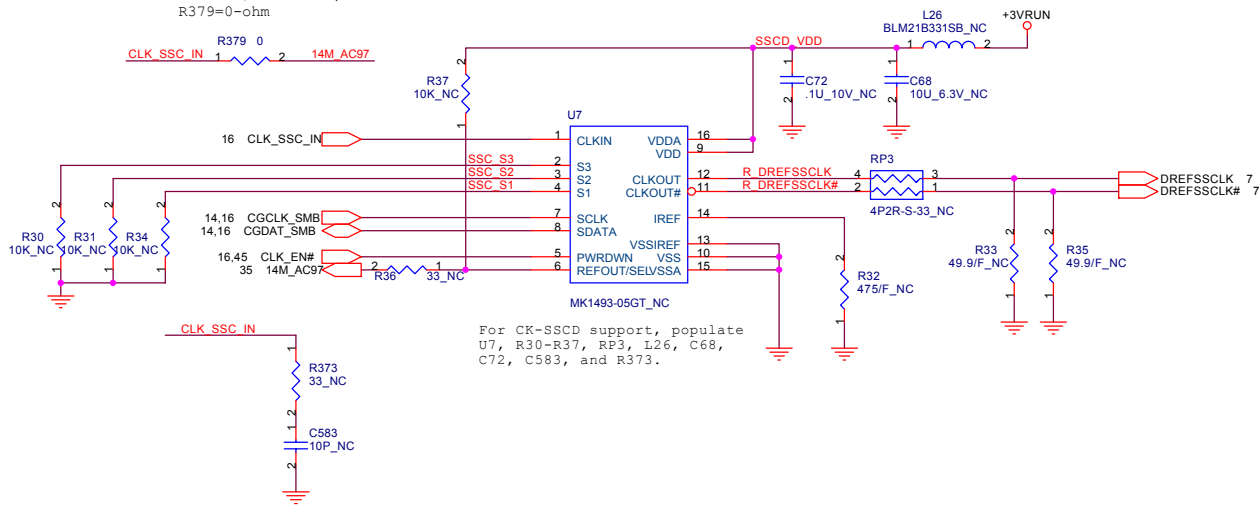
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Title		
Size	Document Number JMSB	Rev 1A
Date: 星期五, 十月 29, 2004	Sheet 18 of 50	E

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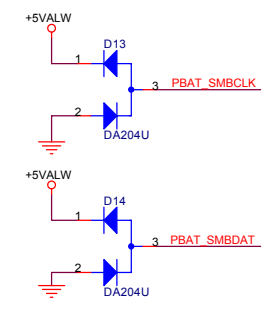
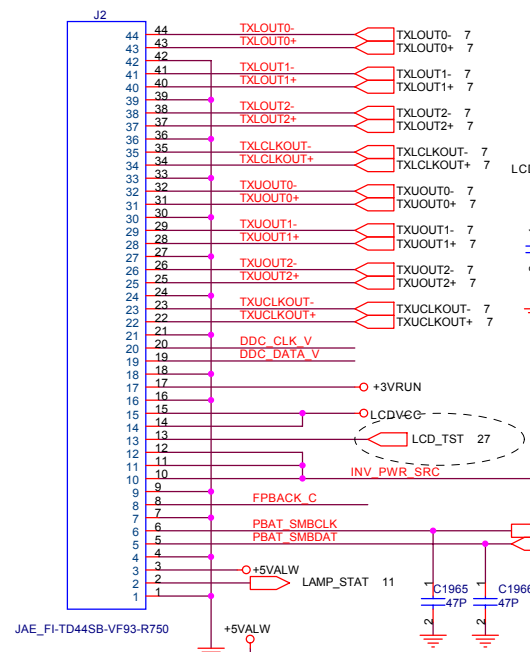
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Title		
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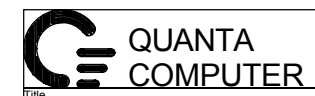
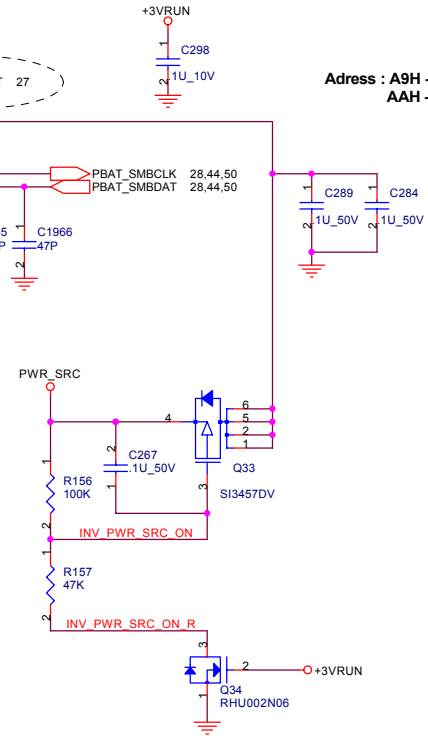
If U7 populated,
R379=NC; If U7=NC,
R379=0-ohm



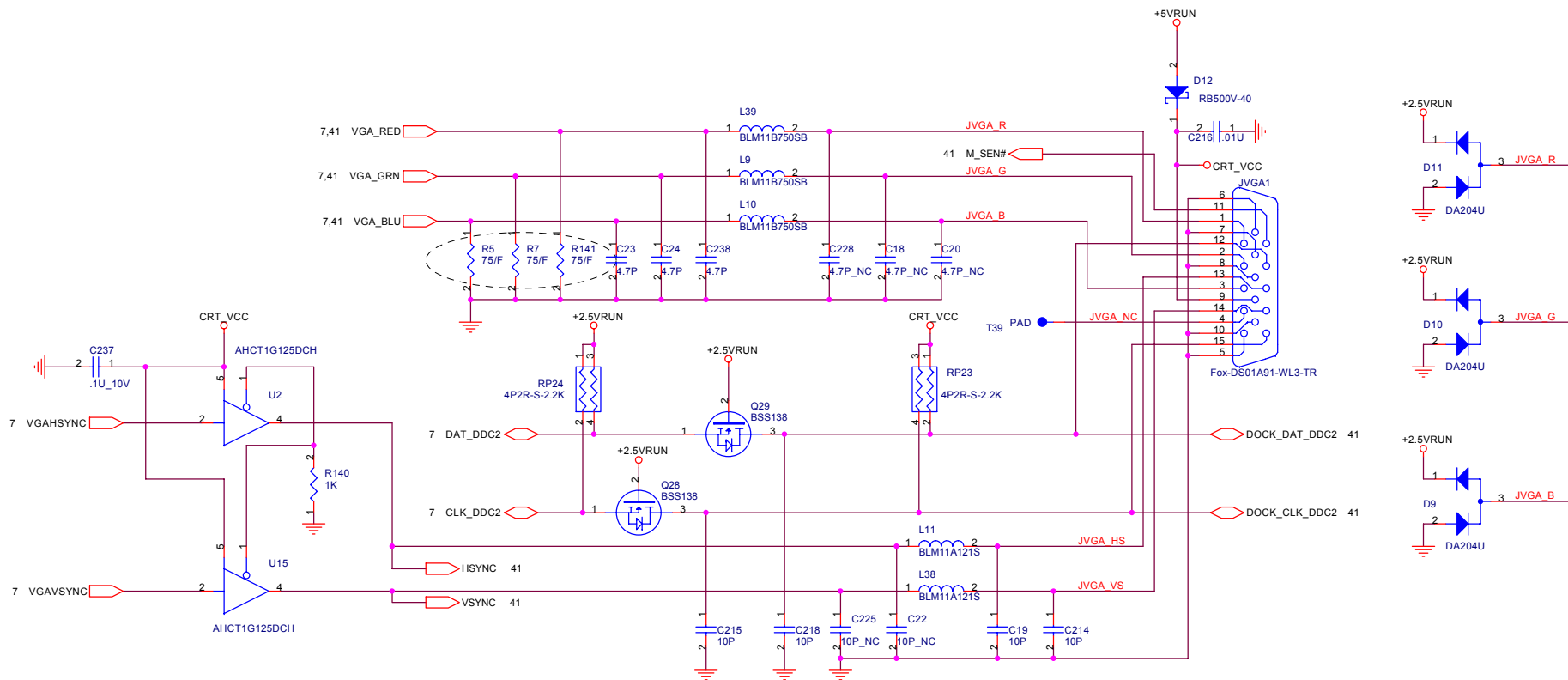
For CK-SSCD support, populate
U7, R30-R37, RP3, L26, C68,
C72, C583, and R373.



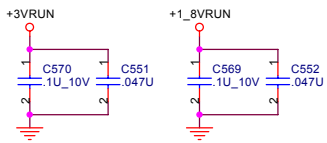
Adress : A9H --Contrast
AAH --Backlight



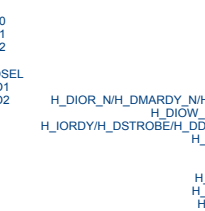
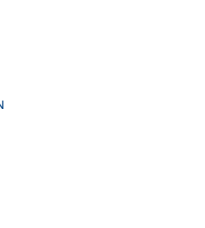
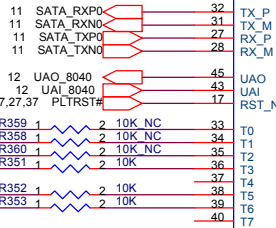
Title LCD CONN&CK-SSCD		
Size JM5B	Document Number JM5B	Rev 2A
Date 星期五, 十月 29, 2004	Sheet 20	of 50



Title CRT&TV CONN		
Size JMSB	Document Number JMSB	Rev 2A
Date: 星期五, 十月 29, 2004	Sheet 21	of 50

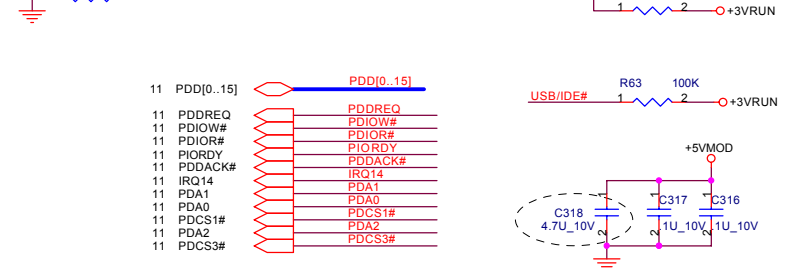
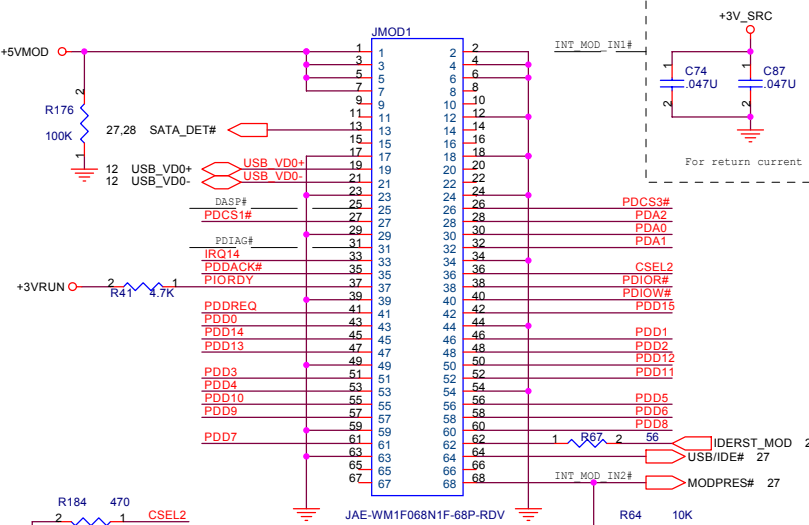
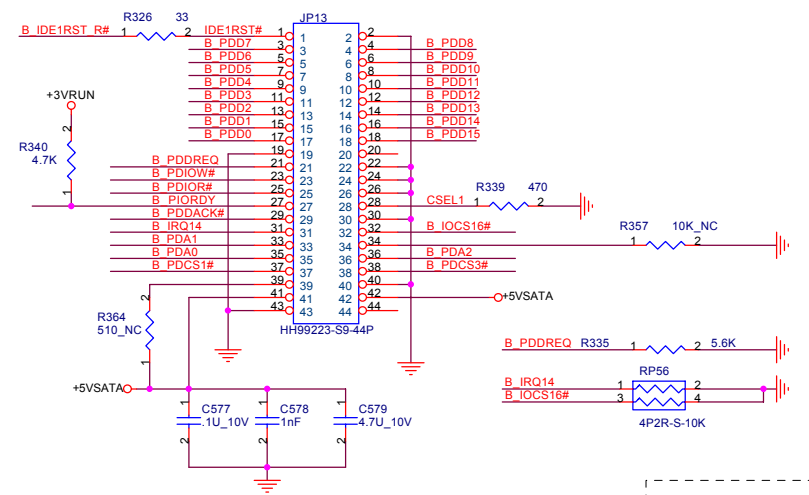
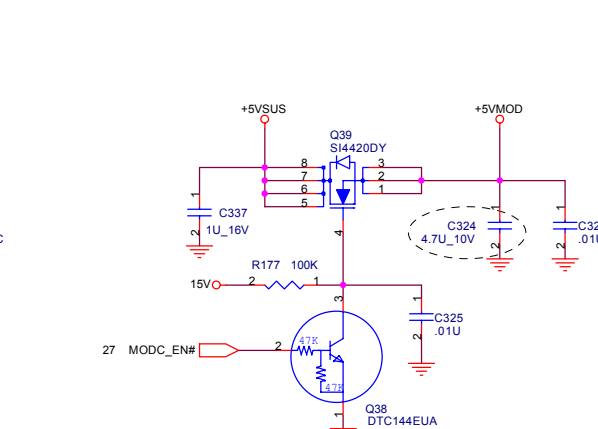
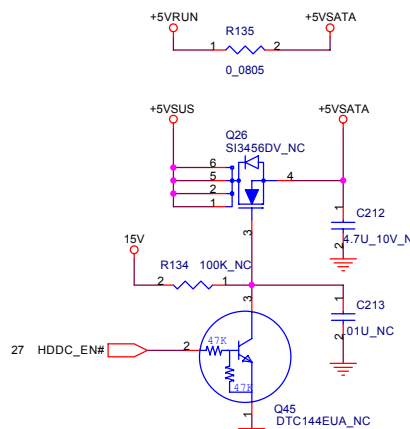
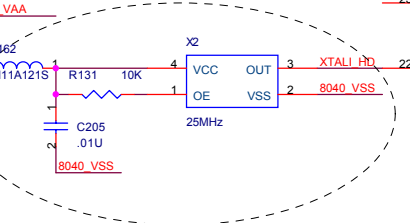


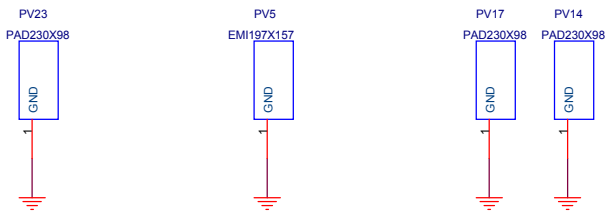
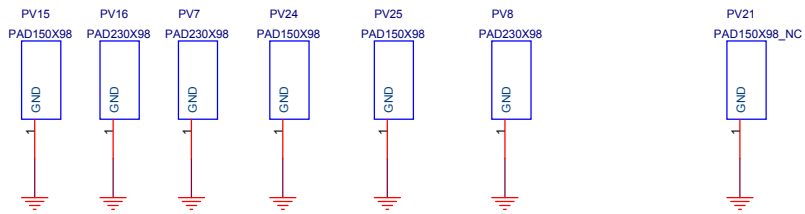
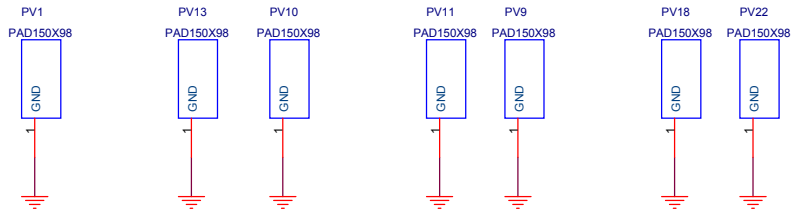
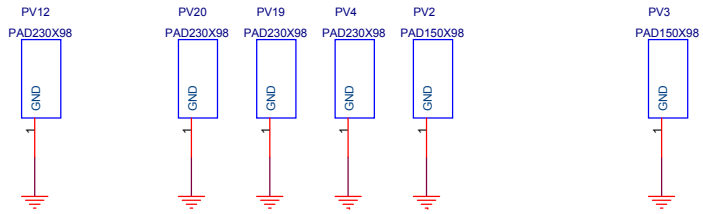
U44



DEVICE CONFIGURATION

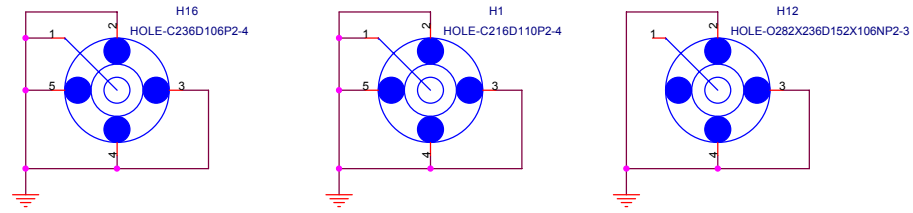
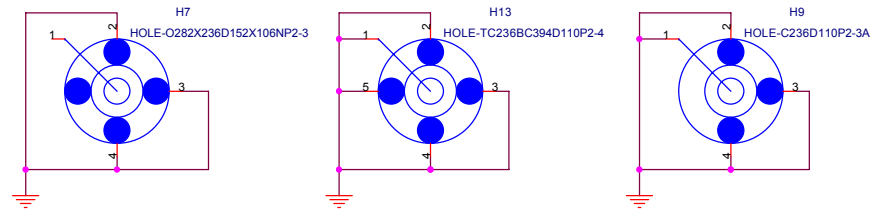
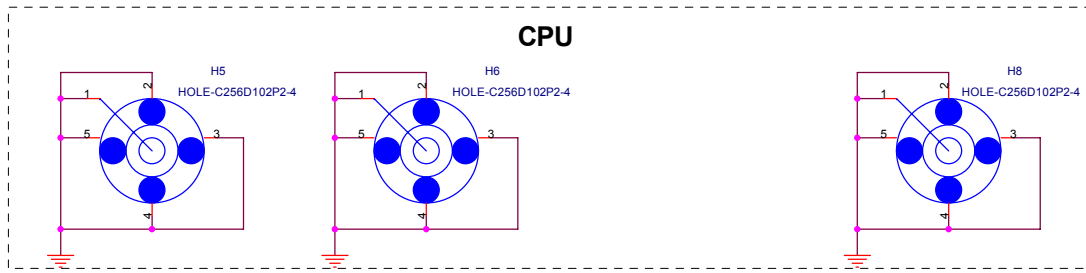
Pin Name	Pin#	Settings
T7	40	NC
T6	39	1/NC
T5	38	0
T4	37	NC
T3	36	1/NC
T2	35	1/NC
T1	34	0/NC
T0	33	1/NC
CNFG[2:0]	20, 19, 18	NC/0/NC
ATAIOSEL	21	1/NC
H_PDIA# N	46	0
H_IOCS16 N	52	1/NC



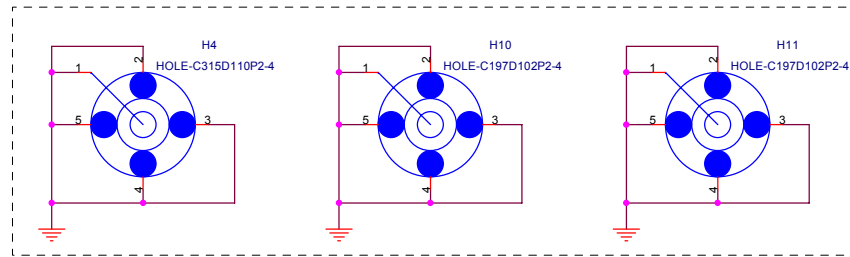


FOR AUDIO

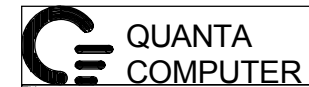
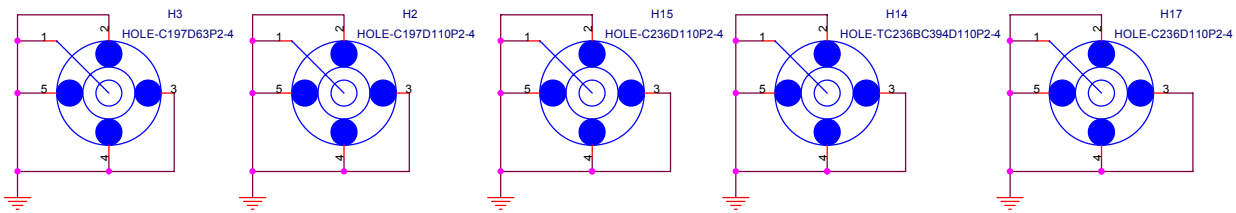
FOR DOCKING



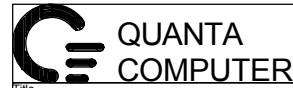
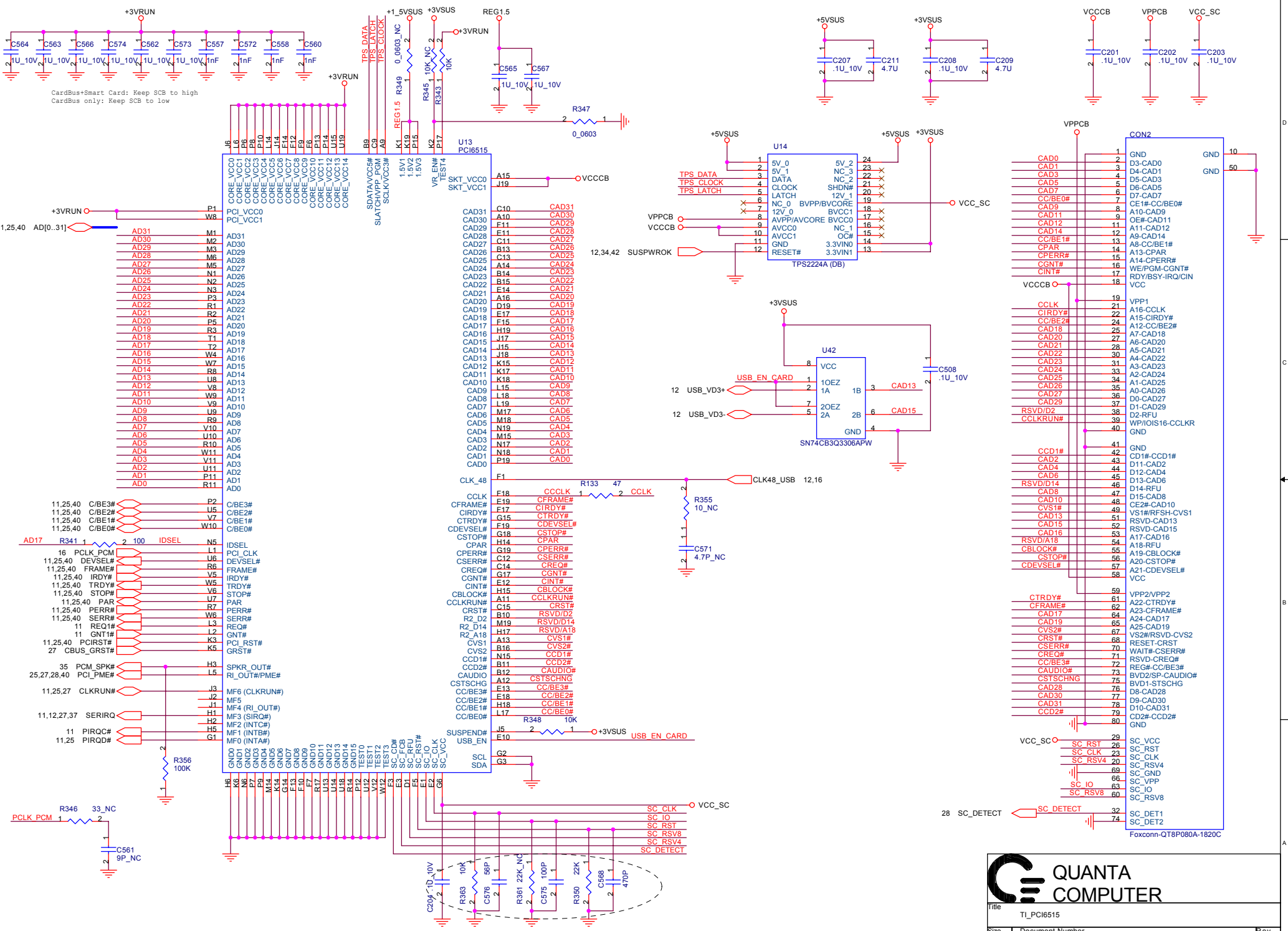
HEAT SINK

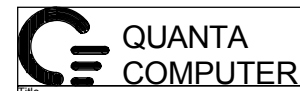
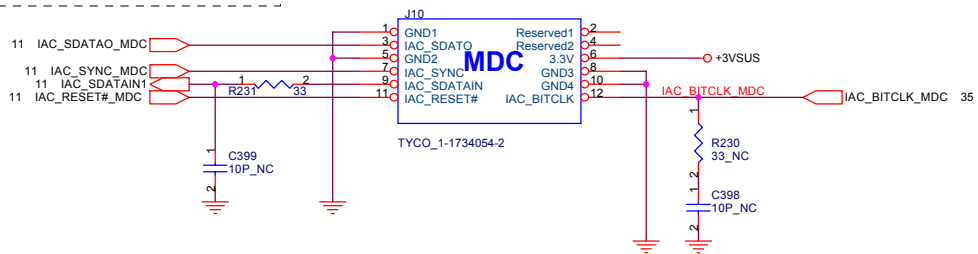
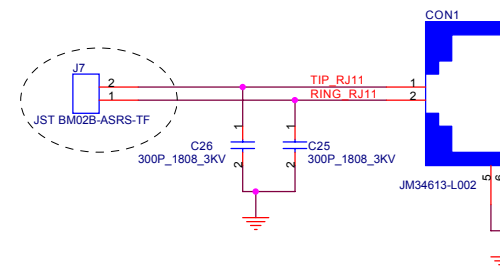
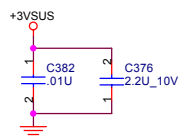
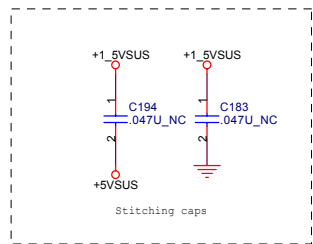


HDD

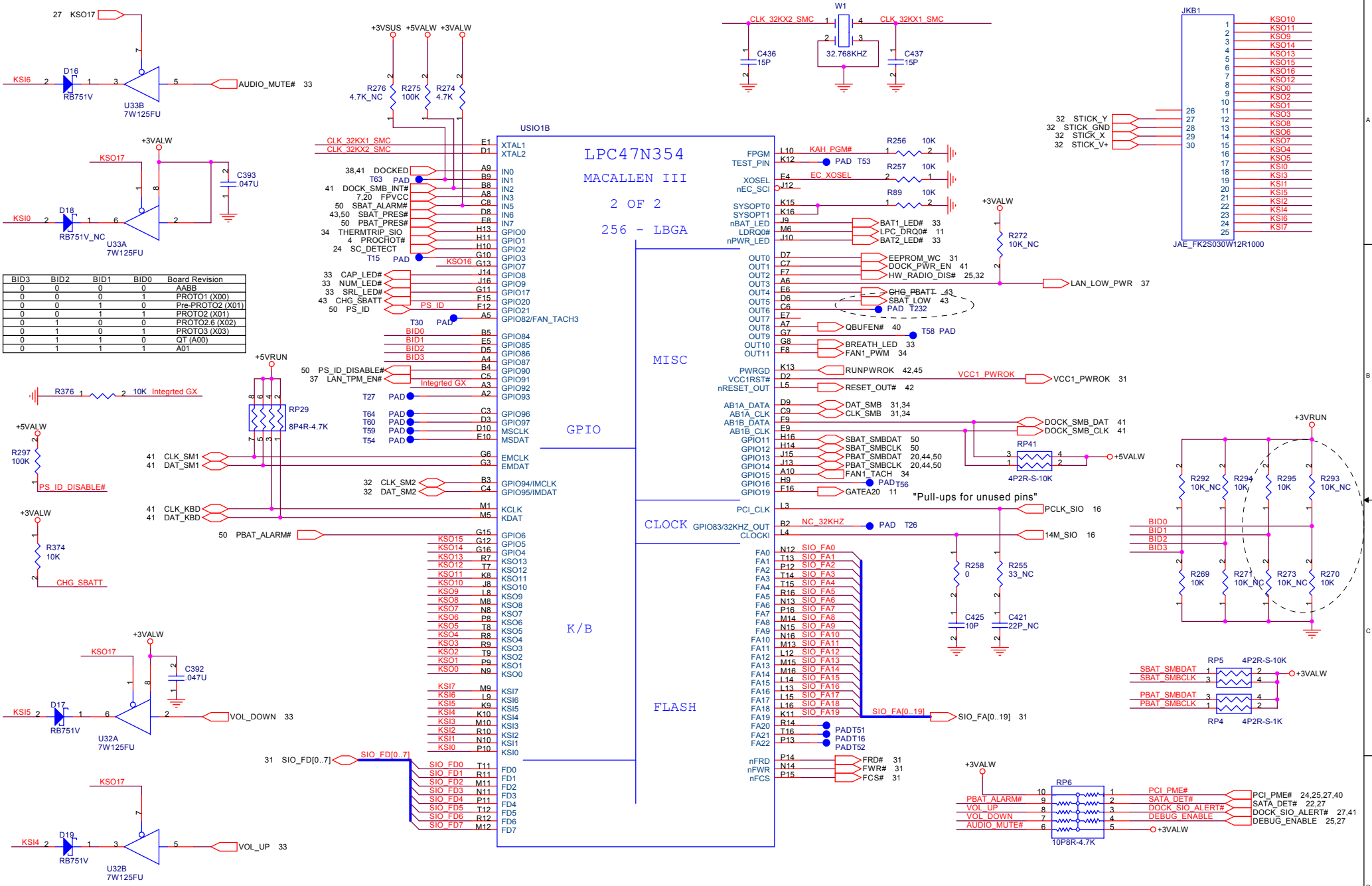


Title SCREW PAD		
Size	Document Number JM5B	Rev 2A
Date:	星期五, 十月 29, 2004	Sheet 23 of 51

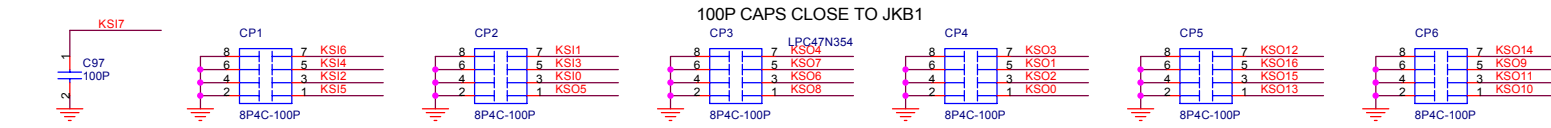




Title		
MDC CONN.		
Size	Document Number	Rev
	JMSB	2A
Date:	星期五, 十月 29, 2004	Sheet 26 of 50



BID3	BID2	BID1	BID0	Board Revision
0	0	0	0	AABB
0	0	1	0	PROTO1 (X00)
0	0	1	0	Pre-PROTO2 (X01)
0	0	1	1	PROTO2 (X01)
0	1	0	0	PROTO2.6 (X02)
0	1	0	1	PROTO3 (X03)
0	1	1	0	QT (A00)
0	1	1	1	A01

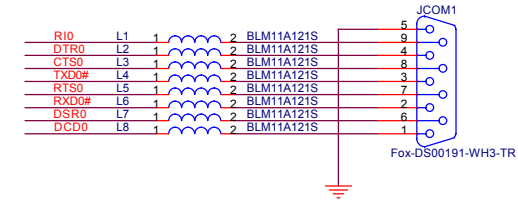
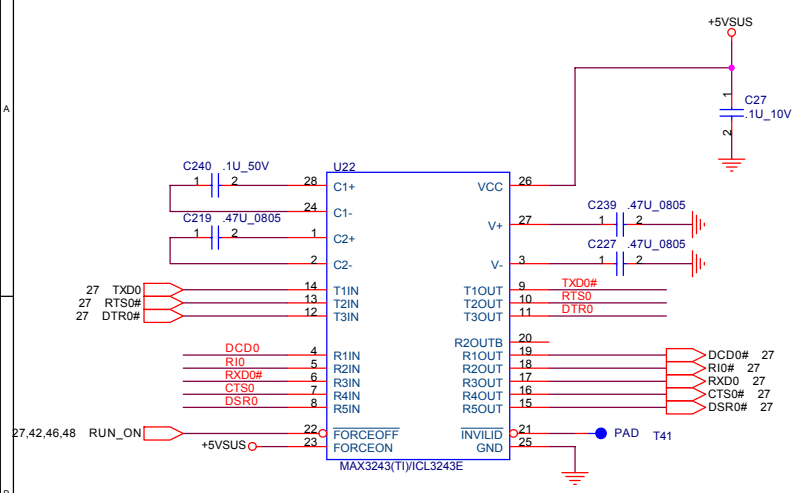


**QUANTA
COMPUTER**

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

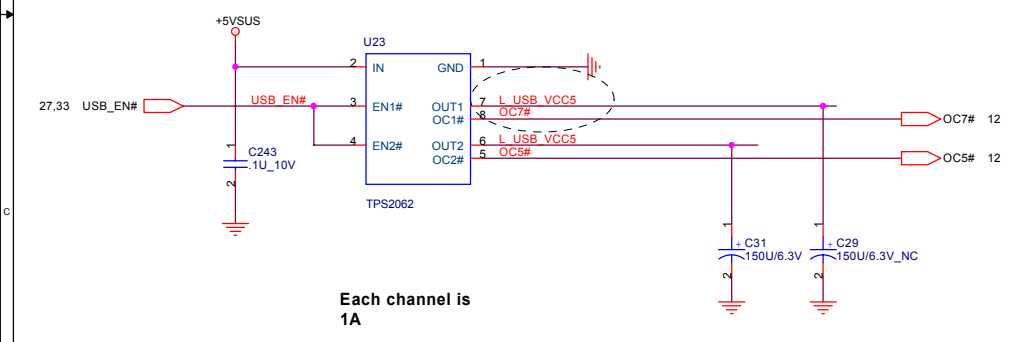
Size	Document Number JMSB	Rev 2A
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Date: 星期五, 十月 29, 2004 Sheet 28 of 50

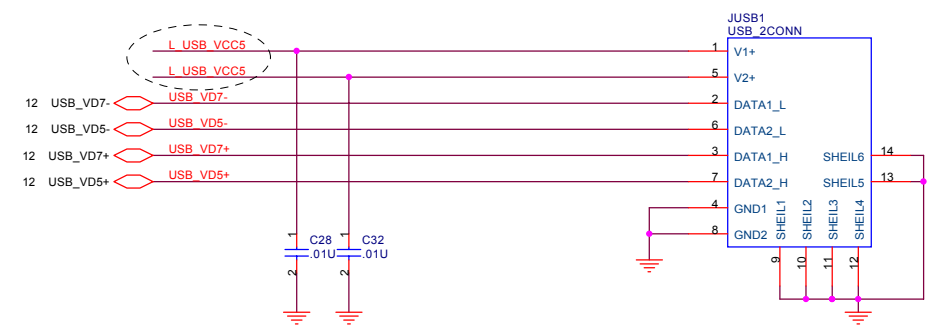


Place these beads close to JCOM1 as soon as possible

If MAX3243 pin 22 tied to RUN_ON, then it can not support Ring Out



Each channel is 1A

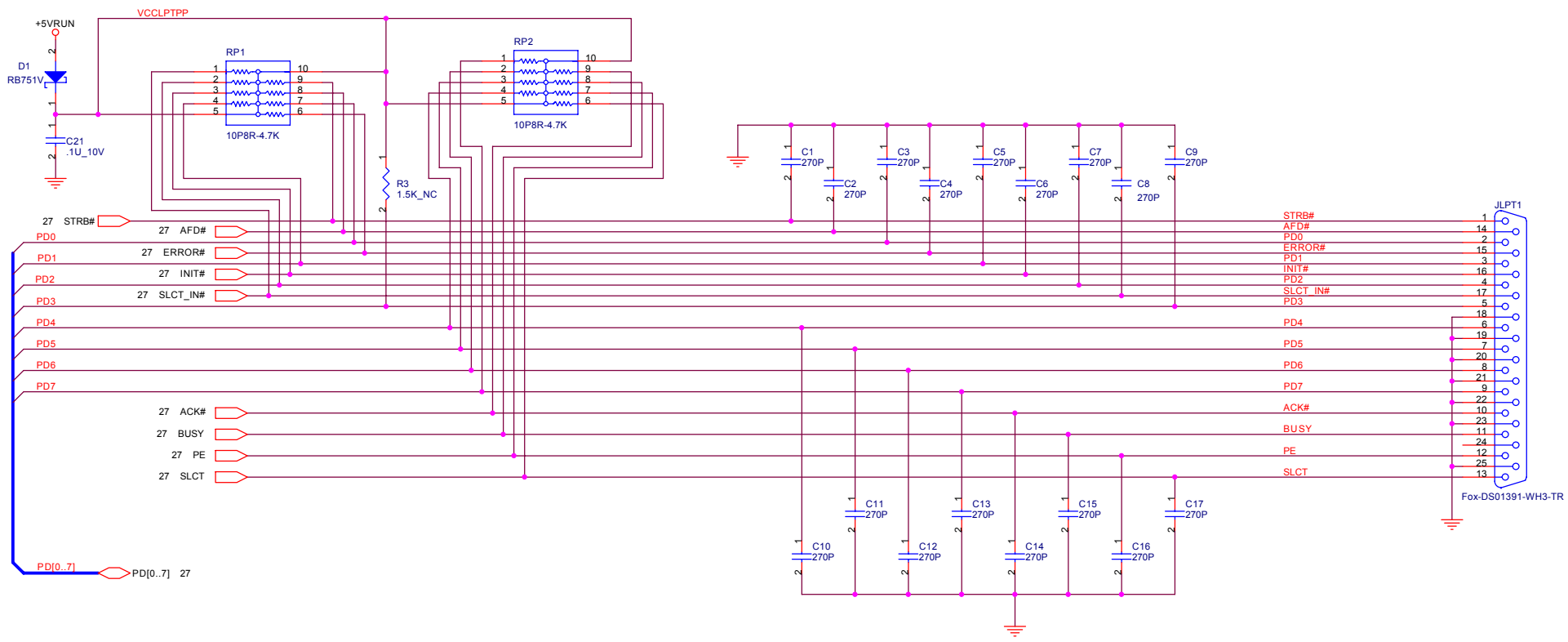


**QUANTA
COMPUTER**

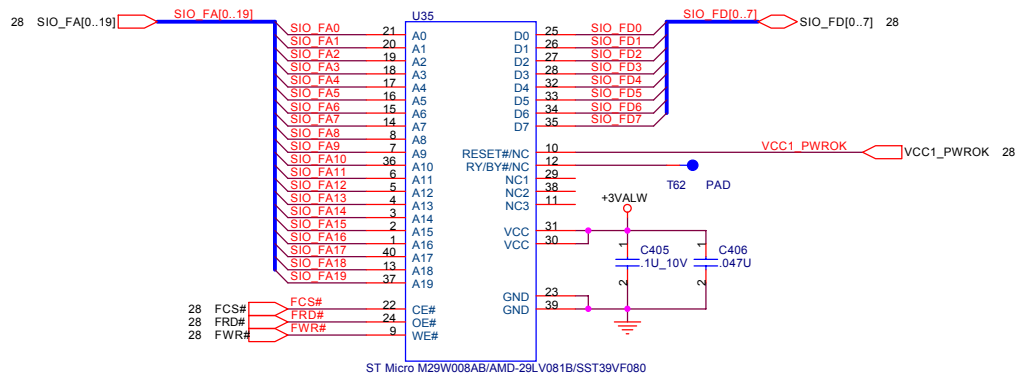
Title SERIAL PORT & USB

Size	Document Number JMSB	Rev 2A
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Date: 星期五, 十月 29, 2004 Sheet 29 of 50



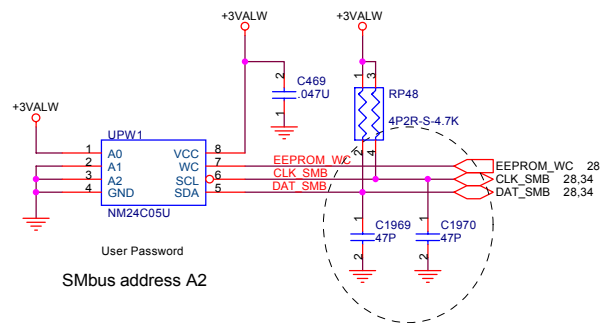
8Mbit (1M Byte),NO PLCC TYPE

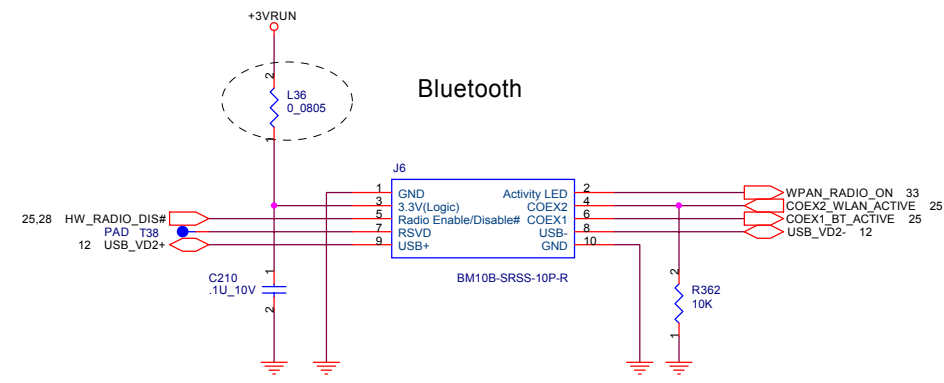
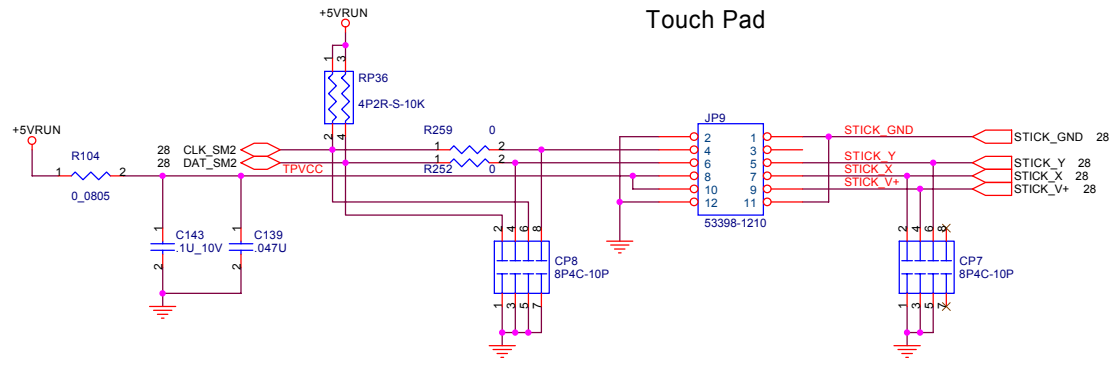


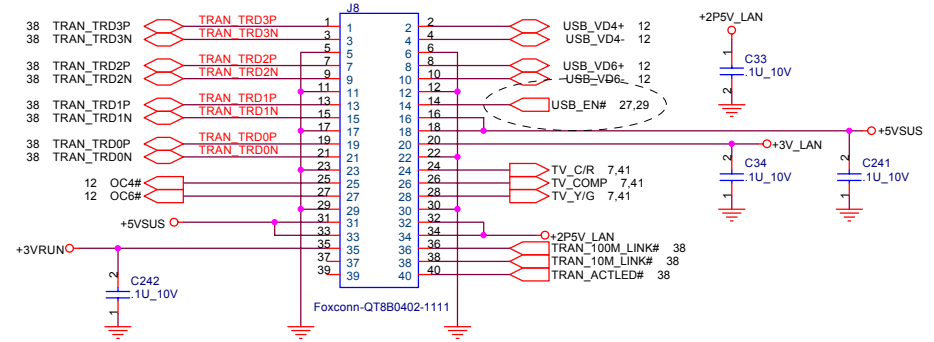
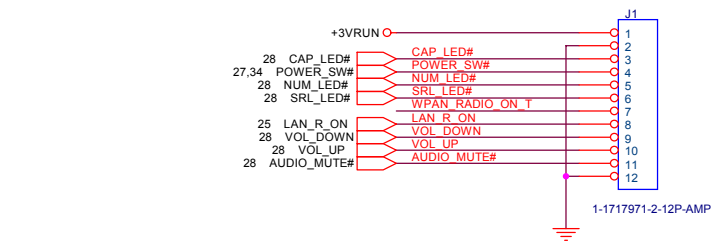
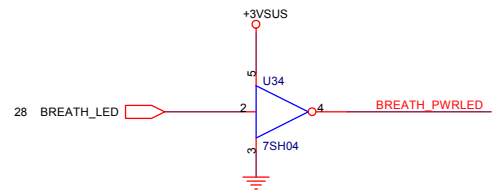
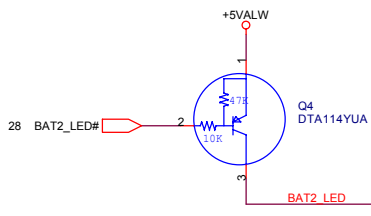
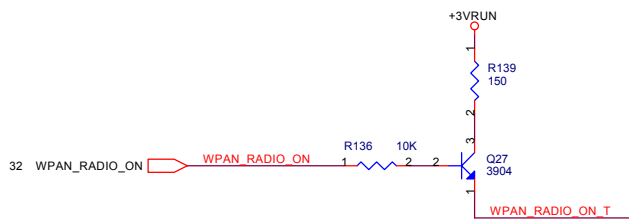
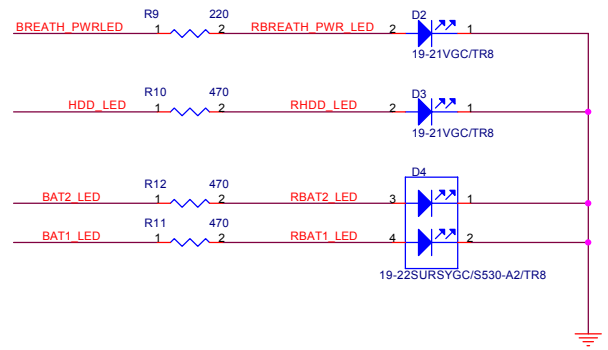
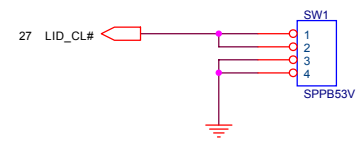
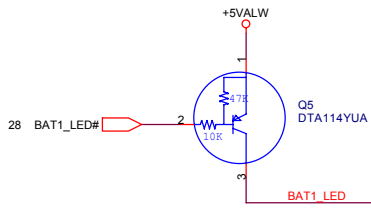
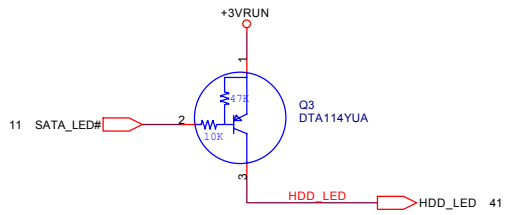
ST Micro M29W008AB/AMD-29LV081B/SST39VF080

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

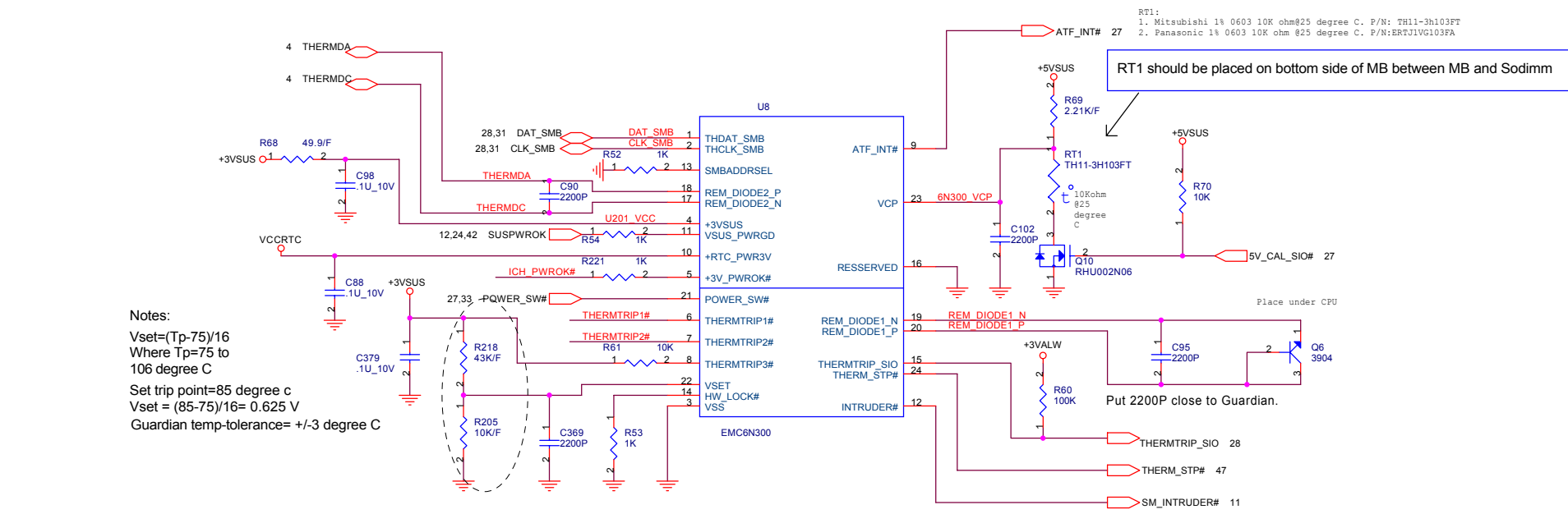
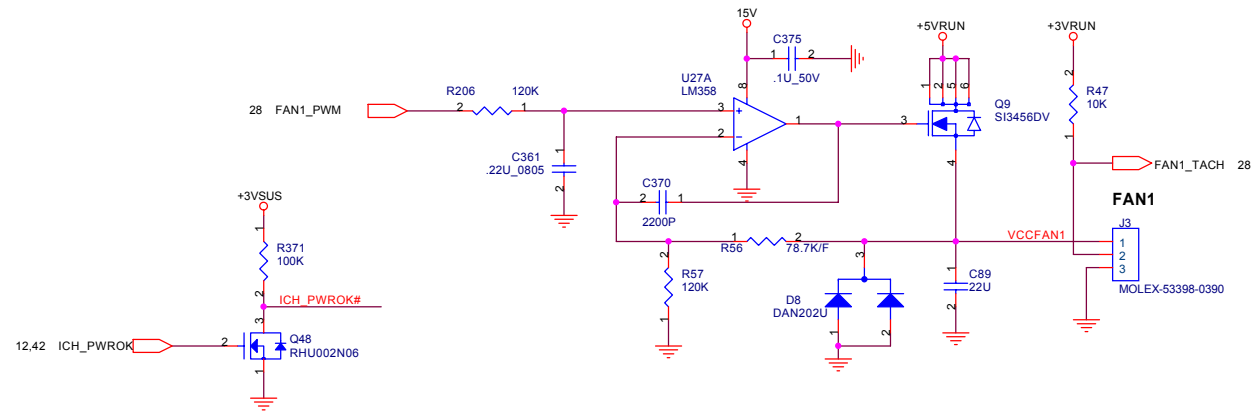
- 1.AMD-29LV081B require MAX 500nS Tready for it's hardware reset.And MAX6326_UR29 has >100mS reset timing.So we can tie it's reset# pin to +3VALW directly.
- 2.SIO has internal 20 mS delay of VCC1_PWROK



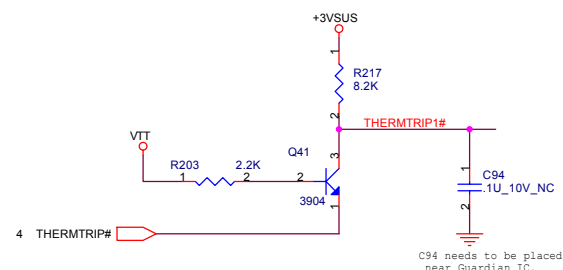




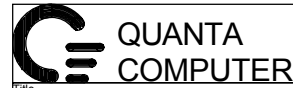
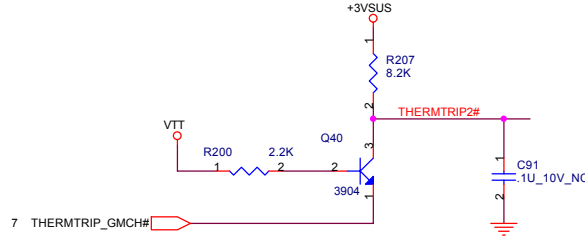
Title SWITCH & LED		
Size	Document Number JMSB	Rev 2A
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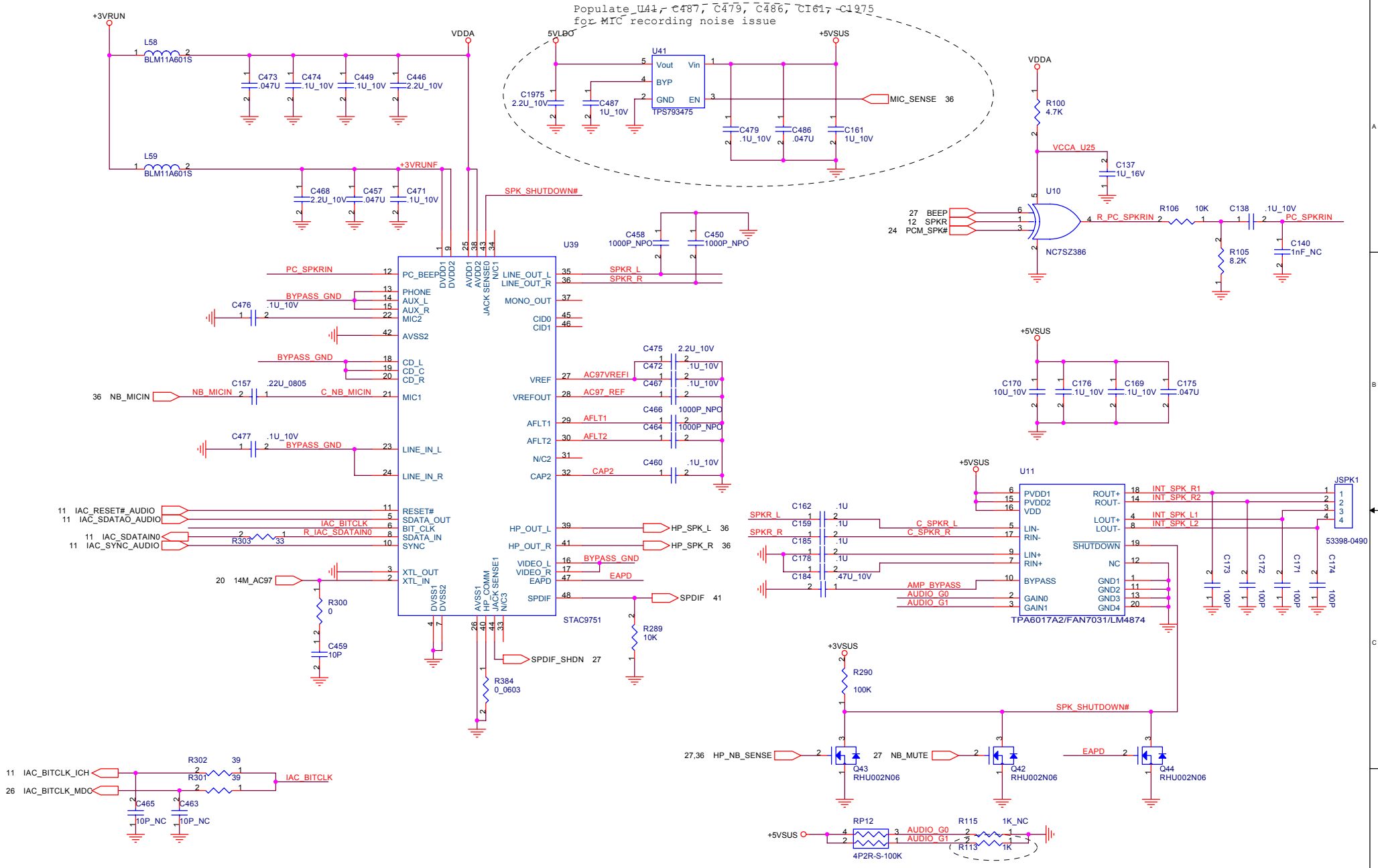
Notes:
 $V_{set} = (T_p - 75) / 16$
 Where $T_p = 75$ to 106 degree C
 Set trip point = 85 degree C
 $V_{set} = (85 - 75) / 16 = 0.625$ V
 Guardian temp-tolerance = ± 3 degree C



C94 needs to be placed near Guardian IC.



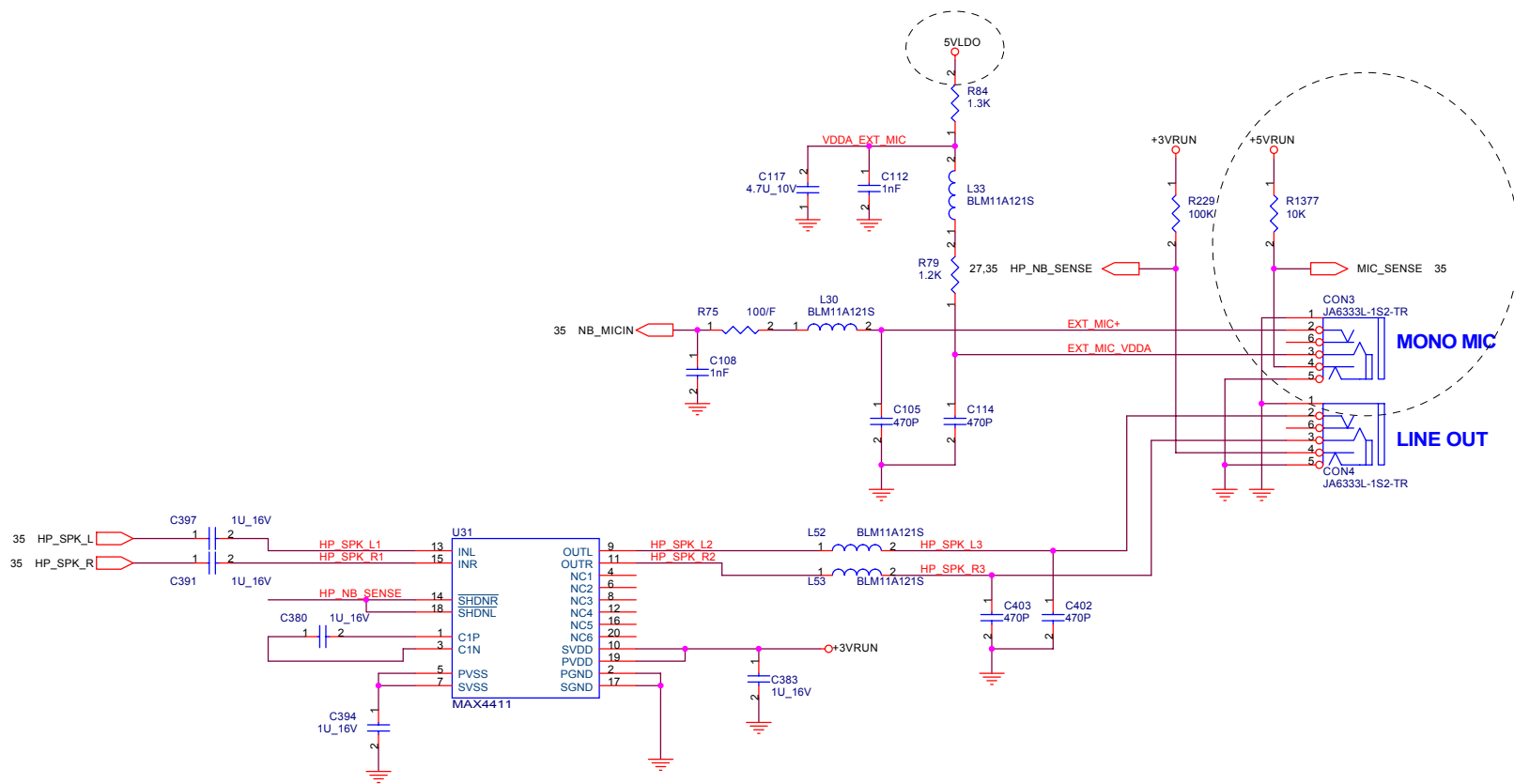
Title FAN & THERMAL		
Size	Document Number JMSB	Rev 2A
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Populate_U41, C487, C479, C486, C161, C1975
for MIC recording noise issue

GAIN0	GAIN1	AV
0	0	6dB
0	1	10dB
1	0	15.6dB
1	1	21.6dB



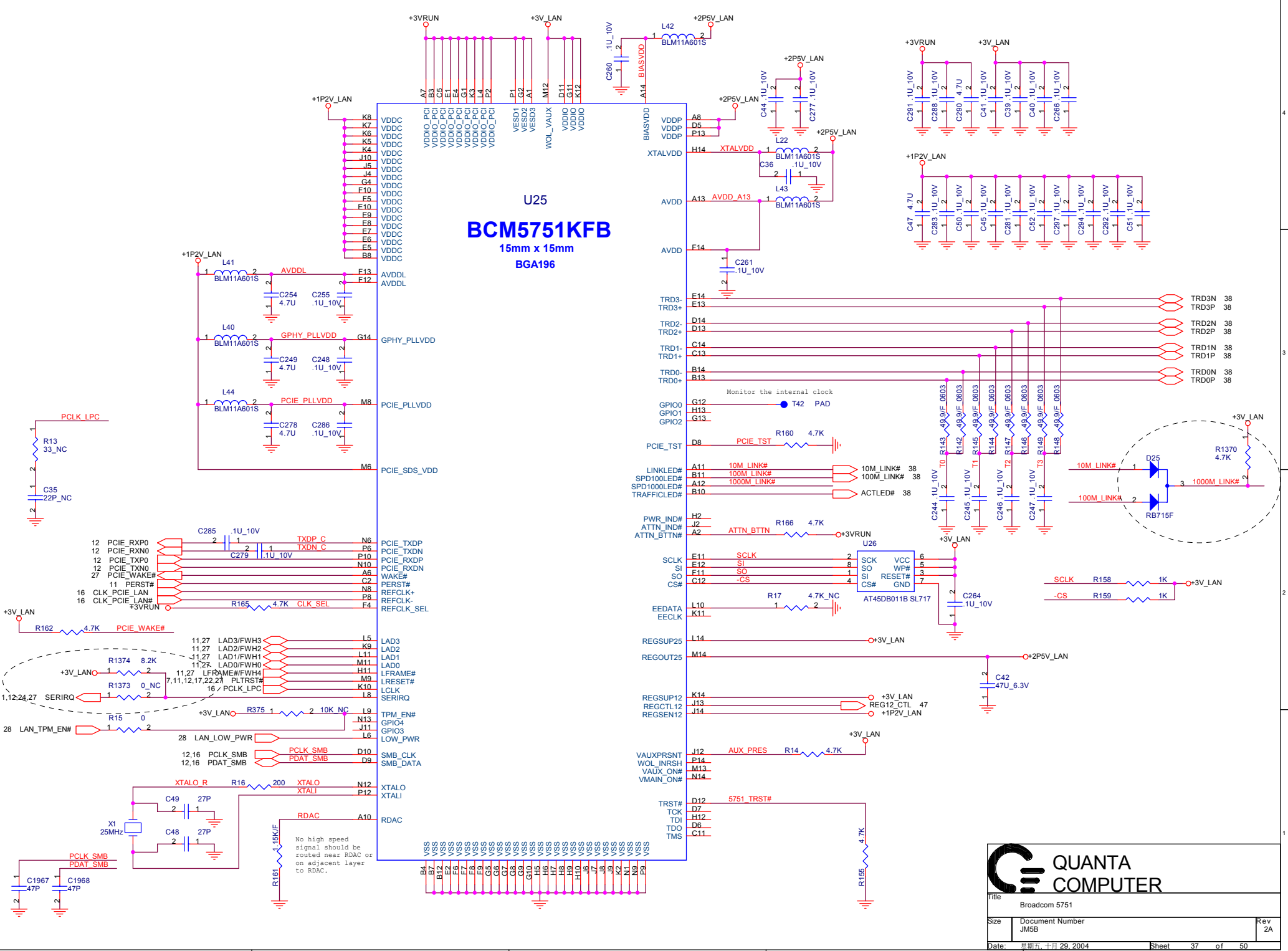


QUANTA COMPUTER

Title: AUDIO CONN

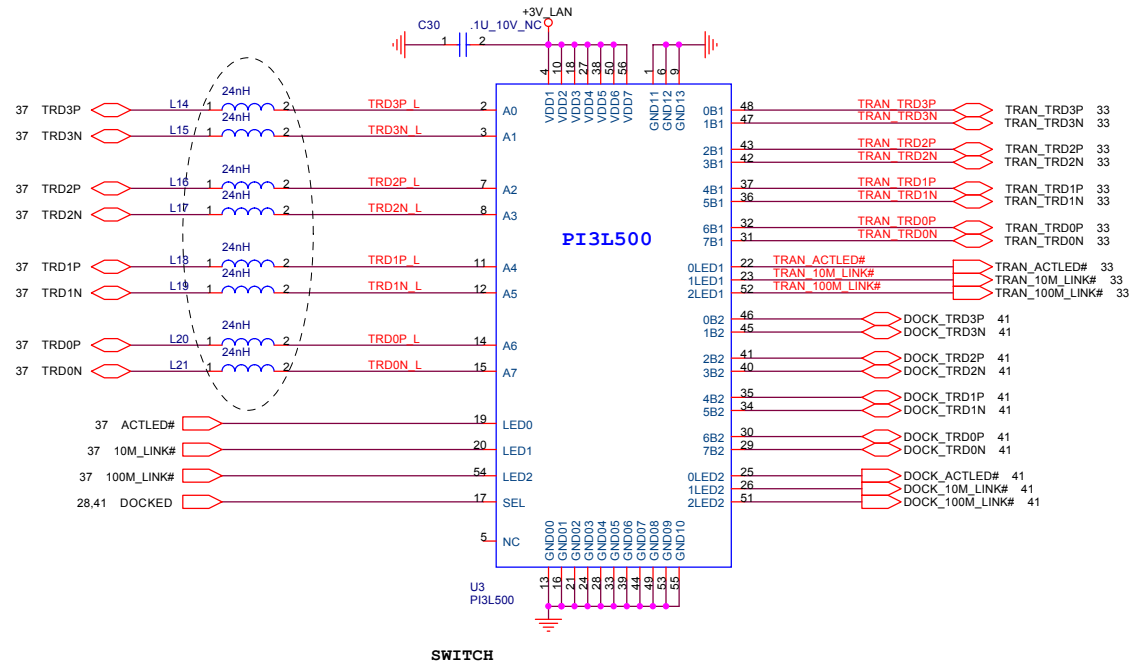
Size	Document Number JMSB	Rev 2A
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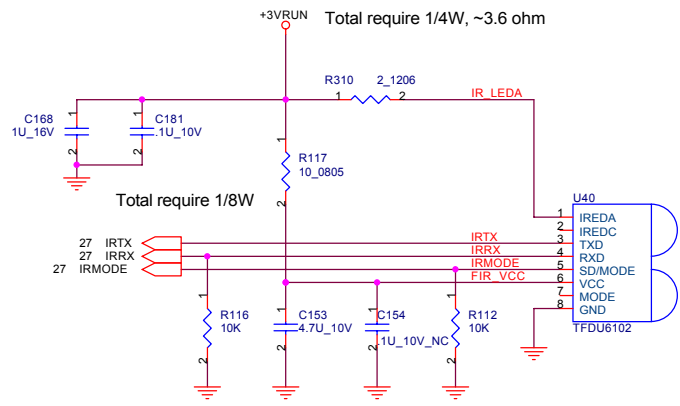
U25
BCM5751KFB
 15mm x 15mm
BGA196

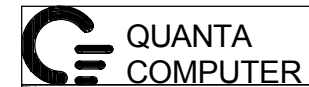
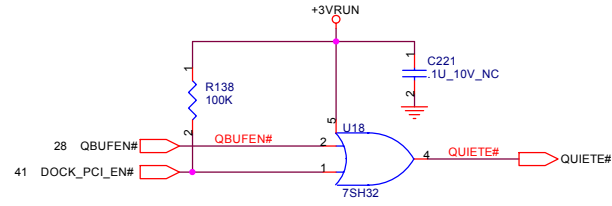
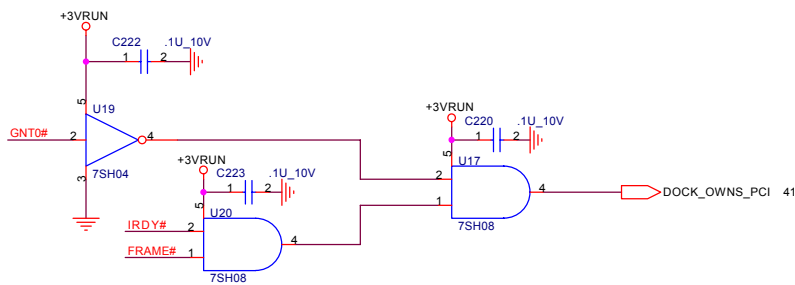
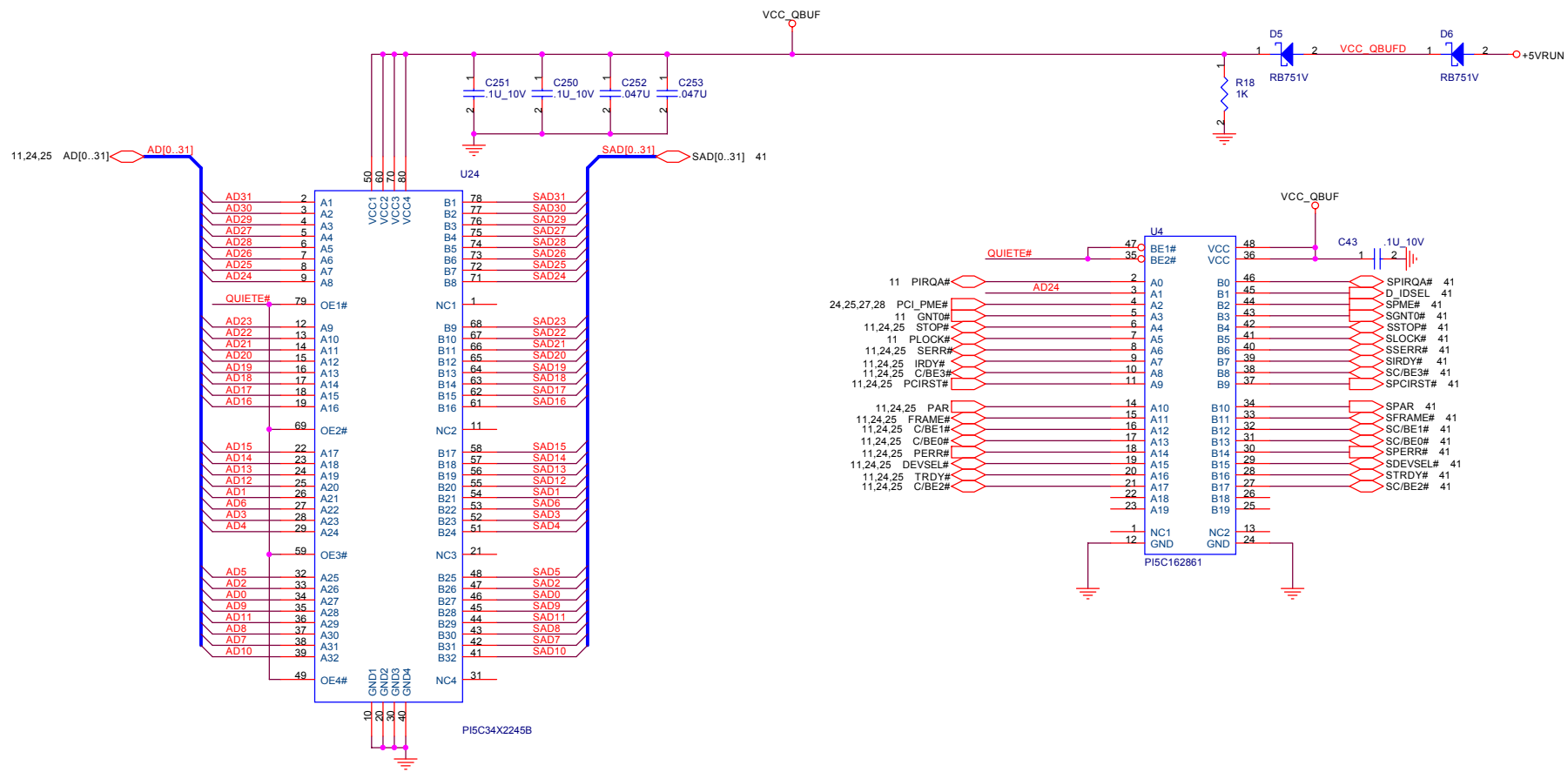


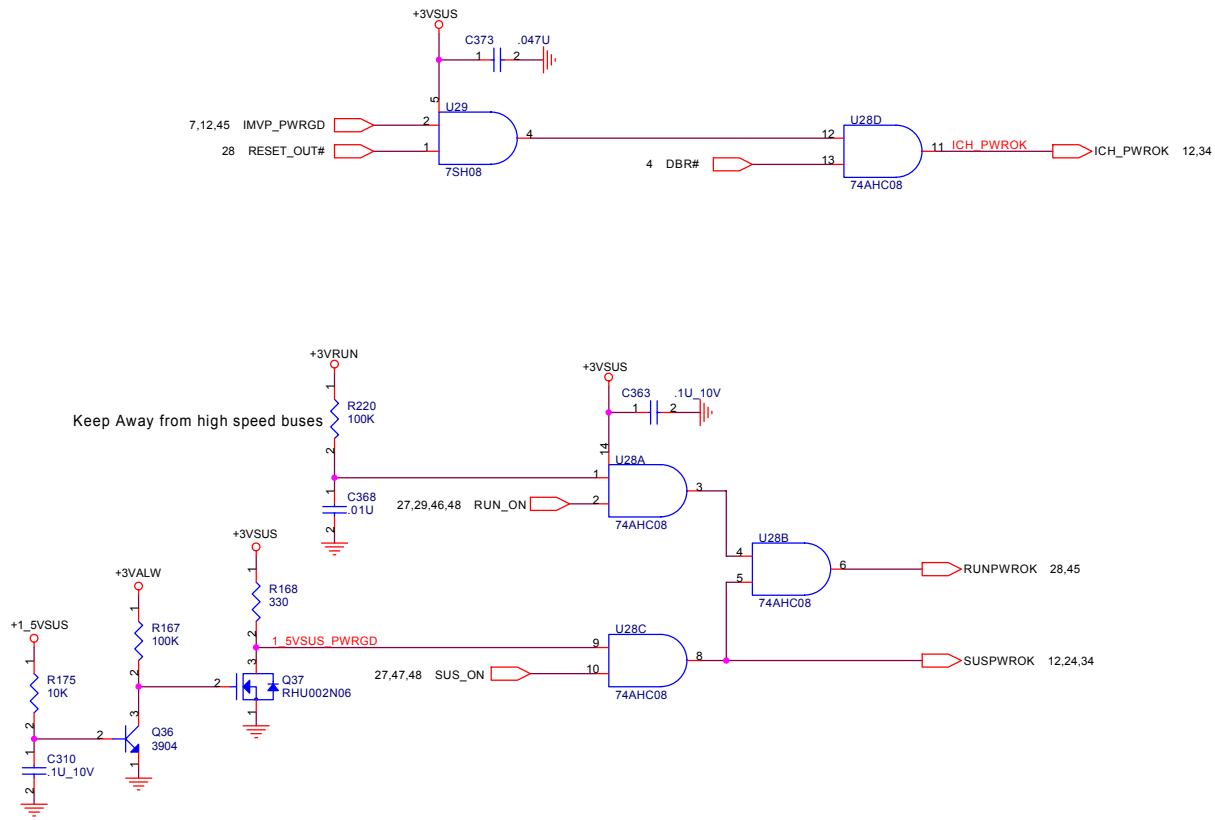
Title Broadcom 5751		
Size	Document Number JMSB	Rev 2A
Date:	星期二, 十月 29, 2004	Sheet 37 of 50

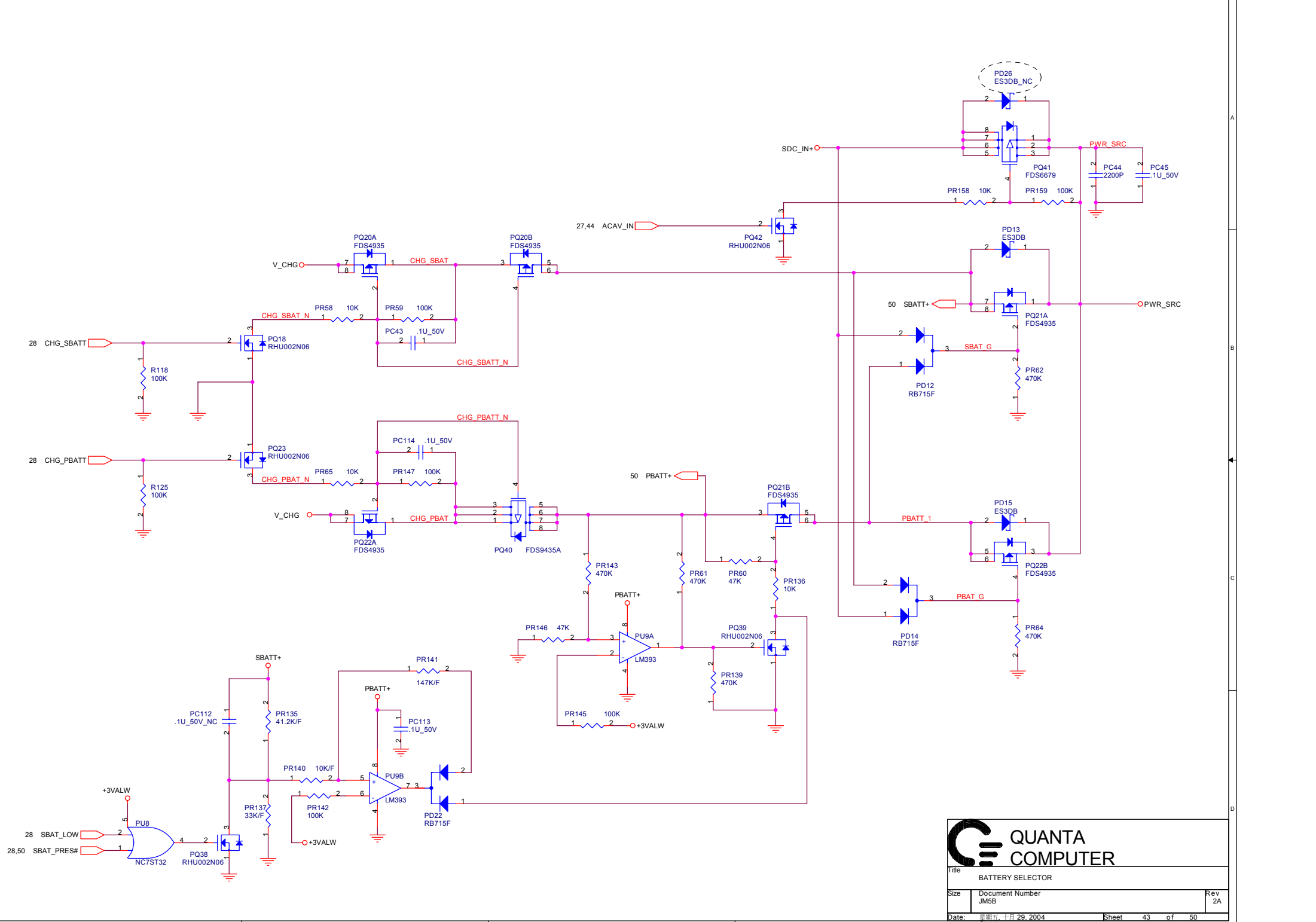
L14/L15/L16/L17/L18/L19/L20/L21 must be 0603



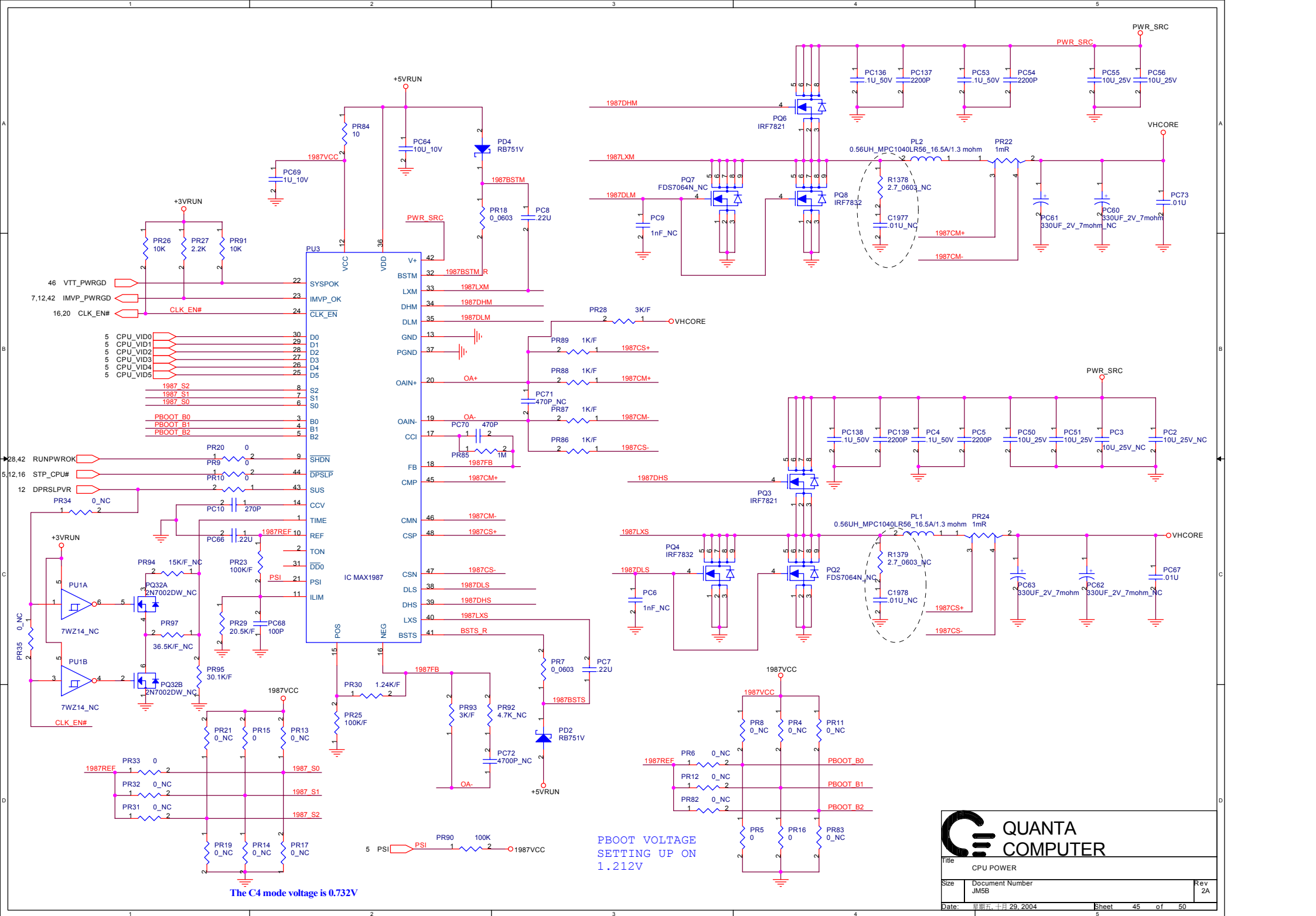








Title BATTERY SELECTOR		
Size	Document Number JM5B	Rev 2A
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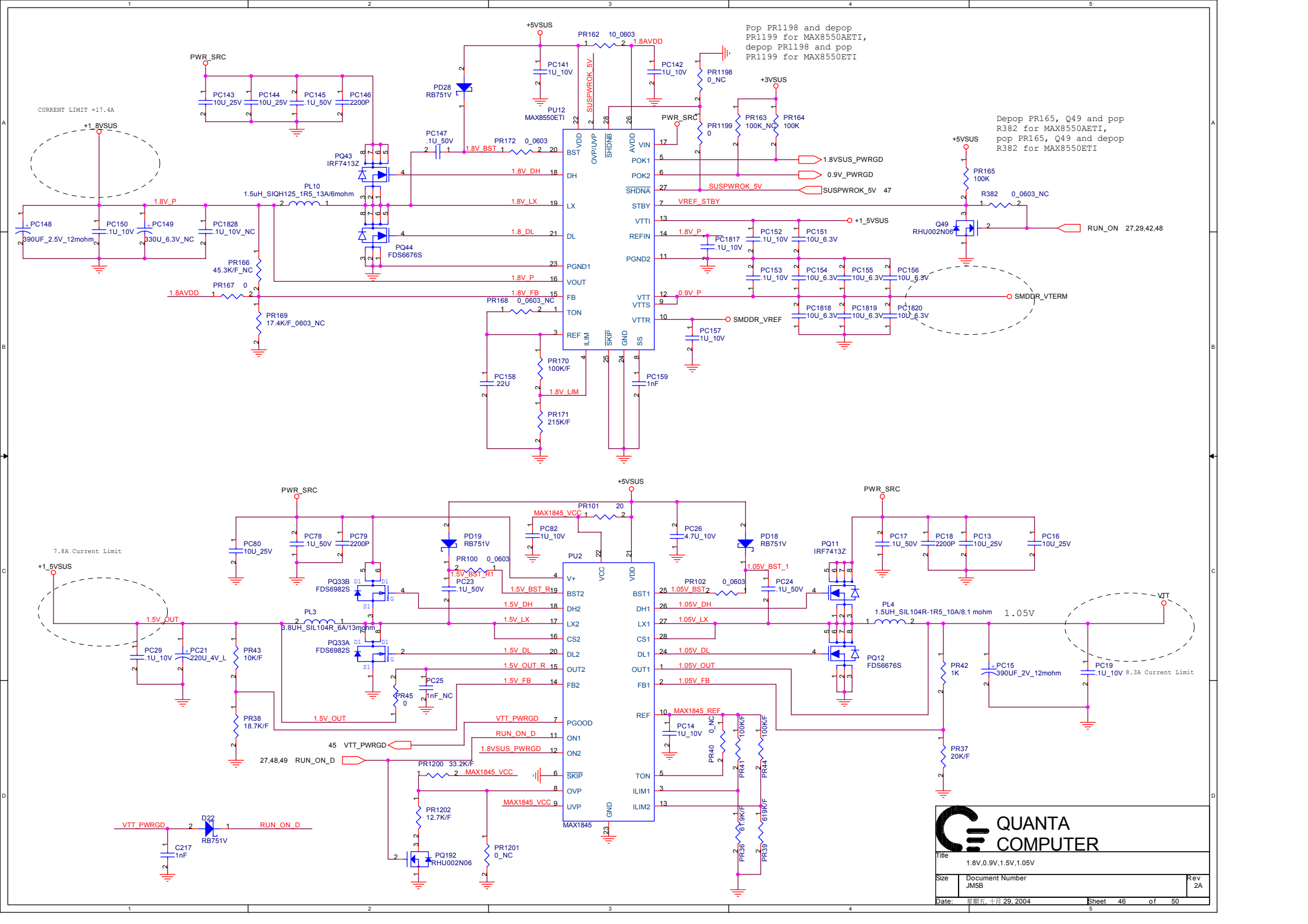


The C4 mode voltage is 0.732V

PBOOT VOLTAGE
SETTING UP ON
1.212V



Title CPU POWER		
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Pop PR1198 and depop
 PR1199 for MAX8550AETI,
 depop PR1198 and pop
 PR1199 for MAX8550ETI

Depop PR165, Q49 and pop
 R382 for MAX8550AETI,
 pop PR165, Q49 and depop
 R382 for MAX8550ETI

CURRENT LIMIT =17.4A

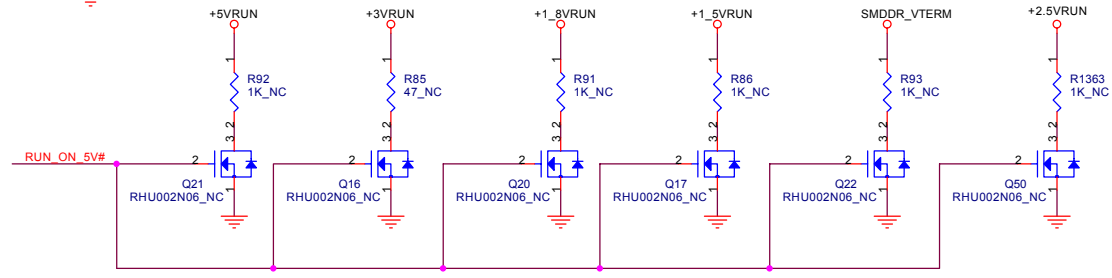
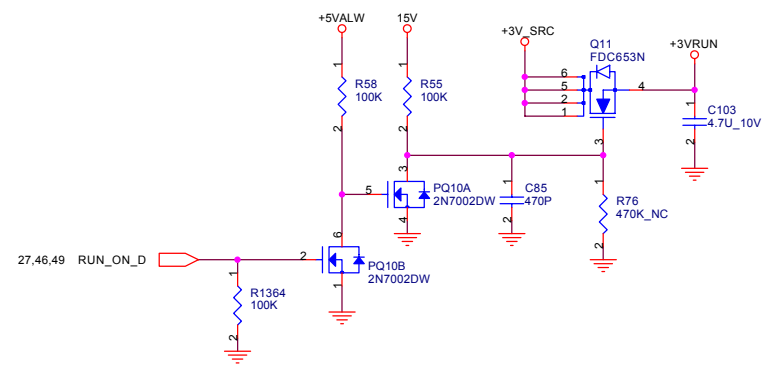
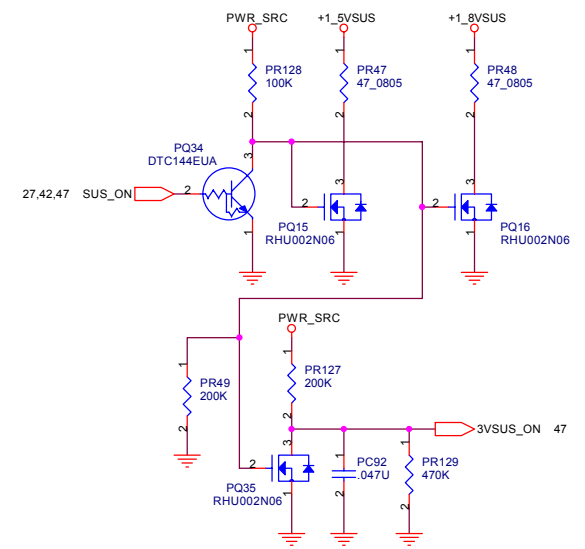
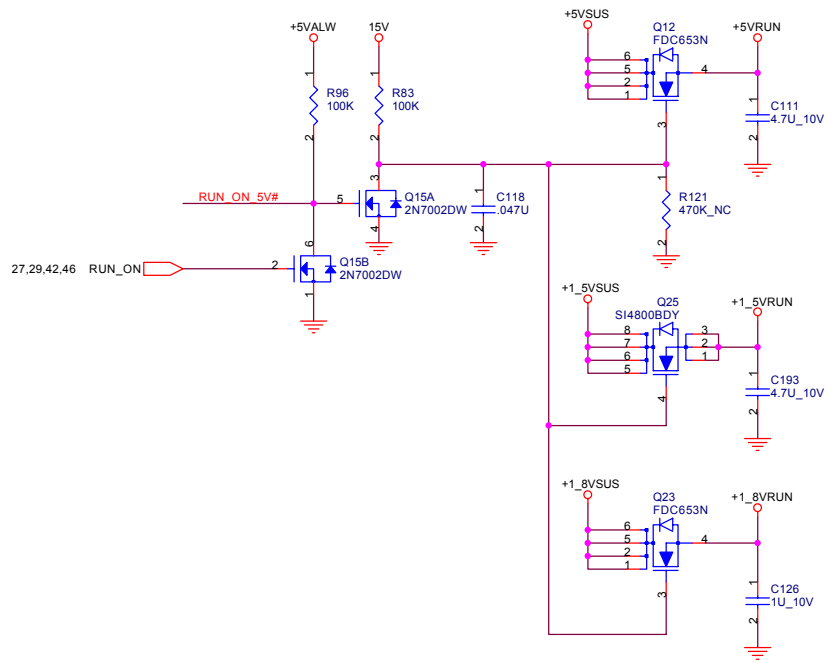
7.8A Current Limit

QUANTA COMPUTER

Title: 1.8V,0.9V,1.5V,1.05V

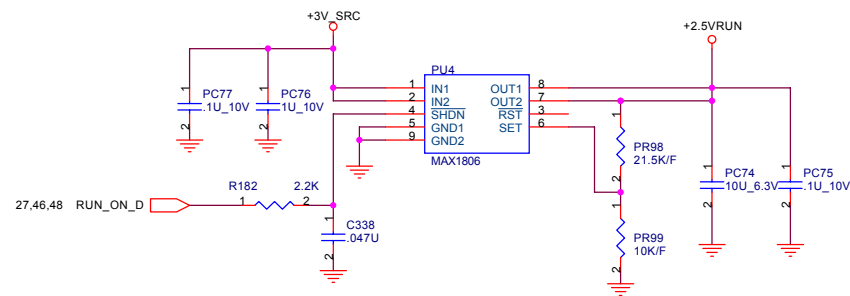
Size	Document Number	Rev
	JMSB	2A

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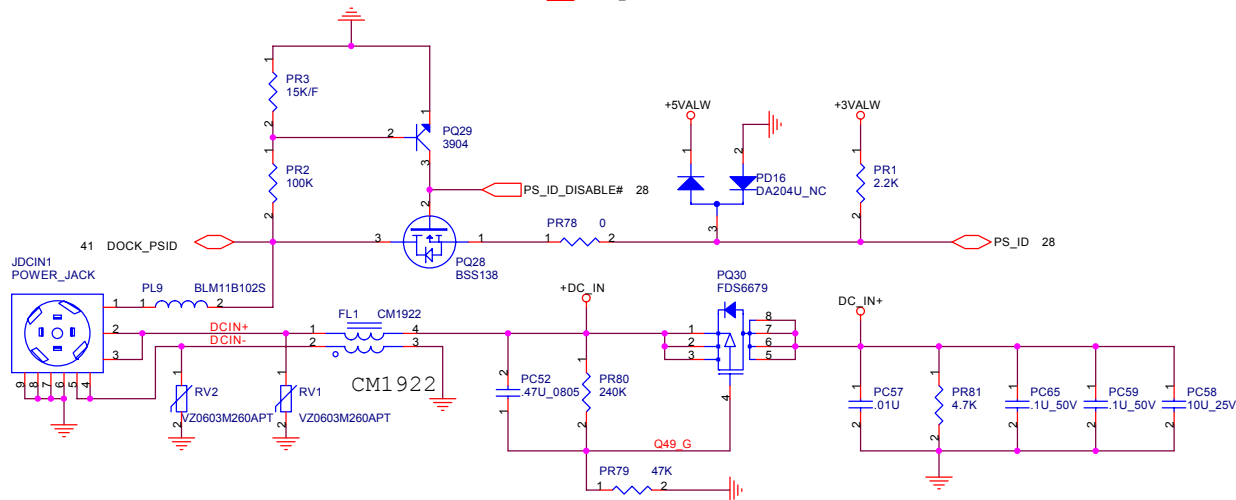
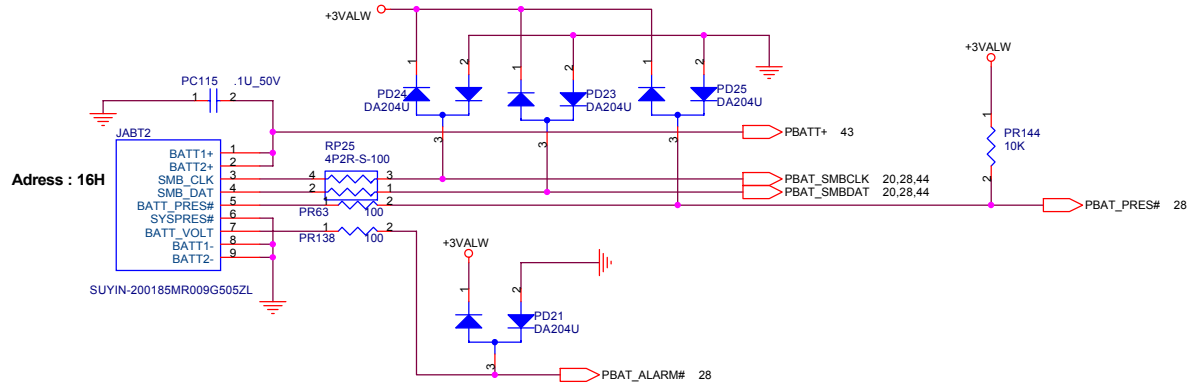
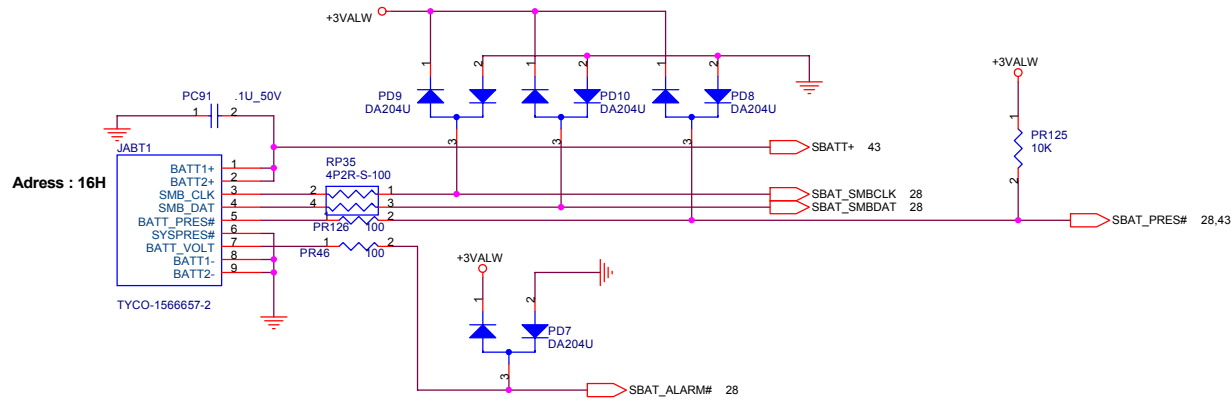


Reserve discharge path

**QUANTA
COMPUTER**
 Title RUN POWER SW
 Size Document Number JMSB Rev 2A
 Date: 星期五, 十月 29, 2004 Sheet 48 of 50



Title		
VGA DC/DC		
Size	Document Number	Rev
JMSB		2A
Date:	星期五, 十月 29, 2004	Sheet 49 of 50



Title		
DCIN,BATT CONNECTOR		
Size	Document Number	Rev
JMSB		2A
Date:	星期五, 十月 29, 2004	Sheet 50 of 50