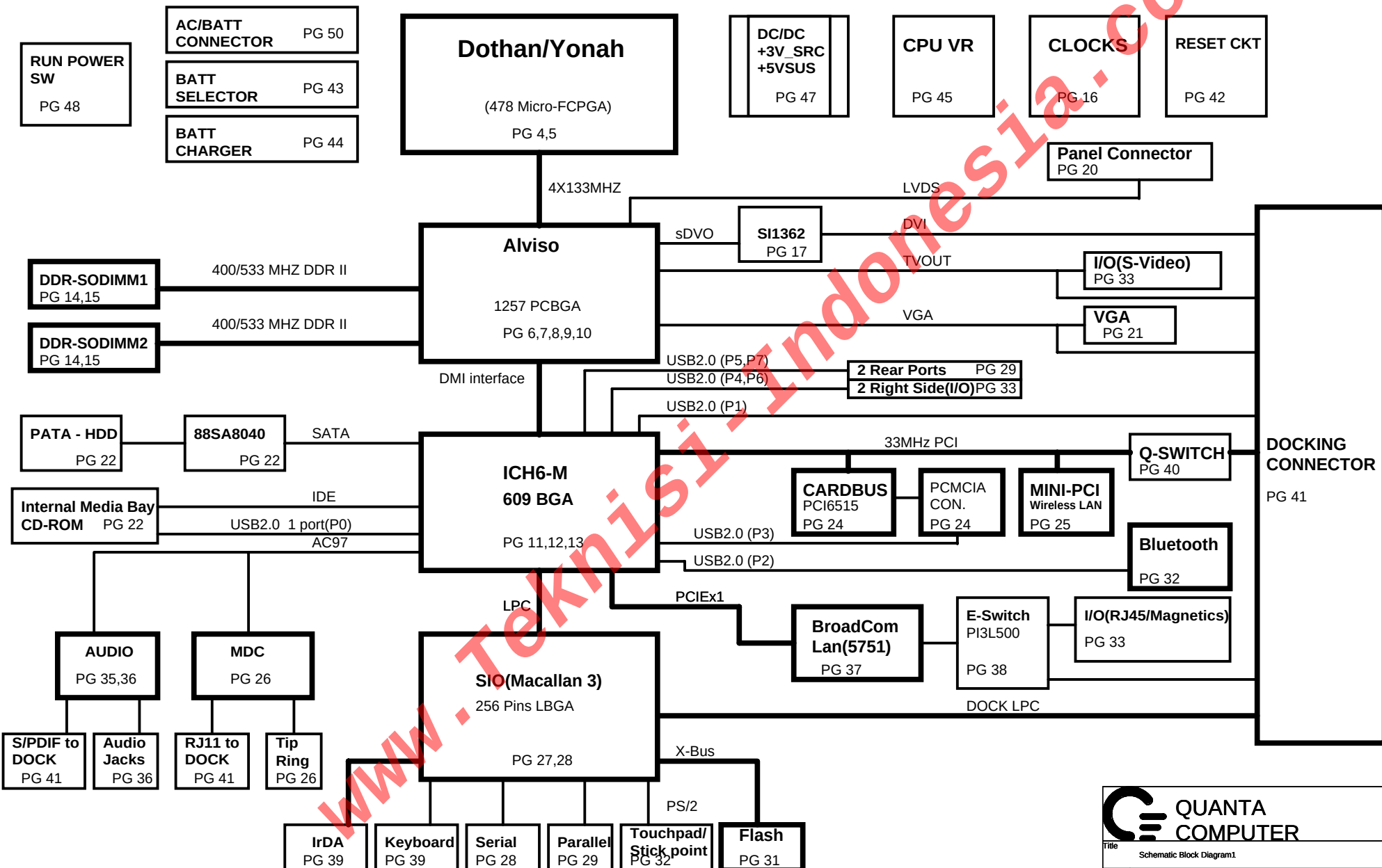


AZEDA-INTEGRATED

Pb-Free

PWA: MF788, SCHEM: CD623
VER : 3A



Blank Page

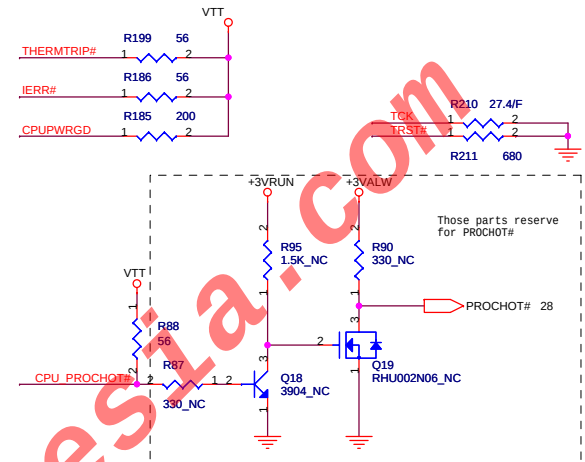
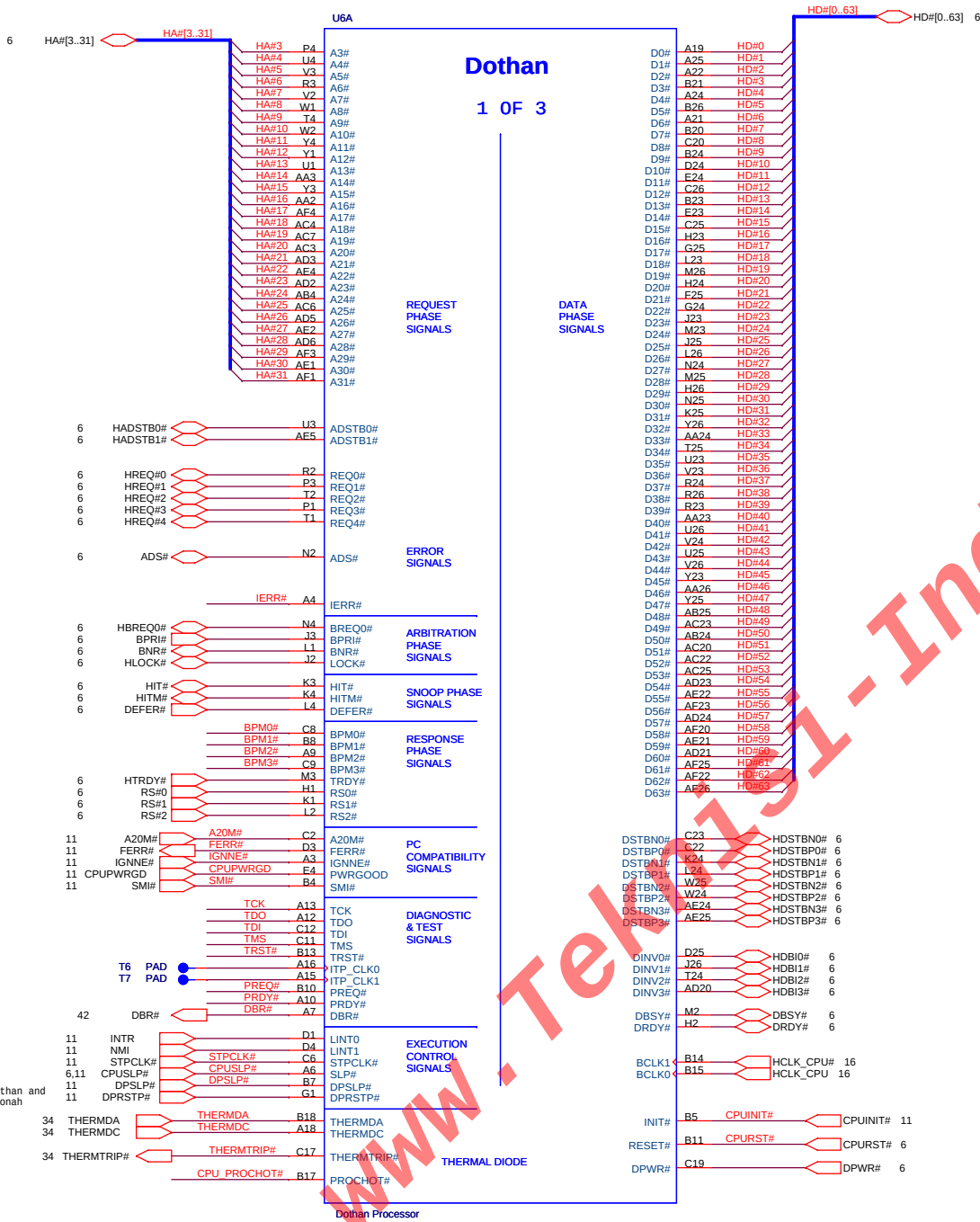
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 QUANTA COMPUTER		
Title		
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INDEX		
Pg#	Description	DNI LIST
1	Schematic Block Diagram 1	
2	Blank Page	
3	Front Page	
4-5	Dothan	
6-10	Alviso	
11-13	ICH6	
14-15	DDRII SO-DIMM(200P)	
16	Clock Generator	
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	

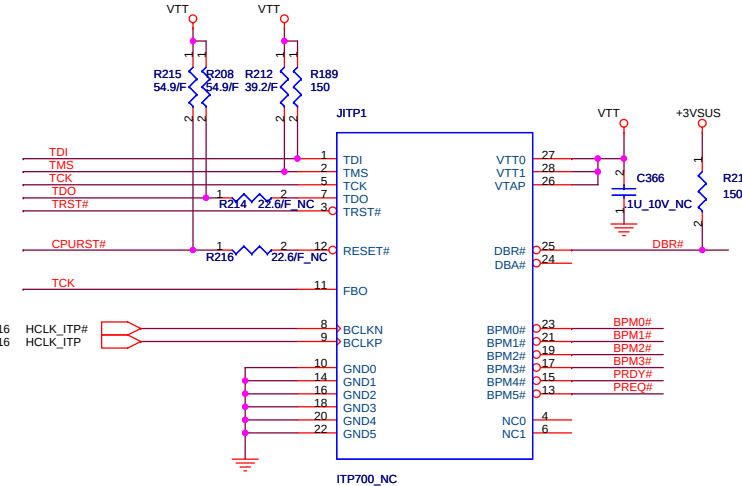
 QUANTA COMPUTER		
Title Index, DNI, Power & Ground		
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ITP disable guidelines

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 CK410M Pin8

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

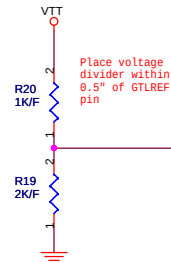
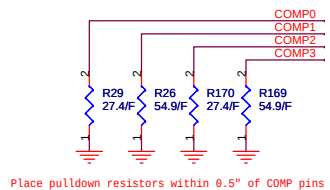


QUANTA COMPUTER

Title Dothan Processor (HOST)

Size Document Number JM5D Rev 3A

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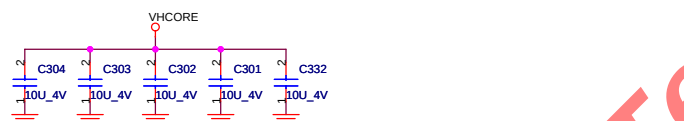
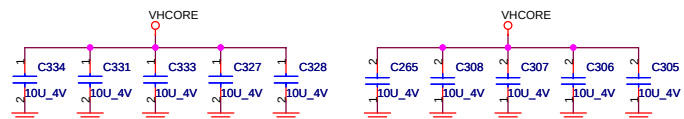
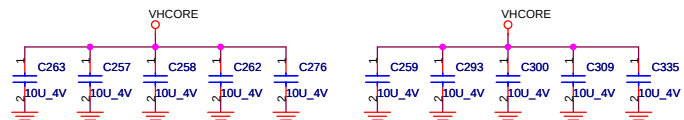
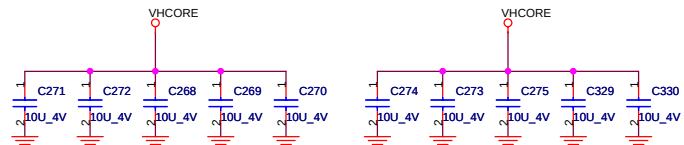
COMP0 P25
COMP1 P26
COMP2 AB2
COMP3 AB1

GTLREF0 AD26
TEST1 C5
TEST2 F23

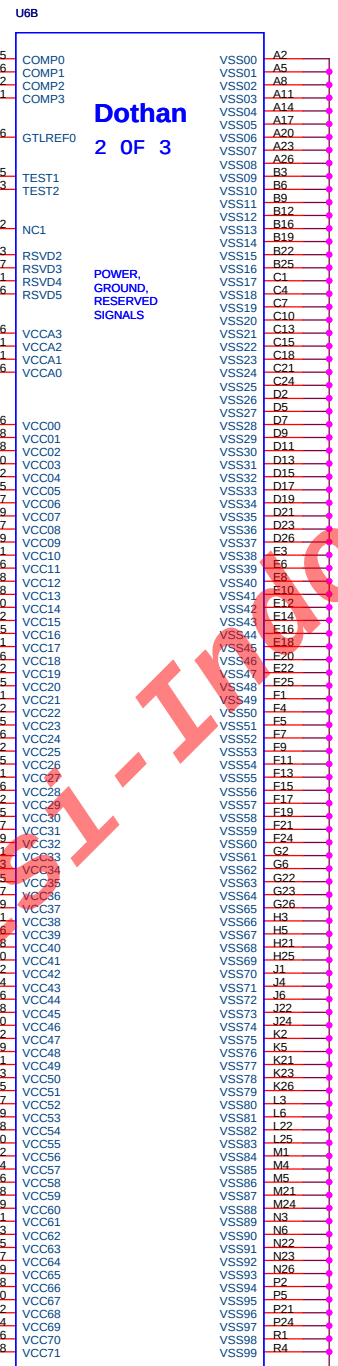
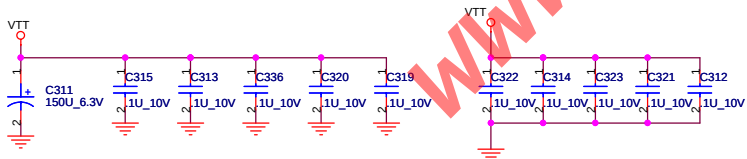
T44 PAD
T43 PAD
T46 PAD
T45 PAD
T1 PAD
T4 PAD
T5 PAD

AC26
N1
B1
F26
CPU VCCA
VHCORE

Dothan used 1.5V for VCCA

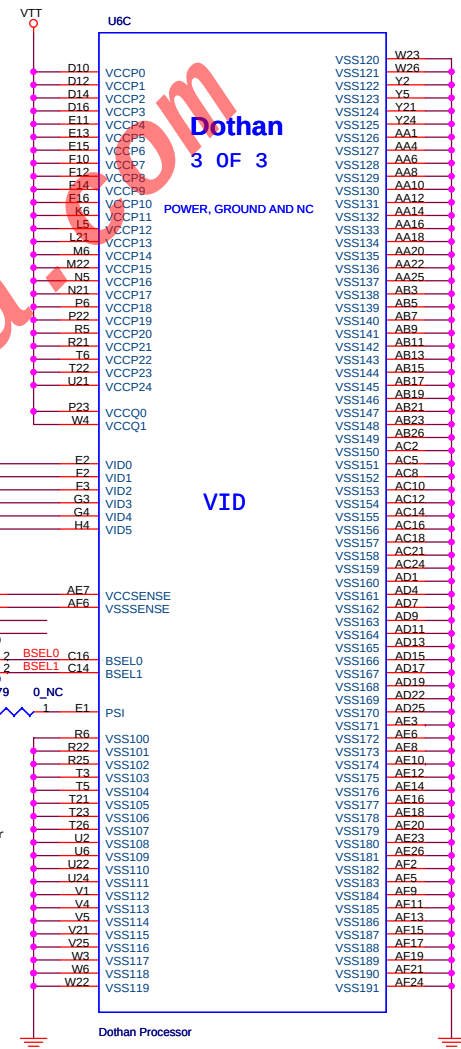


Total caps = 2633 uF
ESR = 15m ohm/5 // 5m ohm/25 // 5m ohm/15



Dothan
2 OF 3

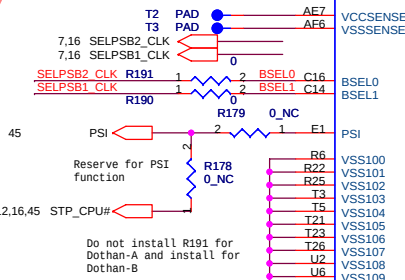
POWER, GROUND, RESERVED SIGNALS

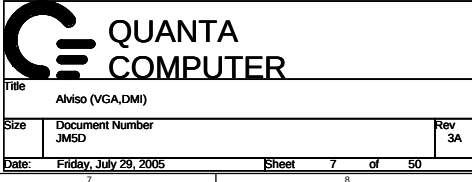


Dothan
3 OF 3

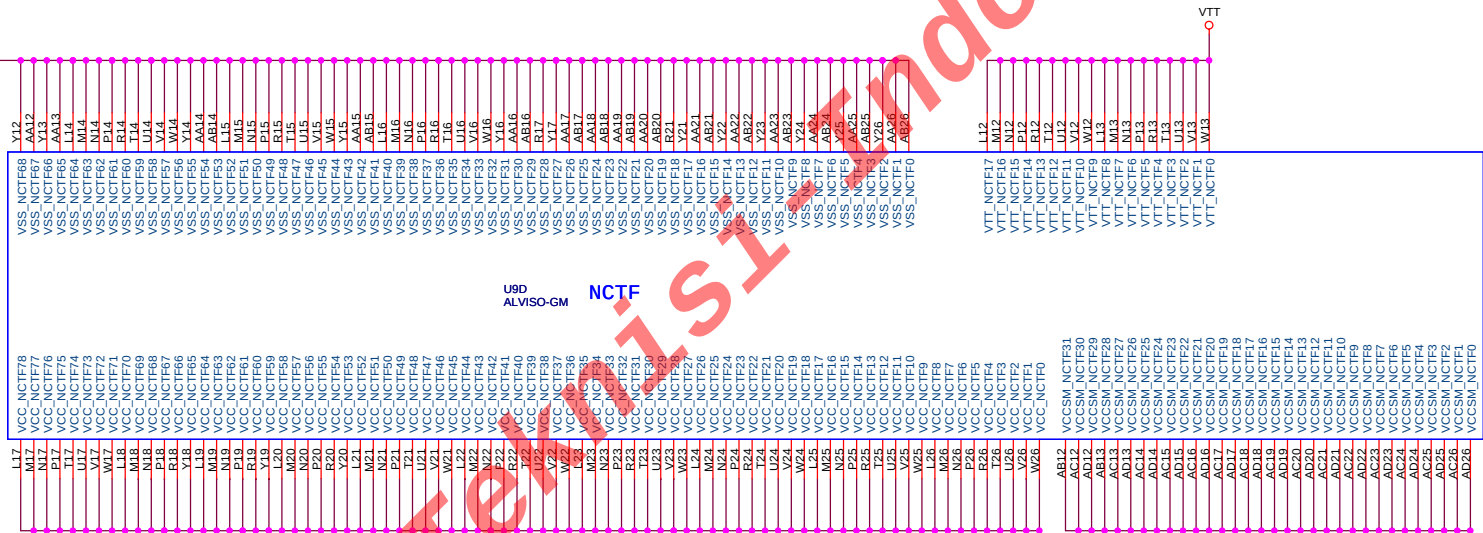
POWER, GROUND AND NC

VID

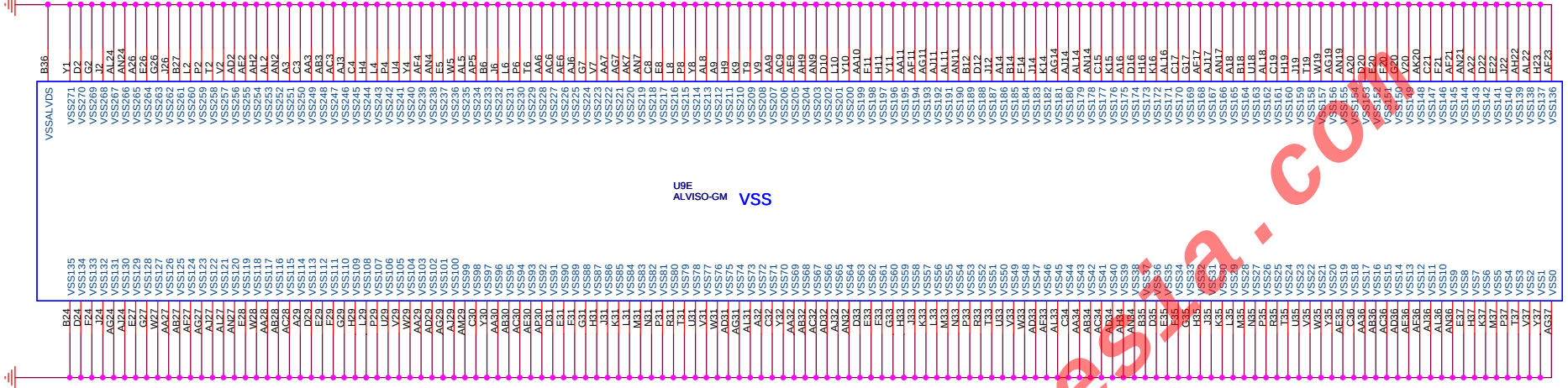




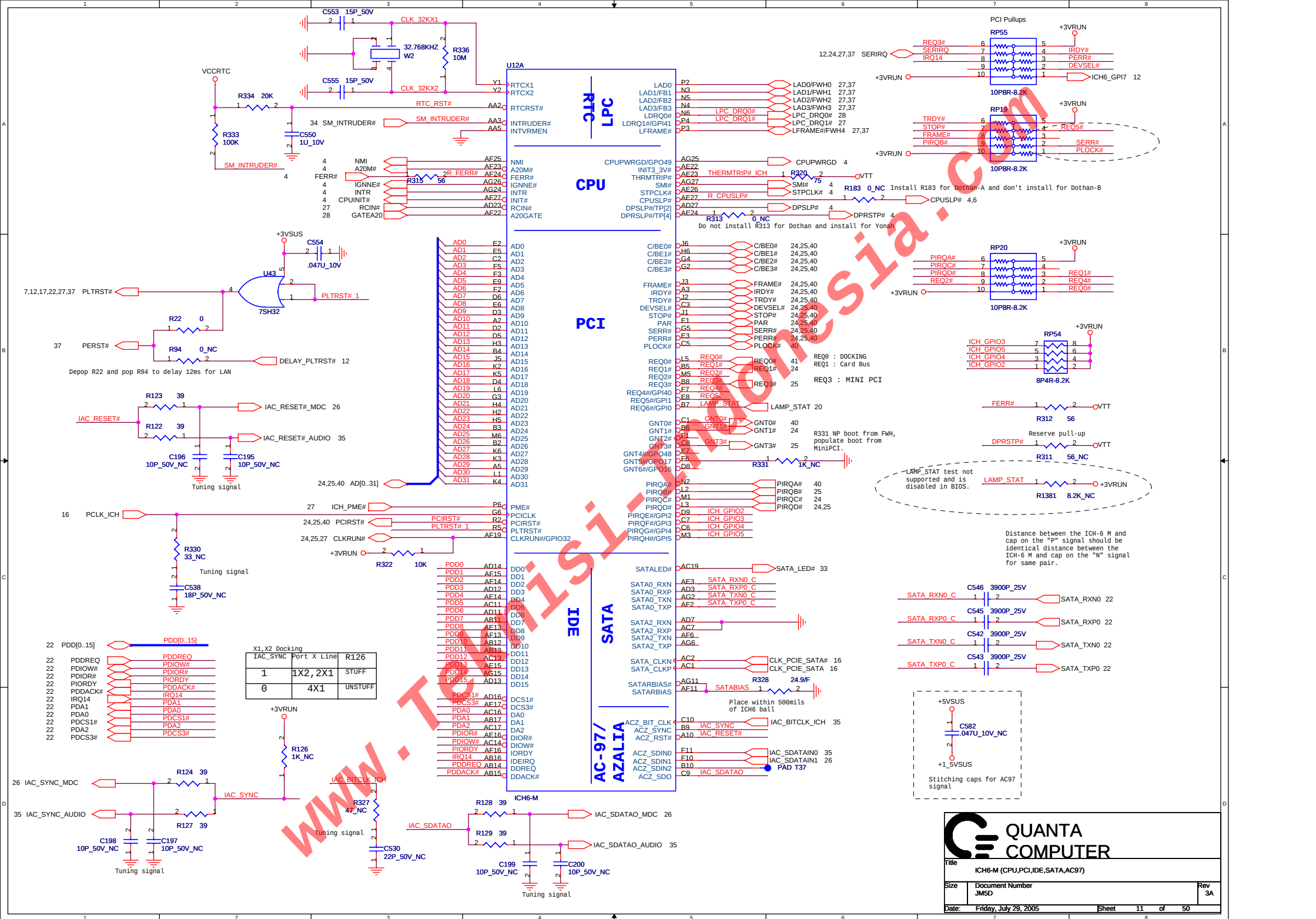


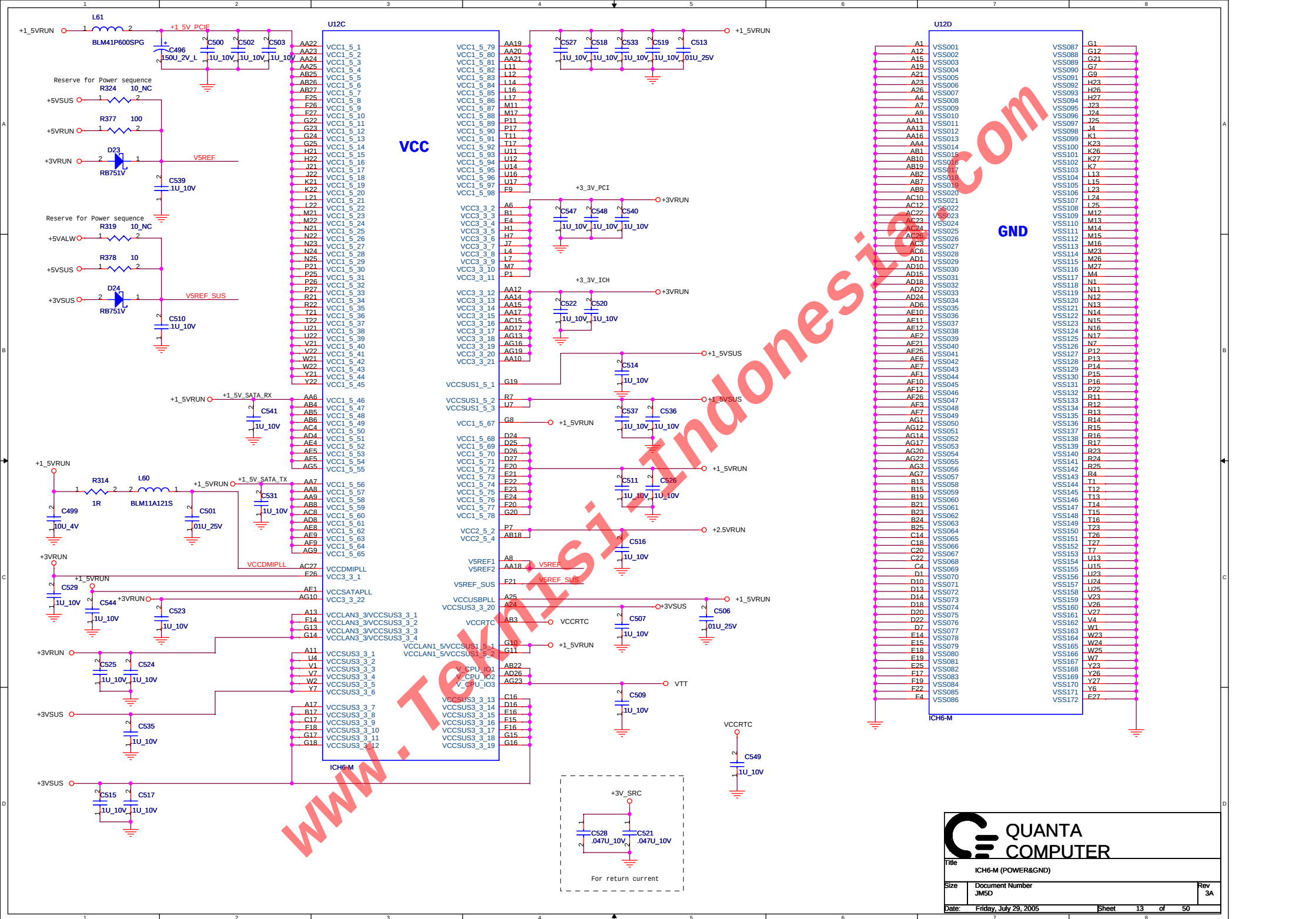


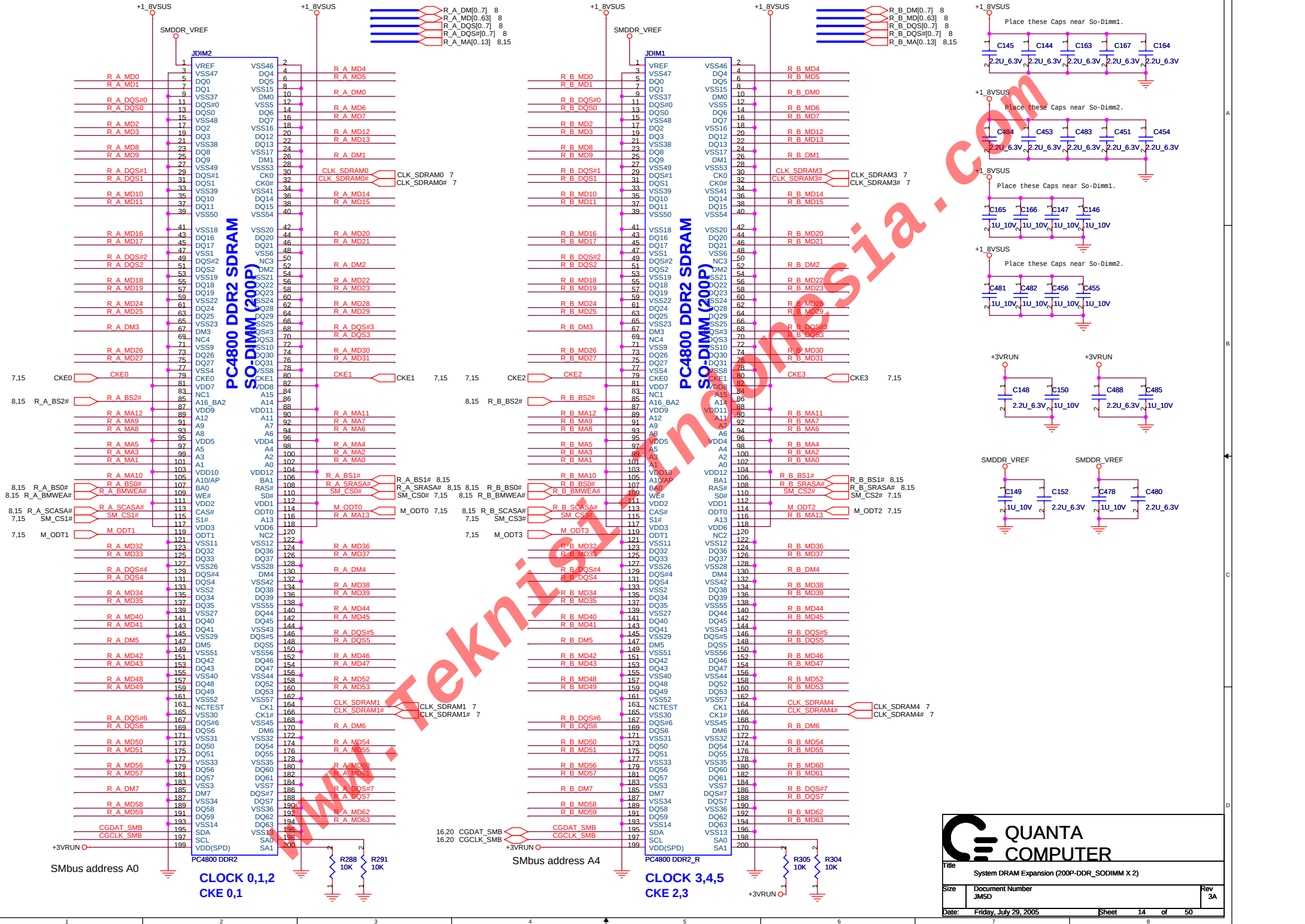
U9D
ALVISO-GM
NCTF



U9E
ALVISO-GM
VSS







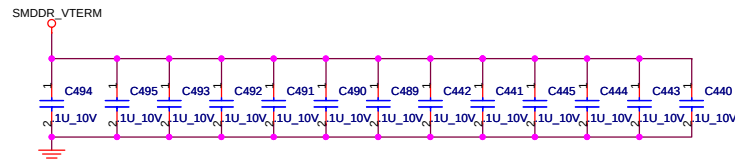


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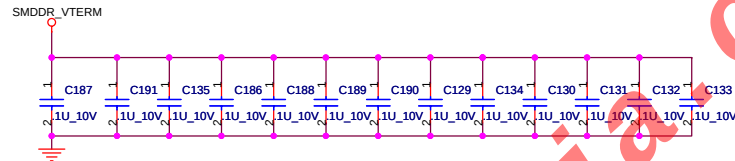
Title System DRAM Expansion (200P-DDR_SODIMM X 2)		
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R_A_MA[0..13] 8,14

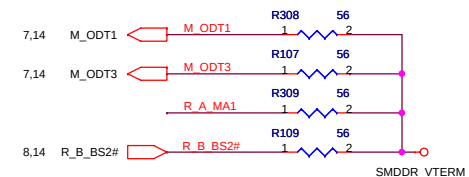
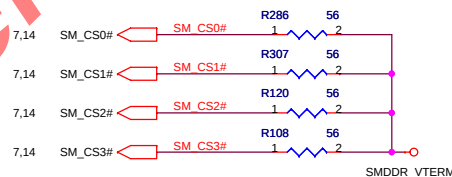
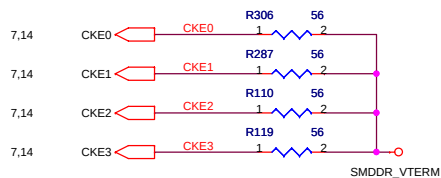
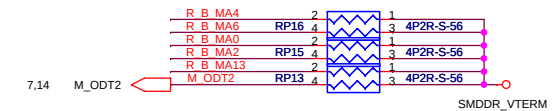
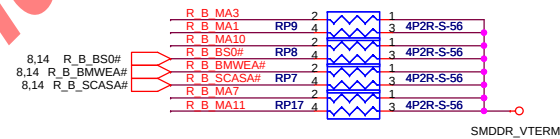
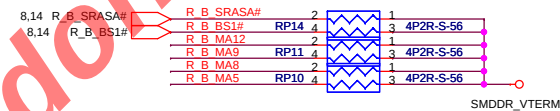
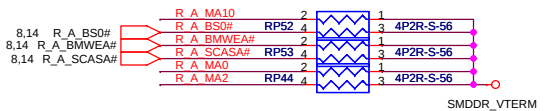
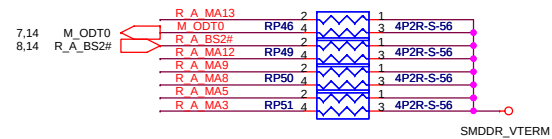
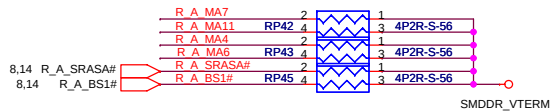
R_B_MA[0..13] 8,14



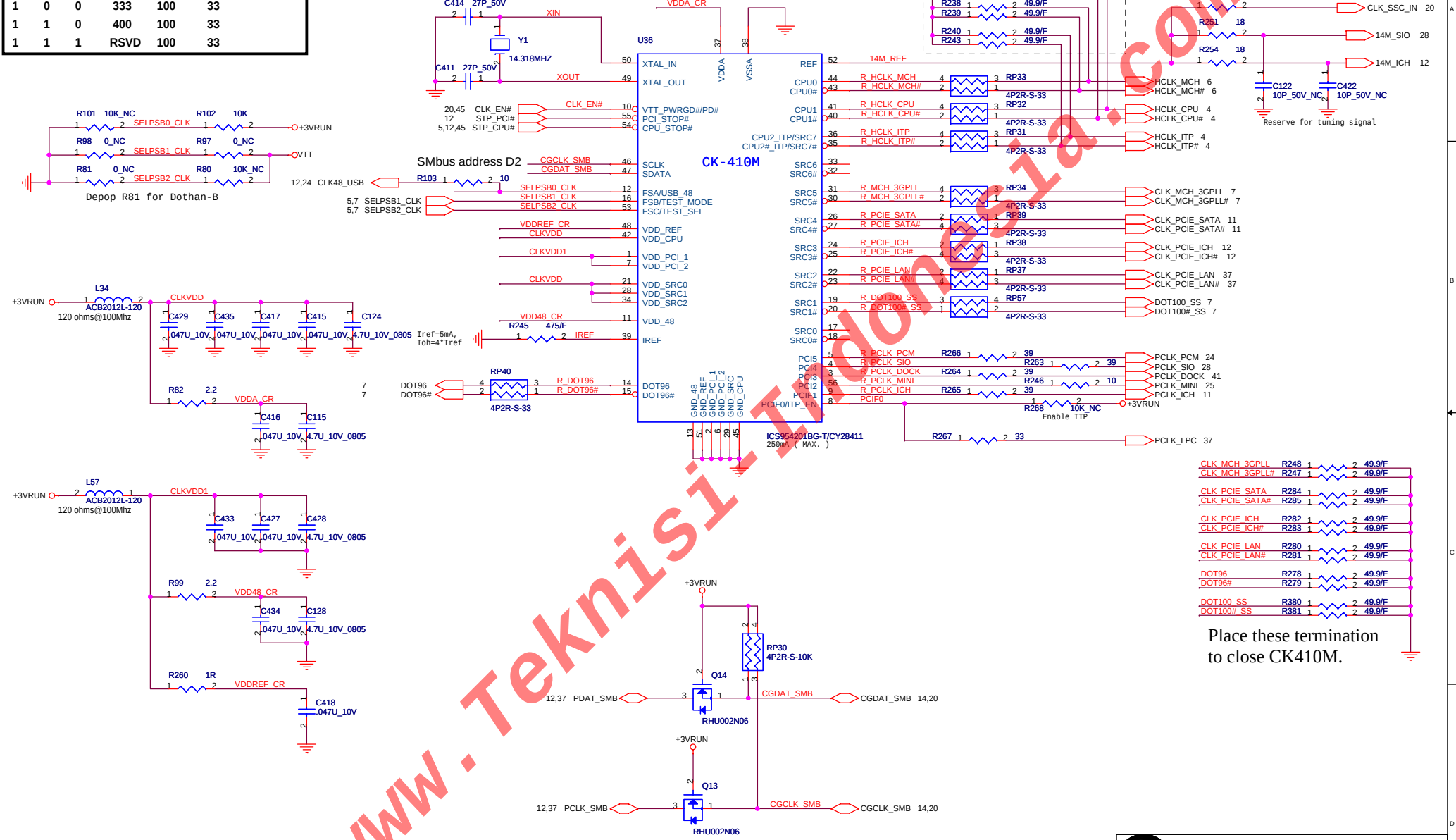
Layout note: Place 1 cap close to every 1 R-pack terminated to SMDDR_VTERM.

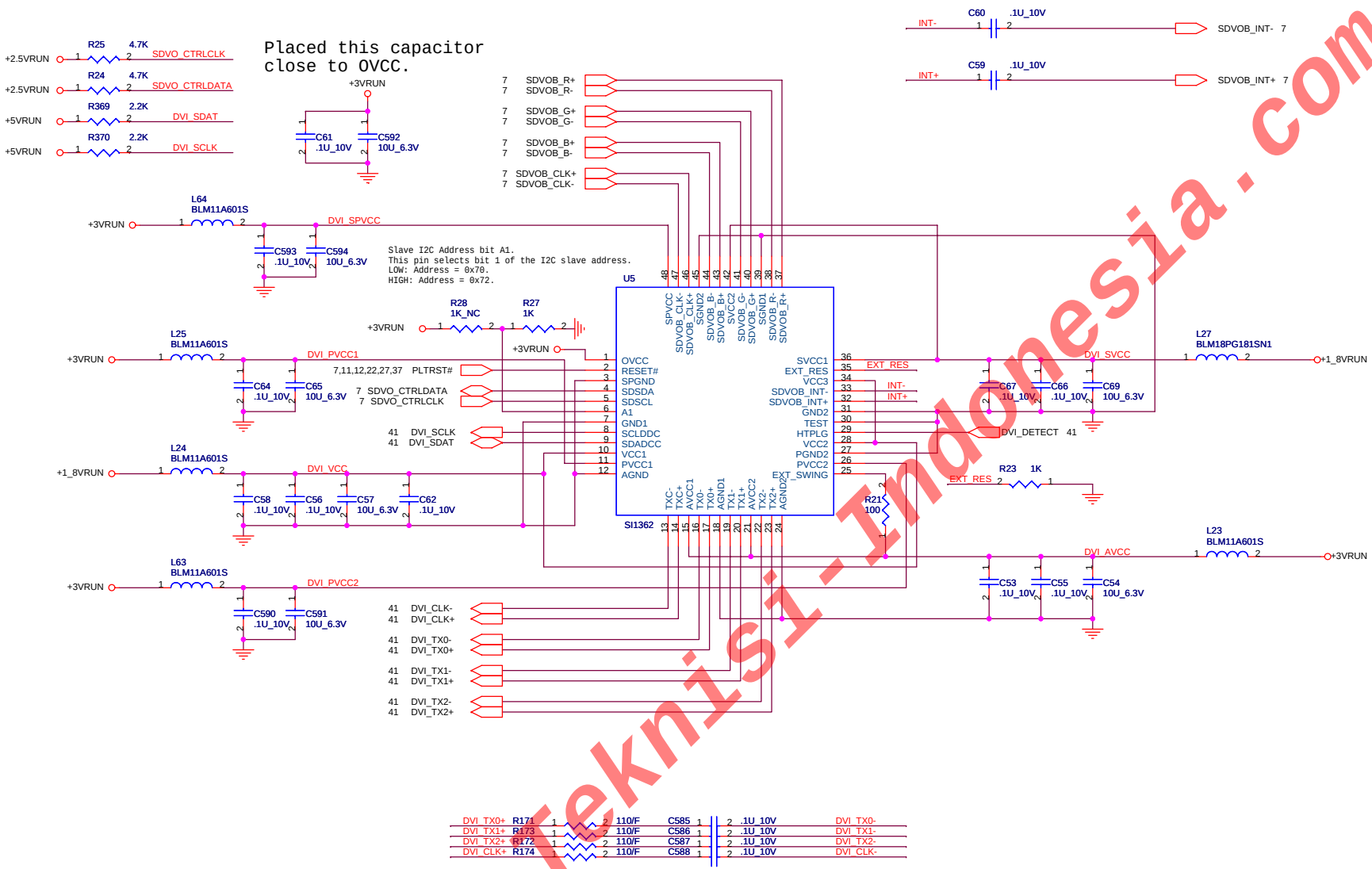


Layout note: Place 1 cap close to every 1 R-pack terminated to SMDDR_VTERM.



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





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

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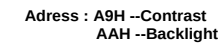
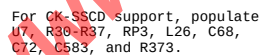
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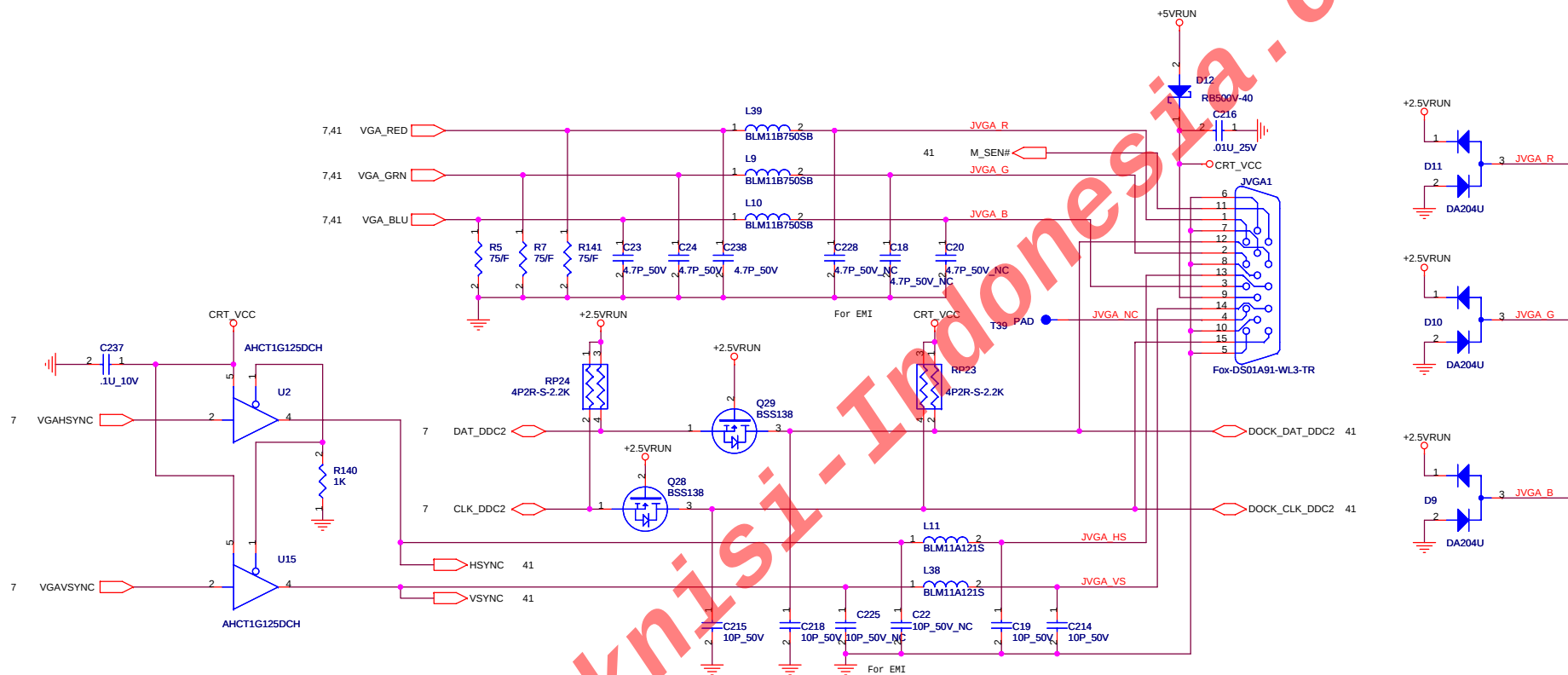
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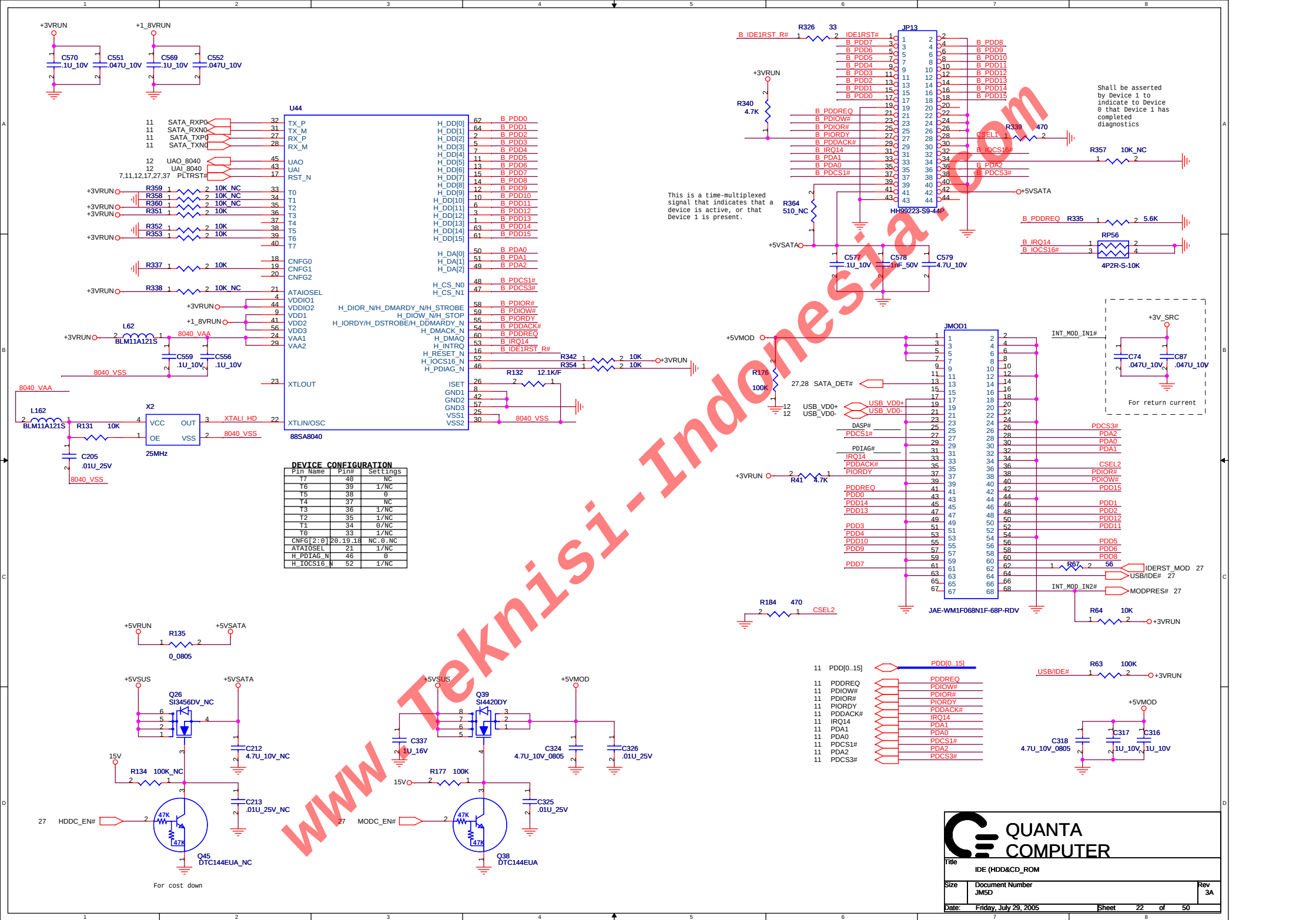
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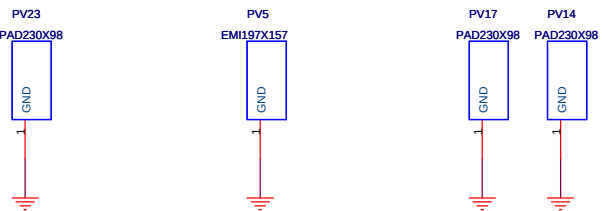
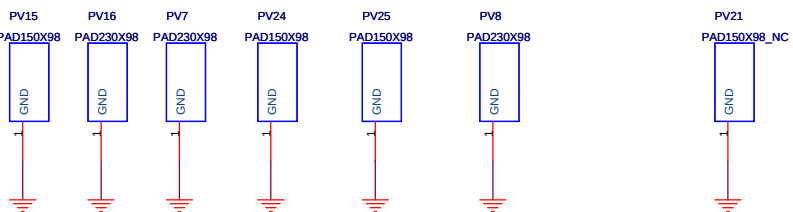
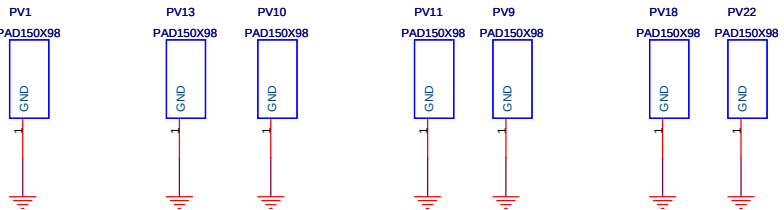
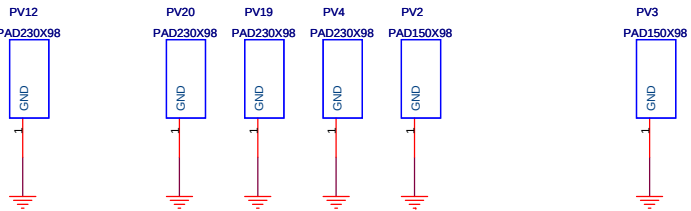
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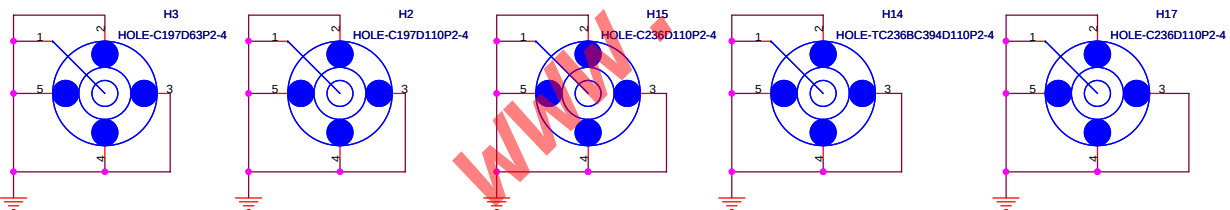


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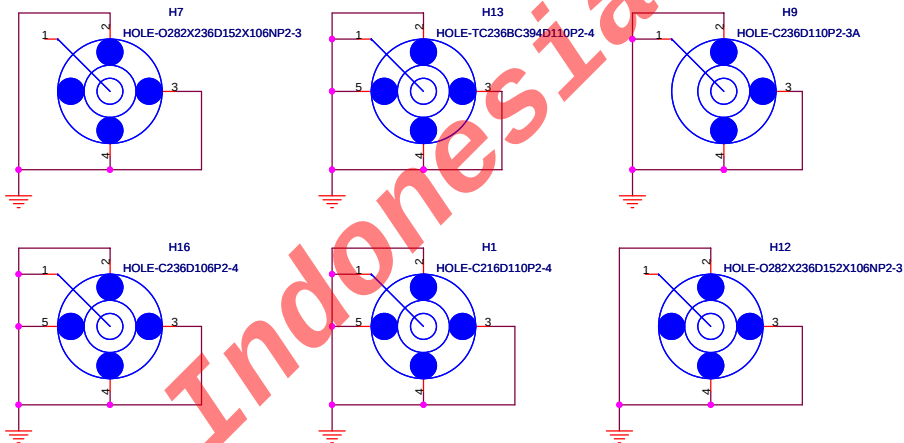
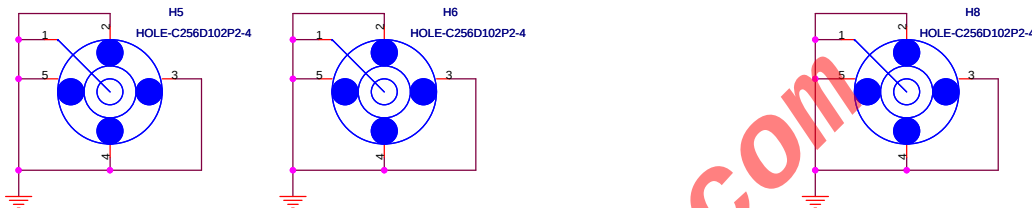
FOR DOCKING



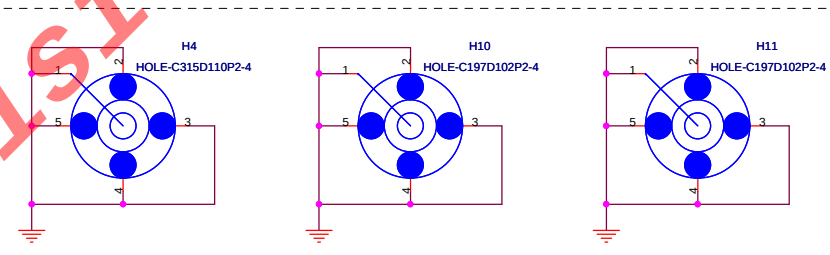
HDD



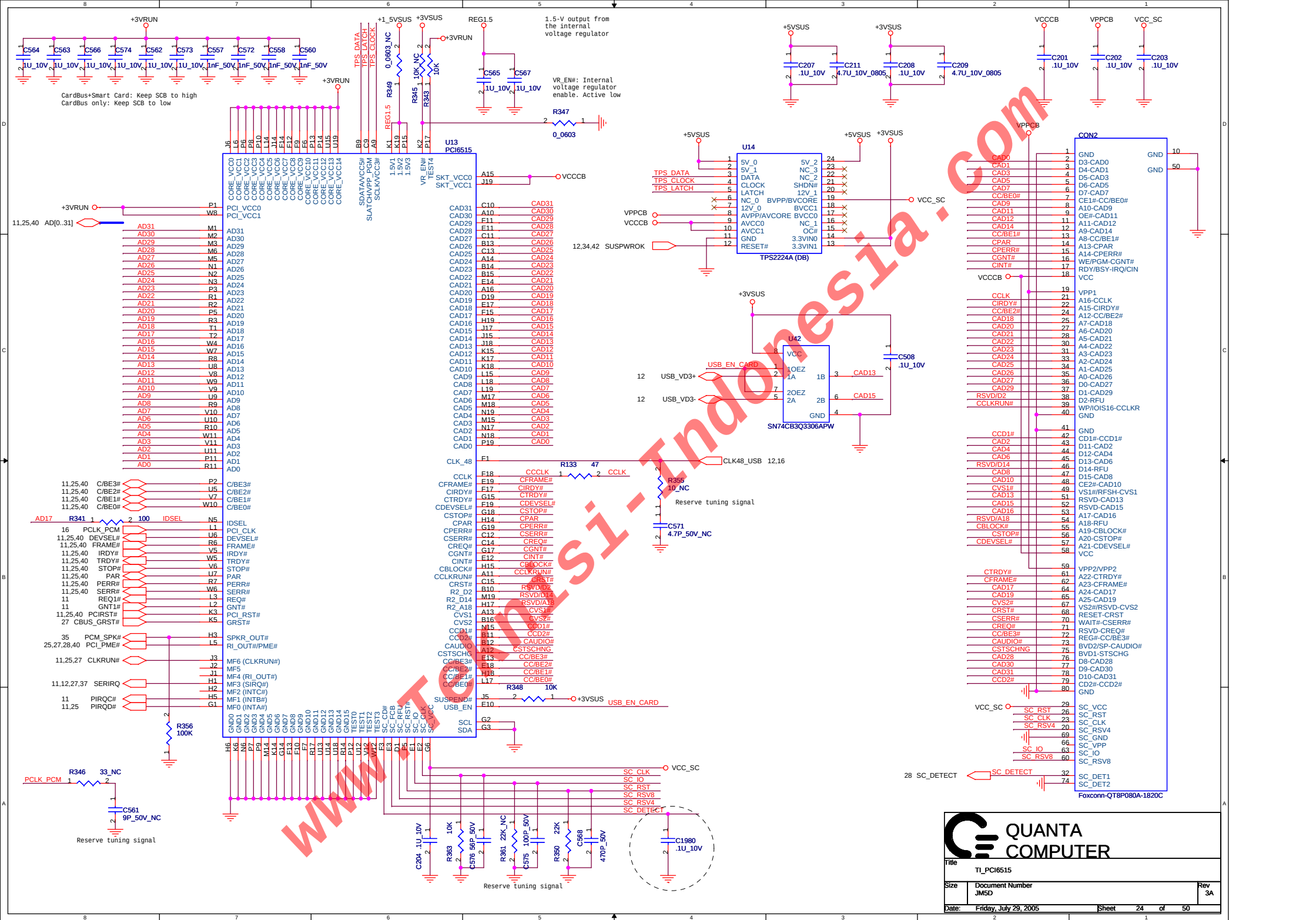
CPU

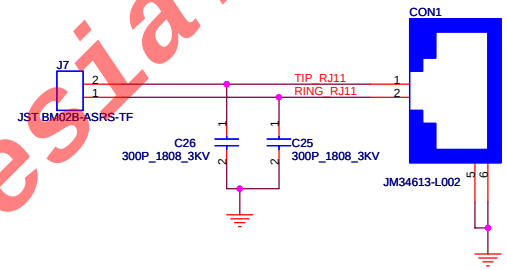
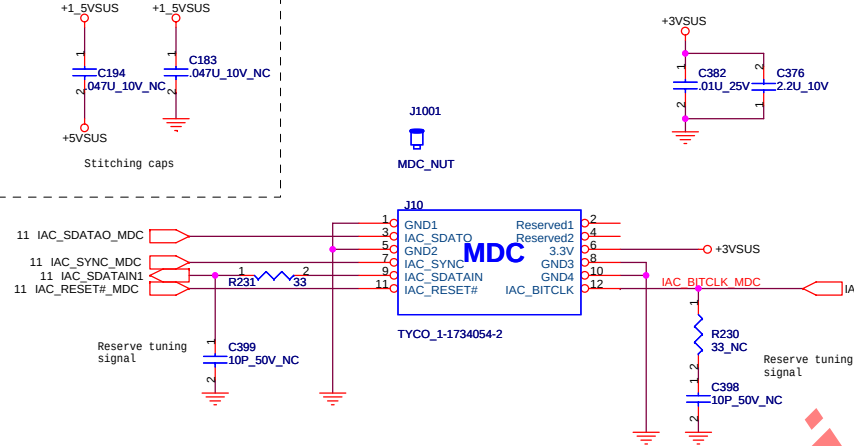
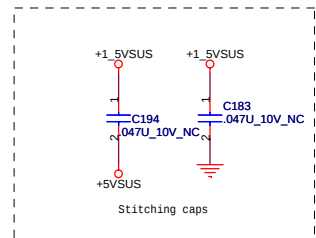


HEAT SINK

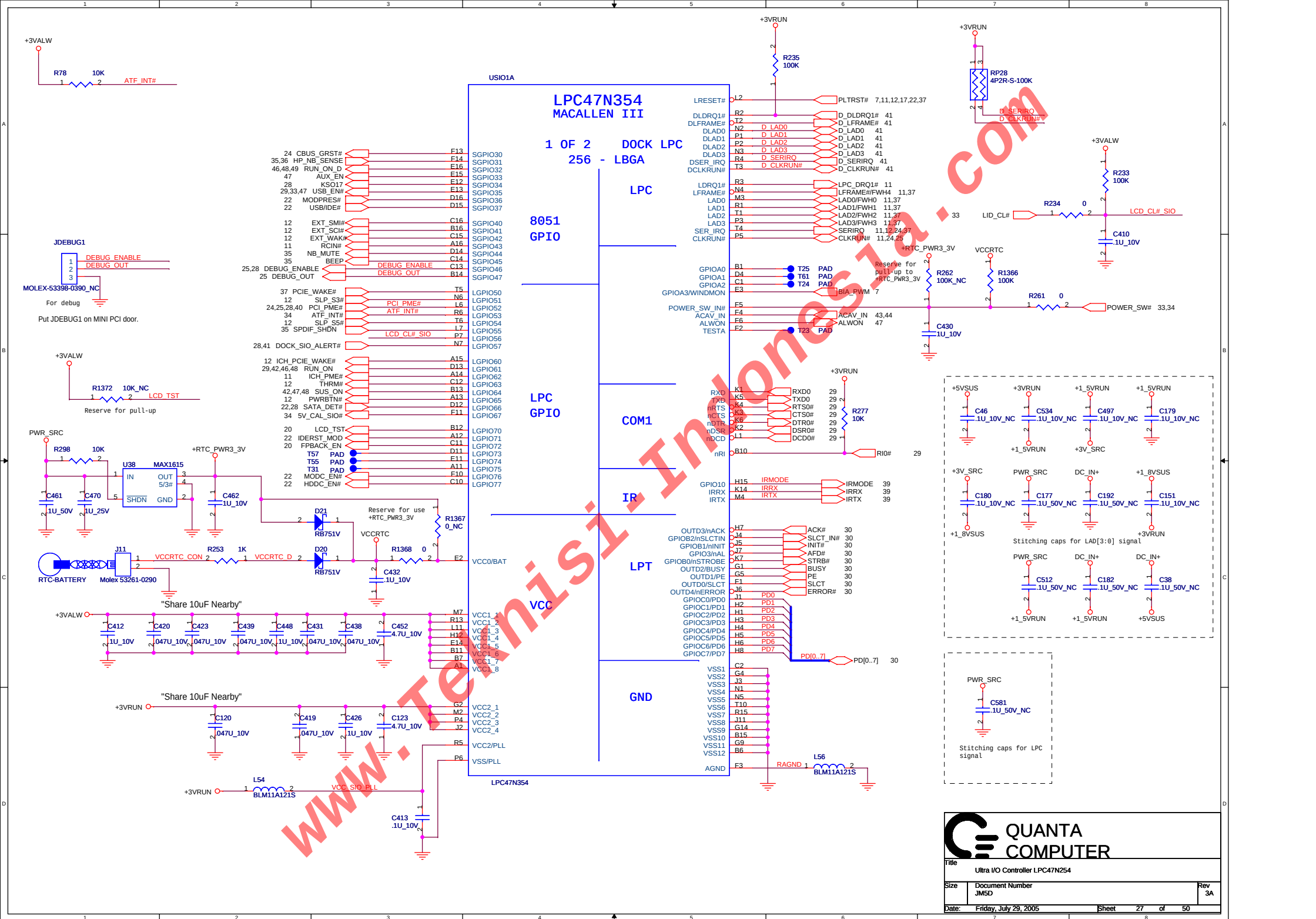


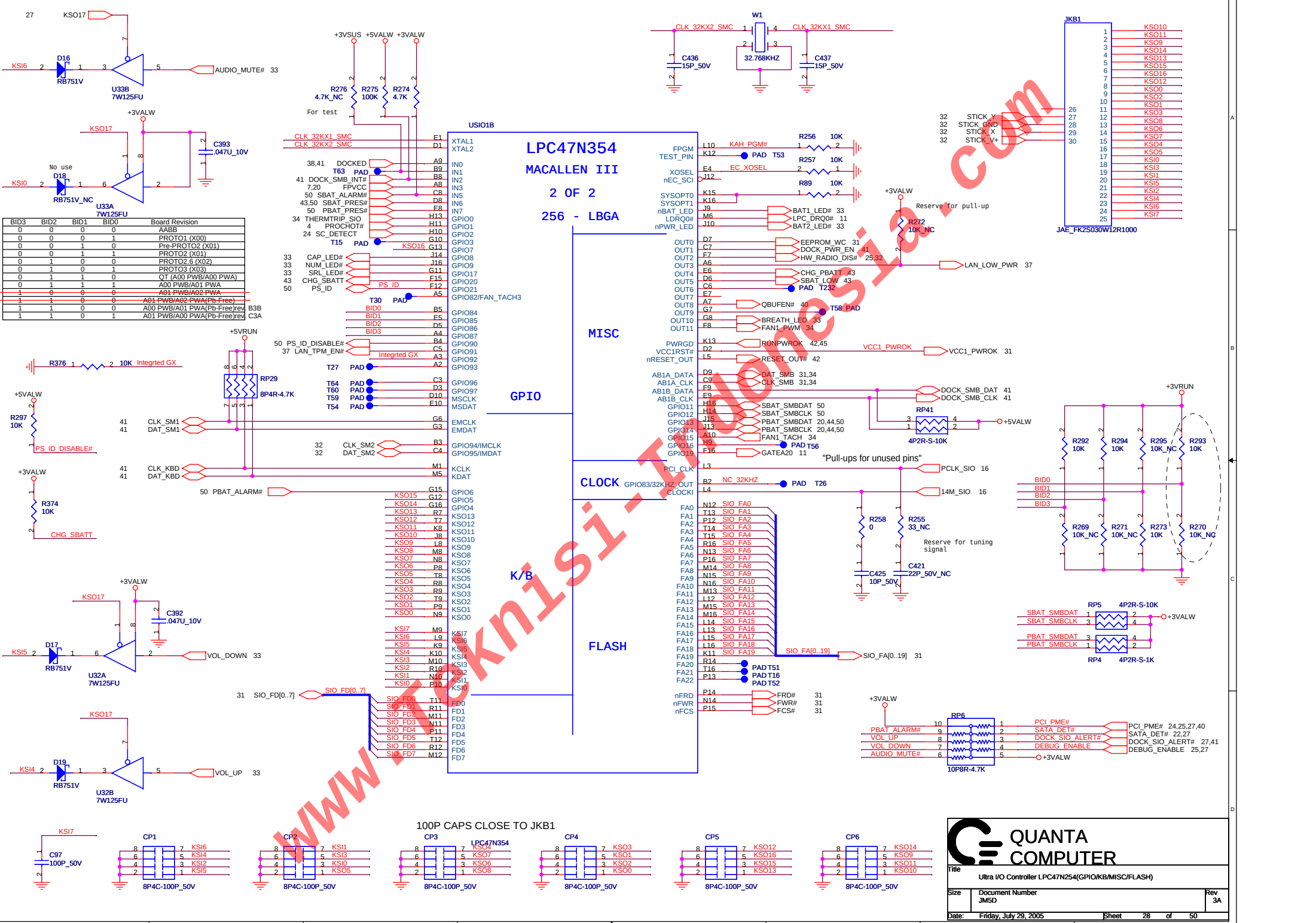
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Title SCREW PAD		
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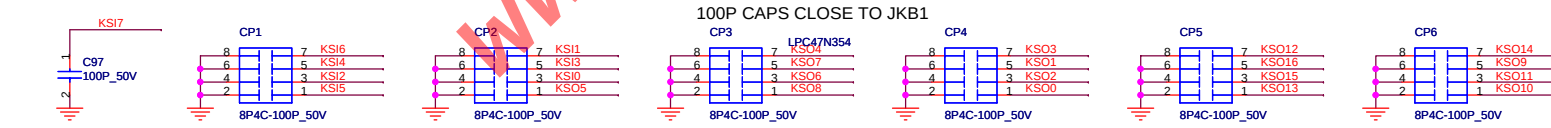


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BID3	BID2	BID1	BID0	Board Revision
0	0	0	0	A43B
0	0	0	1	PROTO1 (X00)
0	0	1	0	Pre-PROTO2 (X01)
0	0	1	1	PROTO2 (X01)
0	1	0	0	PROTO2.6 (X02)
0	1	0	1	PROTO3 (X03)
0	1	1	0	QT (A00 PWB/A00 PWA)
0	1	1	1	A00 PWB/A01 PWA
1	0	0	0	A01 PWB/A02 PWA
1	1	0	0	A01 PWB/A02 PWA (Pb-Free)
1	1	0	1	A01 PWB/A01 PWA (Pb-Free)rev B3B
1	1	1	0	A01 PWB/A00 PWA (Pb-Free)rev C3A





QUANTA
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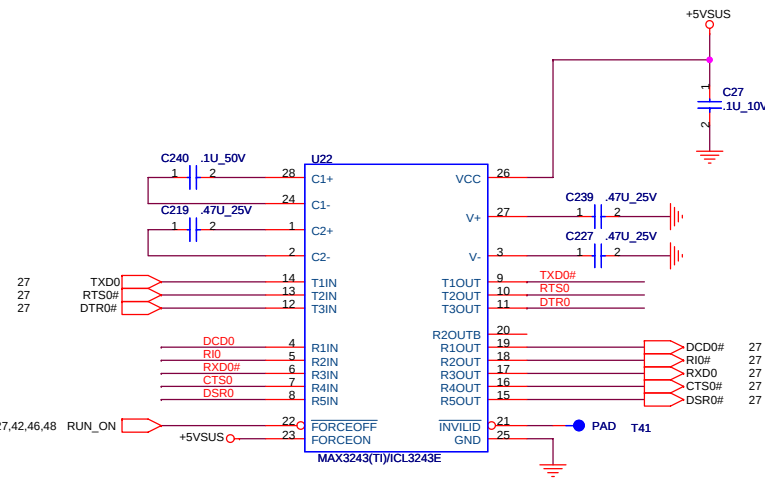
Title

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

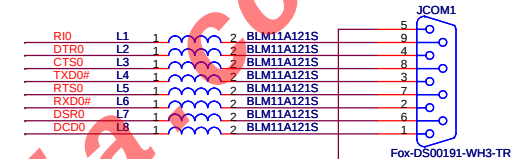
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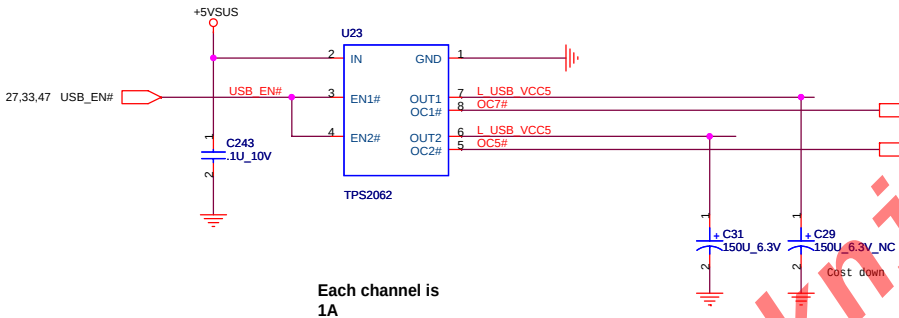
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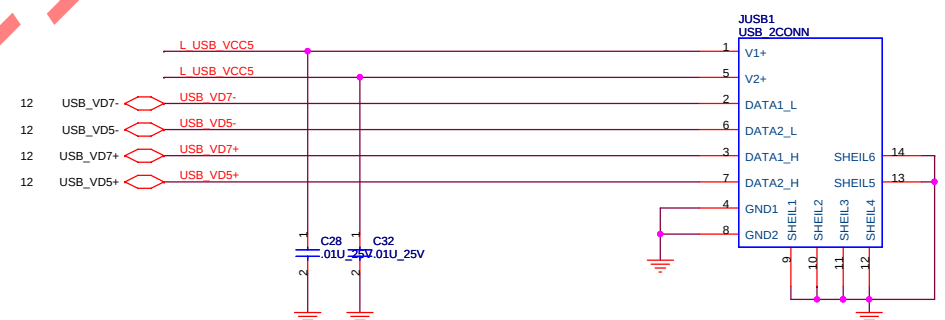
If MAX3243 pin 22 tied to RUN_ON, then it can not support Ring Out

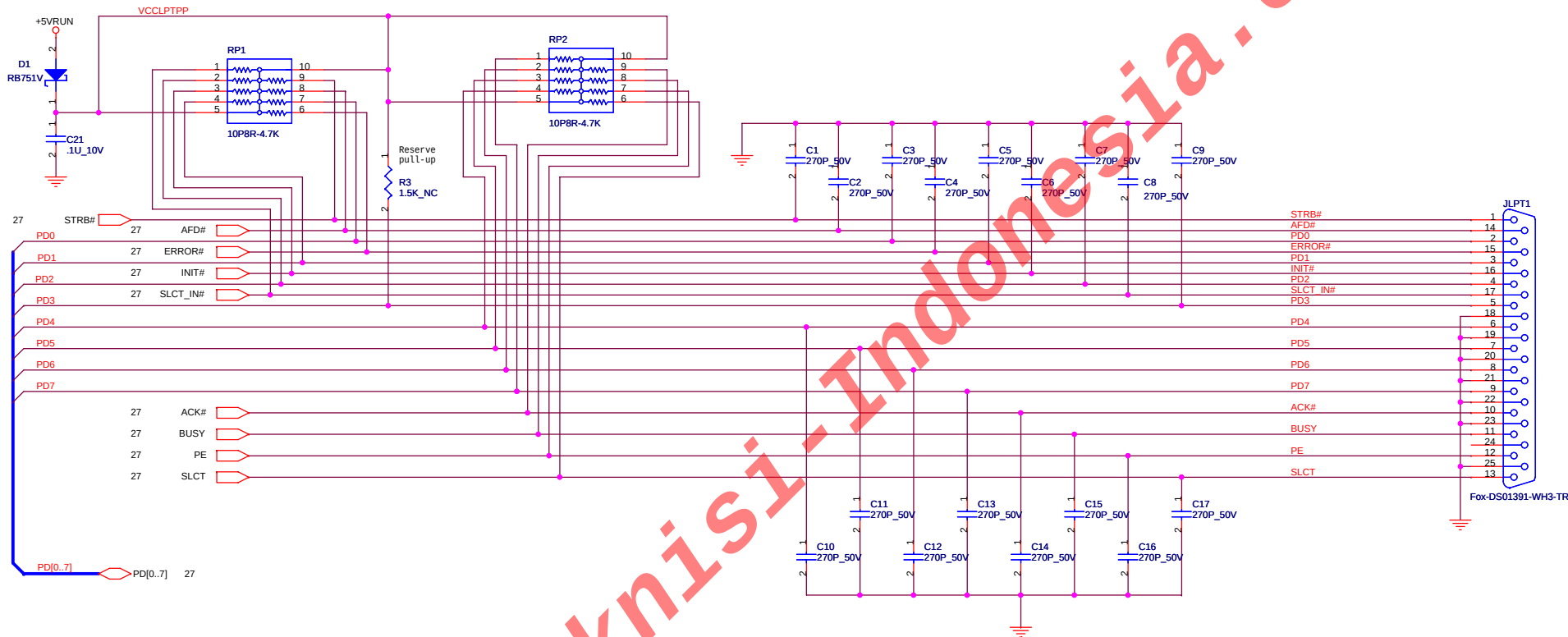


Place these beads close to JCOM1 as soon as possible



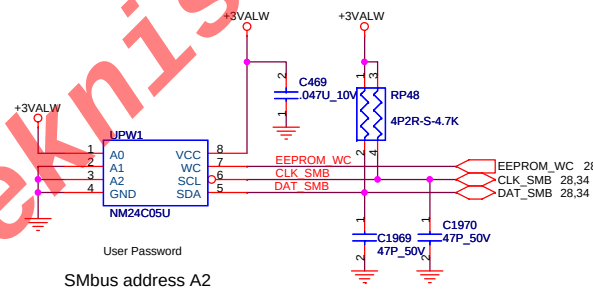
Each channel is 1A

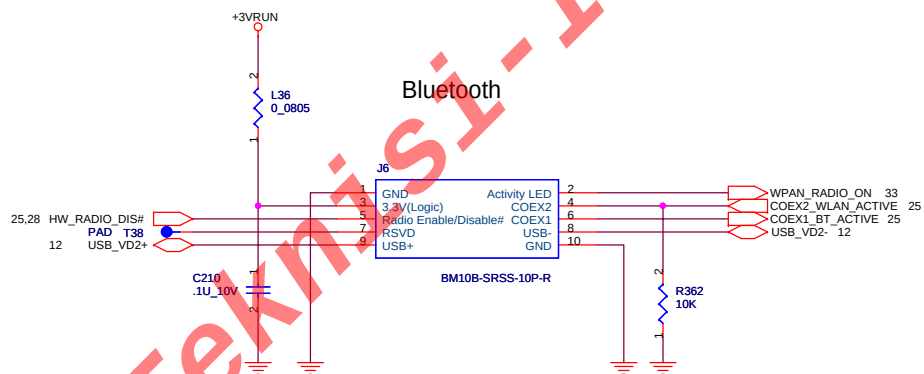
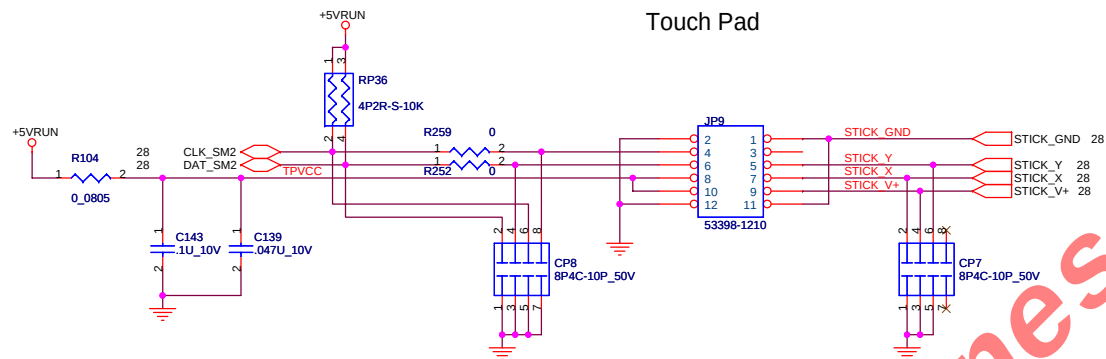


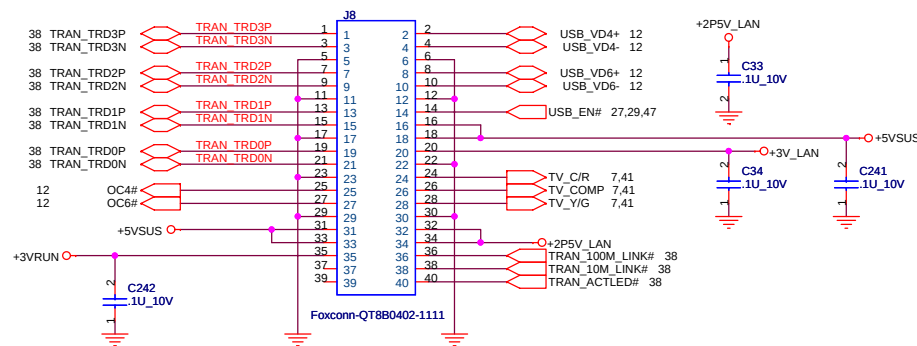
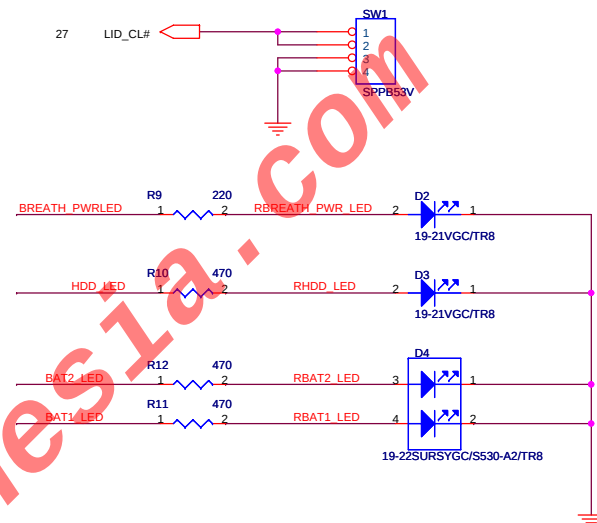
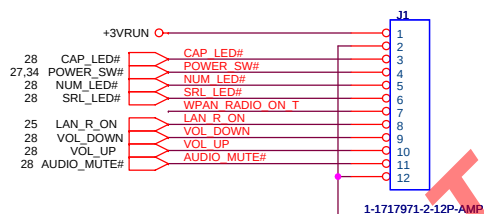
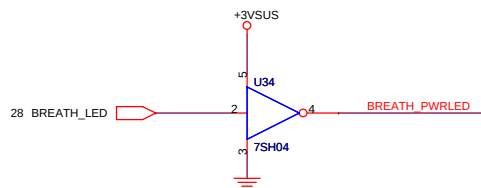
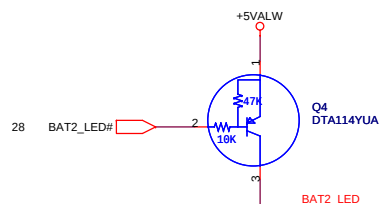
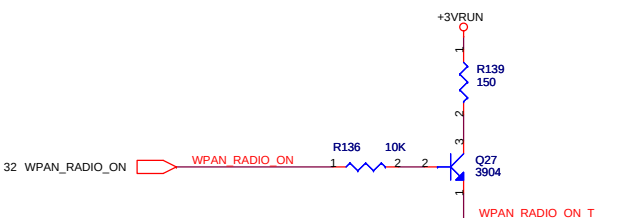
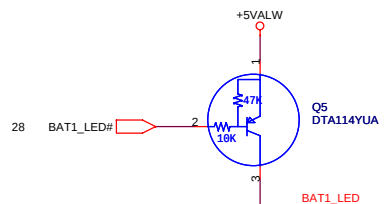
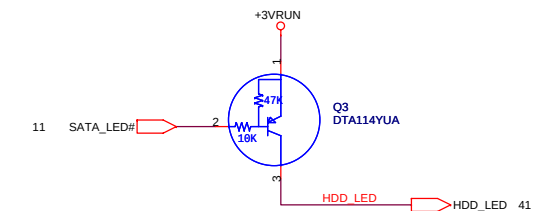


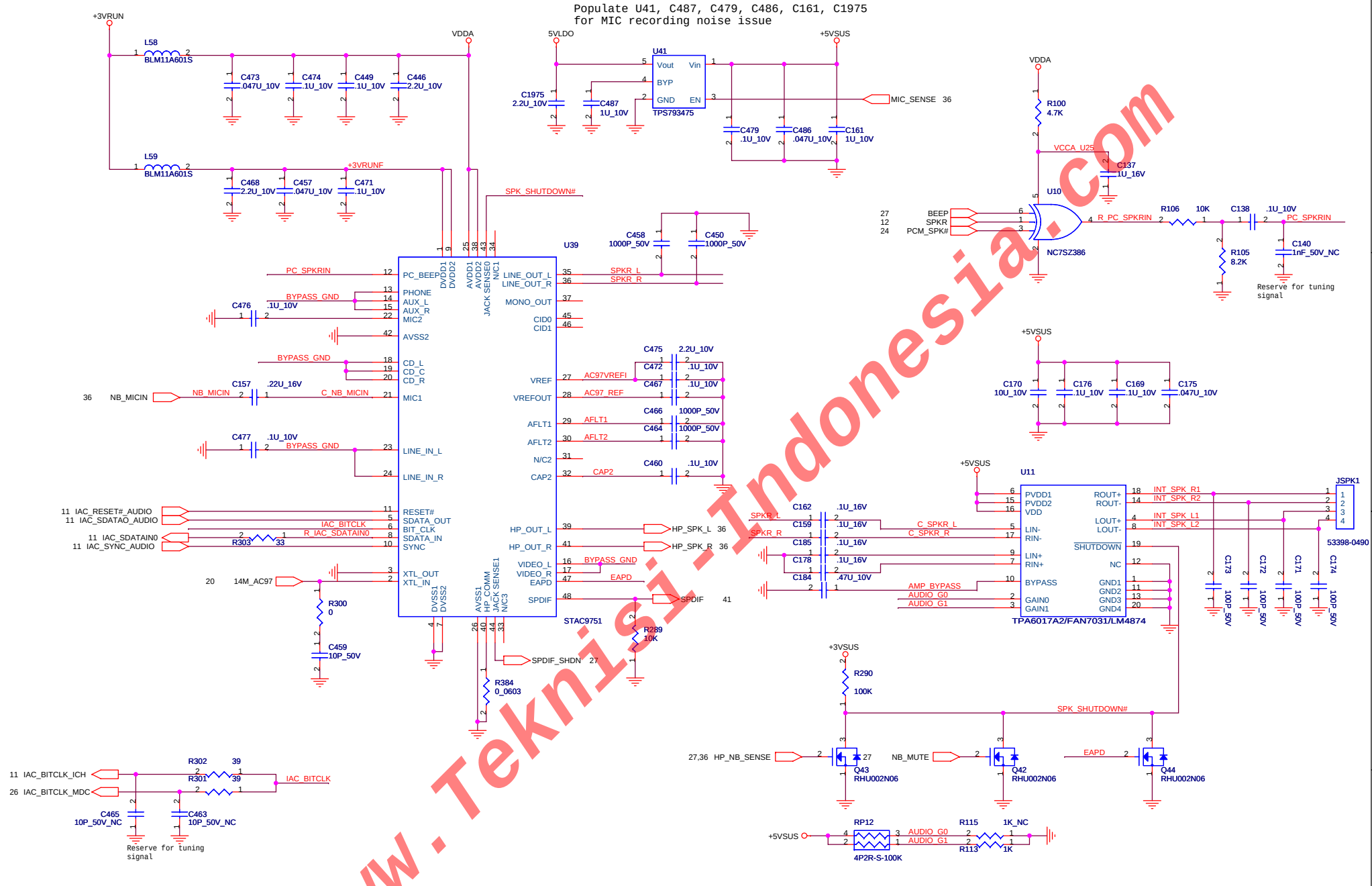
[illegible]

- 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



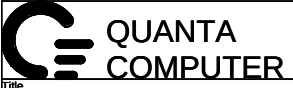


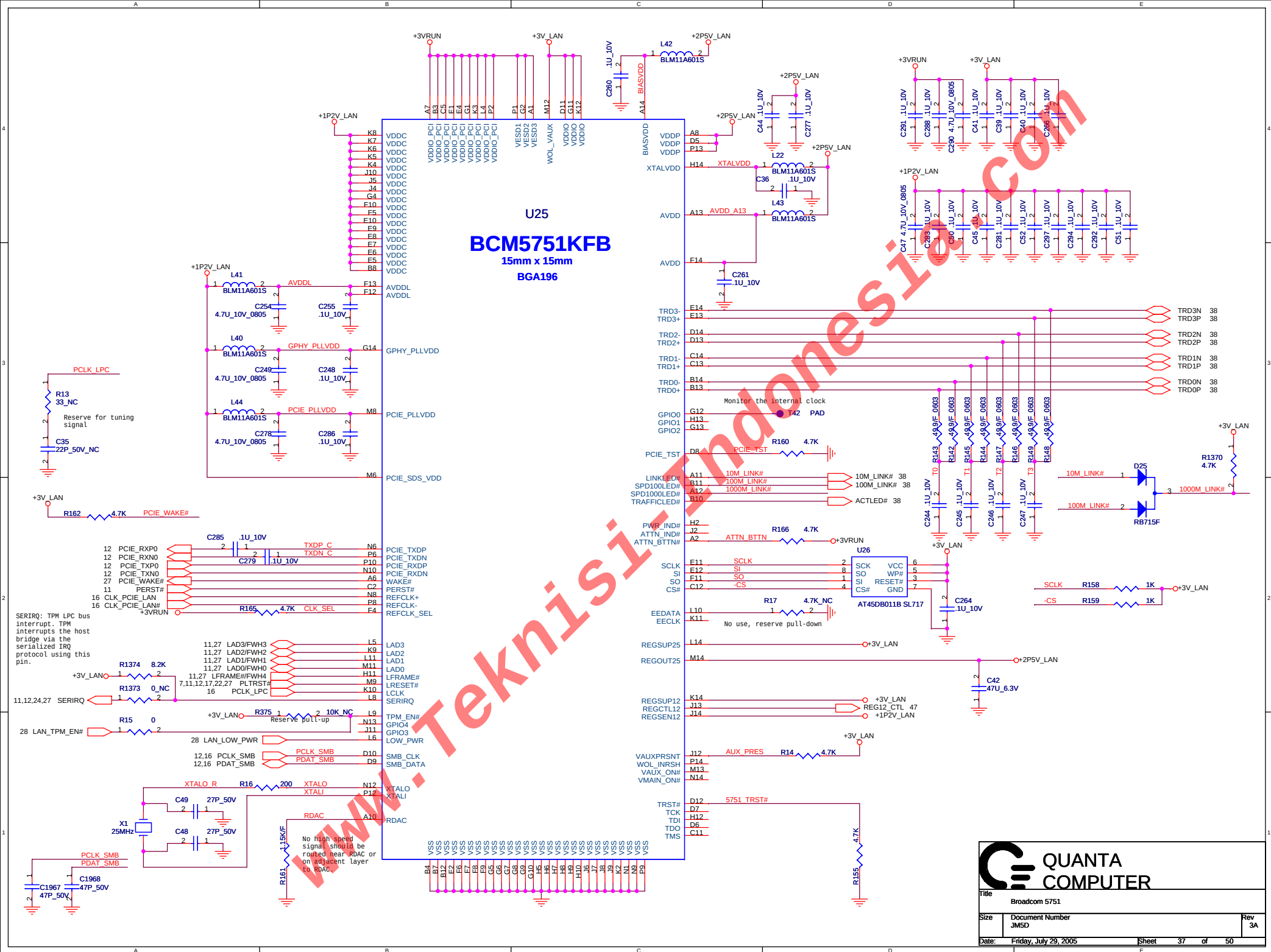




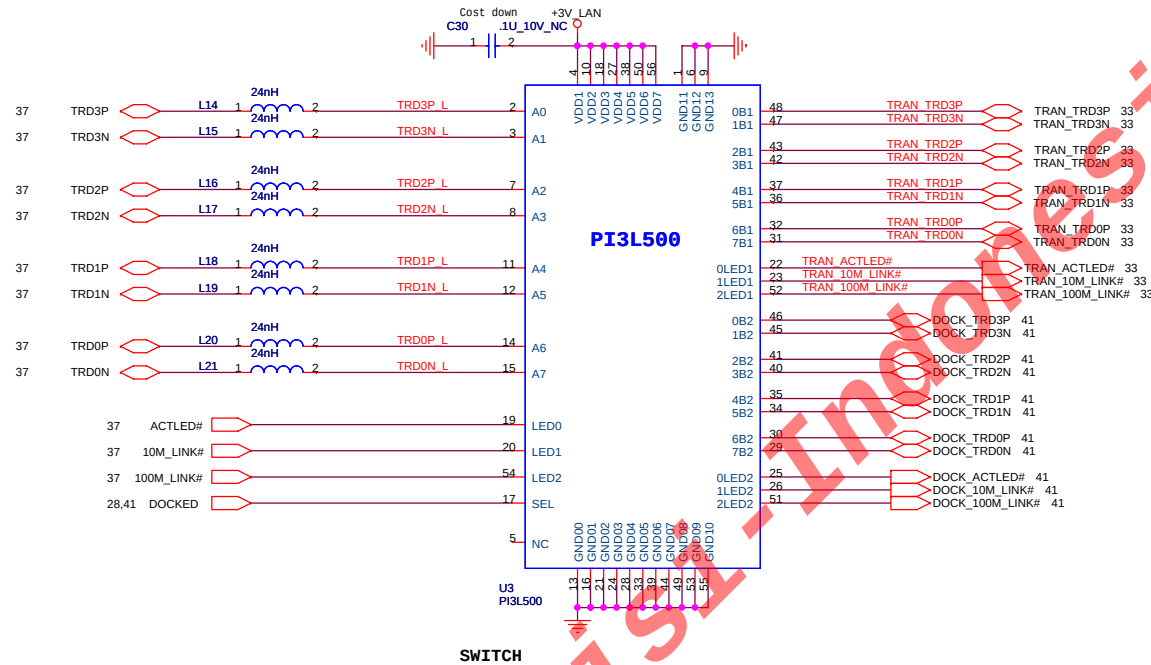
Populate U41, C487, C479, C486, C161, C1975
for MIC recording noise issue

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

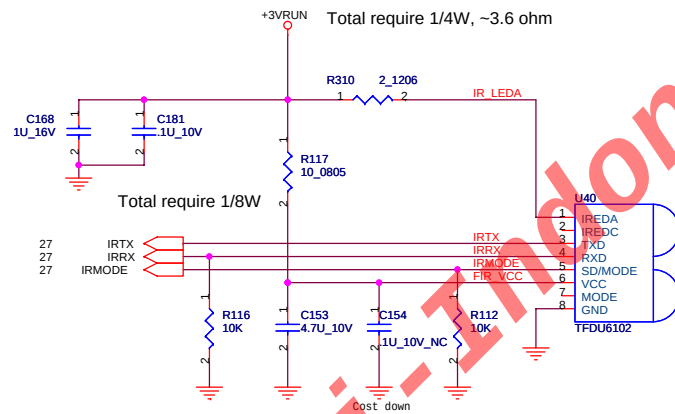


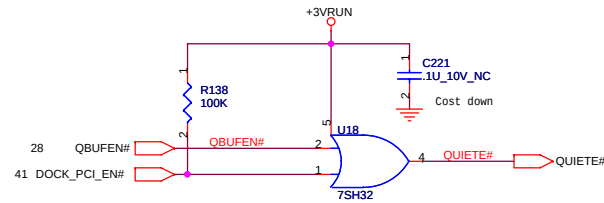
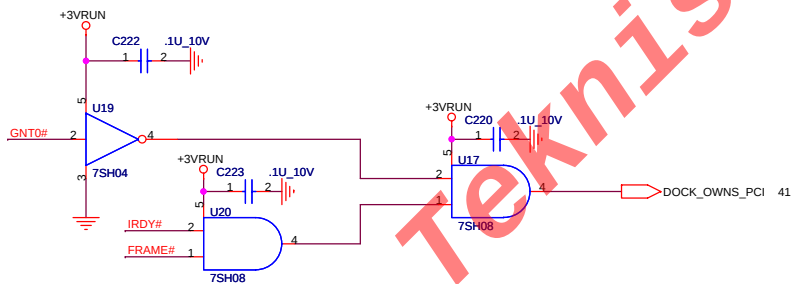
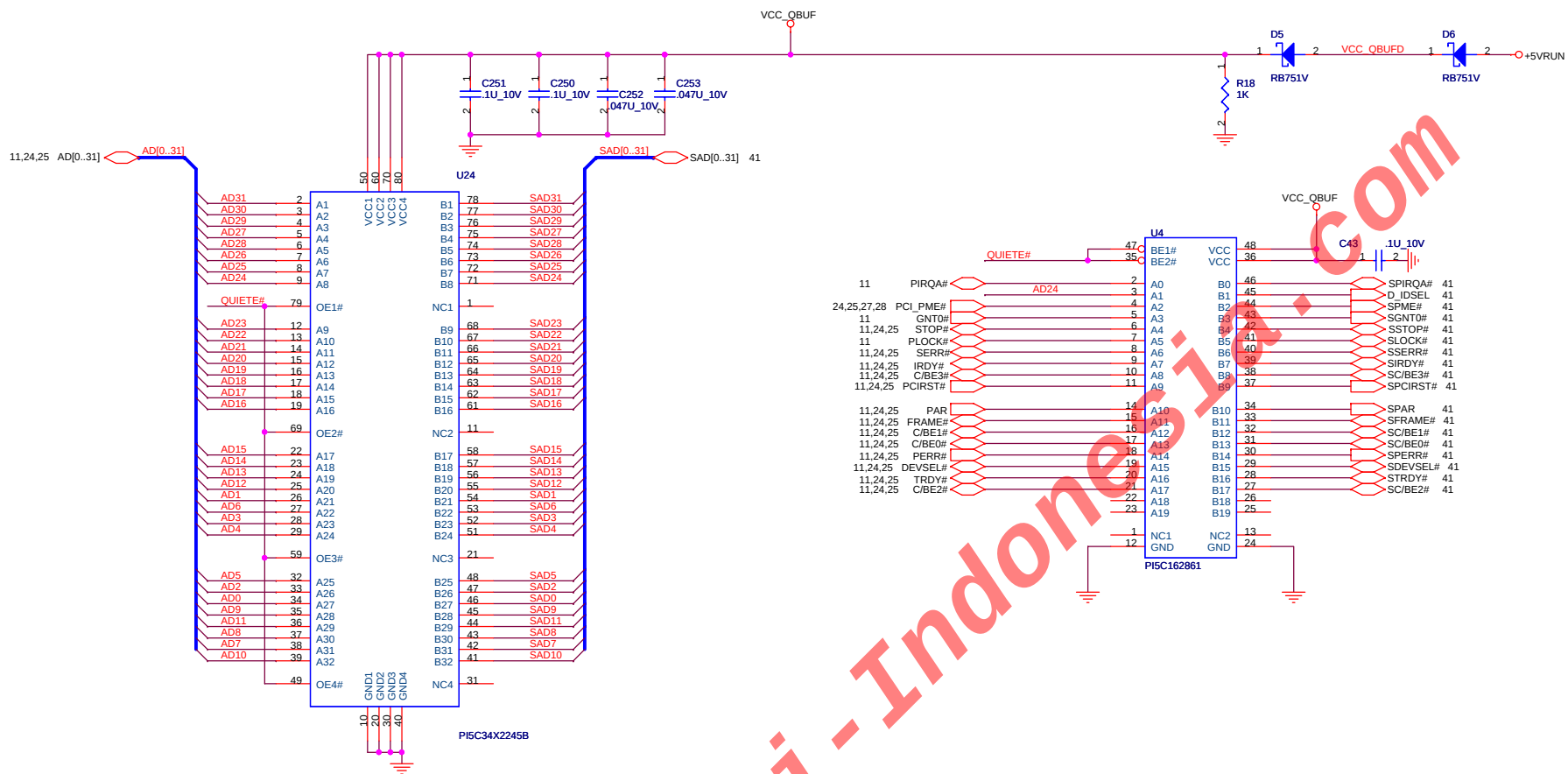


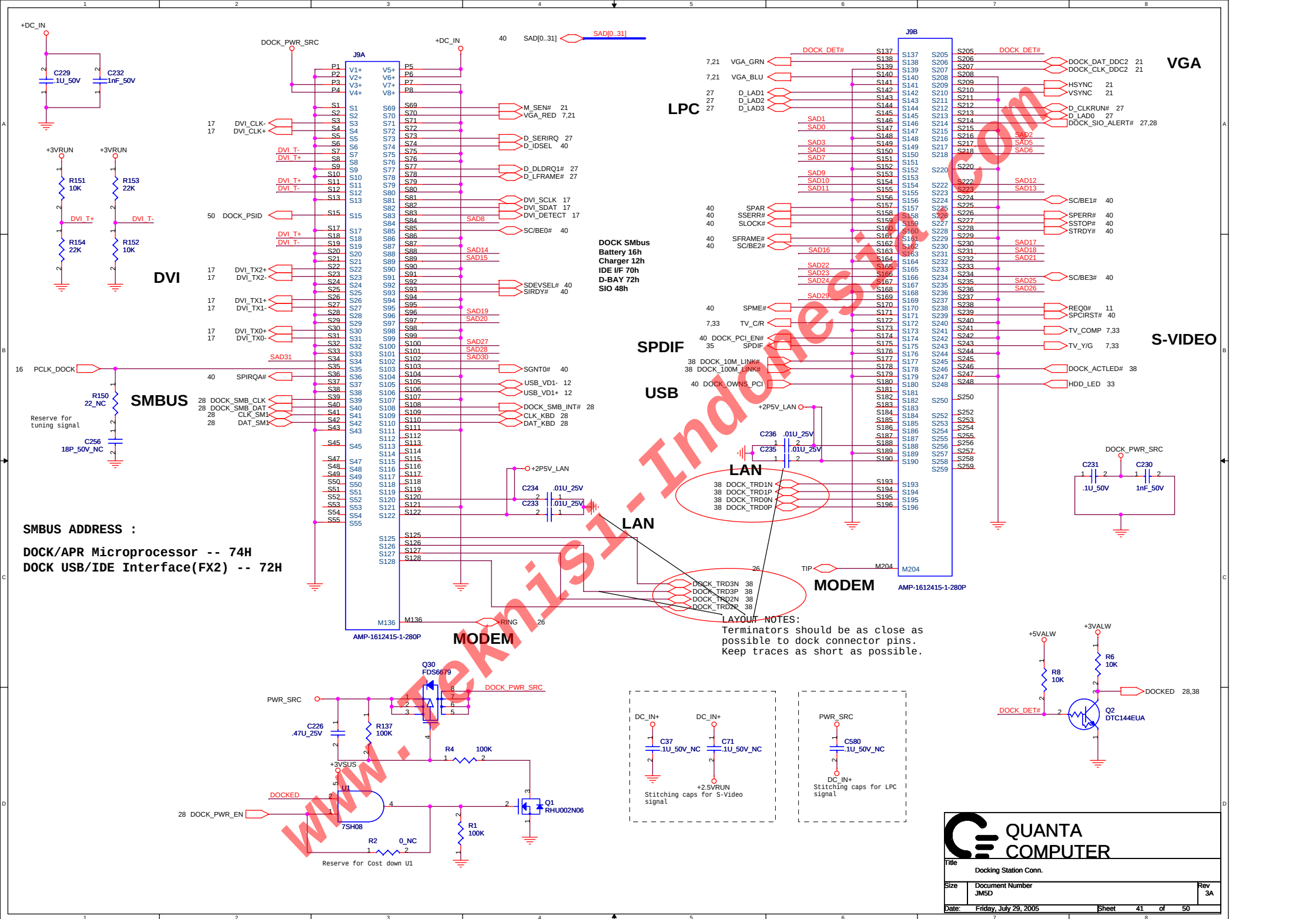
L14/L15/L16/L17/L18/L19/L20/L21 must be 0603

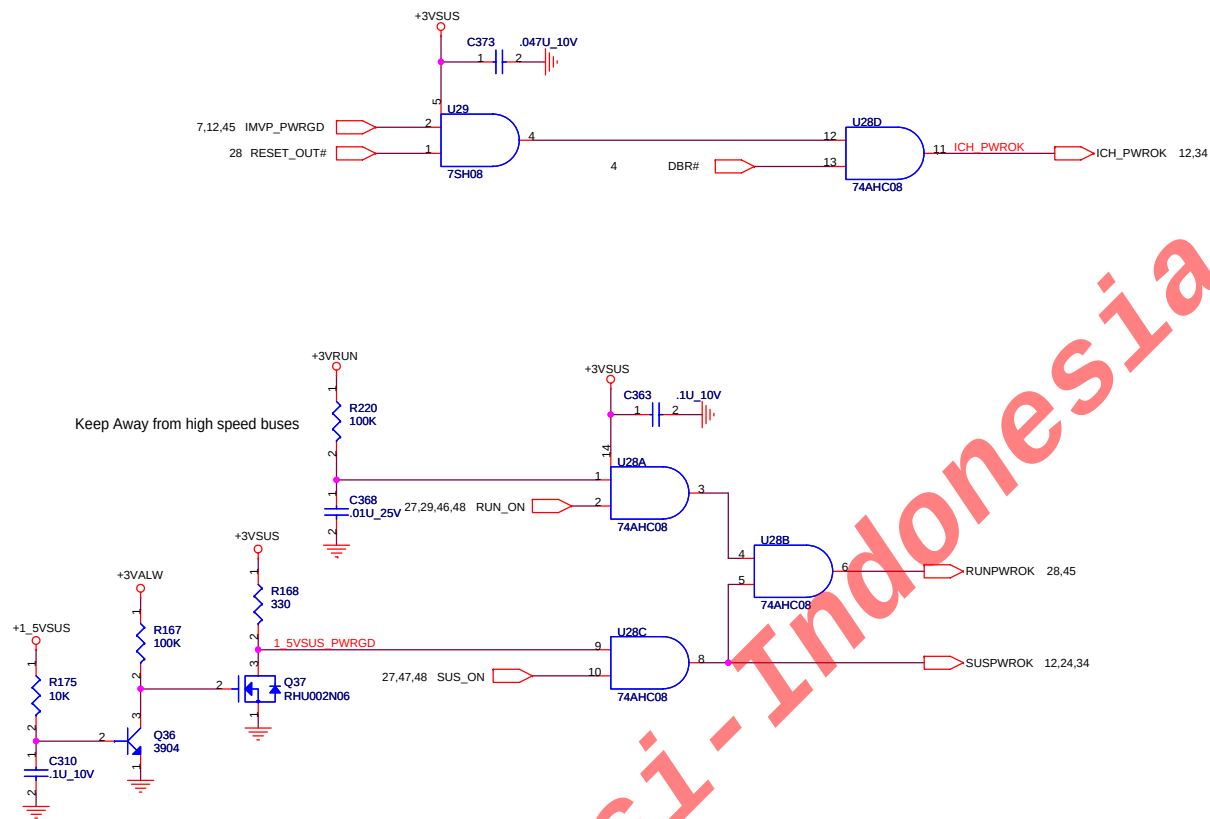


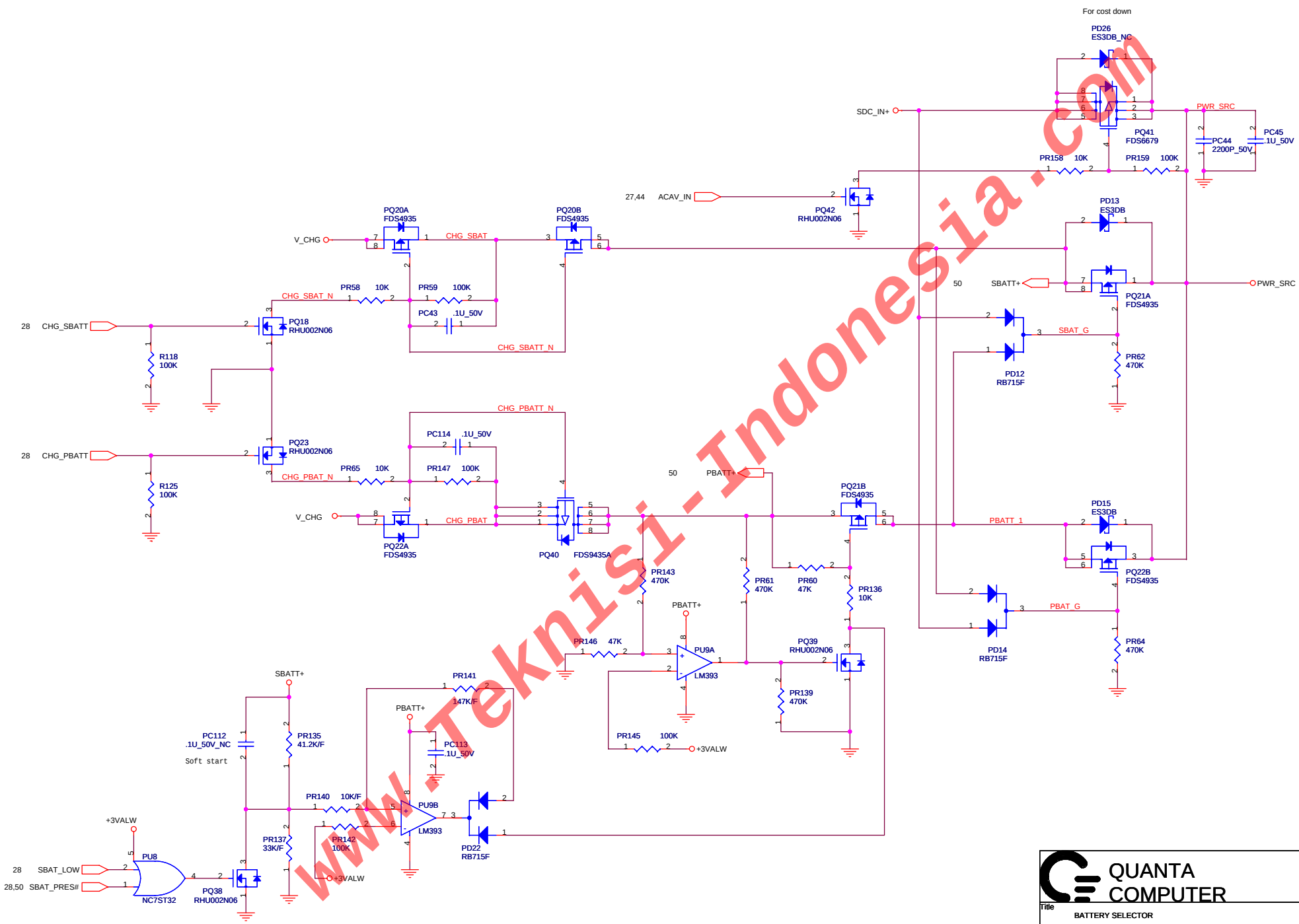
www.Teknisi-Indonesia.com

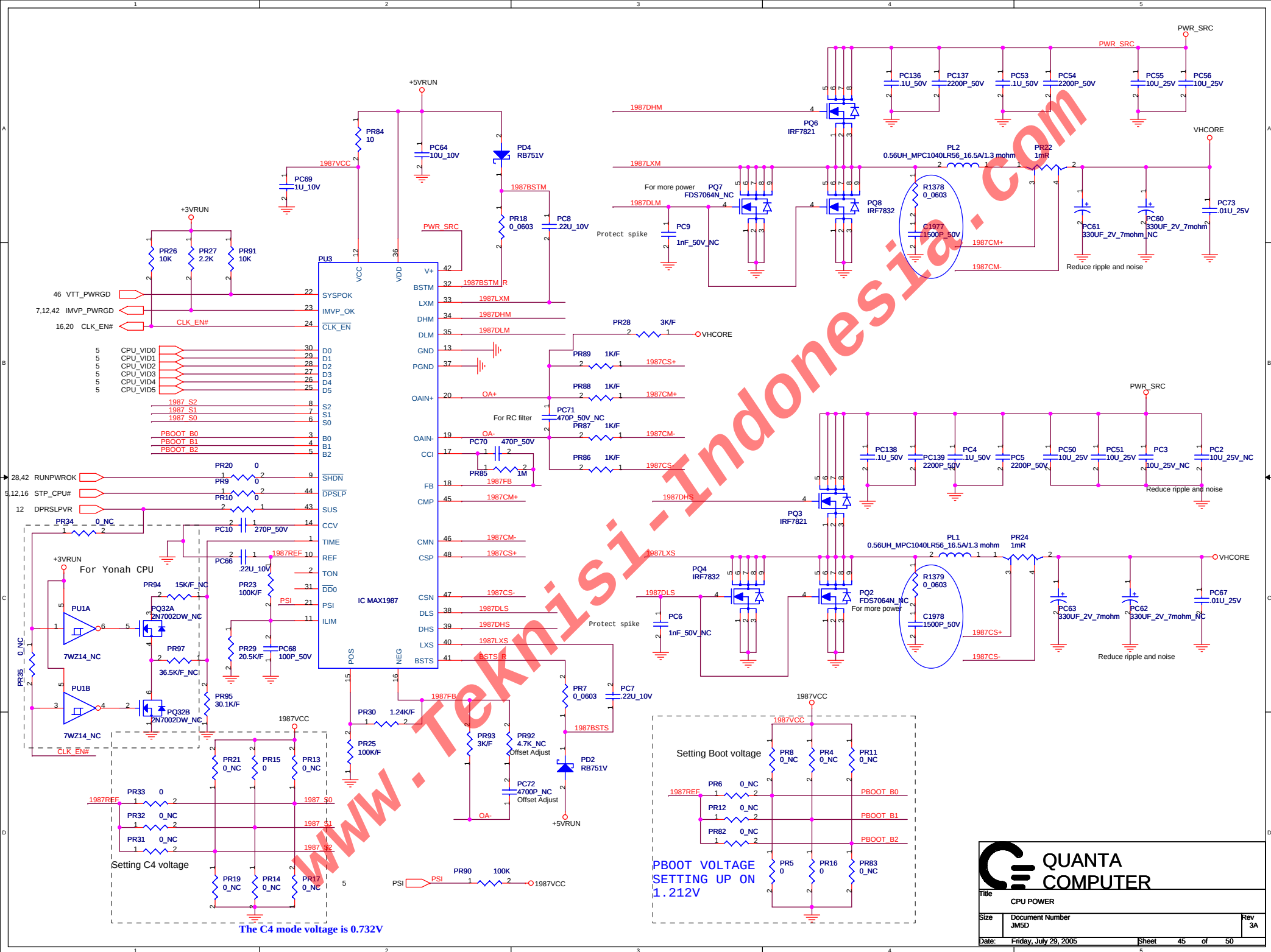


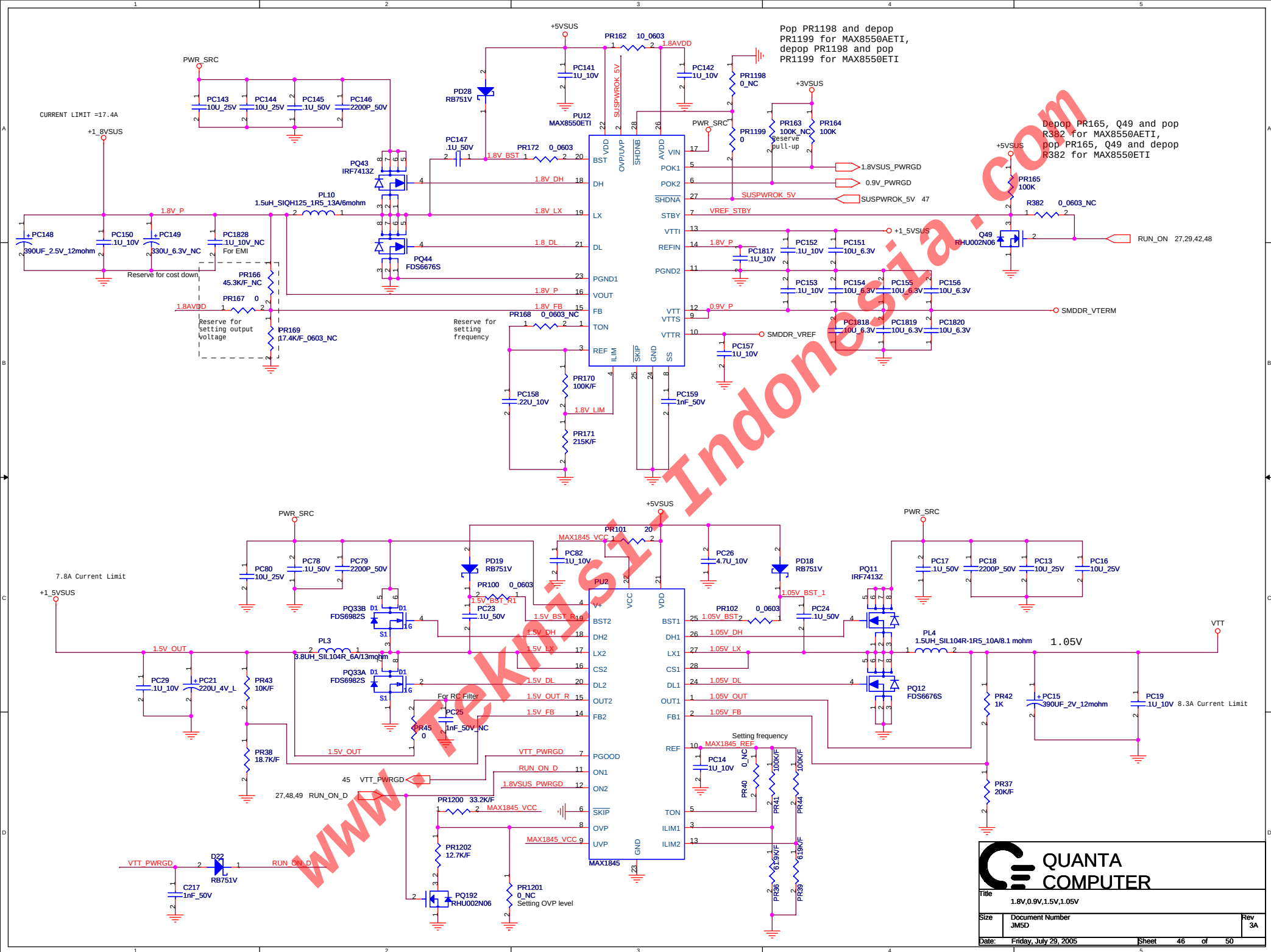


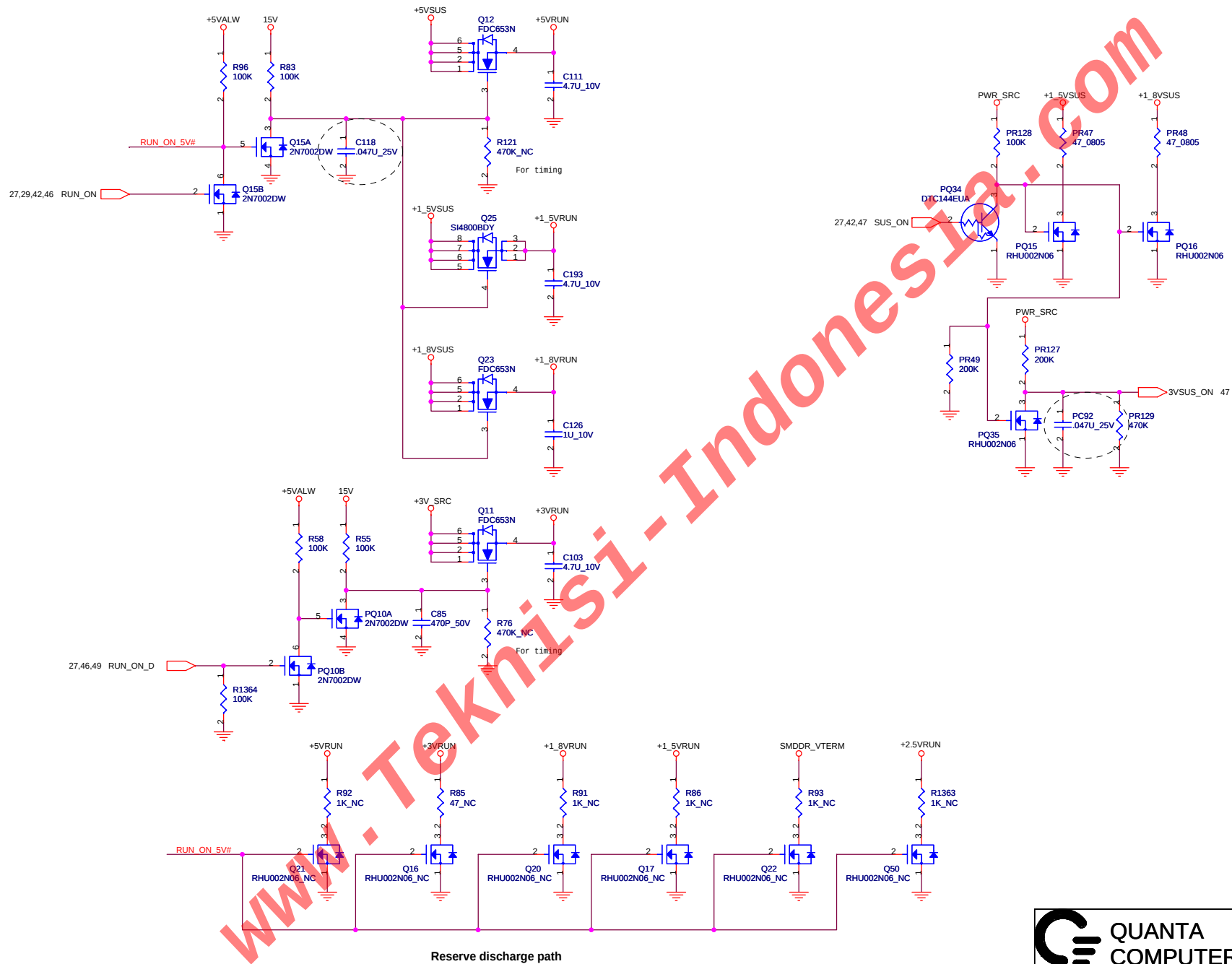


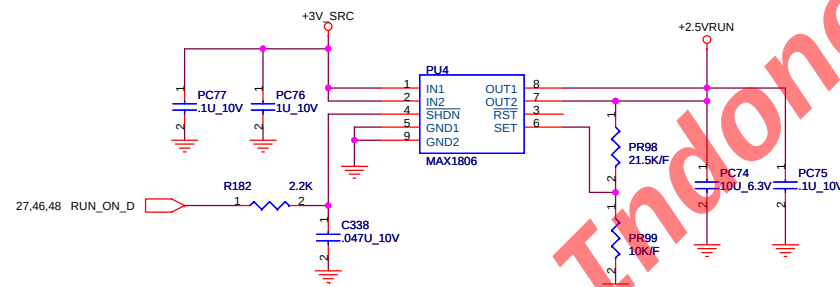


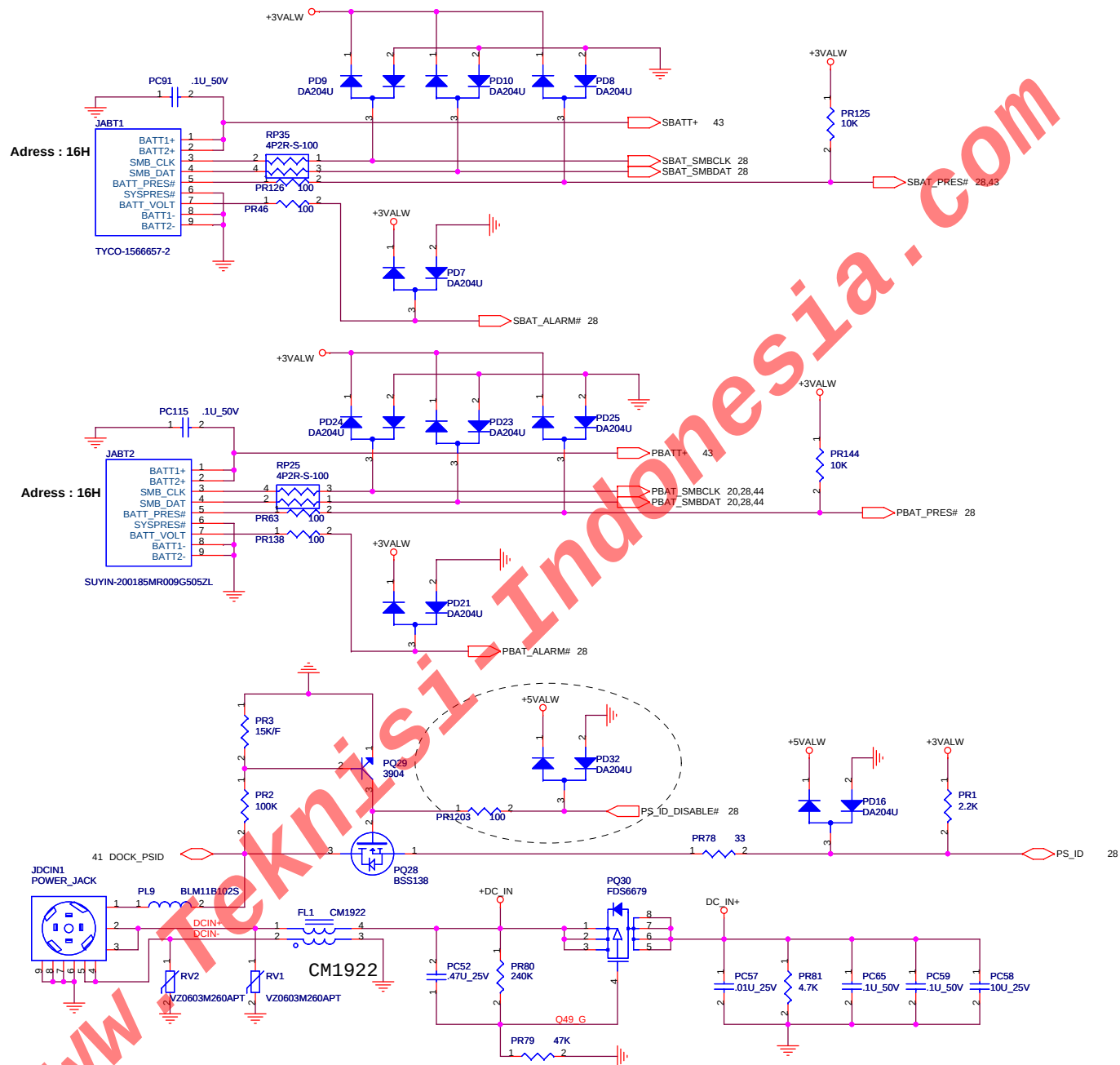












MODEL	REV	CHANGE LIST	Model	JM5D MB	
			Page	FM JM5D rev. B3B	TO
JM5D MB	3A	Base on 31JM5MB0045 rev. B3B , include below 5 changes. Separate LAMP_STAT from resistor array Smart Card, card detect add de-bounce circuit USB 2.0 HDD Non Compliance PSID protect improvement EMI Snubber circuit change Headphone noise move related components as far away +3VRun as possible by layout modification. Correct BID table & update BID from "1100" to "1101" for A00(rev. B3B) to A01(rev. C3A) Page 28 : depopulate R270 ; populate R293	1	3A	
			2	3A	
			3	3A	
			4	3A	
			5	3A	
			6	3A	
			7	3A	
			8	3A	
			9	3A	
			10	3A	
			11	3A	
			12	3A	
			13	3A	
			14	3A	
			15	3A	
			16	3A	
			17	3A	
			18	3A	
			19	3A	
			20	3A	
			21	3A	
			22	3A	
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			39	3A	
			40	3A	
			41	3A	
			42	3A	
			43	3A	
			44	3A	
			45	3A	
			46	3A	
			47	3A	
			48	3A	
			49	3A	
			50	3A	
 QUANTA COMPUTER		PROJECT : JM5D	DOC. NO. 204	REV: 3A	ASSY: 31JM5MB00**(new, wait to apply)
		APPROVED BY : Mike Hwang	CHECKED BY : Mike Hwang	DRAWN BY : Guresu Lo	DATE : Jul., 29, 2005