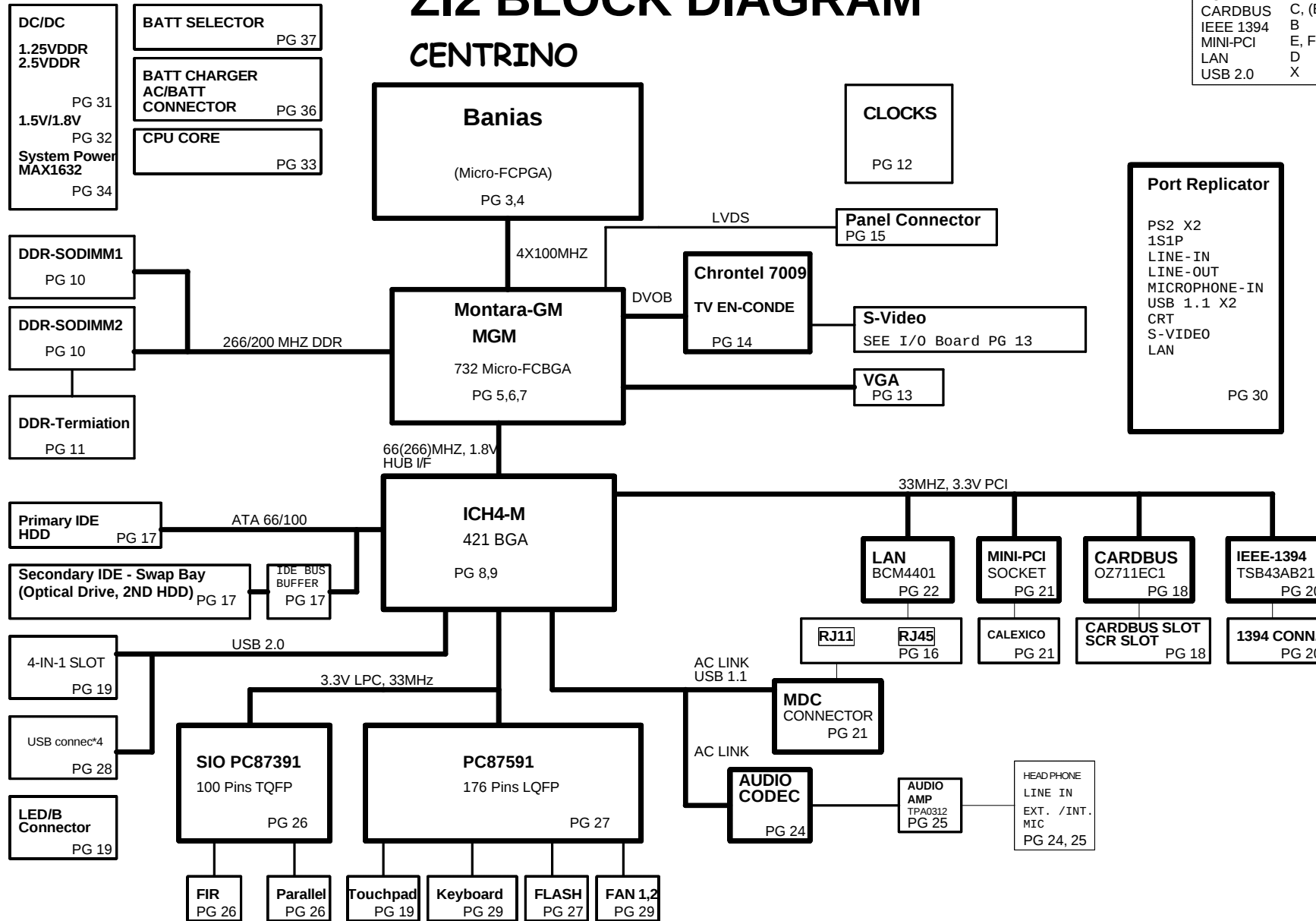


5					4					3					2					1				
MODEL :	REV :	CHANGE LIST :															PAGE	FROM	TO					
Z12 MB	1A	FIRST RELEASE : ECN NO. E200302-3095															1	1A						
	1B	MODIFY BOM : ECN NO. E200303-0277 PAGE05 : R495 CHANGE TO 127 ohm 1% PAGE06 : C604 & C654 CHANGE TO 220uF / 2.5V PAGE18 : D4 CHANGE TO CH715F PAGE26 : D35 DON'T STUFF PAGE33 : PU6 CHANGE TO MAX1907AETL , PQ15 & PQ23 CHANGE TO FDB7045L , PC46 CHANGE TO 220pF PAGE36 : PU13 CHANGE TO LM358AM															2	1A						
																	3	3B						
																	4	3A						
																	5	1B						
		1C	MODIFY BOM : ECN NO. E200303-2680 PAGE03 : Q40 CHANGE FOOTPRINT FOR SMT ISSUE PAGE06 : SOLVE FOR I2C BUS CAN'T READ DATA PAGE07 : C560 CHANGE FOOTPRINT FOR ASSEMBLY ISSUE PAGE08 : SOLVE FOR PCIRST SIGNAL NOT GOOD ISSUE PAGE09 : STUFF R634 FOR LAN WORKING PAGE10 : DDR ADDRESS LINE CHANGE & ADD EMI SOLUTION PAGE12 : SOLVE FOR I2C BUS CAN'T READING PAGE14 : U10 CHANGE TO CH7011A-T & CHANGE Q86,Q87 FOR SMBUS READING PAGE15 : SOLVE FOR LCD BACKLIGHT OFF ISSUE PAGE16 : UPDATE 4 IN 1 BOARD'S ALLOCATION HOLE SIZE PAGE18 : SOLVE FOR 4 IN 1 CARD READER MODULE READING SIGNAL PAGE19 : CHANGE LCD CONNECTOR FOOTPRINT FOR SMT ISSUE PAGE21 : ADD Q88 Q89 PAGE23 : ADD EMI SOLUTION PAGE24 : SOLVE FOR AUDIO QUALITY PAGE25 : ADD EMI SOLUTION & SOLVE FOR AUDIO QUALITY PAGE28 : SOLVE FOR USB2.0 ISSUE PAGE27 : CHANGE Q23 FOOTPRINT FOR SMT ISSUE PAGE29 : ADD EMI SOLUTION PAGE30 : ADD EMI SOLUTION PAGE32 : PQ6 CHANGE TO SI4810DY															6	2A					
																7	1C							
																8	3B							
																9	3A							
																10	1C							
																11	1A							
																12	3B	3C						
																13	3B							
																14	3B							
																15	3A							
																16	3A							
																17	3B							
	2A		MODIFY BOM : ECN NO. E200303-3536 PAGE06 : ADD R480 FOR TV-OUT PAGE21 : DON'T STUFF R510 FOR MINI PCI LAN CARD DON'T WORK PAGE27 : DON'T STUFF R150 FOR PWROK SIGNAL QUALITY															18	3B					
																		19	3B					
																		20	3B					
	3A		MODIFY BOM : ECN NO. E200304-2184 PAGE03 : SOLVE LEAKAGE CURRENT ISSUE (Q40) PAGE04 : CHANGE FOOTPRINT FOR SMT ISSUE PAGE09 : CHANGE R460 FOR USB2.0 EYE DIAGRAM PAGE12 : ADD CLK BYPASS CAPACITOR FOR SIGNAL QUALITY PAGE14 : SOLVE FOR TV-OUT NOT GOOD ISSUE PAGE15 : ADD ACER'S REQUEST (HOT-KEY FOR BACKLIGHT) PAGE16 : ADD FINGER FOR ASSEMBLY ISSUE PAGE19 : SOLVE LEAKAGE CURRENT ISSUE (Q57) PAGE23 : CHANGE PART FOR ASSEMBLY ISSUE PAGE24 : SOLVE AUDIO NOISE & VOLUME ISSUE PAGE25 : SOLVE AUDIO NOISE ISSUE PAGE26 : CHANGE PART BY PURCHASE DEPT REQUEST PAGE27 : SOLVE LEAKAGE CURRENT ISSUE (Q23) PAGE28 : CONNECT USB HUB OVER CURRENT SIGNAL 1&2 TOGETHER PAGE29 : DELETE UNUSED NET PAGE31 : CHANGE PART FOR ASSEMBLY ISSUE															21	3B					
																		22	3B					
																	23	3A						
																	24	3B						
																	25	3B						
																	26	3A						
																	27	3B						
																	28	3A						
		3B	MODIFY BOM : ECN NO. E200305-1836 & E200305-2668 & E200306-0261 PAGE03 : DELETE ITP & SOLVE THERMAL SIGNAL MIXER PAGE08 : ENHANCE PCIRST SIGNAL QUALITY PAGE12 : ADD SUSC# FOR CLOCK POWERDOWN PAGE13 : SOLVE FOR ACER'S LCD MONITOR 1280X1024 NO DISPLAY ISSUE PAGE14 : SOLVE FOR VIEW SONIC'S MONITOR DISPLAY NO GOOD ISSUE PAGE17 : ENHANCE IDE RST SIGNAL PAGE18 : IMPROVE ICH_PME# SIGNAL PAGE19 : PREVENT SUPPEND LEAKAGE CURRENT ISSUE PAGE20 : IMPROVE ICH_PME# SIGNAL PAGE21 : IMPROVE ICH_PME# SIGNAL PAGE22 : SOLVE WAKE UP ON LAN ISSUE PAGE24 : SOLVE MTC SMALL VOLUME ISSUE PAGE25 : SOLVE PCMCIA DOS TEST NO SOUND ISSUE PAGE27 : SOLVE WAKE UP ON LAN ISSUE PAGE29 : PREVENT THERMAL SIGNAL UNPROBABLY WORK ISSUE PAGE35 : PREVENT DTC144EUA TRANSISTOR BAD CAUSE HDD NO POWER & REBOOT FAIL ISSUE															29	3B					
																		30	1C					
																31	3A							
																32	1C							
																33	1B							
																34	1A							
																35	3B							
																36	1B							
																37	1A							
3C	MODIFY BOM : ECN NO. E200306-1724 PAGE12 : MODIFY R244 TO 22 OHM 1% FOR USB CLOCK TIMING ISSUE																							
 PROJECT : Z12 Quanta Computer Inc.		PROJECT : Z12 MB ASSY'S P/N : 31ZI2MB0007			APPROVE BY: LAWRENCE CHAO PROJECT LEADER: JIM HSU			DRAWING BY: JACKY CHENG DOCUMENT NO: 204			REV : 3C DATE :2003/06/18			COVER SHEET 1 OF 1										
5					4					3					2					1				

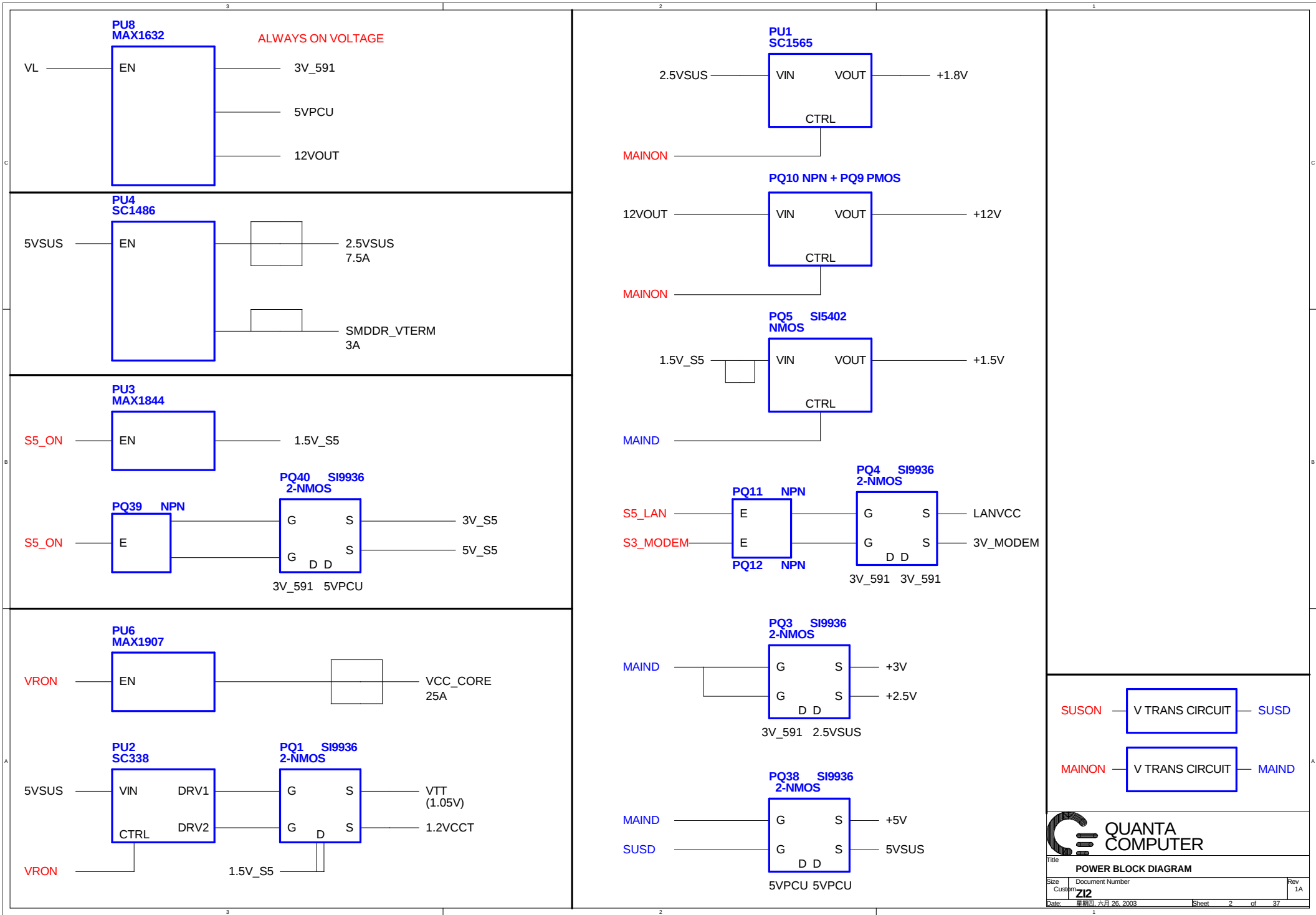
ZI2 BLOCK DIAGRAM

CENTRINO

	PIRQ#	REQ#/GNT#	IDSEL
VGA	X	X	X
CARDBUS	C, (B)	3	22
IEEE 1394	B	2	23
MINI-PCI	E, F	1	20
LAN	D	0	18
USB 2.0	X	X	X

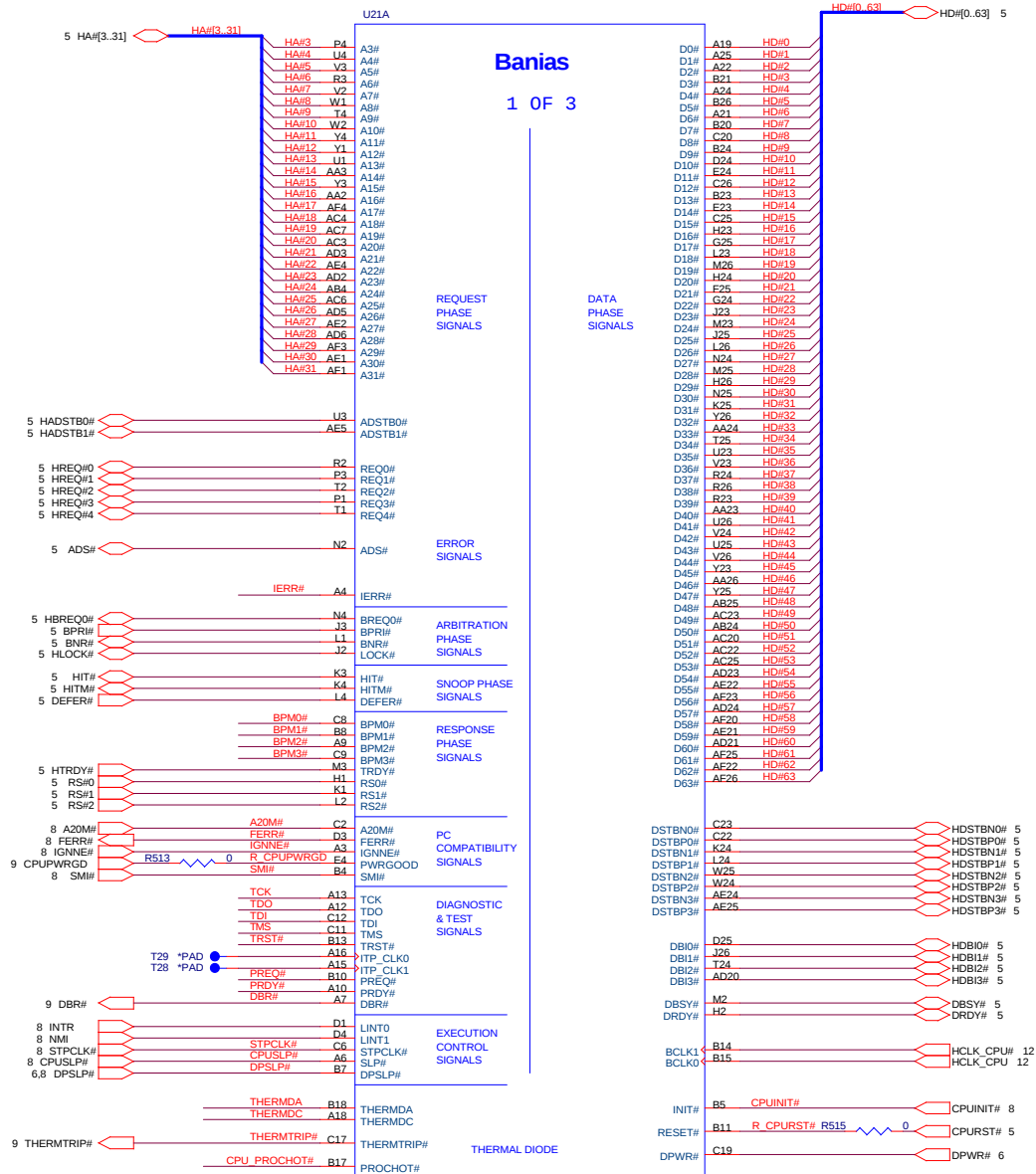


Title Schematic Block Diagram1		
Size	Document Number ZI2	Rev 1A
Date 日期: 六月 26, 2003	Sheet 8	of 37

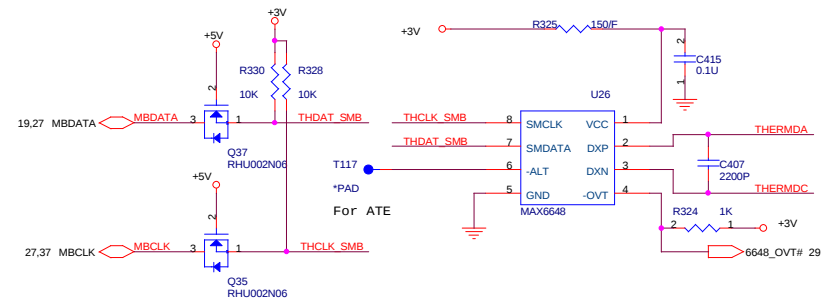


Banias

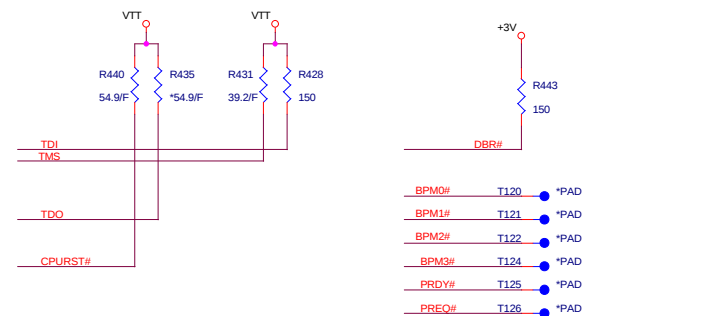
1 OF 3



Banias_Processor



R516 should be place within 2" of the processor ; others place near ITP

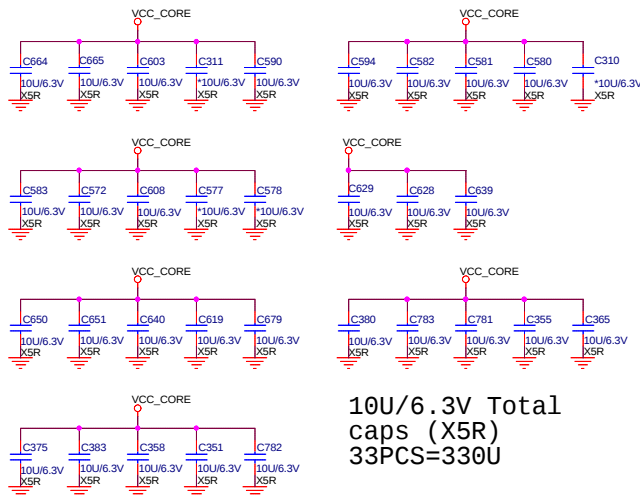
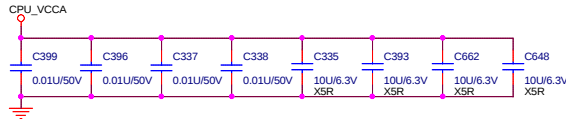
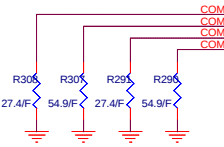


De1 ITP700
De1 R434, R439, C542, R442

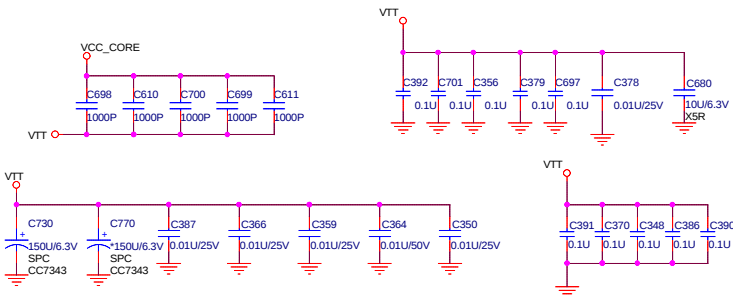


Title		Banias Processor (HOST)	
Size	Document Number	Z12	
Date	Rev	3B	
7	8	9	10

These 4 Resistors need to place with 0.5" of CPU.
Comp0,2 trace need to be $z_0=27.4\ \Omega$,
comp1,3 traces need to be $z_0=55\ \Omega$.

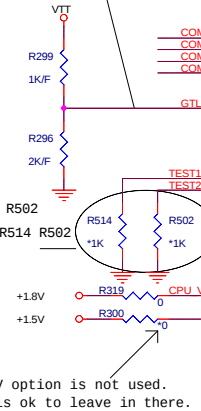


10U/6.3V Total
caps (X5R)
33PCS=330U



GTREF: 2/3 VCCP+-2%
 $T < 0.5"$ 25 mils space

25 MILS (>50 MILS PREFERRED) SPACE
 $T < 0.5"$

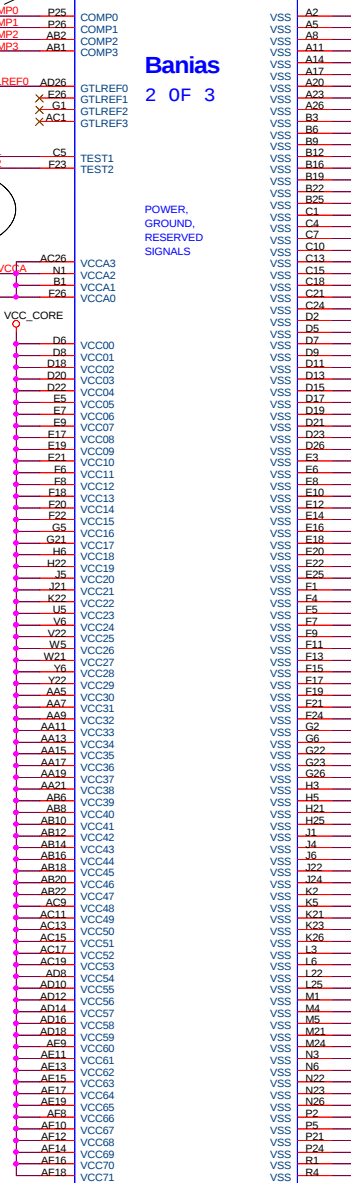


A0 CPU install R514 R502
A1 CPU not install R514 R502

1.5V option is not used.
It is ok to leave in there.

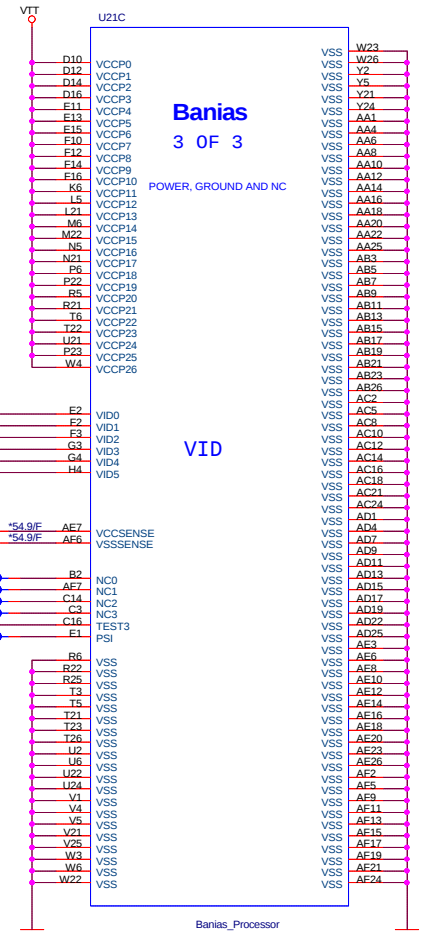
Banias
2 OF 3

POWER, GROUND, RESERVED SIGNALS

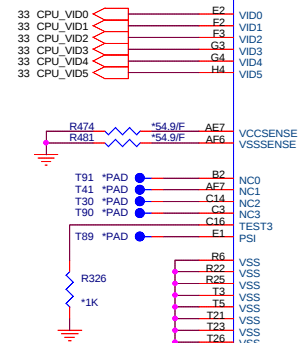


Banias
3 OF 3

POWER, GROUND AND NC



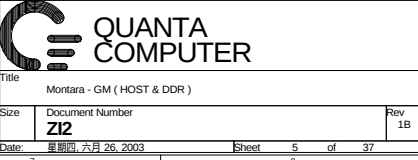
VID

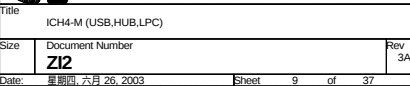


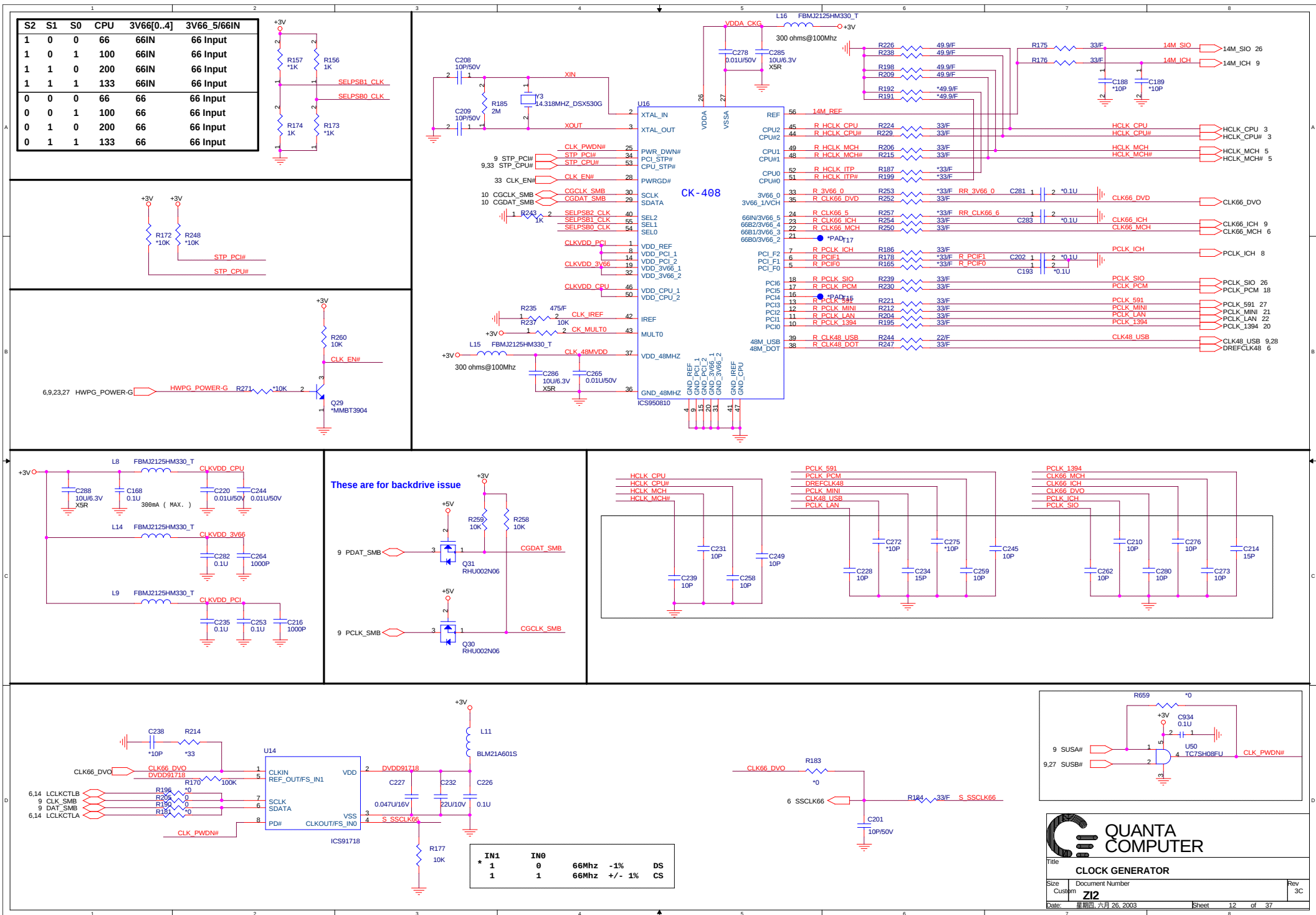
* VCC,BOOT 1.2V
VCC_CORE 1.468V
(DEEPER SLEEP) 0.956V
VTT 1.05V
VCCA 1.8V

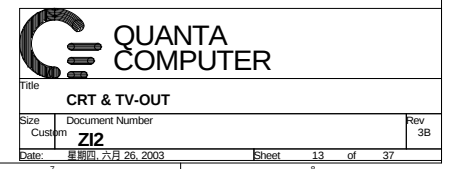
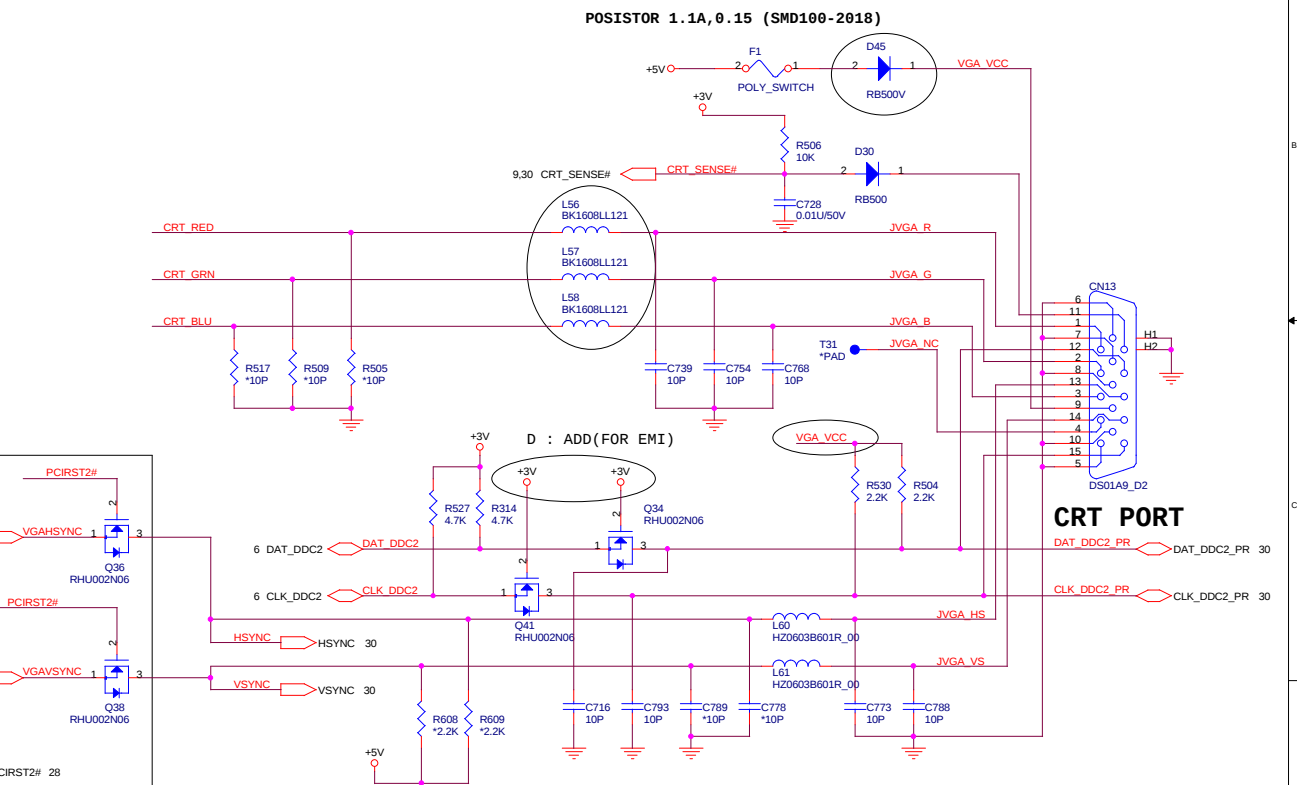
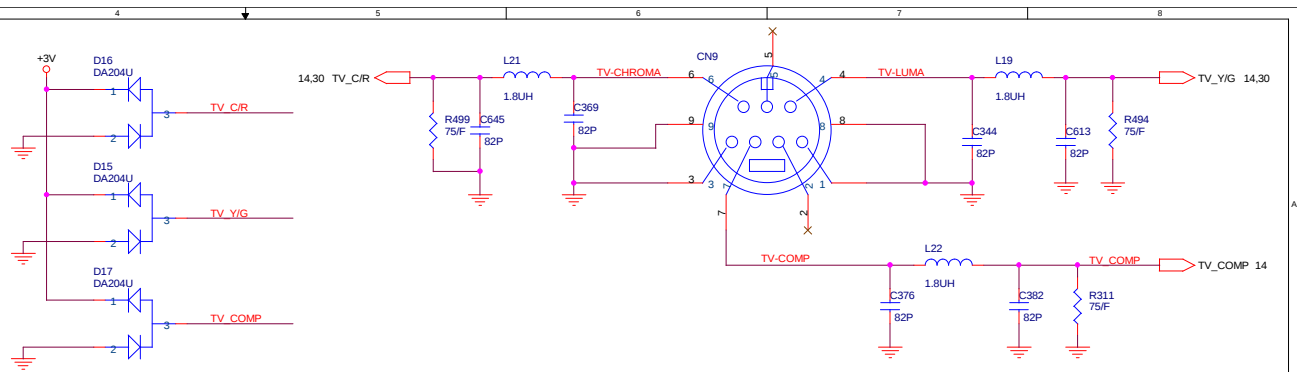


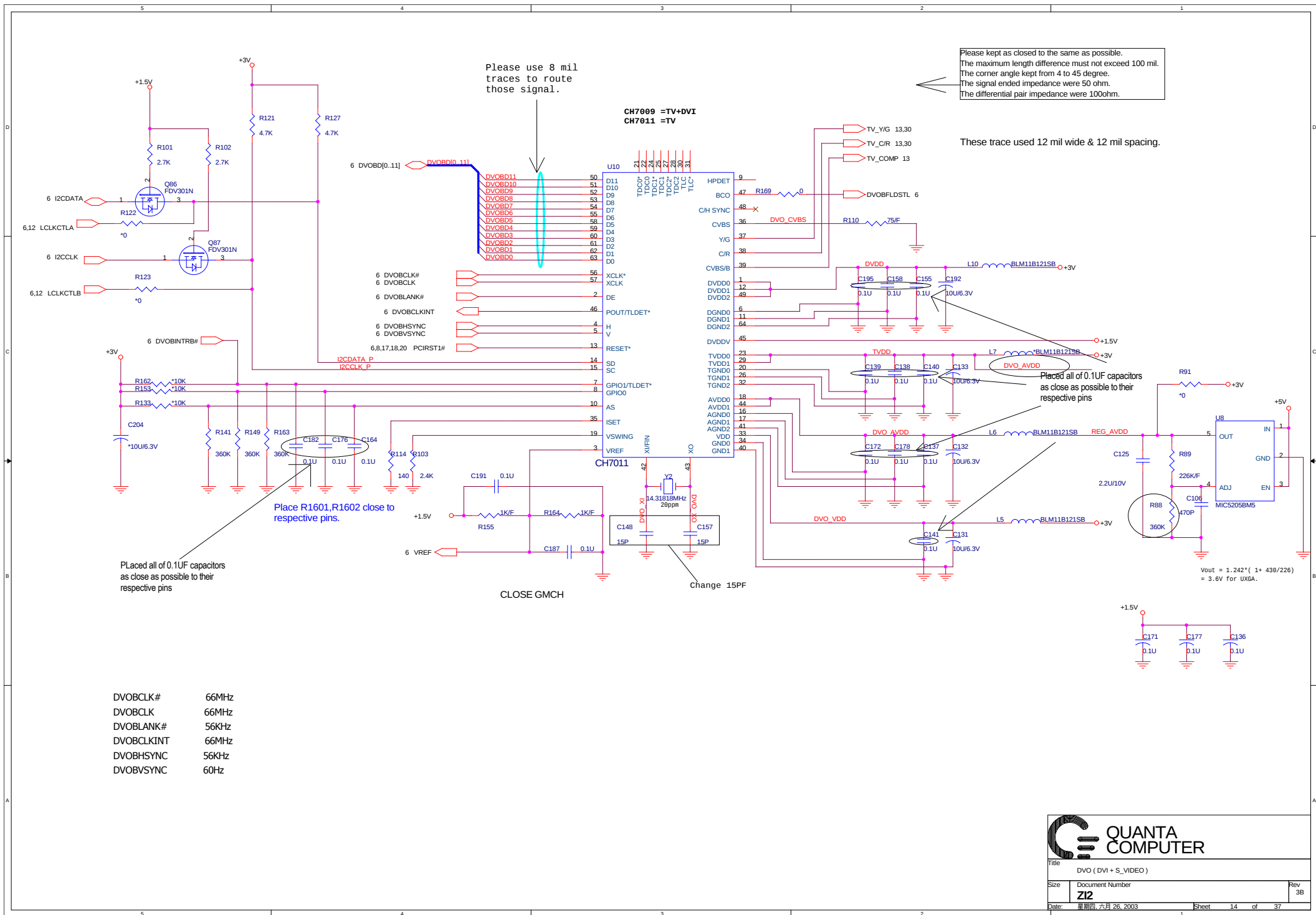
Title			
Banias Processor (POWER)			
Size	Document Number	Rev	
Z12		3A	
Date	日期	Sheet	4 of 37
2003.06.26		8	











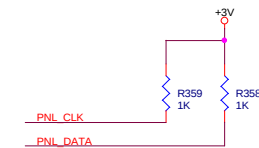
FILTER FBM2125 HM330-T(4A,0.015)

TRANSISTOR MOSFET RHU002N06(60V,200MA)

FILTER FBM2125 HM330-T(4A,0.015)

PANEL ID:

	PANEL_ID2	PANEL_ID1	PANEL_ID0
ID3 XGA	0	1	1
ID4 UXGA	1	0	0
ID5 SXGA+	1	0	1
ID6 SXGA	1	1	0
ID7 NC	1	1	1

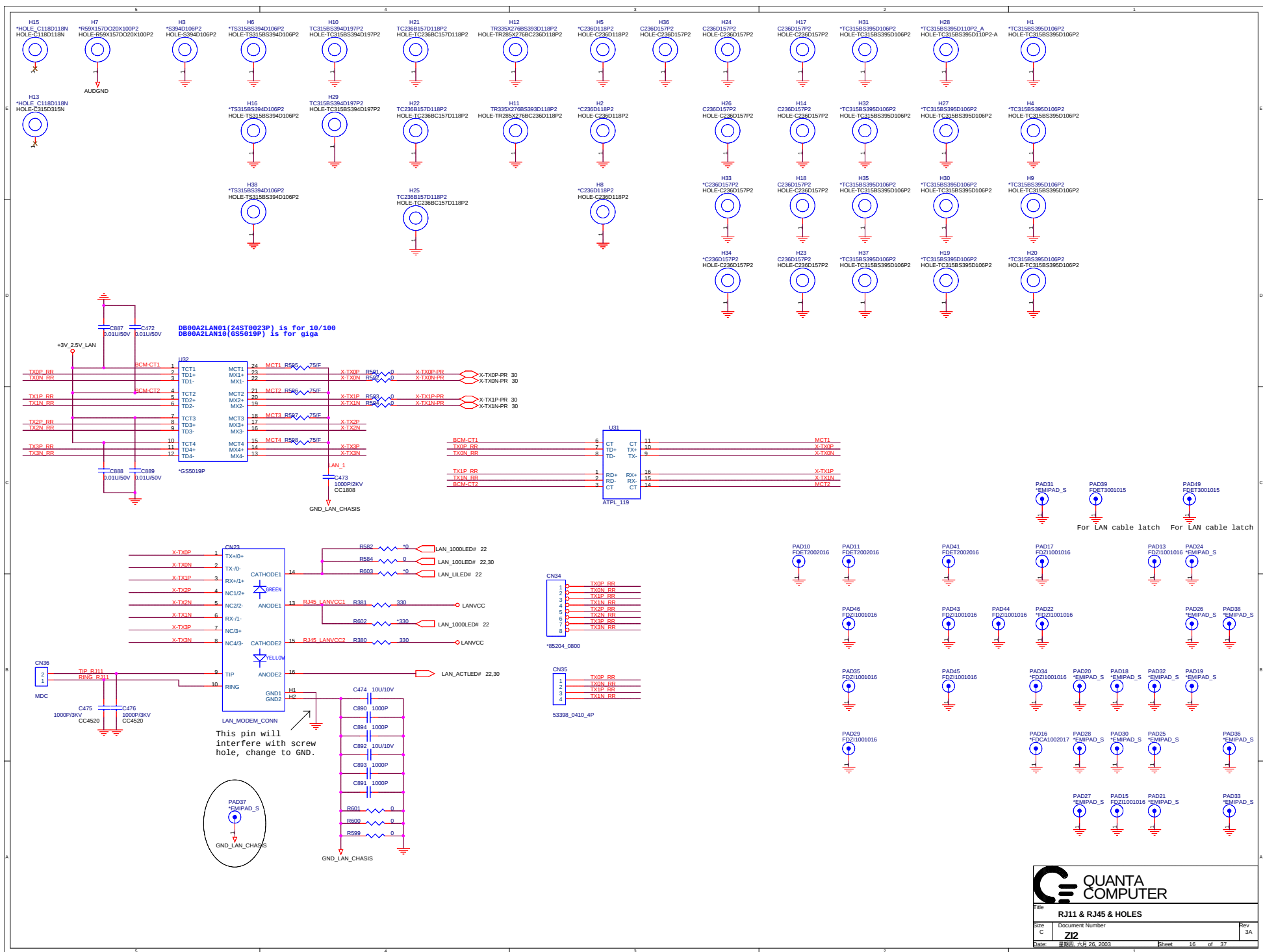


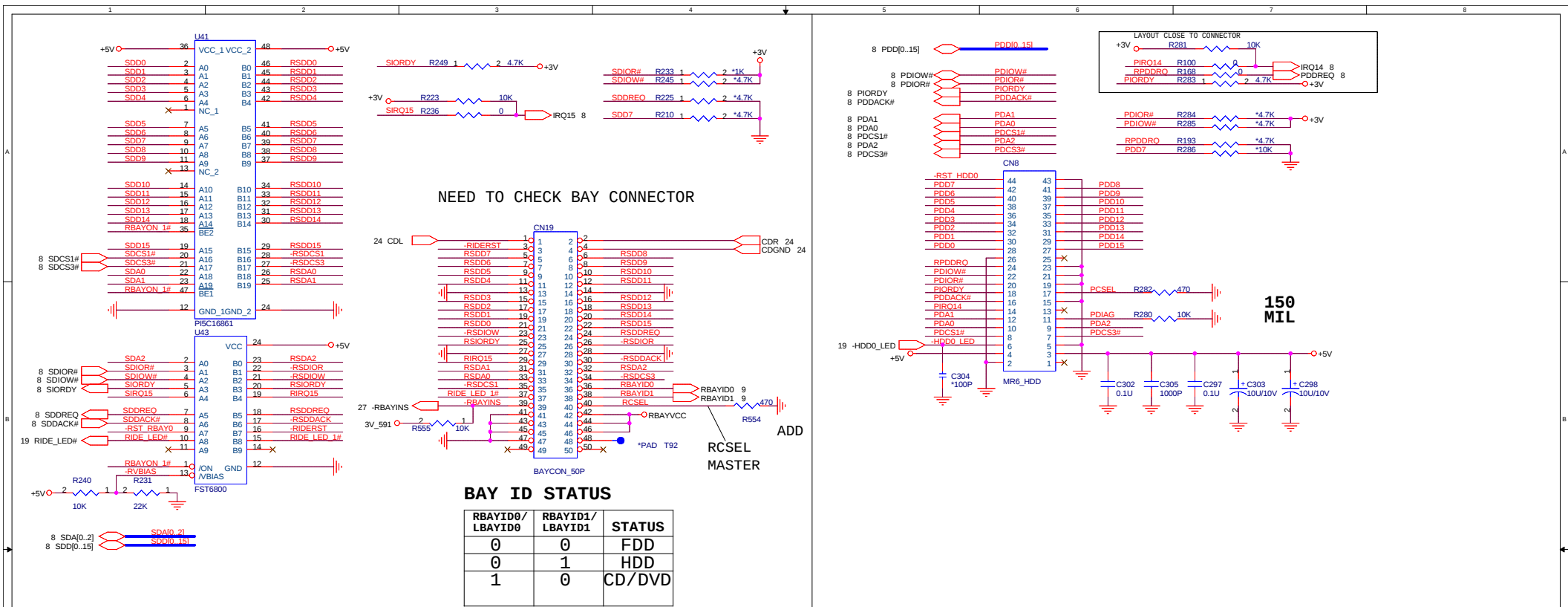
Change SPEC by Acer

Add new



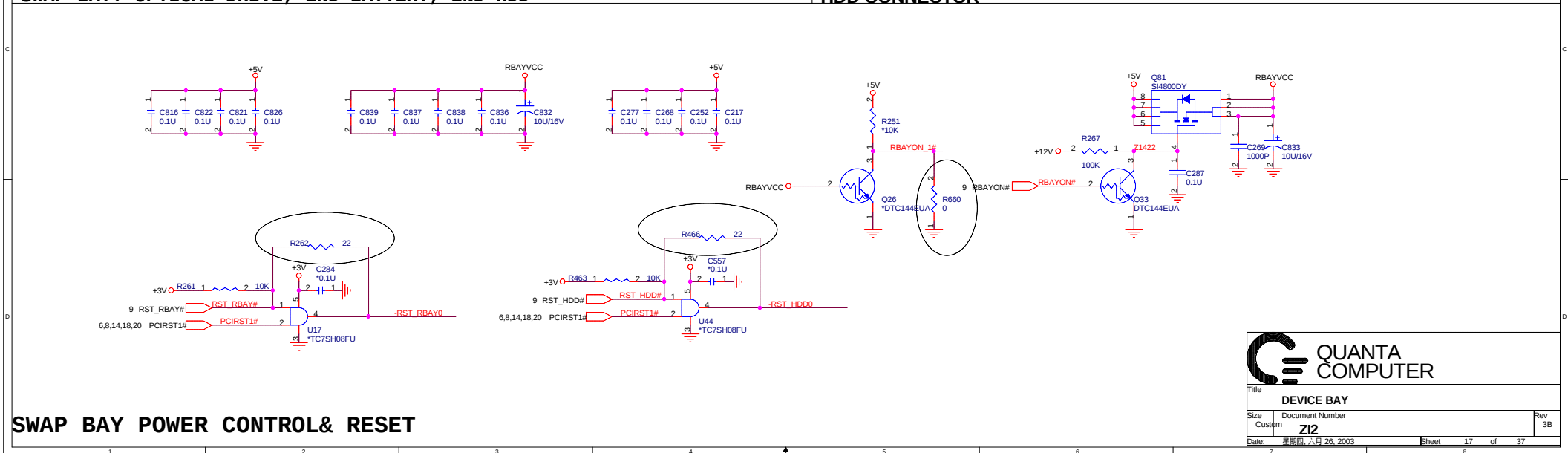
Title	LCD CONN		
Size	Custom	Document Number	Rev 3A
Date	星期四, 六月 26, 2003	Sheet 15 of 37	



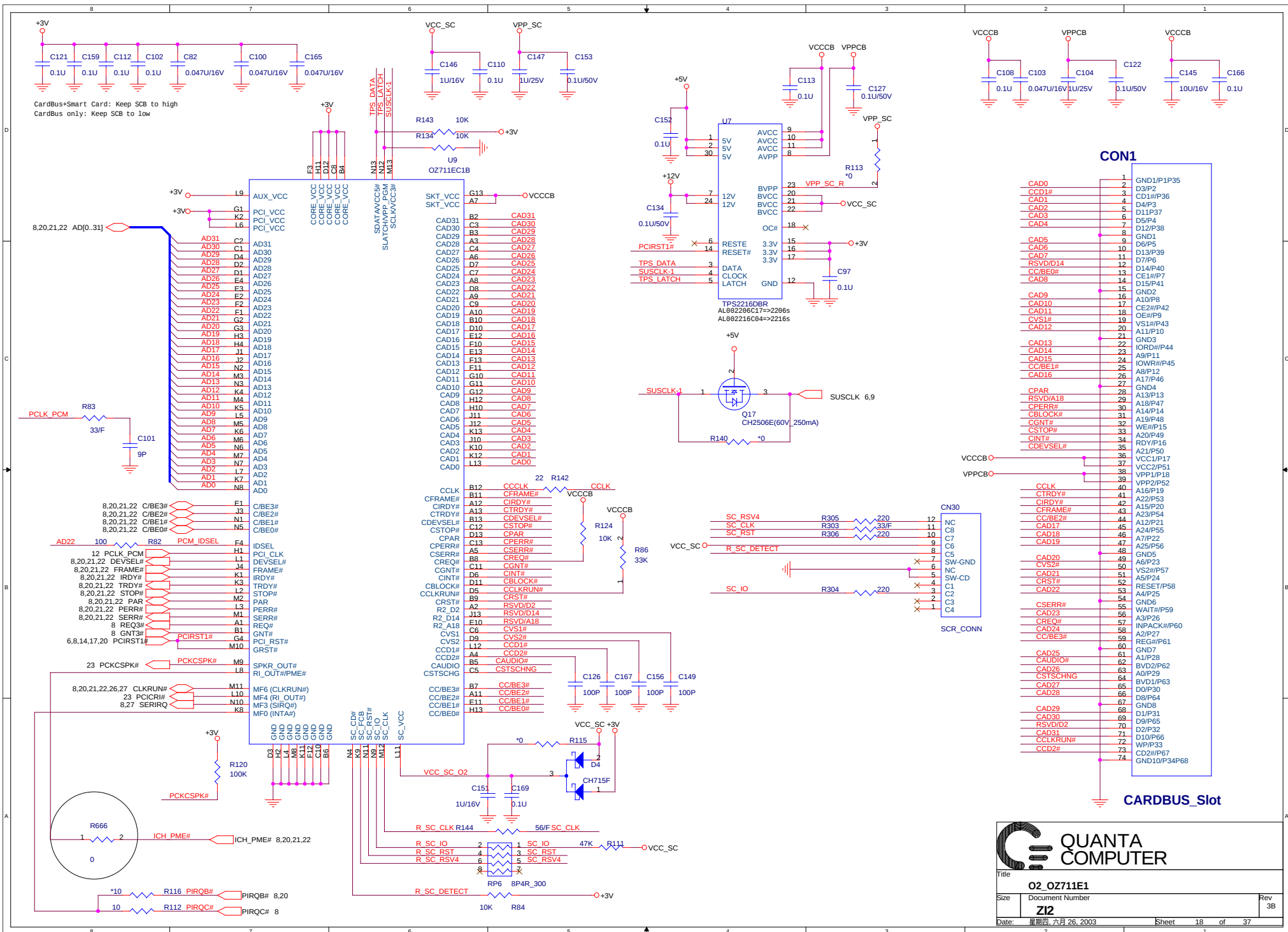


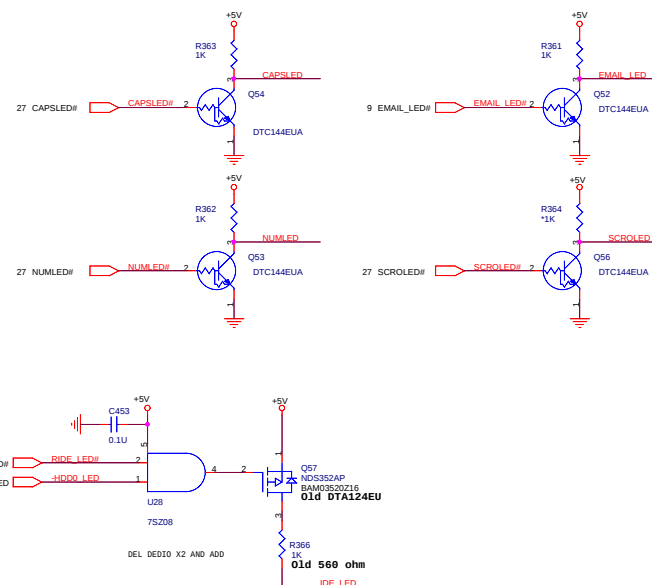
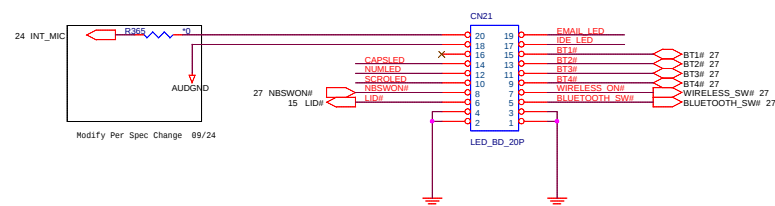
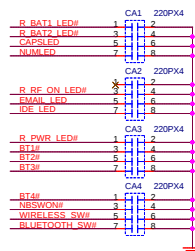
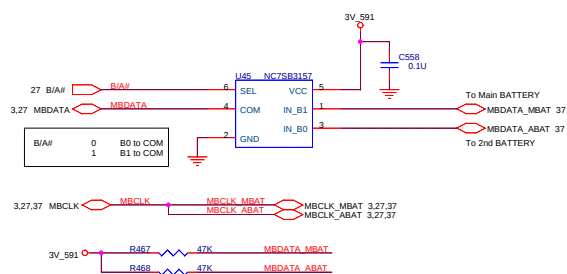
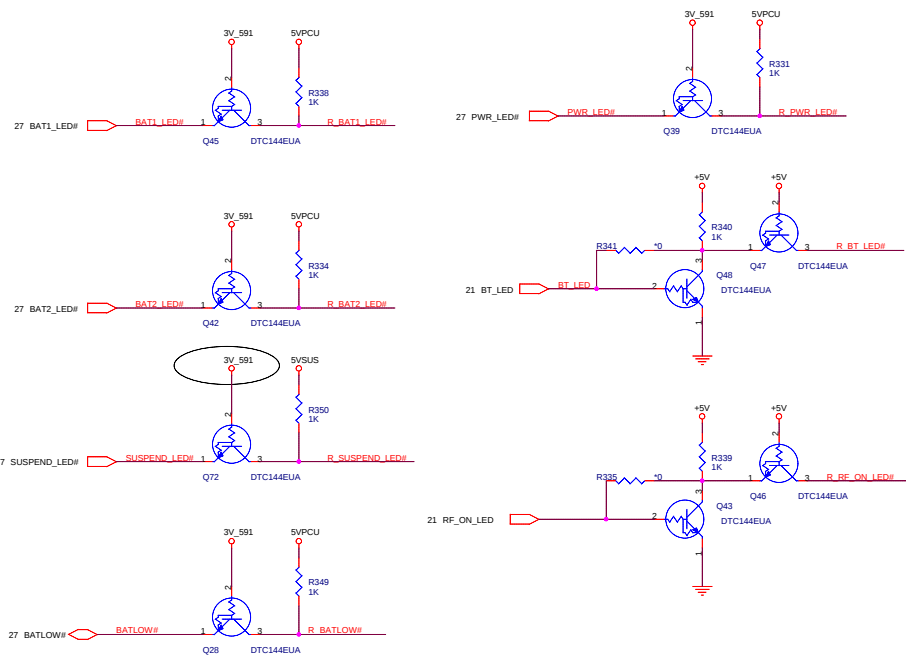
SWAP BAY: OPTICAL DRIVE, 2ND BATTERY, 2ND HDD

HDD CONNECTOR

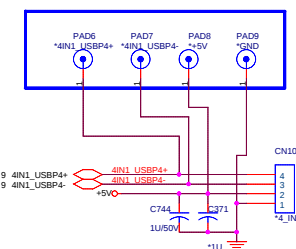


Title		
DEVICE BAY		
Size	Document Number	Rev
Custom	Z12	3B
Date	星期四, 六月 26, 2003	Sheet 17 of 37

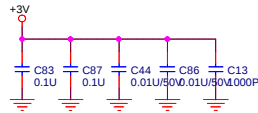


[illegible]

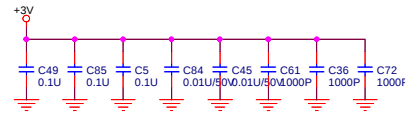
Don't separate this
four PAD for the
function as a CONN



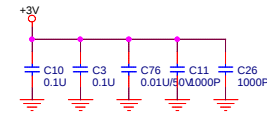
IEEE -1394



Used for vccp
(Pin20, 35, 48, 62, 78)

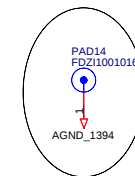
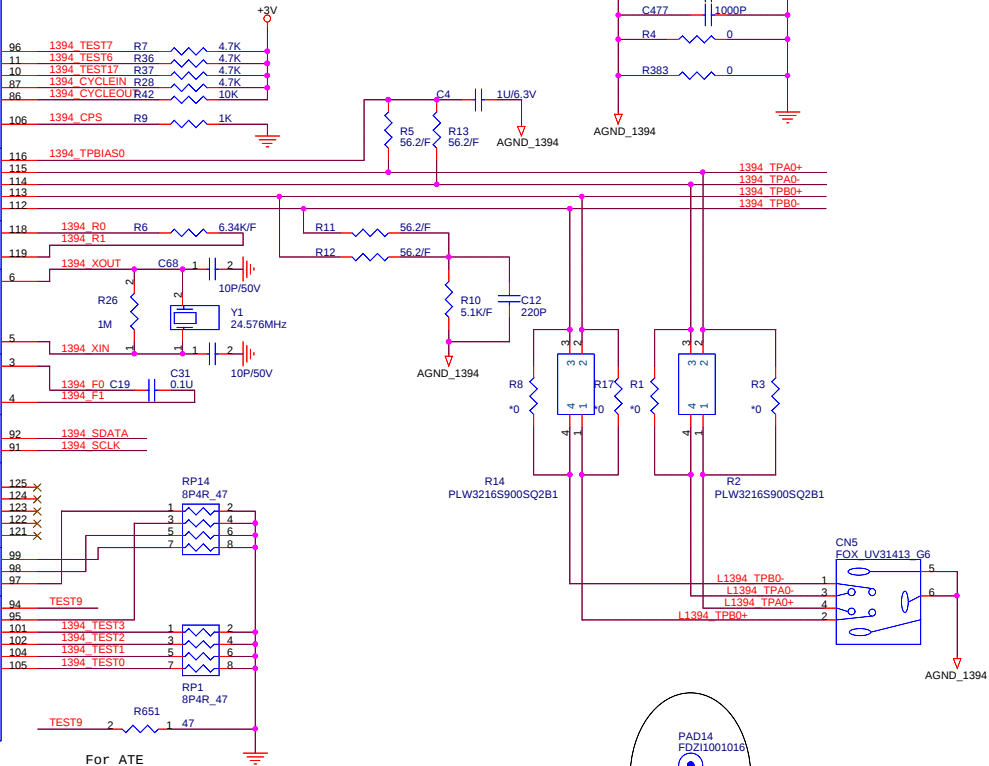
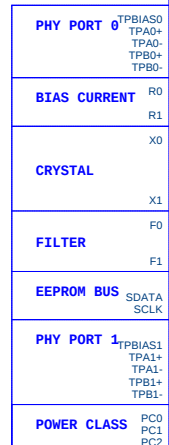
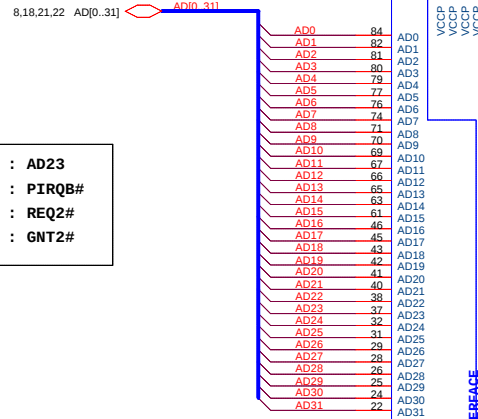


Used for vcc3
(Pin15, 27, 39, 51, 59, 72, 88, 100)

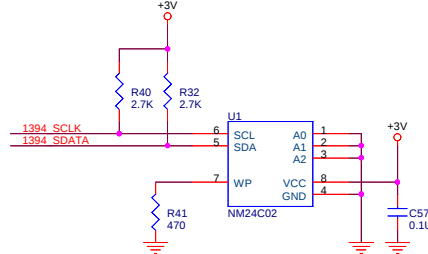
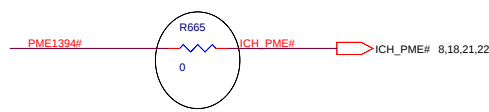
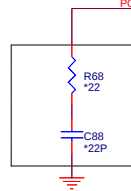


Used for AVCC
(Pin1, 2, 107, 108, 120)

ID Select : AD23
Interrupt Pin : PIRQB#
Request indicates : REQ2#
Grant indicates : GNT2#

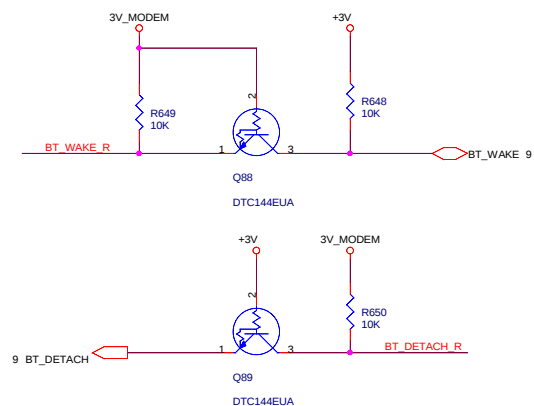
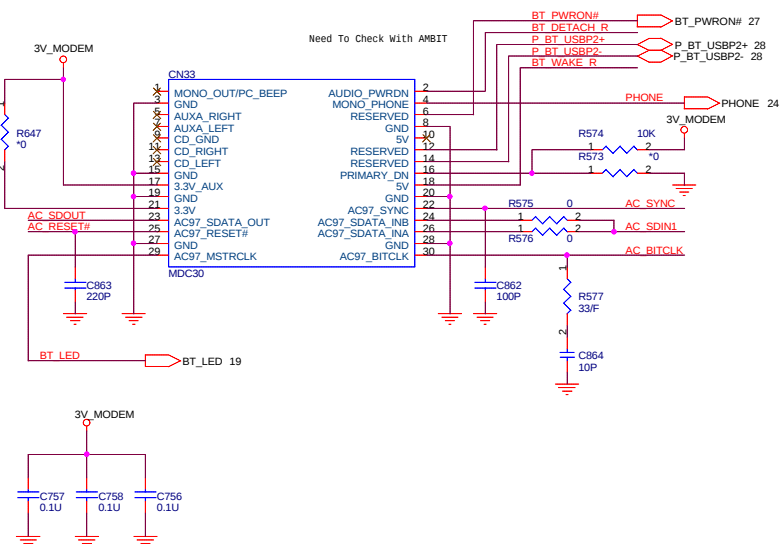
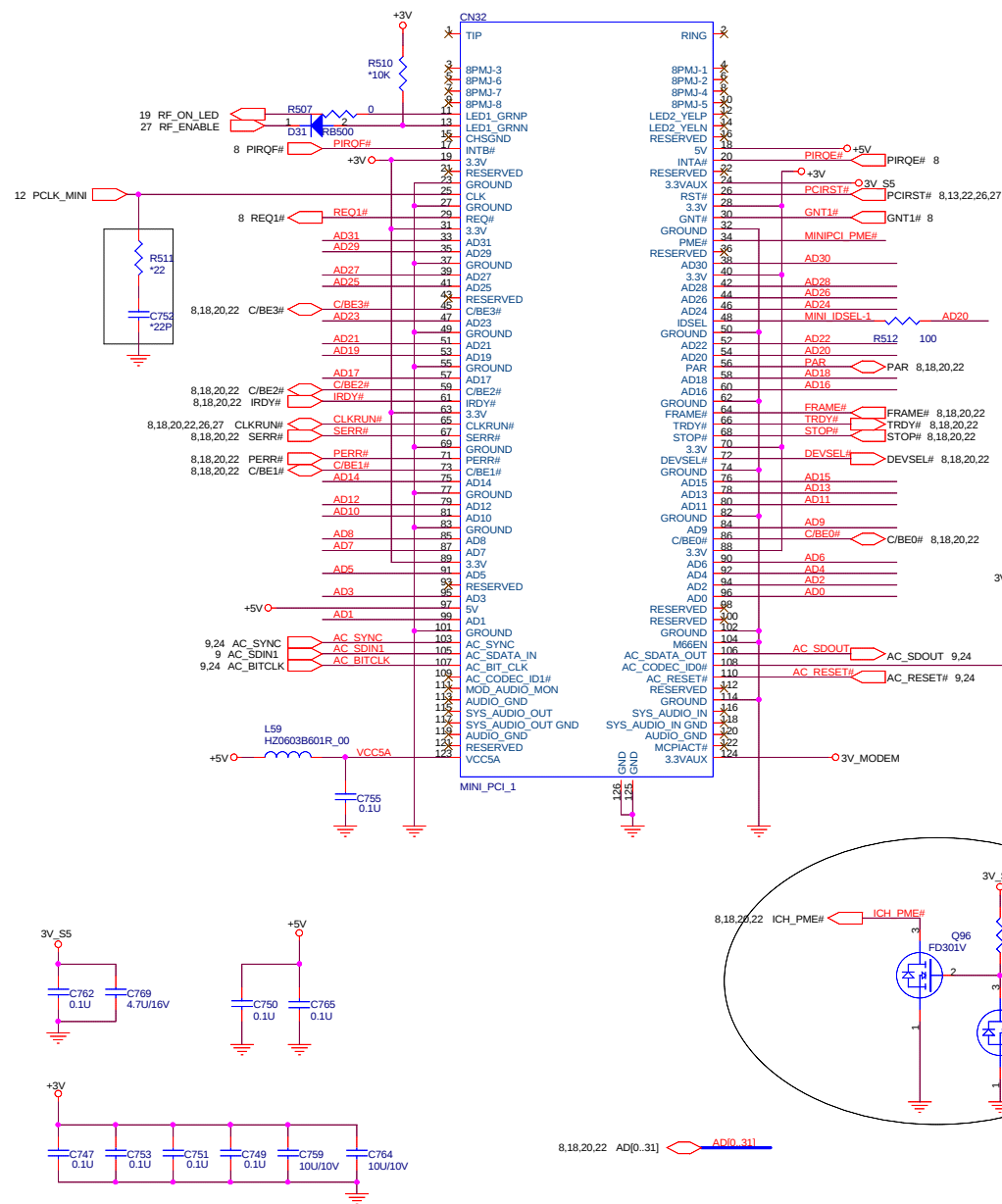


For EMI Request; PAD size is not determined yet.

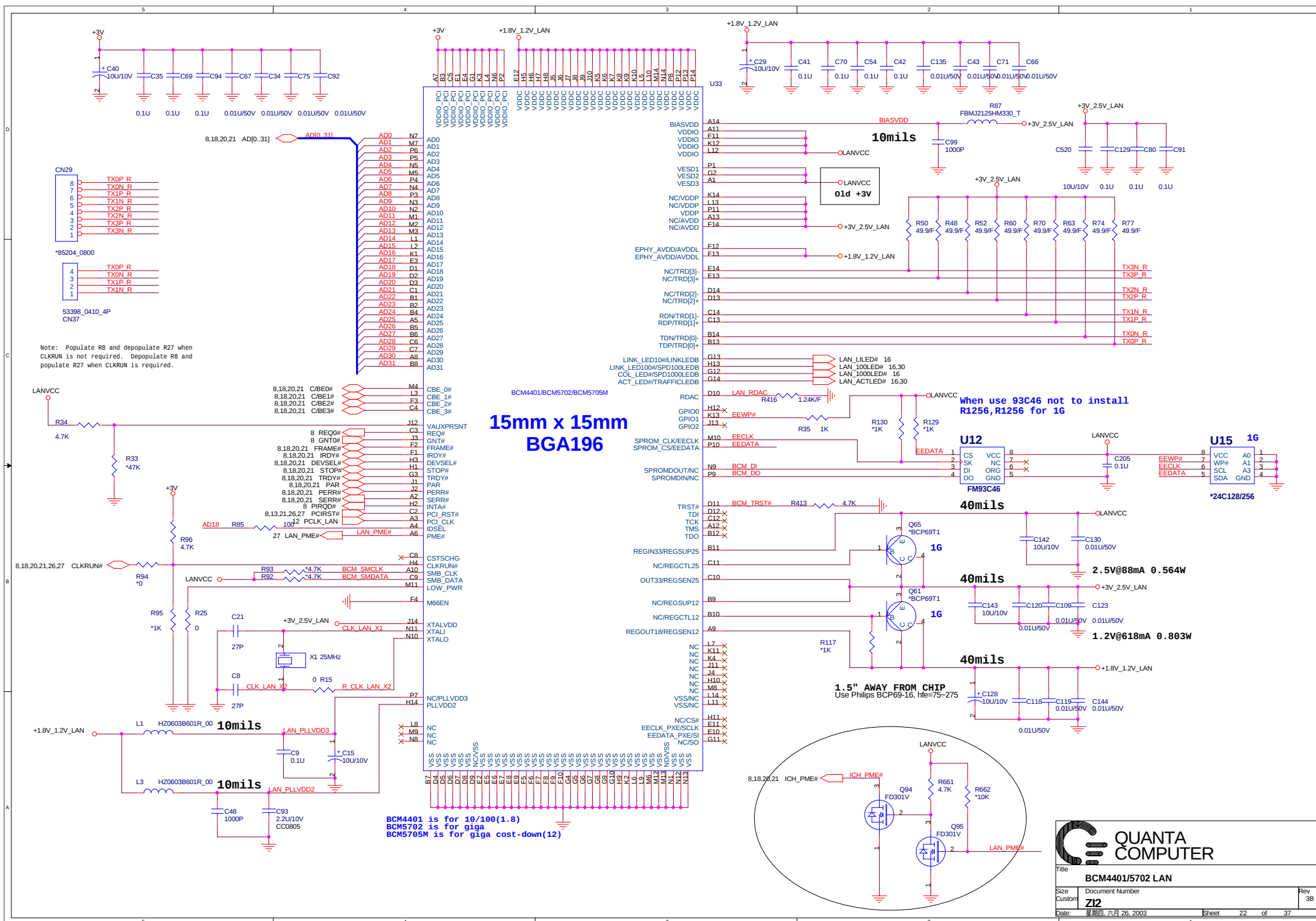


Title	TSB43AB21[1394]		
Size	Document Number	Rev 3B	
Custom	Z12		
Date	星期四, 六月 26, 2003	Sheet	20 of 37

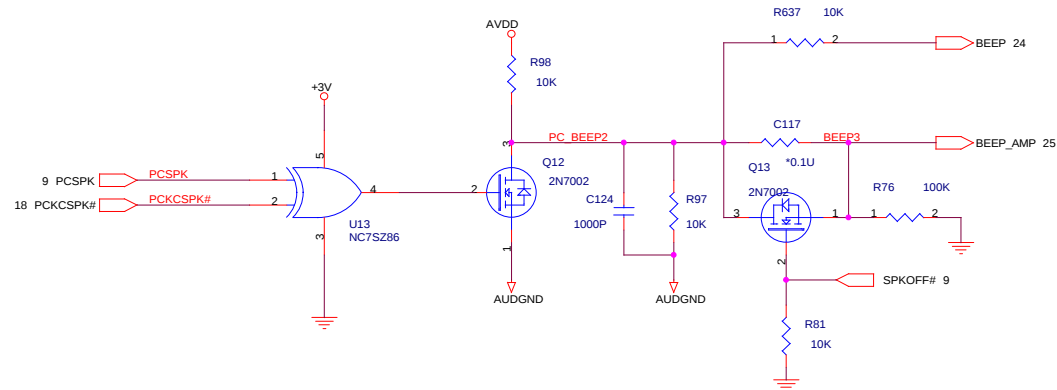
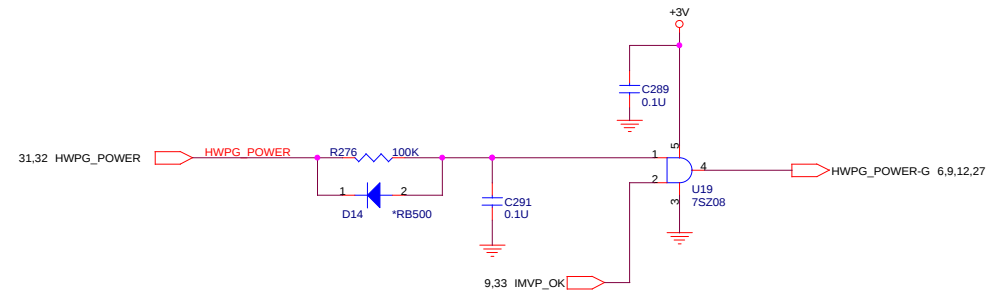
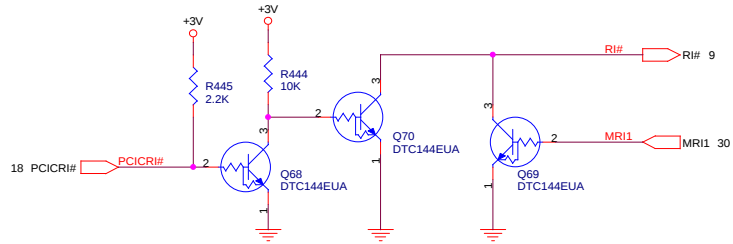
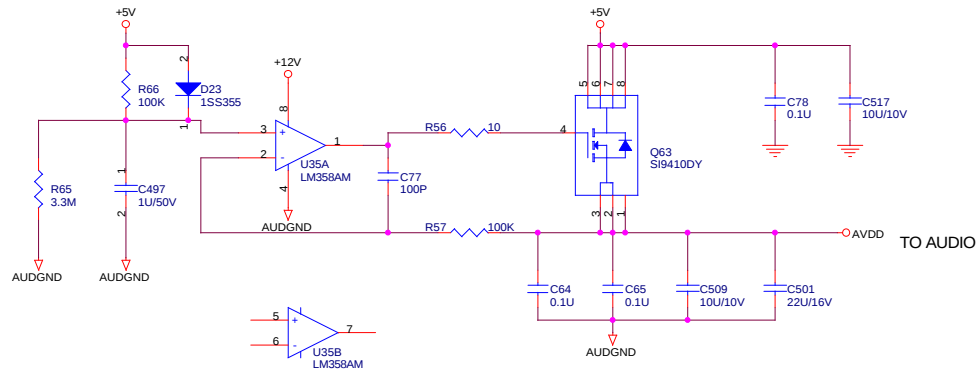
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ID Select      : AD20
Interrupt Pin   : PIRQE# , PIRQF#
Request indicates : REQ1#
Grant indicates  : GNT1#
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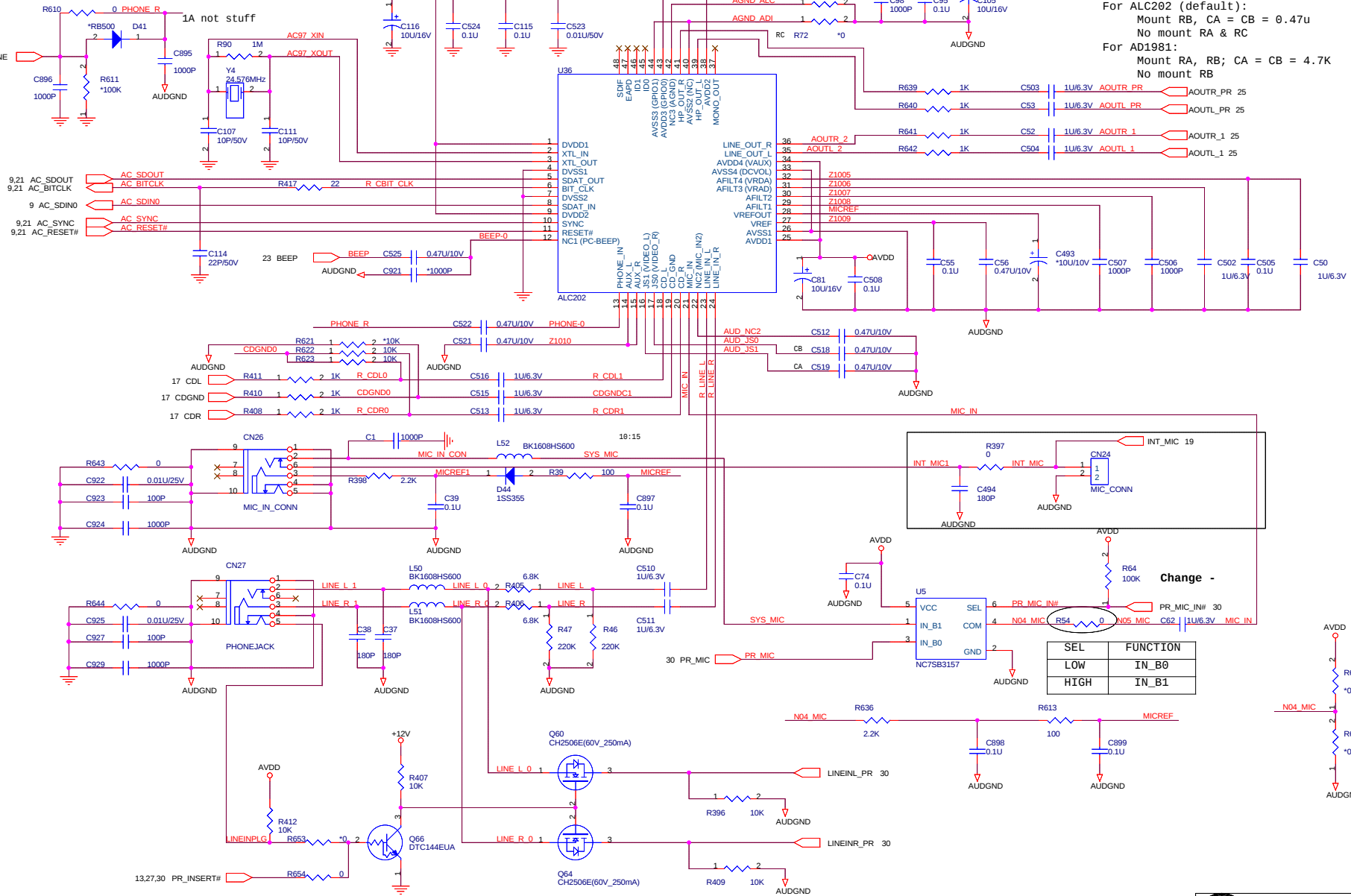
Title			
MINI-PCI & MDC			
Size	Document Number	Rev	
Custom	712	3B	
Date:	星期四, 六月 26, 2003	Sheet	21 of 37



AUDIO POWER



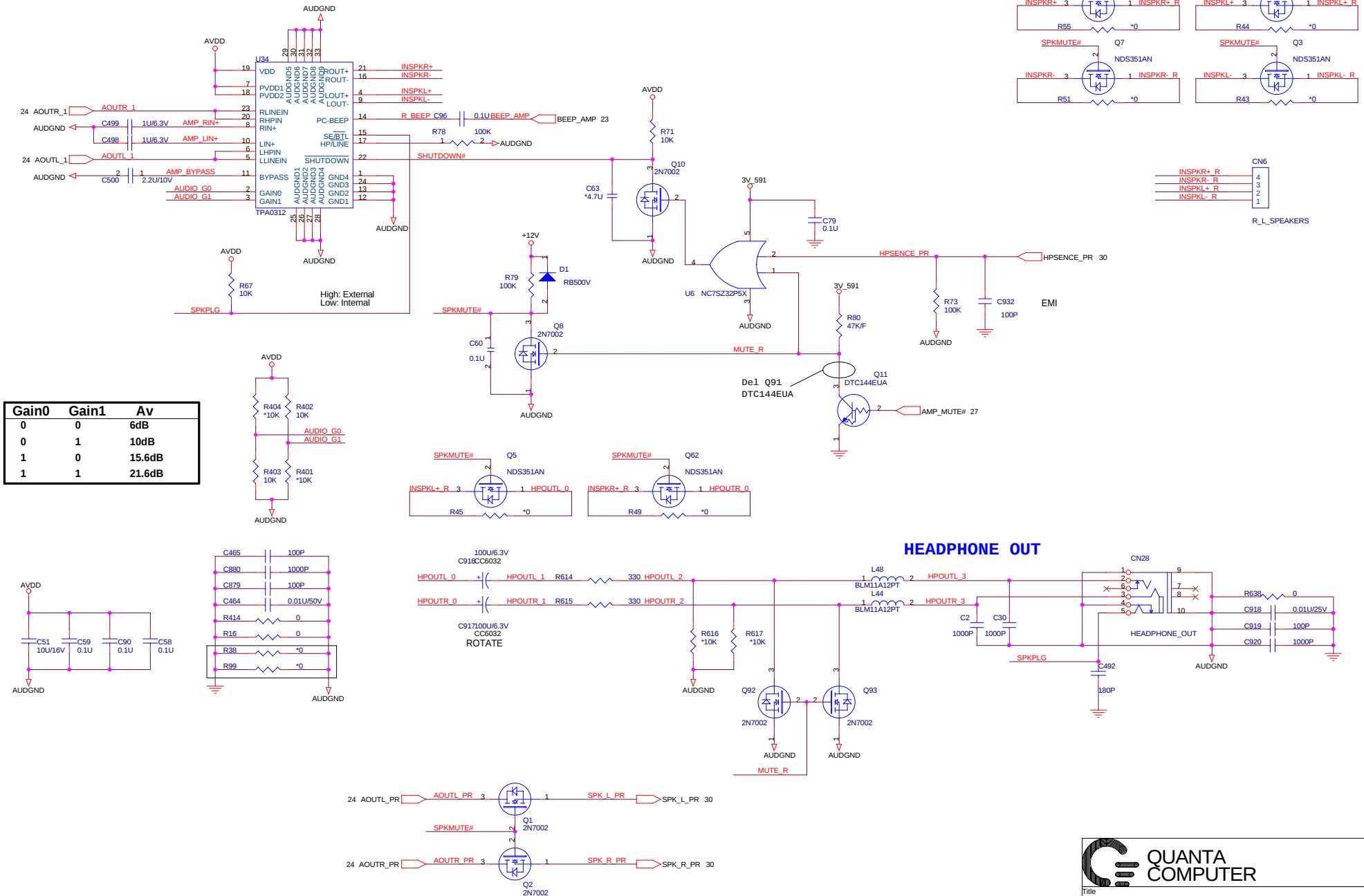
AC97 CODEC



Spec Change 18/02

Title
ACP7 CODECSize
CustomDate
2003.06.20Sheet
24 of 37Rev
38

Audio Amplifier

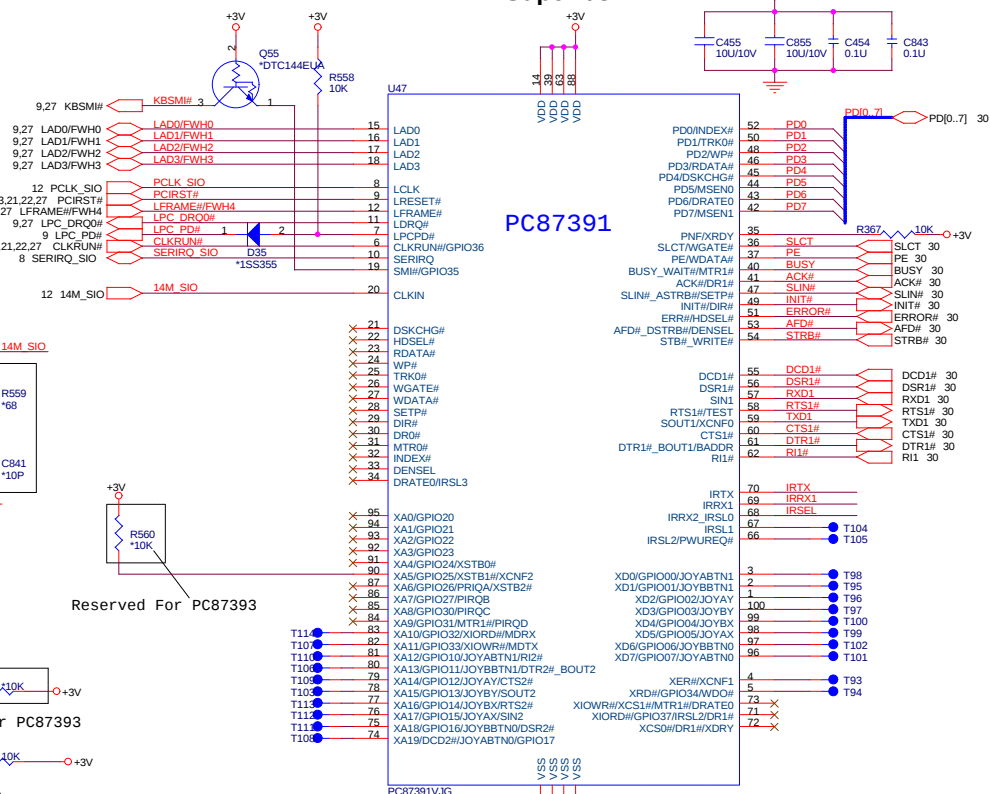


Gain0	Gain1	Av
0	0	6dB
0	1	10dB
1	0	15.6dB
1	1	21.6dB

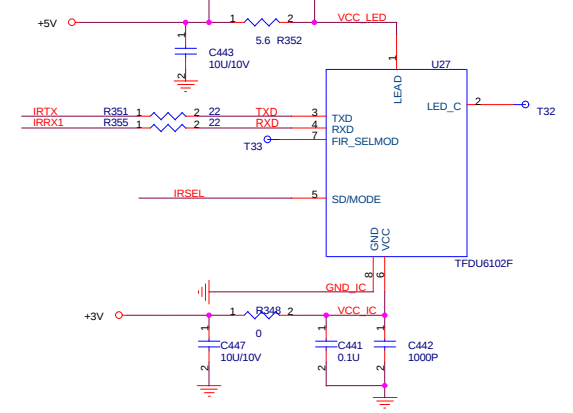
HEADPHONE OUT

Super I/O

PC87391

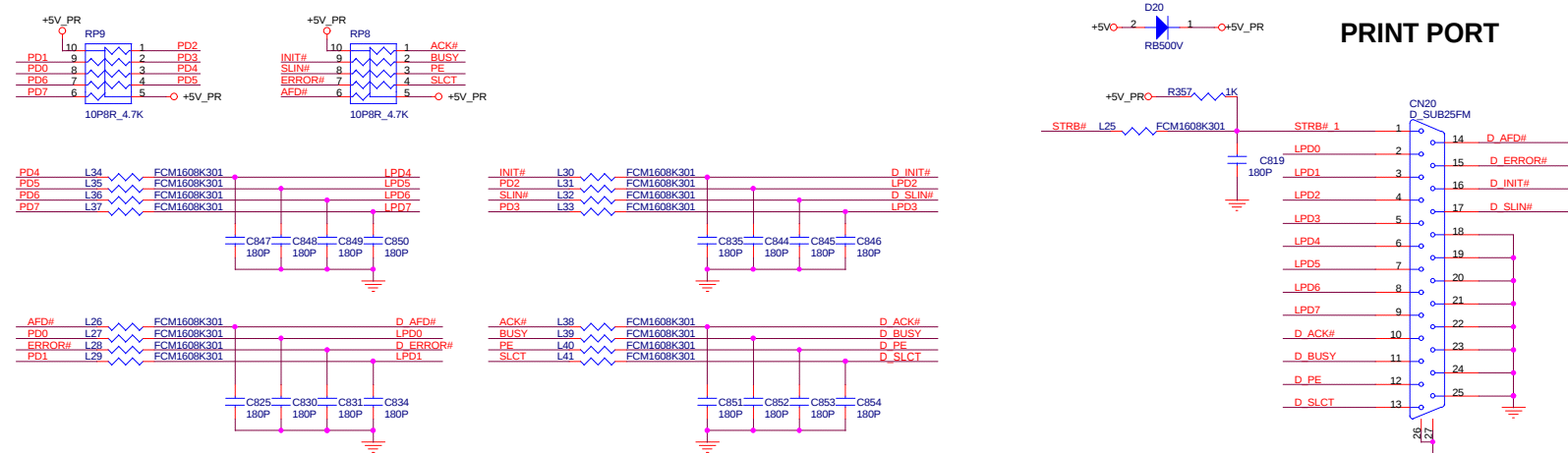


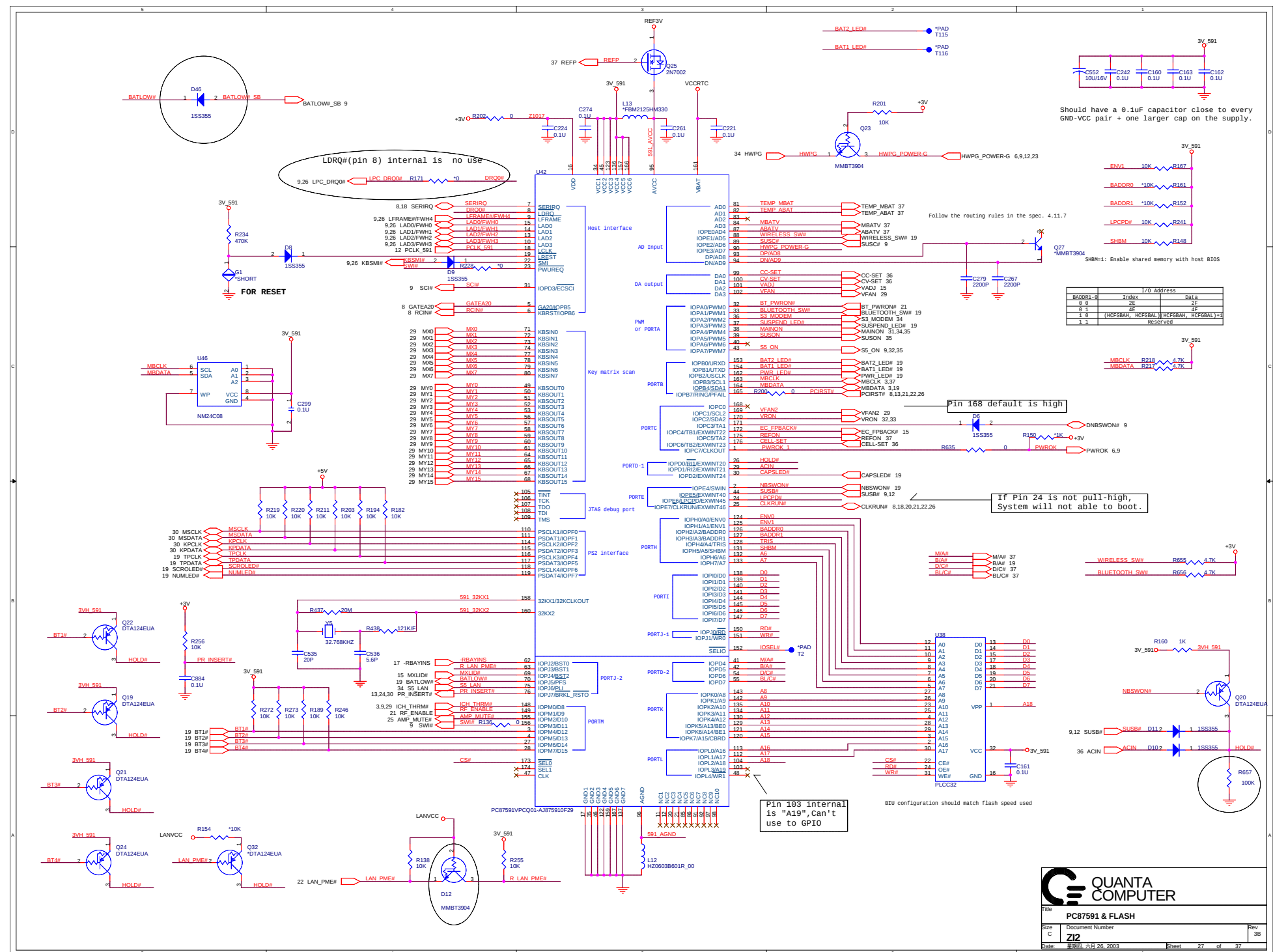
FIR



40mil: Power/ GND
 35mil: VCC_LED, VCC_IC, GND_IC
 10mil: TXD, RXD, IRSEL, IRTX, IRRX1

PRINT PORT





Should have a 0.1uF capacitor close to every GND-VCC pair + one larger cap on the supply.

BAD061-6	Index	I/O Address	Data
0 0	2E		2E
0 1	4E		4E
1 0	(HCF5BAH, HCF5BAL, HCF5BAH, HCF5BAL)+2		
1 1	Reserved		

Pin 168 default is high

If Pin 24 is not pull-high, System will not able to boot.

Pin 163 internal is "A19", Can't use to GP10

BIU configuration should match flash speed used

Title

PC87591 & FLASH

Size

C

Document Number

Z12

Date

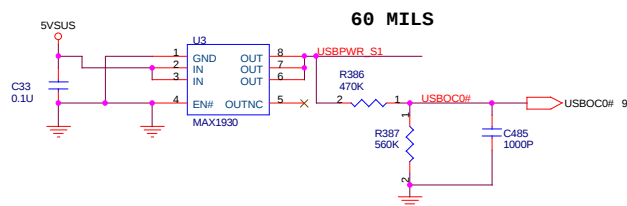
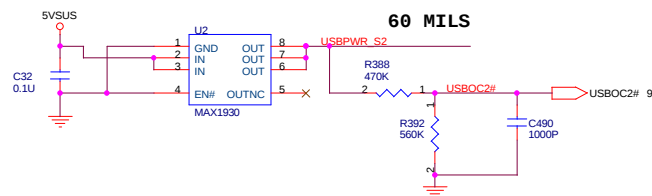
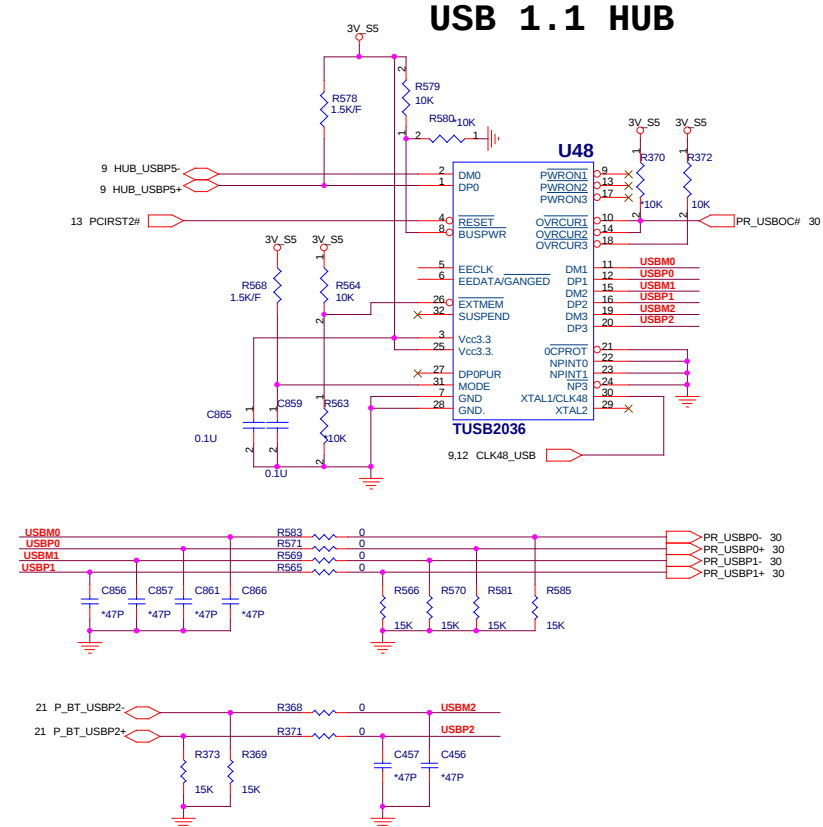
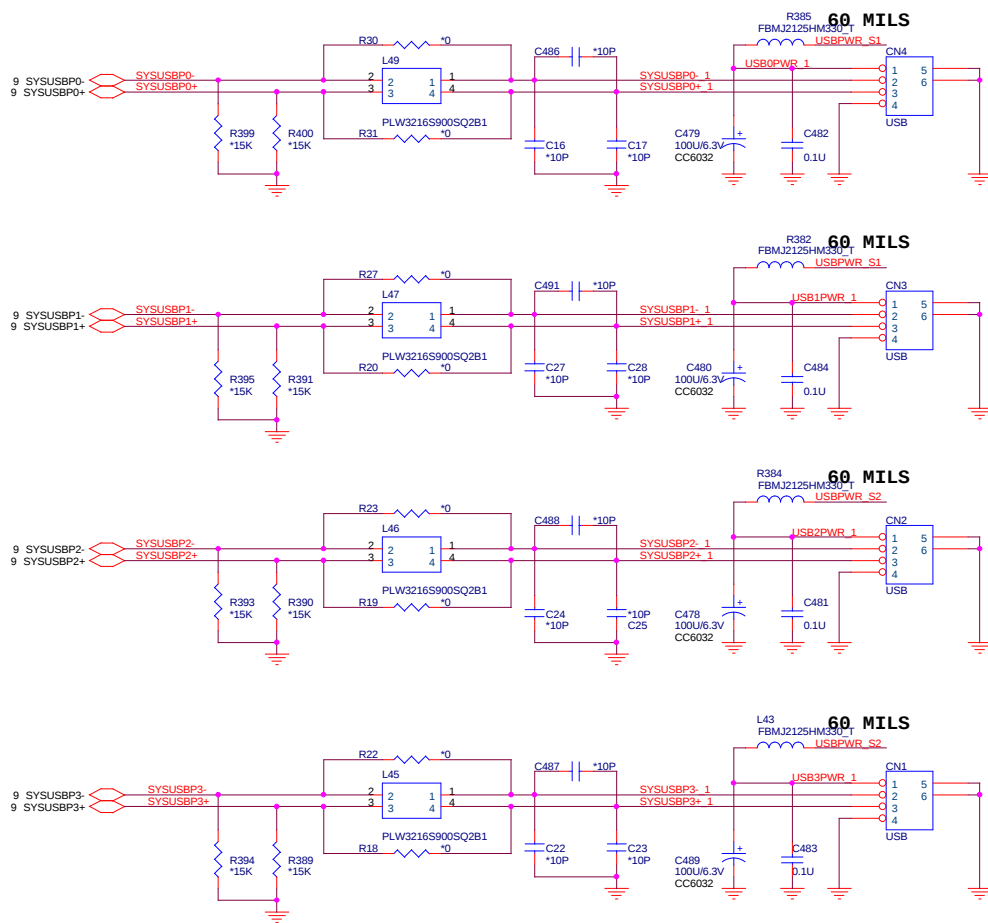
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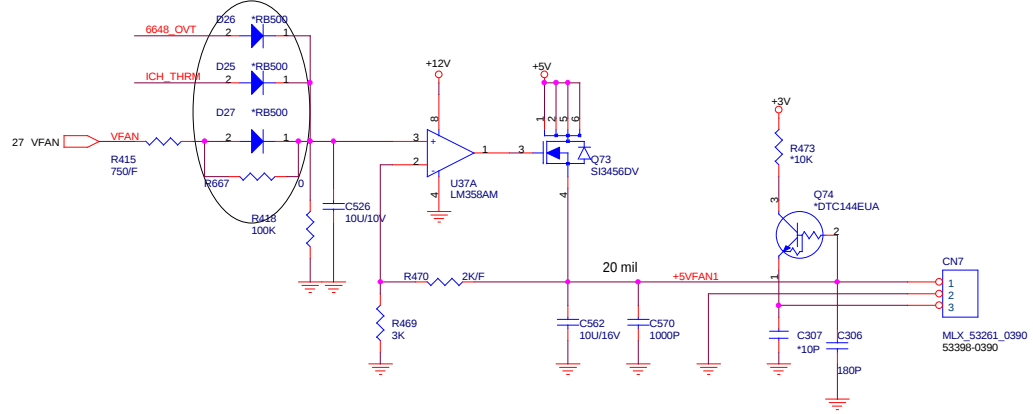
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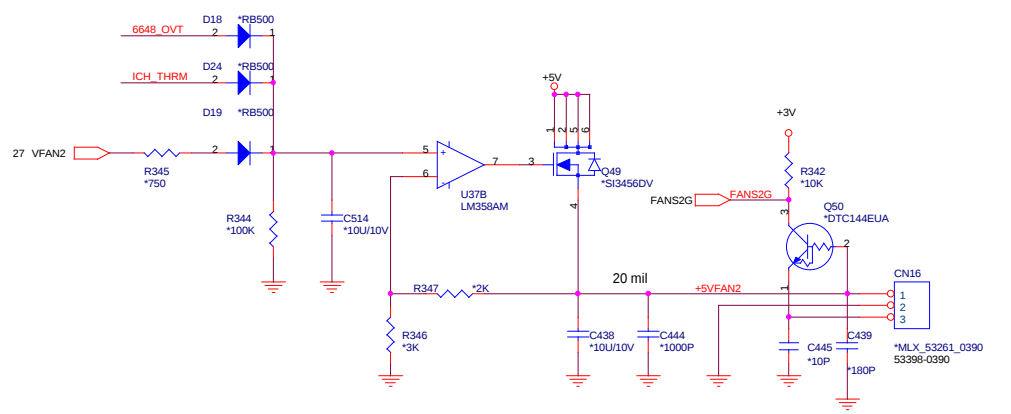
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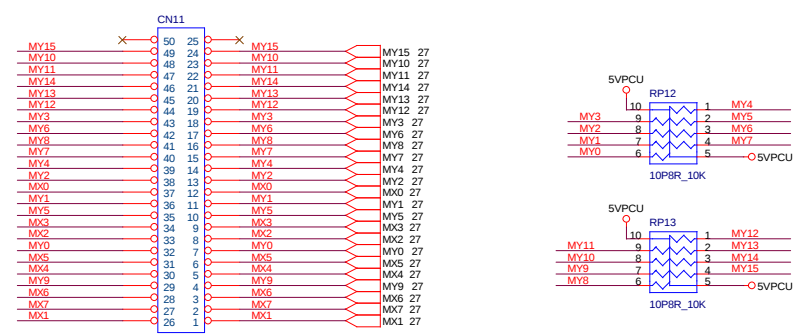
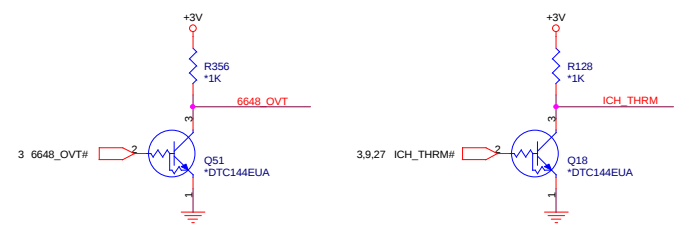
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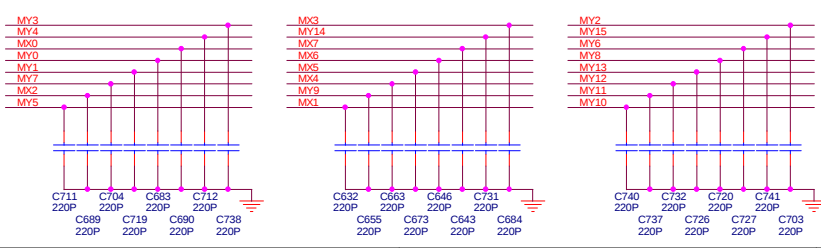
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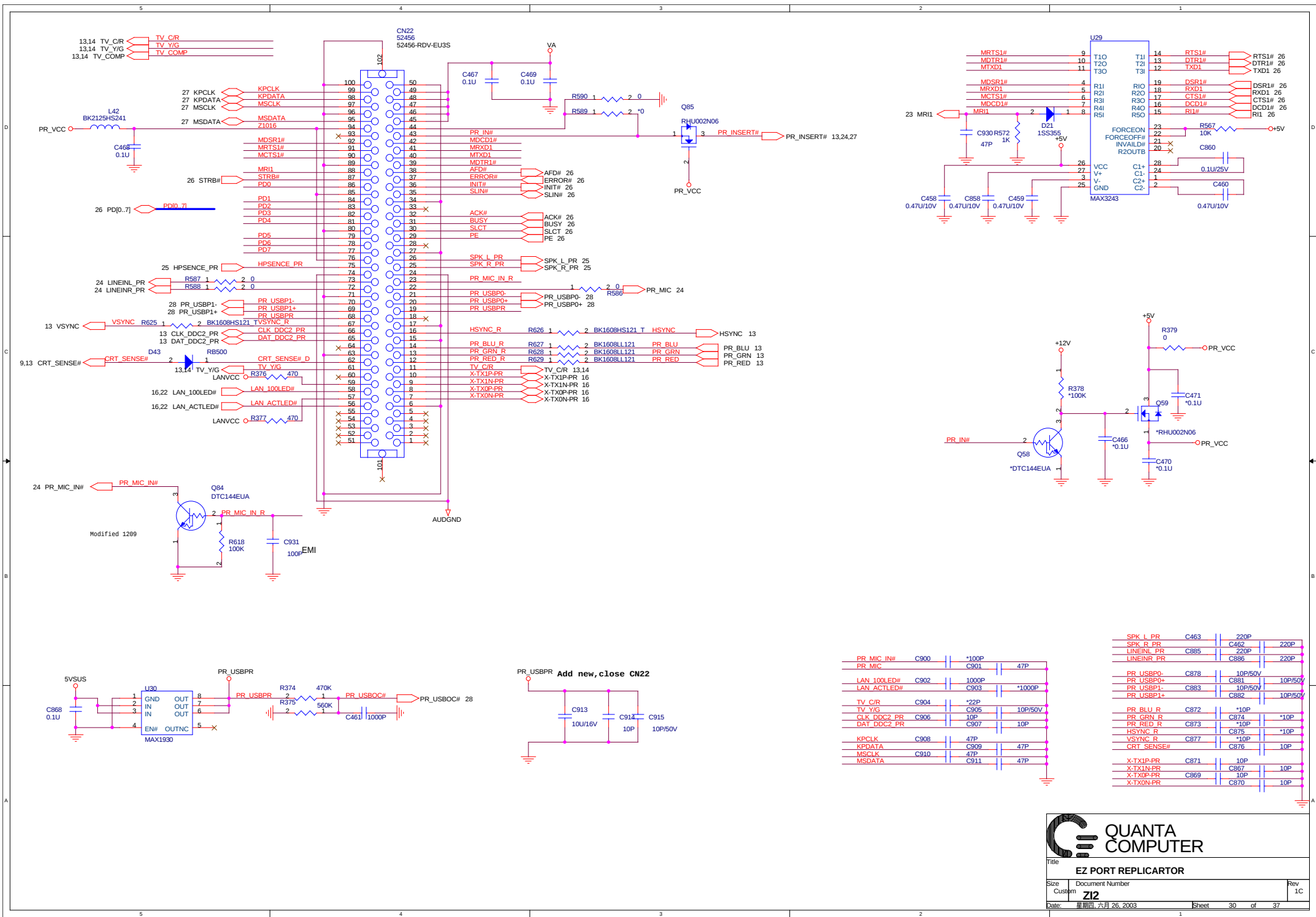


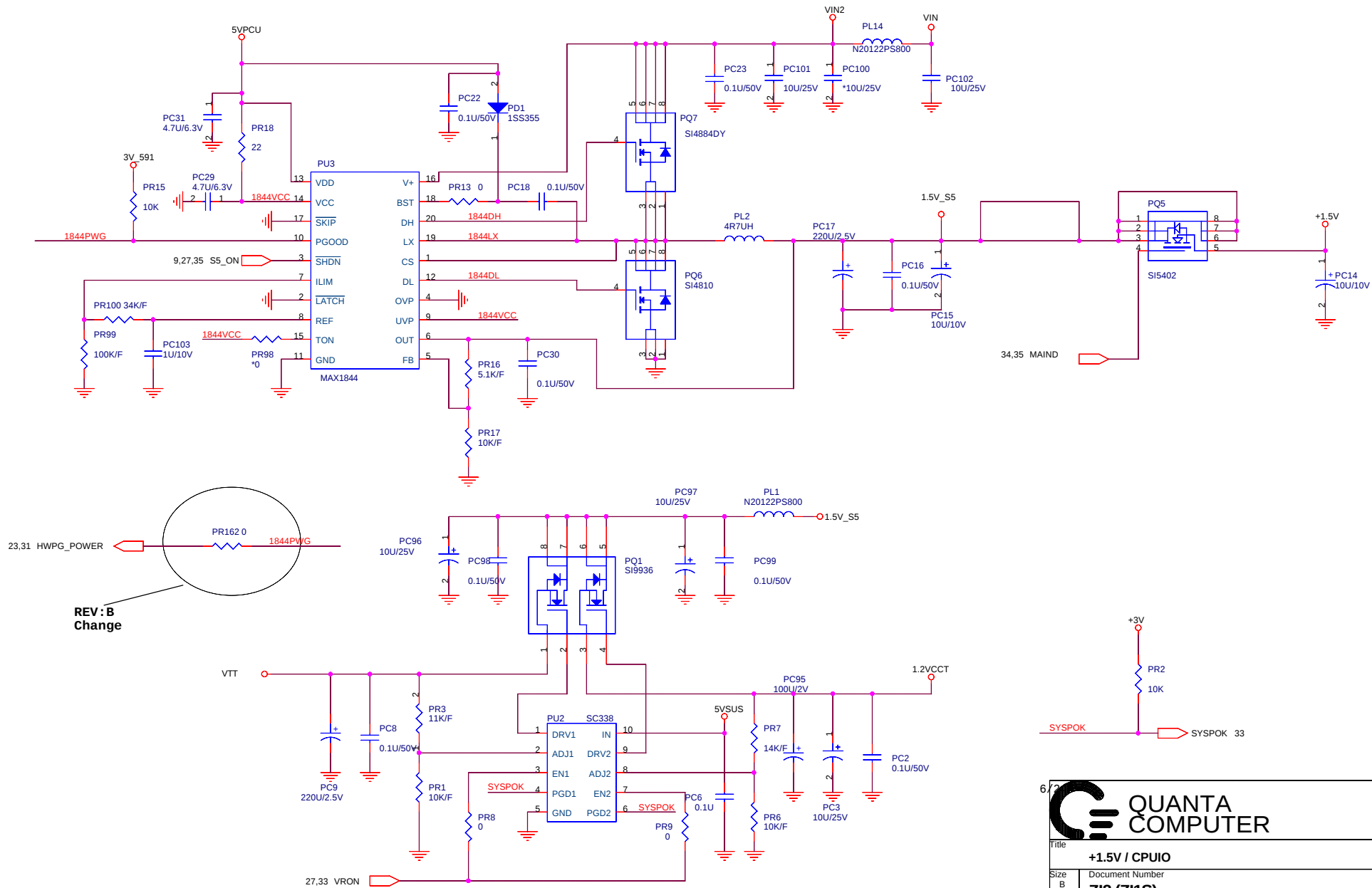
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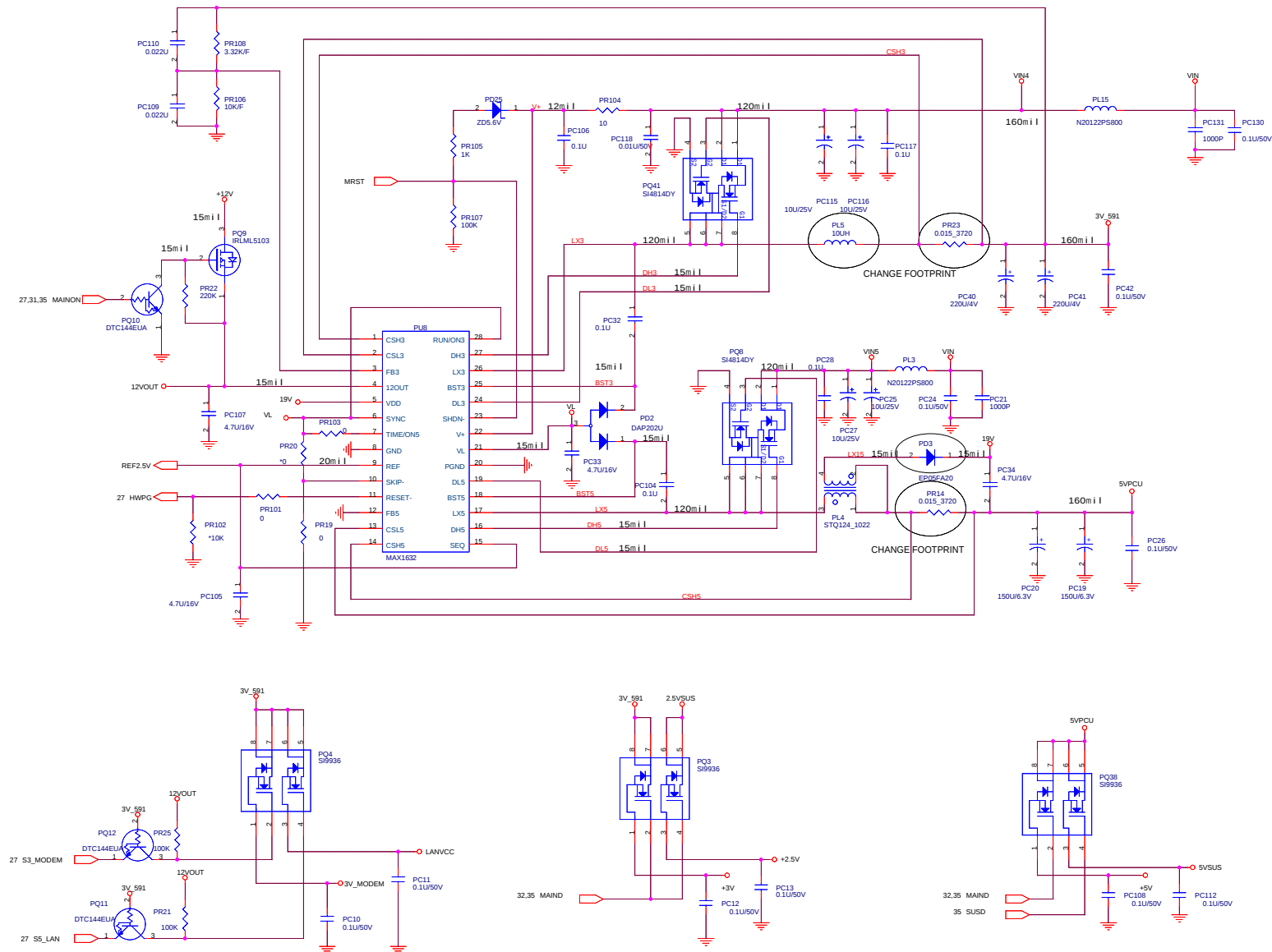


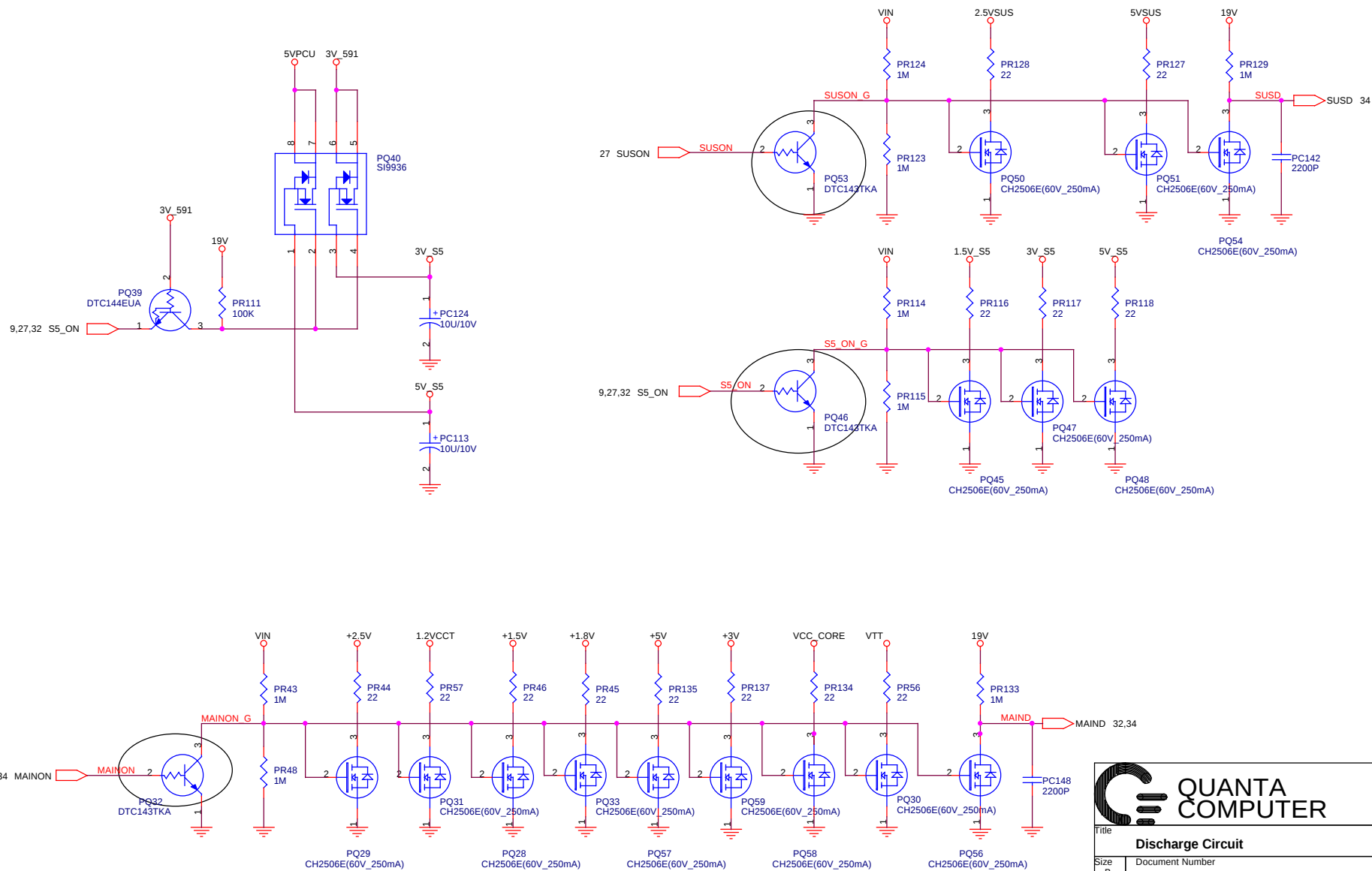
KEYBOARD









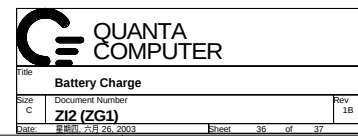




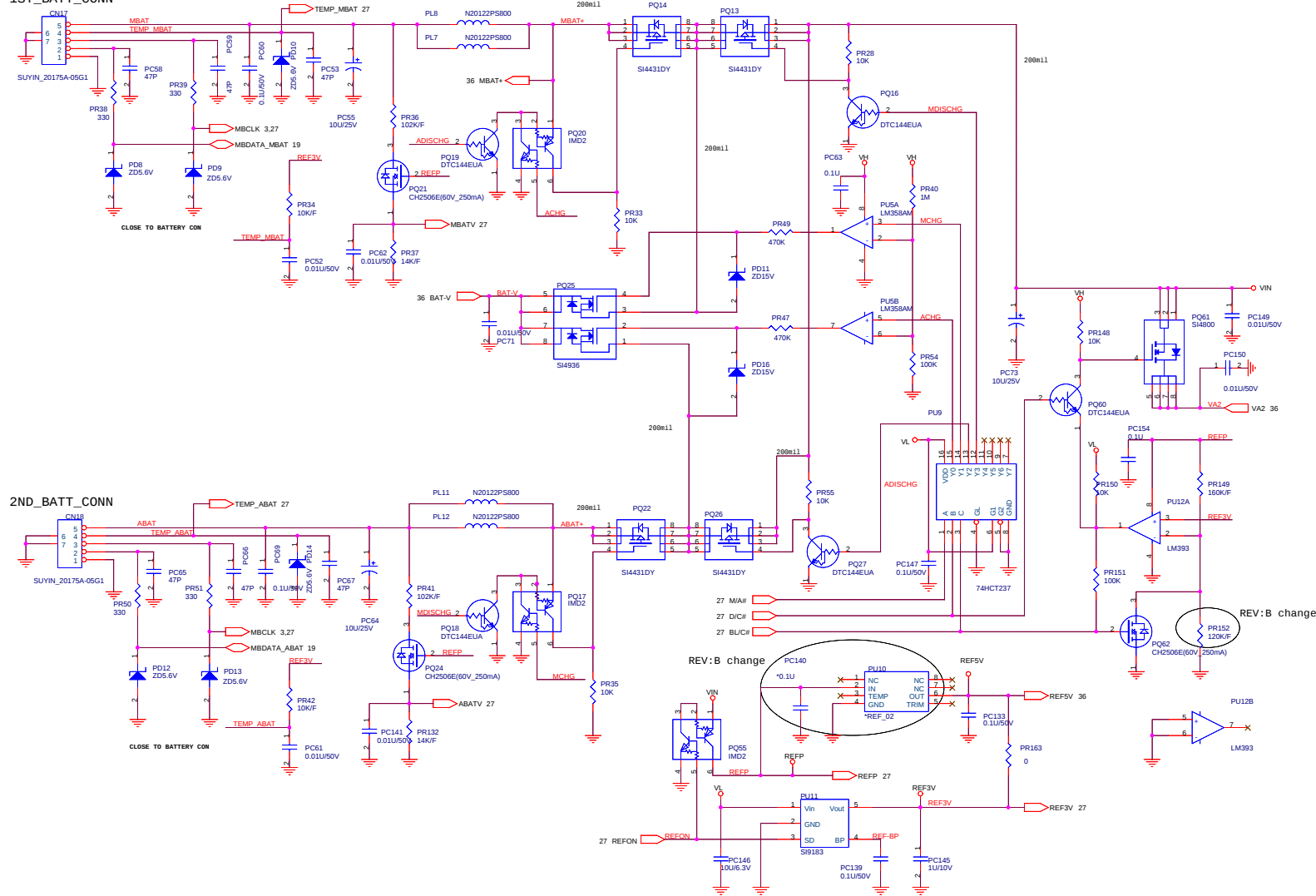
QUANTA

COMPUTER

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