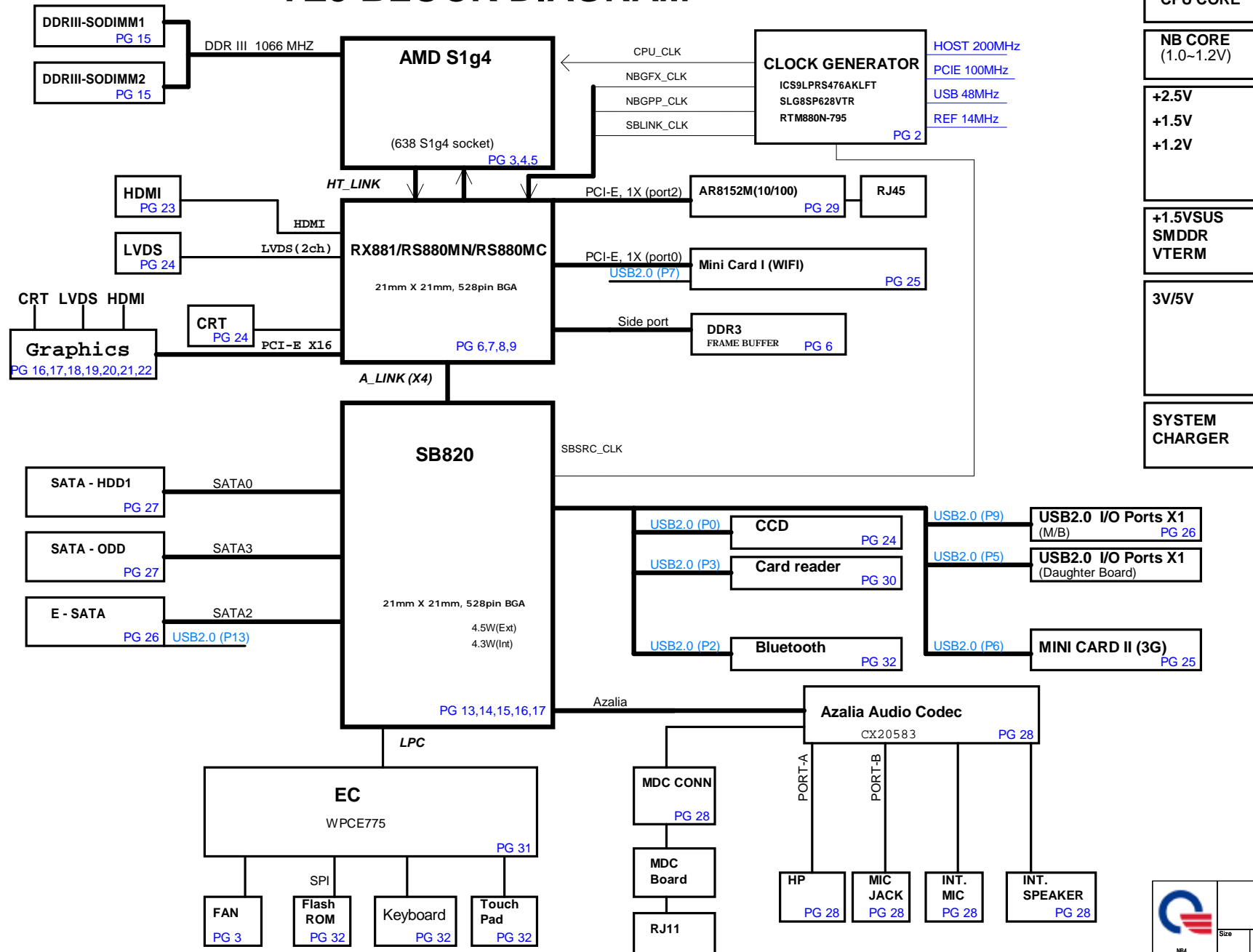


TE3 BLOCK DIAGRAM



1 PCB STACK UP

LAYER 1 : TOP
LAYER 2 : GND1
LAYER 3 : IN1
LAYER 4 : IN2
LAYER 5 : VCC
LAYER 6 : BOT

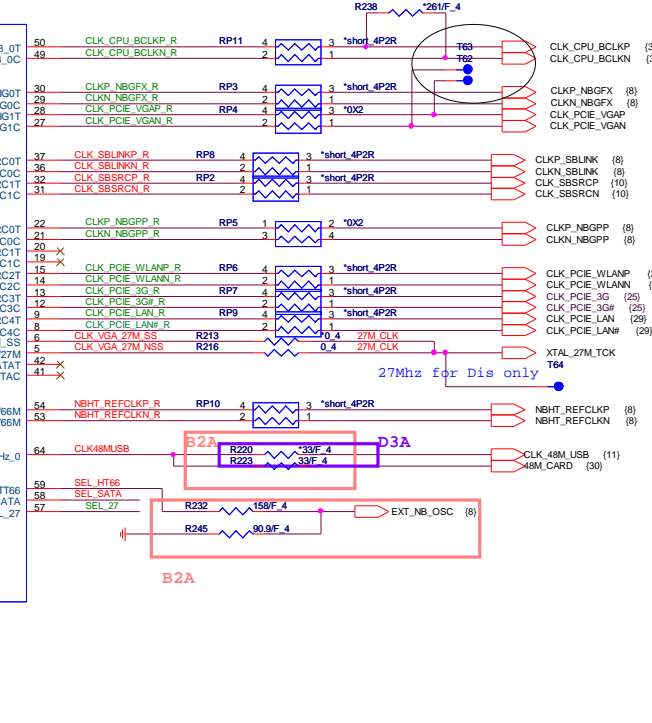
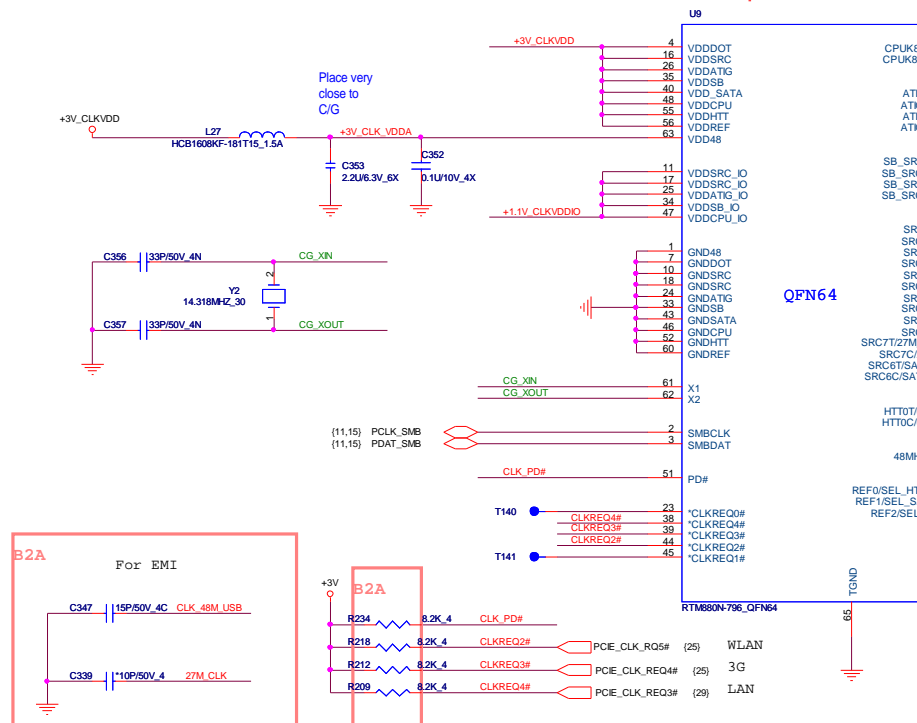
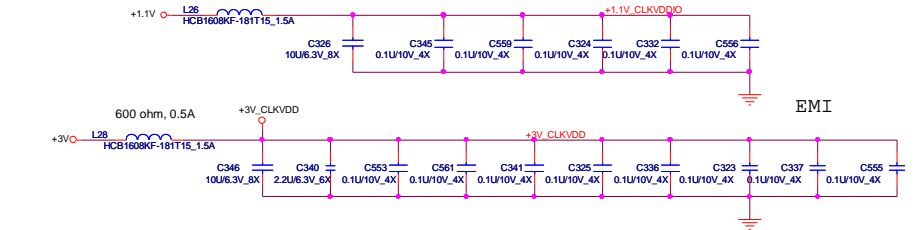
Daughter Board

MMB Board
Audio & USB Board
Touch Pad Board (with FP & w/o FP)
LED Board
MDC Board

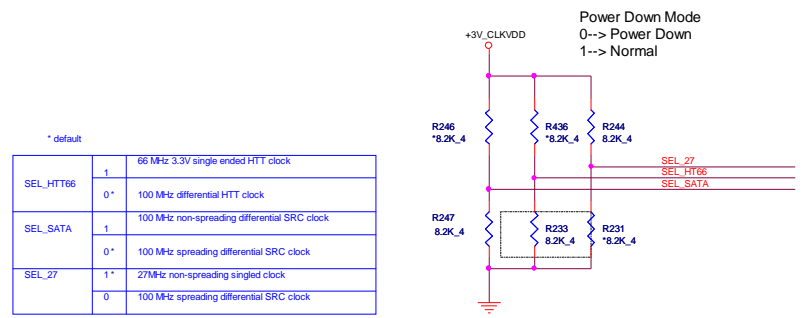
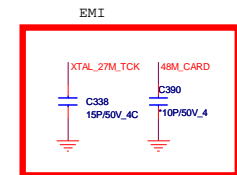
CLOCK GENERATOR

CLOCKS name	Discrete	Clock pin function
NBFX_CLKP NBFX_CLKN	RP48 STUFF	to NB for VGA reference clock
EXT GFX_CLKP EXT GFX_CLKN	RP47 STUFF	to Park-S3 external reference clock -Discrete only
SBLINK_CLKP SBLINK_CLKN	RP43 STUFF	to NB for AC-LINK reference clock
CLK VGA 27M_SS CLK_VGA_27M_NSS	R213,R215 STUFF	To Park-S3 27Mhz - Discrete only

Need check the net name for the short pad



to CPU
to NB
to VGA CARD
EXTERNAL MODE to NB-AC-LINK
EXTERNAL MODE to SB
Reserve ONLY
to WLAN
to 3G
to LAN
to VGA

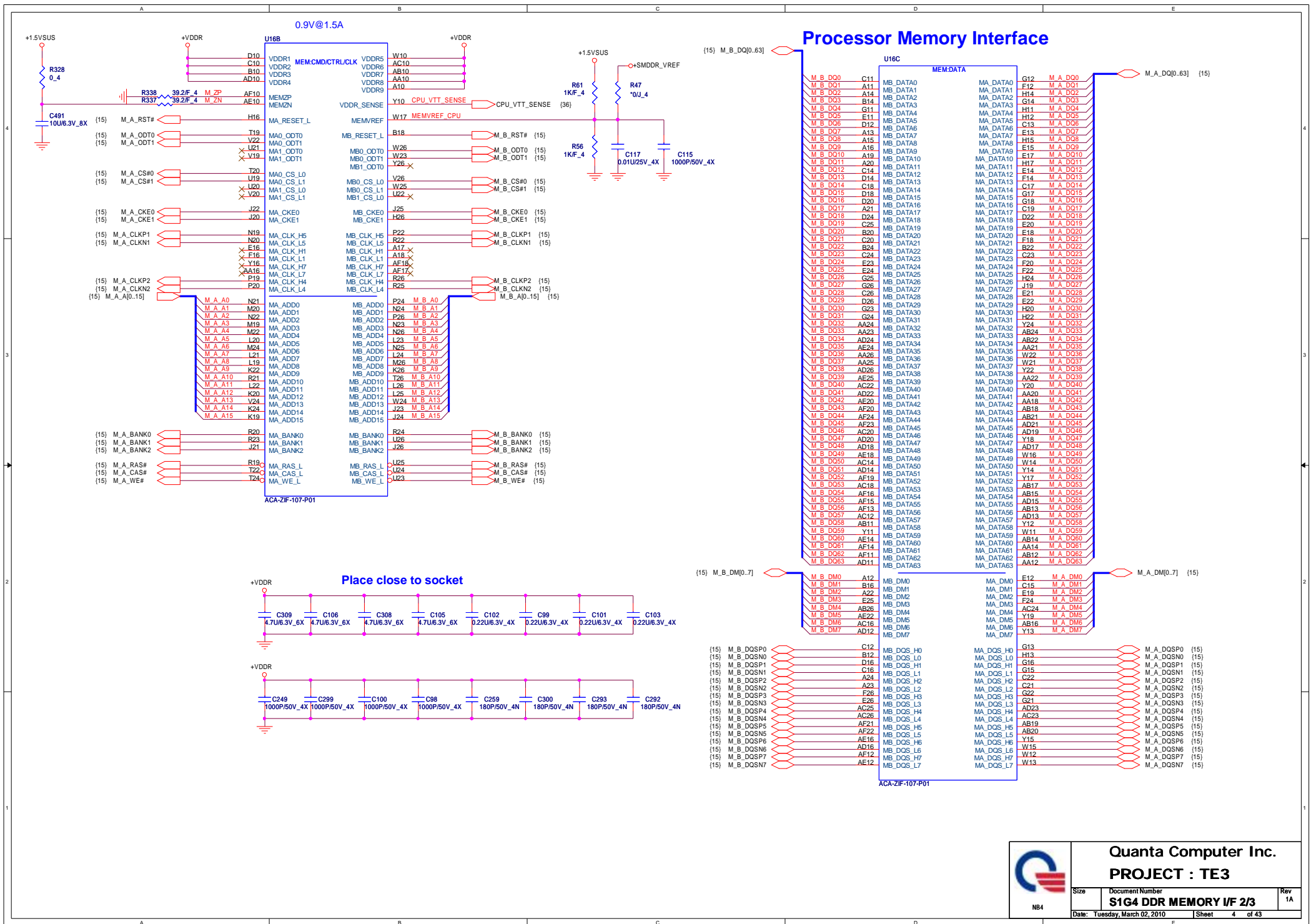


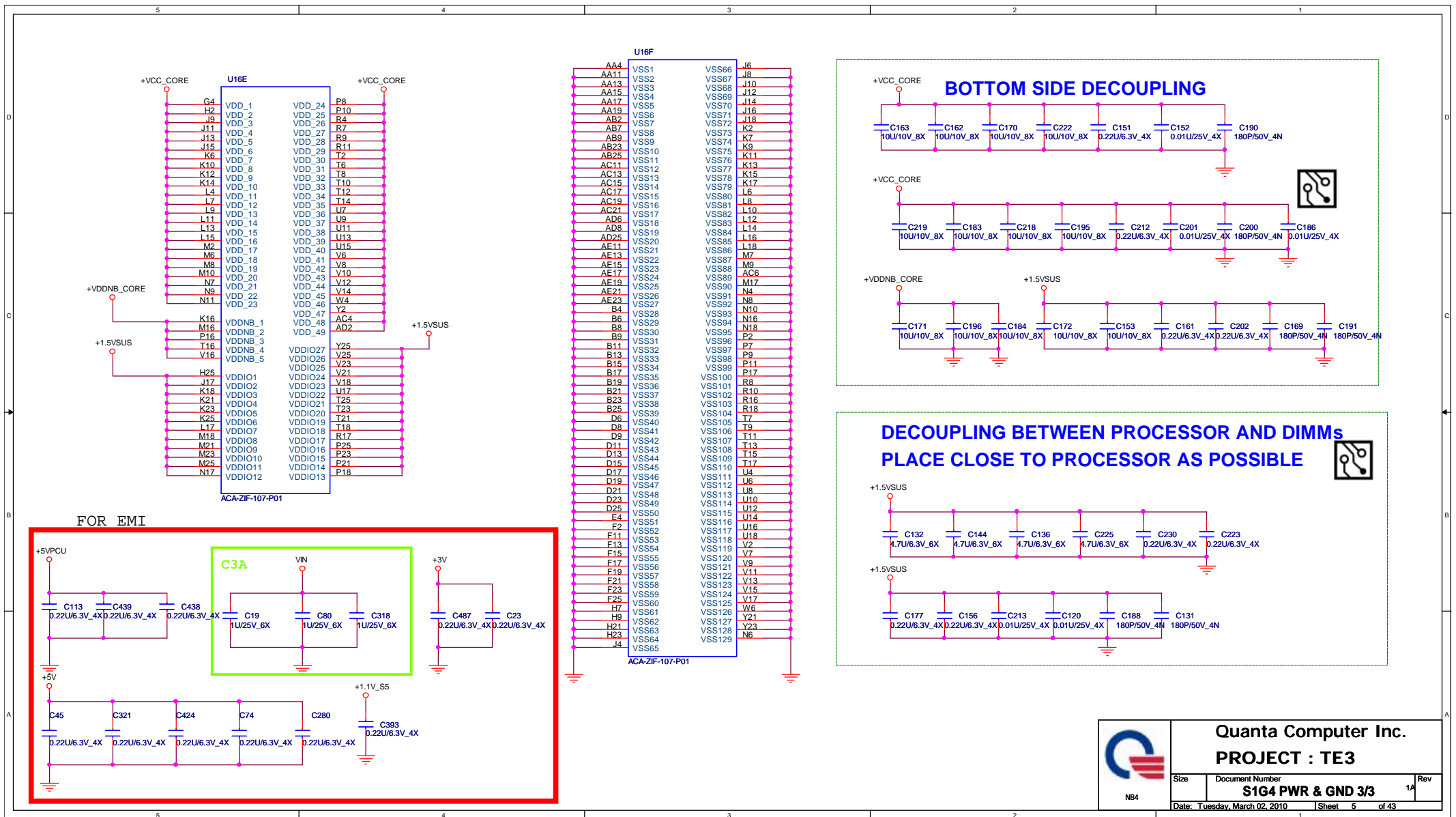
SEL_HTT66	1	66 MHz 3.3V single ended HTT clock
SEL_HTT66	0*	100 MHz differential HTT clock
SEL_SATA	1	100 MHz non-spreading differential SRC clock
SEL_SATA	0*	100 MHz spreading differential SRC clock
SEL_27	1*	27MHz non-spreading singled clock
SEL_27	0	100 MHz spreading differential SRC clock

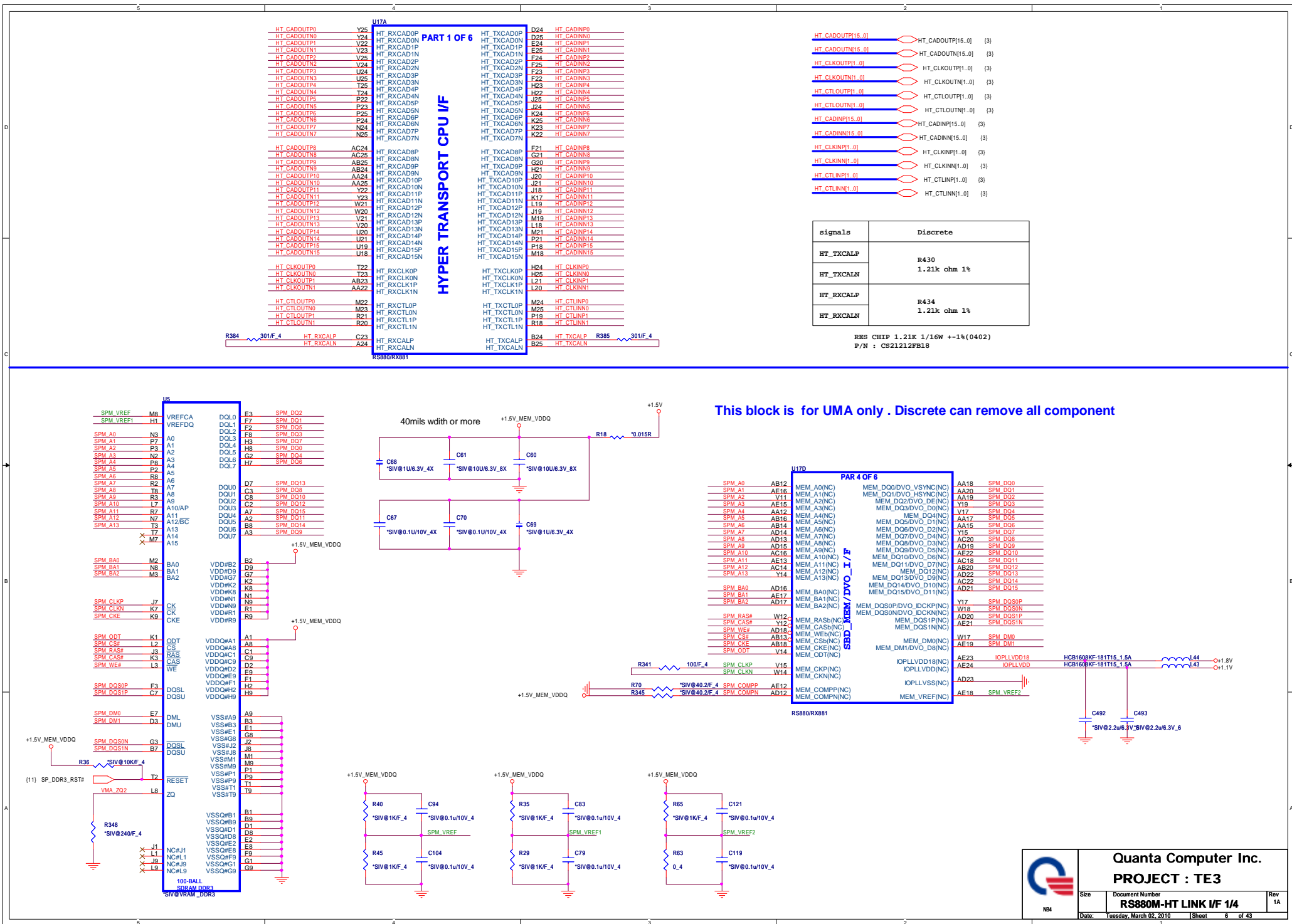
Quanta Computer Inc.
PROJECT : TE3

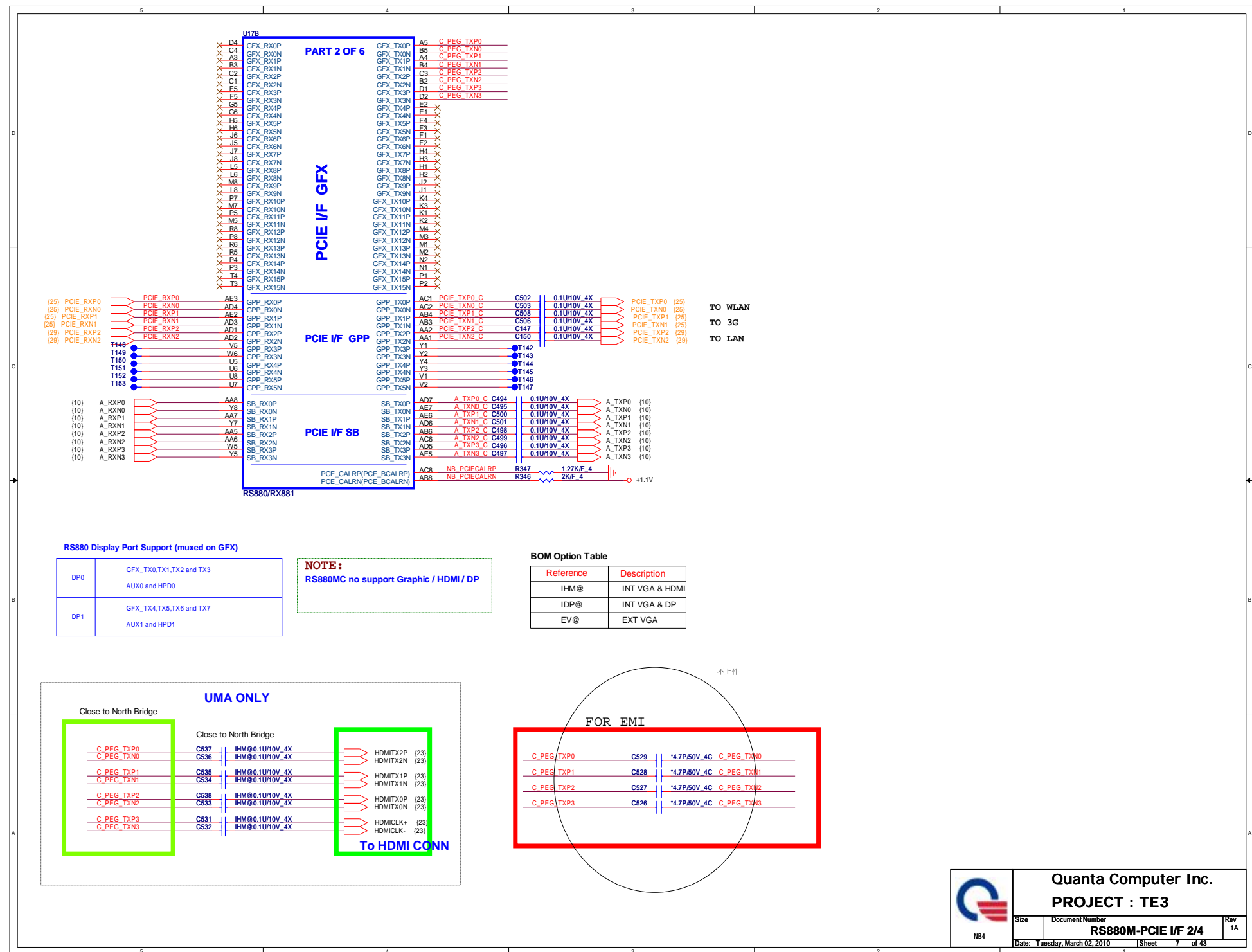
Size Document Number
NB4 Clock Generator

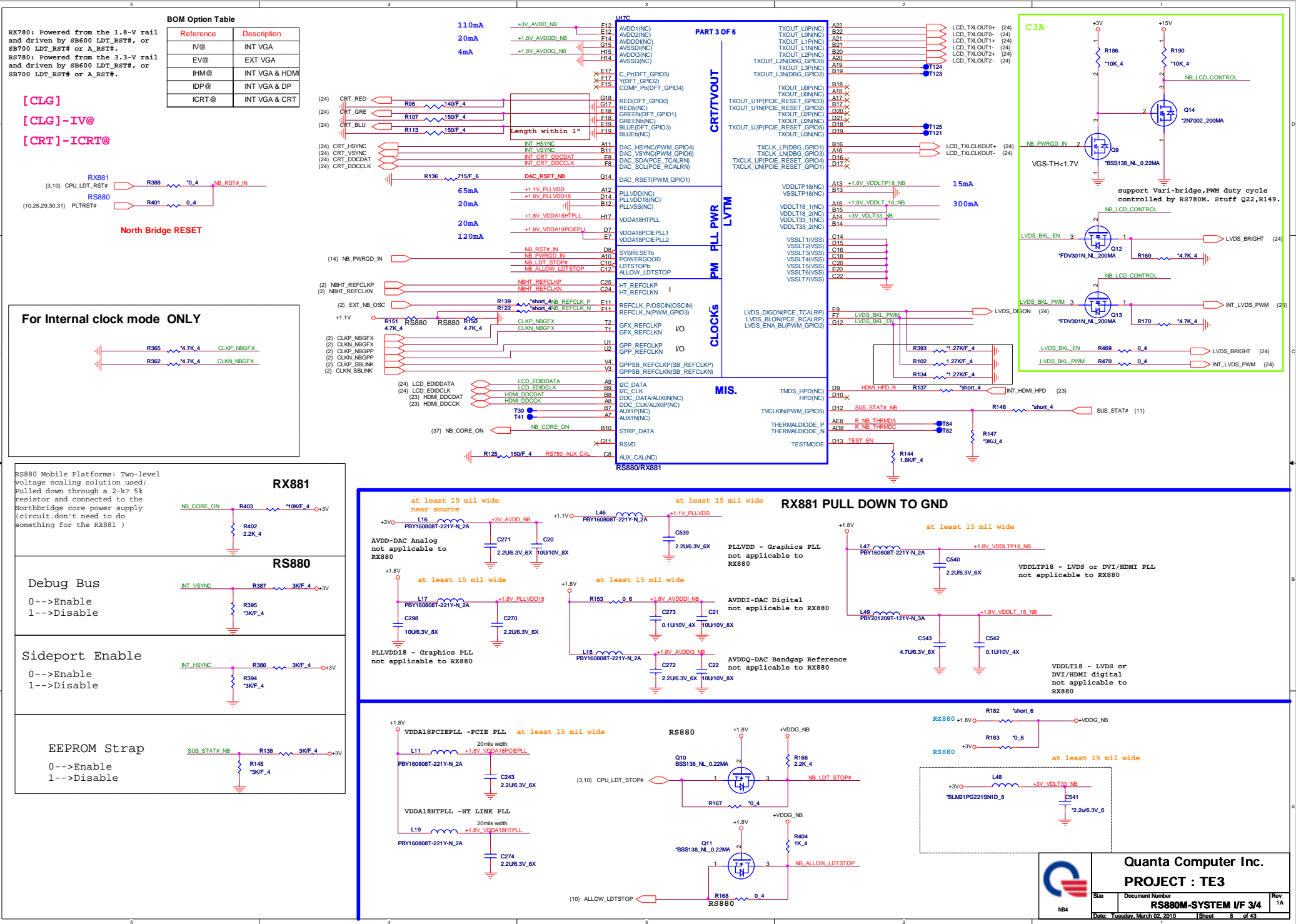
Date: Thursday, March 04, 2010 Sheet 2 of 43

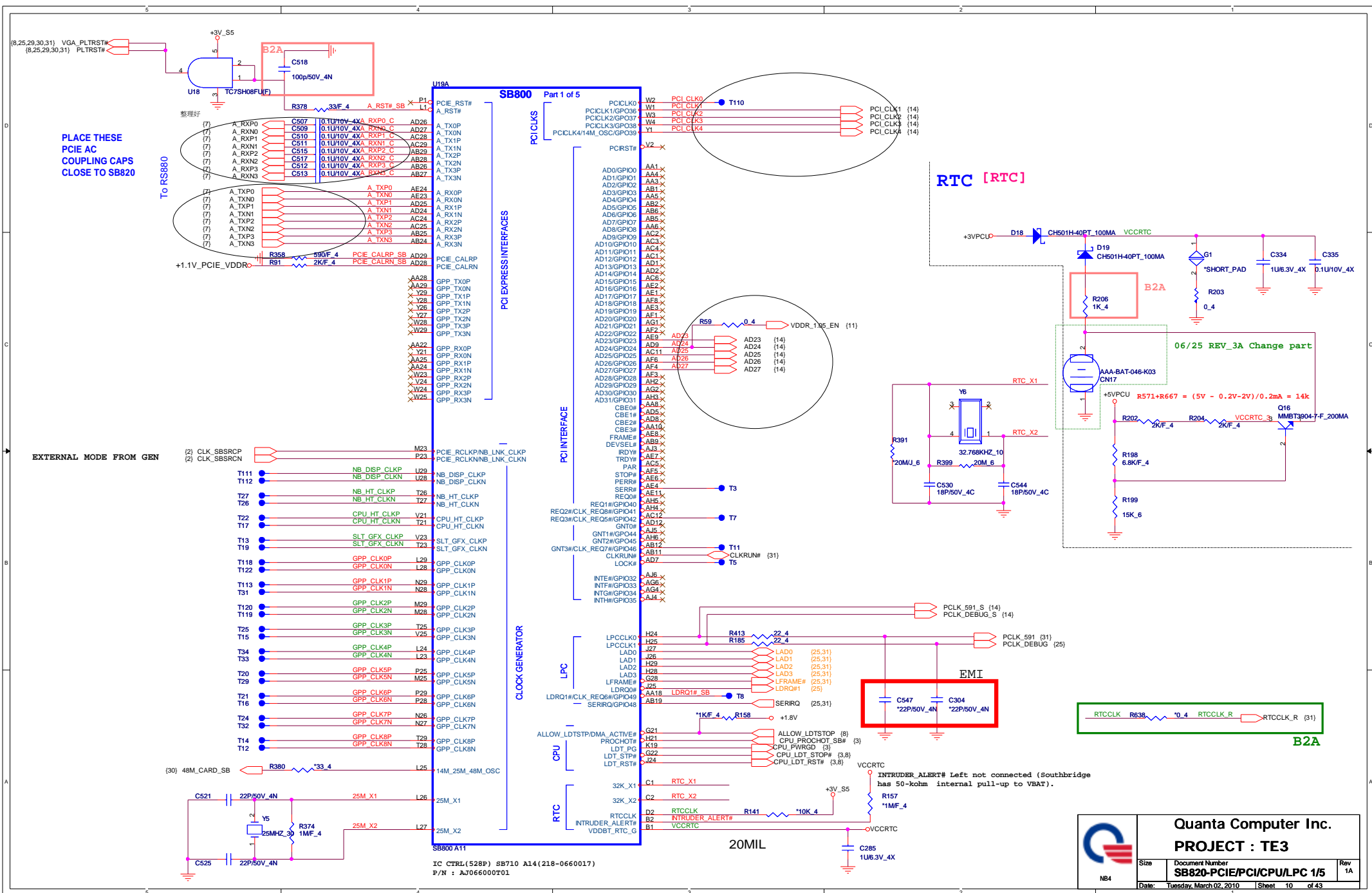


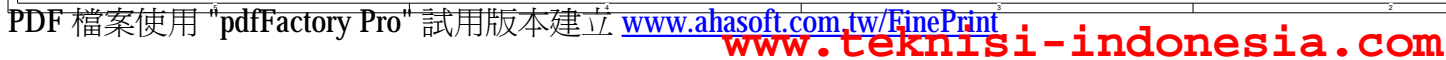












SATA PORT 0,1,2,3
can support AHCI
mode

SATA HDD

E-SATA

SATA ODD

U19B

SB800
Part 2 of 5

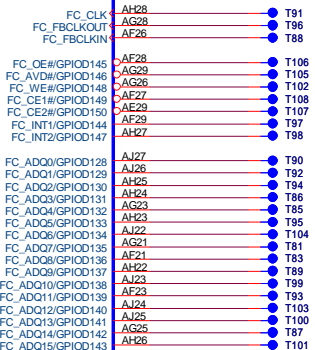
FLASH

SERIAL ATA

HW MONITOR

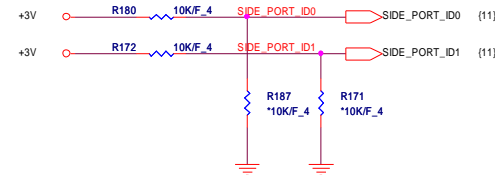
SPI ROM

SB800 A11

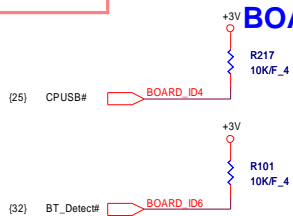
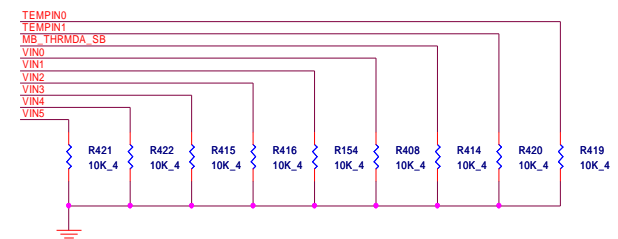
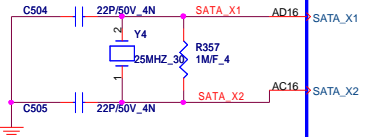


IF THERE IS NO IDE, TEST
POINTS FOR DEBUG BUS
IS MANDATORY

ID1	ID0	Function
0	0	Samsung
0	1	Hynix
1	0	Reserve
1	1	No sideport support



PLACE SATA CAL
RES VERY CLOSE
TO BALL OF SB820



BOARD ID SETTING

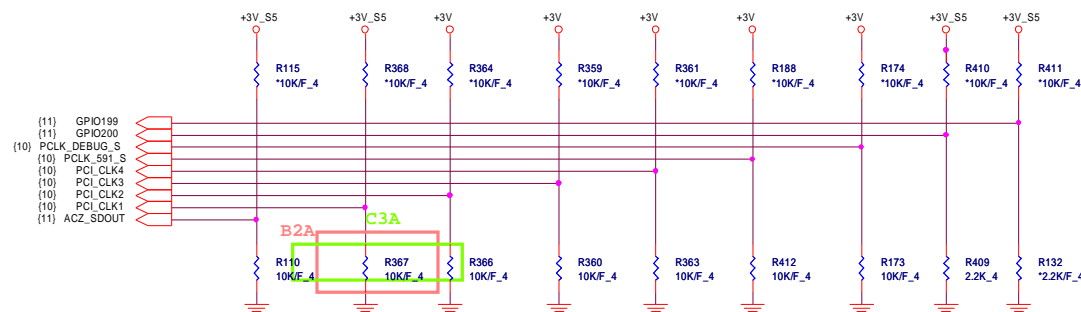
Board ID	ID1	ID2	ID3	ID4	ID5	ID6	ID7	ID8
UMA SKU	H							
VGA SKU	L							
W/ MDC		H						
W/O MDC		L						
W/ HDMI			H					
W/O HDMI			L					
W/O 3G				H				
W/ 3G				L				
15"					H			
14"					L			
W/O BT						H		
W/ BT						L		
13W							H	
17W							L	
W/ CF								H
W/O CF								L



Quanta Computer Inc.
PROJECT : TE3

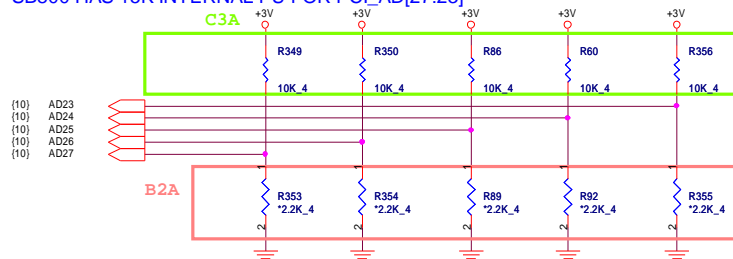
Size	Document Number	Rev
	SB820-SATA/IDE/HWM/SPI 3/5	1A
Date: Tuesday, March 02, 2010	Sheet 12 of 43	

OVERLAP COMMON PADS WHERE POSSIBLE FOR DUAL-OP RESISTORS.



	AZ_SDOUT	PCI_CLK1	PCI_CLK2	PCI_CLK3	PCI_CLK4	LPC_CLK0	LPC_CLK1	GPIO200 (PWM3) GPIO199 (PWM2)
PULL HIGH	LOW POWER MODE	ALLOW PCIE Gen2 DEFAULT	Watchdog Timer Enable	USE DEBUG STRAPS	non_Fusion CLOCK MODE DEFAULT	EC ENABLED	CLKGEN ENABLED DEFAULT	GPIO199 (PWM2) GPIO200 (PWM3) H, H=Reserved H, L=SPI ROM
PULL LOW	PERFORMANCE MODE DEFAULT	FORCE PCIE Gen1	Watchdog Timer Disable DEFAULT	IGNORE DEBUG STRAPS DEFAULT	Fusion CLOCK MODE	EC DISABLED DEFAULT	CLKGEN DISABLED	L, H=LPC ROM L, L=FWH ROM

SB800 HAS 15K INTERNAL PU FOR PCI_AD[27:23]



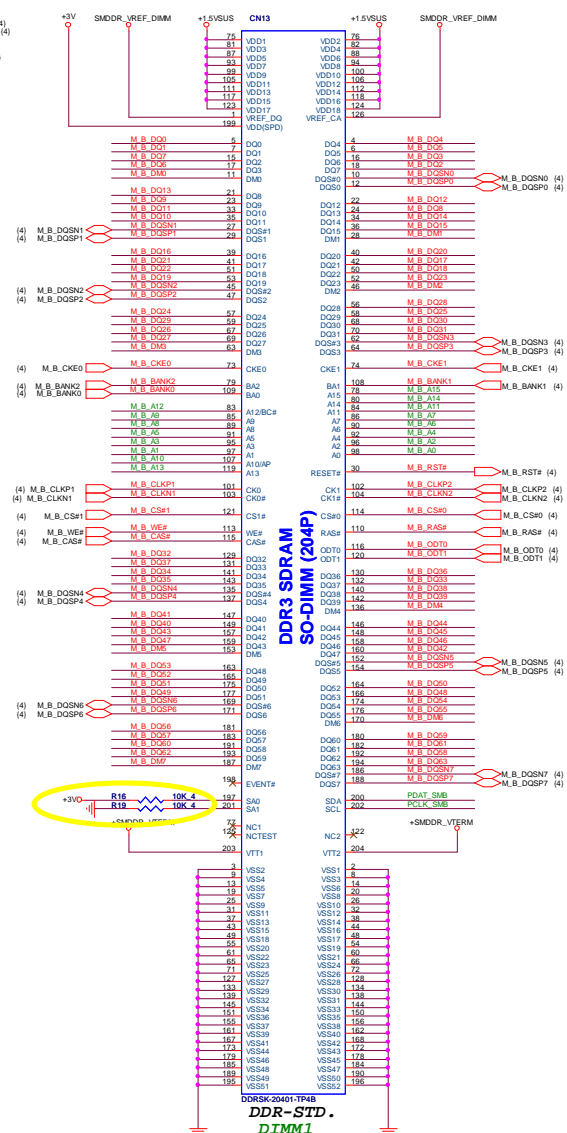
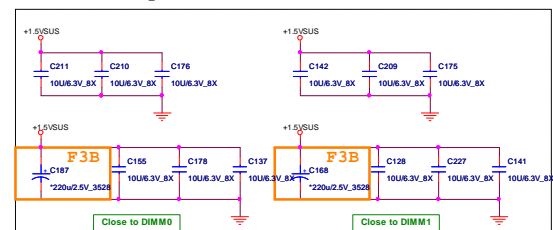
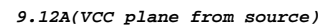
	PCI_AD27	PCI_AD26	PCI_AD25	PCI_AD24	PCI_AD23
PULL HIGH	USE PCI PLL DEFAULT	DISABLE ILA AUTORUN DEFAULT	USE FC PLL DEFAULT	USE DEFAULT PCIE STRAPS DEFAULT	DISABLE PCI MEM BOOT DEFAULT
PULL LOW	BYPASS PCI PLL	ENABLE ILA AUTORUN	BYPASS FC PLL	USE EEPROM PCIE STRAPS	ENABLE PCI MEM BOOT

[illegible]

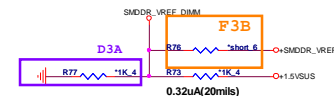
Quanta Computer Inc.
PROJECT : TE3

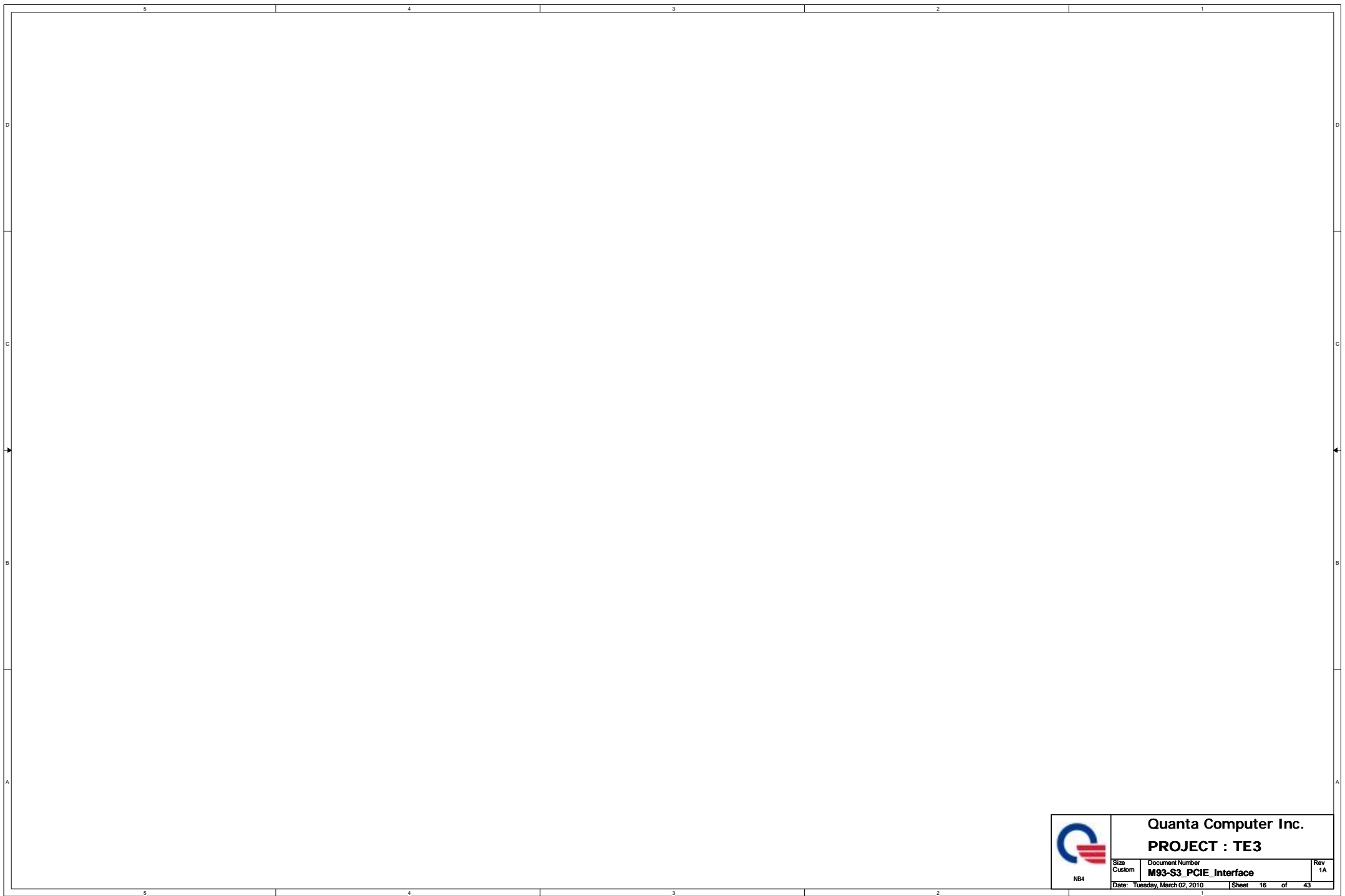
Size	Document Number	Rev
	SB820-STRAPS 5/5	1
Date	Tuesday, March 02, 2010	Sheet 14 of 43


TERMINATOR DECOUPLING CAPACITOR




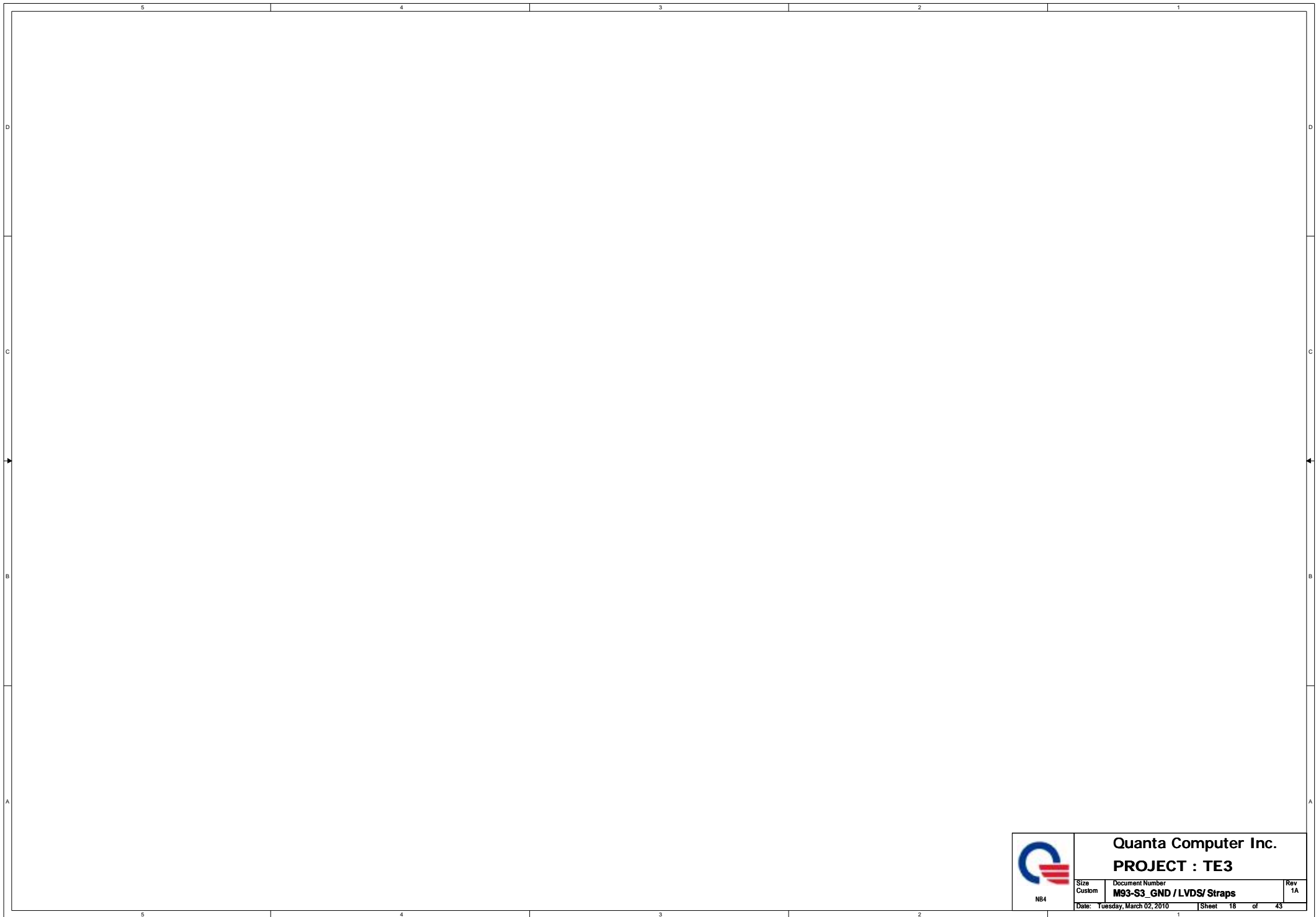
**CHECK BY CRB S1G4 DONT
SUPPORT MEM HOT?**





 NB4	Quanta Computer Inc. PROJECT : TE3				
	Size	Document Number			Rev
	Custom	M93-S3_PCIE_Interface			1A
Date: Tuesday, March 02, 2010		Sheet	16	of	43

D				D												
C				C												
B				B												
A				A												
				<div data-bbox="1841 1244 2159 1329"><table><tr><td colspan="3">Quanta Computer Inc.</td></tr><tr><td colspan="3">PROJECT : TE3</td></tr><tr><td>Site Custom</td><td>Document Number M93-S3_Main</td><td>Rev 1A</td></tr><tr><td colspan="3">Date: Tuesday, March 09, 2016 10:00:17 of 43</td></tr></table></div>	Quanta Computer Inc.			PROJECT : TE3			Site Custom	Document Number M93-S3_Main	Rev 1A	Date: Tuesday, March 09, 2016 10:00:17 of 43		
Quanta Computer Inc.																
PROJECT : TE3																
Site Custom	Document Number M93-S3_Main	Rev 1A														
Date: Tuesday, March 09, 2016 10:00:17 of 43																



N84

Quanta Computer Inc.
PROJECT : TE3

Size Custom	Document Number M93-S3_GND / LVDS/ Straps	Rev 1A
Date: Tuesday, March 02, 2010	Sheet 18 of 43	


	5	4	3	2	1
D					
C					
B					
A					
	5	4	3	2	1




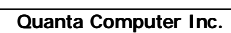
NB4

Quanta Computer Inc.
PROJECT : TE3

Size Custom	Document Number M93-S3_Power_and_NC	Rev 1A
Date: Tuesday, March 02, 2010	Sheet 19 of 43	

 NB4	Quanta Computer Inc. PROJECT : TE3		
	Size	Document Number M93-S3 HDMI_Thermal	Rev 1/A
Date: Tuesday, March 02 2010	Sheet 20	of 43	

 NB4	Quanta Computer Inc. PROJECT : TE3		
	Size Custom	Document Number M93-S3_Interface	Rev 1A
	Date: Tuesday, March 02, 2010		Sheet 21 of 43



PROJECT : TE3

Size	Custom
------	--------

Document Number
M93-S3 VRAM_A0,A1

Rev
1A

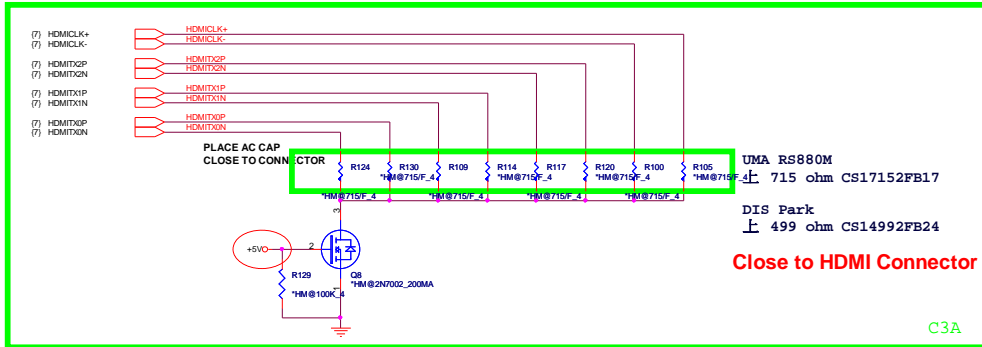
Date: Tuesday, March 02, 2010 Sheet 22 of 43

HDMI Conn [HDM]

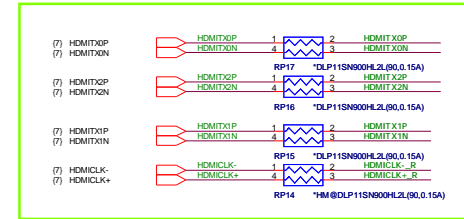
D3A

FOR HDMI PAGE 23

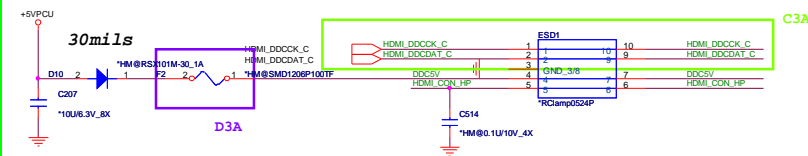
Close to HDMI CONN



C3A

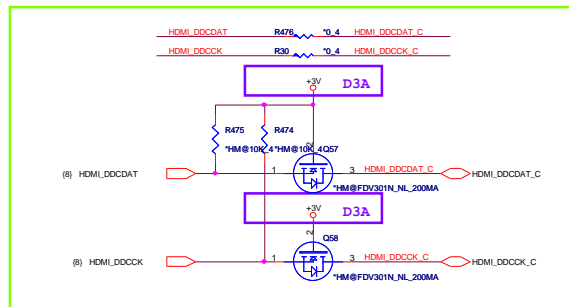


C3A

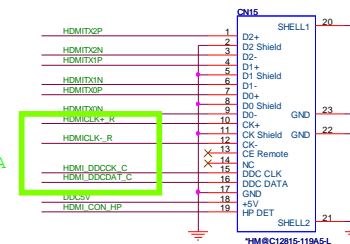
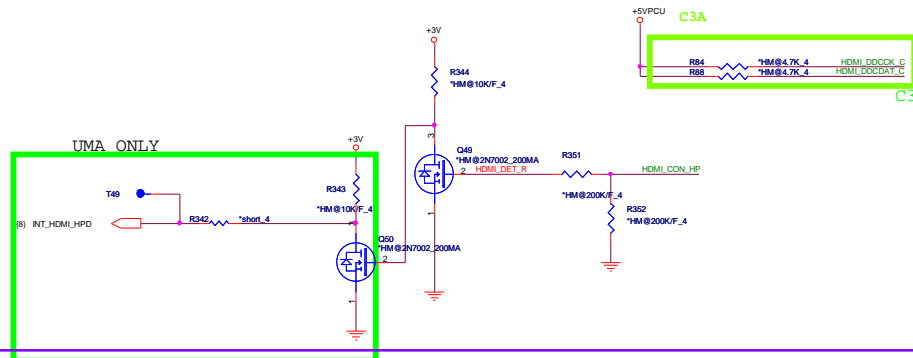


HDMI INTERFACE

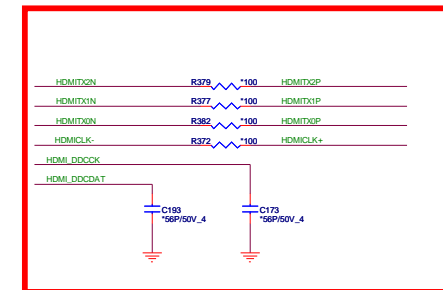
C3A



HDMI HPD SENSE



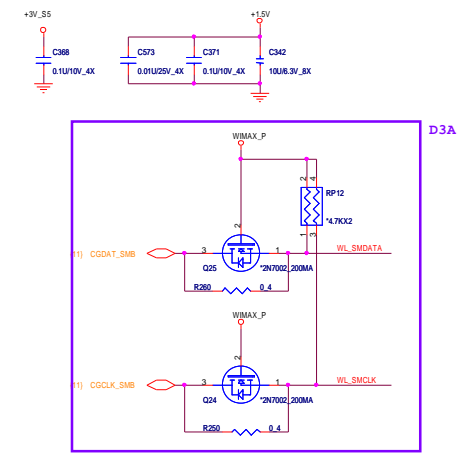
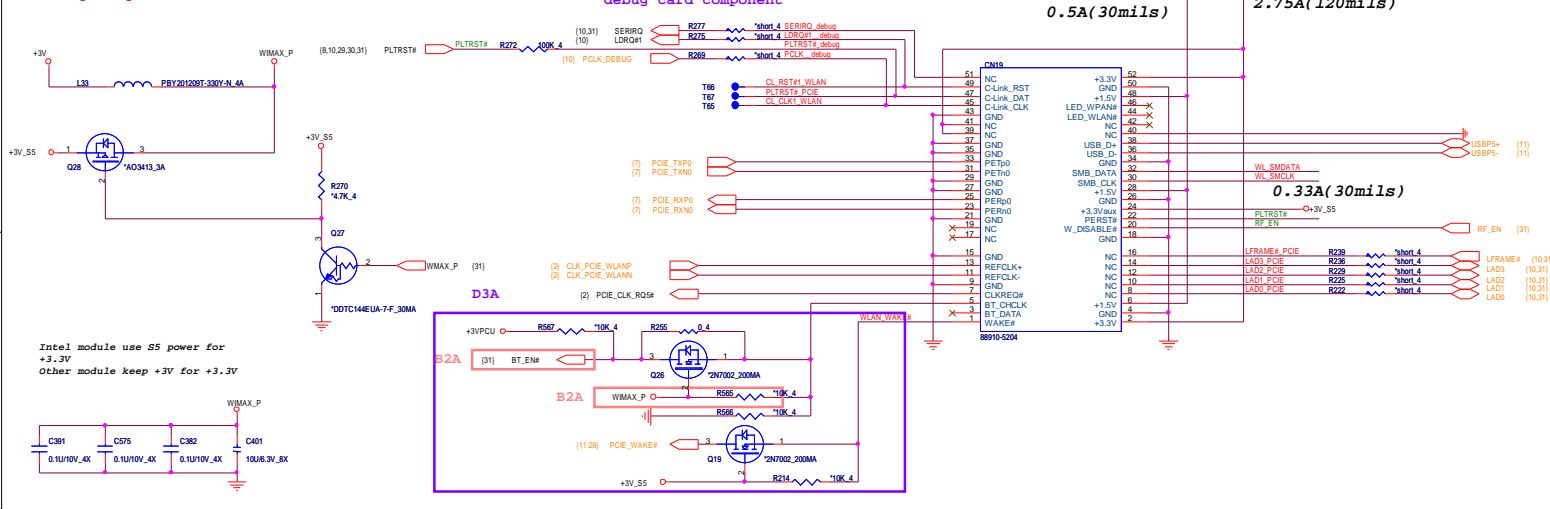
FOR EMI



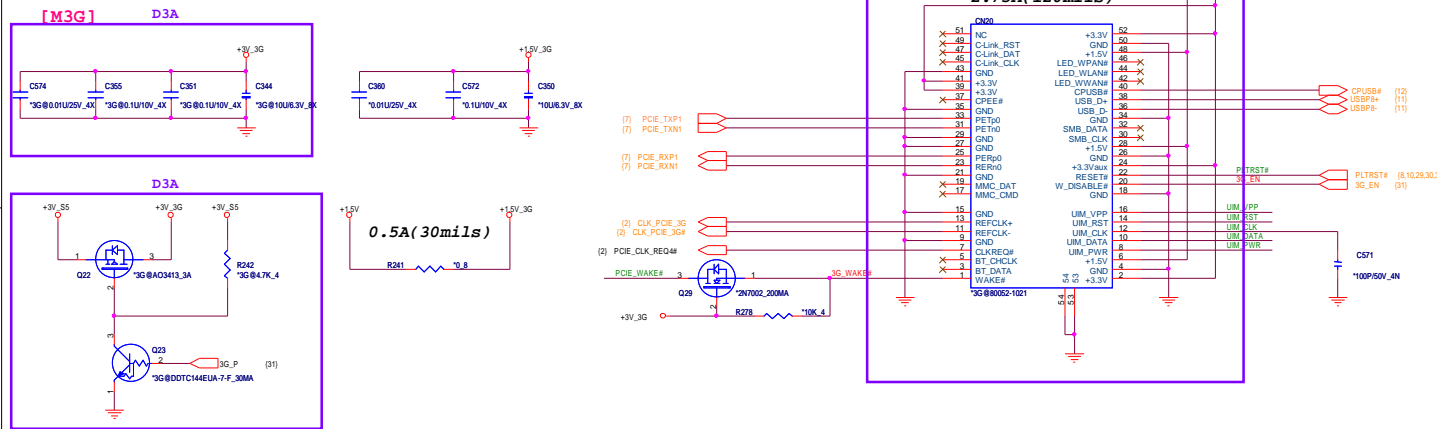
Close to connector

PROJECT : TE3			
Size	Document Number	HDMI CONN	
Date: Tuesday, March 02, 2010	Sheet	23	of 43

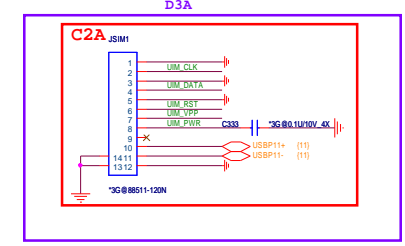
MINI Card Slot#1
(WiFi) [WLN]



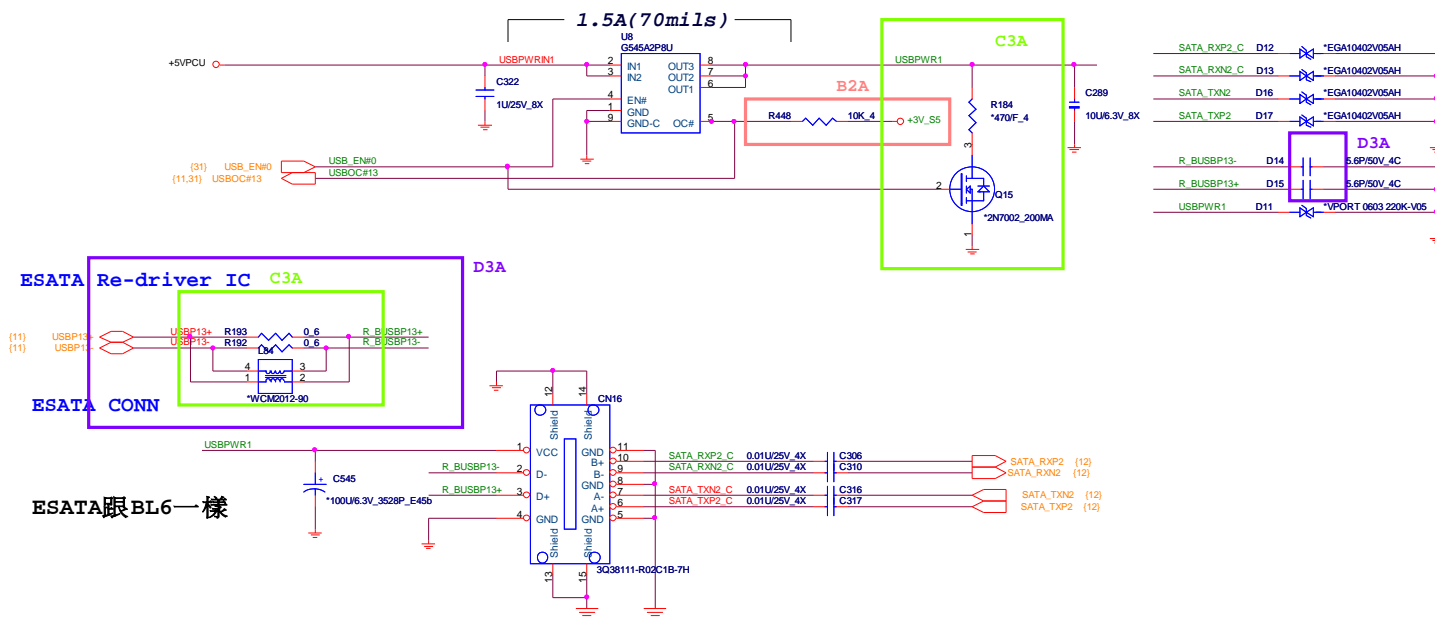
MINI Card Slot#2
3G



SIM CARD [M3G]



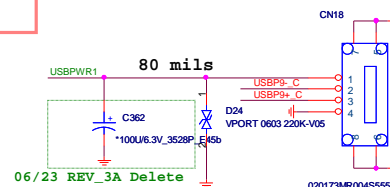
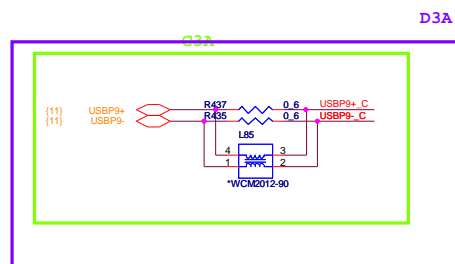
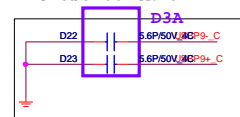
E-SATA [ESA]




USB MB SIDE



Close to CN25



 Quanta Computer Inc. PROJECT : TE3		
Size	Document Number	Rev
NB4	TP/SW/ESATA/USB+Audio/LED	1A
Date:	Thursday, March 04, 2010	Sheet 26 of 43

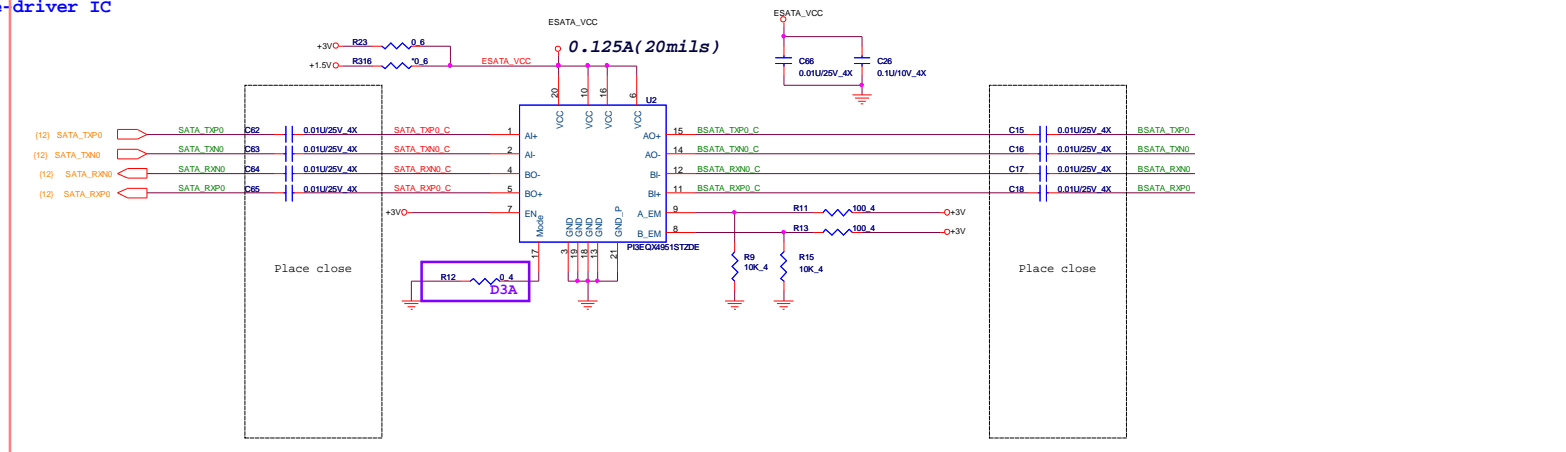
SATA ODD

[ODD]



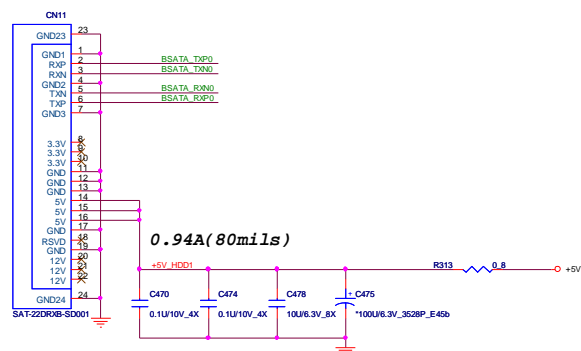
SATA HDD Re-driver IC

B2A

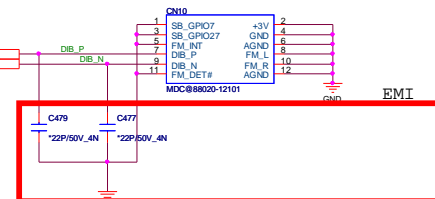



SATA HDD

[HDD]



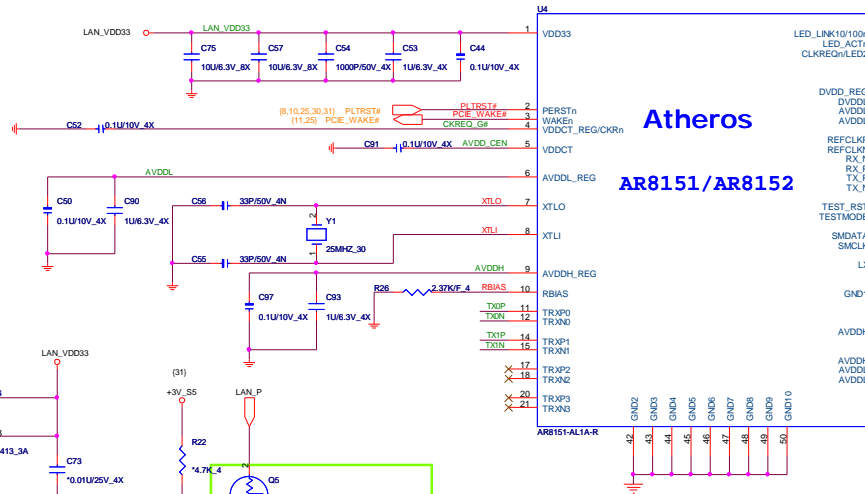
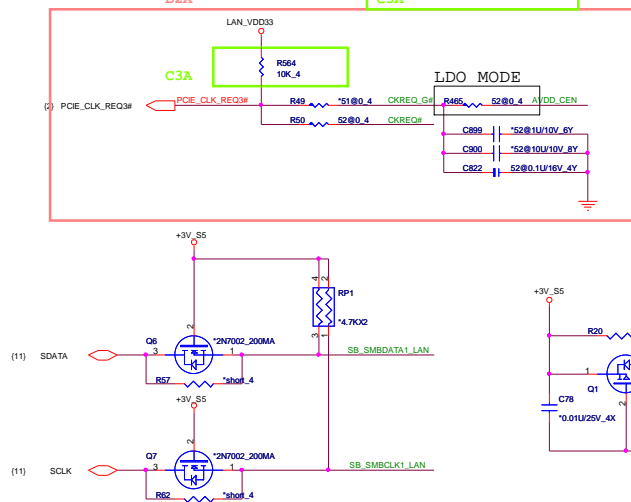
MDC



 NB4	Quanta Computer Inc.		
	PROJECT : TE3		
	Size	Document Number	Rev
	HDD/ODD		1/
Date: Tuesday, March 02, 2010		Sheet: 27 of 43	

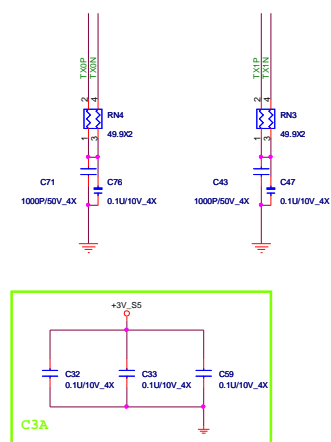
Atheros Lan

51_52@:
GIGA = NC
10/100 = 0 ohm CS00002JB38

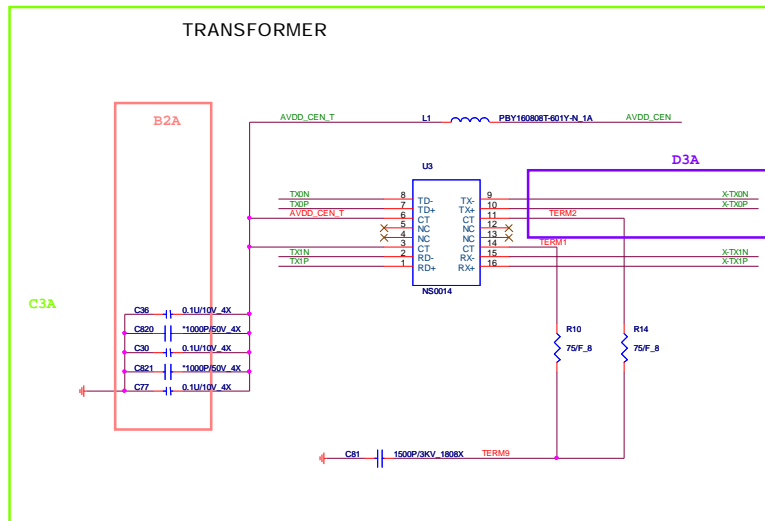


GIGA:AR8151-AL1A-R = AL008151001
10/100:AR8152-AL1A-R = AL008152004

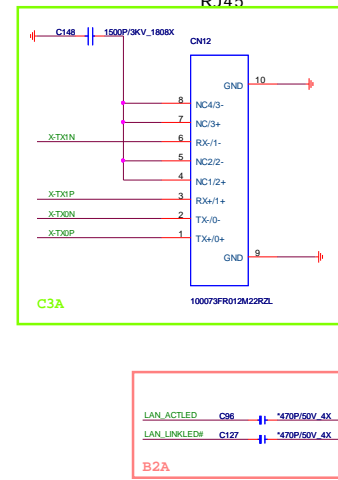
PLACE NEAR LAN IC SIDE



TRANSFORMER



RJ45

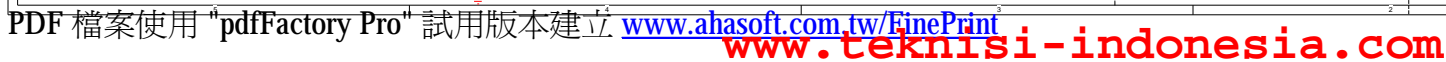


LED0 = LAN_ACTLED	1	Over-clocking enable (default = 1)
	0	Over-clocking disable
LED1 = LAN_LINKLED#	1	SWR switch-mode regulator select
	0	Giga LAN pull High (default = 1)
	0	LDO linear regulator select
	0	10/100M LAN pull Low
CKREQ# or CKREQ_G#	1	Normal function
	0	ATE test mode

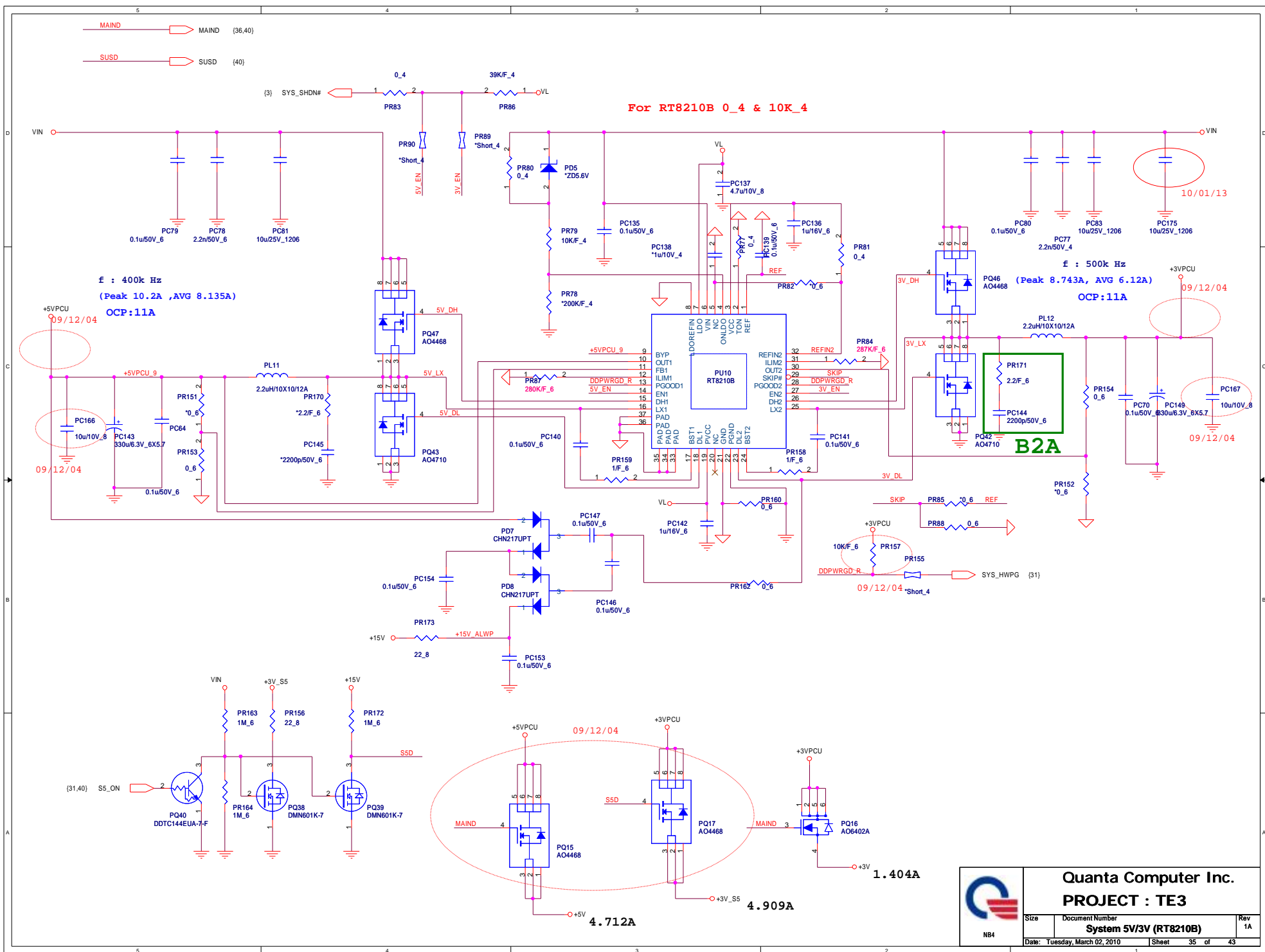
Power on Strapping pin



Size	Quanta Computer Inc.	
	PROJECT : TE3	
Document Number	Atheros Lan	
Date	Tuesday, March 02, 2010	Sheet 20 of 43

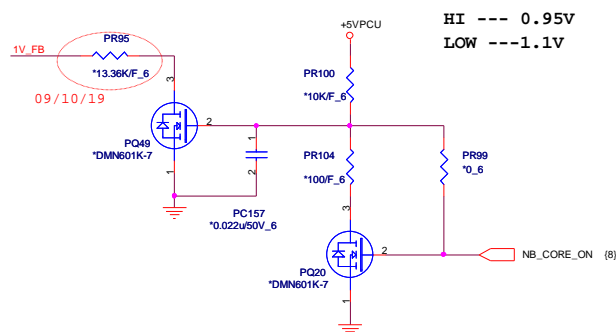
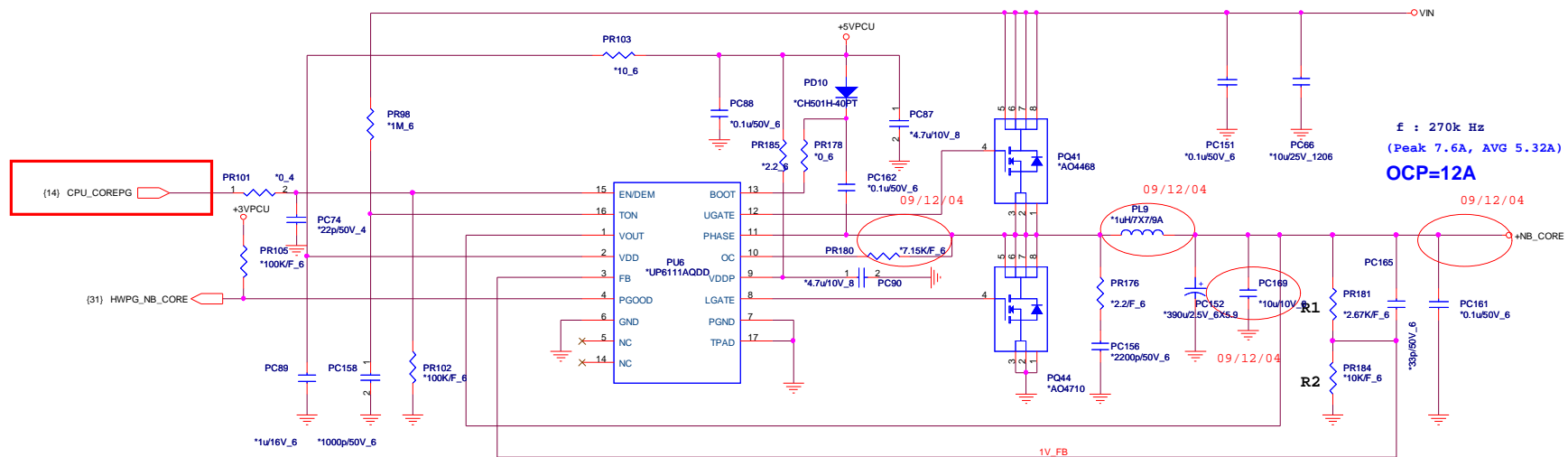




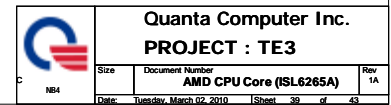


Quanta Computer Inc.
PROJECT : TE3

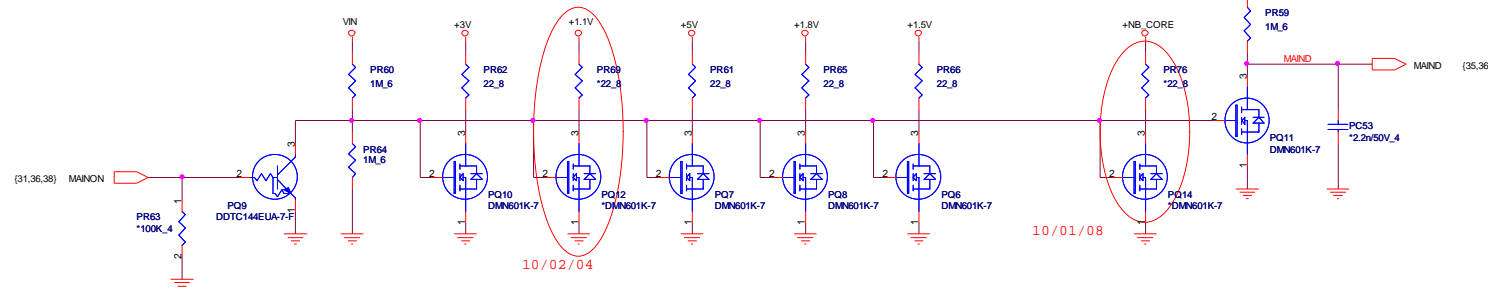
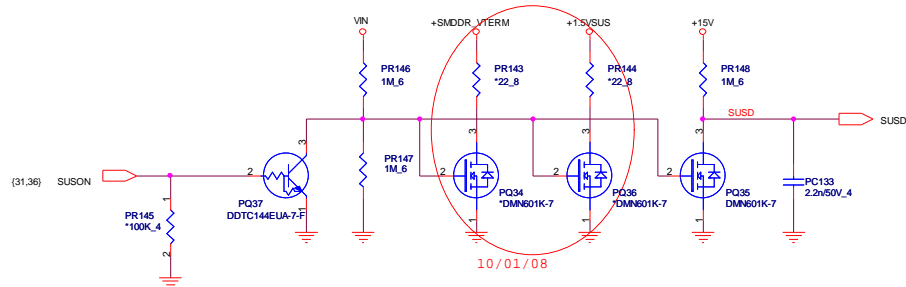
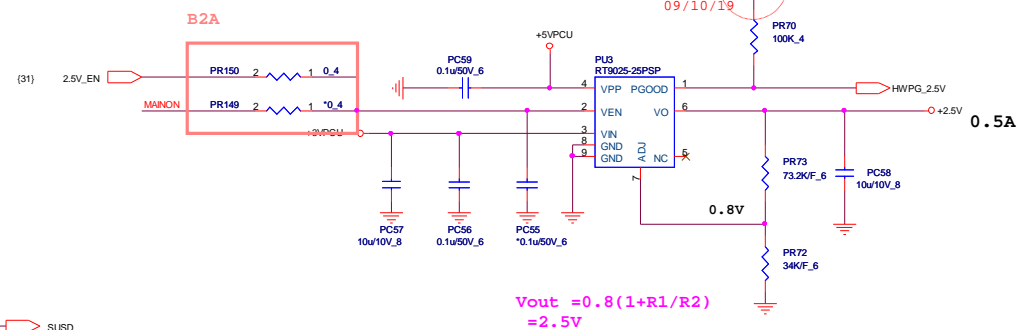
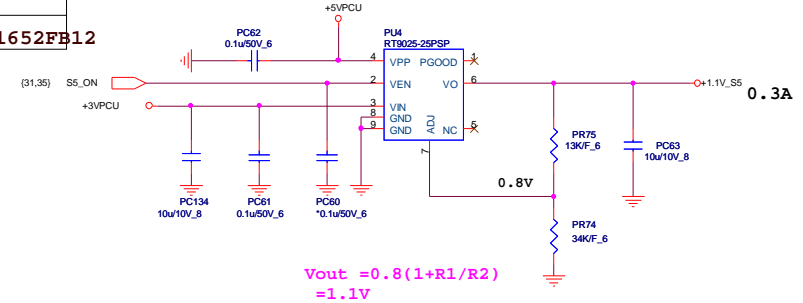
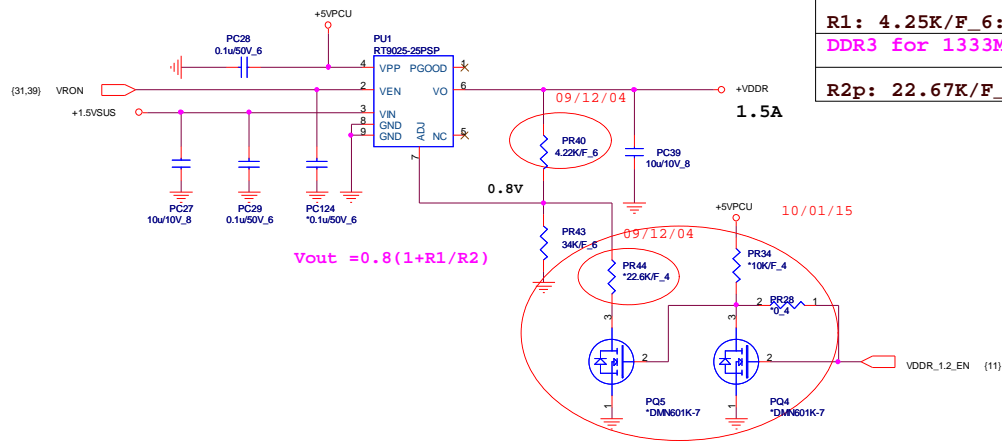
Size	Document Number	Rev
	System 5V/3V (RT8210B)	1A
Date: Tuesday, March 02, 2010	Sheet 35 of 43	



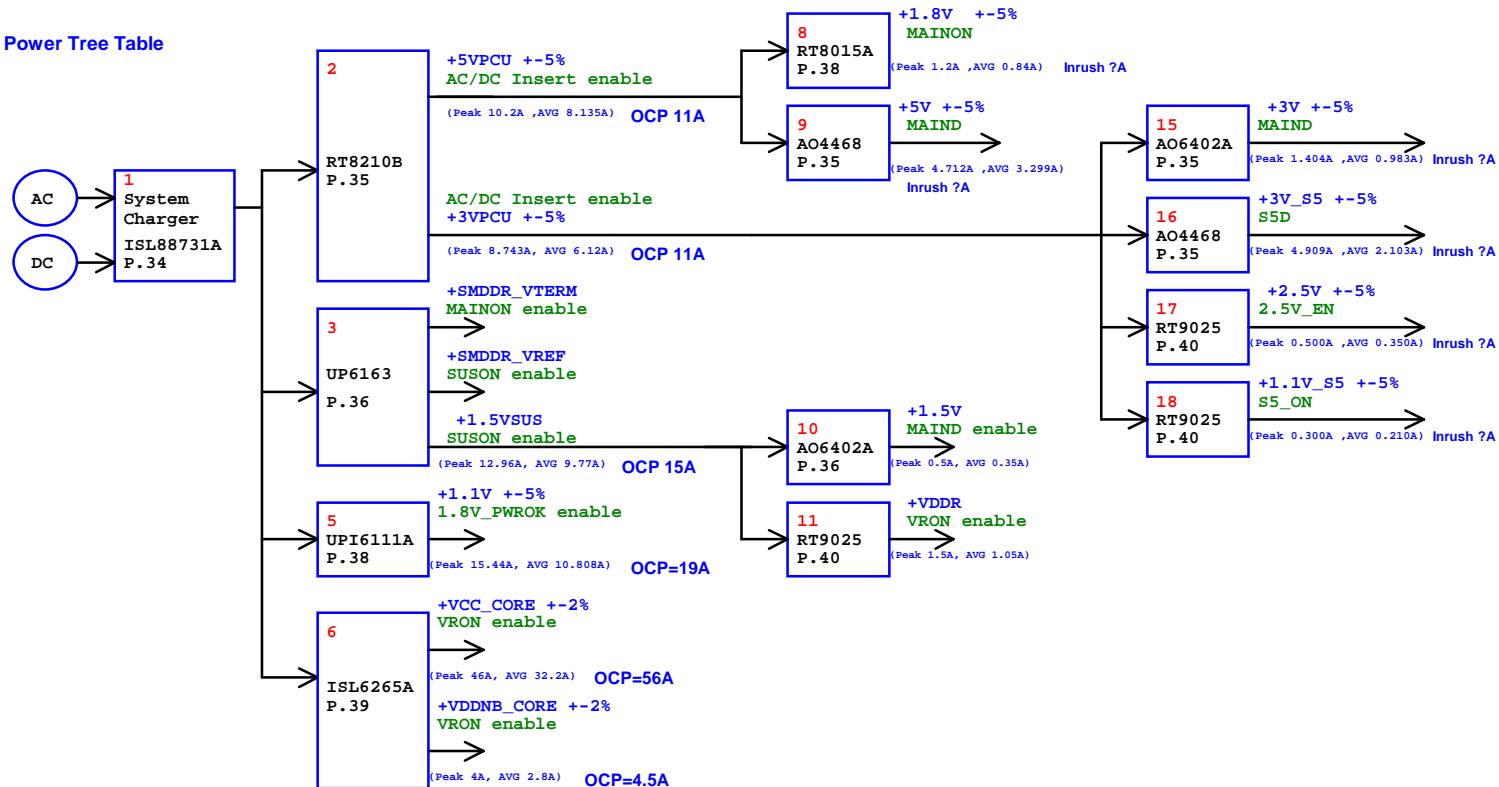
SVC	SVD	Output
0	0	1.4
0	1	1.2
1	0	1.0
1	1	0.8



DDR3 for 1066MHZ----0.9V
R1: 4.25K/F_6: CS31073F908
DDR3 for 1333MHZ----1.05V
R2p: 22.67K/F_4: CS31652FB12



Power Tree Table



Power Distribution List

Power	Distribution

