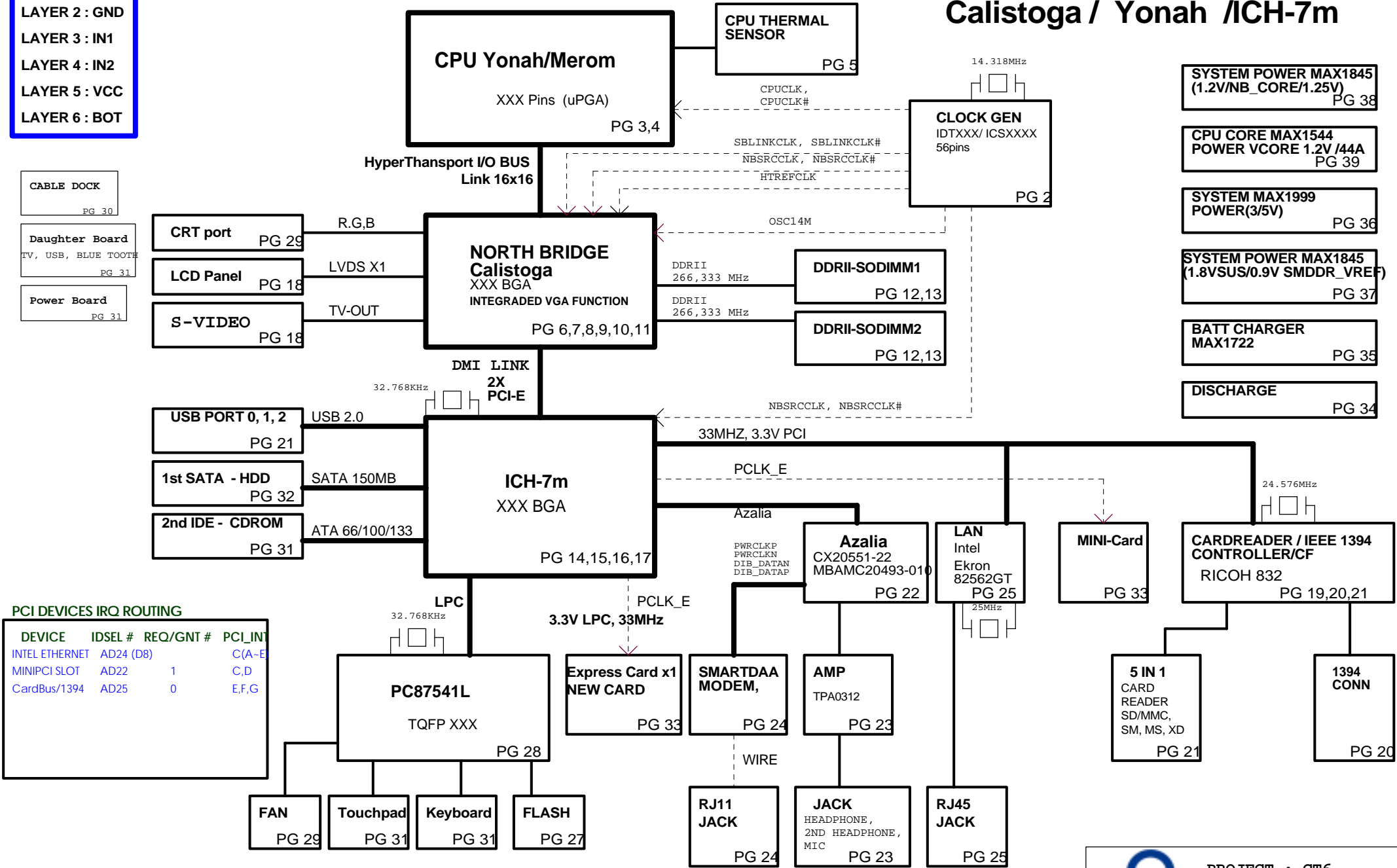


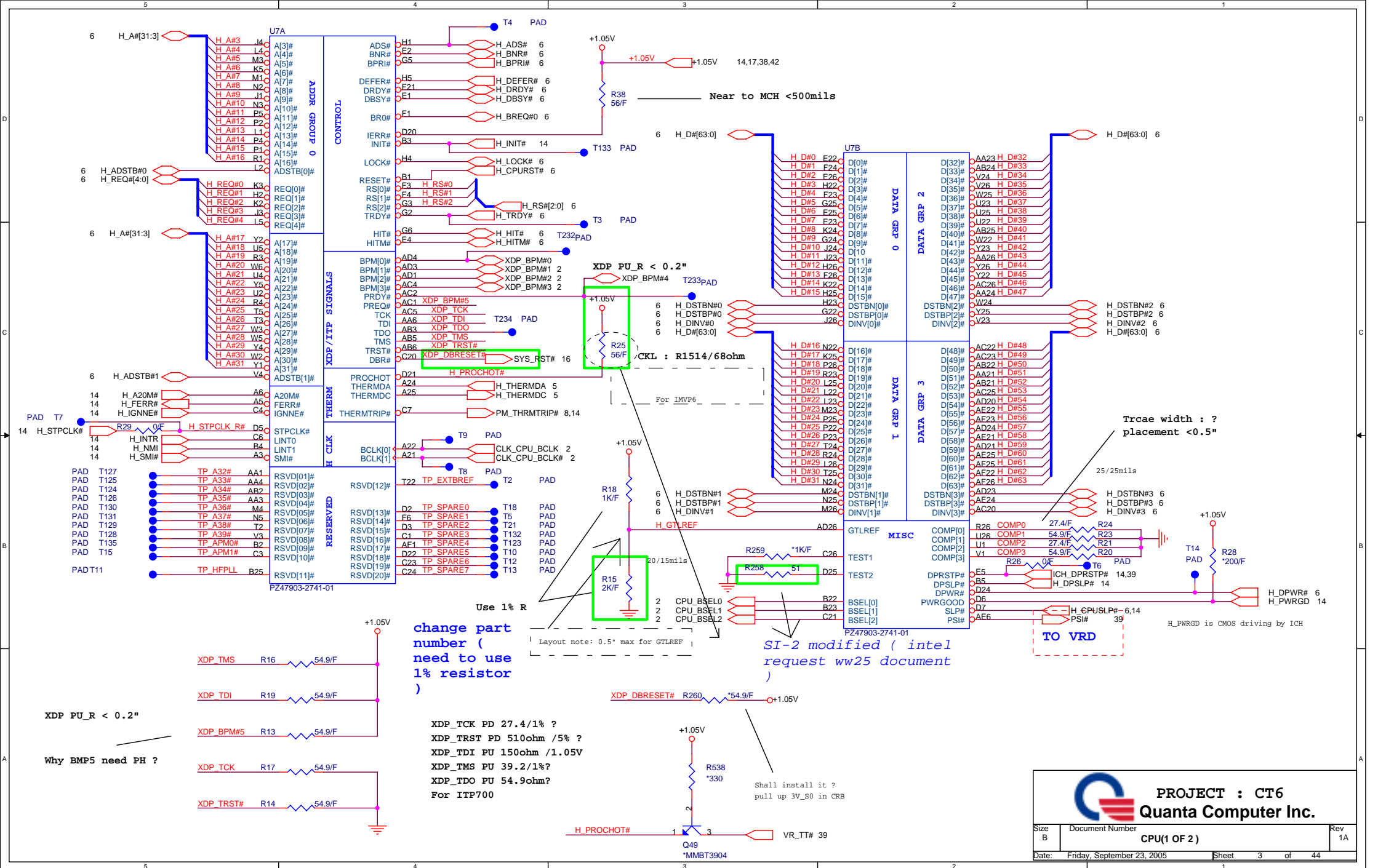
PCB STACK UP

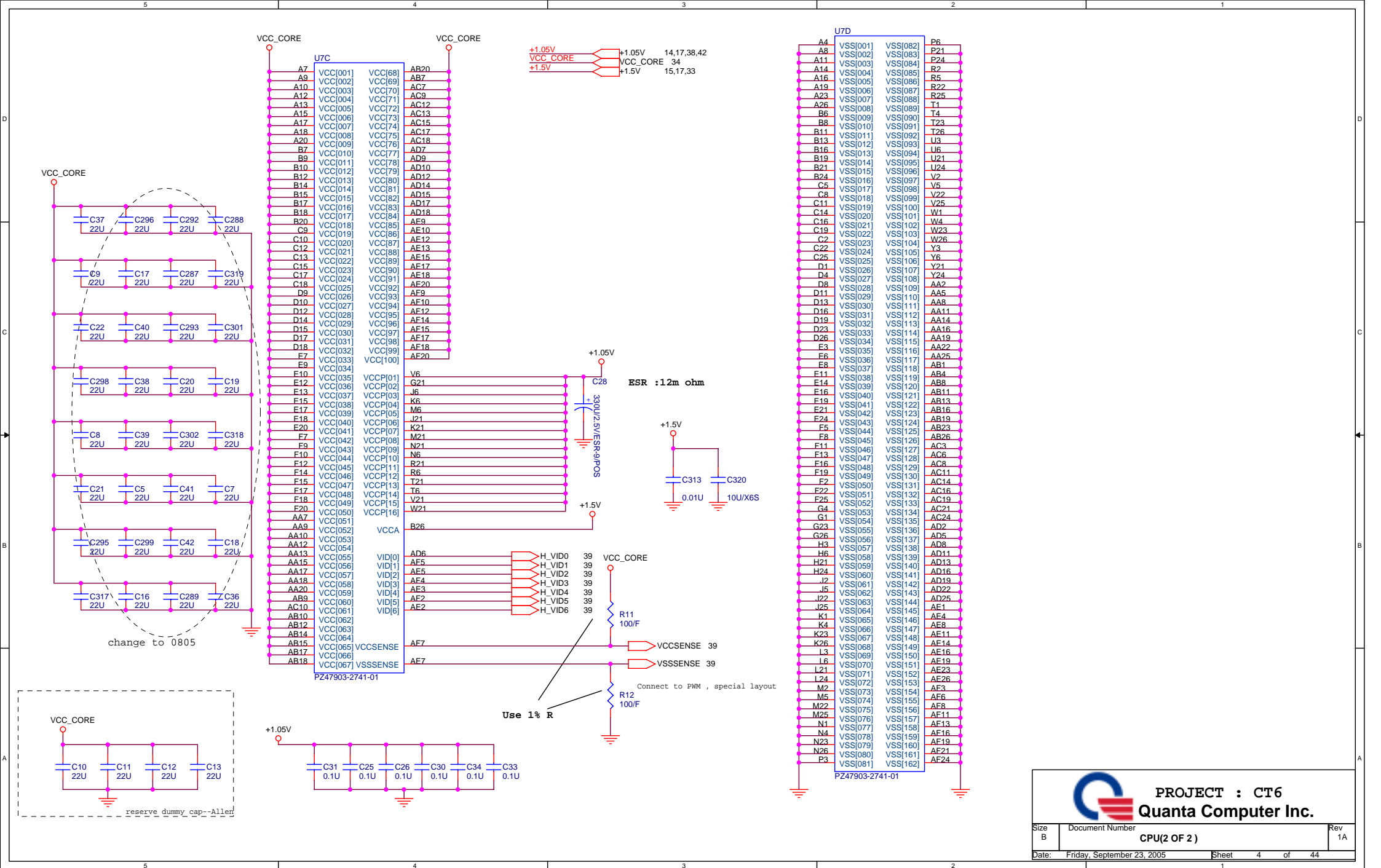
- LAYER 1 : TOP
- LAYER 2 : GND
- LAYER 3 : IN1
- LAYER 4 : IN2
- LAYER 5 : VCC
- LAYER 6 : BOT

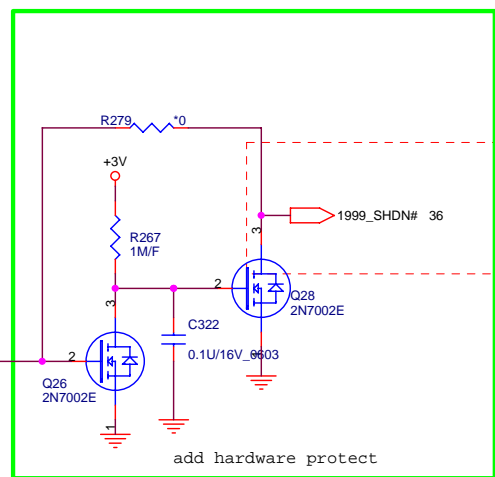
CT6 BLOCK DIAGRAM

Calistoga / Yonah /ICH-7m



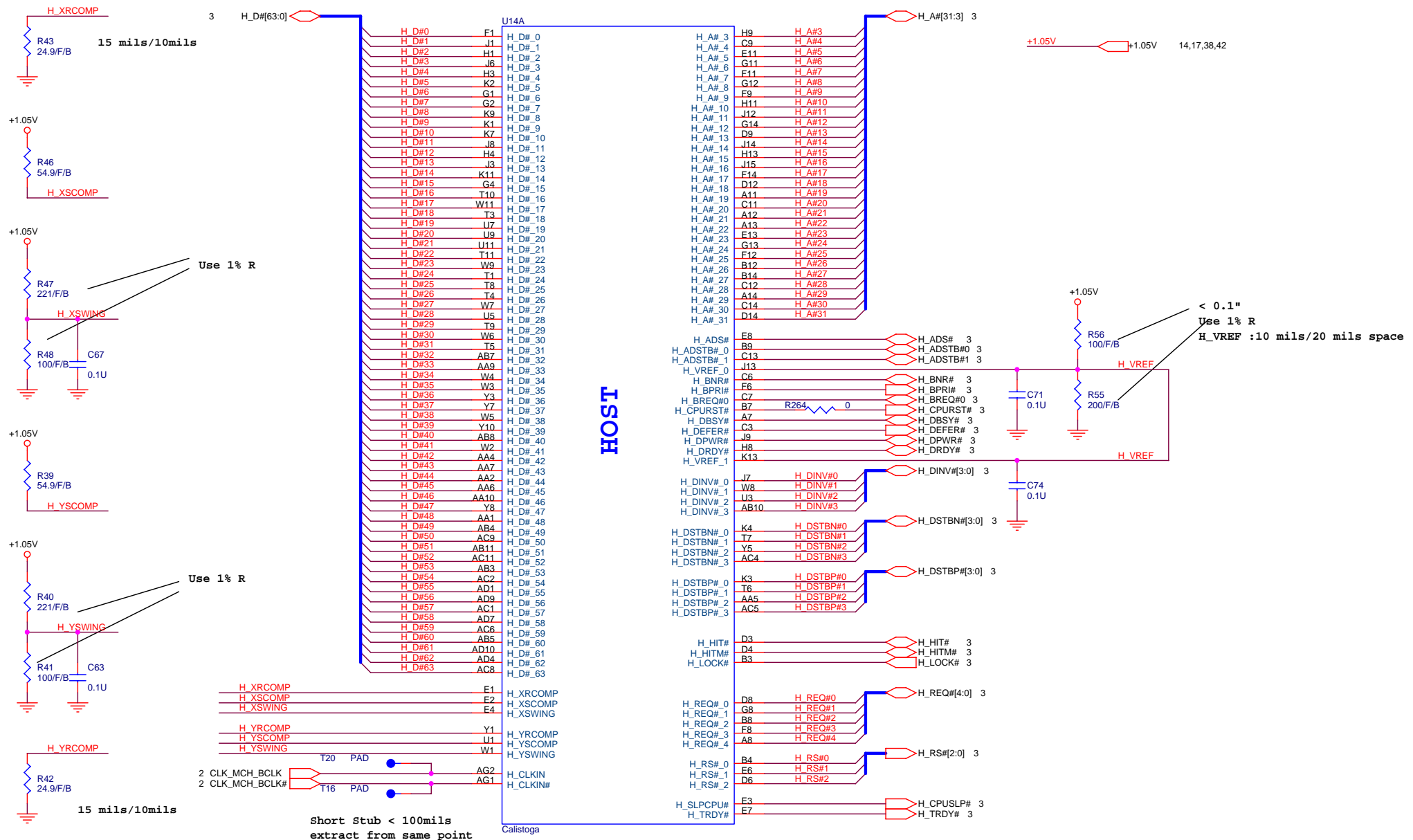


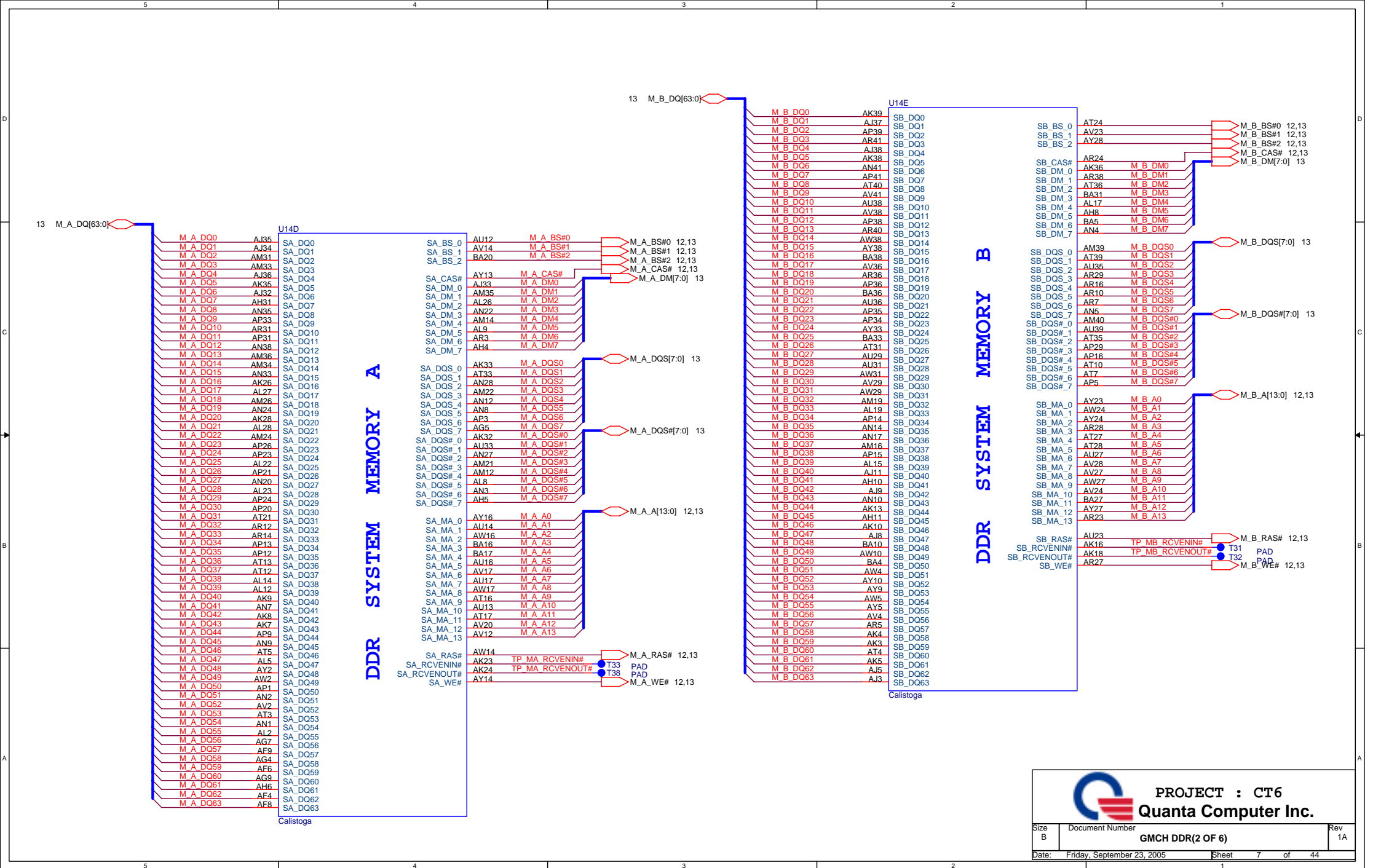


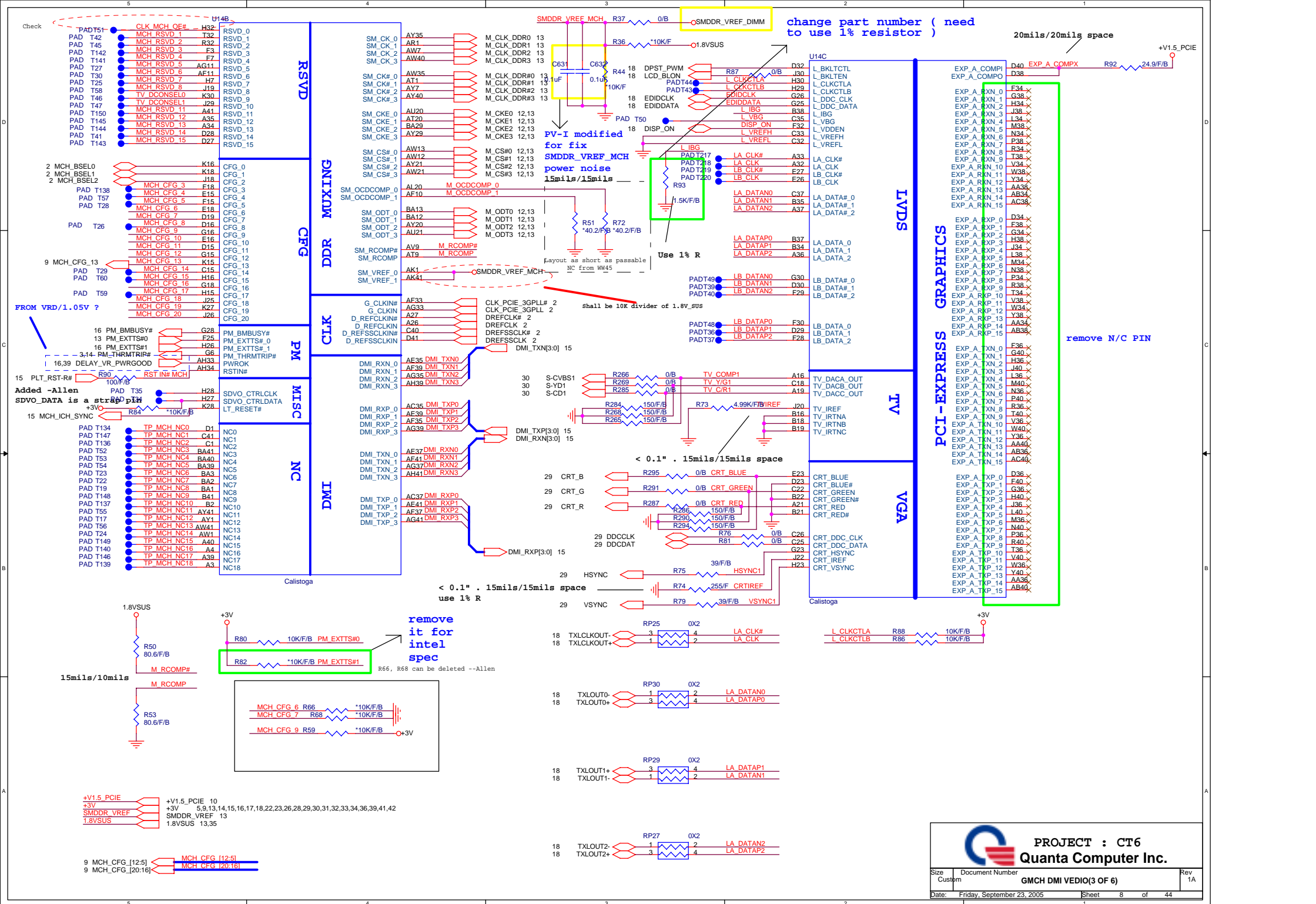


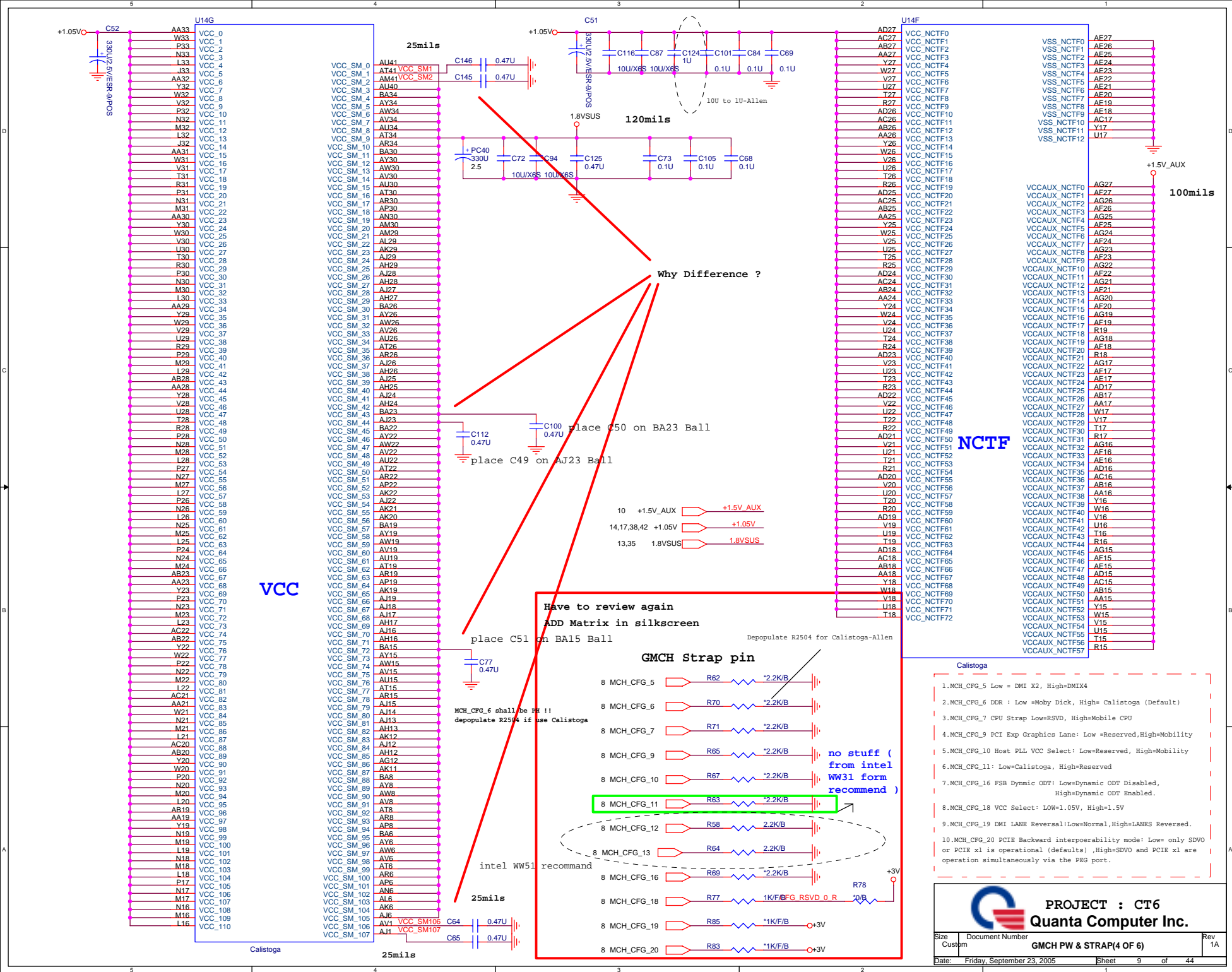
The top diagram shows the connection for Q27 (RHU002N06) to the LM86 SMD component. The gate of Q27 is connected to +3V. The drain is connected to pin 3 of the MBDATA signal, and the source is connected to pin 1 of the LM86 SMD component.

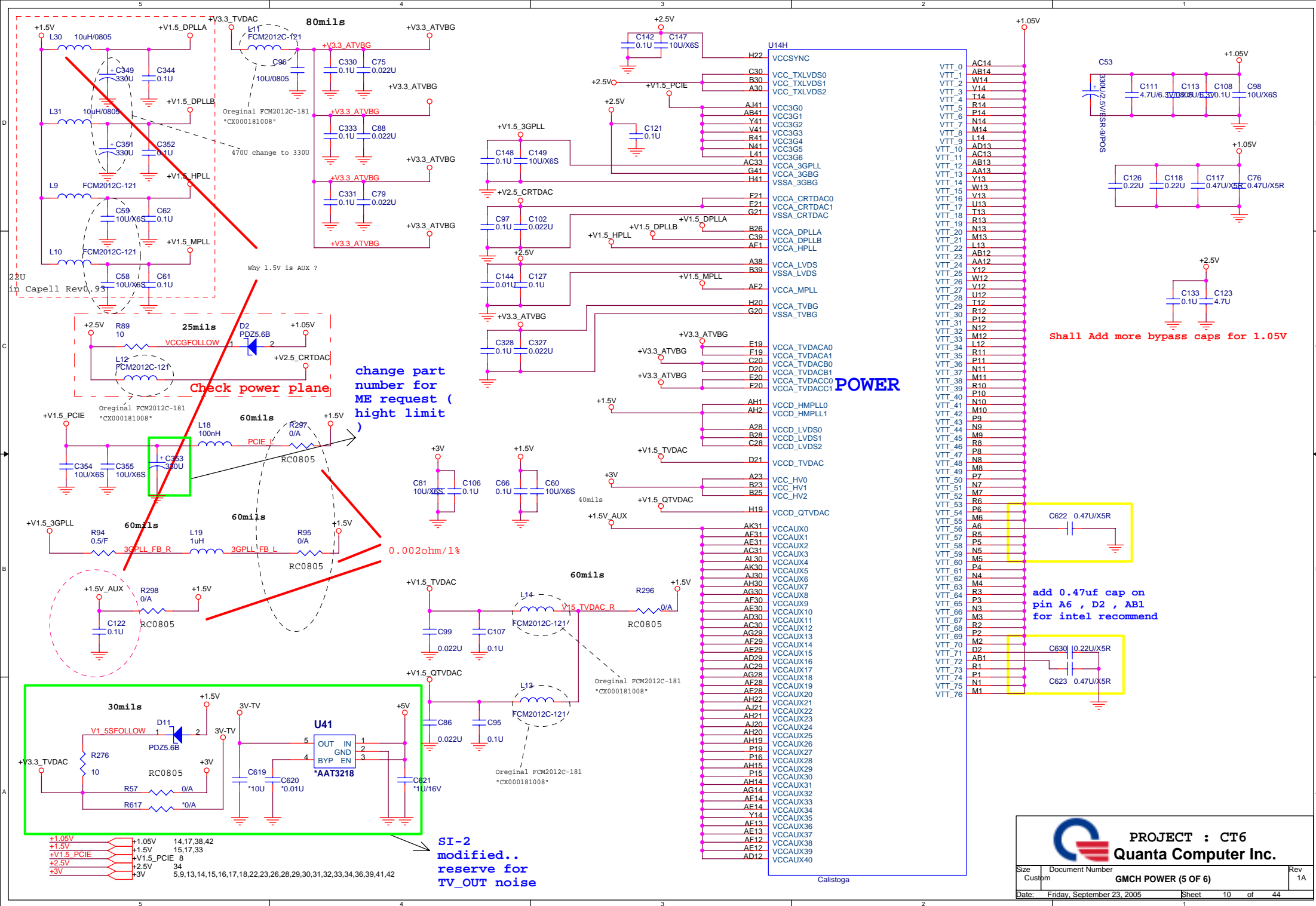
The bottom diagram shows the connection for Q29 (RHU002N06) to the LM86 SMC component. The gate of Q29 is connected to +3V. The drain is connected to pin 3 of the MBCLK signal, and the source is connected to pin 1 of the LM86 SMC component.

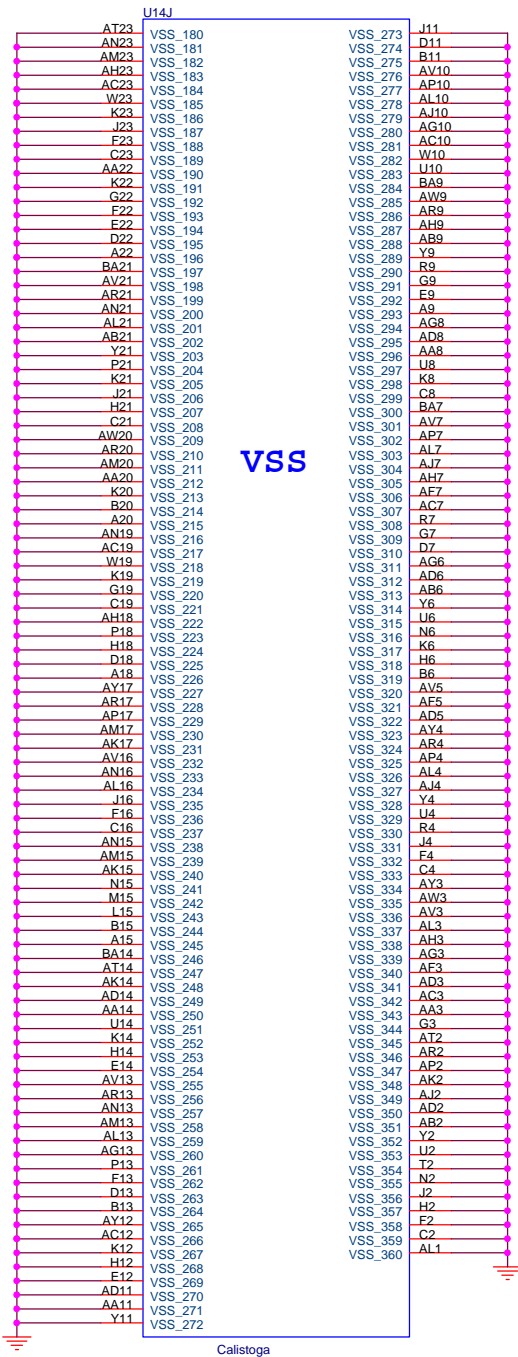
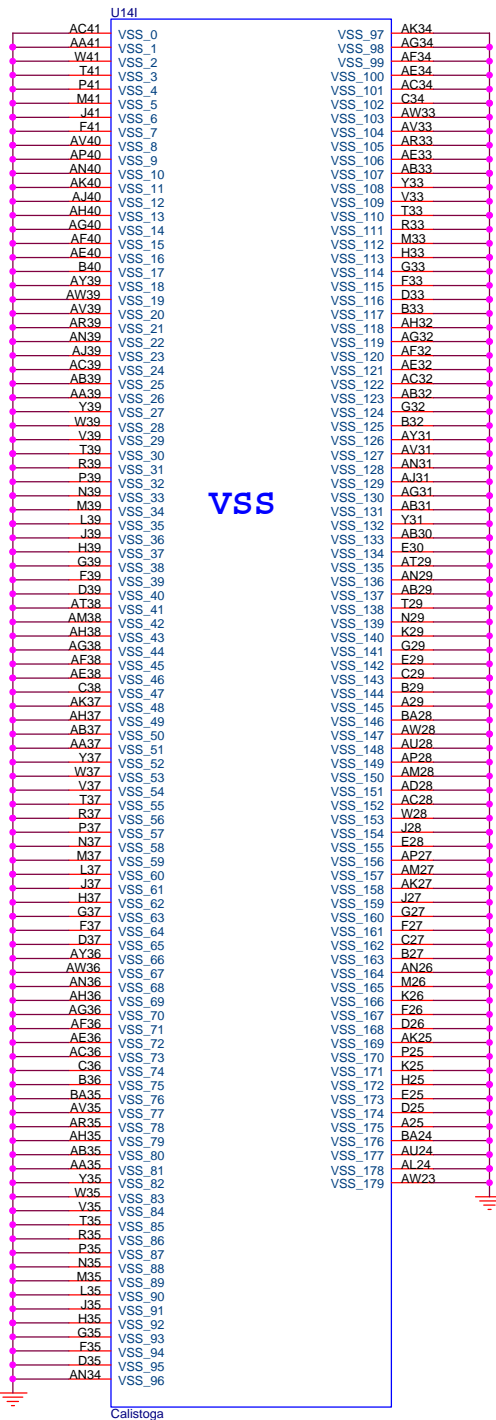




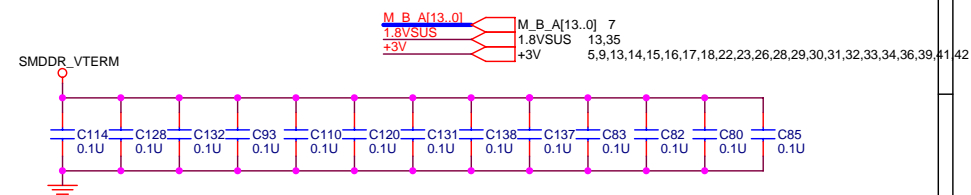




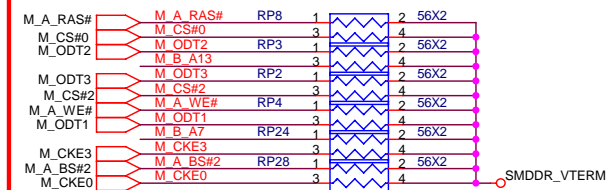
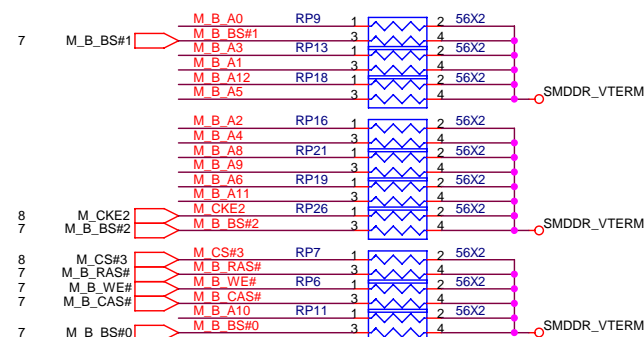




DDR II B CHANNEL



Layout note: Place one cap close to every 2 pullup resistors terminated to SMDDR_VTERM



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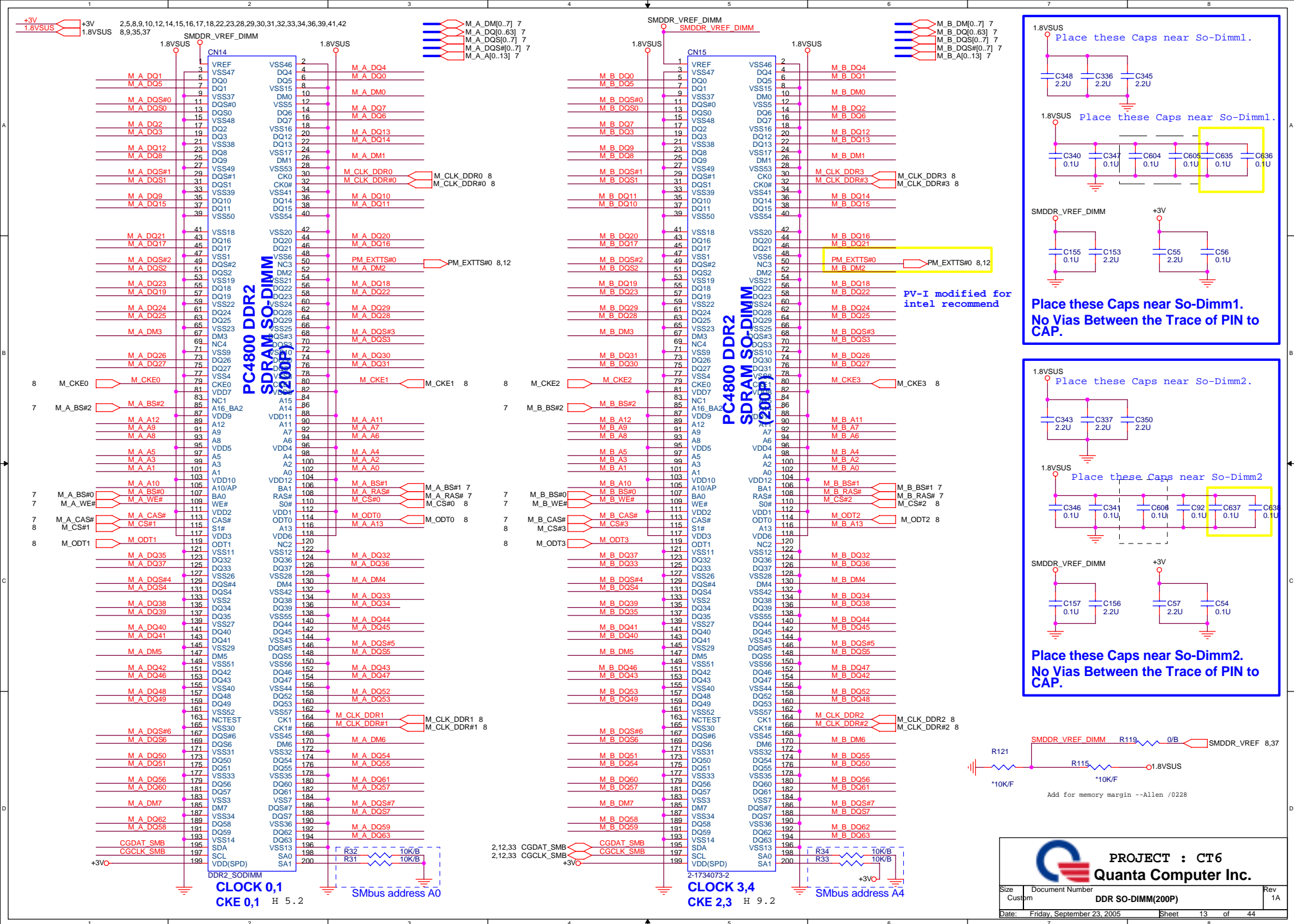
Size	Document Number
------	-----------------

DDR RES. ARRAY

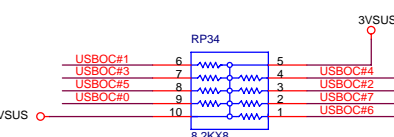
Rev	
1A	

Date: Friday, September 23, 2005

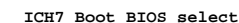
Sheet 12 of 44



EXPRESS CARD (NEW CARD)

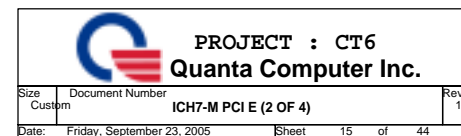


CKL use 10Kohm



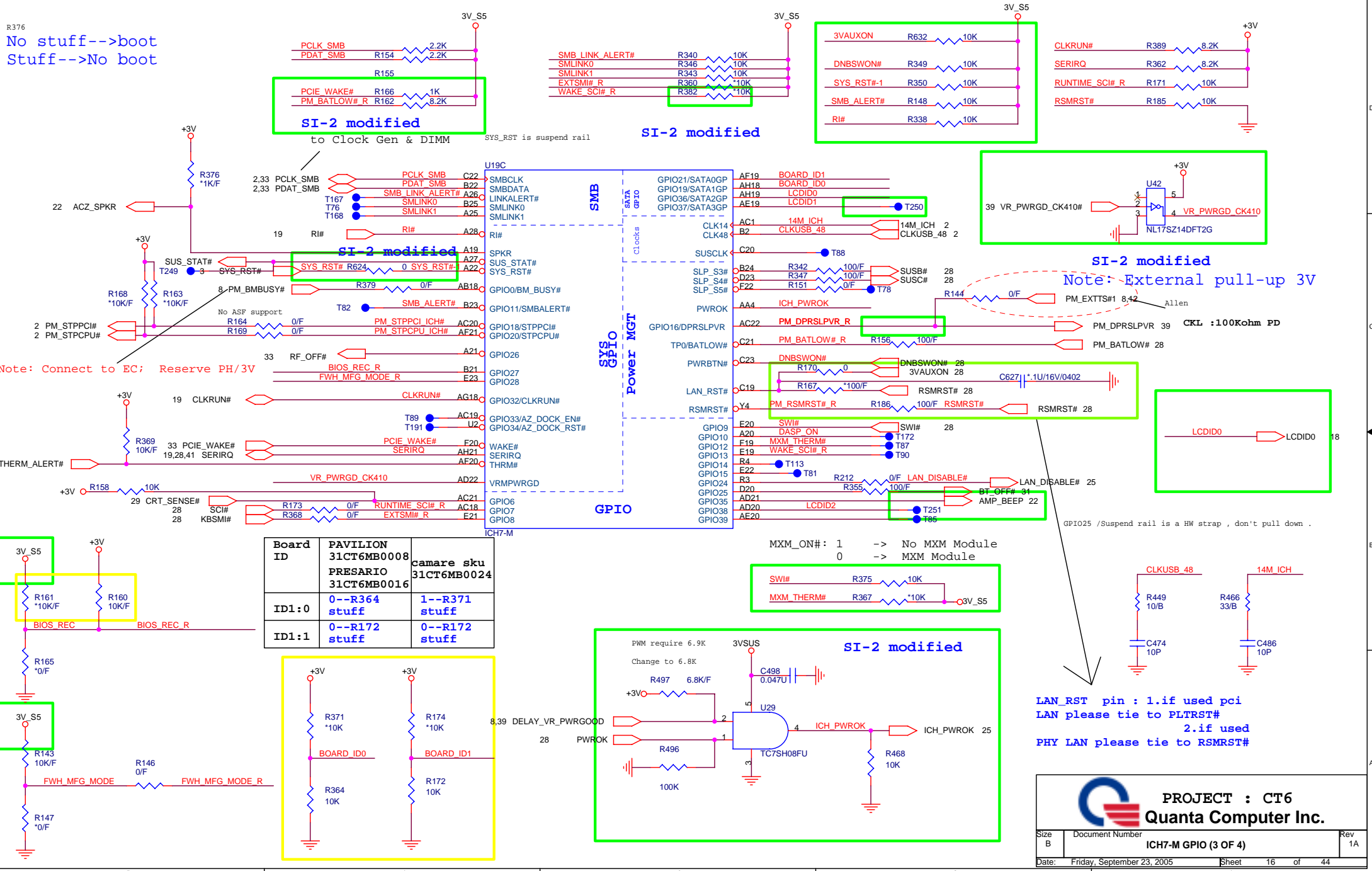
	STRAP	GNT5# R1	GNT4# R2
LPC (default)	11	UNSTUFF	UNSTUFF
PCI	10	UNSTUFF	STUFF
SPI	01	STUFF	UNSTUFF

PCI DEVICE	IDSEL#	REQ# / GNT#	Interrupts
PCI7411	AD25	REQ3# / GNT3#	INT B/C/G#
Relteck Lan	AD16	REQ2# / GNT2#	INT C#




R376

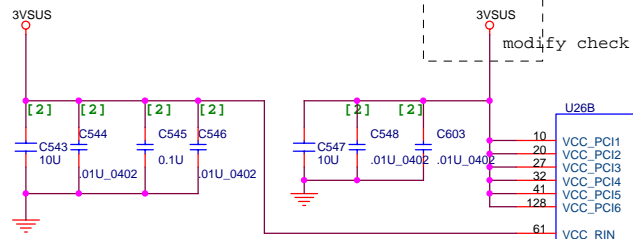
No stuff-->boot
Stuff-->No boot



Board ID	PAVILION 31CT6MB0008 PRESARIO 31CT6MB0016	Camare sku 31CT6MB0024
ID1:0	0--R364 stuff	1--R371 stuff
ID1:1	0--R172 stuff	0--R172 stuff

```
LAN_RST pin : 1.if used pci
LAN please tie to PLTRST#
                2.if used
PHY LAN please tie to RSMRST#
```

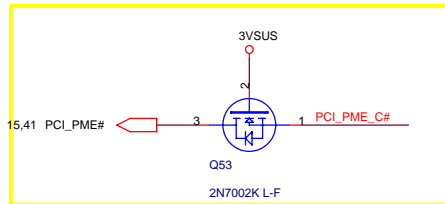
 <div style="display: inline-block; vertical-align: middle;"> <p>PROJECT : CT6</p> <p>Quanta Computer Inc.</p> </div>			
Size B	Document Number	ICH7-M GPIO (3 OF 4)	Rev 1A
Date:	Friday, September 23, 2005	Sheet	16 of 44



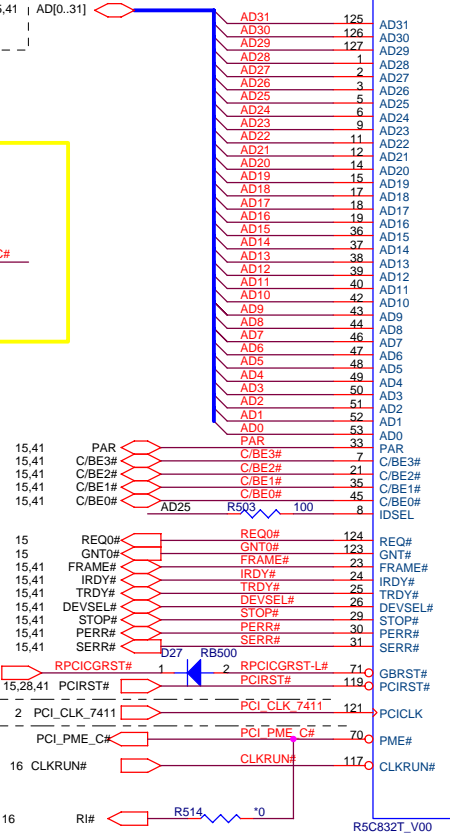
PCI Bus

PowerOnReset for VccCore

When GRESET# is controlled by system, the pull-up resistor(R3) and capacitor(C13) do not need to apply.

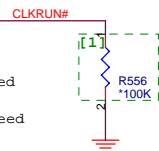


PV-1 modified to fix S5 WAKE-UP-LAN ISSUE (CH7M has leakage power to card reader)

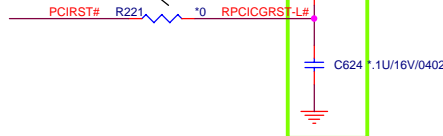


CoreLogic CLOCKRUN#

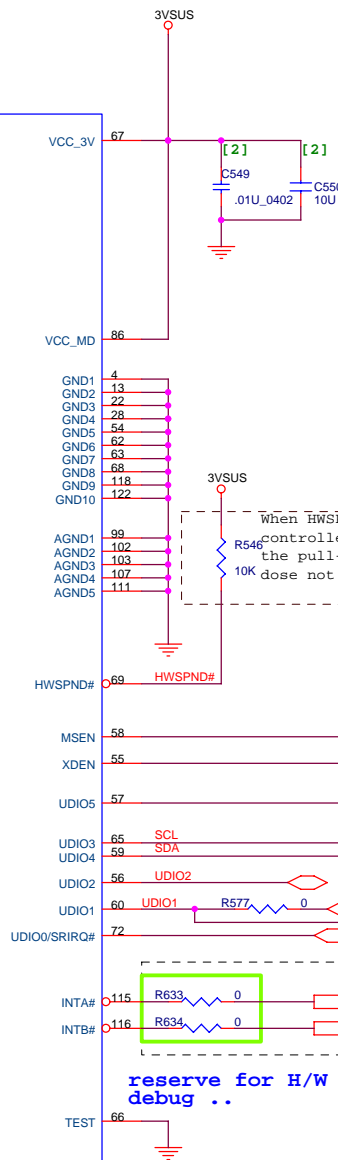
When CLKRUN# is controlled by system, the pull-down resistor(R14) dose not need to apply.



Check EC's RPCICGRST#. If uninstall R221, R374 shall be installed/Allen.



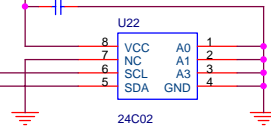
PCI / OTHER



When HWSPND# is controlled by system, the pull-up resistor(R2) dose not need to apply.

* NOT Use EEPROM : R545 : installed R547,U22,C555 : NOT installed * Use EEPROM : R547,U22,C555 : installed R545 : NOT installed

Serial EEPROM



reserve for H/W debug ..

SI-2 modified

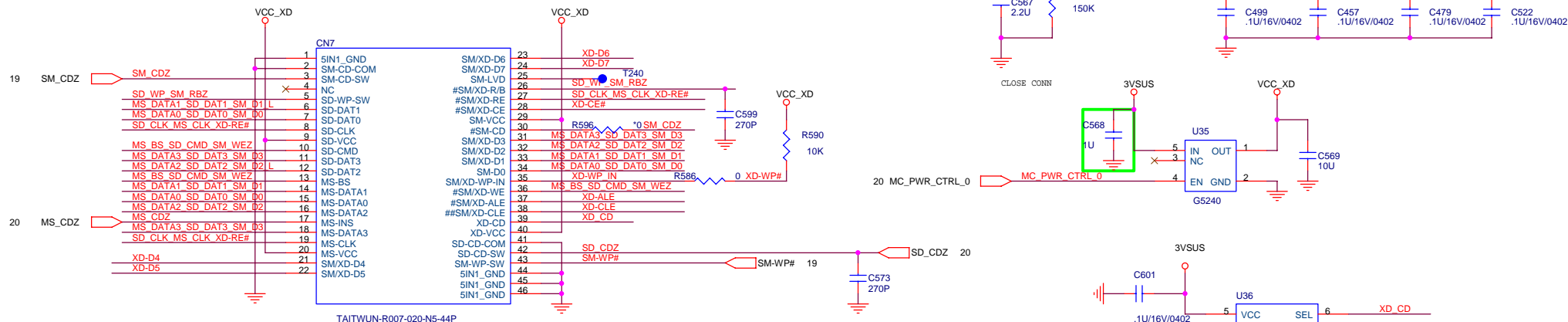
fix card reader LED always on when system into the S3

- [1] NOT INSTALLED
- [2] AS CLOSE AS POSSIBLE TO DEVICE TERMINALS
- [3] CLK LINE : SHIELDED BY GND. (RECOMMENDED)

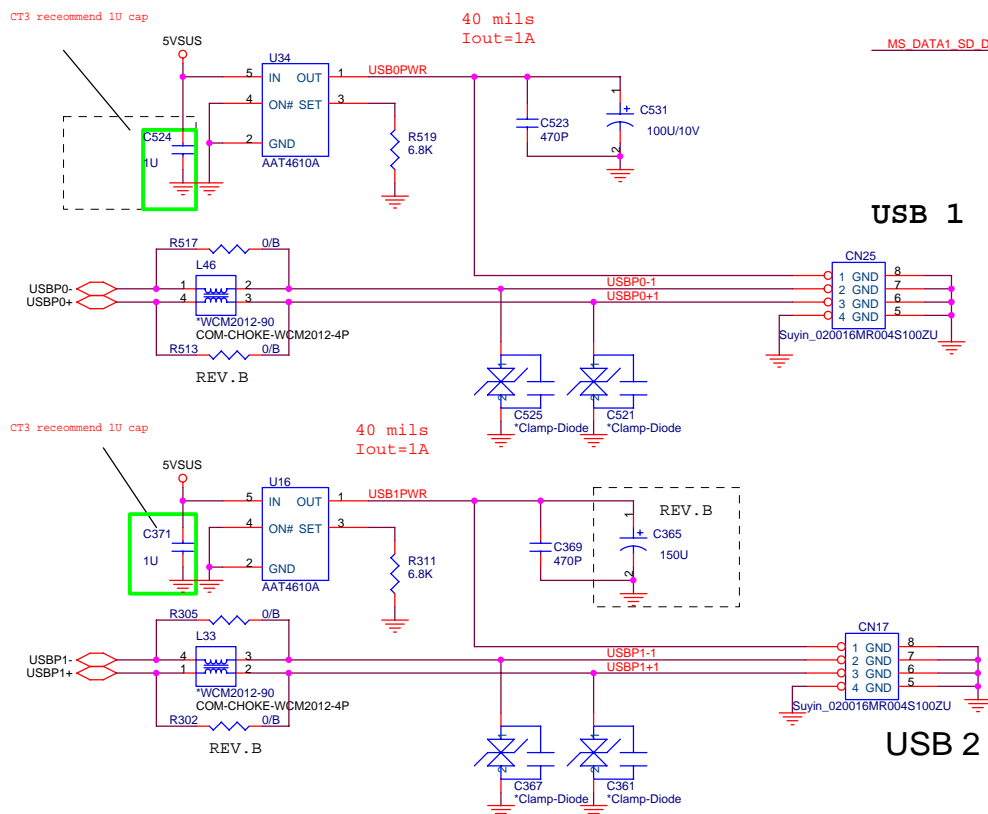


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DO NOT INSERT SD/MMC, MEMORYSTICK AND XD SIMULTANEOUSLY.

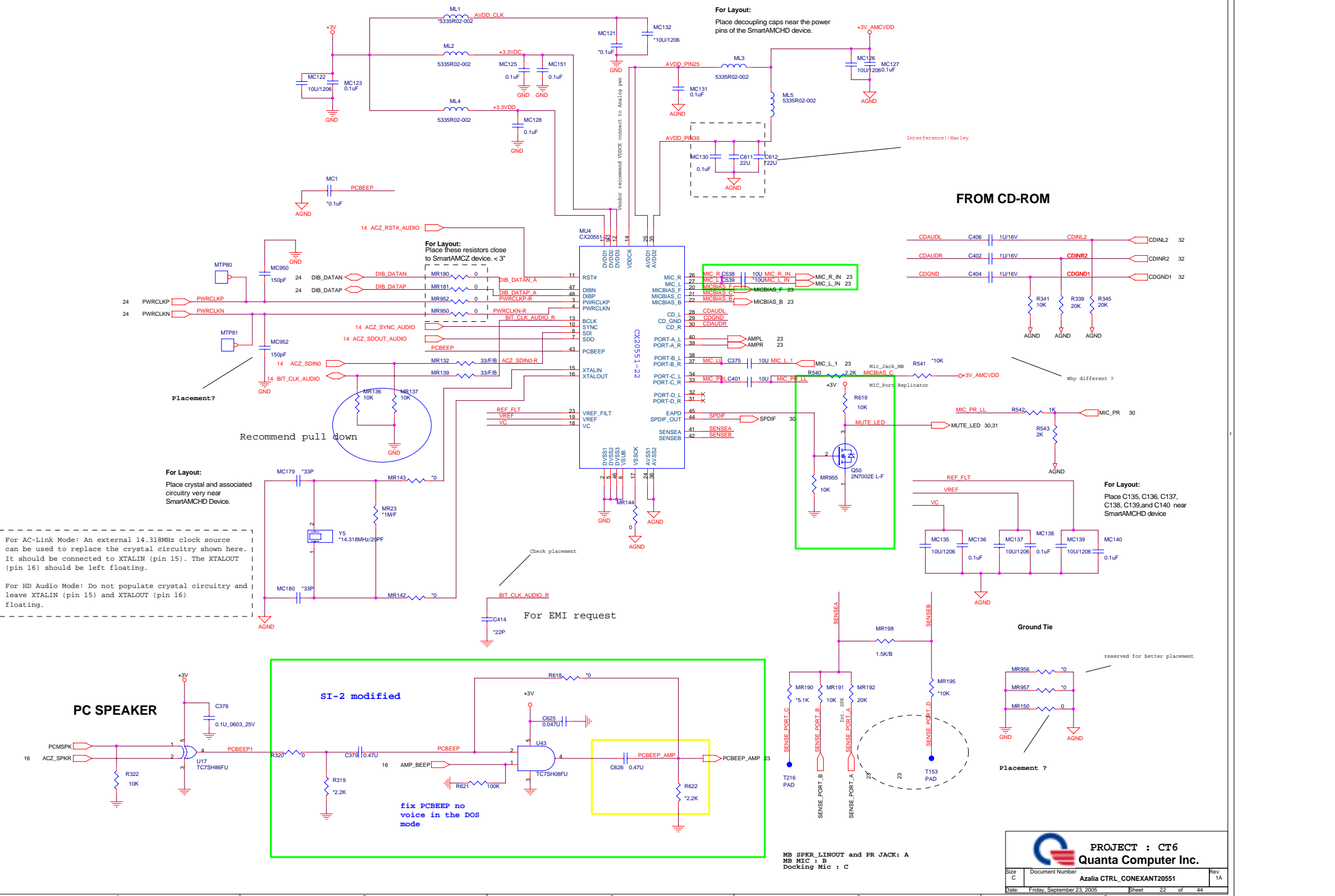


5 IN1 CARD READER

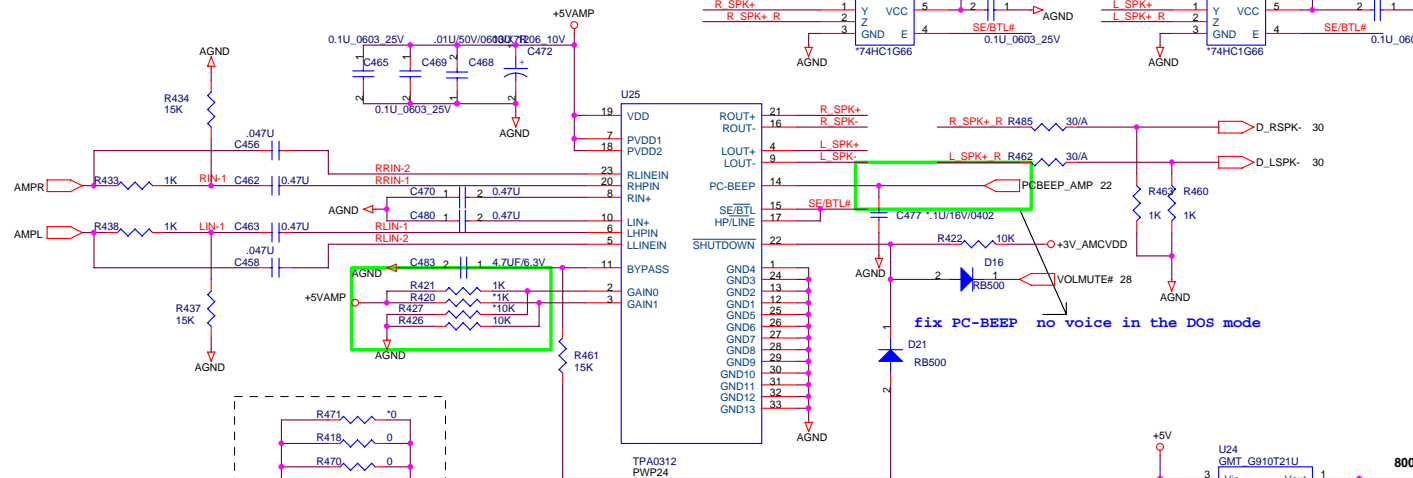


20	MDIO03	MDIO03	R587	56	SD_WP_SM_RBZ
20	MDIO17	MDIO17	R200	56	XD-D7
20	MDIO16	MDIO16	R202	56	XD-D6
20	MDIO15	MDIO15	R210	56	XD-D5
20	MDIO14	MDIO14	R216	56	XD-D4
20	MDIO13	MDIO13	R191	56	MS_DATA3_SD_DAT3_SM_D3
20	MDIO12	MDIO12	R187	56	MS_DATA2_SD_DAT2_SM_D2
20	MDIO11	MDIO11	R184	56	MS_DATA1_SD_DAT1_SM_D1
20	MDIO10	MDIO10	R182	56	MS_DATA0_SD_DAT0_SM_D0
20	MDIO08	MDIO08	R181	56	MS_BS_SD_CMD_SM_WEZ
20	MDIO05	MDIO05	R197	56	XD-WP#
20	MDIO19	MDIO19	R563	56	XD-ALE
20	MDIO18	MDIO18	R564	56	XD-CLE
20	MDIO02	MDIO02	R220	56	XD-CE#
20	MDIO09	MDIO09	R222	56	SD_CLK_MS_CLK_XD-RE#

change from 0 ohm to 56 ohm (from vendor recommend)



AUDIO AMPLIFIER

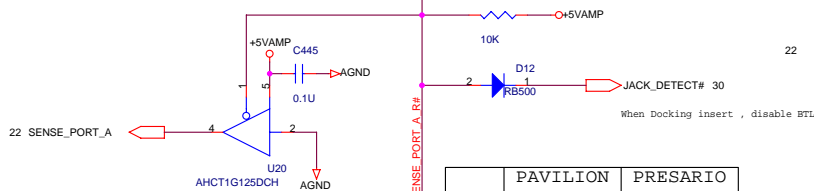
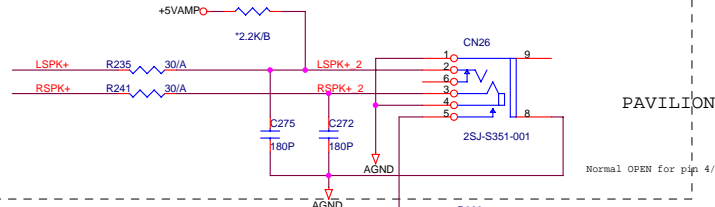


0312 Gain Table

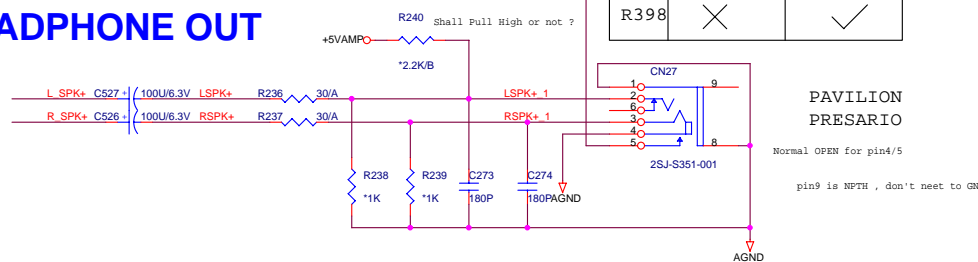
GAIN0	GAIN1	SE/BTL	AV(inv)
0	0	0	6 dB
0	1	0	10 dB
1	0	0	15.6 dB
1	1	0	21.6 dB
X	X	1	4.1 dB

Placement ?

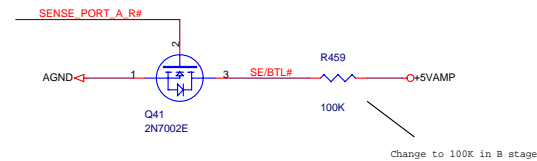
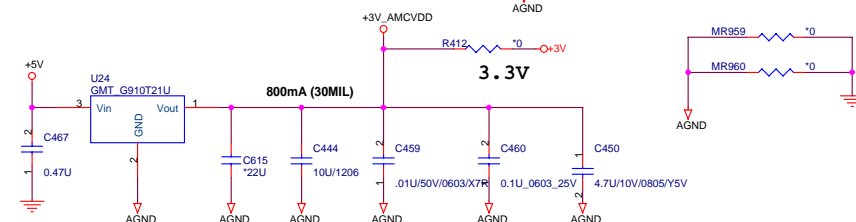
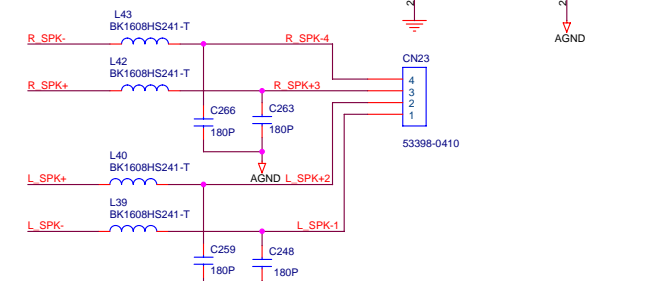
2ND HEADPHONE OUT



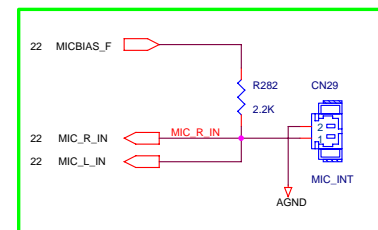
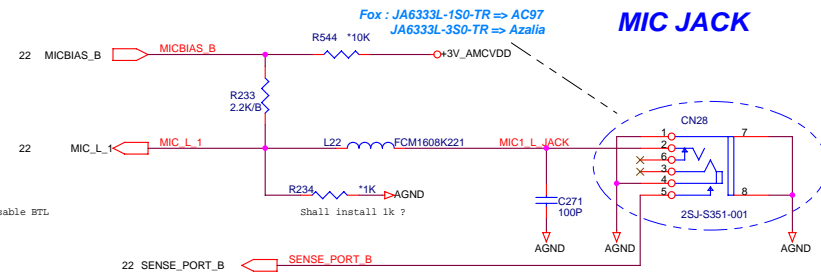
HEADPHONE OUT



SPEAKER OUT



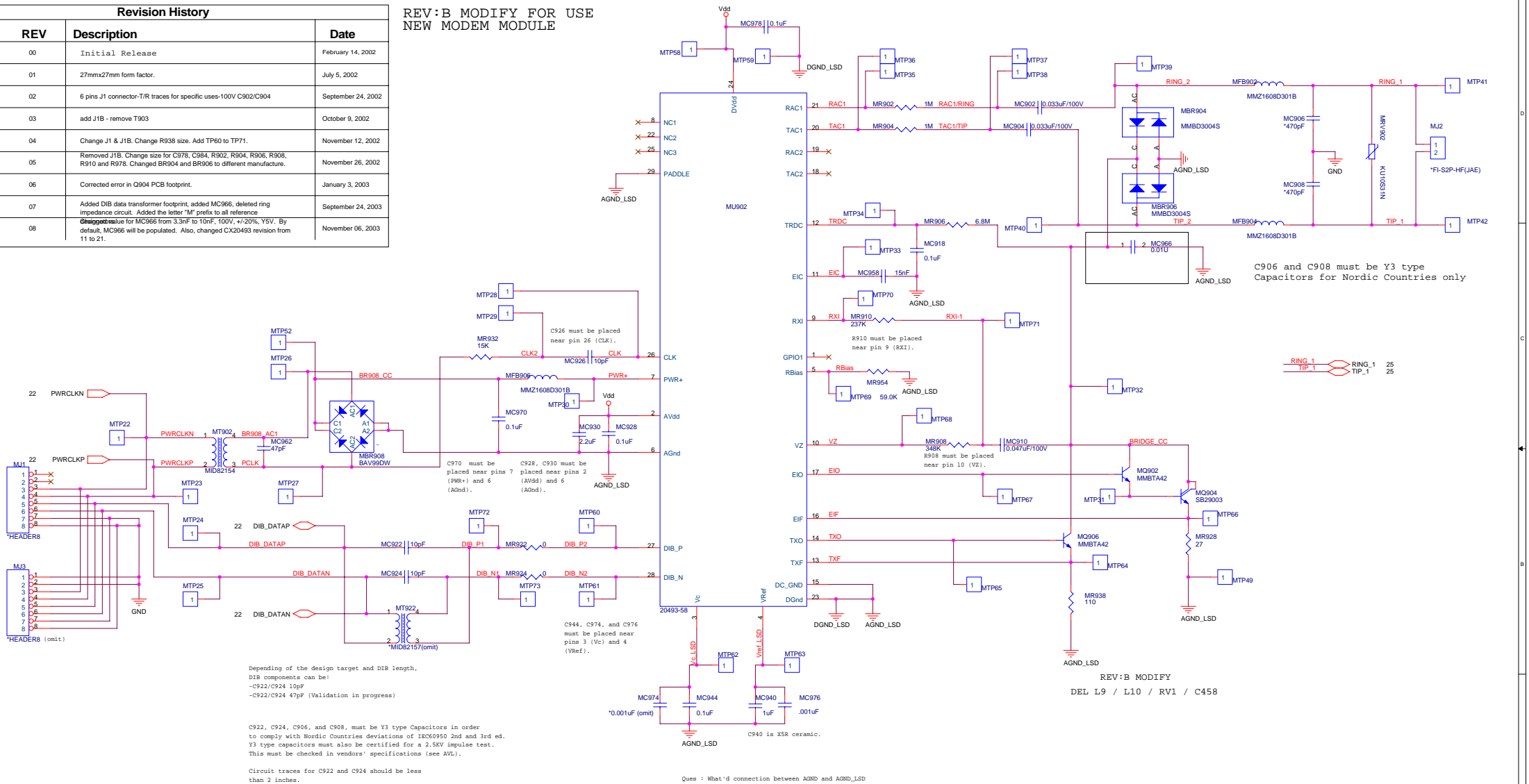
MIC JACK



Internal MIC


Revision History		
REV	Description	Date
00	Initial Release	February 14, 2002
01	27mmx27mm form factor.	July 5, 2002
02	6 pins J1 connector-T/R traces for specific uses-100V C902/C904	September 24, 2002
03	add J1B - remove T903	October 9, 2002
04	Change J1 & J1B. Change R938 size. Add TP60 to TP71.	November 12, 2002
05	Removed J1B. Change size for C978, C984, R902, R904, R906, R908, R910 and R978. Changed BR904 and BR906 to different manufacture.	November 26, 2002
06	Corrected error in Q904 PCB footprint.	January 3, 2003
07	Added DIB data transformer footprint, added MC966, deleted ring impedance circuit. Added the letter "M" prefix to all reference designators for MC986 from 3.3nF to 10nF, 100V, +/-20%, Y5V. By default, MC966 will be populated. Also, changed CX20493 revision from 11 to 21.	September 24, 2003
08		November 06, 2003

REV:B MODIFY FOR USE
NEW MODEM MODULE



C906 and C908 must be Y3 type
Capacitors for Nordic Countries only

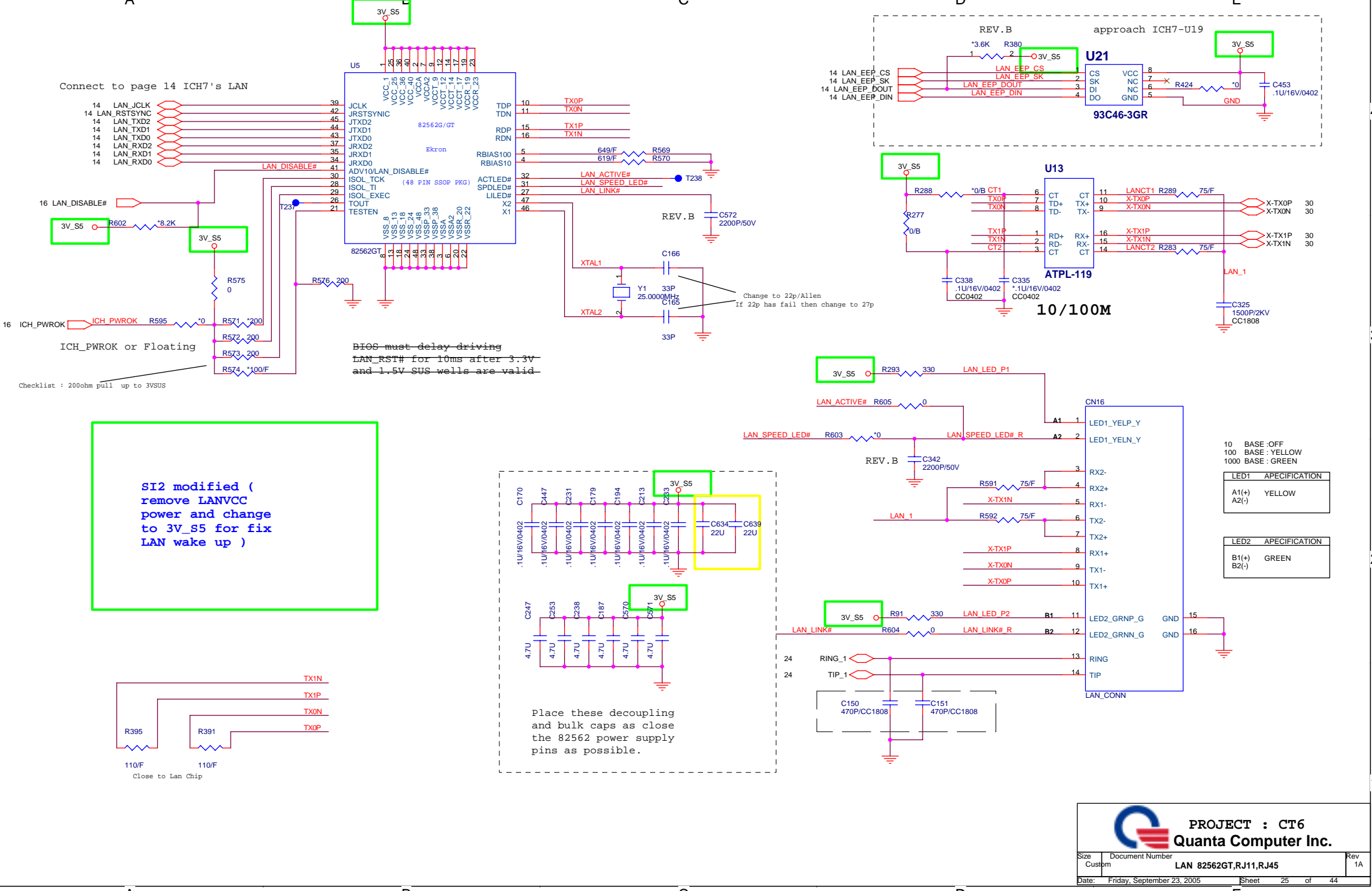
REV:B MODIFY
DEL L9 / L10 / RV1 / C458

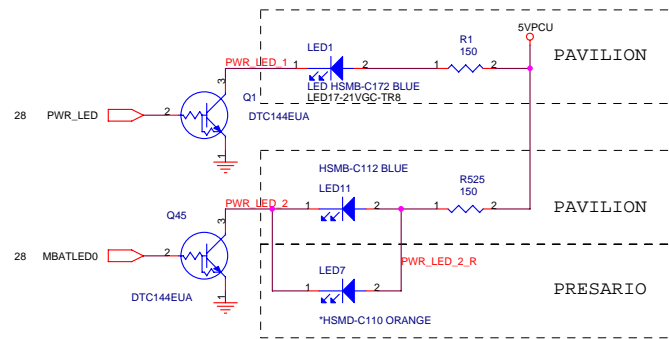


PROJECT : CT6

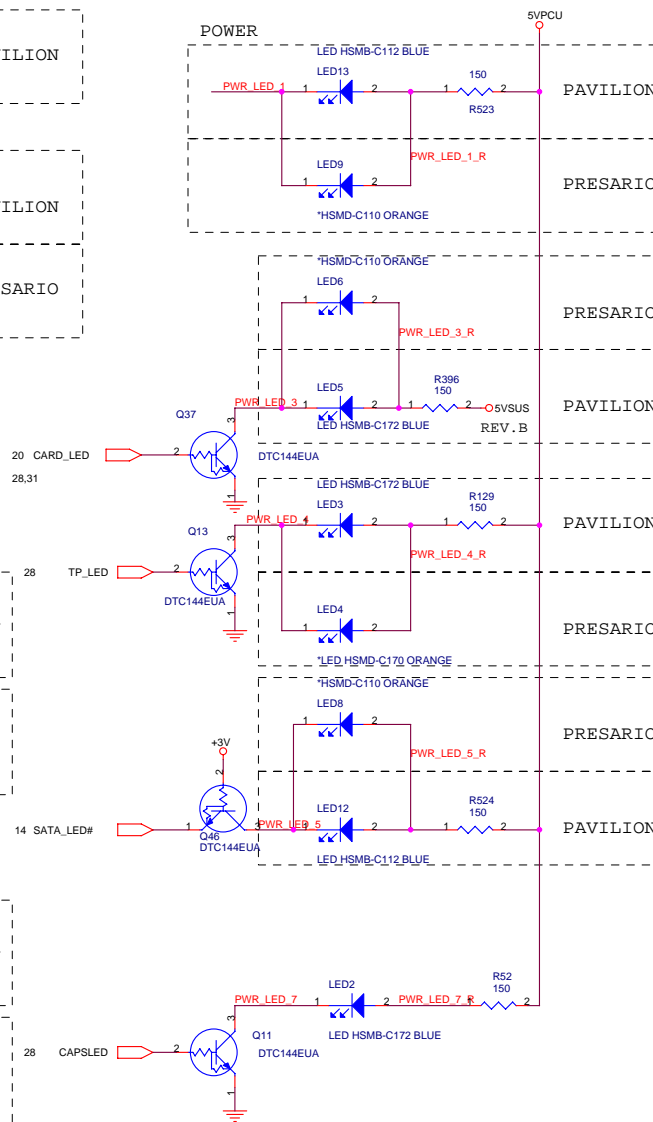
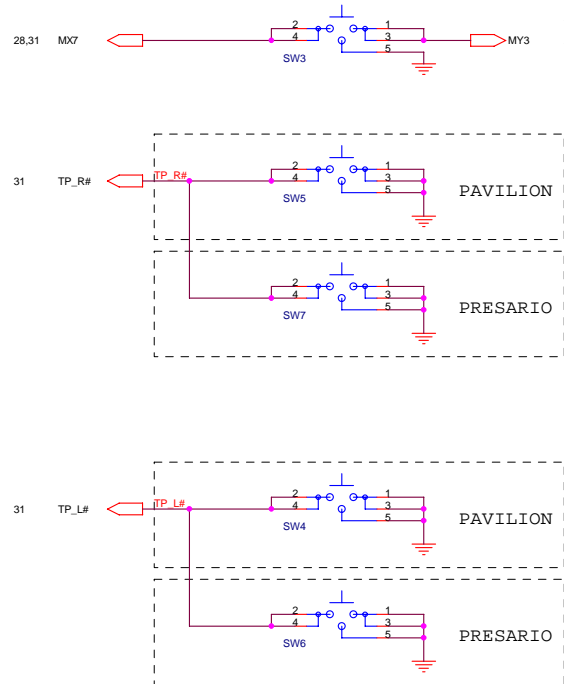
Quanta Computer Inc.

Size	Document Number	Rev
Custom	MODEM (DAA)	1A
Date:	Friday, September 23, 2005	Sheet 24 of 44

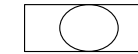




Touchpad control



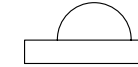
LED HSMB-C170 ORANGE



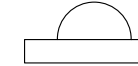
LED HSMB-C172 BLUE



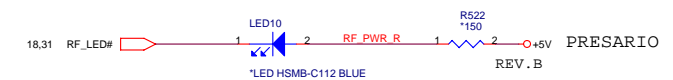
LED HSMB-C110 ORANGE



LED HSMB-C112 BLUE

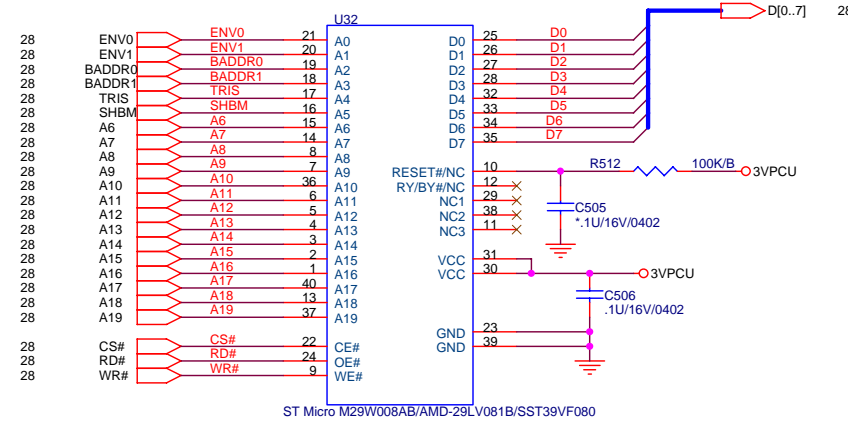


REV.B: LED7 AND LED8 SWAP



PROJECT : CT6
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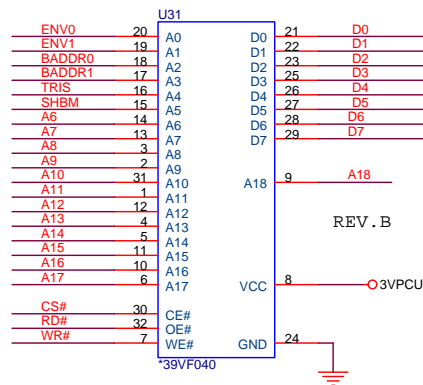
8Mbit (1M Byte), TSSOP40



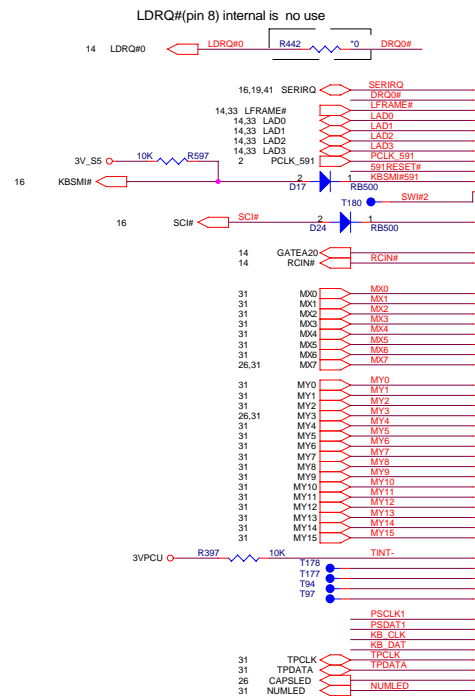
AMD :Pin 10 is RESET# ; Pin12 is RY/BY#
SST :Pin10,12 are NC

- 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

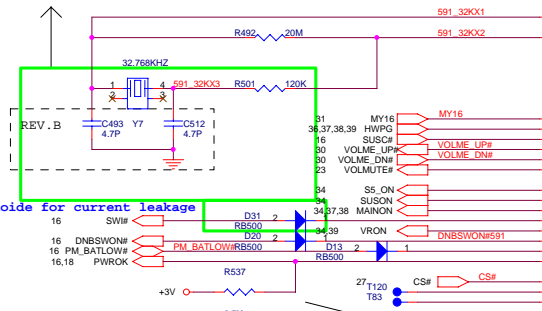
4Mbit (512k Byte), TSSOP32



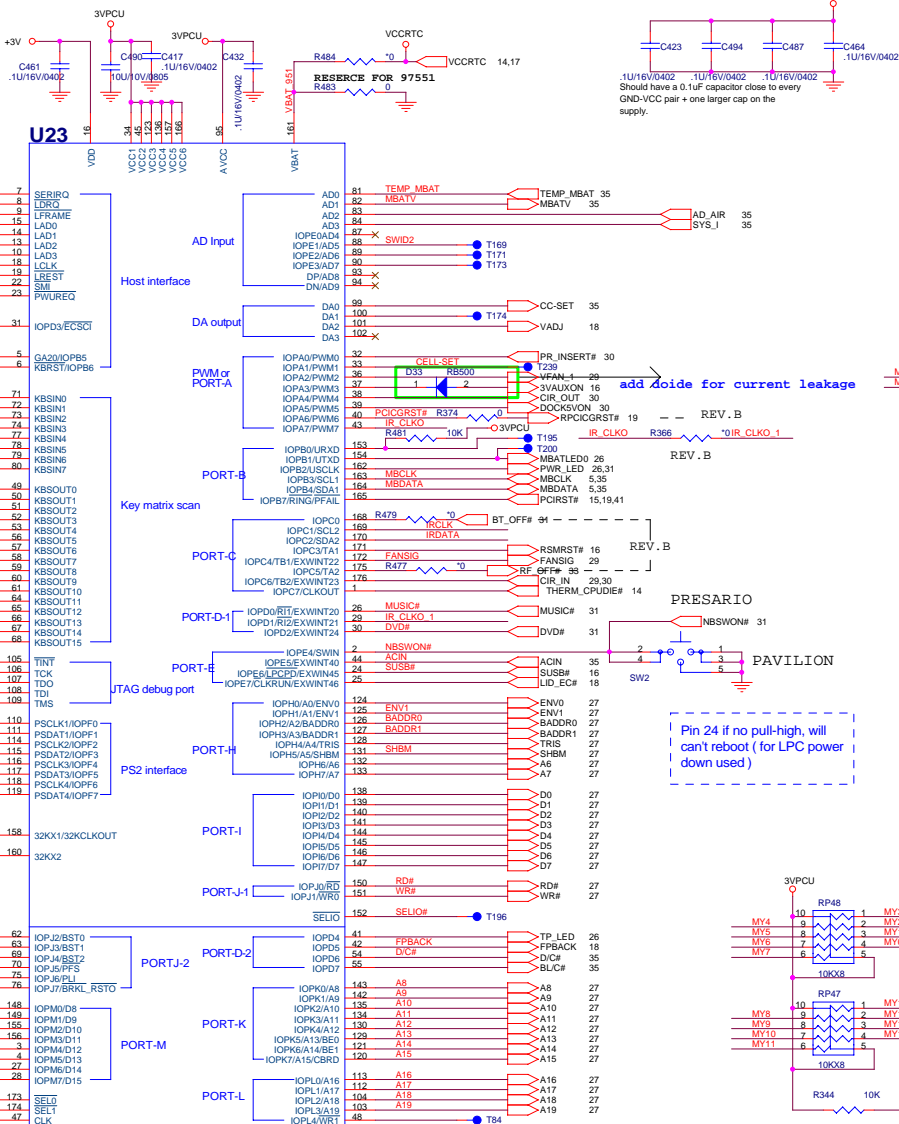
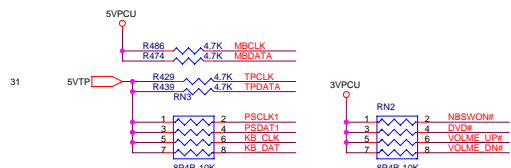
KBC-NS87541L



change footprint for SMT request

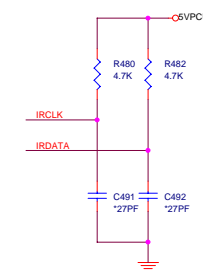
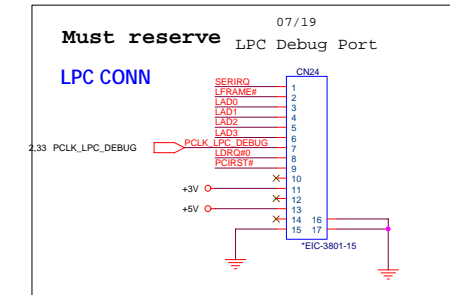
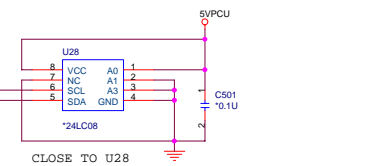
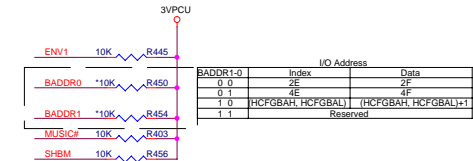
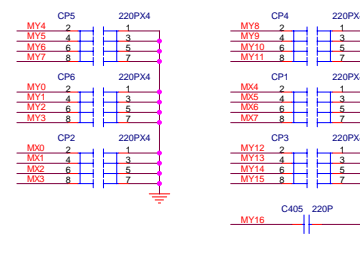


REV.B 1. Remove R468.
2. Add a Diode D20 on BATLOW#.
3. R470 no stuff.

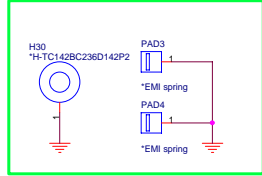
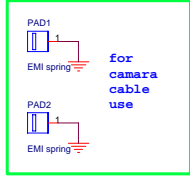
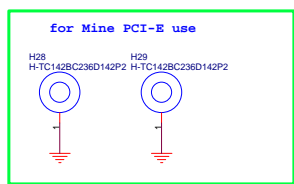
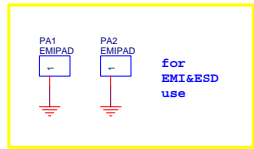


541L

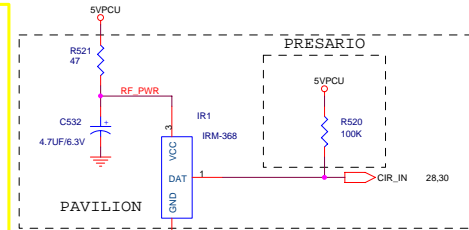
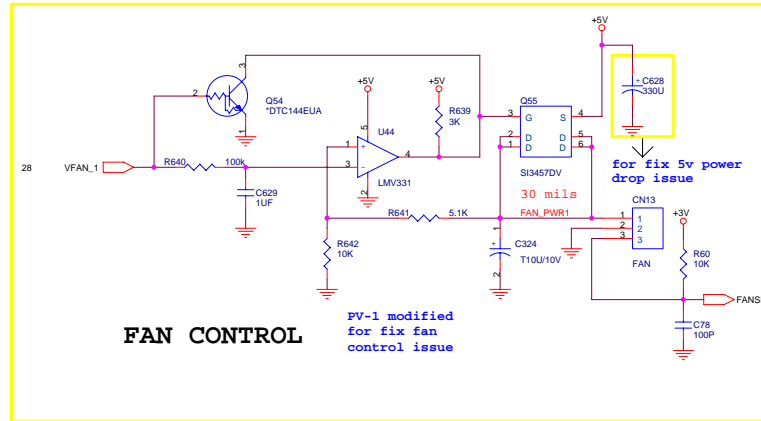
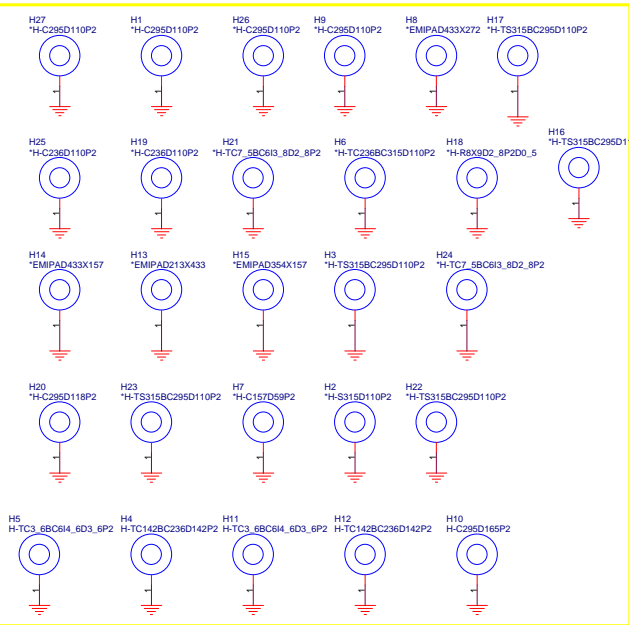
Pin 103 internal is "A19", Can't use to GPIO

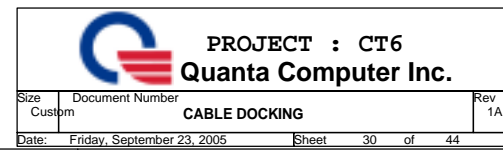


```
remove debug port
SI-2 modified
```

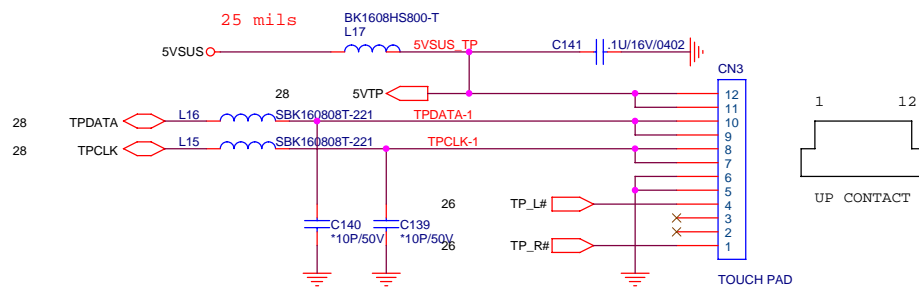


Area of Hole



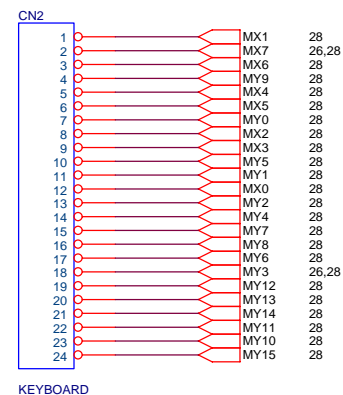


TOUCH PAD CONNECTOR

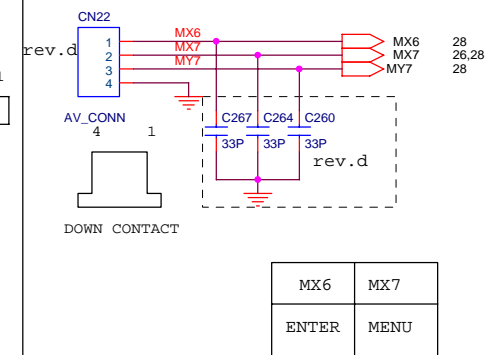


CHECK PIN DEFINE

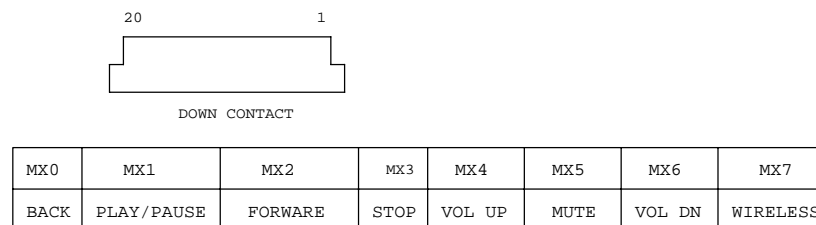
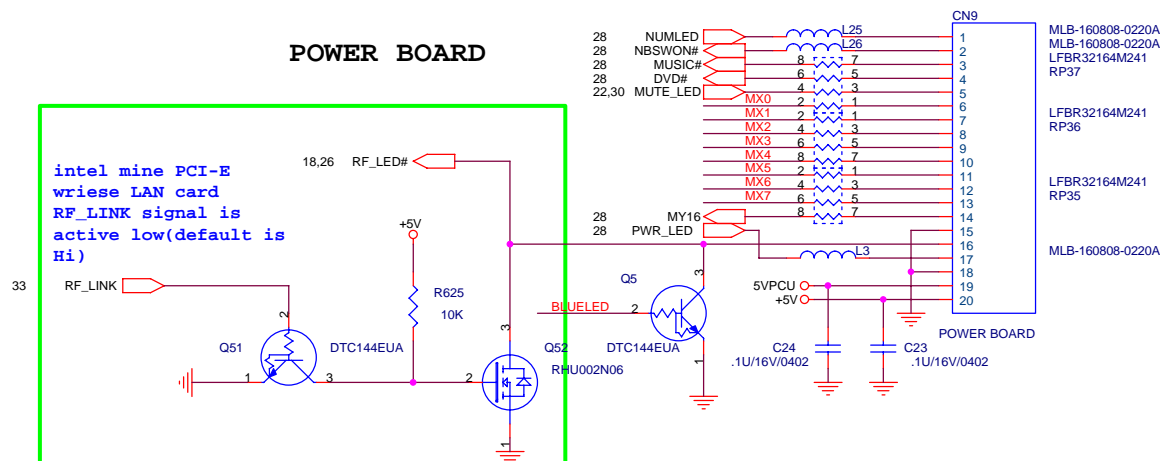
KEYBOARD CONNECTOR



AV BOARD

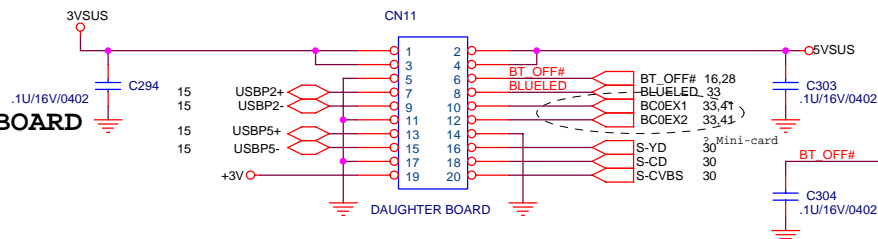


POWER BOARD



STOP =>MX0+MY12
NEW=>MX1+MY12

DAUGHTER BOARD

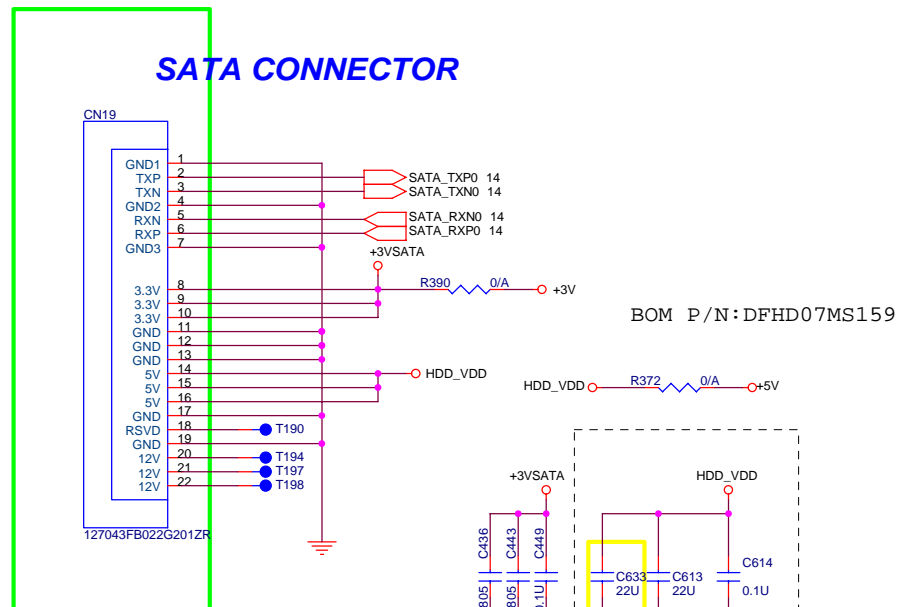
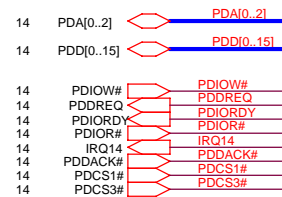
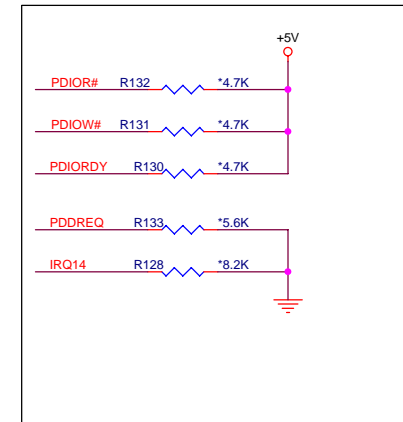
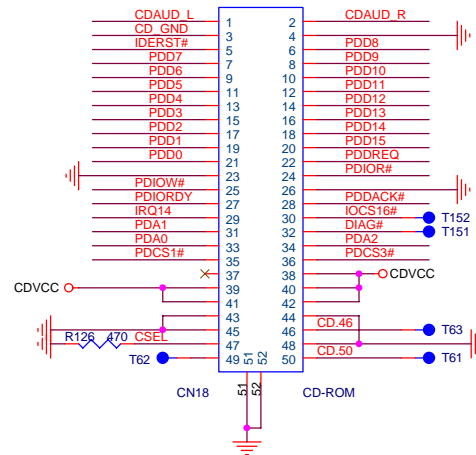
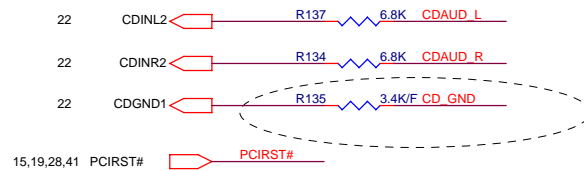
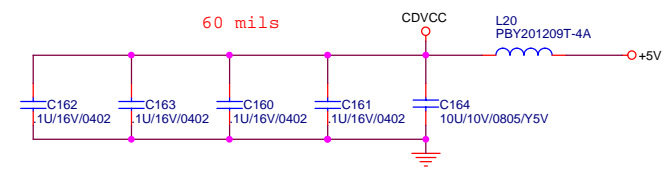


TOP VIEW

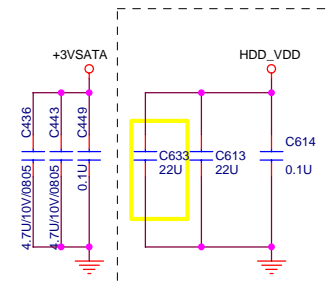


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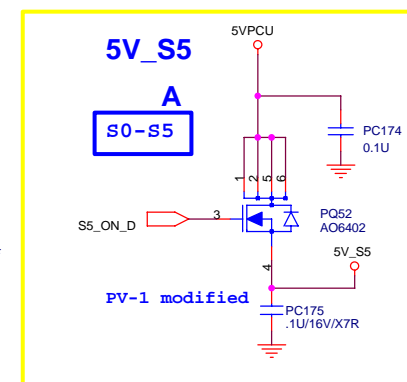
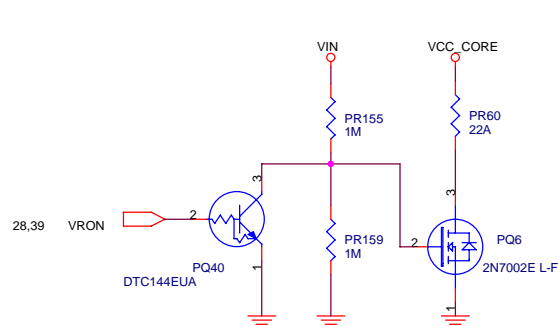
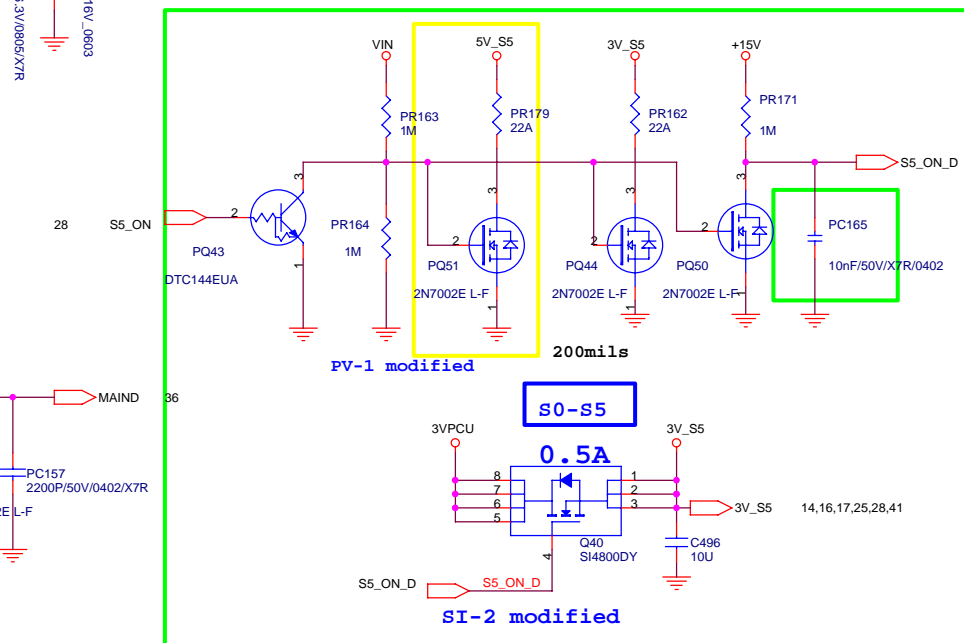
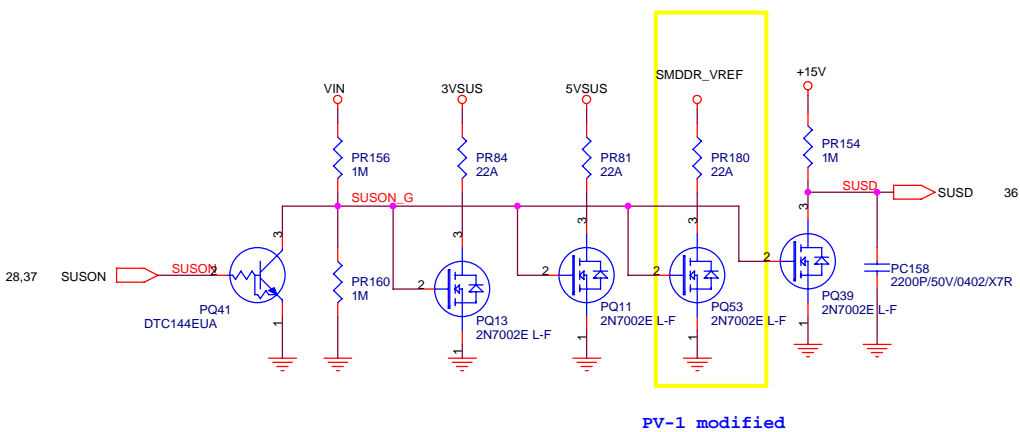
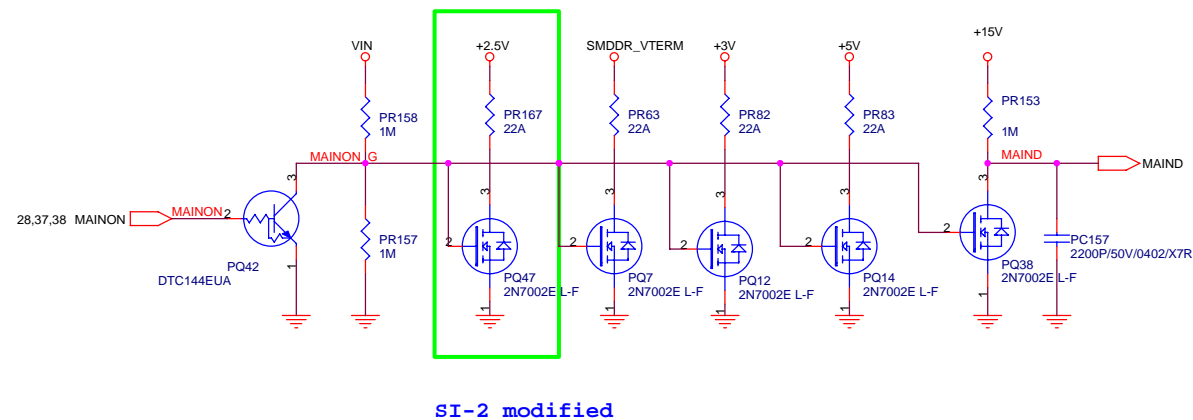
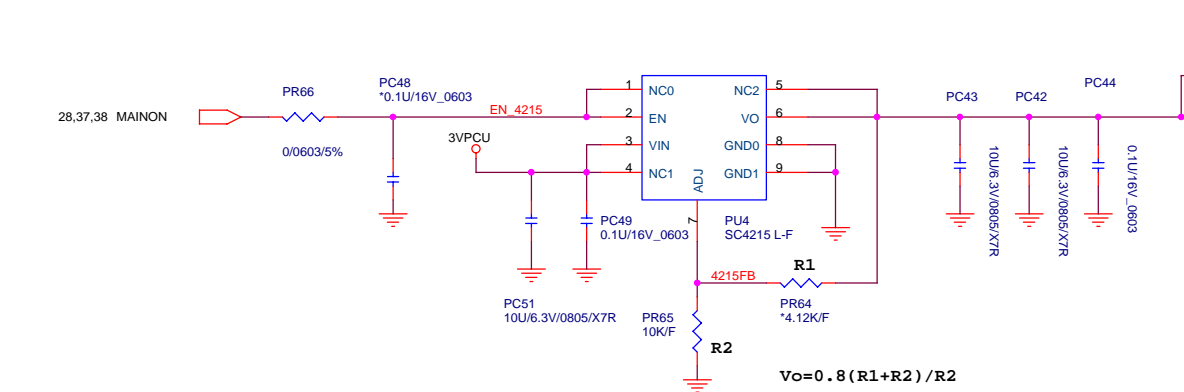


```
change footprint for SMT request(
add 防呆 pin )
```



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ADAPTER 18.5V 65W 3.51A

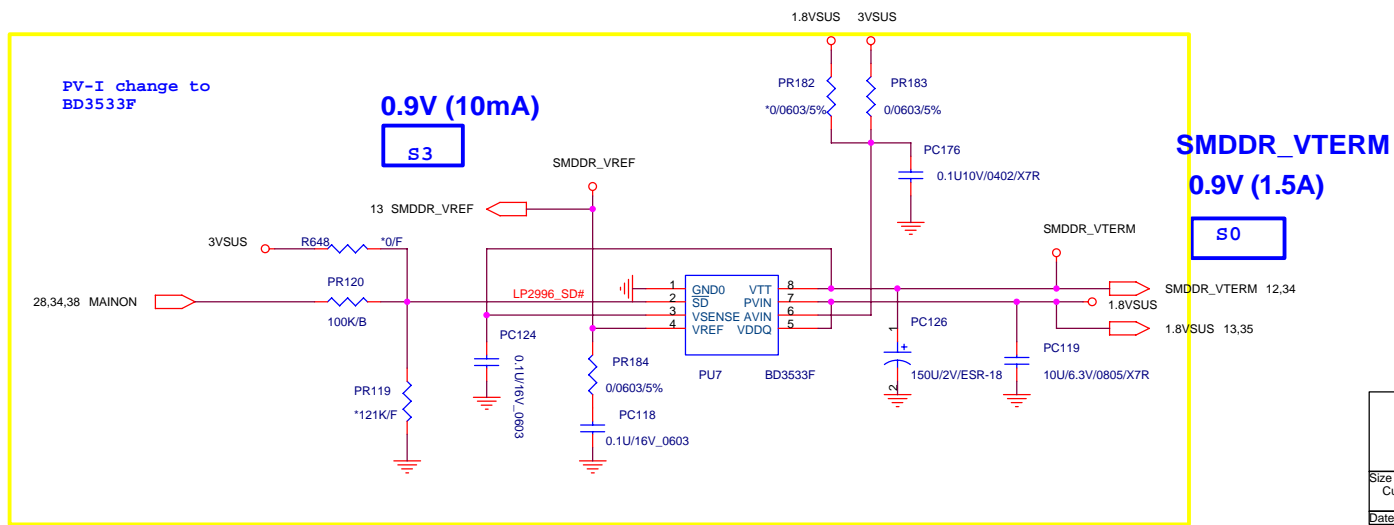
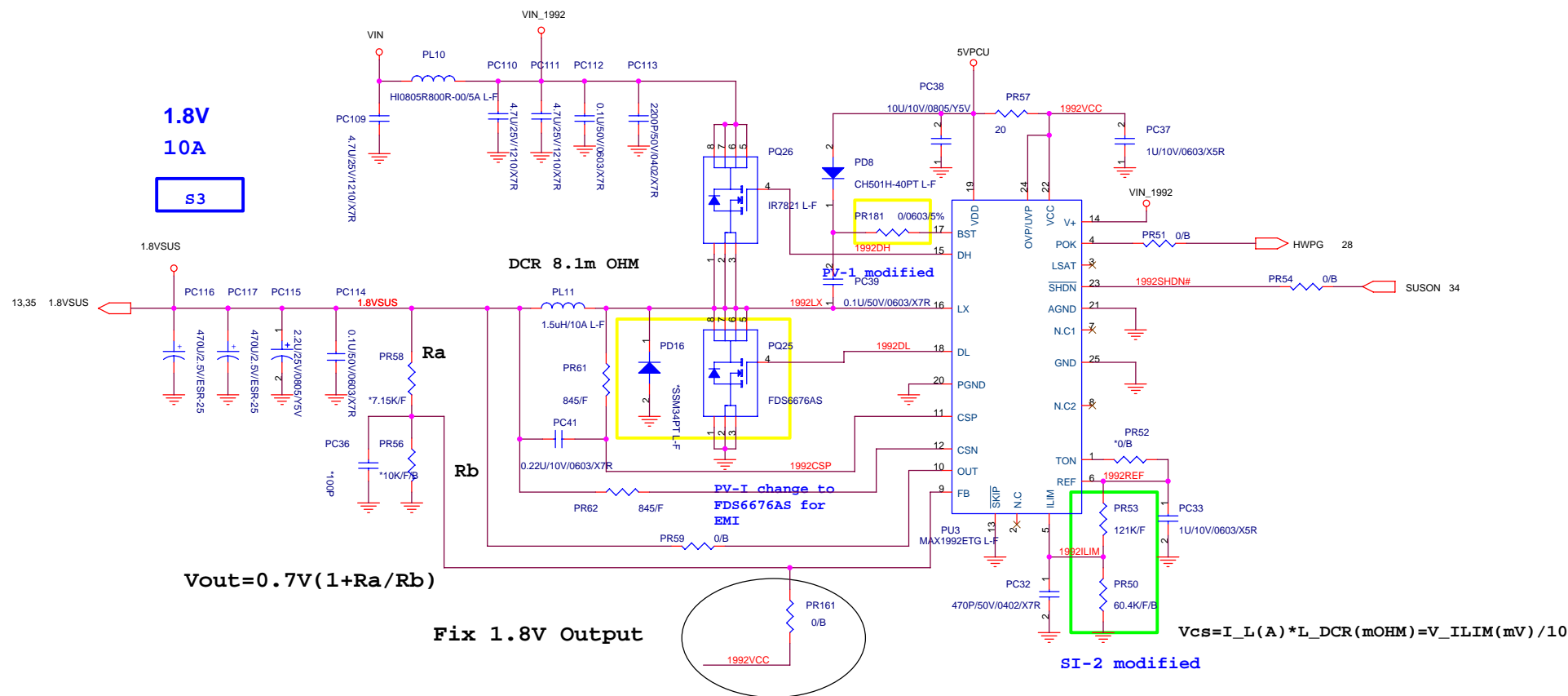
Second: BAM66790014

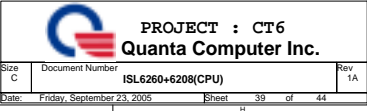


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0.9V (0.1A)





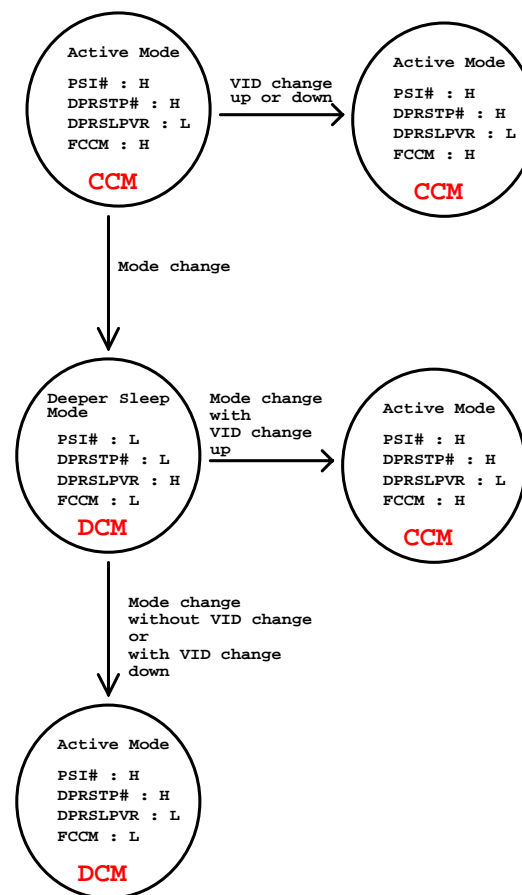
IMVP Spec. Rev. 0.8

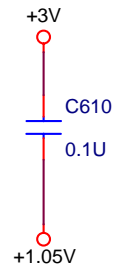
(Nom.)	Yonah-2M	Meron
HFM	1.2875 V	1.1500 V
LFM	0.8375 V	0.8375 V
Deeper	0.7625 V	0.7625 V
VBOOT	1.2000 V	1.2000 V
SLOPE	-2.1 mV/A	-2.1 mV/A

(Max.)	Yonah-2M	Meron
HFM	36 A	44 A
LFM	9.5 A	12.5 A
Deeper	3.5 A	5.5 A
Dynamic	27 A	34.5 A
TDC	26 A	32 A

Vo	VID6	VID5	VID4	VID3	VID2	VID1	VID0
1.5000	0	0	0	0	0	0	0
1.4375	0	0	0	0	1	0	1
1.4000	0	0	0	1	0	0	0
1.3000	0	0	1	0	0	0	0
1.2875	0	0	1	0	0	0	1
1.2000	0	0	1	1	0	0	0
1.1500	0	0	1	1	1	0	0
1.1000	0	1	0	0	0	0	0
1.0000	0	1	0	1	0	0	0
0.9625	0	1	0	1	0	1	1
0.9000	0	1	1	0	0	0	0
0.8375	0	1	1	0	1	0	1
0.8000	0	1	1	1	0	0	0
0.7625	0	1	1	1	0	1	1
0.7500	0	1	1	1	1	0	0
0.7000	1	0	0	0	0	0	0
0.6000	1	0	0	1	0	0	0
0.5000	1	0	1	0	0	0	0
0.3000	1	1	0	0	0	0	0

CCM : Continuous Conduction Mode
DCM : Dis-Continuous Mode






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Size A	Document Number TPM	Rev 1A
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MODEL		REV	CHANGE LIST		Model CT6 MB BOARD		
					Page	FROM	TO
CT6 MB 31CT6MBXXXX	1A				1	1A	
					2	1A	
					3	1A	
					4	1A	
					5	1A	
					6	1A	
					7	1A	
					8	1A	
					9	1A	
					10	1A	
					11	1A	
					12	1A	
					13	1A	
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					38	1A	
					39	1A	
					40	1A	
					41	1A	
					42	1A	
					43	1A	
					44	1A	

5	4	3	2	1
	description	31 BOM difference list (base on 31CT6MB0008 BOM)		
D	31CT6MB0008	Pavilion FF		D
	31CT6MB0024	Pavilion FF+Camera/Mic	ADD : 1.CN30 2.CN31 3.CN32 4.CN29 <div> <div>for camera connector</div> <div>for internal MIC connector</div> </div>	
C	31CT6MB0016	Presario FF	ADD: LED 9 -- PWR_LED LED 8 --SATA_LED LED 7 --MBATLED LED4 --TP_LED LED2 --CAPD_LED LED6 --CARD_LED SW7 -- TP_R SWITCH SW6 -- TP_L SWITCH REMOVE: IR1--- IR component LED13--PWR_LED LED12 --SATA_LED LED11 --MBAT_LED C532 -- IR R521 -- IR CN22 -- AV BOARD CN26 -- 2ND H/P CON LED5 -- CARD_LED LED3 -- TP_LED LED2 -- CAPS_LED LED1 -- PWR_LED C267 -- AV BOARD EMI C264 -- AV BOARD EMI C260 -- AV BOARD EMI C275 -- 2ND H/P EMI C272 -- 2ND H/P EMI R241 --2ND H/P damp res R235 --2ND H/P damp res R1 -- PWR RES SW5 -TP_R SWITCH SW4 -- TP_L SWITCH SW2-NBWON# SWITCH	C
B				B
A				A
5	4	3	2	1



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