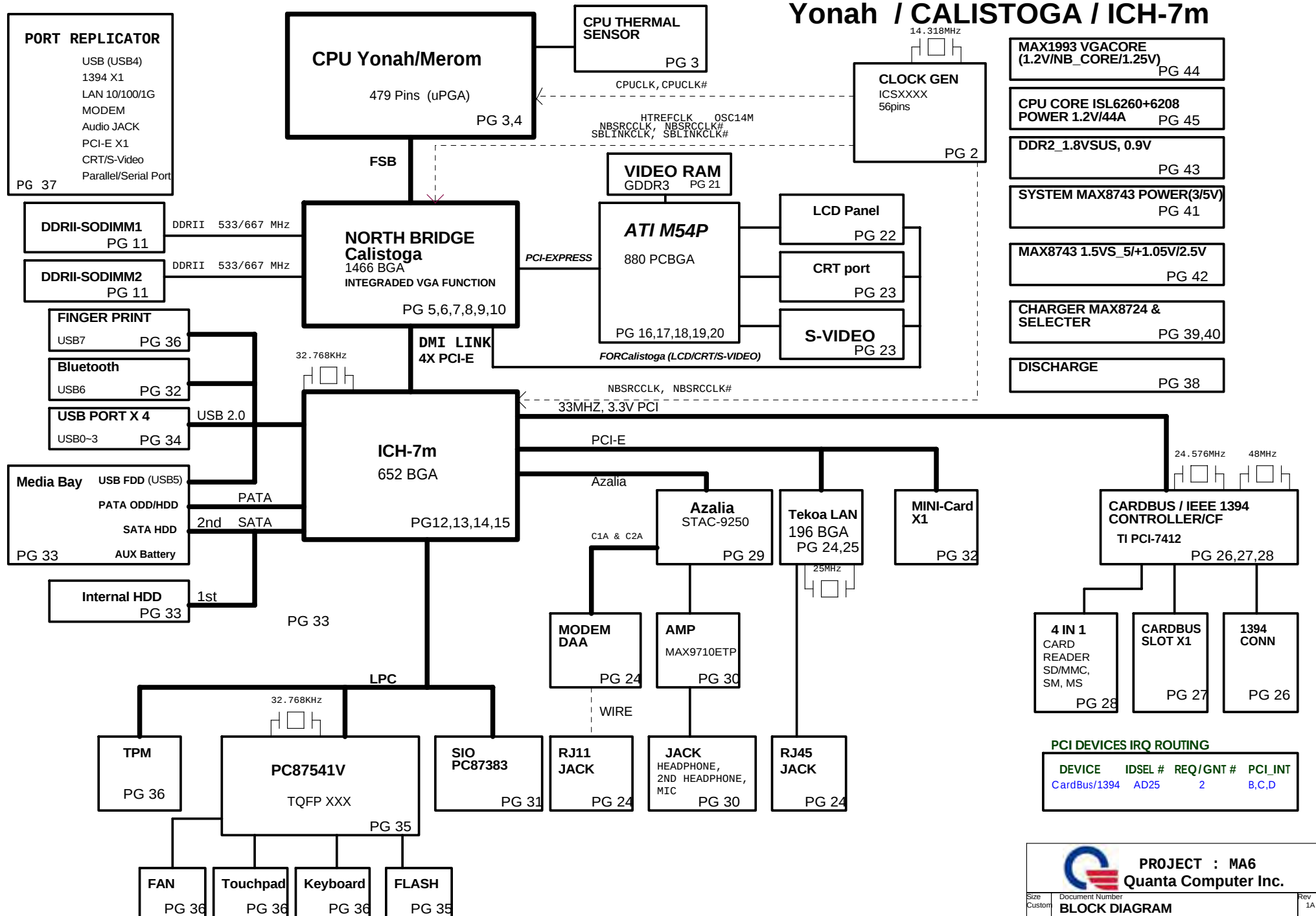
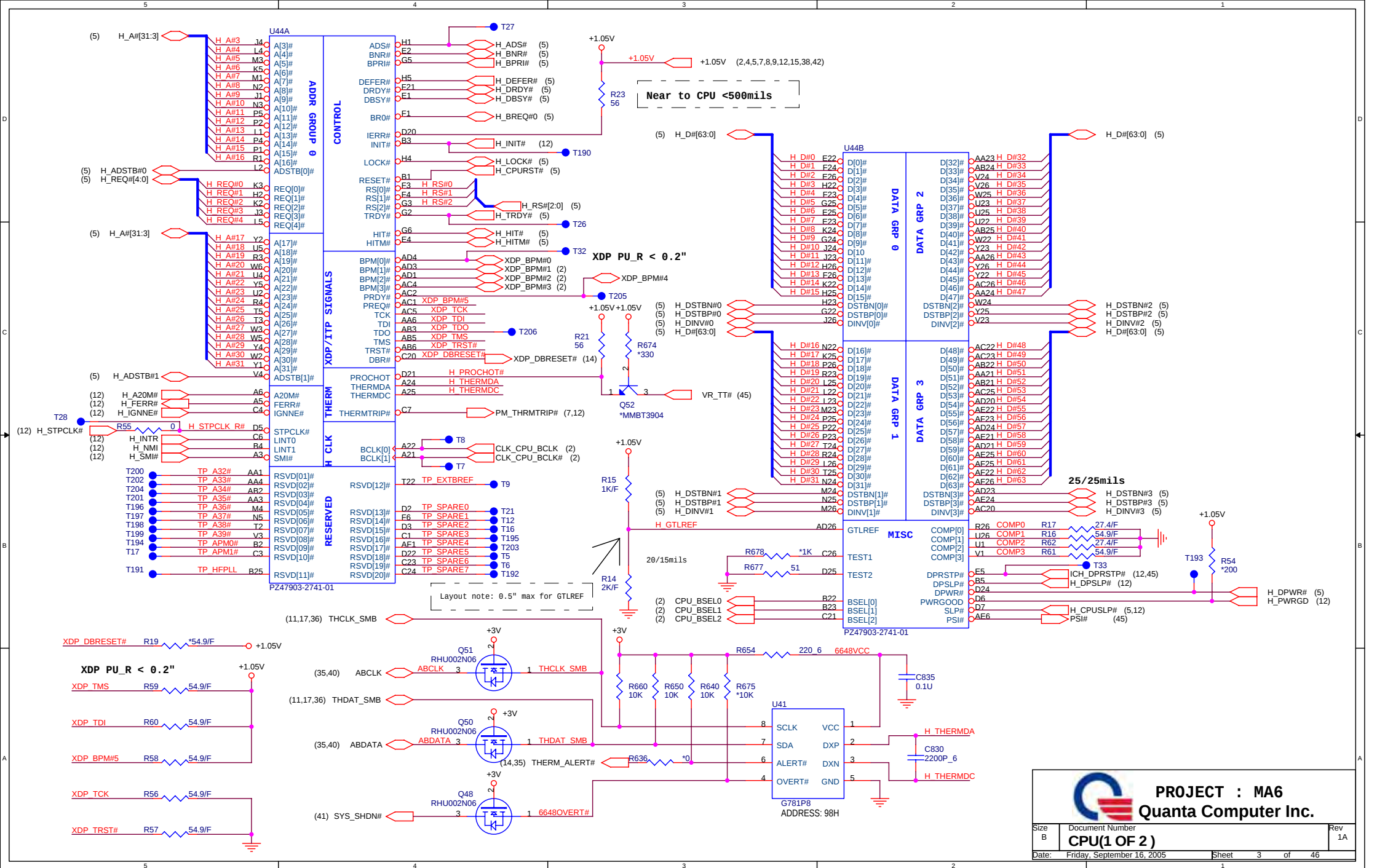


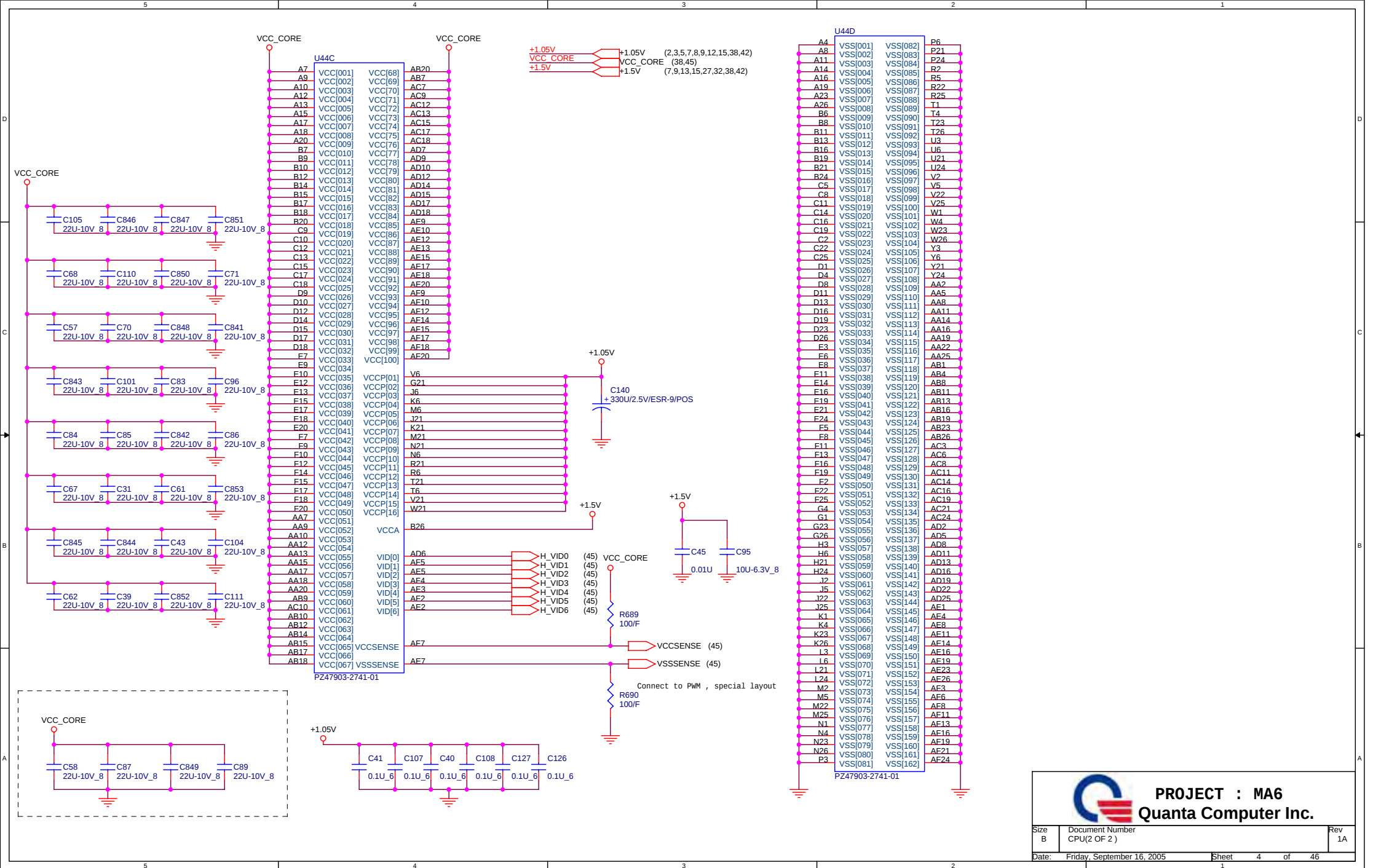
MA6 BLOCK DIAGRAM

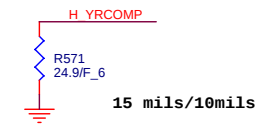
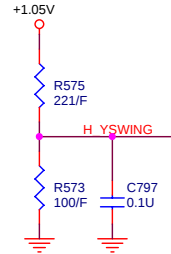
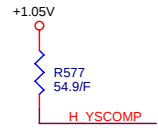
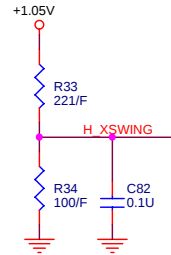
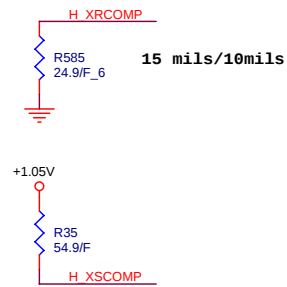
Yonah / CALISTOGA / ICH-7m



PROJECT : MA6
 Quanta Computer Inc.





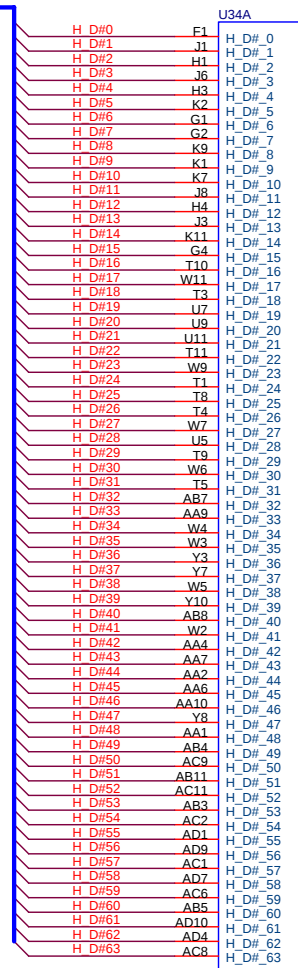


(3) H_D#[63:0]

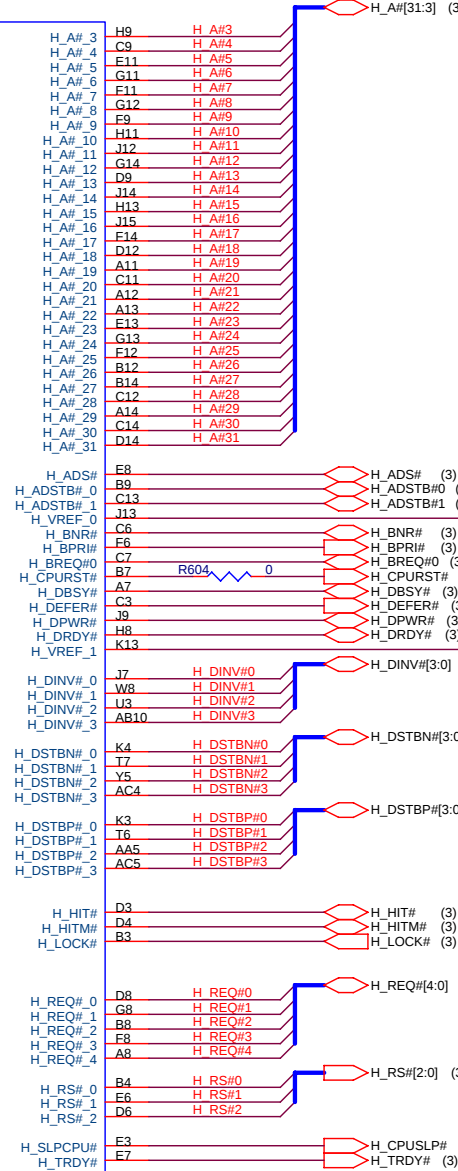
H_XRCOMP
H_XSCOMP
H_XSWING
H_YRCOMP
H_YSCOMP
H_YSWING

(2) CLK_MCH_BCLK
(2) CLK_MCH_BCLK#

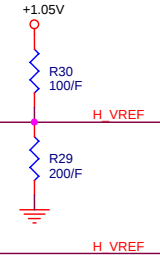
Short Stub < 100mils
extract from same point

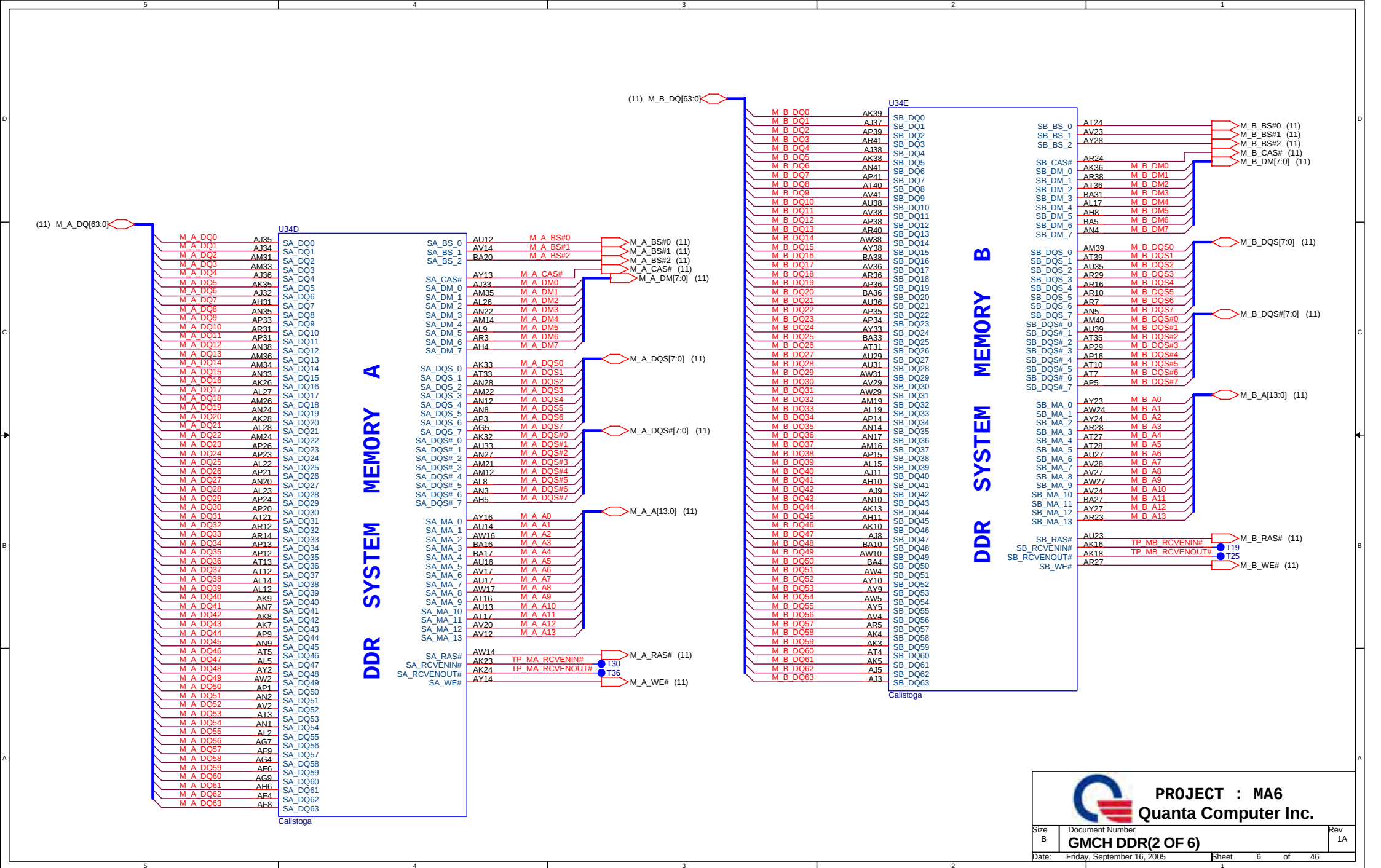


HOST



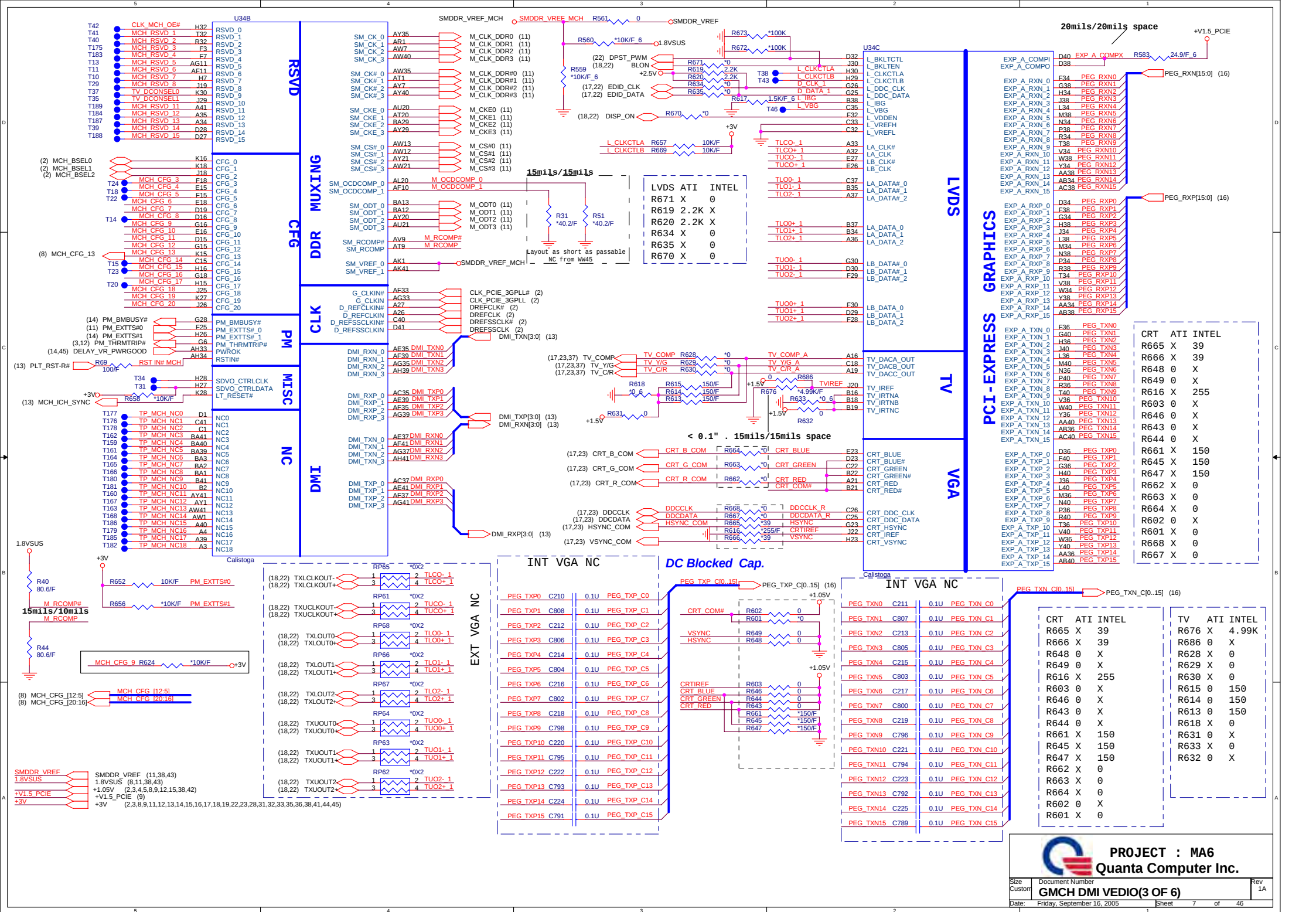
+1.05V +1.05V (2,3,4,7,8,9,12,15,38,42)

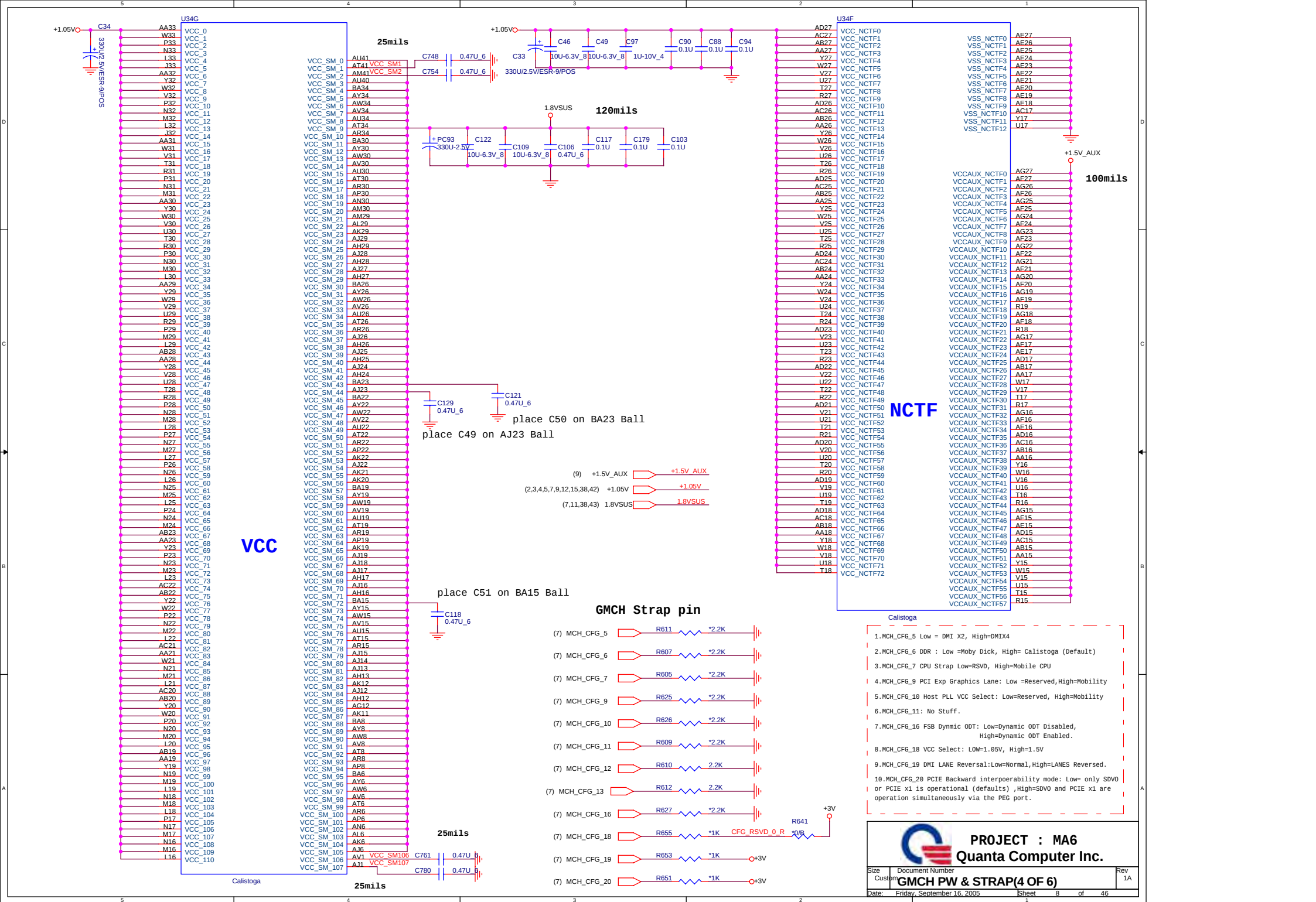


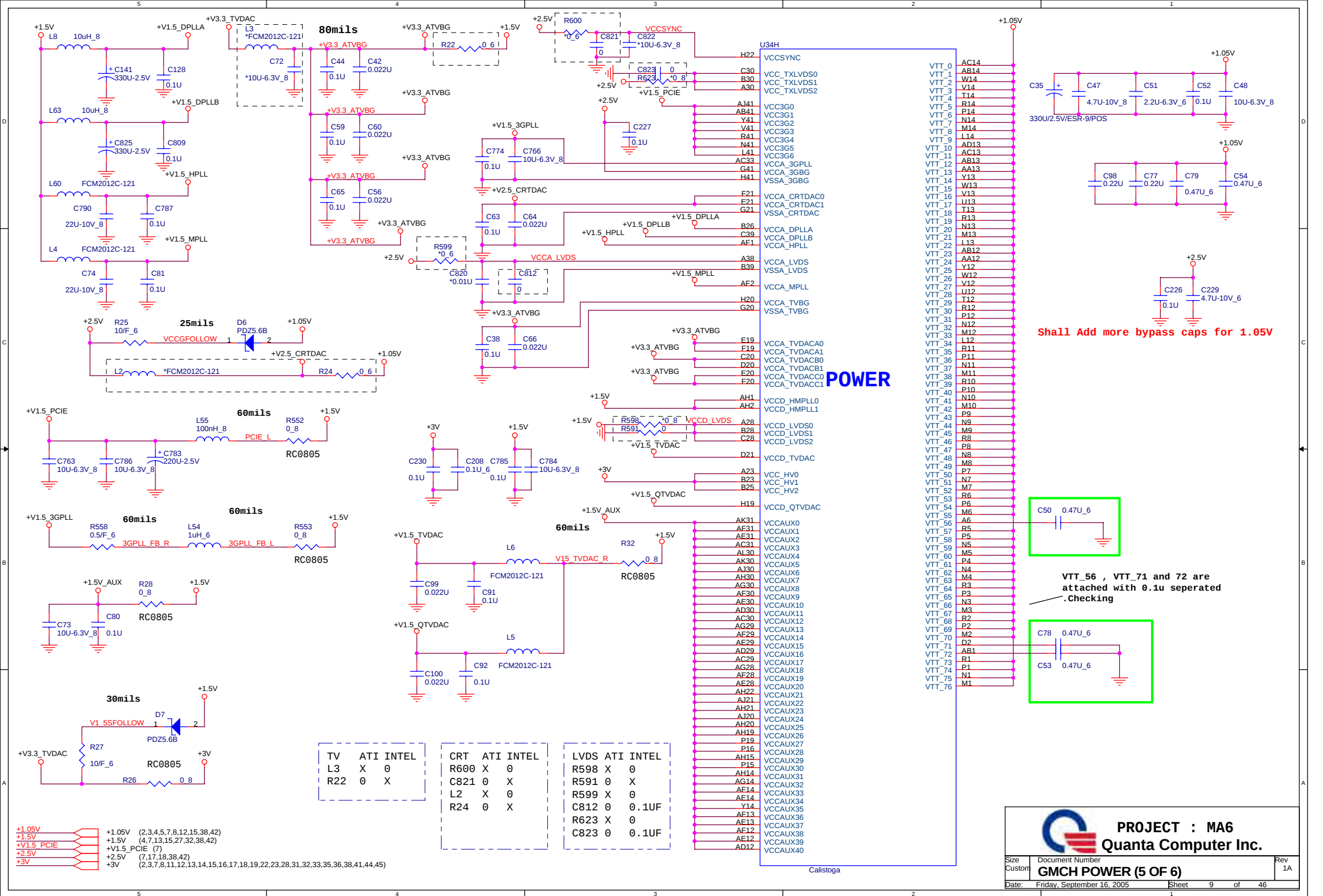


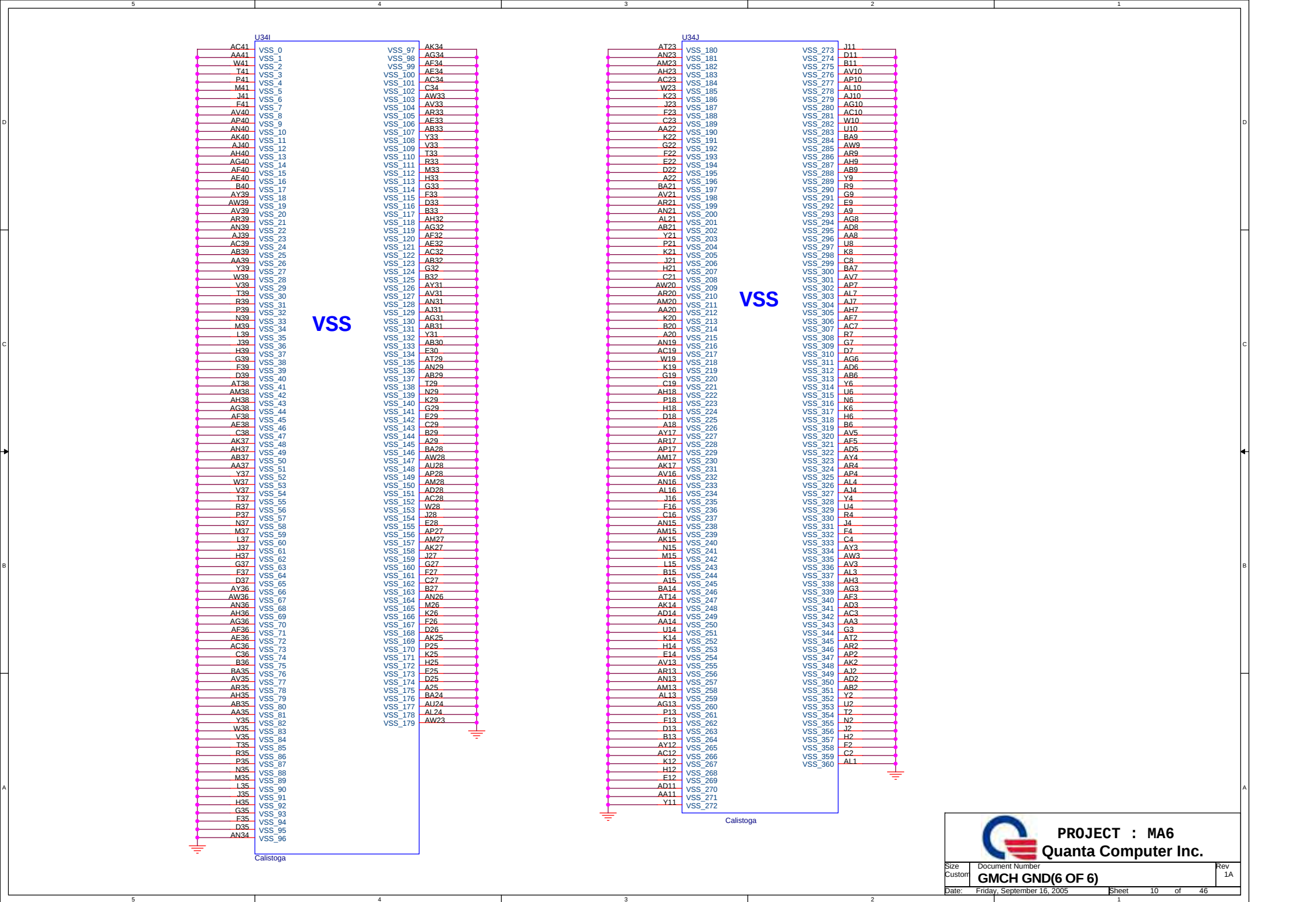
PROJECT : MA6
Quanta Computer Inc.

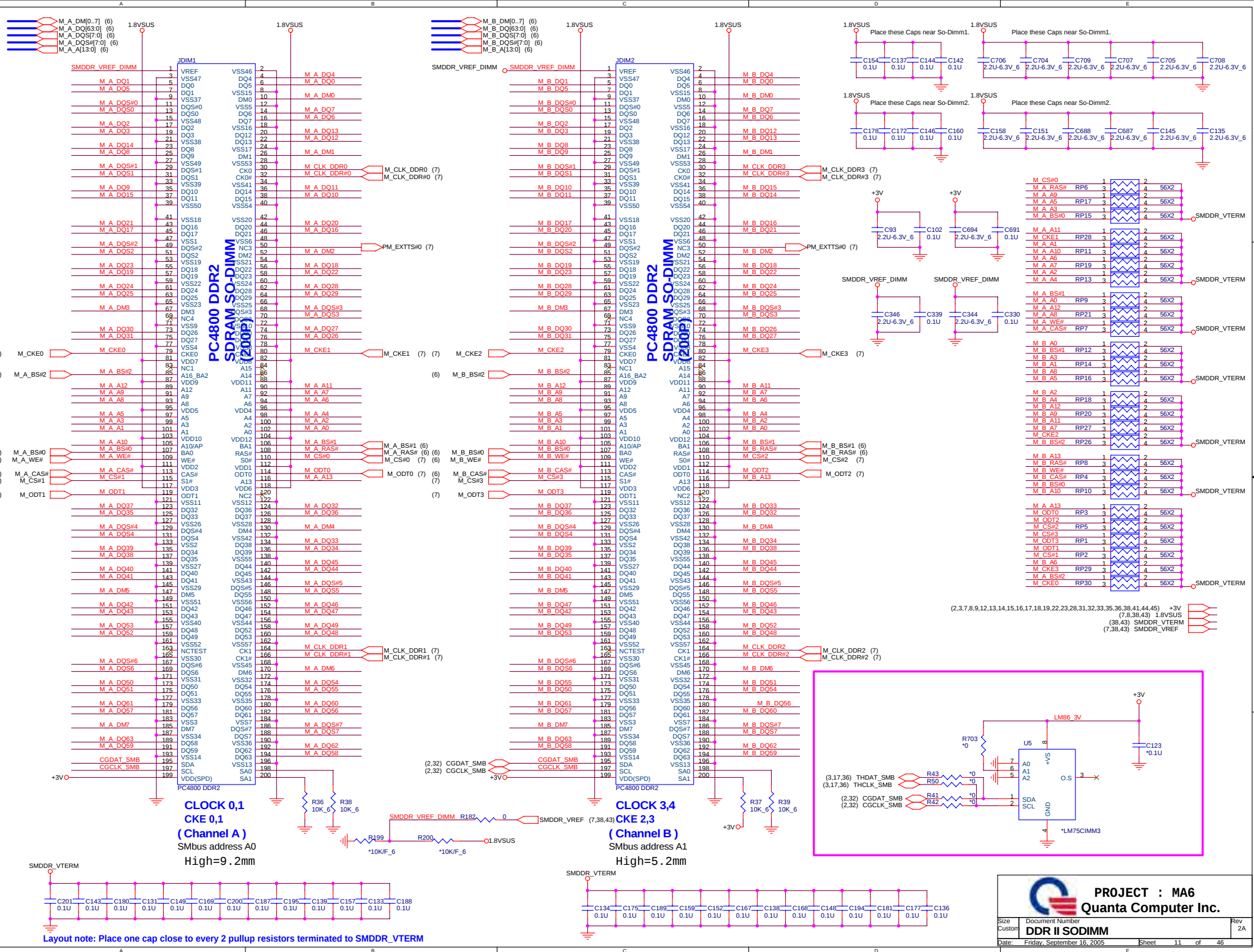
Size	Document Number	Rev
B	GMCH DDR(2 OF 6)	1A
Date:	Friday, September 16, 2005	Sheet 6 of 46



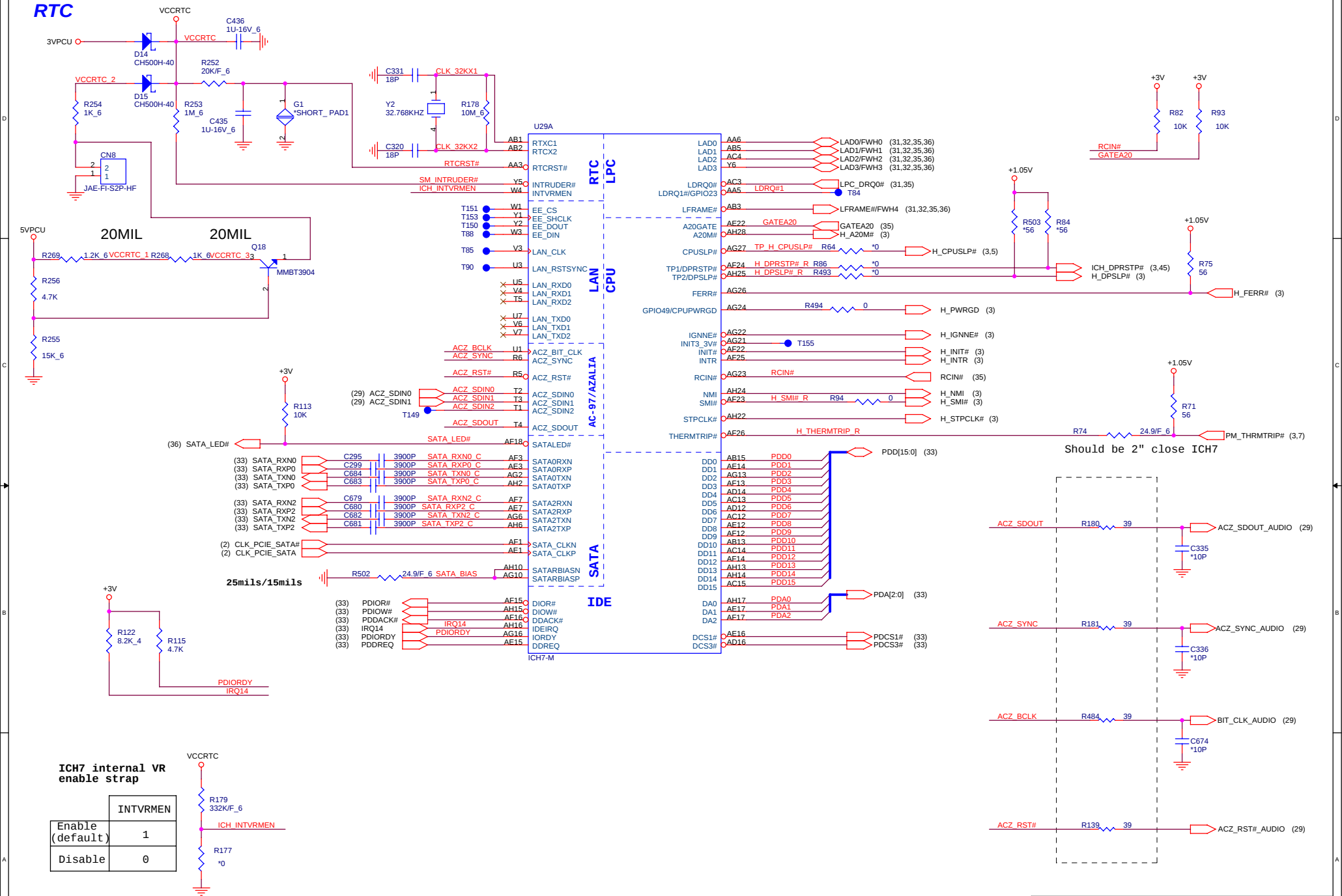








RTC

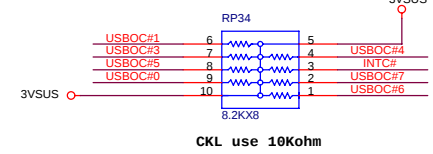
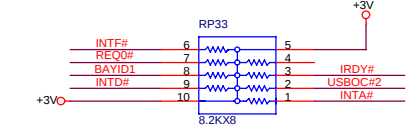
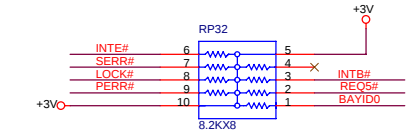
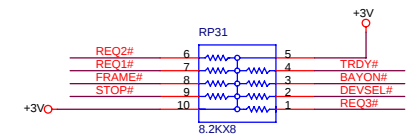
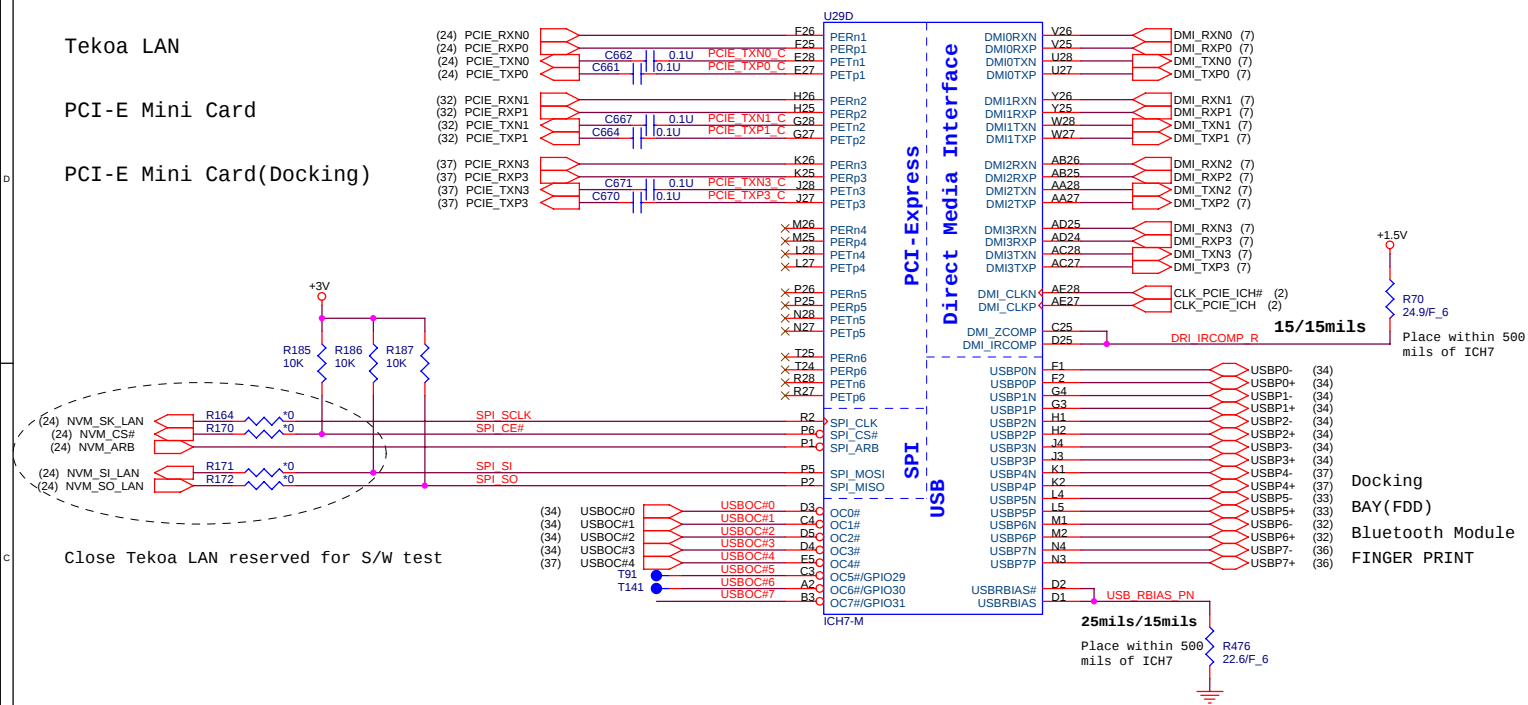


ICH7 internal VR enable strap	
	INTVRMEN
Enable (default)	1
Disable	0

Tekoa LAN

PCI-E Mini Card

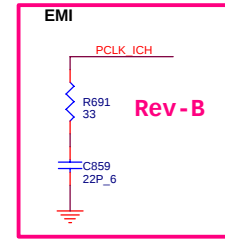
PCI-E Mini Card(Docking)



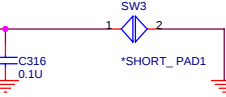
Docking
BAY(FDD)
Bluetooth Module
FINGER PRINT

ICH7 Boot BIOS select

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



Crisis SW

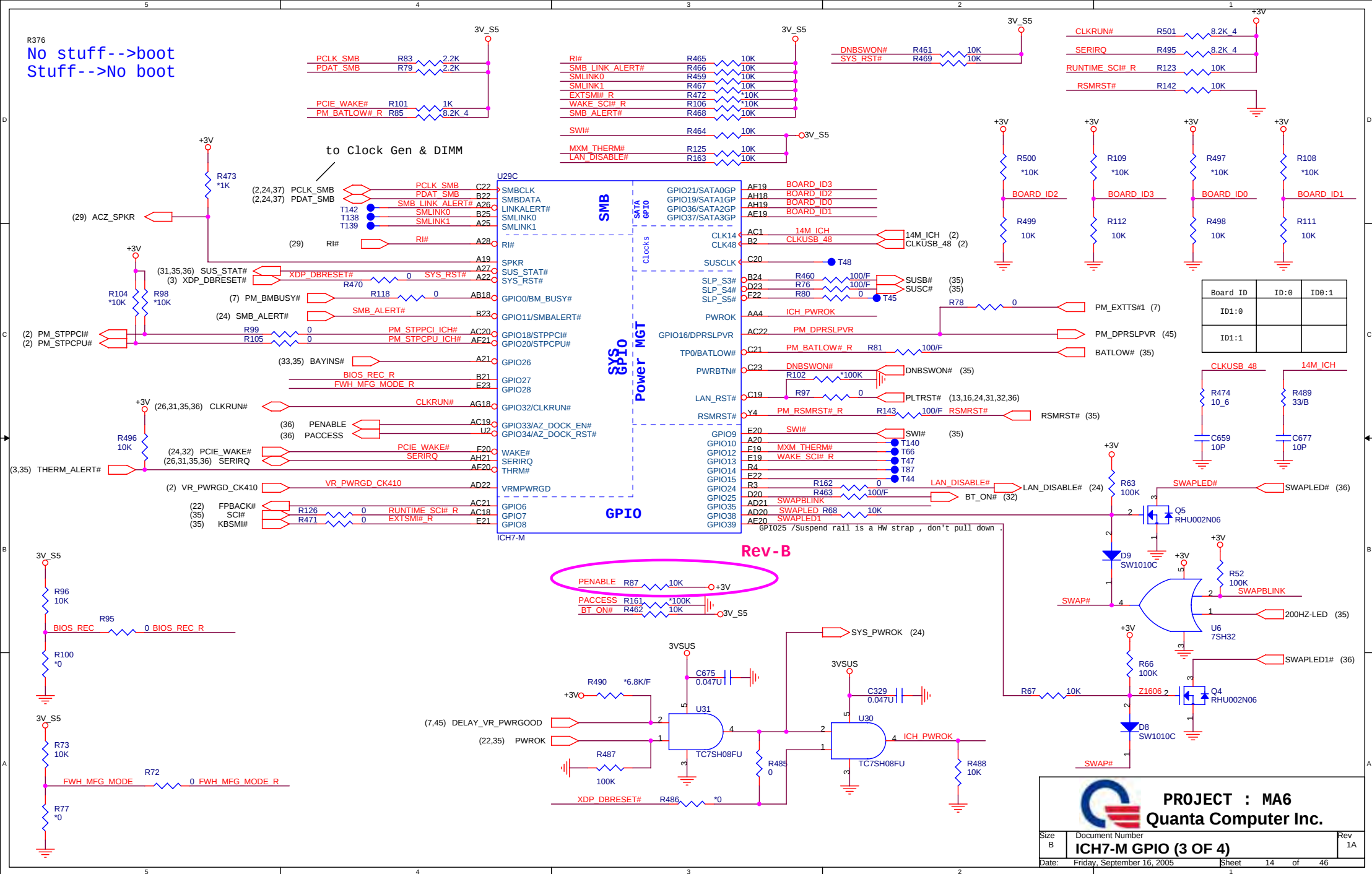


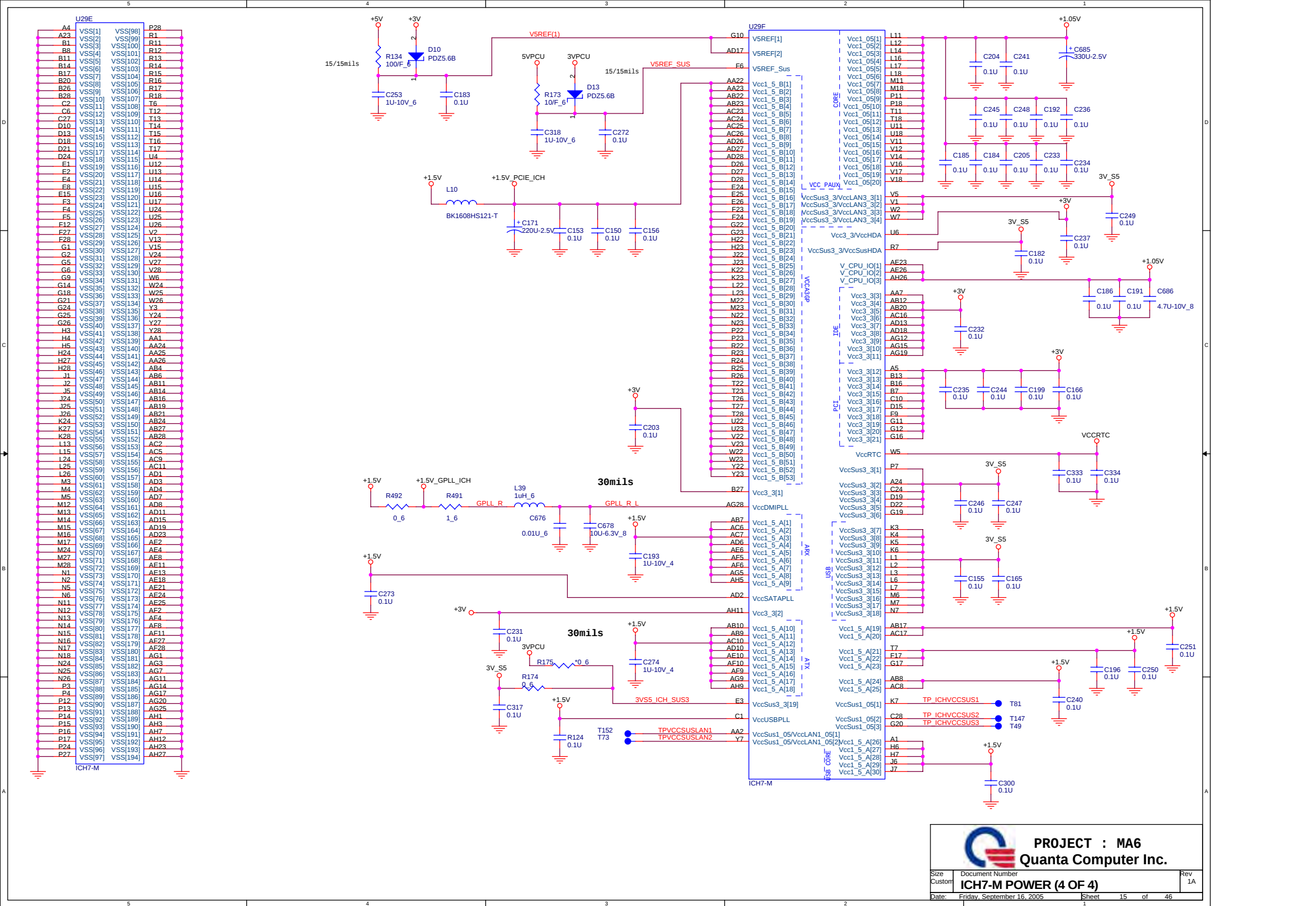
Don't connect to PCI device / Express card

PCI DEVICE	IDSEL#	REQ# / GNT#	Interrupts
PCI7412	AD25	REQ2# / GNT2#	INT B/C/D#

R376

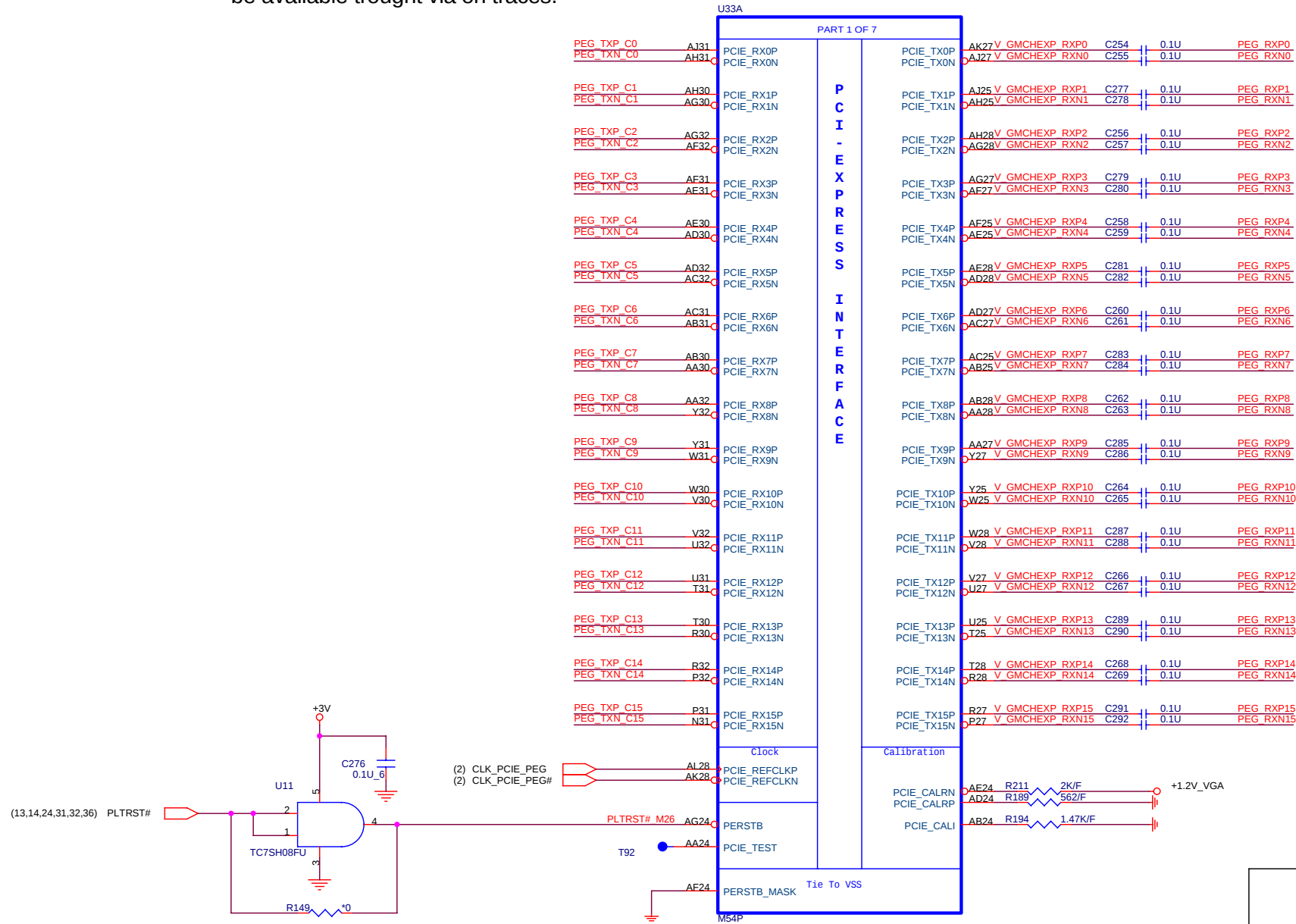
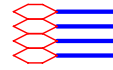
No stuff-->boot
Stuff-->No boot

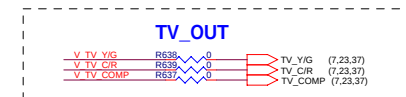
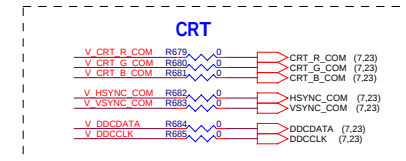
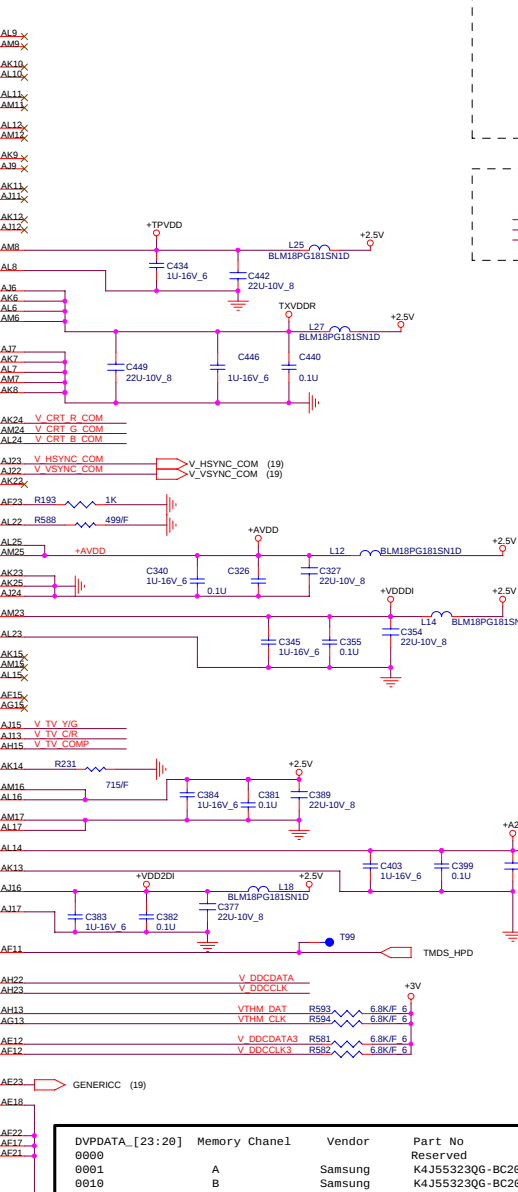
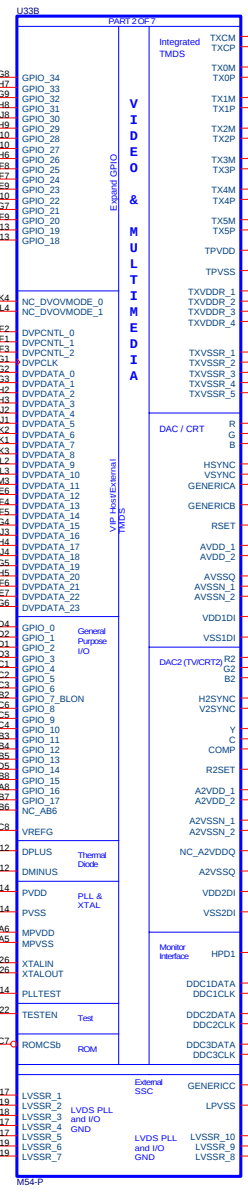
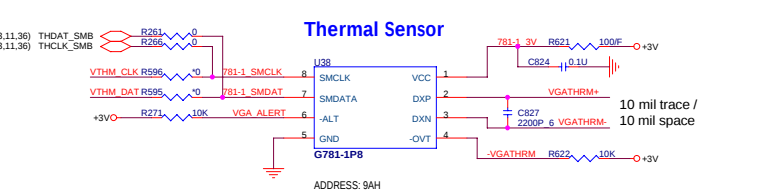
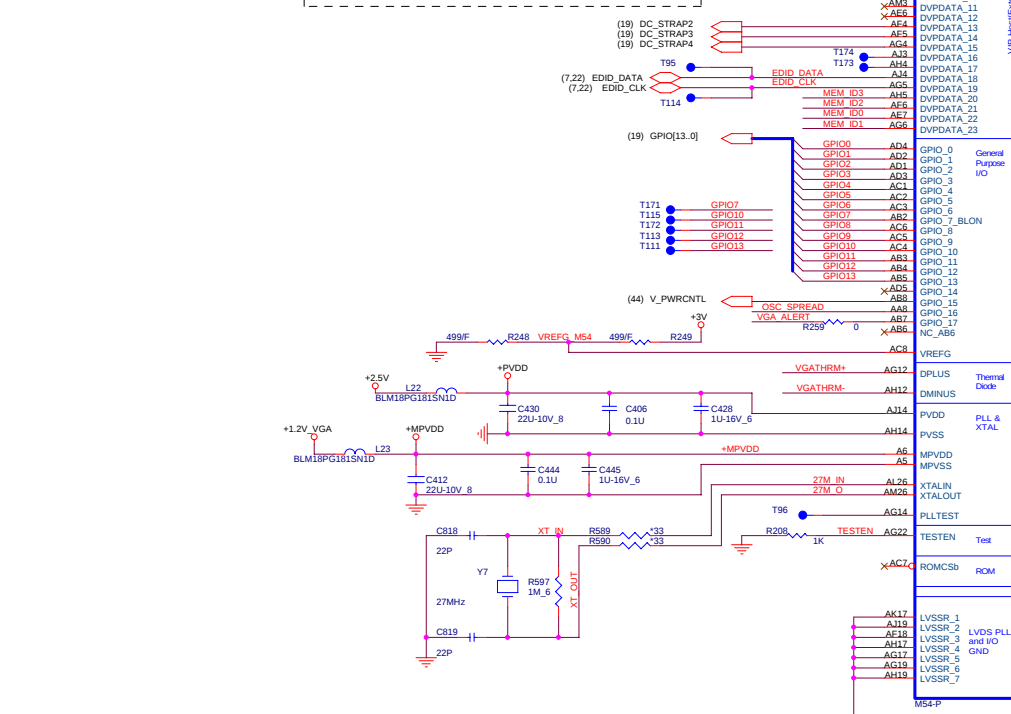
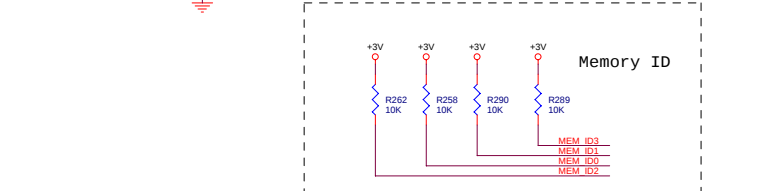




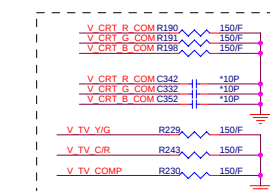
NOTE: some of the PCIE testpoints will be available through via on traces.

(7) PEG_RXP[15:0]
(7) PEG_RXN[15:0]
(7) PEG_TXP_C[0..15]
(7) PEG_TXN_C[0..15]

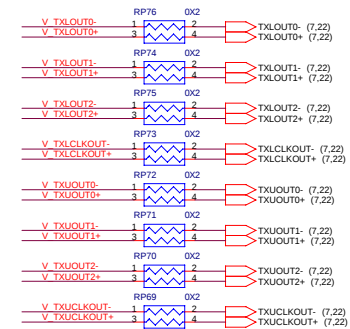
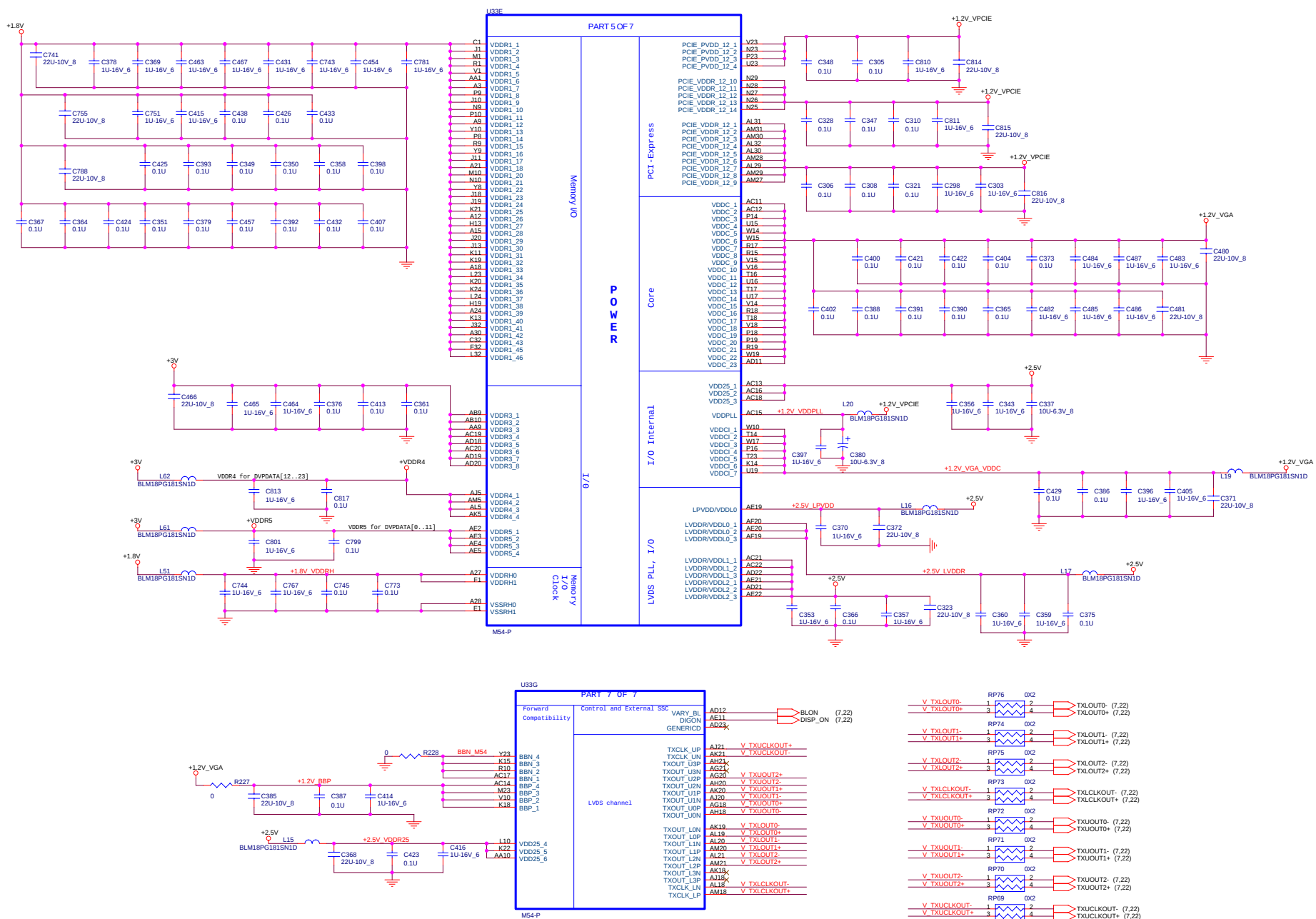


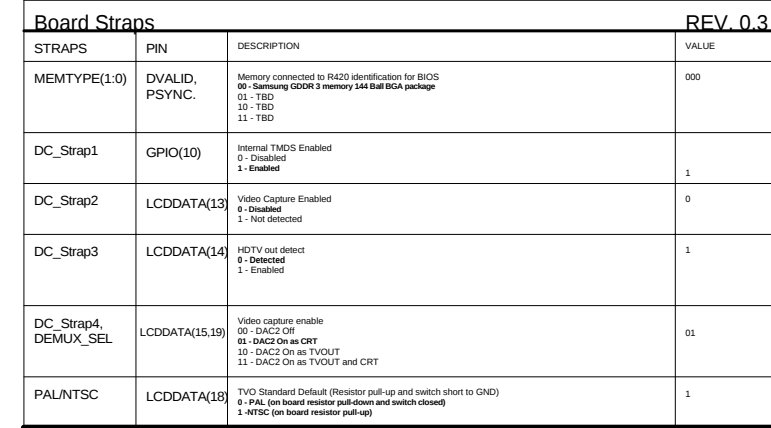
[illegible]

PLACE CLOSE TO ASIC



DVPDATA_[23:20]	Memory Chan.e1	Vendor	Part No	Package organized	
0000			Reserved		
0001	A	Samsung	K4J5532306-QC20	256M(8Mx32) GDDR3-136P	64M memory aperture
0010	B	Samsung	K4J5532306-QC20	256M(8Mx32) GDDR3-136P	64M memory aperture
0011	A& B	Samsung	K4J5532306-QC20	256M(8Mx32) GDDR3-136P	128M memory aperture
0100	A	Hynix	HY5RS573225AFP-2	256M(8Mx32) GDDR3-136P	64M memory aperture
0101	B	Hynix	HY5RS573225AFP-2	256M(8Mx32) GDDR3-136P	64M memory aperture
0110	A& B	Hynix	HY5RS573225AFP-2	256M(8Mx32) GDDR3-136P	128M memory aperture
0111	A	Infineon	HYB18H256321AF-12	256M(8Mx32) GDDR3-136P	64M memory aperture
1000	B	Infineon	HYB18H256321AF-12	256M(8Mx32) GDDR3-136P	64M memory aperture
1001	A& B	Infineon	HYB18H256321AF-12	256M(8Mx32) GDDR3-136P	128M memory aperture
1010			Reserved		
1011			Reserved		
1100			Reserved		
1101	A	Infineon	HYB18H512321AFL-20 512M(16Mx32)GDDR3-136P	128M memory aperture	
1110	B	Infineon	HYB18H512321AFL-20 512M(16Mx32)GDDR3-136P	128M memory aperture	
1111	A& B	Infineon	HYB18H512321AFL-20 512M(16Mx32)GDDR3-136P	256M memory aperture	

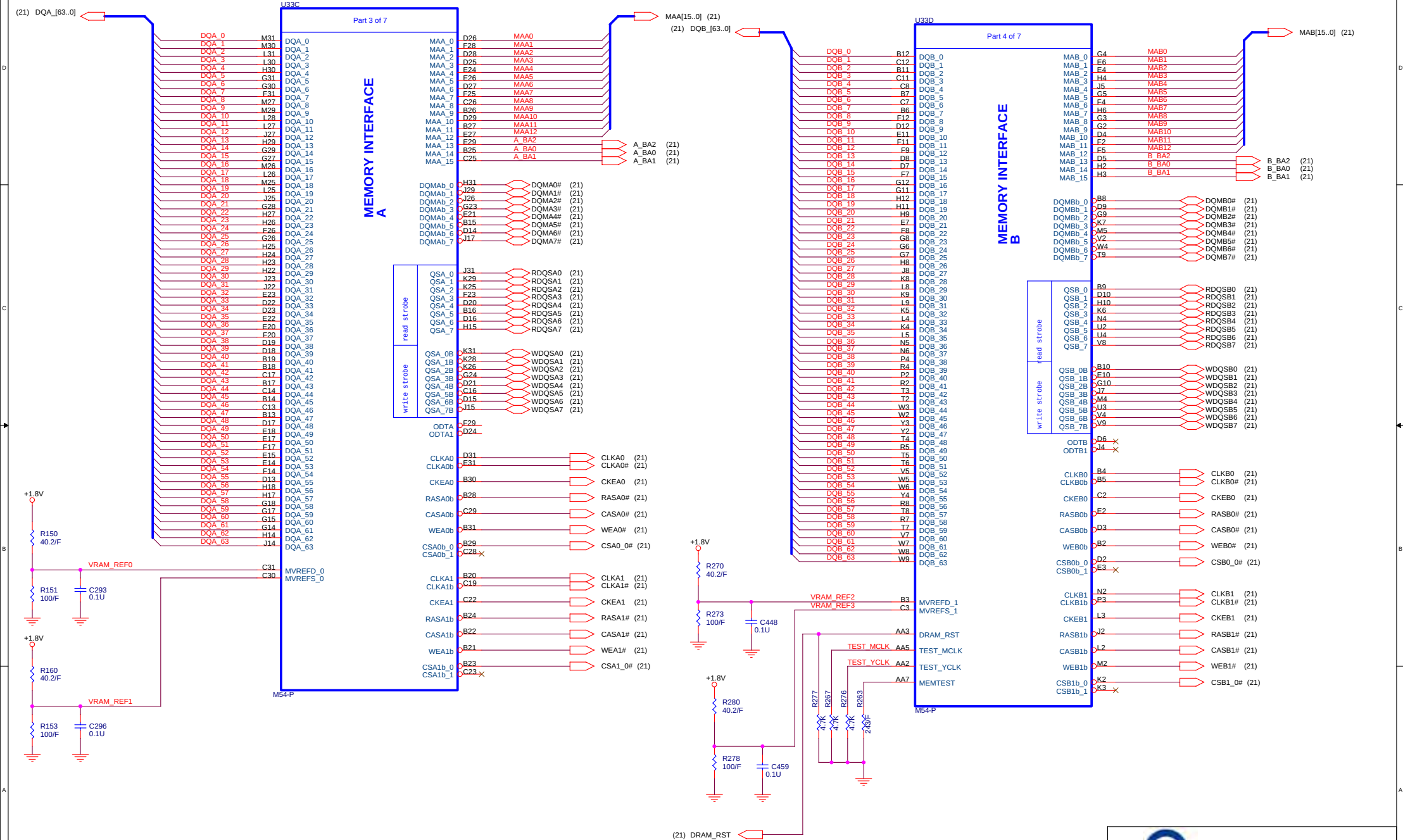




 PROJECT : MA6 Quanta Computer Inc.		
Size C	Document Number M54P CORE GND & OPTION STRAPS(4 OF 6)	Rev 1

Channel A **RV410 MEMORY CHANNELS A and B**

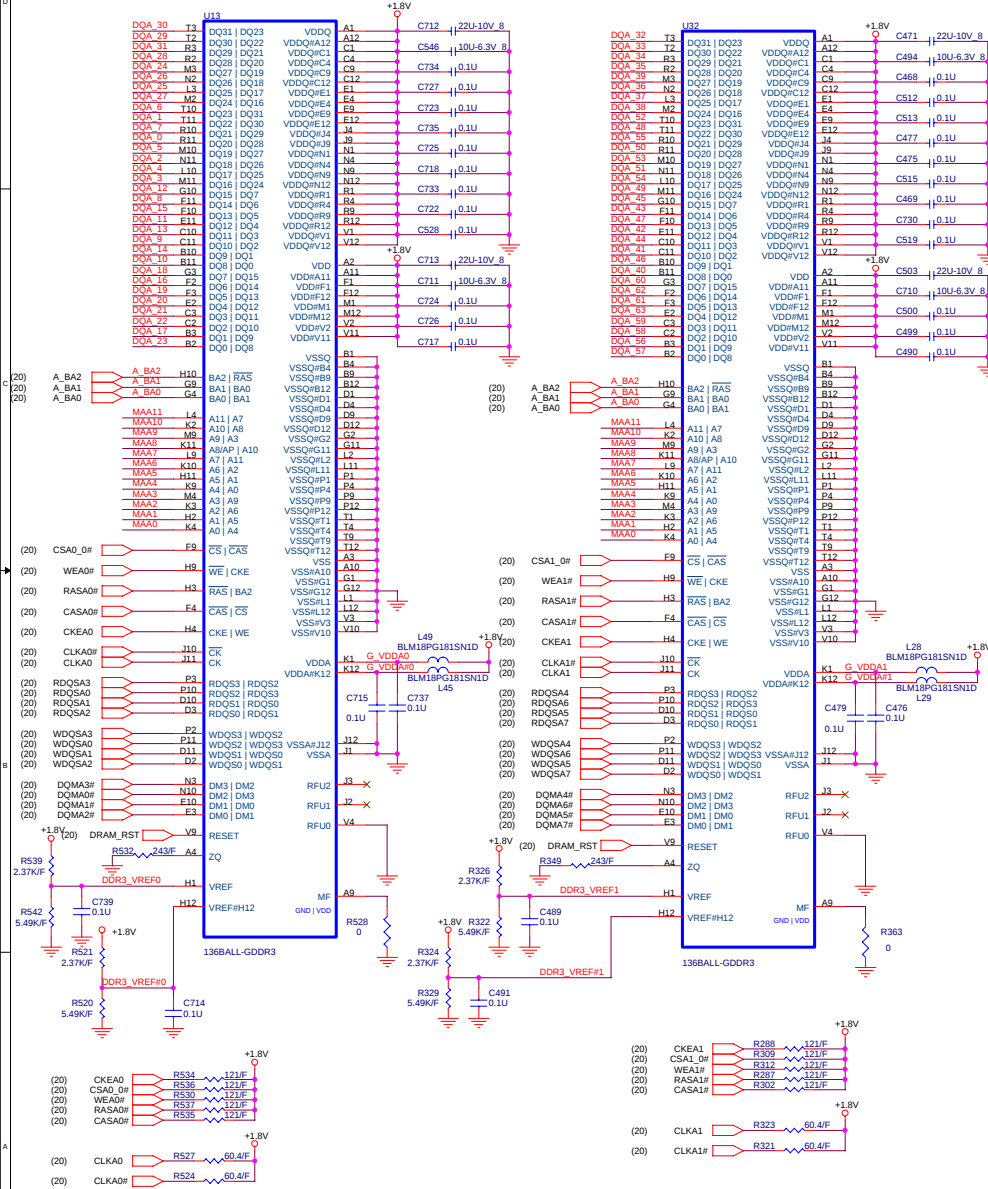
Channel B



PROJECT : MA6
Quanta Computer Inc.

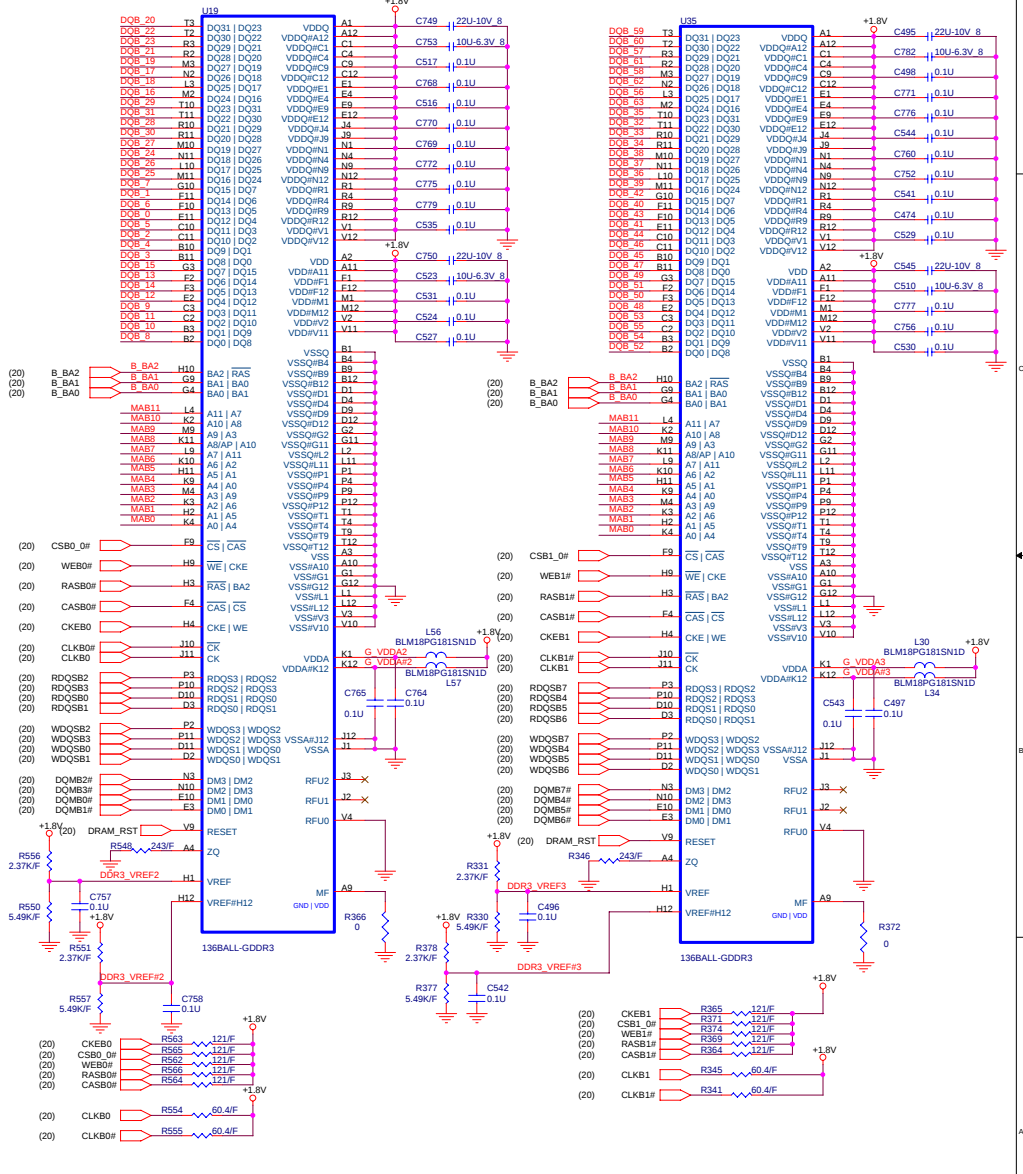
(20) MAA[15..0] MAA[15..0]
(20) DQA[63..0] DQA[63..0]

Channel A

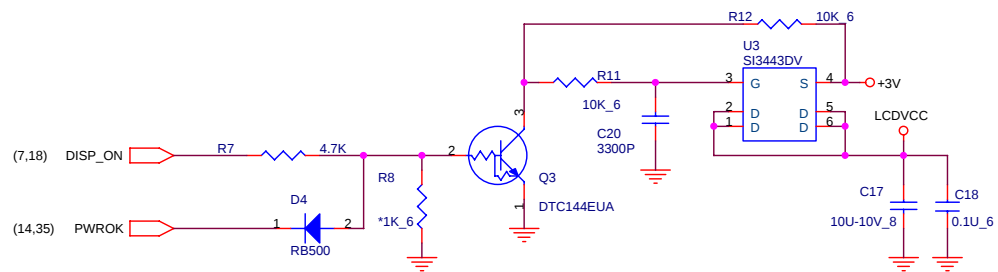


(20) MAB[15..0] MAB[15..0]
(20) DQB[63..0] DQB[63..0]

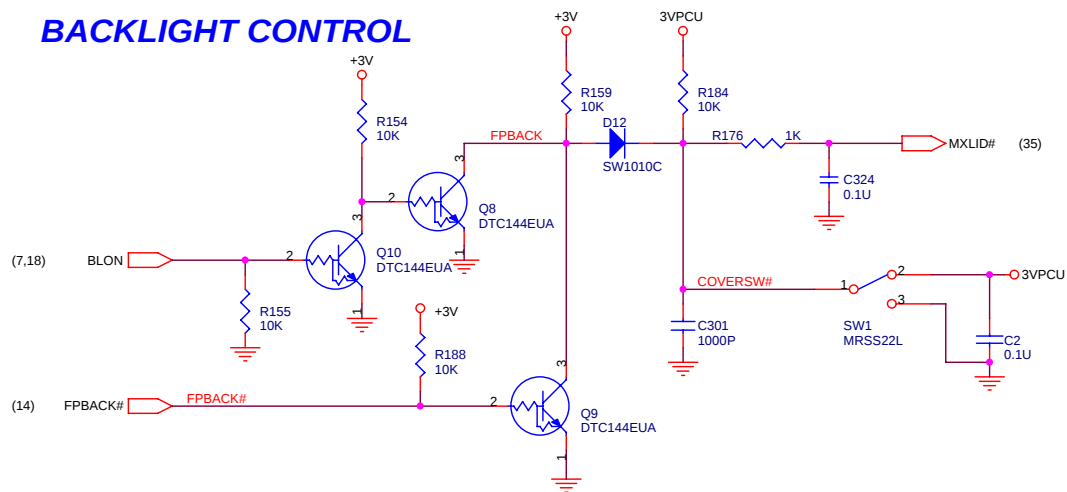
Channel B



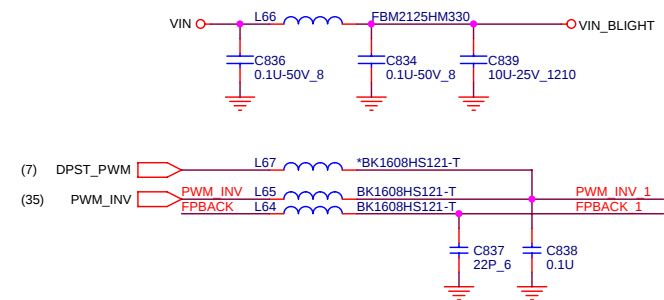
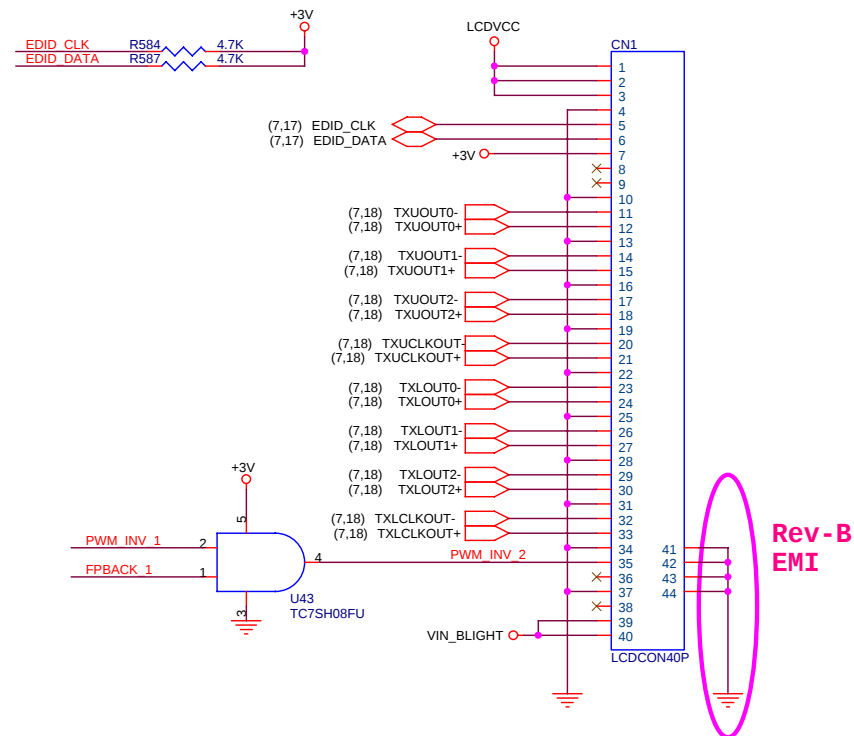
PANEL VCC CONTROL



BACKLIGHT CONTROL



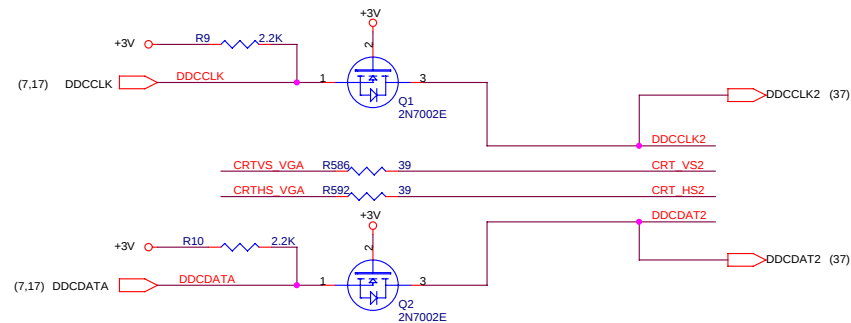
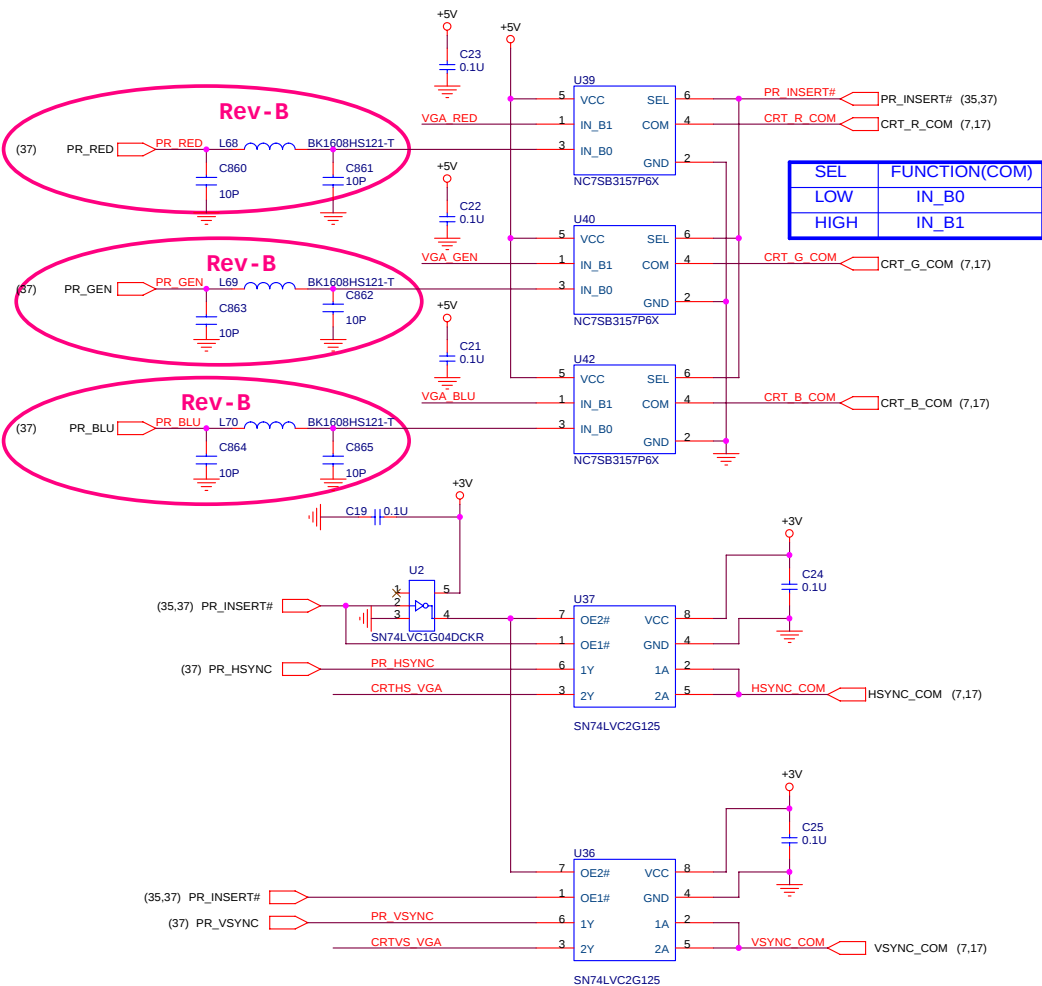
LCD CONNECTOR



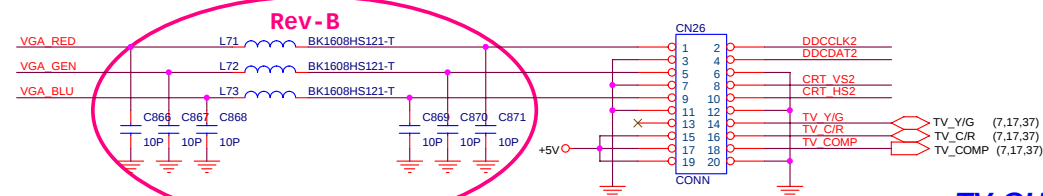
PROJECT : MA6
Quanta Computer Inc.

Size B	Document Number LCD CONN	Rev 1A
Date:	Friday, September 16, 2005	Sheet 22 of 46

CRT SWITCH



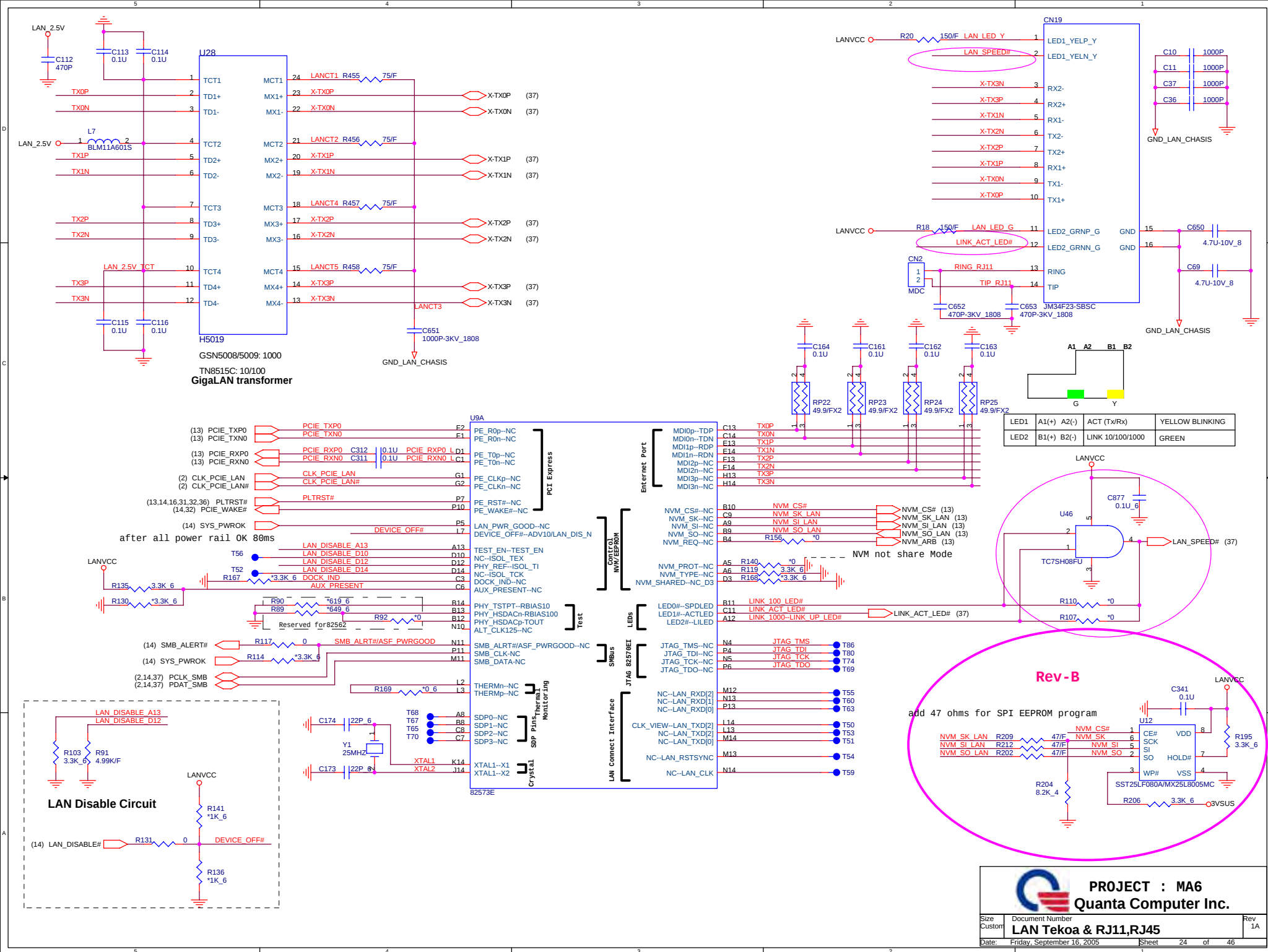
CRT PORT

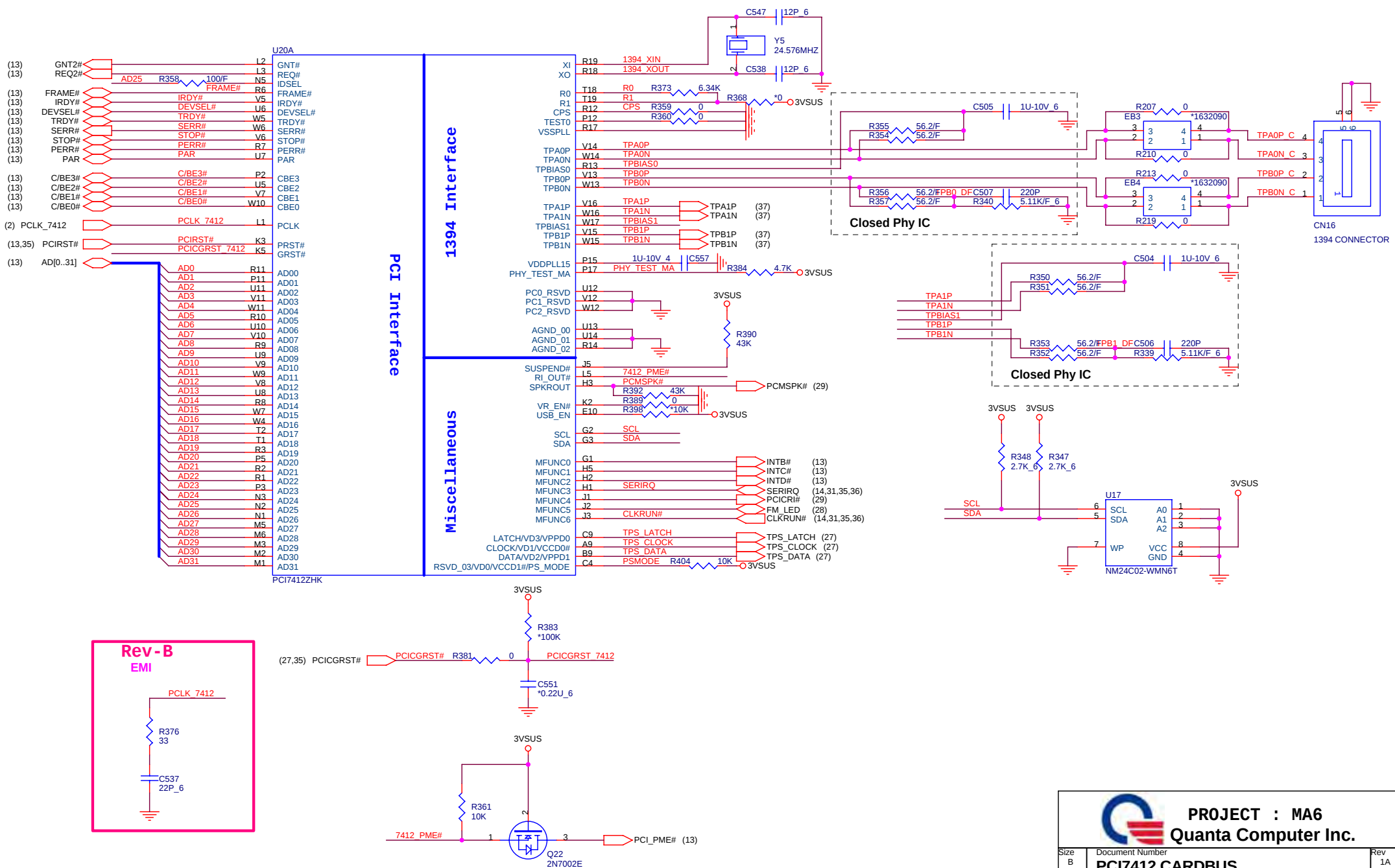


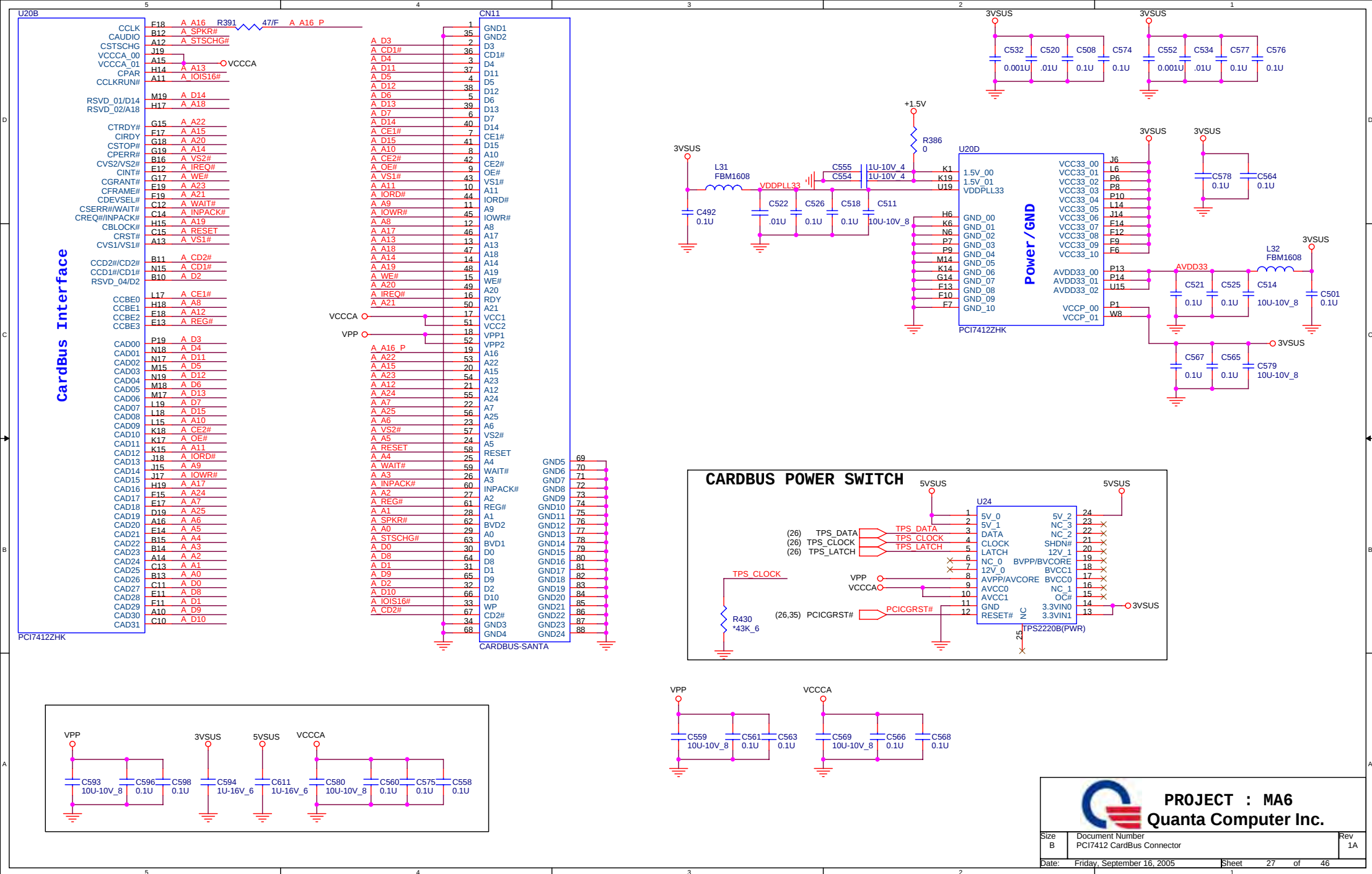
TV-OUT

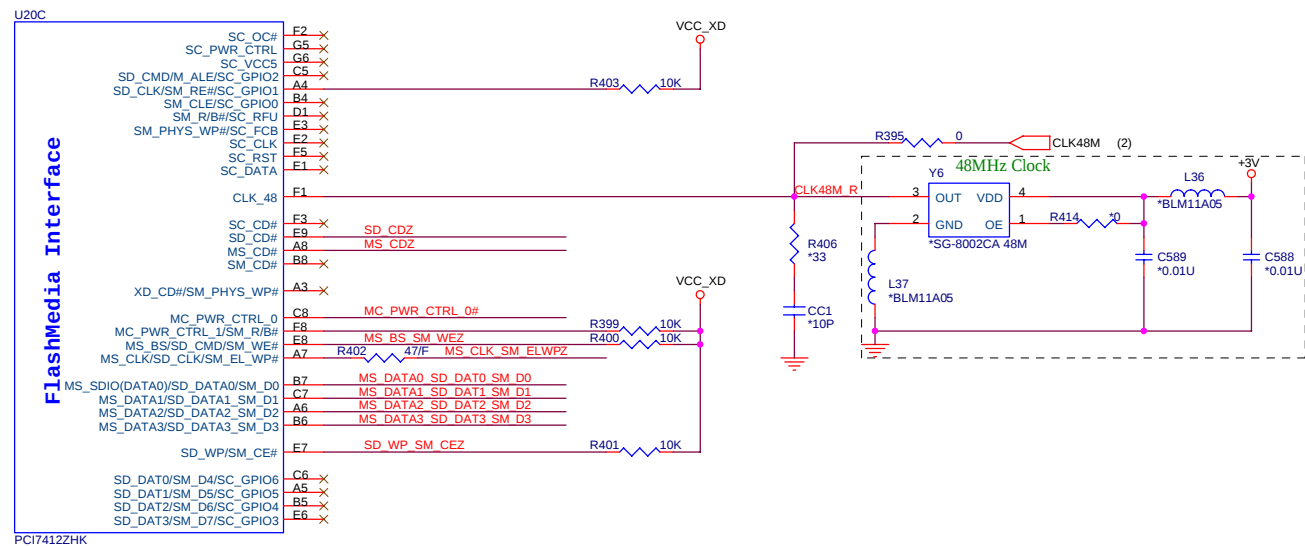


PROJECT : MA6
Quanta Computer Inc.

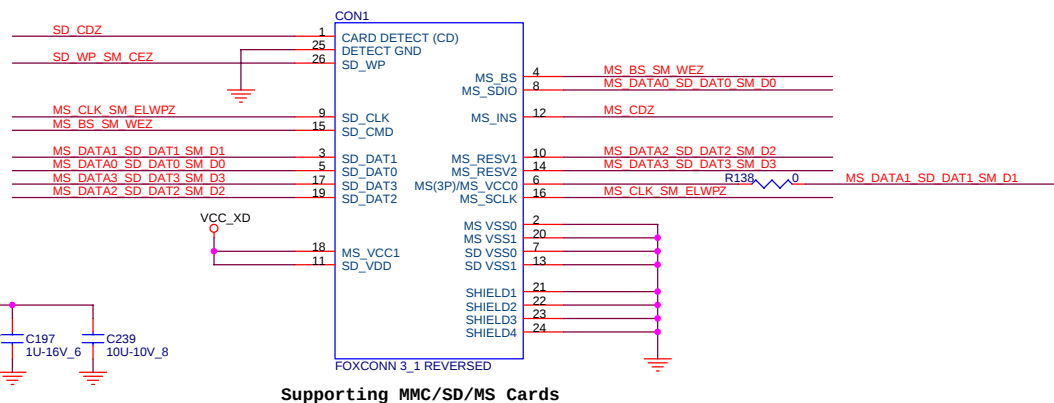








3 IN1 CARD READER



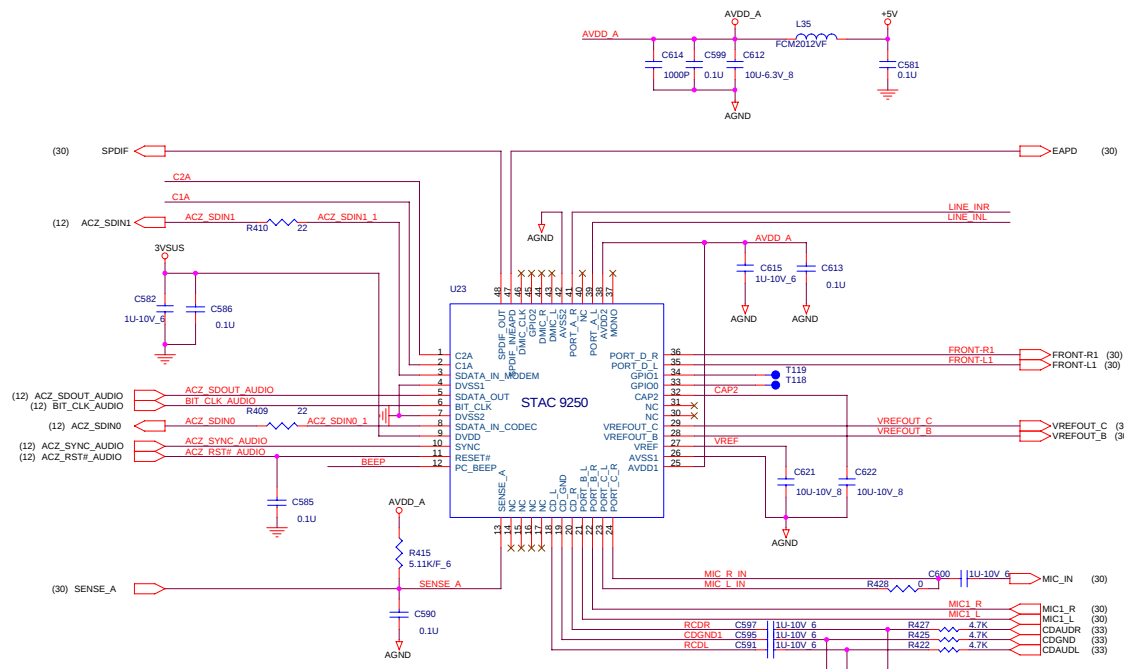
Supporting MMC/SD/MS Cards

WORKAROUND PROPOSAL



PROJECT : MA6
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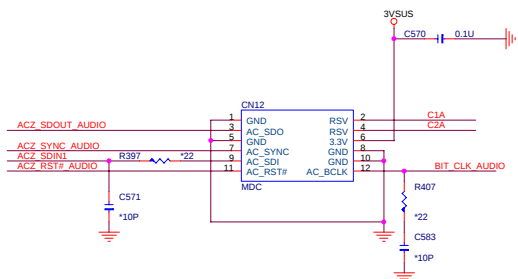
Size	Document Number	Rev
Custom	PC7412 CARD_READER	1A
Date:	Friday, September 16, 2005	Sheet 28 of 46



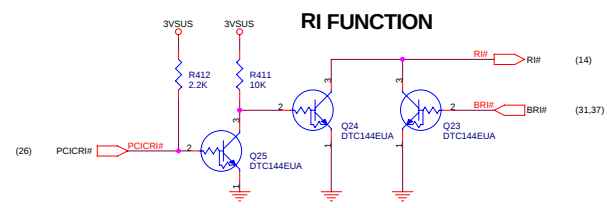
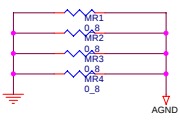
speakers

Internal MIC

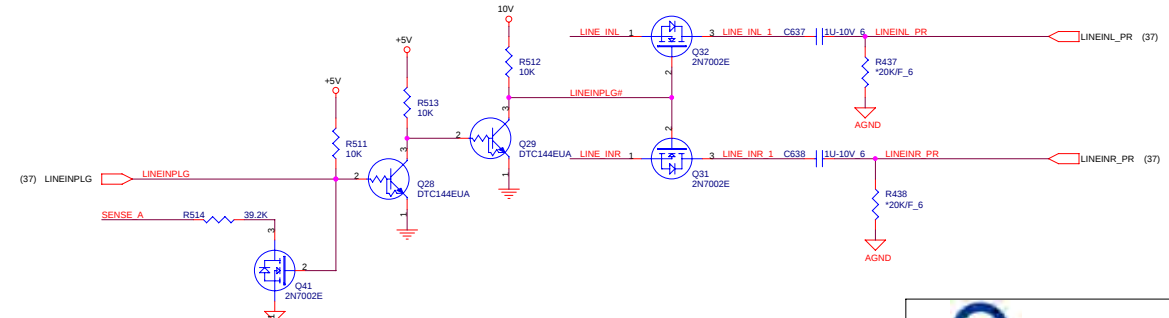
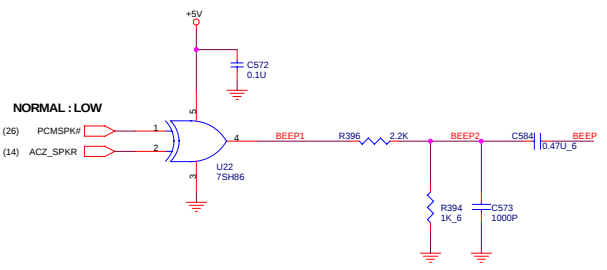
External MIC



For MDC/DAA Module

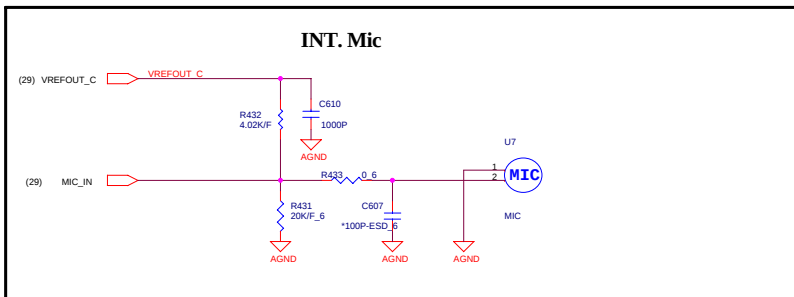
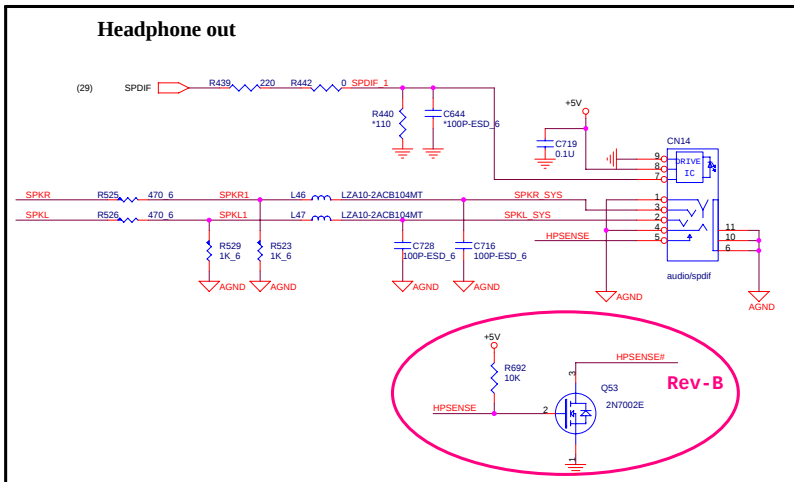
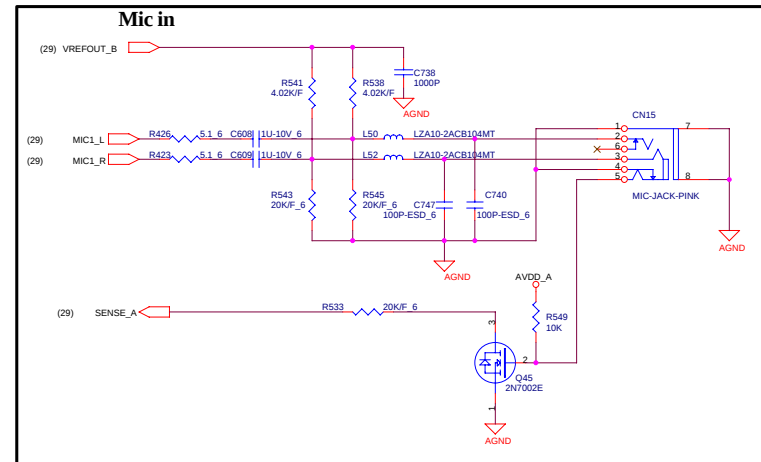
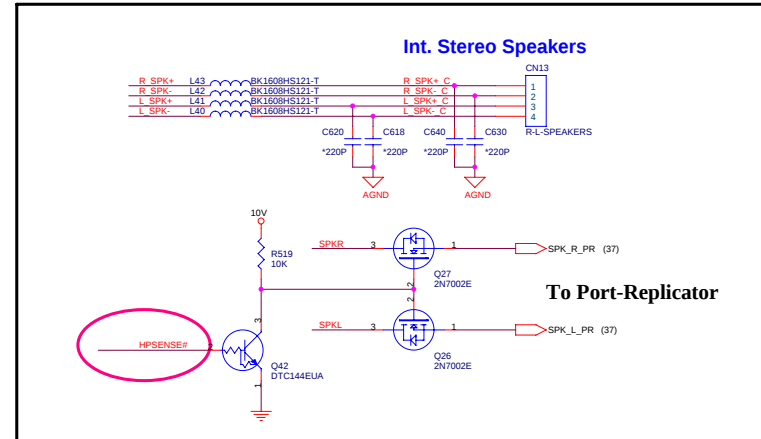
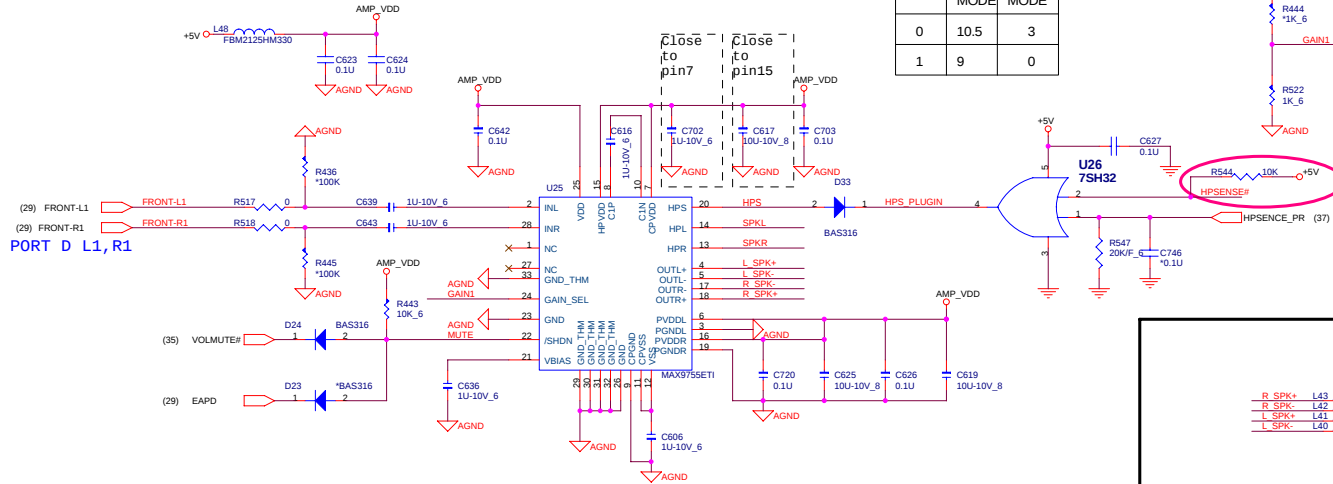


PC BEEP CONTROL

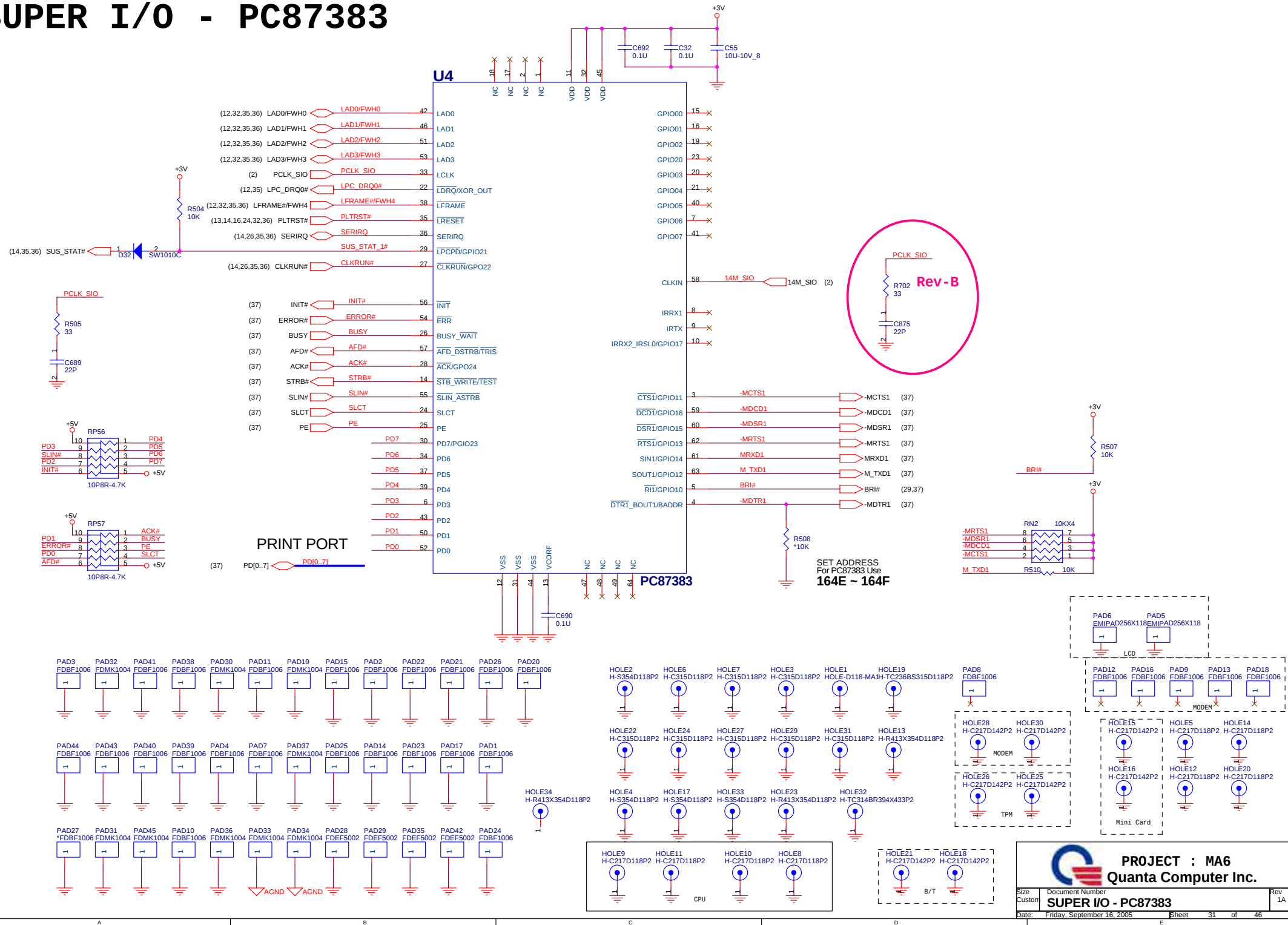


AUDIO AMPLIFIER-MAX9755

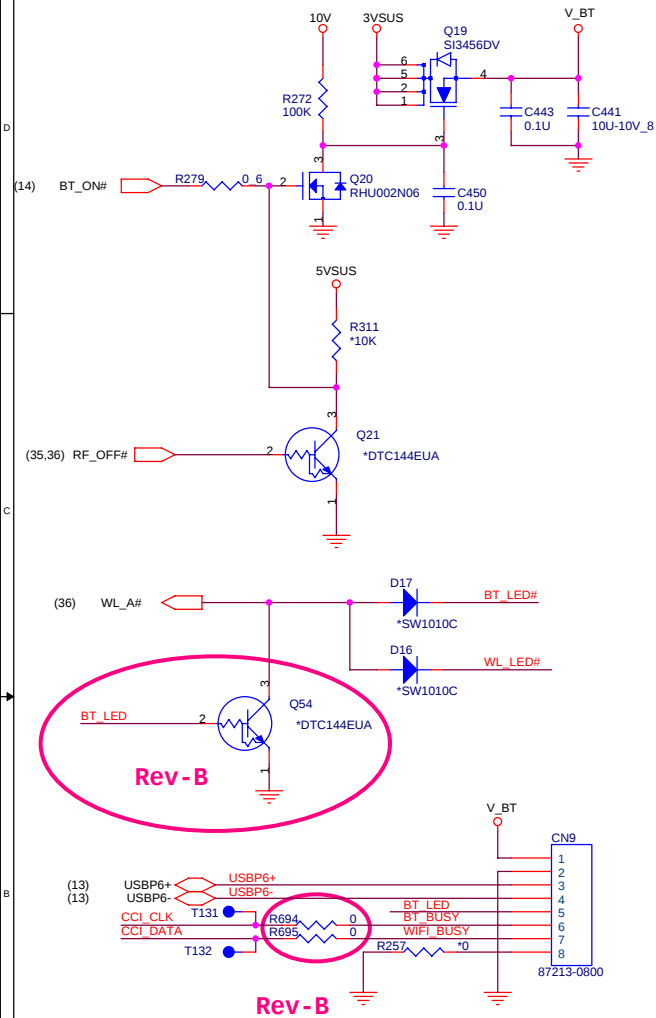
GAIN1	SPKR MODE	HP MODE
0	10.5	3
1	9	0



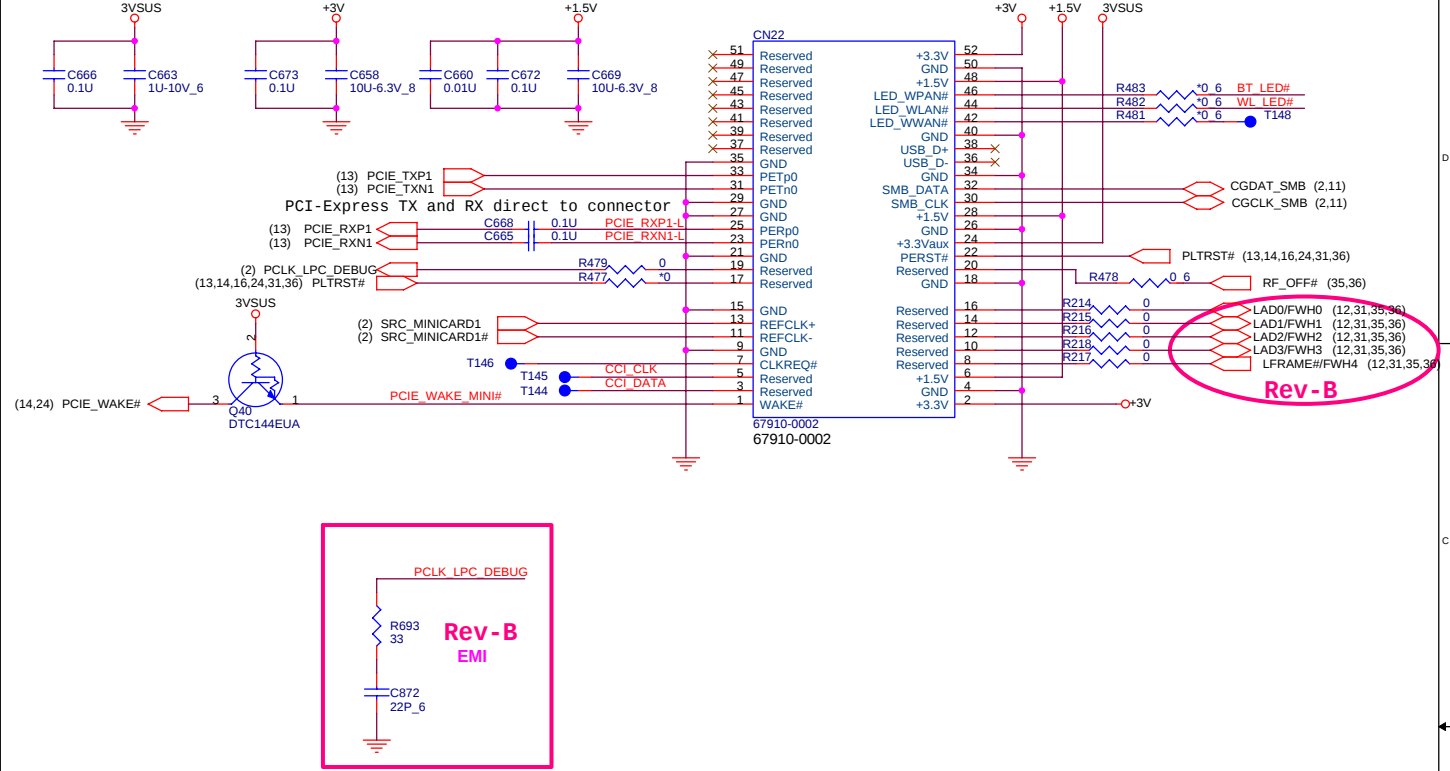
SUPER I/O - PC87383



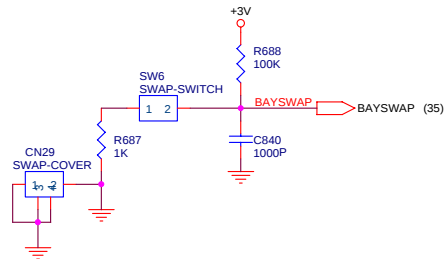
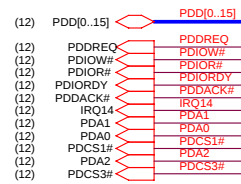
BLUETOOTH CONNECTOR



Mini PCI-E Card 1

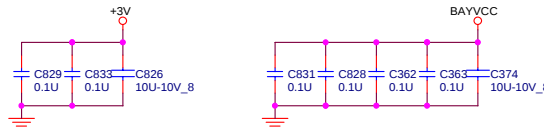
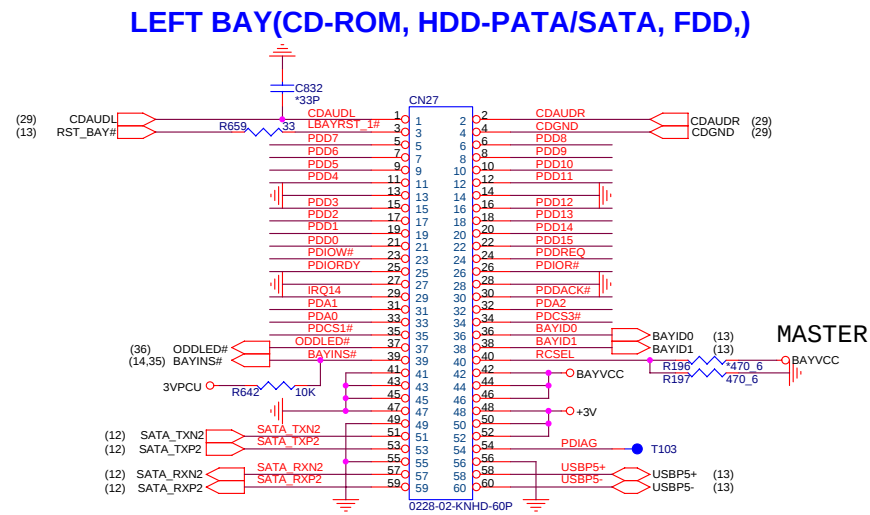


PROJECT : MA6
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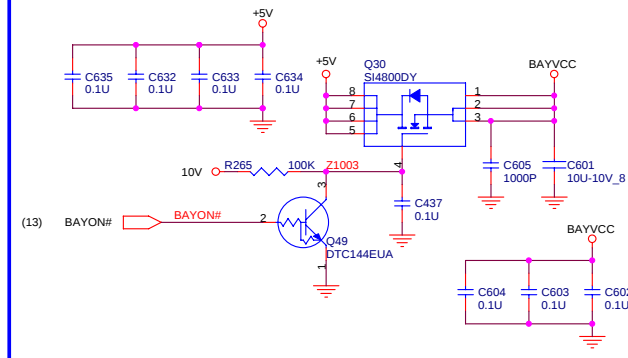
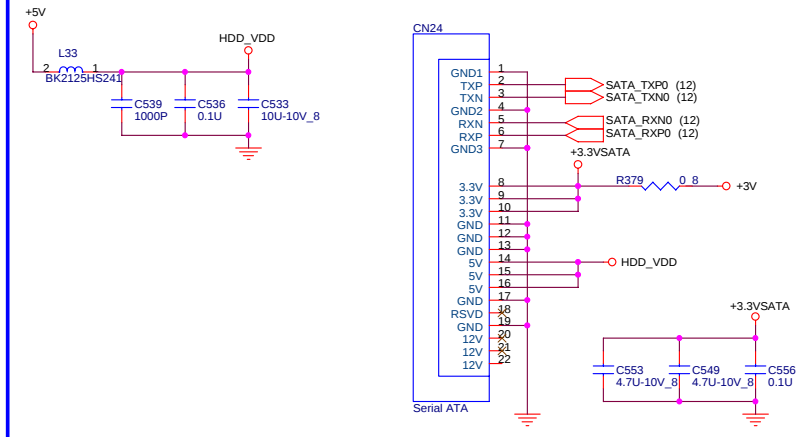


Del Q11

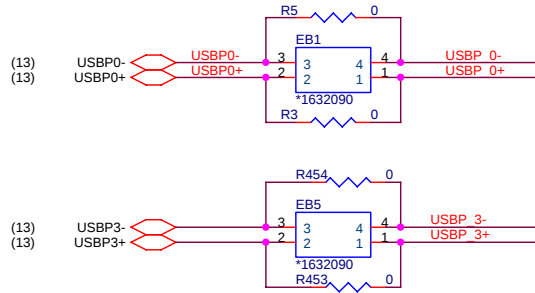
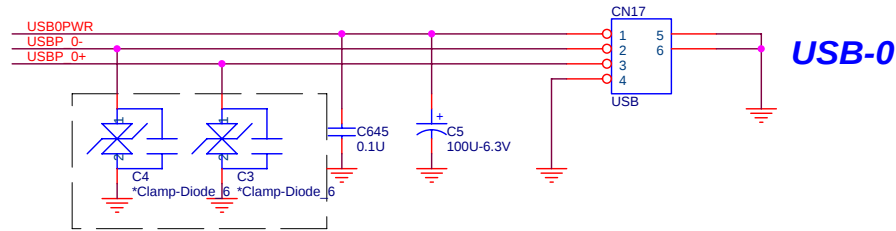
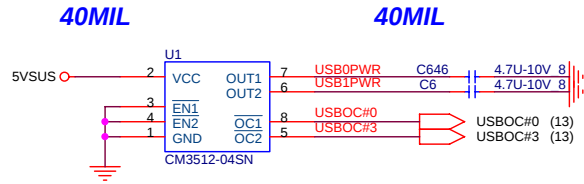
Rev - B



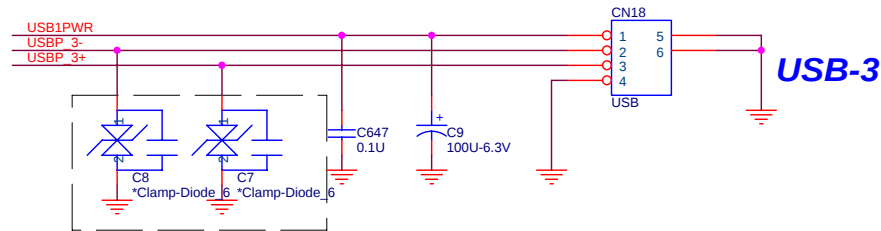
LBAY	ID	STATUS
LEFT BAYID1	LEFT BAYID0	STATUS
0	0	HDD (PATA)
0	1	ODD
1	0	HDD (SATA)
1	1	



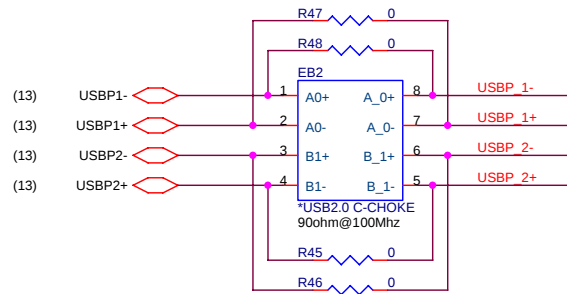
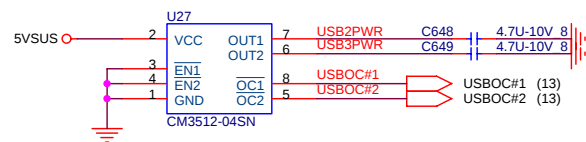
LEFT SIDE



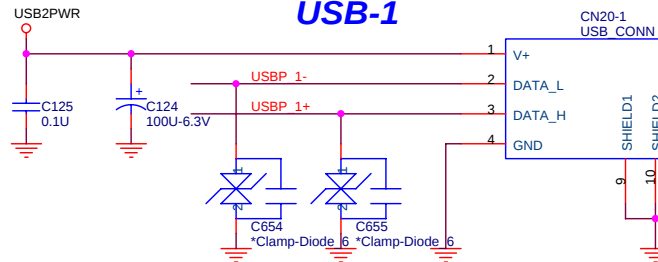
LEFT SIDE



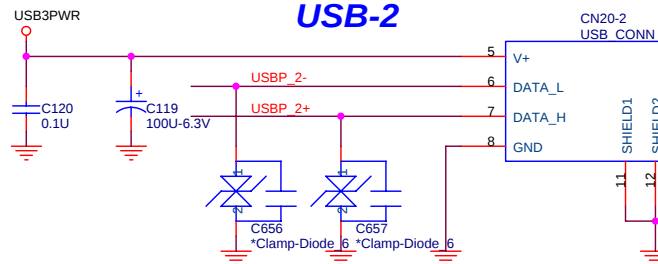
40MIL



USB-1



USB-2

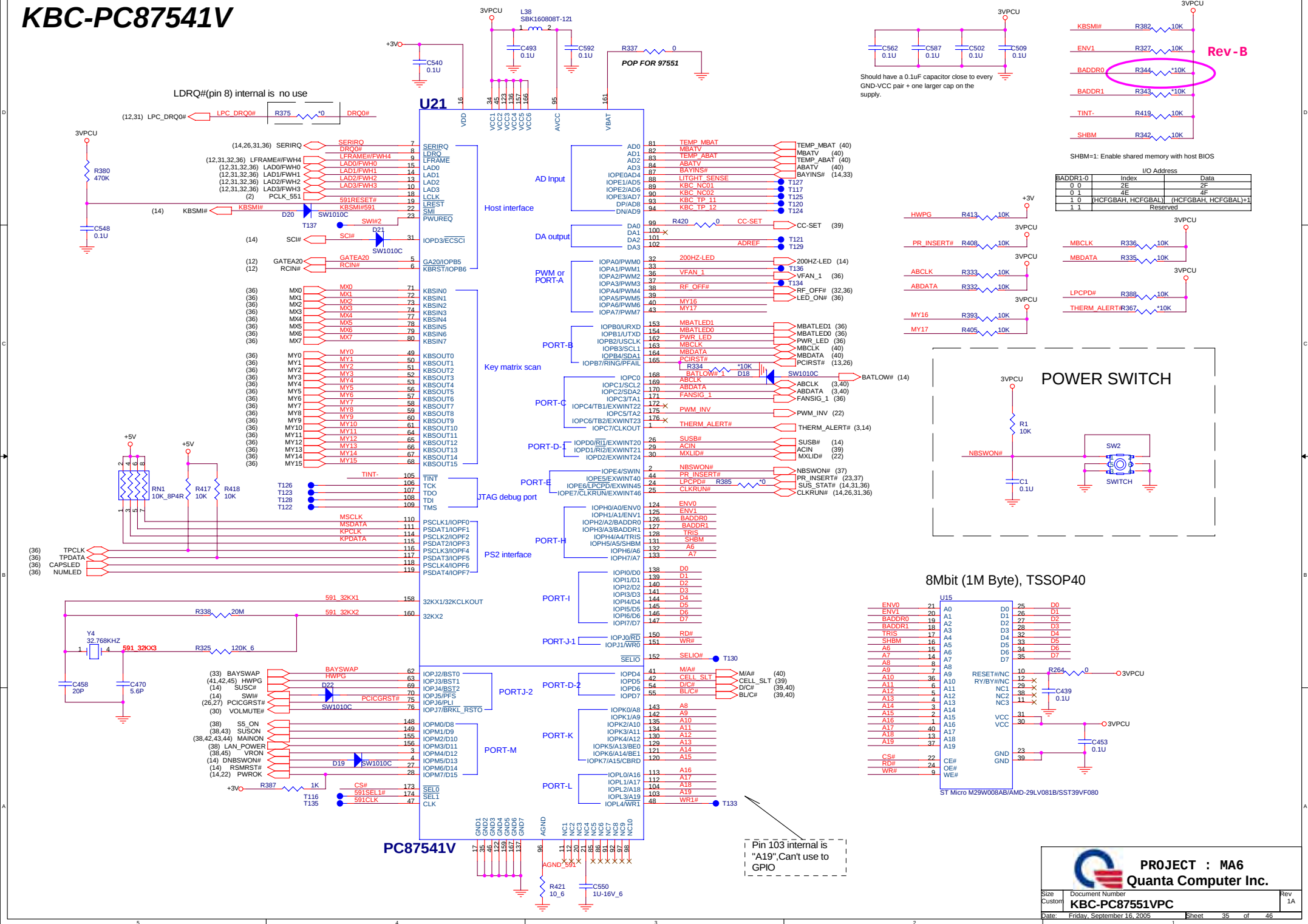


(27,32,37,38,41,43) 5VSUS

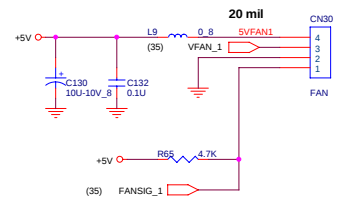


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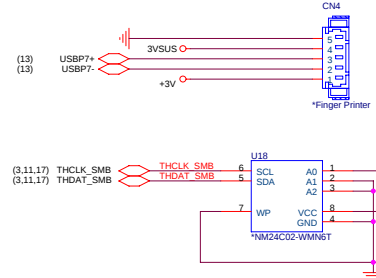
KBC-PC87541V



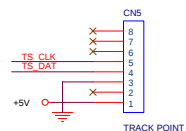
FAN OUT PWM CONNECTOR



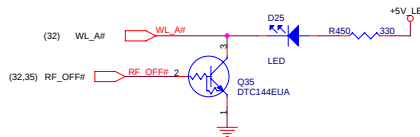
FINGER PRINT



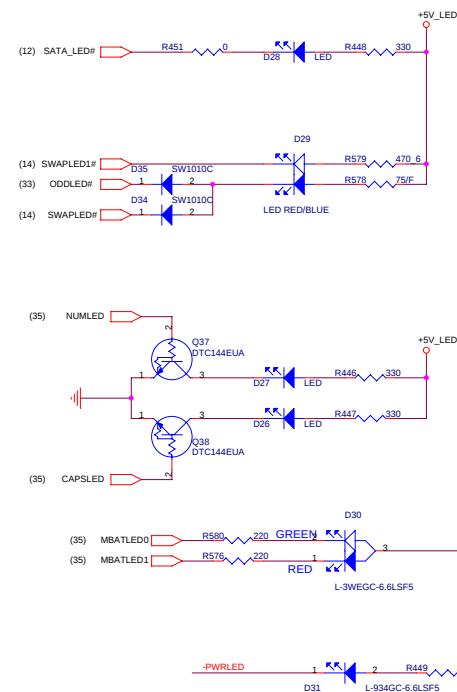
TRACK POINT



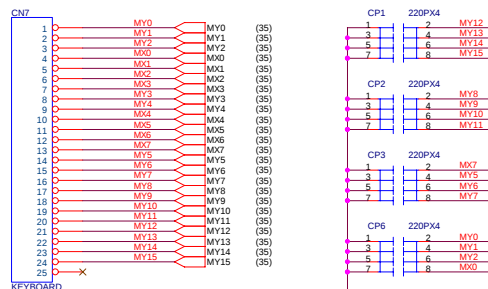
WIRELESS LED



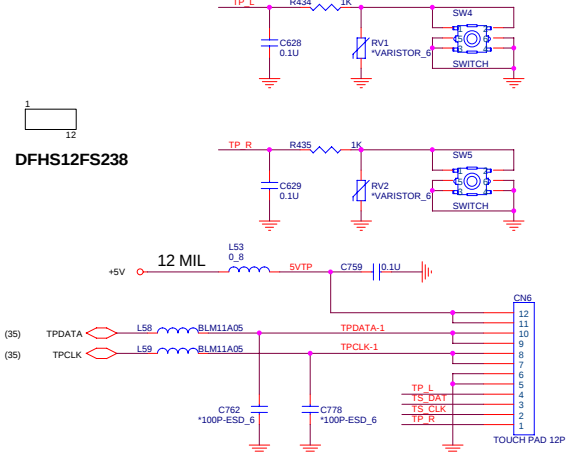
LED INDIATOR



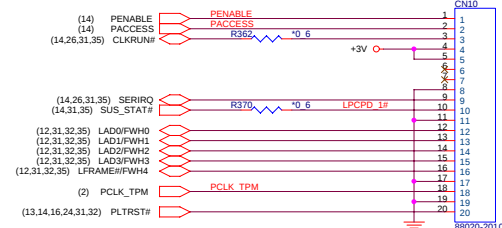
KEYBOARD

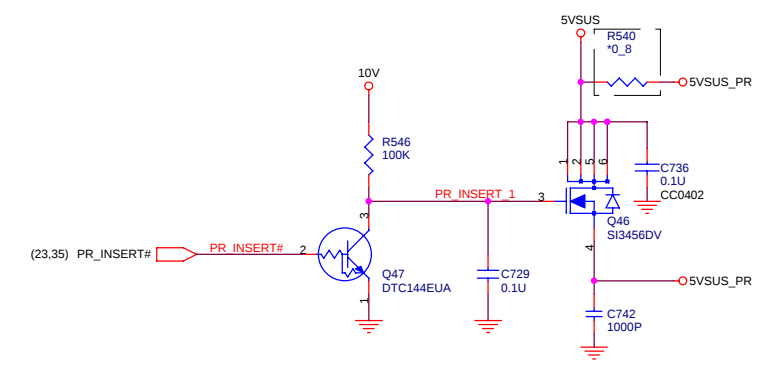
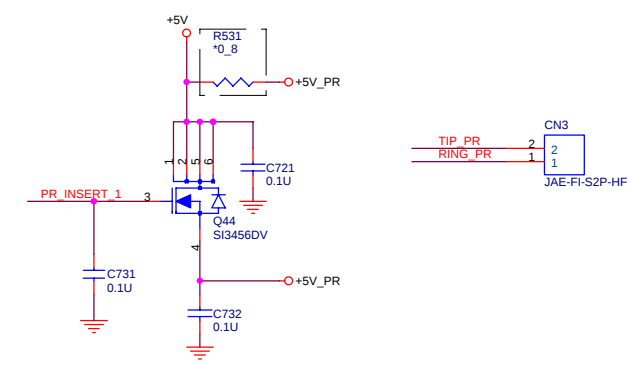
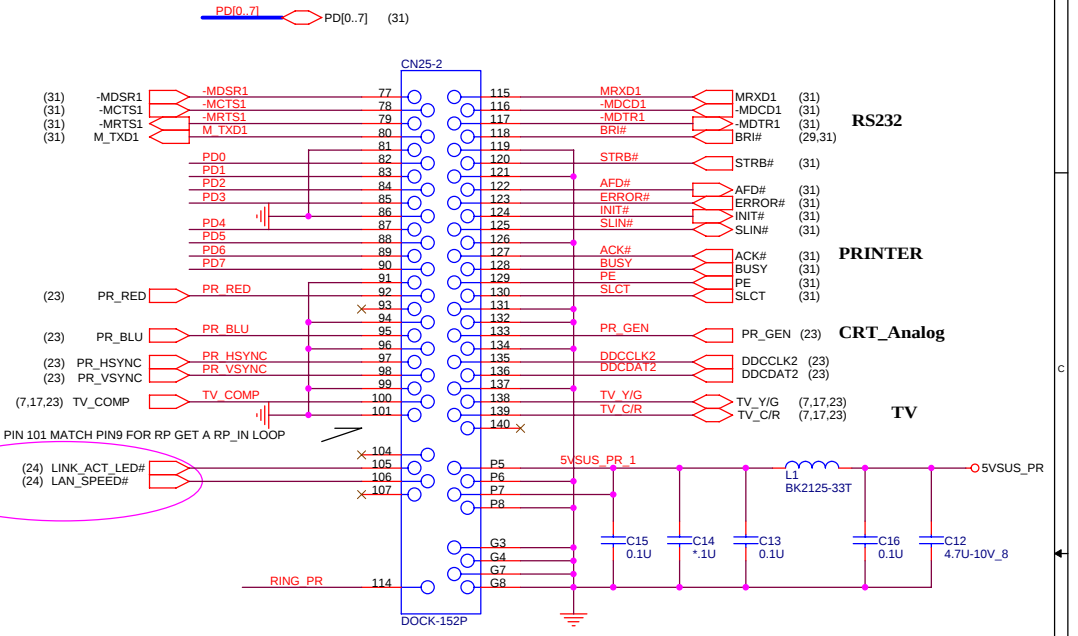
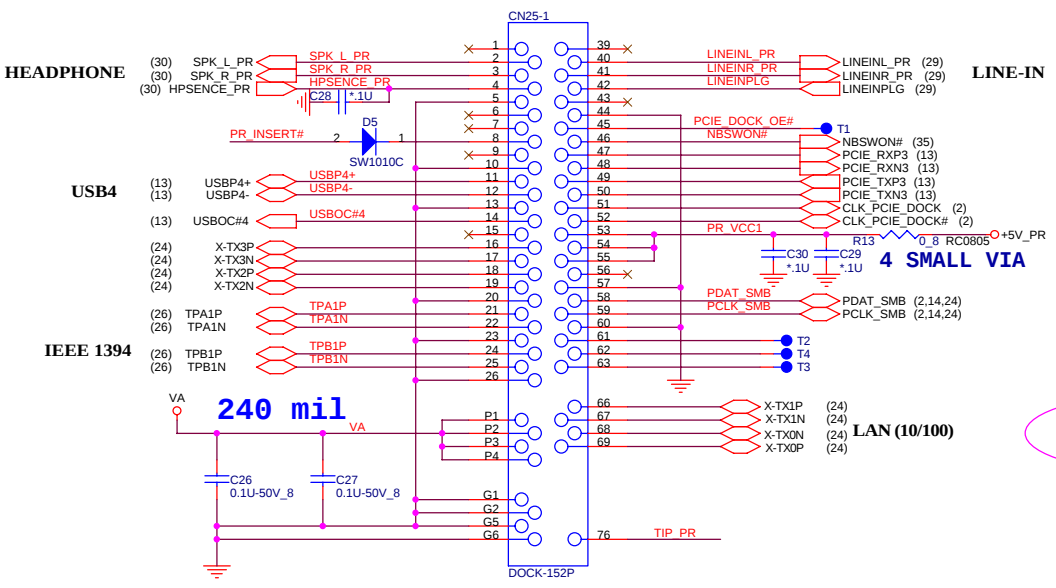


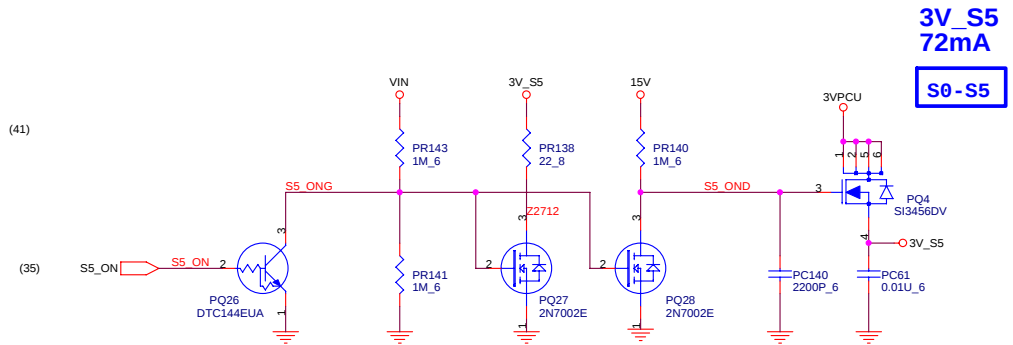
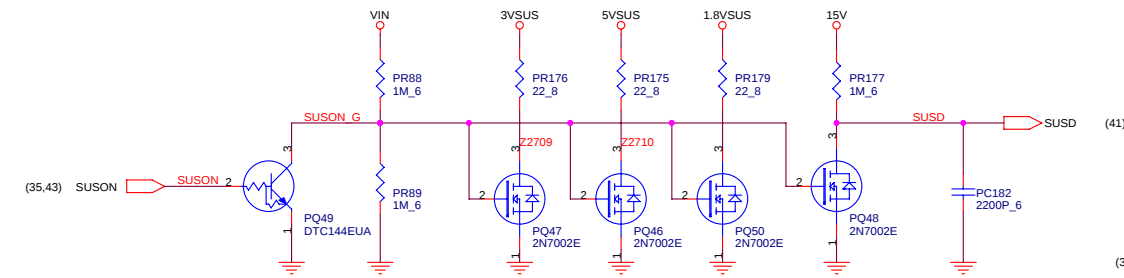
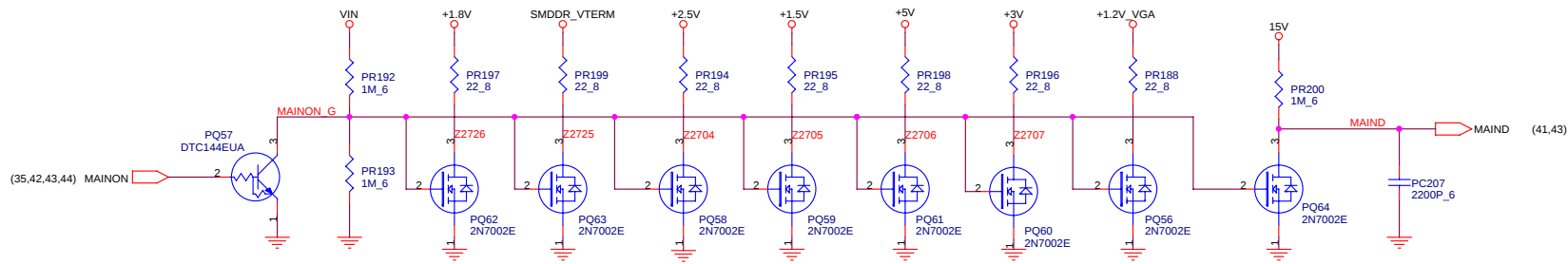
TOUCHPAD



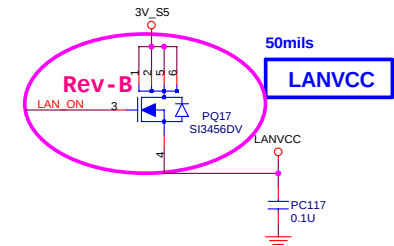
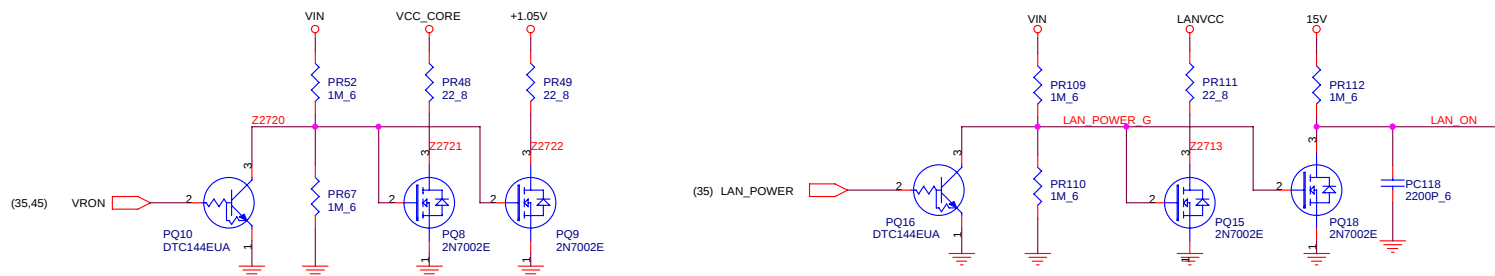
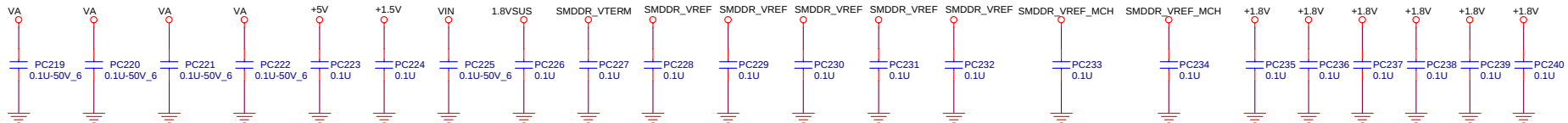
TPM Connector



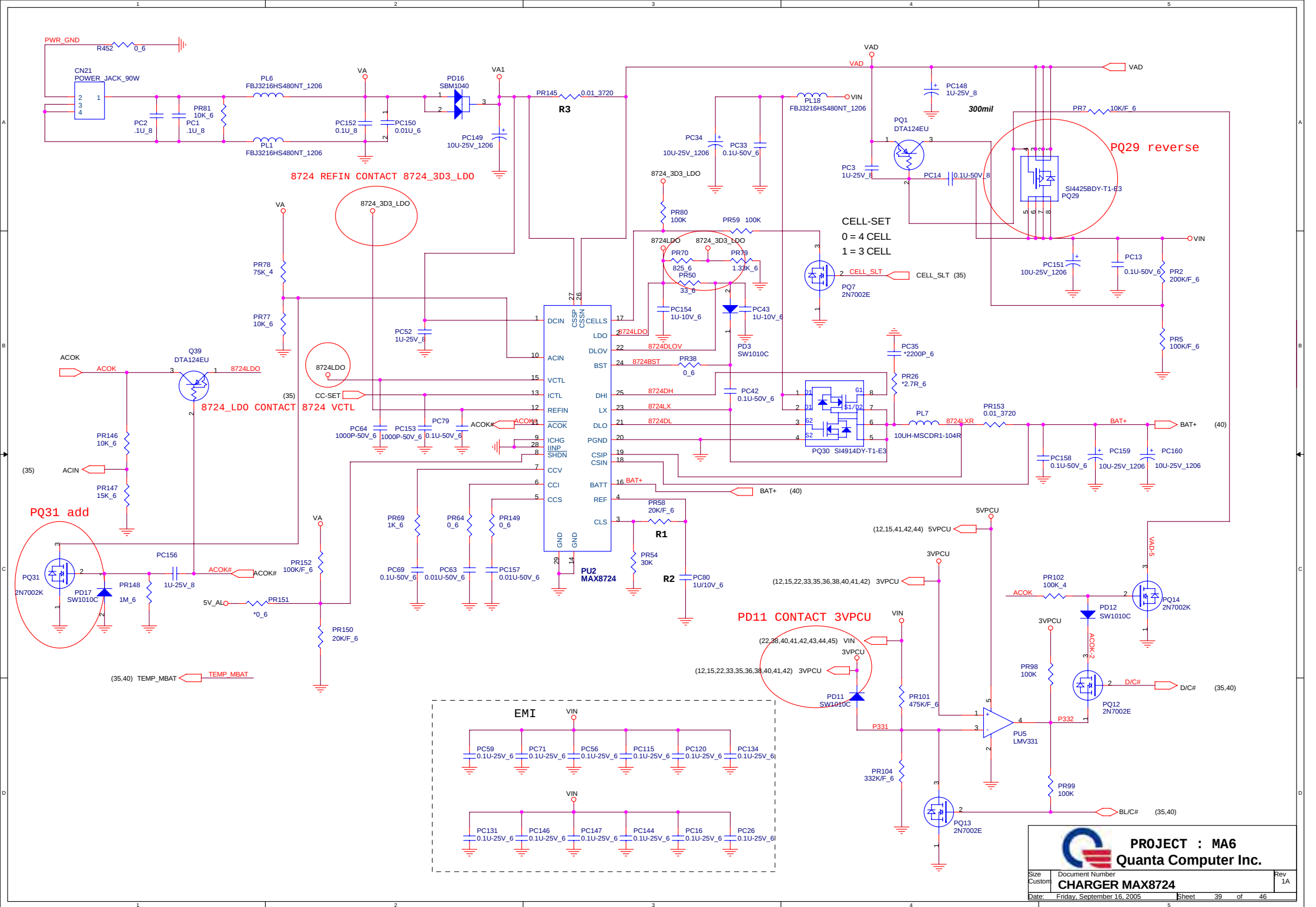


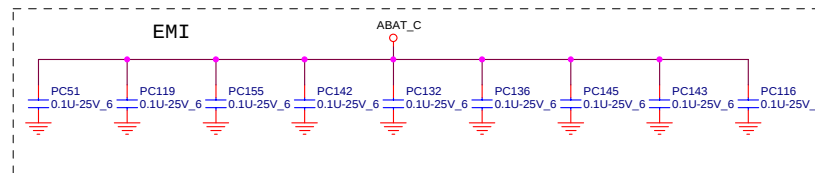
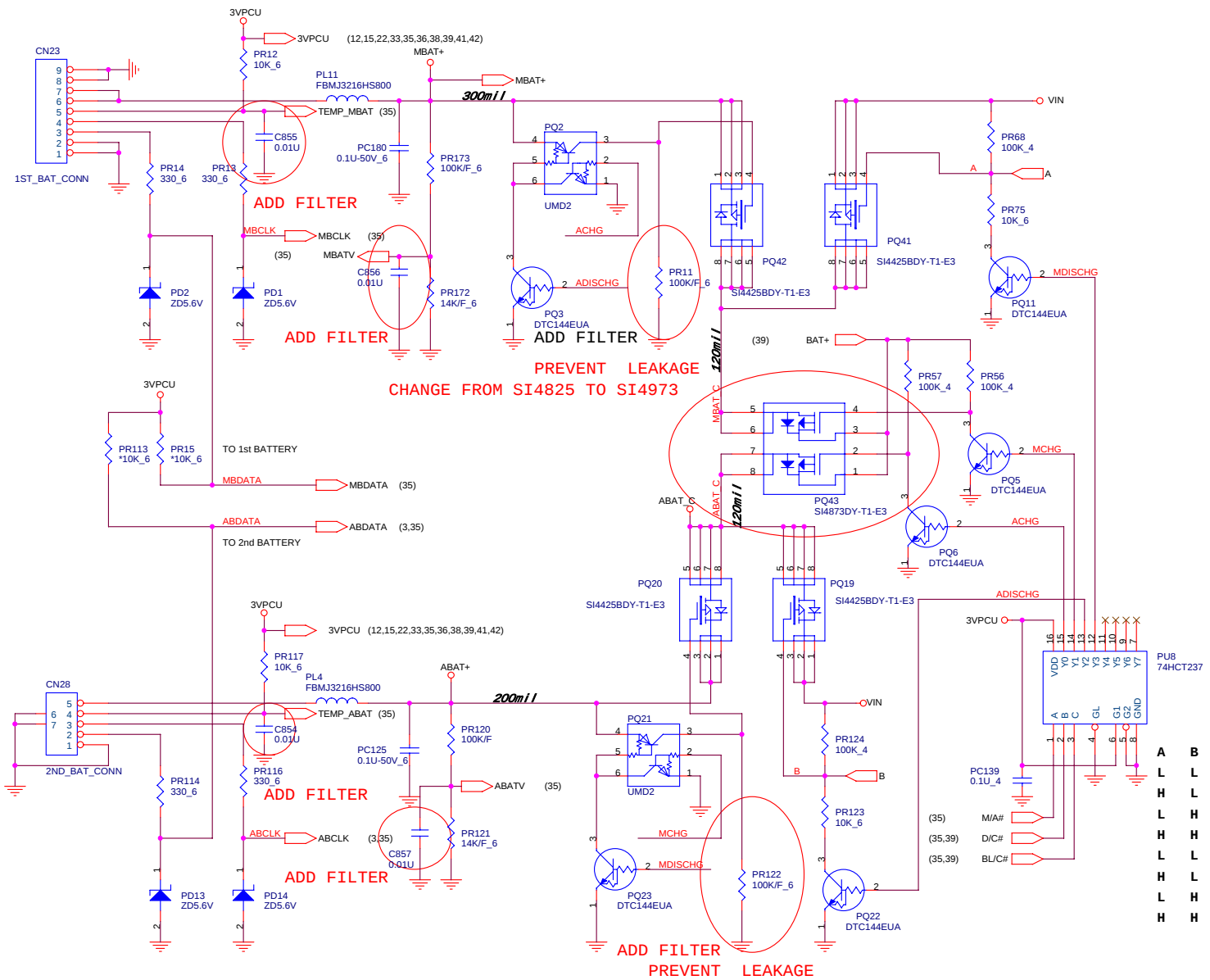


Rev-B EMI



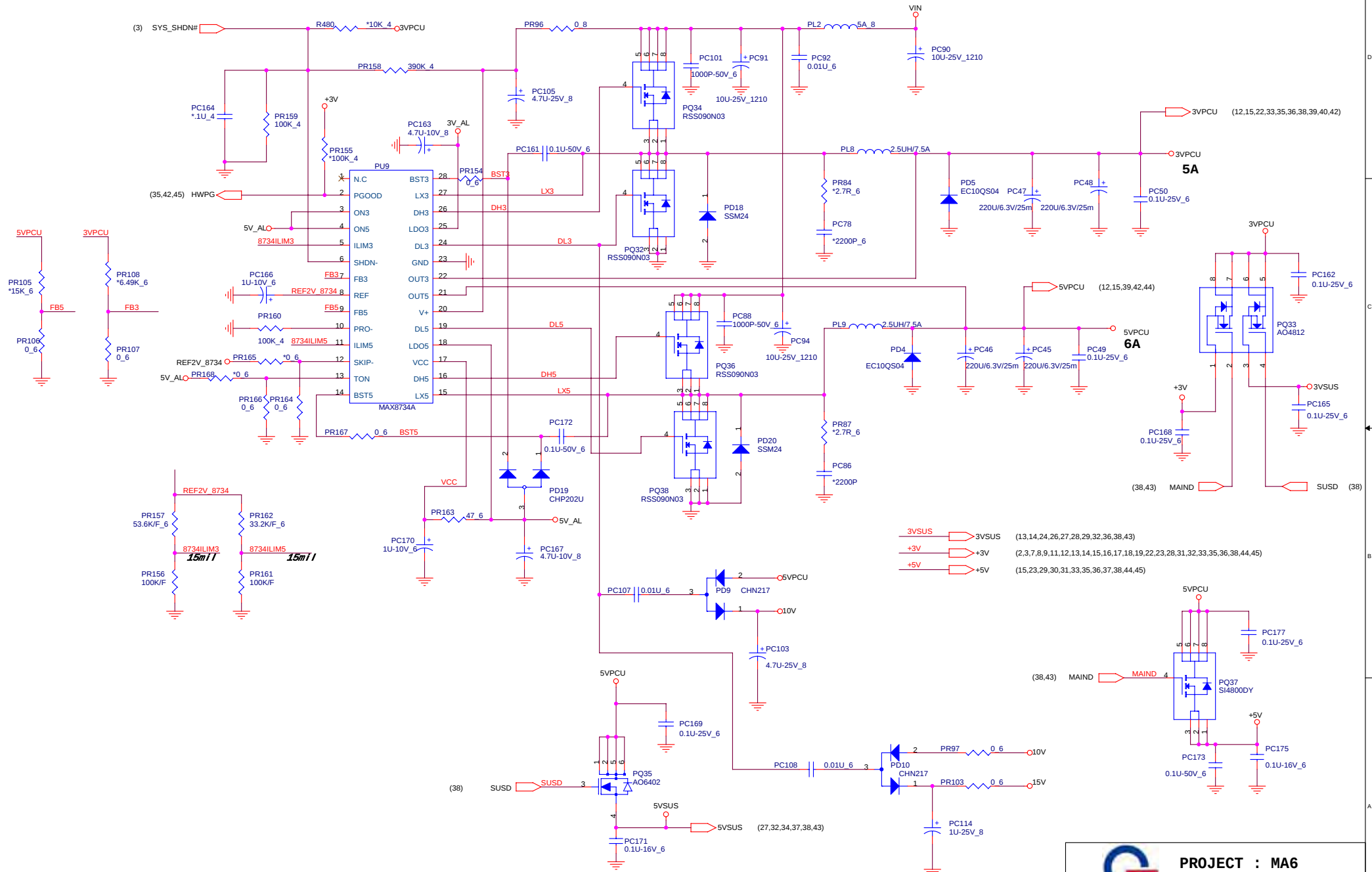
PROJECT : MA6
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	A	B	C	Y0	Y1	Y2	Y3
L	L	L	L	H	L	L	L
H	L	L	L	L	H	L	L
L	H	L	L	L	L	H	L
H	H	L	L	L	L	L	H
L	L	H	L	L	L	L	L
L	H	H	L	L	L	L	L
H	H	H	L	L	L	L	L

DC-DC (MAX8734A)



1.5V/ 6A

Ra

Rb

$$V_{out} = (1 + R_a/R_b) * 1$$

1.05V/ 11A

Rc

Rd

$$V_{out} = (1 + R_c/R_d) * 1$$

2.5V
1.1A

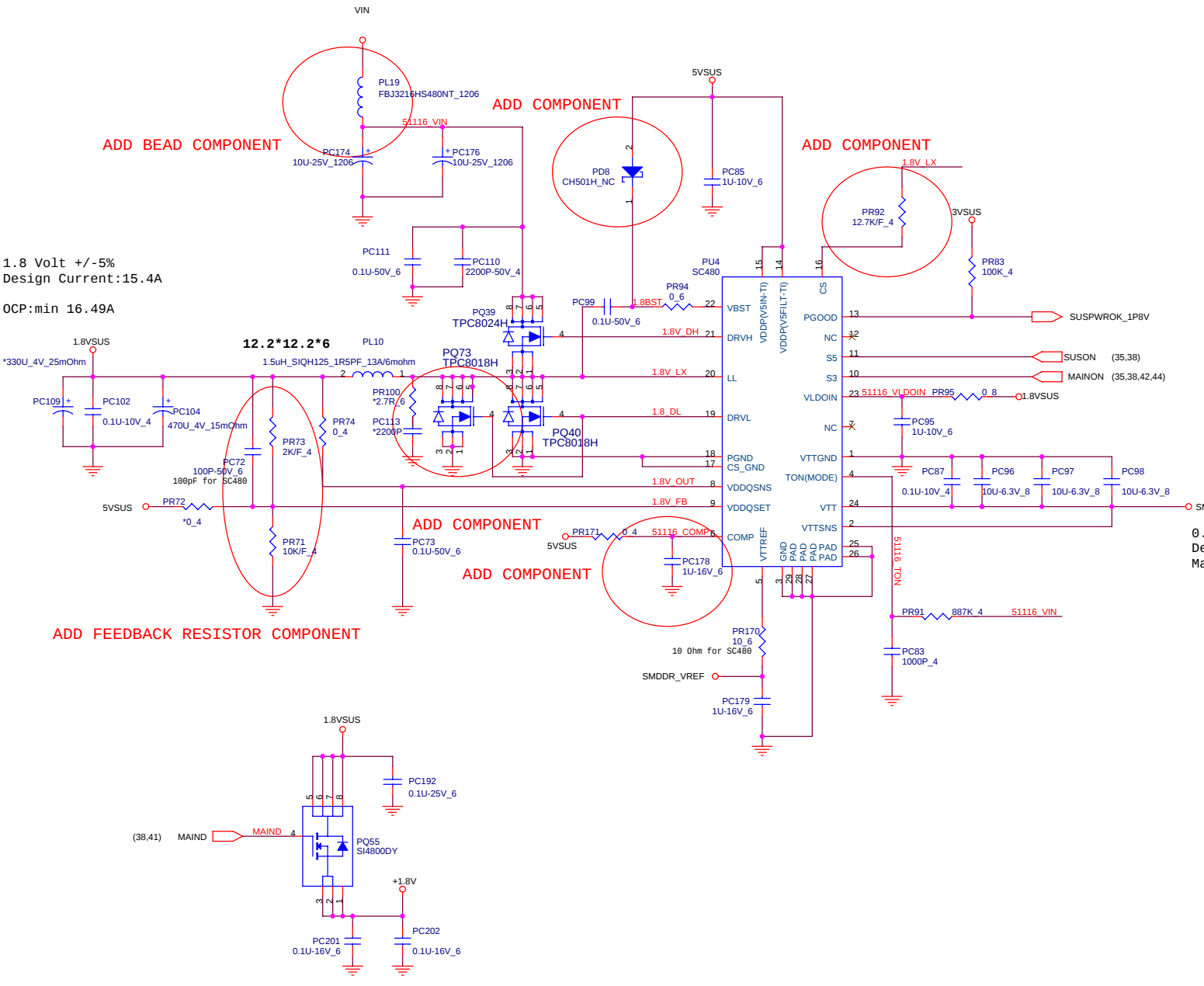
S0

$$V_o = 0.8 (R_1 + R_2) / R_2$$



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Size	Custom	Document Number	MAX8743 1.5VS_5/+1.05V/2.5V	Rev	1A
Date:	Friday, September 16, 2005	Sheet	42	of	46



1.8 Volt +/-5%
Design Current:15.4A
OCP:min 16.49A

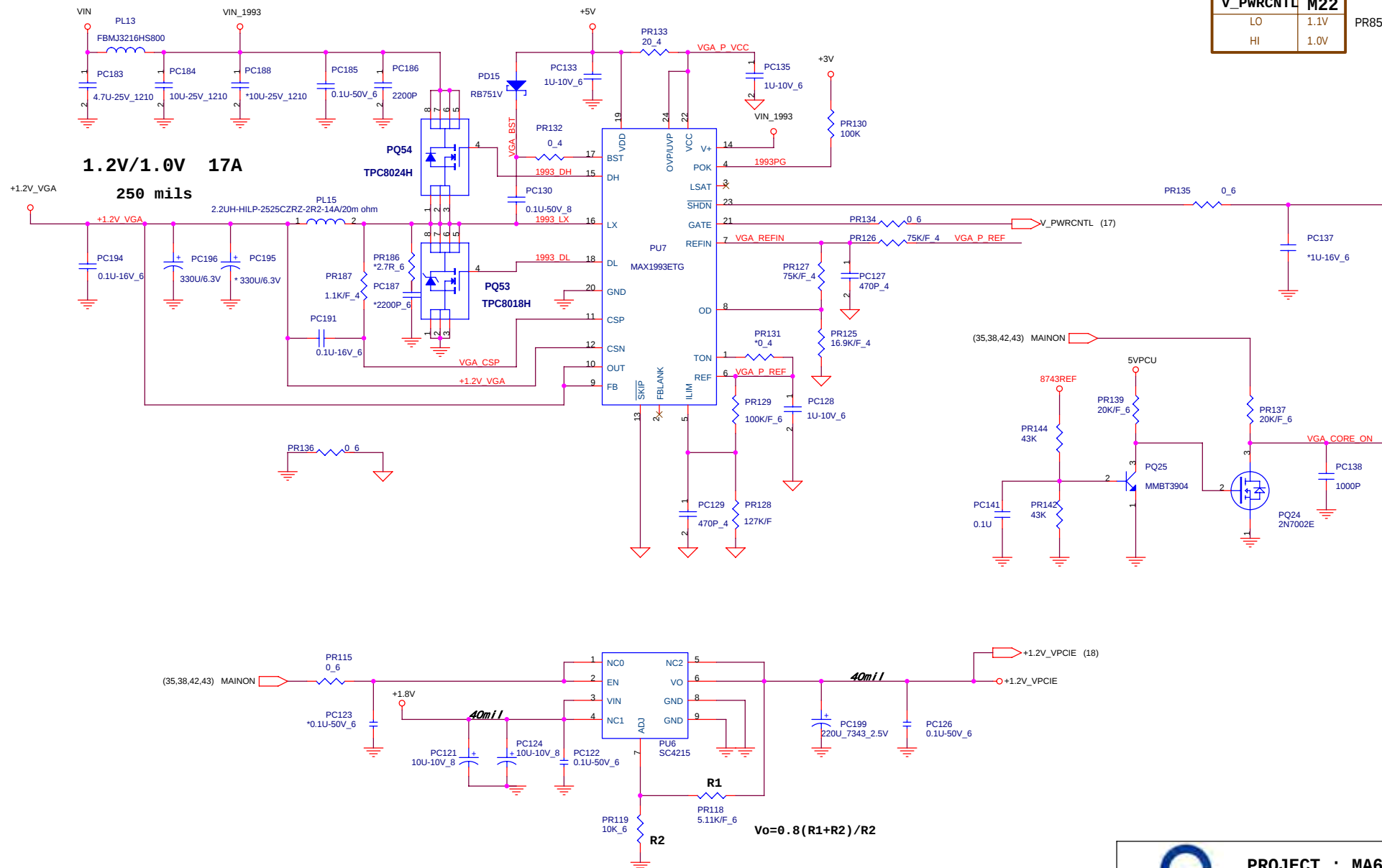
0.9 Volt +/-5%
Design Current:1.2A
Maximum Current: 1.5A

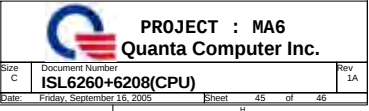
V_PWRCNTL	M24
LO	1.2V
HI	1.0V

PR85=37.4K

V_PWRCNTL	M22
LO	1.1V
HI	1.0V

PR85=16.9K





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

