

PCB STACK UP

Cable Docking

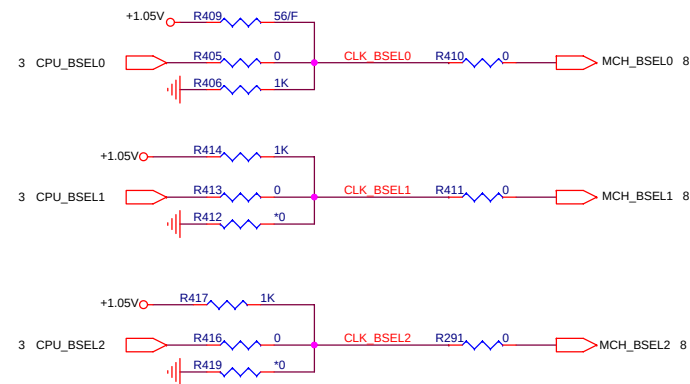
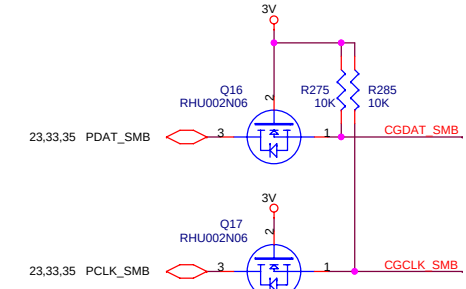
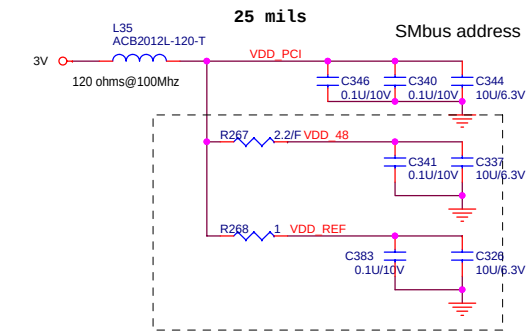
PAG 38

CPU CORE MAX8771
PAG 44



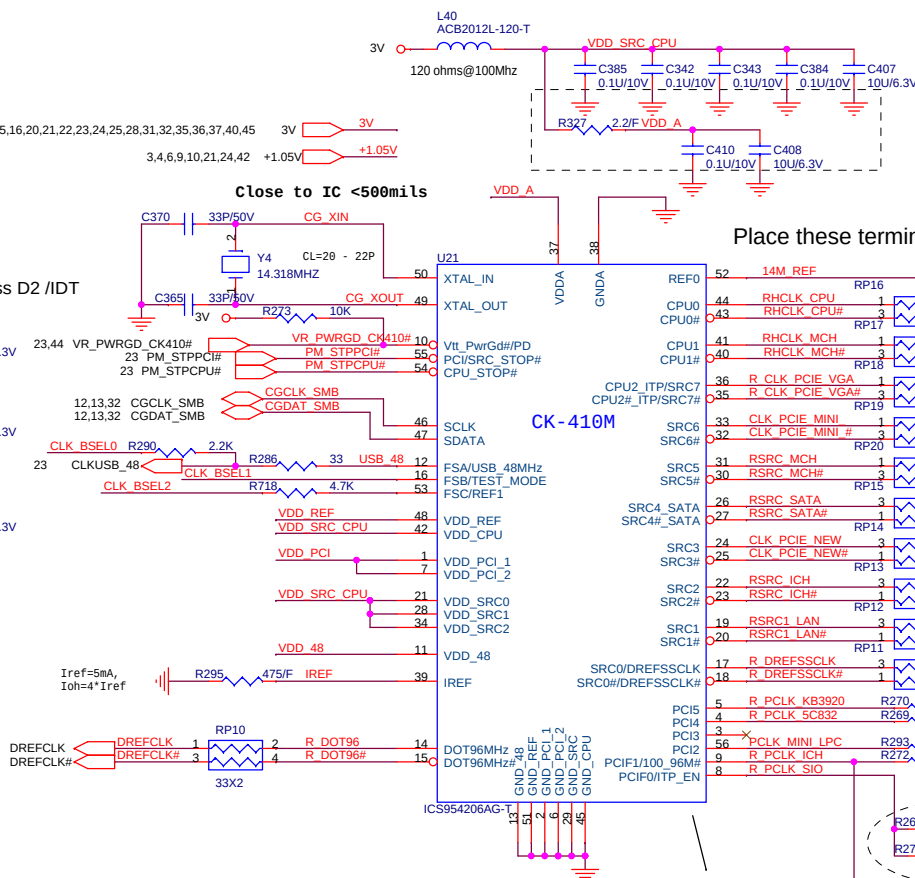
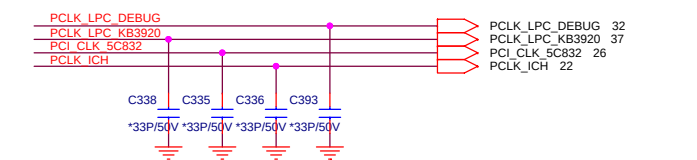
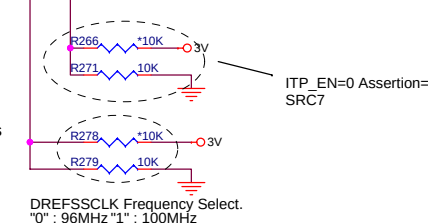
Size Custom	Document Number BLOCK DIAGRAM	Rev 1A
Date: Monday, May 22, 2006		Sheet 1 of 45

FSC	FSB	FSA	CPU	SRC	PCI	DOT
1	0	1	100	100	33	96
0	0	1	133	100	33	96
0	1	1	166	100	33	96
0	1	0	200	100	33	96
0	0	0	266	100	33	96
1	0	0	333	100	33	96
1	1	0	400	100	33	96
1	1	1	200	100	33	96

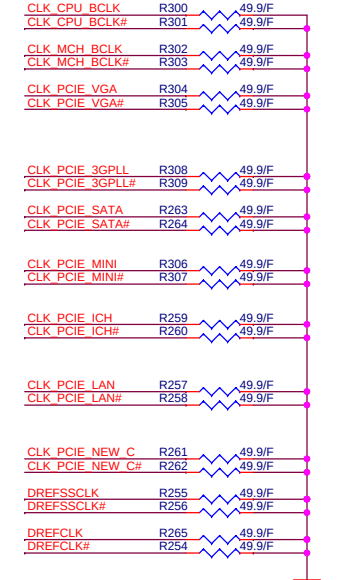


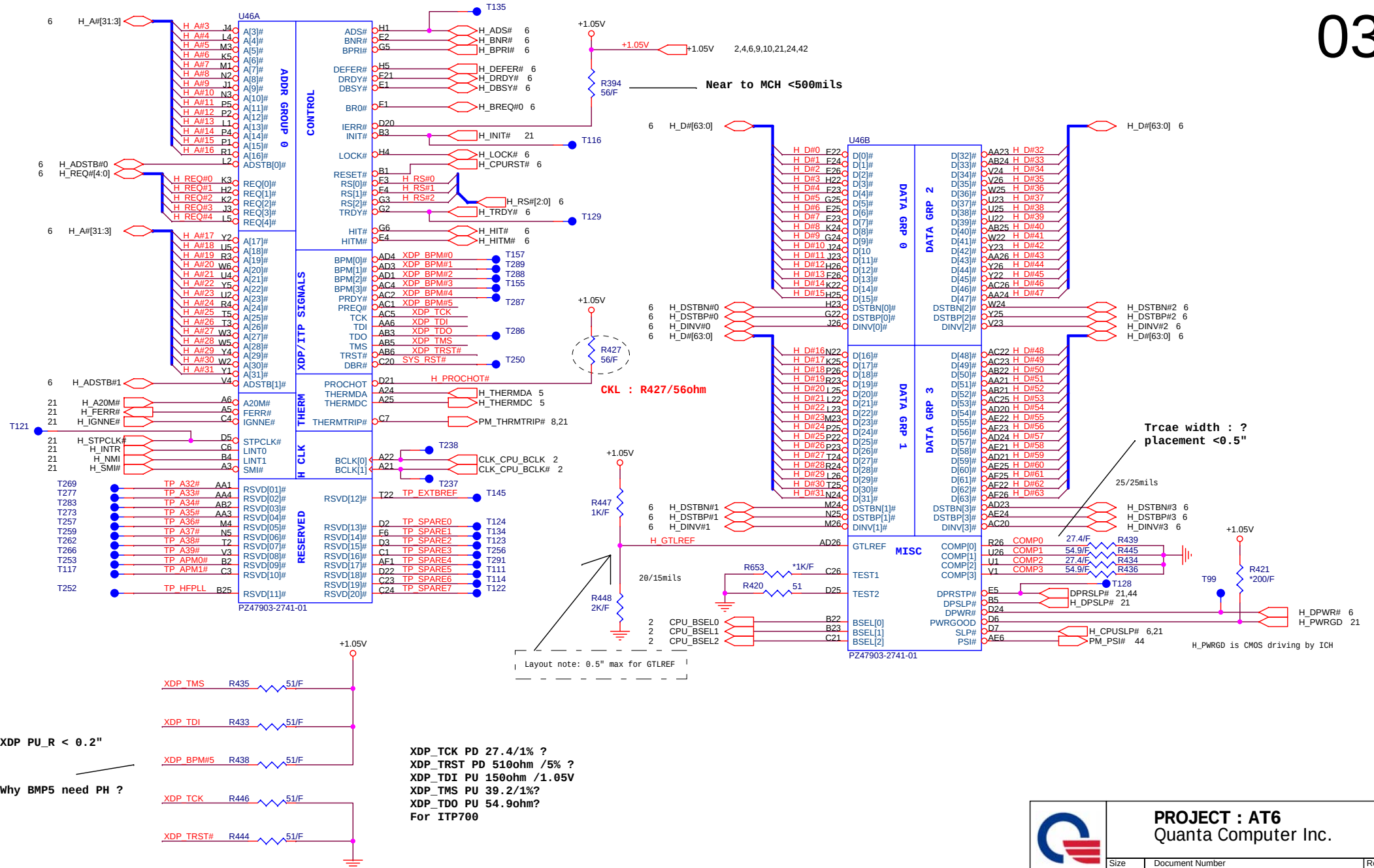
FSB Frequency Select

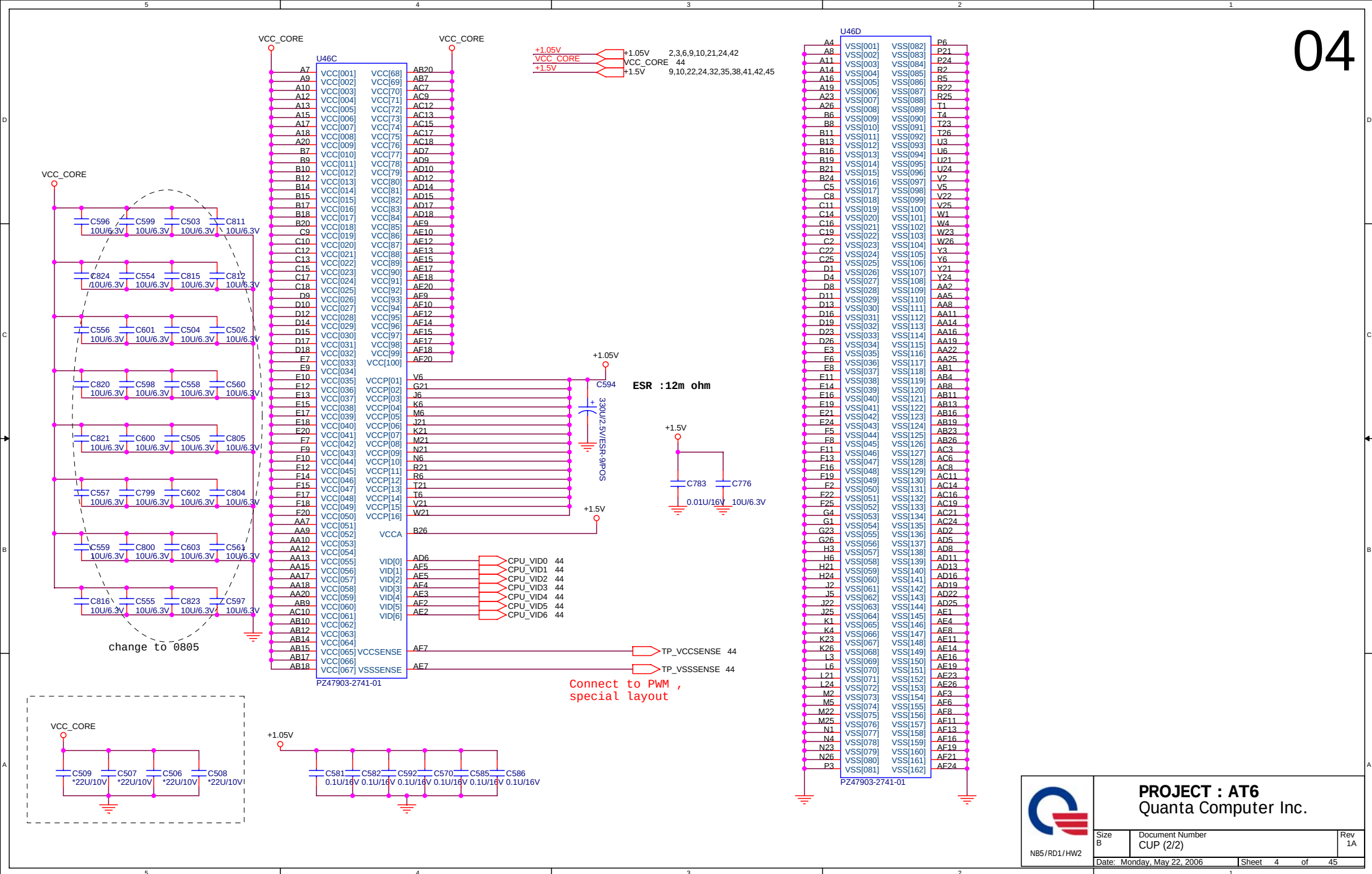
FSB Freq (Mhz)	CPU DRIVEN (default)	533	667
R405=0	R405=0	R405=N0 STUFF	R405=N0 STUFF
R406=1K	R406=1K	R409=56/F	R409=56/F
R413=0	R413=0	R413=N0 STUFF	R413=N0 STUFF
R414=1K	R414=1K	R412=0	R414=1K
R416=0	R416=0	R416=N0 STUFF	R416=N0 STUFF
R417=1K	R417=1K	R419=0	R419=0

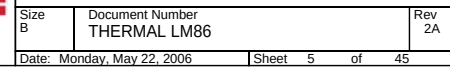
CYP CY28442 /56pins
ICS954206AGT /56pins

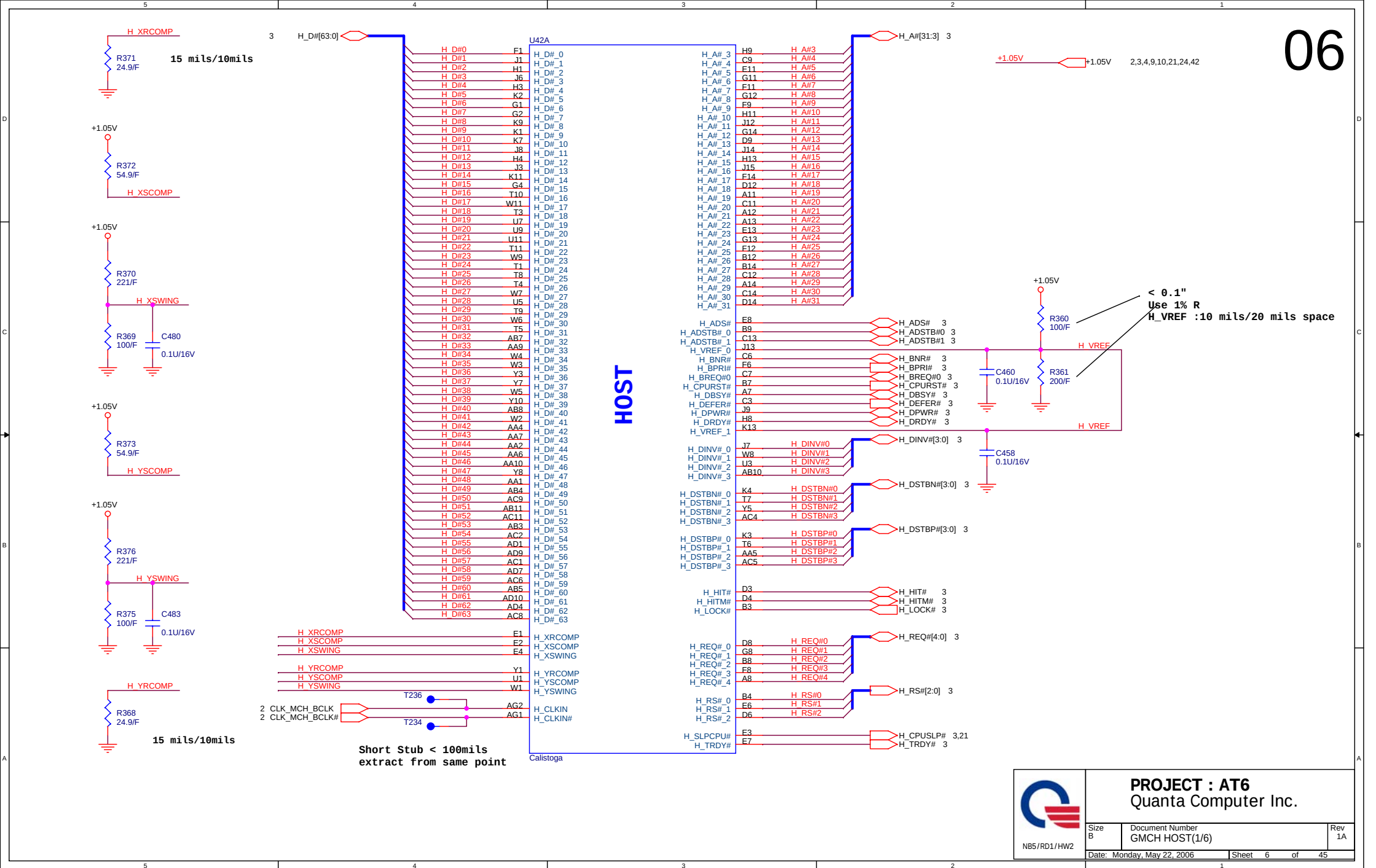
Place these termination to close CK410M.

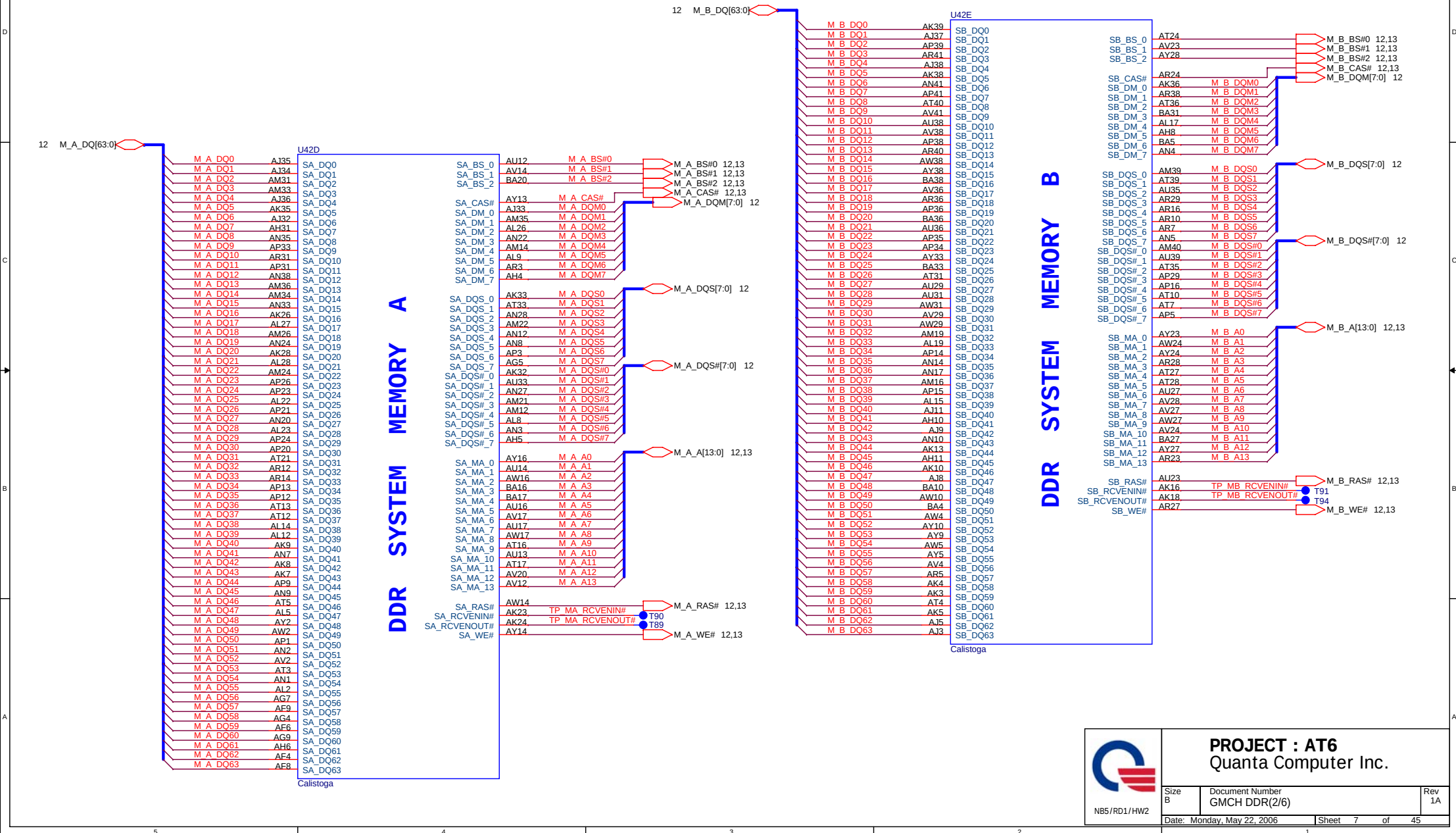
PROJECT : AT6
Quanta Computer Inc.

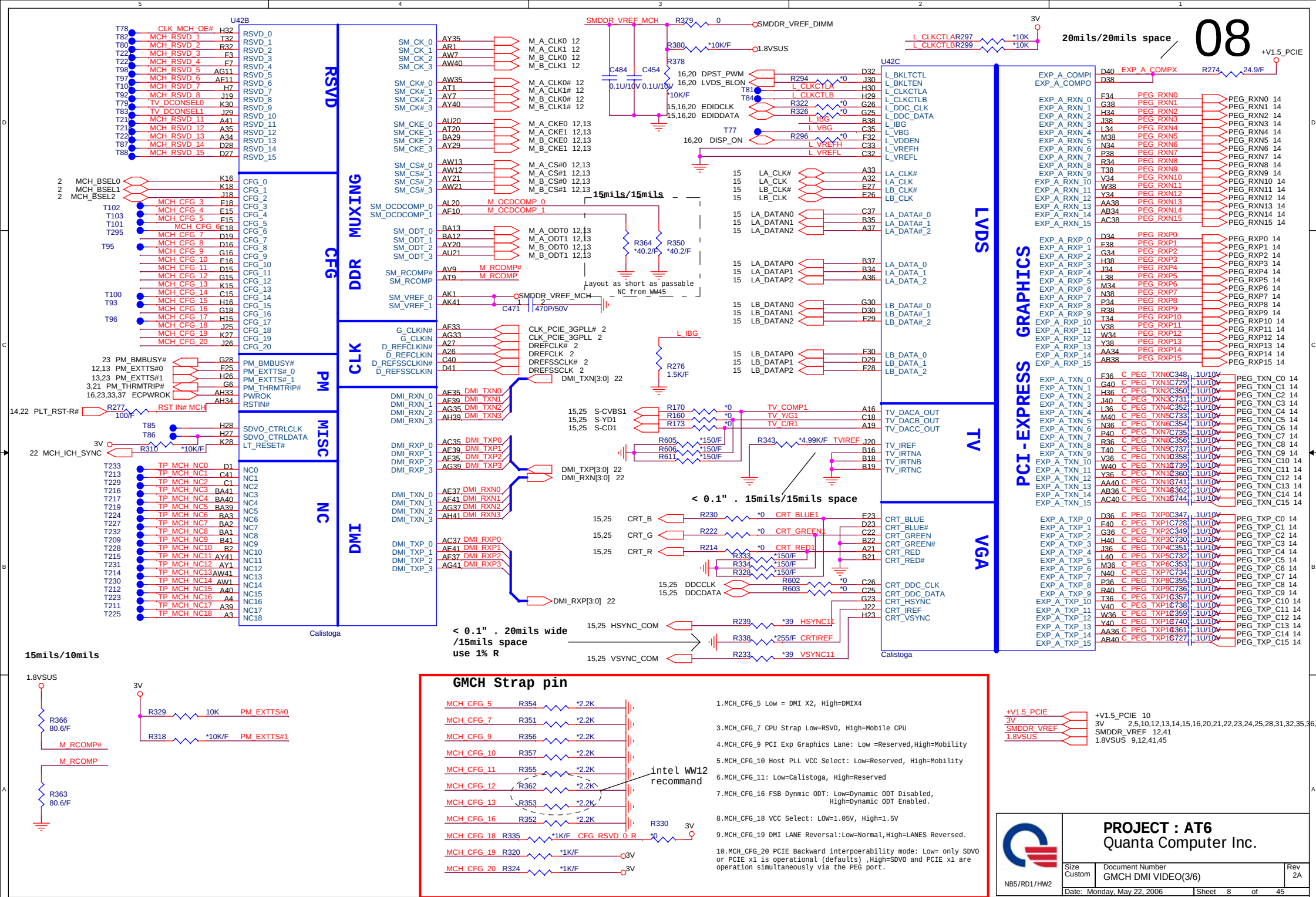


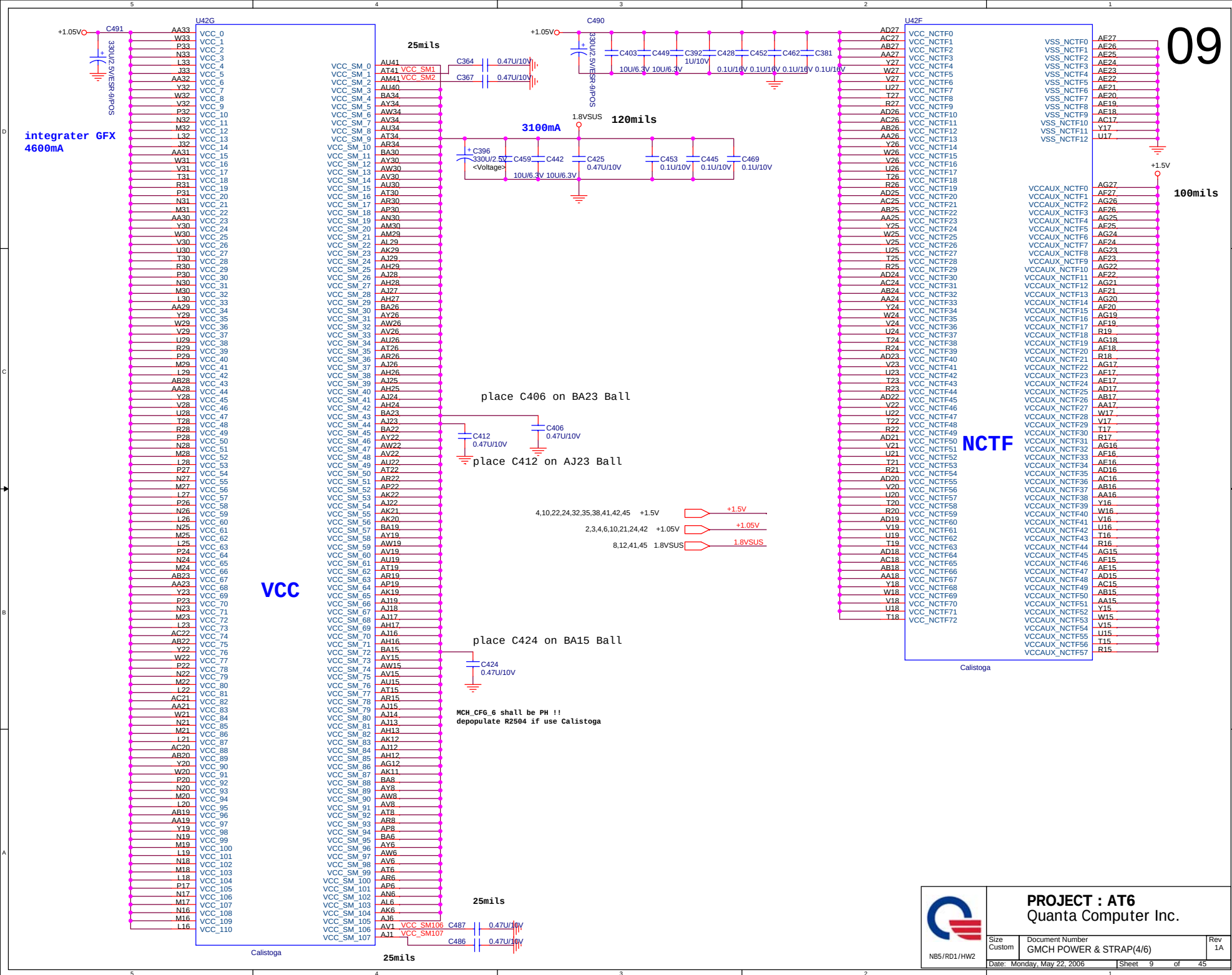


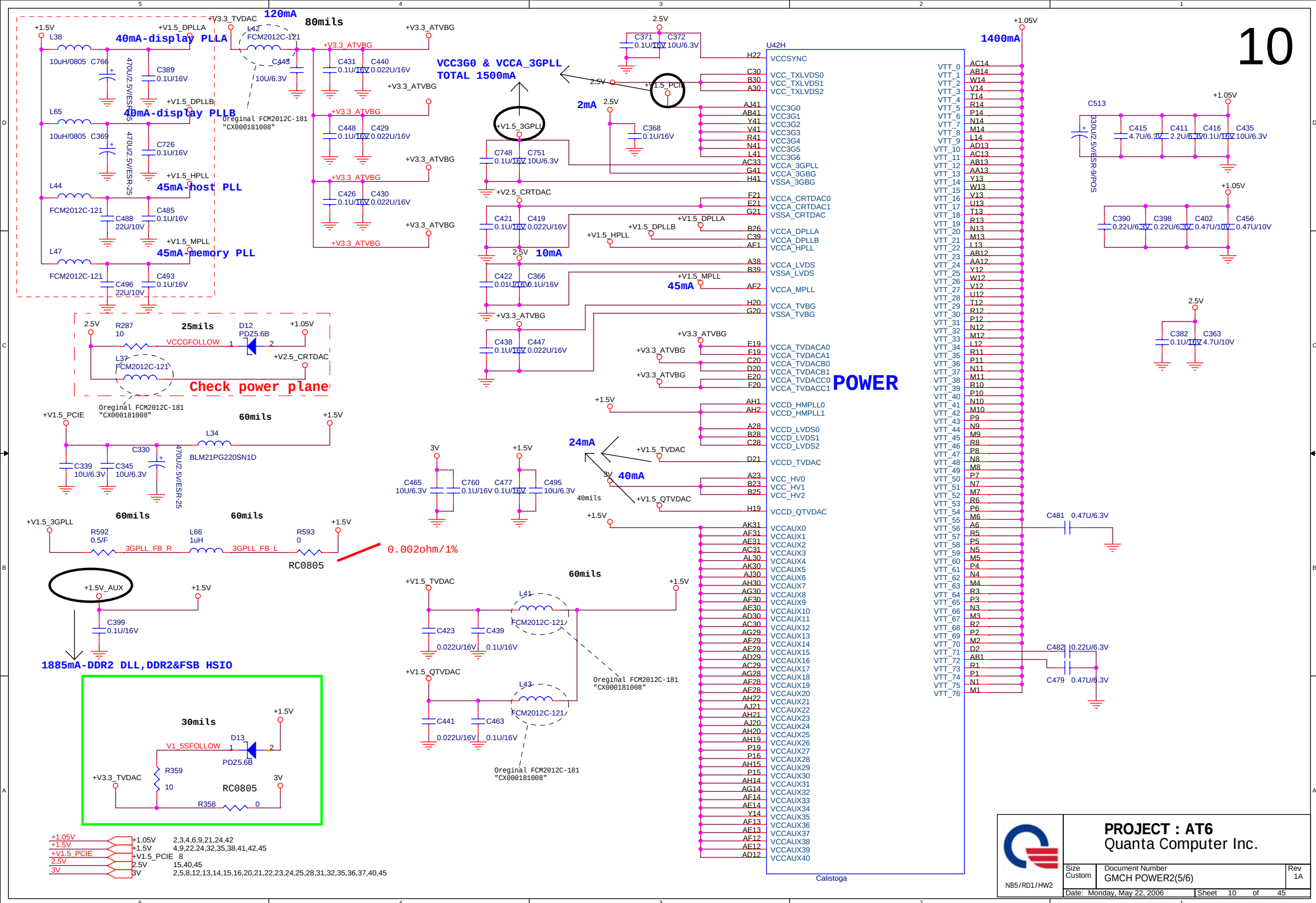












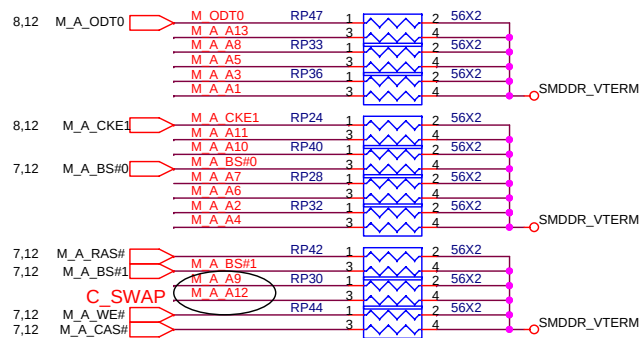
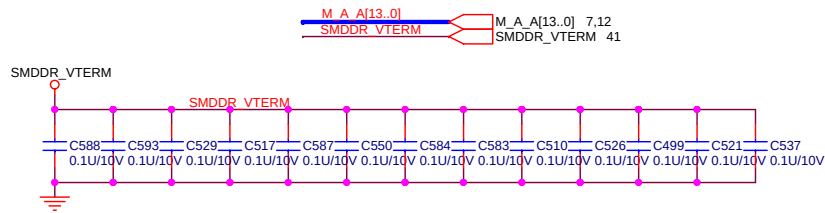


Size Custom	Document Number GMCH GND (6/6)	Rev 1A
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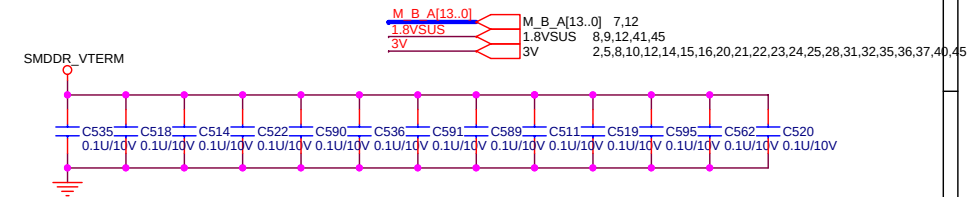
DDRII DUAL CHANNEL A, B.

13

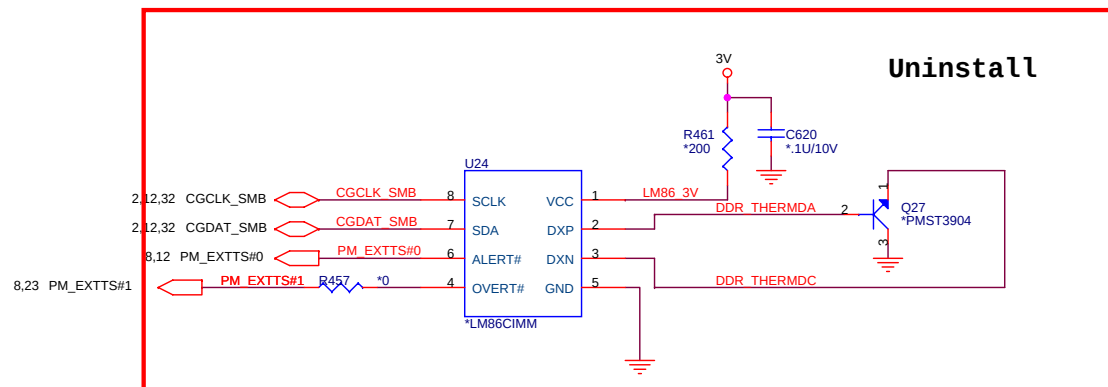
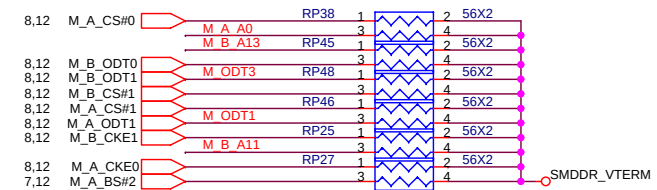
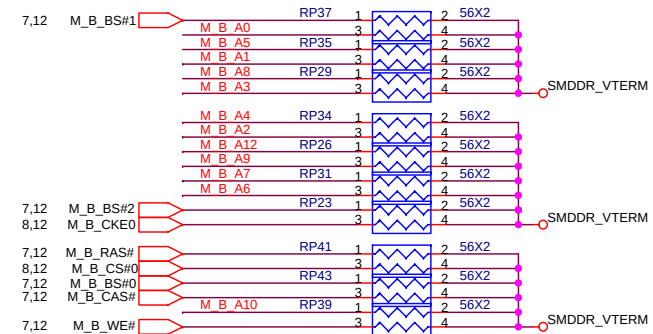
DDRII A CHANNEL

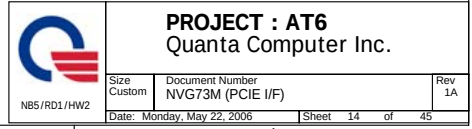


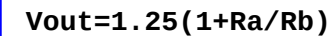
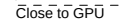
DDRII B CHANNEL



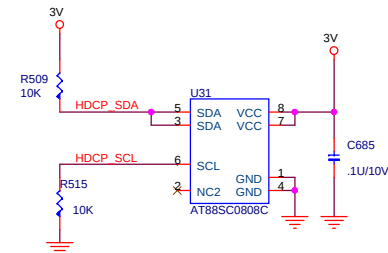
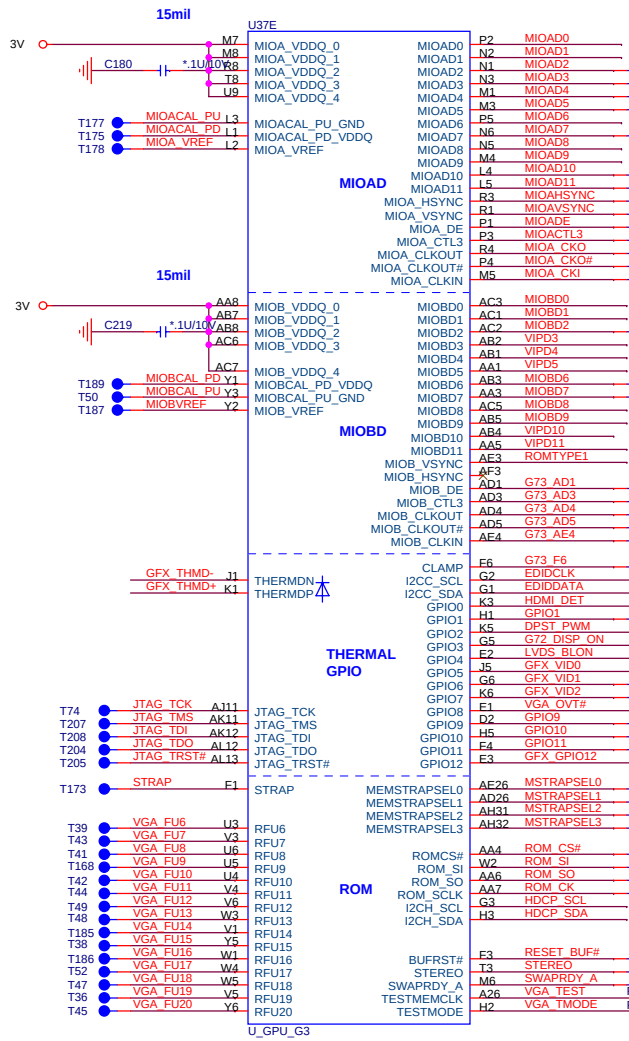
Layout note: Place one cap close to every 2 pullup resistors terminated to SMDR_VTERM



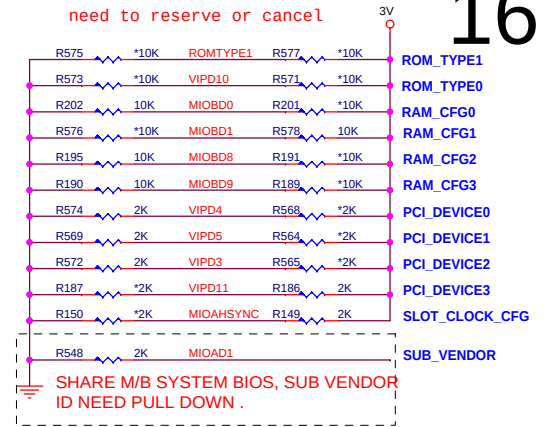
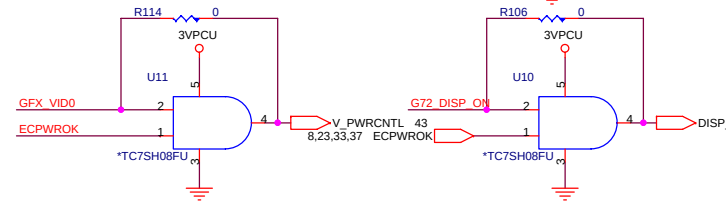
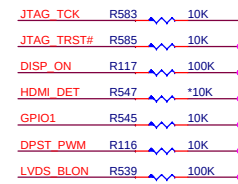
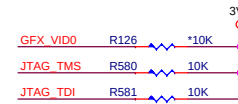




need to reserve or cancel



PCI_DEVICE[3:0]	DESCRIPTION
1000	G72M/G73M
0110	G72M-Z
0111	G72M-V/G73M-V
others	Reserved

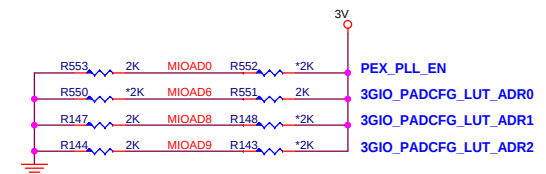
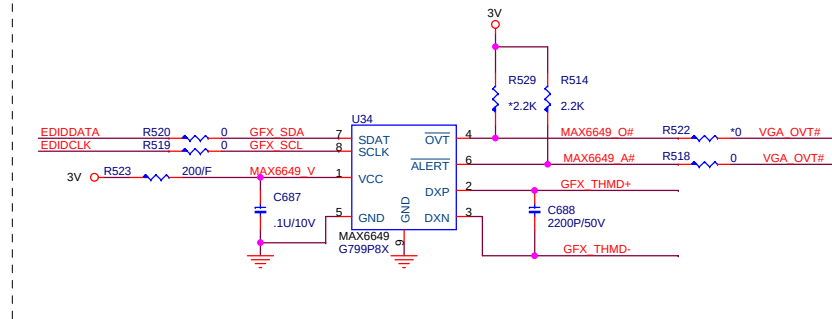
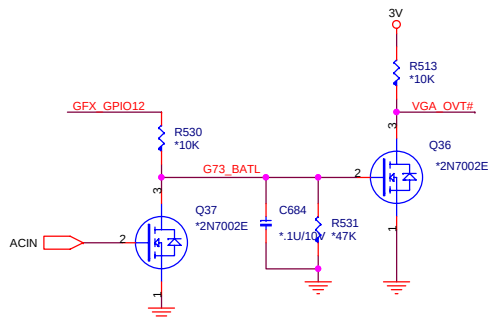


G72M VRAM Configuration Table

RAM_CFG[3:0]	DESCRIPTION	Vendor
0000	DDR2 16Mx16x4, 64bit, 128MB	Elpida
0001	DDR2 16Mx16x4, 64bit, 128MB	Samsung
0010	DDR2 16Mx16x4, 64bit, 128MB	Infineon
0011	DDR2 16Mx16x4, 64bit, 128MB	Hynix
0100	Reserved	
0101	DDR2 32Mx16x4, 64bit, 256MB	Samsung
0110	DDR2 32Mx16x4, 64bit, 256MB	Infineon
0111	DDR2 32Mx16x4, 64bit, 256MB	Hynix
1000	DDR2 16Mx16x2, 32bit, 64MB	Elpida
1001	DDR2 16Mx16x2, 32bit, 64MB	Samsung
1010	DDR2 16Mx16x2, 32bit, 64MB	Infineon
1011	DDR2 16Mx16x2, 32bit, 64MB	Hynix
others	Reserved	

G73M VRAM Configuration Table

RAM_CFG[3:0]	DESCRIPTION	Vendor
0000	DDR2 16Mx16x8, 128bit, 256MB	Elpida
0001	DDR2 16Mx16x8, 128bit, 256MB	Samsung
0010	DDR2 16Mx16x8, 128bit, 256MB	Infineon
0011	DDR2 16Mx16x8, 128bit, 256MB	Hynix
0100	Reserved	
0101	DDR2 32Mx16x8, 128bit, 512MB	Samsung
0110	DDR2 32Mx16x8, 128bit, 512MB	Infineon
0111	DDR2 32Mx16x8, 128bit, 512MB	Hynix
1000	DDR2 16Mx16x4, 64bit, 128MB	Elpida
1001	DDR2 16Mx16x4, 64bit, 128MB	Samsung
1010	DDR2 16Mx16x4, 64bit, 128MB	Infineon
1011	DDR2 16Mx16x4, 64bit, 128MB	Hynix
1100	Reserved	
1101	DDR2 32Mx16x4, 64bit, 256MB	Samsung
1110	DDR2 32Mx16x4, 64bit, 256MB	Infineon
1111	DDR2 32Mx16x4, 64bit, 256MB	Hynix



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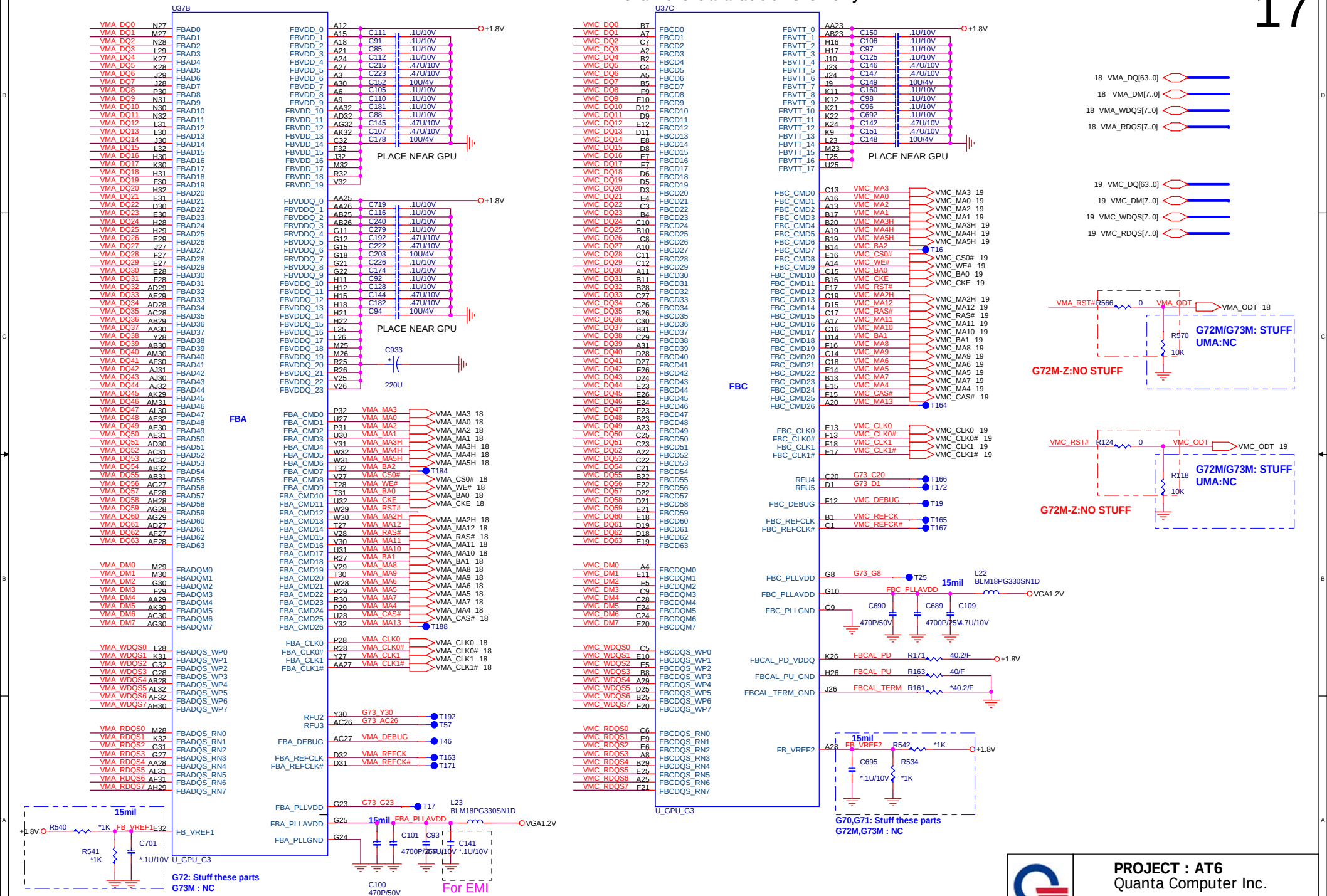
FOR BATTERY MODE FUNCTION
GFX_GPIO12=H ENABLE
GFX_GPIO12=L DISABLE

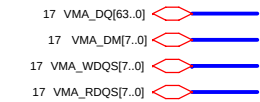
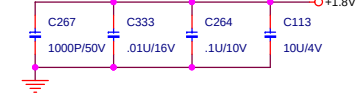
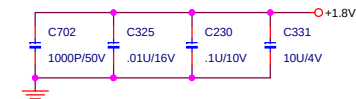
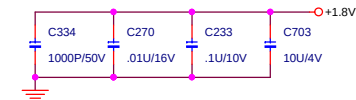
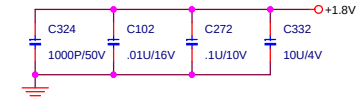
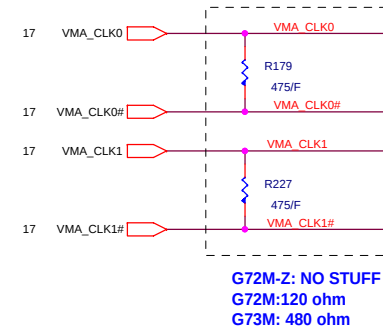
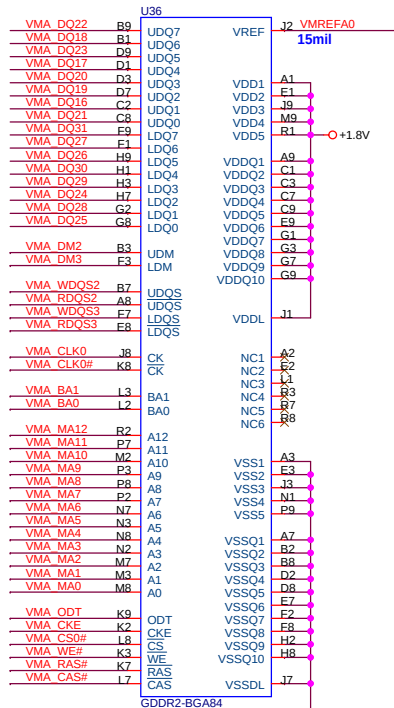
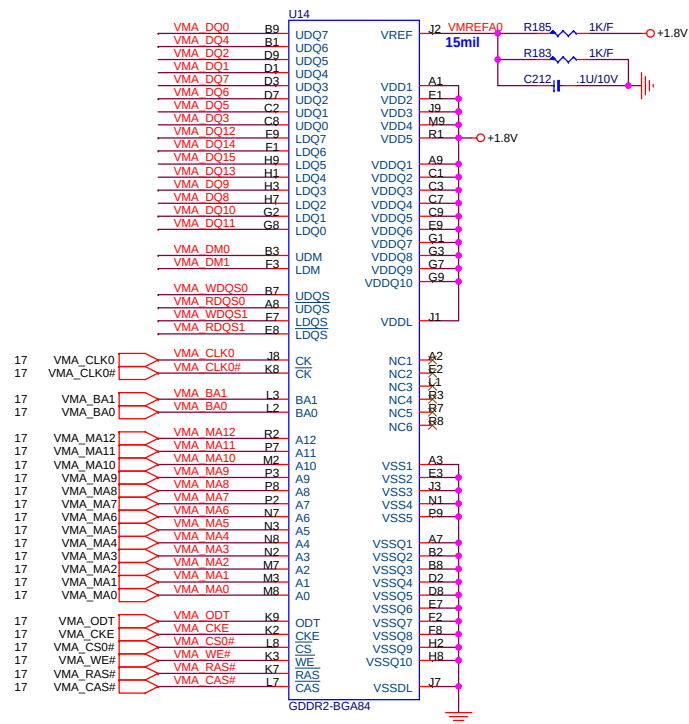
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PROJECT : AT6
Quanta Computer Inc.

Size Custom	Document Number NVG73M (ROM/GPIO/STRAP)	Rev 2A
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256Mb : AKD5JGAT*05

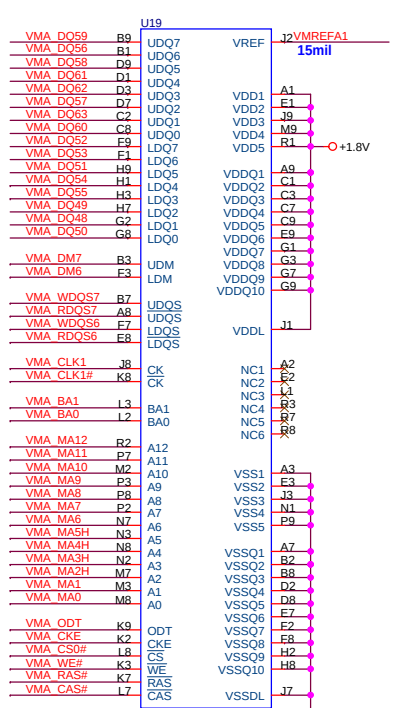
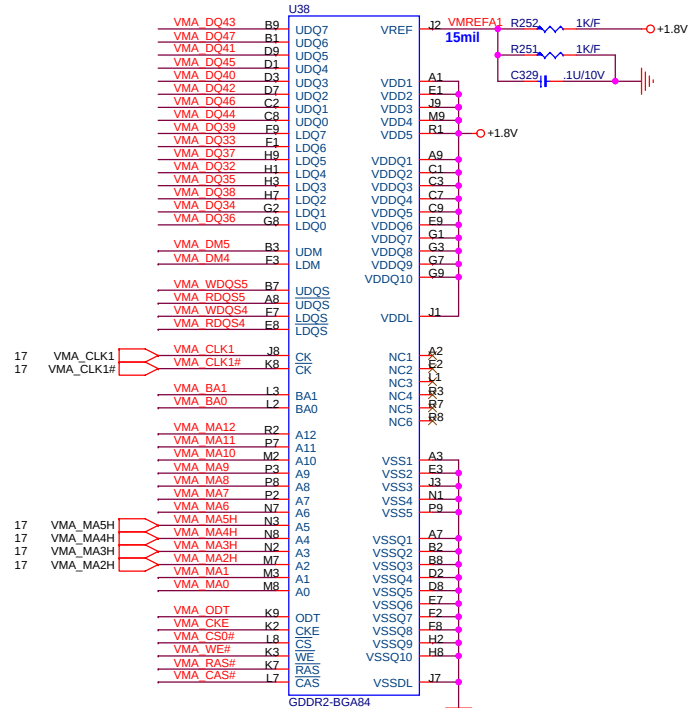
512Mb : AKD59G-T*01



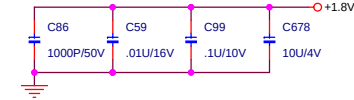
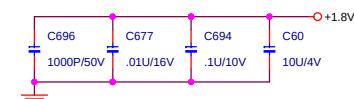
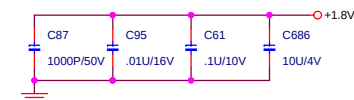
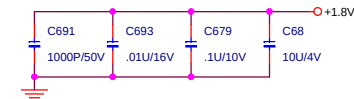
PROJECT : AT6

Quanta Computer Inc.

Size Custom	Document Number NVG73M VRAN-1(GDDR2 BGA84)	Rev 1A
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VMC CKE R521 10K



17 VMC_DQ[63..0]  

17 VMC_DM[7..0]  

17 VMC_WDQS[7..0]  

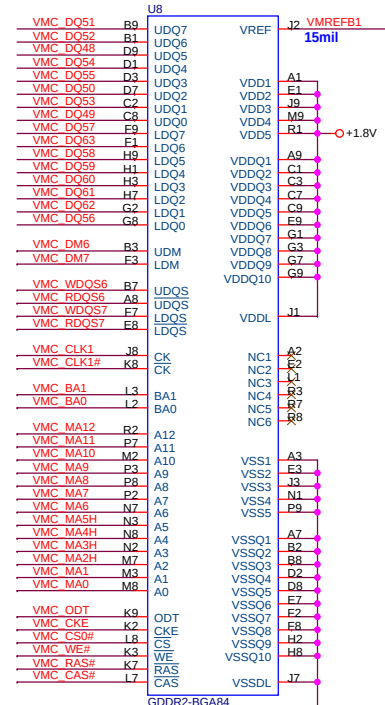
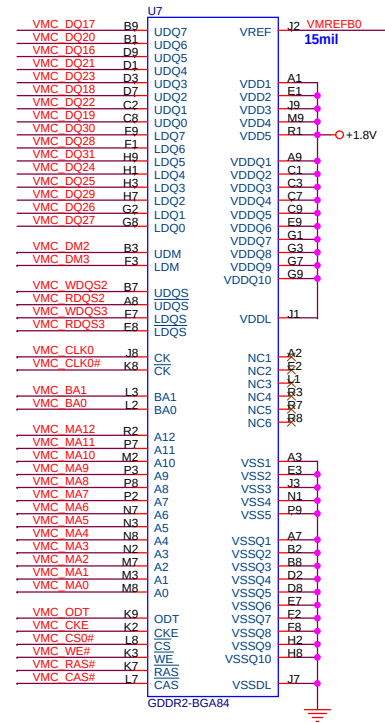
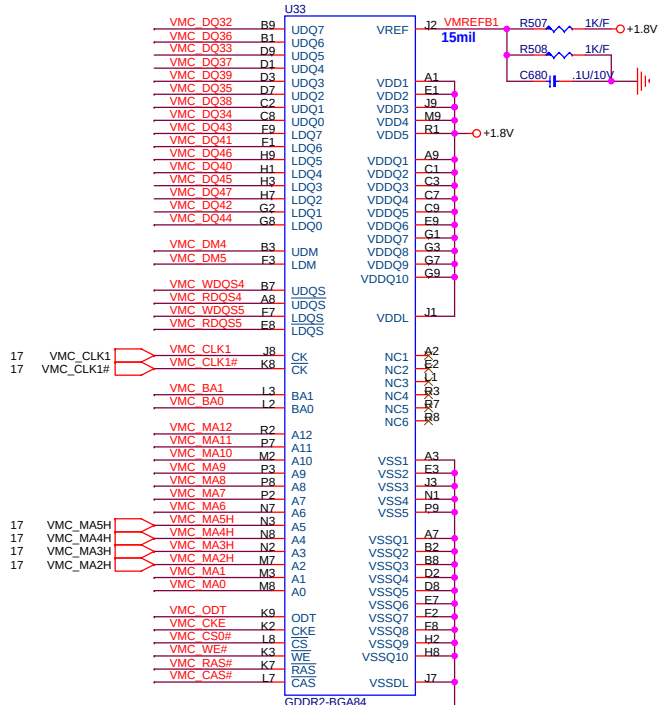
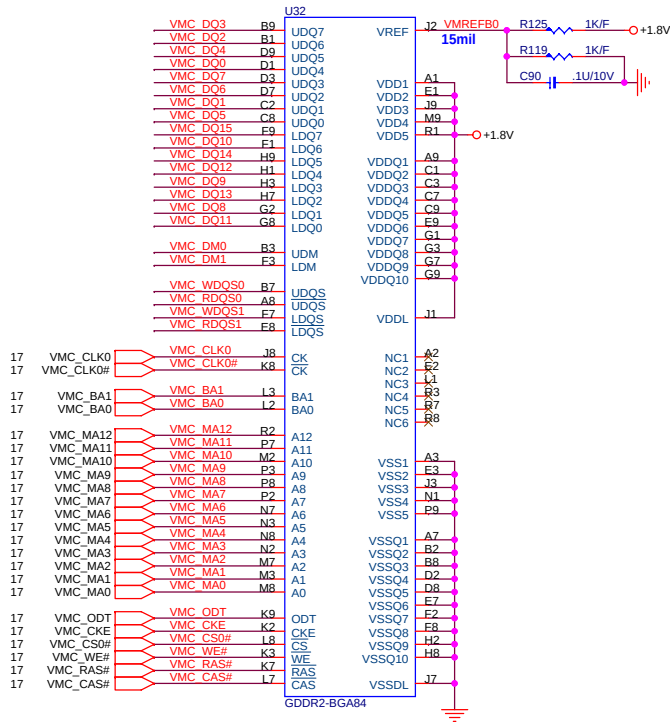
17 VMC_RDQS[7..0]  

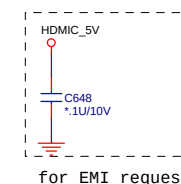
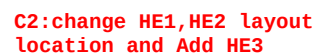
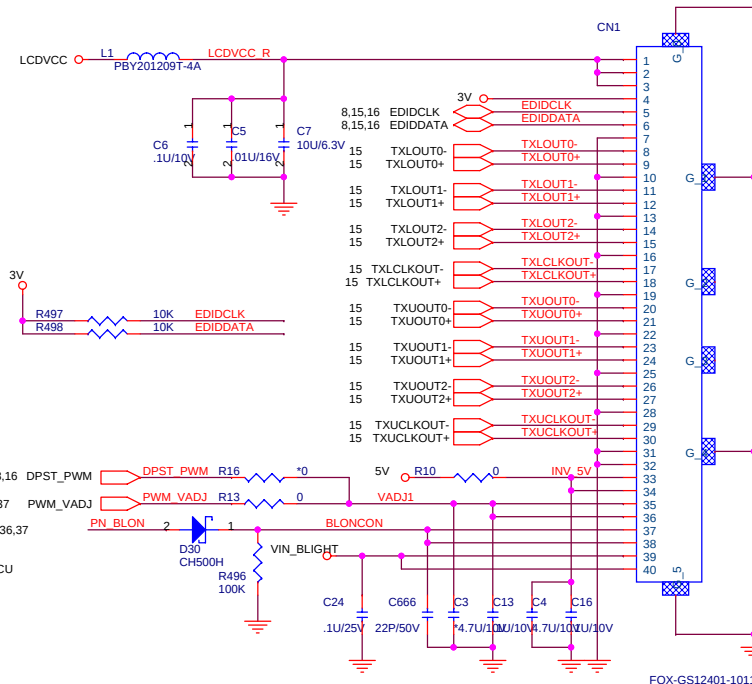


NB5/RD1/HW2

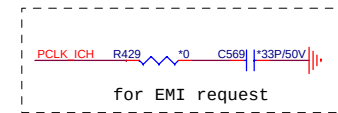
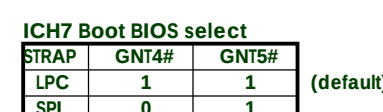
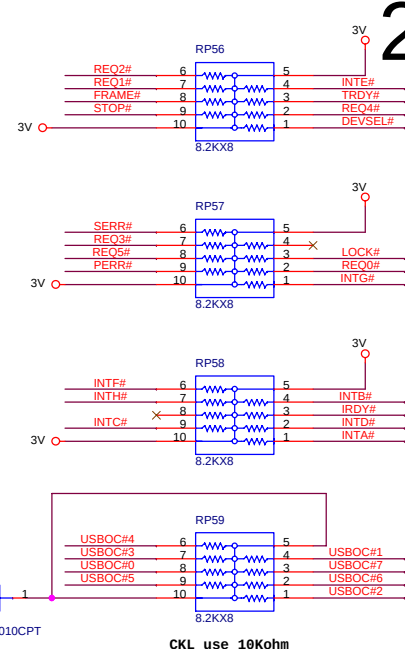
PROJECT : AT6
Quanta Computer Inc.

Size Custom	Document Number NVG73M VREM-2(GDDR2 BGA84)	Rev 1A
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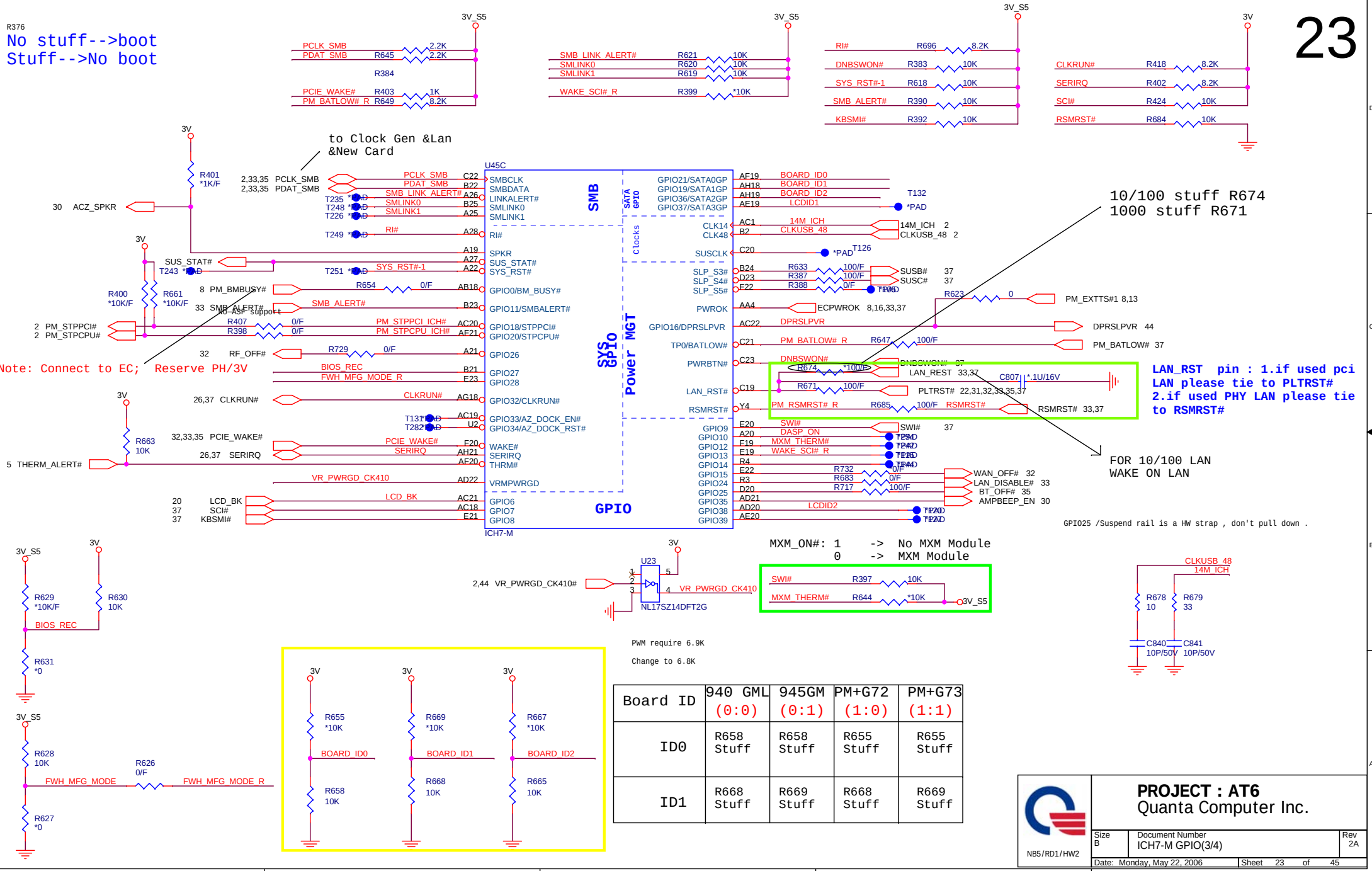
LAYOUT must support connectors from JAE, Molex and Acon.

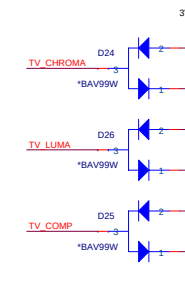
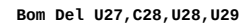


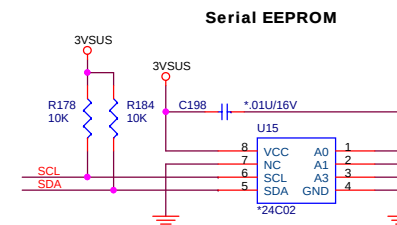
PCI ROUTING TABLE	IDSEL	INTERUPT	DEVICE
REF0# / GNT0#	AD21	INTA#.INTB#	RI0H832

 NBS / RD1 / HW2	PROJECT : AT6 Quanta Computer Inc.			Rev 1A
	Size Custom	Document Number ICH7-M M PCI E(2/4)		
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No stuff-->boot
Stuff-->No boot

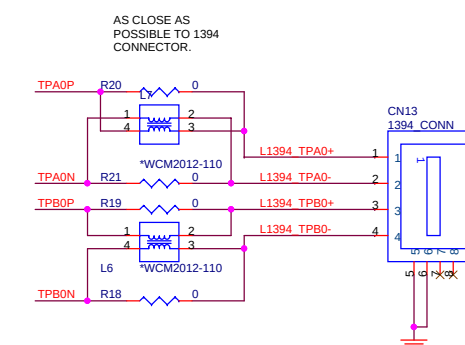




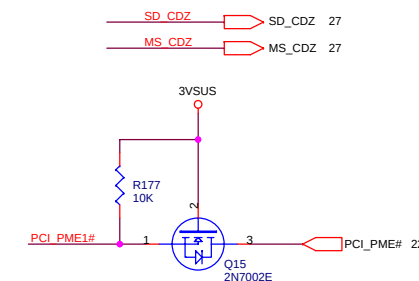


* NOT Use EEPROM :
R199 : installed
R207,U15,C198 : NOT installed

* Use EEPROM :
R207,U15,C198 : installed
R199 : NOT installed

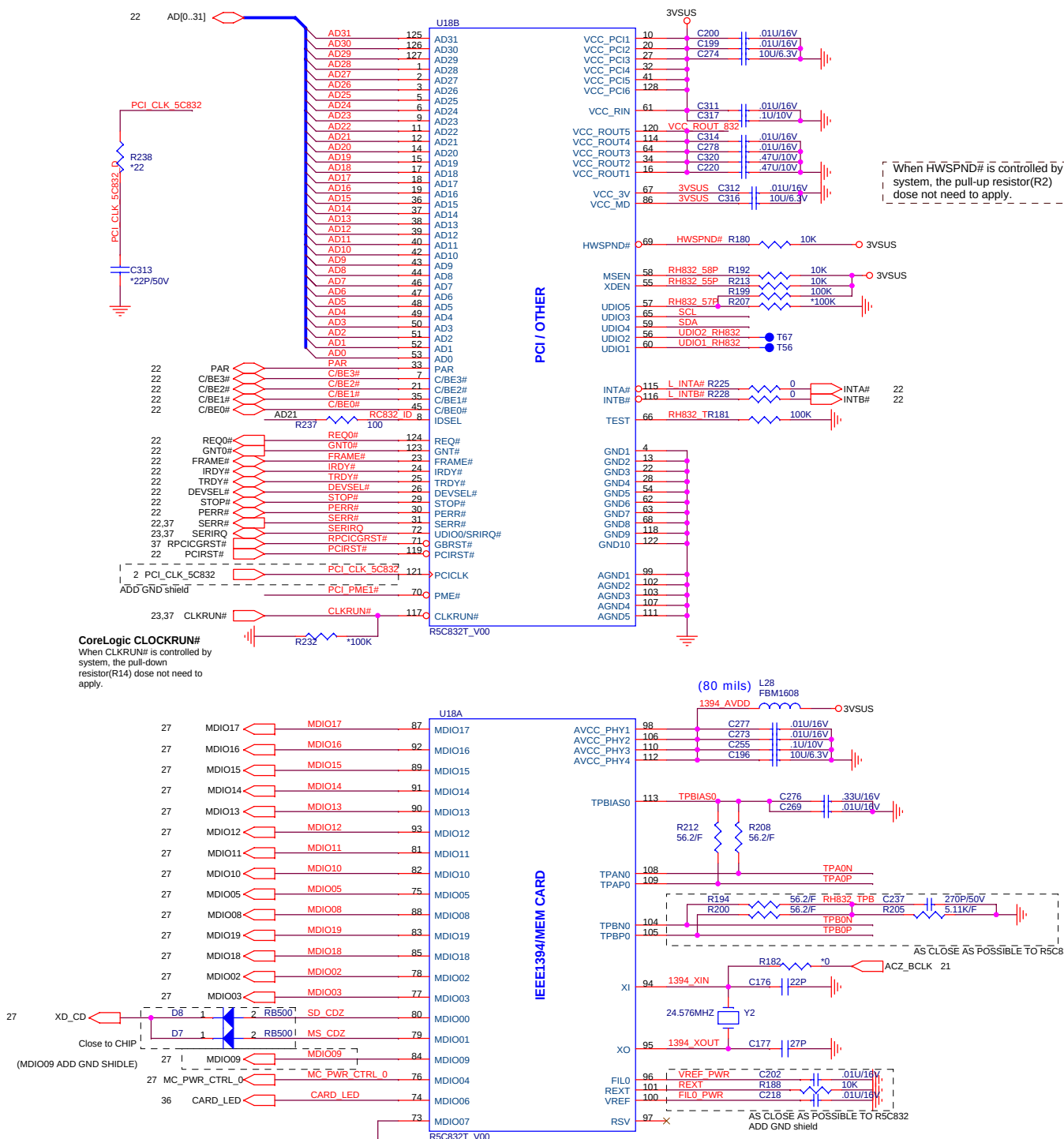


- *TPA/TPA#,TPB/TPB# pair trace : As close as possible.
- *TPA/TPA#,TPB/TPB# pair trace : Same length electrically. And layout with shields.
- * Termination resistor for TPA +/- : As close as possible to its cable driver (device pin out).

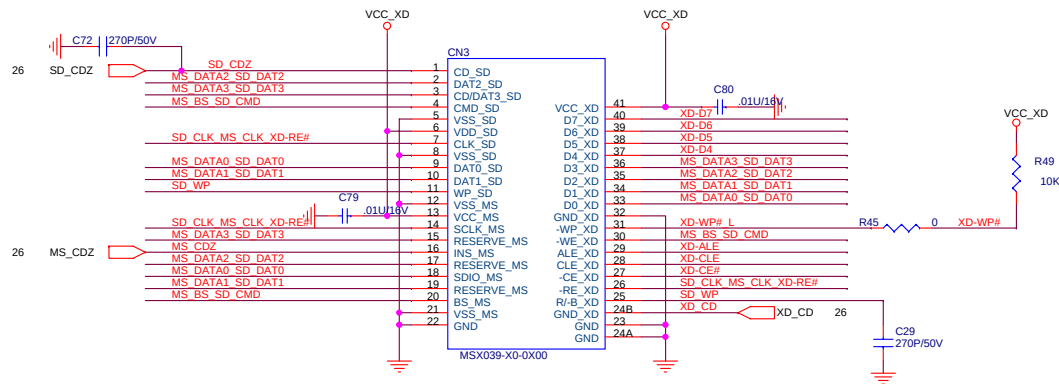


PROJECT : AT6
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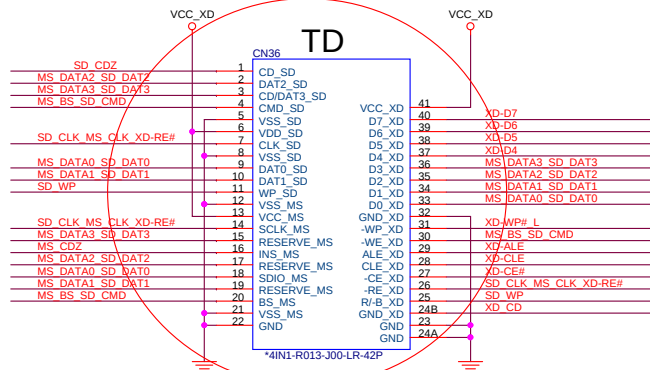
Size Custom	Document Number RICOH832 Controller	Rev 2A
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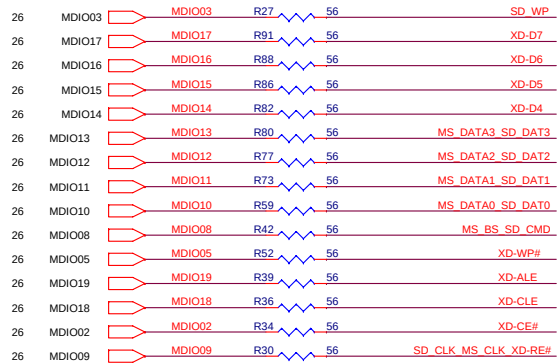
4 IN1 CARD READER XD, MMC/SD, MS/MSP



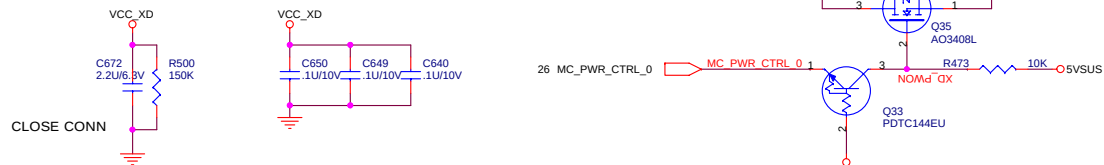
C7: change CN36 footprint



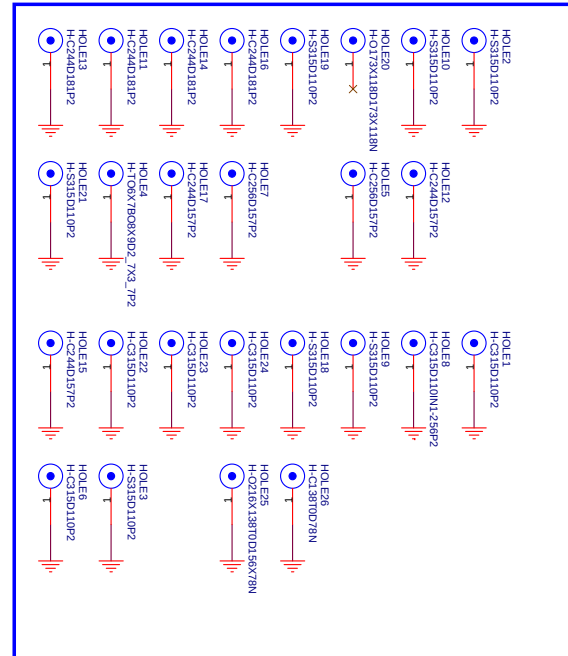
bom create 2'nd source



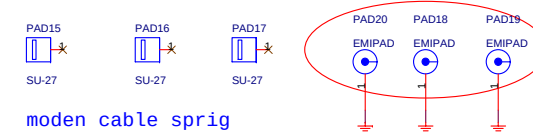
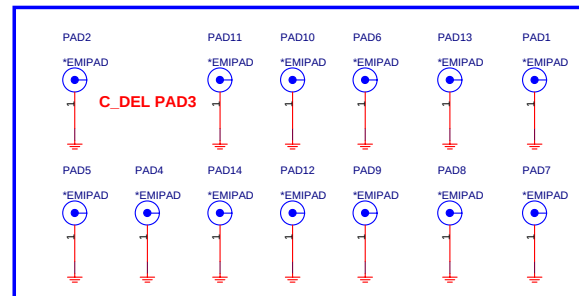
C_Delete reserve circuit for card reader power.



SCREW HOLE



EMI PAD

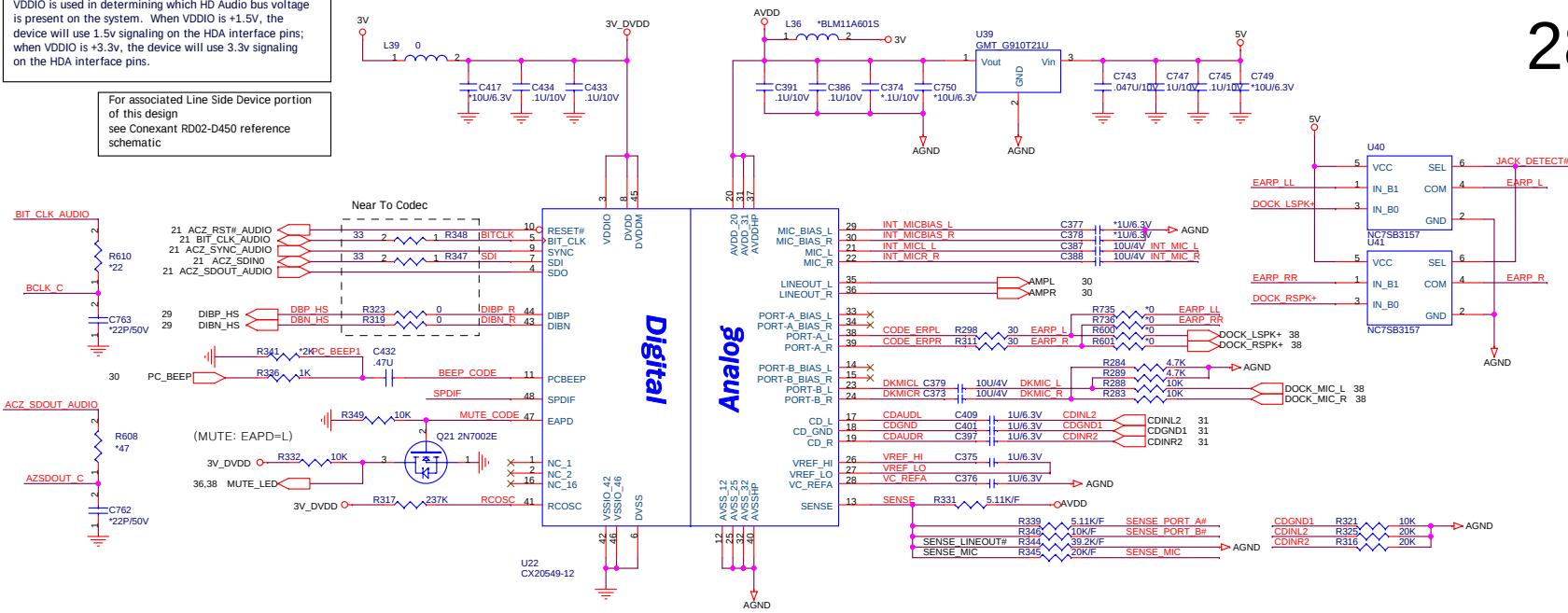


moden cable sprig

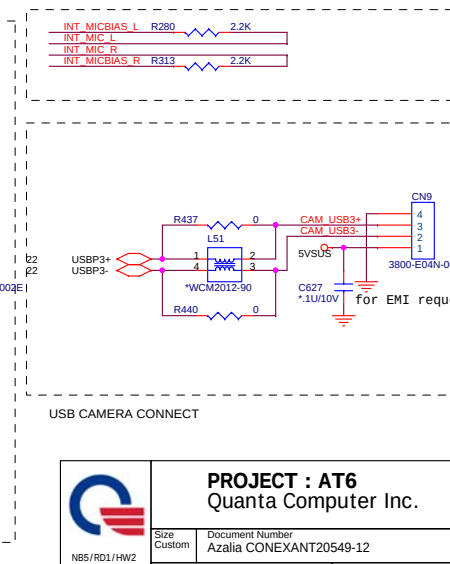
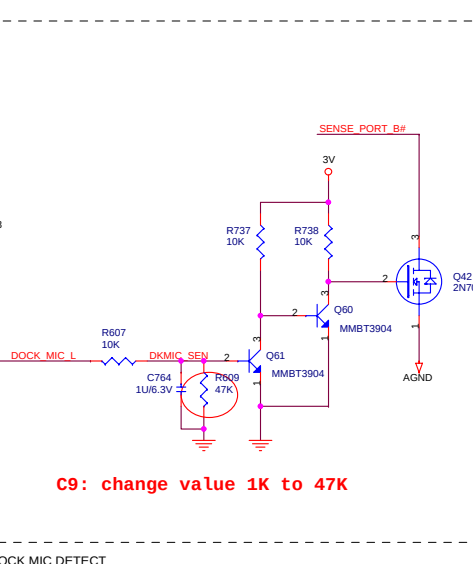
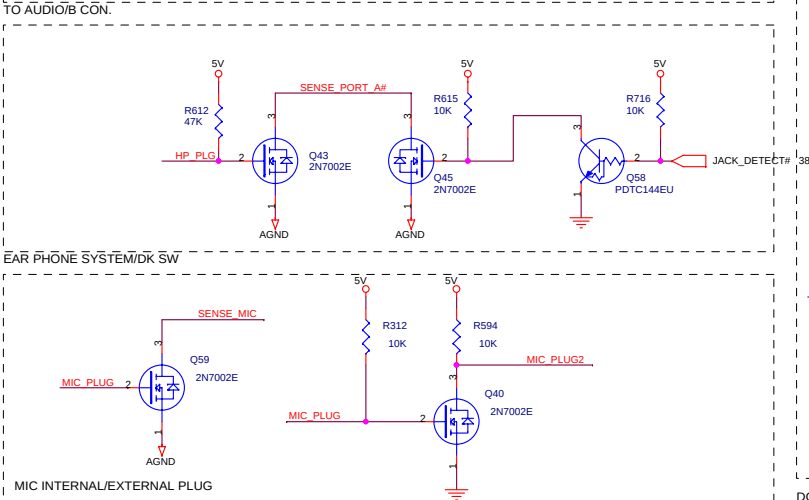
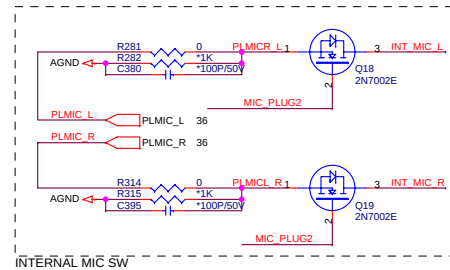
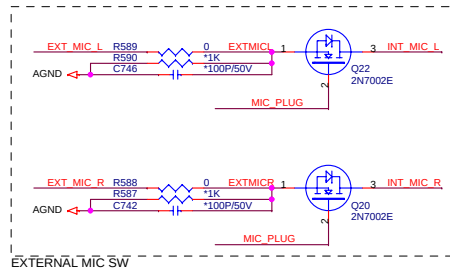
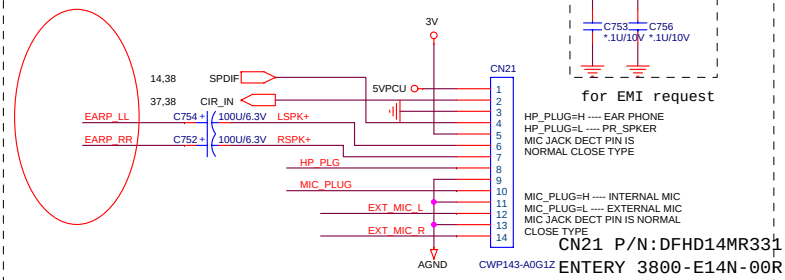
C8: Add lock bluetools cable sprig

For associated Line Side Device portion
of this design
see Conexant RD02-D450 reference
schematic

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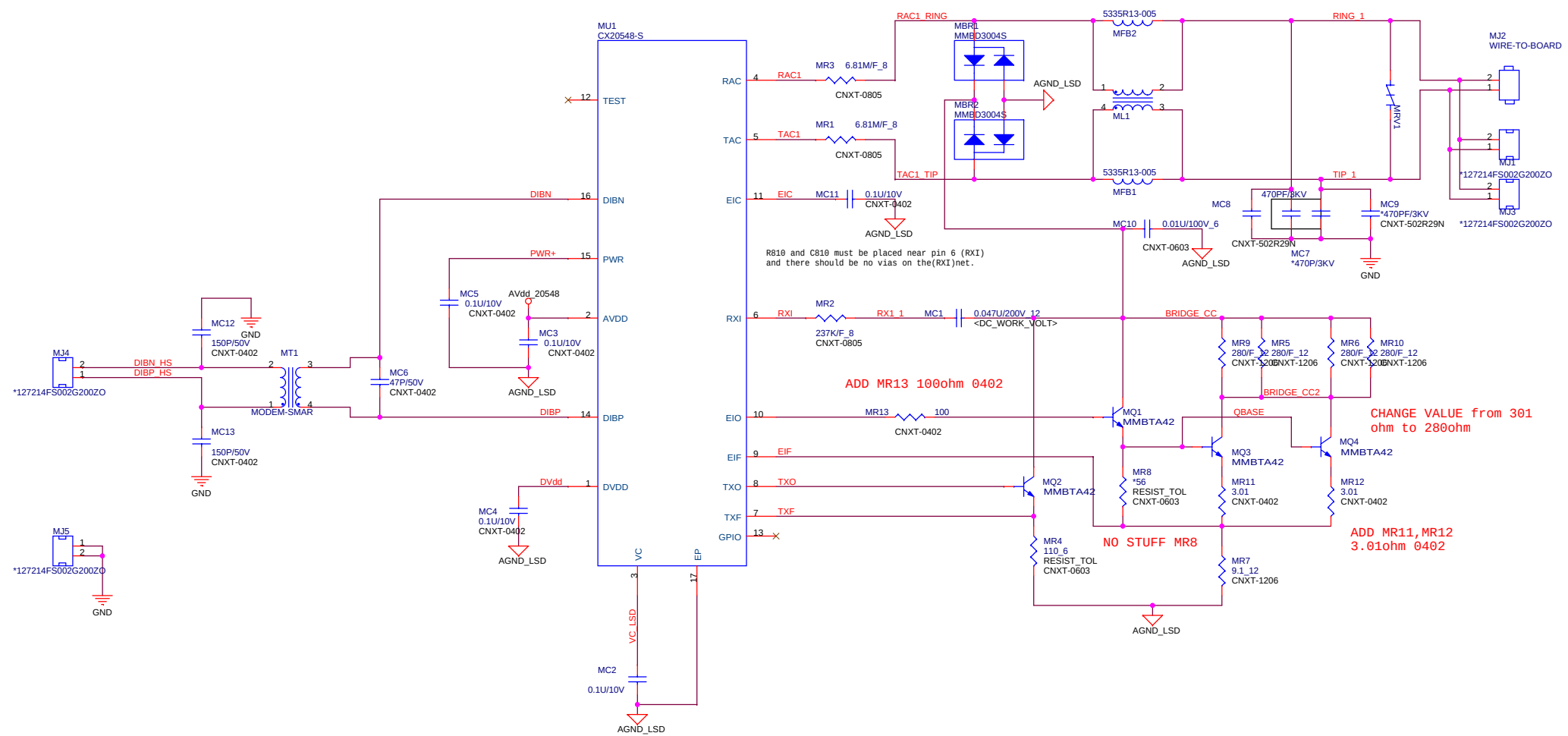


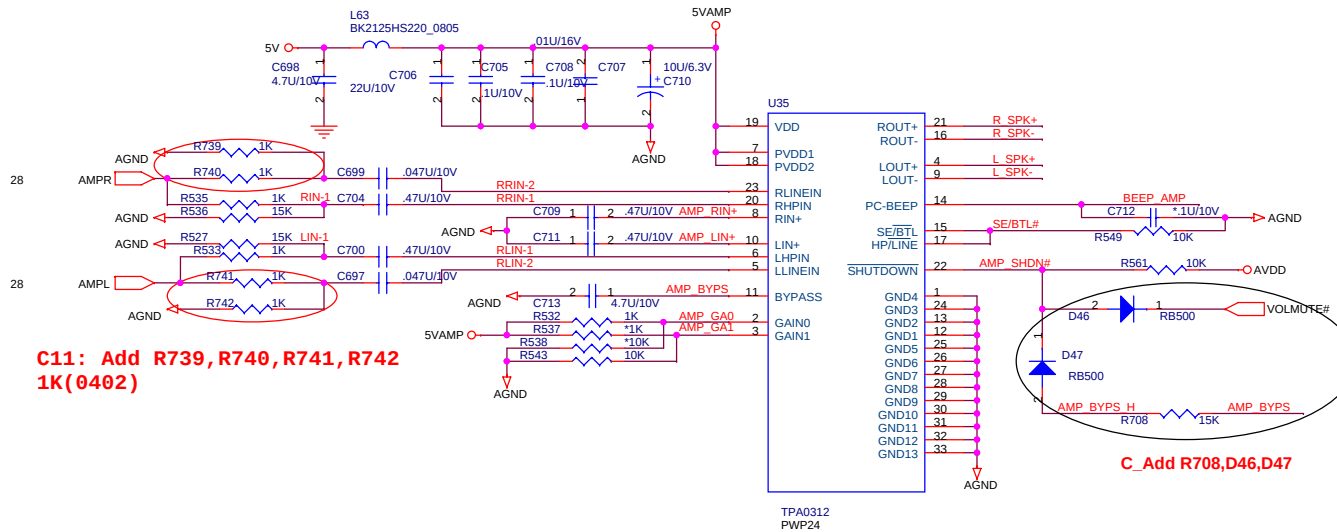
C10: layout del R595,R596,R597,R598



Revision History		
REV	Description	Date
0	Initial Release	April 26, 2005

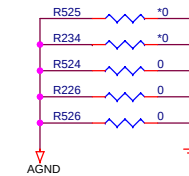
28 DIBN_HS DIBN_HS
28 DIBP_HS DIBP_HS





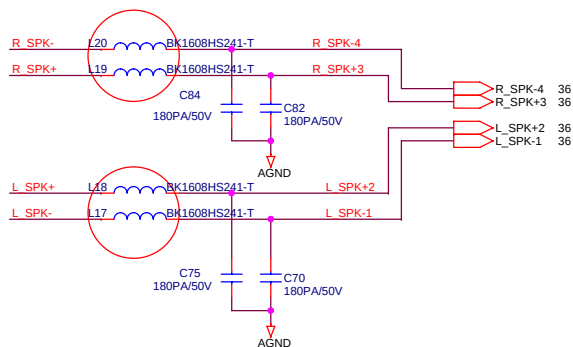
0312 Gain Table

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



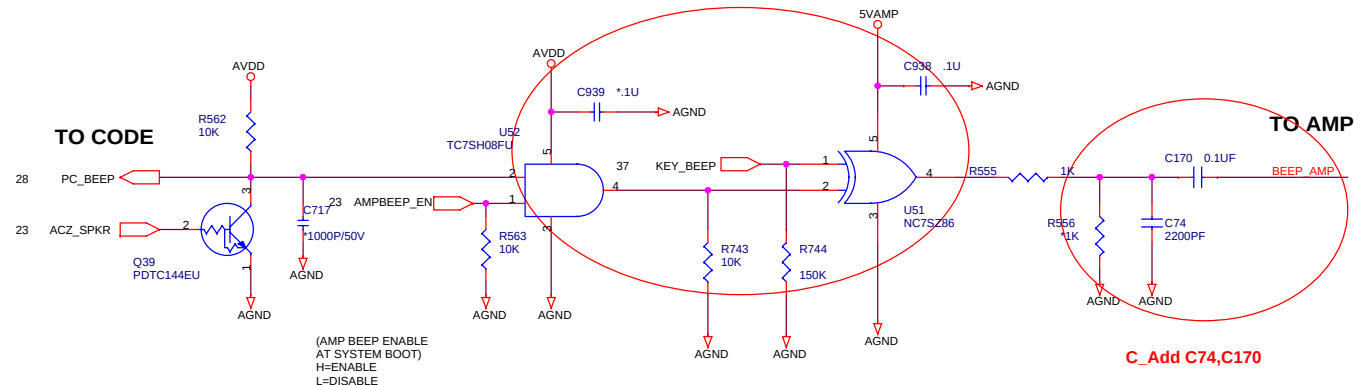
INT. SPEAKER

C12: change L17, L18, L19, L20 value to 240 Ohm

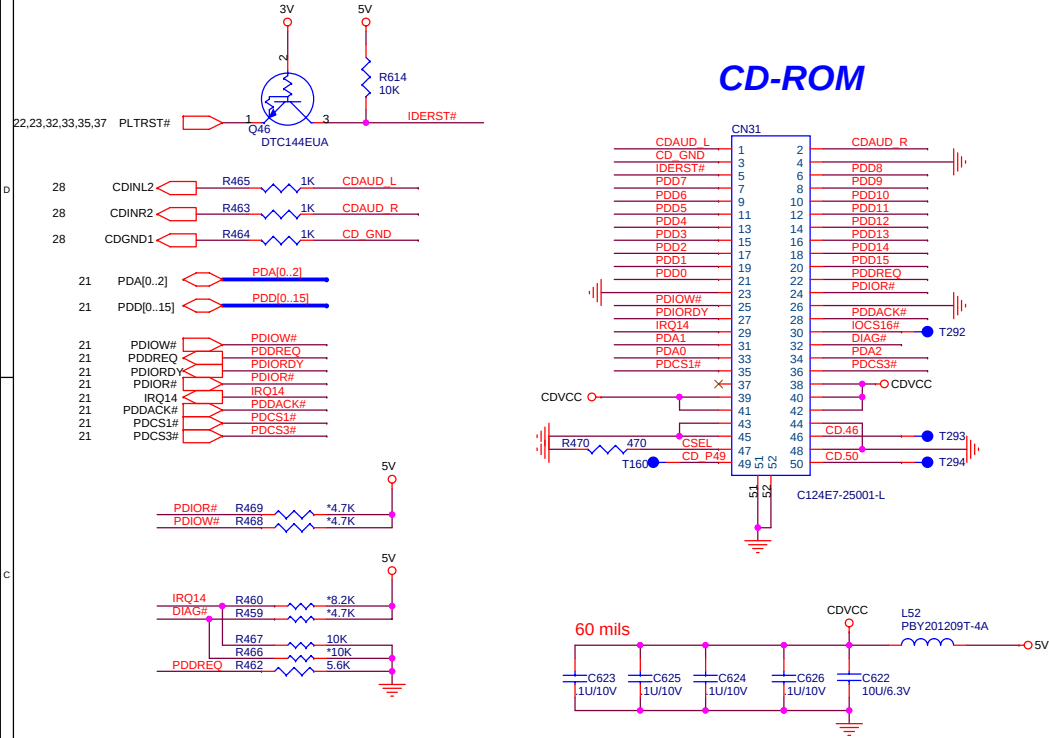
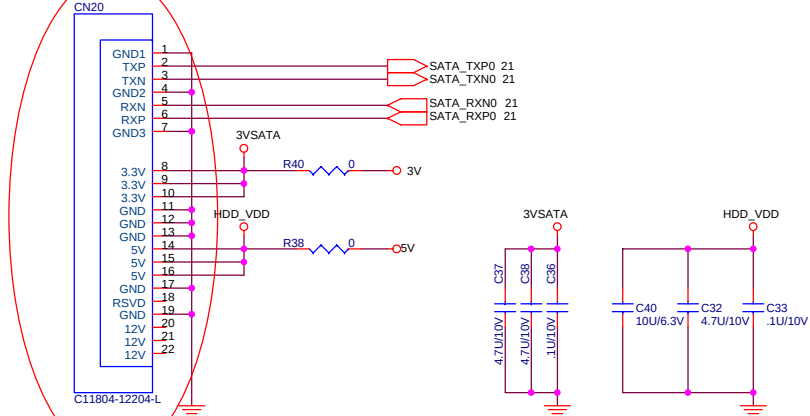


PCSPK BEEP

C13: Del Q57, R715, R554, C714 Add C938, U51, R774, R743, U52, C939, R563

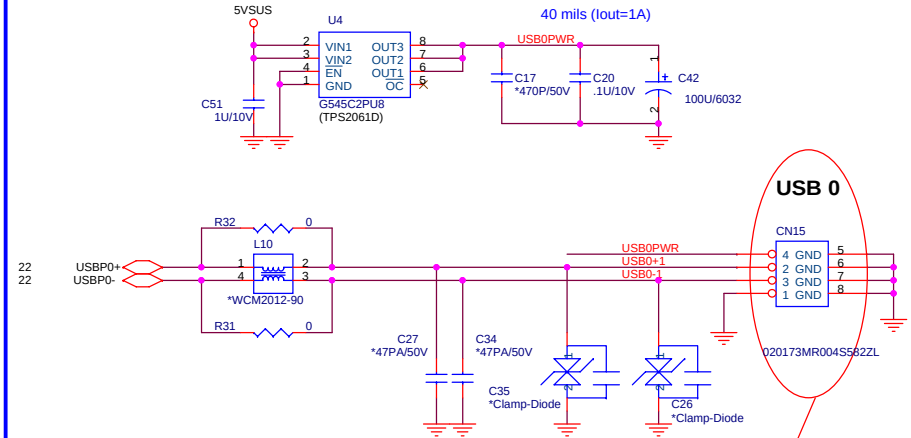
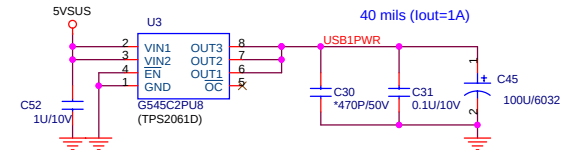


CD-ROM

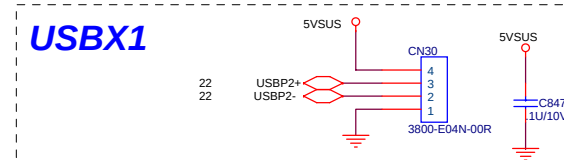
SATA 1
CONNECTOR

C14: change CN20 footprint

USBX2

C15: change
CN14, CN15
footprint

USBX1

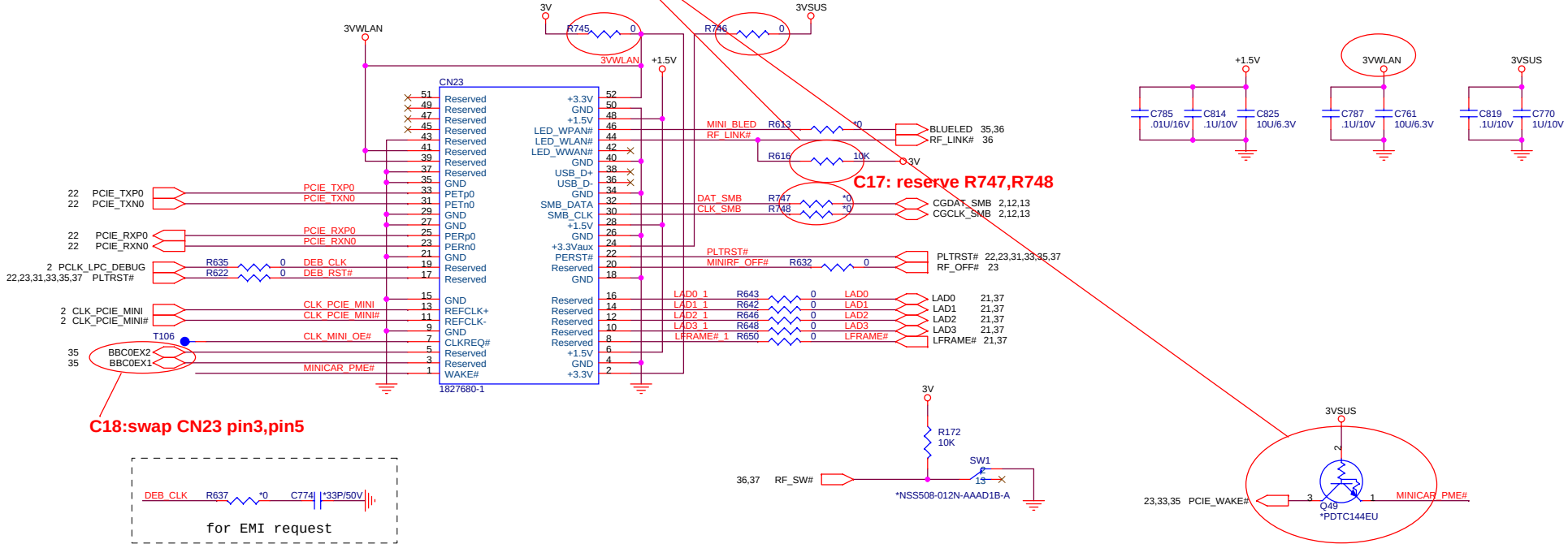


PROJECT : AT6
Quanta Computer Inc.

Size Custom	Document Number SATA HDD/CD-ROM/USBX3	Rev 2A
Date: Monday, May 22, 2006	Sheet 31 of 45	

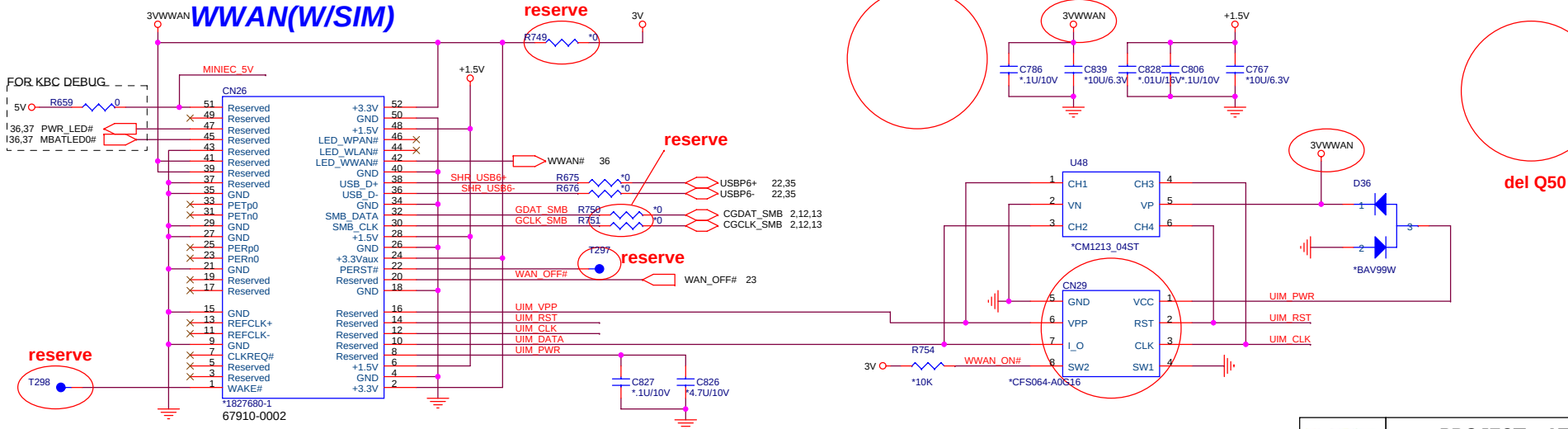
Mini PCI-E Card 1 WLAN

C16: Add Bom R745(RC1206) R746(RC0603) and R616
Del Q49

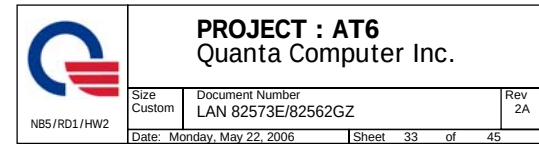


Mini PCI-E Card 2 WWAN(W/SIM)

del C771,C822

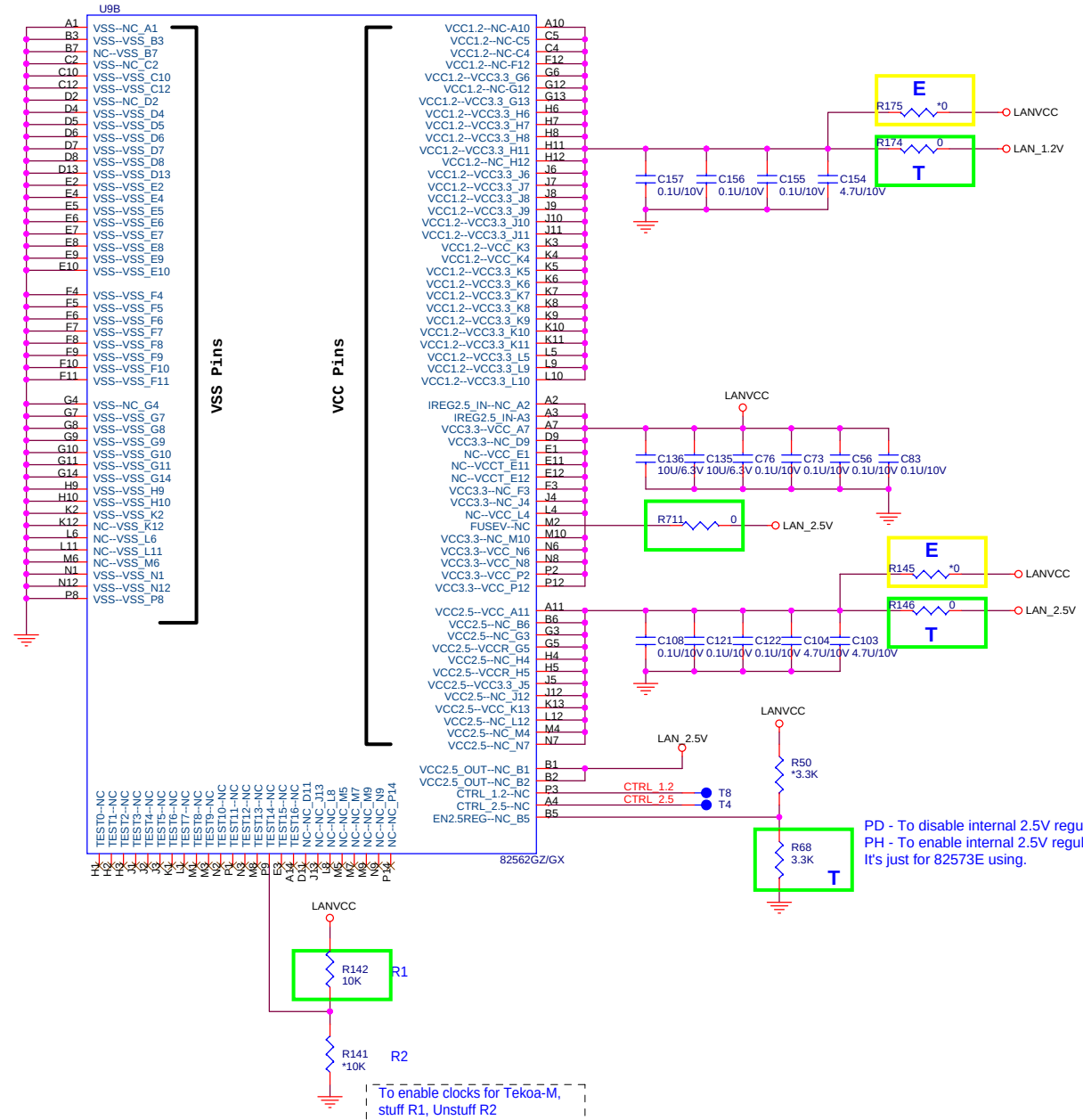
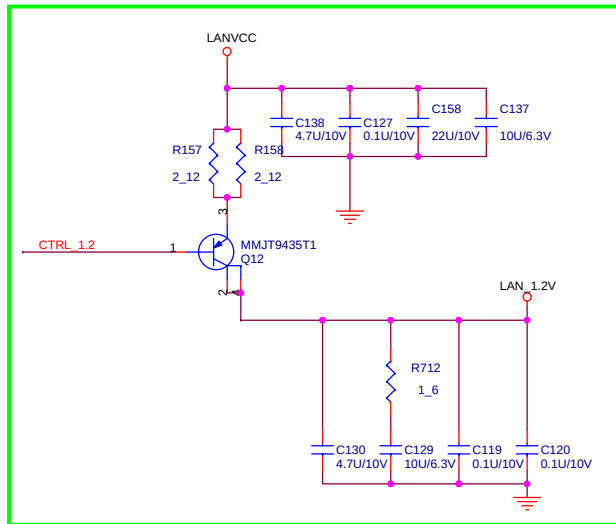
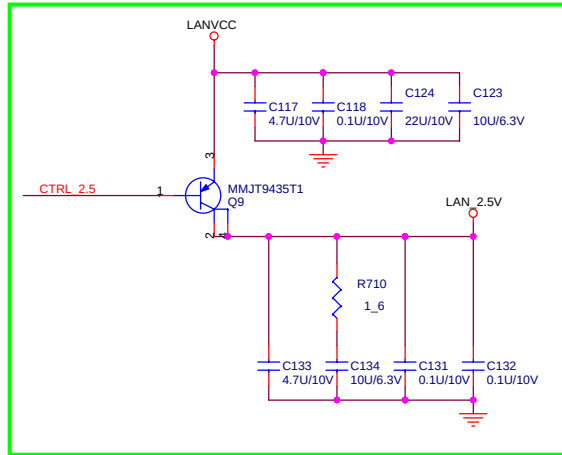


C. Change to P-TWO footprint.
SDCARD-CSF064-A0G16-1-8P



T : Stuffed for 82573L(10/100/1000)

E : Stuffed for 8256GZ/GX(10/100)

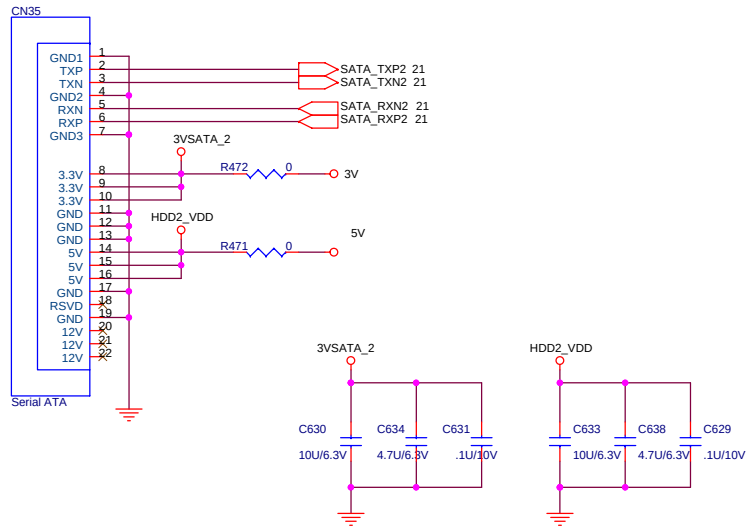


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Quanta Computer Inc.

Size Custom	Document Number LAN POWER	Rev 2A
Date: Monday, May 22, 2006		Sheet 34 of 45

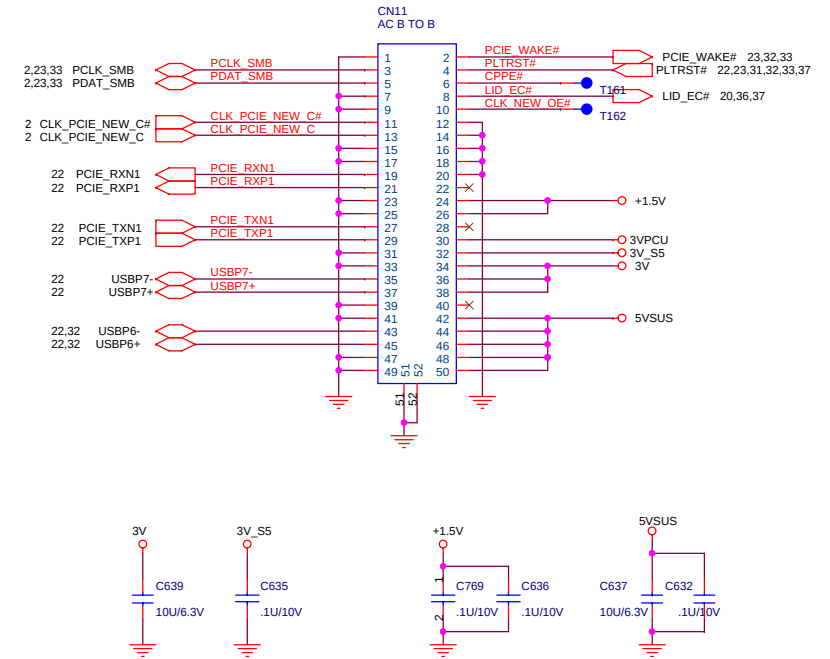
SATA_2 CONNECTOR

For 17"W Second HDD

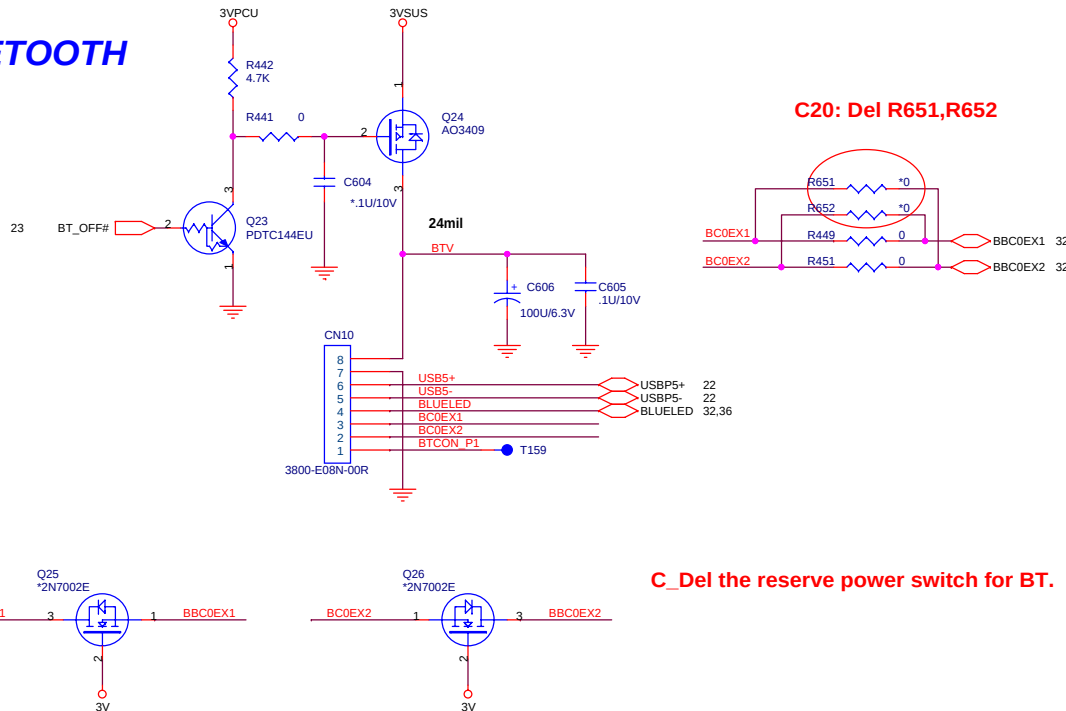


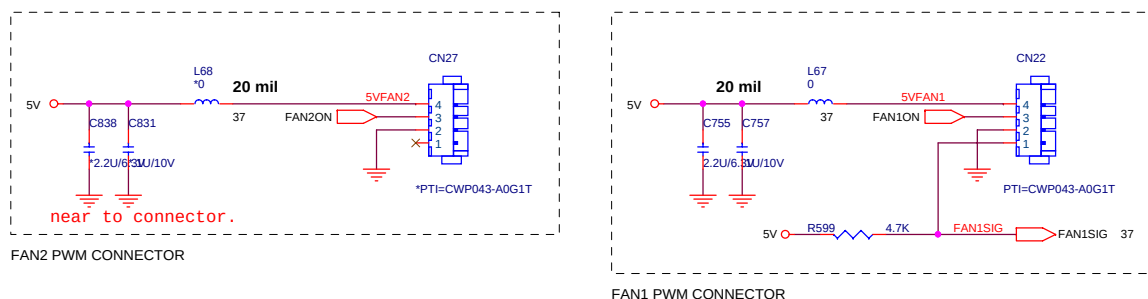
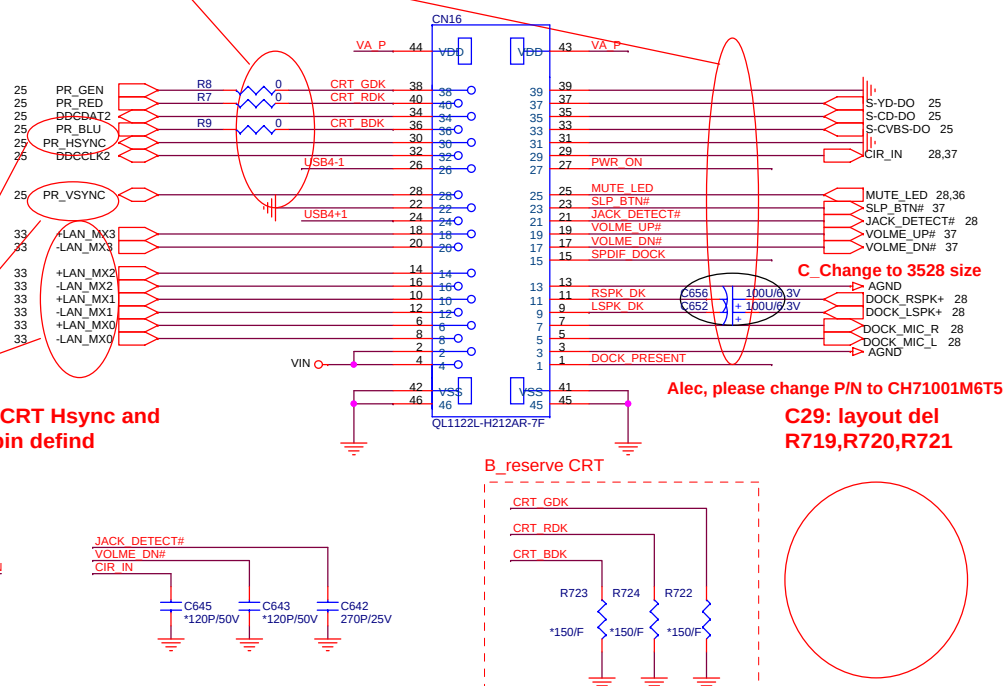
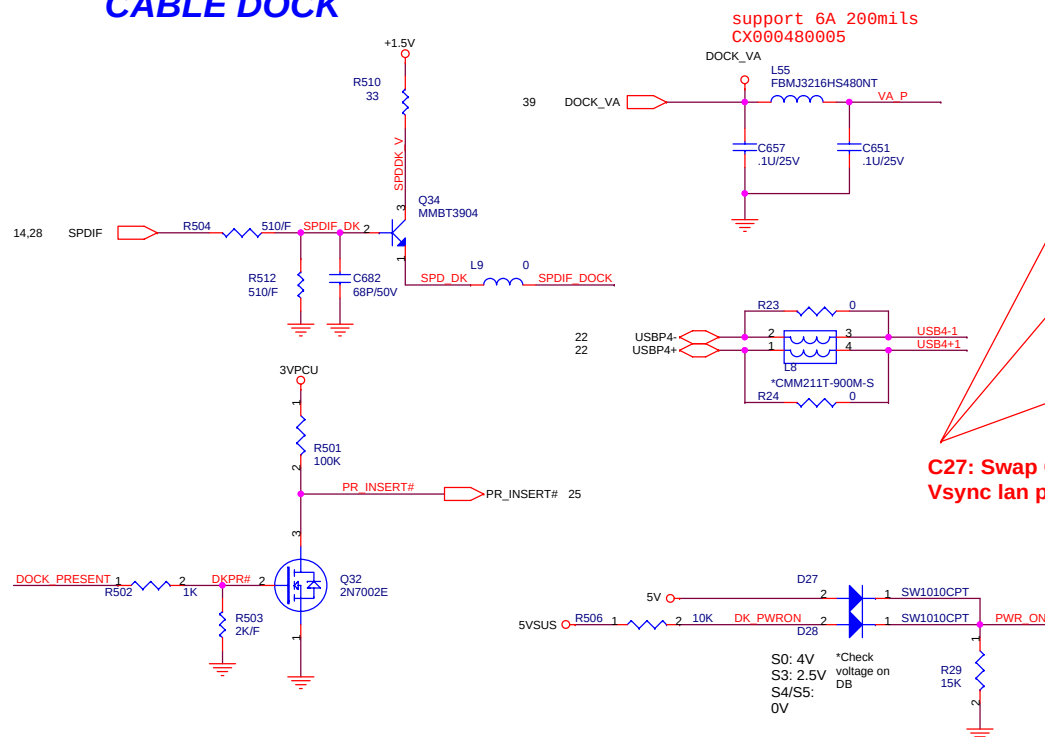
NEWCARD

35

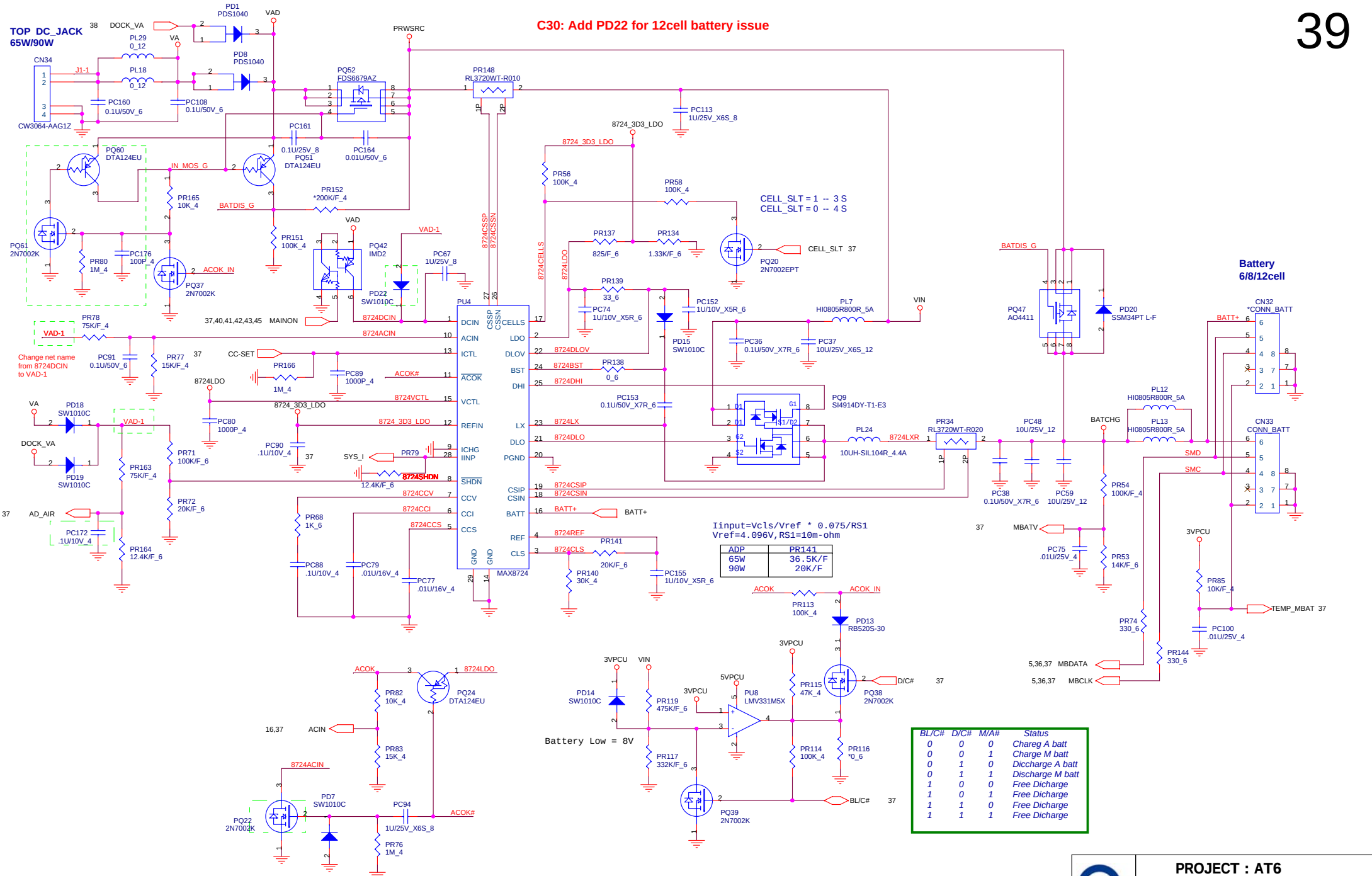


BLUETOOTH





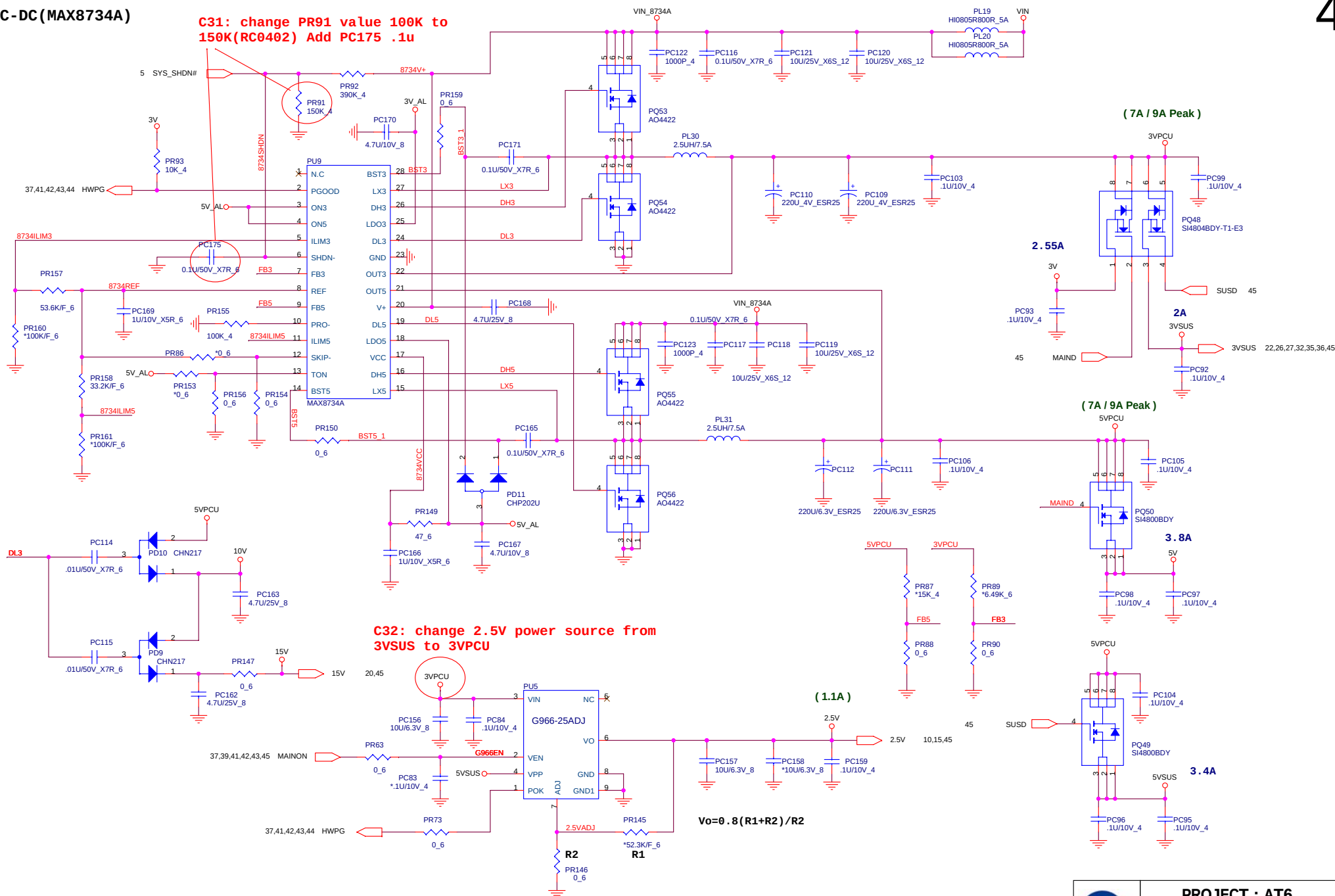
C30: Add PD22 for 12cell battery issue



BL/C#	D/C#	M/A#	Status
0	0	0	Charge A batt
0	0	1	Charge M batt
0	1	0	Discharge A batt
0	1	1	Discharge M batt
1	0	0	Free Discharge
1	0	1	Free Discharge
1	1	0	Free Discharge
1	1	1	Free Discharge

DC-DC (MAX8734A)

C31: change PR91 value 100K to 150K(RC0402) Add PC175 .1u



C32: change 2.5V power source from 3VSUS to 3VPCU

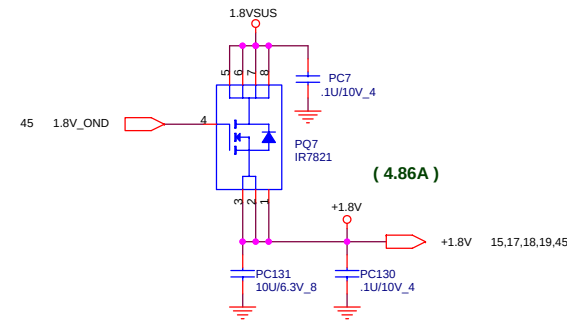
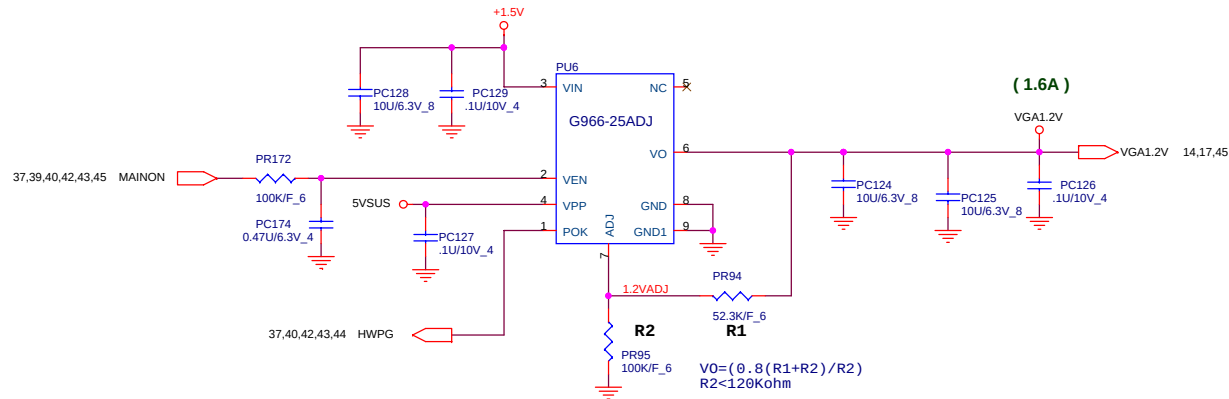
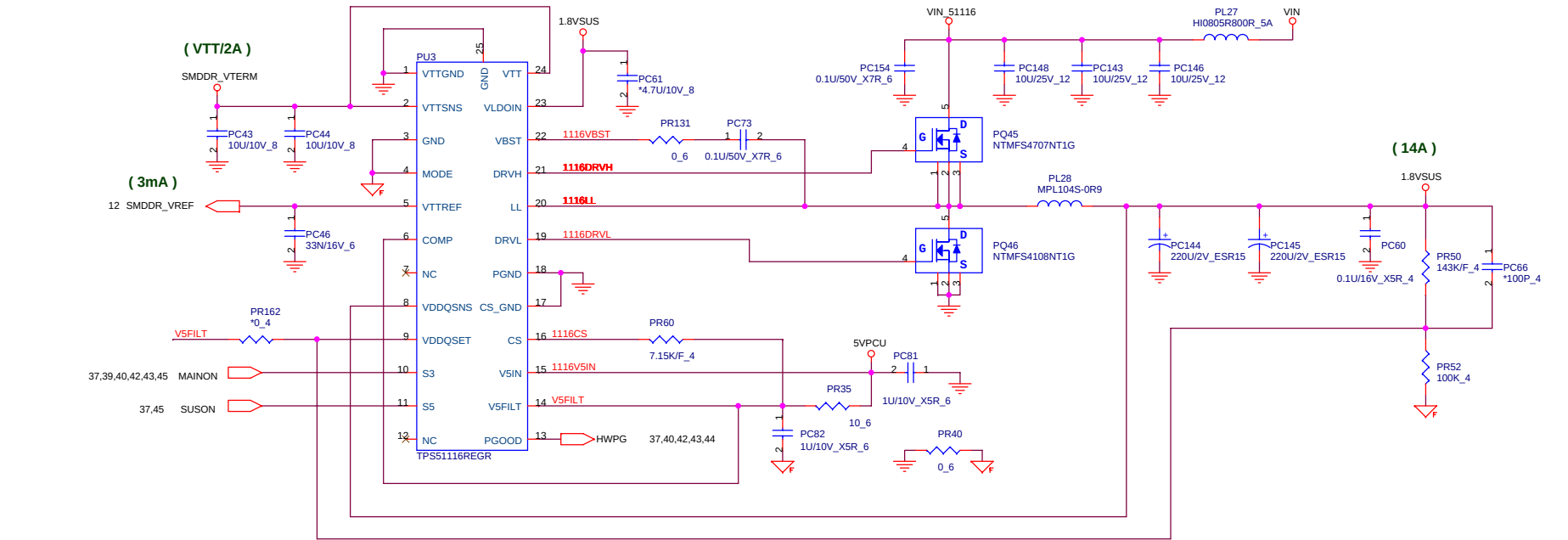
(1.1A)

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



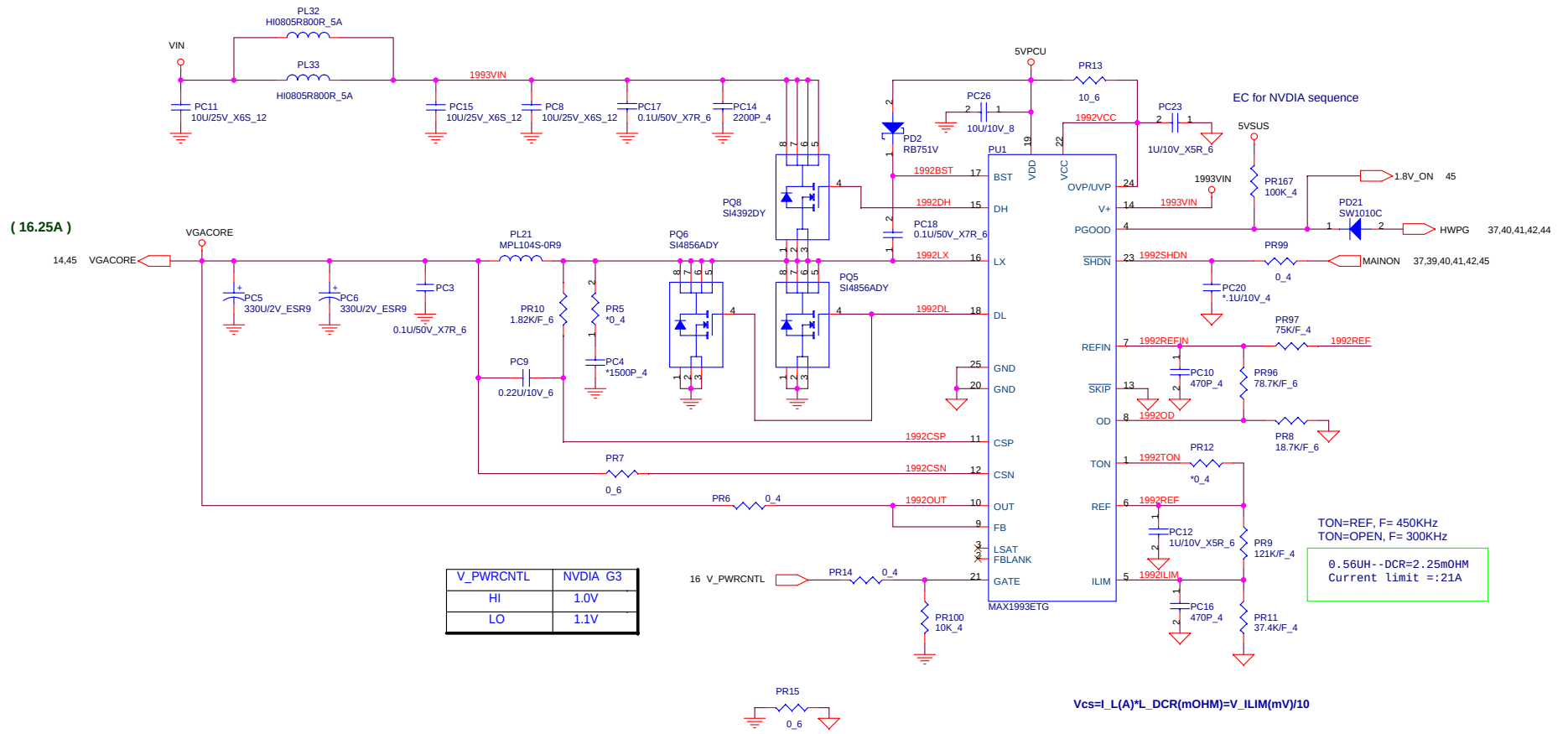
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Quanta Computer Inc.

Size Custom	Document Number SYS PWR 5V/3.3V(MAX8734A)	Rev 2A
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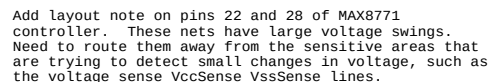
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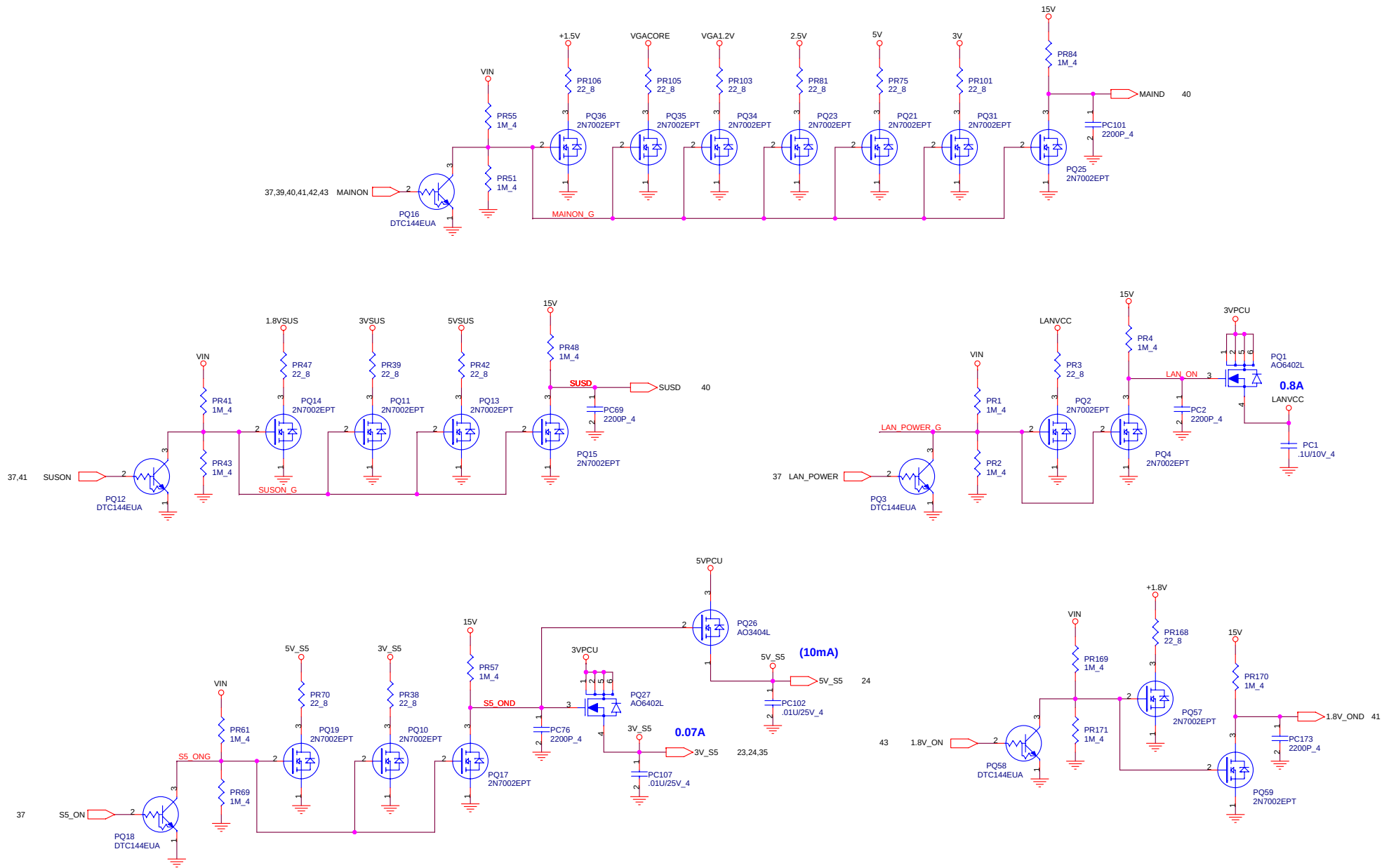
Size Custom	Document Number DDR11 1.8VSUS/SMDDR_VTERM	Rev 2A
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Size Custom	Document Number VGACORE (MAX1993)	Rev 2A
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Quanta Computer Inc.

Size Custom	Document Number DISCHARGE	Rev 2A
Date: Monday, May 22, 2006	Sheet 45 of 45	