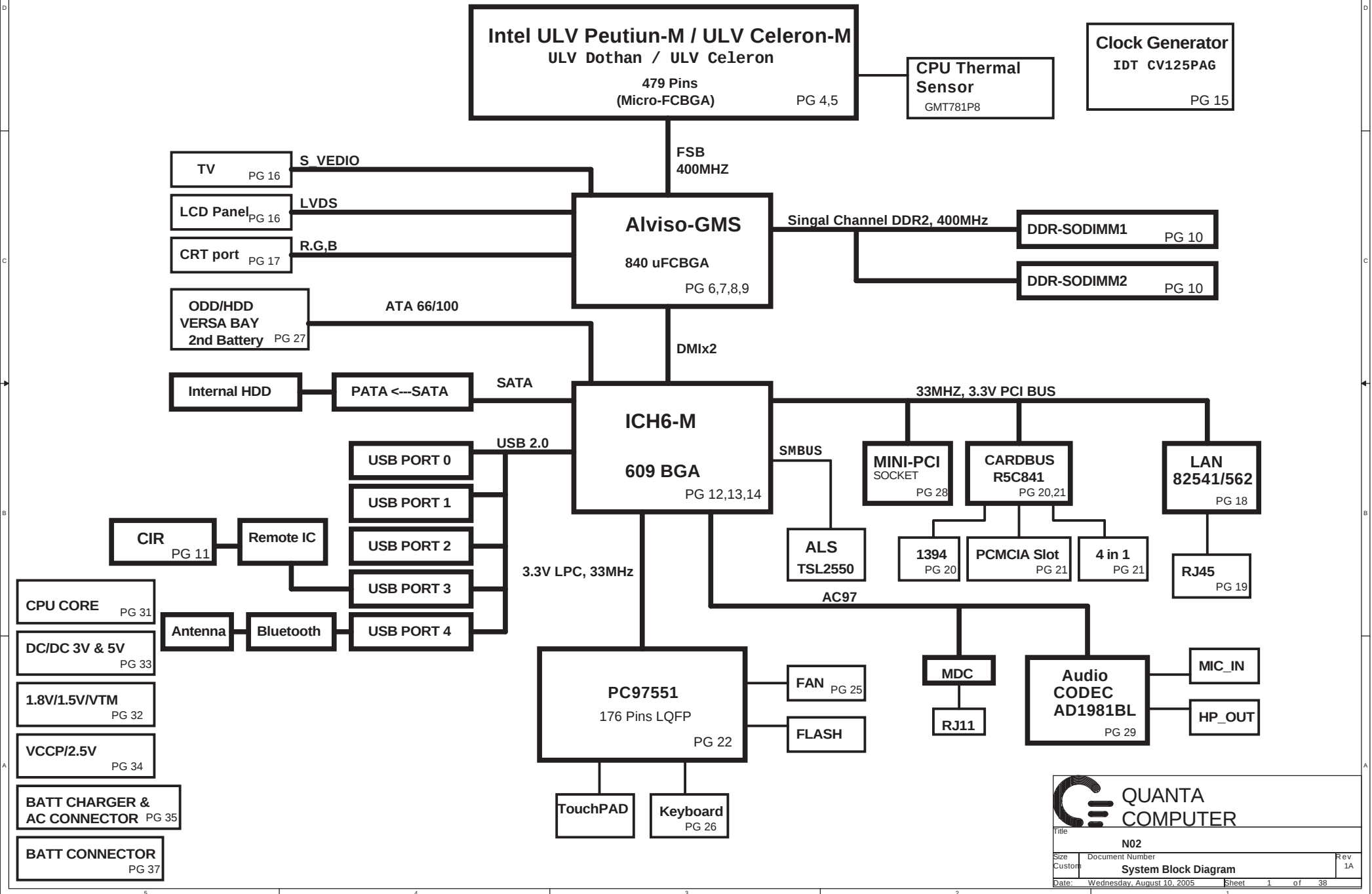


ULV DOTHAN+ALVISO(915GMS)+ICH6-M



1. N02 Schematic Page Description :

<http://hobi-elektronika.net>

- | | | |
|----------------------------------|------------------------------------|----------------------------------|
| 1. Block Diagram | 15. Clock Generator(CK410_M) | 29.CODEC AD1981BL |
| 2. Schematic Page List | 16. LCD CONNECTOR | 30. AUDIO AMP,HP,MIC |
| 3. System Info | 17. CRT | 31. CPU CORE |
| 4. u-FCBGA Dothan (1/2) | 18. LAN CONTROLLER 82541/562 | 32. DDR II 1.8V,1.5V,SMDDR_VTERM |
| 5. u-FCBGA Dothan (2/2) | 19. LAN TRANSFORMER | 33. 3V,5V POWER |
| 6. ALVISO HOST,DMI | 20. CARDBUS R5C841 (PCI/1394) | 34. VCCP , 2.5V |
| 7. ALVISO DDR II | 21. CARDBUS R5C841 (CARDBUS/MEDIA) | 35. BATTERY CHARGER |
| 8. ALVISO VGA/VSS/NCTF | 22. PCU PC97551 | 36. BATTERY Selector |
| 9. ALVISO POWER | 23. Versa Bay | 37. BATTERY CONNECTOR |
| 10. DDR II SODIMM CNN | 24. HDD SATA==>PATA | |
| 11.CIR | 25. RTC/FAN / ALS/ GUIL_ PAD | |
| 12. ICH6-M CPU/PCI/IDE/SATA/AC97 | 26. KB / USB / STAND CNN | |
| 13. ICH6-M USB/DMI/LPC/PCI_E | 27. LED / SW /BLUETOOTH | |
| 14. ICH6-M POWER/GND | 28. MINIPCI/MDC /SCREW | |

2. PCI Description :

IDSEL	CHIP
AD18	LAN 82541/562
AD20	Mini PCI(Wireless LAN)
AD23	CardBus (R5C841)

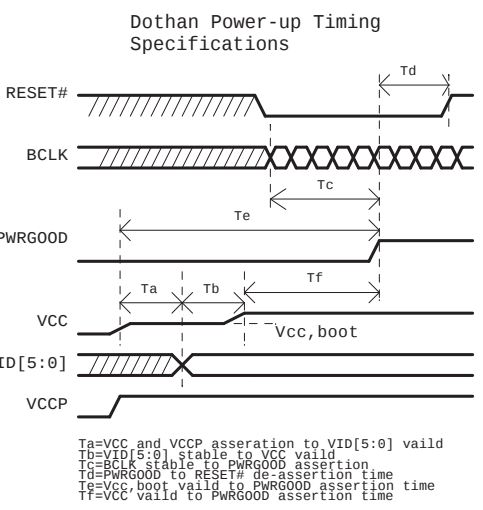
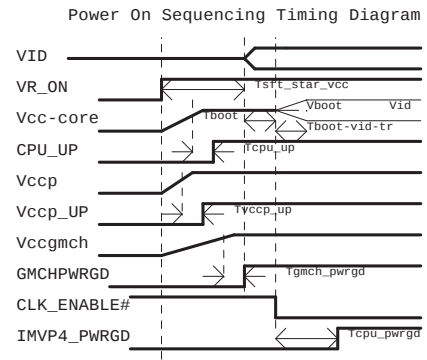
PCIINT	CHIP
IRQA	CardBus
IRQB	CardBus/MiniPCI
IRQC	CardBus/MiniPCI
IRQD	LAN
IRQE	
IRQF	

BUSMASTER	
REQ	CHIP
REQ0 / GNT0	LAN 82541/562
REQ1 / GNT1	CardBus (R5C841)
REQ2 / GNT2	Mini PCI(Wireless LAN)
REQ3 / GNT3	
REQ4 / GNT4	

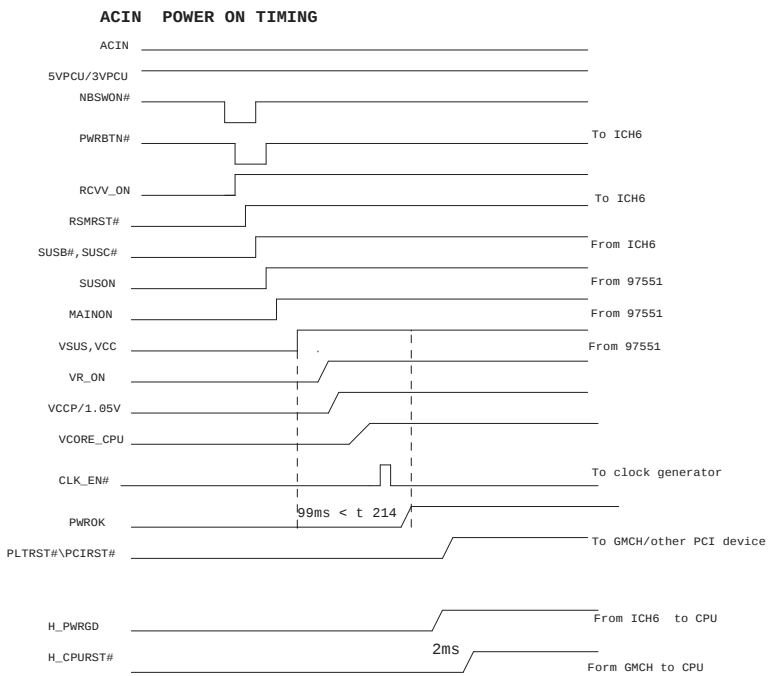
Board Stack up Description

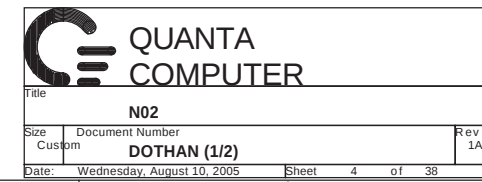
PCB Layers

- Layer 1 TOP(Component,Other)
- Layer 2 Power Plane
- Layer 3 IN1(FSB, DDR2, PCI, IDE, LPC)
- Layer 4 IN2(FSB,CLOCK, DDR2, CLK)
- Layer 5 Ground Plane
- Layer 6 BOTTOM, (FSB, DDR2, CLK, Component)

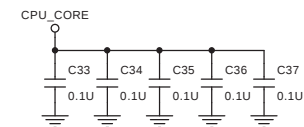
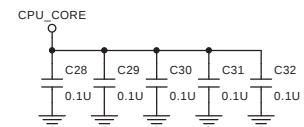
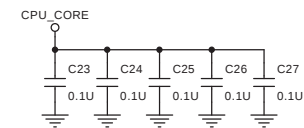
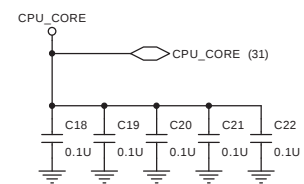
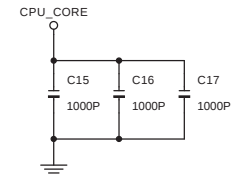
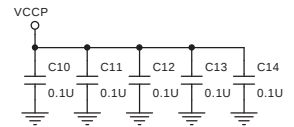
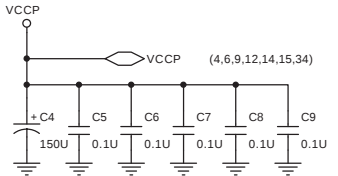
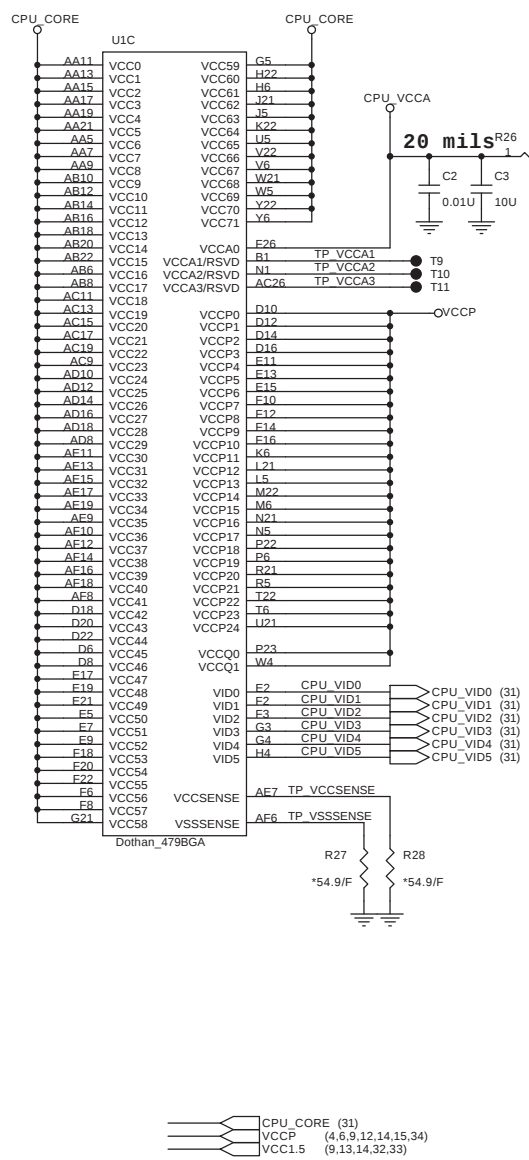


Voltage Rails		ON S0-S2	ON S3	ON S4	ON S5	Control signal
VCC_CORE	Core voltage for Processor	X				VR_ON 0.726V~0.94V
VCCP	Core voltage for CPU / NB	X				VR_ON
SMDDR_VTERM 0.9V	for DDR2 Termination voltage	X				MAINON
RVCC1.5		X	X	X		RVCC_ON
RVCC3		X	X	X		RVCCD
VCC1.5		X				MAIND
VCC2.5		X				MAINON
VCC3		X				MAIND
VCC5		X				MAIND
1.8VSUS		X	X			SUSON
3VSUS		X	X			SUSD
5VSUS		X	X			SUSD
3VPCU		X	X	X	X	VL
5VPCU		X	X	X	X	VL
9VPCU		X	X	X	X	5VPCU

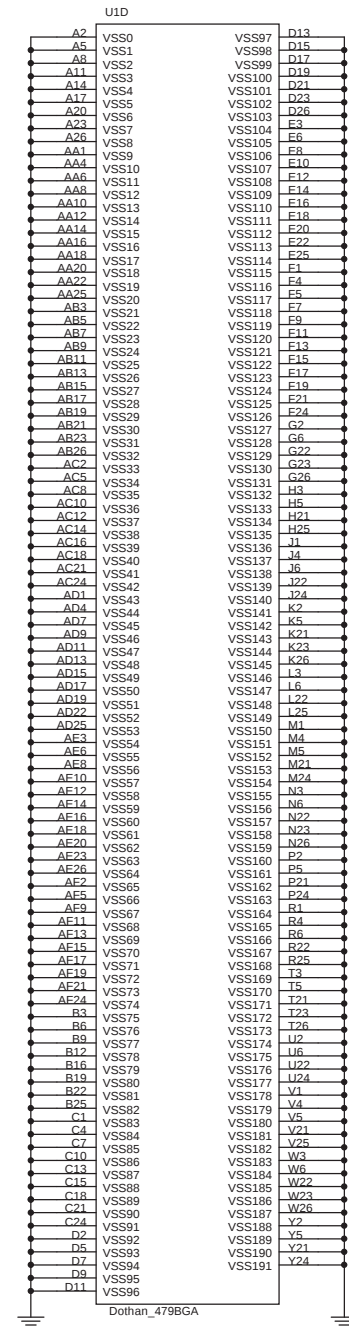
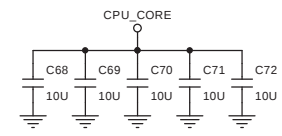
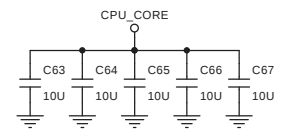
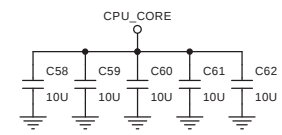
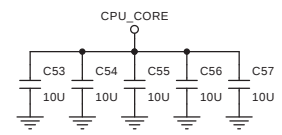
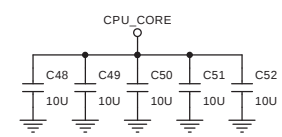
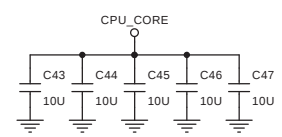


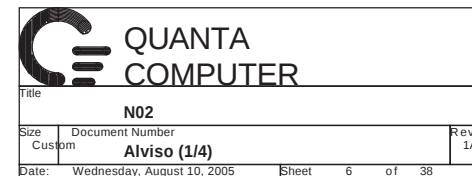


7A 280mils

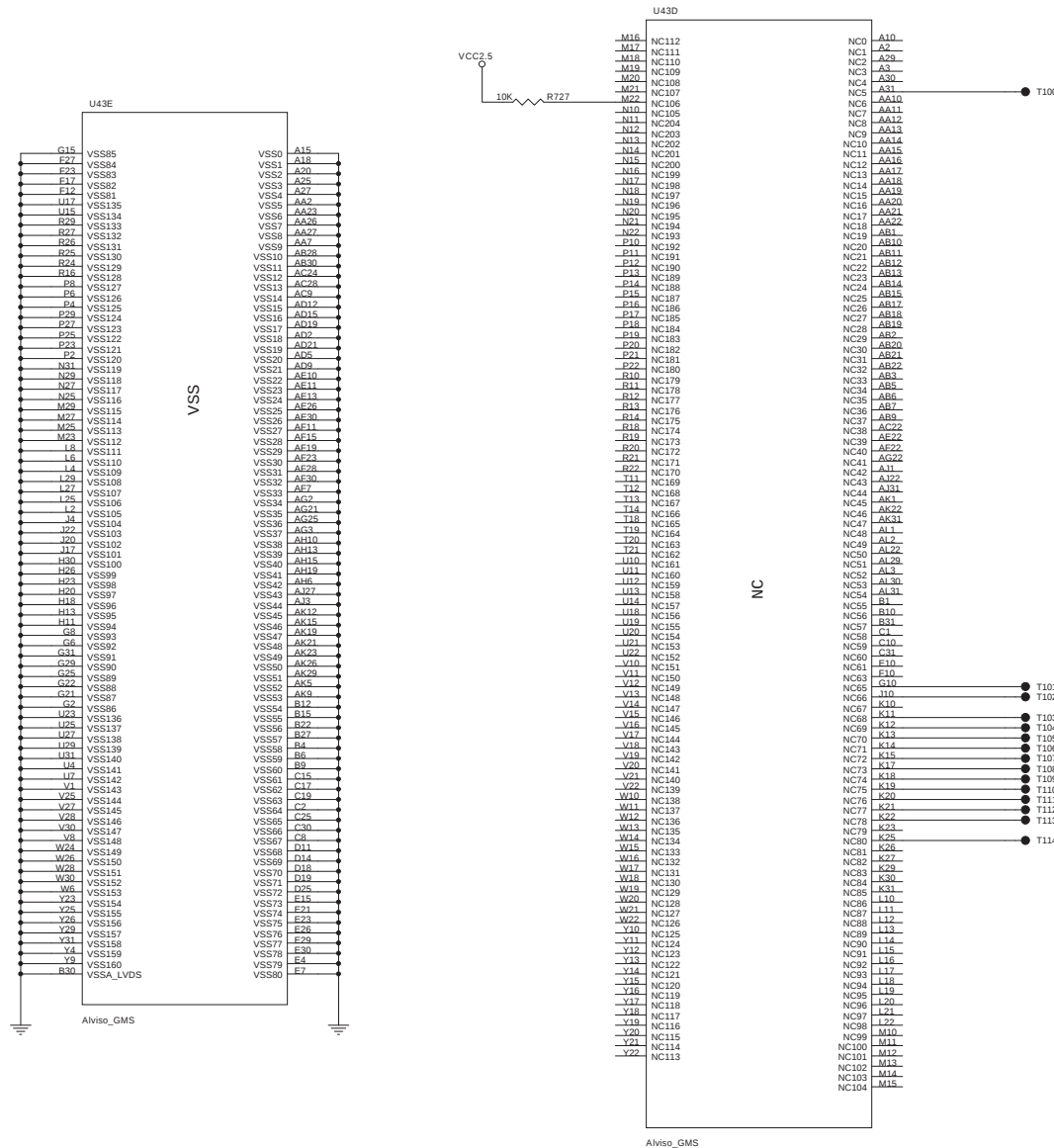


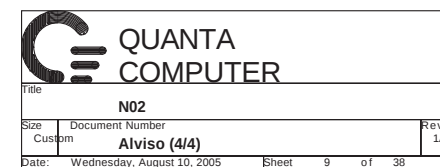
10U/6.3V/X5R(CC0805)
5 mOhm*35

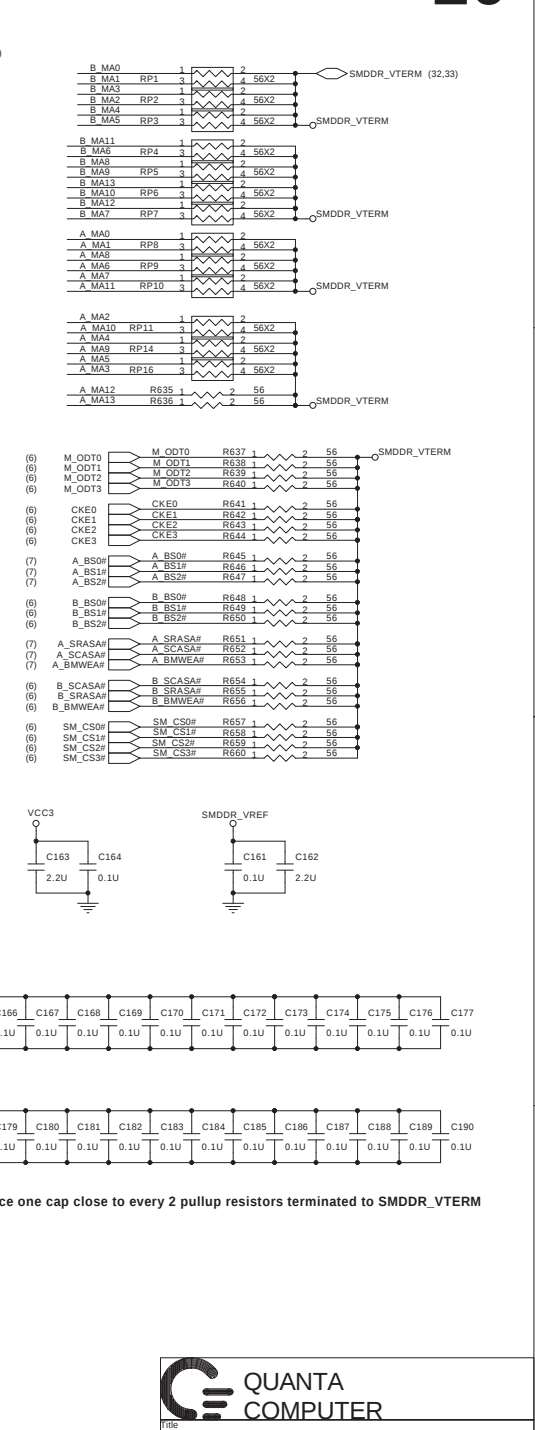
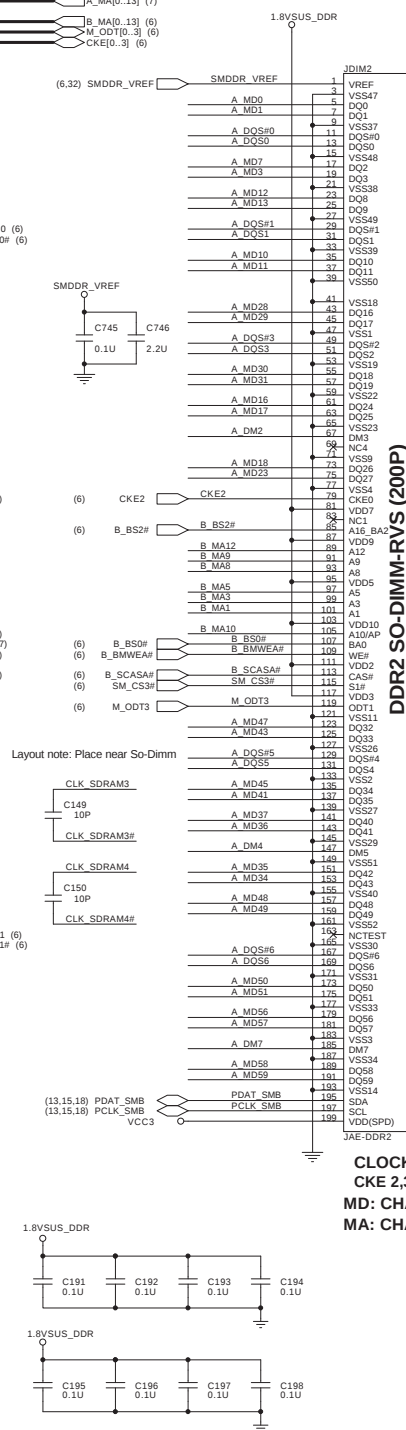


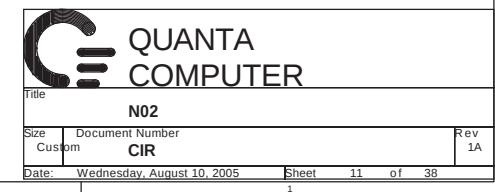




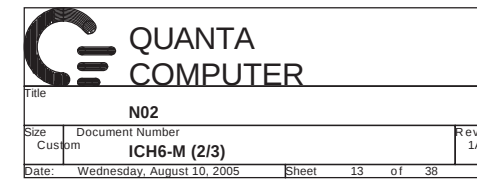


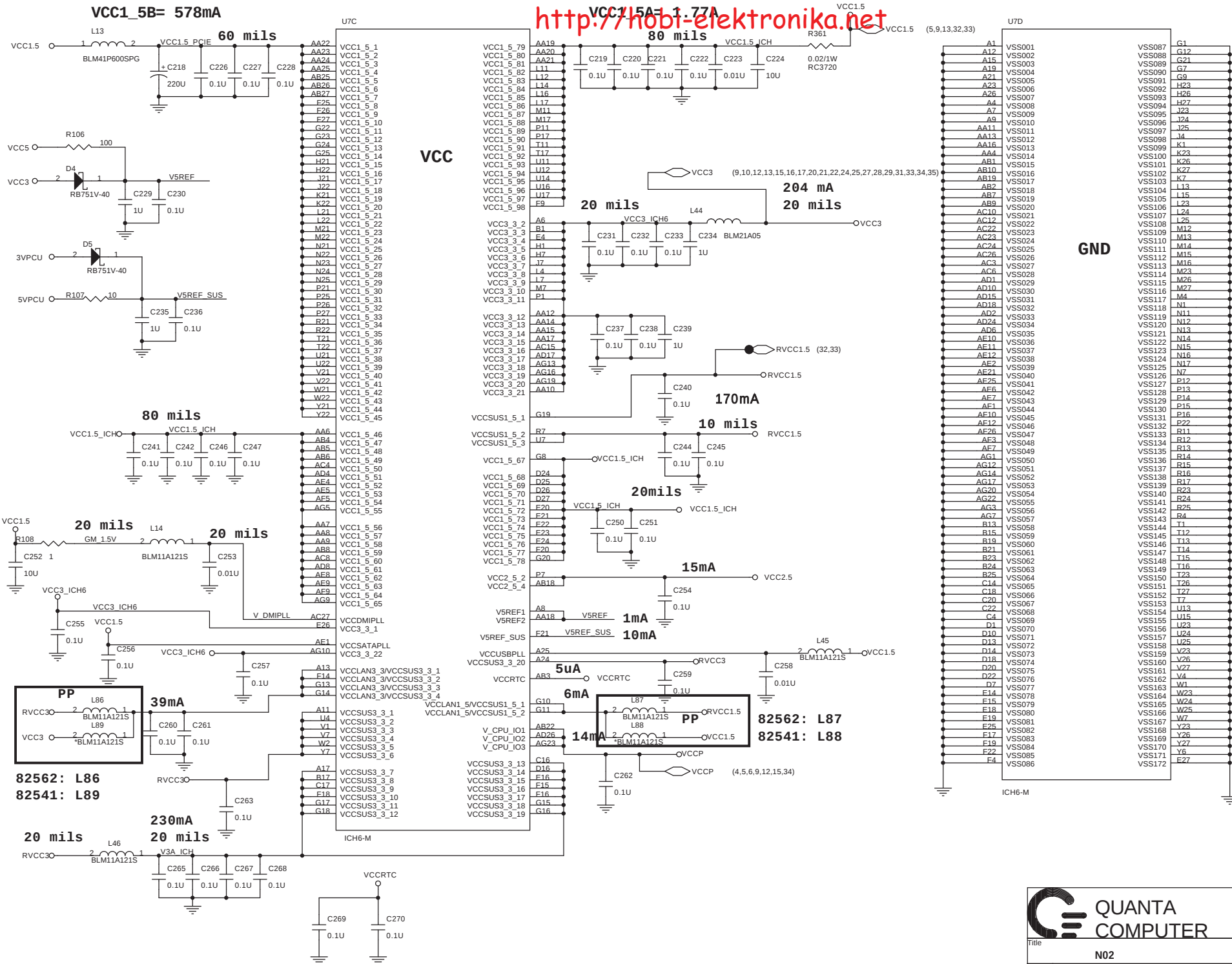




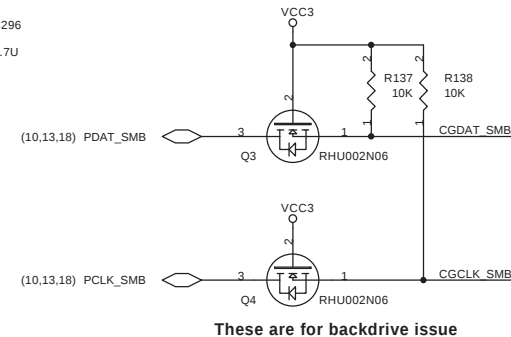
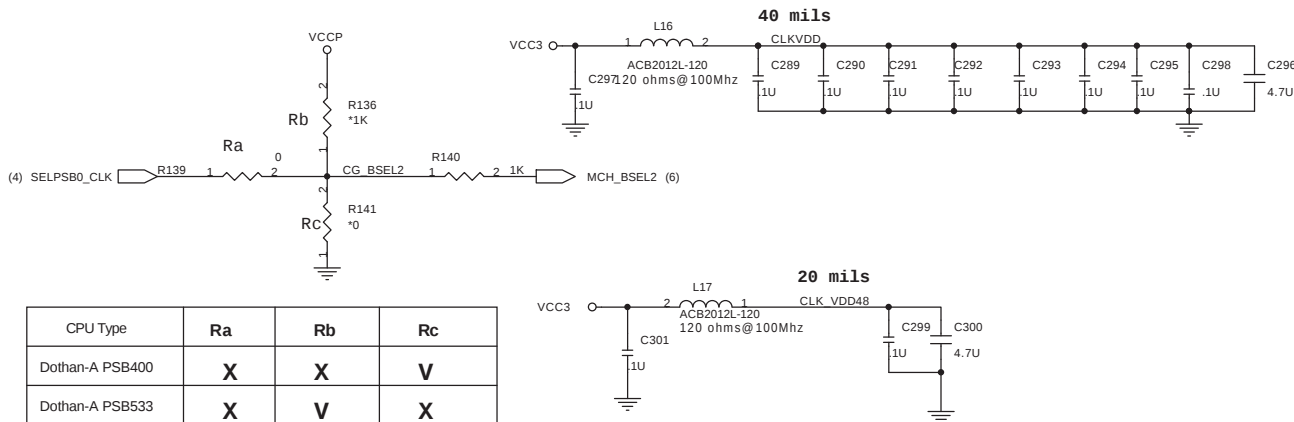




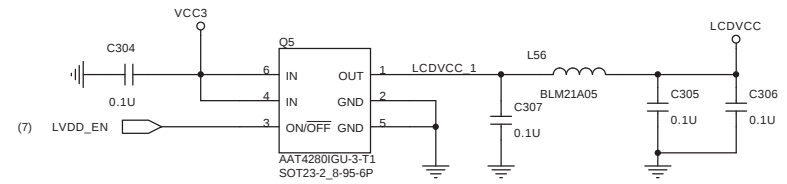




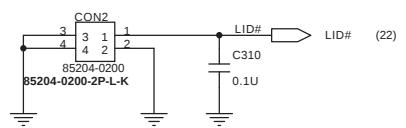
CPU Type	Ra	Rb	Rc
Dothan-A PSB400	X	X	V
Dothan-A PSB533	X	V	X
Dothan-B and later	V	X	X



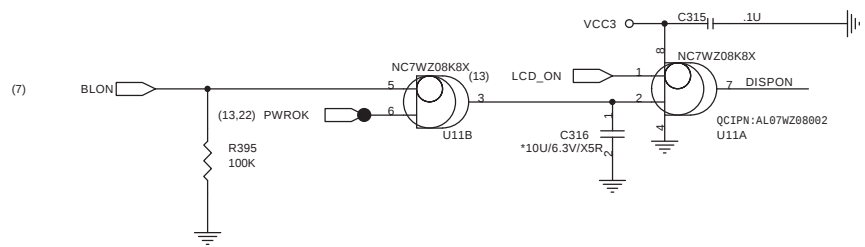
PANEL VCC CONTROL



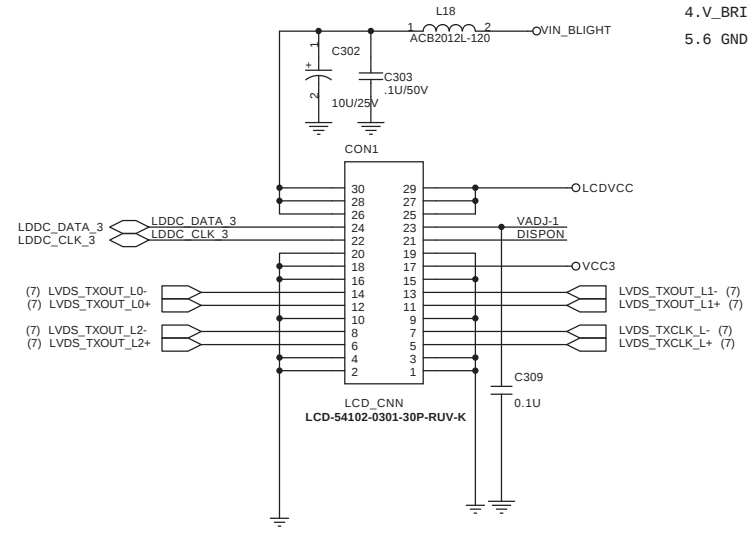
LID



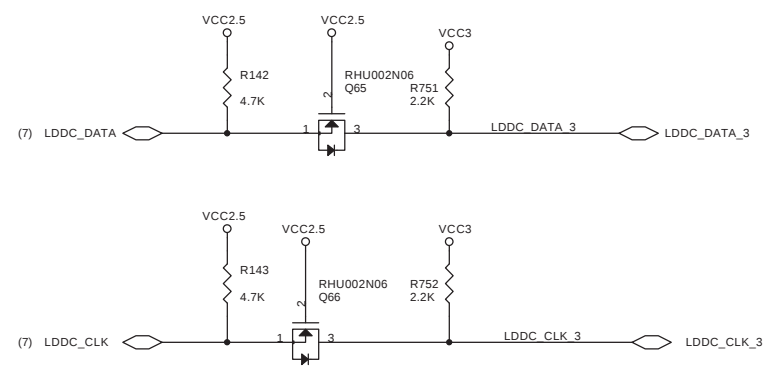
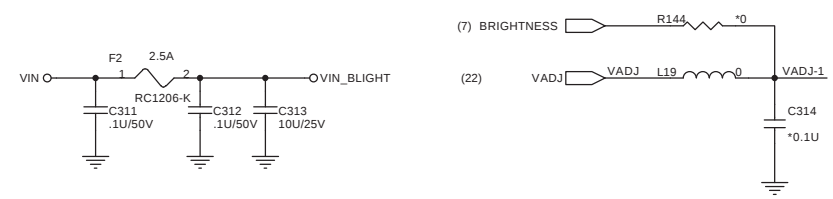
BACKLIGHT CONTROL

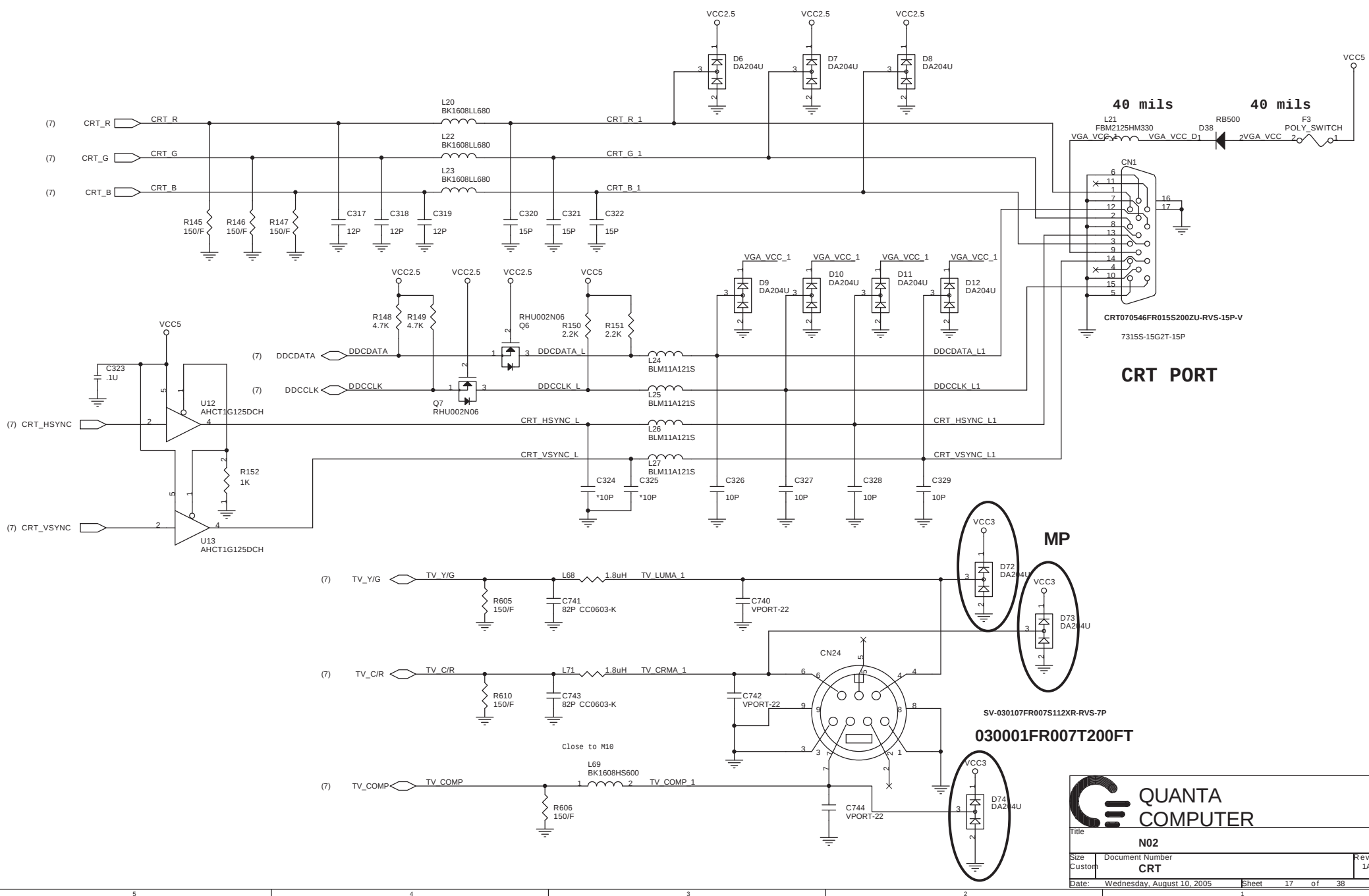


LCD CONNECTOR



Inverter Pin define:
1.2 Vin
3.DISPON
4.V_BRI
5.6 GND





QUANTA COMPUTER

Title: **N02**

Size: **Custom**

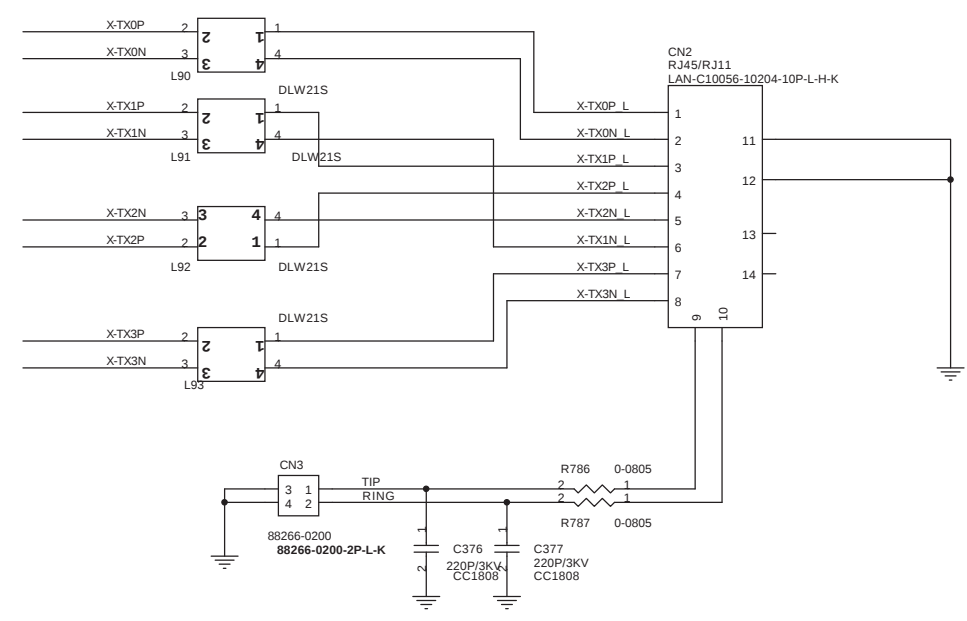
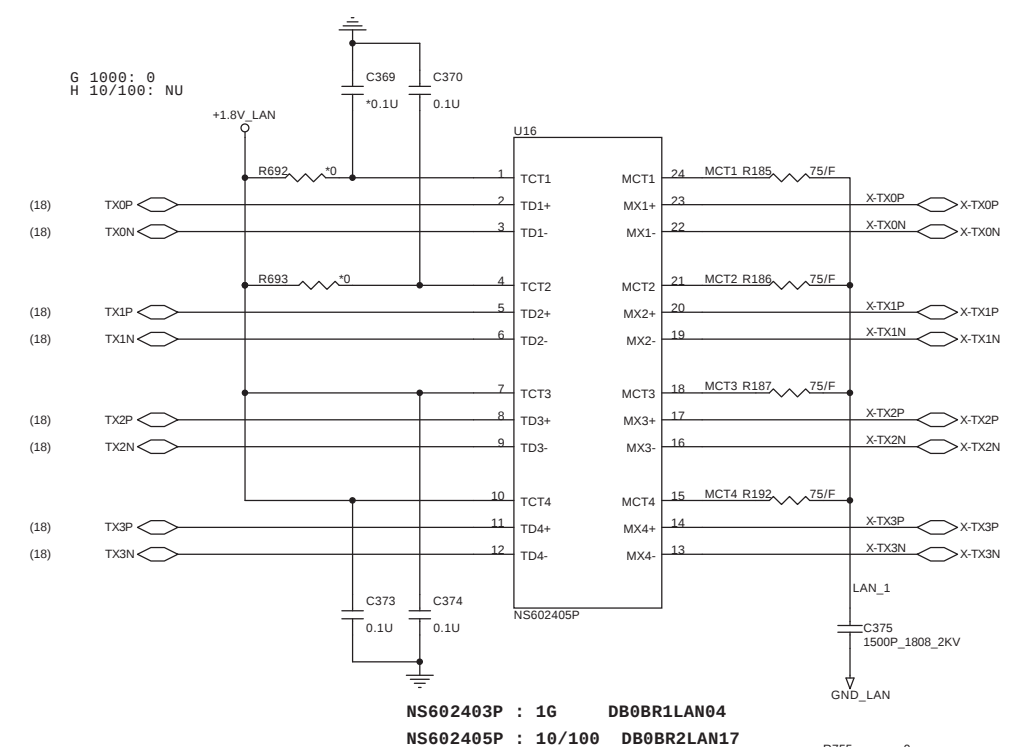
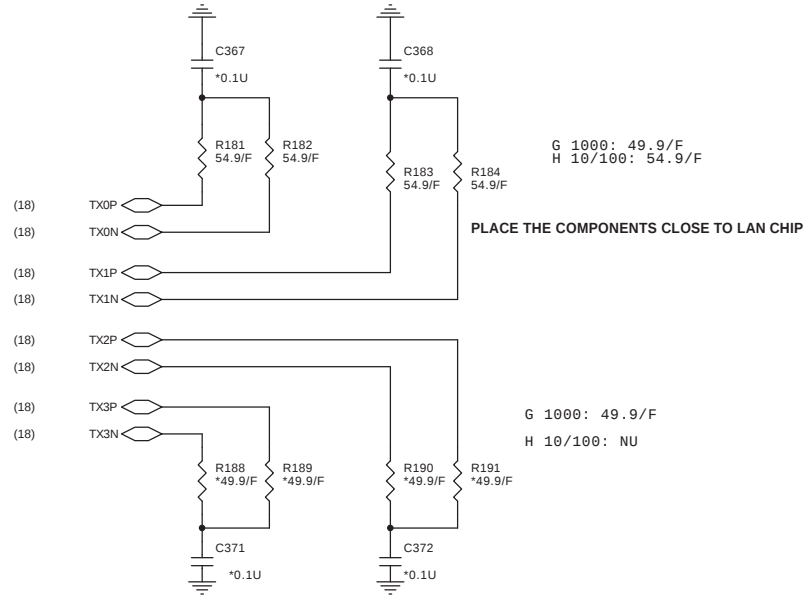
Document Number: **CRT**

Date: **Wednesday, August 10, 2005**

Sheet: **17** of **38**

Rev: **1A**







DIP

1394-020115FR004S510ZL-4P-K

Closed Chip

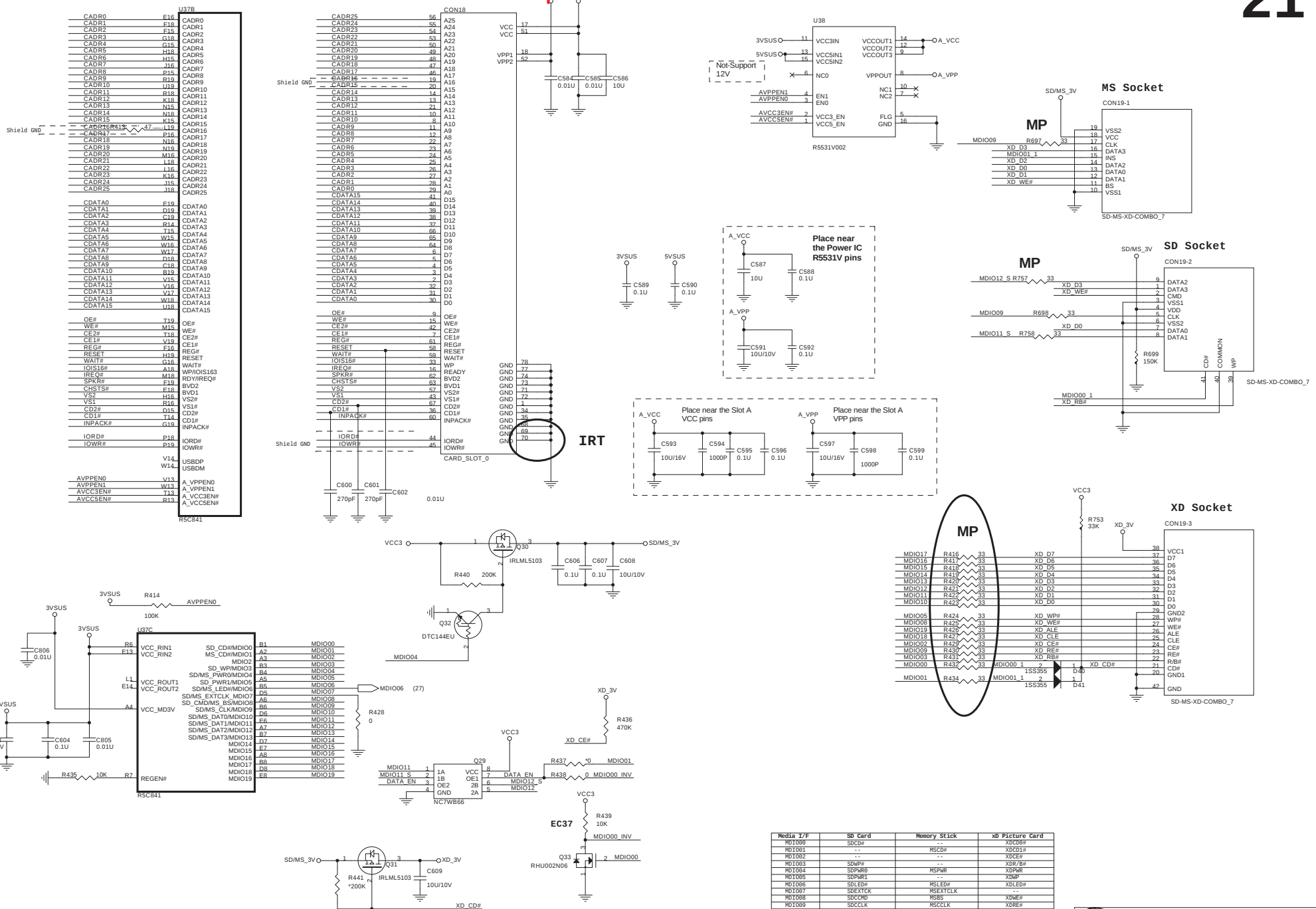
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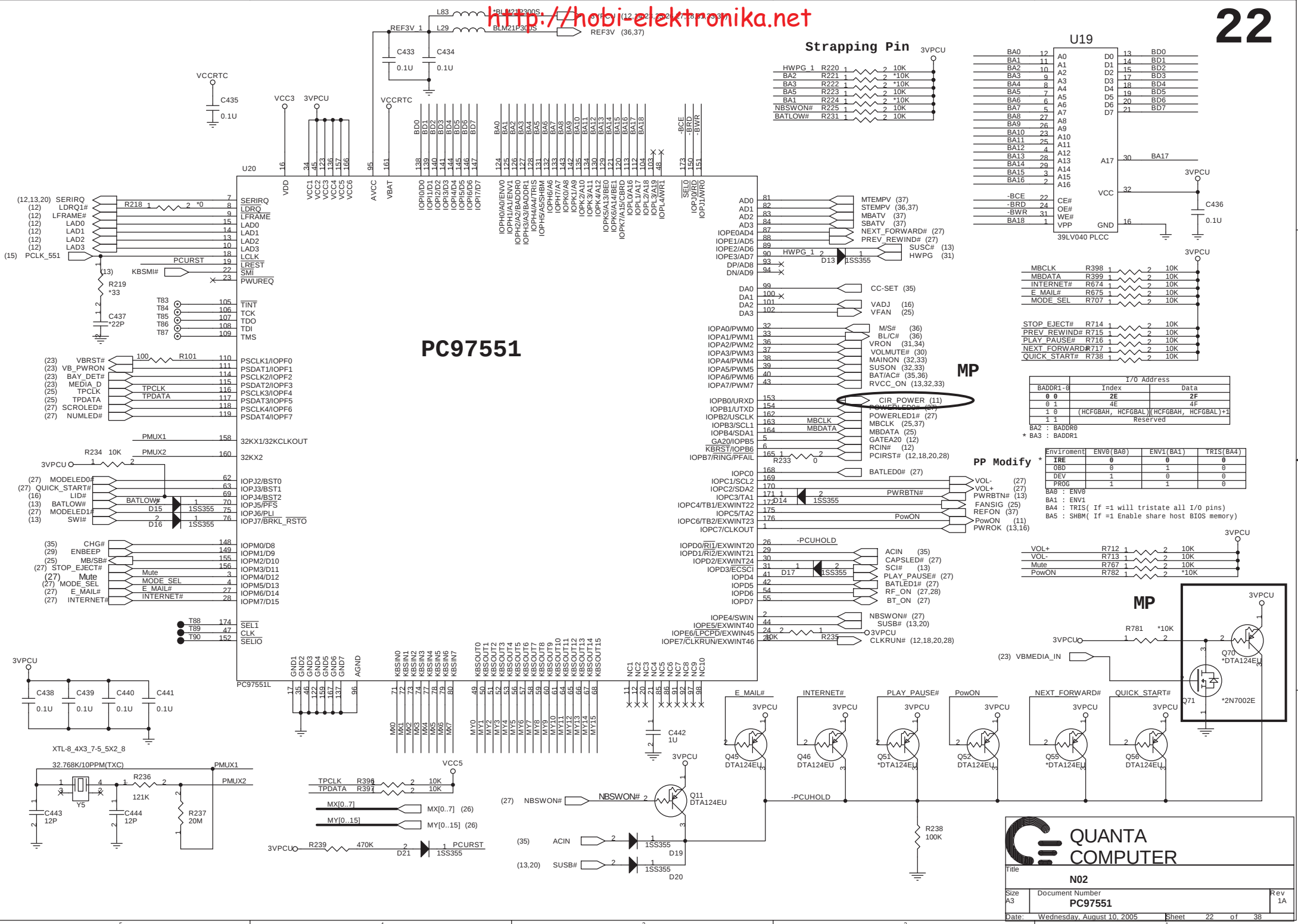


QUANTA
COMPUTER

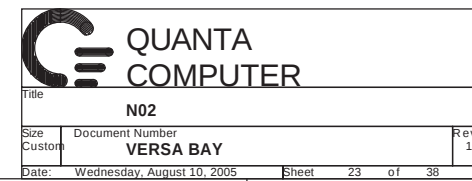
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Size	Document Number	
Custom	R5C841 (PCI/1394)	

Date: Thursday, August 11, 2005 Sheet 20 of 38



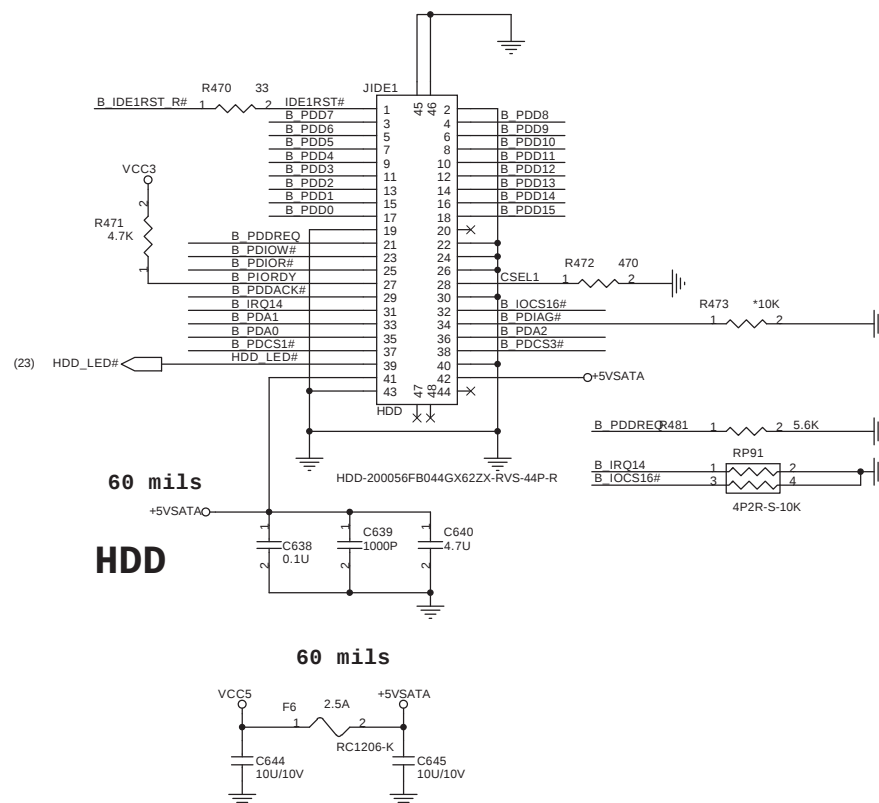


(12) PDD[0..15]		PDD[0..15]
(12) PDDREQ		PDDREQ
(12) PDIOW#		PDIOW#
(12) PDIOR#		PDIOR#
(12) PIORDY		PIORDY
(12) PDDACK#		PDDACK#
(12) IRQ14		IRQ14
(12) PDA1		PDA1
(12) PDA0		PDA0
(12) PDCS1#		PDCS1#
(12) PDA2		PDA2
(12) PDCS3#		PDCS3#



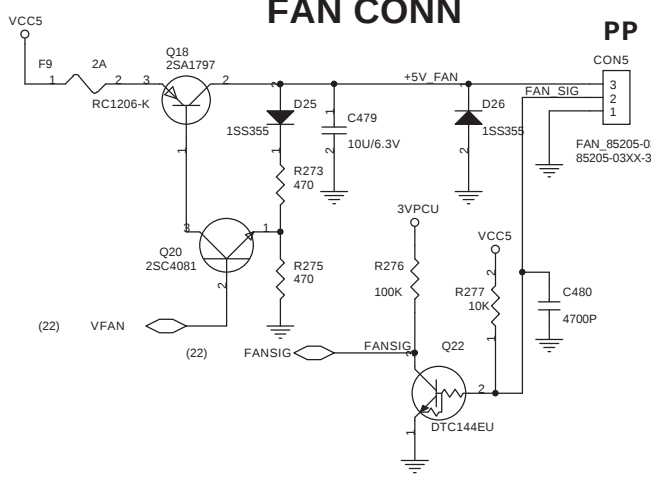


SATA TO PATA SWITCH

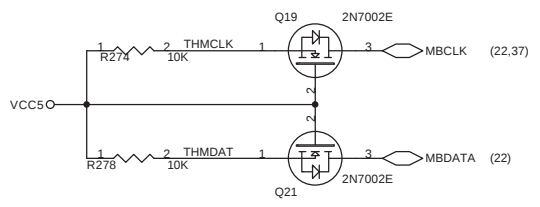


DEVICE CONFIGURATION		
Pin Name	Pin#	Settings
T7	40	NC
T6	39	1/NC
T5	38	0
T4	37	NC
T3	36	1/NC
T2	35	1/NC
T1	34	0/NC
T0	33	1/NC
CNFG 2:0	20, 19, 18	NC, 0, NC
ATA0SEL	21	1/NC
H_PDIAG_N	46	0
H_IOC16_N	52	1/NC

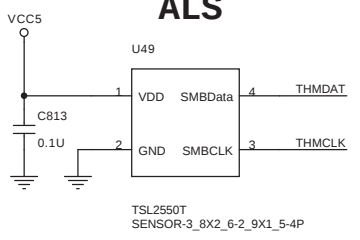
FAN CONN



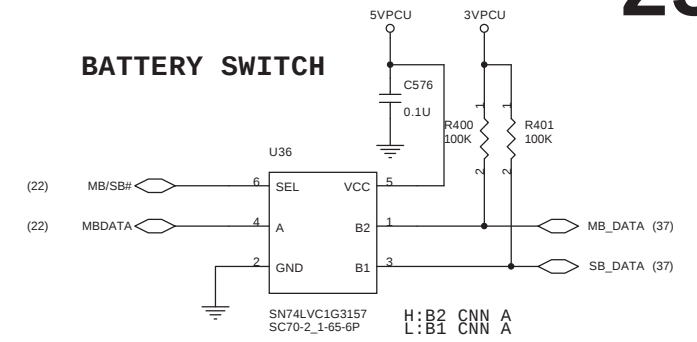
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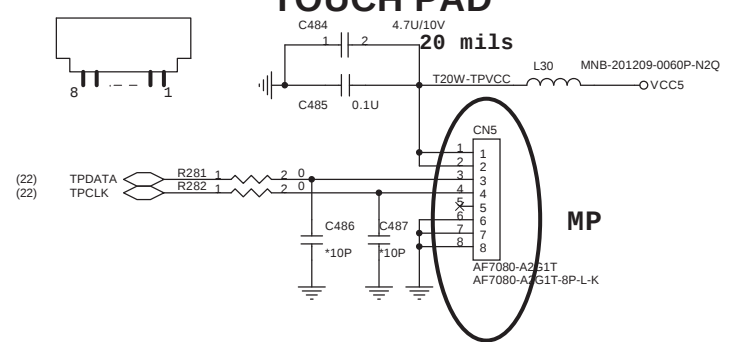
ALS



BATTERY SWITCH

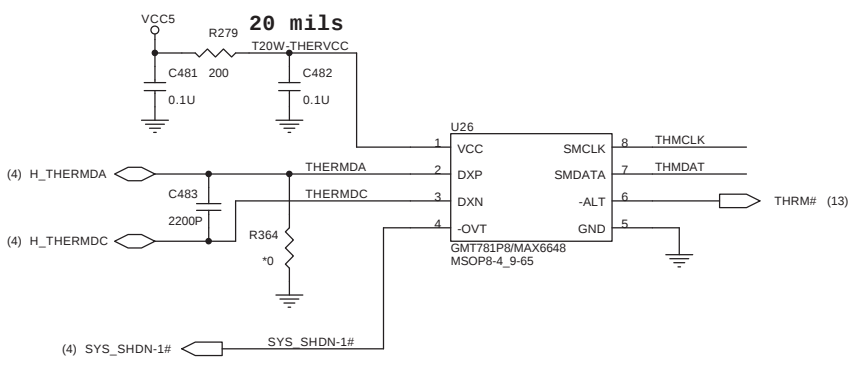


Touch Pad Conn.



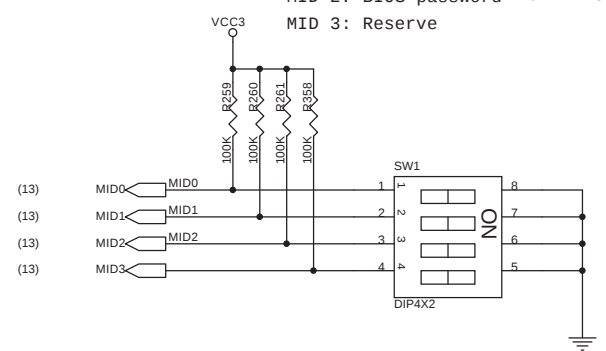
TOUCH PAD

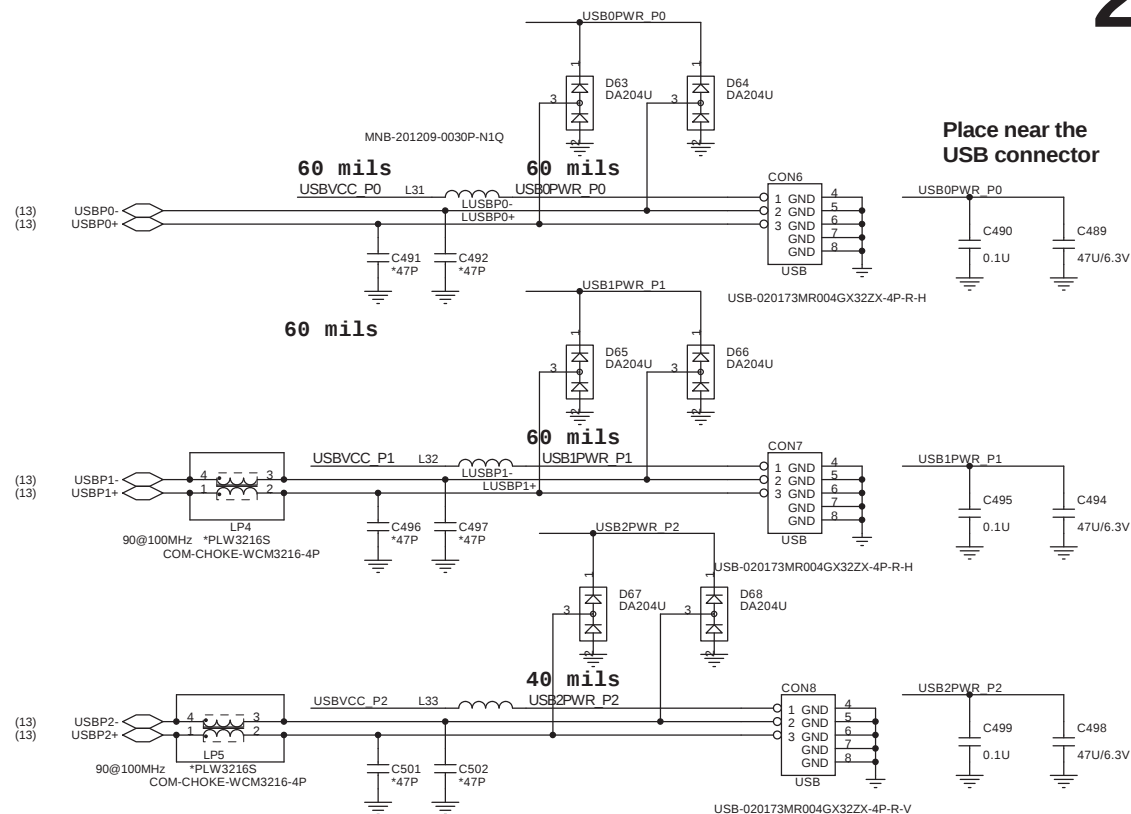
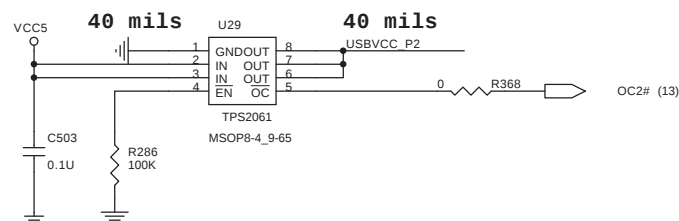
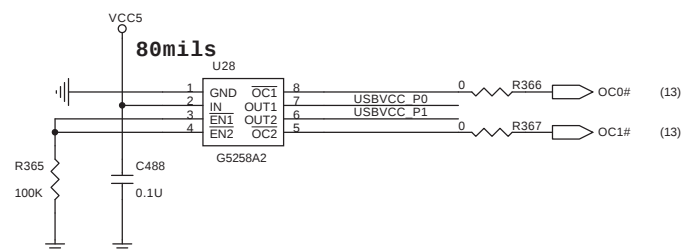
Thermal Control



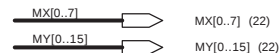
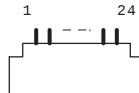
MID[2:0] On side:"0", Off side:"1"

- MID 0: KBSEL1
- MID 1: KBSEL2
- MID 2: BIOS password
- MID 3: Reserve
- 11: Lavie (For JPN consumer)
- 01: US International KB for HK/CH
- 00: VersaPro (For JPN commercial)
- 10: Reserve
- Off: Disable password default
- On: Enable

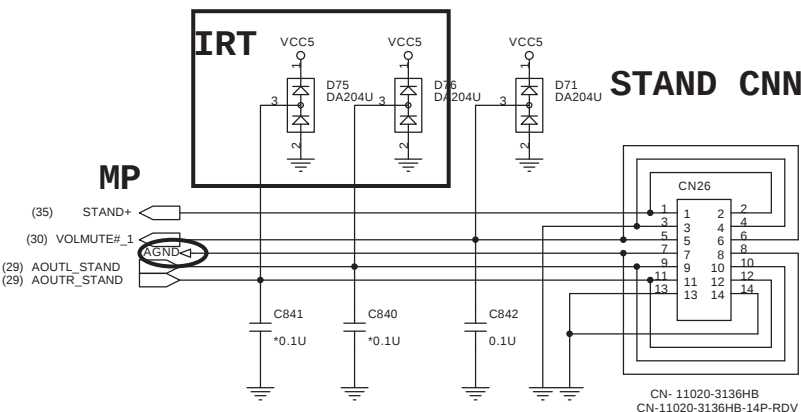
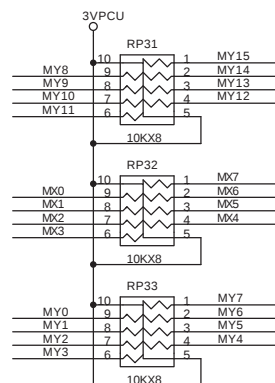
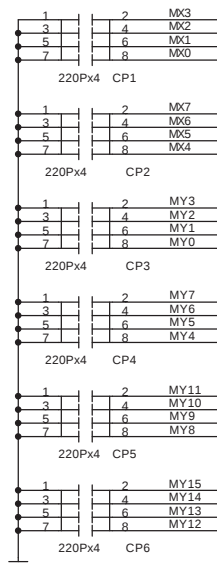
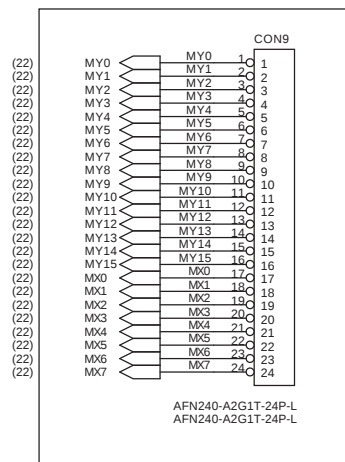




KEYBOARD



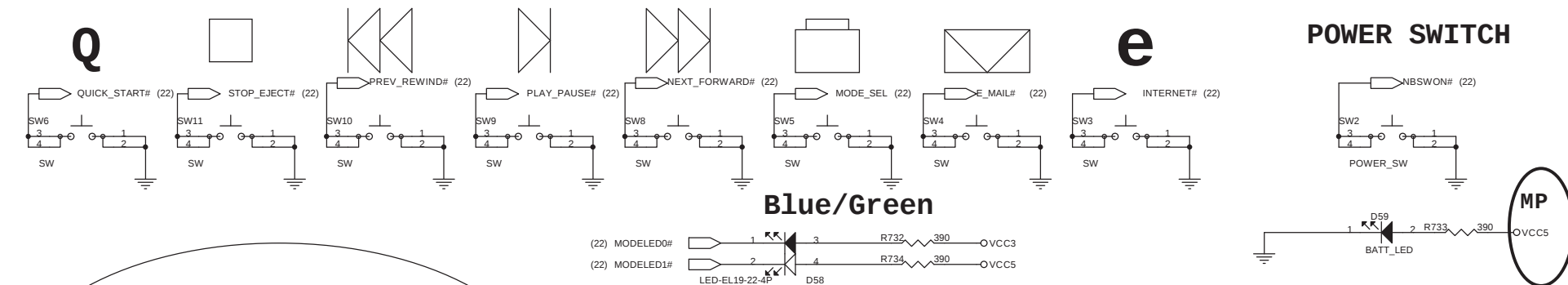
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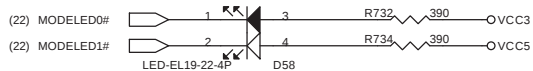
Q

e

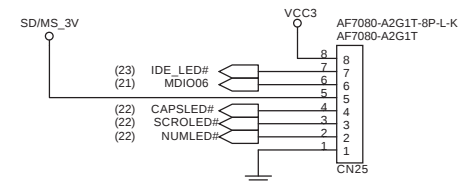
POWER SWITCH



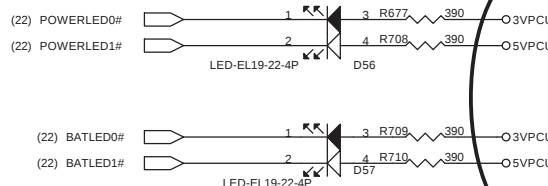
Blue/Green



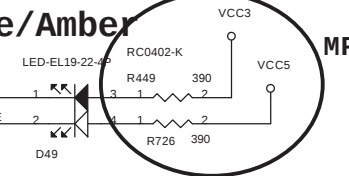
LED/B CNN



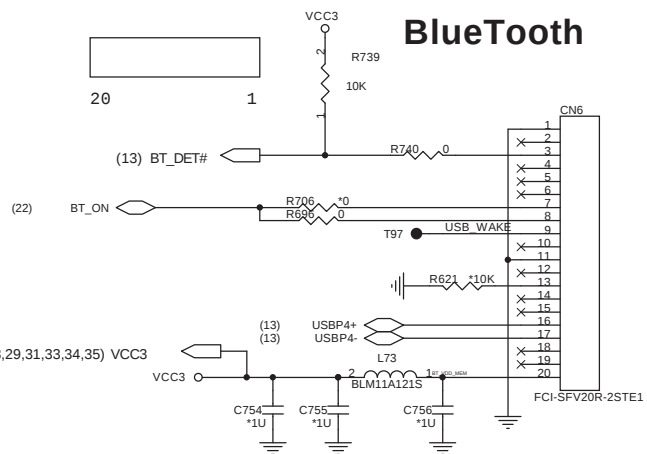
Blue/Amber



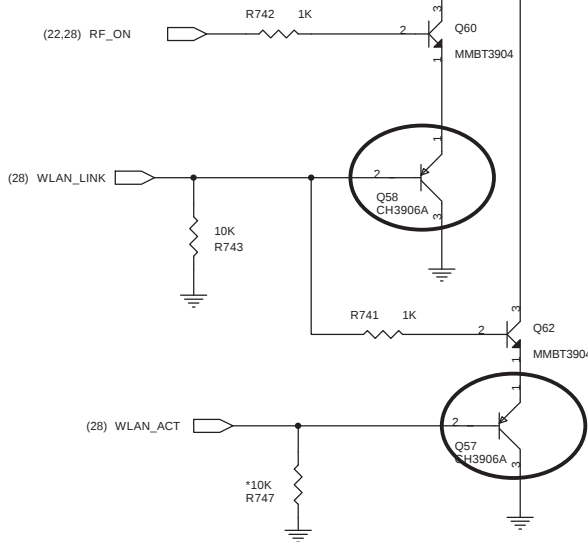
Blue/Amber



BlueTooth

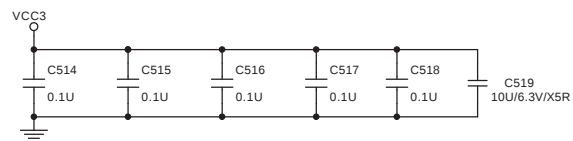
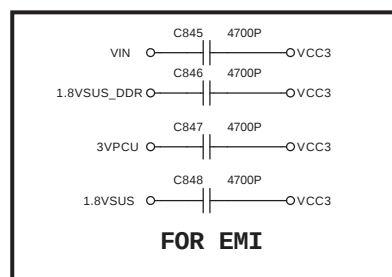
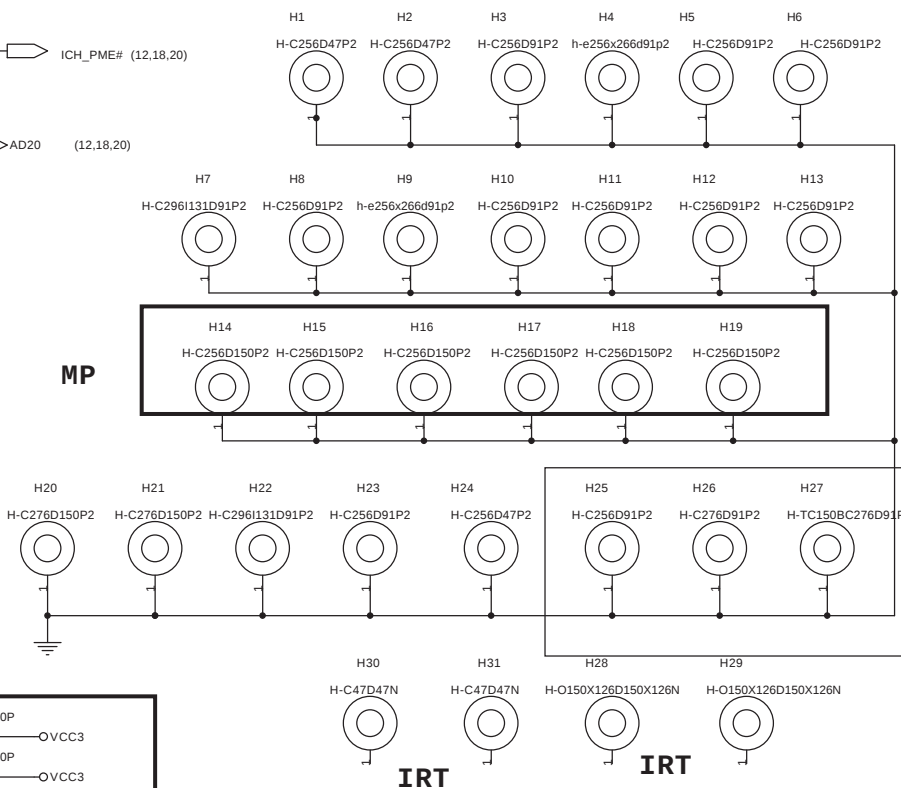
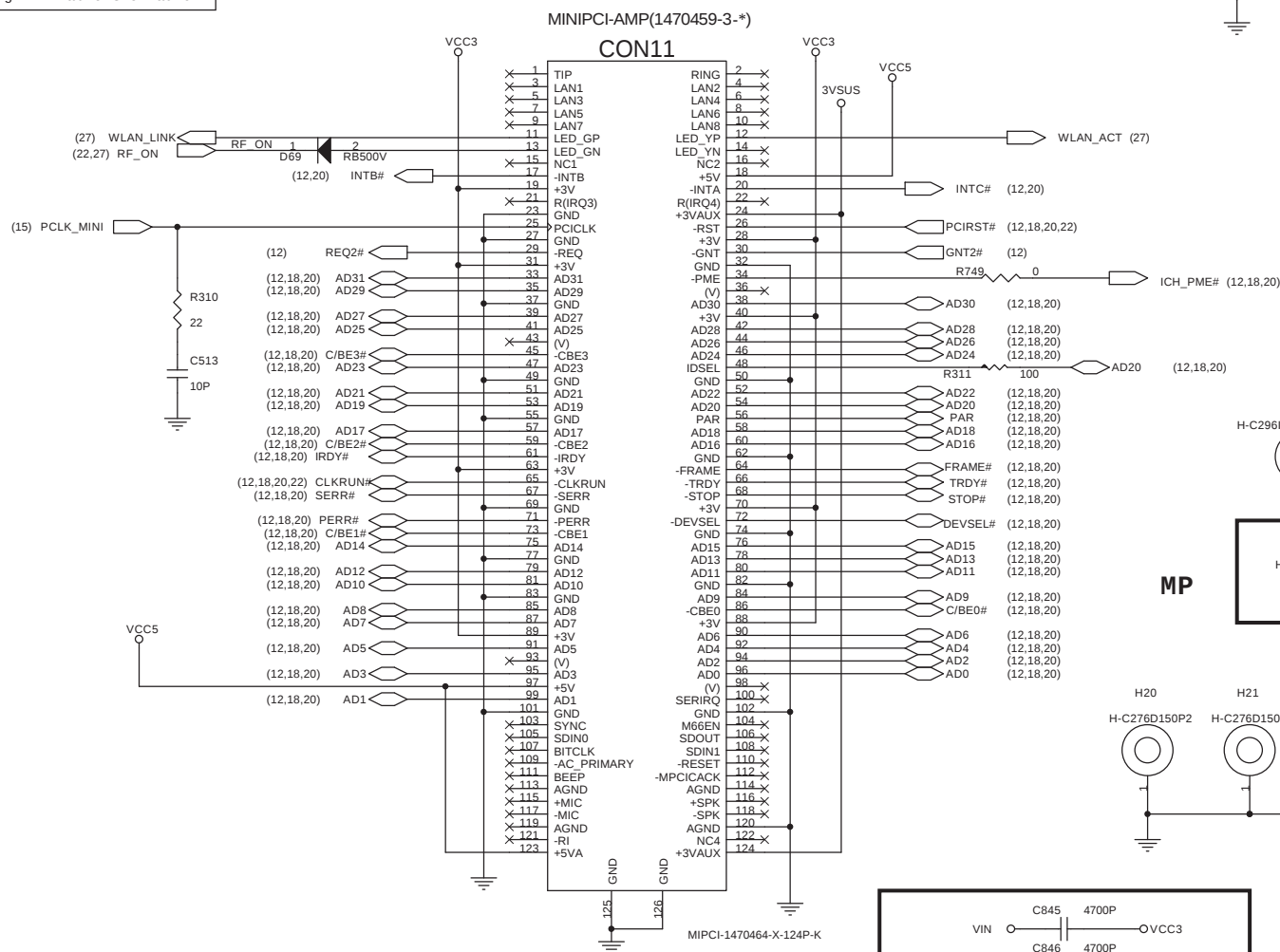
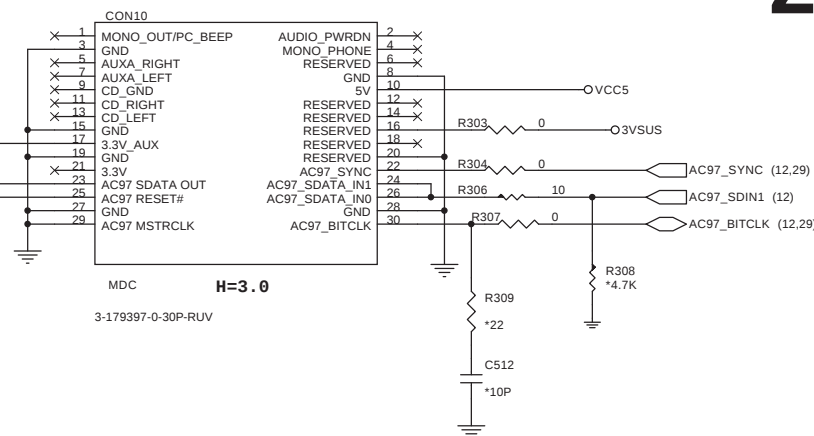
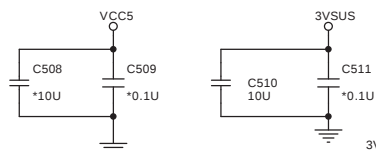
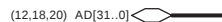


MAX: 200mA



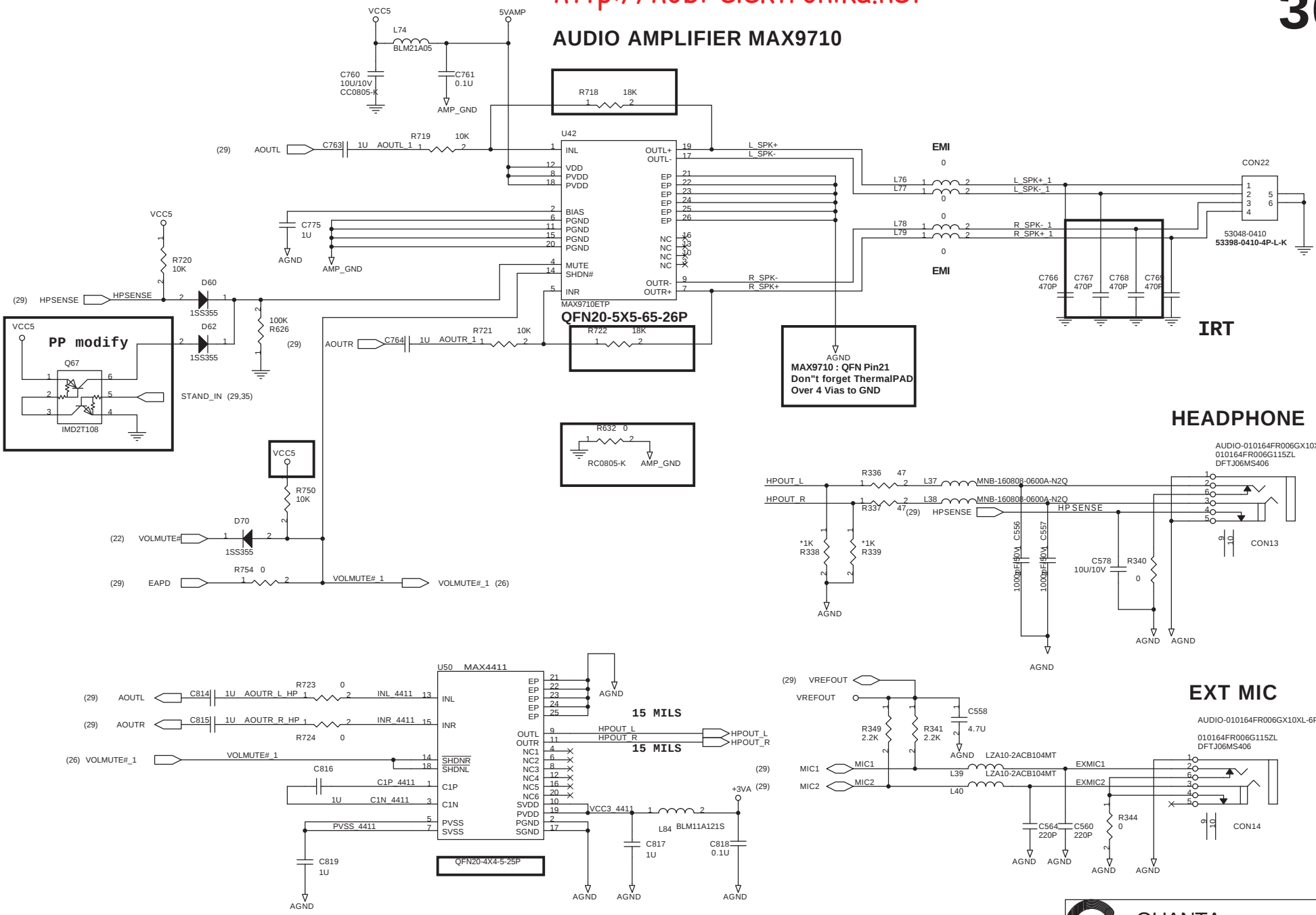
Title		
N02		
Size	Document Number	Rev
Custom	HDD/LED	1A
Date:	Wednesday, August 10, 2005	Sheet 27 of 38

```
WLSW:
Low : disable the radio.
High : Enable the radio.
```





AUDIO AMPLIFIER MAX9710



IRT

HEADPHONE

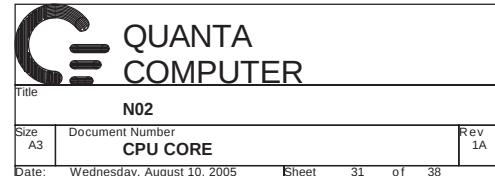
EXT MIC



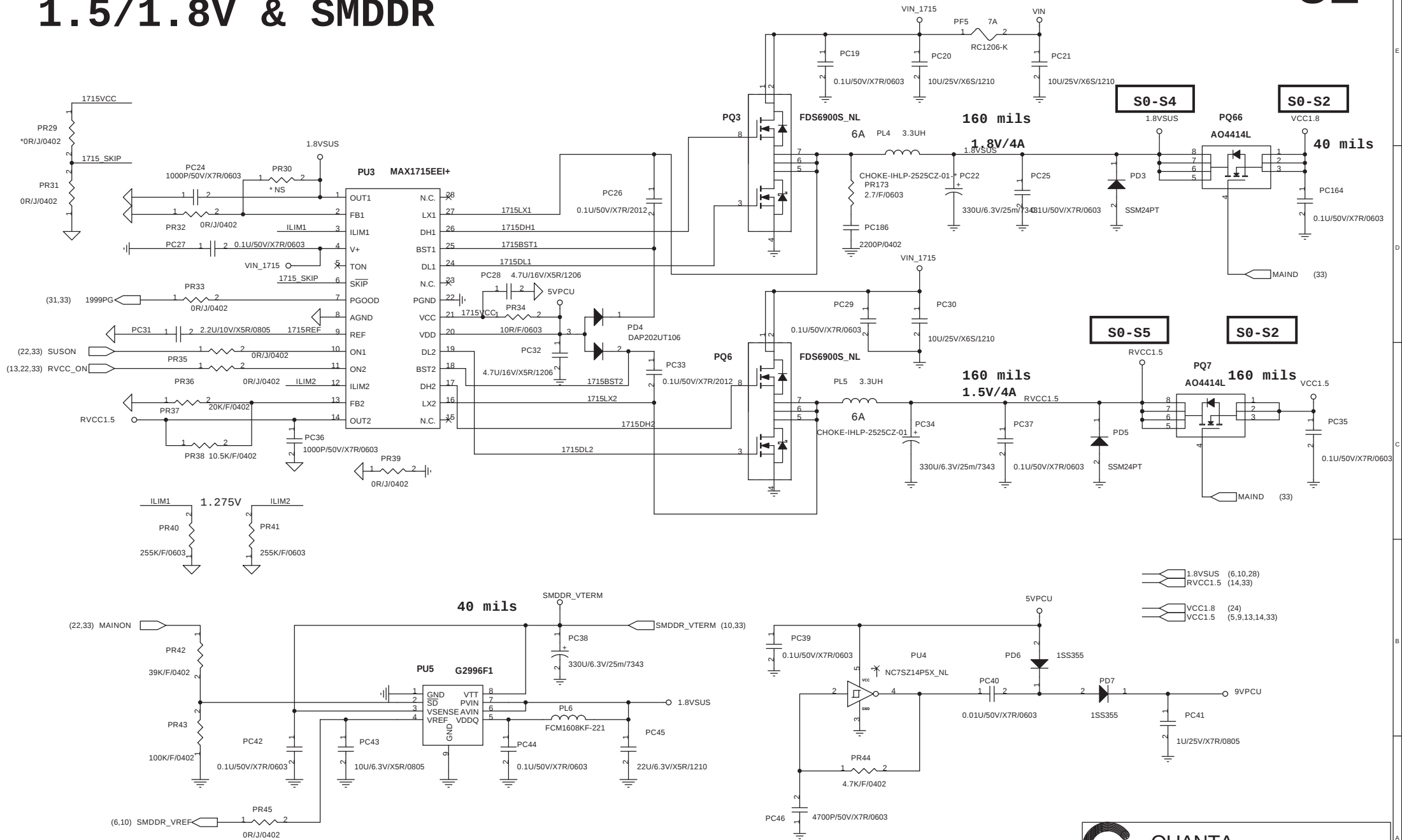
QUANTA
COMPUTER

Title		
N02		
Size	Document Number	Rev
Custom	AUDIO(AMP,POWER,HP CNN)	1A
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1.5/1.8V & SMDDR



**QUANTA
COMPUTER**

Title

N02

Size

A3

Document Number

1.5V/1.8V & SMDDR

Rev

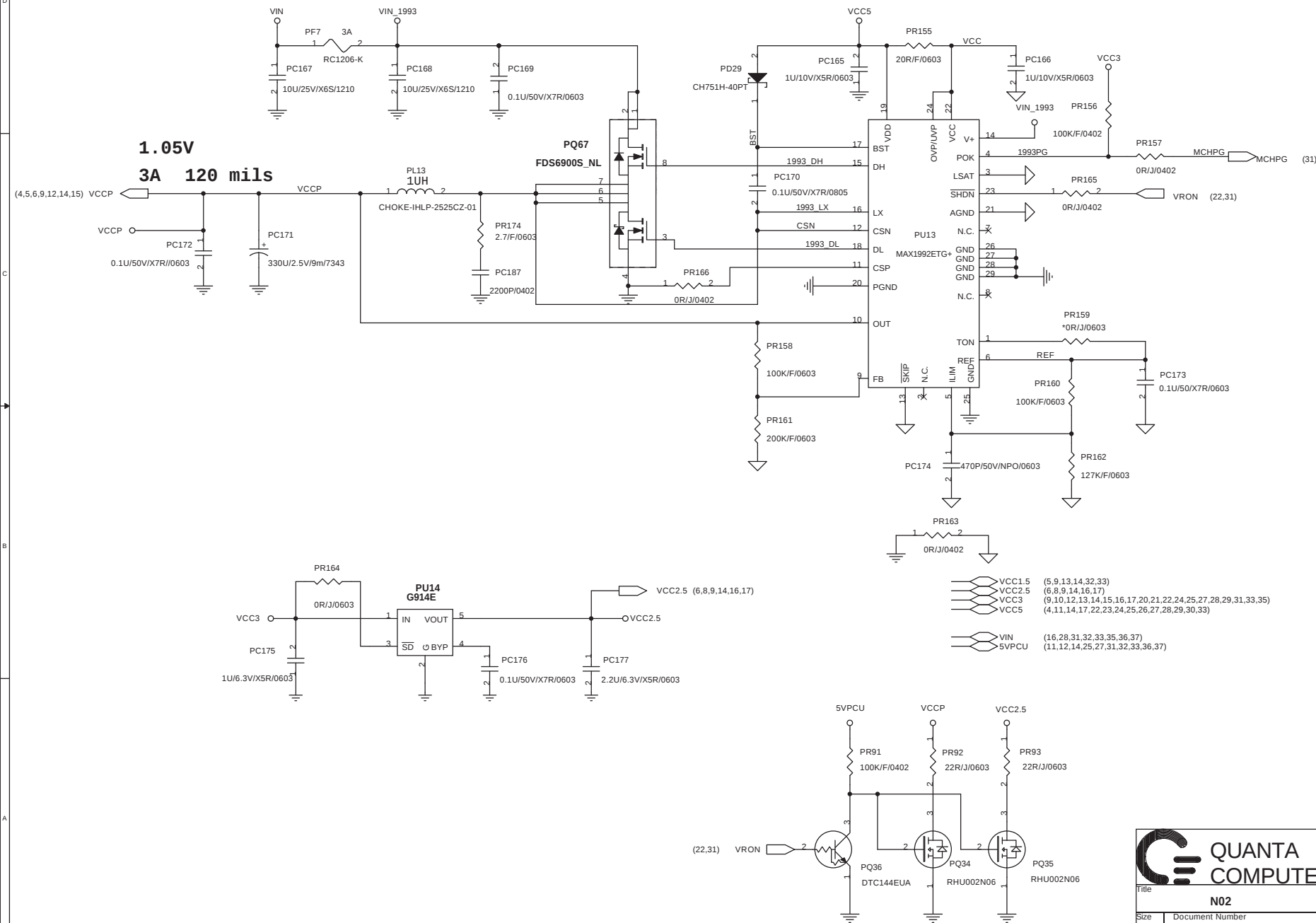
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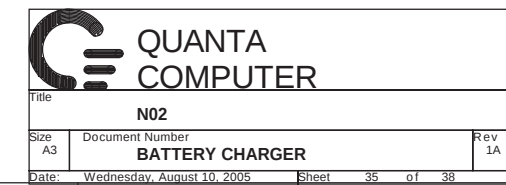
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Wednesday, August 10, 2005

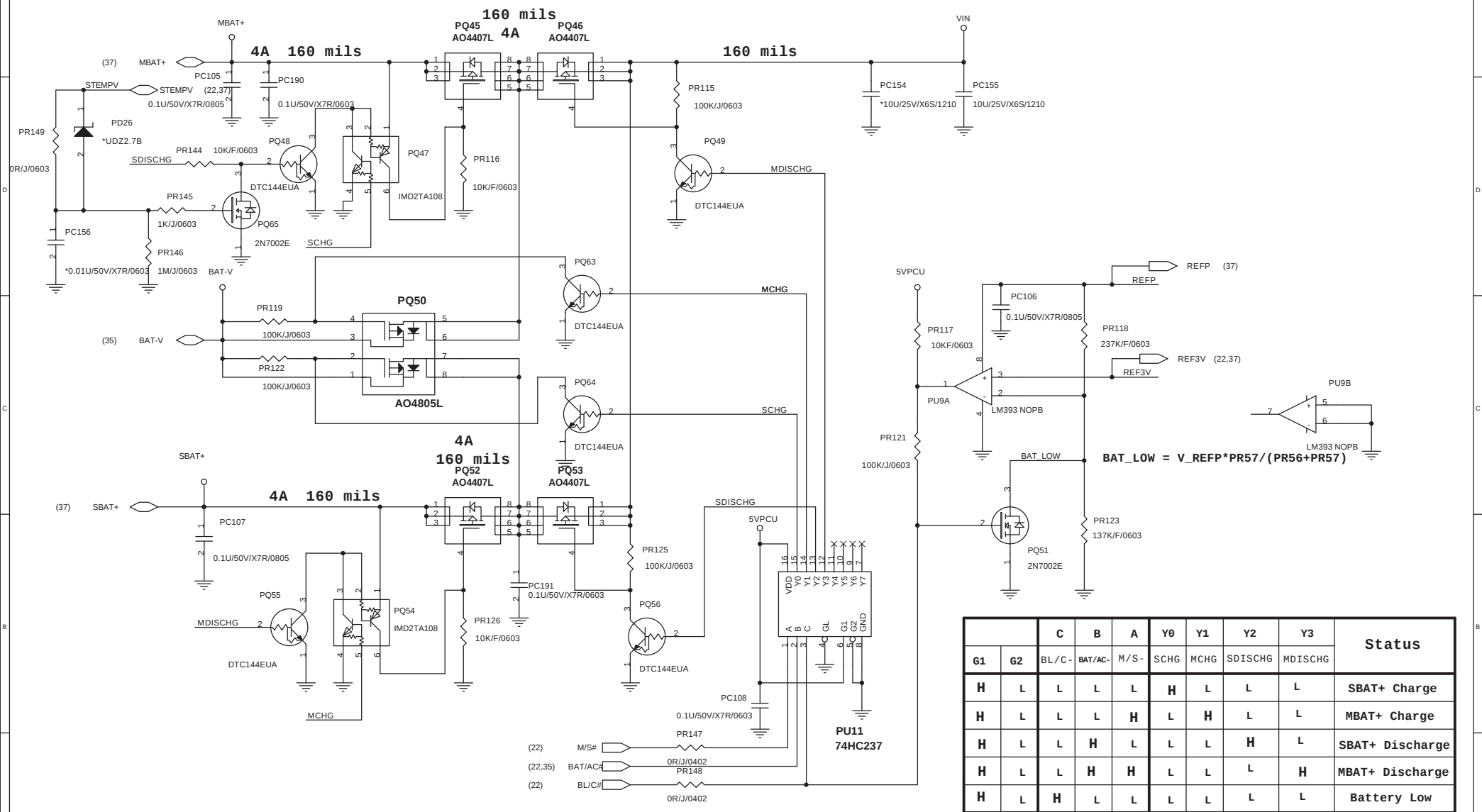
Sheet

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M/S Battery Selector



		C	B	A	Y0	Y1	Y2	Y3	Status
G1	G2	BL/C-	BAT/AC-	M/S-	SCHG	MCHG	SDISCHG	MDISCHG	
H	L	L	L	L	H	L	L	L	SBAT+ Charge
H	L	L	L	H	L	H	L	L	MBAT+ Charge
H	L	L	H	L	L	L	H	L	SBAT+ Discharge
H	L	L	H	H	L	L	L	H	MBAT+ Discharge
H	L	H	L	L	L	L	L	L	Battery Low



QUANTA
COMPUTER

Title

N02

Size

Document Number

Custom

M/S BATTERY SELECTOR

Date:

Wednesday, August 10, 2005

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Rev

1A

Battery Connector

