
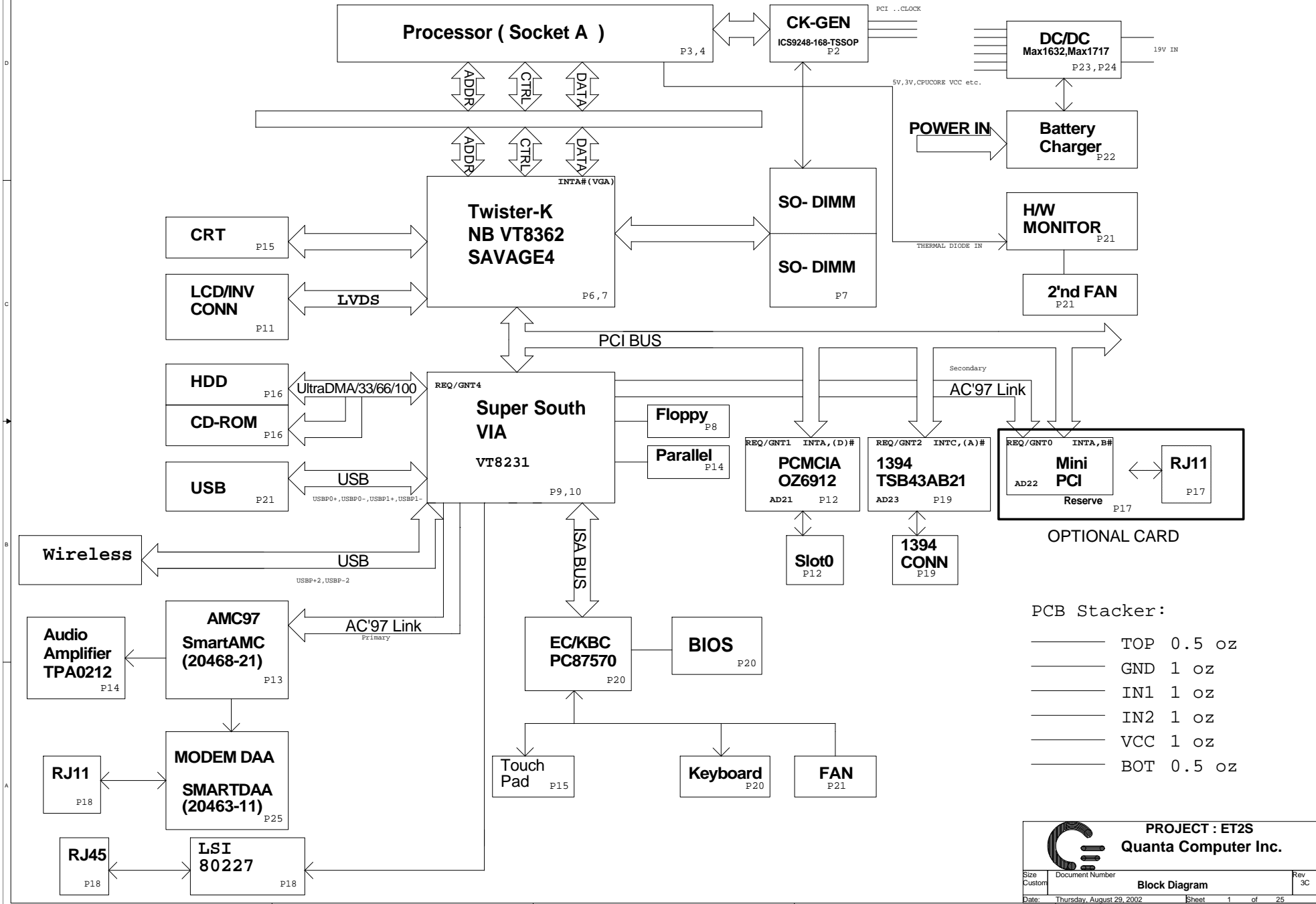


MODEL:	REV	CHANGE LIST	MODEL		
			ET2S	MB (LAN)	
			PAGE	FROM	TO
ET2S MB (LAN)	3A	FIRST RELEASE	1	3C	
	3B	Reference ECN :E200206-0630	2	3C	3D
	3C	Reference ECN :E200206-0675	3	3C	
	3D	Reference ECN :E200207-1262	4	3C	
			5	3C	
			6	3C	
			7	3C	
			8	3C	
			9	3C	
			10	3C	
			11	3C	
			12	3C	
			13	3C	
			14	3C	
			15	3C	
			16	3C	
			17	3C	
			18	3C	
			19	3C	
			20	3C	
			21	3C	
			22	3C	
			23	3C	
			24	3C	
			25	3C	

 <b>Quanta Computer Inc.</b>	Project : ET2S MB(LAN)	MB Assy' P/N: 21ET2MB00C1	Document No.: 204	REV 3D
	Approved by : Jacky Lee	Drawing by : CHIN HAO KUO	DATE: 2002/5/28	Cover Sheet: 1 of 1

# ET2S SYSTEM BLOCK DIAGRAM



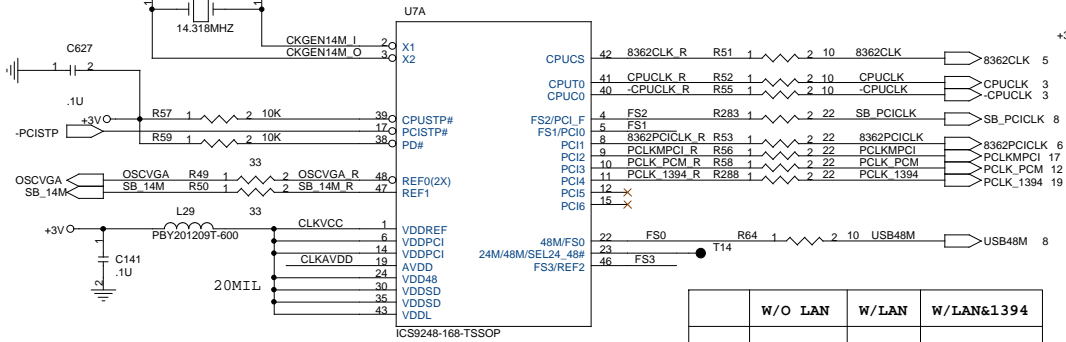
OPTIONAL CARD

- PCB Stacker:
- \_\_\_\_\_ TOP 0.5 oz
  - \_\_\_\_\_ GND 1 oz
  - \_\_\_\_\_ IN1 1 oz
  - \_\_\_\_\_ IN2 1 oz
  - \_\_\_\_\_ VCC 1 oz
  - \_\_\_\_\_ BOT 0.5 oz

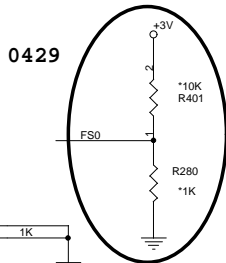
**PROJECT : ET2S**  
**Quanta Computer Inc.**

Size Custom	Document Number <b>Block Diagram</b>	Rev 3C
Date: Thursday, August 29, 2002	Sheet 1	of 25

# CLOCK GENERATOR

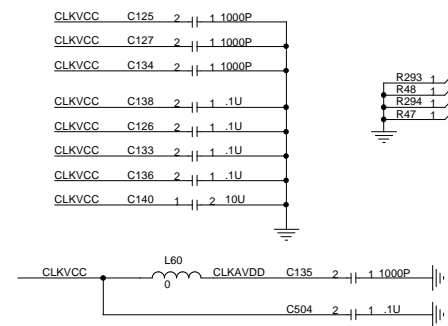


	W/O LAN	W/LAN	W/LAN&1394
<b>R288</b>	NC	NC	Mount



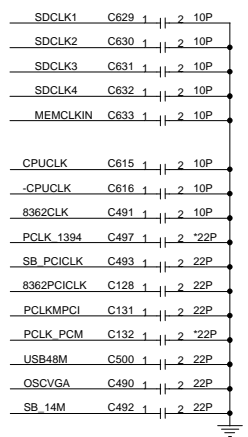
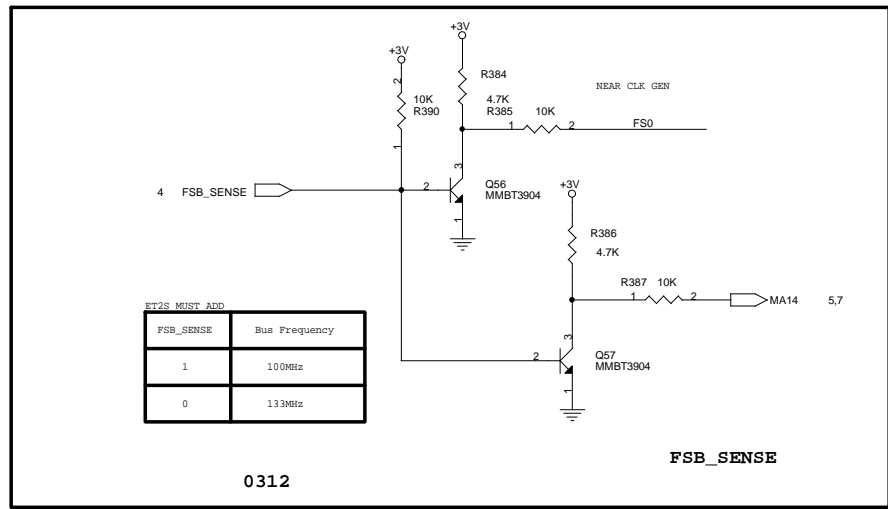
	FS2	FS1	FS0	CPU	SS
	1	1	1	1.33	+/-0.25%
	1	1	0	1.00	+/-0.25%
	1	0	1	1.33	+/-0.6%
	1	0	0	1.00	+/-0.6%
	0	1	1	1.33	-0.5%
	0	1	0	1.00	-0.5%
	0	0	1	1.33	+/-0.35%
	0	0	0	1.00	+/-0.35%


DEFAULT SETTING



CLKVCC trace width: 30mil

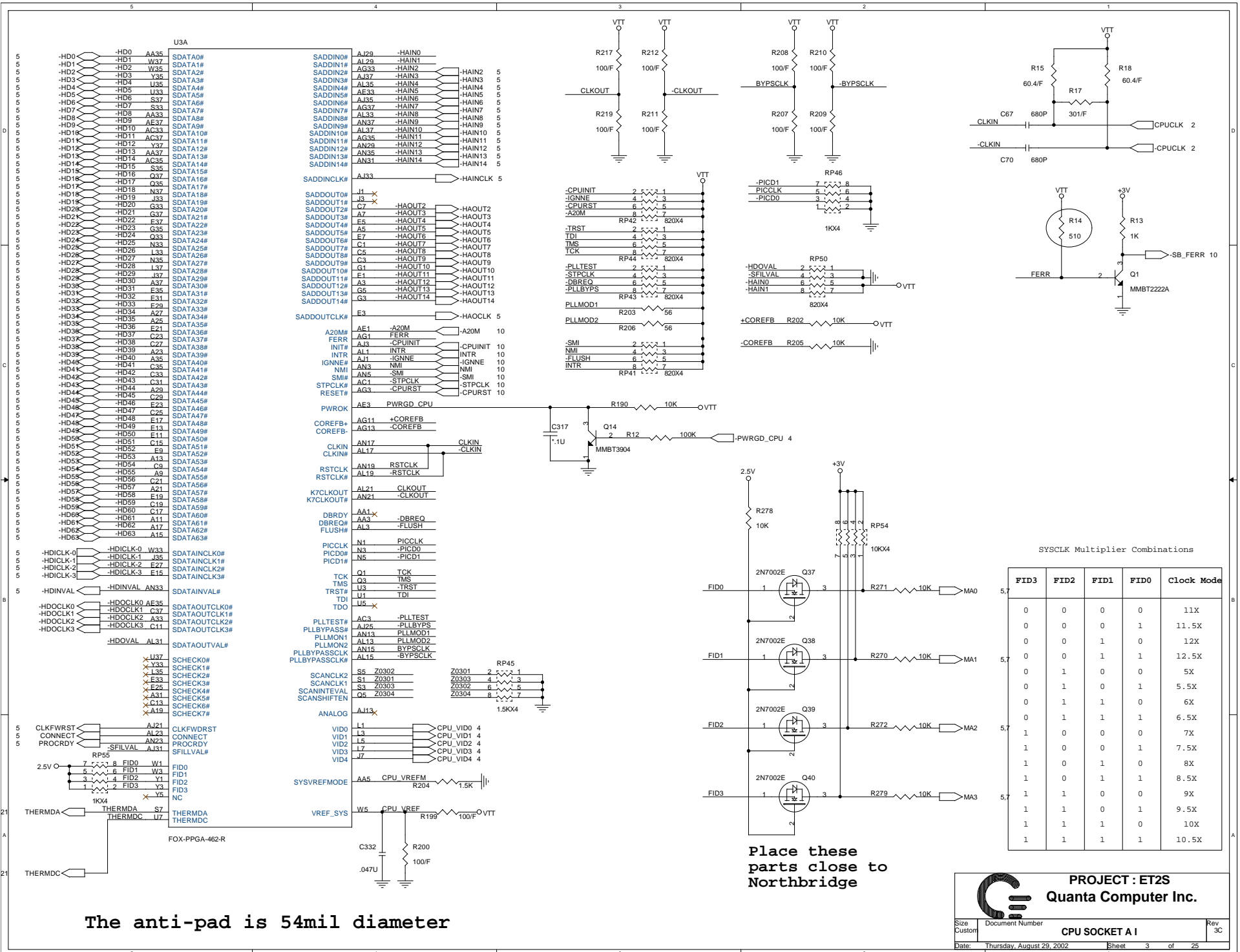
- CPUCLK = Lnb-1" ( 0"~8" )
- CPUCLK = Lnb-1" ( 0"~8" )
- 8362CLK = Lnb ( 1"~9" )
- MEMCLKOUT = As short as possible ( 1"~9" )
- MEMCLKIN = Lsd+4.5" ( 5.5"~8.5" )
- DIMCLK[1..4] = Lsd ( 1"~4" )
- DIMCLK0 = Lsd+2.5" ( 3.5"~6.5" )
- 8362PCICLK = Lpci +3" ( 4"~15" )
- SB\_PCICLK = Lpci +3" ( 4"~15" )
- PCMCICLK = Lpci ( 1"~12" )
- MINIPICLK = Lpci ( 1"~12" )





**PROJECT : ET2S**  
**Quanta Computer Inc.**

Size Custom	Document Number <b>CLOCK GENERATOR</b>	Rev 3D
Date: Thursday, August 29, 2002 Sheet 2 of 25		

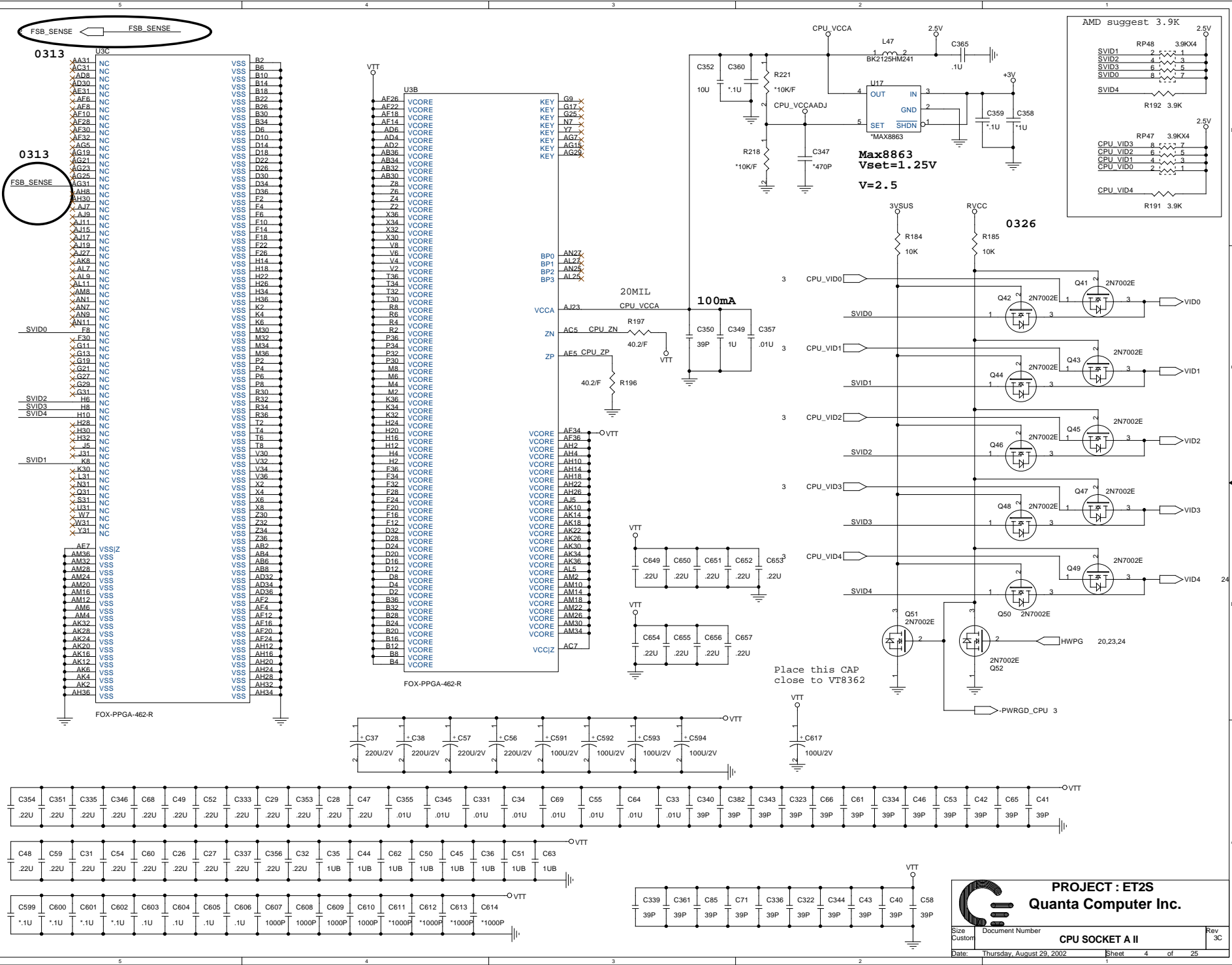


The anti-pad is 54mil diameter

Place these parts close to Northbridge

**PROJECT : ET2S**  
**Quanta Computer Inc.**

Size: Custom    Document Number: CPU SOCKET A I    Rev: 3C  
Date: Thursday, August 29, 2002    Sheet: 3 of 25



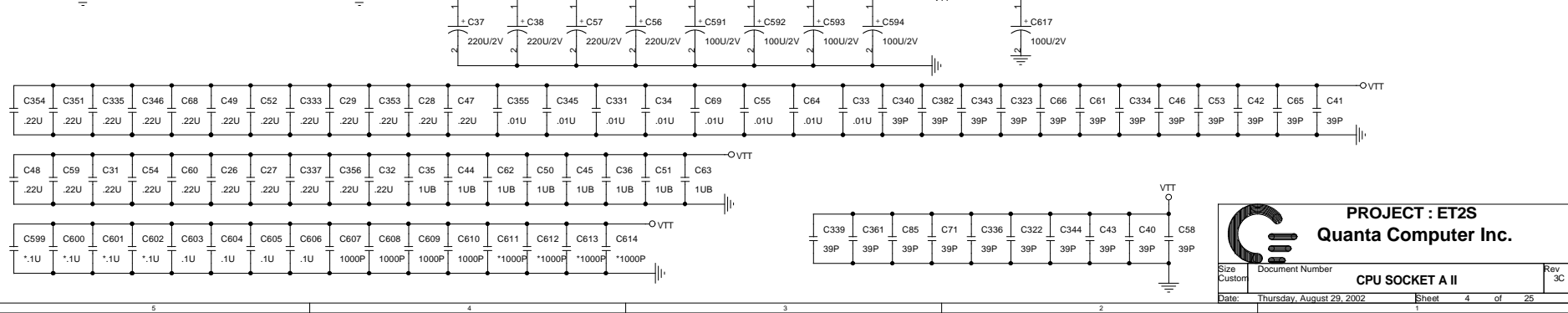
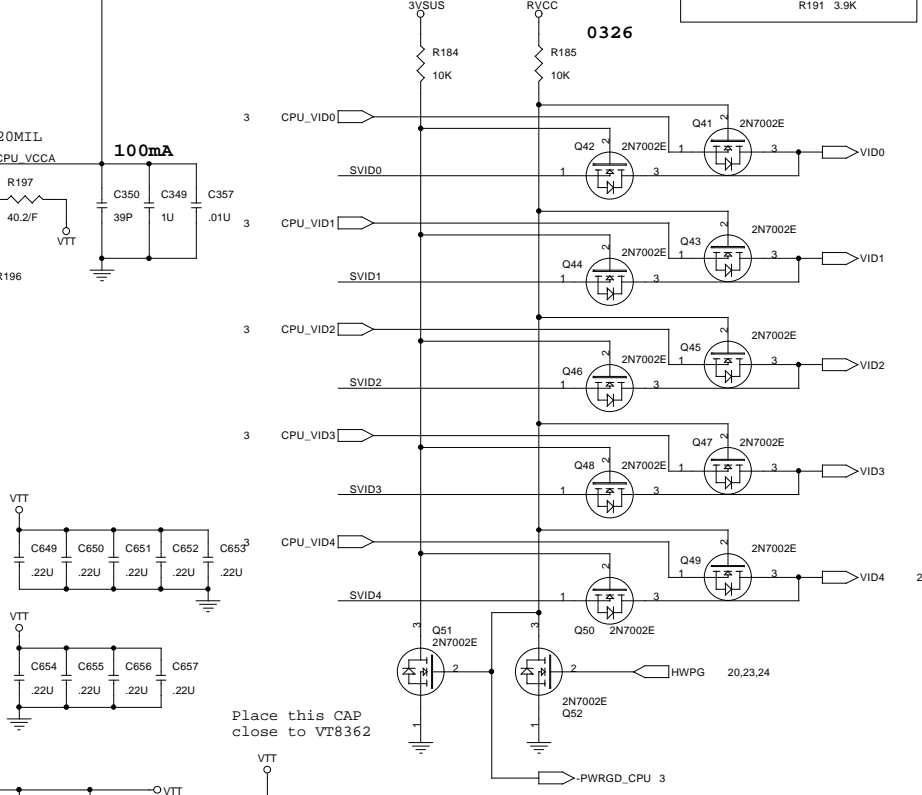
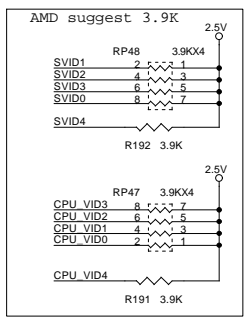
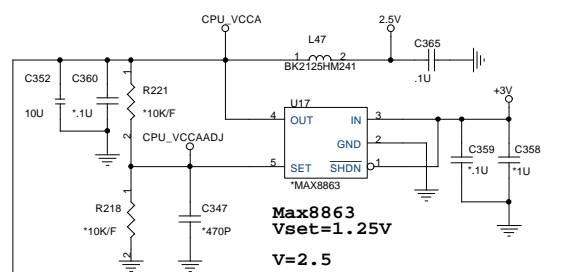
FSB\_SENSE ← FSB\_SENSE

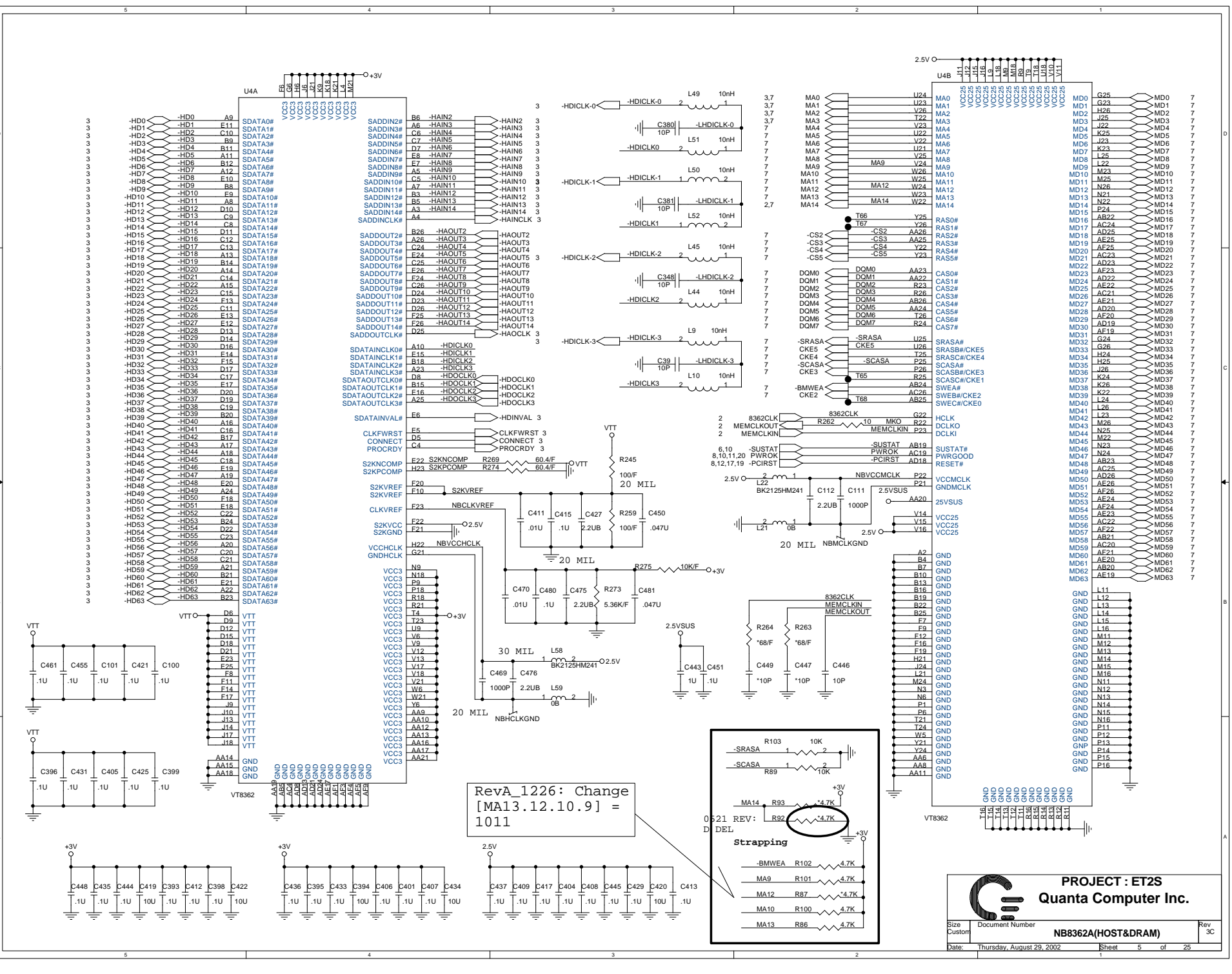
0313

AA31	NC	B2	VSS
AC31	NC	B6	VSS
AD8	NC	B10	VSS
AD90	NC	B14	VSS
AE31	NC	B18	VSS
AF6	NC	B22	VSS
AF8	NC	B26	VSS
AF10	NC	B30	VSS
AF28	NC	B34	VSS
AF30	NC	B38	VSS
AF32	NC	D10	VSS
AG5	NC	D14	VSS
AG19	NC	D18	VSS
AG21	NC	D22	VSS
AG23	NC	D26	VSS
AG25	NC	D30	VSS
AG31	NC	D34	VSS
AH8	NC	D36	VSS
AH10	NC	F2	VSS
AH7	NC	F4	VSS
AJ9	NC	F6	VSS
AJ11	NC	F10	VSS
AJ15	NC	F14	VSS
AJ17	NC	F18	VSS
AJ19	NC	F22	VSS
AJ27	NC	F26	VSS
AK8	NC	H4	VSS
AL7	NC	H2	VSS
AL9	NC	H26	VSS
AL11	NC	H34	VSS
AM8	NC	H36	VSS
AN1	NC	K2	VSS
AN7	NC	K6	VSS
AN9	NC	R4	VSS
AN11	NC	R2	VSS
FB	NC	M30	VSS
F30	NC	M32	VSS
G11	NC	M34	VSS
G13	NC	M36	VSS
G19	NC	P2	VSS
G21	NC	P4	VSS
G27	NC	P6	VSS
G29	NC	M4	VSS
G31	NC	R30	VSS
H6	NC	R32	VSS
H8	NC	R34	VSS
H10	NC	R36	VSS
H28	NC	T2	VSS
H30	NC	T4	VSS
H32	NC	T6	VSS
J6	NC	T8	VSS
J31	NC	V30	VSS
K8	NC	V32	VSS
K30	NC	V34	VSS
L31	NC	F34	VSS
N31	NC	X2	VSS
Q31	NC	X4	VSS
S31	NC	F24	VSS
U31	NC	X8	VSS
W7	NC	F20	VSS
W31	NC	Z30	VSS
Y31	NC	Z32	VSS
AF7	VSSIZ	Z34	VSS
AM36	VSS	Z36	VSS
AM32	VSS	AB2	VSS
AM28	VSS	AB4	VSS
AM24	VSS	AB6	VSS
AM20	VSS	AB8	VSS
AM16	VSS	AD32	VSS
AM12	VSS	AD34	VSS
AM6	VSS	AD36	VSS
AM4	VSS	D2	VSS
AK28	VSS	B36	VSS
AK24	VSS	B32	VSS
AK20	VSS	B28	VSS
AK16	VSS	B24	VSS
AK12	VSS	B20	VSS
AK6	VSS	B16	VSS
AK4	VSS	B12	VSS
AK2	VSS	B8	VSS
AH36	VSS	AH12	VSS
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		AH34	VSS

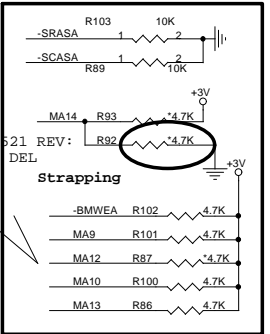
U3B

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AF22	VCORE	KEY	G17
AF18	VCORE	KEY	G22
AF14	VCORE	KEY	N7
AD6	VCORE	KEY	V7
AD4	VCORE	KEY	AG7
AD2	VCORE	KEY	AG15
AB36	VCORE	KEY	AG24
AB34	VCORE		
AB32	VCORE		
AB30	VCORE		
Z8	VCORE		
Z6	VCORE		
Z4	VCORE		
Z2	VCORE		
X36	VCORE		
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X32	VCORE		
X30	VCORE		
V8	VCORE		
V6	VCORE		
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V2	VCORE		
T36	VCORE		
T34	VCORE		
T32	VCORE		
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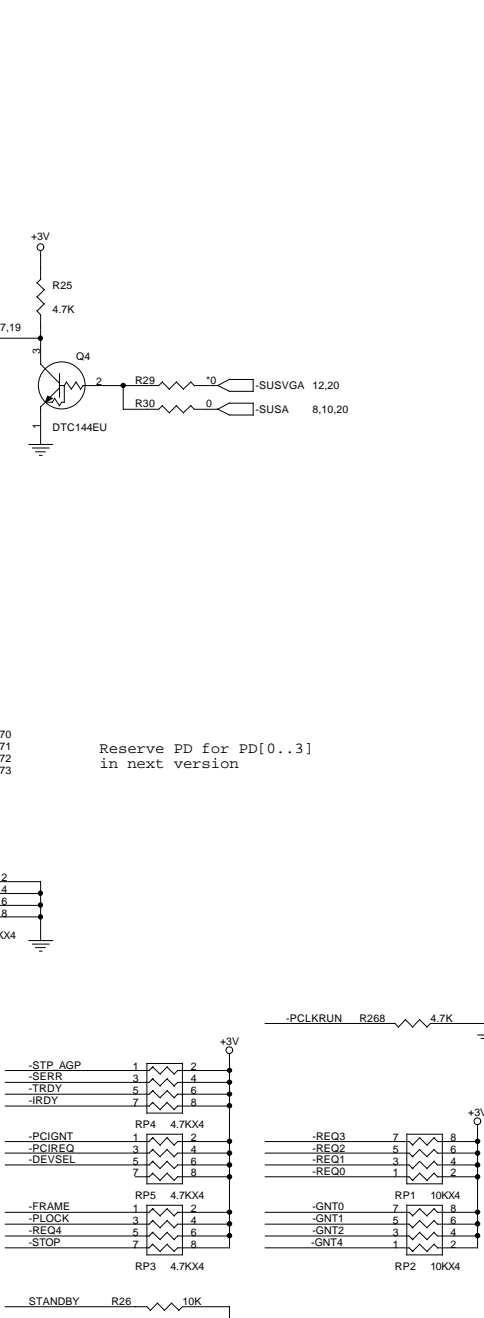
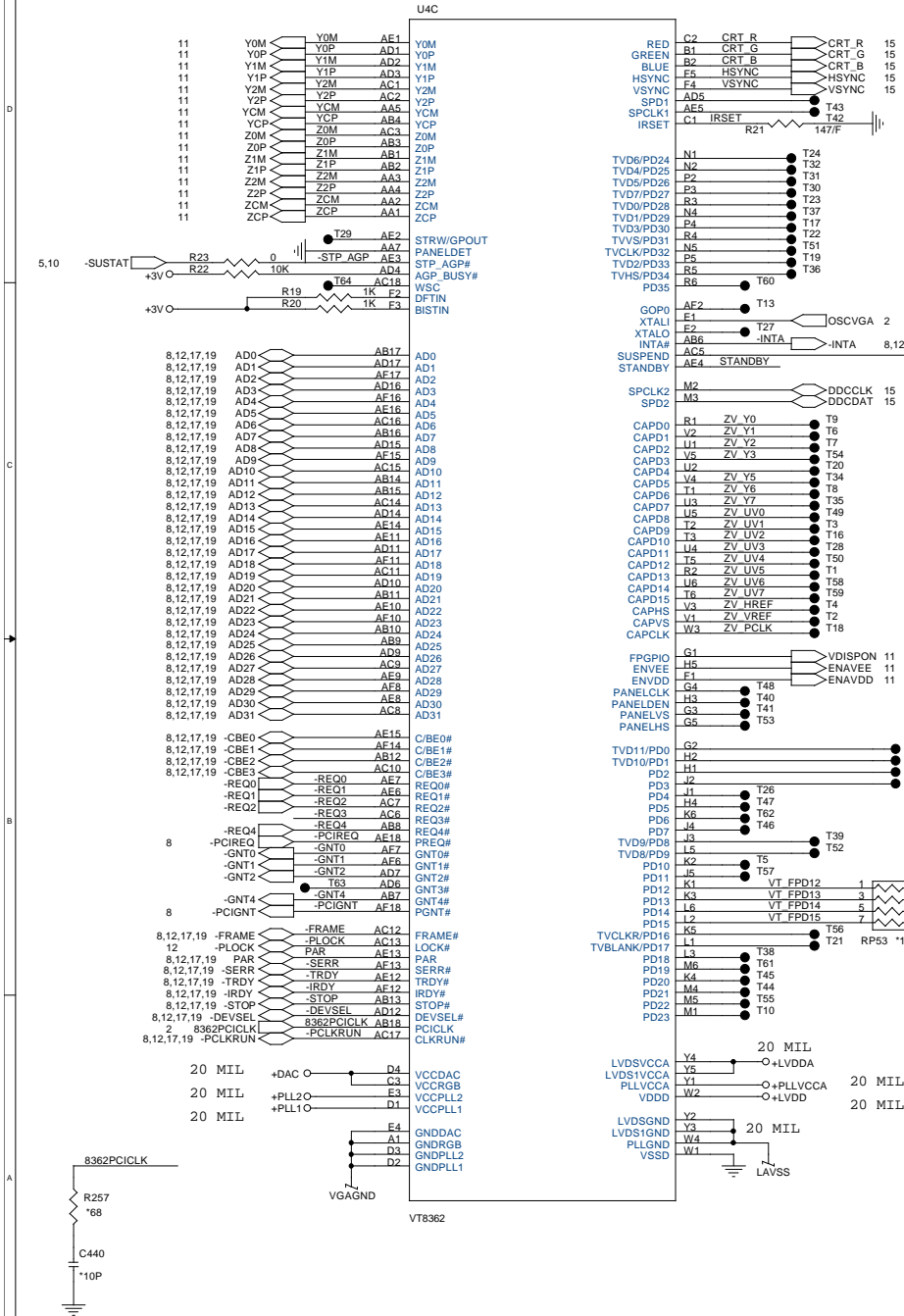




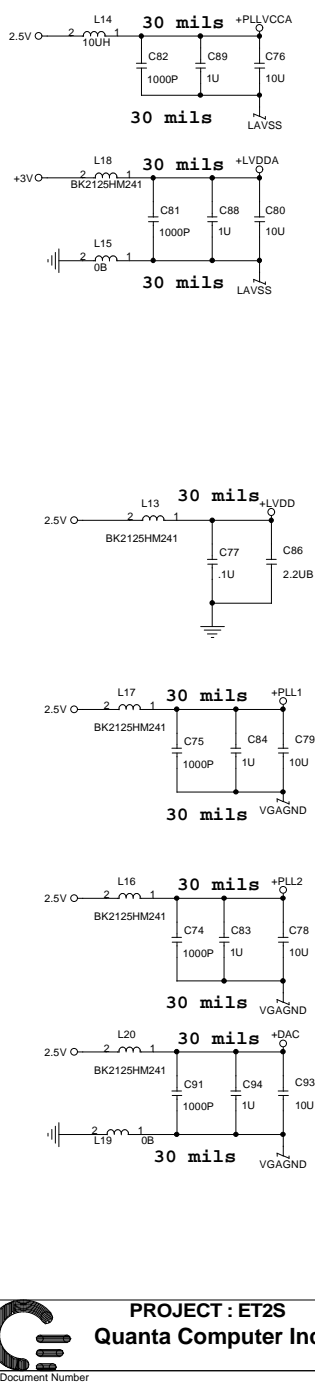
RevA\_1226: Change  
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1011



**PROJECT : ET2S**  
**Quanta Computer Inc.**



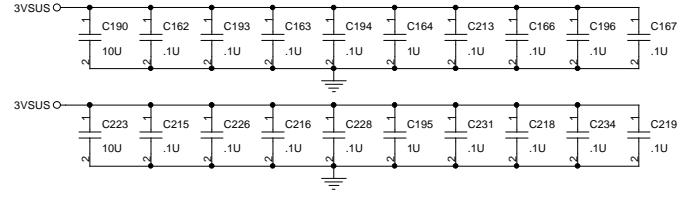
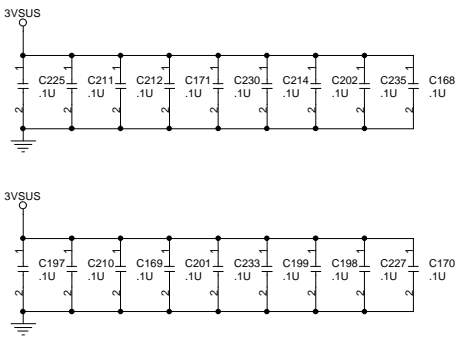
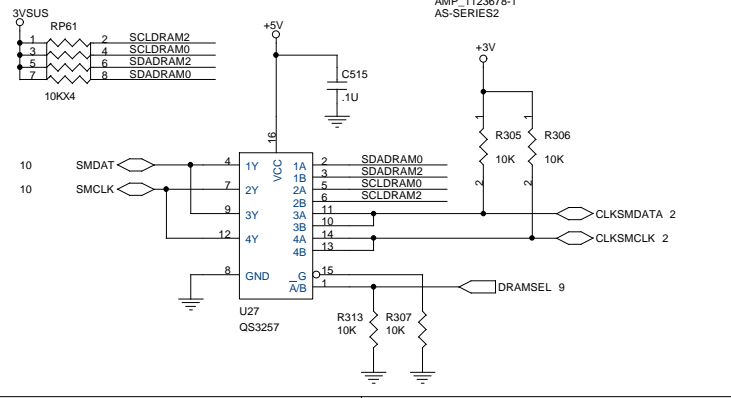
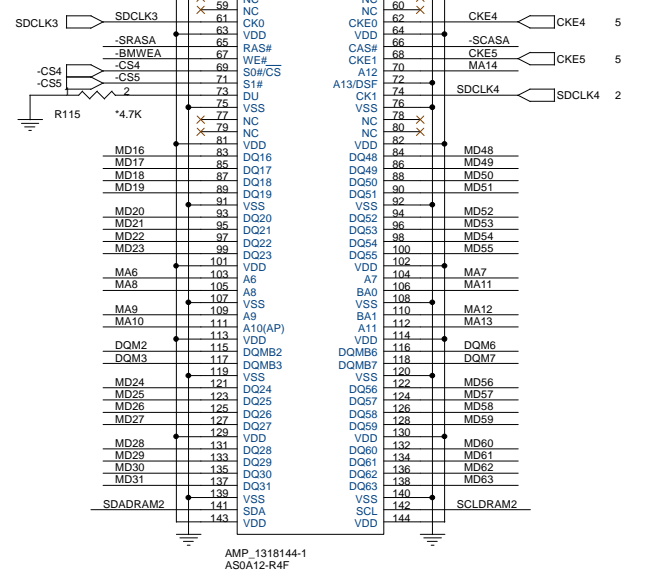
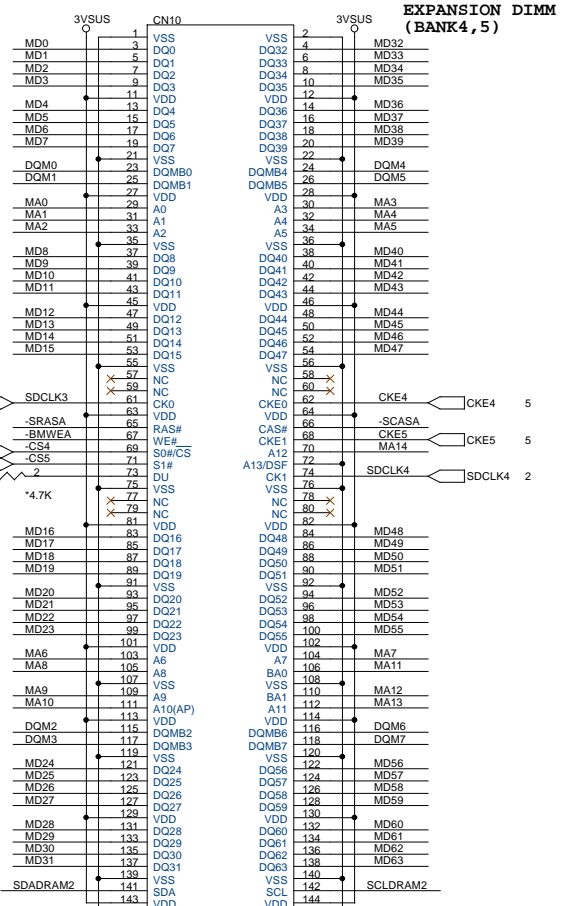
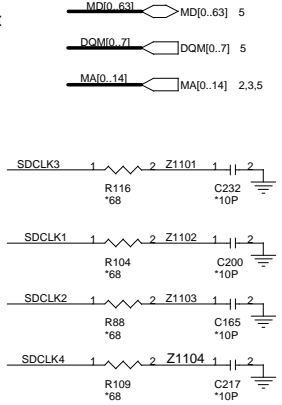
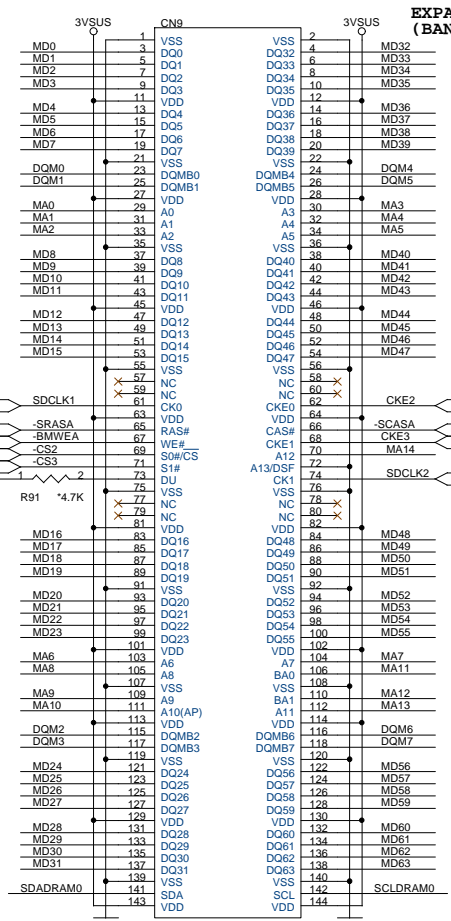
Reserve PD for PD[0..3] in next version



**PROJECT : ET2S**  
**Quanta Computer Inc.**

Size Custor Document Number **NB8362A(PCI&VGA)** Rev 3C  
Date: Thursday, August 29, 2002 Sheet 6 of 25

# EXPANSION SO-DIMM SOCKET

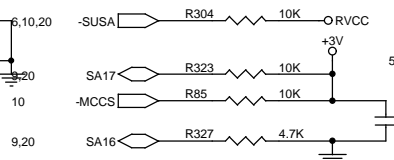
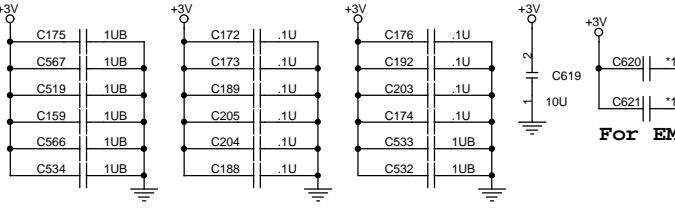


**PROJECT : ET2S**  
**Quanta Computer Inc.**

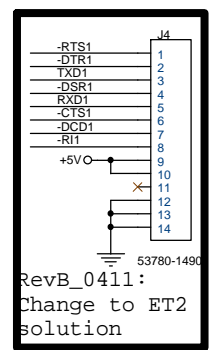
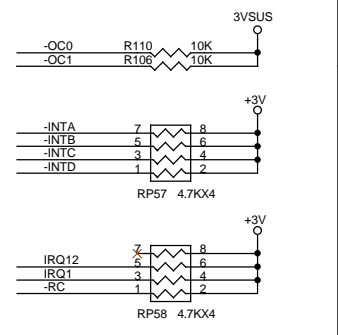
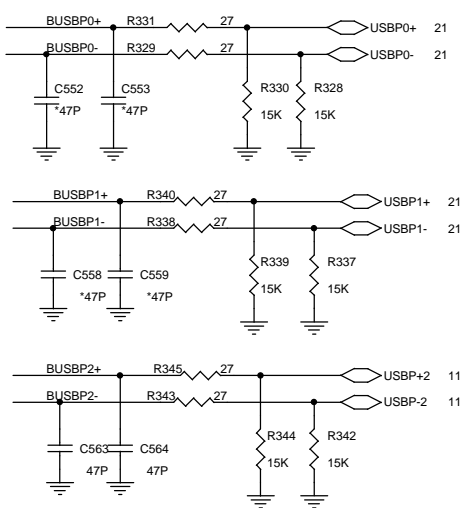
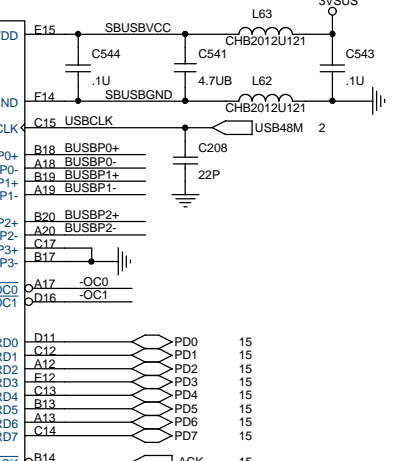
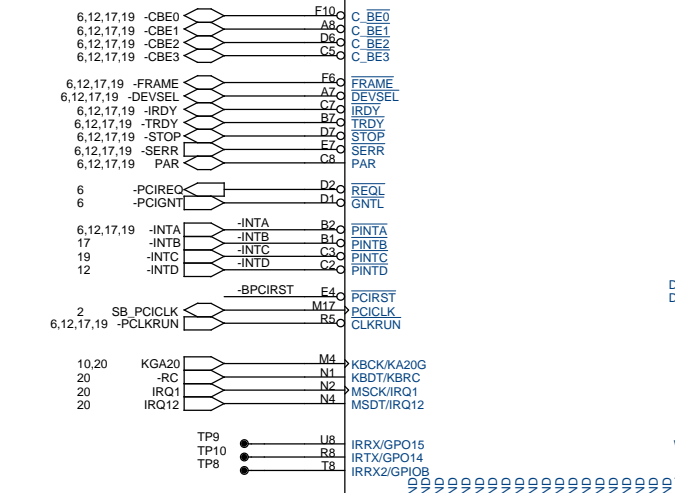
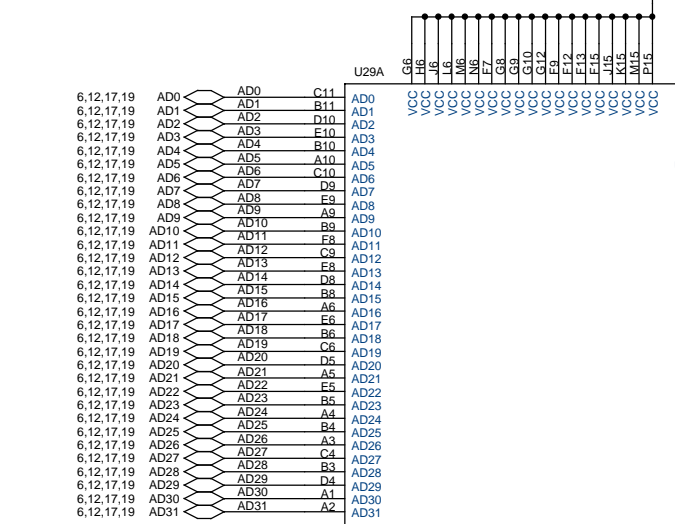
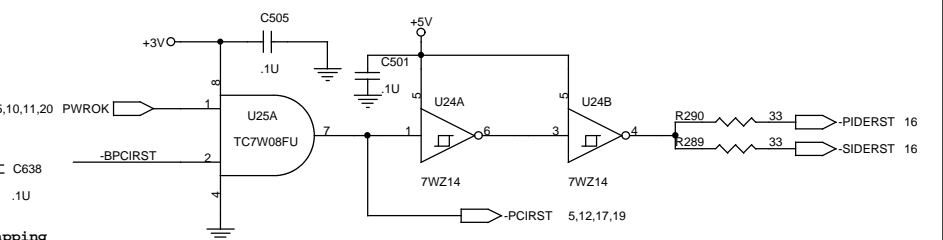
Size Custom	Document Number <b>SO-DIMM</b>	Rev 3C
Date: Thursday, August 29, 2002		Sheet 7 of 25



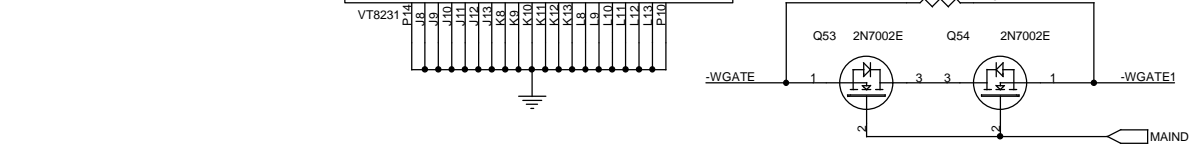
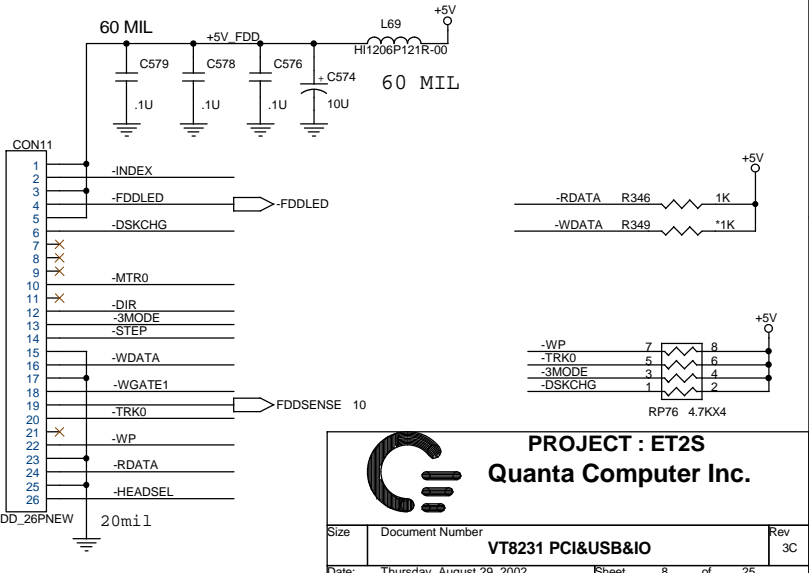
Power-On Configuration Strapping Pins



For EMI  
 -MCCS(High):Disable AMD CPU Frequency Strapping  
 SA17(High):Disable auto reboot  
 SA16(High):Disable LPC  
 -SUSA(High):Select Socket A



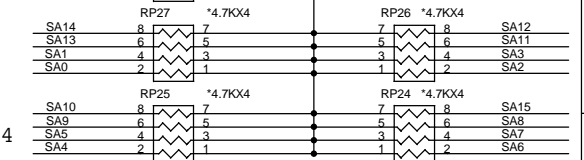
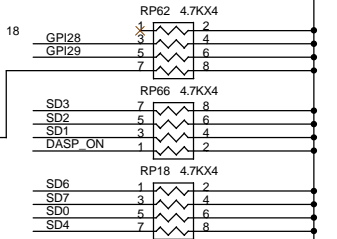
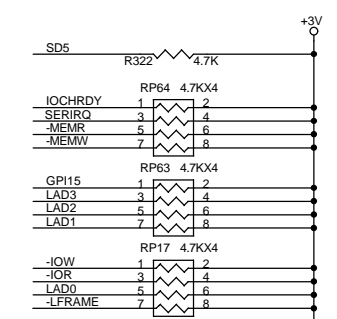
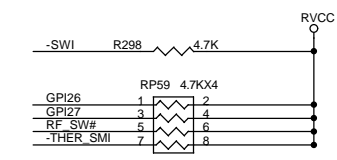
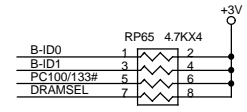
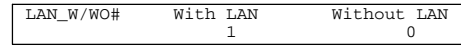
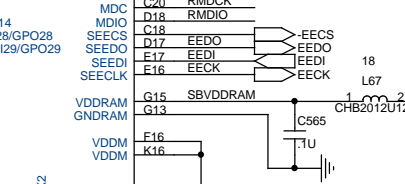
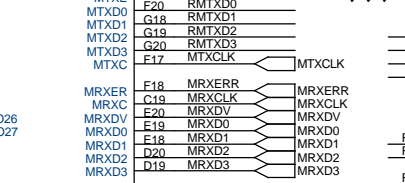
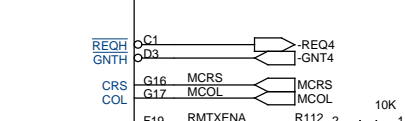
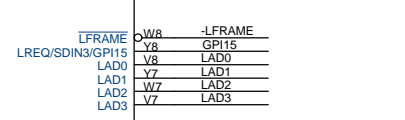
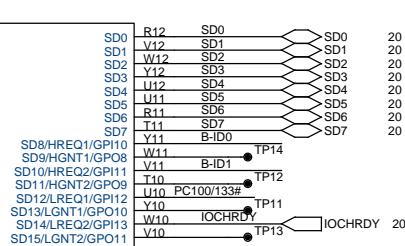
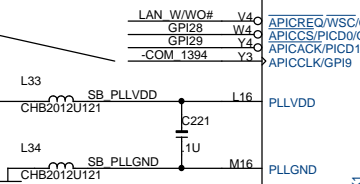
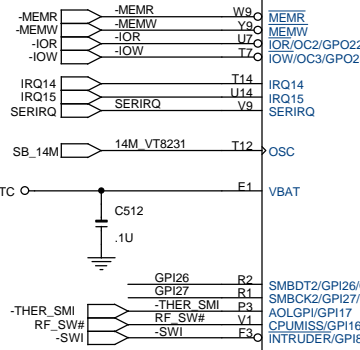
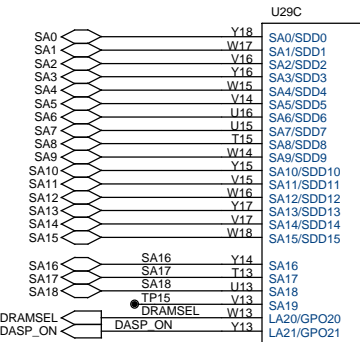
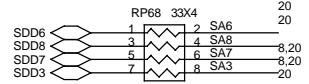
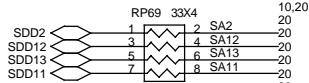
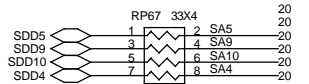
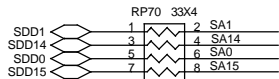
RevB\_0411:  
 Change to ET2  
 solution



**PROJECT : ET2S**  
**Quanta Computer Inc.**

Size Document Number  
**VT8231 PCI&USB&IO** Rev 3C

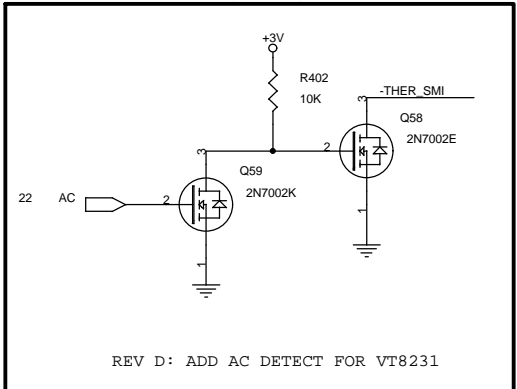
Date: Thursday, August 29, 2002 Sheet 8 of 25



RevA\_1224 Modified

RevA\_1224 Modified

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NOT-Mount: Without 1394

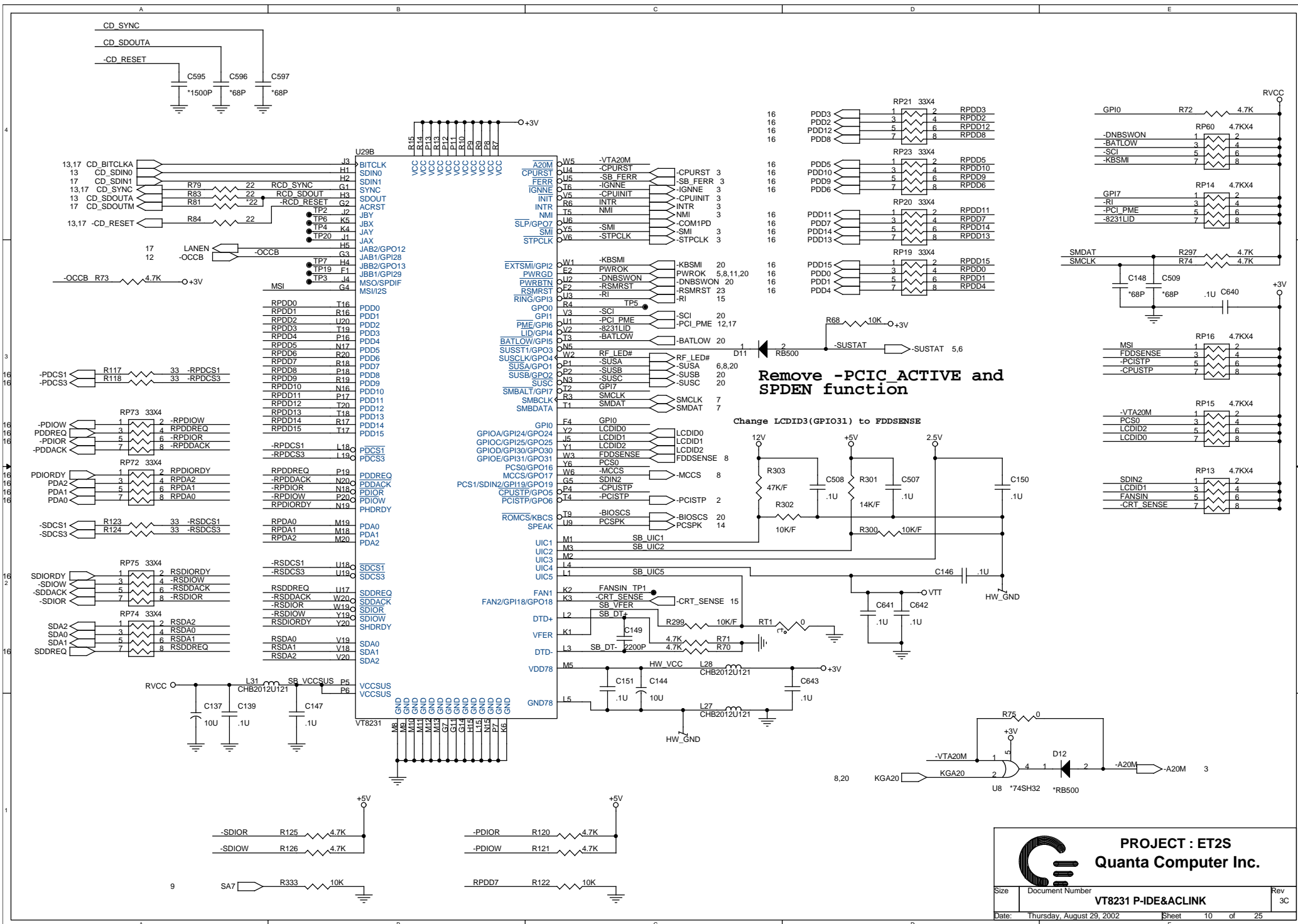


REV D: ADD AC DETECT FOR VT8231

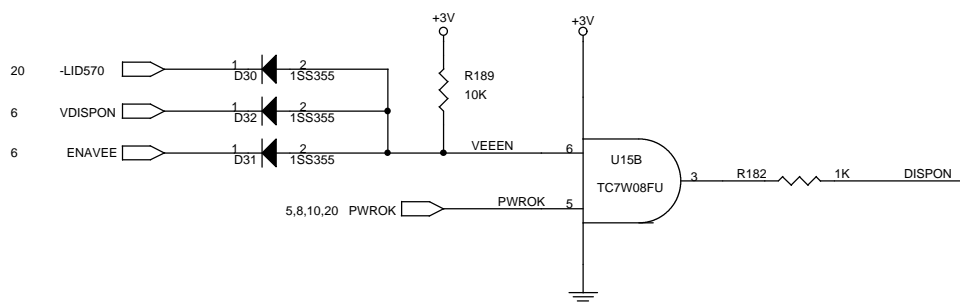
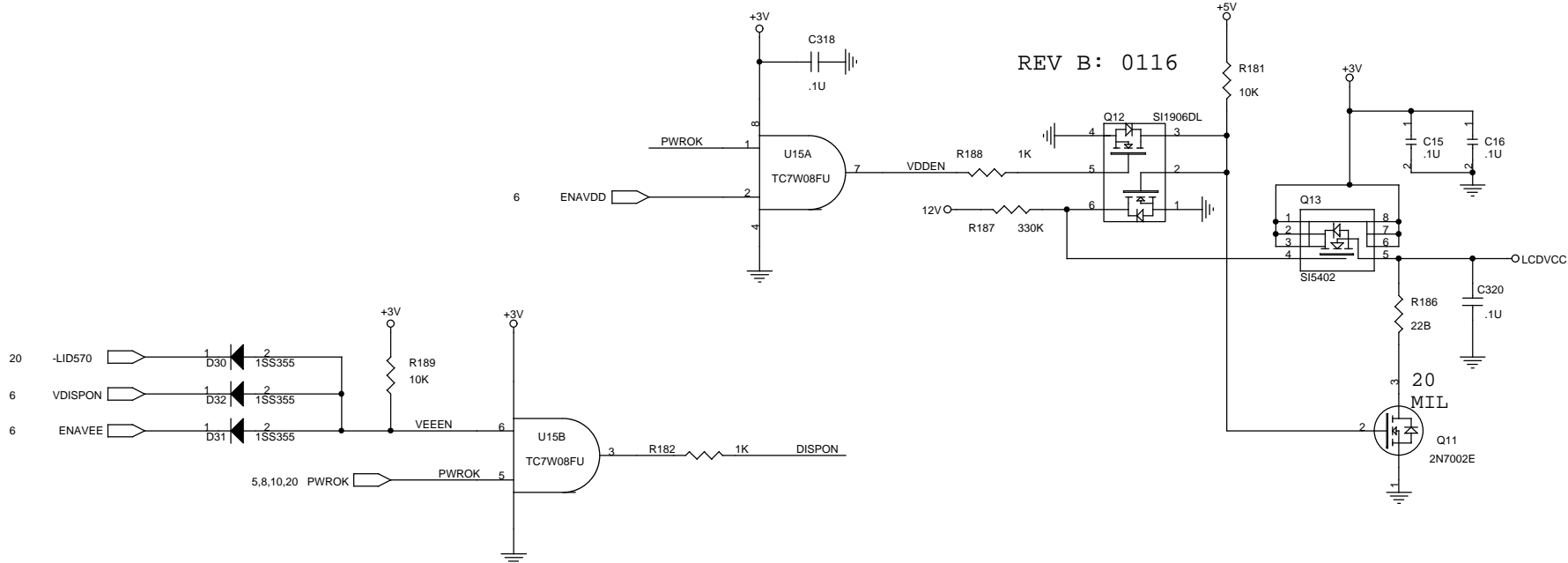
**PROJECT : ET2S**  
**Quanta Computer Inc.**

Size Document Number **VT8231 S-IDE&LAN&RTC** Rev 3C

Date: Thursday, August 29, 2002 Sheet 9 of 25

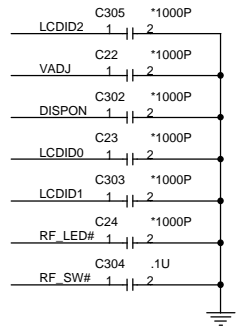
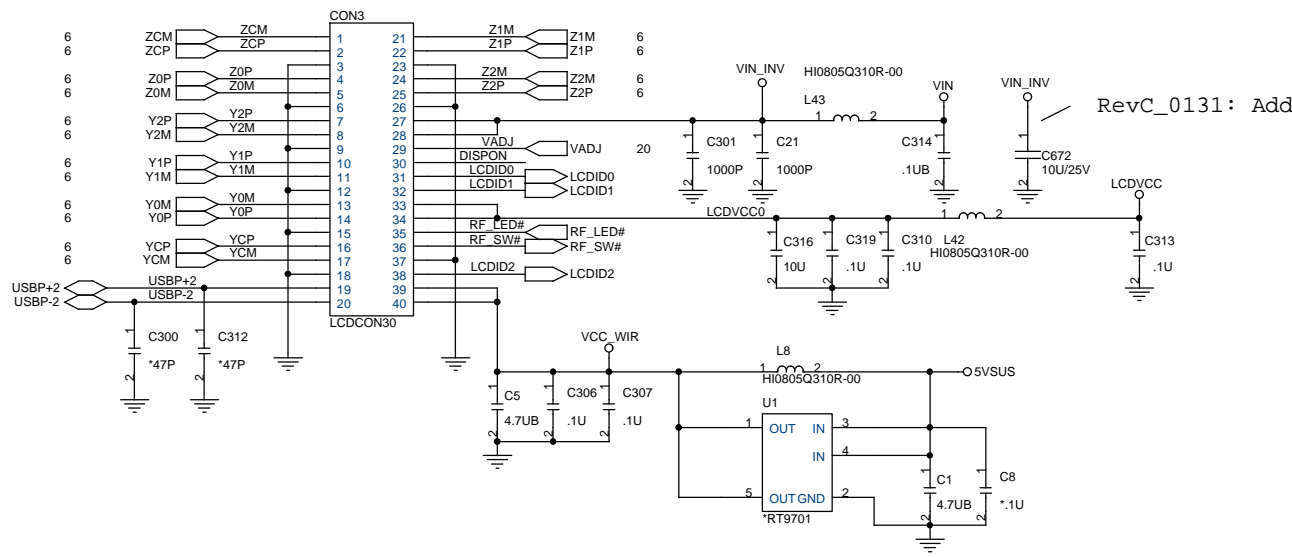


REV B: 0116



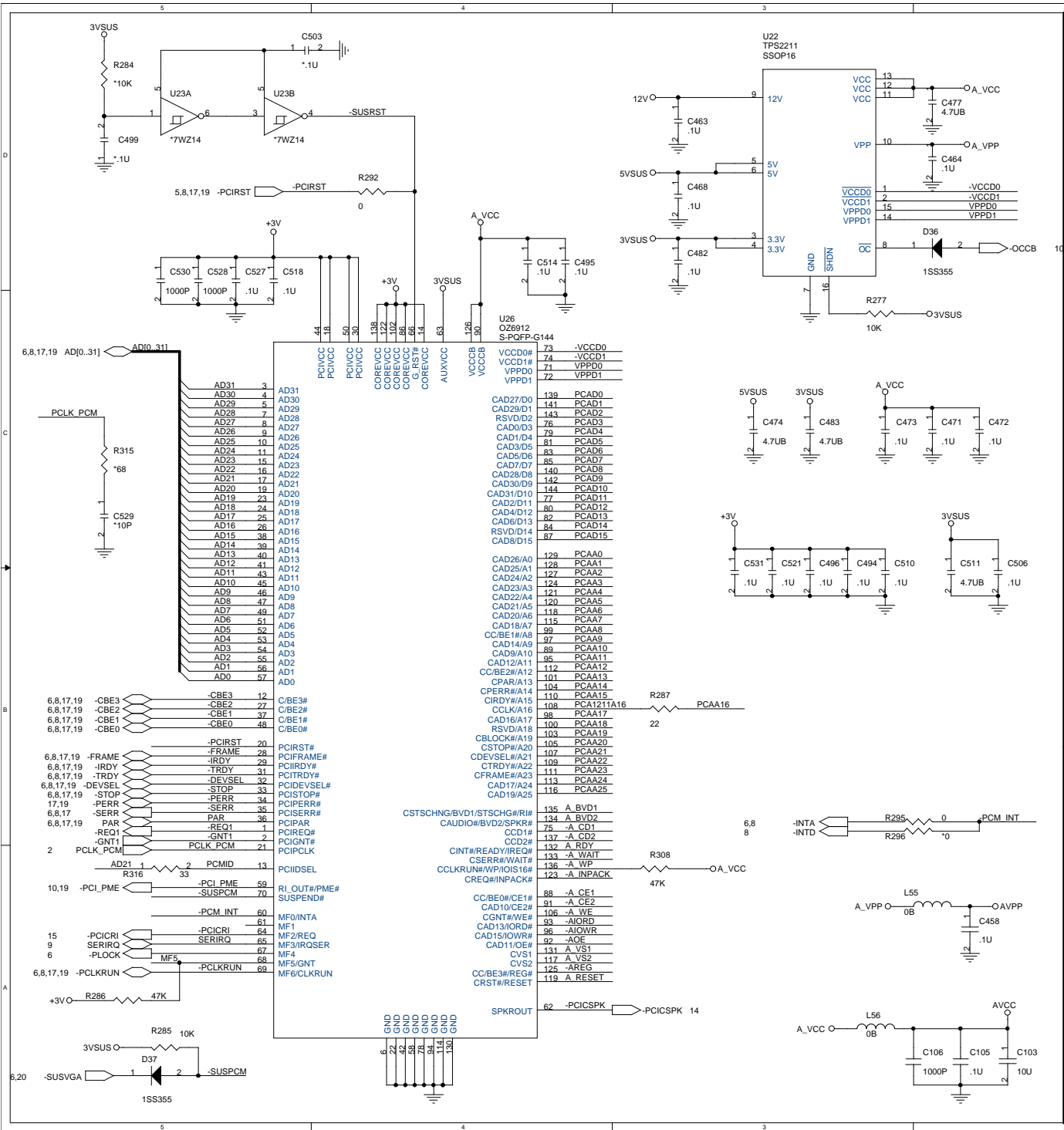
LCDID0	LCDID1	LCDID2	QDI-141X1LH03
1	1	1	
1	0	1	SAM-LTN141X8

Reserve Dual Channels LVDS

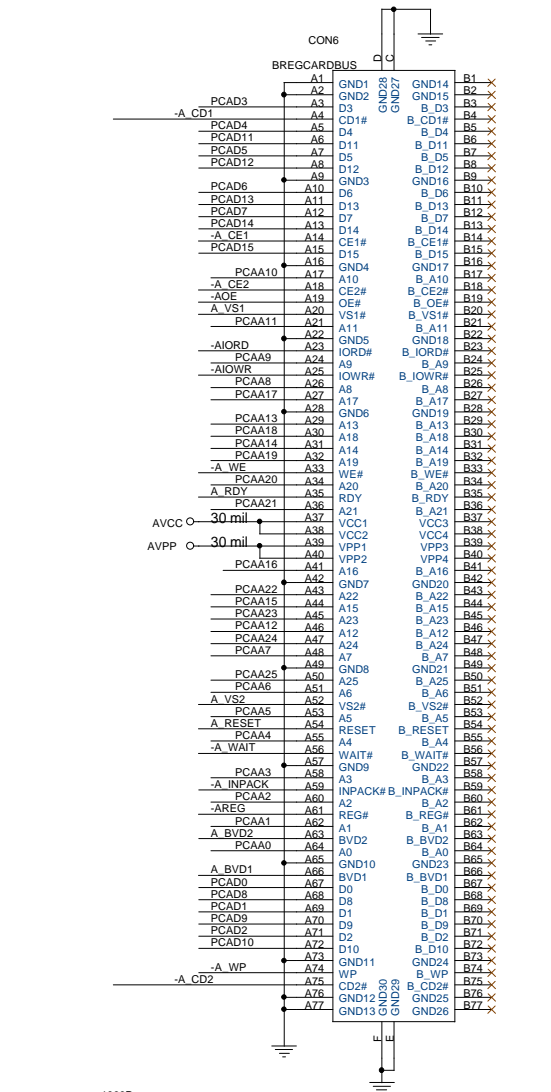


**PROJECT : ET2S**  
**Quanta Computer Inc.**

Size	Document Number	Rev
	<b>LCD Interface</b>	3C
Date: Thursday, August 29, 2002		Sheet 11 of 25



### CARDBUS PCMCIA SOCKET



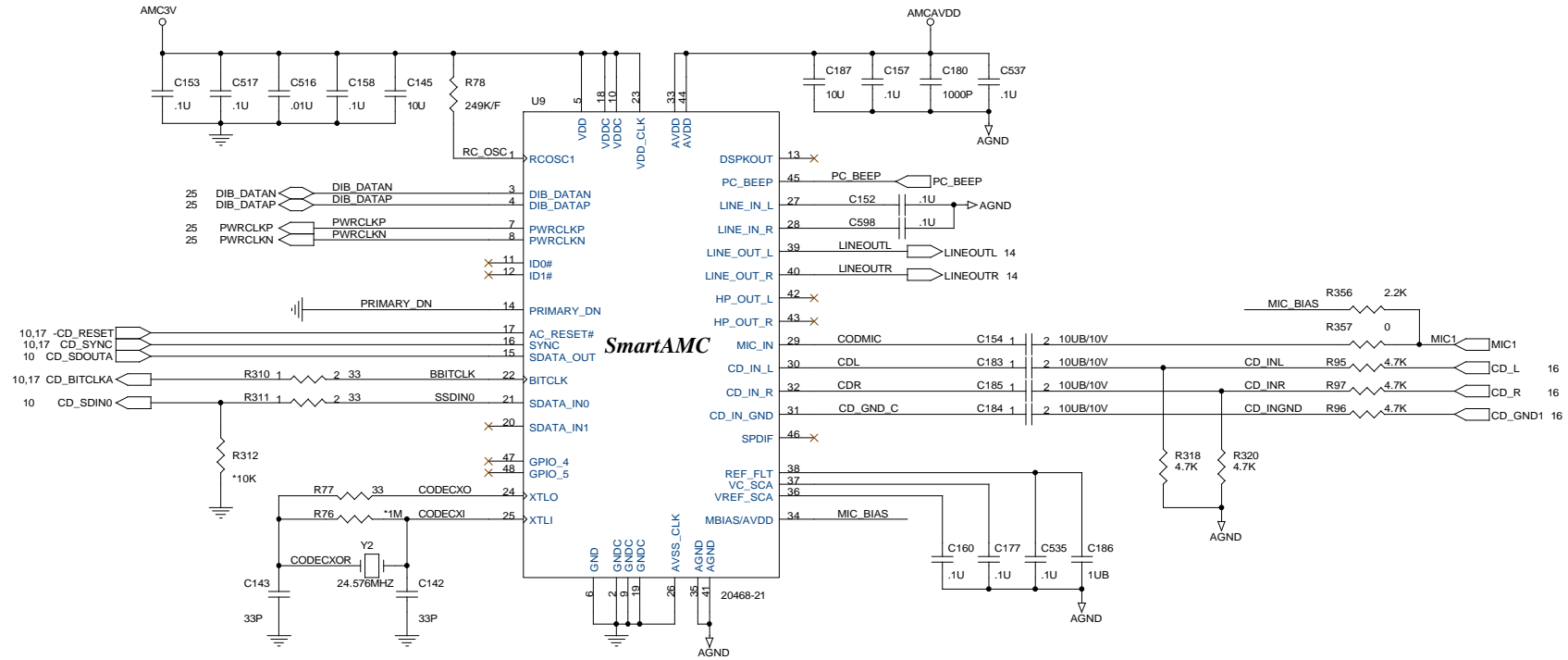
**PROJECT : ET2S**  
**Quanta Computer Inc.**

**PCMCIA-OZ6912**

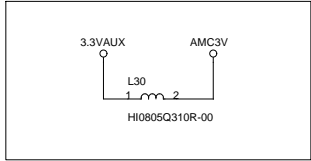
Size: Custom    Document Number: **PCMCIA-OZ6912**    Rev: 3C

Date: Thursday, August 29, 2002    Sheet: 12 of 25

The AMC20463-002 modem is used for mother board family MBAMC20463-002.

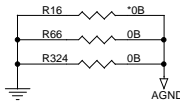
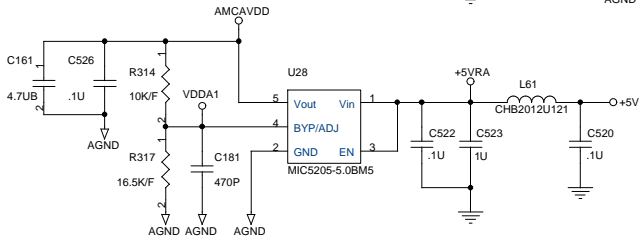


GAIN0	GAIN1	SE/BTL#	Av	Zi
0	0	0	-2 V/V	91K Ohm
0	1	0	-6 V/V	45.5K Ohm
1	0	0	-12 V/V	26K Ohm
1	1	0	-24 V/V	14K Ohm
X	X	1	-1 V/V	

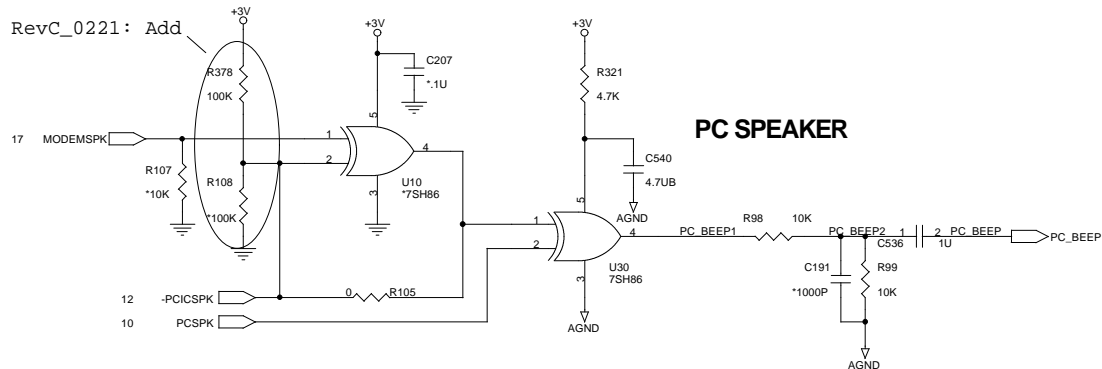


$V_{set} = 1.242V$  ;  $AMCAVDD = 1.242 \times (10 + 16.5) / 10 = 3.29V$

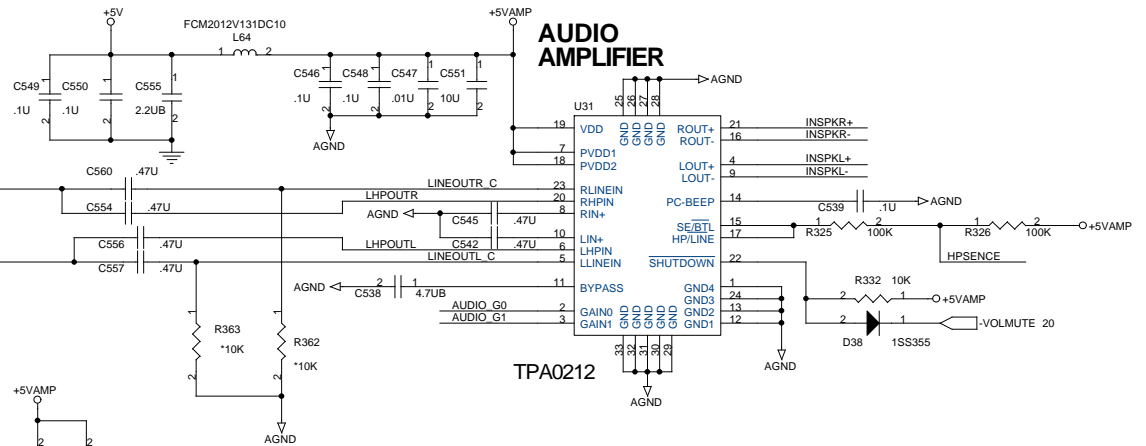
AMCVDD should be 3.3V



Gain = -6

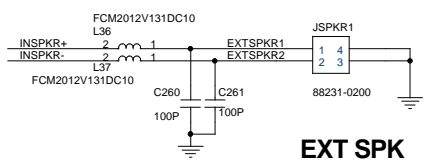
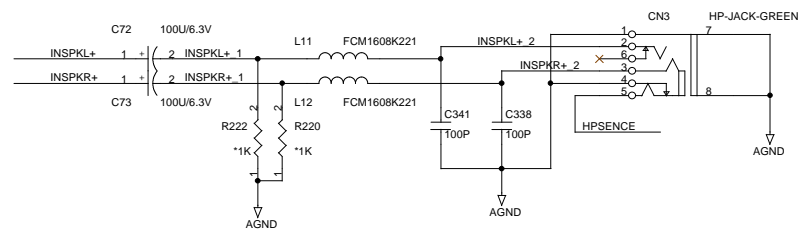
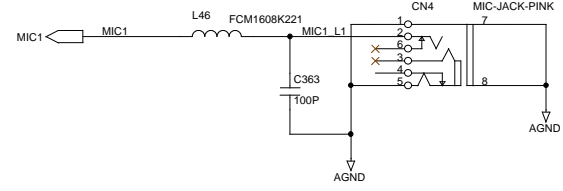


**PC SPEAKER**

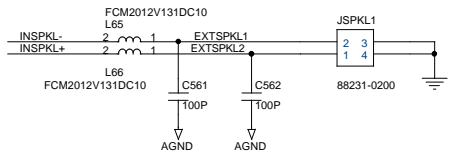


**AUDIO AMPLIFIER**

**TPA0212**

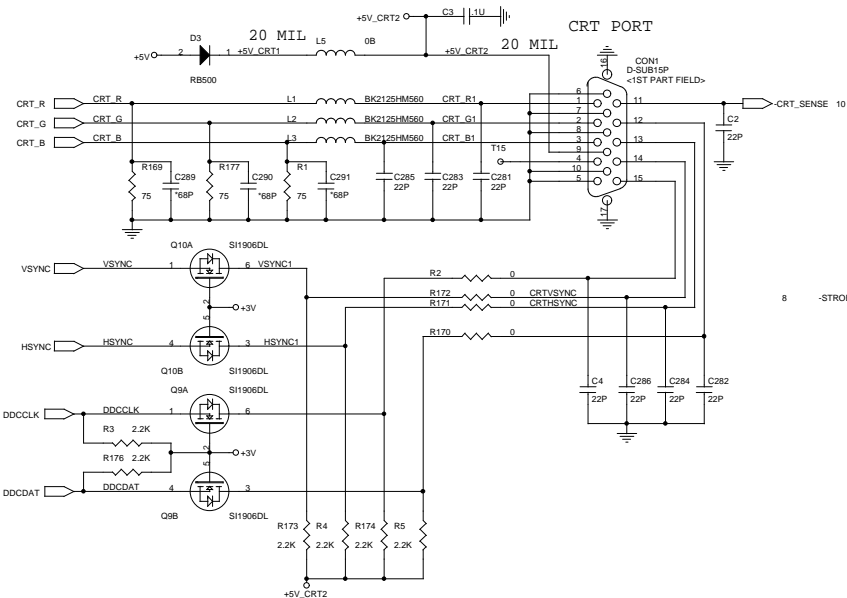
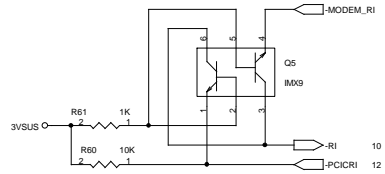
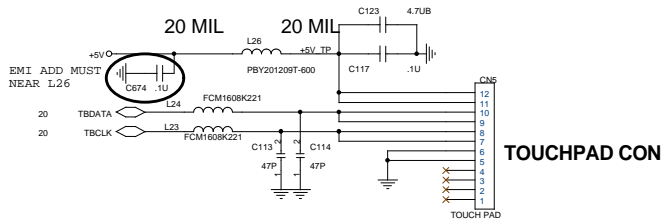
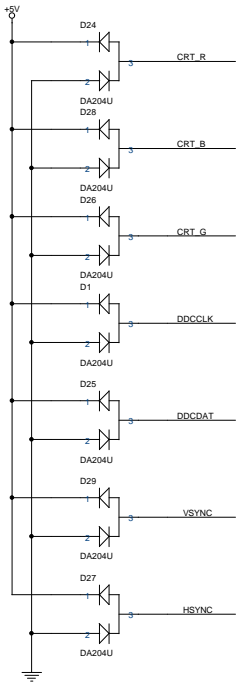


**EXT SPK**

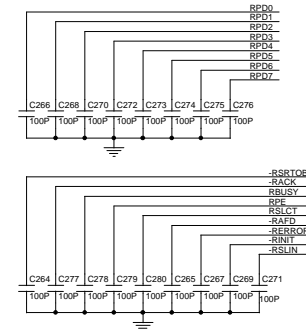
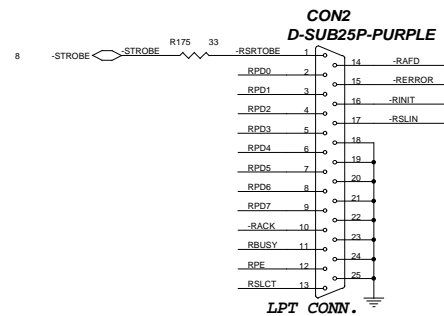
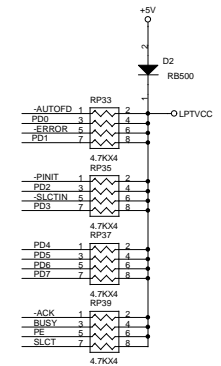
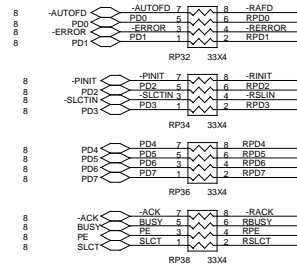


**PROJECT : ET2S**  
**Quanta Computer Inc.**

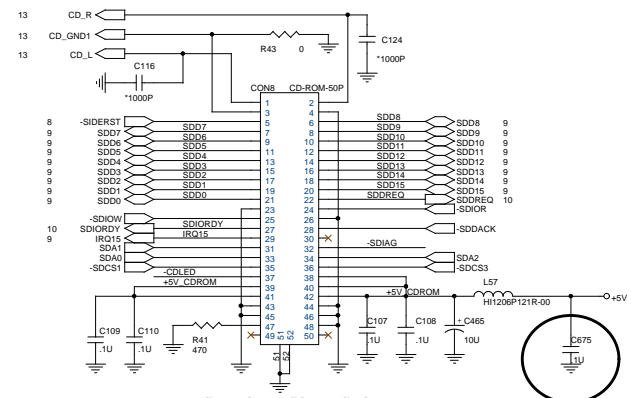
Size	Document Number	Rev
Custom	TPA0212&Audio Jack	3C
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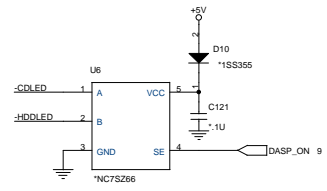
REMOVE COM PORT



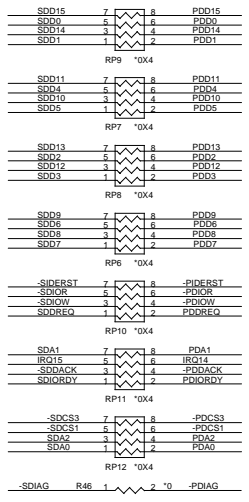




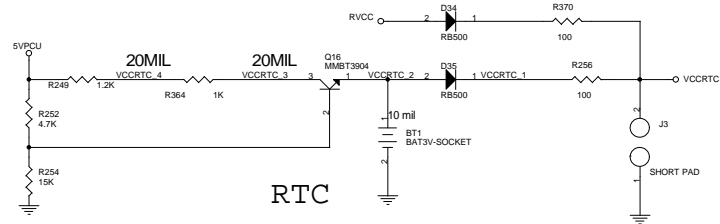
CD-ROM CONNECTOR



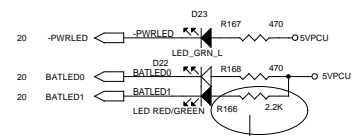
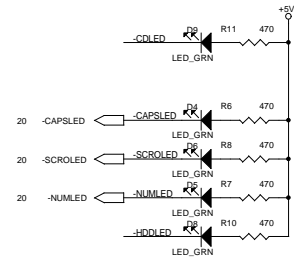
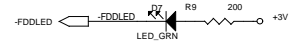
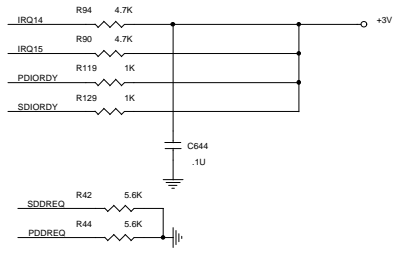
EMI SOLUTION



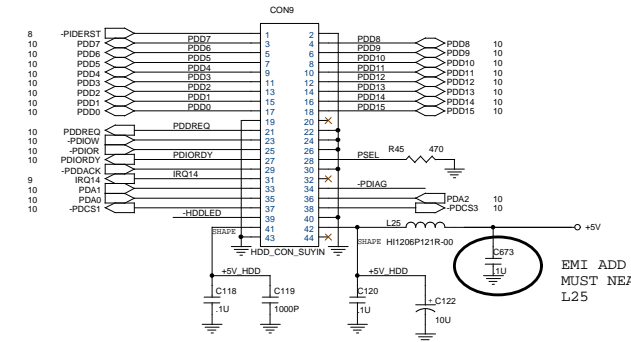
IDE BUS	ONE CHANNEL	TWO CHANNEL
ADD	RP100, RP101, RP102, RP103, RP104, RP105, RP106, R663	RP73, RP74, RP75, RP76, R509, R510, R511, R513, R514, R515, R516, R518, R520, R522, R442, R470
DEL	RP73, RP74, RP75, RP76, R509, R510, R511, R513, R514, R515, R516, R518, R520, R522, R442, R470	RP100, RP101, RP102, RP103, RP104, RP105, RP106, R663



RTC



RevC\_0209

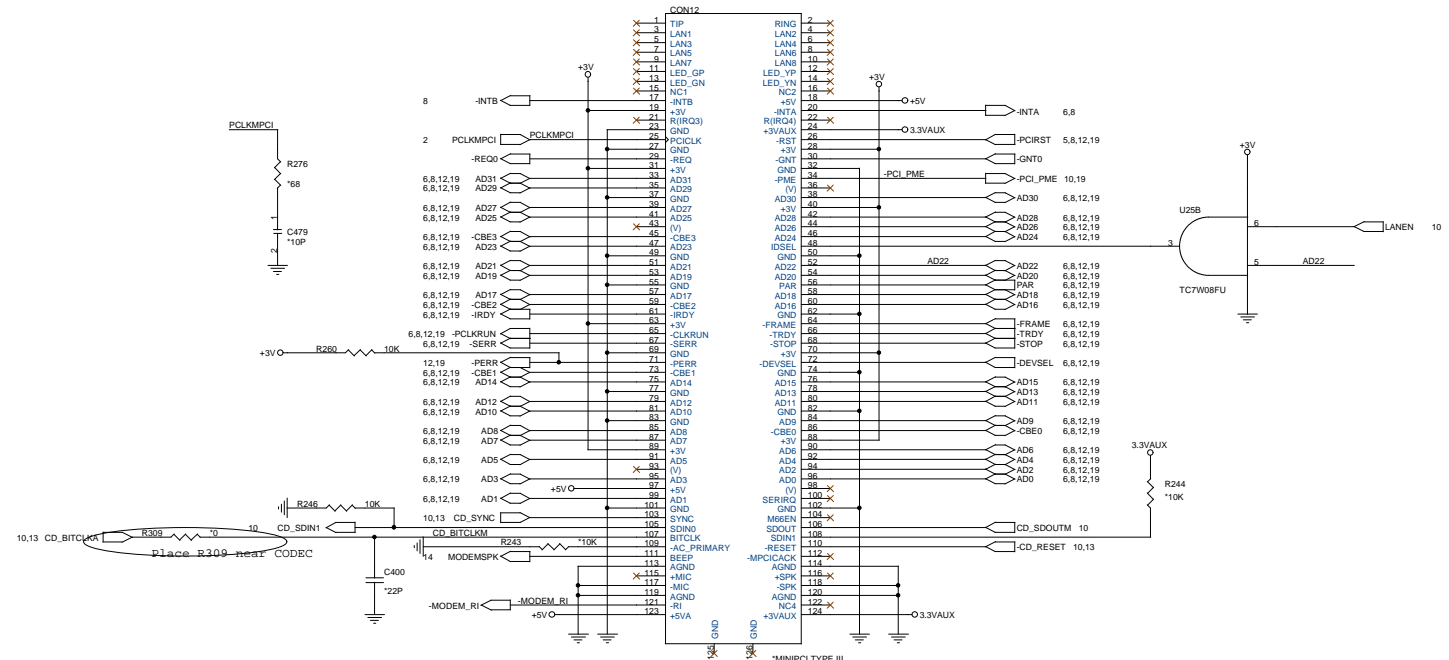
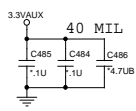
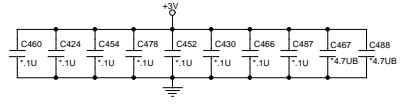
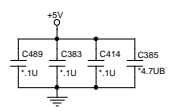


HDD connector

**PROJECT : ET2S**  
**Quanta Computer Inc.**

Size	Document Number	IDE,RTC,LEDs	Rev
			3C

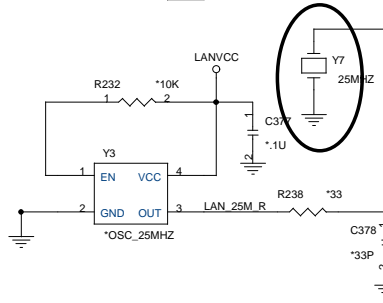
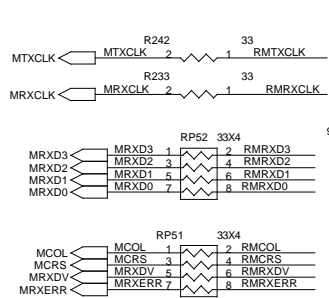
Date: Thursday, August 23, 2002 8:28:16 AM of 25



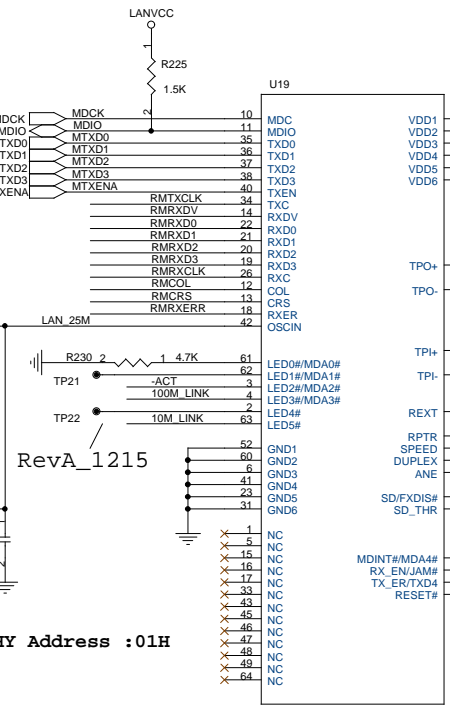
MINI-PCI Aclink is DATA\_IN1

**PROJECT : ET2S**  
**Quanta Computer Inc.**

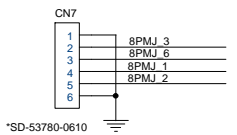
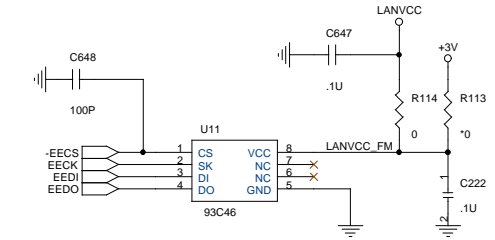
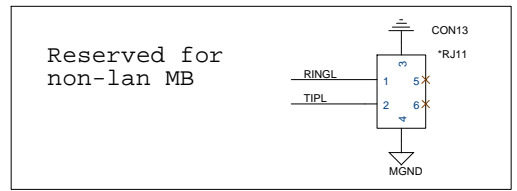
Size	Document Number	MINI-PCI	Rev	3C
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PHY Address : 01H



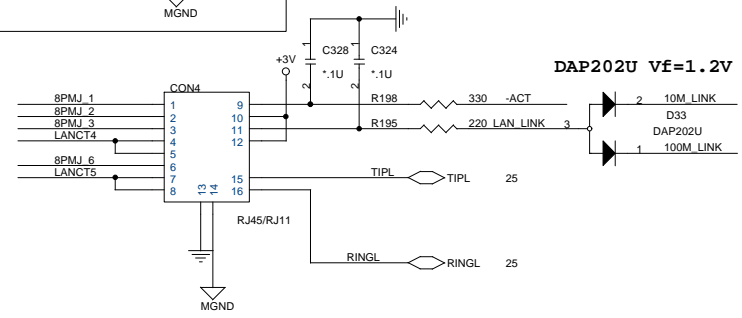
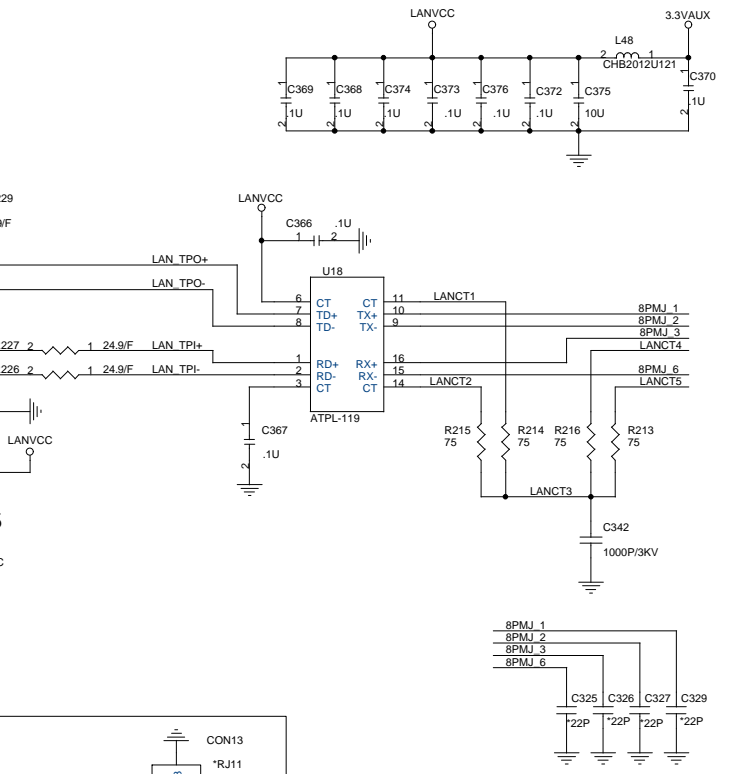
LSI-80227 /80223C



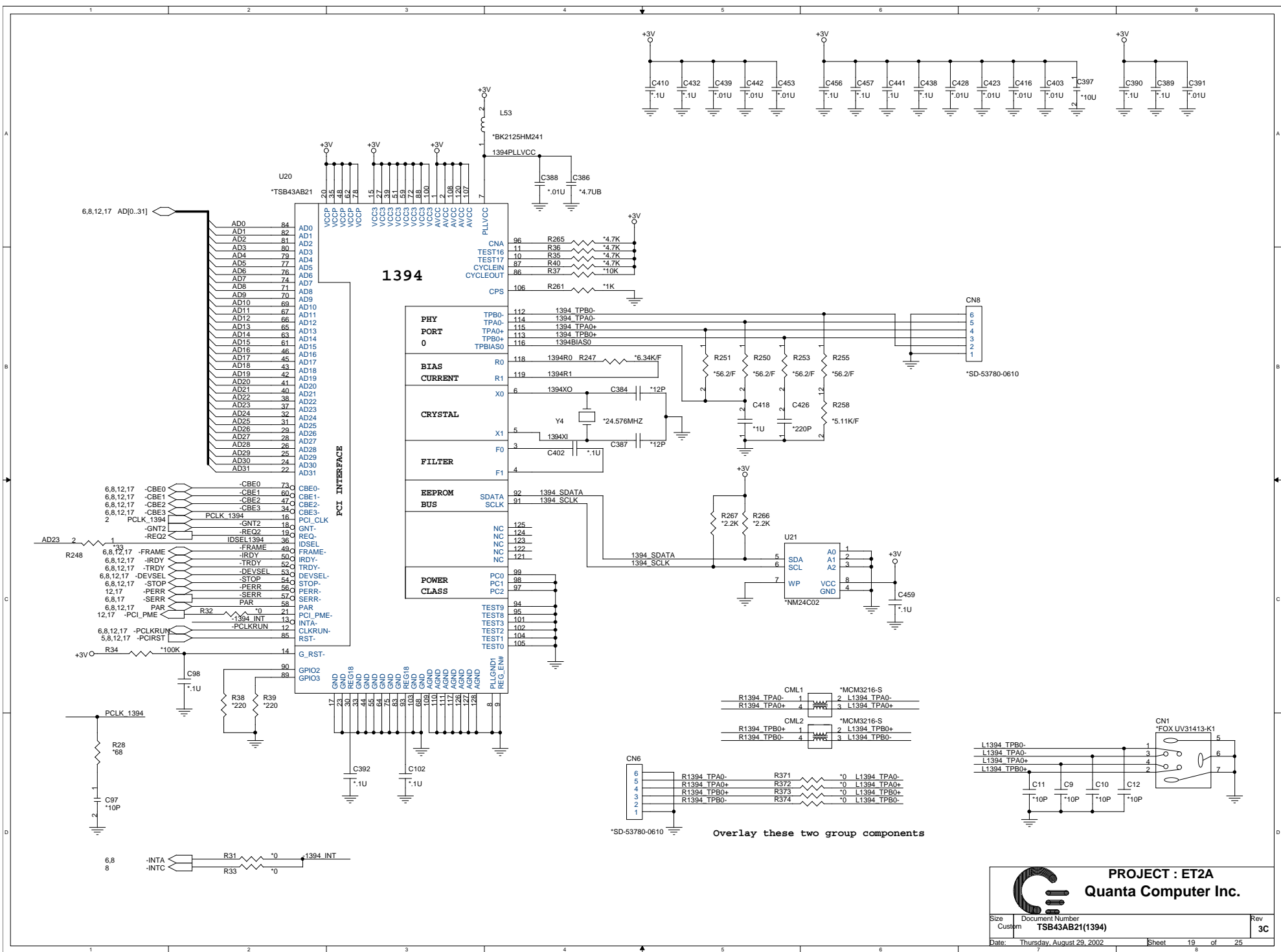
\*SD-53780-0610

**PROJECT : ET2S**  
**Quanta Computer Inc.**

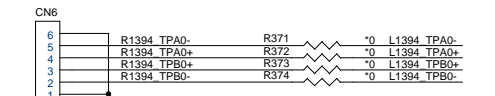
Size	Document Number	Rev
Custom	LSI 80223C/80227	3C
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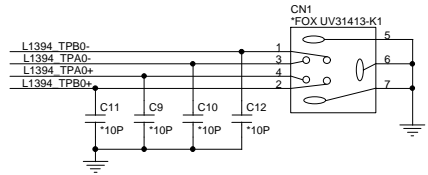
DAP202U Vf=1.2V



CML1		*MCM3216-S	
R1394	TPA0-	1	2 L1394 TPA0-
R1394	TPA0+	4	3 L1394 TPA0+
CML2		*MCM3216-S	
R1394	TPB0+	1	2 L1394 TPB0+
R1394	TPB0-	4	3 L1394 TPB0-

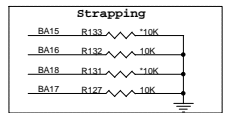
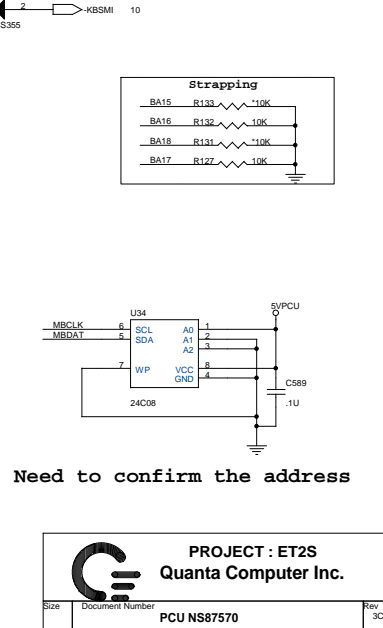
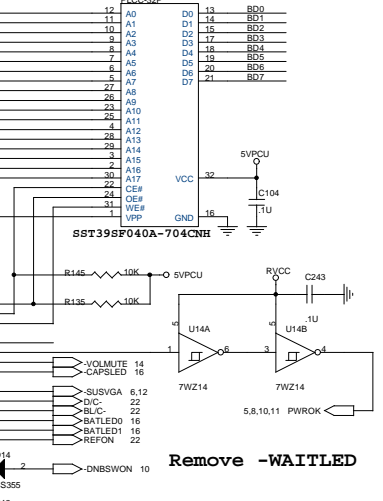
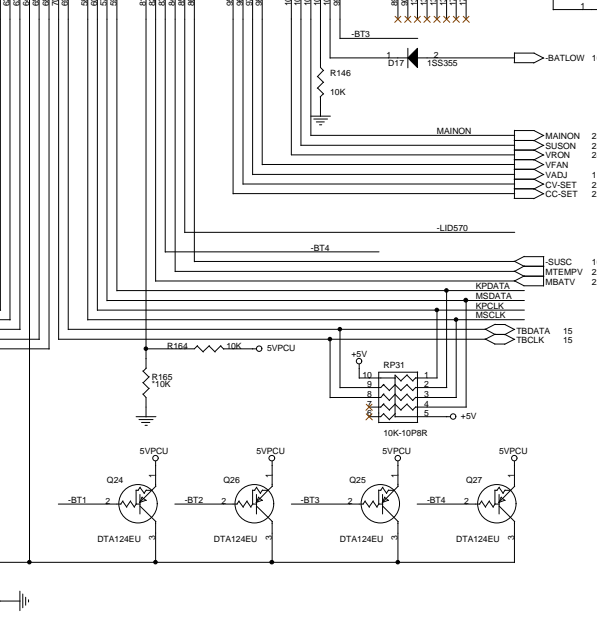
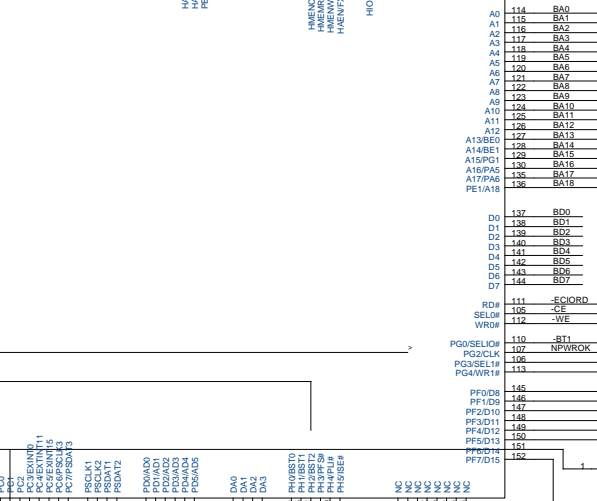
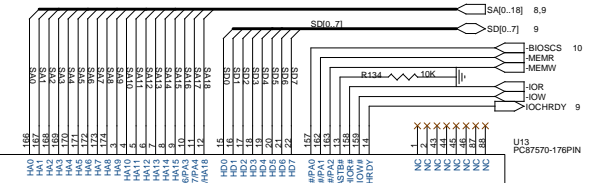
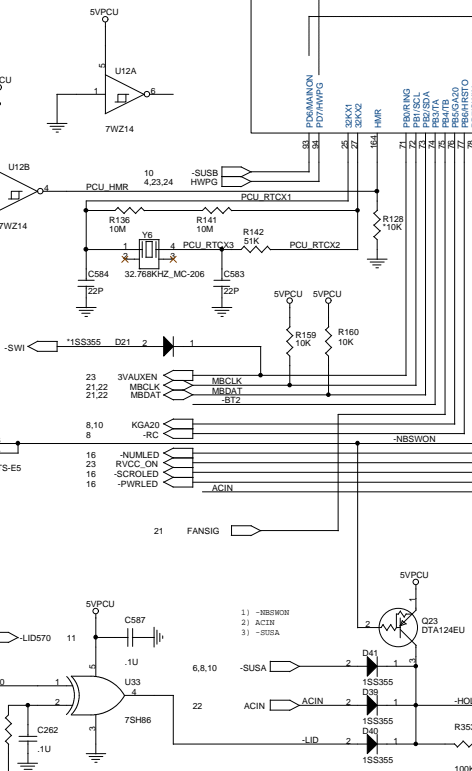
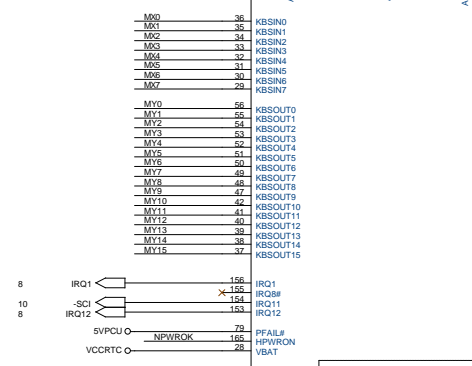
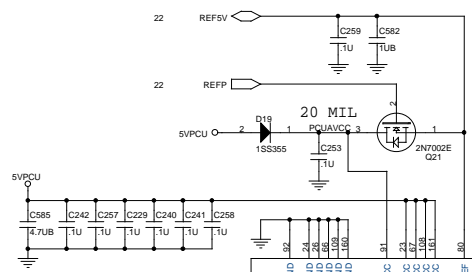
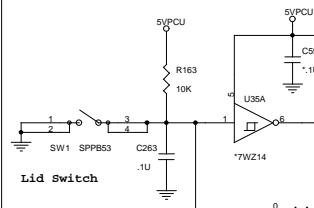
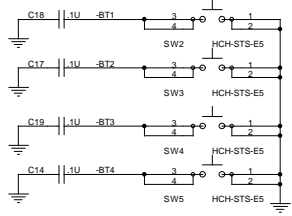
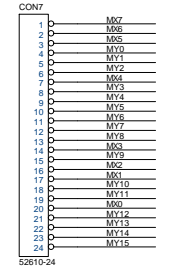
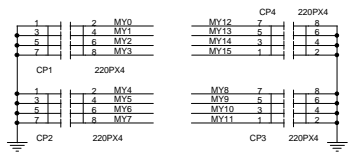
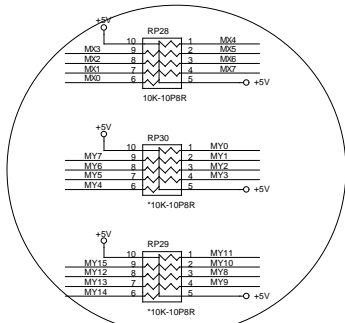


\*SD-53780-0610 Overlay these two group components



**PROJECT : ET2A**  
**Quanta Computer Inc.**

Size Custom	Document Number <b>TSB43AB21(1394)</b>	Rev <b>3C</b>
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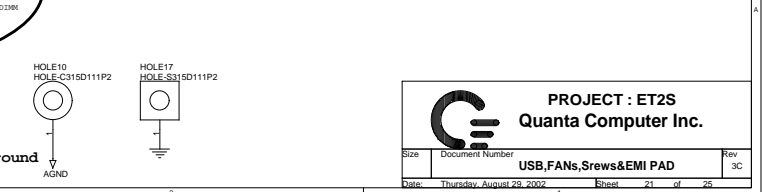
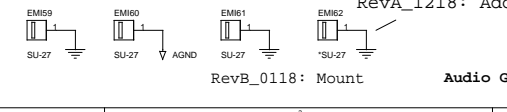
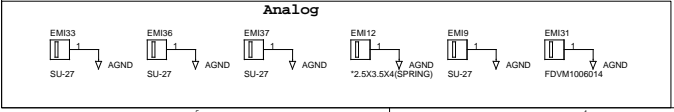
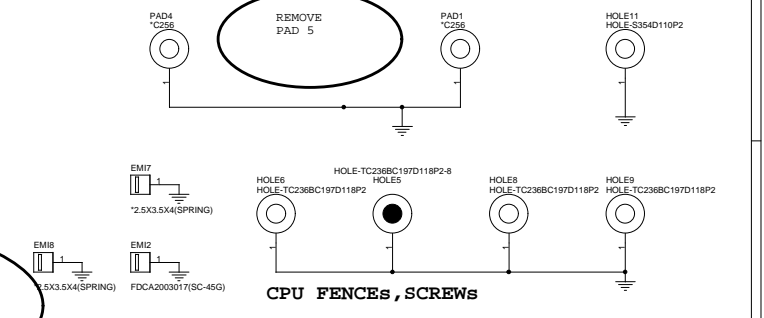
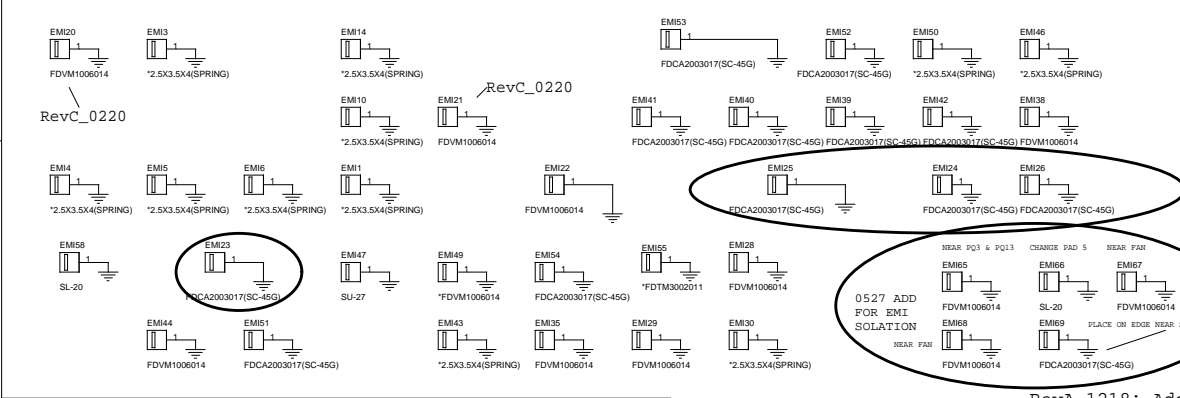
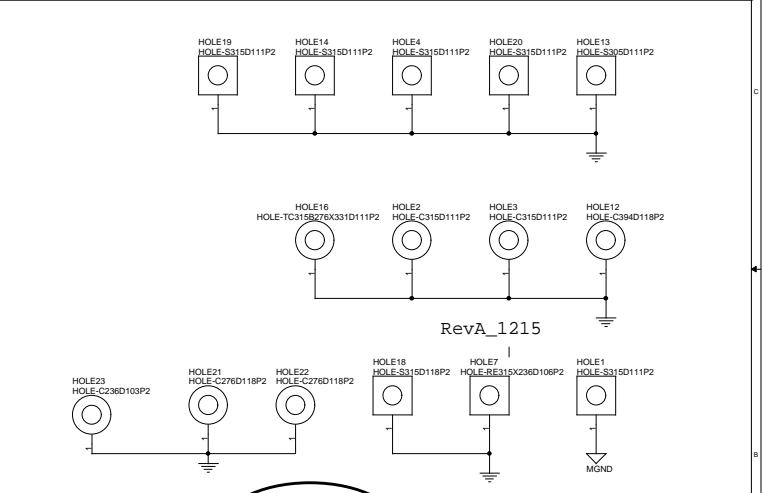
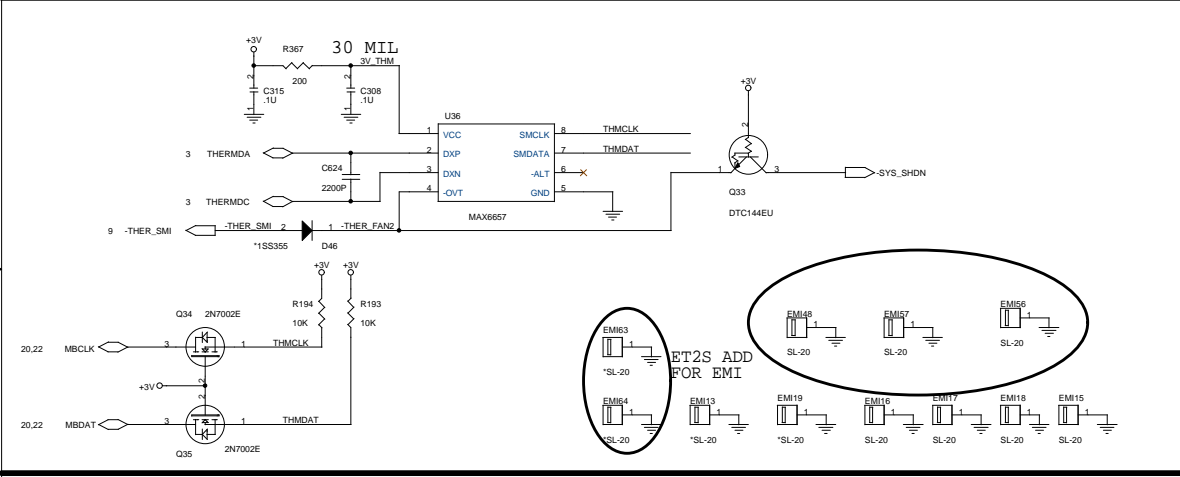
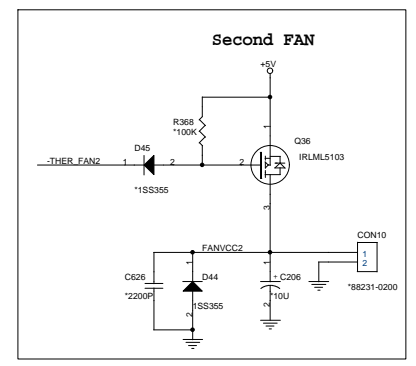
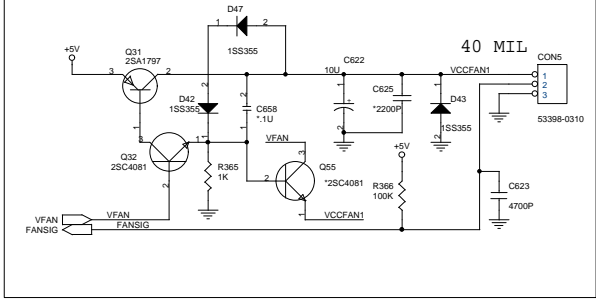
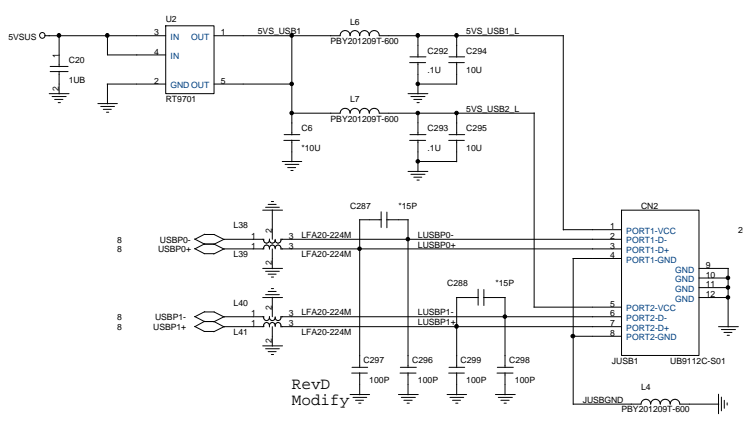


Need to confirm the address

**PROJECT : ET2S**  
**Quanta Computer Inc.**

Size: Document Number: **PCU NS87570** Rev: 3C

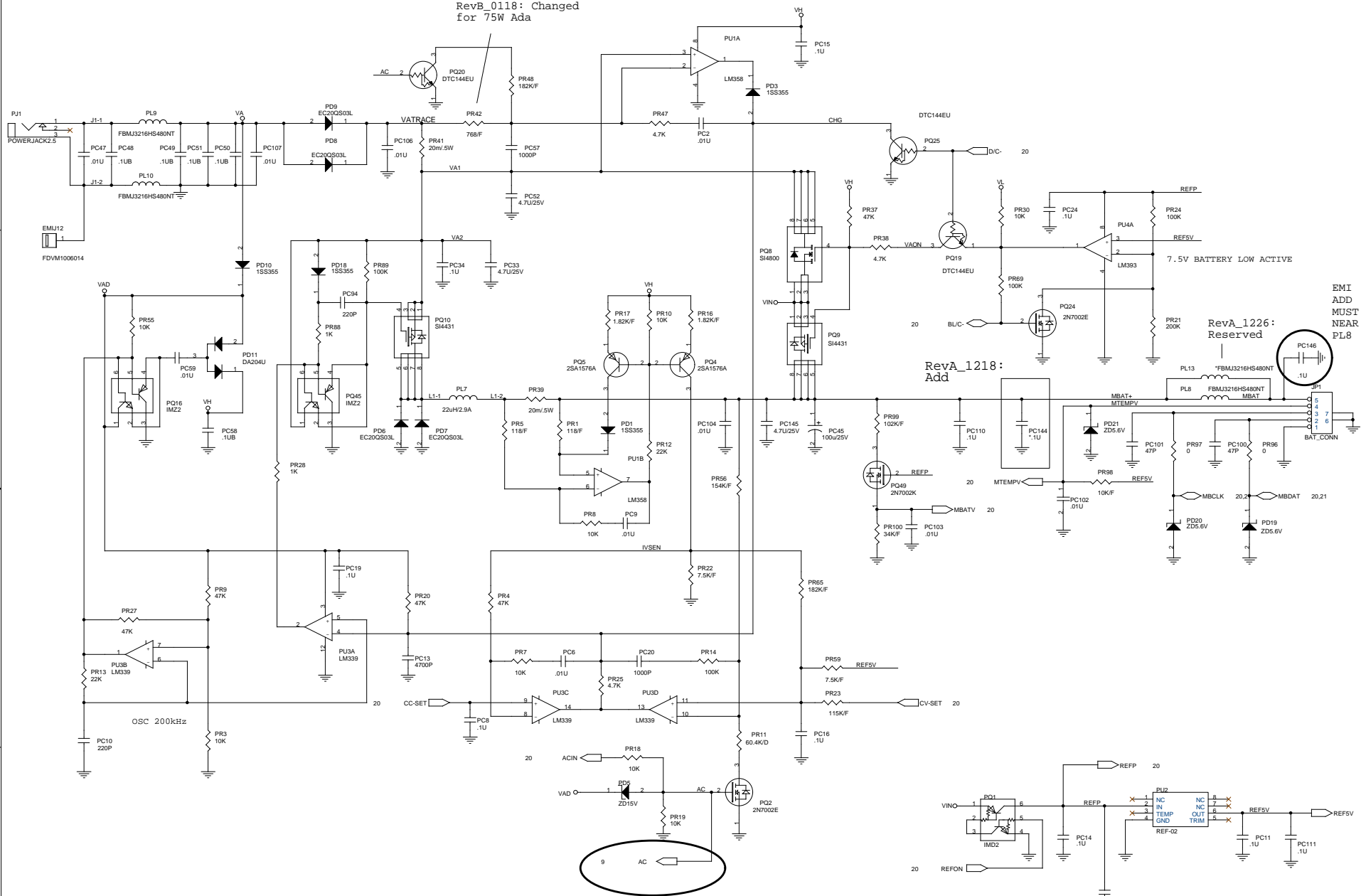
Date: Thursday, August 23, 2002 ESheet: 20 of 25



**PROJECT : ET2S**  
**Quanta Computer Inc.**

Size	Document Number	<b>USB,FANS,Srews&amp;EMI PAD</b>	Rev
Date	Thursday, August 28, 2002	Esheet	21 of 25

RevB\_0118: Changed  
for 75W Ada



RevA\_1226:  
Reserved

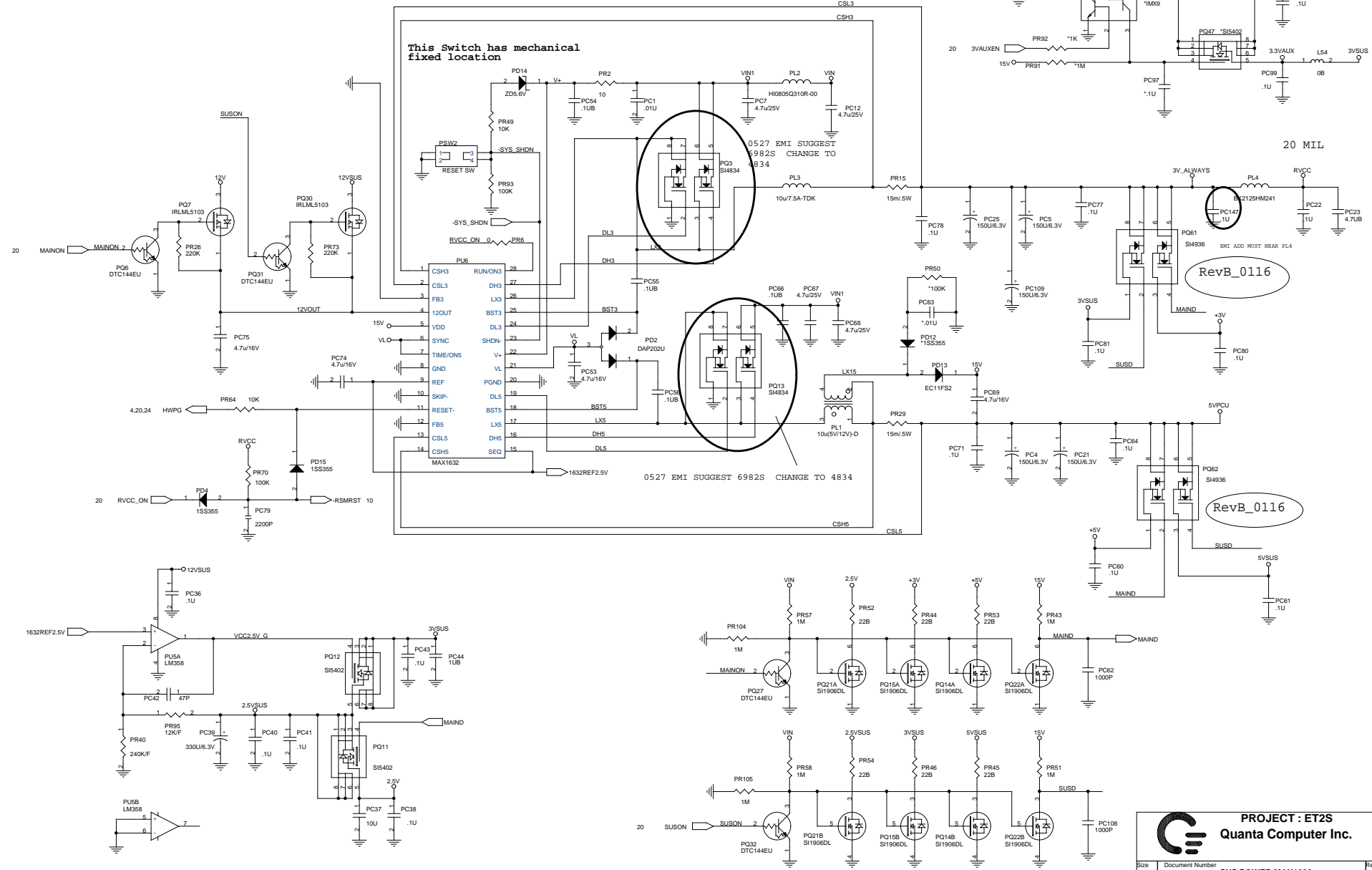
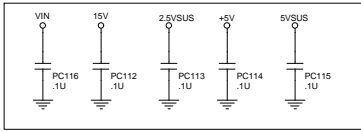
RevA\_1218:  
Add

EMI  
ADD  
MUST  
NEAR  
PL8

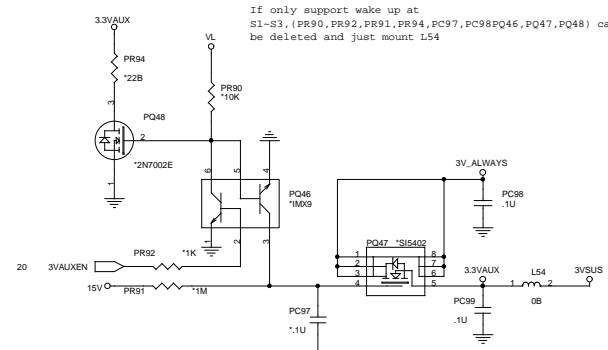
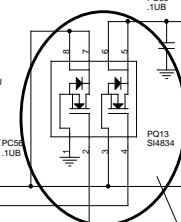
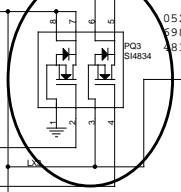
REV D: connect to 8231  
for AC detect

**PROJECT : ET2S**  
**Quanta Computer Inc.**

Size	Document Number	Rev
	<b>CHARGER CIRCUIT</b>	3C
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This Switch has mechanical fixed location



If only support wake up at S1-S3, (PR90, PR92, PR91, PR94, PC97, PC98, PC946, PQ47, PQ48) can be deleted and just mount L54

20 MIL

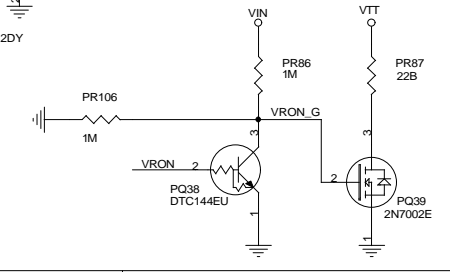
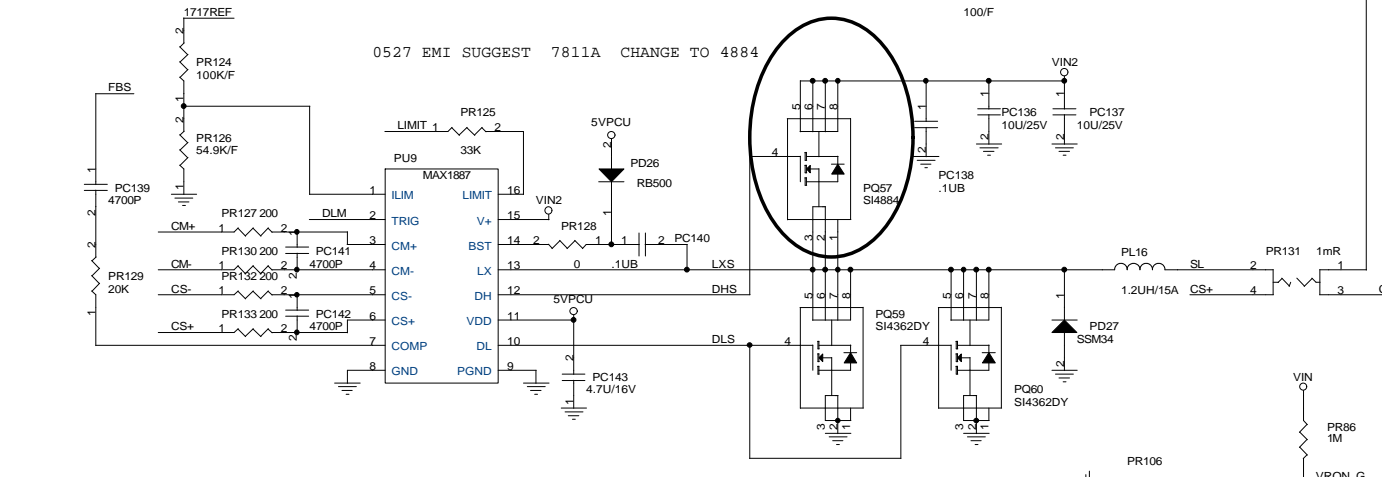
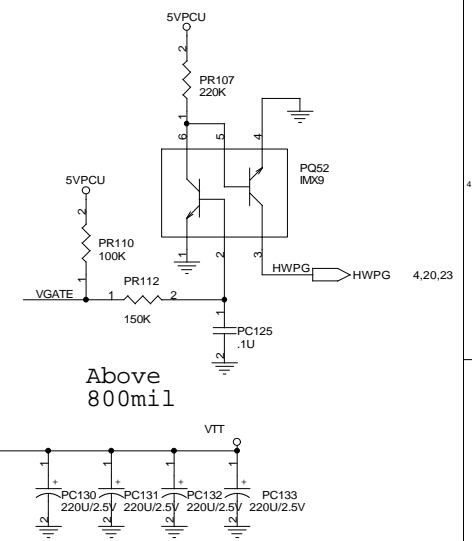
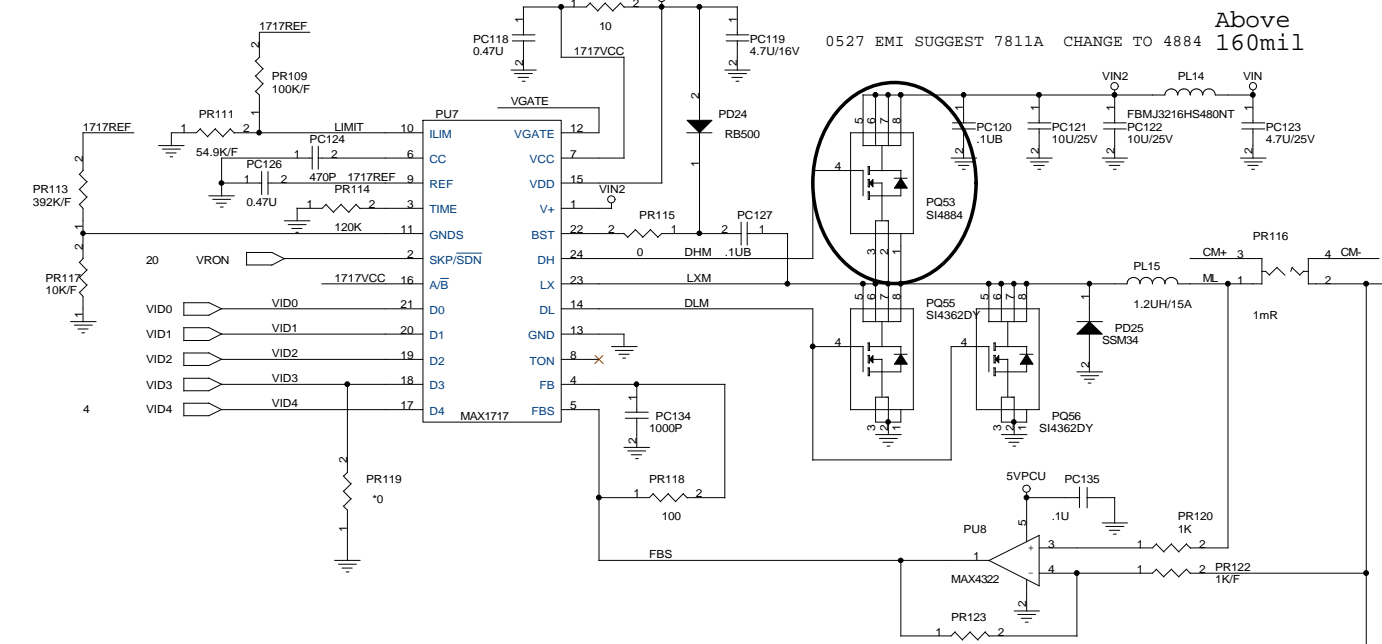
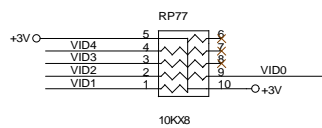
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VIT VOLTAGE SETTING  
0=GND 1=FLAOT

D4 = 1	D4 = 0	D3	D2	D1	D0
1.275	2.00	0	0	0	0
1.250	1.95	0	0	0	1
1.225	1.90	0	0	1	0
1.200	1.85	0	0	1	1
1.175	1.80	0	1	0	0
1.150	1.75	0	1	0	1
1.125	1.70	0	1	1	0
1.100	1.65	0	1	1	1
1.075	1.60	1	0	0	0
1.050	1.55	1	0	0	1
1.025	1.50	1	0	1	0
1.000	1.45	1	0	1	1
0.975	1.40	1	1	0	0
0.950	1.35	1	1	0	1
0.925	1.30	1	1	1	0
SHUTDOWN	SHUTDOWN	1	1	1	1

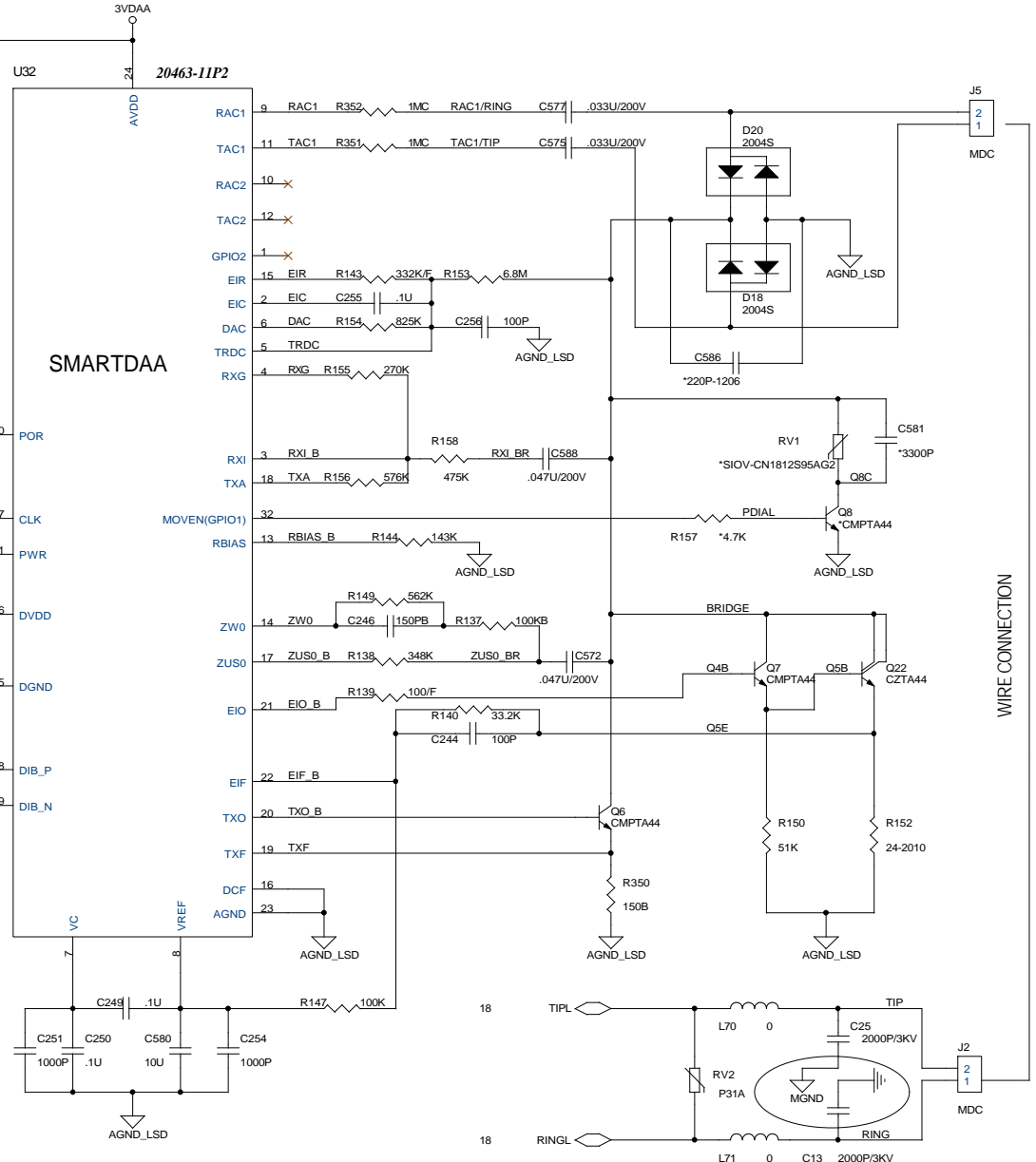
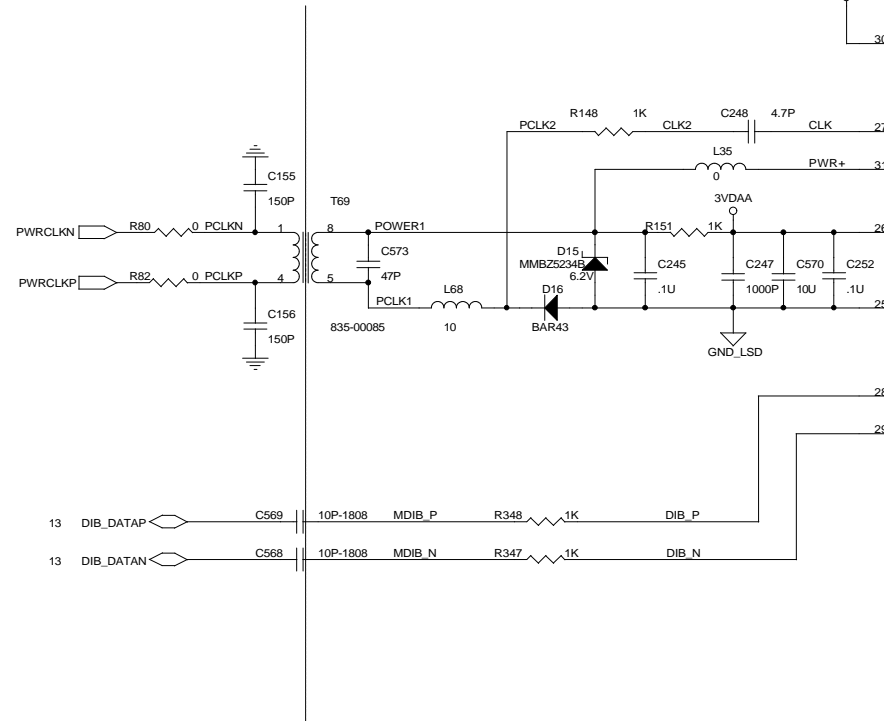
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The AMC20463-002 modem is used for mother board family MBAMC20463-002.

DIGITAL ISOLATION BARRIER



GND\_LSD      AGND\_LSD

With 12 mil to connect both GND

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