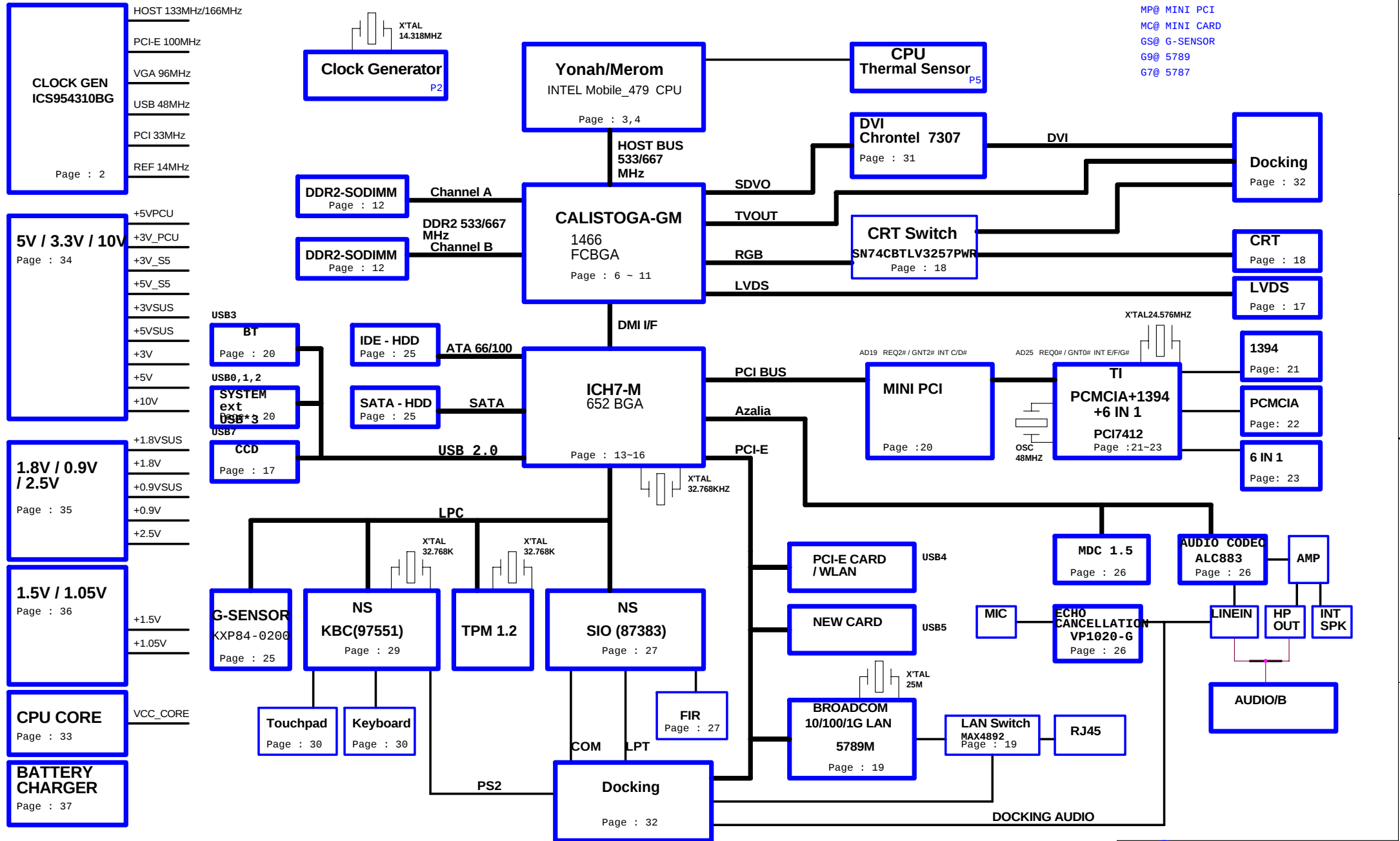
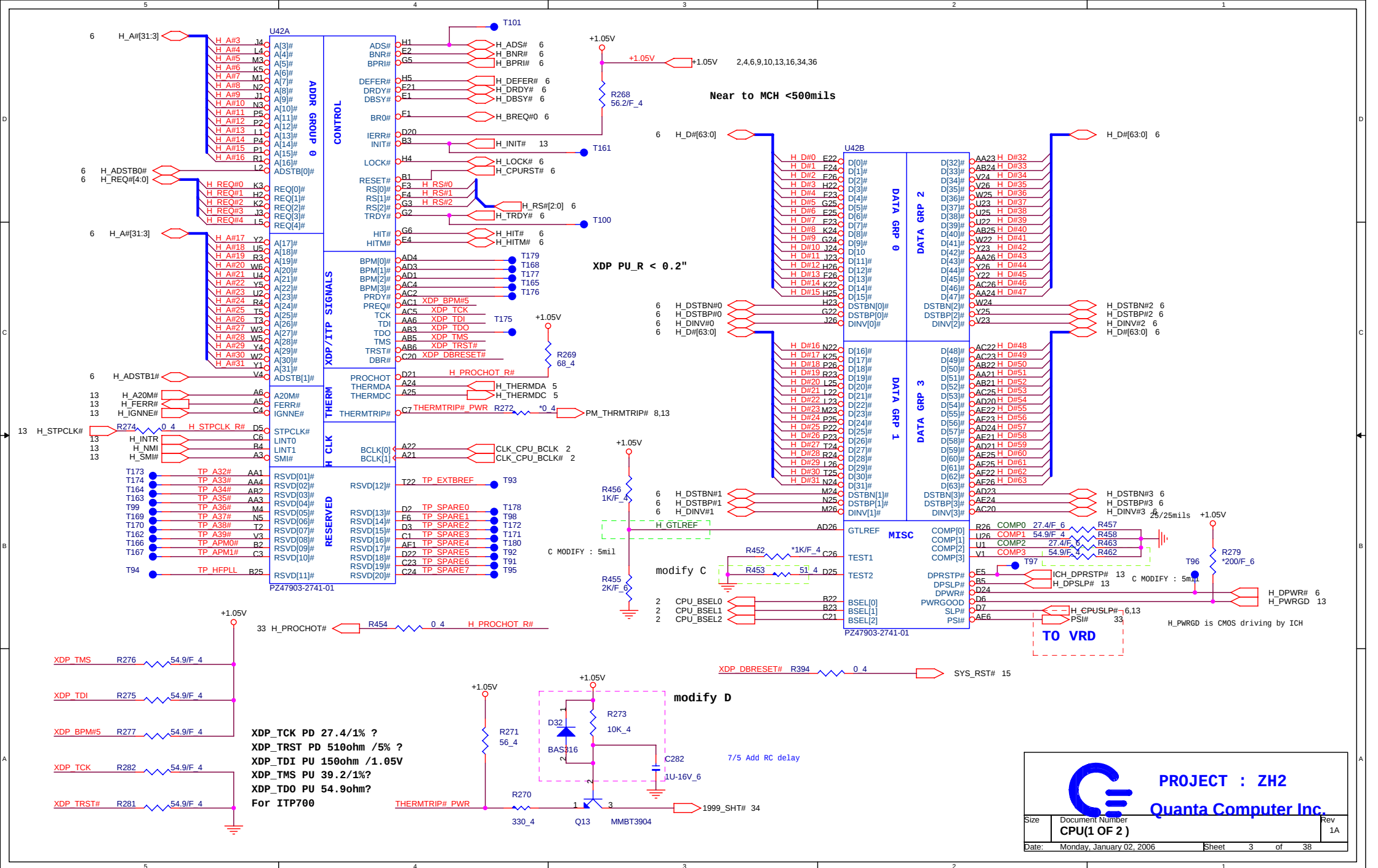


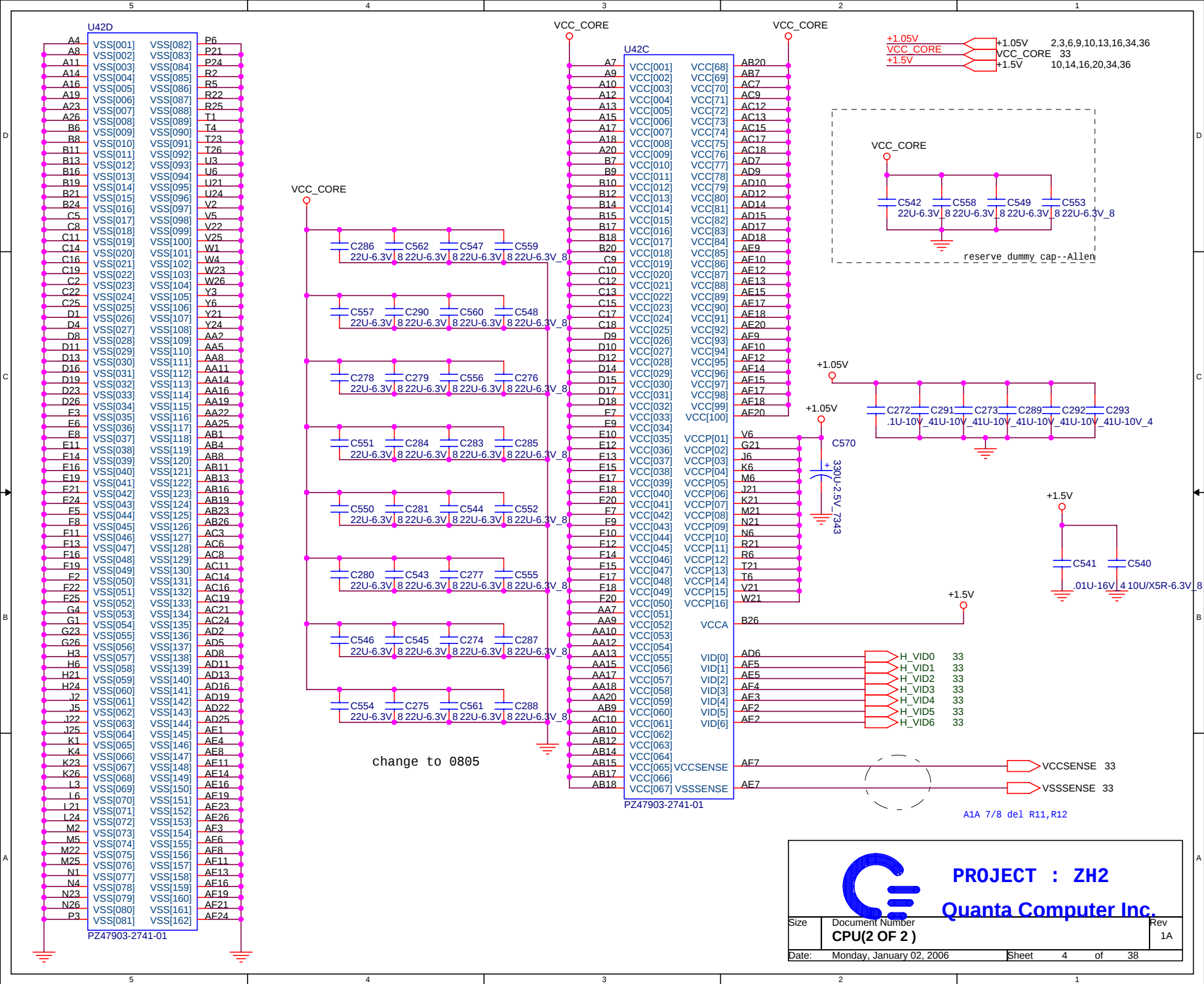
ZH2 Block Diagram

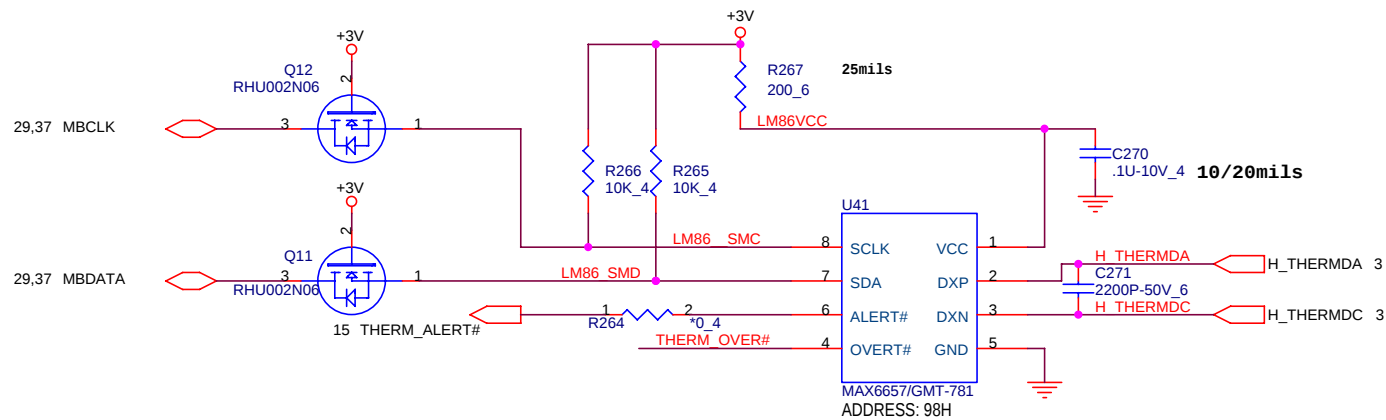
PA@ PATA
SA@ SATA
MP@ MINI PCI
MC@ MINI CARD
GS@ G-SENSOR
G9@ 5789
G7@ 5787



PCI DEVICE	IDSEL#	REQ# / GNT#	Interrupts
PCI7412	AD25	REQ0# / GNT0#	INT E/F/G#
MINI PCI	AD19	REQ2# / GNT2#	INT C/D#

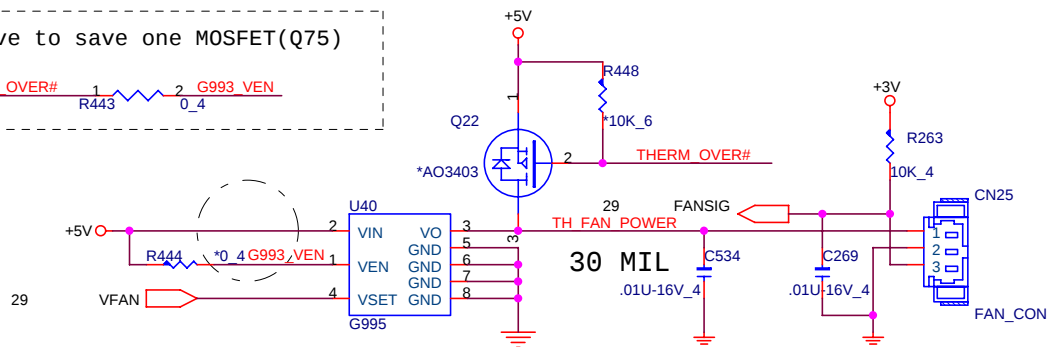






reserve to save one MOSFET(Q75)

THERM_OVER# 1 R443 2 0_4 G993_VEN

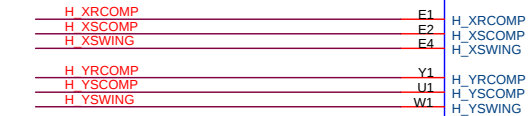
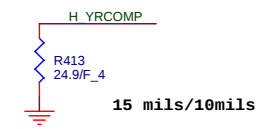
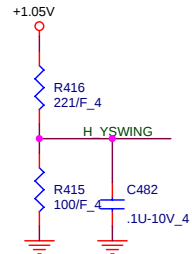
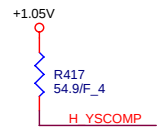
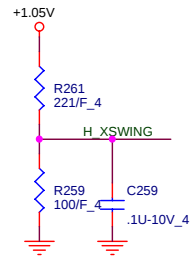
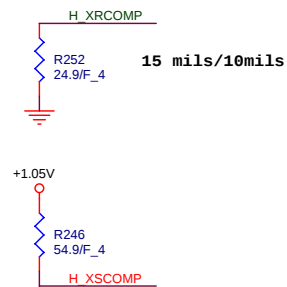


PROJECT : ZH2

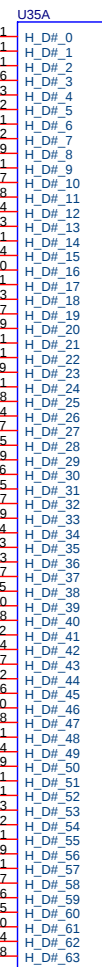
Quanta Computer Inc.

Size	Document Number	Rev
	Thermal Sensor LM86	1A

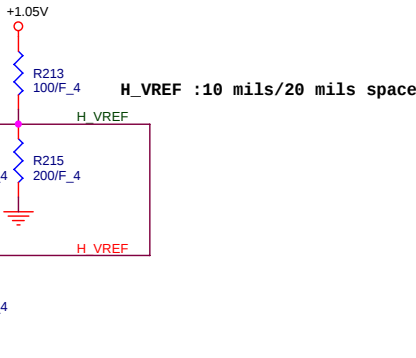
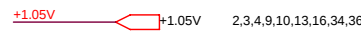
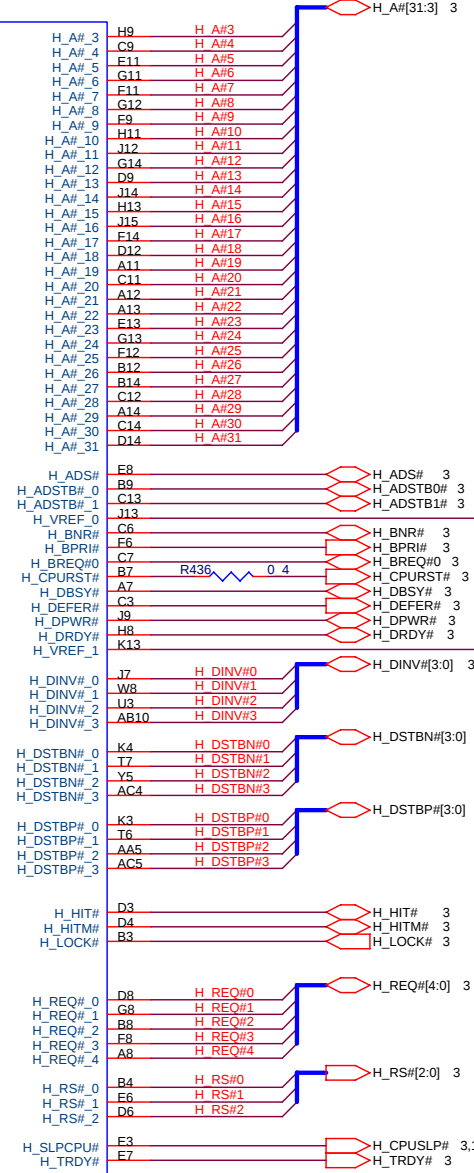
Date: Monday, January 02, 2006 Sheet 5 of 38



Short Stub < 100mils
extract from same point



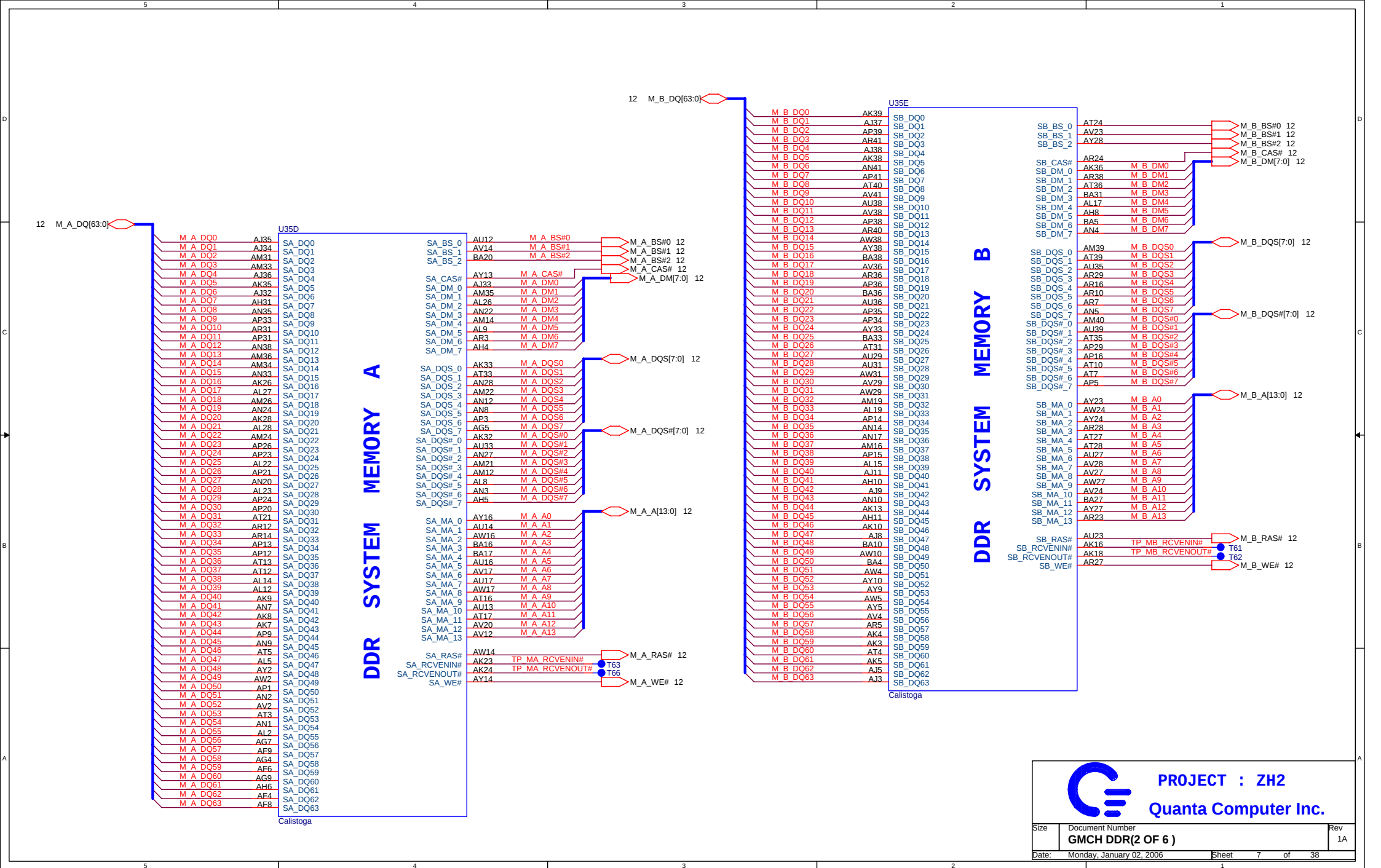
HOST

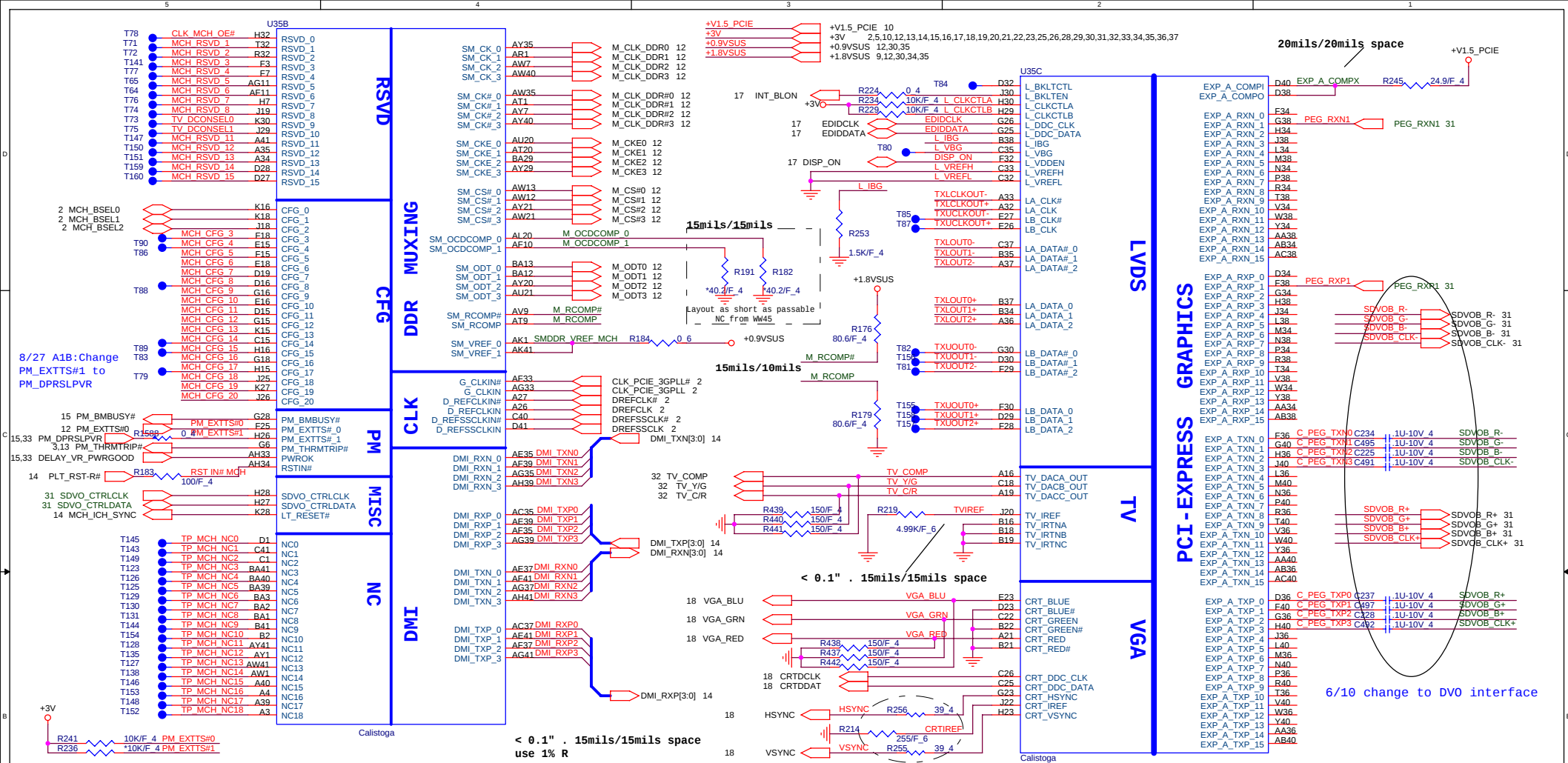


COMPONENTS	P/N
945GM	AJ009450T04

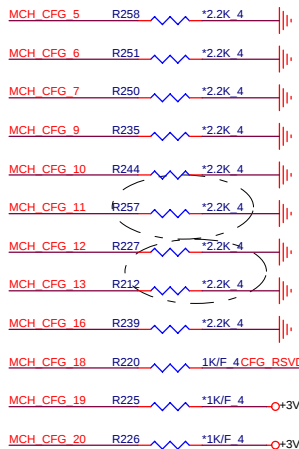
PROJECT : ZH2
Quanta Computer Inc.

Size	Document Number	Rev
	GMCH HOST(1 OF 6)	1A
Date:	Monday, January 02, 2006	Sheet 6 of 38





GMCH Strap pin



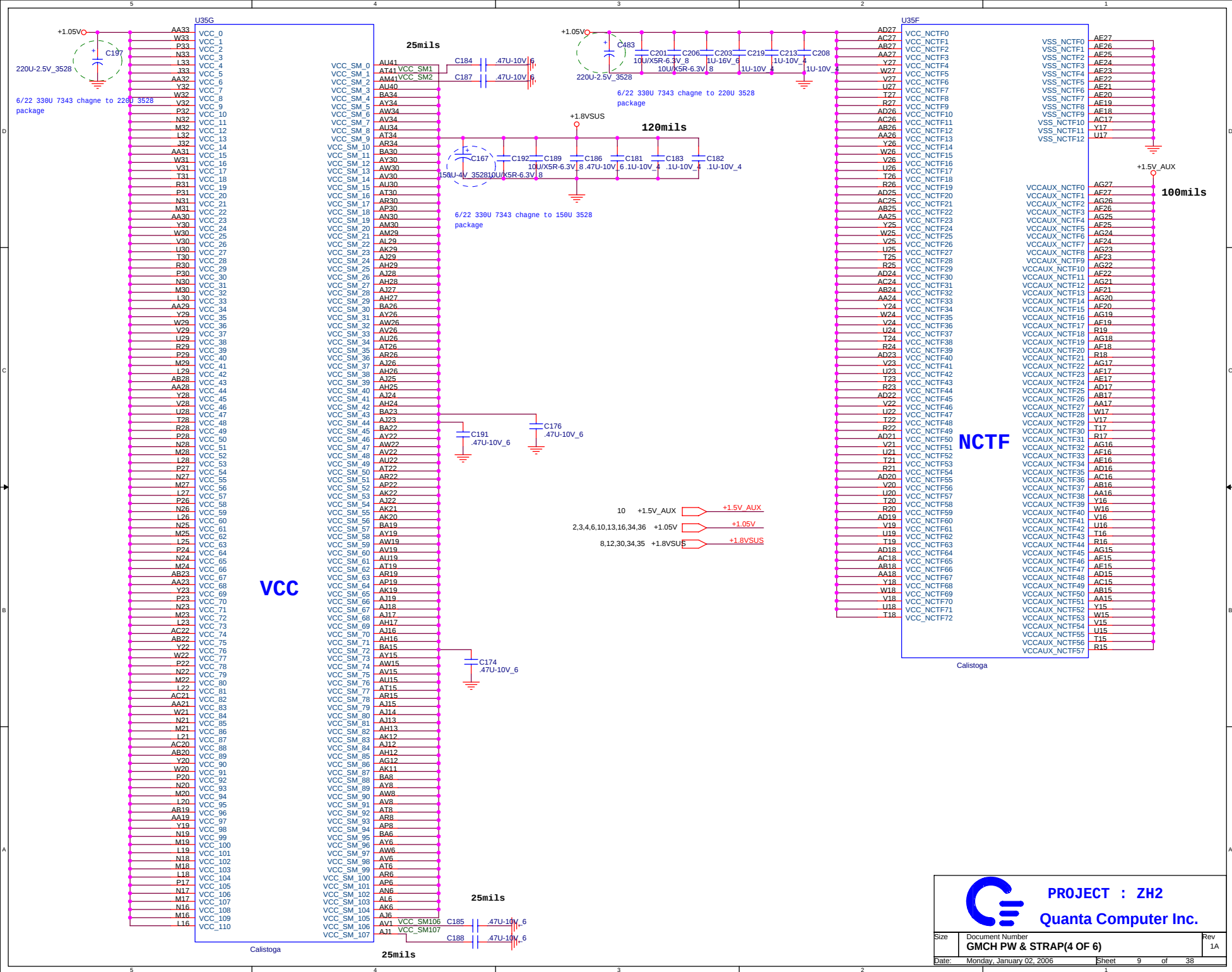
- 1.MCH_CFG_5 Low = DMI X2, High=MobIX4
- 2.MCH_CFG_6 DDR : Low =Moby Dick, High= Calistoga (Default)
- 3.MCH_CFG_7 CPU Strap Low=RSVD, High=Mobile CPU
- 4.MCH_CFG_9 PCI Exp Graphics Lane: Low =Reserved,High=Mobility
- 5.MCH_CFG_10 Host PLL VCC Select: Low=Reserved, High=Mobility
- 6.MCH_CFG_11: PSB 4x CLK ENABLE Low=Reserved, High=Calistoga
- 7.MCH_CFG_16 FSB Dynmic ODT: Low=Dynamic ODT Disabled, High=Dynamic ODT Enabled.
- 8.MCH_CFG_18 VCC Select: LOW=1.05V, High=1.5V
- 9.MCH_CFG_19 DMI LANE Reversal: Low=Normal,High=LANES Reversed.
- 10.MCH_CFG_20 PCIE Backward interpoerability mode: Low= only SDVO or PCIE x1 is operational (defaults) ,High=SDVO and PCIE x1 are operation simultaneously via the PEG port.

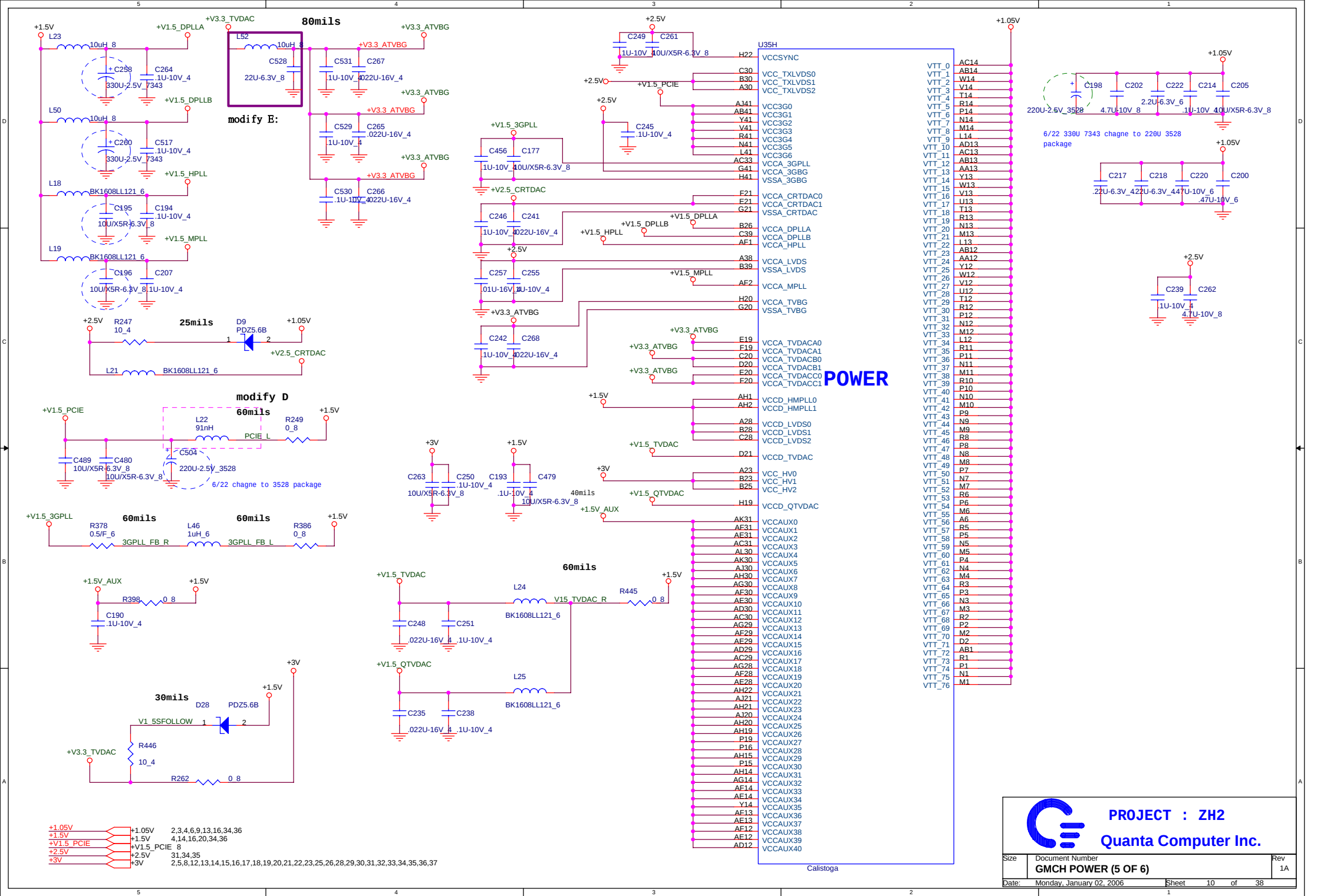
6/30 change to one channel



PROJECT : ZH2
Quanta Computer Inc.

Size	Document Number	Rev
	GMCH DMI/Vedio(3 OF 6)	1A
Date:	Monday, January 02, 2006	Sheet 8 of 38





U35I		
AC41	VSS_0	VSS_97
AA41	VSS_1	VSS_98
W41	VSS_2	AE34
T41	VSS_3	AE34
P41	VSS_4	AC34
M41	VSS_5	C34
J41	VSS_6	AW33
F41	VSS_7	AV33
AV40	VSS_8	AP33
AF40	VSS_9	AE33
AN40	VSS_10	AB33
AK40	VSS_11	Y33
A140	VSS_12	V33
AH40	VSS_13	T33
AG40	VSS_14	R33
AF40	VSS_15	M33
AE40	VSS_16	H33
B40	VSS_17	G33
AY39	VSS_18	F33
AW39	VSS_19	D33
AV39	VSS_20	B33
AR39	VSS_21	AH32
AN39	VSS_22	AG32
AJ39	VSS_23	AF32
AC39	VSS_24	AE32
AB39	VSS_25	AC32
AA39	VSS_26	AB32
Y39	VSS_27	G32
W39	VSS_28	B32
V39	VSS_29	AY31
T39	VSS_30	AV31
R39	VSS_31	AN31
P39	VSS_32	AJ31
N39	VSS_33	AG31
M39	VSS_34	AB31
L39	VSS_35	Y31
J39	VSS_36	AB30
H39	VSS_37	E30
G39	VSS_38	AT29
F39	VSS_39	AN29
D39	VSS_40	AB29
AT38	VSS_41	T29
AM38	VSS_42	N29
AH38	VSS_43	K29
AG38	VSS_44	H29
AF38	VSS_45	D29
AE38	VSS_46	C29
C38	VSS_47	B29
AK37	VSS_48	A29
AH37	VSS_49	BA28
AB37	VSS_50	AW28
AA37	VSS_51	AU28
Y37	VSS_52	AP28
W37	VSS_53	AM28
V37	VSS_54	AD28
T37	VSS_55	AC28
R37	VSS_56	J16
P37	VSS_57	W28
N37	VSS_58	J28
M37	VSS_59	E28
L37	VSS_60	AP27
J37	VSS_61	AM27
H37	VSS_62	AK27
G37	VSS_63	J27
F37	VSS_64	G27
D37	VSS_65	E27
AY36	VSS_66	C27
AW36	VSS_67	B27
AV36	VSS_68	AN26
AR36	VSS_69	M26
AG36	VSS_70	K26
AF36	VSS_71	E26
AE36	VSS_72	D26
AC36	VSS_73	AK25
C36	VSS_74	P25
B36	VSS_75	H25
BA35	VSS_76	E25
AV35	VSS_77	D25
AR35	VSS_78	A25
AH35	VSS_79	BA24
AB35	VSS_80	AU24
AA35	VSS_81	AL24
Y35	VSS_82	AW23
W35	VSS_83	
V35	VSS_84	
T35	VSS_85	
R35	VSS_86	
P35	VSS_87	
N35	VSS_88	
M35	VSS_89	
L35	VSS_90	
J35	VSS_91	
H35	VSS_92	
G35	VSS_93	
F35	VSS_94	
D35	VSS_95	
AN34	VSS_96	

U35J		
AT23	VSS_180	VSS_273
AN23	VSS_181	D11
AM23	VSS_182	B11
AH23	VSS_183	AV10
AC23	VSS_184	AP10
W23	VSS_185	AL10
K23	VSS_186	AJ10
J23	VSS_187	AG10
F23	VSS_188	AC10
AE33	VSS_189	W10
AA22	VSS_190	U10
K22	VSS_191	BA9
G22	VSS_192	AW9
F22	VSS_193	AR9
E22	VSS_194	AH9
D22	VSS_195	AB9
A22	VSS_196	Y9
BA21	VSS_197	R9
AV21	VSS_198	G9
AR21	VSS_199	E9
AN21	VSS_200	A9
AL21	VSS_201	AG8
AB21	VSS_202	AD8
Y21	VSS_203	AA8
P21	VSS_204	U8
K21	VSS_205	K8
J21	VSS_206	C8
H21	VSS_207	BA7
C21	VSS_208	AV7
AW20	VSS_209	AP7
AR20	VSS_210	AL7
AM20	VSS_211	AJ7
AA20	VSS_212	AH7
K20	VSS_213	AF7
B20	VSS_214	AC7
A20	VSS_215	R7
AN19	VSS_216	G7
AC19	VSS_217	D7
W19	VSS_218	AG6
K19	VSS_219	AD6
G19	VSS_220	AB6
C19	VSS_221	Y6
AH18	VSS_222	U6
K18	VSS_223	N6
H18	VSS_224	K6
D18	VSS_225	H6
A18	VSS_226	B6
AY17	VSS_227	AV5
AR17	VSS_228	AF5
AP17	VSS_229	AD5
AM17	VSS_230	AY4
AK17	VSS_231	AB4
AV16	VSS_232	AP4
AN16	VSS_233	AL4
AL16	VSS_234	AJ4
J16	VSS_235	Y4
F16	VSS_236	U4
C16	VSS_237	R4
AN15	VSS_238	J4
AM15	VSS_239	F4
AK15	VSS_240	C4
N15	VSS_241	AY3
M15	VSS_242	AW3
L15	VSS_243	AV3
B15	VSS_244	AL3
A15	VSS_245	AH3
BA14	VSS_246	AG3
AT14	VSS_247	AF3
AK14	VSS_248	AD3
AD14	VSS_249	AC3
U14	VSS_250	AA3
K14	VSS_251	G3
H14	VSS_252	AT2
E14	VSS_253	AR2
AV13	VSS_254	AP2
AR13	VSS_255	AK2
D25	VSS_256	AD2
AM13	VSS_257	AB2
AL13	VSS_258	Y2
AG13	VSS_259	U2
P13	VSS_260	T2
F13	VSS_261	N2
D13	VSS_262	J2
B13	VSS_263	H2
AY12	VSS_264	F2
AC12	VSS_265	C2
K12	VSS_266	AL1
H12	VSS_267	
E12	VSS_268	
AD11	VSS_269	
AA11	VSS_270	
Y11	VSS_271	
	VSS_272	

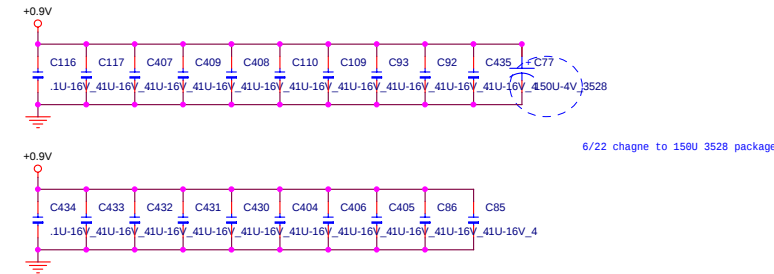
Calistoga



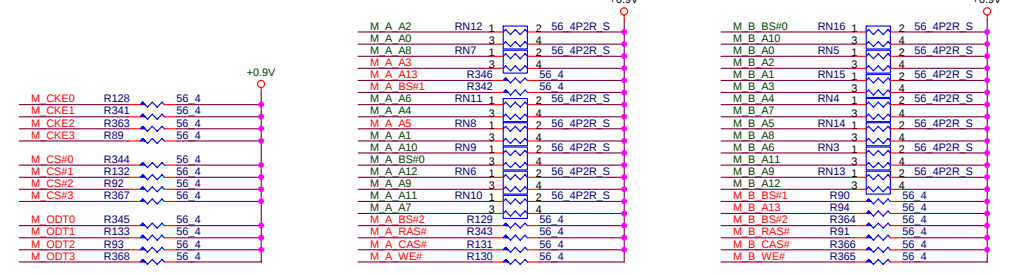
PROJECT : ZH2
Quanta Computer Inc.

Size	Document Number	Rev
	GMCH GND(6 OF 6)	1A
Date:	Monday, January 02, 2006	Sheet 11 of 38

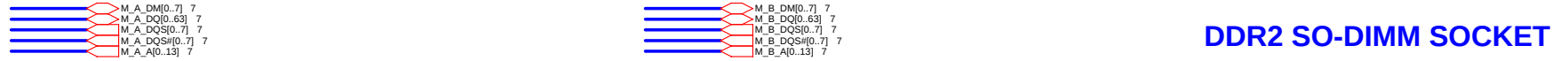
TERMINATOR DECOUPLING CAPACITOR



DDR2 TERMINATOR

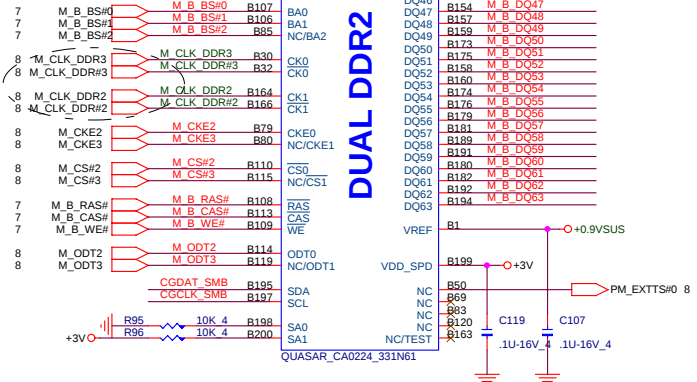
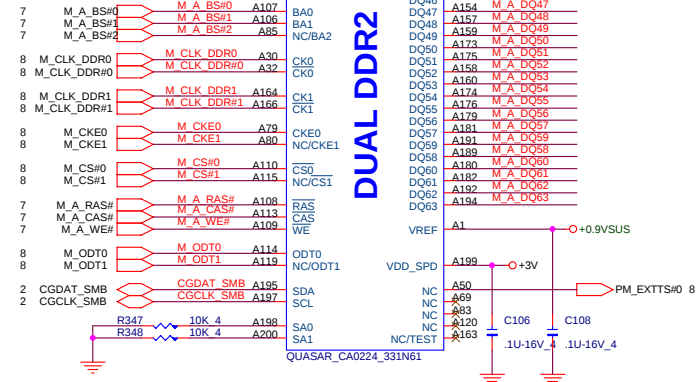
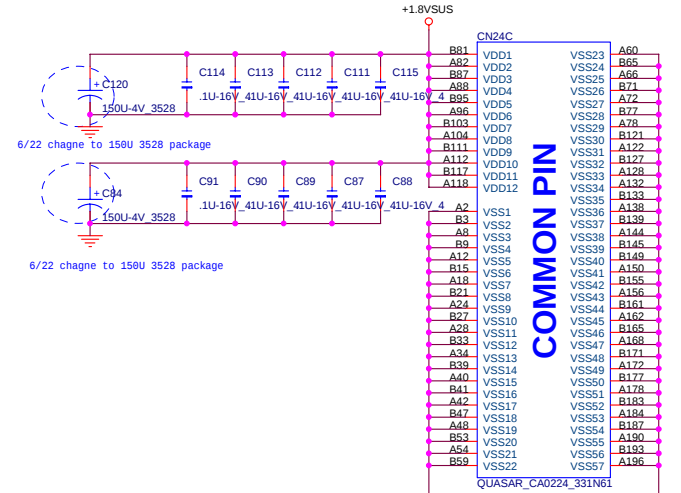


DDR2 SO-DIMM SOCKET

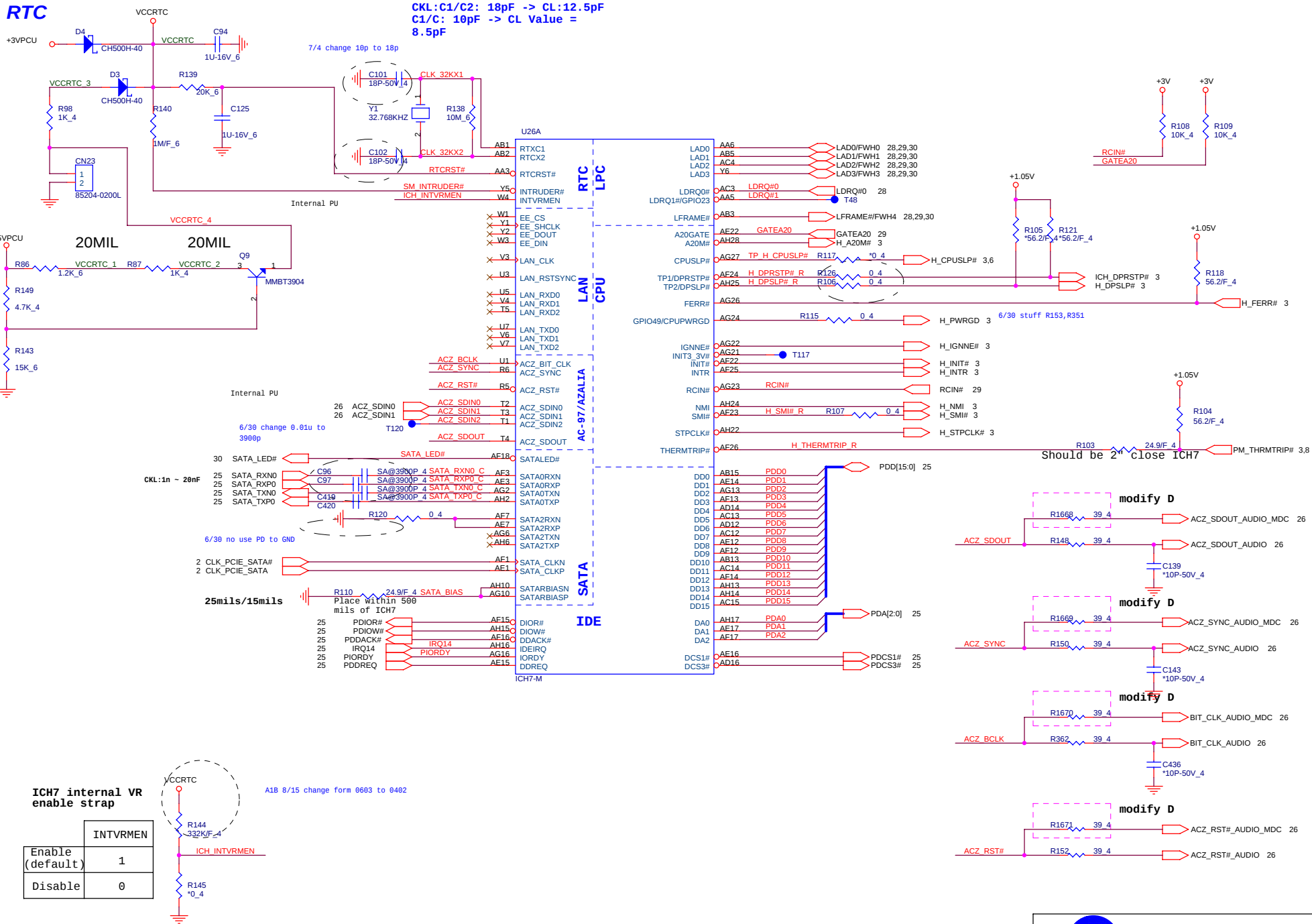


M_A_DM0	A10	DM0	A5	M_A_DQ5
M_A_DM1	A26	DM1	A7	M_A_DQ1
M_A_DM2	A52	DM2	A17	M_A_DQ2
M_A_DM3	A67	DM3	A19	M_A_DQ3
M_A_DM4	A130	DM4	A4	M_A_DQ4
M_A_DM5	A147	DM5	A6	M_A_DQ0
M_A_DM6	A170	DM6	A16	M_A_DQ6
M_A_DM7	A185	DM7	A18	M_A_DQ7
			A23	M_A_DQ12
			A25	M_A_DQ8
			A32	M_A_DQ9
			A35	M_A_DQ11
			A20	M_A_DQ13
			A22	M_A_DQ14
			A36	M_A_DQ10
			A38	M_A_DQ5
			A43	M_A_DQ16
			A45	M_A_DQ17
			A55	M_A_DQ18
			A57	M_A_DQ19
			A44	M_A_DQ20
			A46	M_A_DQ21
			A56	M_A_DQ22
			A58	M_A_DQ23
			A61	M_A_DQ24
			A63	M_A_DQ25
			A73	M_A_DQ26
			A75	M_A_DQ27
			A62	M_A_DQ25
			A64	M_A_DQ28
			A74	M_A_DQ30
			A76	M_A_DQ31
			A123	M_A_DQ36
			A125	M_A_DQ32
			A135	M_A_DQ34
			A137	M_A_DQ35
			A124	M_A_DQ33
			A126	M_A_DQ37
			A134	M_A_DQ38
			A136	M_A_DQ39
			A143	M_A_DQ45
			A151	M_A_DQ41
			A141	M_A_DQ40
			A153	M_A_DQ43
			A140	M_A_DQ44
			A142	M_A_DQ44
			A152	M_A_DQ46
			A154	M_A_DQ47
			A157	M_A_DQ48
			A159	M_A_DQ49
			A173	M_A_DQ50
			A175	M_A_DQ51
			A158	M_A_DQ52
			A160	M_A_DQ53
			A174	M_A_DQ54
			A176	M_A_DQ55
			A179	M_A_DQ56
			A191	M_A_DQ57
			A189	M_A_DQ58
			A180	M_A_DQ60
			A182	M_A_DQ61
			A192	M_A_DQ62
			A194	M_A_DQ63

M_B_DM0	B10	DM0	B5	M_B_DQ4
M_B_DM1	B26	DM1	B7	M_B_DQ0
M_B_DM2	B52	DM2	B17	M_B_DQ2
M_B_DM3	B67	DM3	B19	M_B_DQ2
M_B_DM4	B130	DM4	B4	M_B_DQ1
M_B_DM5	B147	DM5	B6	M_B_DQ5
M_B_DM6	B170	DM6	B14	M_B_DQ3
M_B_DM7	B185	DM7	B16	M_B_DQ3
			B23	M_B_DQ12
			B25	M_B_DQ8
			B32	M_B_DQ10
			B35	M_B_DQ11
			B20	M_B_DQ13
			B22	M_B_DQ9
			B36	M_B_DQ14
			B38	M_B_DQ5
			B43	M_B_DQ16
			B45	M_B_DQ17
			B55	M_B_DQ18
			B57	M_B_DQ19
			B44	M_B_DQ20
			B46	M_B_DQ21
			B56	M_B_DQ22
			B58	M_B_DQ23
			B61	M_B_DQ24
			B63	M_B_DQ25
			B73	M_B_DQ26
			B75	M_B_DQ27
			B62	M_B_DQ28
			B64	M_B_DQ29
			B74	M_B_DQ30
			B76	M_B_DQ31
			A123	M_B_DQ36
			A125	M_B_DQ32
			A135	M_B_DQ34
			A137	M_B_DQ35
			A124	M_B_DQ33
			A126	M_B_DQ37
			A134	M_B_DQ38
			A136	M_B_DQ39
			A143	M_B_DQ45
			A151	M_B_DQ41
			A141	M_B_DQ40
			A153	M_B_DQ43
			A140	M_B_DQ44
			A142	M_B_DQ44
			A152	M_B_DQ46
			A154	M_B_DQ47
			A157	M_B_DQ48
			A159	M_B_DQ49
			A173	M_B_DQ50
			A175	M_B_DQ51
			A158	M_B_DQ52
			A160	M_B_DQ53
			A174	M_B_DQ54
			A176	M_B_DQ55
			A179	M_B_DQ56
			A191	M_B_DQ57
			A189	M_B_DQ58
			A180	M_B_DQ60
			A182	M_B_DQ61
			A192	M_B_DQ62
			A194	M_B_DQ63



RTC



PROJECT : ZH2
Quanta Computer Inc.

Size	Document Number ICH7-M HOST (1 OF 4)	Rev 1A
Date:	Monday, January 02, 2006	Sheet 13 of 38

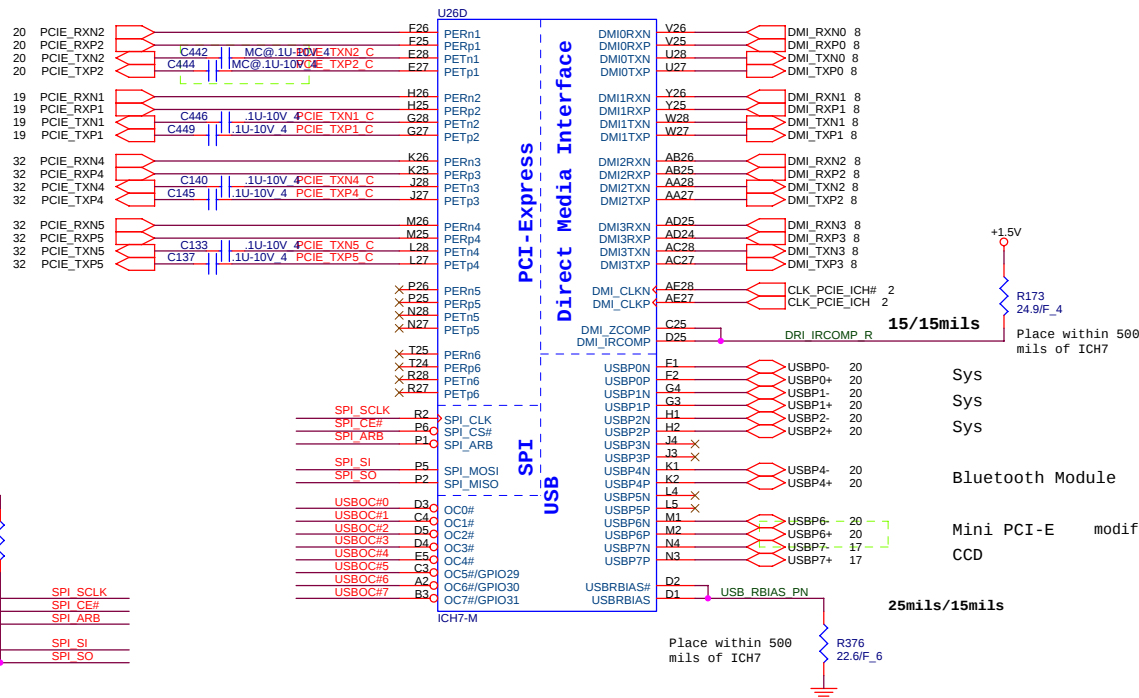
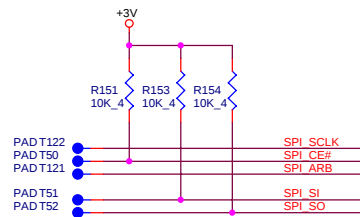
MINI CARD PCI-E

5789M

EZ4

EZ4

A1A 8/1 chagne PCI-E signal for different SB use



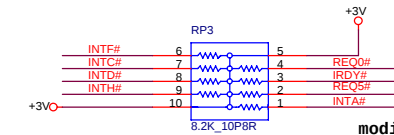
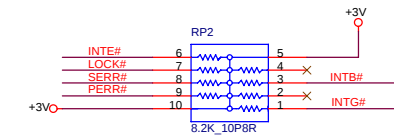
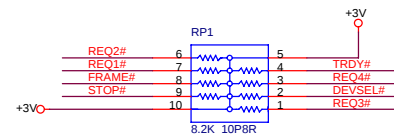
Sys
Sys
Sys

Bluetooth Module

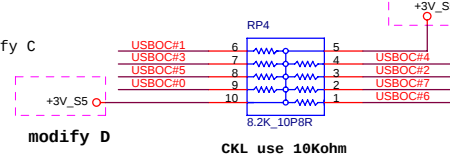
Mini PCI-E modify C
CCD

25mils/15mils

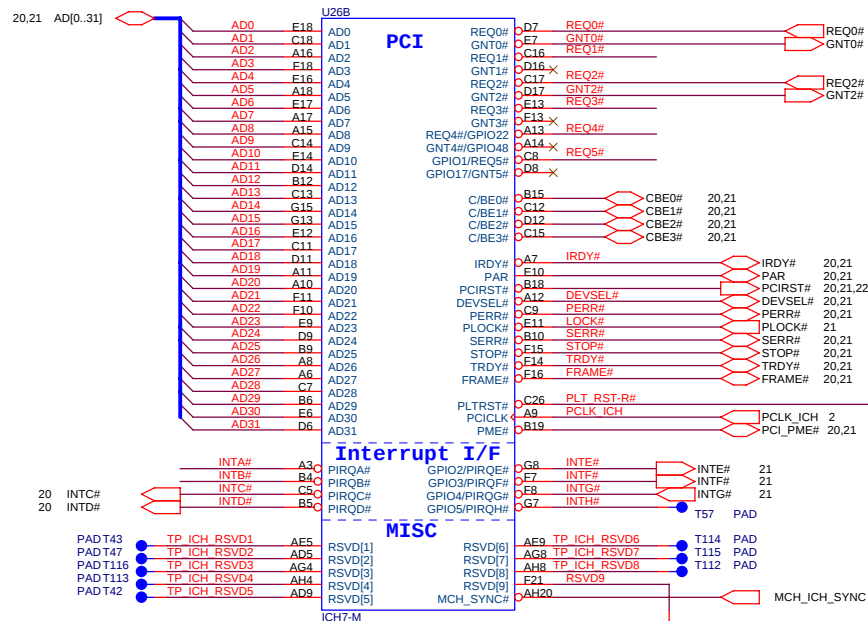
Place within 500
mils of ICH7



modify D



CKL use 10Kohm



Don't connect to PCI device / Express card

ICH7 Boot BIOS select

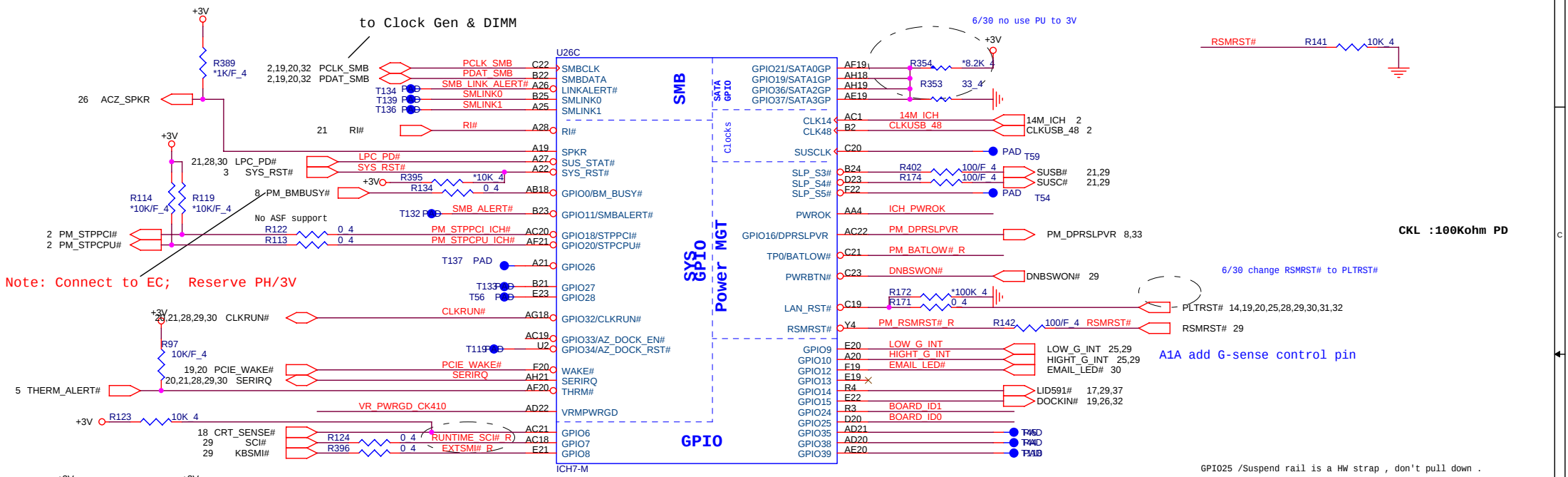
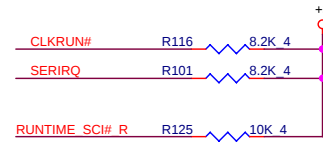
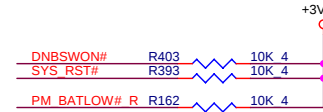
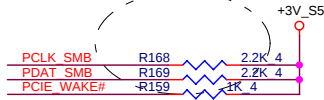
	STRAP	GNT5# R1	GNT4# R2
LPC (default)	11	UNSTUFF	UNSTUFF
PCI	10	UNSTUFF	STUFF
SPI	01	STUFF	UNSTUFF

PCI DEVICE	IDSEL#	REQ# / GNT#	Interrupts
PCI7411	AD25	REQ0# / GNT0#	INT E/F/G#



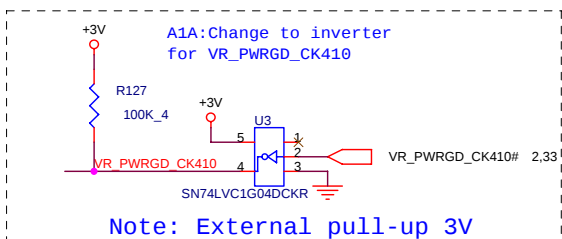
PROJECT : ZH2
Quanta Computer Inc.

7/4 change 2.2 to 2.2K

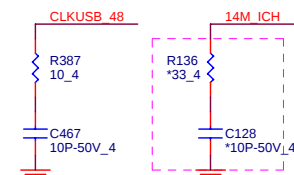


CKL :100Kohm PD

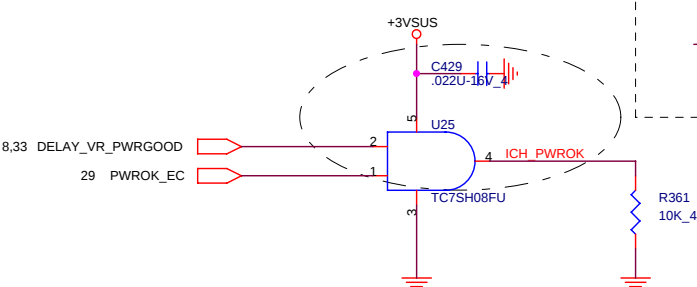
GPIO25 /Suspend rail is a Hw strap , don't pull down .



Note: External pull-up 3V



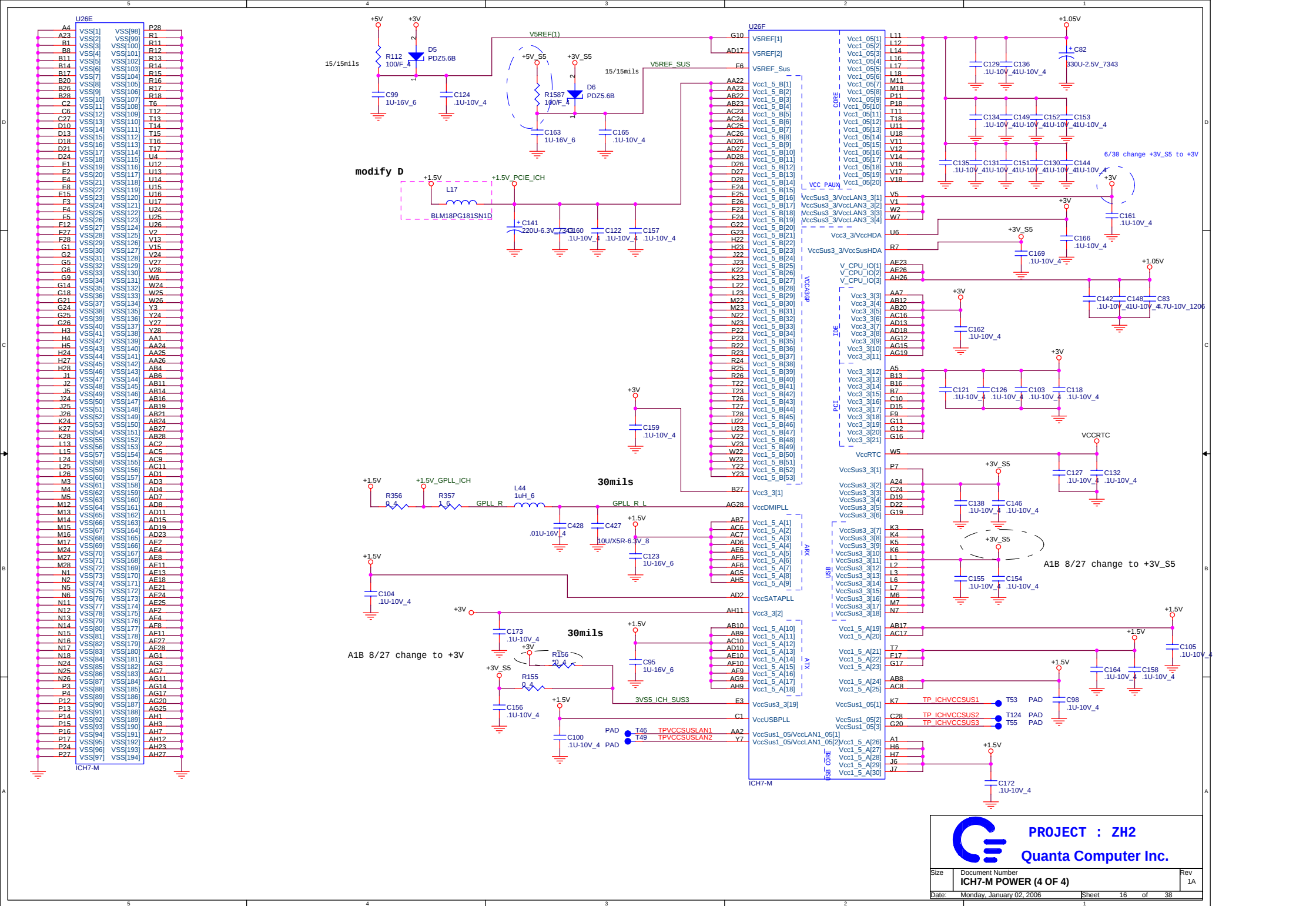
modify D

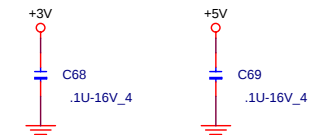
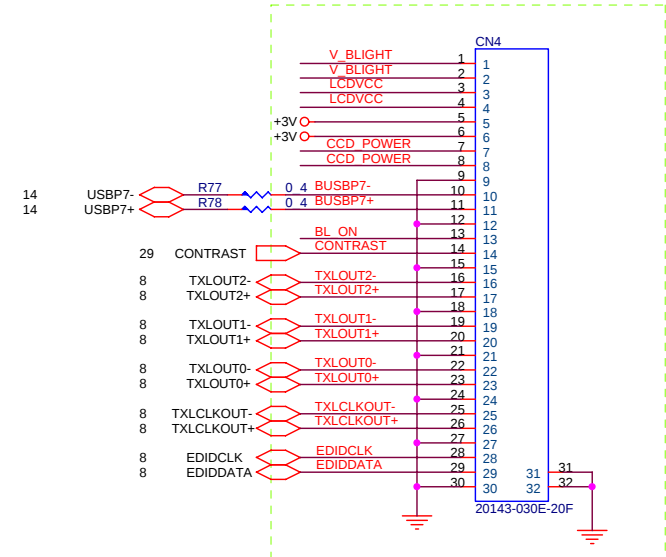
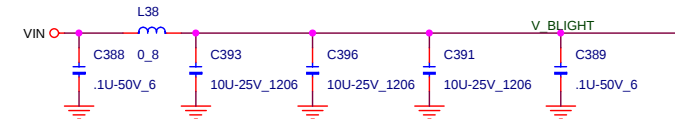
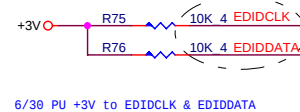
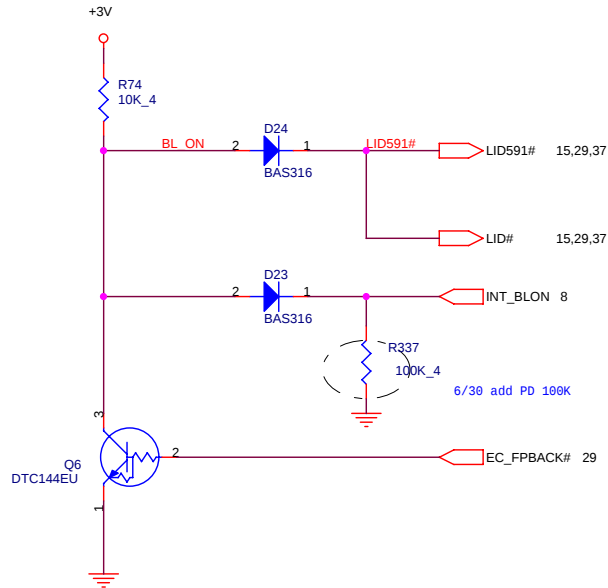


Board ID	ID1	ID0	
00			PATA, PCMCIA
01			PATA, NEW
10			SATA, PCMCIA
11			PATA, NEW

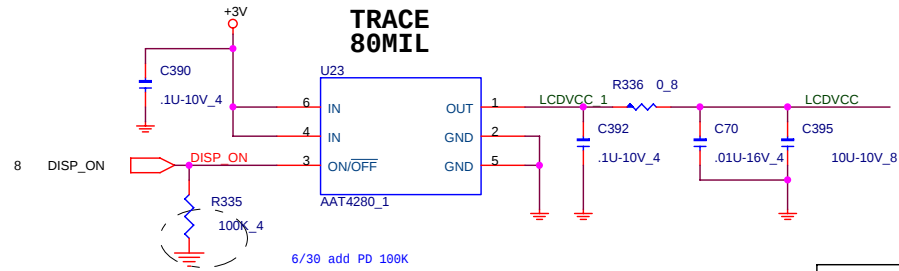
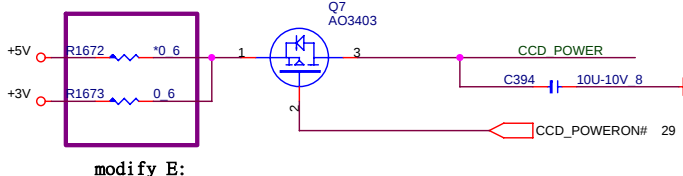
PROJECT : ZH2
Quanta Computer Inc.

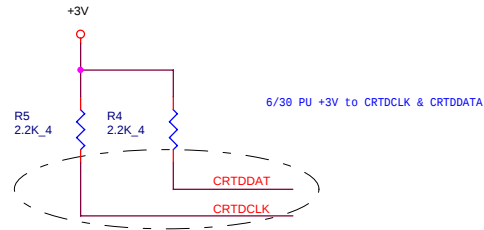
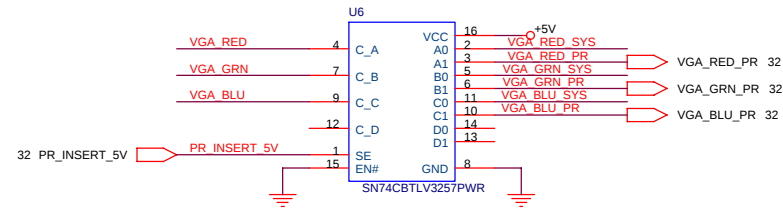
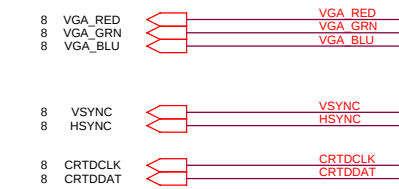
Size	Document Number	Rev
	ICH7-M GPIO (3 OF 4)	1A
Date:	Monday, January 02, 2006	Sheet 15 of 38



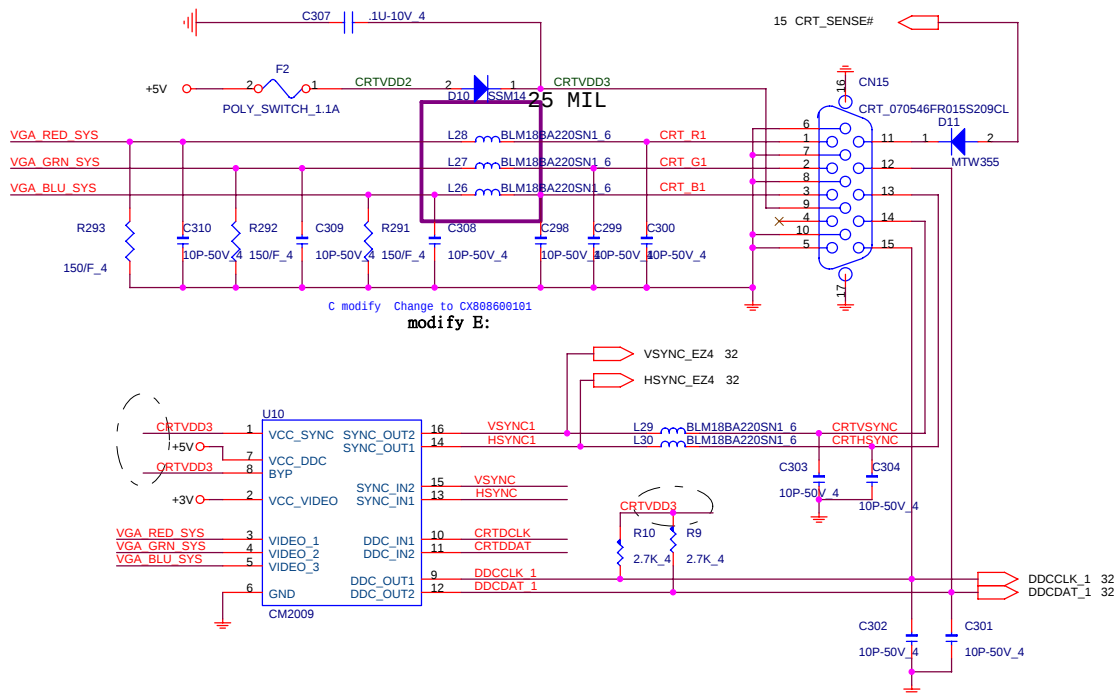
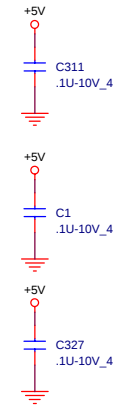


CAMERA MODULE CONNECTOR

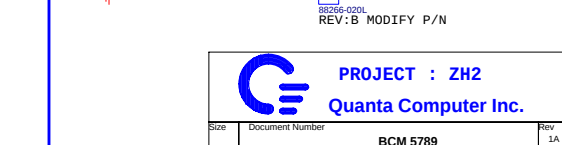
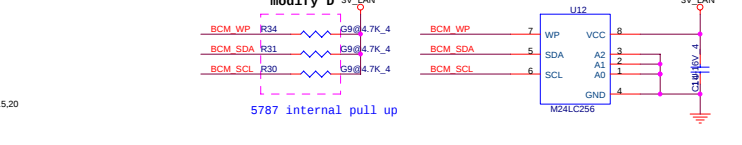
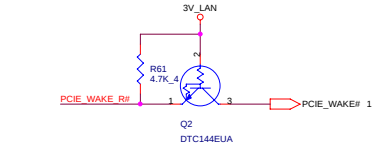




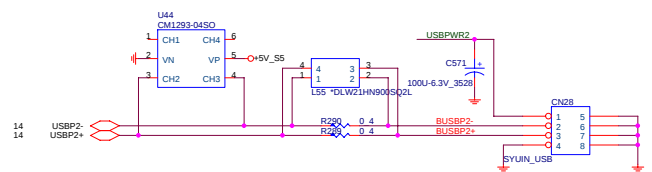
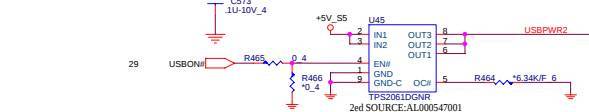
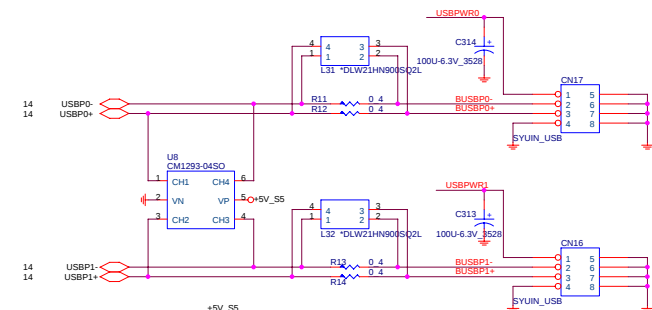
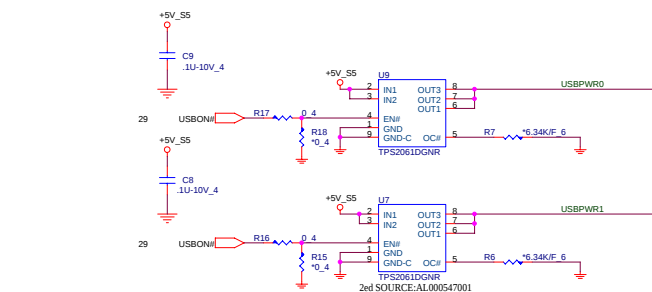
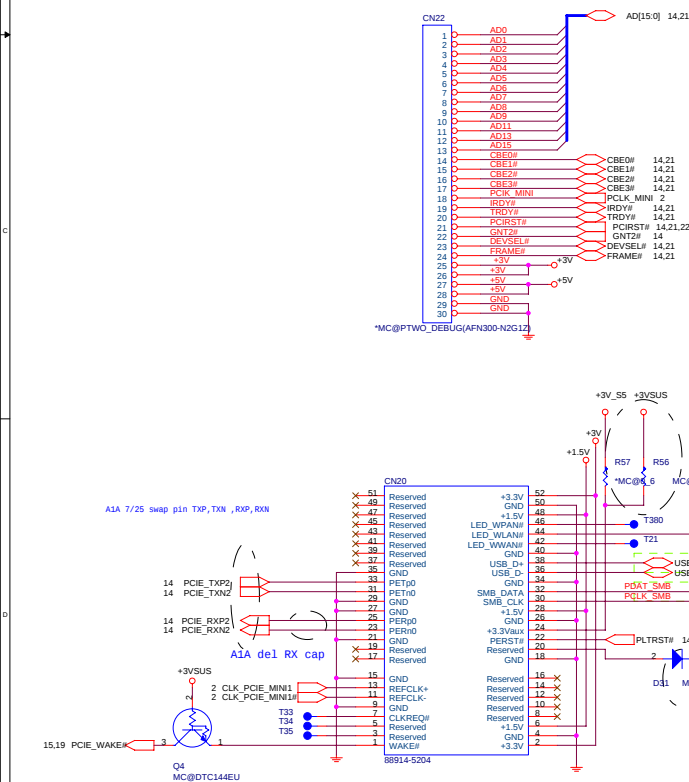
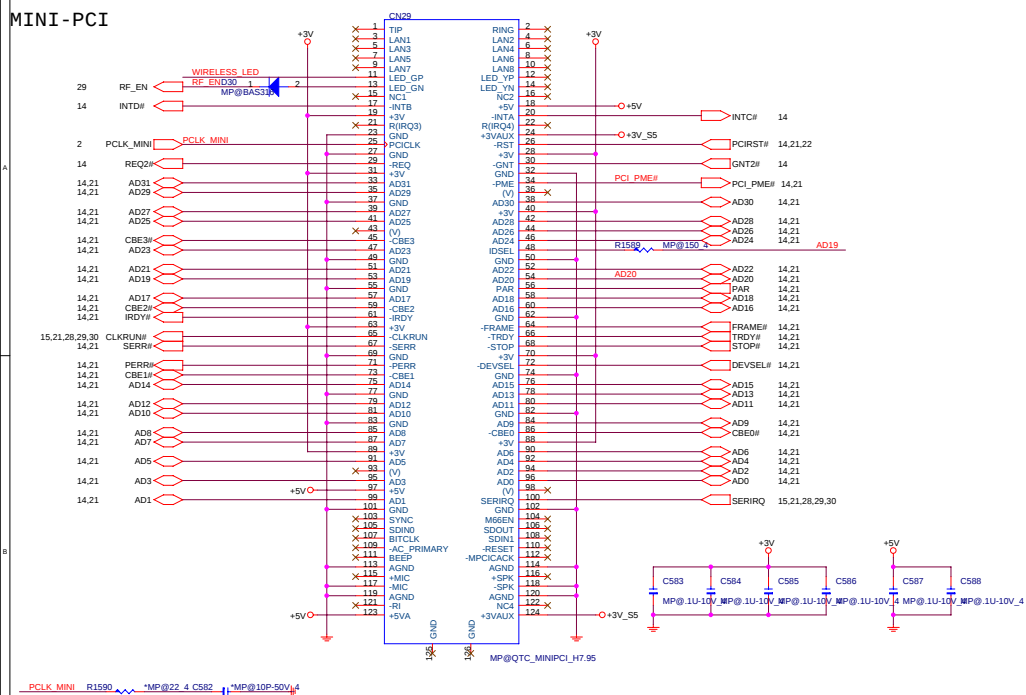
SEL	FUNCTION
LOW	IN_B0
HIGH	IN_B1



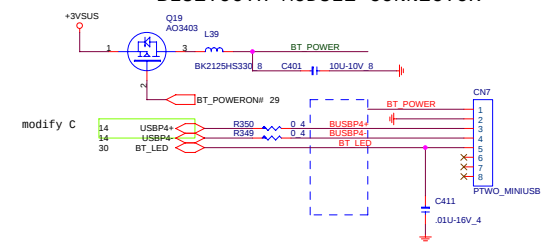
PROJECT : ZH2
Quanta Computer Inc.

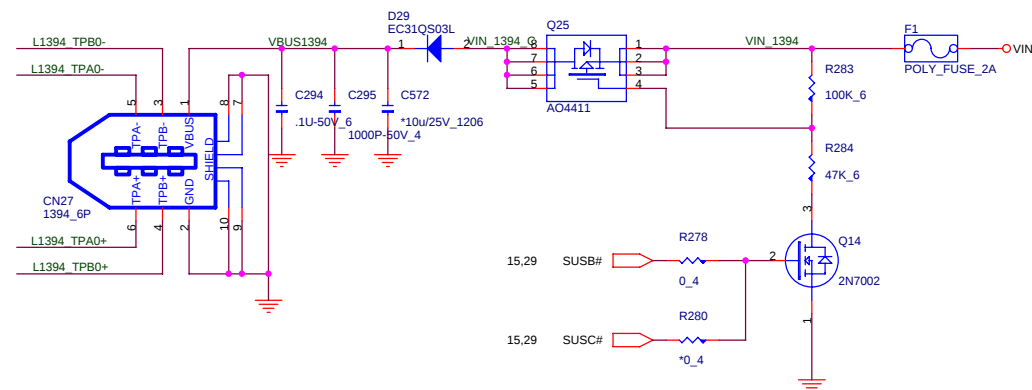
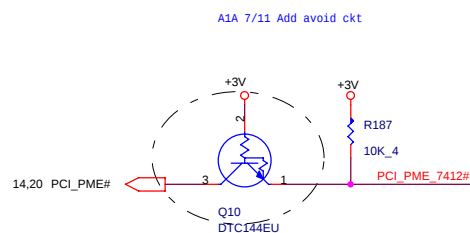
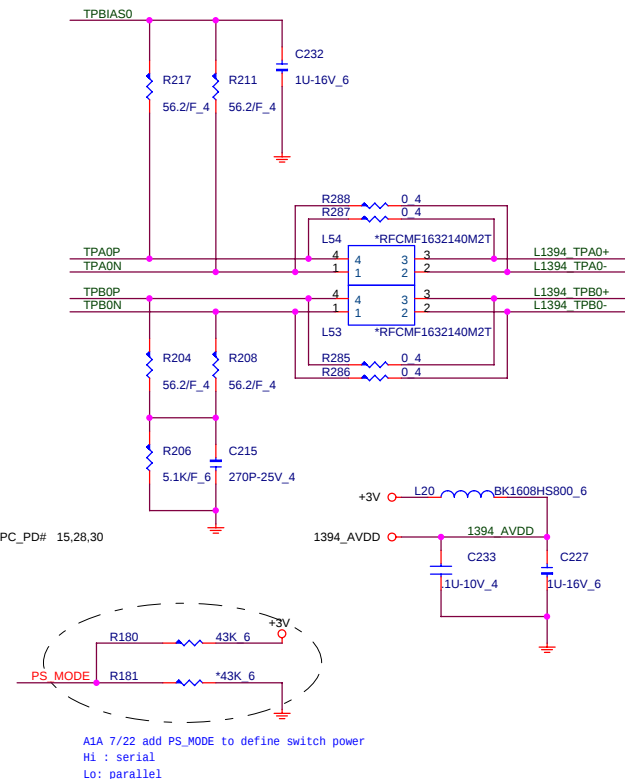


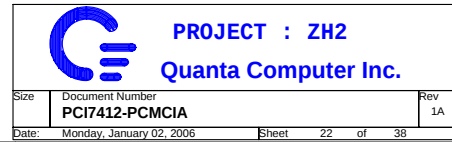
MINI-PCI

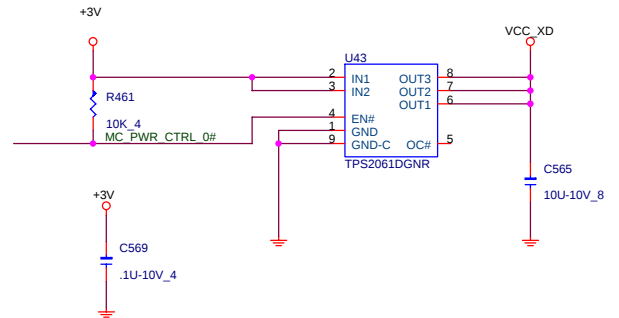
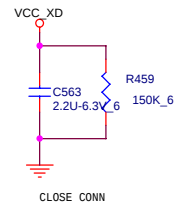
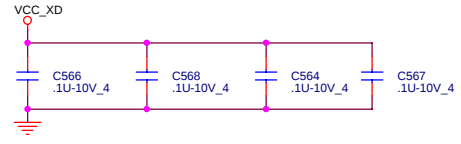
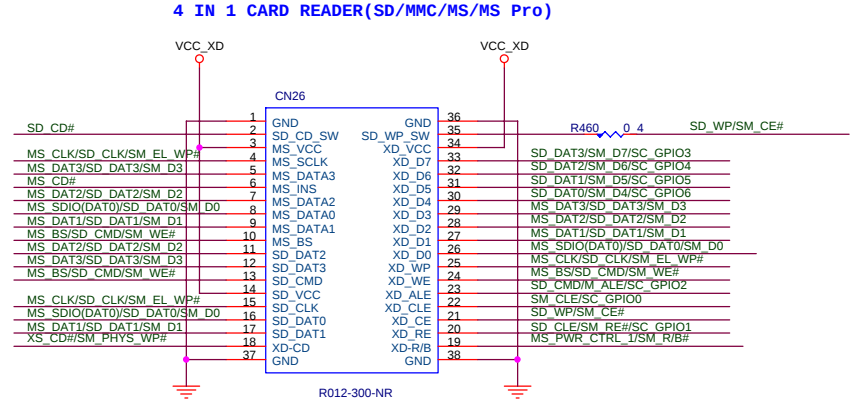
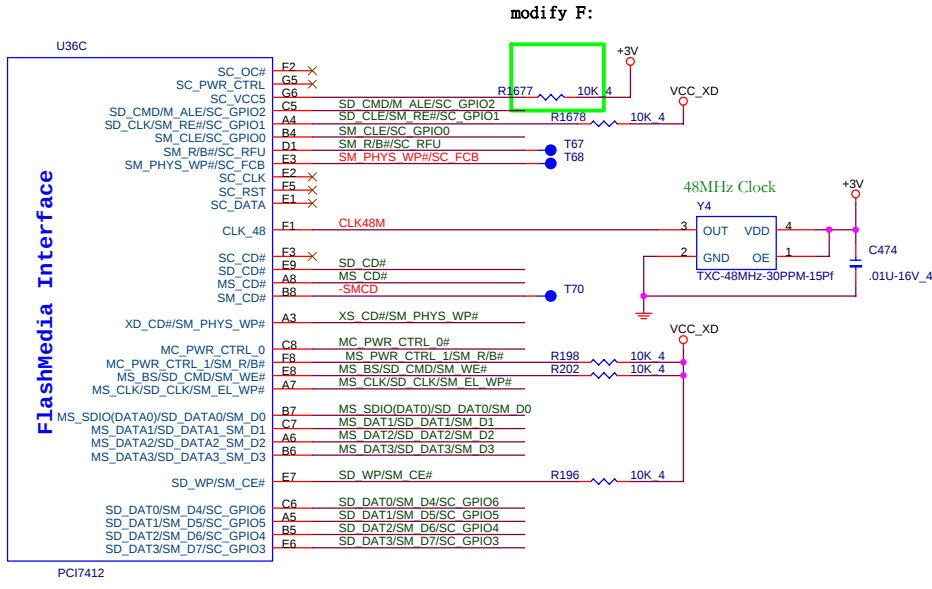


BLUETOOTH MODULE CONNECTOR



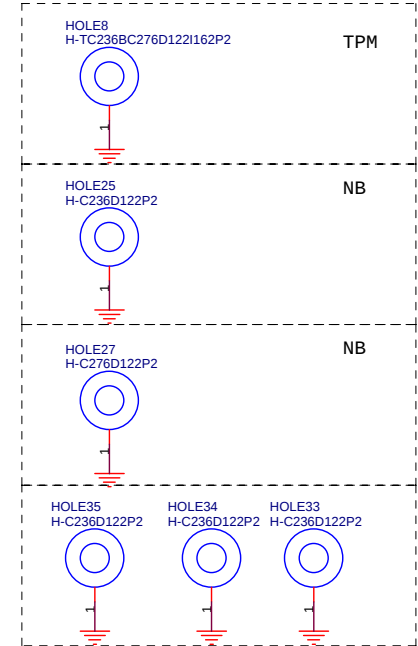
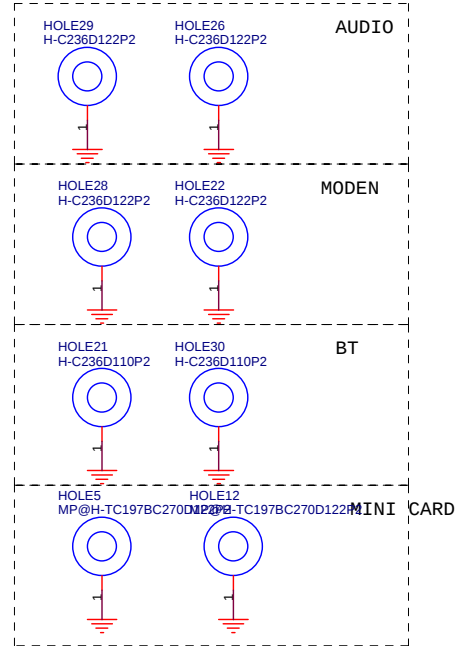
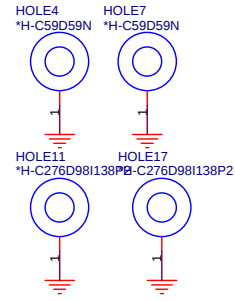
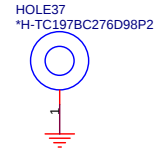
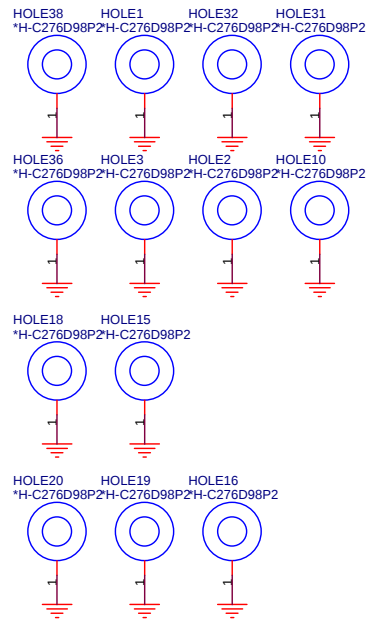






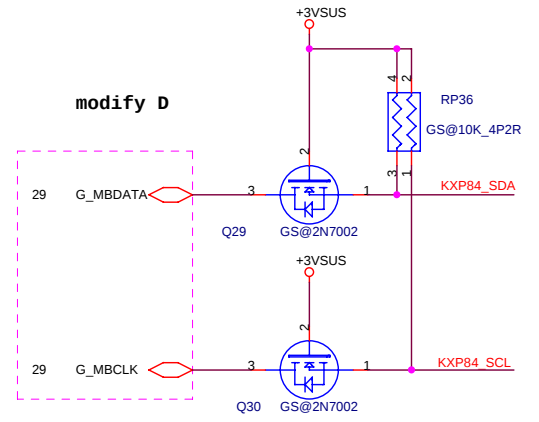
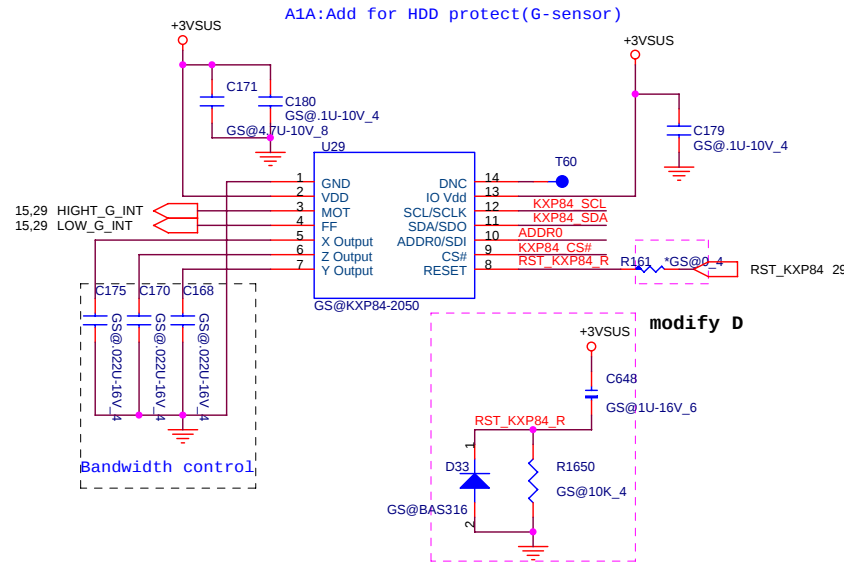
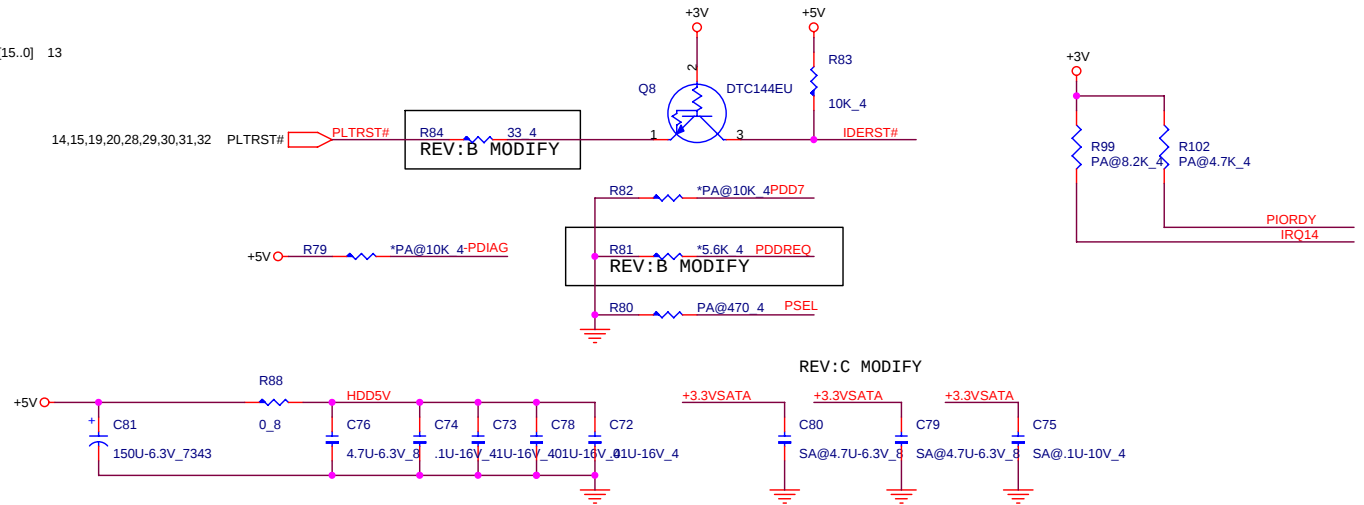
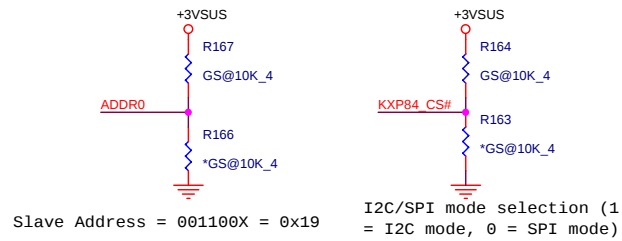
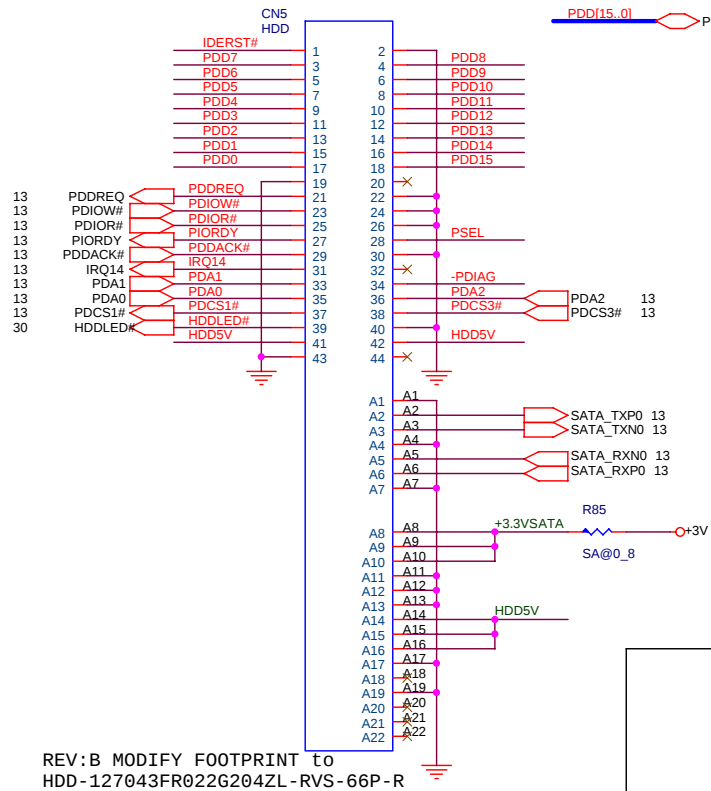
TOP

BOT

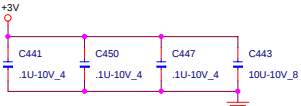
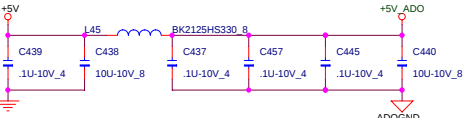


PROJECT : ZH2
Quanta Computer Inc.

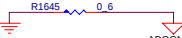
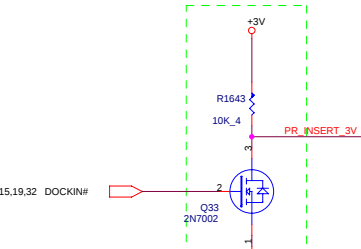
Size	Document Number	Rev
	NEW CARD &HOLE	C
Date:	Monday, January 02, 2006	Sheet 24 of 38



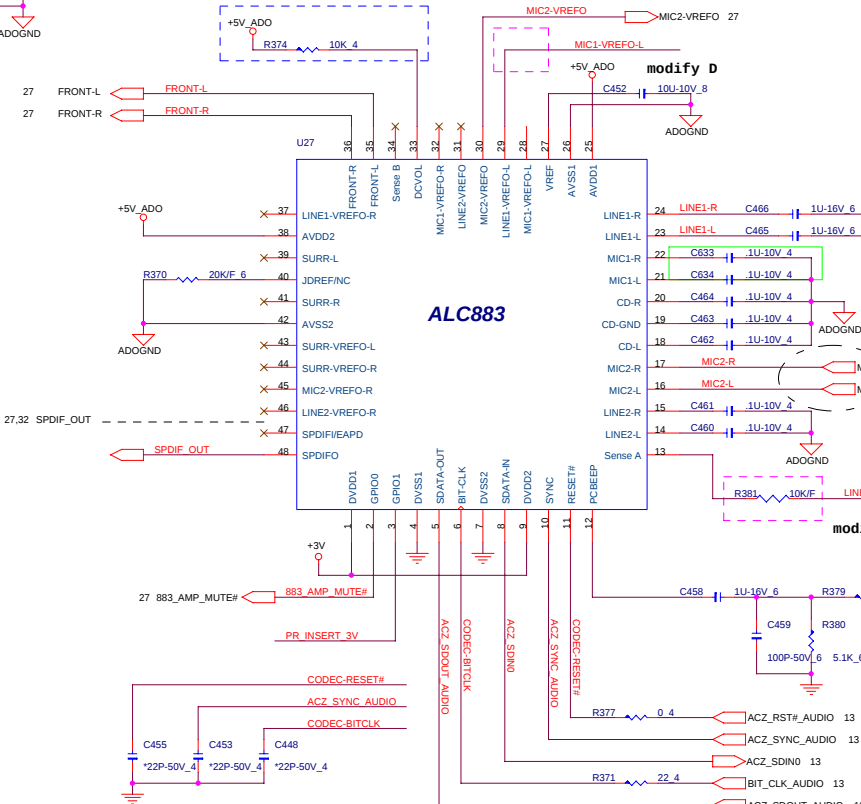
CODEC (ALC883)



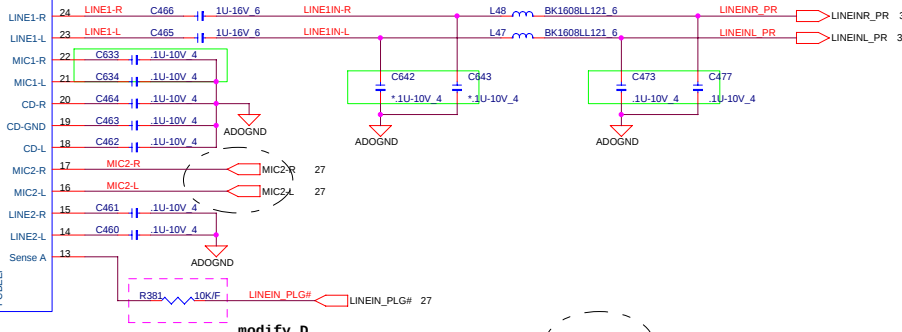
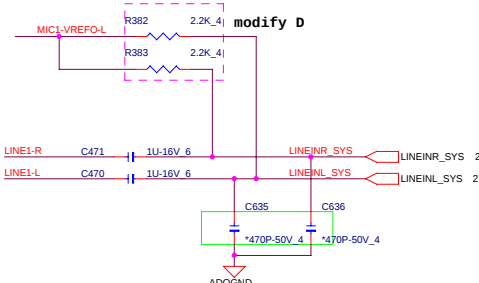
Tied at one point only under the
eaves or near the eaves



Option of External Volume Control or Standby Mode/De-Pon



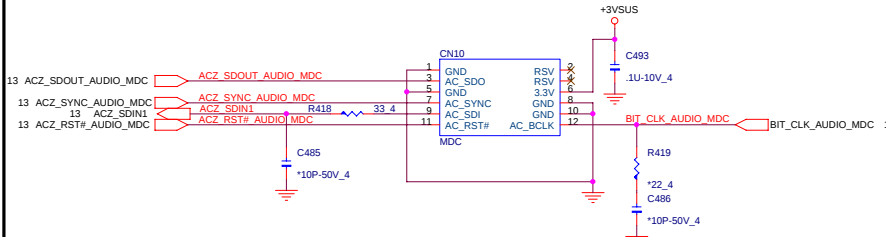
LINE IN



MDO

For MDC Module

A1A 7/20 chang
+3V_S5 to
+3V_S5

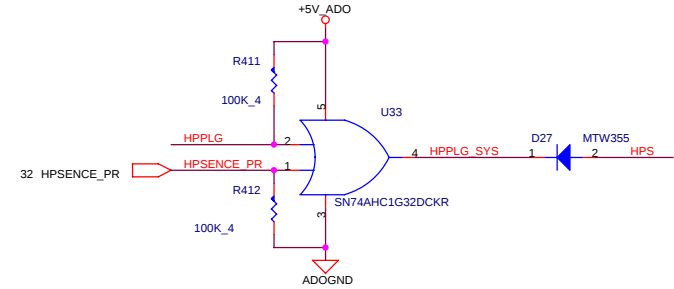
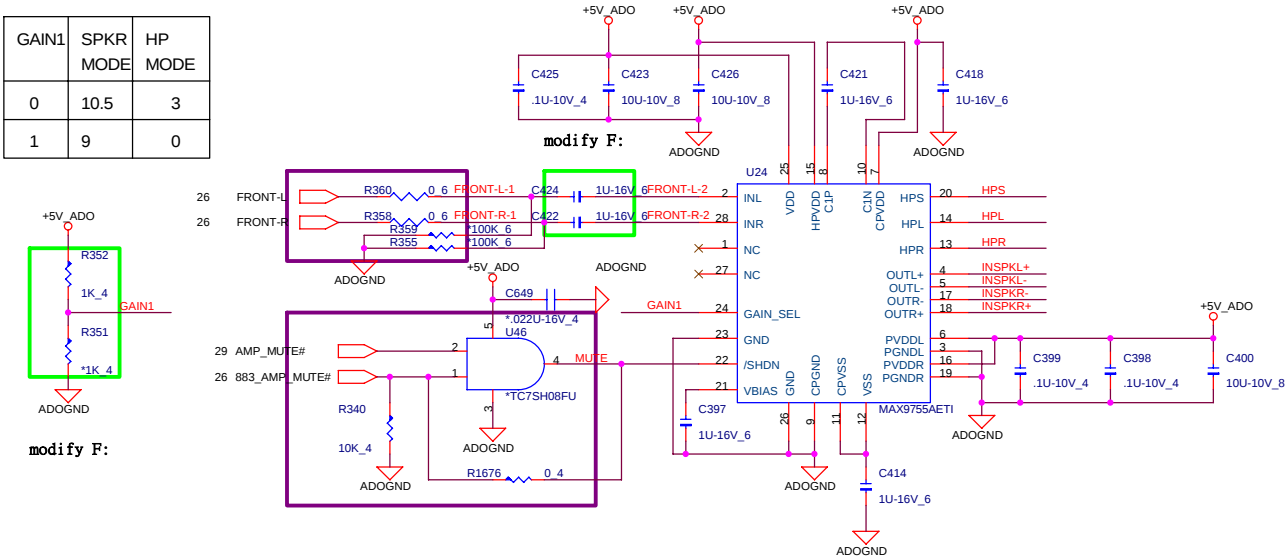


PROJECT : ZH2

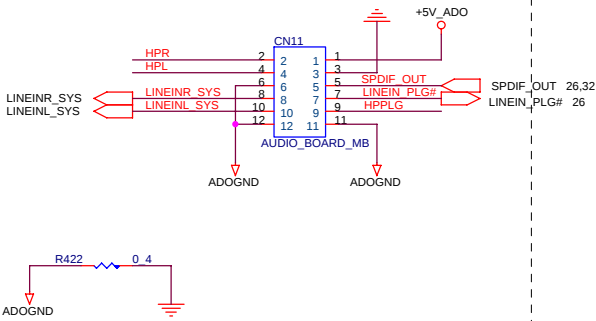
Quanta Computer Inc.

Size	Document Number	Revision
	REALTEK ALC883 & MDC	

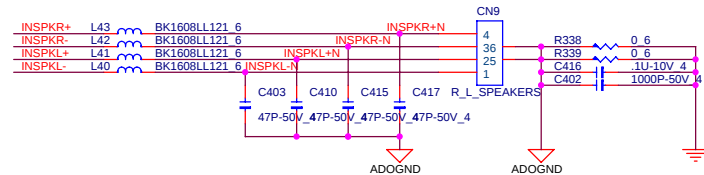
GAIN1	SPKR MODE	HP MODE
0	10.5	3
1	9	0



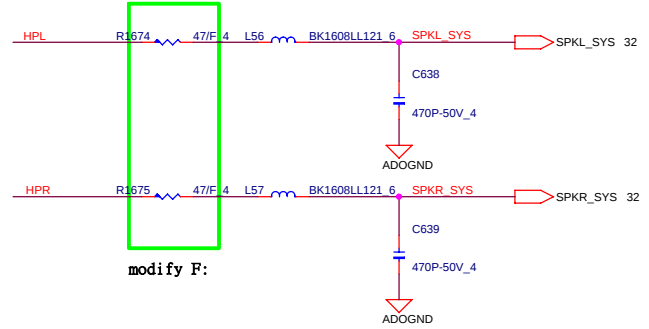
AUDIO BOARD



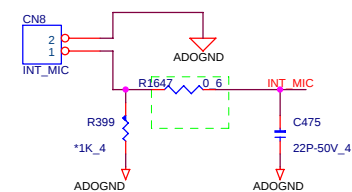
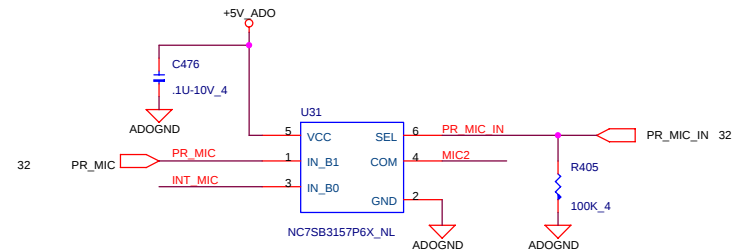
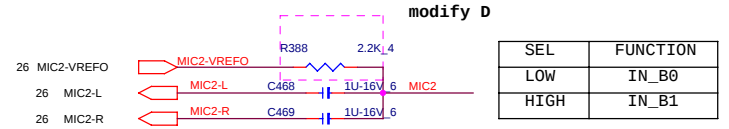
SPEAKER CONNECTOR



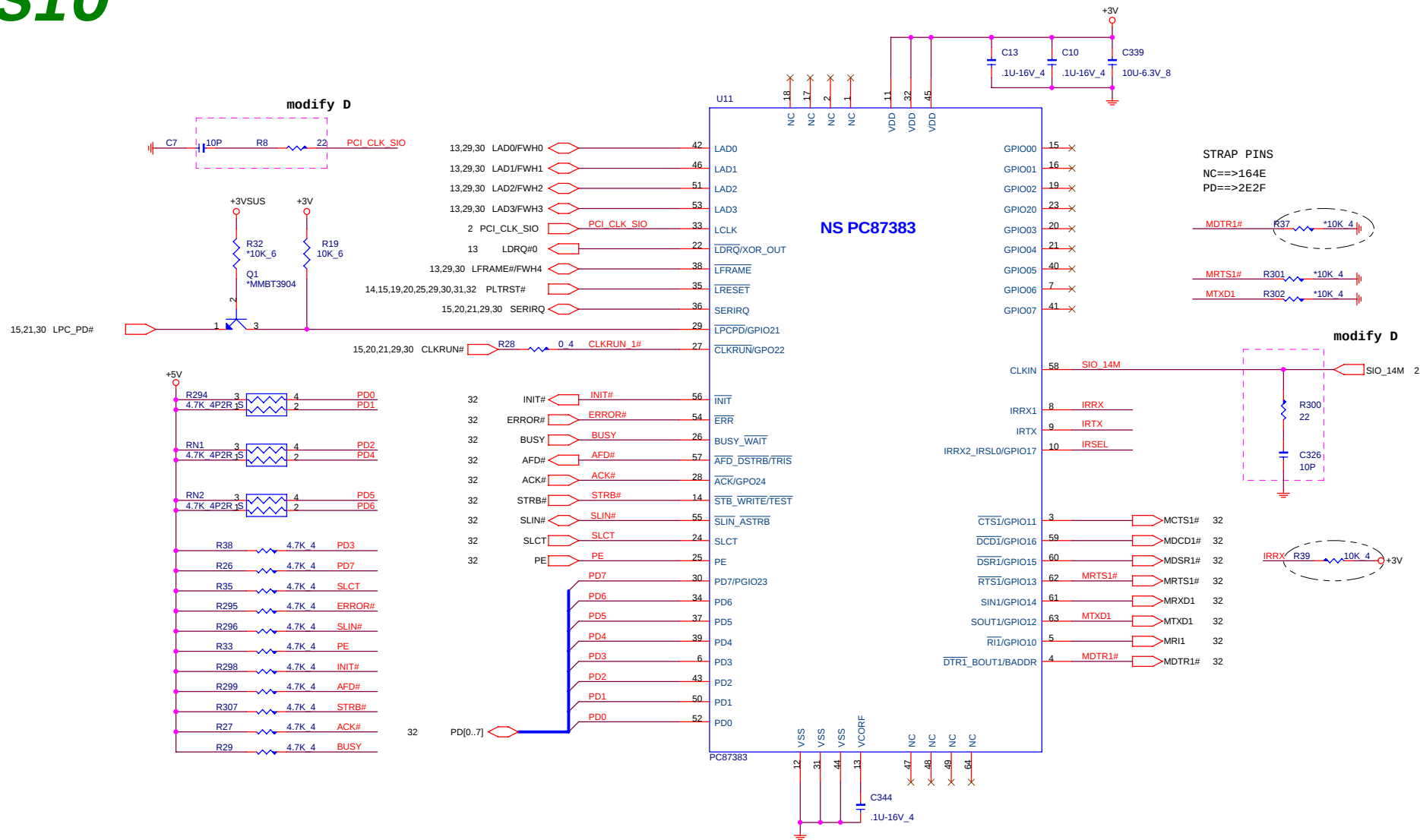
SPKR



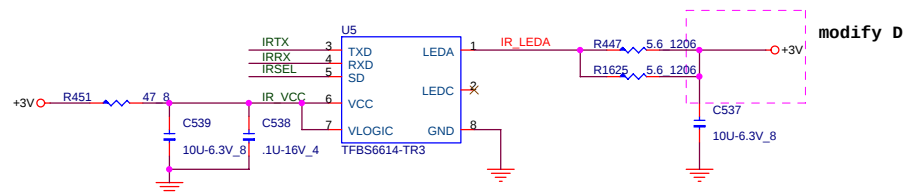
MIC

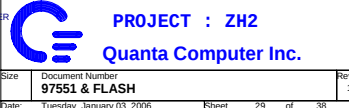


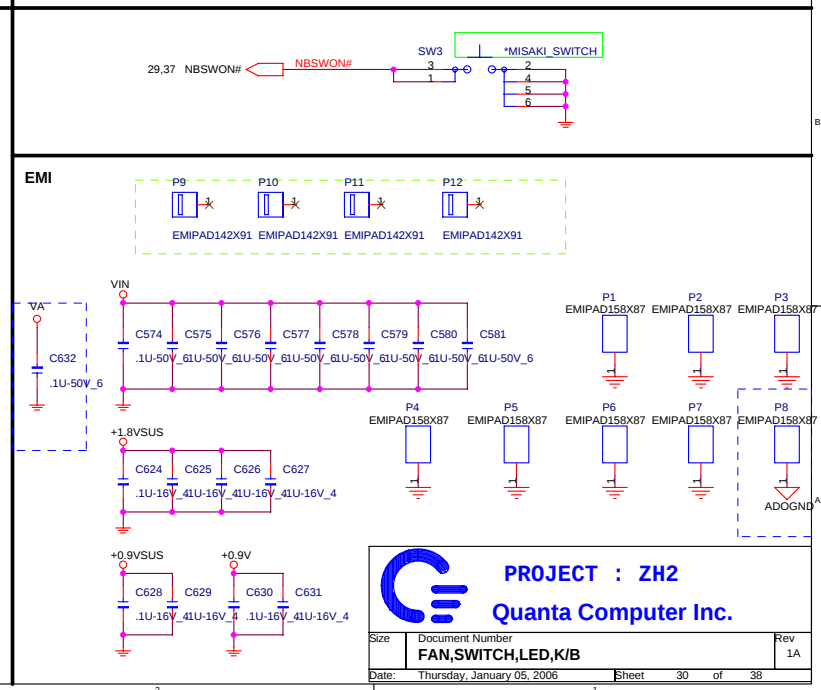
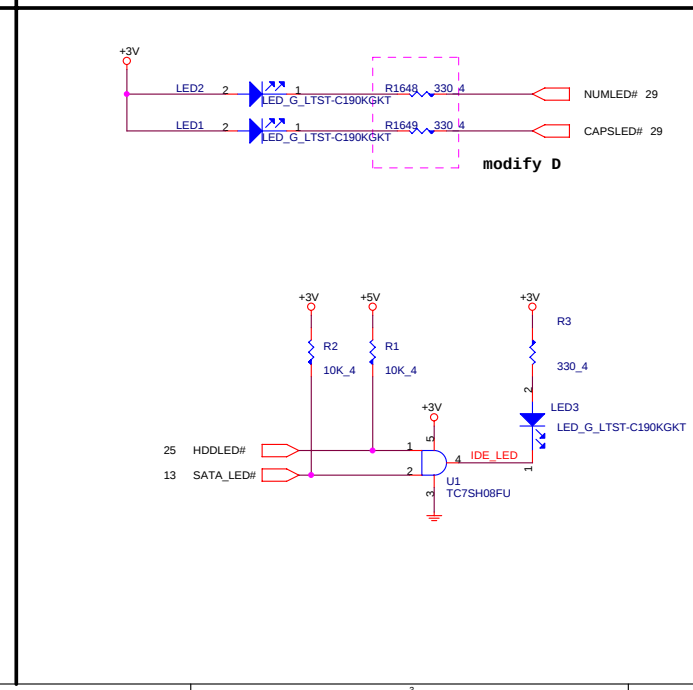
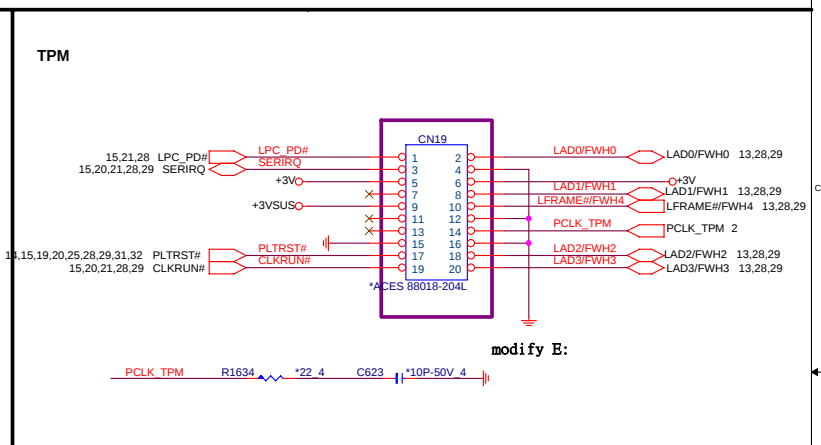
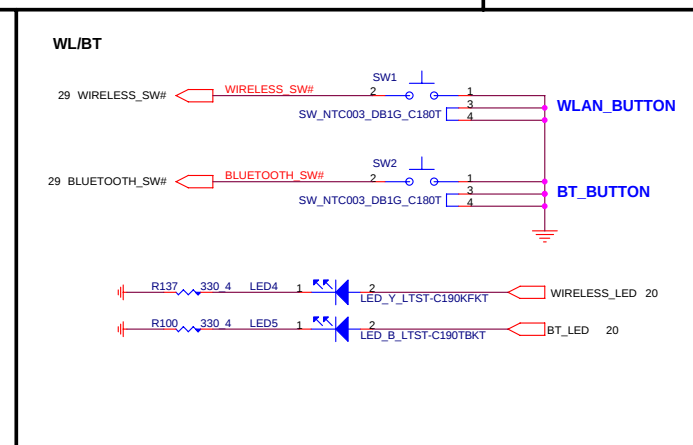
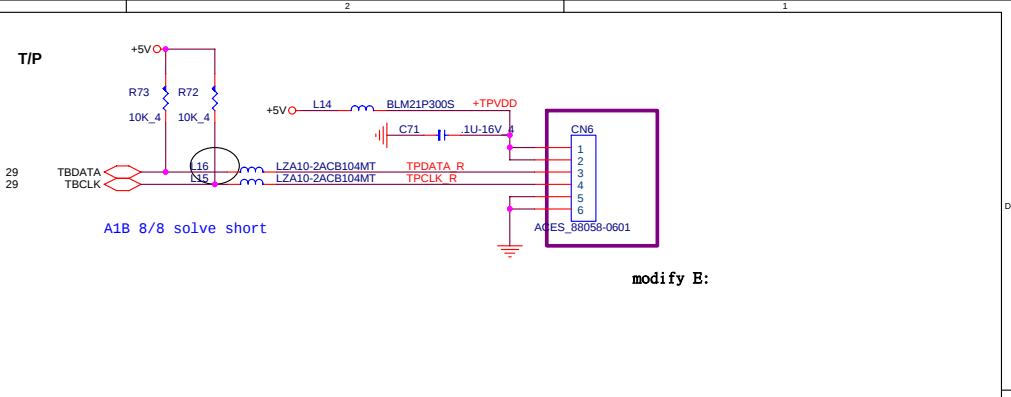
SIO

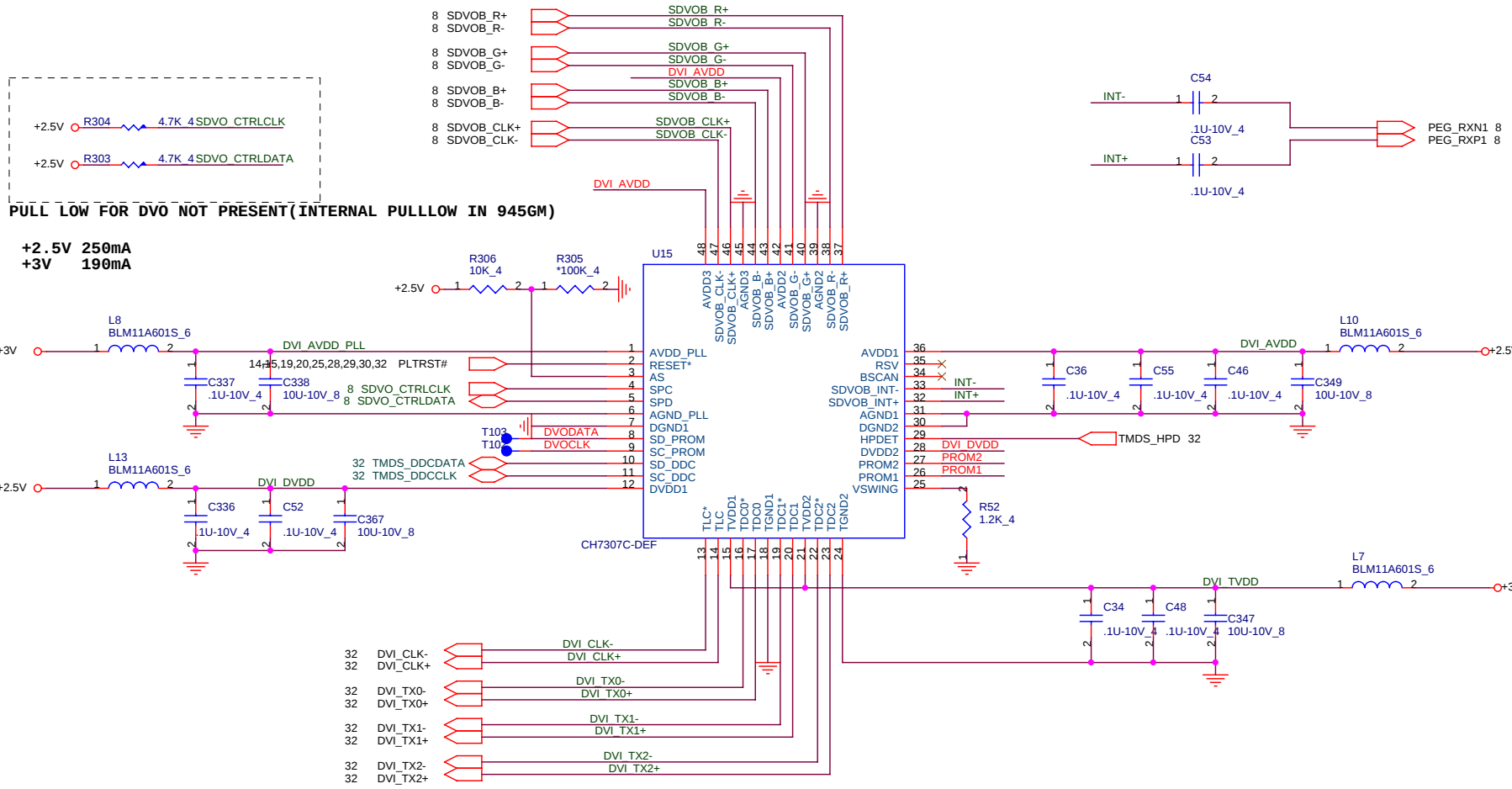


8/29 change trace to 30 mil

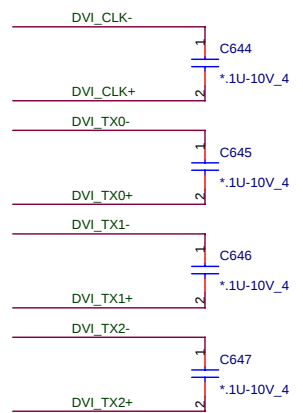
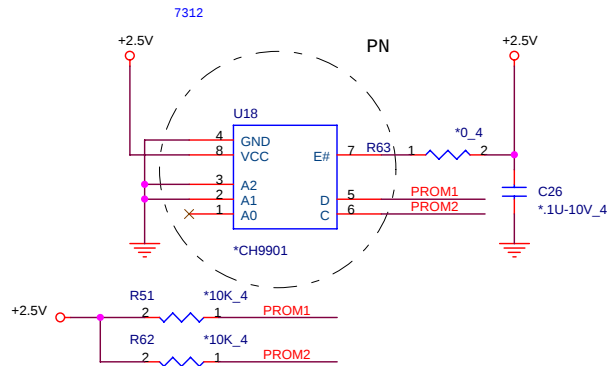








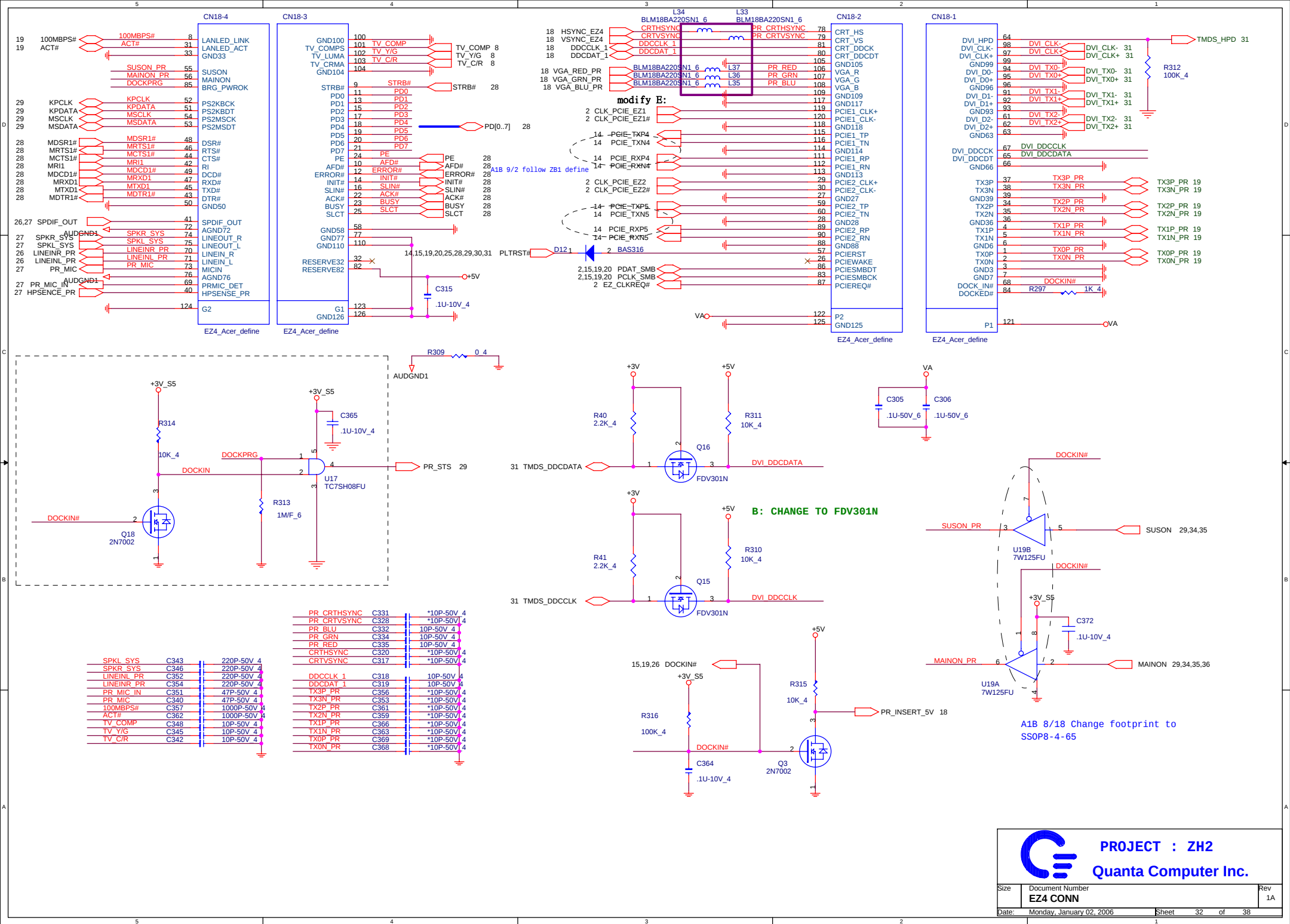
FOR CH7312 HDCP USE

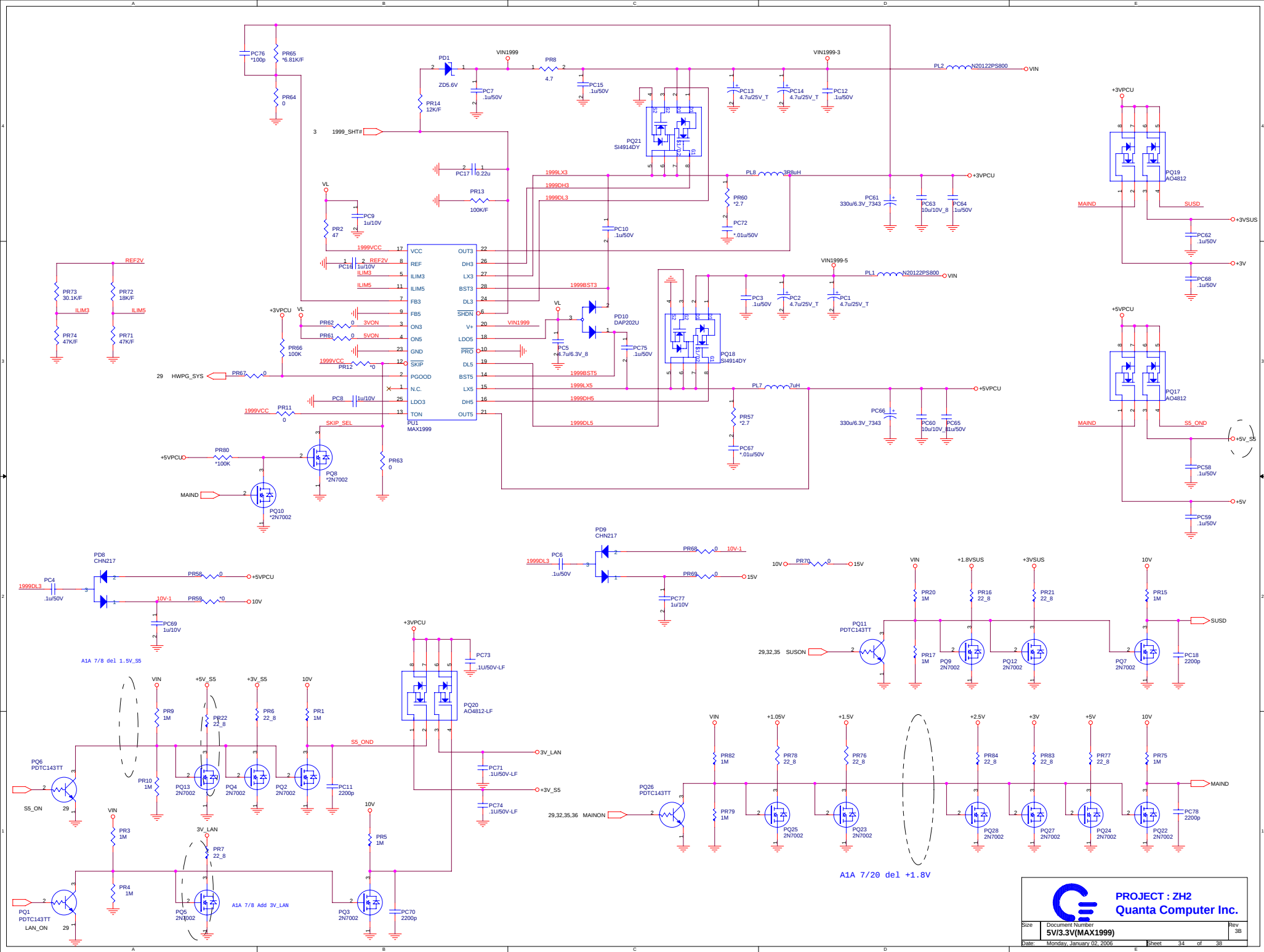




PROJECT : ZH2
Quanta Computer Inc.

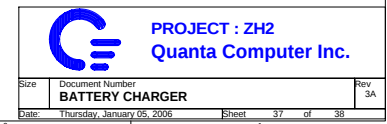
Size	Document Number	Rev
	CH7307	1A
Date:	Monday, January 02, 2006	Sheet 31 of 38

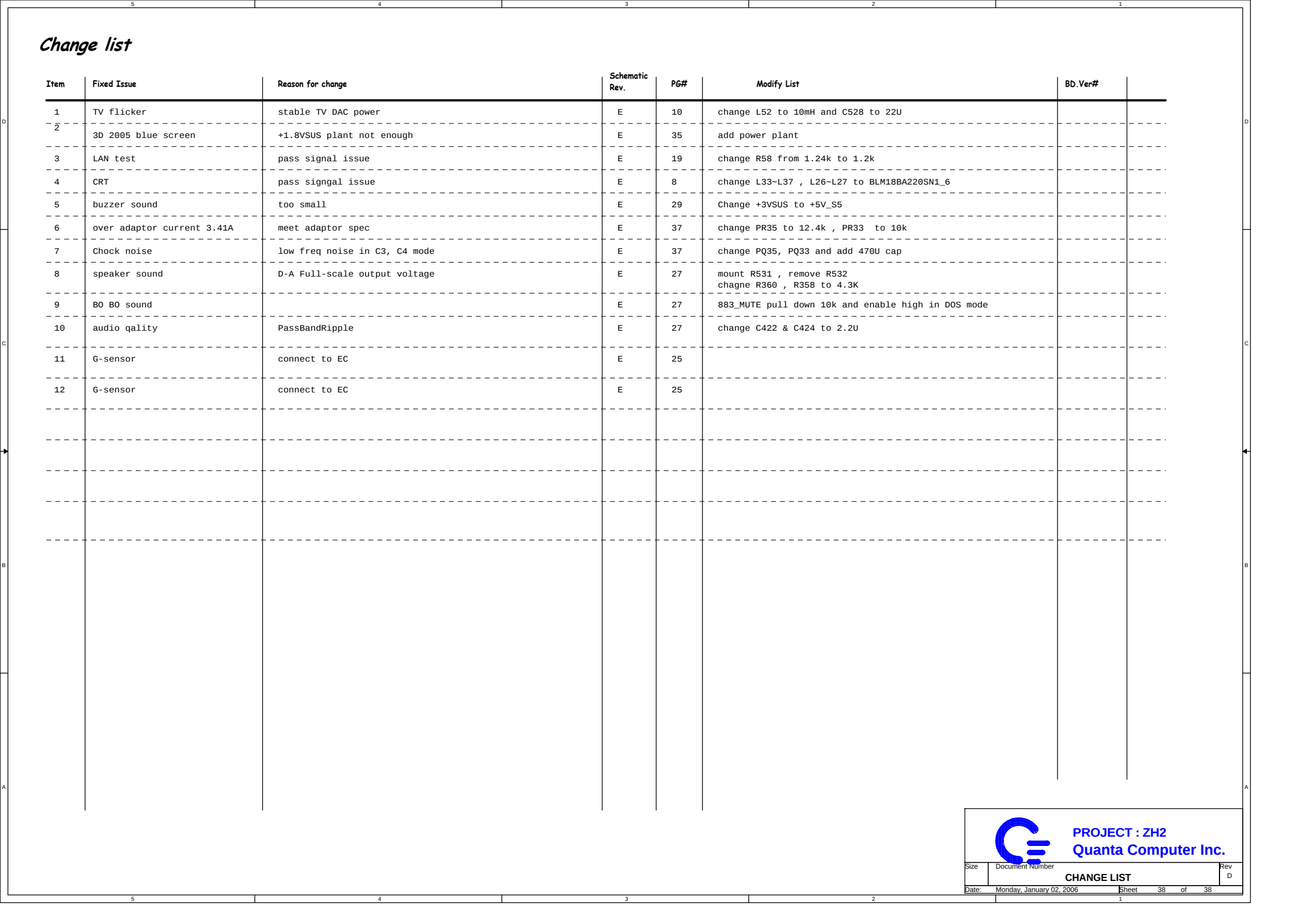






Size	Document Number 2.5VSUS / 1.25VTERM	Rev 3B
Date:	Monday, January 02, 2006	Sheet 35 of 38



[illegible][illegible][illegible][illegible]