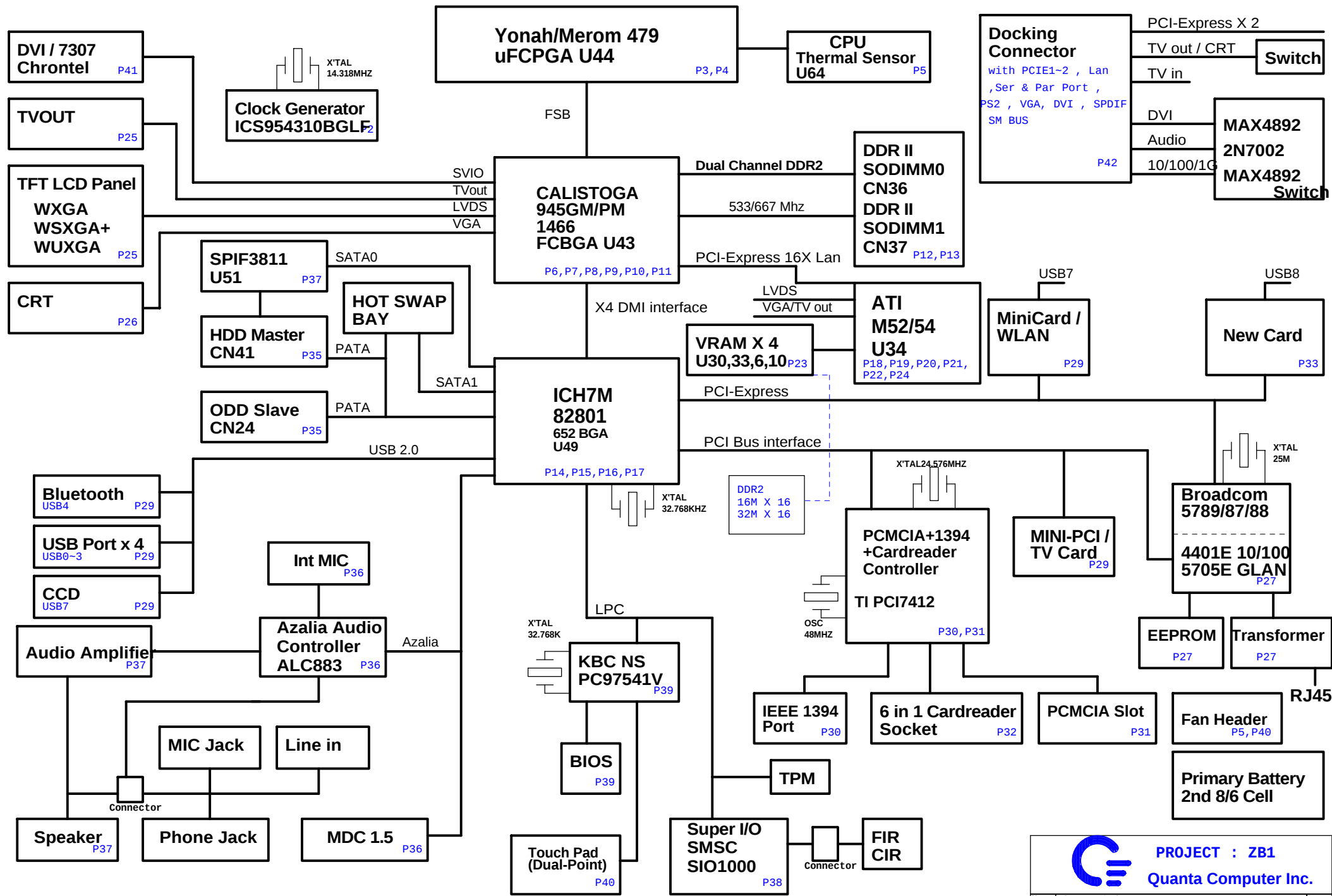
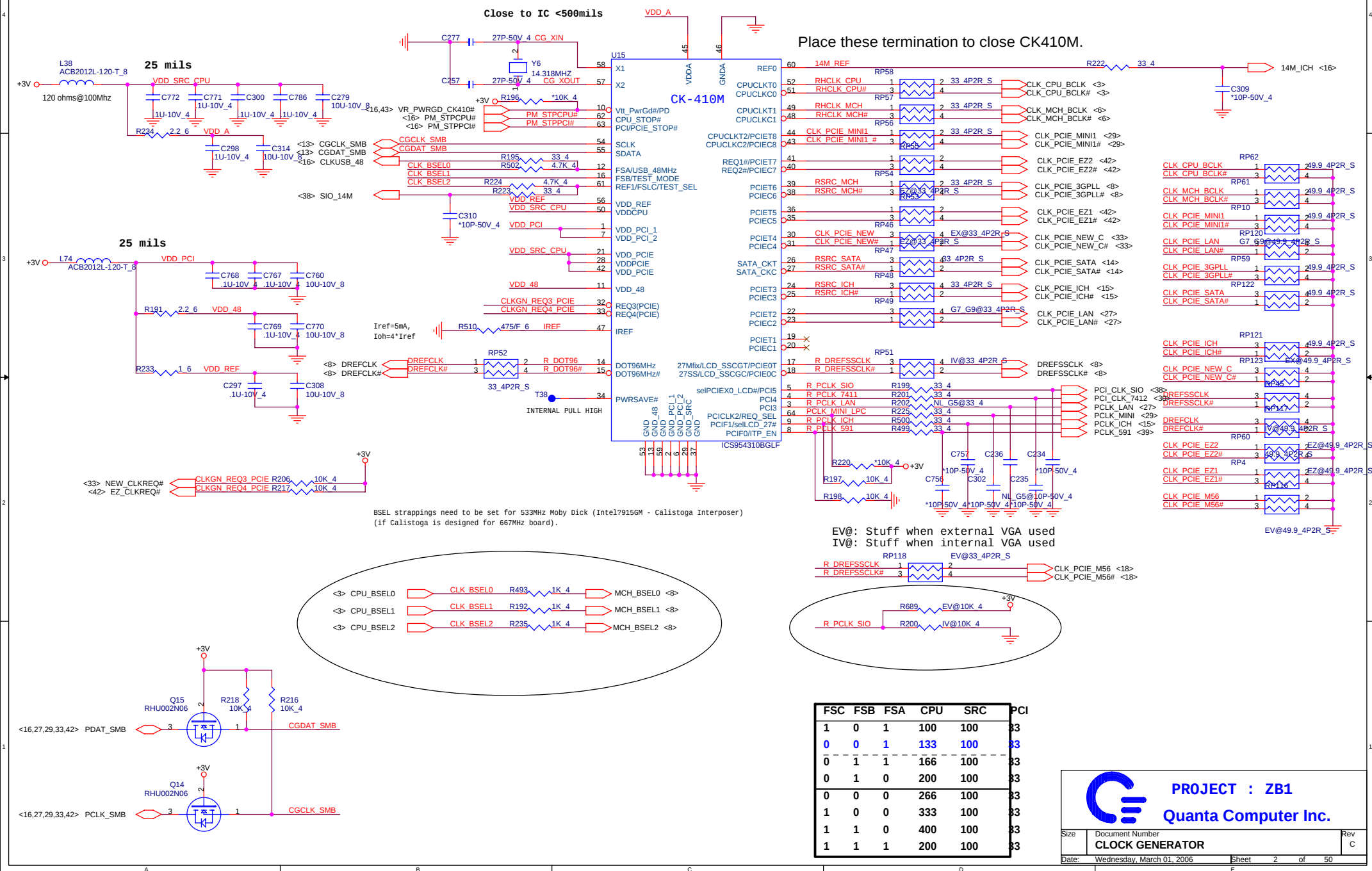
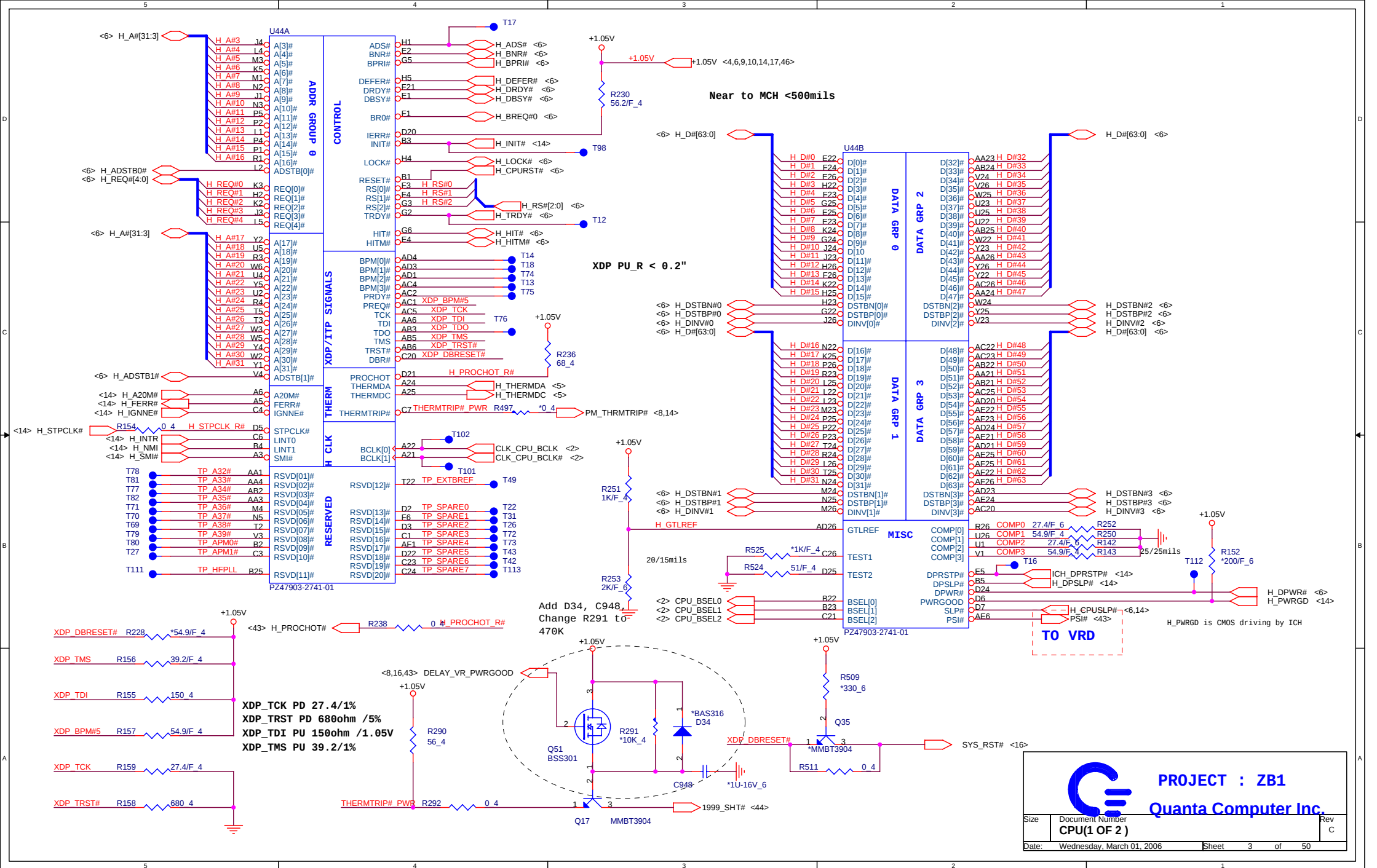


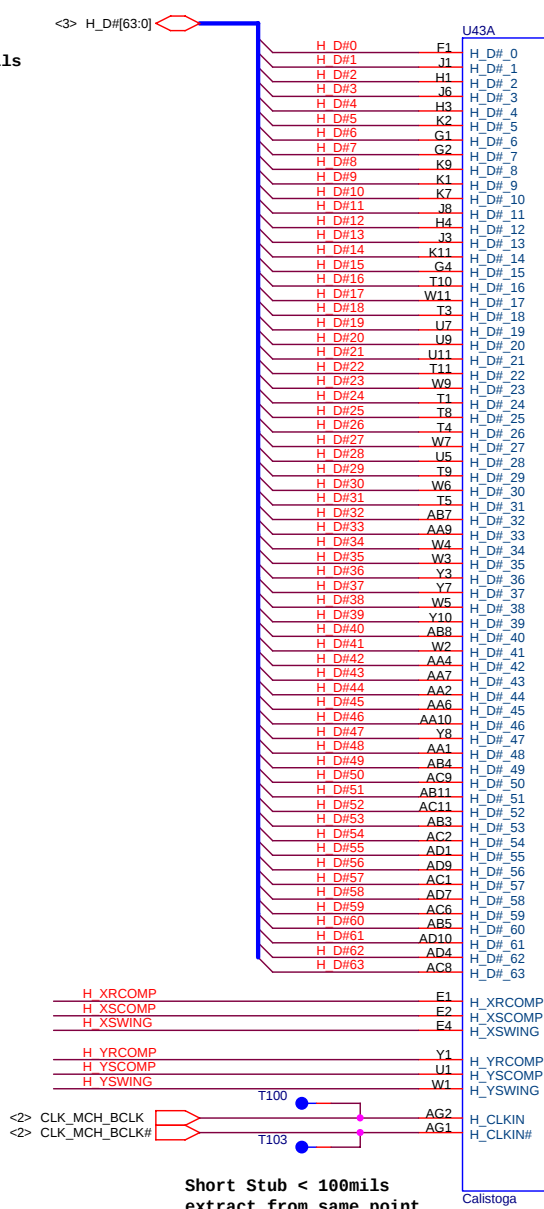
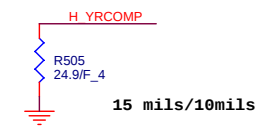
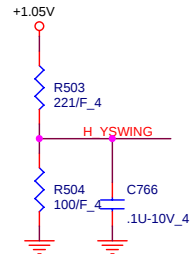
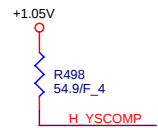
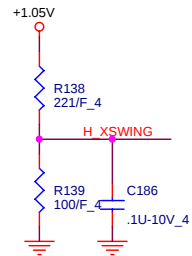
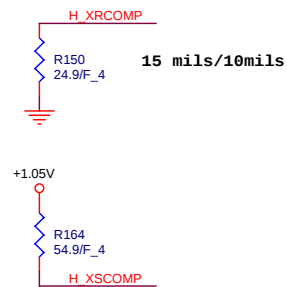
ZB1 SYSTEM BLOCK DIAGRAM





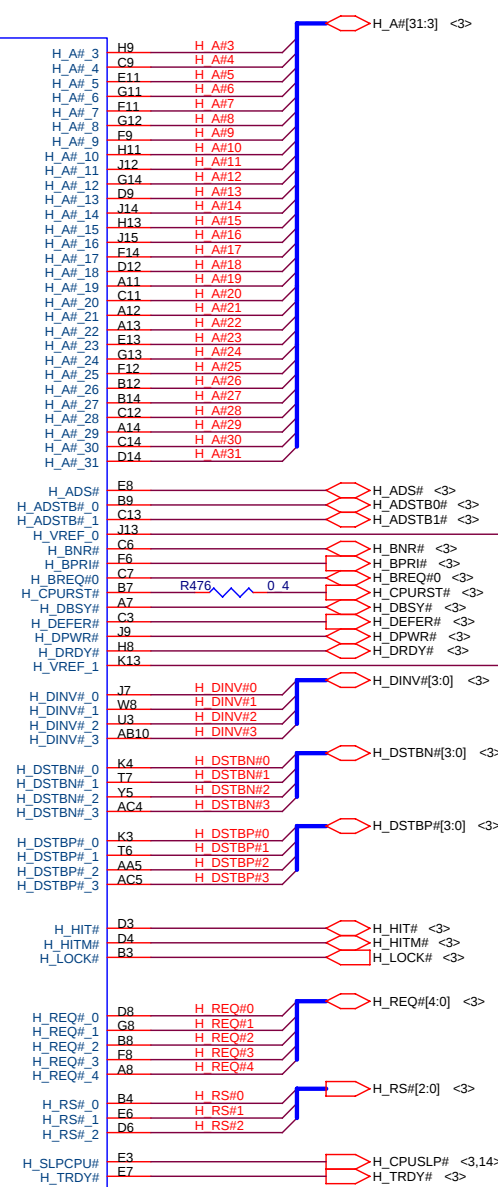
FSC	FSB	FSA	CPU	SRC
1	0	1	100	100
0	0	1	133	100
0	1	1	166	100
0	1	0	200	100
0	0	0	266	100
1	0	0	333	100
1	1	0	400	100
1	1	1	200	100





Short Stub < 100mils
extract from same point

HOST



+1.05V <3,4,9,10,14,17,46>

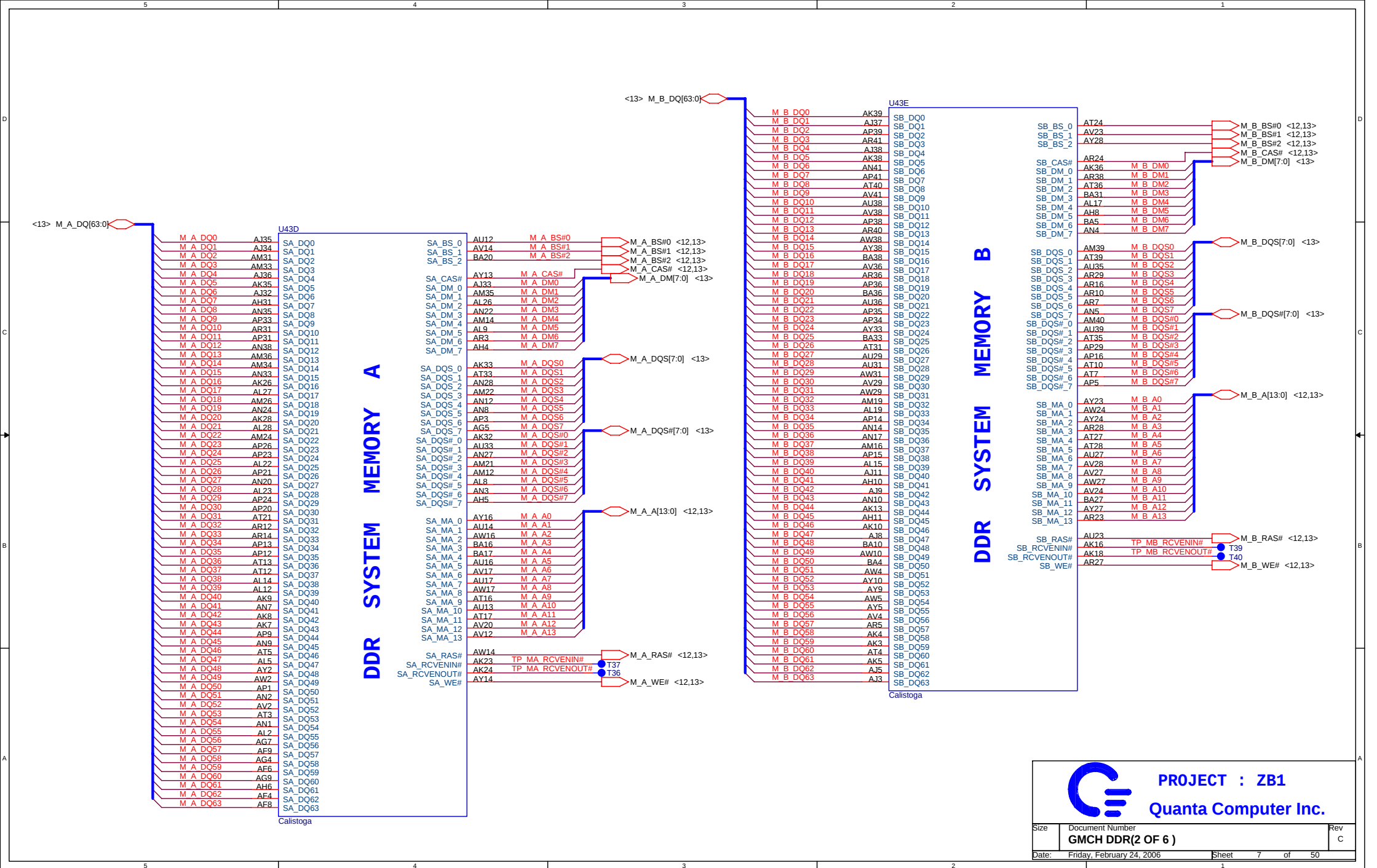
H_VREF :10 mils/20 mils space

COMPONENTS	P/N
945GM	AJ009450T04
945PM	AJ009450T12



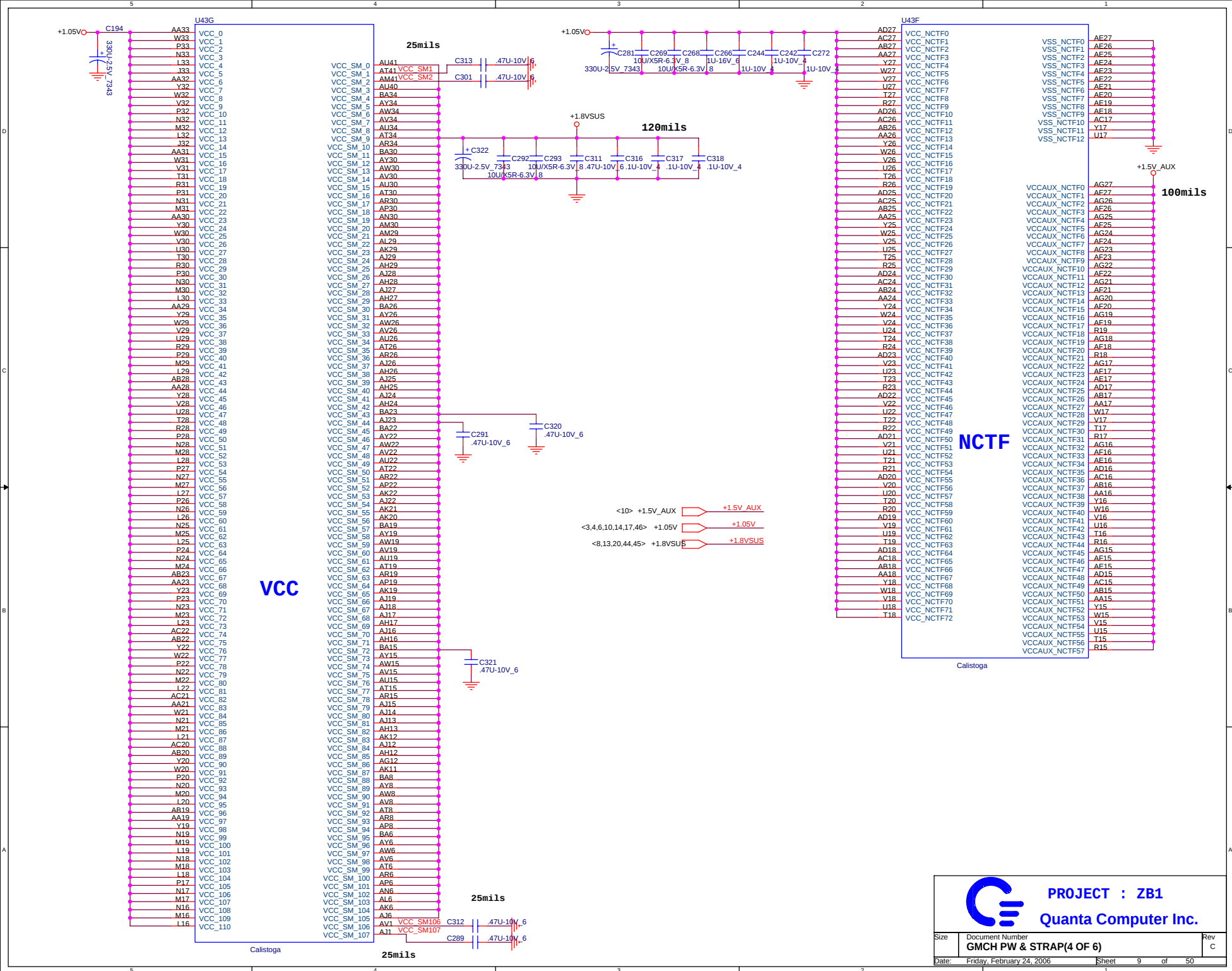
PROJECT : ZB1
Quanta Computer Inc.

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Date:	Friday, February 24, 2006	Sheet 6 of 50



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Quanta Computer Inc.

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U43I		
AC41	VSS_0	VSS_97
AA41	VSS_1	VSS_98
W41	VSS_2	VSS_99
T41	VSS_3	VSS_100
P41	VSS_4	VSS_101
M41	VSS_5	VSS_102
J41	VSS_6	VSS_103
F41	VSS_7	VSS_104
AV40	VSS_8	VSS_105
AF40	VSS_9	VSS_106
AN40	VSS_10	VSS_107
AK40	VSS_11	VSS_108
A140	VSS_12	VSS_109
AH40	VSS_13	VSS_110
AG40	VSS_14	VSS_111
AF40	VSS_15	VSS_112
AE40	VSS_16	VSS_113
B40	VSS_17	VSS_114
AY39	VSS_18	VSS_115
AW39	VSS_19	VSS_116
AV39	VSS_20	VSS_117
AR39	VSS_21	VSS_118
AN39	VSS_22	VSS_119
AJ39	VSS_23	VSS_120
AC39	VSS_24	VSS_121
AB39	VSS_25	VSS_122
AA39	VSS_26	VSS_123
Y39	VSS_27	VSS_124
W39	VSS_28	VSS_125
V39	VSS_29	VSS_126
T39	VSS_30	VSS_127
R39	VSS_31	VSS_128
P39	VSS_32	VSS_129
N39	VSS_33	VSS_130
M39	VSS_34	VSS_131
L39	VSS_35	VSS_132
J39	VSS_36	VSS_133
H39	VSS_37	VSS_134
G39	VSS_38	VSS_135
F39	VSS_39	VSS_136
D39	VSS_40	VSS_137
AT38	VSS_41	VSS_138
AM38	VSS_42	VSS_139
AH38	VSS_43	VSS_140
AG38	VSS_44	VSS_141
AF38	VSS_45	VSS_142
AE38	VSS_46	VSS_143
C38	VSS_47	VSS_144
AK37	VSS_48	VSS_145
AH37	VSS_49	VSS_146
AB37	VSS_50	VSS_147
AA37	VSS_51	VSS_148
Y37	VSS_52	VSS_149
W37	VSS_53	VSS_150
V37	VSS_54	VSS_151
T37	VSS_55	VSS_152
R37	VSS_56	VSS_153
P37	VSS_57	VSS_154
N37	VSS_58	VSS_155
M37	VSS_59	VSS_156
L37	VSS_60	VSS_157
J37	VSS_61	VSS_158
H37	VSS_62	VSS_159
G37	VSS_63	VSS_160
F37	VSS_64	VSS_161
D37	VSS_65	VSS_162
AY36	VSS_66	VSS_163
AW36	VSS_67	VSS_164
AV36	VSS_68	VSS_165
AR36	VSS_69	VSS_166
AF36	VSS_70	VSS_167
AE36	VSS_71	VSS_168
AC36	VSS_72	VSS_169
C36	VSS_73	VSS_170
B36	VSS_74	VSS_171
BA35	VSS_75	VSS_172
AV35	VSS_76	VSS_173
AR35	VSS_77	VSS_174
AH35	VSS_78	VSS_175
AB35	VSS_79	VSS_176
AA35	VSS_80	VSS_177
Y35	VSS_81	VSS_178
W35	VSS_82	VSS_179
V35	VSS_83	
T35	VSS_84	
R35	VSS_85	
P35	VSS_86	
N35	VSS_87	
M35	VSS_88	
L35	VSS_89	
J35	VSS_90	
H35	VSS_91	
G35	VSS_92	
F35	VSS_93	
D35	VSS_94	
AN34	VSS_95	
	VSS_96	

U43J		
AT23	VSS_180	VSS_273
AN23	VSS_181	VSS_274
AM23	VSS_182	VSS_275
AH23	VSS_183	VSS_276
AC23	VSS_184	VSS_277
W23	VSS_185	VSS_278
K23	VSS_186	VSS_279
J23	VSS_187	VSS_280
F23	VSS_188	VSS_281
AE33	VSS_189	VSS_282
AB33	VSS_190	VSS_283
Y33	VSS_191	VSS_284
V33	VSS_192	VSS_285
T33	VSS_193	VSS_286
R33	VSS_194	VSS_287
M33	VSS_195	VSS_288
H33	VSS_196	VSS_289
G33	VSS_197	VSS_290
F33	VSS_198	VSS_291
D33	VSS_199	VSS_292
B33	VSS_200	VSS_293
AH32	VSS_201	VSS_294
AG32	VSS_202	VSS_295
AF32	VSS_203	VSS_296
AE32	VSS_204	VSS_297
AC32	VSS_205	VSS_298
AB32	VSS_206	VSS_299
J21	VSS_207	VSS_300
H21	VSS_208	VSS_301
C21	VSS_209	VSS_302
AW20	VSS_210	VSS_303
AR20	VSS_211	VSS_304
AM20	VSS_212	VSS_305
AA20	VSS_213	VSS_306
K20	VSS_214	VSS_307
B20	VSS_215	VSS_308
A20	VSS_216	VSS_309
AN19	VSS_217	VSS_310
AC19	VSS_218	VSS_311
W19	VSS_219	VSS_312
K19	VSS_220	VSS_313
G19	VSS_221	VSS_314
C19	VSS_222	VSS_315
AH18	VSS_223	VSS_316
K18	VSS_224	VSS_317
H18	VSS_225	VSS_318
D18	VSS_226	VSS_319
A18	VSS_227	VSS_320
AY17	VSS_228	VSS_321
AR17	VSS_229	VSS_322
AP17	VSS_230	VSS_323
AM17	VSS_231	VSS_324
AK17	VSS_232	VSS_325
AV16	VSS_233	VSS_326
AN16	VSS_234	VSS_327
AL16	VSS_235	VSS_328
J16	VSS_236	VSS_329
F16	VSS_237	VSS_330
C16	VSS_238	VSS_331
AN15	VSS_239	VSS_332
AM15	VSS_240	VSS_333
AK15	VSS_241	VSS_334
N15	VSS_242	VSS_335
M15	VSS_243	VSS_336
L15	VSS_244	VSS_337
B15	VSS_245	VSS_338
A15	VSS_246	VSS_339
BA14	VSS_247	VSS_340
AT14	VSS_248	VSS_341
AK14	VSS_249	VSS_342
K26	VSS_250	VSS_343
AD14	VSS_251	VSS_344
U14	VSS_252	VSS_345
K14	VSS_253	VSS_346
H14	VSS_254	VSS_347
E14	VSS_255	VSS_348
AV13	VSS_256	VSS_349
AR13	VSS_257	VSS_350
D25	VSS_258	VSS_351
AM13	VSS_259	VSS_352
AL13	VSS_260	VSS_353
AG13	VSS_261	VSS_354
P13	VSS_262	VSS_355
F13	VSS_263	VSS_356
D13	VSS_264	VSS_357
B13	VSS_265	VSS_358
AY12	VSS_266	VSS_359
AC12	VSS_267	VSS_360
K12	VSS_268	
H12	VSS_269	
E12	VSS_270	
AD11	VSS_271	
AA11	VSS_272	
Y11		

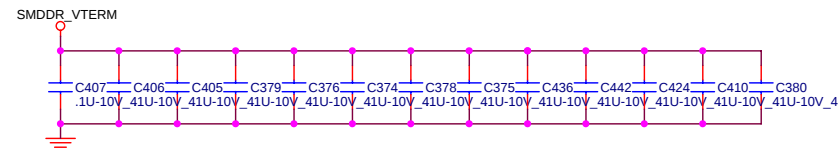
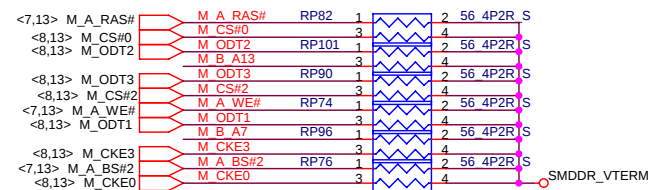
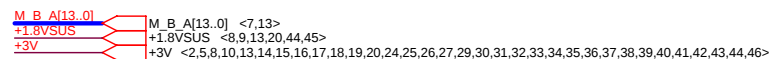
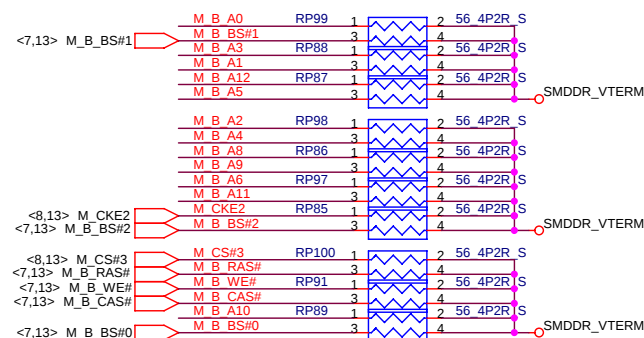
VSS



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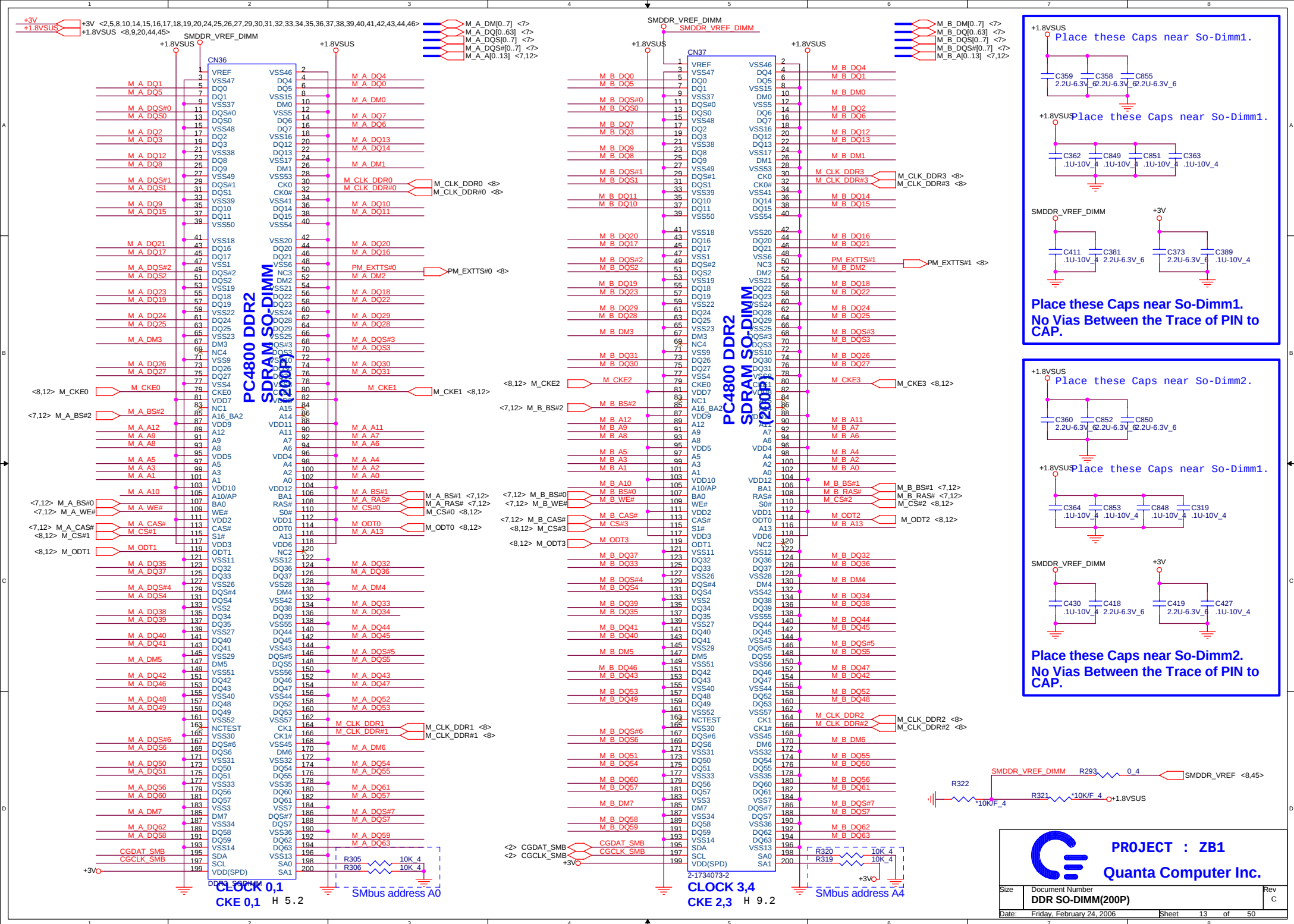
Size	Document Number	Rev
	GMCH GND(6 OF 6)	C
Date:	Tuesday, February 07, 2006	Sheet 11 of 50

DDRII B CHANNEL

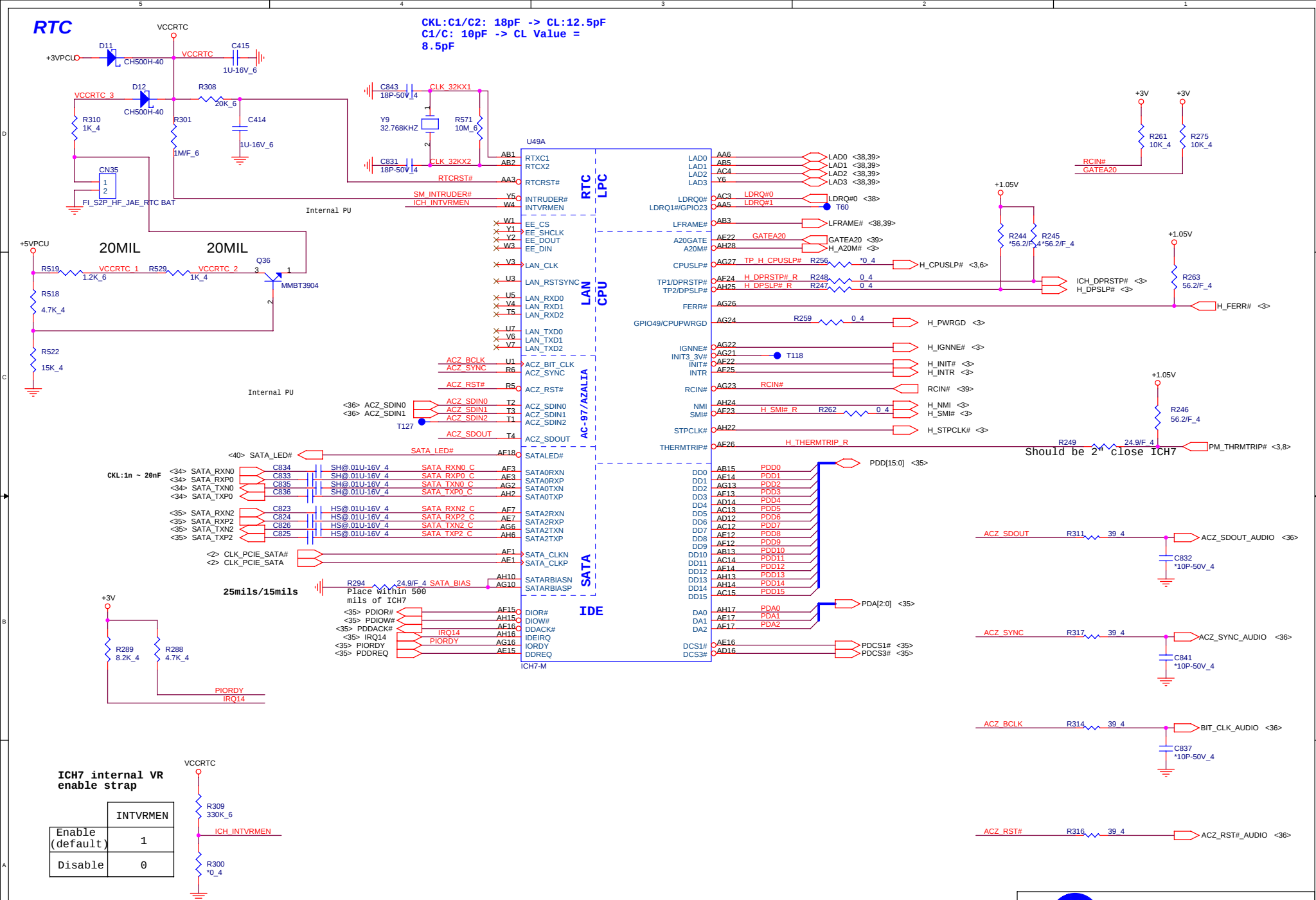
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Quanta Computer Inc.

Size	Document Number	Rev
	DDR RES. ARRAY	C
Date:	Friday, February 24, 2006	Sheet 12 of 50

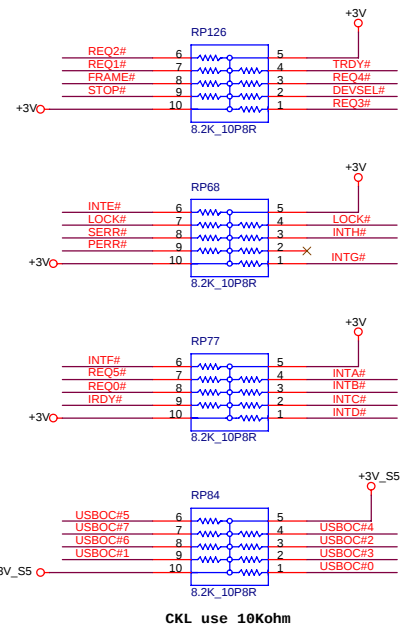


RTC



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Quanta Computer Inc.

Size	Document Number ICH7-M HOST (1 OF 4)	Rev	C
Date:	Wednesday, March 01, 2006	Sheet	14 of 50



Docking
Bluetooth Module
Mini PCI-E
NEW CARD

Place within 500
mils of ICH7



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

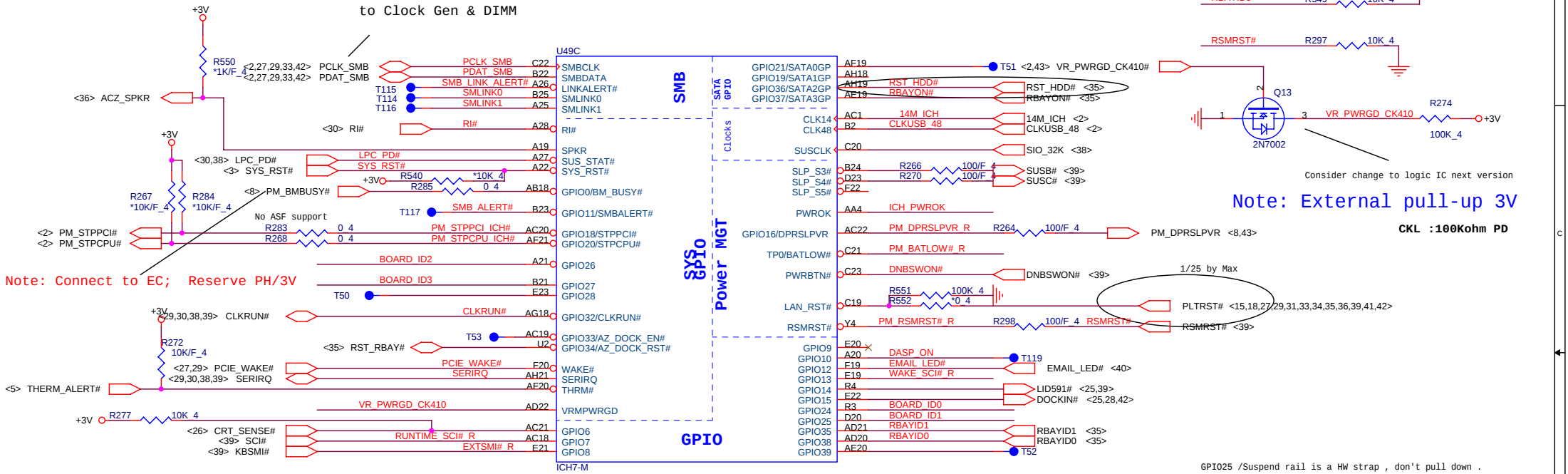
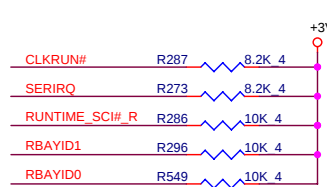
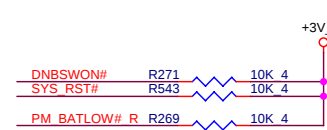
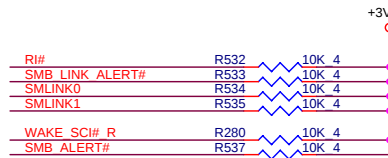
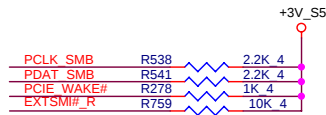
PCI DEVICE	IDSEL#	REQ# / GNT#	Interrupts
PCI7411	AD25	REQ0# / GNT0#	INT E/F/G#
Relteck Lan	AD16	REQ1# / GNT1#	INT B#
MINI PCI	AD19	REQ2# / GNT2#	INT C/D#



PROJECT : ZB1
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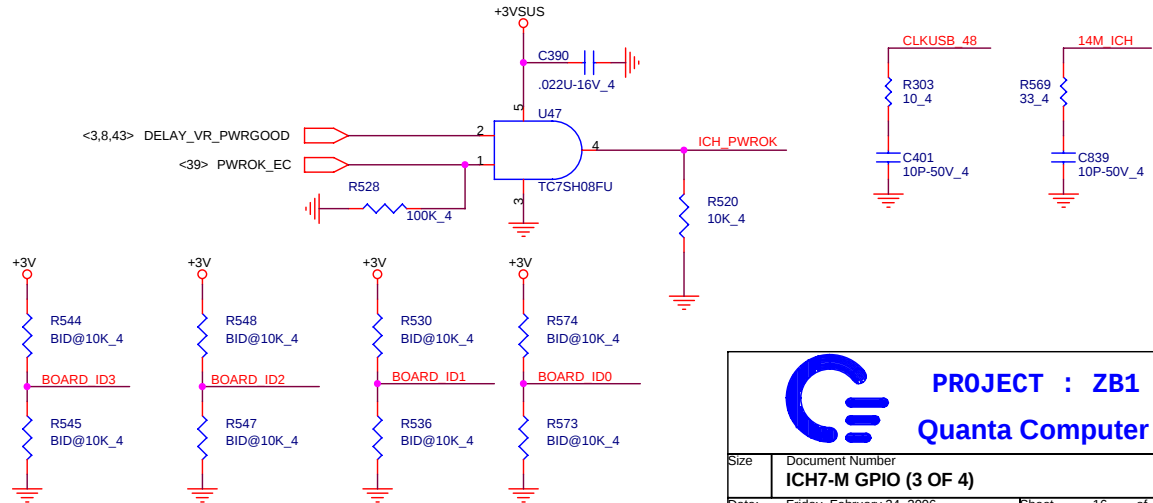
Size	Document Number ICH7-M PCI E (2 OF 4)		
Date:	Friday, February 24, 2006	Sheet	15 of 50

Don't connect to PCI device / Express card

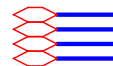


Board ID	ID3	ID2	ID1	ID0
ZB1H	1	0	0	0
ZB1I	1	0	0	1
ZB1J	1	0	1	1
ZB1J1	1	1	0	0
ZB1J2	1	1	0	1
ZB1J3	1	1	1	0
ZB1K	1	1	1	1

Board ID	ID3	ID2	ID1	ID0
With EZ Dock w/o CIR	0	0	0	0
w/o EZ Dock w/o CIR	0	0	0	1
With EZ Dock With CIR	0	0	1	0
w/o EZ Dock With CIR	0	0	1	1
ZB1B	0	1	0	0
ZB1C	0	1	0	1
ZB1F	0	1	1	0
ZB1G	0	1	1	1

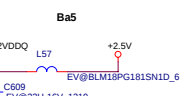
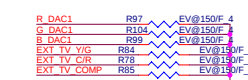
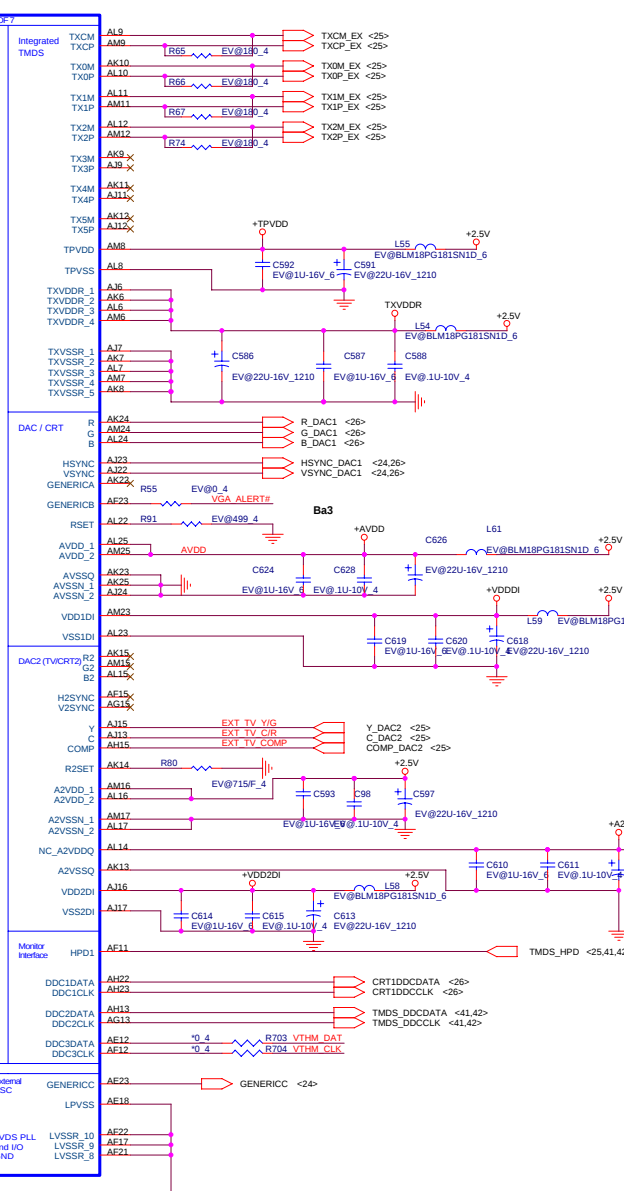
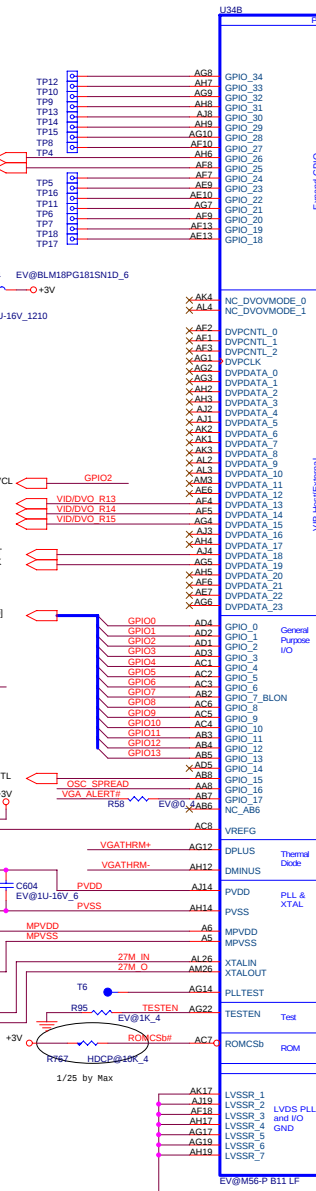
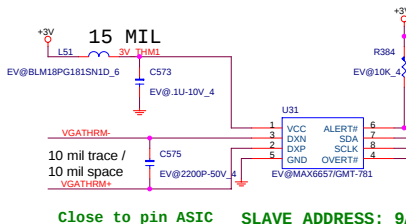
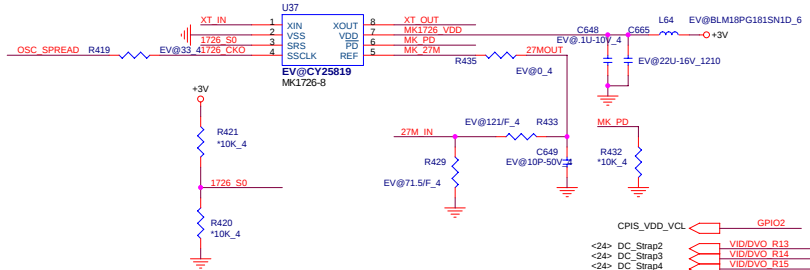



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<8,41> PEG_RXP[15:0]
<8,41> PEG_RXN[15:0]
<8,41> PEG_TXP[15:0]
<8,41> PEG_TXN[15:0]
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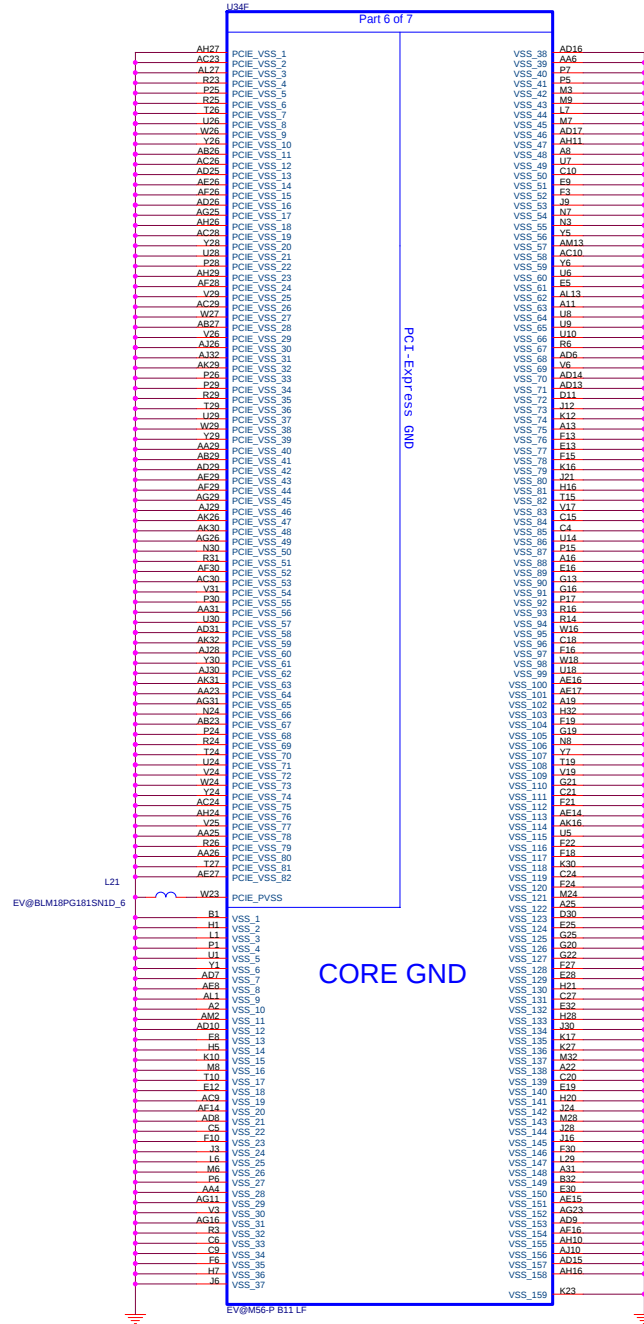


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Quanta Computer Inc.

Size	Document Number M56P 1 OF 7	Rev C
Date:	Friday, February 24, 2006	Sheet 18 of 50

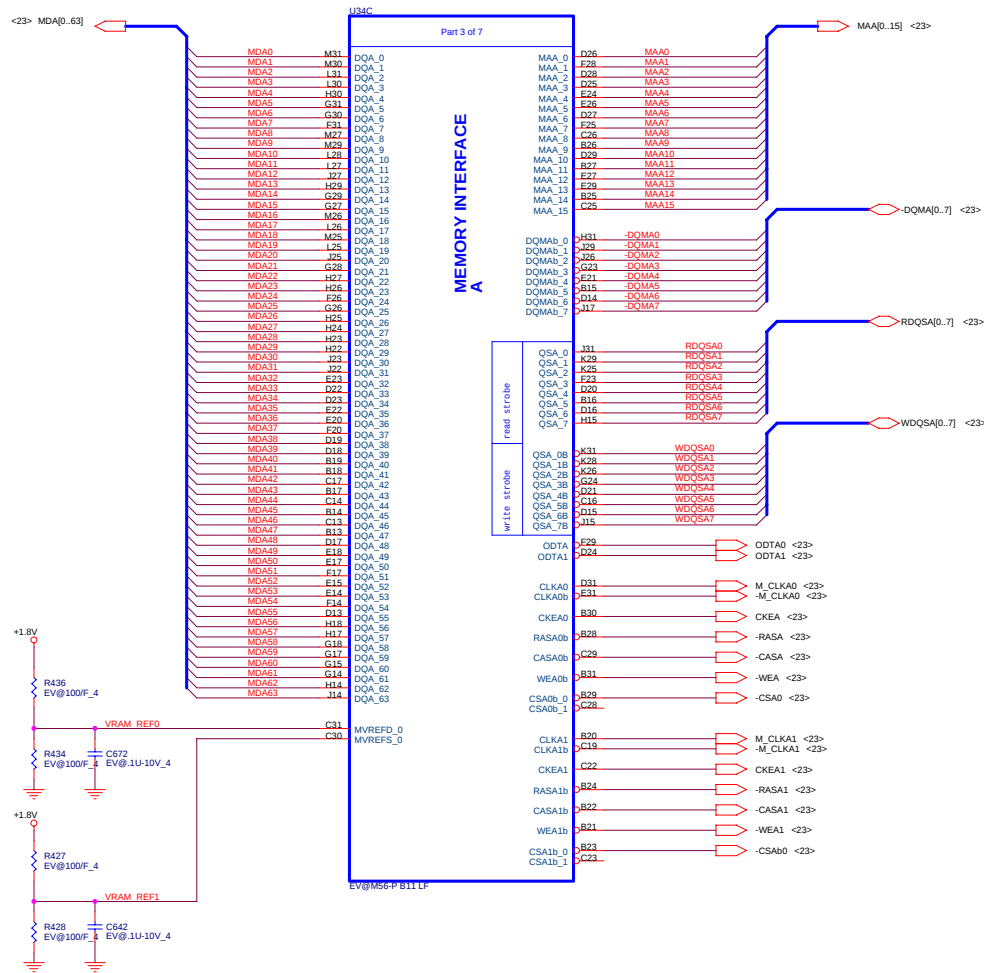


 PROJECT : ZB1
Quanta Computer Inc.

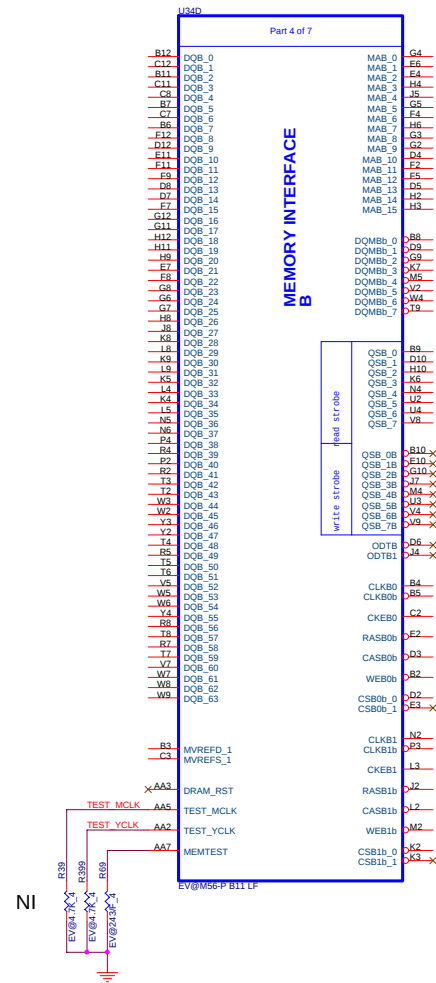


RV410 MEMORY CHANNELS A and B

Channel A

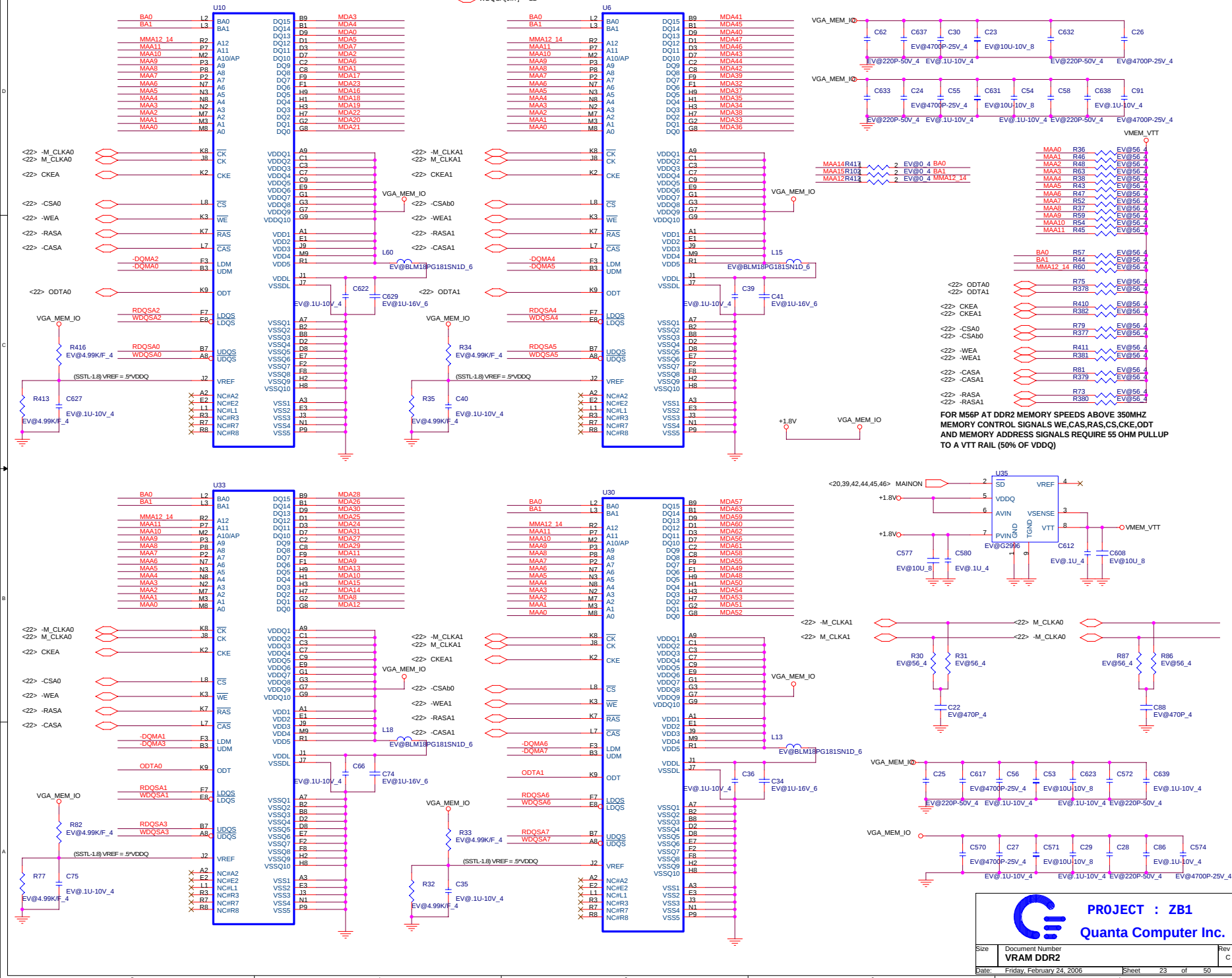


Channel B

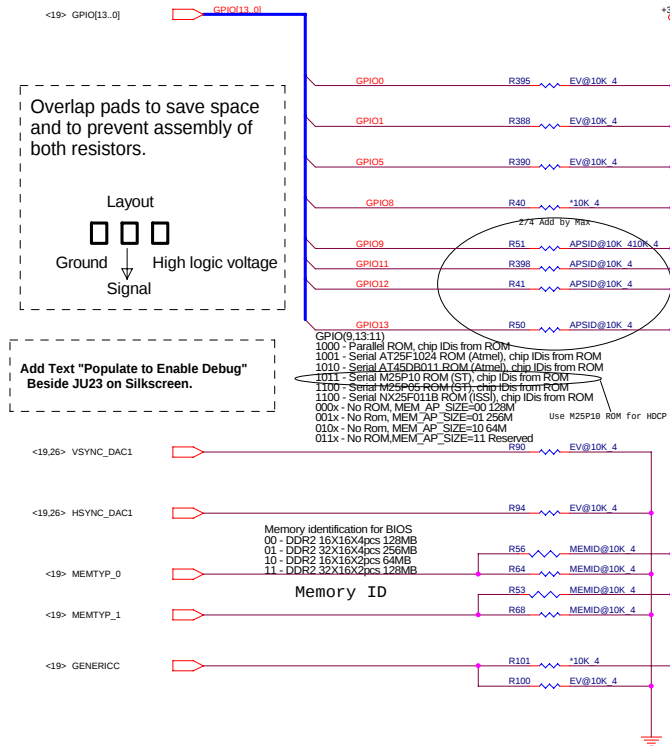


N

CHAN A DDR2 84BGA 16MX16 MEMORY

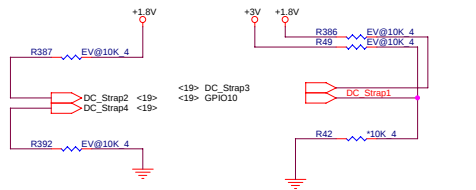


OPTION STRAPS



M56-P Strap

STRAPS	PIN	DESCRIPTION	Board DEFAULT
TX_PWRS_ENB	GPIO0	Transmitter Power Saving Enable 0: 50% Tx output swing 1.full Tx output swing	1
TX_DEEMPH_EN	GPIO1	Transmitter De-emphasis Enable 0: Tx de-emphasis disabled 1.Tx de-emphasis enabled	1
	GPIO(3:2)	RSVD	
DEBUG_ACCESS	GPIO4	Strap to set the debug muxes to bring out DEBUG signals even if registers are inaccessible	0
	GPIO5	RSVD	
	GPIO6	RSVD	
Force_ Compliance	GPIO8	Force chip to get to compliance state quickly for Tester purposes	0
ROMIDCFG(3:0)	GPIO(9,13:11)	If no ROM attached, controls chip IDs. If rom attached identifies ROM type 000x - No ROM, MEM_AP_SIZE=00 128M 001x - No Rom, MEM_AP_SIZE=01 256M 010x - No Rom, MEM_AP_SIZE=10 64M 011x - No ROM, MEM_AP_SIZE=11 Reserved 1000 - Parallel ROM, chip IDs from ROM 1001 - Serial AT25F1024 ROM (Atmel), chip IDs from ROM 1010 - Serial AT45DB011 ROM (Atmel), chip IDs from ROM 1011 - Serial M25P10 ROM (ST), chip IDs from ROM 1100 - Serial M25P10 ROM (ST), chip IDs from ROM 1101 - Serial M25P10 ROM (ST), chip IDs from ROM 1110 - Serial NX25F011B ROM (ISSI), chip IDs from ROM	000
VIP_DEVICE	VSYNC	Indicates if any slave VIP host devices drove this pin low during reset. 0- Slave VIP host port device present. 1-No slave VIP port devices reporting presence during reset	No default
H2SYNC, V2SYNC, GENERICC		RSVD	
VSYNC		RSVD	
HSYNC		RSVD	
PCIE_TEST		RSVD	

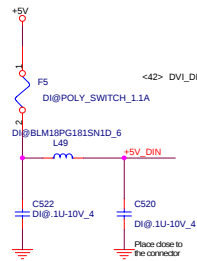


Board Straps		REV. 0.3	
STRAPS	PIN	DESCRIPTION	VALUE
MEMTYP(1:0)	GPIO25,26	Memory identification for BIOS 00 - DDR2 16X16X4pcs 128MB 01 - DDR2 32X16X4pcs 256MB 10 - DDR2 16X16X2pcs 64MB 11 - DDR2 32X16X2pcs 128MB	
DC_Strap1	GPIO(10)	Internal TMDs Enabled 0 - Disabled 1 - Enabled	1
DC_Strap2	LCDDATA(13)	Video Capture Enabled 0 - Disabled 1 - Not detected	0
DC_Strap3	LCDDATA(14)	HDTV out detect 0 - Detected 1 - Enabled	1
DC_Strap4, DEMUX_SEL	LCDDATA(15,19)	Video capture enable 00 - DAC2 Off 01 - DAC2 On as CRT 10 - DAC2 On as TVOUT 11 - DAC2 On as TVOUT and CRT	01
PAL/NTSC	LCDDATA(18)	TVO Standard Default (Resistor pull-up and switch short to GND) 0 - PAL (on board resistor pull-down and switch closed) 1 - NTSC (on board resistor pull-up)	1

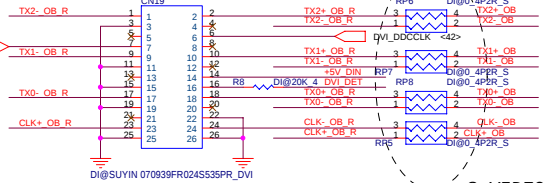


PROJECT : ZB1
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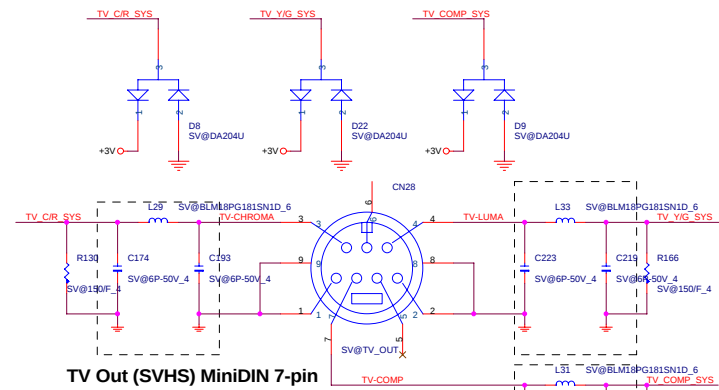
DVI-I CONNECTOR (DVI-D)



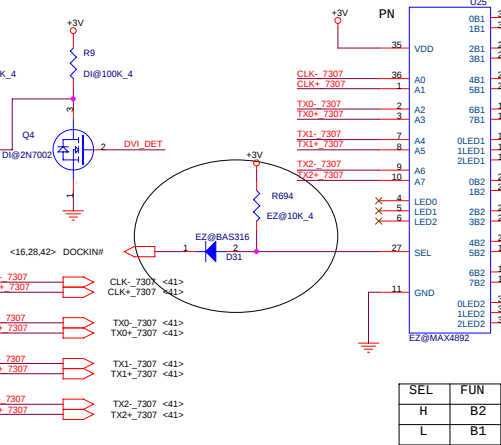
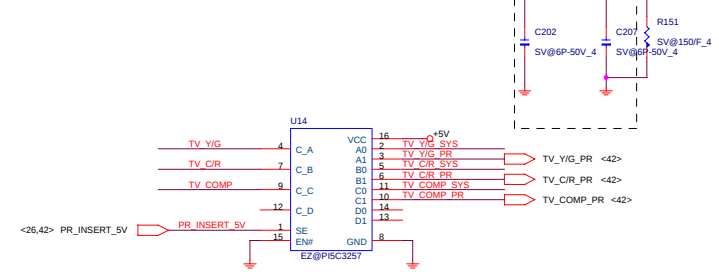
DVI PORT



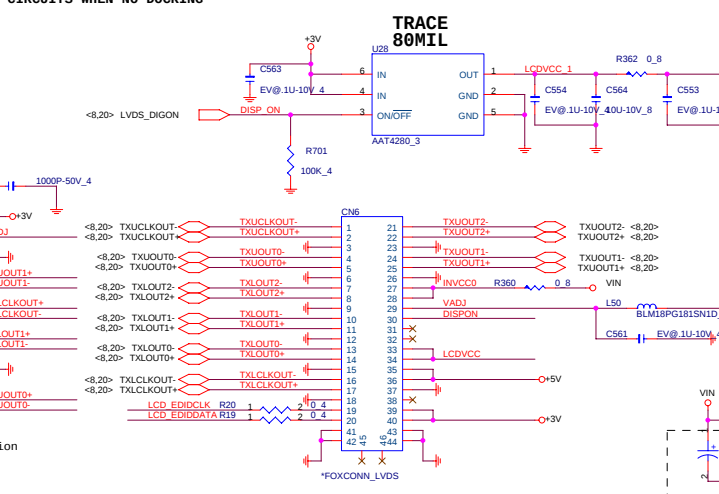
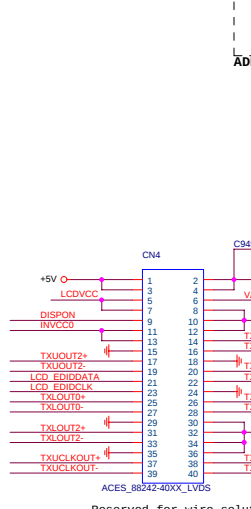
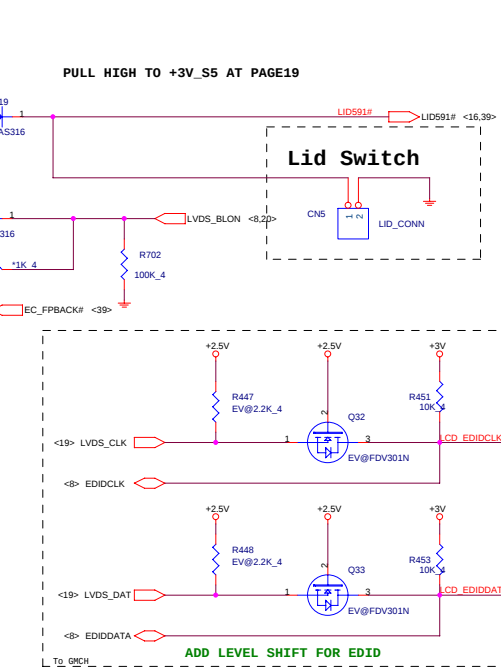
S-VIDEO

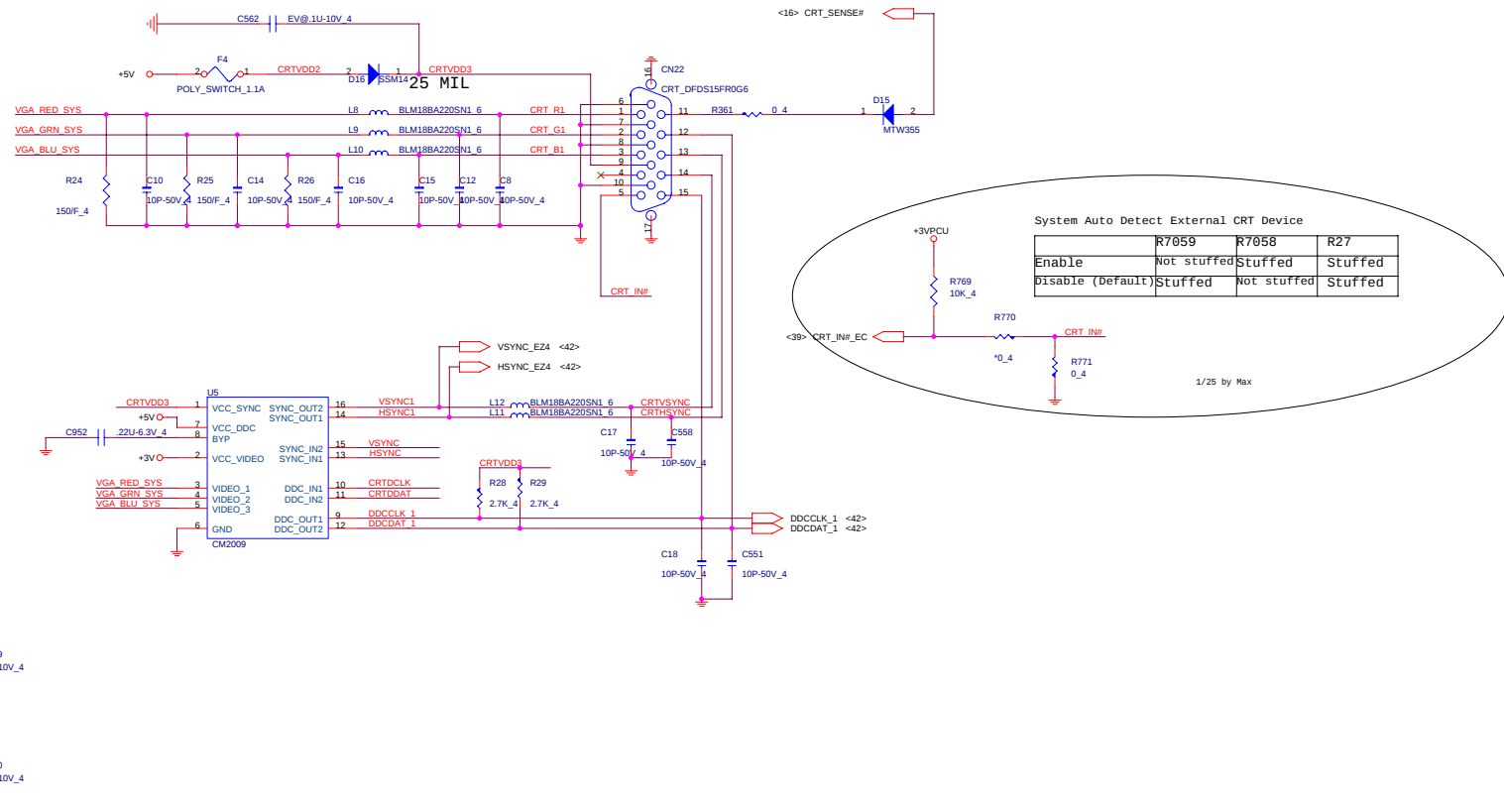
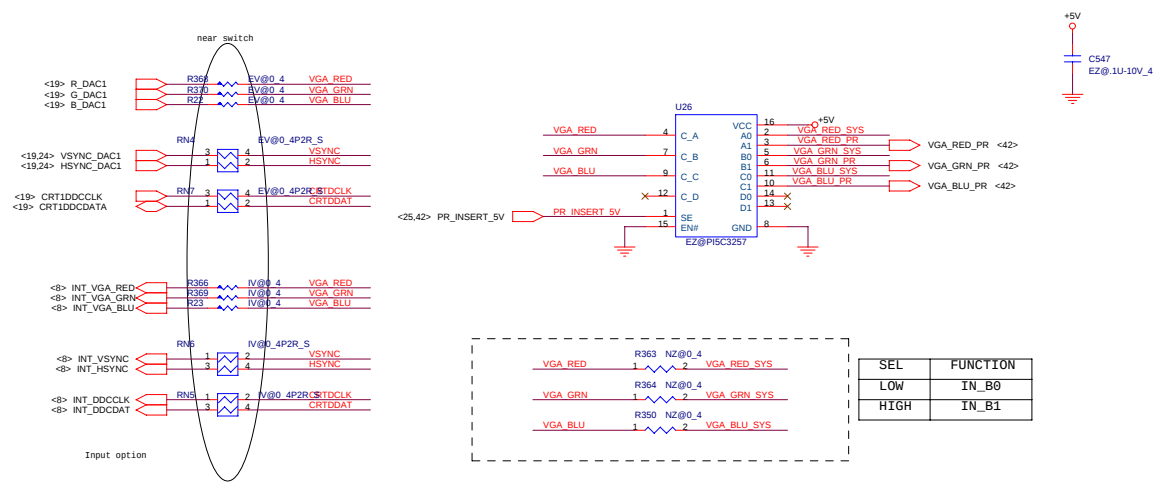


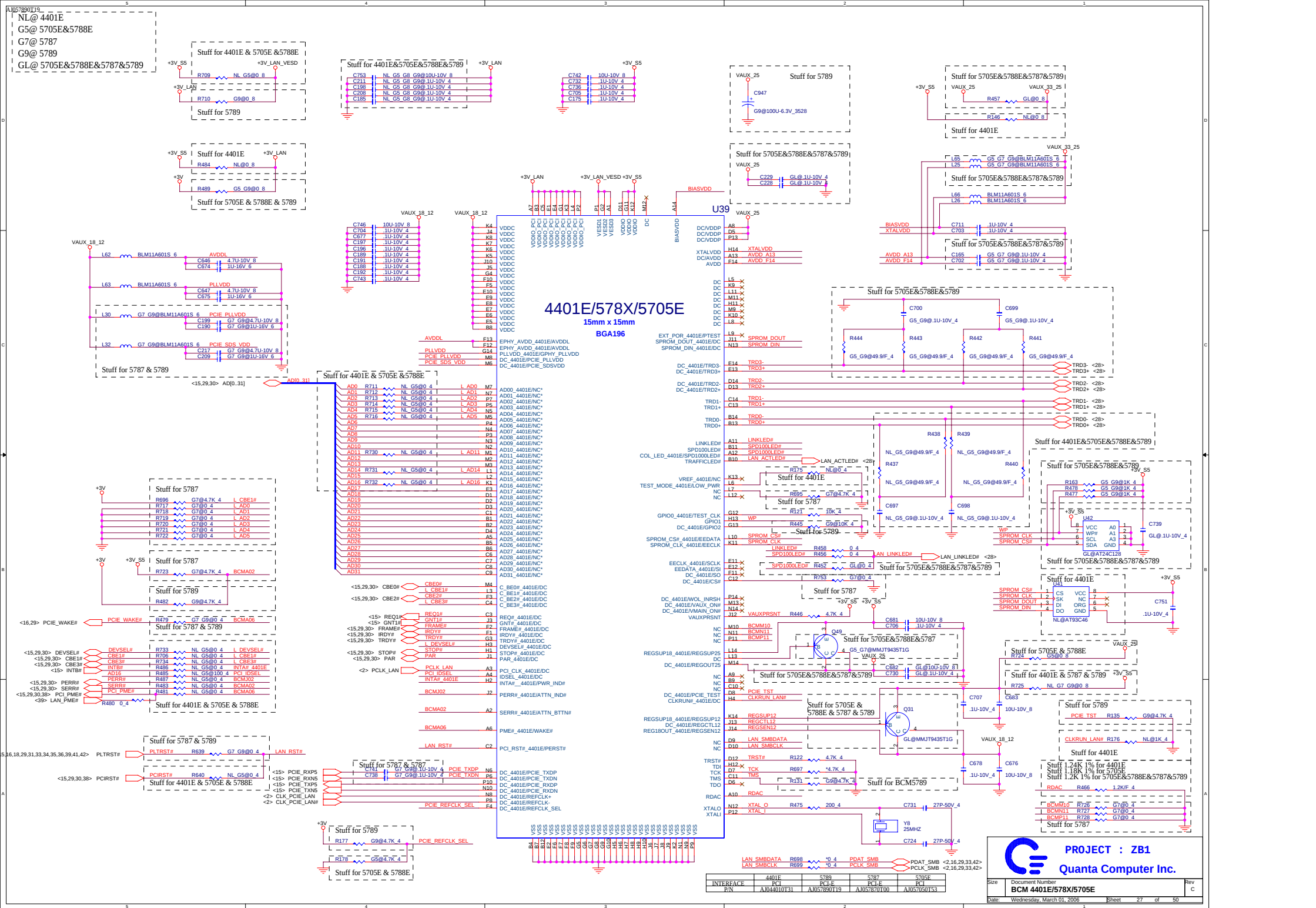
TV Out (SVHS) MiniDIN 7-pin

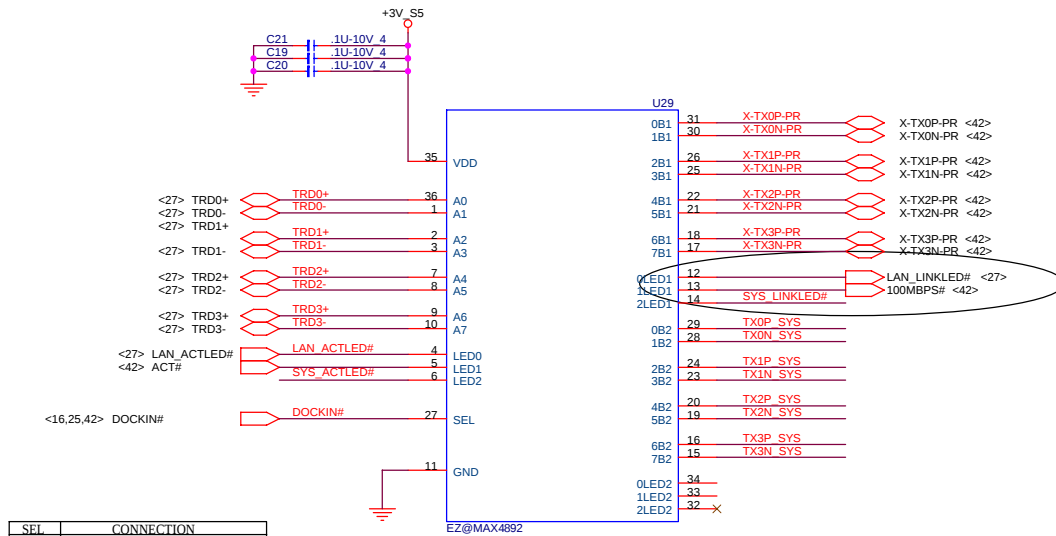


SEL	FUN
H	B2
L	B1



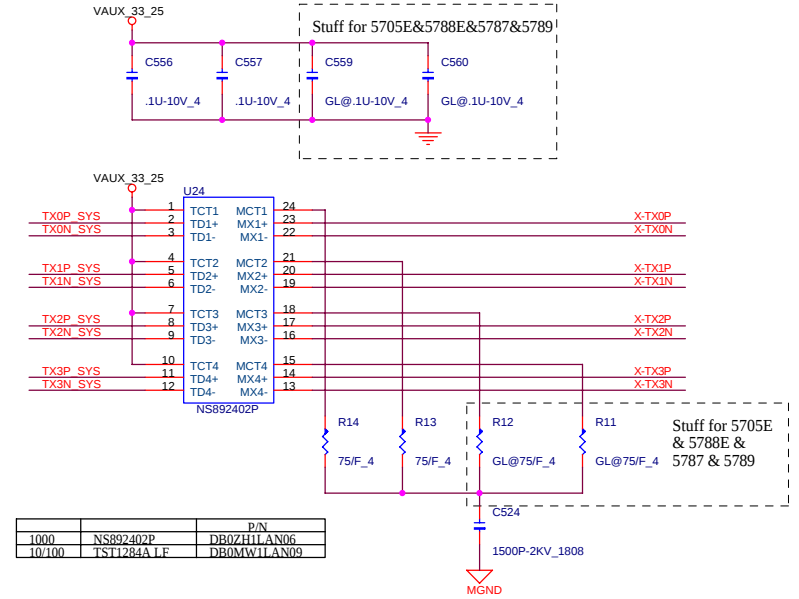
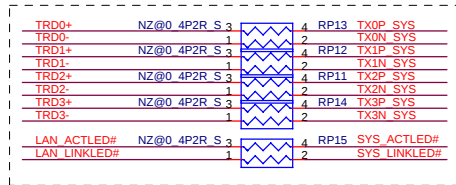




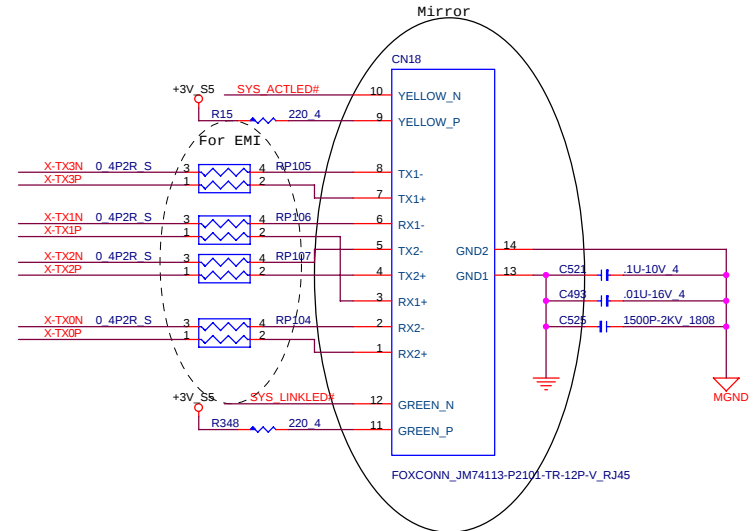


SEL	CONNECTION
0	Ax to xB1 : LEDx to xLED1
1	Ax to xB2 : LEDx to xLED2

ADD CIRCUITS WHEN NO DOCKING



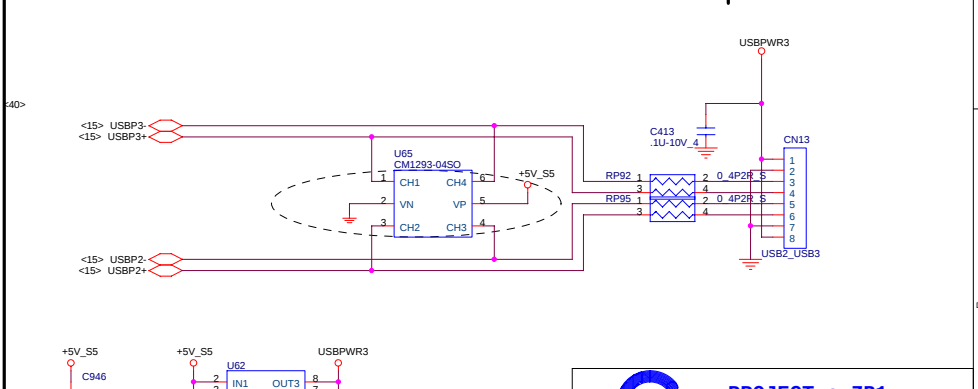
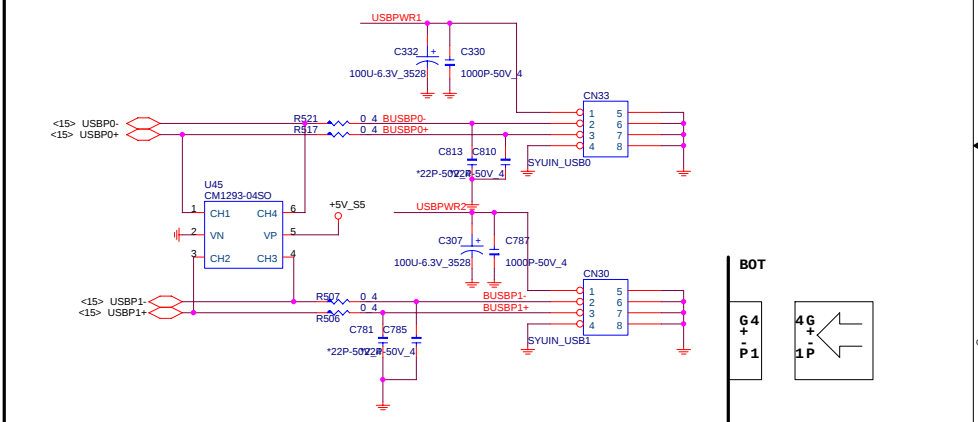
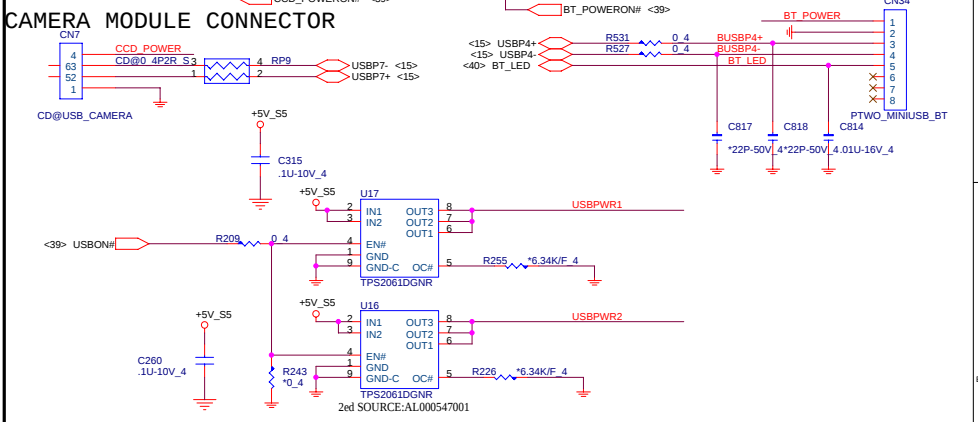
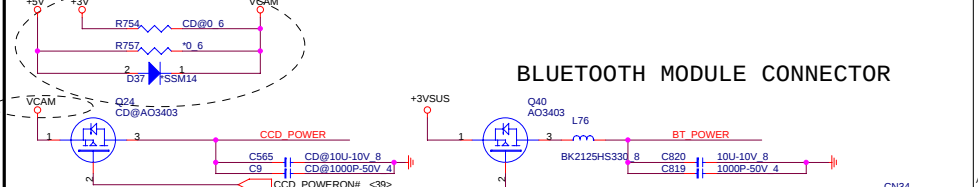
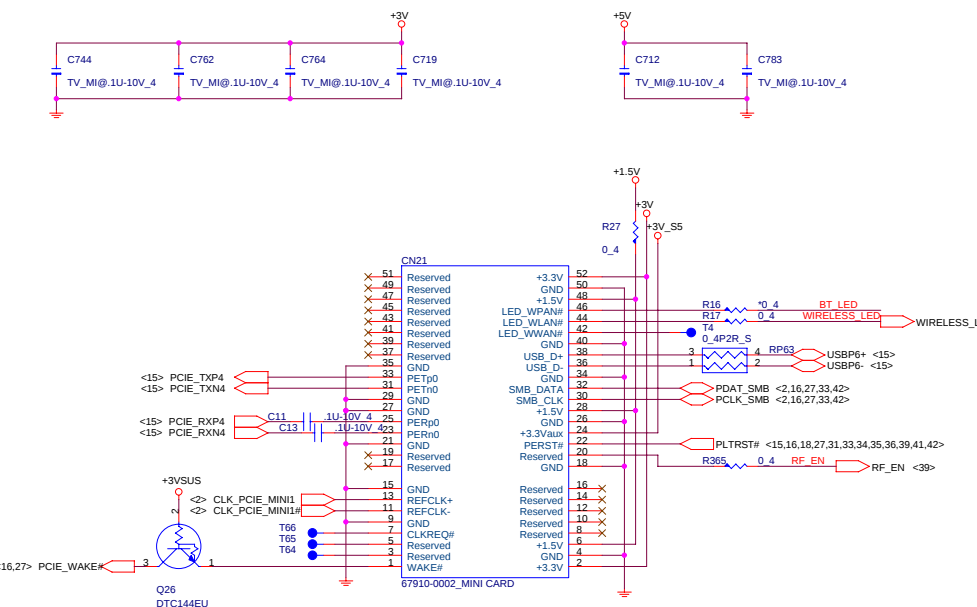
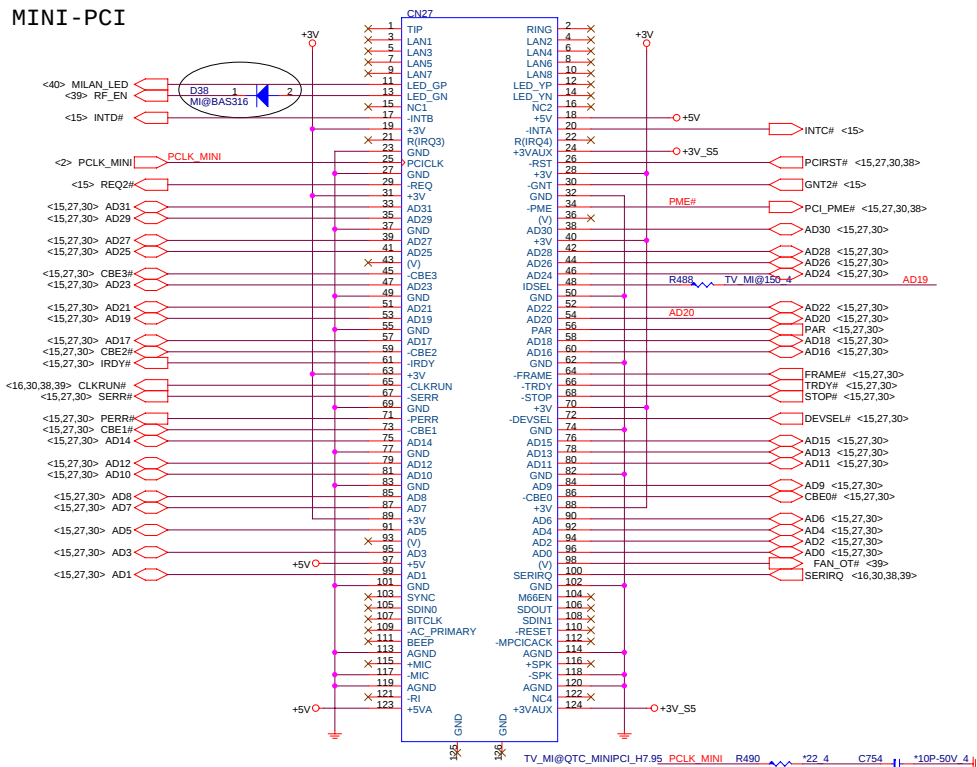
		P/N
1000	NS892402P	DB07H1LAN06
10/100	TST1284A LF	DB08MW1LAN09

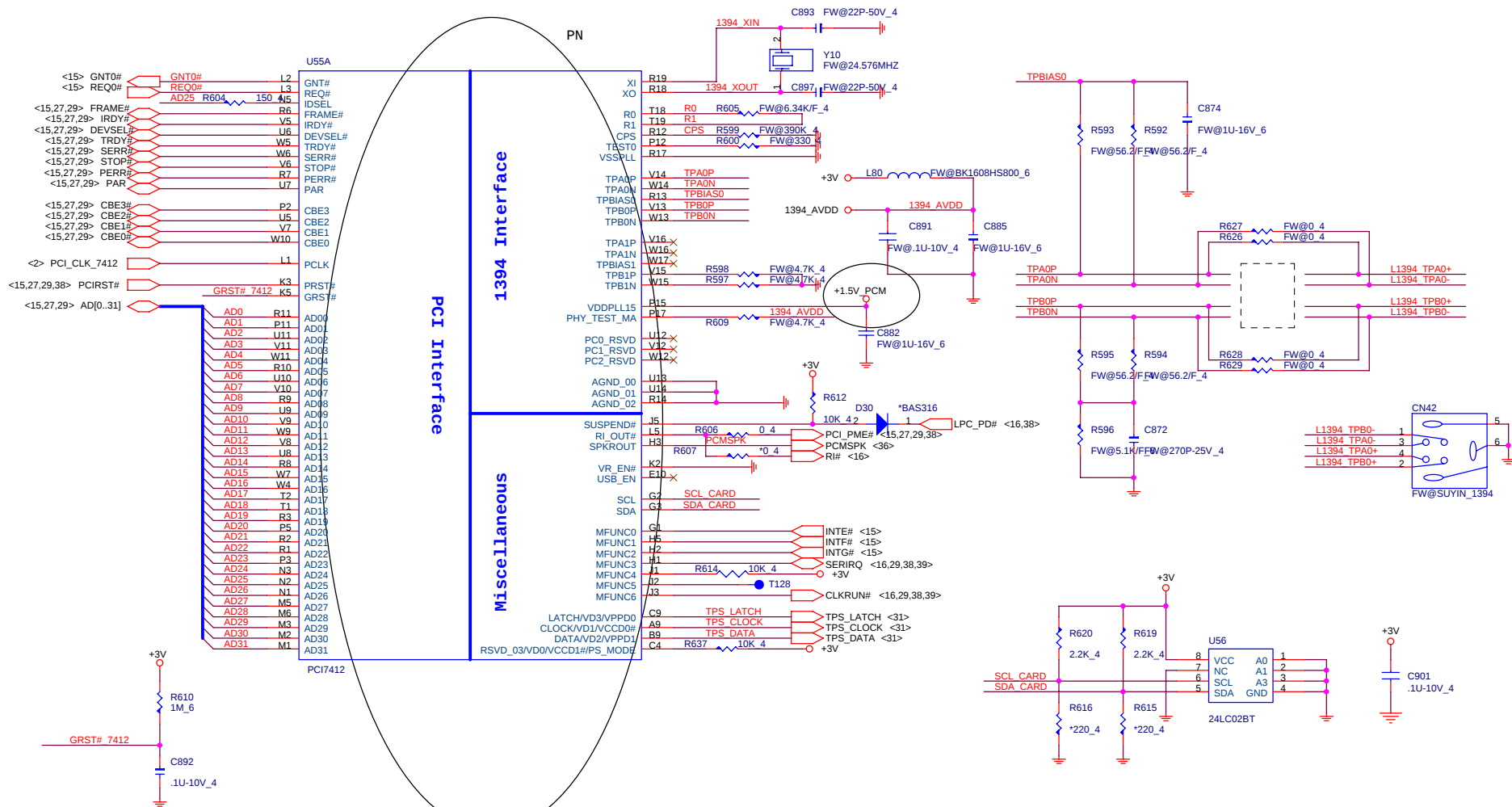


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Quanta Computer Inc.

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	TRANSFORMER/RJ45	C
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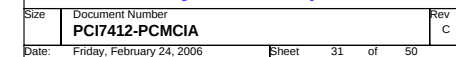
MINI-PCI



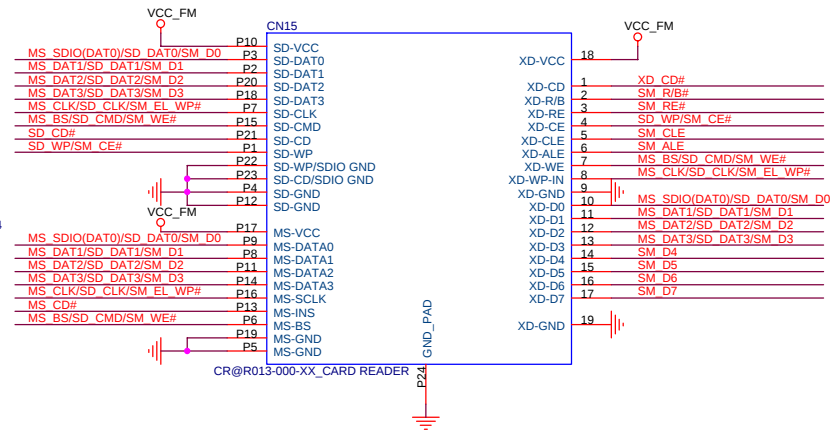
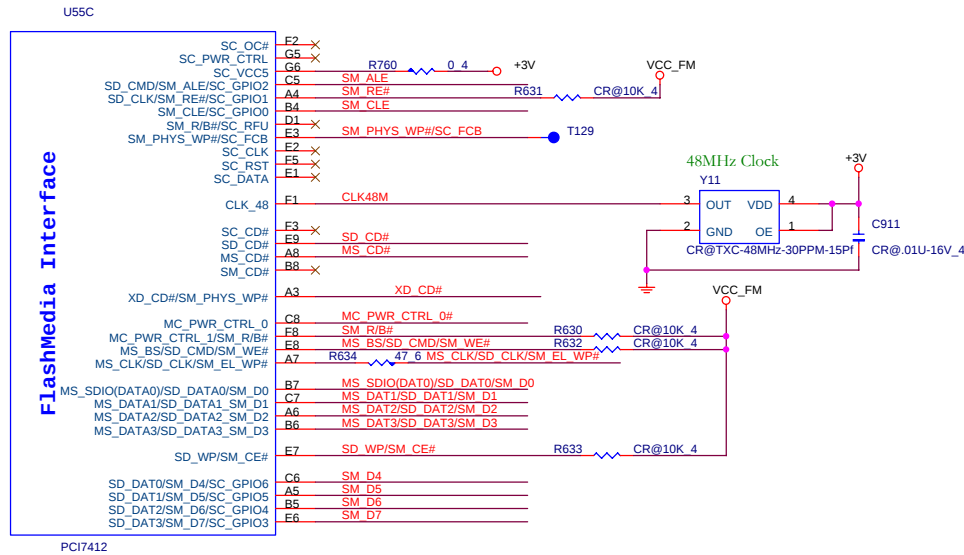


PROJECT : ZB1
Quanta Computer Inc.

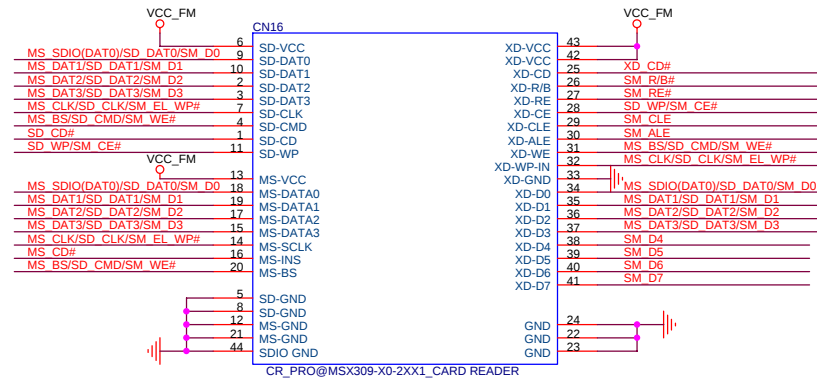
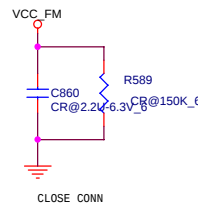
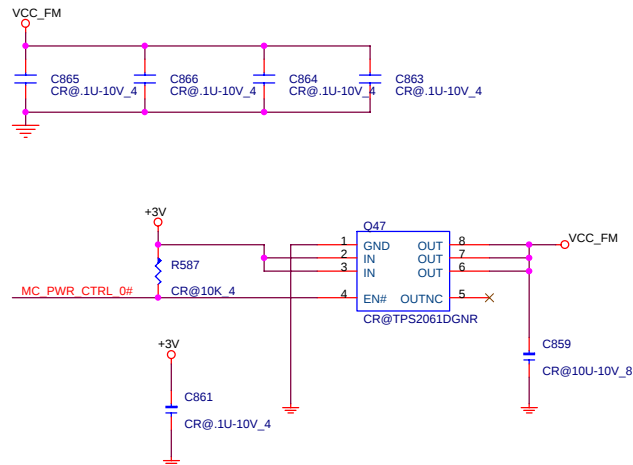
Size	Document Number	Rev
	PCI7412-IEEE1394	C
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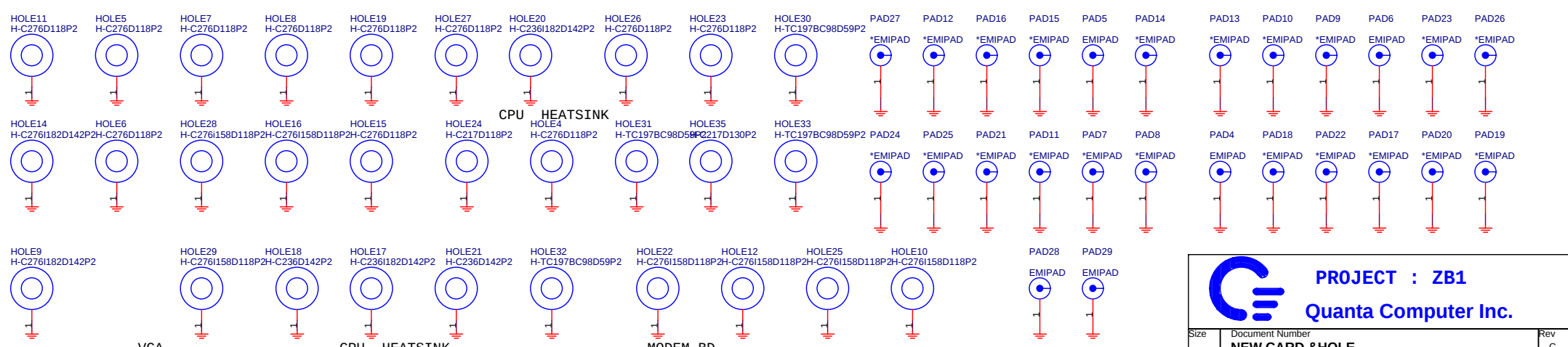
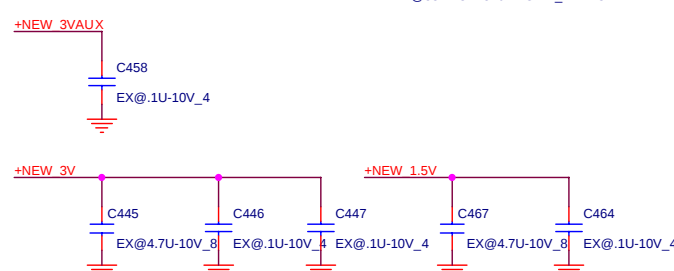
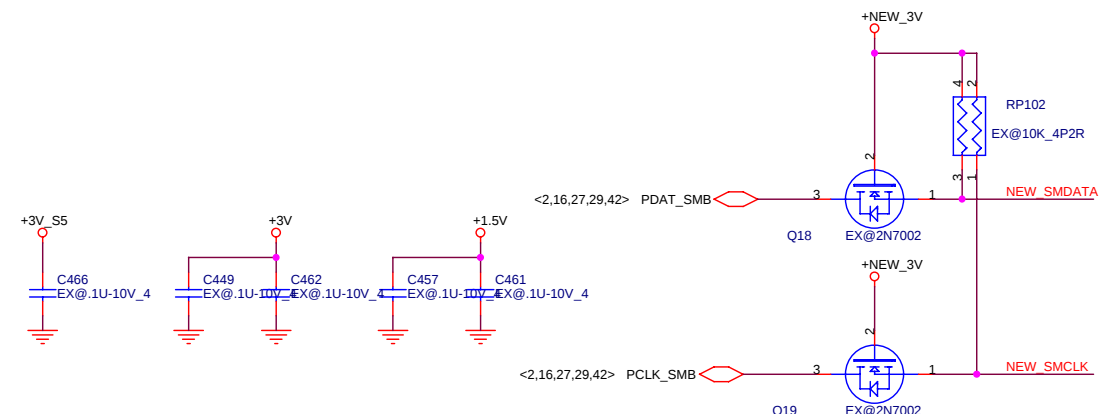
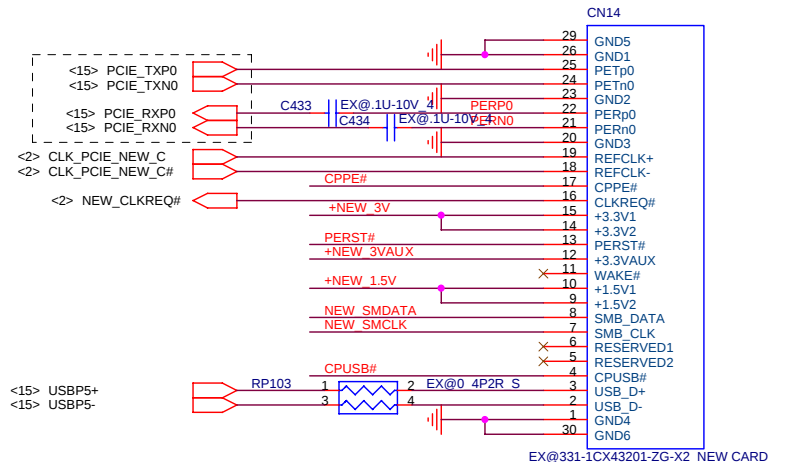
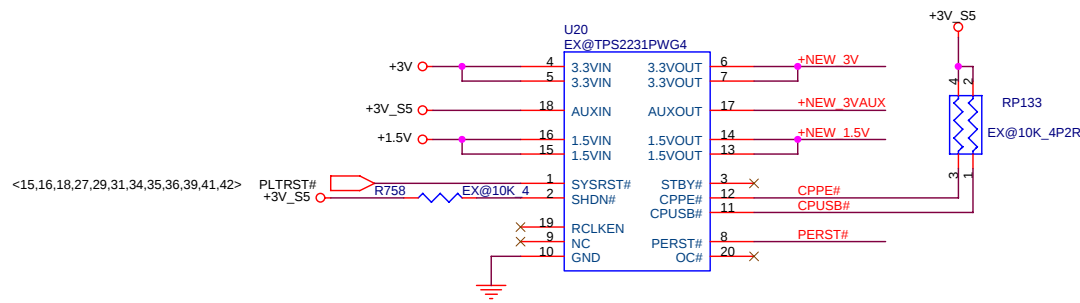
DO NOT INSERT SD/MMC, MEMORYSTICK AND XD SIMULTANEOUSLY.



5 IN1 CARD READER



PROJECT : ZB1
Quanta Computer Inc.

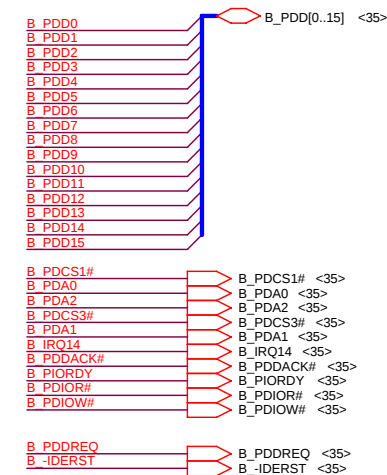
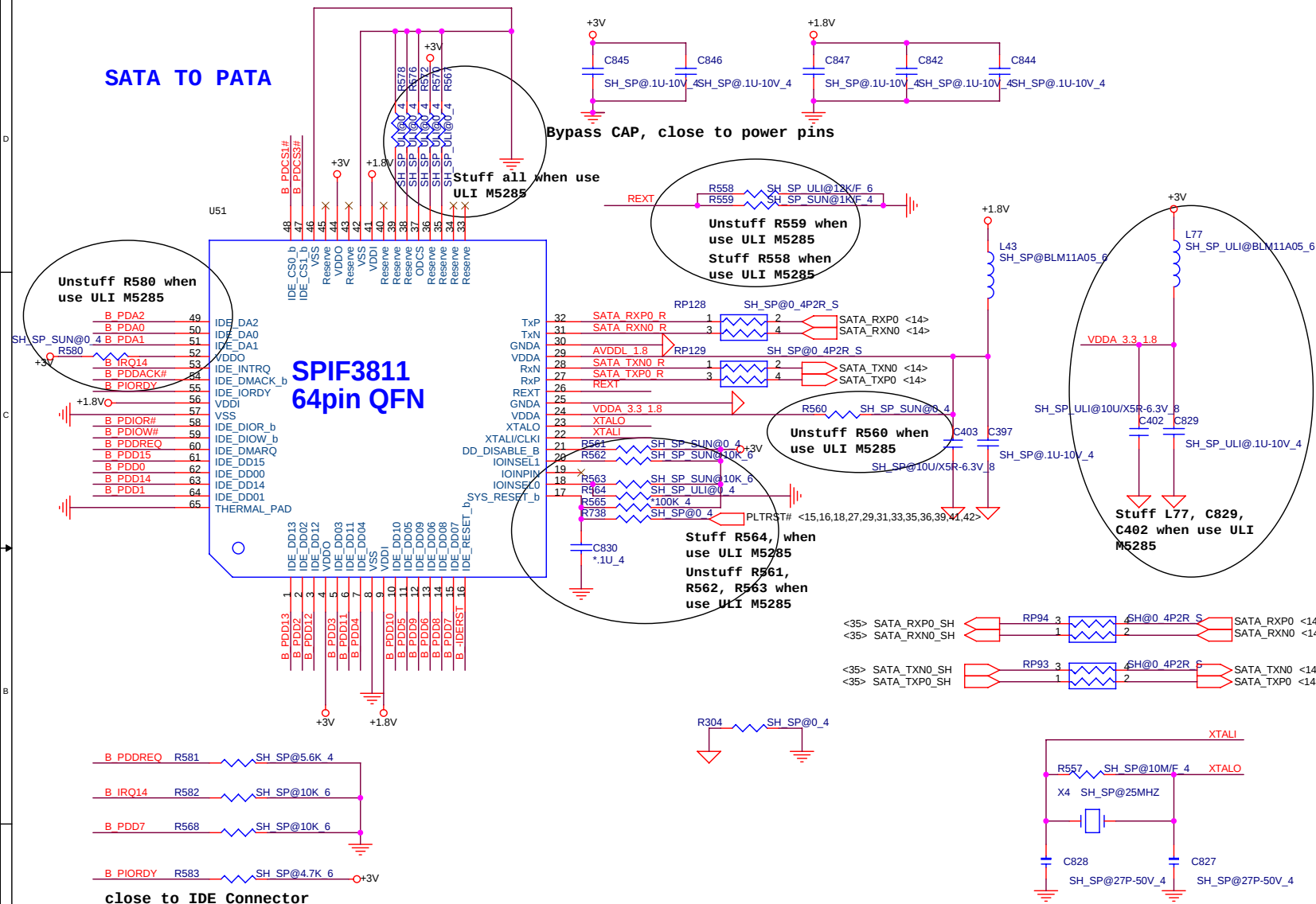




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SATA TO PATA



Reference clock select

ATAIOEN	Note
0	disable PATA output
1	enable PATA output

1	enable
Operation Mode	

MODE[2..0]	
0 0 0	Device mode 100MB/S
0 0 1	Device mode 133MB/S
0 1 0	Device mode 150MB/S
0 1 1	RESERVE
1 0 0	Host mode 100MB/S
1 0 1	Host mode 133MB/S
1 1 0	Host mode 150MB/S
1 1 1	RESERVED

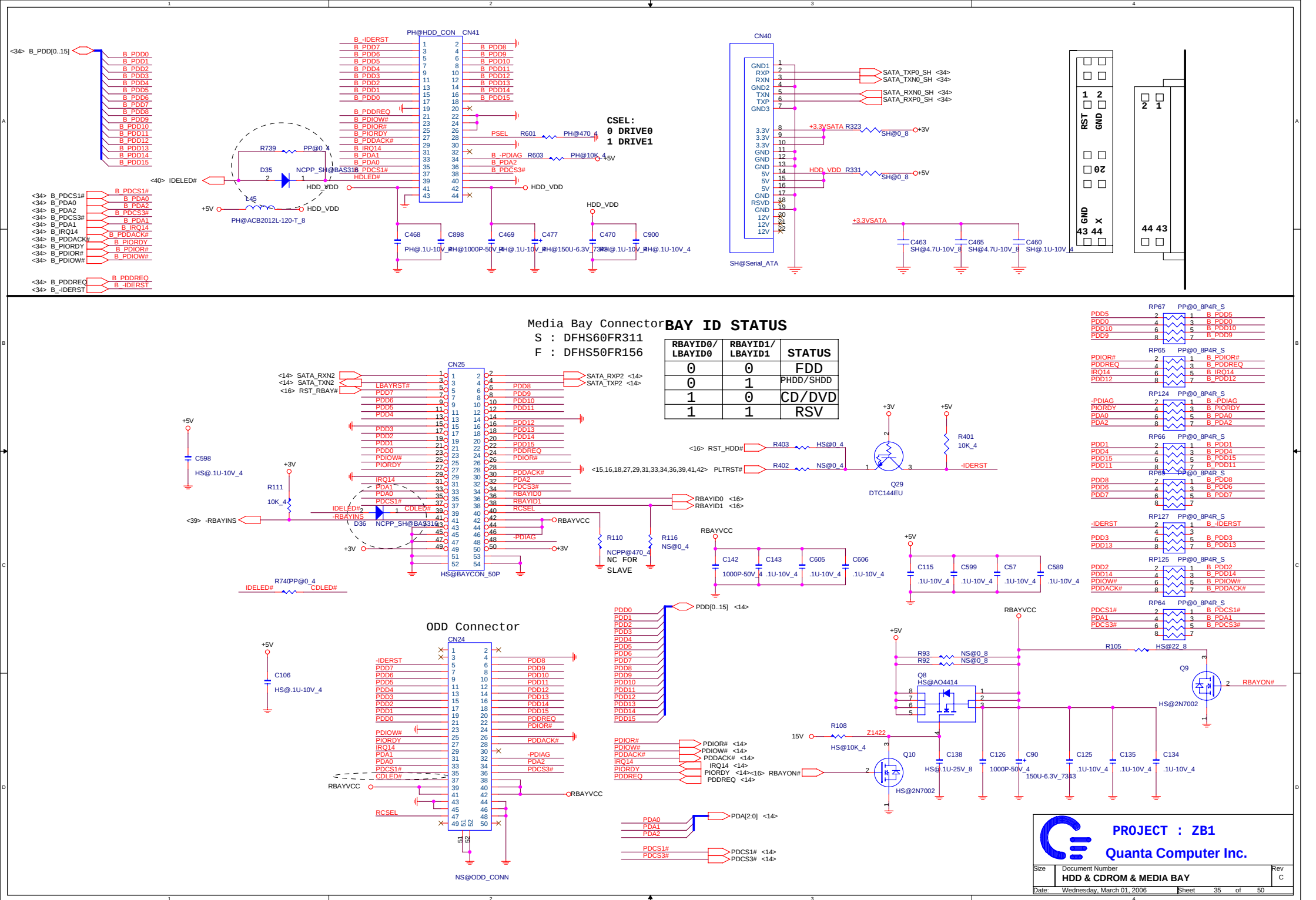
111	RESERVED
Reference clock select	

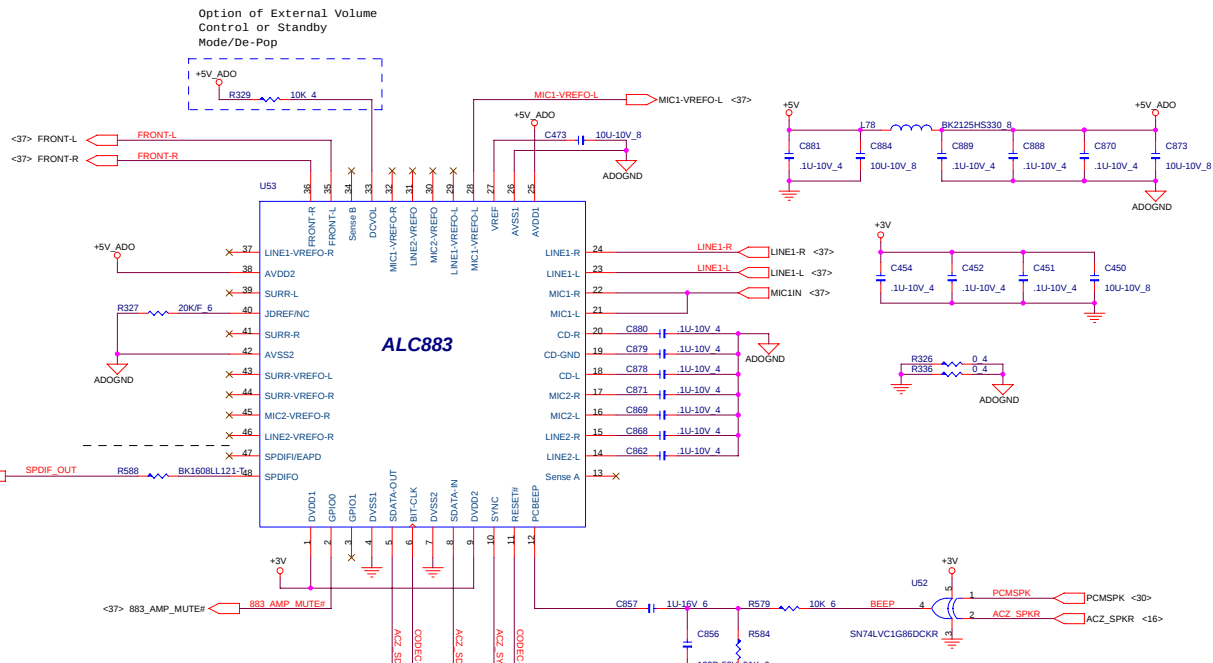
CLKSEL[1..0]	External clock
0 0	20 MHz
0 1	25 MHz



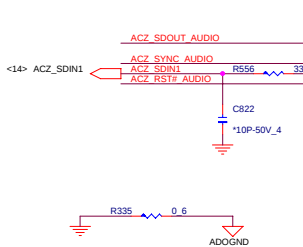
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Quanta Computer Inc.

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For MDC Module



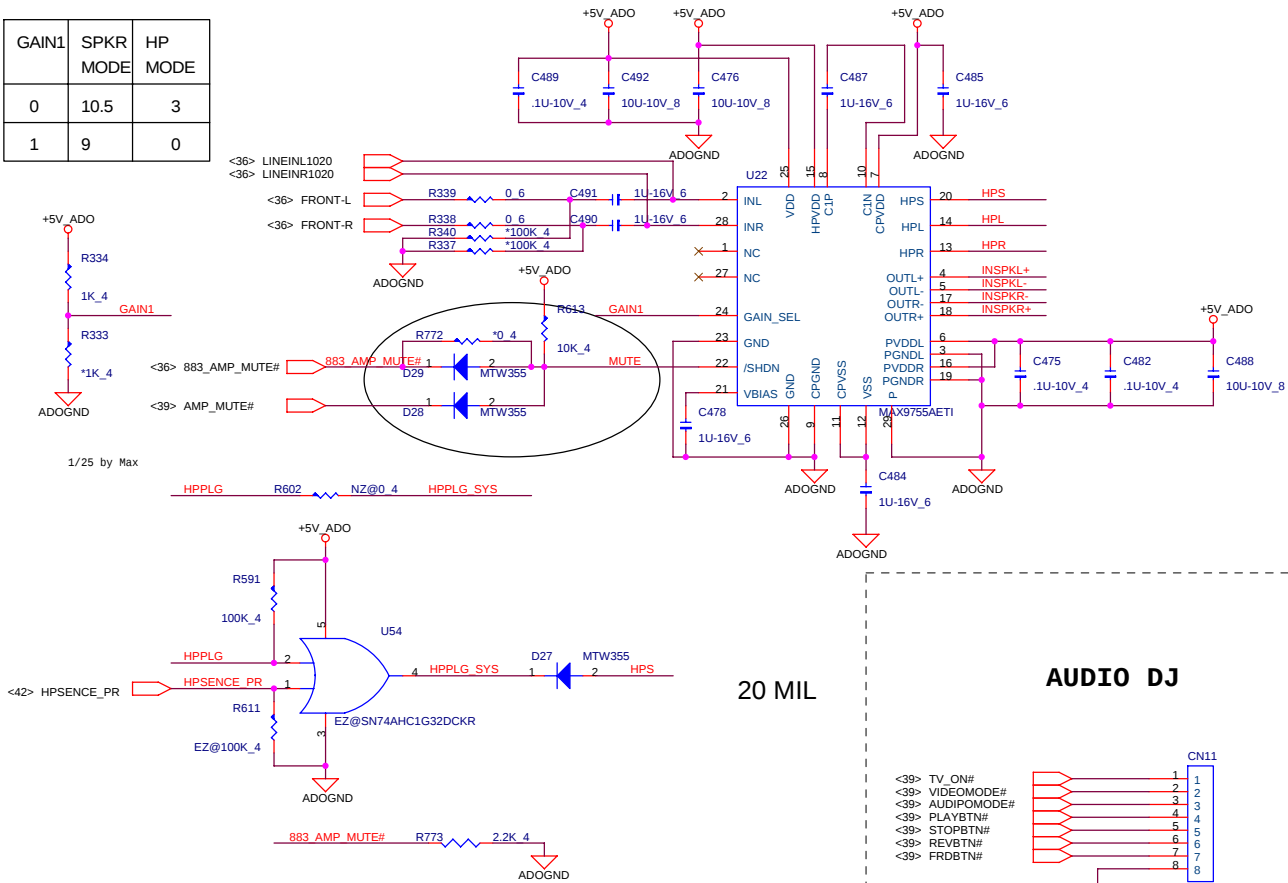
Tied at one point only under the codec or near the codec

GP107	GP106	GP105	
0	0	X	Internal mode
0	1	X	Reserved
1	0	0	Small EEPROM
1	1	0	Large EEPROM
1	0	1	SHI
1	1	1	UART

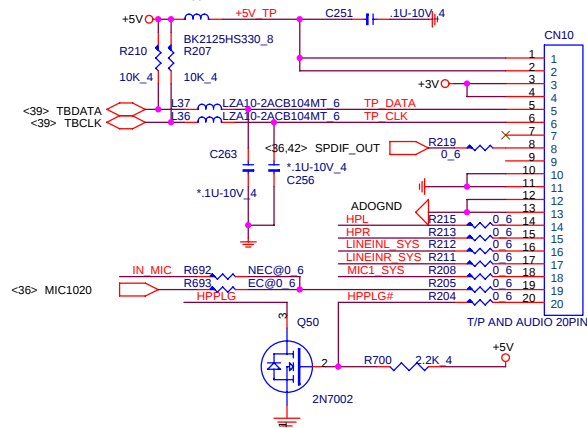
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Quanta Computer Inc.

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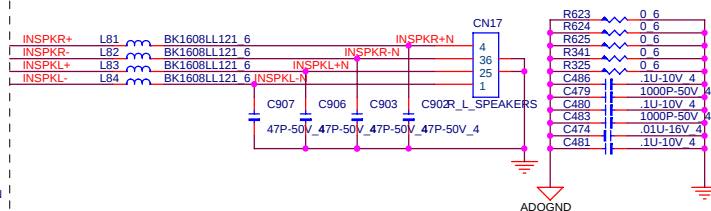
GAIN1	SPKR MODE	HP MODE
0	10.5	3
1	9	0



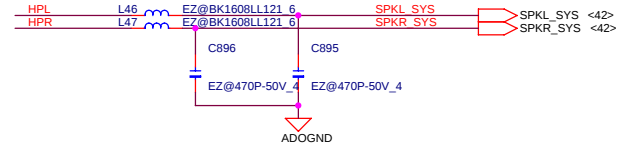
TOUCH PAD/AUDIO JACK FFC connector



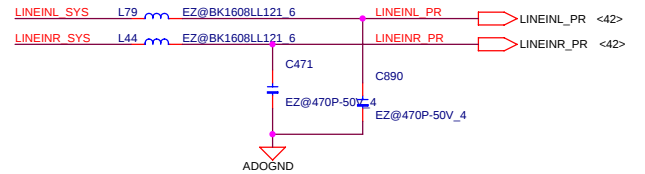
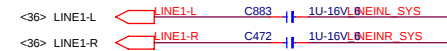
SPEAKER CONNECTOR



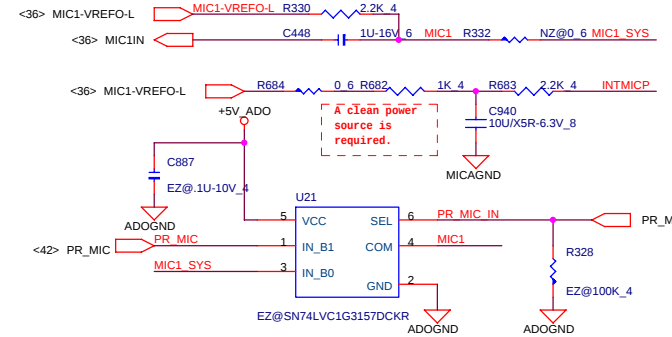
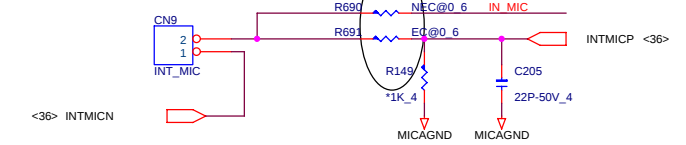
LINE OUT



LINE IN



MIC



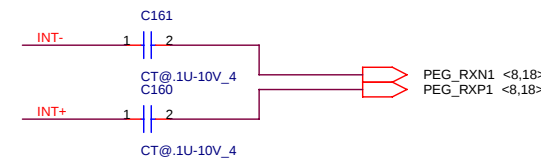
SEL	FUNCTION
LOW	IN_B0
HIGH	IN_B1

PROJECT : ZL6
Quanta Computer Inc.

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	AUDIO AMP(MAX 9755)	C
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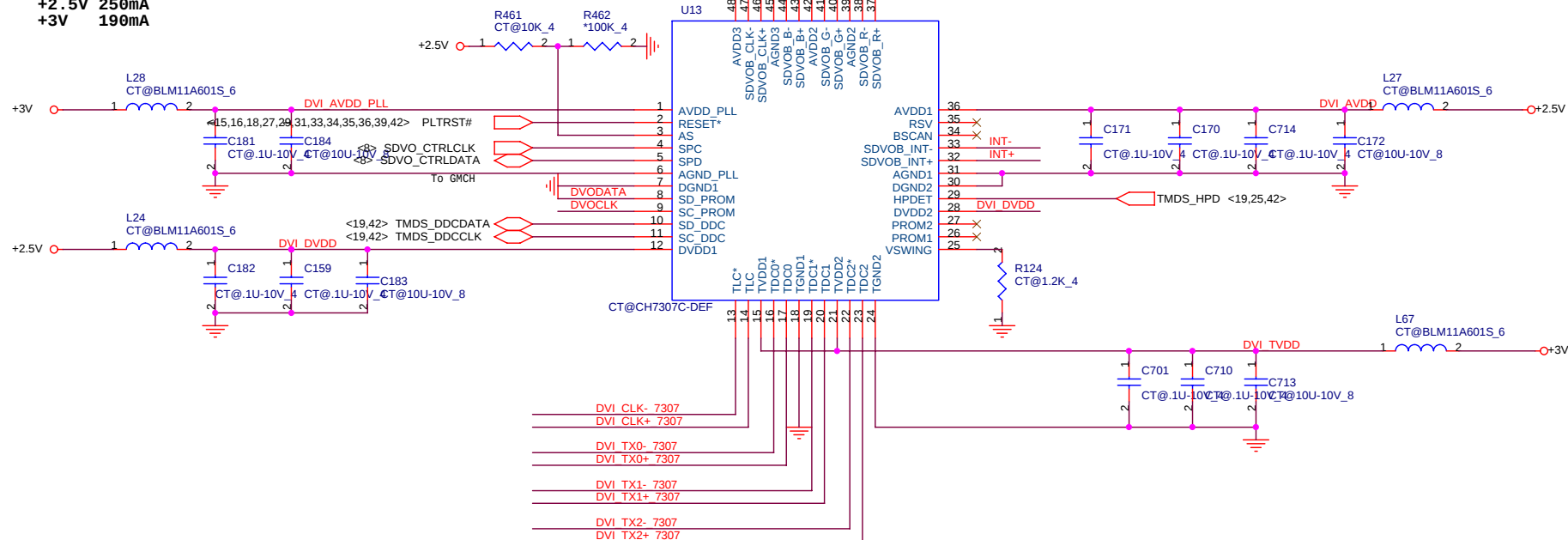
<8,18> PEG_TXP0
<8,18> PEG_TXN0
<8,18> PEG_TXP1
<8,18> PEG_TXN1
<8,18> PEG_TXP2
<8,18> PEG_TXN2
<8,18> PEG_TXP3
<8,18> PEG_TXN3

SDVOB_R+
SDVOB_R-
SDVOB_G+
SDVOB_G-
DVI_AVDD
SDVOB_B+
SDVOB_B-
SDVOB_CLK+
SDVOB_CLK-

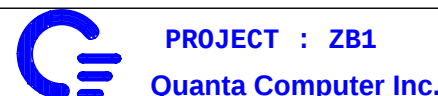
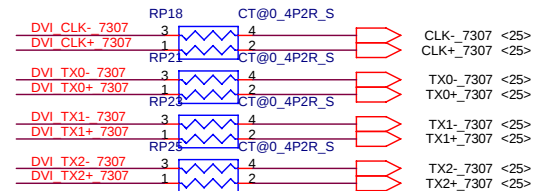
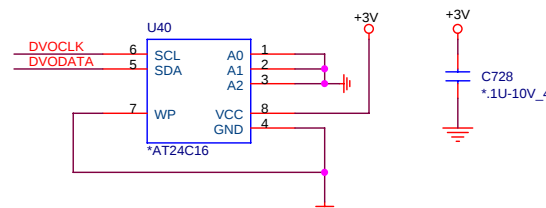


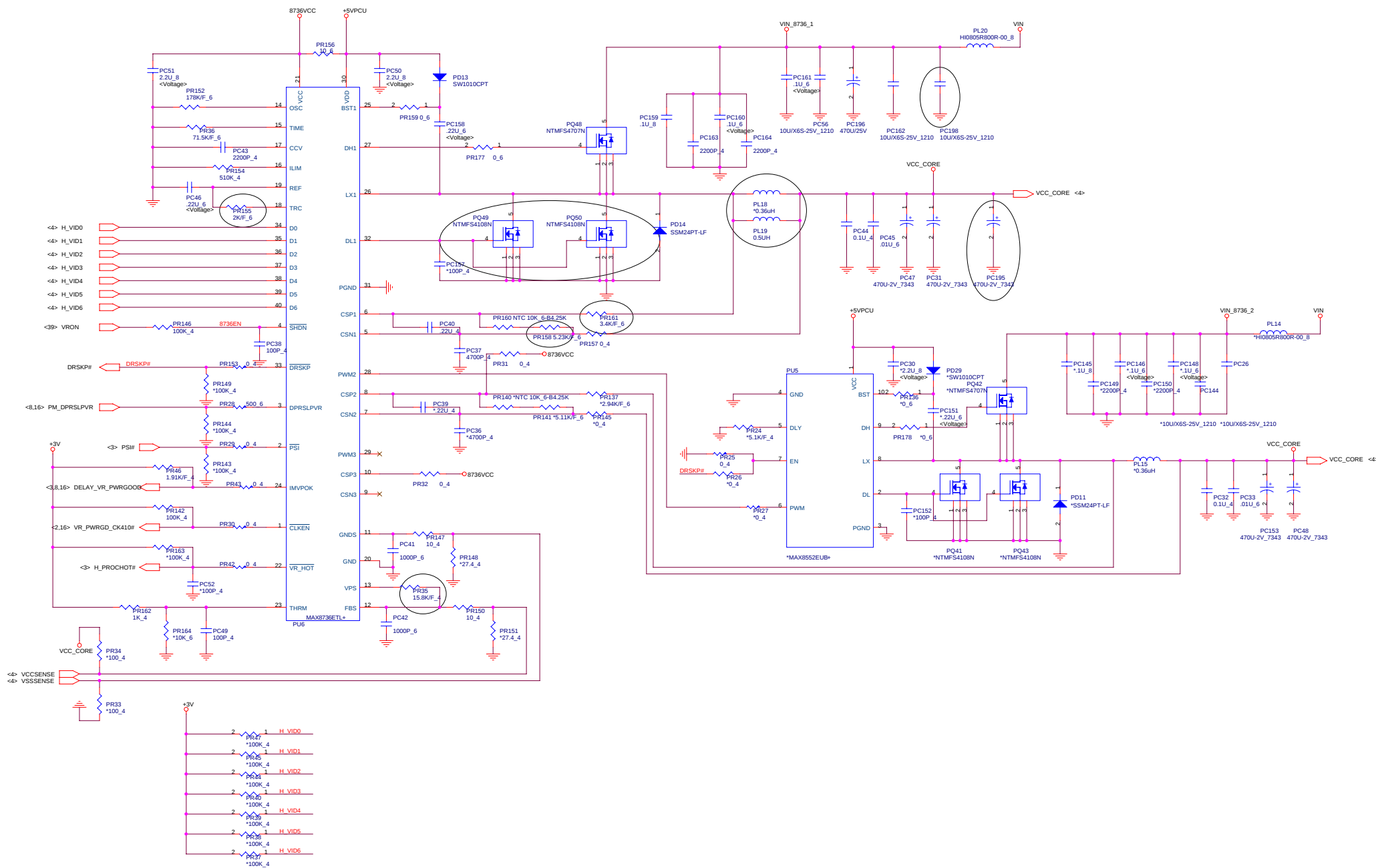
PULL LOW FOR DVO NOT PRESENT (INTERNAL PULLLOW IN 915GM)

+2.5V 250mA
+3V 190mA

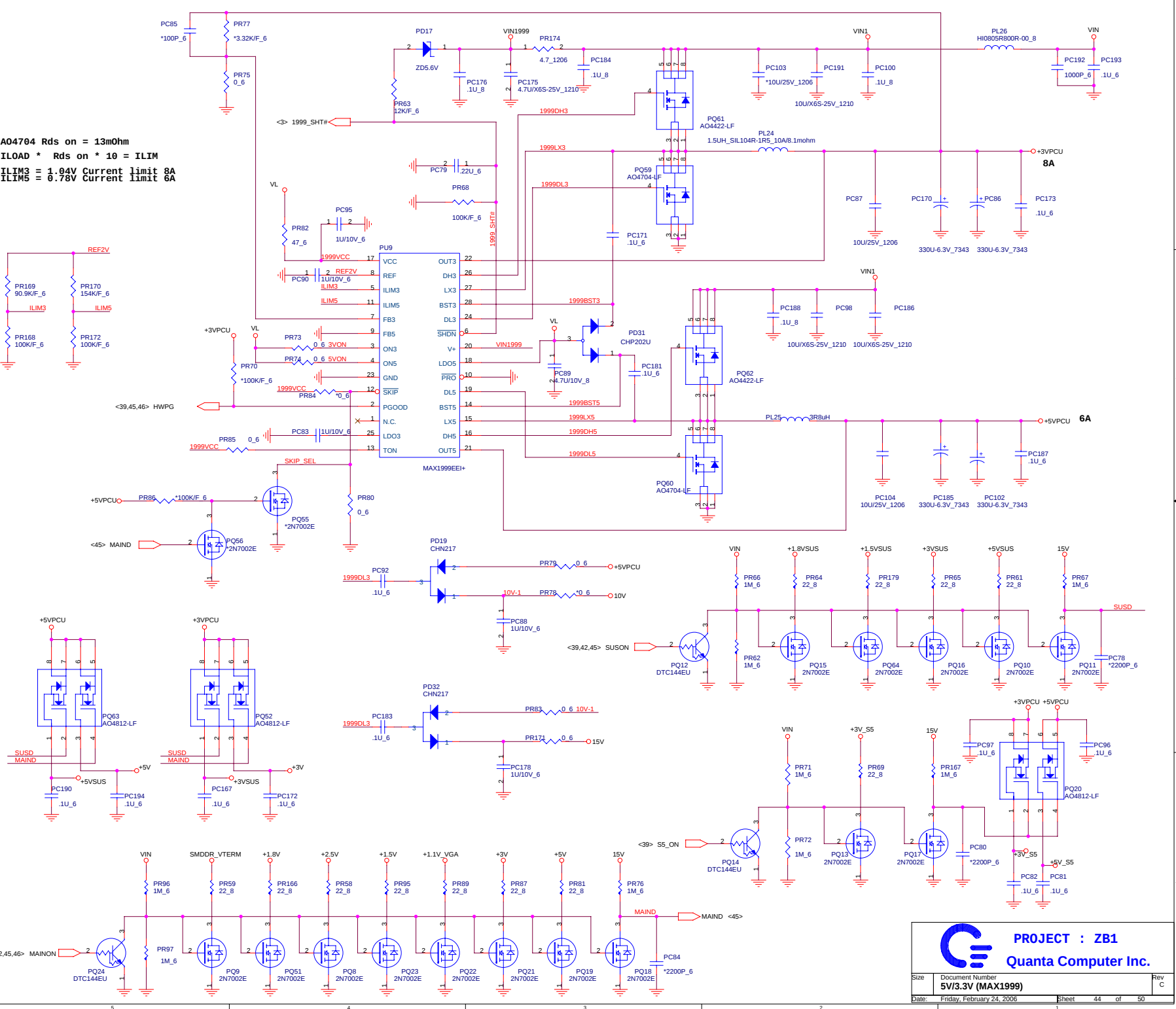


ALWAYS NOT ON, TEST ONLY

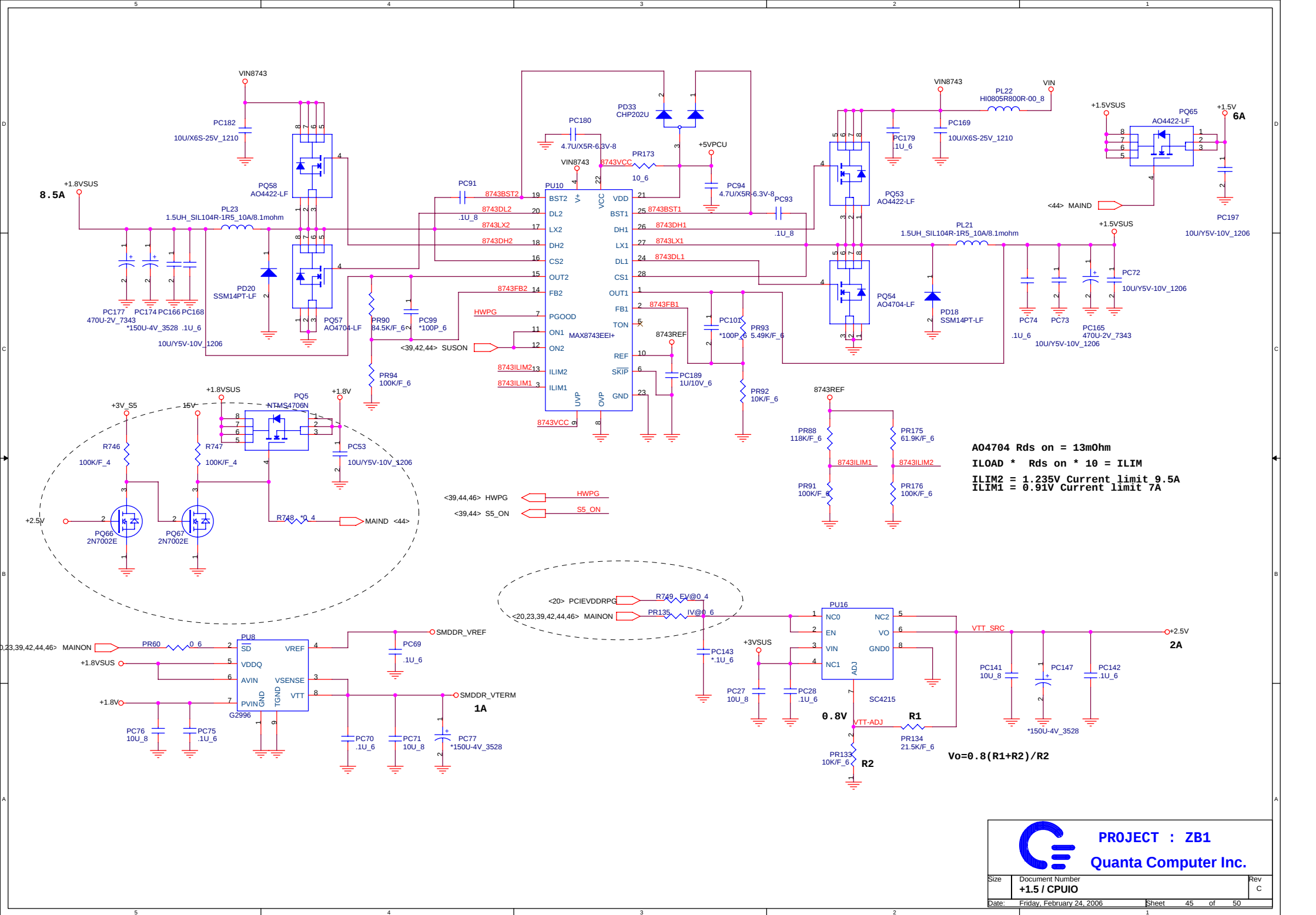


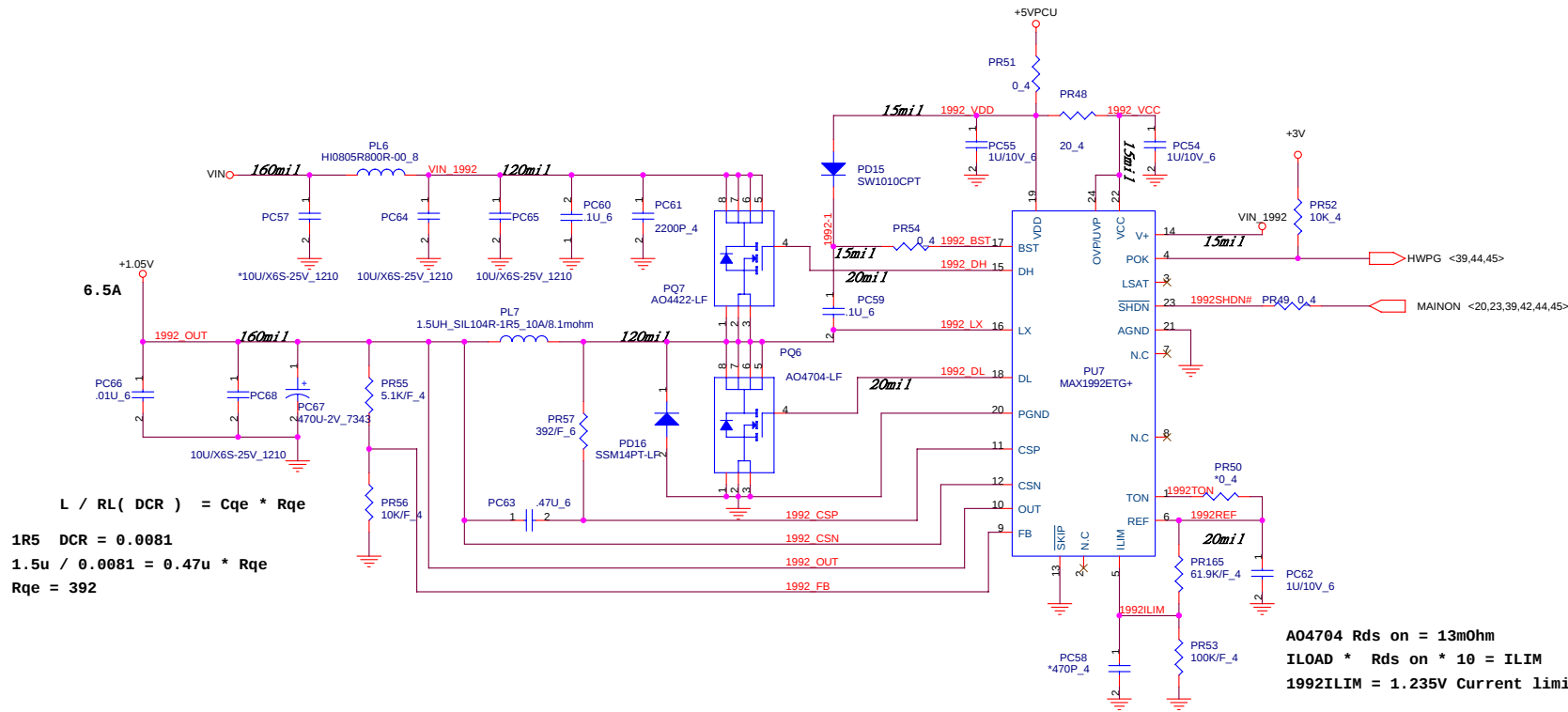


A04704 Rds on = 13mOhm
 ILOAD * Rds on * 10 = ILIM
 ILIM3 = 1.94V Current limit 8A
 ILIM5 = 0.78V Current limit 6A

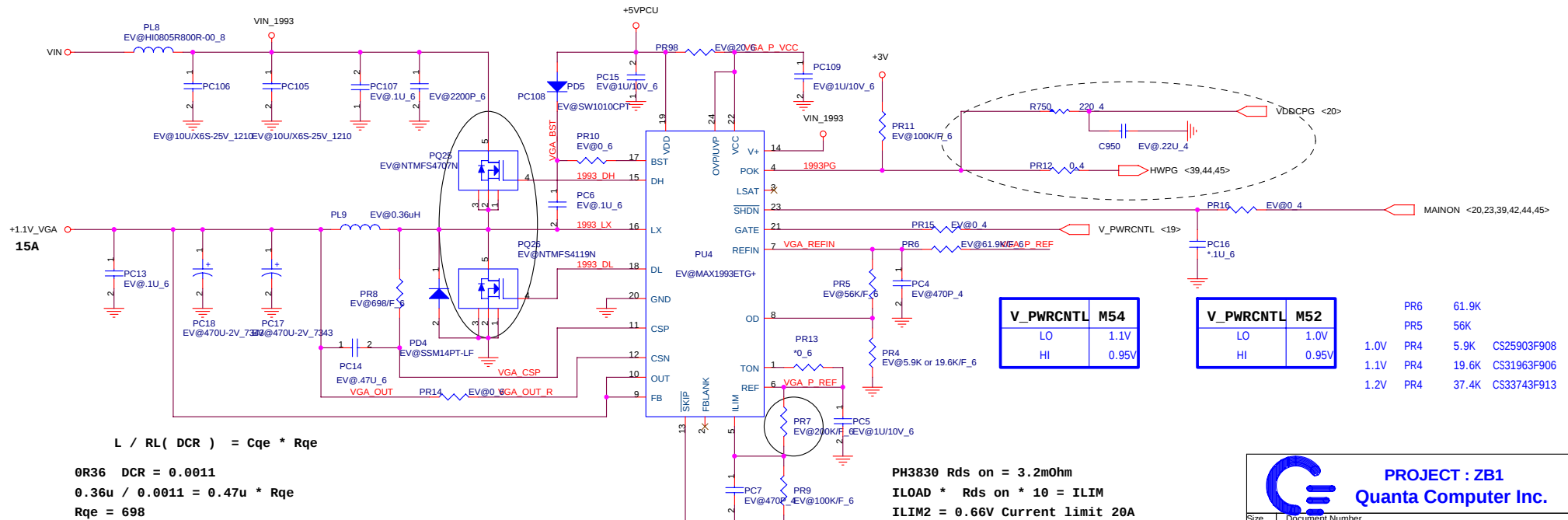


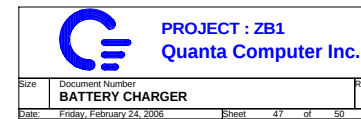
PROJECT : ZB1
Quanta Computer Inc.



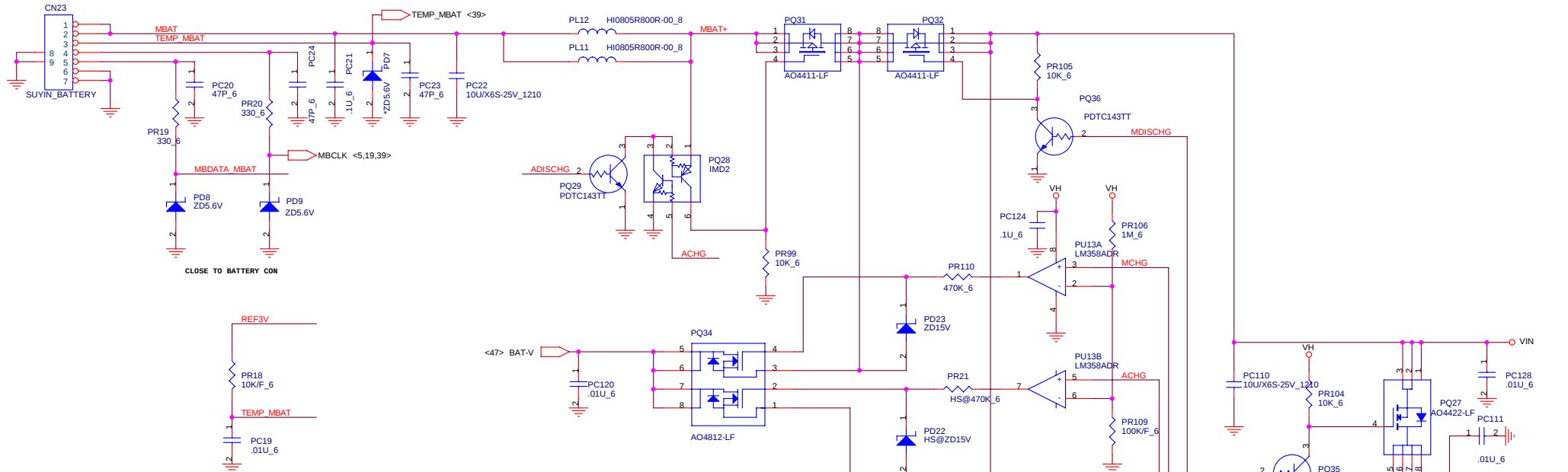


M54

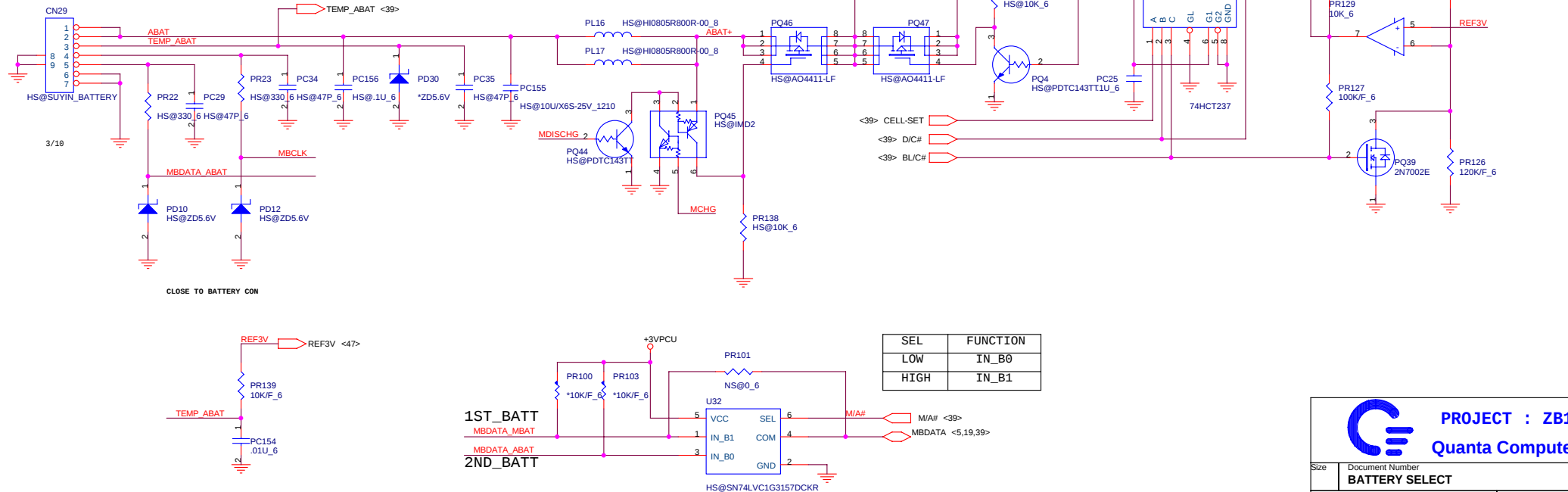




1ST_BATT_CONN



2ND_BATT_CONN



SEL	FUNCTION
LOW	IN_B0
HIGH	IN_B1



PROJECT : ZB1
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NCPP@ Unstuff when use PATA HDD + PATA ODD.
EV@ Stuff when use external VGA.
IV@ Stuff when use UMA.
M56@ unstuff when use M52/54 ASIC.
EZ@ Stuff when use EZ4.
NZ@ Stuff when no EZ4.
DI@ Stuff when use DVI port.
CT@ Stuff when UMA with DVI port.
CT_EV@ Stuff when UMA with DVI port or external VGA.
SV@ Stuff when use S-video.
GL@ Stuff when use Giga lan.
NL@ Stuff when use 10/100 lan.
CR@ Stuff when use card reader
CR_PRO@ Stuff when card reader connector use PROCONN
FI@ Stuff when use FIR.
FW@ Stuff when use IEEE1394.
PH@ Stuff when use PATA HDD.
PP@ Stuff when use PATA HDD + PATA ODD.
SH@ Stuff when use SATA HDD.
SH_SP@ Stuff when use PATA to SATA bridge.
SH_SP_SUN@ Stuff when PATA to SATA bridge use SUNPLUS chip.
SH_SP_ULI@ Stuff when PATA to SATA bridge use ULI chip.
WIRE@ Stuff when LCD connector use wire type.
TV@ Stuff when use TV in.
CD@ Stuff when use camera.
NCD@ unstuff when use camera.
HDCP@ stuff when use HDCP for ATi M5x.

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