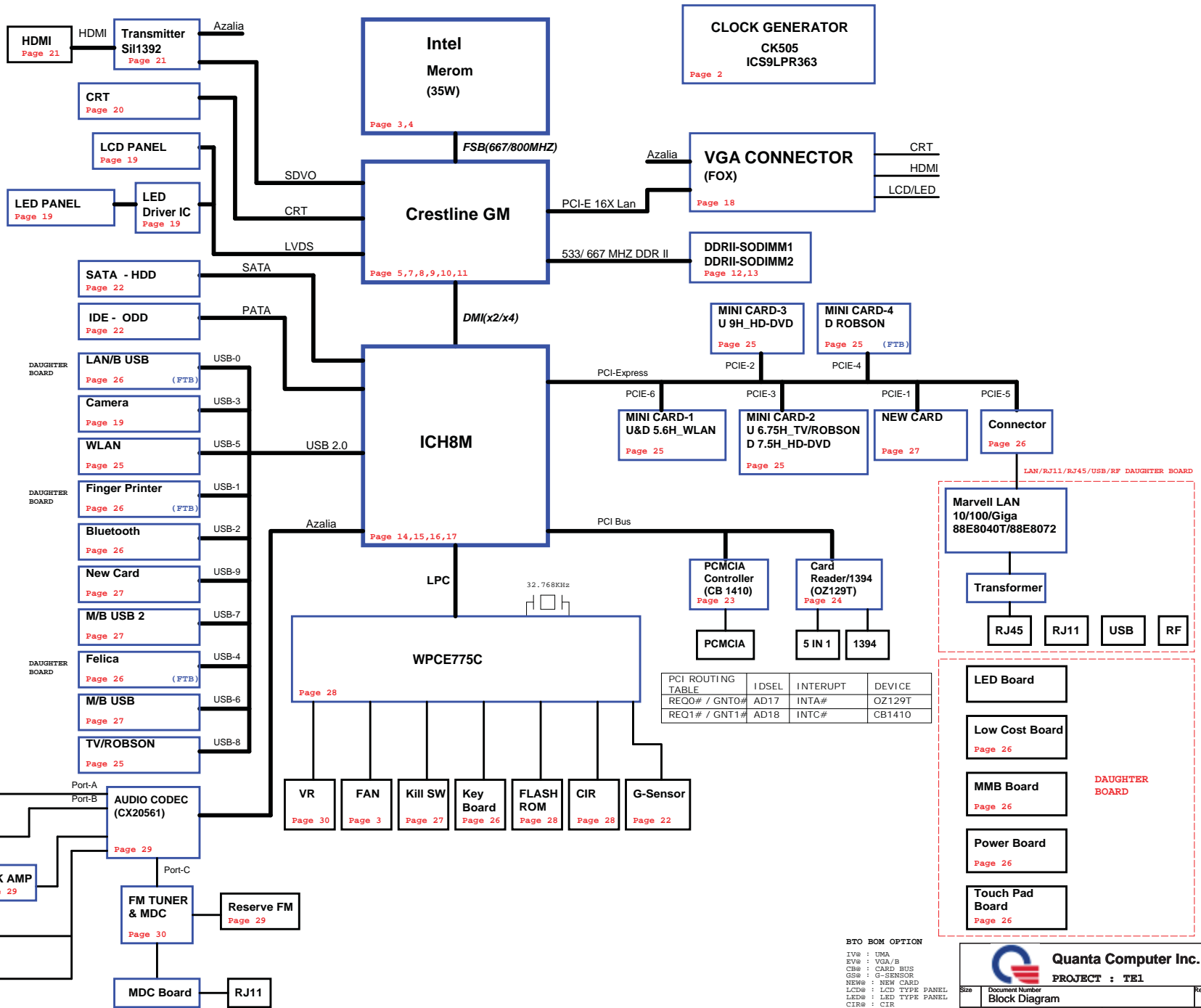


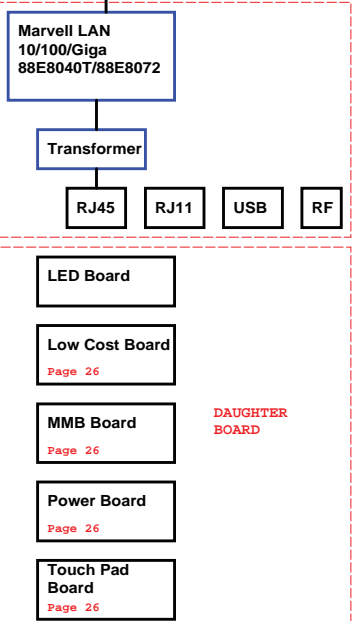
LAYER 1 : TOP
 LAYER 2 : SGND
 LAYER 3 : IN1
 LAYER 4 : VCC
 LAYER 5 : IN2
 LAYER 6 : IN3
 LAYER 7 : SGND2
 LAYER 8 : BOT

- VCC_CORE
- +1.5V
 - +1.05V
 - +1.25V
 - +1.8VSUS
 - +1.8V
 - +3VPCU
 - +3V_S5
 - +3VSUS
 - +3V
 - +5VPCU
 - +5V_S5
 - +5V
 - +SMDDR_VTERM
 - +SMDDR_VREF

TE1 Block Diagram



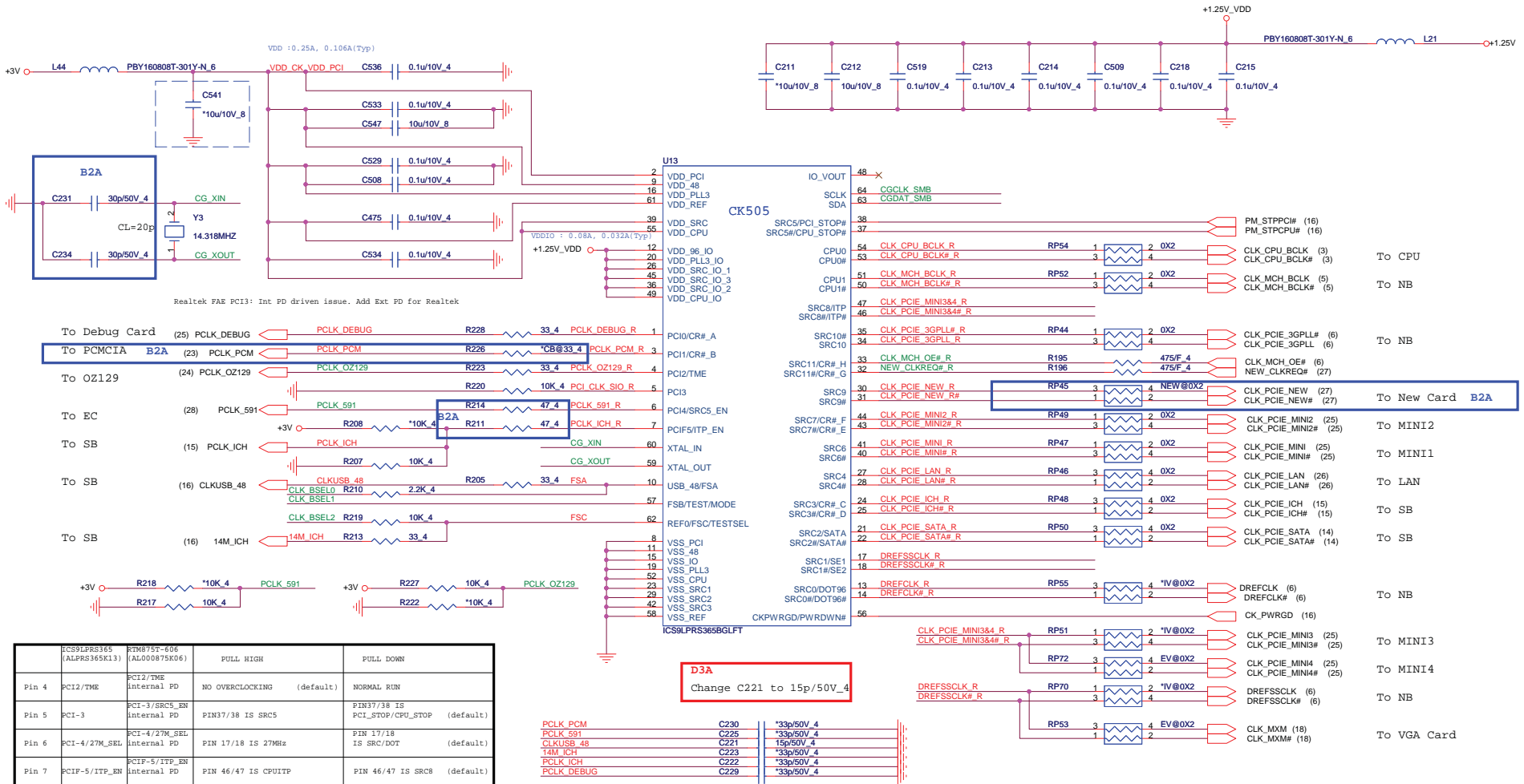
PCI ROUTING TABLE	IDSEL	INTERUPT	DEVICE
REQ0# / GNT0#	AD17	INTA#	OZ129T
REQ1# / GNT1#	AD18	INTC#	CB1410



BTO BOM OPTION

IV@ : UMA
 FVB : VGA/B
 CB@ : CARD BUS
 GS@ : G-SENSOR
 NEW@ : NEW CARD
 LCD@ : LCD TYPE PANEL
 LED@ : LED TYPE PANEL
 CIR@ : CIR

Clock Generator

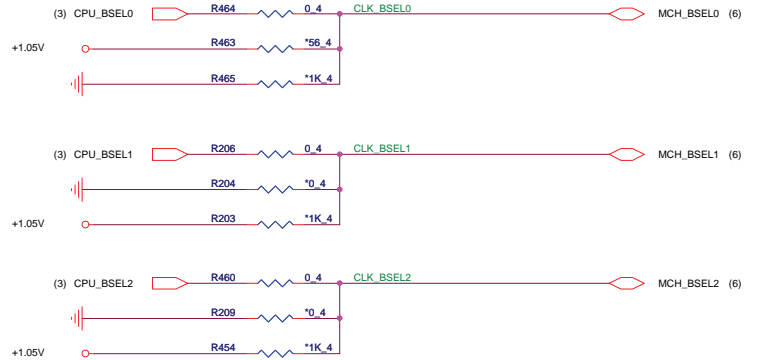


Pin	Function	Internal PD	NO OVERCLOCKING (default)	NORMAL RUN
Pin 4	PCI2/TME	PCI2/TME Internal PD	NO OVERCLOCKING (default)	NORMAL RUN
Pin 5	PCI-3	PCI-3/SRC5_EN Internal PD	PIN37/38 IS SRC5	PIN37/38 IS PCI_STOP/CPU_STOP (default)
Pin 6	PCI-4/27M_SEL	PCI-4/27M_SEL Internal PD	PIN 17/18 IS 27MHz	PIN 17/18 IS SRC/DOT (default)
Pin 7	PCIF-5/ITP_EN	PCIF-5/ITP_EN Internal PD	PIN 46/47 IS CPUITP	PIN 46/47 IS SRC8 (default)

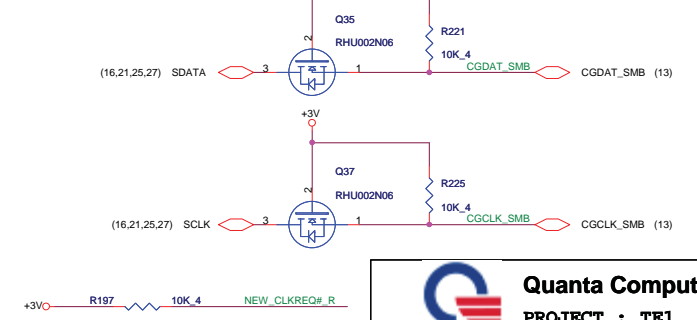
D3A
Change C221 to 15p/50V_4

BSEL Frequency Select Table

FSC	FSB	FSA	Frequency
0	0	0	266Mhz
0	0	1	133Mhz
0	1	1	166Mhz
1	1	0	400Mhz
1	1	1	Reserved
1	0	1	100Mhz
1	0	0	333Mhz



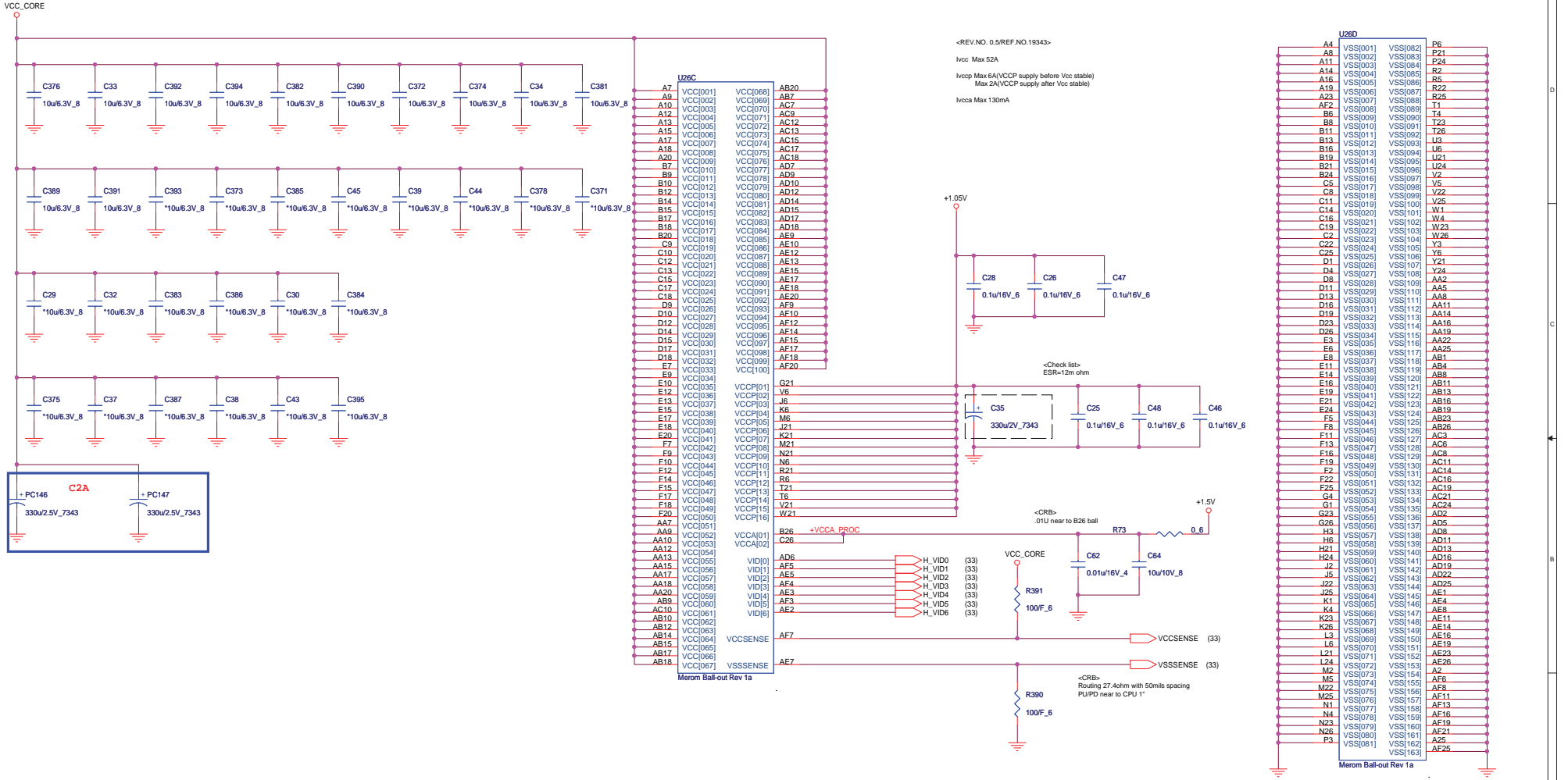
Clock Gen I2C



Quanta Computer Inc.
PROJECT : TE1

Size	Document Number	Rev
	CLK_GEN / CK505	1A
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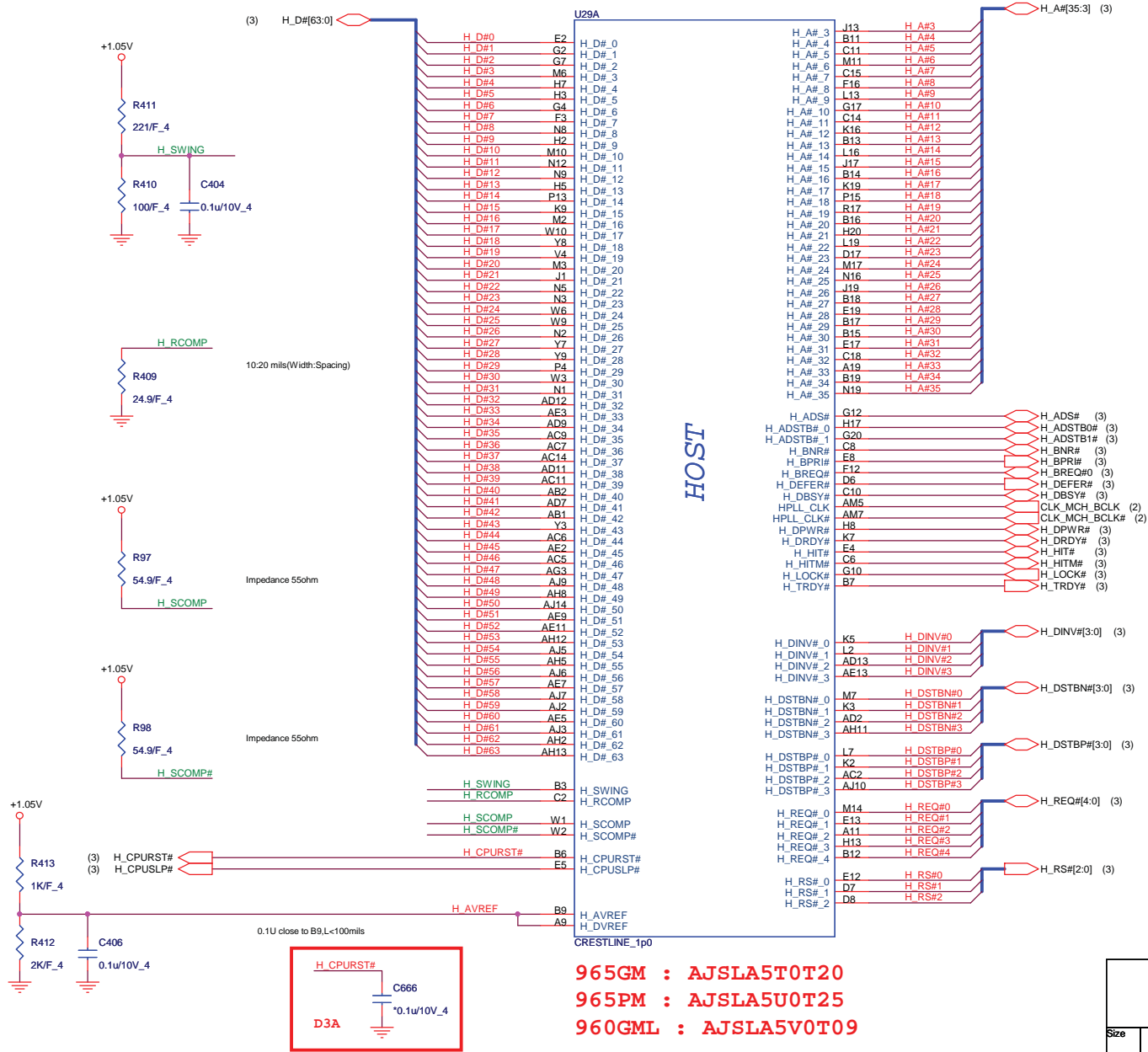
CPU (Power)



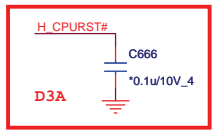
Quanta Computer Inc.
PROJECT : TE1

Size	Document Number	Rev
	CPU(2 of 2)	1A
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NB (HOST)



965GM : AJSLA5T0T20
 965PM : AJSLA5U0T25
 960GML : AJSLA5V0T09



Quanta Computer Inc.
 PROJECT : TE1

Size	Document Number	Rev
	GMCH HOST(1 of 7)	1A
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NB(Memory controller)

(13) M_A_DQ[63:0]

U29D	SA	SB
M A D00	AR43	SA_DQ_0
M A D01	AW44	SA_DQ_1
M A D02	BA45	SA_DQ_2
M A D03	AY46	SA_DQ_3
M A D04	AR41	SA_DQ_4
M A D05	AR45	SA_DQ_5
M A D06	AT42	SA_DQ_6
M A D07	AW47	SA_DQ_7
M A D08	BA48	SA_DQ_8
M A D09	BF48	SA_DQ_9
M A D10	BG47	SA_DQ_10
M A D11	BJ45	SA_DQ_11
M A D12	BE47	SA_DQ_12
M A D13	BG50	SA_DQ_13
M A D14	BH49	SA_DQ_14
M A D15	BE45	SA_DQ_15
M A D16	AW43	SA_DQ_16
M A D17	BE44	SA_DQ_17
M A D18	BG42	SA_DQ_18
M A D19	BE40	SA_DQ_19
M A D20	BF44	SA_DQ_20
M A D21	BH45	SA_DQ_21
M A D22	BG40	SA_DQ_22
M A D23	BF40	SA_DQ_23
M A D24	AR40	SA_DQ_24
M A D25	AT39	SA_DQ_25
M A D26	AW36	SA_DQ_26
M A D27	AW41	SA_DQ_27
M A D28	AY41	SA_DQ_28
M A D29	AV38	SA_DQ_29
M A D30	AT38	SA_DQ_30
M A D31	AV13	SA_DQ_31
M A D32	AT13	SA_DQ_32
M A D33	AW11	SA_DQ_33
M A D34	AV11	SA_DQ_34
M A D35	AU15	SA_DQ_35
M A D36	AT11	SA_DQ_36
M A D37	BA13	SA_DQ_37
M A D38	BA11	SA_DQ_38
M A D39	BE10	SA_DQ_39
M A D40	BD10	SA_DQ_40
M A D41	BD8	SA_DQ_41
M A D42	AY9	SA_DQ_42
M A D43	BG10	SA_DQ_43
M A D44	AW9	SA_DQ_44
M A D45	BD7	SA_DQ_45
M A D46	BB9	SA_DQ_46
M A D47	BS5	SA_DQ_47
M A D48	AY7	SA_DQ_48
M A D49	AT5	SA_DQ_49
M A D50	AT7	SA_DQ_50
M A D51	AY6	SA_DQ_51
M A D52	BS7	SA_DQ_52
M A D53	AR5	SA_DQ_53
M A D54	AR8	SA_DQ_54
M A D55	AR9	SA_DQ_55
M A D56	AN3	SA_DQ_56
M A D57	AM8	SA_DQ_57
M A D58	AN10	SA_DQ_58
M A D59	AT9	SA_DQ_59
M A D60	AN9	SA_DQ_60
M A D61	AM9	SA_DQ_61
M A D62	AN11	SA_DQ_62
M A D63	AN11	SA_DQ_63

DDR SYSTEM MEMORY A

SA	SB	SA	SB
SA_BS_0	BB19	M_A_BS#0 (12,13)	
SA_BS_1	BK19	M_A_BS#1 (12,13)	
SA_BS_2	BF19	M_A_BS#2 (12,13)	
SA_CAS#	BL17	M_A_CAS# (12,13)	
SA_DM_0	AT45	M_A_DM#0 (13)	
SA_DM_1	BD44	M_A_DM#1 (13)	
SA_DM_2	BD42	M_A_DM#2 (13)	
SA_DM_3	AW38	M_A_DM#3 (13)	
SA_DM_4	AW13	M_A_DM#4 (13)	
SA_DM_5	BG8	M_A_DM#5 (13)	
SA_DM_6	AY5	M_A_DM#6 (13)	
SA_DM_7	AN6	M_A_DM#7 (13)	
SA_DQS_0	AT46	M_A_DQS#0 (13)	
SA_DQS_1	BE48	M_A_DQS#1 (13)	
SA_DQS_2	BH43	M_A_DQS#2 (13)	
SA_DQS_3	BC37	M_A_DQS#3 (13)	
SA_DQS_4	BB16	M_A_DQS#4 (13)	
SA_DQS_5	BH6	M_A_DQS#5 (13)	
SA_DQS_6	BS2	M_A_DQS#6 (13)	
SA_DQS_7	AP3	M_A_DQS#7 (13)	
SA_DQS#_0	AT47	M_A_DQS#0 (13)	
SA_DQS#_1	BD47	M_A_DQS#1 (13)	
SA_DQS#_2	BC41	M_A_DQS#2 (13)	
SA_DQS#_3	BA37	M_A_DQS#3 (13)	
SA_DQS#_4	BA16	M_A_DQS#4 (13)	
SA_DQS#_5	BH7	M_A_DQS#5 (13)	
SA_DQS#_6	BC1	M_A_DQS#6 (13)	
SA_DQS#_7	AP2	M_A_DQS#7 (13)	
SA_MA_0	BJ19	M_A_A[13:0] (12,13)	
SA_MA_1	BD20	M_A_A1	
SA_MA_2	BK27	M_A_A2	
SA_MA_3	BH28	M_A_A3	
SA_MA_4	BL24	M_A_A4	
SA_MA_5	BK28	M_A_A5	
SA_MA_6	BJ27	M_A_A6	
SA_MA_7	BJ25	M_A_A7	
SA_MA_8	BL28	M_A_A8	
SA_MA_9	BA28	M_A_A9	
SA_MA_10	BC19	M_A_A10	
SA_MA_11	BE28	M_A_A11	
SA_MA_12	BG30	M_A_A12	
SA_MA_13	BJ16	M_A_A13	
SA_RAS#	BE18	M_A_RAS# (12,13)	
SA_RCVEN#	AY20	TP_SA_RCVEN#	T24
SA_WE#	BA19	M_A_WE# (12,13)	

CRESTLINE_1p0

(13) M_B_DQ[63:0]

U29E	SB	SB
M B D00	AP49	SB_DQ_0
M B D01	AR51	SB_DQ_1
M B D02	AW50	SB_DQ_2
M B D03	AW51	SB_DQ_3
M B D04	AN50	SB_DQ_4
M B D05	AN50	SB_DQ_5
M B D06	AV50	SB_DQ_6
M B D07	AV49	SB_DQ_7
M B D08	BA50	SB_DQ_8
M B D09	BB50	SB_DQ_9
M B D10	BA49	SB_DQ_10
M B D11	BE50	SB_DQ_11
M B D12	AY51	SB_DQ_12
M B D13	AY49	SB_DQ_13
M B D14	BF50	SB_DQ_14
M B D15	BF49	SB_DQ_15
M B D16	BJ50	SB_DQ_16
M B D17	BJ44	SB_DQ_17
M B D18	BJ43	SB_DQ_18
M B D19	BL43	SB_DQ_19
M B D20	BK47	SB_DQ_20
M B D21	BK49	SB_DQ_21
M B D22	BK43	SB_DQ_22
M B D23	BK42	SB_DQ_23
M B D24	BJ41	SB_DQ_24
M B D25	BL41	SB_DQ_25
M B D26	BJ37	SB_DQ_26
M B D27	BJ36	SB_DQ_27
M B D28	BK41	SB_DQ_28
M B D29	BJ40	SB_DQ_29
M B D30	BL35	SB_DQ_30
M B D31	BK37	SB_DQ_31
M B D32	BK13	SB_DQ_32
M B D33	BE11	SB_DQ_33
M B D34	BK11	SB_DQ_34
M B D35	BC13	SB_DQ_35
M B D36	BC13	SB_DQ_36
M B D37	BE12	SB_DQ_37
M B D38	BC12	SB_DQ_38
M B D39	BG12	SB_DQ_39
M B D40	BJ10	SB_DQ_40
M B D41	BL9	SB_DQ_41
M B D42	BK5	SB_DQ_42
M B D43	BL5	SB_DQ_43
M B D44	BK9	SB_DQ_44
M B D45	BK10	SB_DQ_45
M B D46	BJ8	SB_DQ_46
M B D47	BJ6	SB_DQ_47
M B D48	BF4	SB_DQ_48
M B D49	BH5	SB_DQ_49
M B D50	BG1	SB_DQ_50
M B D51	BC2	SB_DQ_51
M B D52	BK3	SB_DQ_52
M B D53	BE4	SB_DQ_53
M B D54	BD3	SB_DQ_54
M B D55	BJ2	SB_DQ_55
M B D56	BA3	SB_DQ_56
M B D57	BB3	SB_DQ_57
M B D58	AR1	SB_DQ_58
M B D59	AT3	SB_DQ_59
M B D60	AY2	SB_DQ_60
M B D61	AY3	SB_DQ_61
M B D62	AU2	SB_DQ_62
M B D63	AT2	SB_DQ_63

DDR SYSTEM MEMORY B

CRESTLINE_1p0

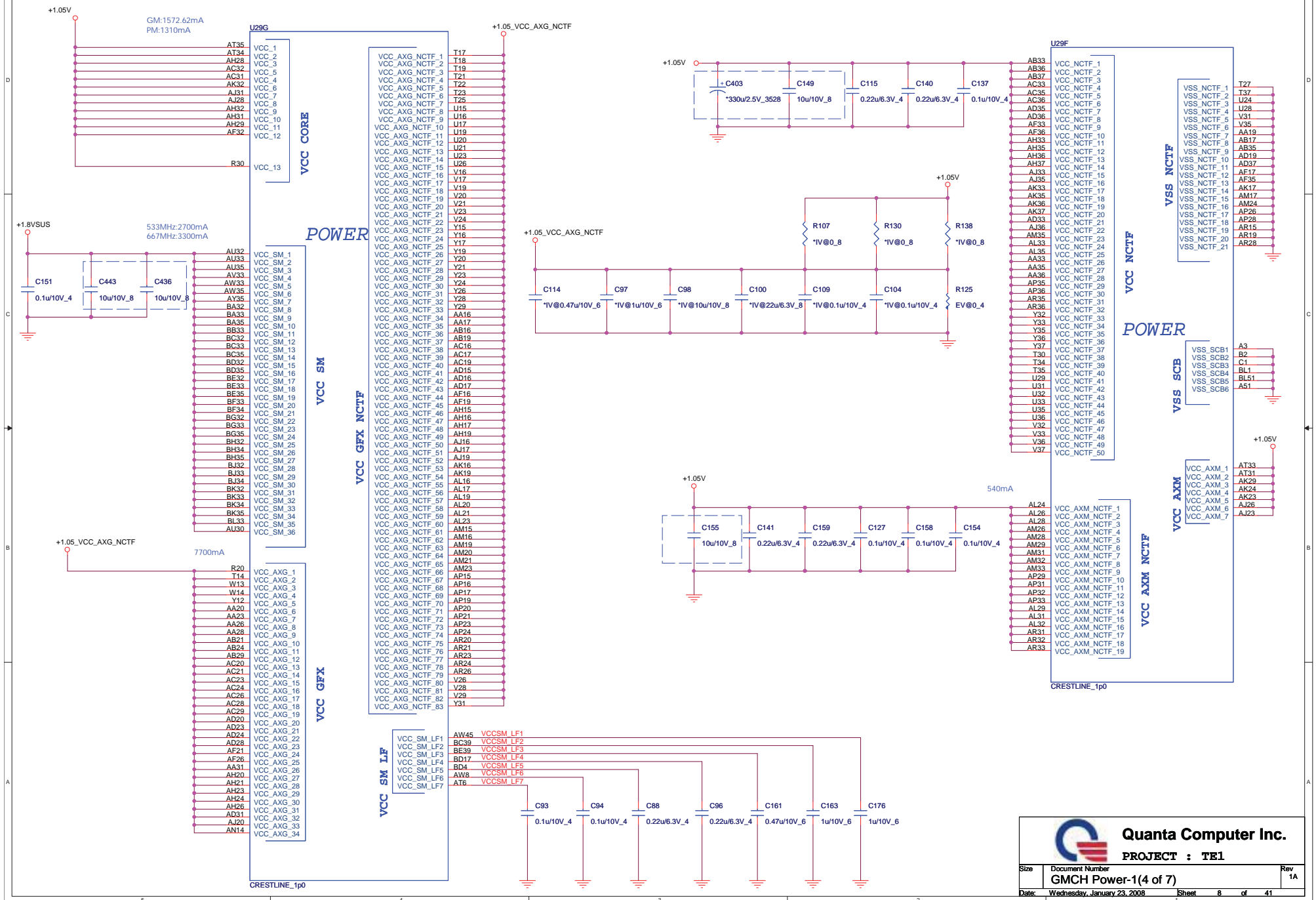
SB	SB	SB	SB
SB_BS_0	AY17	M_B_BS#0 (12,13)	
SB_BS_1	BG18	M_B_BS#1 (12,13)	
SB_BS_2	BG38	M_B_BS#2 (12,13)	
SB_CAS#	BE17	M_B_CAS# (12,13)	
SB_DM_0	AR50	M_B_DM#0 (13)	
SB_DM_1	BD49	M_B_DM#1 (13)	
SB_DM_2	BK45	M_B_DM#2 (13)	
SB_DM_3	BL39	M_B_DM#3 (13)	
SB_DM_4	BH12	M_B_DM#4 (13)	
SB_DM_5	BJ7	M_B_DM#5 (13)	
SB_DM_6	BF3	M_B_DM#6 (13)	
SB_DM_7	AW2	M_B_DM#7 (13)	
SB_DQS_0	AT50	M_B_DQS#0 (13)	
SB_DQS_1	BD50	M_B_DQS#1 (13)	
SB_DQS_2	BK48	M_B_DQS#2 (13)	
SB_DQS_3	BK39	M_B_DQS#3 (13)	
SB_DQS_4	BJ12	M_B_DQS#4 (13)	
SB_DQS_5	BL7	M_B_DQS#5 (13)	
SB_DQS_6	BE2	M_B_DQS#6 (13)	
SB_DQS_7	AV2	M_B_DQS#7 (13)	
SB_DQS#_0	AU50	M_B_DQS#0 (13)	
SB_DQS#_1	BC50	M_B_DQS#1 (13)	
SB_DQS#_2	BL45	M_B_DQS#2 (13)	
SB_DQS#_3	BK38	M_B_DQS#3 (13)	
SB_DQS#_4	BK12	M_B_DQS#4 (13)	
SB_DQS#_5	BK7	M_B_DQS#5 (13)	
SB_DQS#_6	BF2	M_B_DQS#6 (13)	
SB_DQS#_7	AV3	M_B_DQS#7 (13)	
SB_MA_0	BC18	M_B_A[13:0] (12,13)	
SB_MA_1	BG28	M_B_A1	
SB_MA_2	BG25	M_B_A2	
SB_MA_3	AW17	M_B_A3	
SB_MA_4	BE25	M_B_A4	
SB_MA_5	BE25	M_B_A5	
SB_MA_6	BA29	M_B_A6	
SB_MA_7	BC28	M_B_A7	
SB_MA_8	AY28	M_B_A8	
SB_MA_9	BD37	M_B_A9	
SB_MA_10	BG17	M_B_A10	
SB_MA_11	BE37	M_B_A11	
SB_MA_12	BA39	M_B_A12	
SB_MA_13	BG13	M_B_A13	
SB_RAS#	AV16	M_B_RAS# (12,13)	
SB_RCVEN#	AY18	TP_SB_RCVEN#	T14
SB_WE#	BC17	M_B_WE# (12,13)	



Quanta Computer Inc.
PROJECT : TE1

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	MCH DDR(3 of 7)	1A
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NB(Power-1)



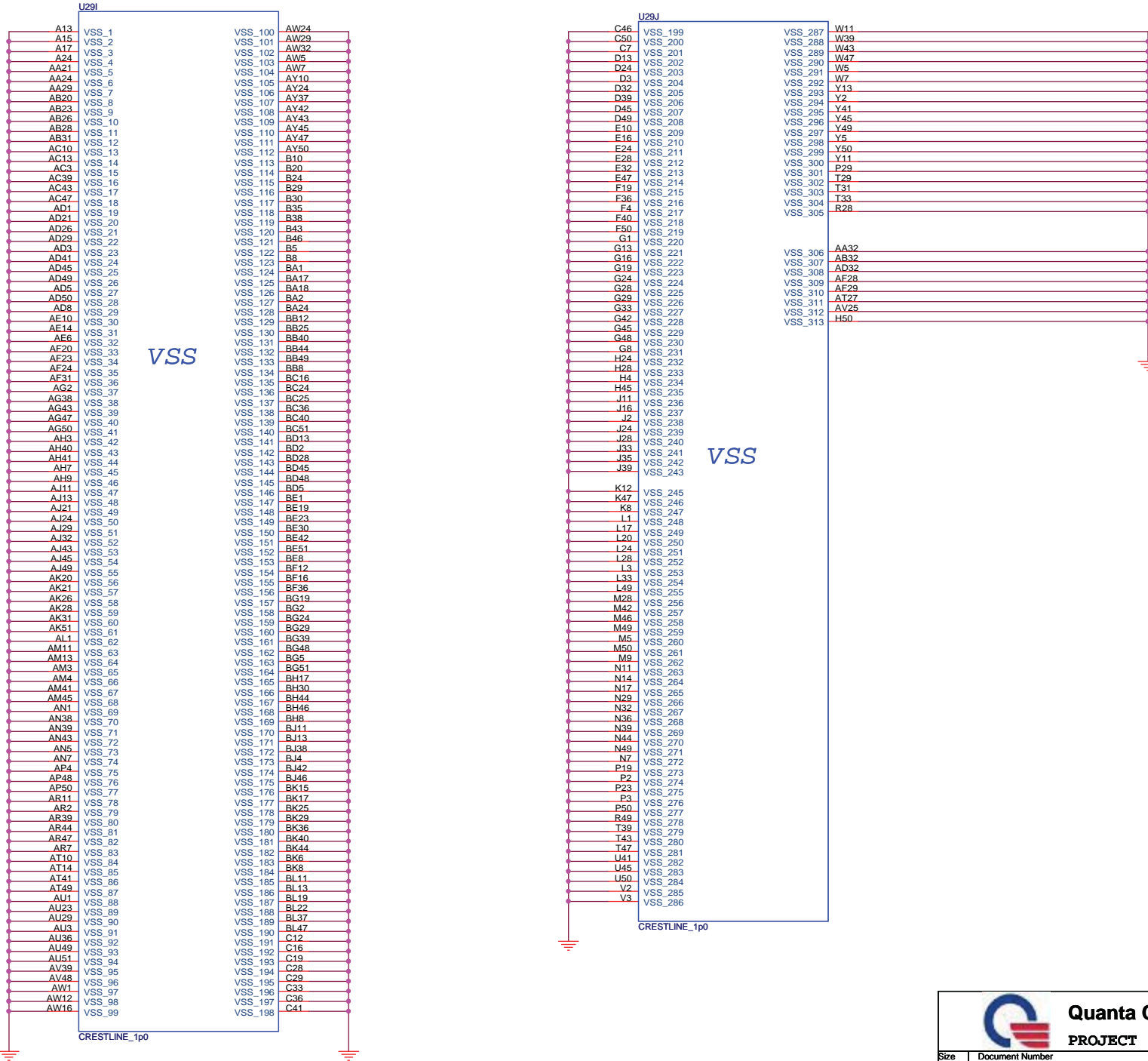
Quanta Computer Inc.
PROJECT : TE1


Size: Document Number
 GMCH Power-1(4 of 7)

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Rev 1A

NB(Power-3)



 Quanta Computer Inc.	
PROJECT : TE1	
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Strap table(base on checklist Ver1.6)

All strap are sampled with respect to the leading edge of the GMCH Power OK(PWROK) Signal

CFG[17:3] Have internal Pull-up

CFG[18:19] Have internal Pull-down

Any CFG signal strapping option not list below should be left NC Pin

Pin Name	Strap description	Configuration
CFG[2:0]	FSB Frequency Select	010 = FSB 800MHz 011 = FSB 667MHz
CFG[4:3]	Reserved	
CFG5	DMI X2 Select	0 = DMI X2 1 = DMI X4(Default)
CFG6	Reserved	
CFG7	Intel? Management Engine Crypto strap	0 = Intel? Management Engine Crypto Transport Layer.Security (TLS) cipher suite with no confidentiality 1= Intel Management Engine Crypto TLS Cipher Suite with confidentiality (default)
CFG8	Reserved	
CFG9	PCI Express Graphics Lane Reversal	0 = Reverse Lanes 1 = Normal operation(Default)
CFG[11:10]	Reserved	
CFG[13:12]	XOR/ALLZ	00 = Reserved 01 = XOR Mode Enable 10 = All-Z Mode Enabled 11 = Normal operation(Default)
CFG[15:14]	Reserved	
CFG16	FSB Dynamic ODT	0 = Dynamic ODT disable 1 = Dynamic ODT Enable(Default)
CFG[18:17]	Reserved	
SDVO_CTRLDATA	SDVO Present	0 = No SDVO Card present(Default) 1 = SDVO Card Present
CFG19	DMI Lane Reversal	0 = Normal operation(Default) 1 = Reverse Lanes
CFG20	SDVO/PCIE concurrent	0 = Only SDVO or PCIE is operation(Default) 1 = SDVO and PCIE are operating simultaneously via the PEG port

DMI X2 Select

MCH_CFG_5	Low = DMIX2 High = IDMIX4(Default)
-----------	---------------------------------------



DMI Lane Reversal

MCH_CFG_19	Low = Normal operation(Default) High = Reverse Lane
------------	--



FSB Dynamic ODT

MCH_CFG_16	Low = ODT Disable High = ODT Enable(Default)
------------	---



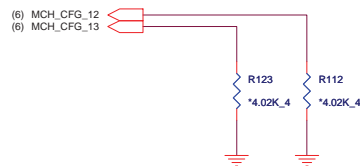
SDVO/PCIE Concurrent operation

MCH_CFG_20	Low = Only SDVO or PCIE is operational(Default) High = SDVO andPCIE are operating simultaneously via the PEG port
------------	--



XOR /ALLz /Clock Un-gating

MCH_CFG_2	MCH_CFG_13	Configuration
0	0	Clock gating disable
0	1	XOR Mode Enable
1	0	ALL-z Mode Enable
1	1	Normal operation(Default)




PCI Express Graphics

MCH_CFG_9	Low = Reverse Lane High = Normal operation(Default)
-----------	--



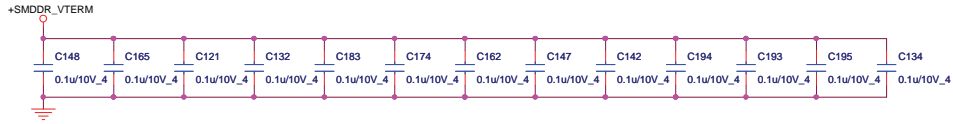
SDVO Present

Strap define at External HDMI control page

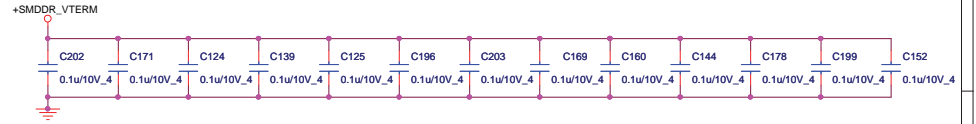
 Quanta Computer Inc. PROJECT : TEL		Rev 1A
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DDRII A CHANNEL

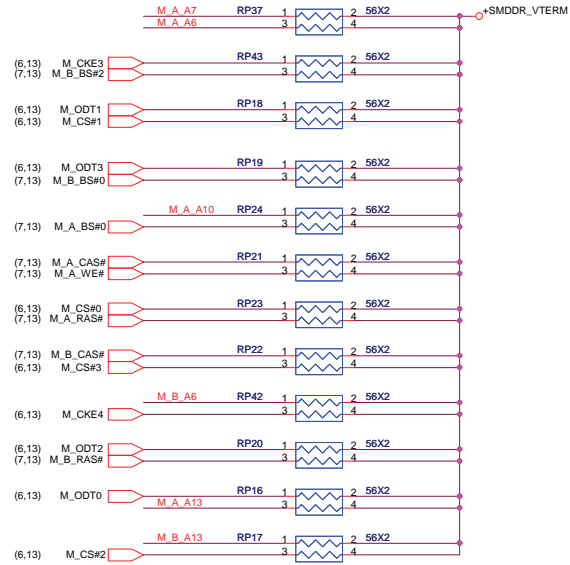
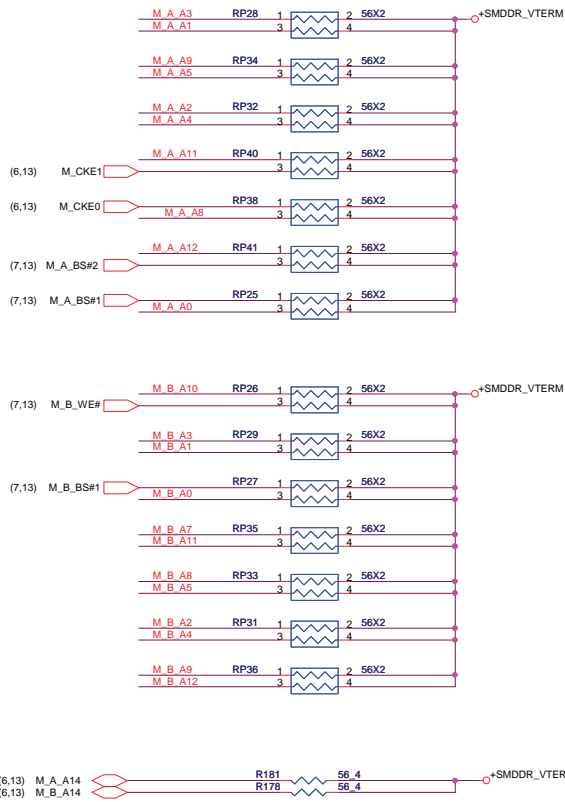
M_A_A[13..0] M_A_A[13..0] (7,13)
 M_B_A[13..0] M_B_A[13..0] (7,13)

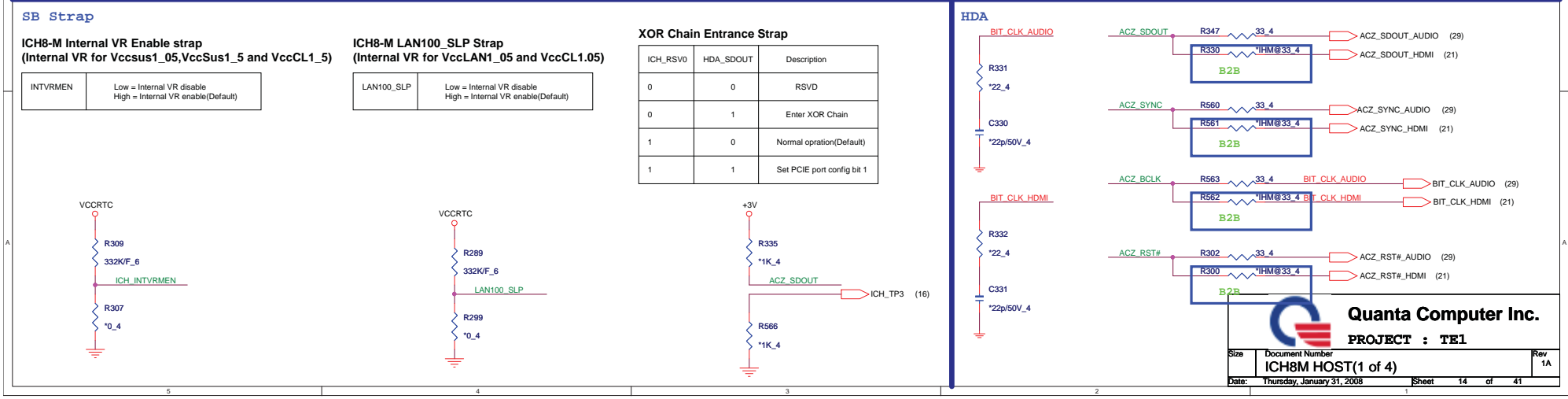
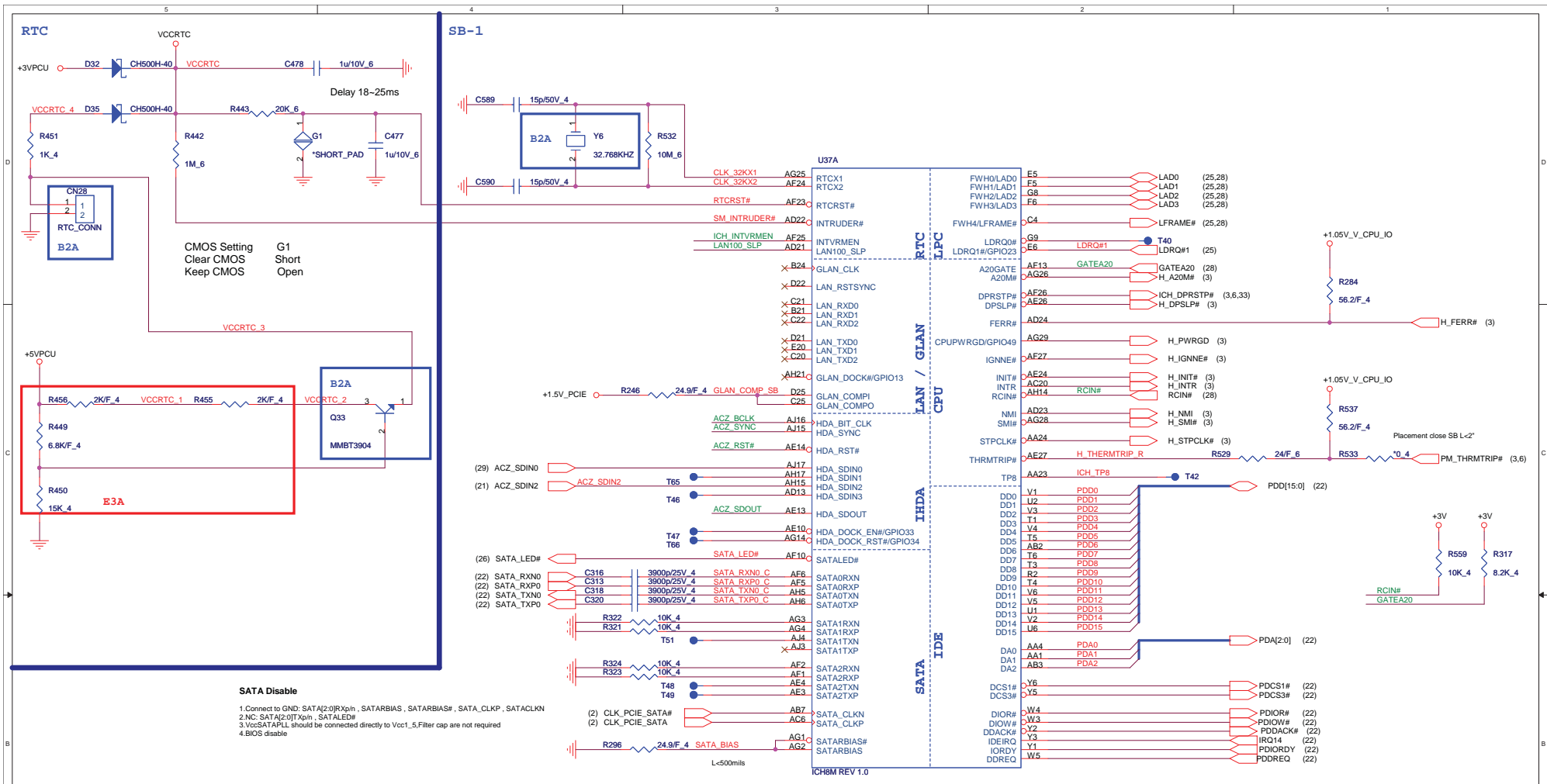


DDRII B CHANNEL

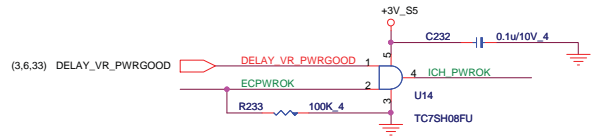
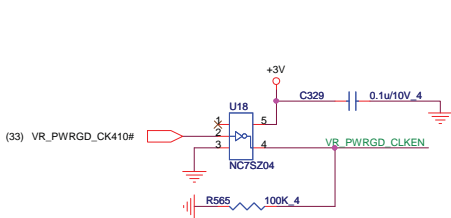
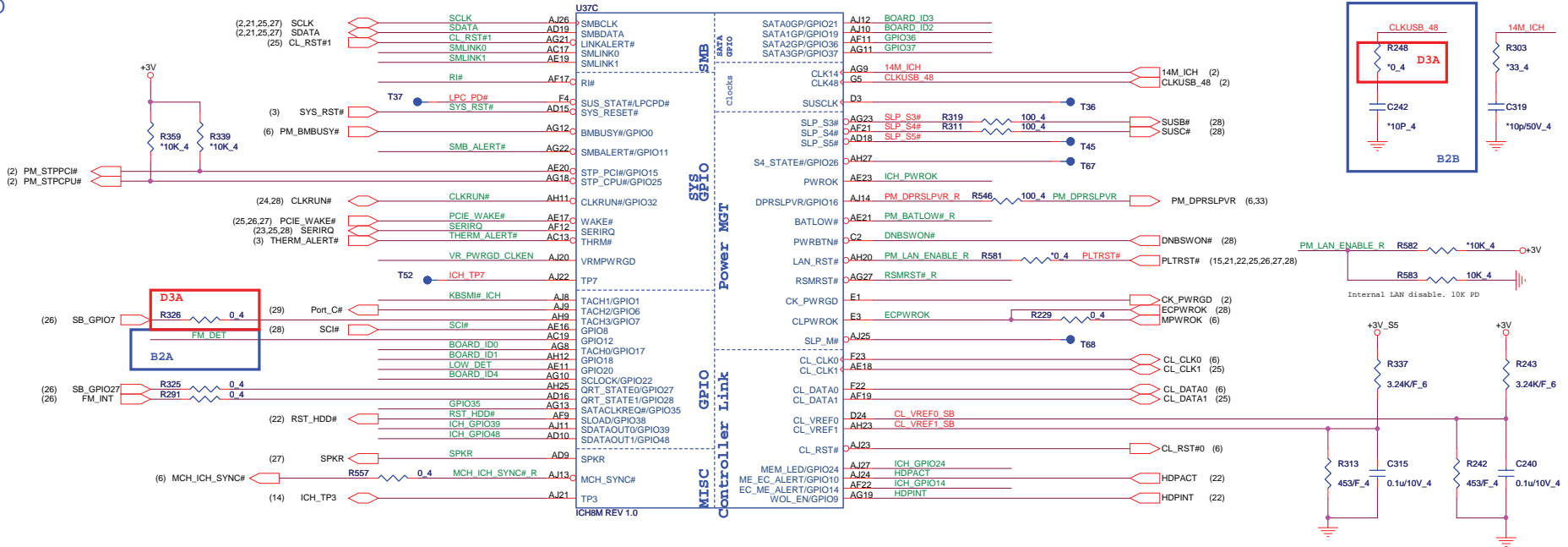


Place one cap close to every 2 pull-up resistor terminated to SMDDR_VTERM



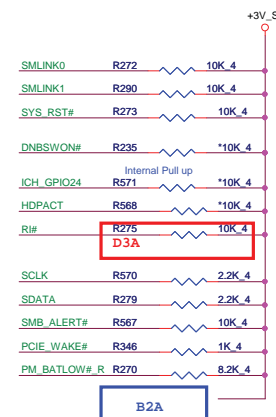
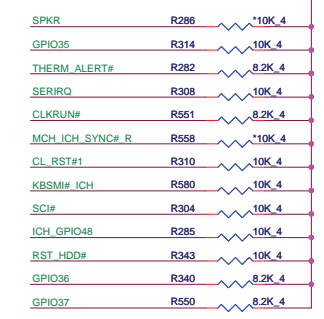


SB-GPIO

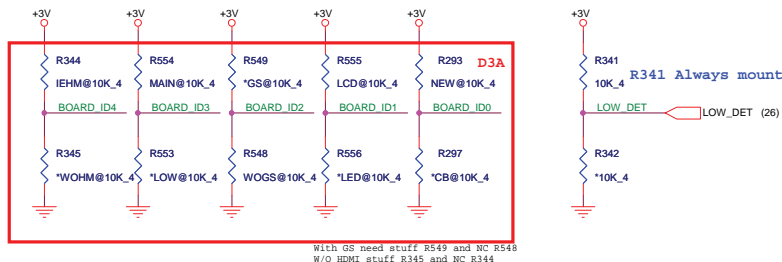


No Reboot strap

SPKR	Low = Default High = No Reboot
------	-----------------------------------

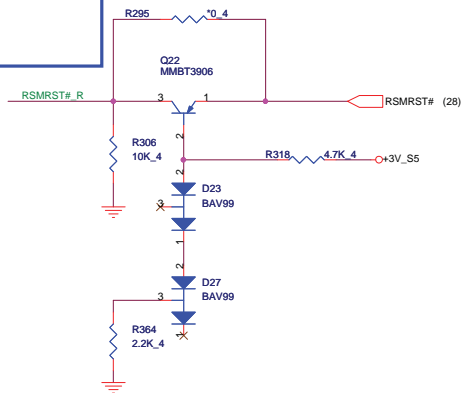
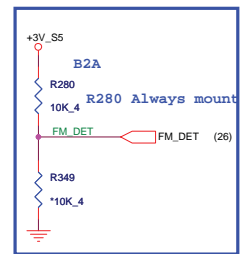



B2A



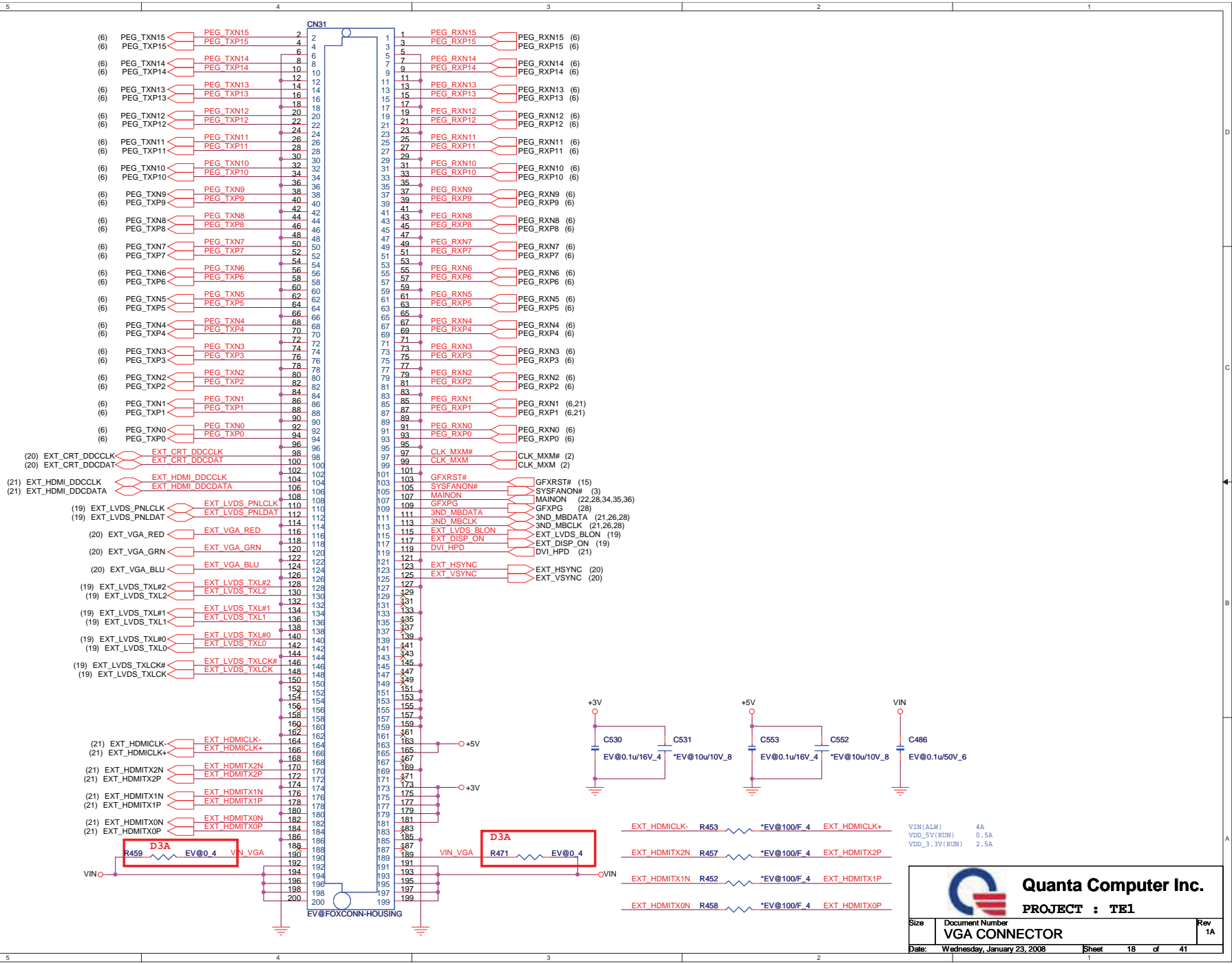
D3A
Change Board ID3 to ID detect and modify Low Cost board detect

Board ID	ID4	ID3	ID2	ID1	ID0	M/L	FM
NEW CARD CARD BUS					H L		
CCFL Panel LED Panel				H L			
W/ G-SENSOR W/O G-SENSOR			H L				
Main stream ID Low Cost ID		H L					
W/ HDMI W/O HDMI	H L						
W/O Low Cost board W Low Cost					H L		
W/O FM W FM						H L	




Quanta Computer Inc.
 PROJECT : TEL
 Size Document Number
ICH8M GPIO(3 of 4)
 Date: Wednesday, January 23, 2008 Sheet 16 of 41 Rev 1A

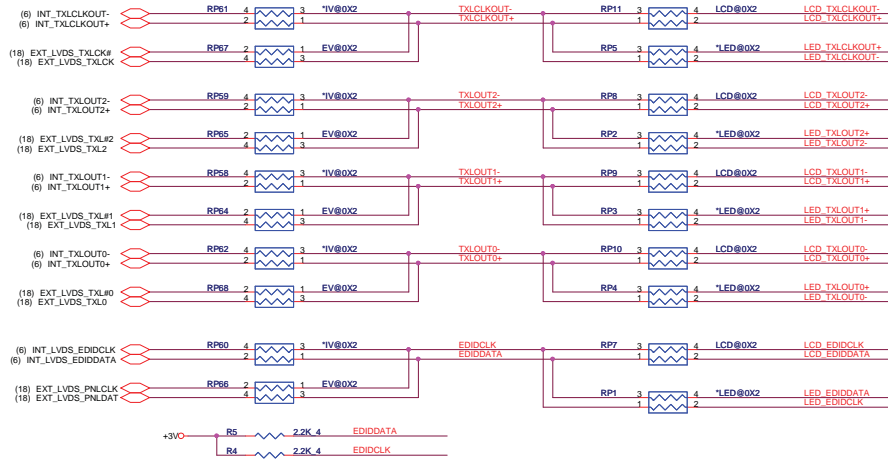
VGA/B conn



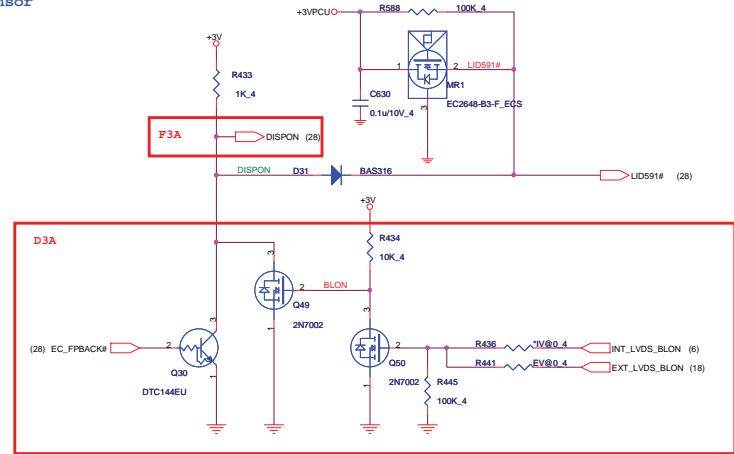
Quanta Computer Inc.
PROJECT : TE1

VIN (ALW) 4A
VDD_5V (RUN) 0.5A
VDD_3.3V (RUN) 2.5A

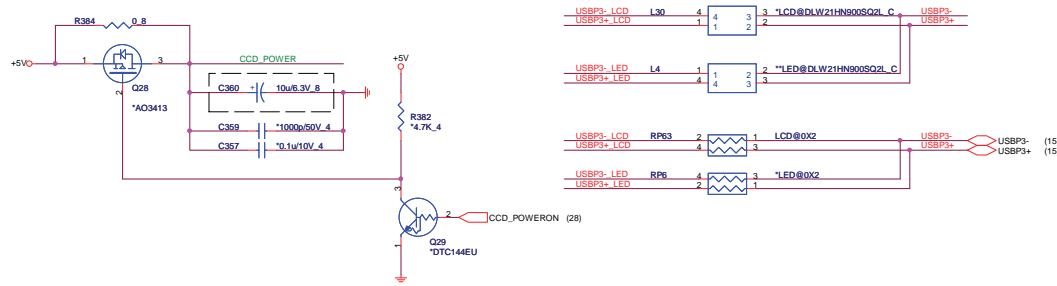
Panel source



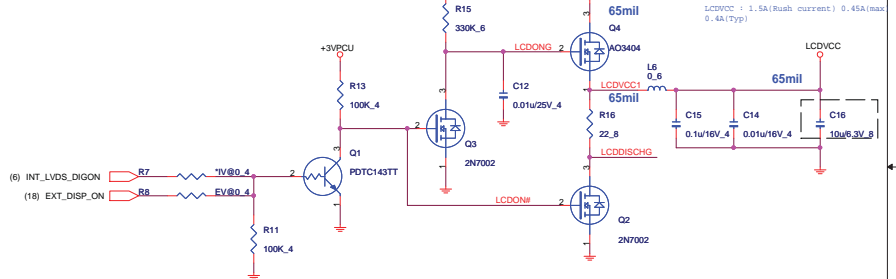
HALL Sensor



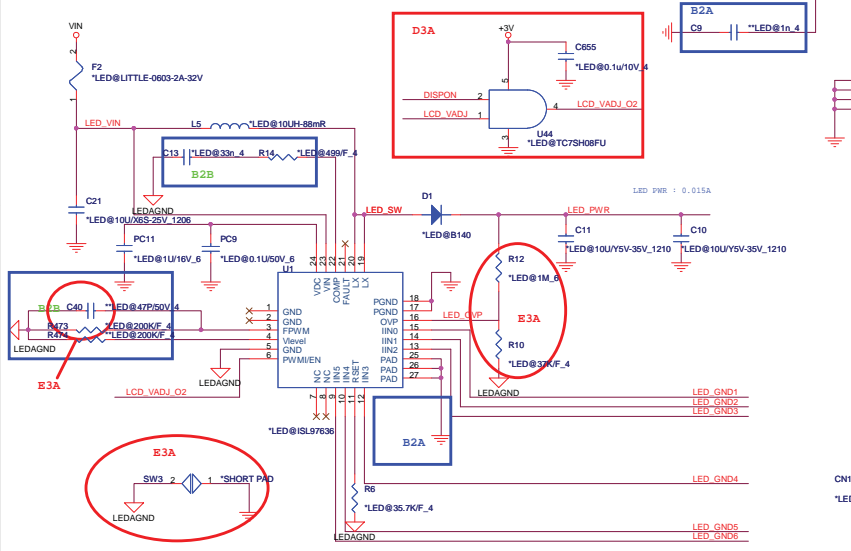
CAMERA Module



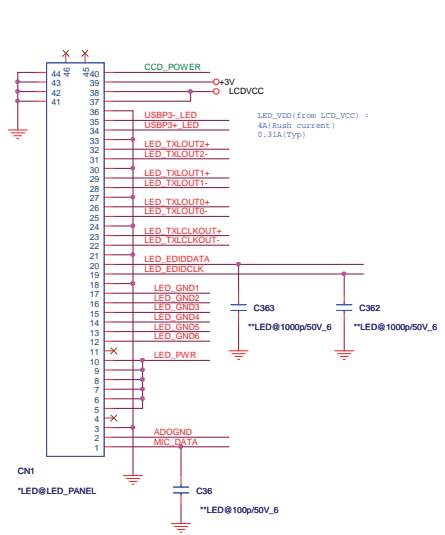
Panel Power



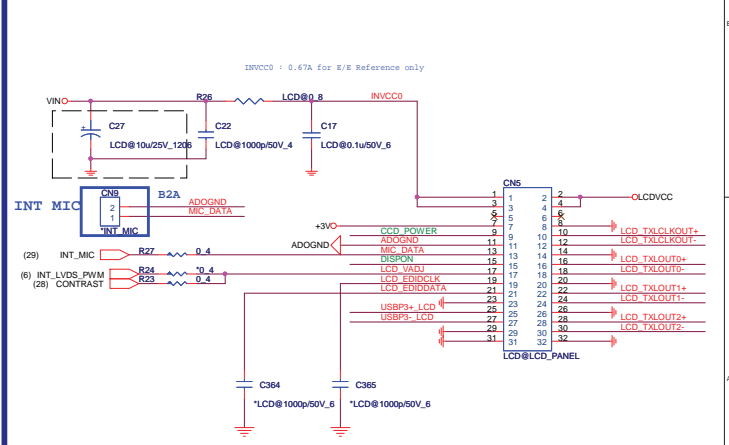
LED Panel Drive IC



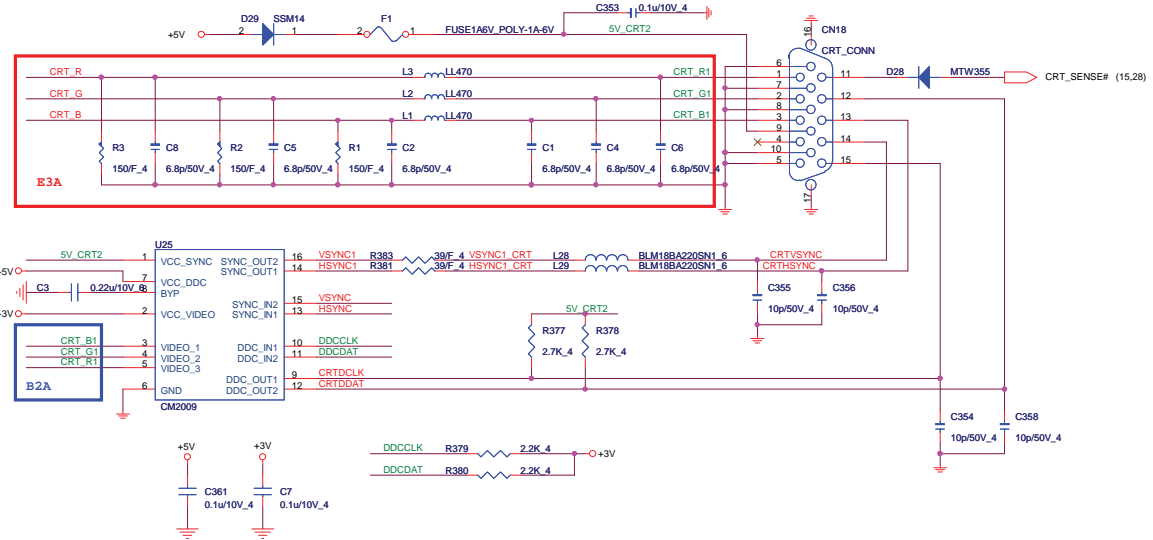
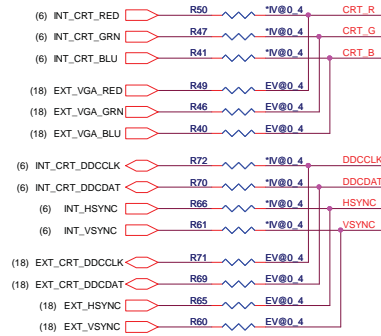
TOSHIBA LED Panel Module



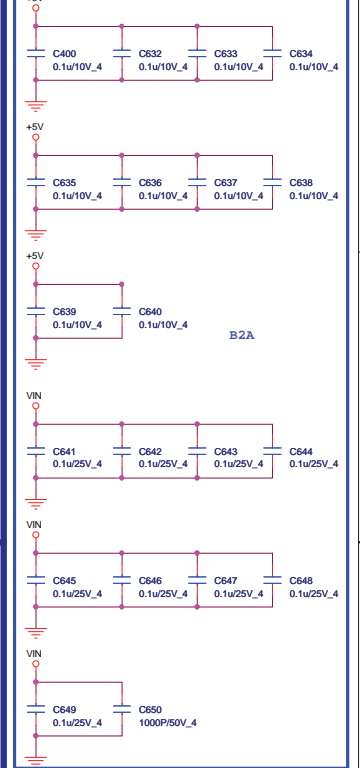
LCD Panel Module



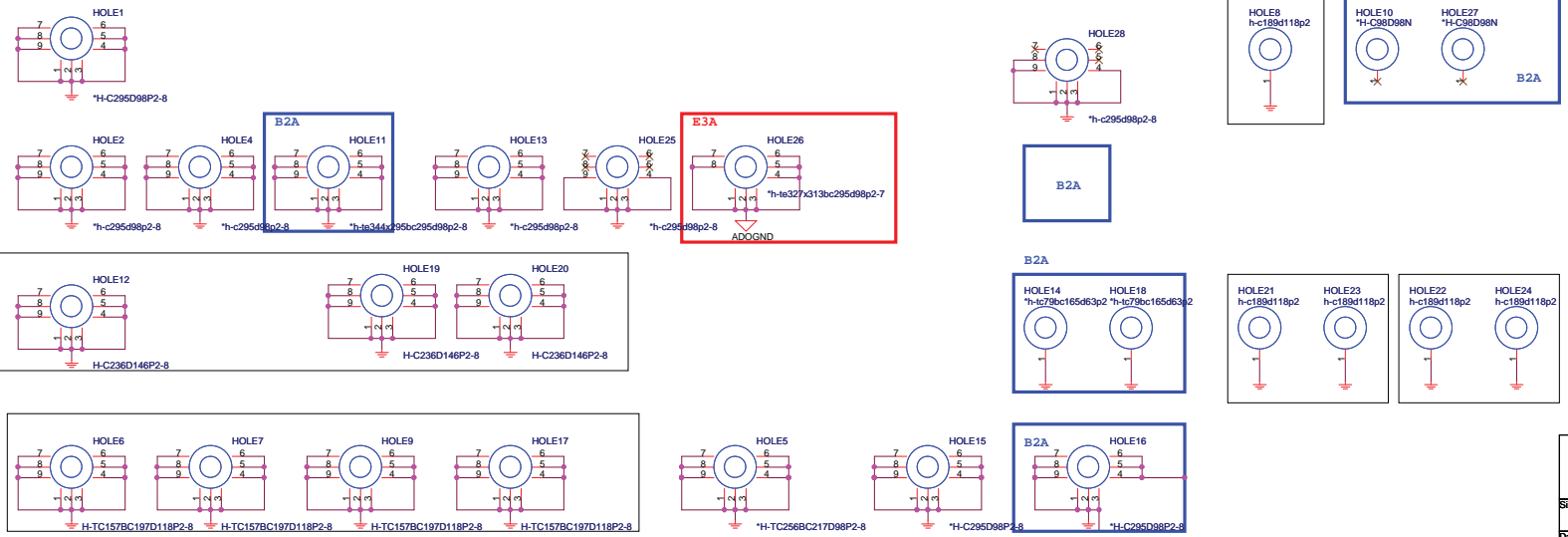
CRT



EMI



HOLE

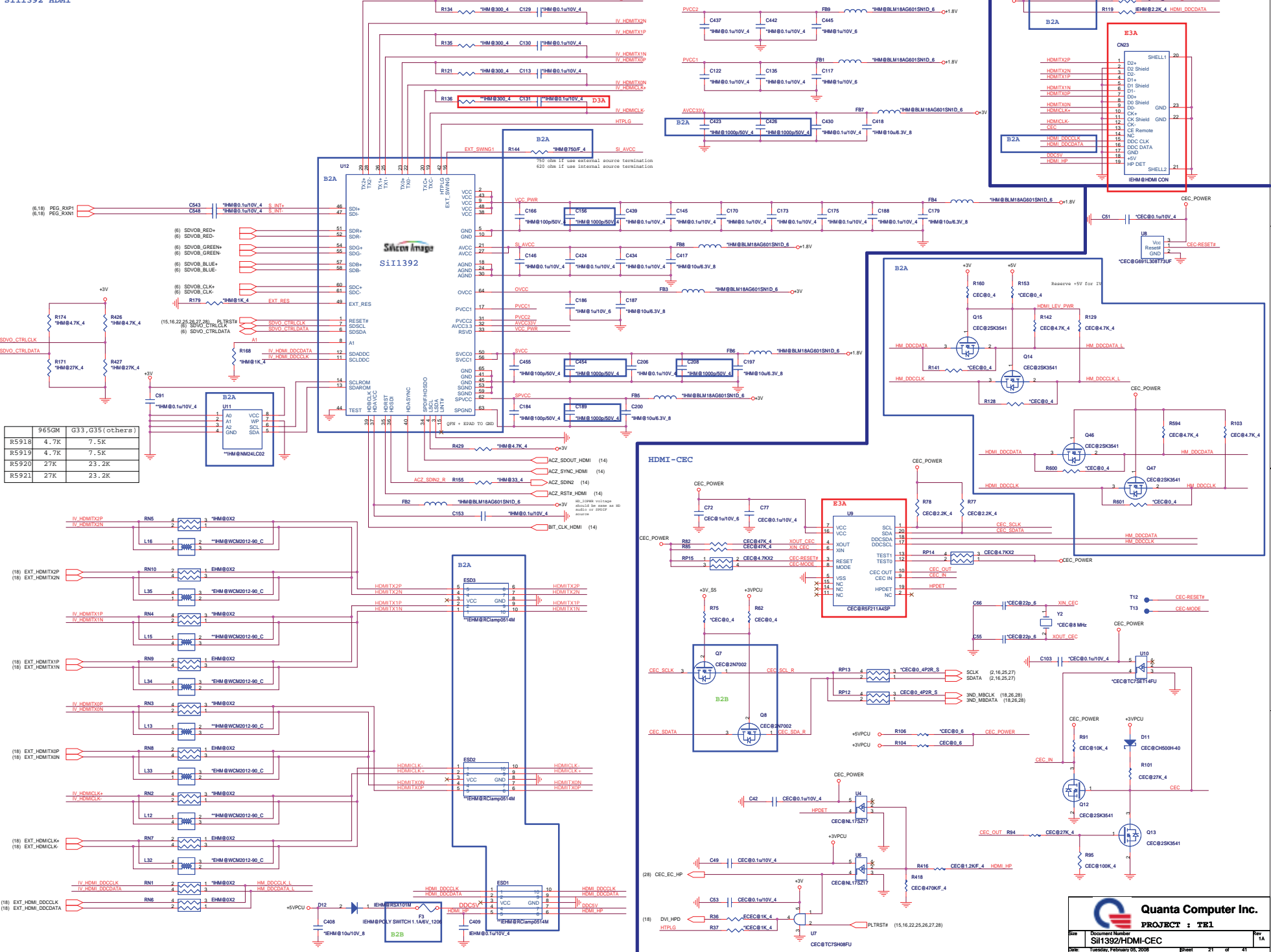


Quanta Computer Inc.

PROJECT : TEL

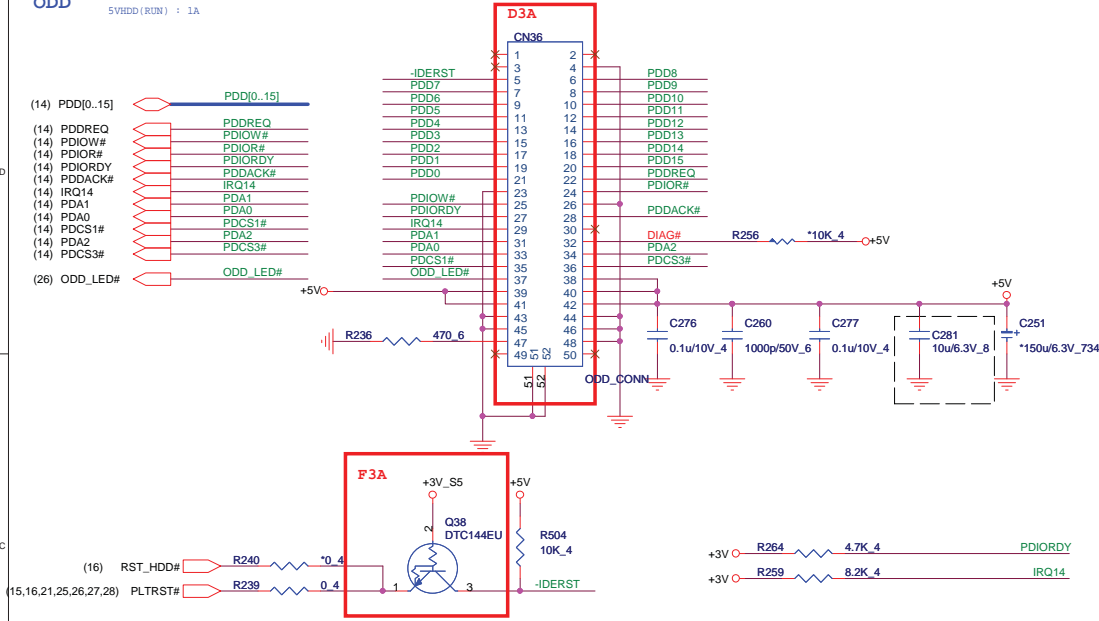
Size	Document Number	Rev
	CRT	1A
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965GM	G33, G35 (others)
R5918	4.7K 7.5K
R5919	4.7K 7.5K
R5920	27K 23.2K
R5921	27K 23.2K



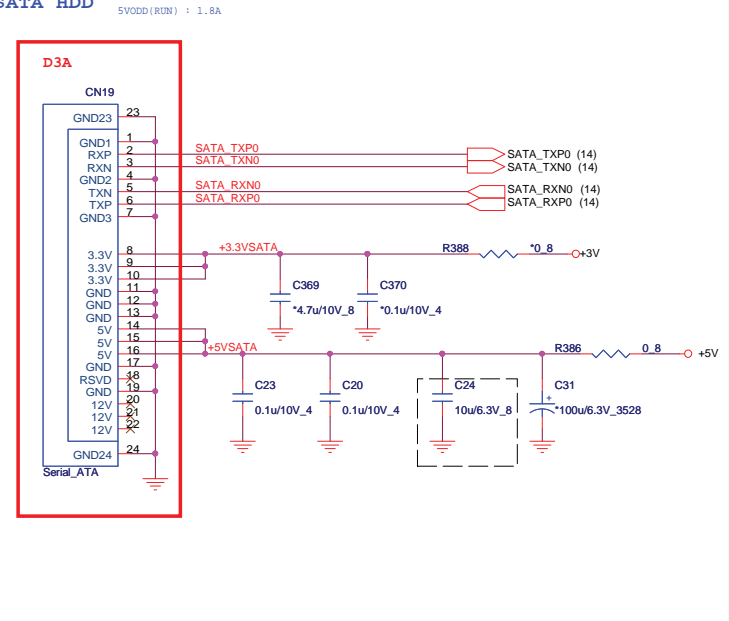
ODD

5VDD (RUN) : 1A

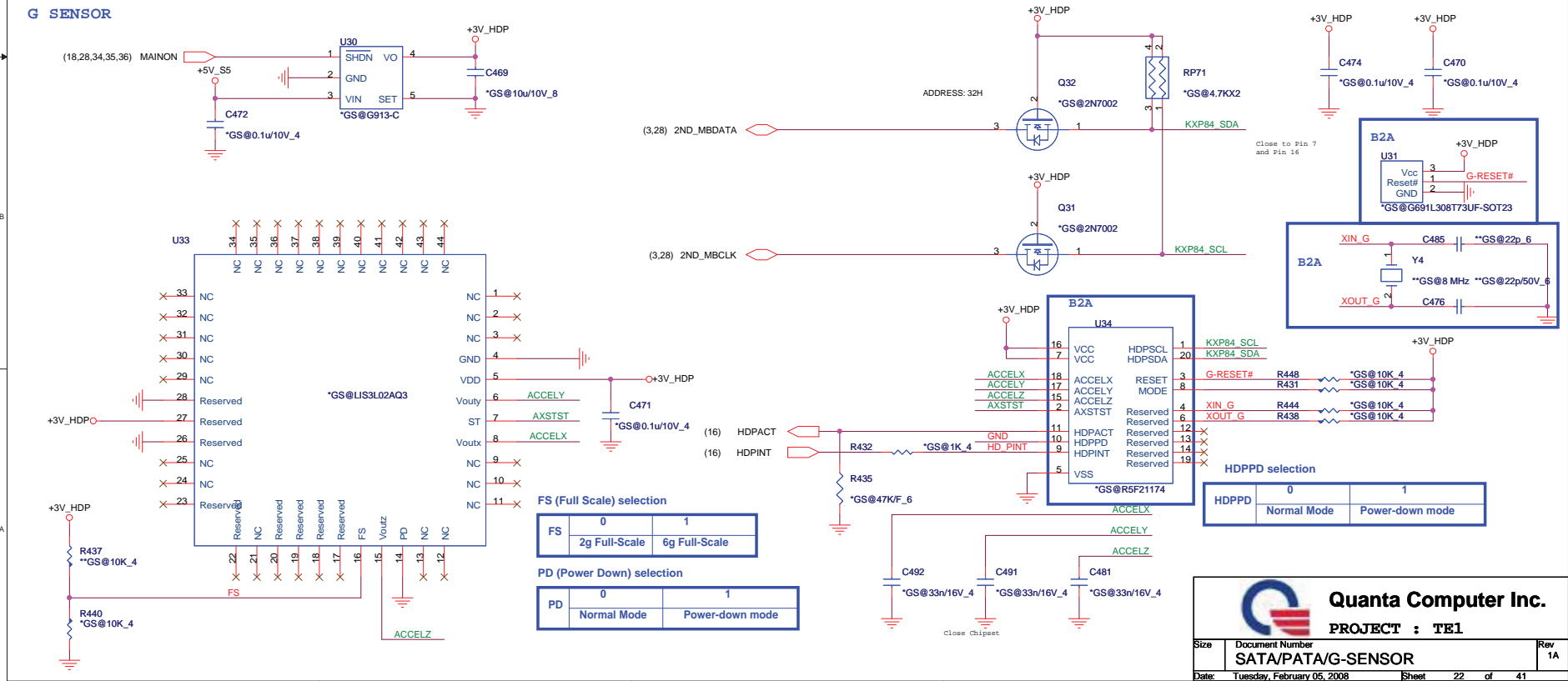


SATA HDD

5VDD (RUN) : 1.8A



G SENSOR

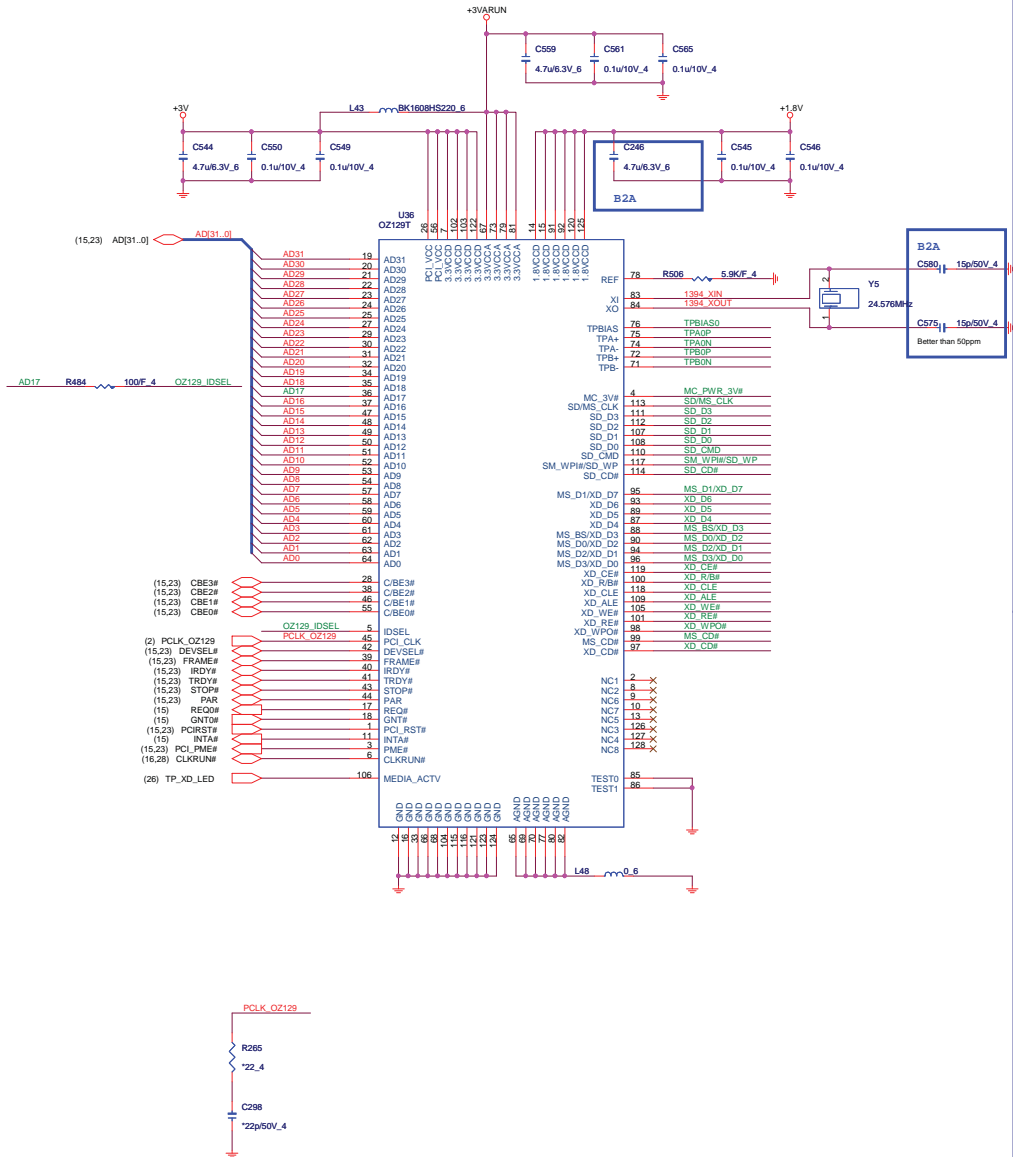


Quanta Computer Inc.
PROJECT : TE1

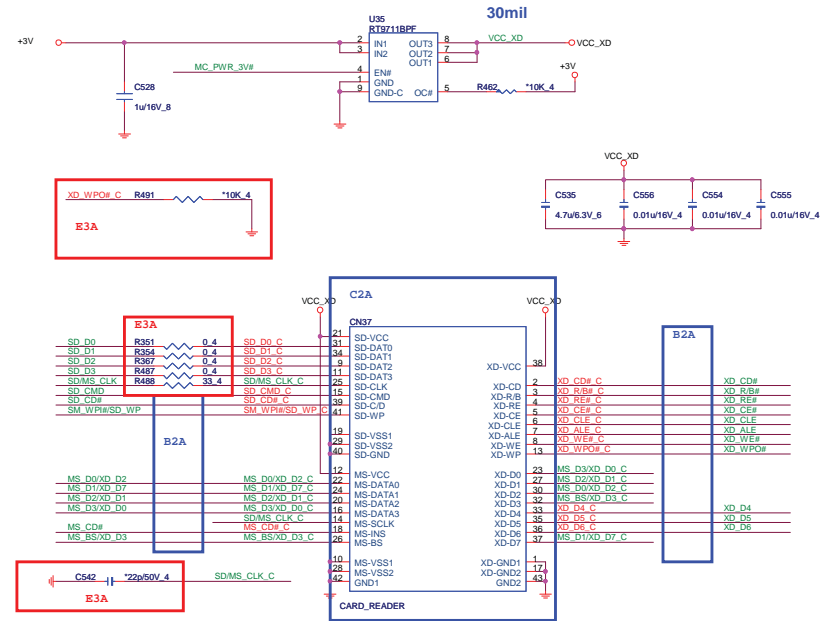
Size	Document Number	Rev
	SATA/PATA/G-SENSOR	1A
Date	Tuesday, February 05, 2008	Sheet 22 of 41

OZ129 for Cardreader+1394

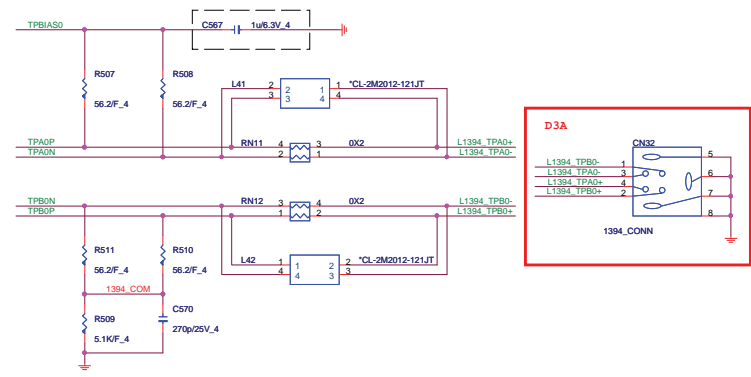
ID Select : AD17
 Interrupt Pin : INTA#
 Request Indicate : REQ0#
 Grant Indicate : GNT0#



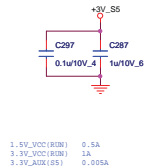
5 IN 1 Card reader



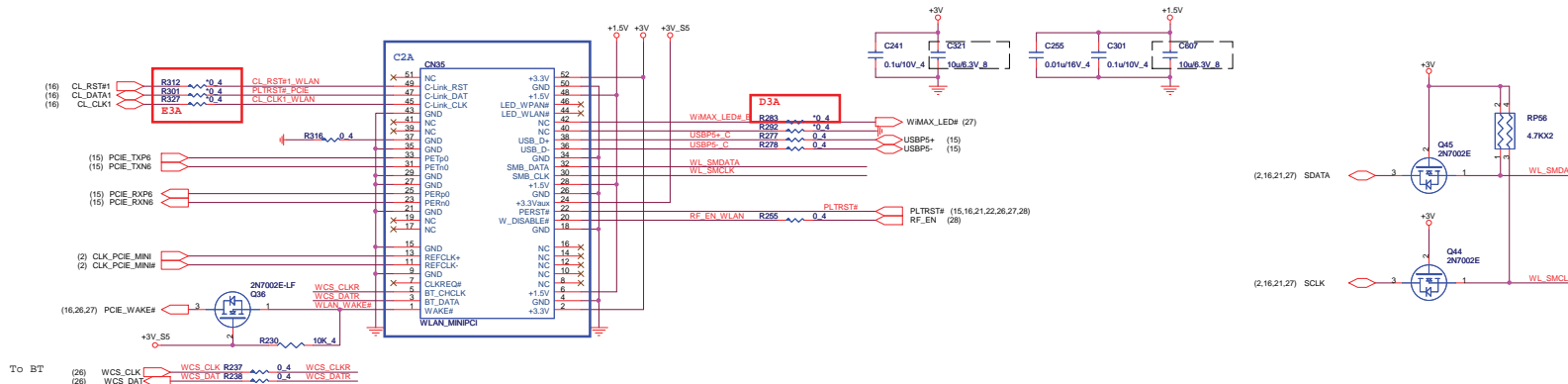
1394



MINI Card 1 U&D 5.6H_WLAN

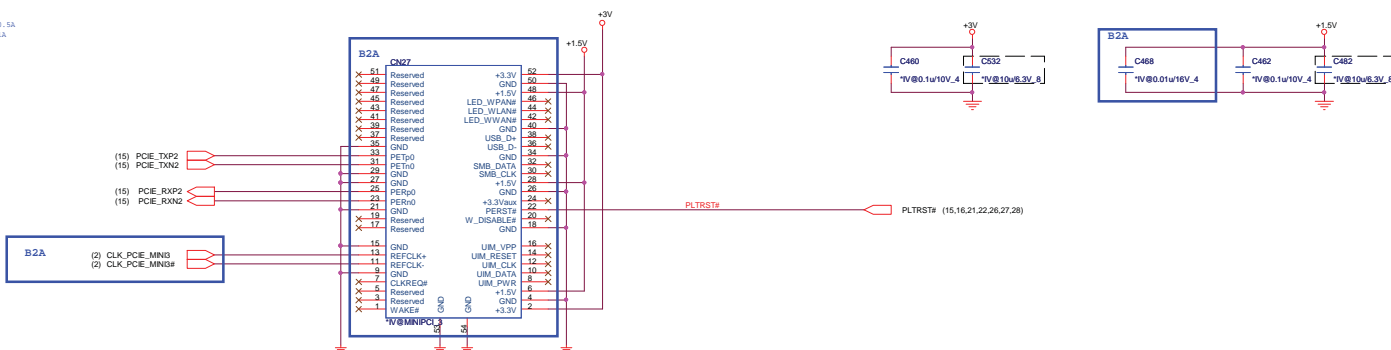


1.5V_VOC(BRN) 0.5A
3.3V_VOC(BRN) 1A
3.3V_AUX(S5) 0.055A



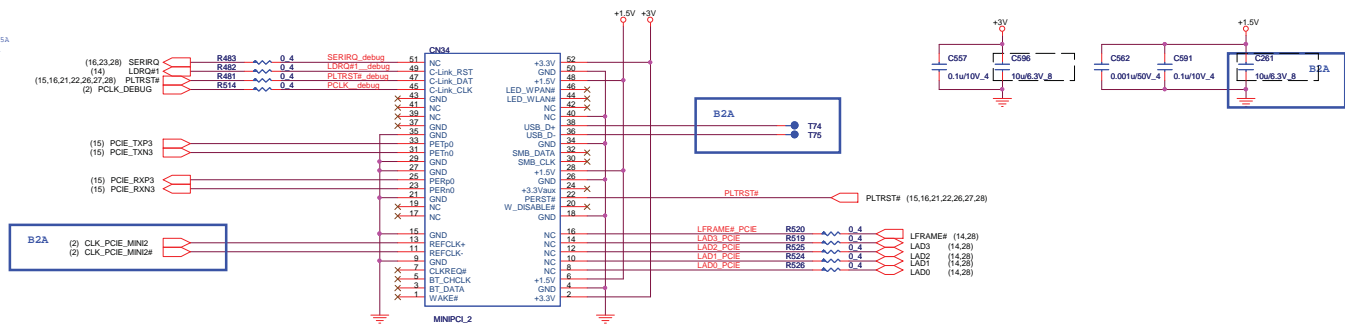
MINI Card 3 U 9H_HD-DVD

1.5V_VOC(BRN) 0.5A
3.3V_VOC(BRN) 1A

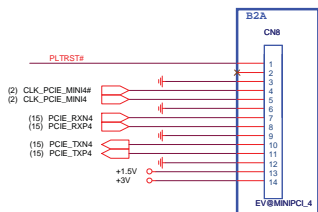


MINI Card 2 U 5.6H_ROBSON D 7.5H_HD-DVD

1.5V_VOC(BRN) 0.5A
3.3V_VOC(BRN) 1A

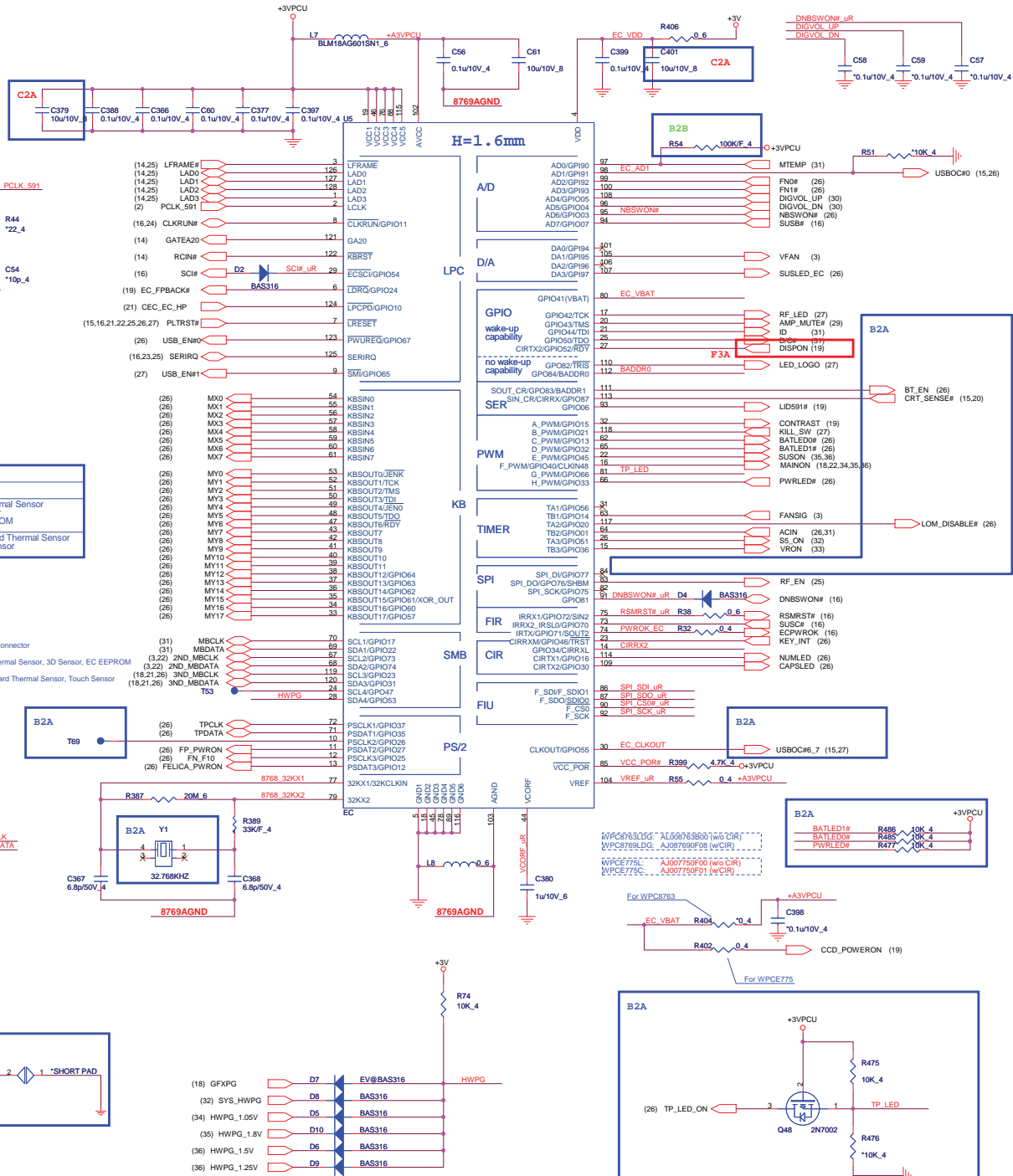


MINI Card 4-D/Robson



Remark1:TV-Robson or HD-DVD-Robson or TV-HD-DVD for DVA 28U
Remark2:TV is just for DVA(13')

	UMA	Discrete
1	WLAN	WLAN
2	Robson	HD-DVD
3	HD-DVD or Robson	N.C
4	N.C	Robson

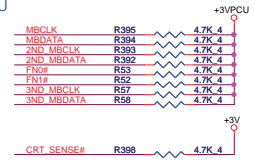


SMBUS Table

SMBUS	Devices
1	Battery
2	CPU Thermal Sensor 3D Sensor EC EEPROM
3	VGA Board Thermal Sensor Touch Sensor

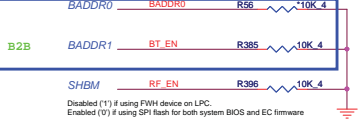
To: Battery connector
 To: CPU Thermal Sensor, 3D Sensor, EC EEPROM
 To: VGA Board Thermal Sensor, Touch Sensor

SM BUS PU

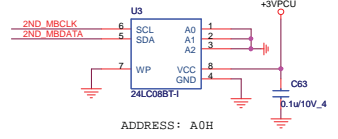


I/O Base Address

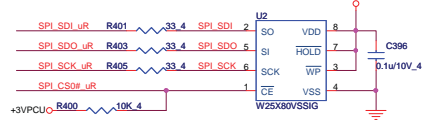
BADDR1-0	Index	Data
0 0	XOR TREE TEST MODE	
0 1	CORE DEFINED	
1 0	2Eh	2Fh
1 1	164Eh	164Fh



ID



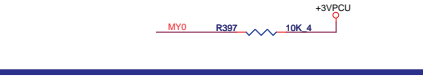
SPI FLASH



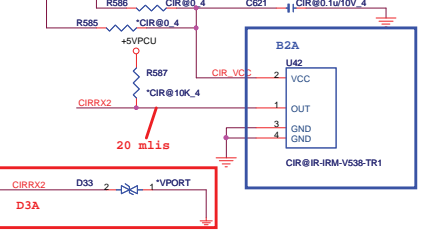
2nd source

MXIC	WISL808	ACE50F0209
MX25L6400	W25X00VSSIG	ACE50F0209
MX25L6400	W25X00VSSIG	ACE50F0209
MX25L6400	W25X00VSSIG	ACE50F0209

INTERNAL KEYBOARD STRIP SET

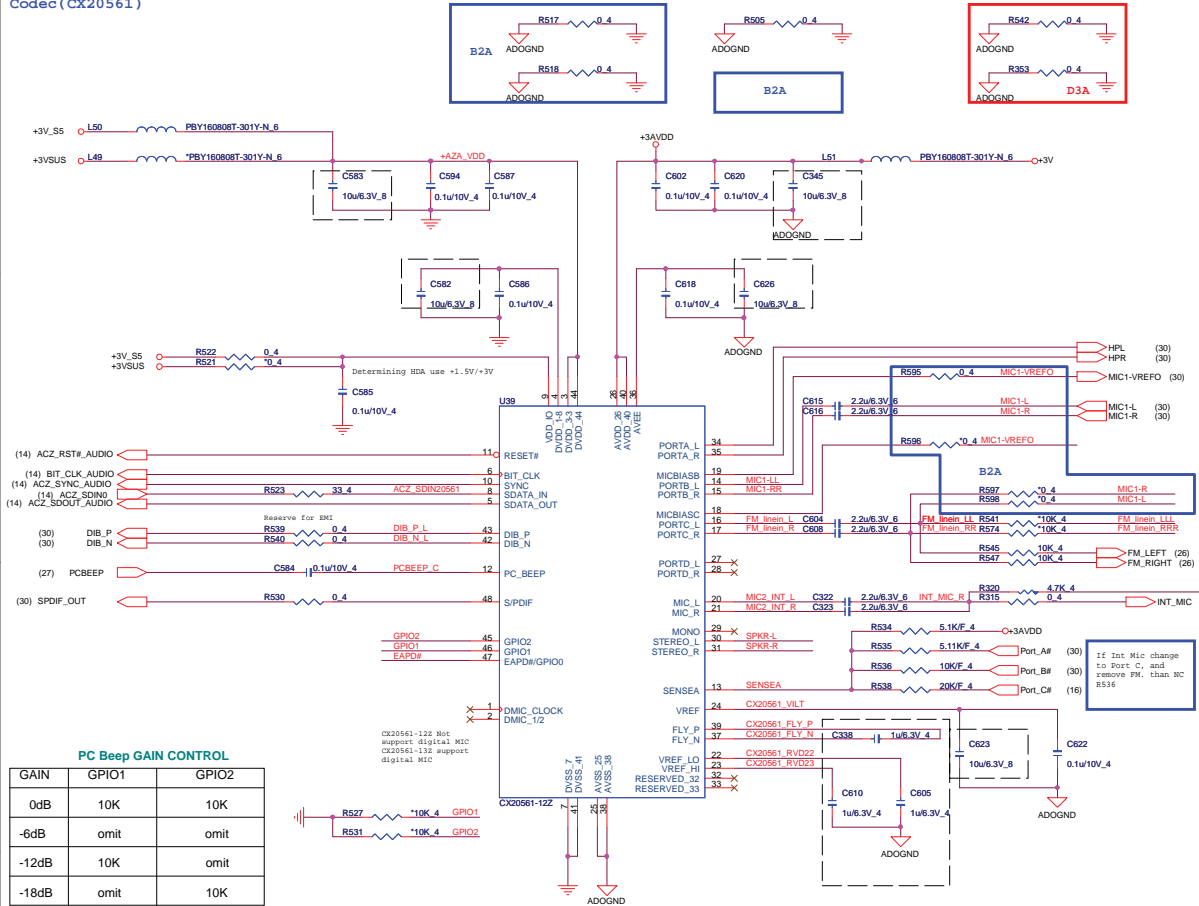


CIR



Quanta Computer Inc.
 PROJECT : BU1
 Size: Document Number EC-PC8763
 Date: Tuesday, February 05, 2008 Sheet 28 of 41

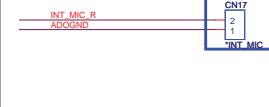
Codec (CX20561)



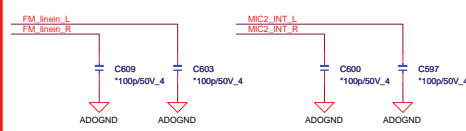
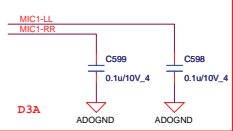
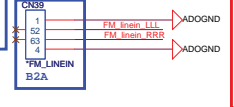
PC BEEP GAIN CONTROL

GAIN	GPIO1	GPIO2
0dB	10K	10K
-6dB	omit	omit
-12dB	10K	omit
-18dB	omit	10K

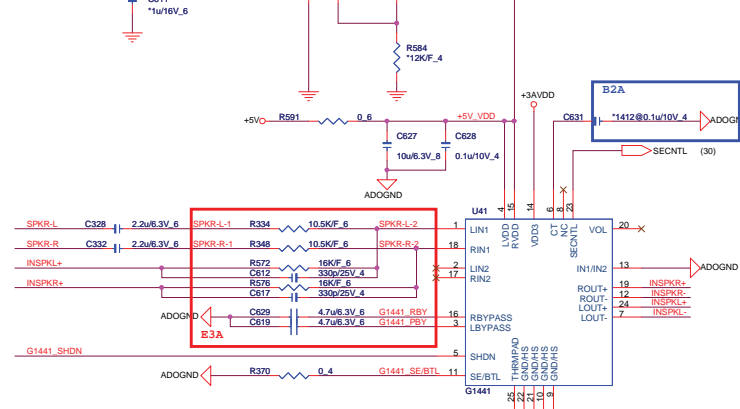
Reserve INTMIC



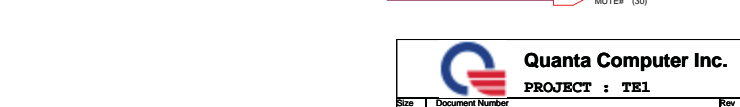
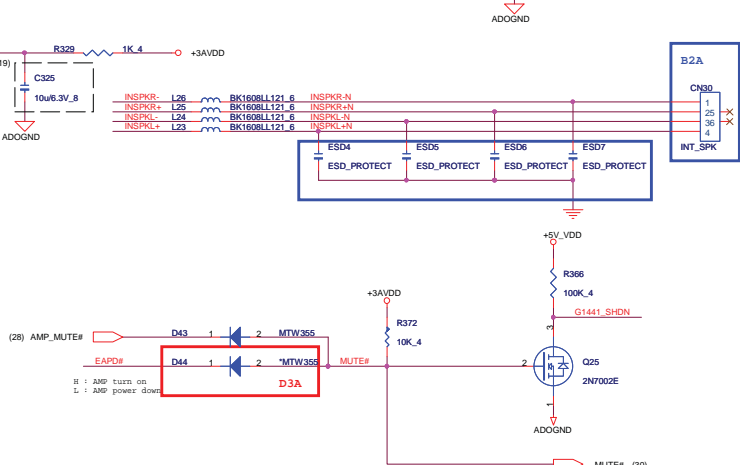
Reserve FM



INT SPK AMP

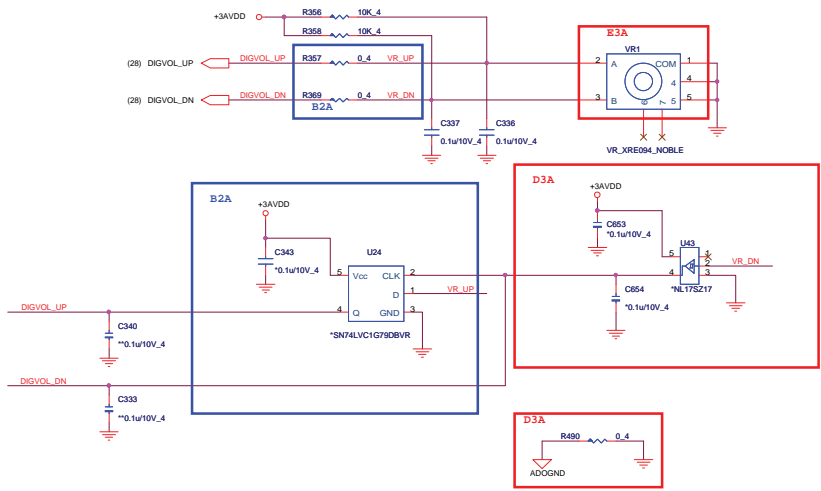


INT SPEAKER

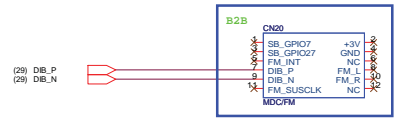


Quanta Computer Inc.
PROJECT : TE1
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Conaxant CX205601
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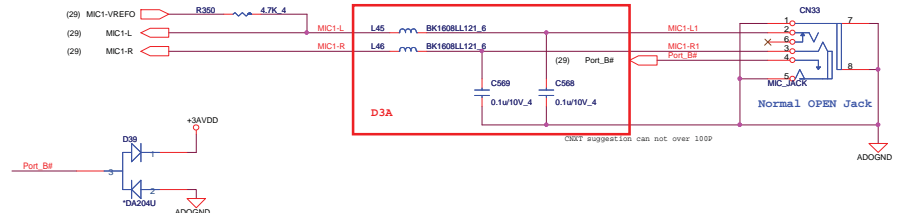
VR



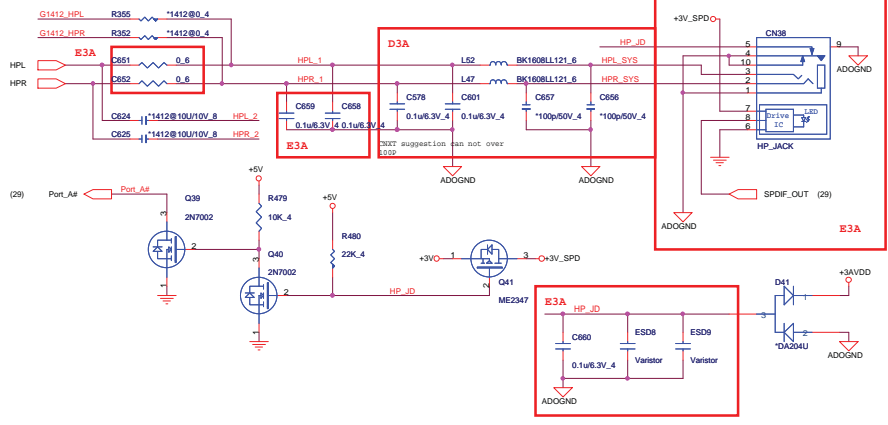
MDC



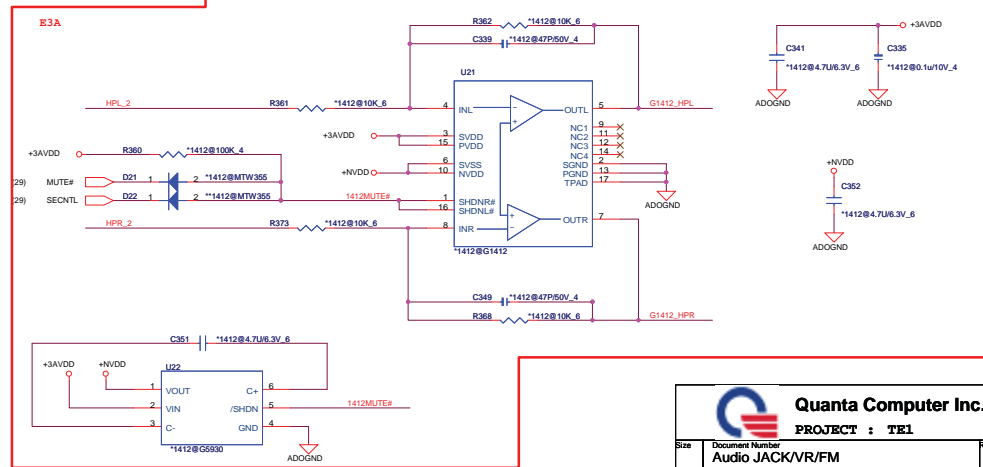
SYSTEM MIC



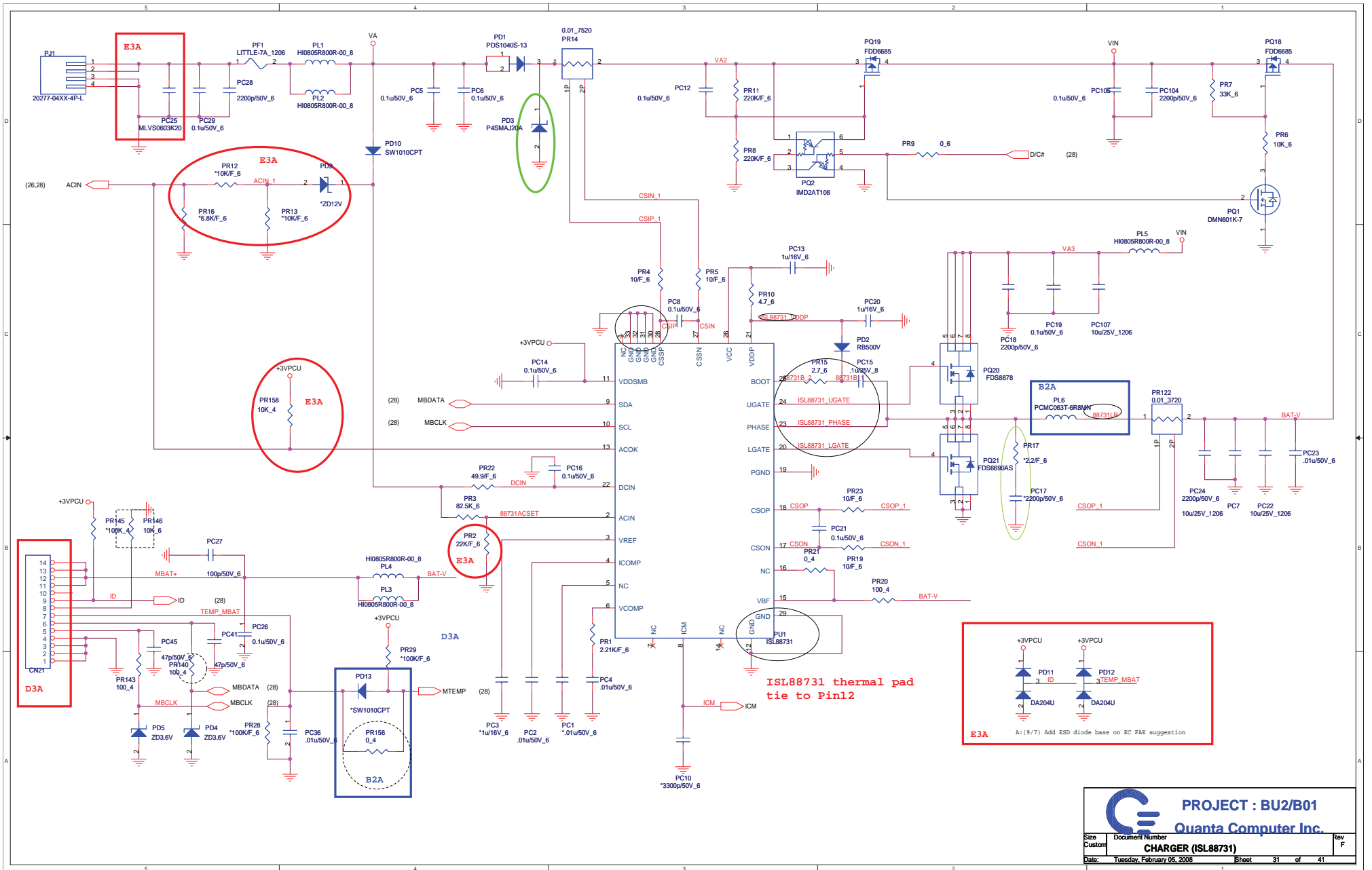
HP

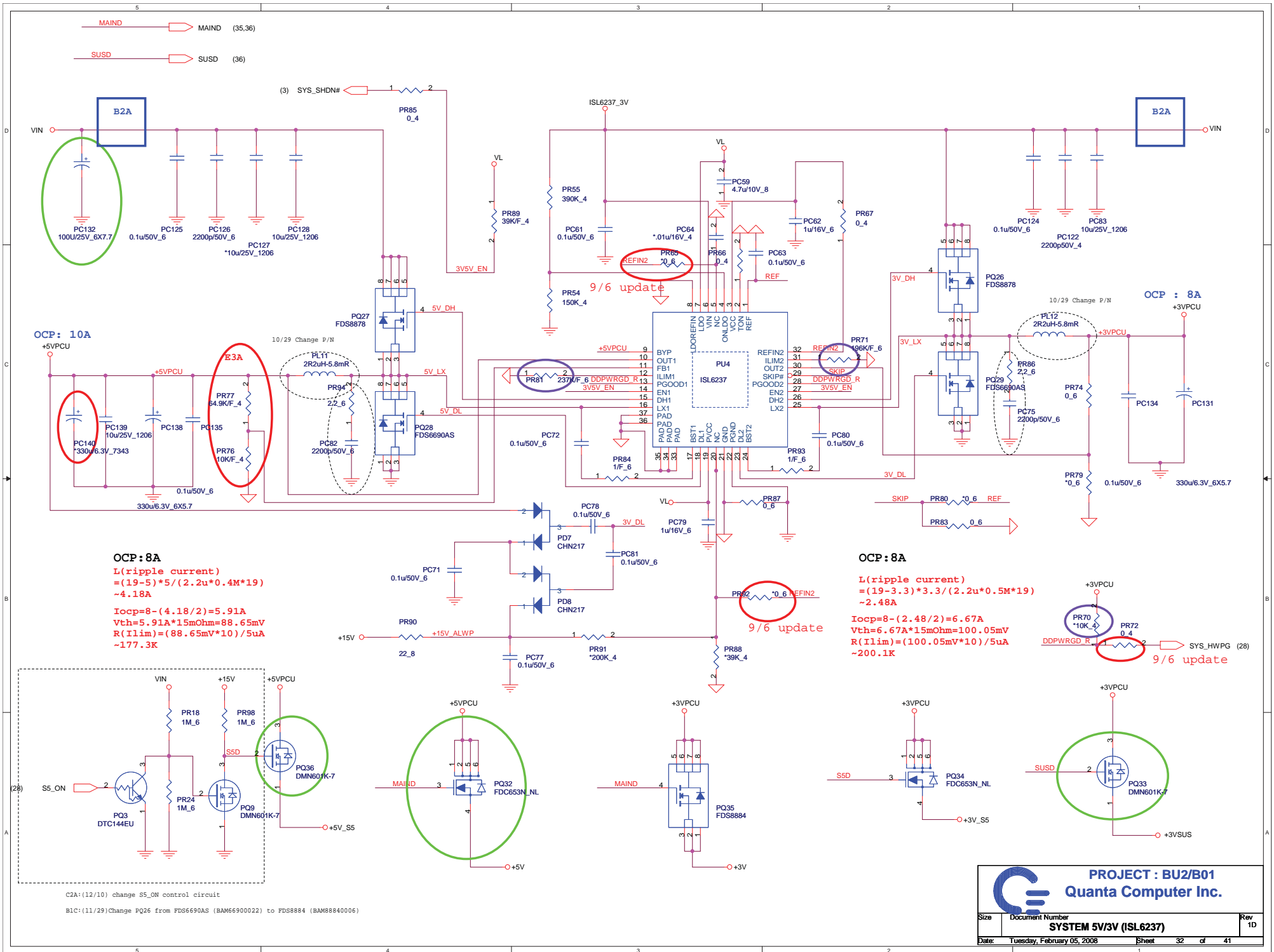


HP Amplifier



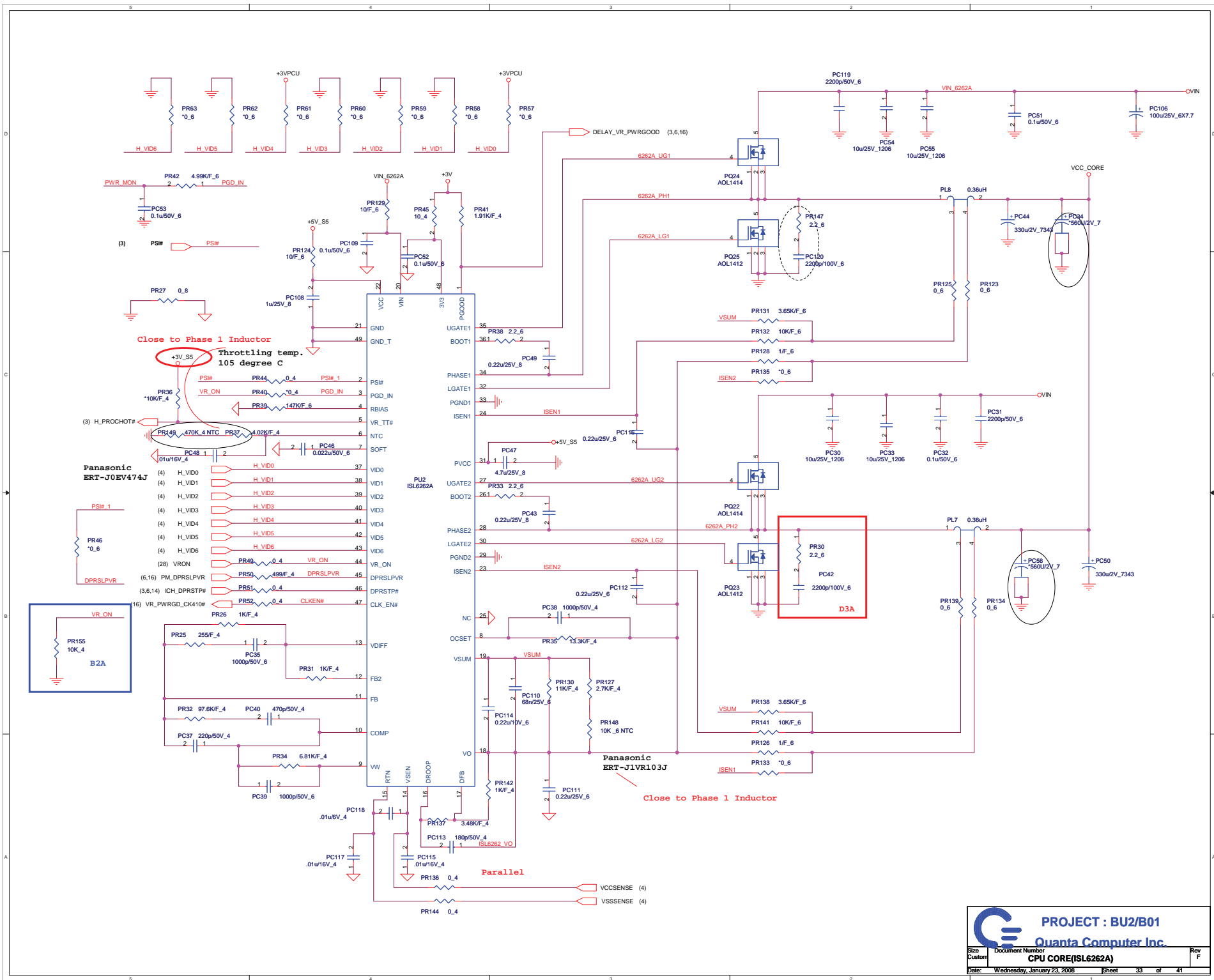
Quanta Computer Inc.
PROJECT : TE1
 Document Number: Audio JACK/VR/FM
 Date: Thursday, January 31, 2008
 Sheet 30 of 41
 Rev 1A

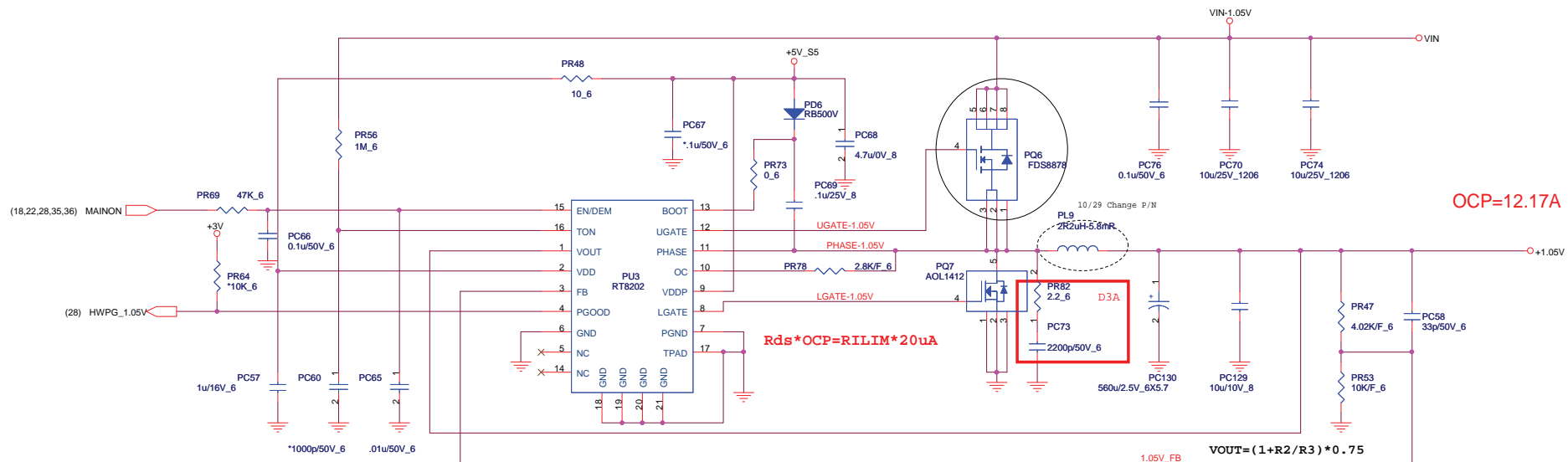




C2A:(12/10) change S5_ON control circuit

B1C:(11/29)Change PQ26 from FDS6690AS (BAM66900022) to FDS8884 (BAM88840006)





OCP=12.17A

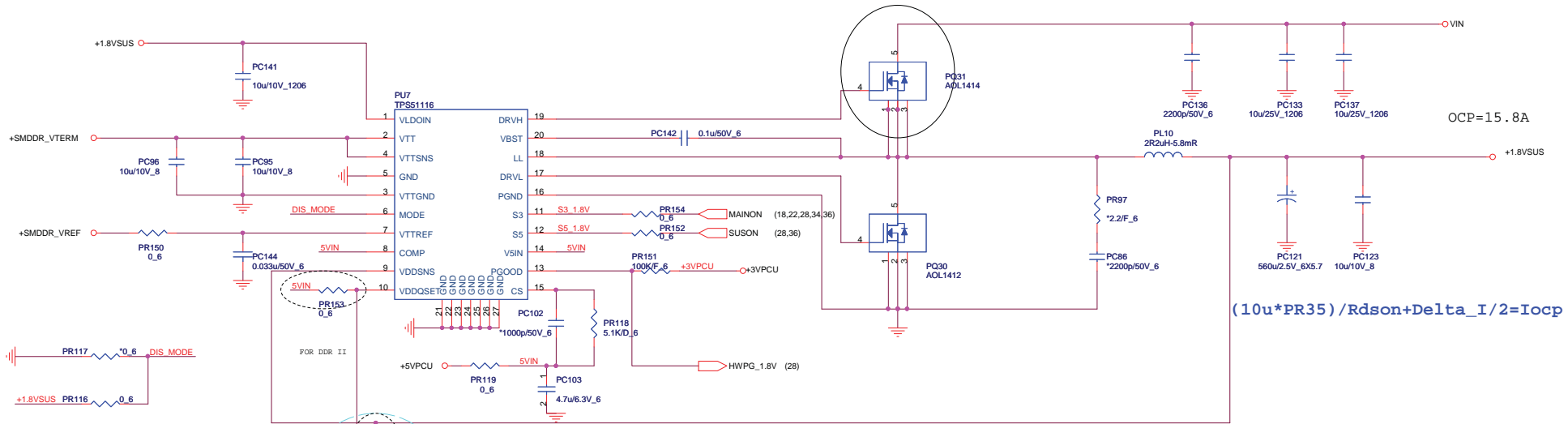
$R_{ds} * OCP = R_{ILIM} * 20 \mu A$

$V_{OUT} = (1 + R_2/R_3) * 0.75$

$TON = 3.85p * RTON * Vout / (Vin - 0.5)$

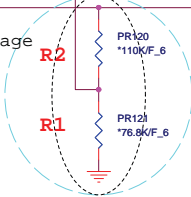
$Frequency = Vout / (Vin * TON)$

AO1412 $R_{ds} = 4.6m\Omega$
 12.17A OCP --- $OC = 2.8k (CS22803F914)$



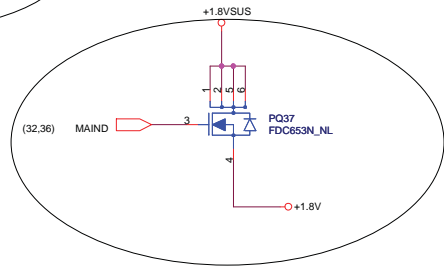
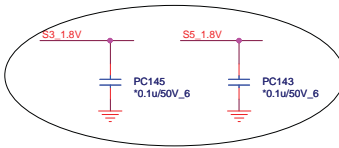
$$(10u * PR35) / R_{dson} + \Delta I / 2 = I_{ocp}$$

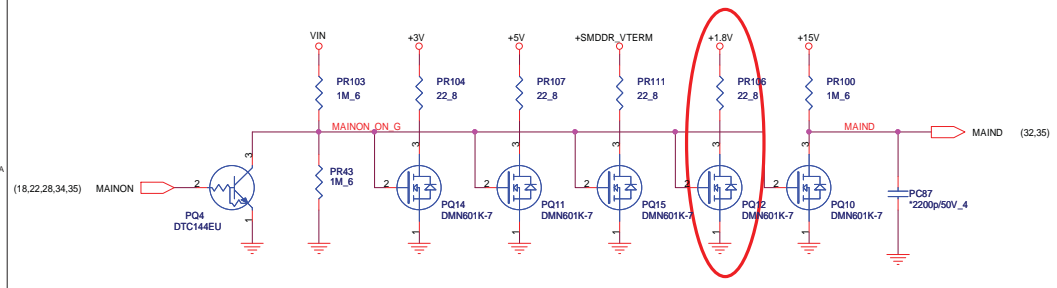
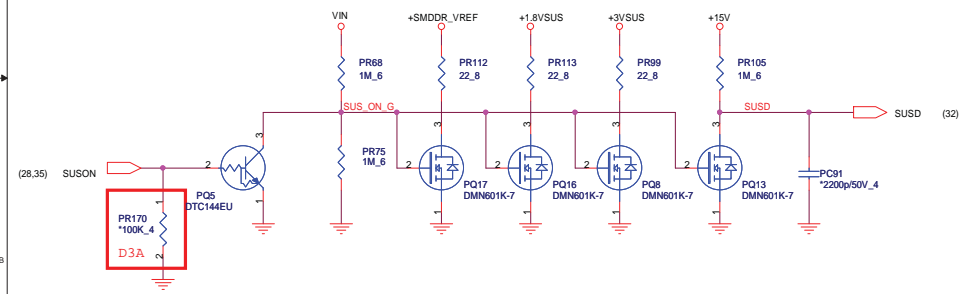
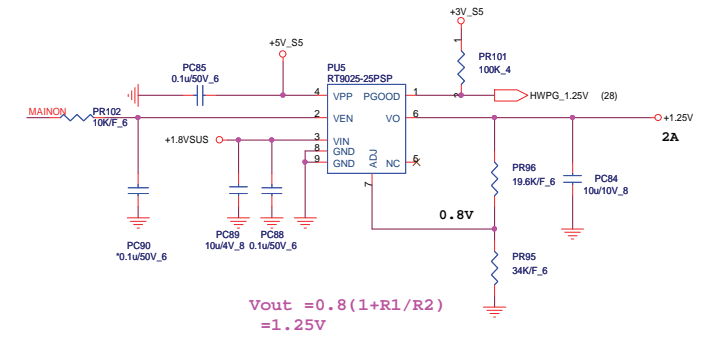
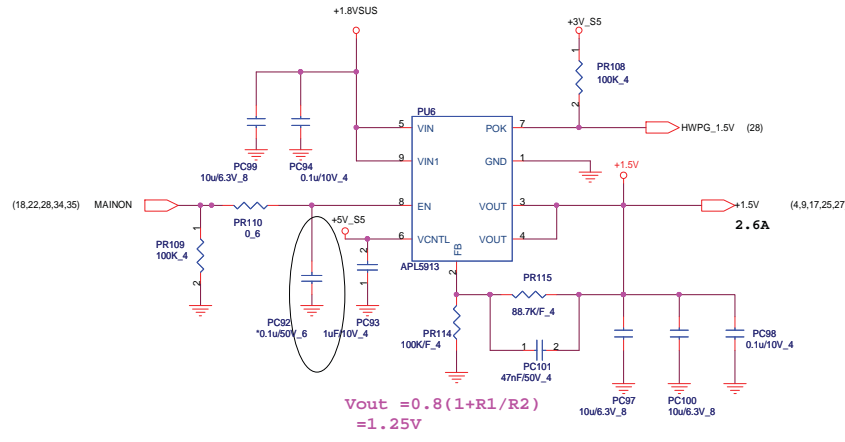
10/29 chnage



$$R1 = (100 * V_{out} - R2) K$$

if tune Vout PR38 un-mount, PR156 PR165 mount





Model	REV	DATE	CHANGE LIST	NOTE
TE1	01	20070824	FIRST RELEASED : 20070824	
	A1A	20070927	FIRST RELEASED : 20070927	
	B2A		<p>Page 22 : U31 for G-sensor SKU must stuff, and add GS@ for BOM clear.</p> <p>Page 22 : Change Y4/C476/C485 Value from * to **, because Gensor function default not need that.</p> <p>Page 3/14 : Q6/Q9/Q33 BA039040039 change to BA0390400H0 for before BA039040039 cause RTC charger issue</p> <p>Page 28 : Change SW1 to short PAD for debug only</p> <p>Page 19 : For LED Panel C9/R10 always reserve</p> <p>Page 14/28 : Y1/Y6 shortage issue change from BG332768909 to BG332768224</p> <p>Page 3 : R81 stuff 10K for OD pin</p> <p>Page 31 : CN21 BOM error, change DFHD07MR000 to DFHD14MS011</p> <p>Page 17 : C540/C606/C289 CH6102ME904(EOL) change to CH6102M1909</p> <p>Page 22 : U34 G-sensor P/N change same as BU1 from AL021174C00 to AR0BU1R0000</p> <p>Page 21 : ESD1/ESD2/ESD3 always reserve for ESD solution, Change value to **</p> <p>Page 18 : CN31/R471/R459/C530/C531/C553/C552/C486/R453/R457/R452/R458 add EV@</p> <p>Page 27 : CN15(New card) change PCB Footprint to "ncard-13180151-u-26p-1"</p> <p>Page 27 : U17 Value change from NEW@OZ27C10LN-B1 to NEW@OZ27C10LN-C1, Let P/N and Value match.</p> <p>Page 21 : U11 P/N error, so change to "new part number" avoid before use error BOM, U11 reserve for sil1392.</p> <p>Page 21 : U12 Value add IHM@ to BOM clear. To avoid BOM build error.</p> <p>Page 21 : U9 Value must modify from "CEC@R5F211A4SP to CEC@R5F211A4SP. To clear BOM.</p> <p>Page 25 : CN27/CN34 MINI Card clock connect error, CN27 must connect to CLK_PCIE_MINI3/3# CN34 must connect to CLK_PCIE_MINI2/2#.</p> <p>Page 24/25 : C261/C246 must stuff, Before NC for A-test layout issue only.</p> <p>Page 3 : RP45 Value add NEW@ for new card clock BOM clear and better EMI result.</p> <p>Page 2 : R226 Value add "CB@" for PCMCIA clock BOM clear and better EMI result.</p> <p>Page 31 : PL6 Change PCB Footprint to "CHOKE-PCMC0631-3R3MN-BD3A" for SMT issue.</p> <p>Page 19 : U1 add pin27 to GND to meet PCB Footprint.</p> <p>Page 20 : U25 Pin3/Pin5 SWAP for layout smooth</p> <p>Page 30 : Del FM interface, Move to LAN/B and Del C400.</p> <p>Page 26 : LAN/B CONN change to 30pin(BL121-30R-30P-L-TE1, DFFC30FR009), and add FM interface</p> <p>Page 22 : C31 change Footprint from 7343 to 3528 for placement no space for EC Xtal move.</p> <p>Page 26 : CN13 Change Footprint to 88060-12001-12P-L for ME assembly issue.</p> <p>Page 28 : U42(CIR) Change PCB Footprint for SMT suggestion, And change P/N from BEBK0076200 to BEBK0038200</p> <p>Page 29/30 : HP AMP NC, Reserve only.</p> <p>Page 26 : Del R103, TP(Mainstream/low cost control by TP/B)</p> <p>Page 15/27 : Add R592/R593 for USB port match OC port</p> <p>Page 21 : Add R103/R594/Q46/Q47/R600/R601 for CEC level shift(BOI mail). And adjust net name for ESD protect ESD1 close to connector.</p> <p>Page 29 : Reserve R595--R598 for Audio WHQL issue. (Can not multite stream when FM not support.</p> <p>Page 27 : LED1/LED2 change type for ME. And modify LED4 Winax LED circuit</p> <p>Page 20 : HOLE 16 add GND for ESD</p> <p>Page 21 : Del D13/R115/R116/D14 same as BL55</p> <p>Page 28 : EC del MMB(10pin)LED0#1/#2# And move BT_EN/CRT_SENSE#</p> <p>Page 26 : CN2 modify Footprint to BL123-06R-6P-L-BL5, P/N to DFFC06FR336</p> <p>Page 26 : CN4 modify Footprint to BL123-04R-4P-L-BL5, P/N to DFFC04FR012. And SWAP pin list for different Footprint</p> <p>Page 26 : CN11/CN14 modify Footprint to BL121-06R-6P-L-BL5, P/N to DFFC06FR003.</p> <p>Page 25 : CN8 modify Footprint to BL123-14R-14P-L-TE1, P/N to DFFC14FR009.</p> <p>Page 22 : CN19 change HDD Footprint to SATA-070820-QU001-22P-R-TE1</p> <p>Page 2 : C231/C234 for Y3 TXC measurement suggestion change from 33p to 30p</p> <p>Page 24 : C580/C575 for Y3 TXC measurement suggestion change from 10p to 15p</p> <p>Page 20 : Del HOLE3 for ME request</p> <p>Page 26/28 : Add LOM_DISABLE# for LAN power consumption</p> <p>Page 2 : Change R214/R211 from 33ohm to 47ohm for EA fail.</p> <p>Page 29 : CN30 use same parts for BOI project. Change to SCY DFWF04MS002.</p> <p>Page 20 : HOLE14/HOLE18 modify footprint for new card move 2mm for BOI request.</p> <p>Page 27 : Kill switch(SW2) change part for ME request, P/N is DHLSS12P07</p> <p>Page 14 : RTC Circuit R455/R456/R449/R450 follow standar circuit value(Eric Lee)</p> <p>Page 13 : CN24 Change Footprint from DDR-C-292564-200P to DDR-C-292564-200P-TE1 for connector fixed pad not meet Footprint.</p> <p>Page 15/25 : Not support TV, Del USB8 and add T71/T73/T74/T75</p> <p>Page 24 : C542 stuff 22p for EMI issue.</p> <p>Page 29 : Add R517/R518 0 ohm for EMI issue.</p> <p>Page 20 : +5V/VIN add 0.1u to shape for EMI issue</p> <p>Page 17 : SB CAP cost down C579/C267</p> <p>Page 8/9 : NB CAP cost down C118/C458/C88/C155/C403/C149/C443/C436</p> <p>Page 2 : CLK CAP cost down C541</p> <p>Page 24 : Card reader cost down, del 0 ohm</p> <p>Page 19 : C16 change BOM/Footprint from CH6101M9905 to CH61001ME96 for cost down</p> <p>Page 27 : C262/C266/C84 change BOM/Footprint from CH5472K9A02 to CH5471M9907 for cost down</p>	



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PROJECT : TE1

Model	REV	DATE	CHANGE LIST	NOTE
TE1	B2A		<p>Page2429 : C567/C338/C610/C605 change BOM from CH5102K9B06 to CH5101K9B01 for cost down</p> <p>Page?? : C596/C261/C607/C321/C482/C532/C201/C583/C582/C345/C626/C325/C623/C360/C24/C281 change BOM from CH6102K9A01 to CH61001ME96 for cost down</p> <p>Page4 : CPU CAP C35 BOM change for cost down from CH733LM8812 to CH733RM8858</p> <p>Page9/17 : C293/C254/C283/C102 cost down from CH5472M9901 to CH5471M9907</p> <p>Page19 : C27 change BOM/Footprint from CH61004M398 to CH61004M291 for cost down</p> <p>Page16 : Add FM_Detect pin to GPIO12</p> <p>Page3 : Del C50,Add R115/R116 for shut down circuit</p> <p>Page16 : Add FM_Detect pin to GPIO12</p> <p>Page20 : HOLE11/HOLE28 modify Footprint for ME issue</p> <p>Page29 : Del R528 for no space adjust modem trace</p> <p>Page32 : Del JP1/JP2</p> <p>Page19 : Reserve R473/R474 200K for LED drive IC</p> <p>Page33 : Add PR155 for VRON stable</p> <p>Page31 : MTEMP add PD13/PR156</p> <p>Page21 : CN23(HDMI) Connect chge Footprint and library pin define for correct library from HDMI-C12815-119A5-L-19P-V to HDMI-C12815-119A5-L-19P-V-TE1</p> <p>Page26 : CNe apply pin 31 and pin32, modify new footprint : BL121-32P-L-TE1</p> <p>Page29 : Change C224, C226, C227 and C228 to 'ESD PROTECT'(ESD4, ESD5, E5D6 and ESD7 : DIODE SMD V-PORT-0603-220K-V05)</p> <p>Page20 : C650 change to 1000P from EMI request</p> <p>Page28 : Apply isolate TP_LED_ON from EC to Mainstream TP</p> <p>Page20 : C641 - C649 apply to CC0402 = CH4104K9B03</p> <p>Page31-38 : Update power circuit to TE1_965PM_B2A-1030-1030</p> <p>Page20 : LT_L3 change to CX8LL470000 from EMI suggestion</p> <p>Page20 : Modify Hole26, NC GND net for layout issue</p> <p>Page21 : IHM@1000p/16V_4 change to IHM@1000p/50V_4</p> <p>Page25 : C468 change Value from 0.01u/25V_4 to 0.01u/16V_4</p> <p>Page25 : CN27 change to DFHD52MS146</p> <p>Page19, 29 : INT_MIC change PN to DFHD02MR003</p> <p>Page29 : CN39 change to DFHD04MR012</p> <p>Page26 : CN13 change to DFFC12FR006</p> <p>Page14 : CN28 change to DFWF02MS000</p> <p>Page29 : R351, R354 change footprint to RC0603</p> <p>Page26 : modify Low cost MMB pin define, CN3 pin2 change to MX5</p> <p>Page28 : apply R486, R485 and R477 PU for Battery LED issue follow BL5</p> <p>Page15 : Del T73, T71 for layout isse (use via to measure)</p> <p>Page20 : del Hole10 and Hole 27 GND pin (layout issue)</p> <p>Page30 : Stuff R357 and R369, reserve C343 U24 R367 Q24 for VR smooth modify</p> <p>Page21 : R144 Value add /F</p>	
	B2B		<p>Page21 : Q7/Q8 Value add CEC@ for BOM option</p> <p>Page21 : F3 Value add IEHM@ for BOM option</p> <p>Page4 : C40/C41 stuff for power measurement issue</p> <p>Page28/31 : PR29 NC / R54 stuff 100K/F for S.Y request</p> <p>Page30 : R516/R543 stuff 1K / R354/R351 stuff 10u/10V_6</p> <p>Page30 : VR1 change P/N from CK0000R2004 to CK0000R2005</p> <p>Page15 : R569 Value add EV@ for BOM option</p> <p>Page14 : R300/R330/R561/R562 Value add IHM for BOM option</p> <p>Page19 : C13 change to 33n / R14 change to 499F, and reserve R473 and R474</p> <p>Page : C289, C540, C606, R351, R354 change to CH6101M9905 for Buyer issue</p> <p>Page16 : Stuff R248 and change 0.4, and Stuff C242 change to 10p_4 for CLKUSB_48 EA fail issue</p> <p>Page30 : CN20 change PN to DFHS12F5000 with SUY forbidden issue</p> <p>Page28 : Add R385 and NC R56 for Boardcom BT issue</p>	
	C2A		<p>Page04 : C40 change Value to PC146, C41 change to PC147</p> <p>Page30 : R354 change Value to C651, R351 change to C652</p> <p>Page31 : Mirror CN21 Pin define</p> <p>Page25 : CN35 change footprint:MIPCI-88958-5204M-52P-H</p> <p>Page28 : C379 and C401 change PN to CH6102K9A19 with BOI issue</p> <p>Page25 : CN35 change to DIP type (footprint:MIPCI-88958-5204M-52P-V), Part Number (DFHS52FR013)</p> <p>Page24 : CN37 change footprint to (4IN1-CM4R-118-43P-L-V), Part Number (DFHD42MS005)</p>	



Quanta Computer Inc.
PROJECT : TE1

Model	REV	DATE	CHANGE LIST	NOTE
TE1	D3A		<p>Page19 : modify MR seneor with BLON circuit to solve flashing issue when system shut-down</p> <p>Page30 : Change C24 to U43 to solve VR not smooth</p> <p>Page31,32 : Change Charger circuit to use ACOK to inform EC</p> <p>Page29 : NC D44 to solve switch mute to un-mute, sound will delay about 2seconds</p> <p>Page24 : Apply R351, R354, R367, R487 and R488 for EMI request</p> <p>Page20 : EMI suggest used LL680 + 4.7 pf x6 cap to avoide CRT issue</p> <p>Page19 : Apply U44 circuit for LED panel black light issue</p> <p>Page27 : Change LED1 and LED2 to new part</p> <p>Page3.5 : Apply L54 near CPU side and C666 near NB side for ESD issue</p> <p>Page36 : Reserve SUSON PD resistor</p> <p>Page28 : Apply R489 reserve for TP_LED_ON enable(Low Cost ID)</p> <p>Page03 : NC C71 for Fansing speed issue follow BL55</p> <p>Page-- : Logo LED, function board conn and Board ID Value apply function option</p> <p>Page21 : HDMI conn change footprint to HDMI-C12815-119A5-L-19P-V-BU2</p> <p>Page25 : Led board conn change PN and Footprint : DFFC12FR285</p> <p>Page25 : Function board conn (mainstream and lowcost) change PN</p> <p>Page20 : Hole26 change footprint to h-te327x313cc295d98a2-7</p> <p>Page22 : SATA conn change Footprint to SATA-070620-QU001-22P-R-TE1</p> <p>Page-- : DDR socket CN24 change PN to DGMK0000040</p> <p>WLAN minicard conn change PN to DFHS52FR016</p> <p>Battery conn change PN to DFHD14MS014</p> <p>ODD conn change PN to DFHS50FR034</p> <p>1394 conn change PN to DFHS04FR109</p> <p>Kill switch change PN to DHLLS512P02</p> <p>FP board conn change PN to DFHD04MRA75</p> <p>BT conn change PN to DFHD10MR008</p> <p>CN3 change PN and Footprint is BL136-10R-10P-L</p> <p>CN2 change PN and Footprint is BL136-06R-6P-R</p> <p>Page-- : R275, C307, C308, R326, R293, R248 change Footprint to -C (circle pad)</p> <p>Page30 : Reserve R490 near VR for ESD protect</p> <p>Page28 : Reserve C33 near CIR for ESD protect</p> <p>Page30 : Reserve C656, C657 for audio noise debug</p> <p>Page21 : NC R136 and C131 to solve HDMI I-diagram fail</p> <p>Page30 : Stuff AMP1412 circuit for audio noise test.</p> <p>Page30 : Change L52, L47 to BK1608LL121 and C578 and C601 to 0.1uF to test 3G/GPRS ExpressCard noise in HP.</p> <p>Page29-30 : C599, C598, C569, C568 apply to CH41002KB93, And L45, L46 change to CX8LL121002 for INT MIC recording noise.</p> <p>Page30 : NC R516 and R543 to meet HP Jack signal measure and HP plug- unplug haven't happen bobo-sound too.</p> <p>Page30 : Change C578 and C691 for 0.1u to 0.22u to enhance avoid 3G noise and meet HP Jack signal measure</p> <p>Page25 : Mini card 版本 : M68-MB11</p>	

Model	REV	DATE	CHANGE LIST	NOTE
TE1	D3A		<p>Inner Document</p> <p>Change C221 to CH01506JBD9, and NC R248, C242 for CLKUSB48 measure pass</p> <p>Add R353 to CS00002JB38 for ESD request</p> <p>Change CN4 PN to DFFC04FR213</p> <p>Add R459 and R471 to CS00002JB38 for EV request</p> <p>Remove Felica function at EV sku</p> <p>Remove MAIN@ parts at Low Cost ID Q26,Q27,R374 and R375</p> <p>Add R542 and R490 for ESD request</p> <p>Change R516, R543, C578 and C601 to CH41002KB93</p>	
	E3A	20080116	<p>Page21 : Change HDMI connector footprint to B test (HDMI-C12815-119A5-L-19P-V-TE1)</p> <p>Page26 : Change CN6 to BL134-32RL-TA1G-32P-L</p> <p>Page20 : Hole26 apply AGND pin for ESD</p> <p>Page30 : HP jack pin9,10 apply GND for ESD</p> <p>Page19,31 : Power modify for LED panel</p> <p>Page26 : Apply CN40 for TP connector 2nd source(ACS)</p> <p>Page21 : Change U9 PN to ARBL5M70000</p> <p>Page24 : PD XD_WPO#_C with R491(reserve) for XD measure</p> <p>Page26 : Change the footprint of DFFC34FR003 from 88171-340L-34P-L to 91504-340N-34P-L</p> <p>Page20 : Change L1, L2 and L3 to CX8LL470000, Change C1, C2, C4, C5, C6 and C8 to CH-686T0B07 for EA CRT measure pass</p> <p>Page16 : Change R345 Value to WOHM@10K_4 and Change R548 to WOGS@10K_4</p> <p>Page26 : Apply FA@ at Felica function Parts Value</p> <p>Page27 : Apply MAIN@ at Q26,Q27,R374 and R375</p> <p>Page30 : R516 change to C659, R543 change to C658</p> <p>Page31 : Apply varistor PD11 and PD12 to BCD A204U209 for ESD request</p> <p>Page30 : Apply ESD8, ESD9(BC03220KZ19) and C660 in HP JP for ESD solution.</p> <p>Page27 : Change R374 and R375 from 390ohm to 150ohm base on ME request for LED light not enough</p> <p>Page27 : Modify New card footprint to NCARD-13180151-U-26P-L-TE1</p> <p>Page26 : NC CN13 pin3 to follow LED board</p> <p>Page31 : PL6 change PN to CDRH104R-TE1</p> <p>Page19 : Apply PN in R10 to CS33742FB17</p> <p>Page14 : Modify RTC circuit to follow BL5S</p> <p>Page30 : Remove 1412 Amp circuit</p> <p>Page29 : Modify speaker gain to 9.7dB, R334 and R348 change to CS31053F909, R572 and R576 change to CS31603F916</p> <p>Page27 : Change new card power switch to TI (AL062231000)</p> <p>Page24 : NC C542 for customer request. O2 spec can't oevr 10p</p>	
	E3A-01	20080125	<p>BOM release</p> <p>E3A-01</p> <p>Page30 : Change C651 and C652 to 0_6</p> <p>Page24 : Change R488 to 33_4</p> <p>Page32 : Change PR76 to 10K/F and stuff PR77 to 64.9K/F</p> <p>Page24 : Change VR1 PN to CK0000RZ006</p> <p>E3B</p> <p>Page14 : remove T50</p> <p>Page19 : apply R14 Value to LED@</p> <p>Page25 : remove R312, R301 and R327</p> <p>Page21 : CN23 apply IEHM@ in Value</p> <p>Page31 : PC25 change to CY060320901 for ESD</p> <p>Page27 : NC C264 and R253 from CS32872FB11 change to CS00002JB38</p> <p>F3A</p> <p>Page7 : EC Pin 27 connect to DISPON</p> <p>Page22 : Q38 pin2 change to +3V_S5</p> <p>Page19 : Change CN4 to DFFC04FR012</p>	

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