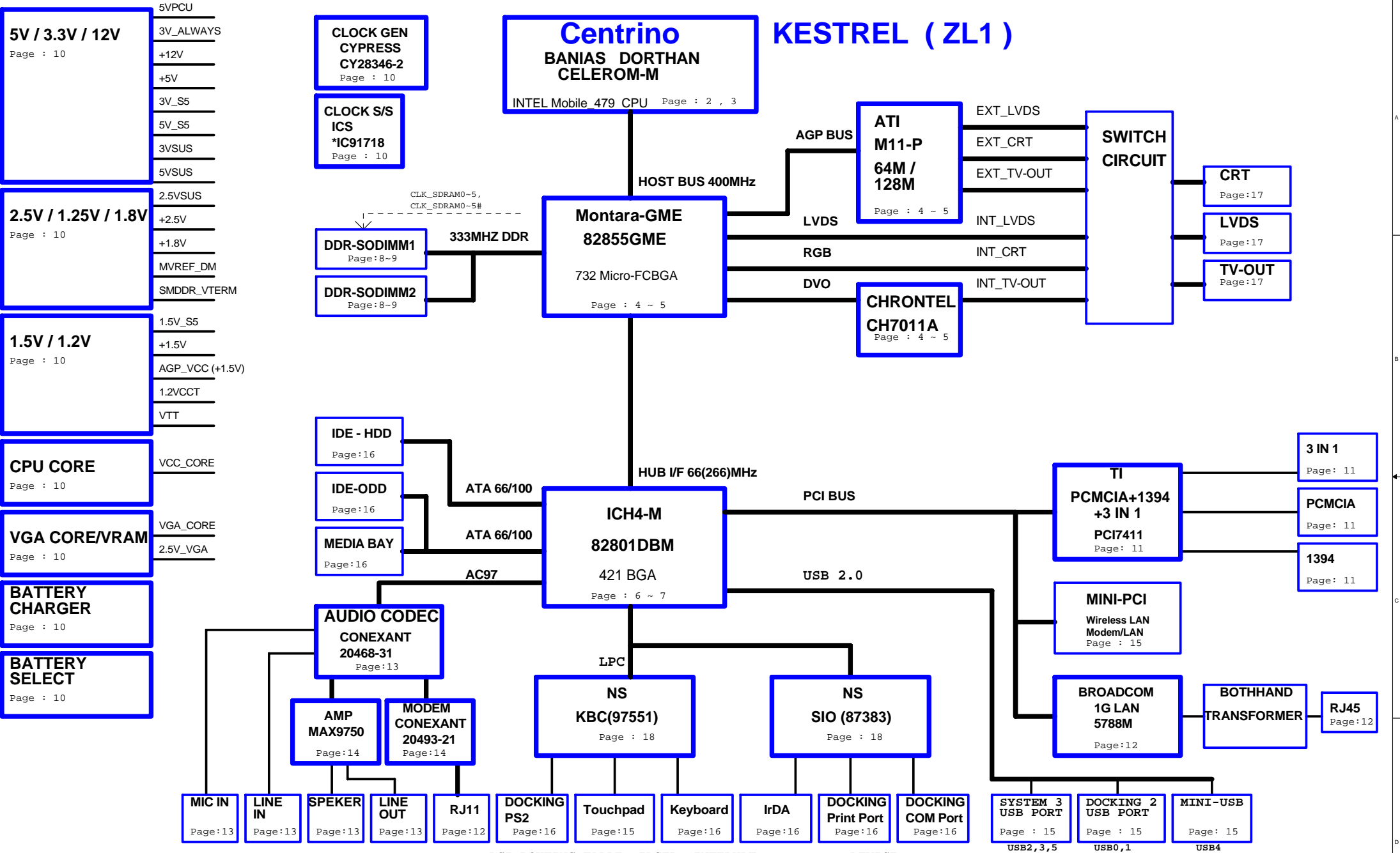


KESTREL (ZL1)

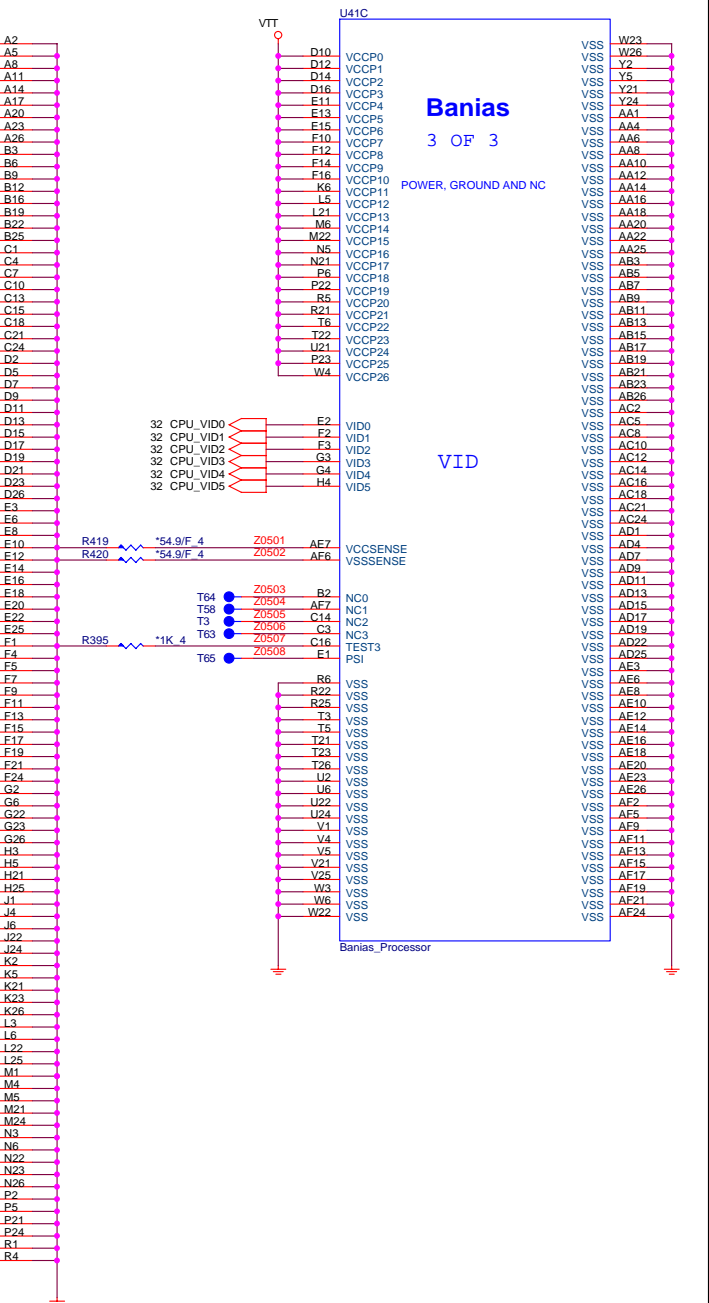
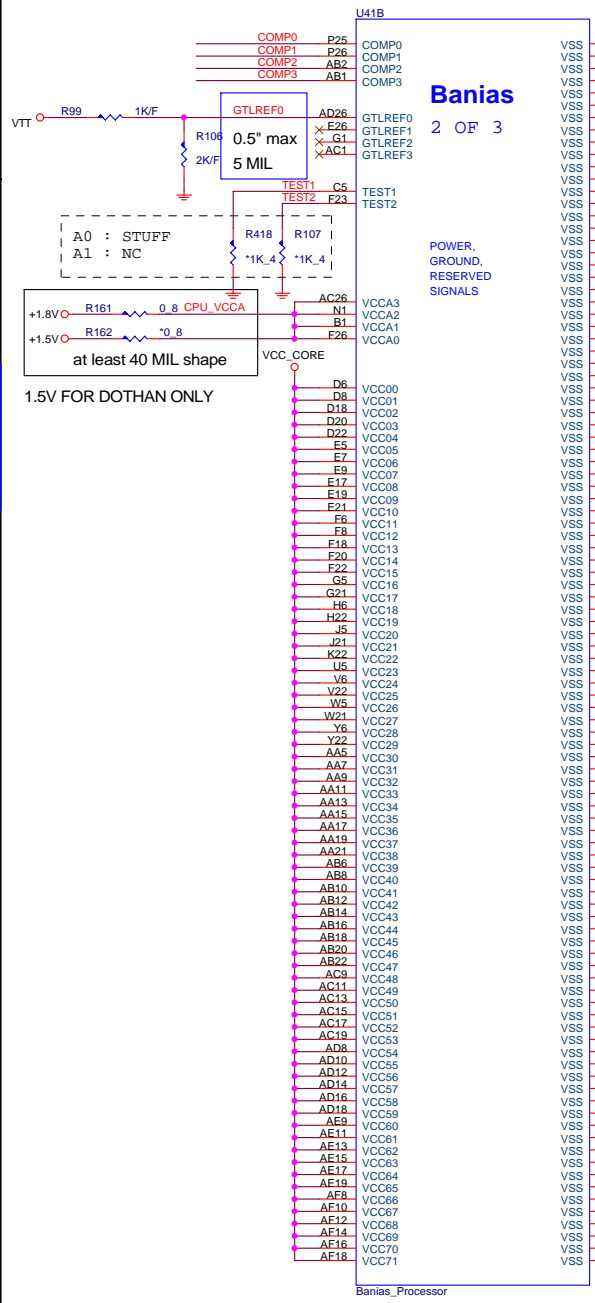
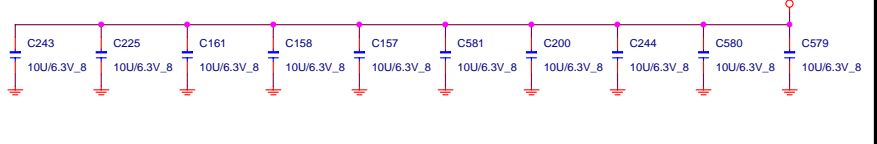
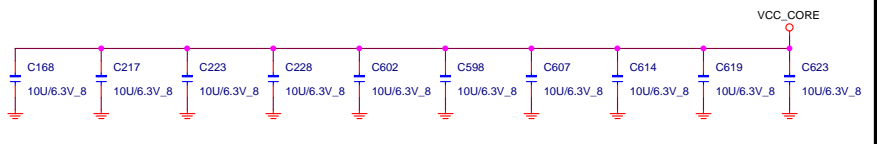
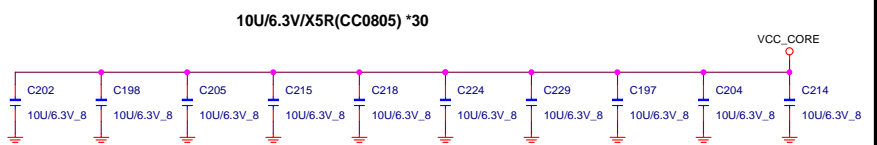
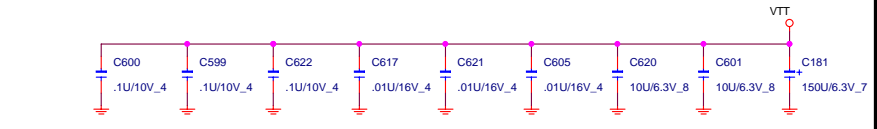
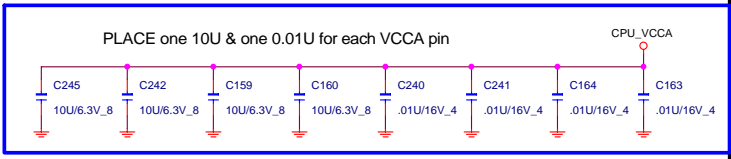
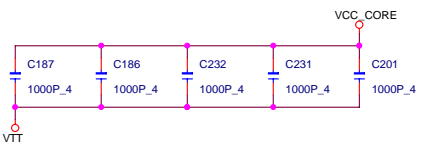
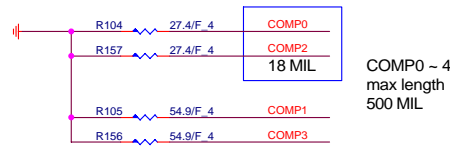


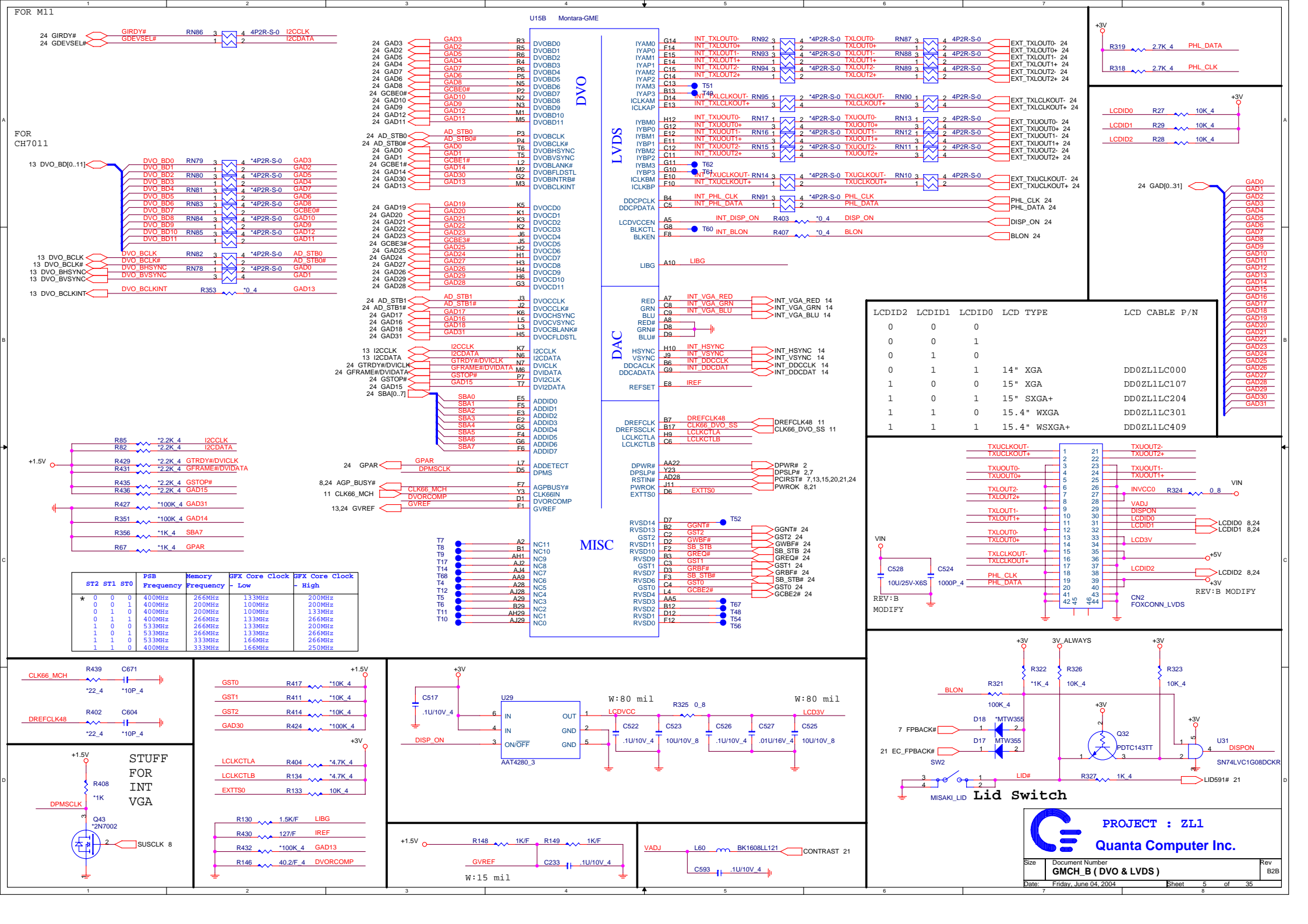
PM : 紀明進 Sunyu Jih
 EE Laerer : 許高銘 Jim Hsu
 ME Leader : 林哲敏 Mill Lin

PCI ROUTING TABLE	IDSEL	INTERUPT	DEVICE
		INTA#	M11
REQ0# / GNT0#	AD18	INTD#	BROADCOM LAN
REQ1# / GNT1#	AD20	INTB# , INTC#	MINI-PCI
REQ2# / GNT2#	AD23		
REQ3# / GNT3#	AD22	INTE#, INTF#, INTG#	TI 7411

PROJECT : ZL1
Quanta Computer Inc.

Size	Document Number	Rev
	BLOCK DIAGRAM	A1A
Date:	Friday, June 04, 2004	Sheet 1 of 35





FOR M11

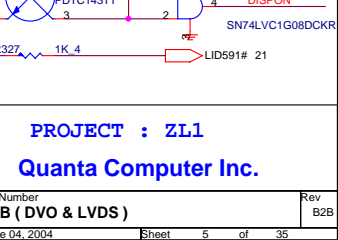
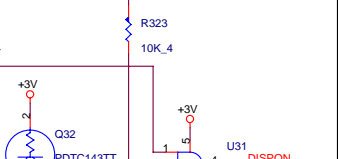
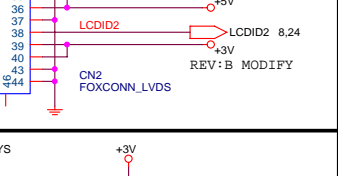
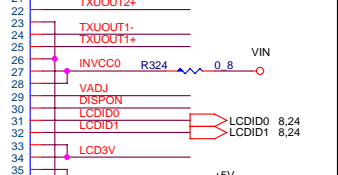
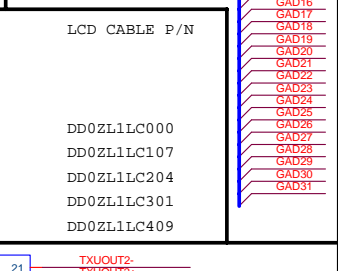
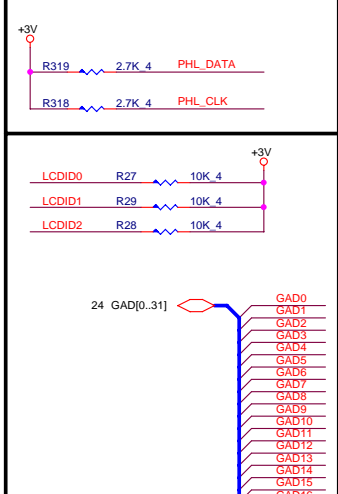
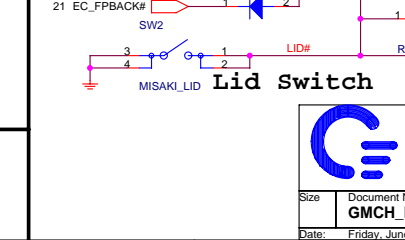
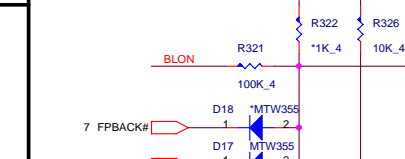
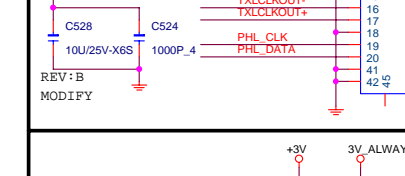
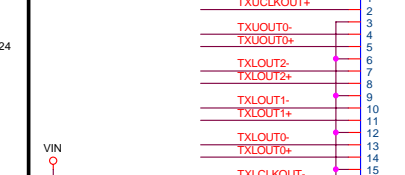
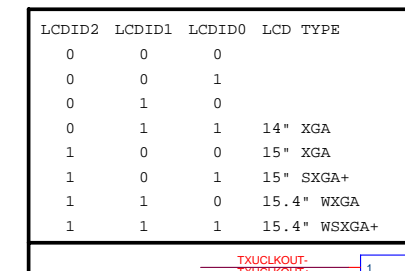
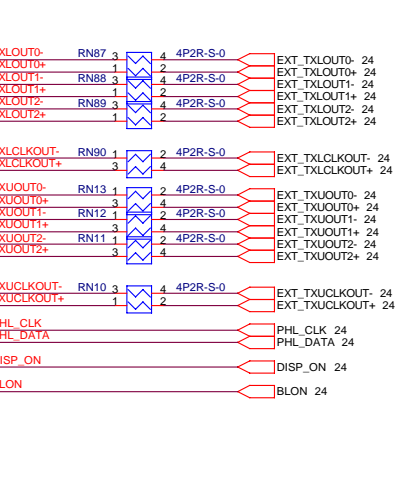
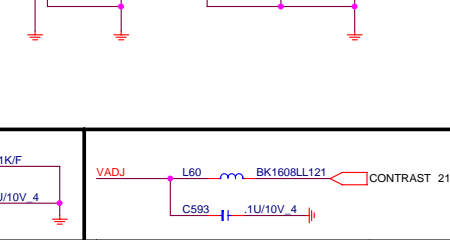
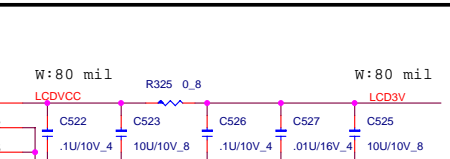
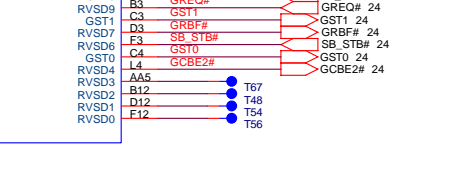
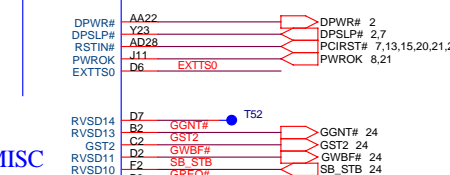
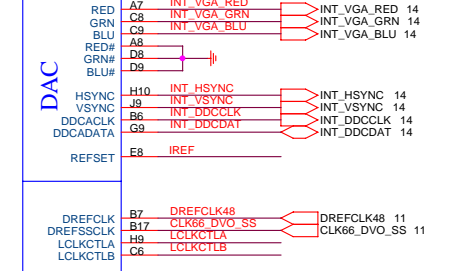
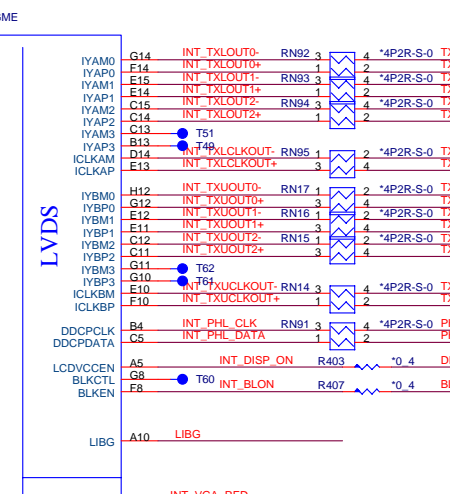
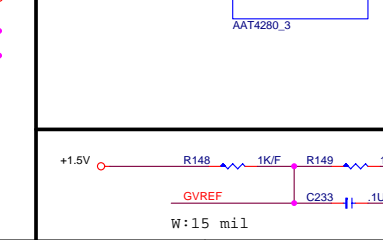
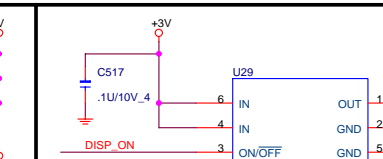
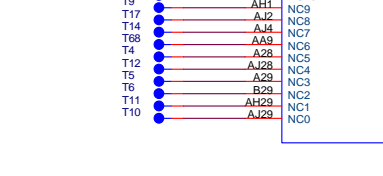
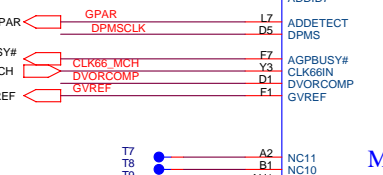
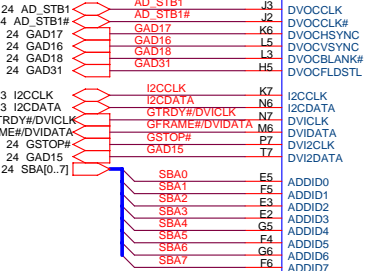
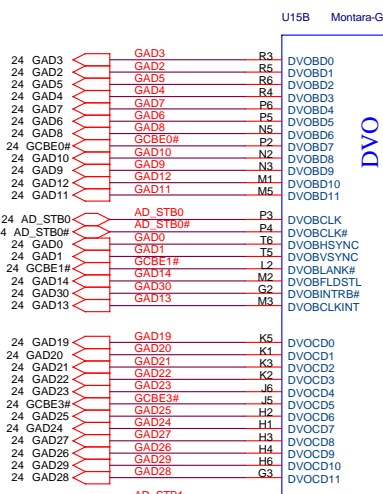
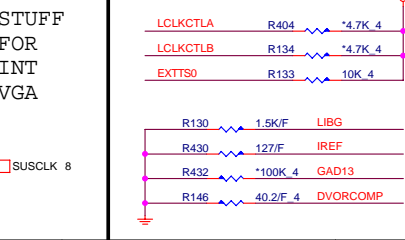
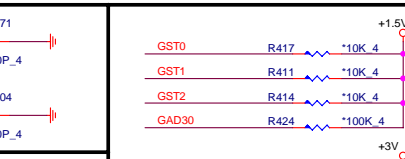
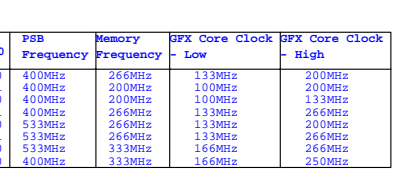
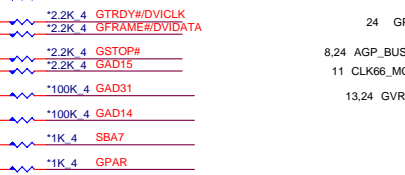
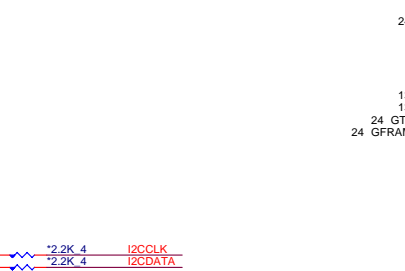
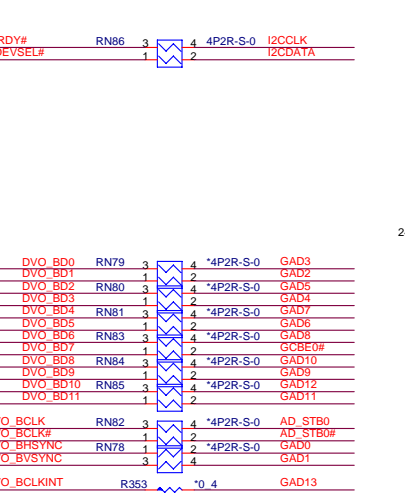
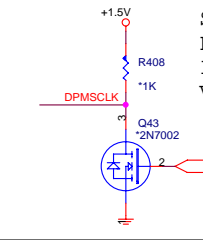
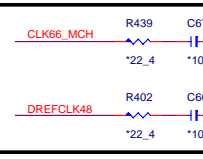
FOR CH7011

+1.5V

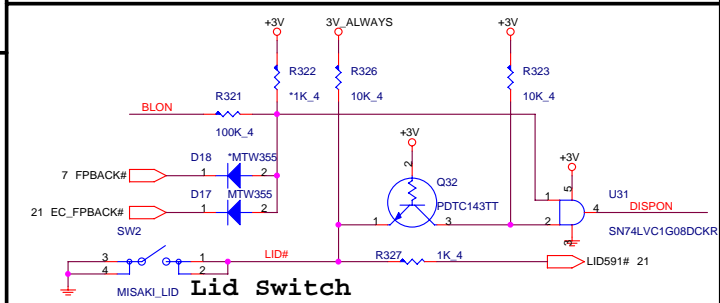
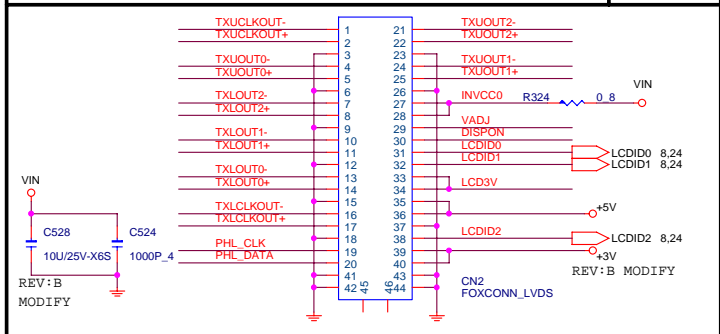
REV: B
MODIFY

STUFF FOR INT VGA

ST2	ST1	ST0	FSB Frequency	Memory Frequency	FX Core Clock - Low	FX Core Clock - High
*	0	0	400MHz	266MHz	1.33MHz	200MHz
0	0	1	400MHz	200MHz	1.00MHz	200MHz
0	1	0	400MHz	200MHz	1.00MHz	1.33MHz
0	1	1	400MHz	266MHz	1.33MHz	2.66MHz
1	0	0	533MHz	266MHz	1.33MHz	2.00MHz
1	0	1	533MHz	266MHz	1.33MHz	2.66MHz
1	1	0	533MHz	333MHz	1.66MHz	2.66MHz
1	1	1	400MHz	333MHz	1.66MHz	2.50MHz

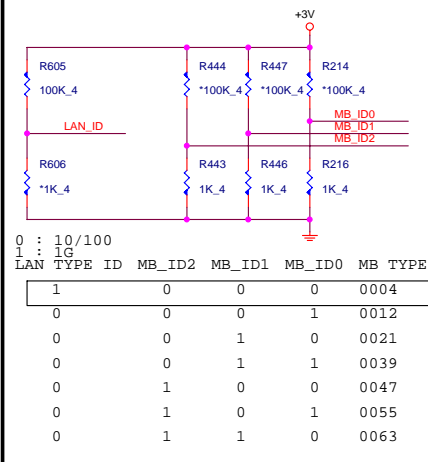


LCDID2	LCDID1	LCDID0	LCD TYPE	LCD CABLE P/N
0	0	0		
0	0	1		
0	1	0	14" XGA	DD0ZL1LC000
0	1	1	15" XGA	DD0ZL1LC107
1	0	1	15" SXGA+	DD0ZL1LC204
1	1	0	15.4" WXGA	DD0ZL1LC301
1	1	1	15.4" WSXGA+	DD0ZL1LC409



PROJECT : ZL1
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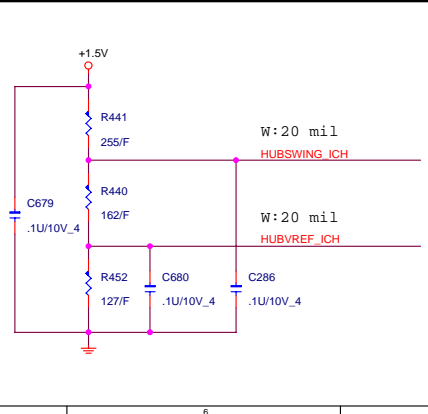
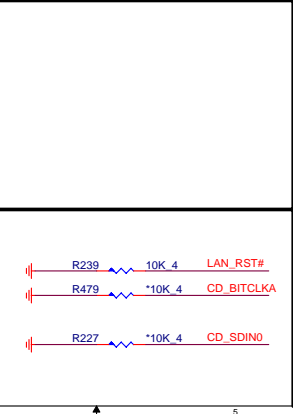
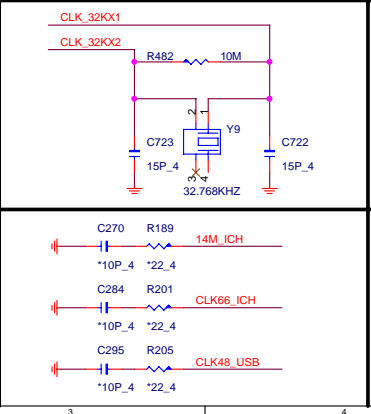
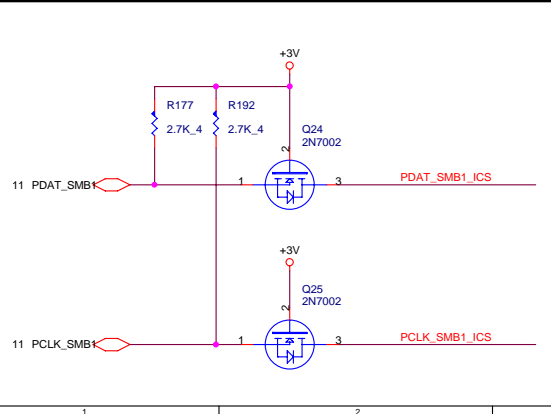
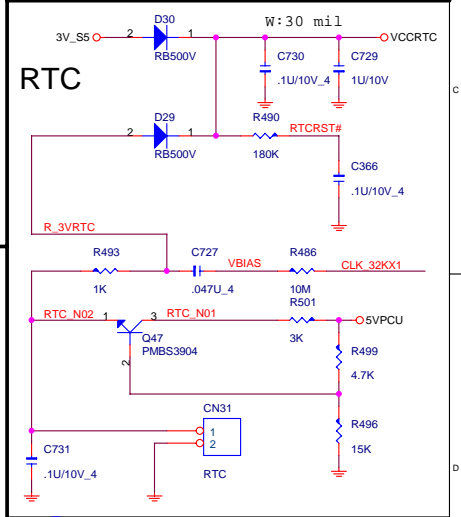
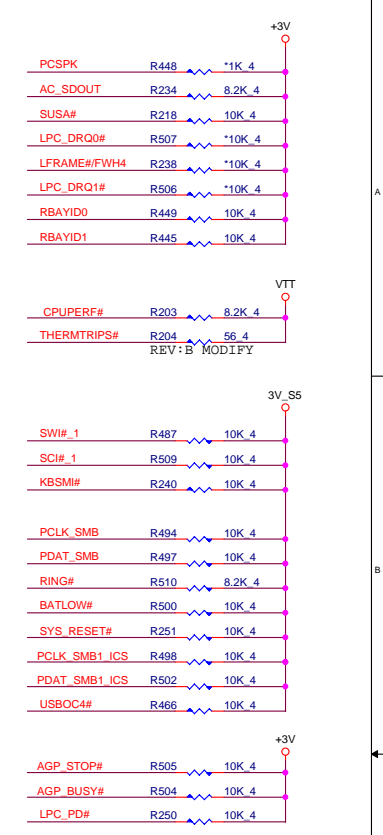
Size: Document Number: Rev: B2B
GMCH_B (DVO & LVDS)
 Date: Friday, June 04, 2004 Sheet 5 of 35

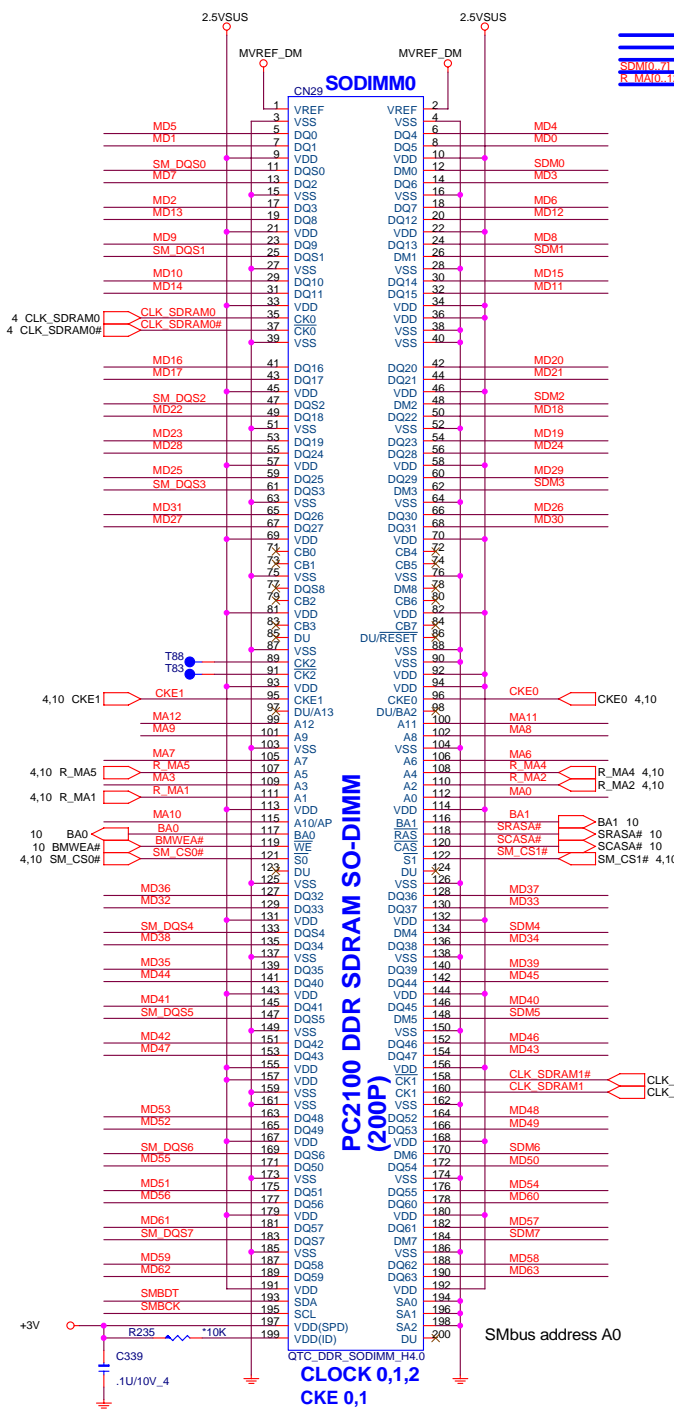


0 : 10/100
1 : 1G

LAN TYPE ID MB_ID2 MB_ID1 MB_ID0 MB TYPE

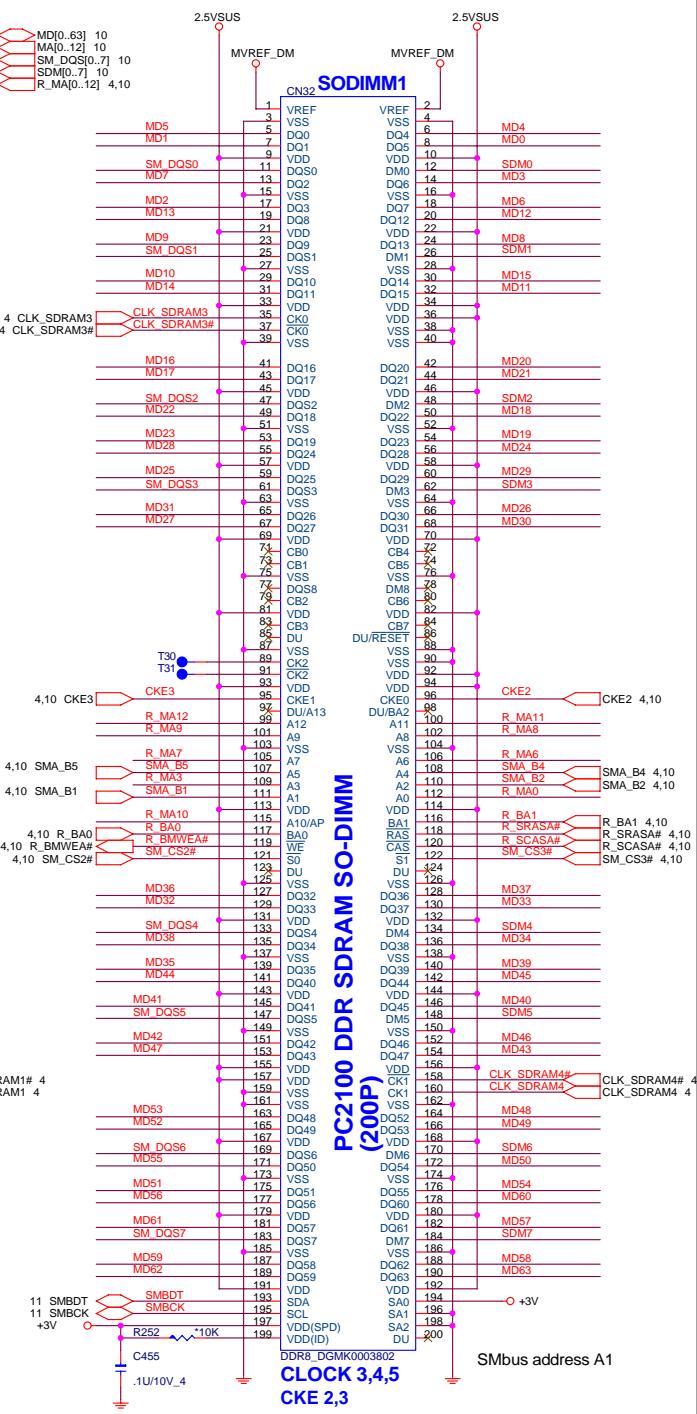
1	0	0	0	0004
0	0	0	1	0012
0	0	1	0	0021
0	0	1	1	0039
0	1	0	0	0047
0	1	0	1	0055
0	1	1	0	0063





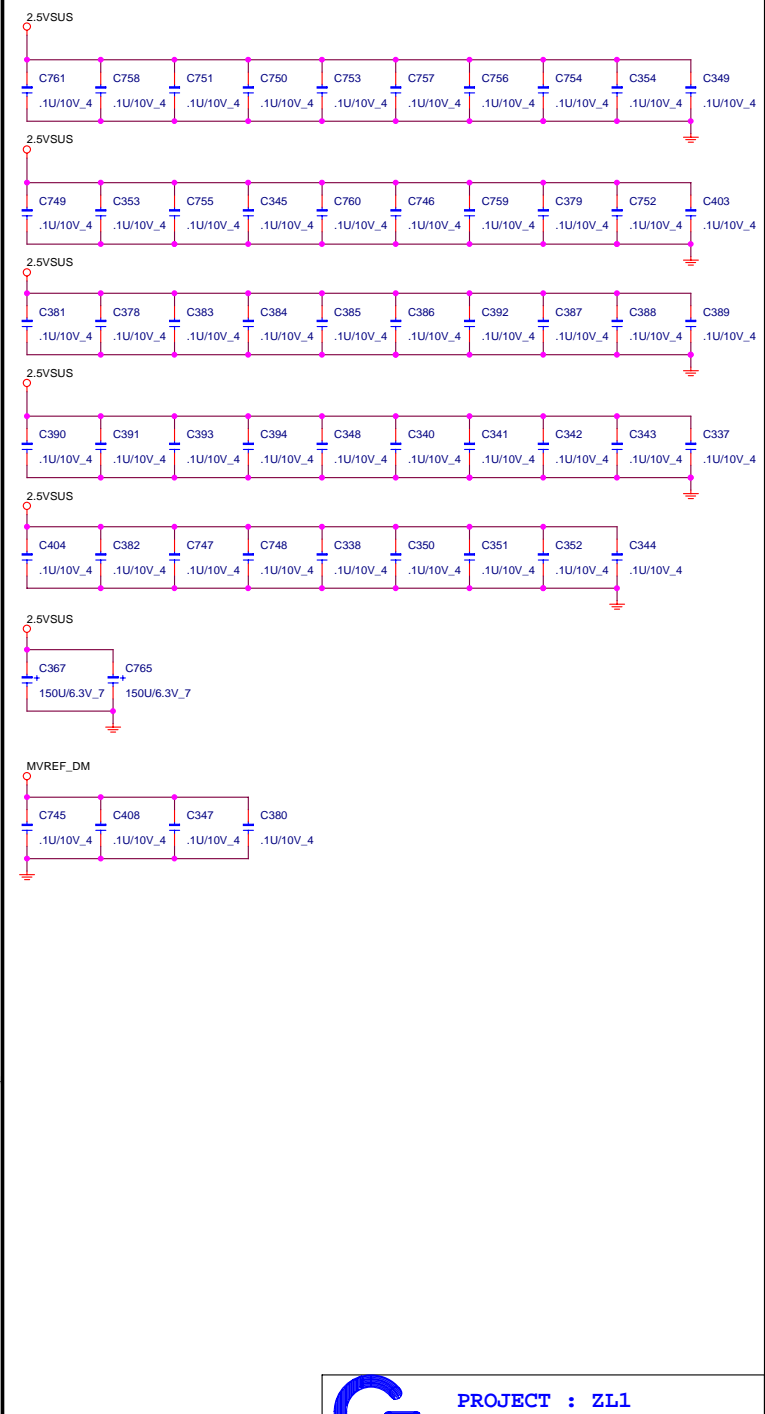
PC2100 DDR SDRAM SO-DIMM (200P)

CLOCK 0,1,2
CKE 0,1



PC2100 DDR SDRAM SO-DIMM (200P)

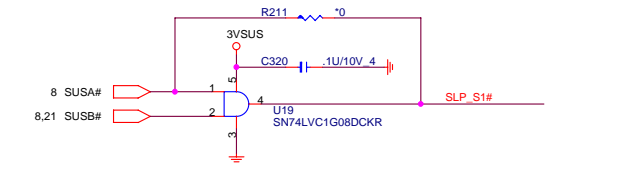
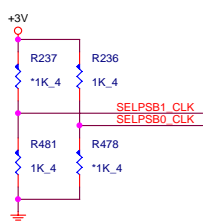
CLOCK 3,4,5
CKE 2,3



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Quanta Computer Inc.

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	DDR SO-DIMM (200P)	A1A
Date:	Friday, June 04, 2004	Sheet 9 of 35

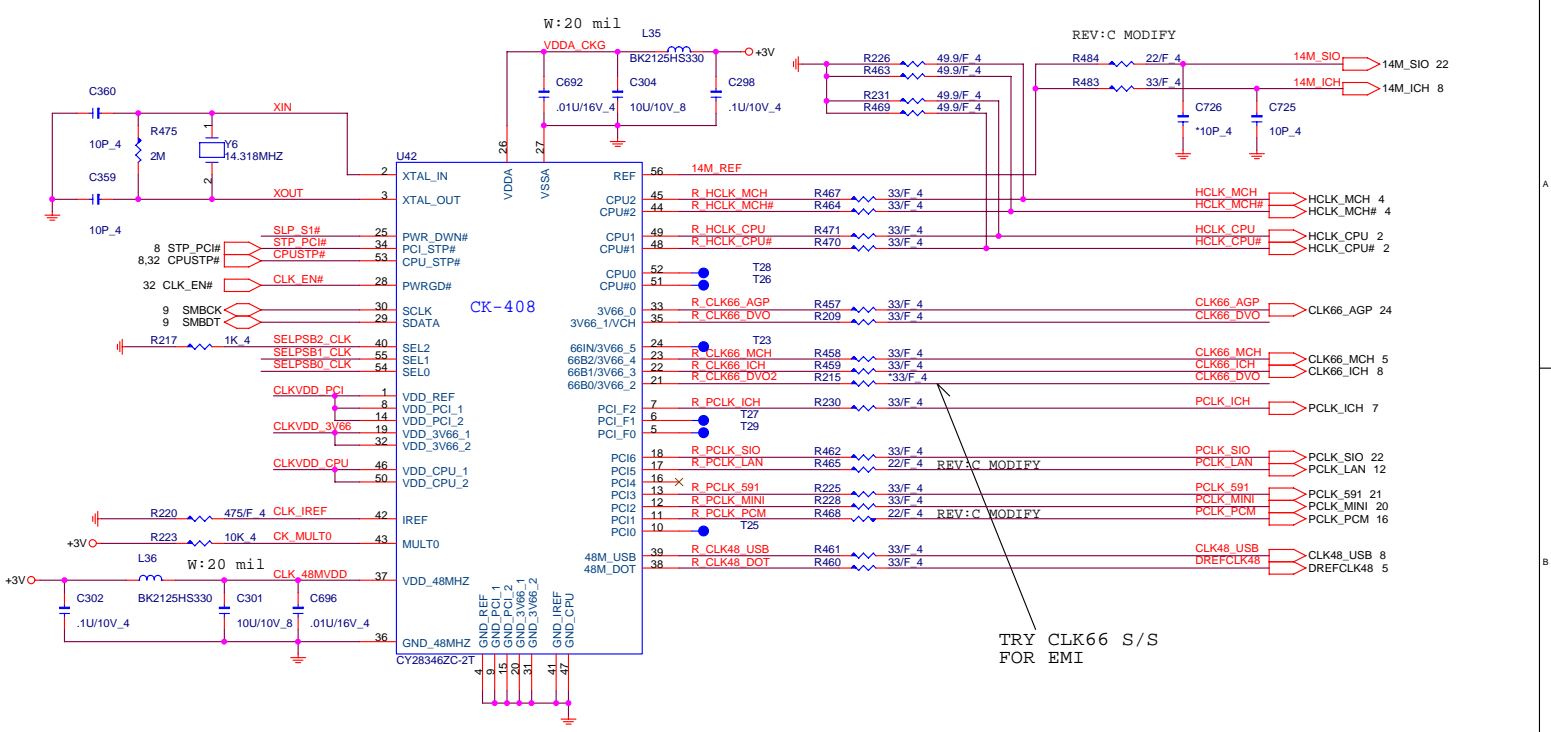
S2	S1	S0	CPU	3V66[0..4]	3V66_5/66IN
1	0	0	66	66IN	66 Input
1	0	1	100	66IN	66 Input
1	1	0	200	66IN	66 Input
1	1	1	133	66IN	66 Input
0	0	0	66	66	66
0	0	1	100	66	66
0	1	0	200	66	66
0	1	1	133	66	66



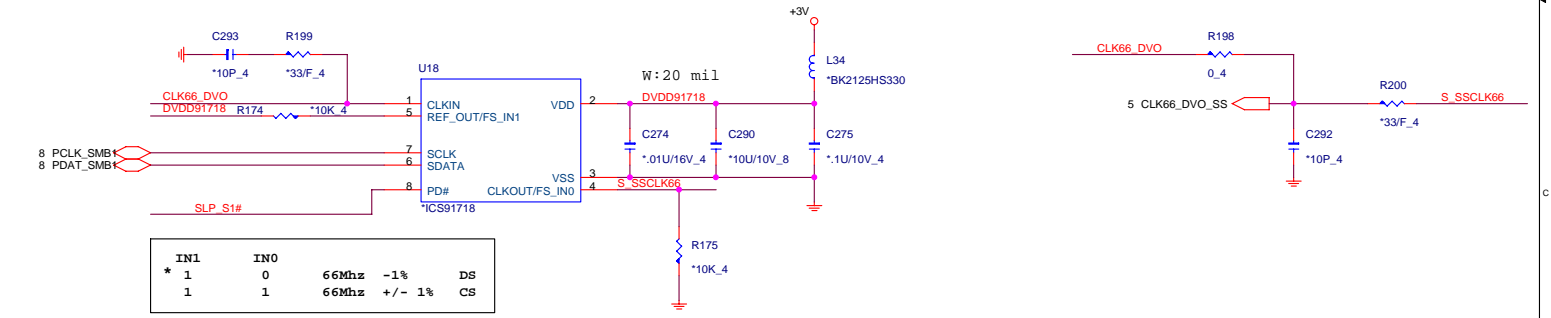
3V66_1/VCH
 SMBus Byte 0, Bit 5 = 0 66 MHz W S/S
 SMBus Byte 0, Bit 5 = 1 48 MHz W/O S/S

Byte 0, Bit 7 = 0 Disable Spread Spectrum
 Byte 0, Bit 7 = 1 Enable Spread Spectrum

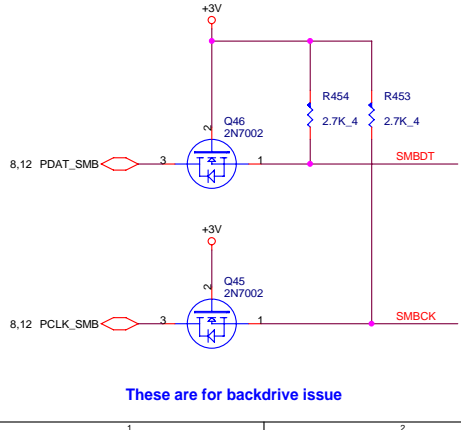
Byte 4 Bit 7	Byte 5 Bit 7	Byte 5 Bit 6	Spread Mode	Spread %
SS2	SS1	SS0		
0	0	0	DOWN	+0.00, -0.25
0	0	1	DOWN	+0.00, -0.50
0	1	0	DOWN	+0.00, -0.75
0	1	1	DOWN	+0.00, -1.00
1	0	0	CENTER	+0.13, -0.13
1	0	1	CENTER	+0.25, -0.25
1	1	0	CENTER	+0.37, -0.37
1	1	1	CENTER	+0.50, -1.50



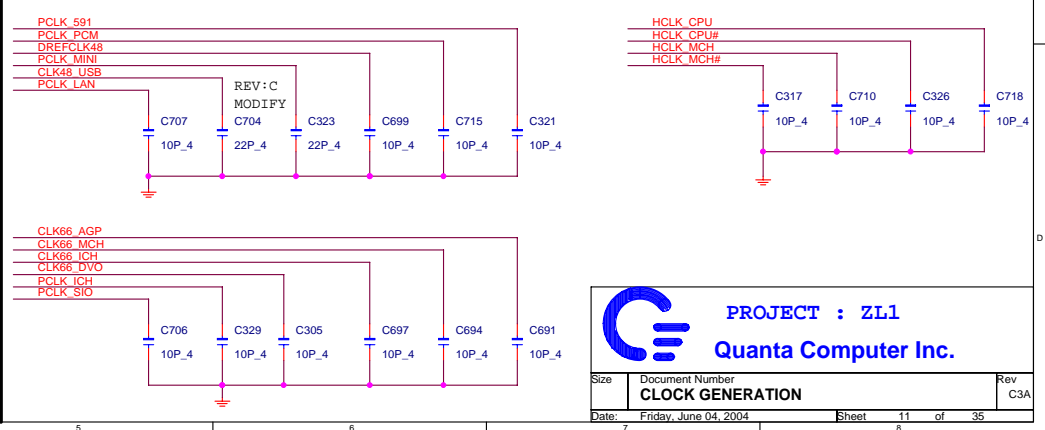
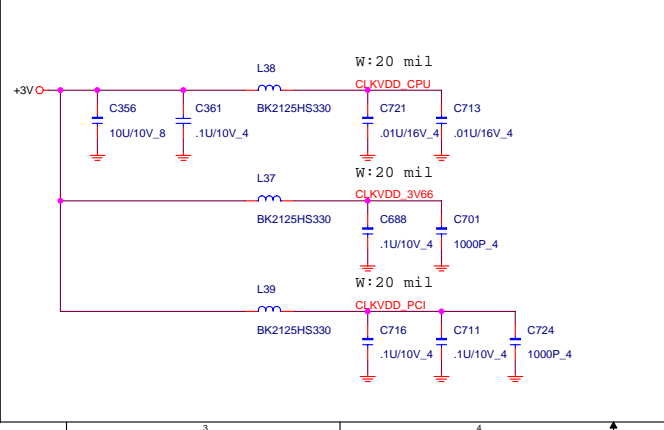
TRY CLK66 S/S FOR EMI



IN1	IN0	Frequency	Tolerance	Mode
* 1	0	66Mhz	-1%	DS
1	1	66Mhz	+/- 1%	CS

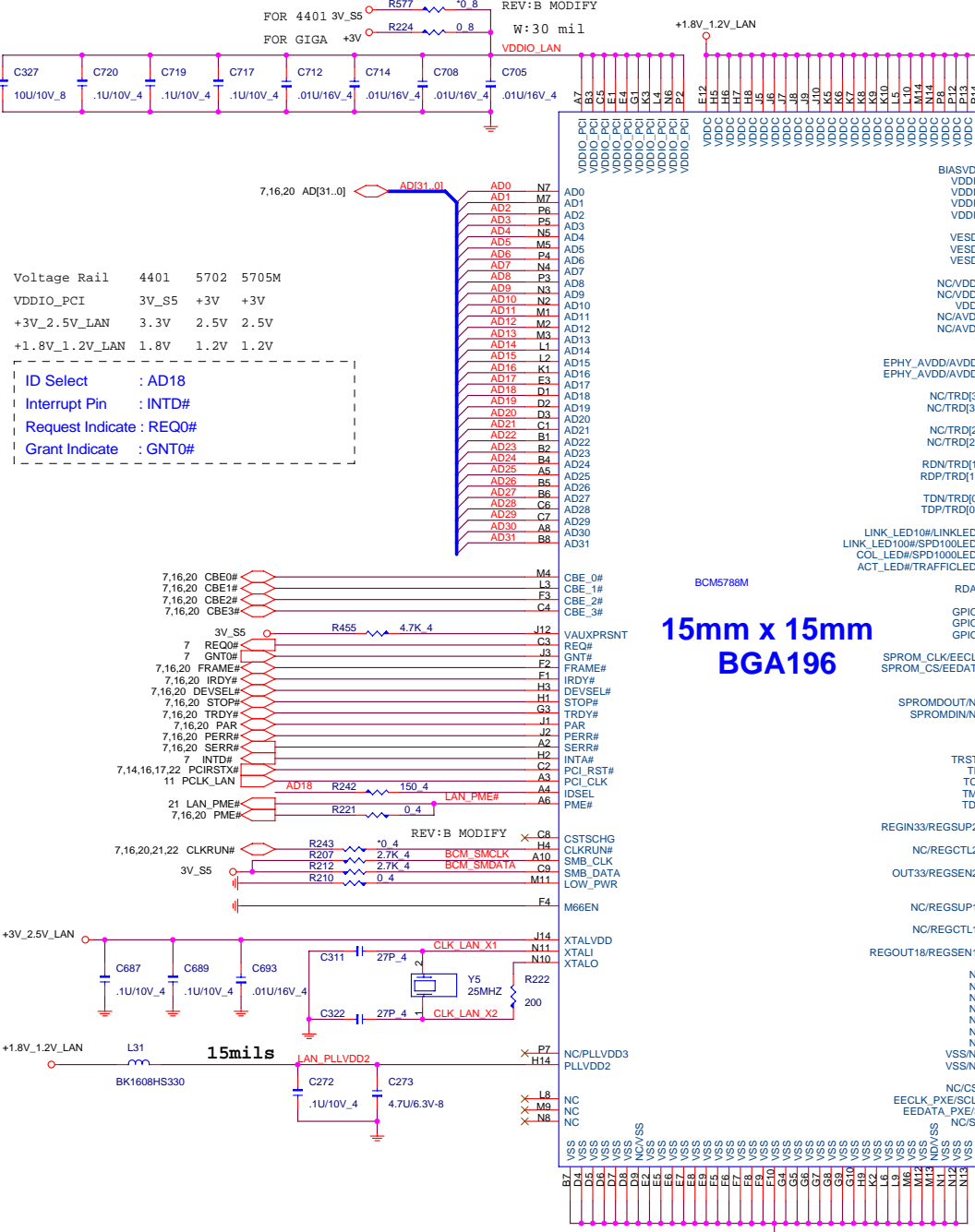


These are for backdrive issue

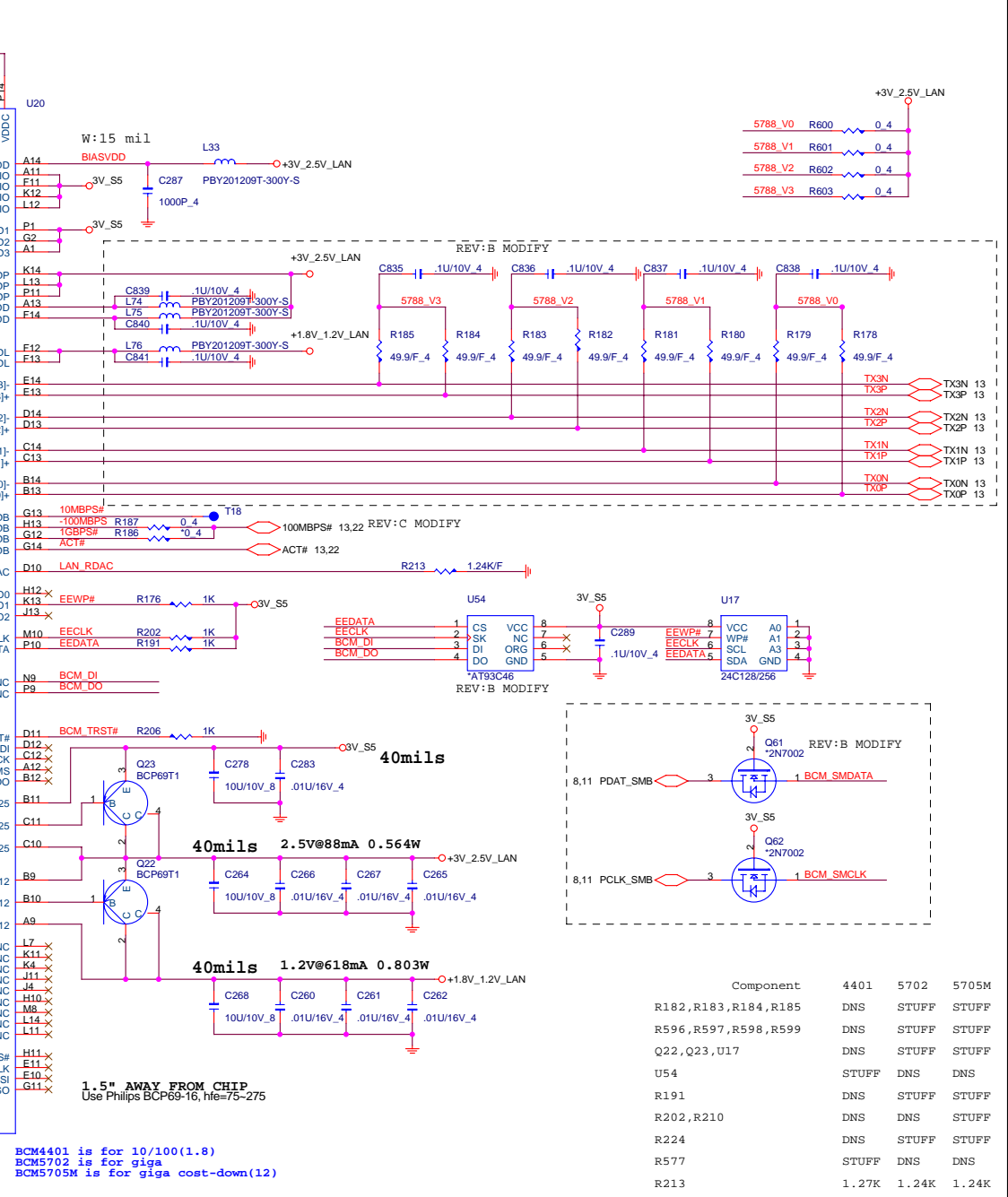


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Quanta Computer Inc.

Size	Document Number	Rev
	CLOCK GENERATION	C3A
Date:	Friday, June 04, 2004	Sheet 11 of 35



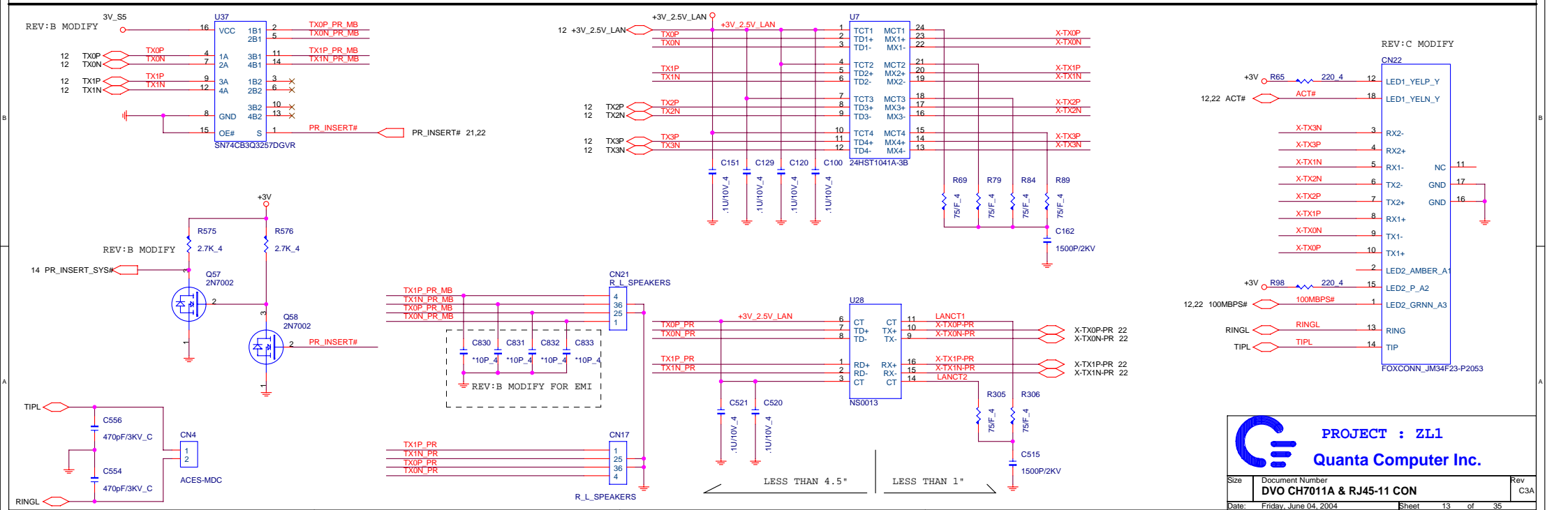
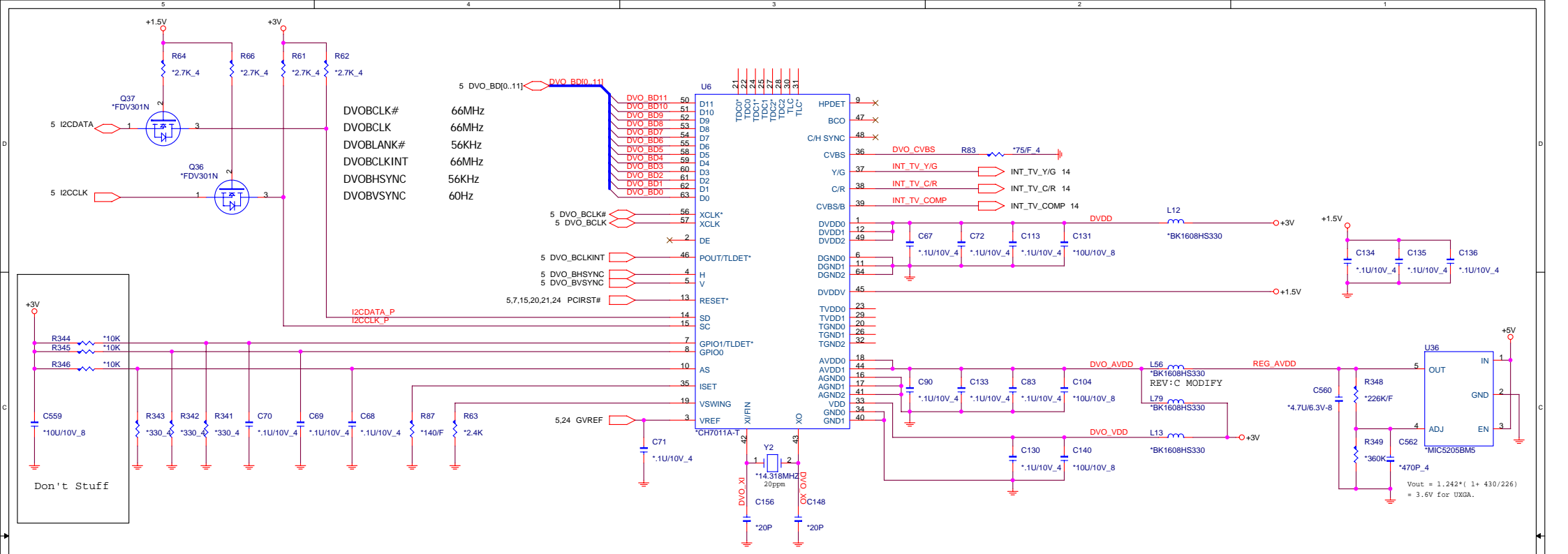
**15mm x 15mm
BGA196**

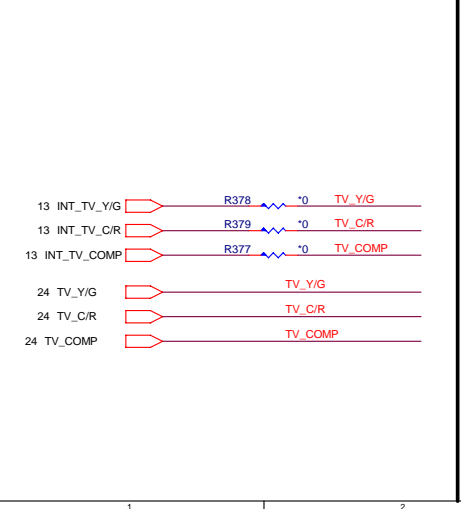
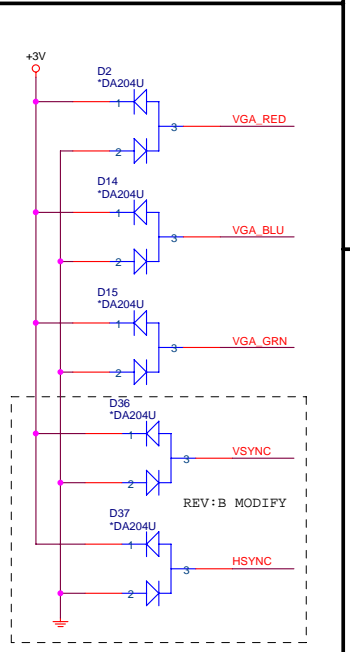
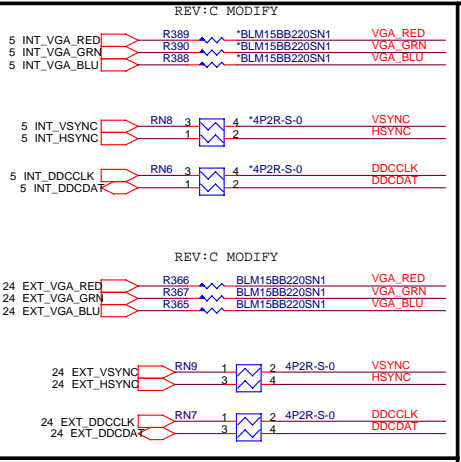
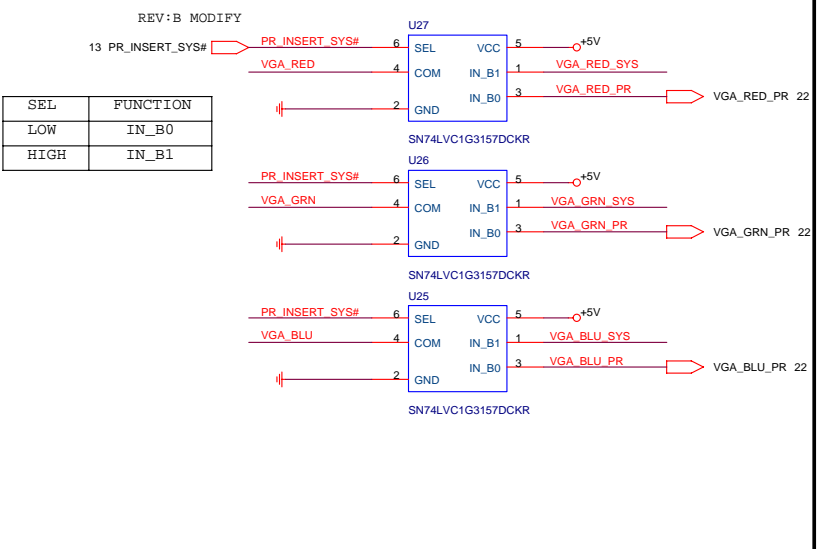


Component	4401	5702	5705M
R182, R183, R184, R185	DNS	STUFF	STUFF
R596, R597, R598, R599	DNS	STUFF	STUFF
Q22, Q23, U17	DNS	STUFF	STUFF
U54	STUFF	DNS	DNS
R191	DNS	STUFF	STUFF
R202, R210	DNS	DNS	STUFF
R224	DNS	STUFF	STUFF
R577	STUFF	DNS	DNS
R213	1.27K	1.24K	1.24K

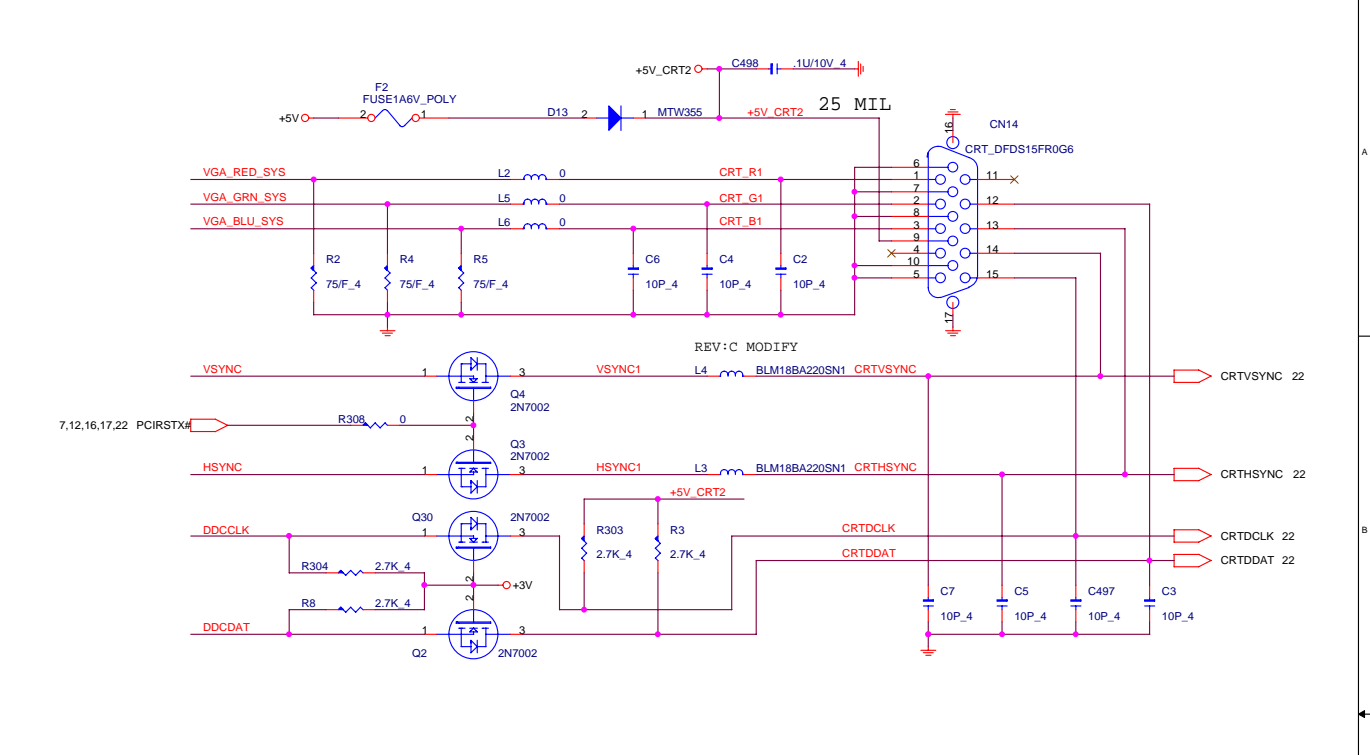
PROJECT : ZL1
Quanta Computer Inc.

Size	Document Number	Rev
	BCM5788M LAN	C3A
Date:	Friday, June 04, 2004	Sheet 12 of 35

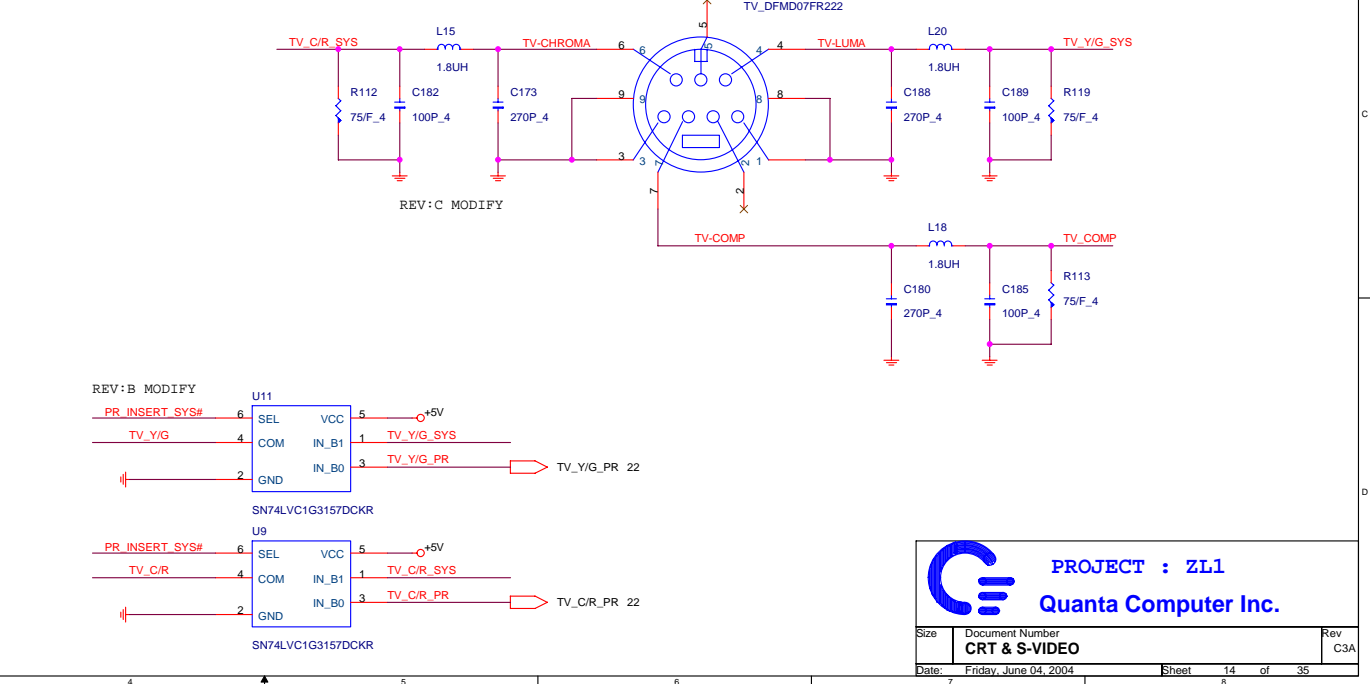


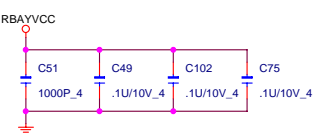
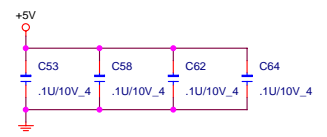
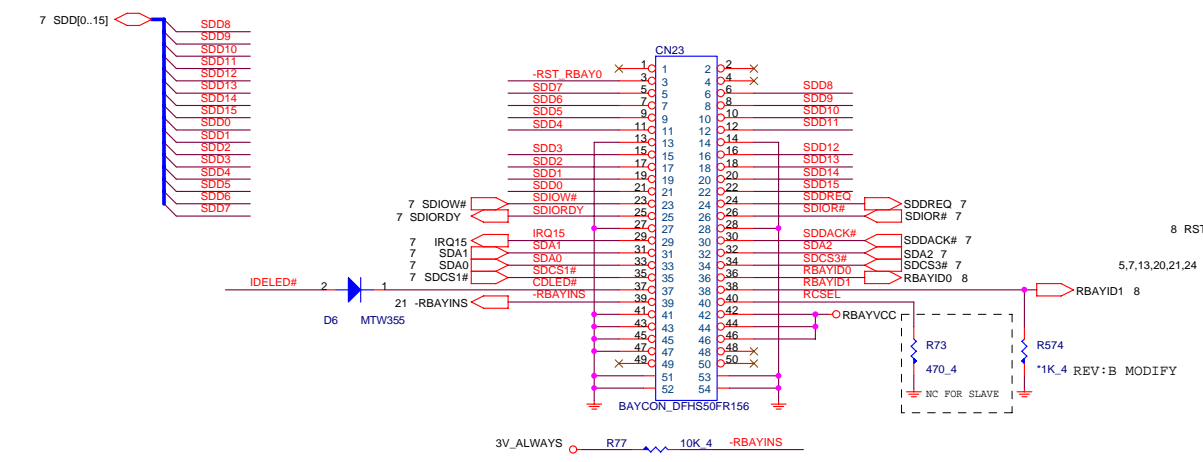
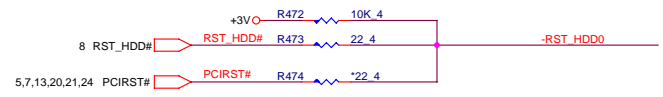
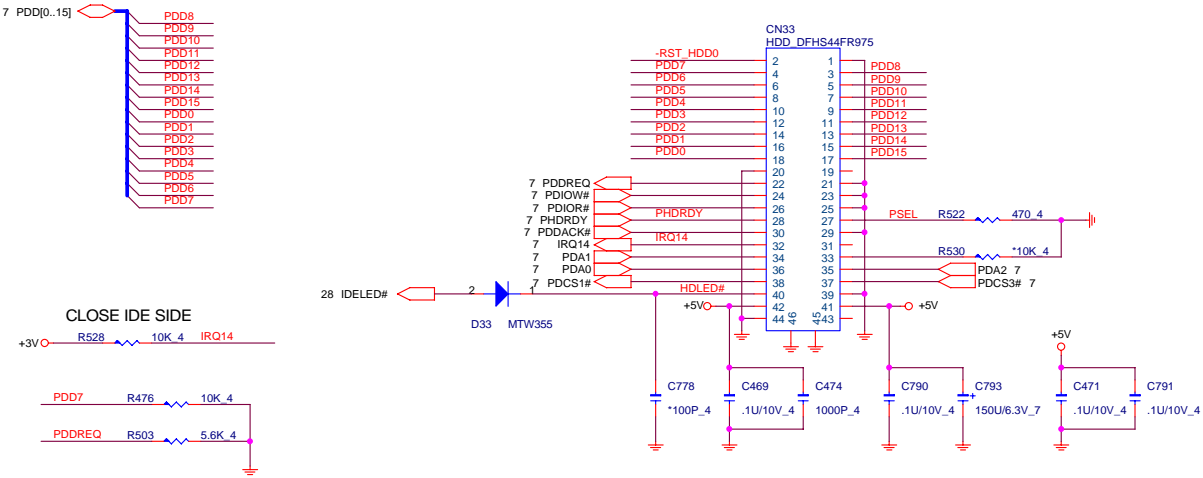


CRT PORT



S-VIDEO

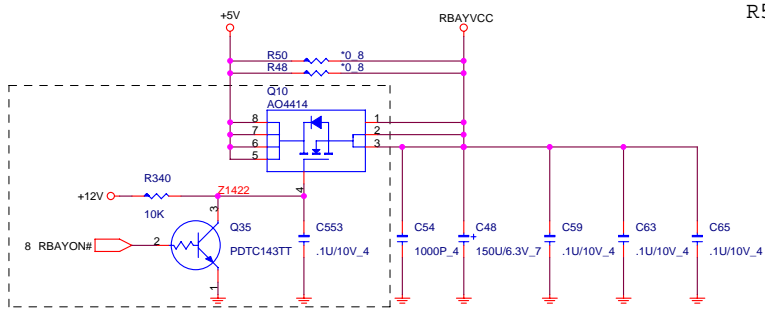
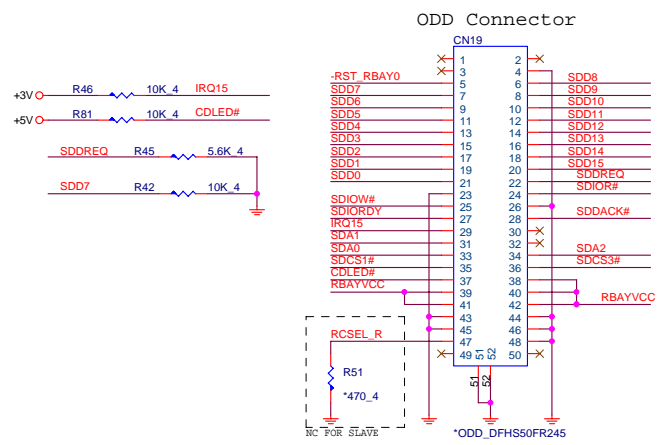




BAY ID STATUS

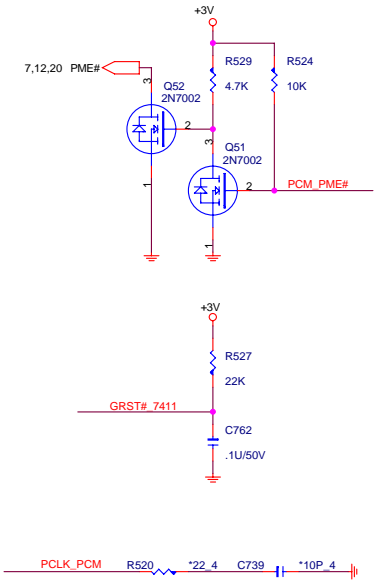
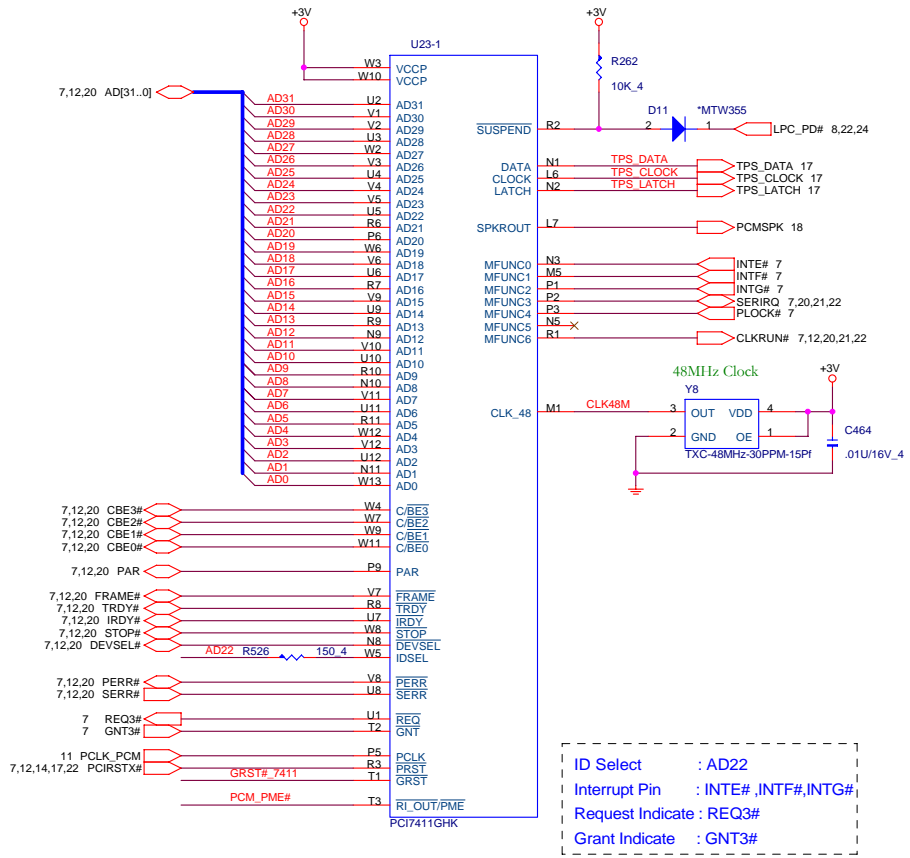
RBAYID0/ LBAYID0	RBAYID1/ LBAYID1	STATUS
0	0	FDD
0	1	HDD
1	0	CD/DVD

Component	W/O Media Bay	W Media Bay
R472, R473	DNS	STUFF
R94, R96	DNS	STUFF
R474, R101	STUFF	DNS
R48, R50	STUFF	DNS
Q10, Q35	DNS	STUFF
R340, C553	DNS	STUFF
R73, CN23	DNS	STUFF
R51, CN19	STUFF	DNS
R574	STUFF	DNS

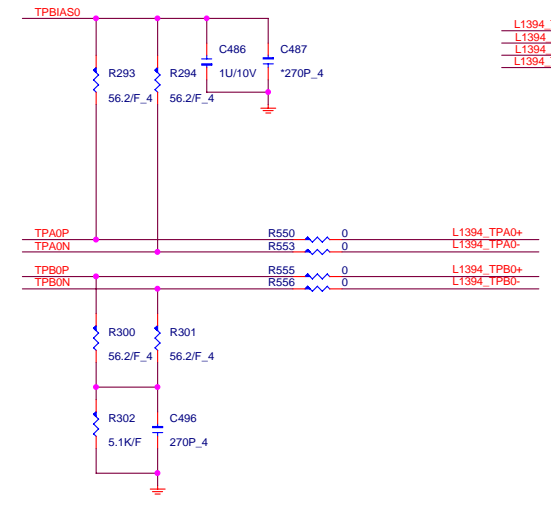
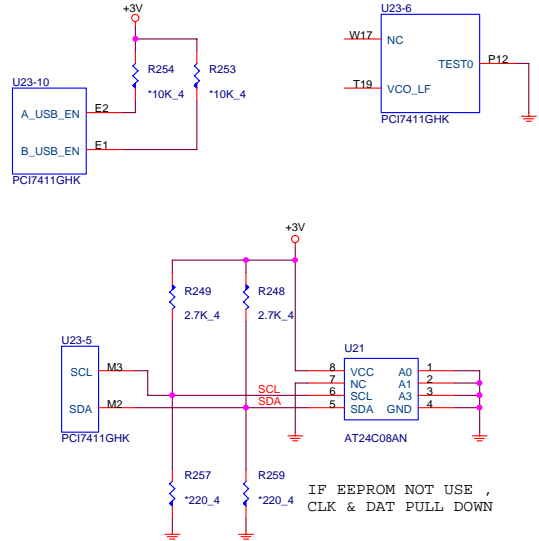
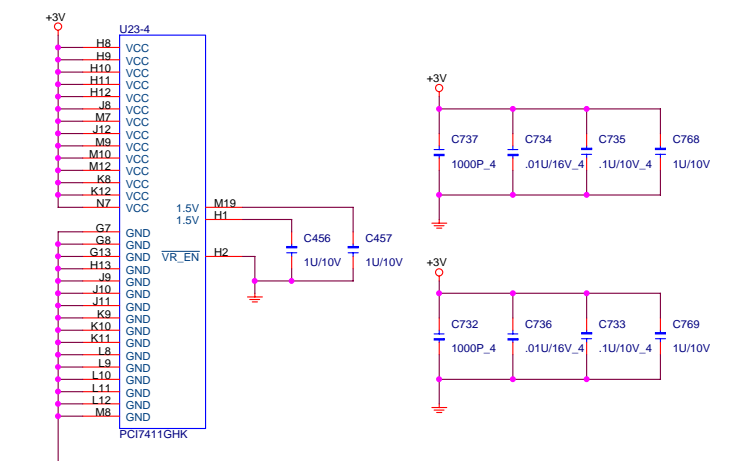
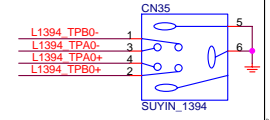
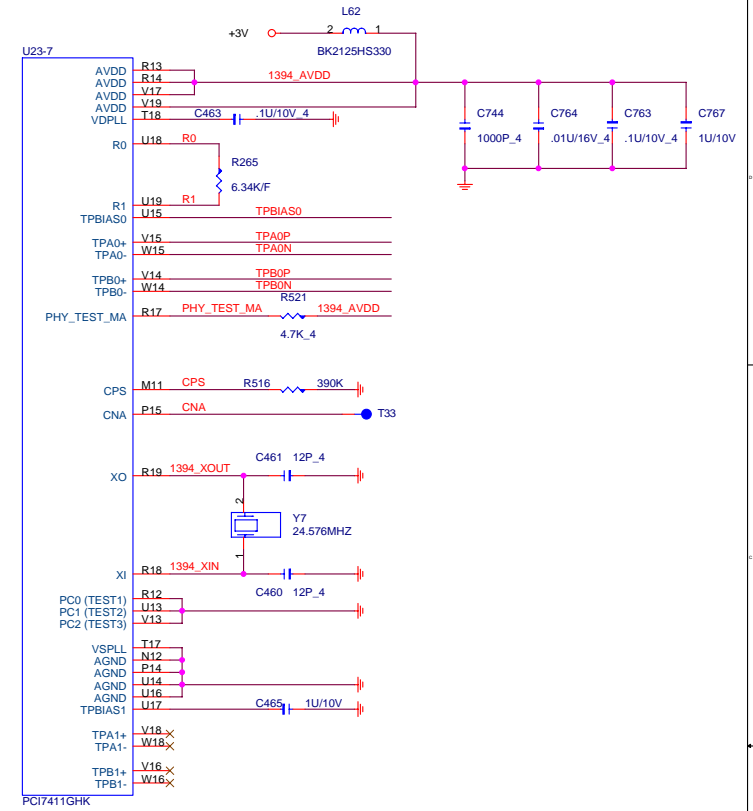


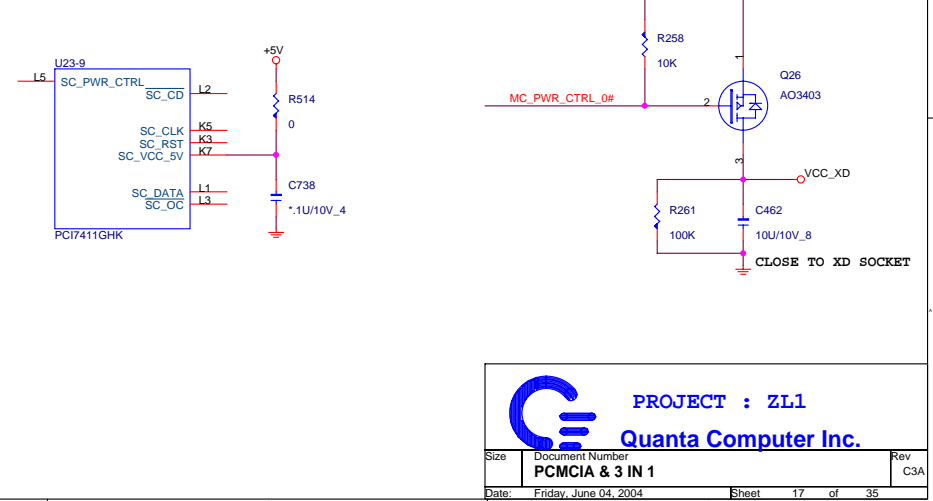
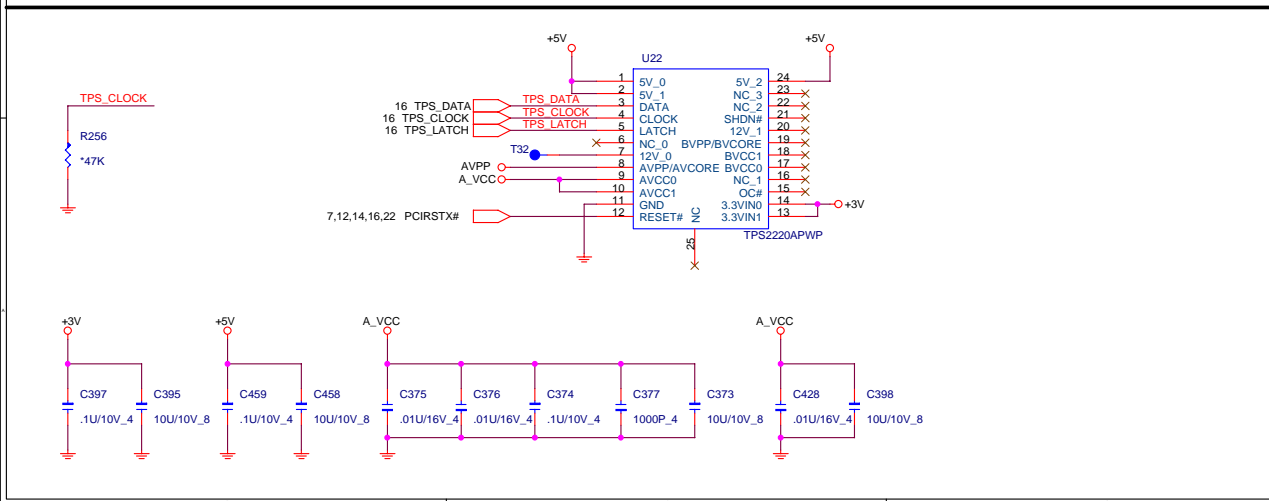
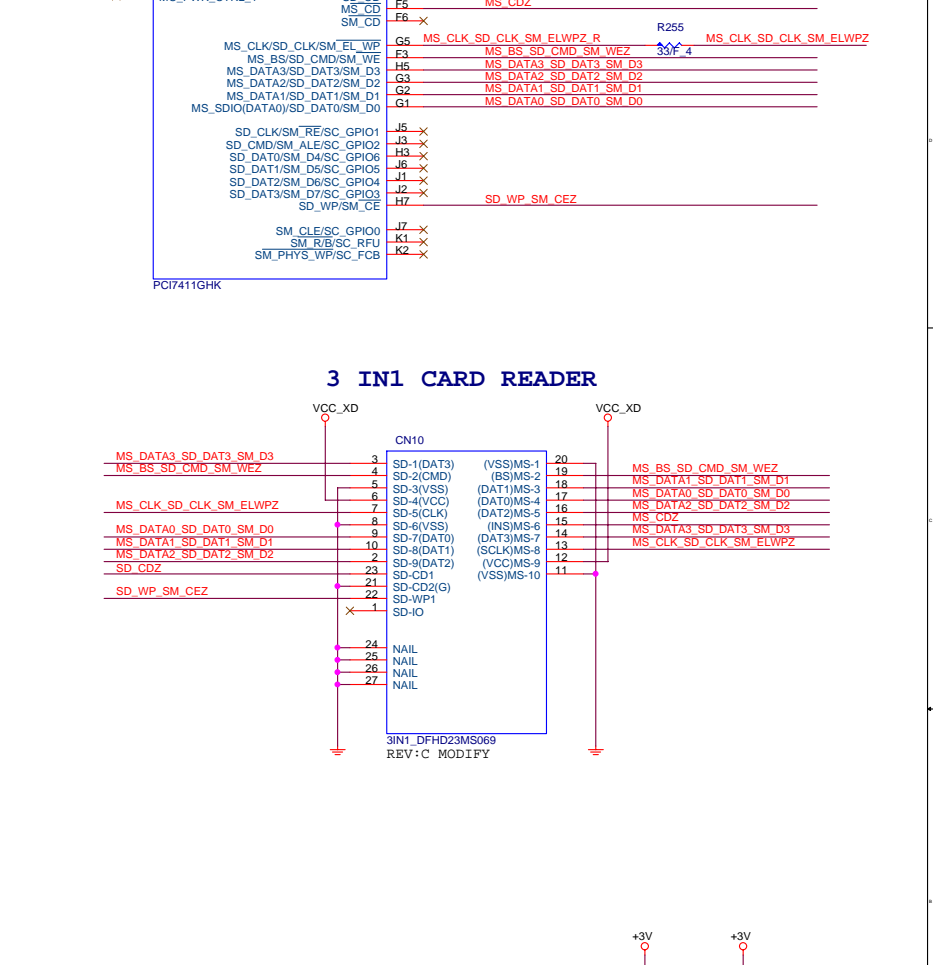
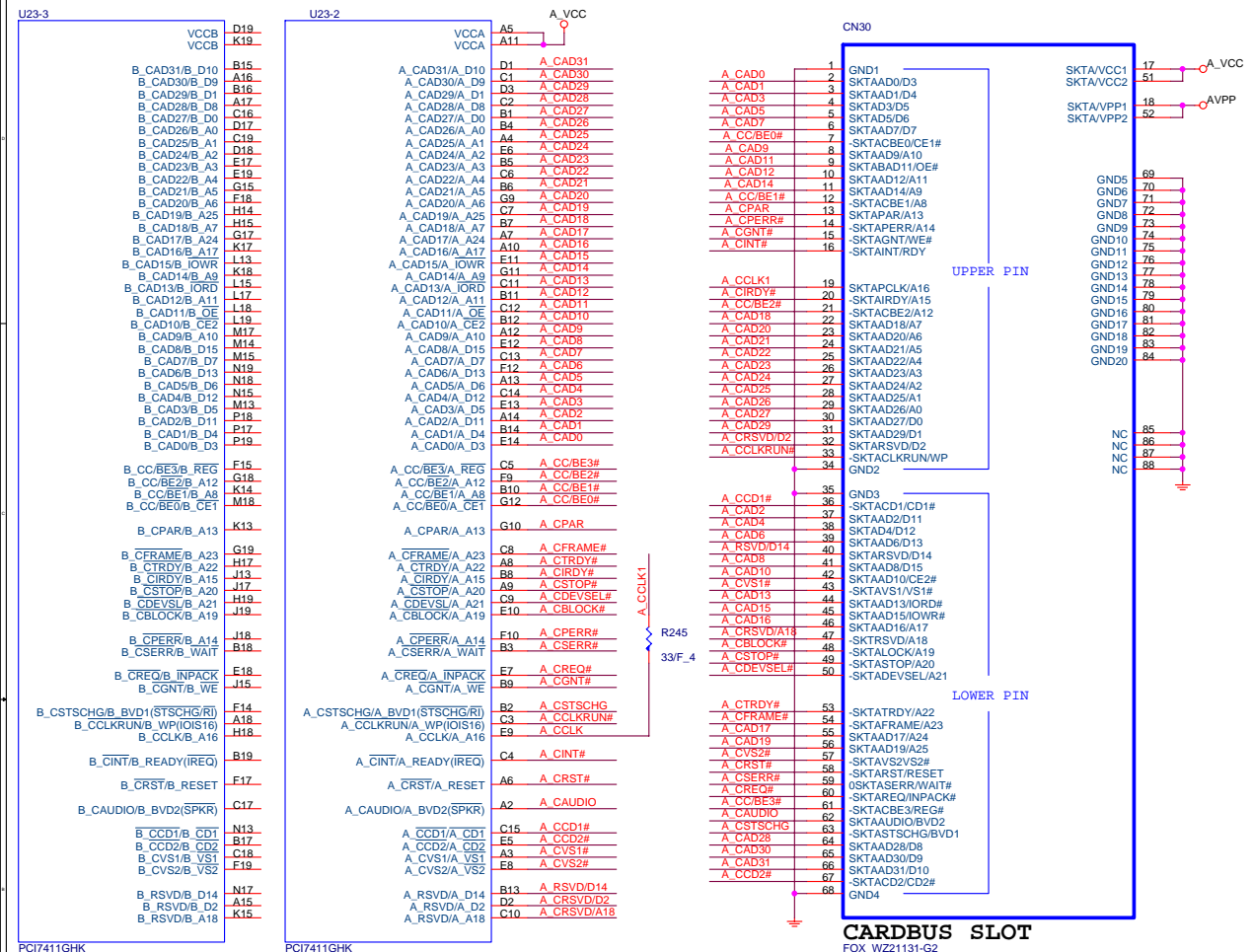
PROJECT : ZL1
Quanta Computer Inc.

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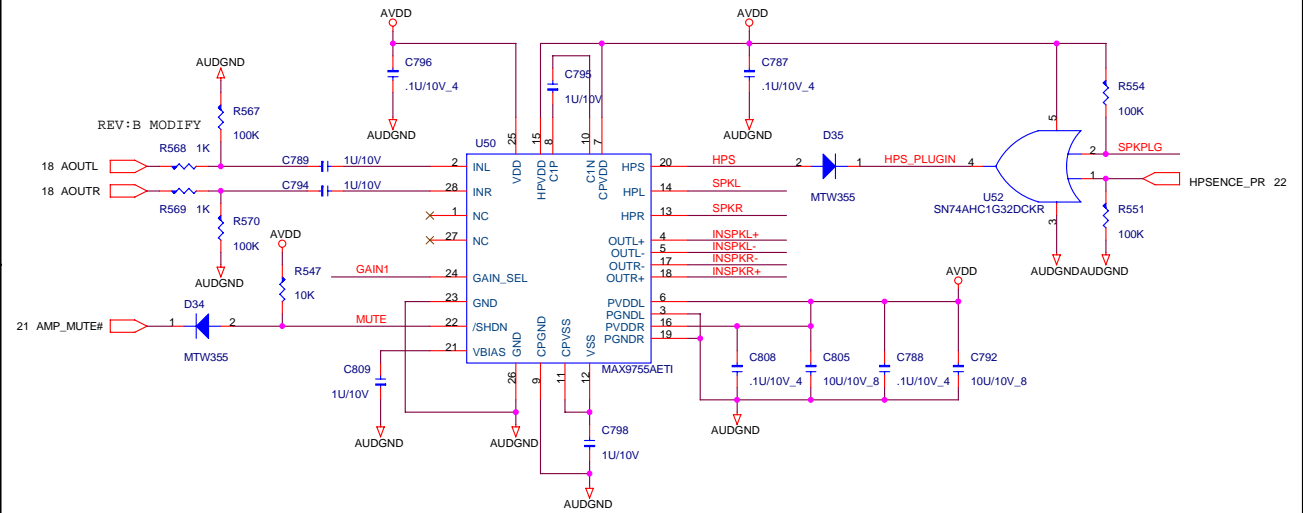
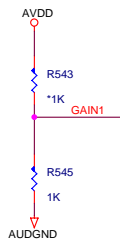


ID Select : AD22
 Interrupt Pin : INTE#, INTF#, INTG#
 Request Indicate : REQ3#
 Grant Indicate : GNT3#

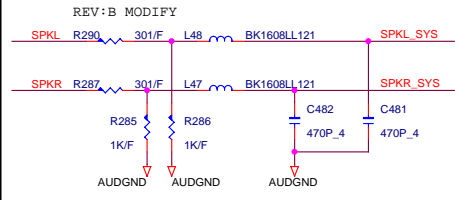
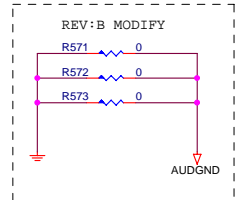
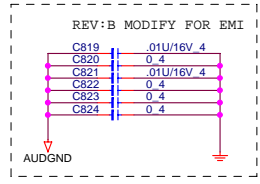
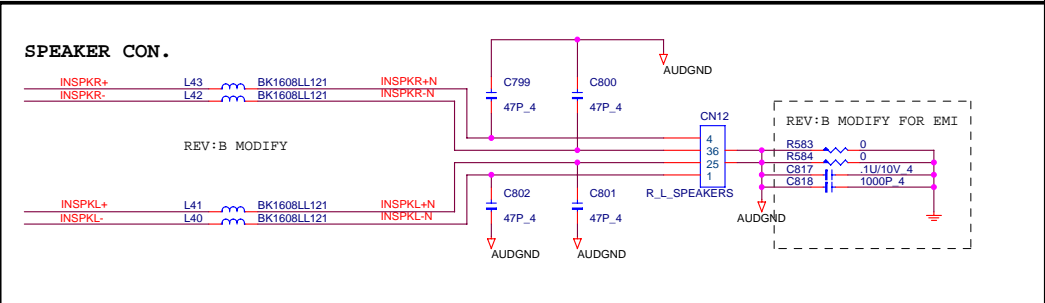
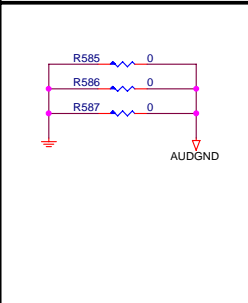
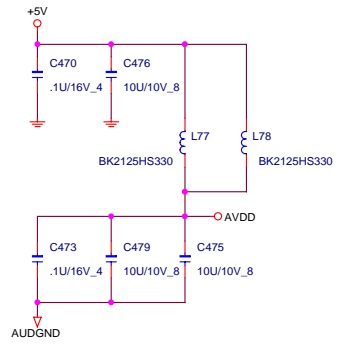




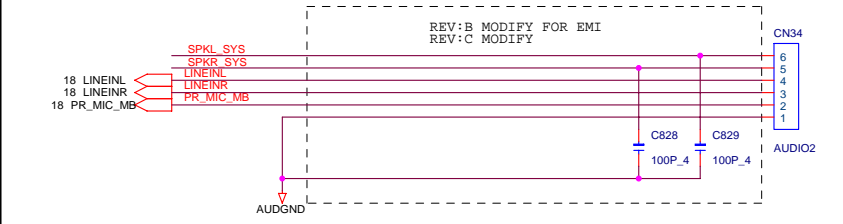
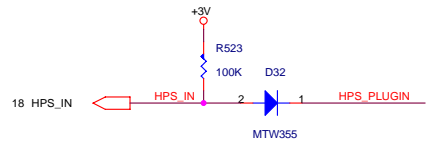
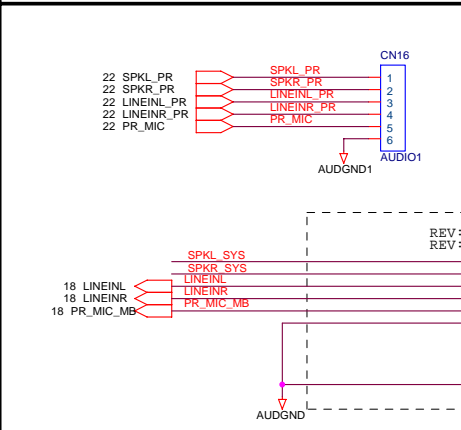
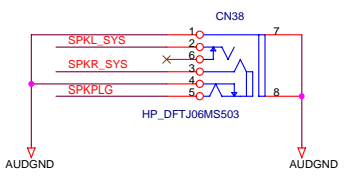
GAIN1	SPKR MODE	HP MODE
0	10.5	3
1	9	0



AMP POWER

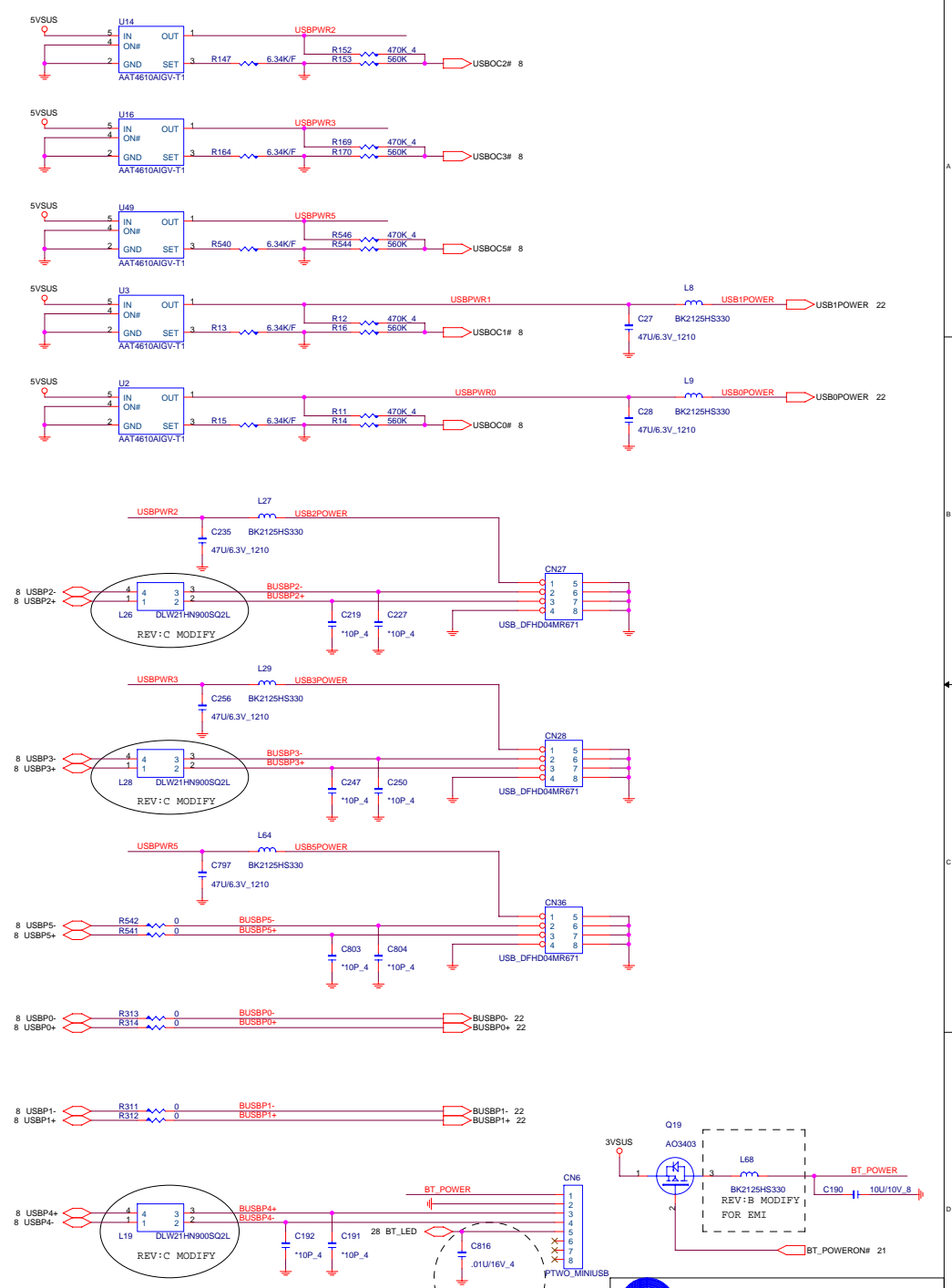
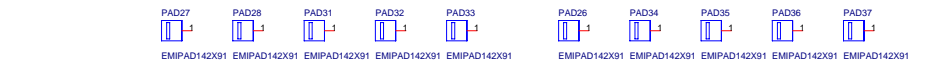
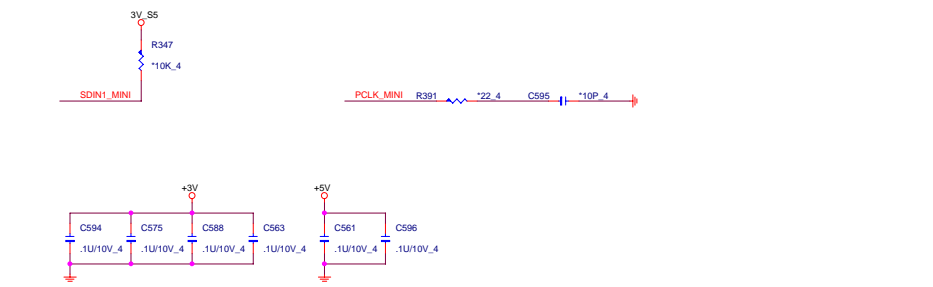
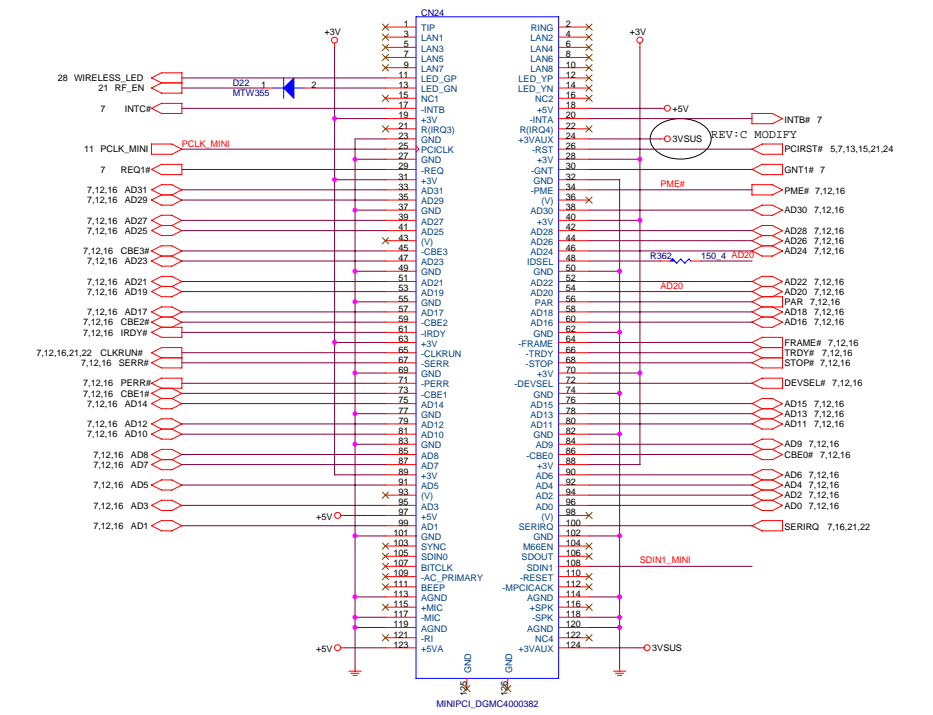


LINE OUT



ID Select : AD20
 Interrupt Pin : INTB#, INTCA#
 Request Indicate : REQ1#
 Grant Indicate : GNT1#

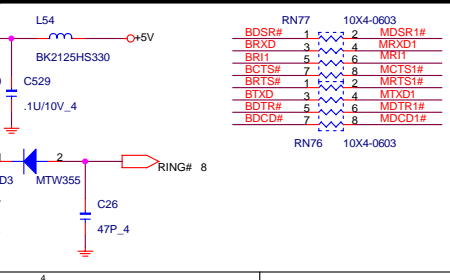
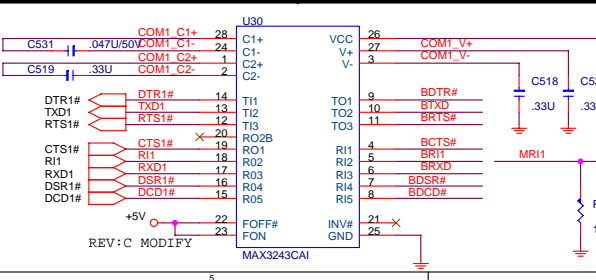
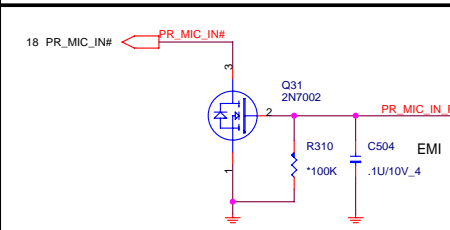
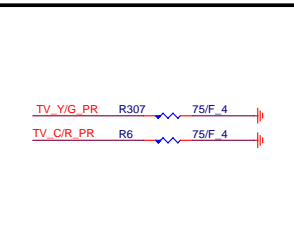
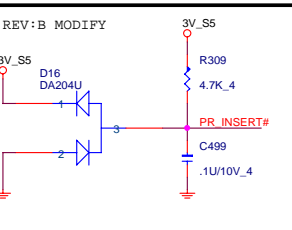
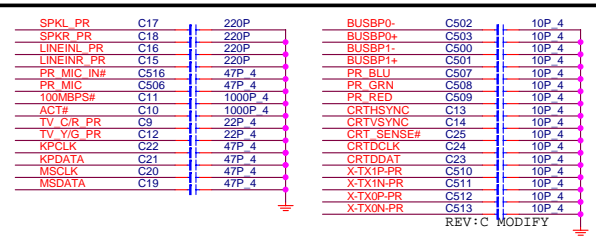
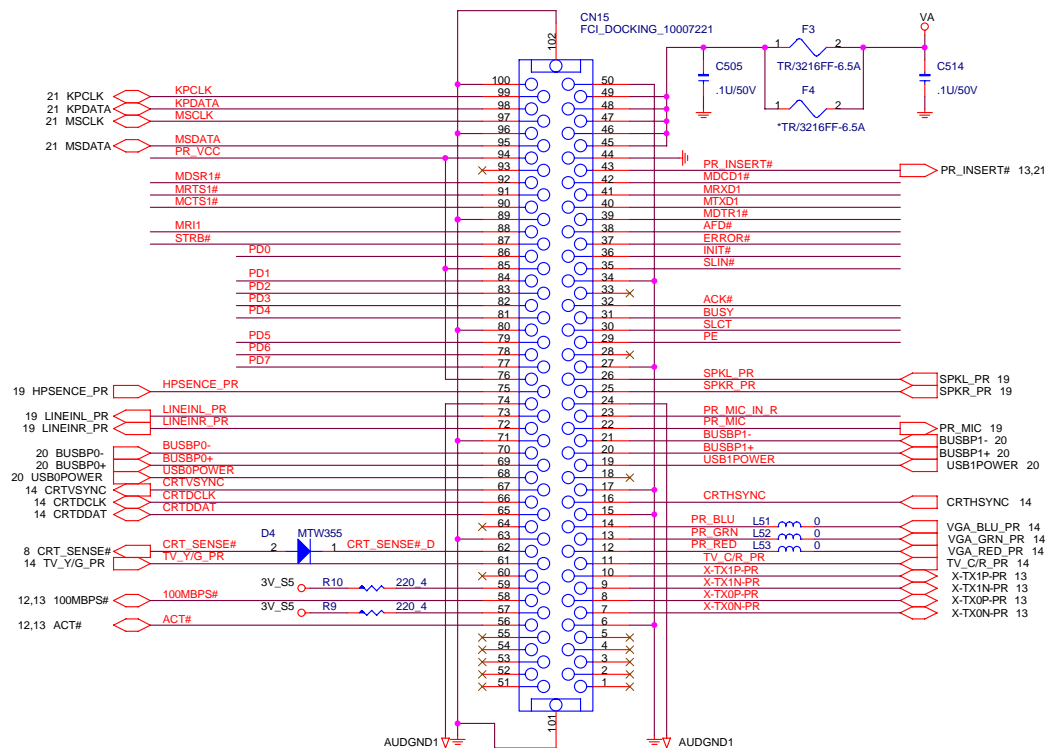
MINI-PCI



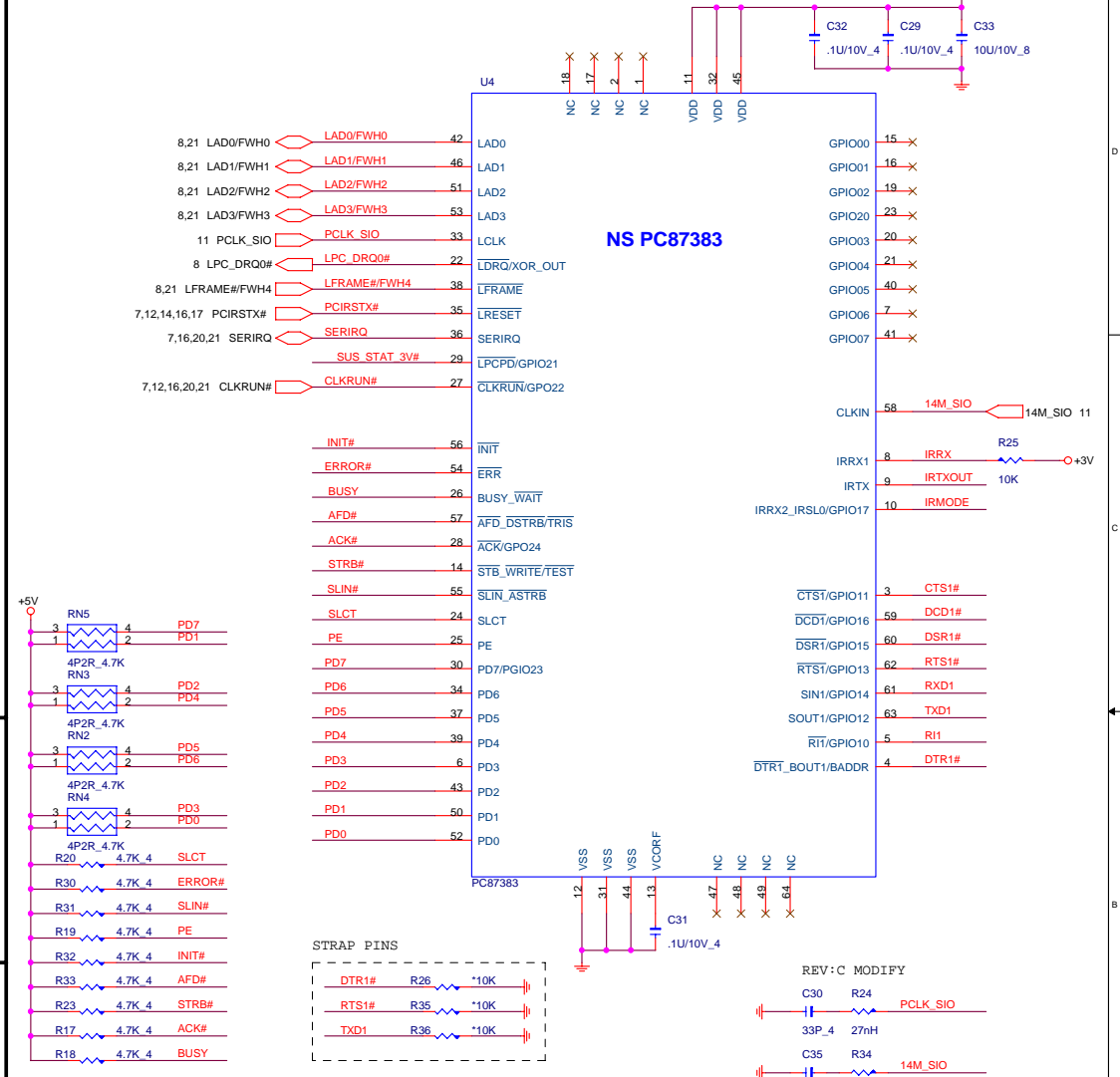
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MINI PCI,USB

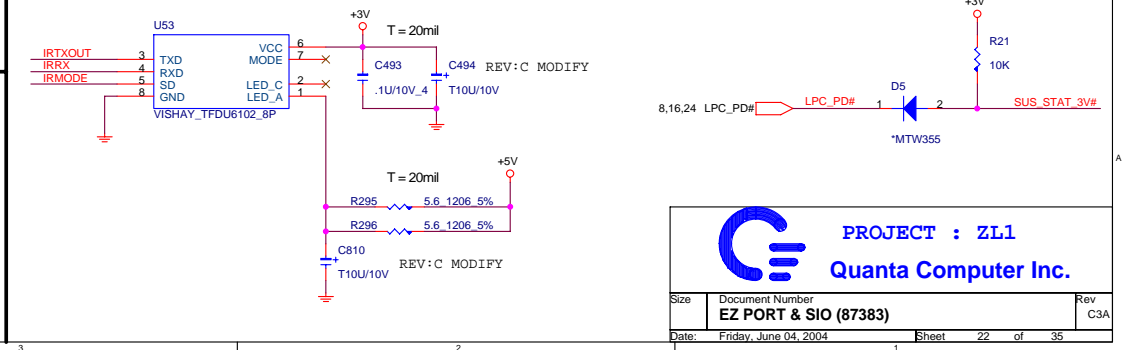
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SUPER I/O



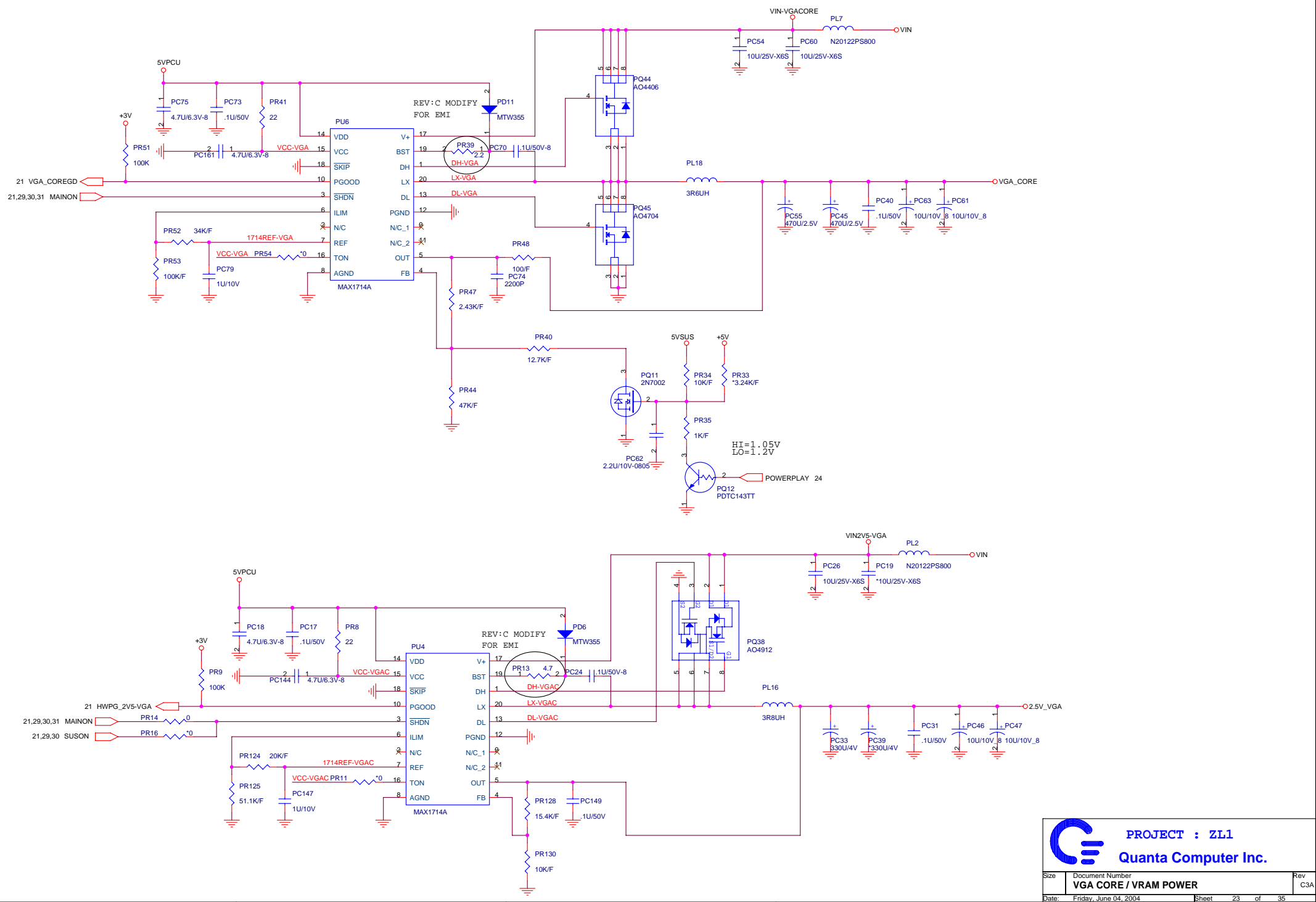
IrDA



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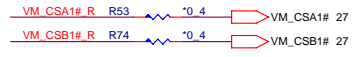
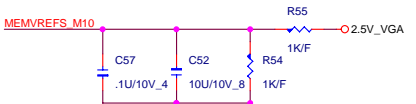
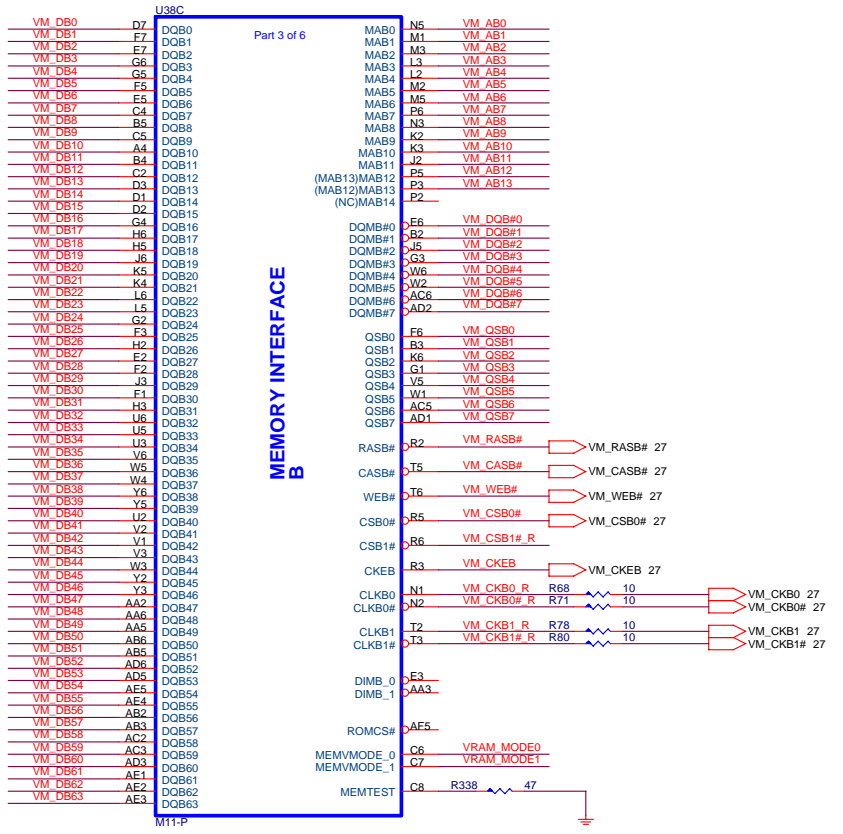
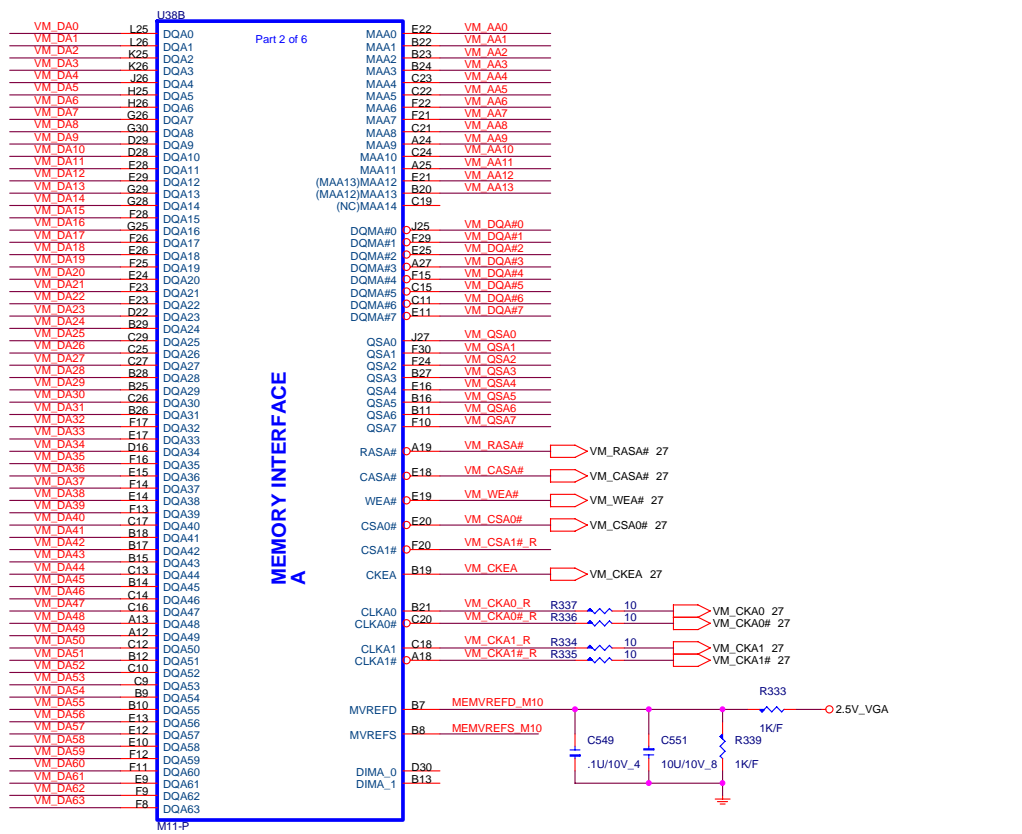
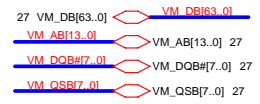
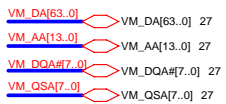
M11 Core & BATTERY



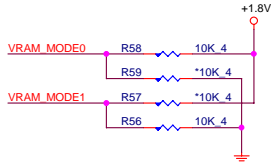
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VGA(MEMORY I/F)

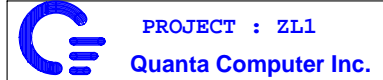


Mount these parts when use hynix 256Mb(8Mx32) VRAM chip

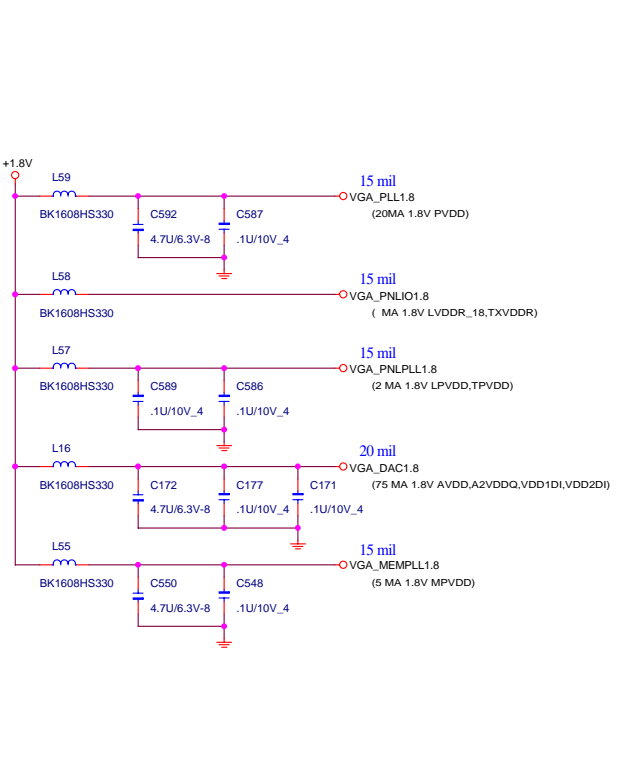


	VRAM_MODE1	VRAM_MODE0
2.5V	0	1
1.8V	1	0
2.8V	1	1

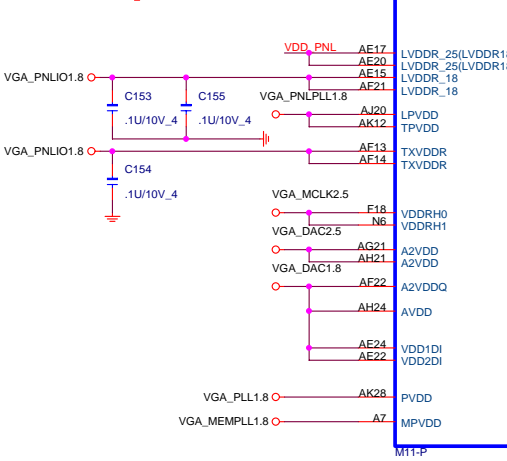
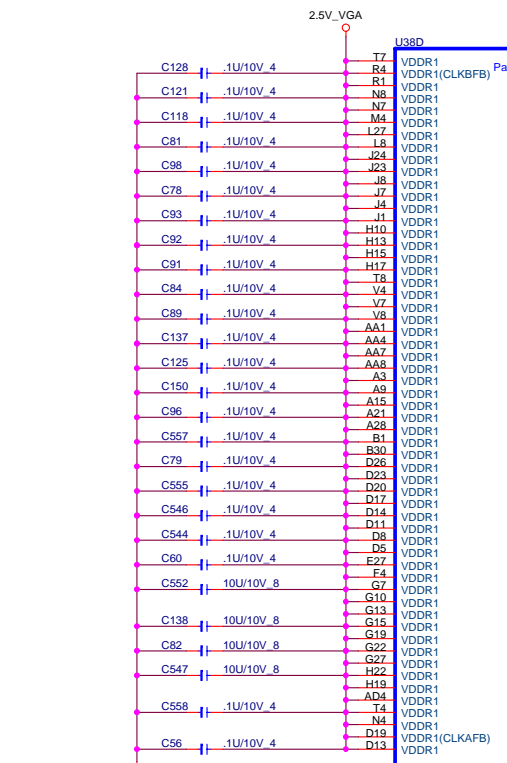
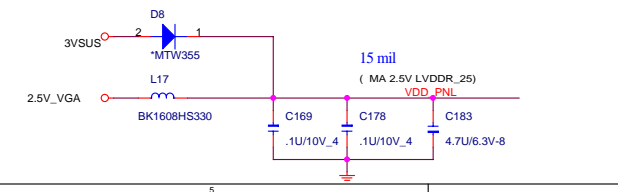
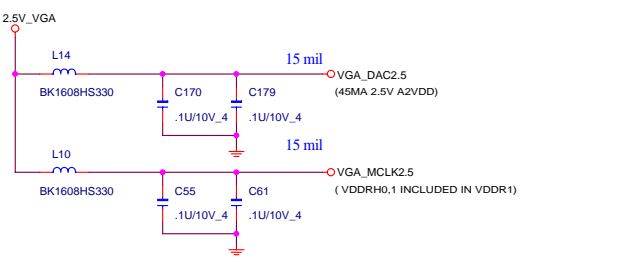
VRAM type setting



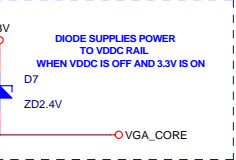
VGA(POWER)



Via : 6 (40/24)
5A (200mil)
Plane

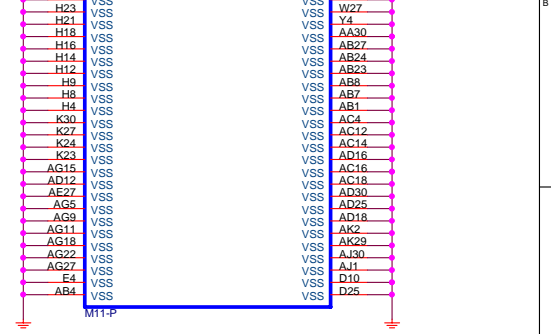
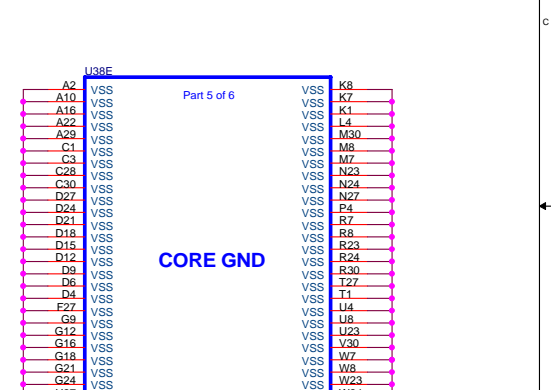
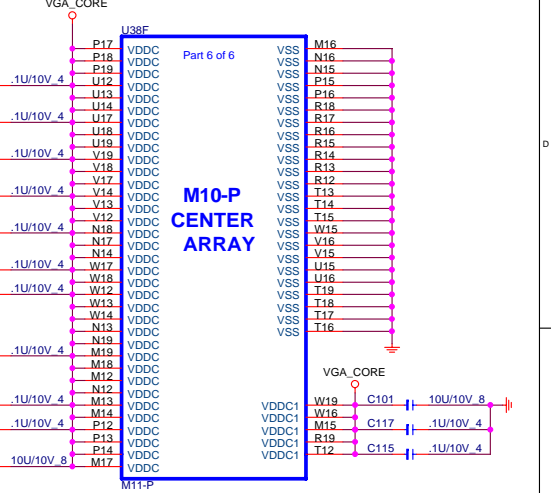
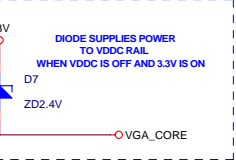
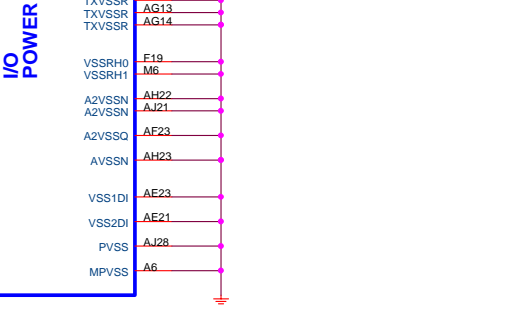


I/O POWER



DIODE SUPPLIES POWER TO VDDC1 RAIL WHEN VDDC1 IS OFF AND 3.3V IS ON

VGA CORE



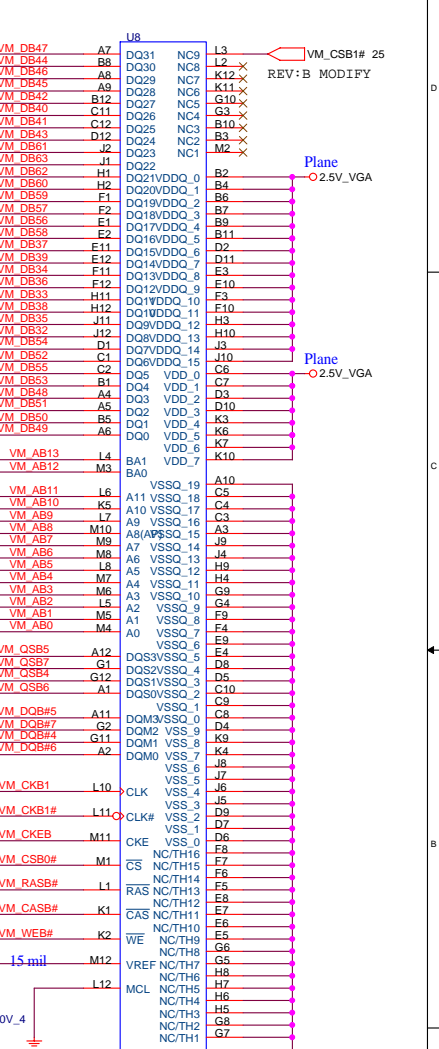
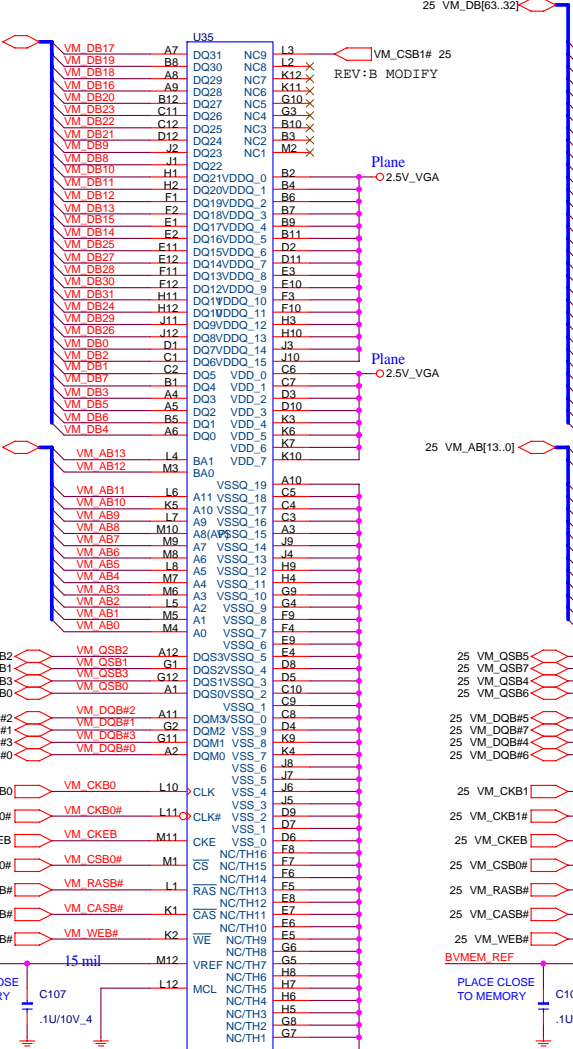
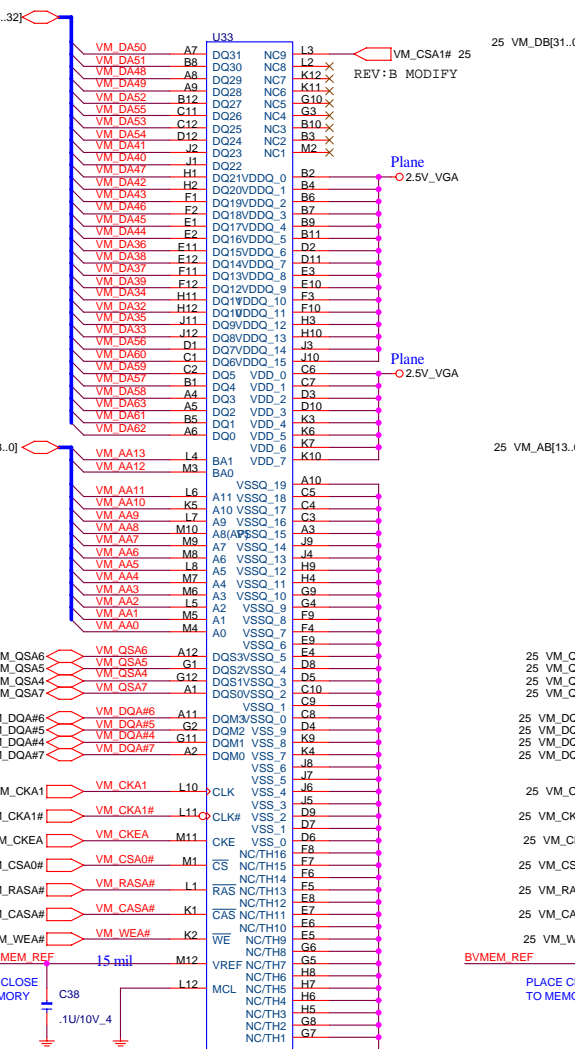
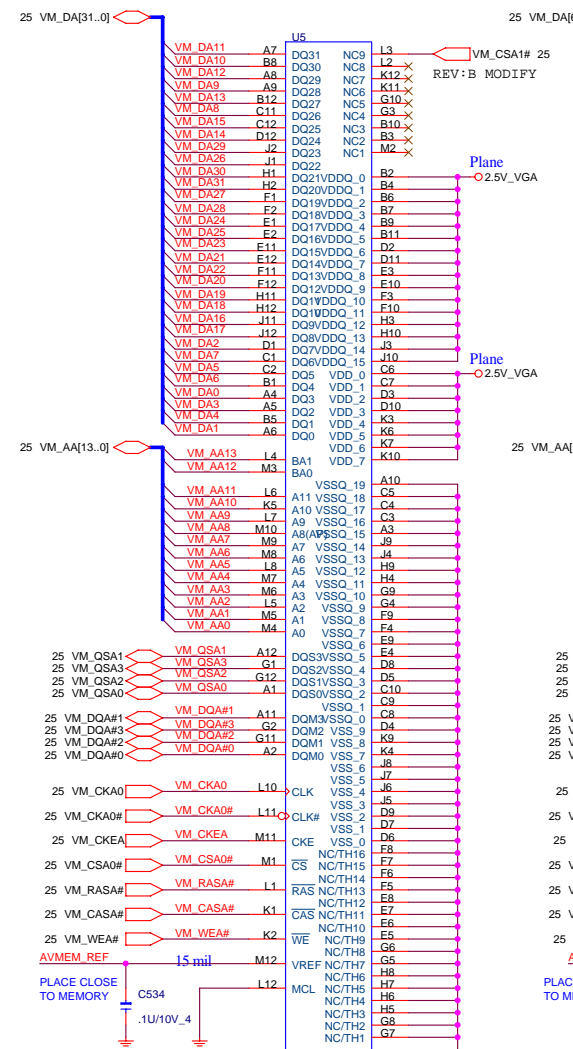
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VGA(VRAM) VRAM Channel A

VRAM Channel B

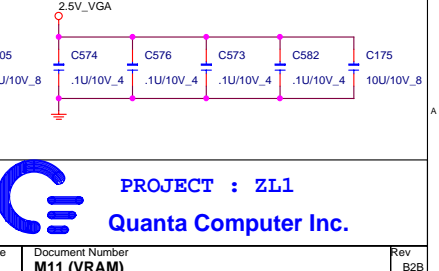
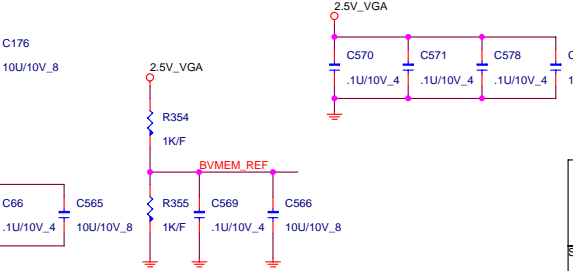
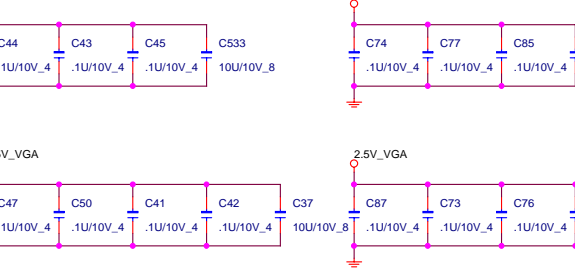
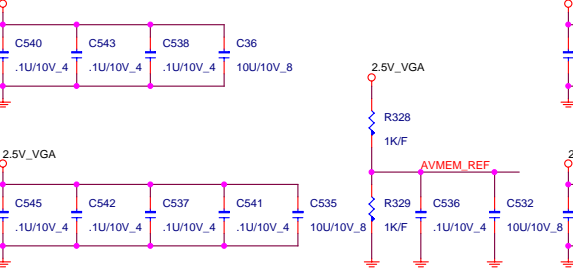


4Mx32 or 8Mx32
K4D263238E-GC33

4Mx32 or 8Mx32
K4D263238E-GC33

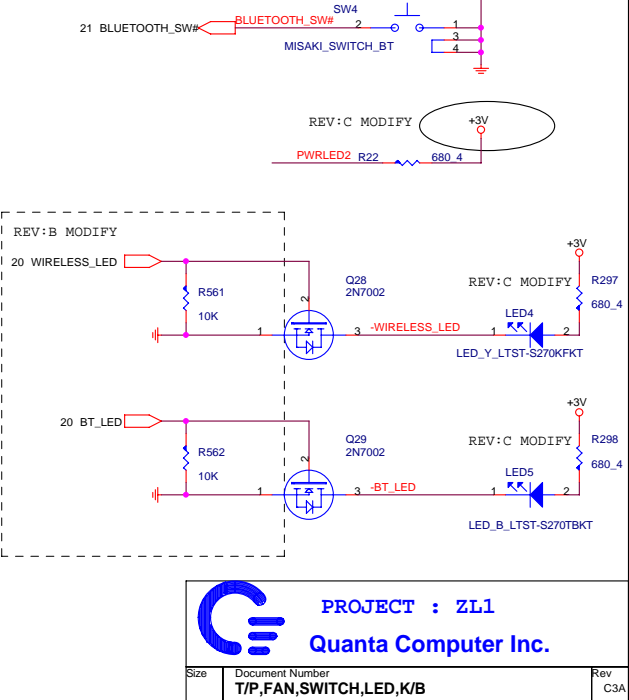
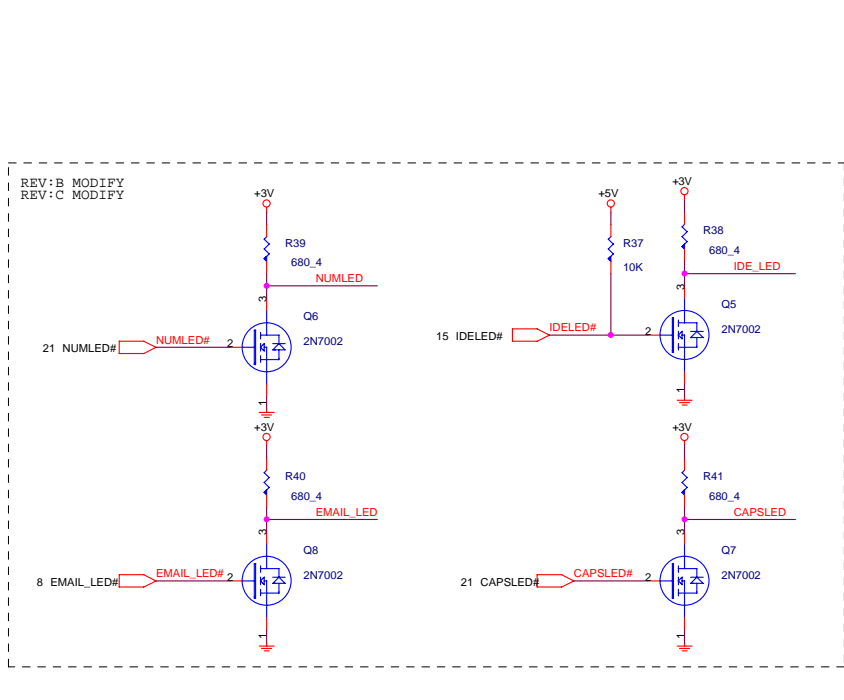
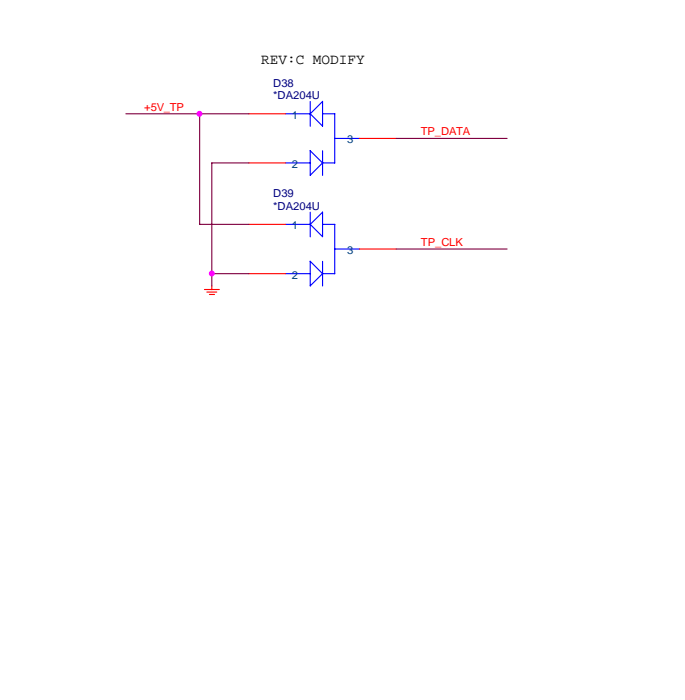
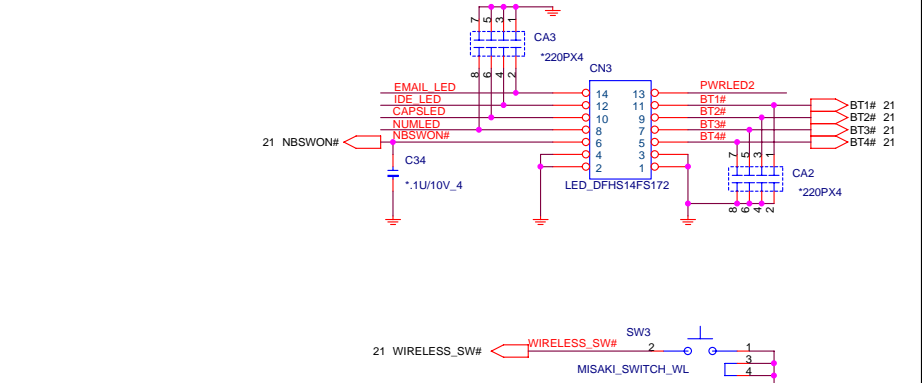
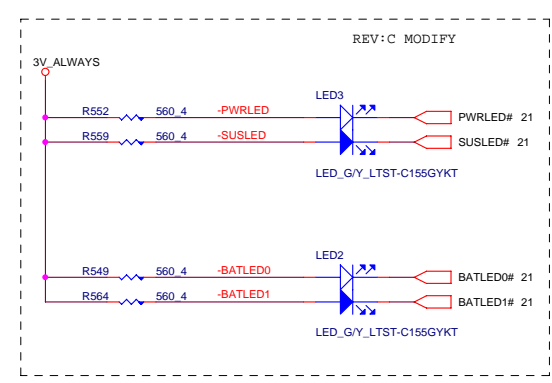
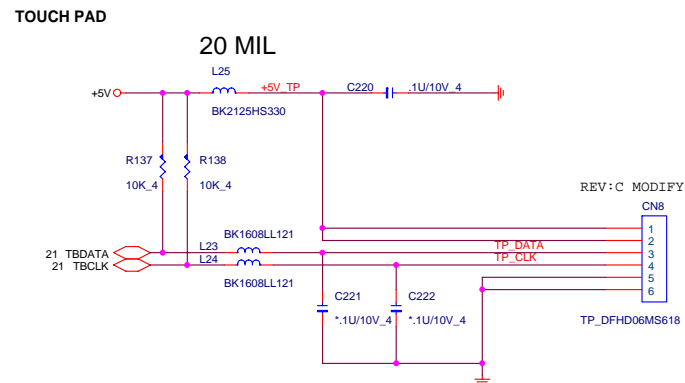
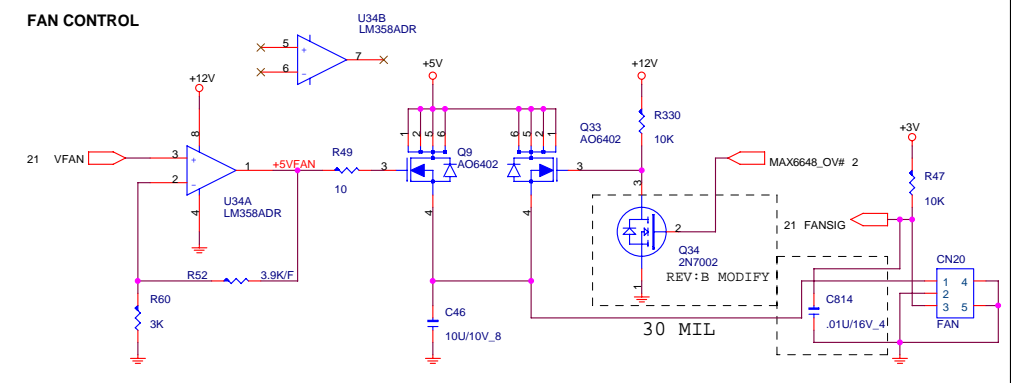
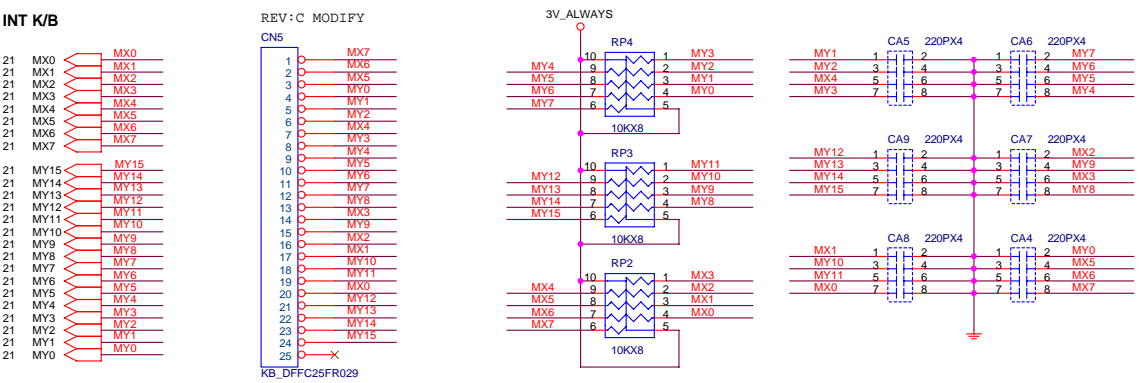
4Mx32 or 8Mx32
K4D263238E-GC33

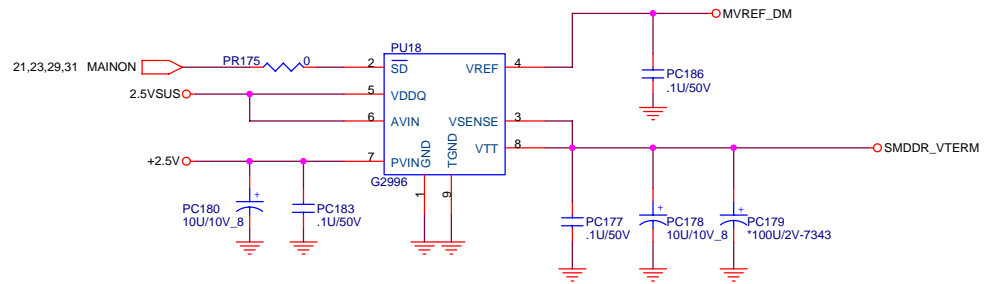
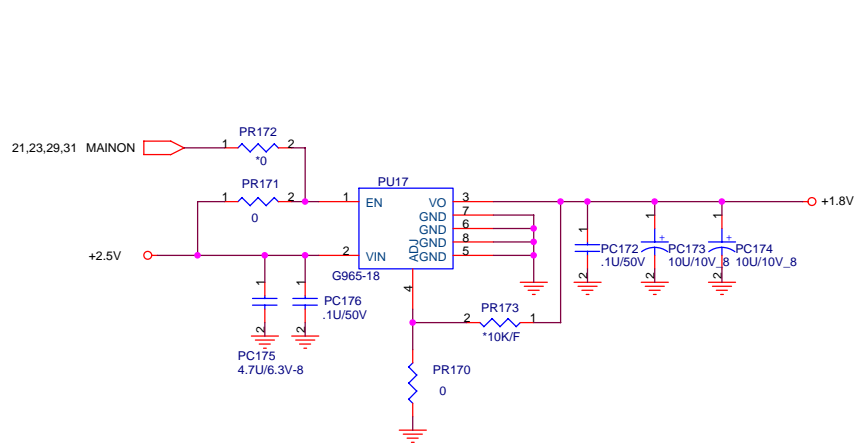
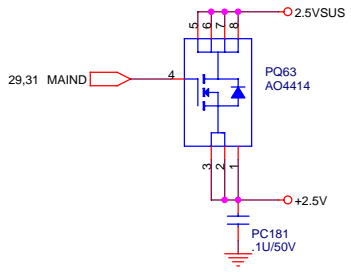
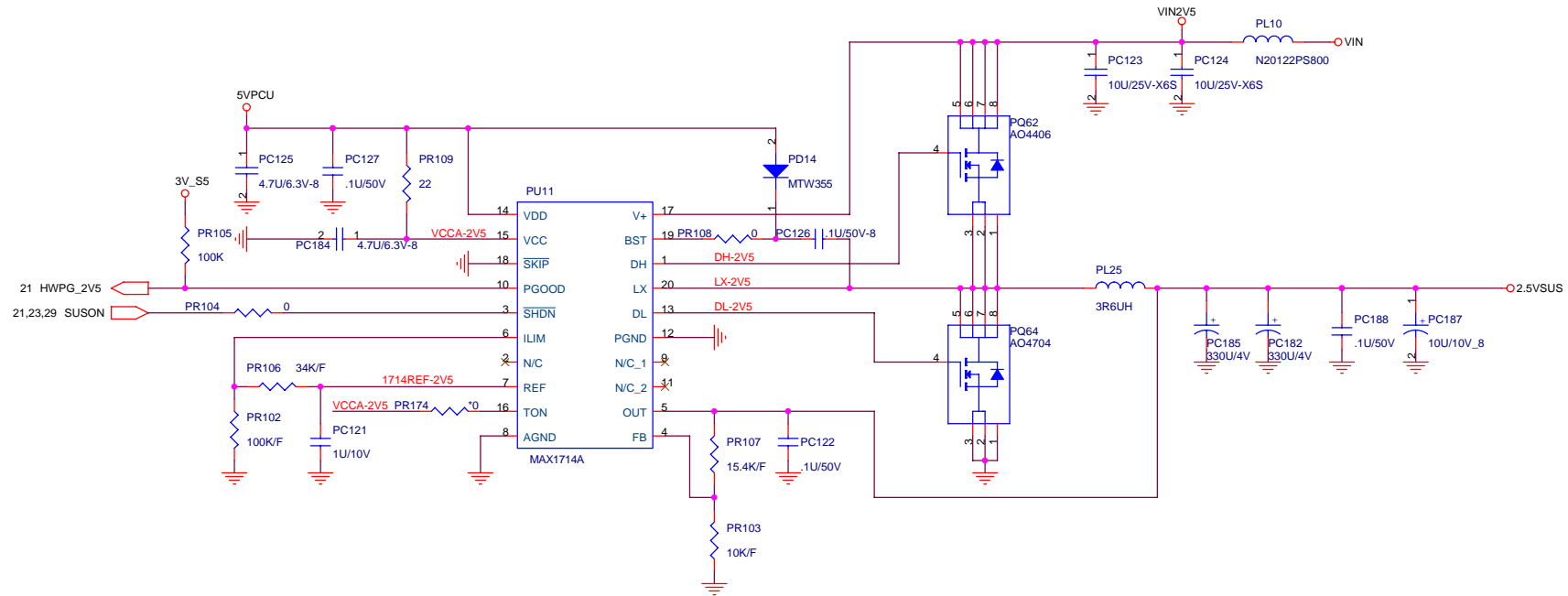
4Mx32 or 8Mx32
K4D263238E-GC33




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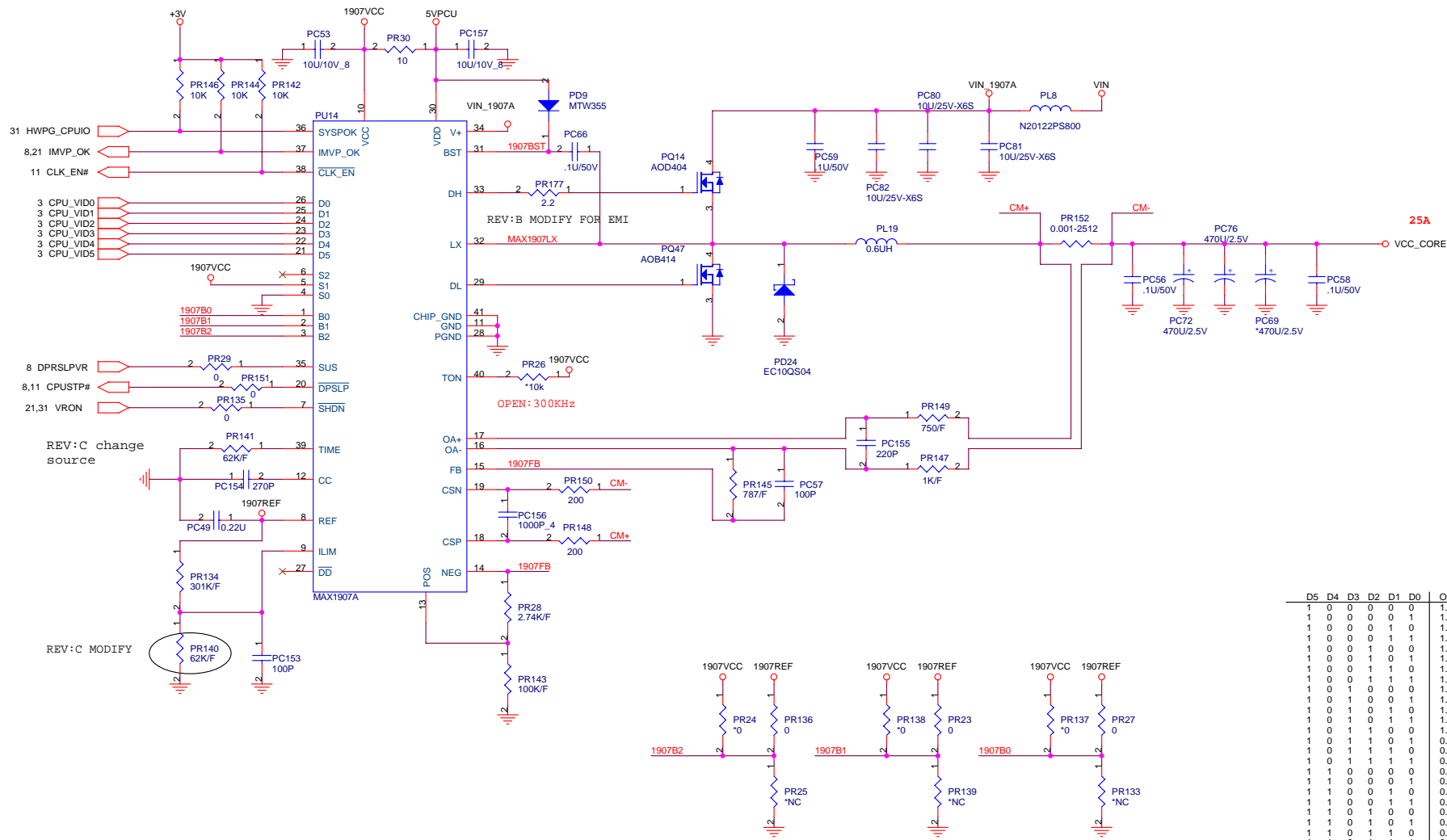






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D5	D4	D3	D2	D1	D0	Output	D5	D4	D3	D2	D1	D0	Output
1	0	0	0	0	0	1.196V	0	0	0	0	0	0	1.708V
1	0	0	0	0	1	1.180V	0	0	0	0	0	1	1.692V
1	0	0	0	1	0	1.184V	0	0	0	0	0	1	1.676V
1	0	0	0	1	1	1.148V	0	0	0	0	1	1	1.660V
1	0	0	1	0	0	1.132V	0	0	0	1	0	0	1.644V
1	0	0	1	0	1	1.116V	0	0	0	1	0	1	1.628V
1	0	0	1	1	0	1.100V	0	0	0	1	1	0	1.612V
1	0	1	0	0	0	1.084V	0	0	1	0	0	0	1.596V
1	0	1	0	0	1	1.068V	0	0	1	0	0	1	1.580V
1	0	1	0	1	0	1.052V	0	0	1	0	0	1	1.564V
1	0	1	0	1	1	1.036V	0	0	1	0	1	0	1.548V
1	0	1	1	0	0	1.020V	0	1	0	0	0	1	1.532V
1	0	1	1	0	1	1.004V	0	0	1	0	0	1	1.516V
1	0	1	1	1	0	0.988V	0	0	1	1	0	1	1.500V
1	0	1	1	1	1	0.972V	0	0	1	1	1	0	1.484V
1	0	1	1	1	1	0.956V	0	0	1	1	1	1	1.468V
1	1	0	0	0	0	0.940V	0	1	0	0	0	0	1.452V
1	1	0	0	0	1	0.924V	0	1	0	0	0	1	1.436V
1	1	0	0	1	0	0.908V	0	1	0	0	1	0	1.420V
1	1	0	0	1	1	0.892V	0	1	0	0	1	1	1.404V
1	1	0	1	0	0	0.876V	0	1	0	1	0	0	1.388V
1	1	0	1	0	1	0.860V	0	1	0	1	0	1	1.372V
1	1	0	1	1	0	0.844V	0	1	0	1	0	1	1.356V
1	1	0	1	1	1	0.828V	0	1	0	1	1	1	1.340V
1	1	1	0	0	0	0.812V	0	1	1	0	0	0	1.324V
1	1	1	0	0	1	0.796V	0	1	1	0	0	1	1.308V
1	1	1	0	1	0	0.780V	0	1	1	0	1	0	1.292V
1	1	1	0	1	1	0.764V	0	1	1	0	1	1	1.276V
1	1	1	1	0	0	0.748V	0	1	1	1	0	0	1.260V
1	1	1	1	0	1	0.732V	0	1	1	1	0	1	1.244V
1	1	1	1	1	0	0.716V	0	1	1	1	1	0	1.228V
1	1	1	1	1	1	0.700V	0	1	1	1	1	1	1.212V

SUSPEND MODE (SUS=HIGH)

S2	S1	S0	Output	
✓	OPEN	VCC	GND	0.748V

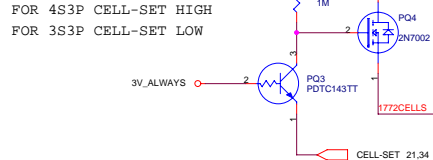
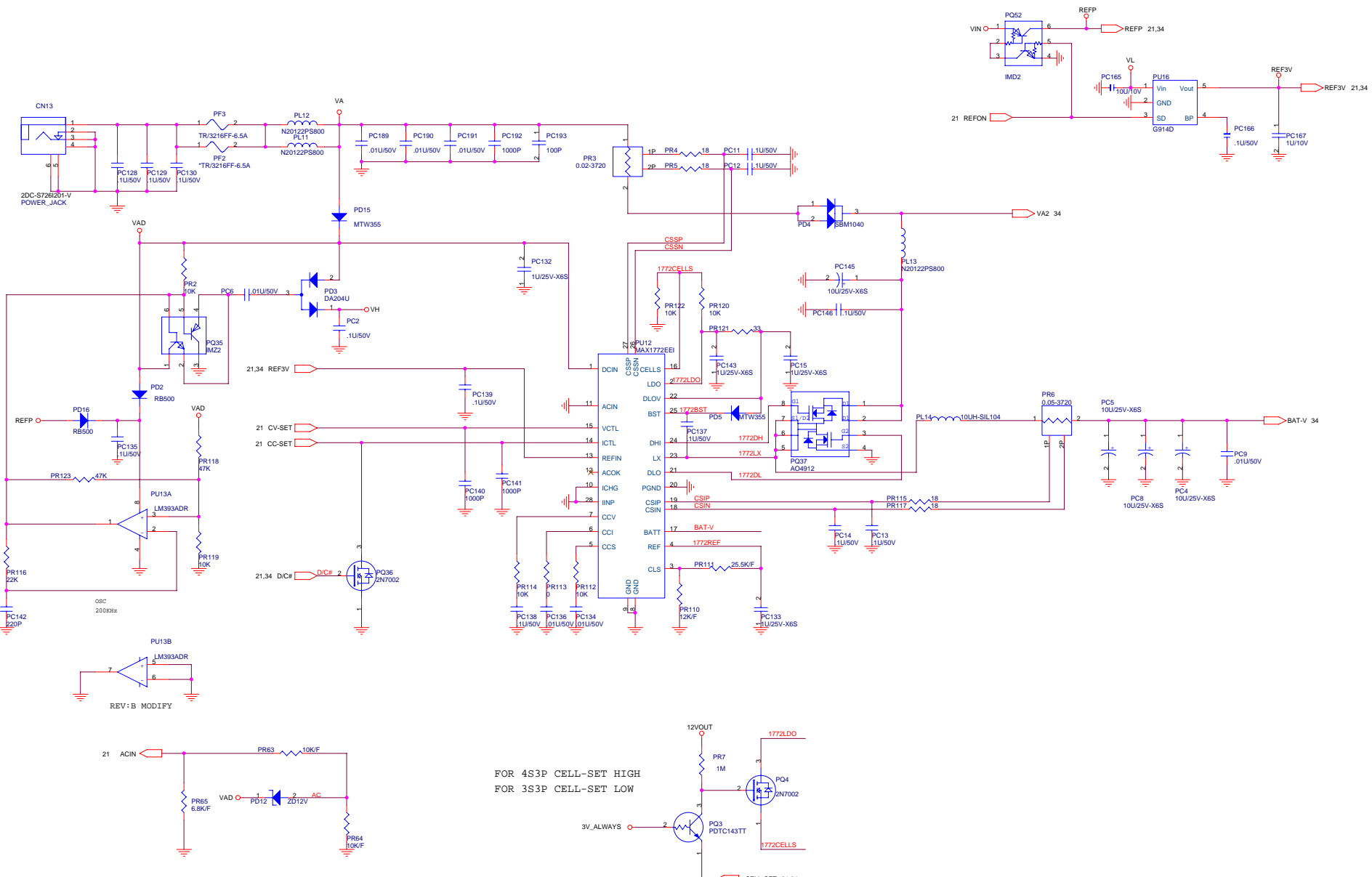
VCC_BOOT

B2	B1	B0	Output	
✓	GND	GND	GND	1.708V
REF	REF	REF	REF	1.372V
OPEN	OPEN	OPEN	OPEN	1.036V
VCC	VCC	VCC	VCC	0.700V
REF	VCC	VCC	VCC	1.212V

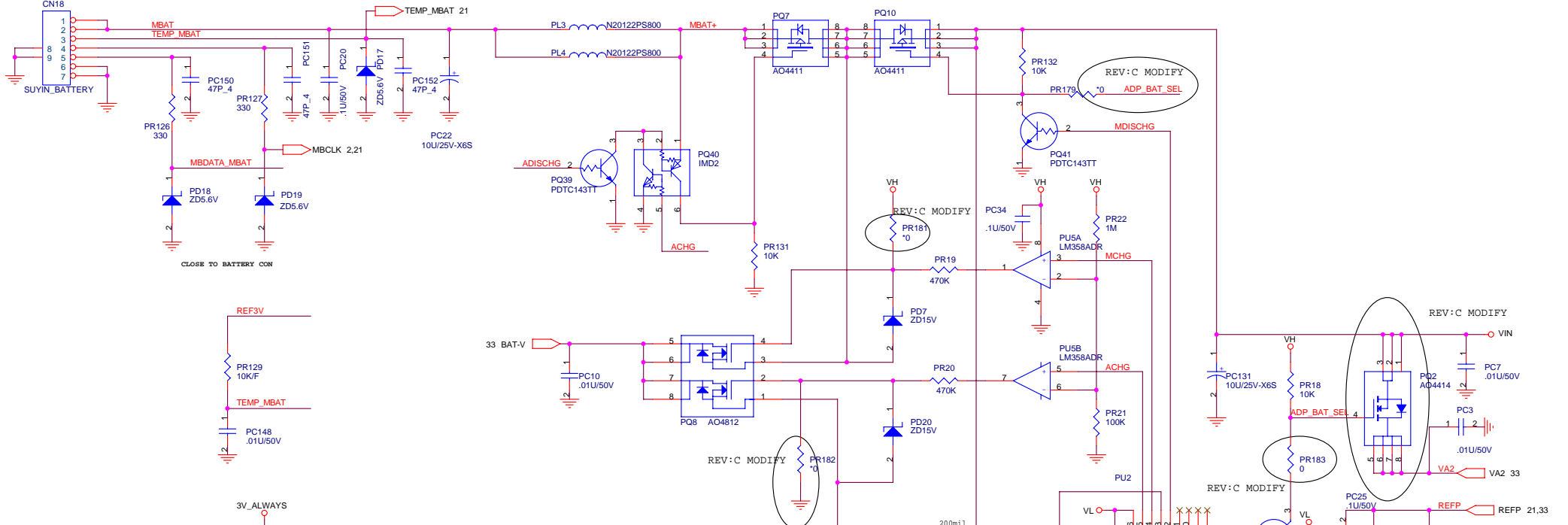
PROJECT : ZL1
Quanta Computer Inc.

Size: Document Number
CPU CORE (MAX1907)
 Rev: C3A

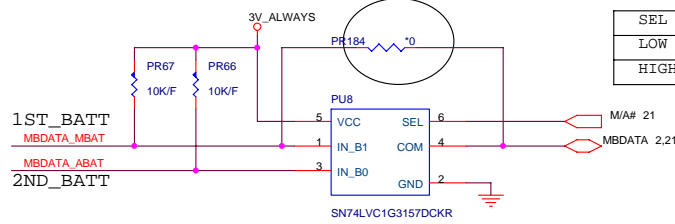
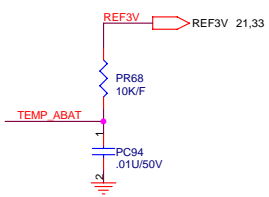
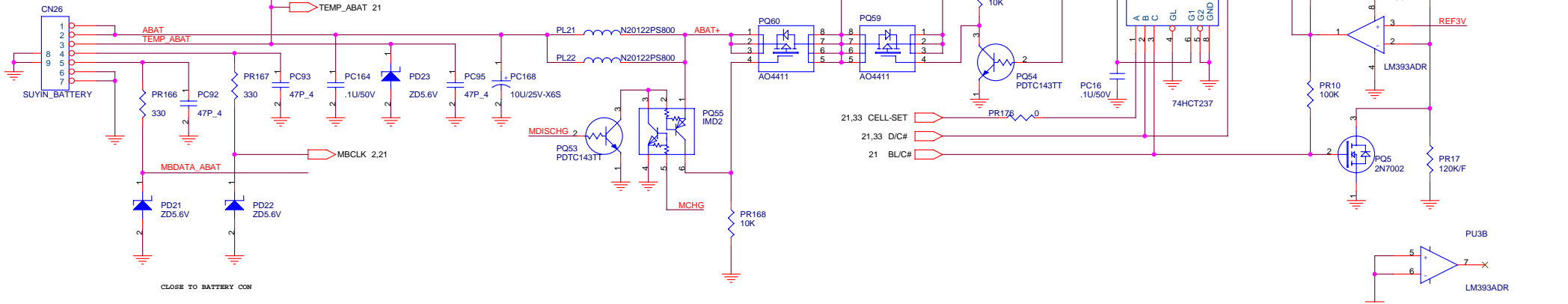
Date: Friday, June 04, 2004 | Sheet 32 of 35



1ST_BATT_CONN




2ND_BATT_CONN



SEL	FUNCTION
LOW	IN_B0
HIGH	IN_B1

PROJECT : ZL1
Quanta Computer Inc.

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BATTERY SELECT
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MODEL :	REV :	CHANGE LIST :	PAGE	FROM	TO			
ZL1 MotherBoard	B2B	PAGE2 . 1.UN-STUFF R392 FOR THERMTRIP 2. STUFF NUTS PAGE5 . 1.ADD +3V FOR LCD EDID 2.MODIFY C528 VALUE PAGE8 . 1.STUFF R204 FOR THERMTRIPS PAGE12 . 1.ADD 10/100 CO LAYOUT CIRCUIT PAGE13 . 1.ADD PR_INSERT# FOR SYSTEM CIRCUIT 2.MODIFY LAN SWITCH POWER PAGE14 . 1.ADD PR_INSERT# FOR SYSTEM CIRCUIT PAGE15 . 1.ADD RBAYID1 PULL DOWN RESISTOR PAGE18 . 1.MODIFY FOR AUDIO QUALITY PAGE19 . 1.MODIFY FOR AUDIO QUALITY PAGE20 . 1.ADD EMI SOLUTION PAGE22 . 1.MODIFY PR_INSERT# PULL HIGH VOLTAGE PAGE23 . 1.STUFF PC45 FOR VGA_CORE 2. MODIFY 2.5V_VGA POWER PAGE24 . 1.MODIFY GPAR PULL HIGH RESISTOR 2. ADD PULL HIGH FOR I2C BUS PAGE27 . 1.MODIFY CS PIN FOR 128MB VRAM PAGE28 . 1.MODIFY LED CIRCUIT 2. MODIFY Q34 TO 2N7002 PAGE29 . 1.MODIFY MAX6648 OV# CIRCUIT PAGE32 . 1.MODIFY CPU CORE VOLTAGE LEVEL PAGE33 . 1.MODIFY CHARGER CIRCUIT PAGE34 . 1.MODIFY CHARGER CIRCUIT	1	A1A				
			2	B2B	C3A			
			3	A1A				
			4	A1A				
			5	B2B				
			6	A1A				
			7	A1A				
			8	B2B				
			9	A1A				
			10	A1A				
		C3A	PAGE02 . 1.MODIFY MAX6648 AL# TO HIGH ACTIVE PAGE11 . 1.MODIFY FOR SIGNAL QUALITY PAGE12 . 1.MODIFY LAN LED 2. MODIFY LAN TRACE PULL HIGH PAGE13 . 1.MODIFY LAN LED 2. MODIFY DVO_AVDD PAGE14 . 1.MODIFY RGB BEAD VALUE PAGE16 . 1.REMOVE COMMON MODE CHOKE PAGE17 . 1.MODIFY 3 IN 1 CARD READER FOOTPRINT PAGE18 . 1.MODIFY LINE IN SIGNAL PAGE19 . 1.MODIFY LINE IN SIGNAL PAGE20 . 1.MODIFY USE COMMON MODE CHOKE 2. MODIFY MINI-PCI 3V_S5 TO 3VSUS PAGE21 . 1.MODIFY 97551 PIN 21 PAGE22 . 1.MODIFY U30 PIN23 TO +5V PAGE23 . 1.MODIFY FOR EMI SOLUTION PAGE24 . 1.ADD EMI SOLUTION PAGE28 . 1.MODIFY PWRLED2 TO +3V 2. ADD TP ESD PROTECT 3. MODIFY LED CIRCUIT PAGE29 . 1.MODIFY FOR POWER SUHTDOWN ISSUE PAGE31 . 1.MODIFY FOR EMI SOLUTION PAGE32 . 1.CHANGE SOURCE PAGE34 . 1.MODIFY CHARGER CIRCUIT FOR COST DOWN	11	A1A	C3A		
				12	B2B	C3A		
				13	B2B	C3A		
				14	B2B	C3A		
				15	B2B			
				16	A1A	C3A		
				17	A1A	C3A		
				18	B2B	C3A		
				19	B2B	C3A		
				20	B2B	C3A		
				21	A1A	C3A		
				22	B2B	C3A		
				23	B2B	C3A		
				24	B2B	C3A		
				25	A1A			
				27	B2B			
				28	B2B	C3A		
				29	B2B	C3A		
				30	A1A			
				31	A1A	C3A		
				32	B2B	C3A		
				33	B2B			
				34	B2B	C3A		
				35	B2B	C3A		
	 PROJECT : ZL1 Quanta Computer Inc.			PROJECT : ZL1		APPROVE BY: JIM HSU	DRAWING BY:JACKY CHENG	REV C3A
Size	Document Number	Rev	MB ASSY'S P/N : 31ZL1MB0004		PROJECT LEADER: JIM HSU	DOCUMENT NO: 204	DATE :2004/06/01	
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