

Project Name :  
Platform : Bay trail(For Valleyview-D/I/M System On Chip)



PAGE CONTENT

- 1. INDEX
- 2. SYSTEM BLOCK DIAGRAM
- 3. POWER DIAGRAM & SEQUENCE
- 4. GPIO & Power Consumption
- 5. SOC-DDR0(1/13)
- 6. SOC-DDR1(2/13)
- 7. SOC-Dispaly(3/13)
- 8. SOC-SATA and PCIE(4/13)
- 9. SOC-PMU AND CLOCK(5/13)
- 10. SOC-USB(6/13)
- 11. SOC POWER1(7/13)
- 12. SOC POWER2(8/13)
- 13. SOC VCC(9,10,11,12,13/13)
- 14. DDR3L SODIMM0
- 15. DDR3L SODIMM1
- 16. RTD2136S-VE-CG
- 17. EC ITIT8528/BIOS/KB CONN
- 18. HDMI/PWR SW
- 19. HDD/ODD /MINI CARD
- 20. LAN/CARD READER/15DB/RT8411
- 21. CODEC(ALC269Q)/INT MIC/SPKR
- 22. EXT\_MIC/C\_PAD/USB/FAN/G-SEN
- 23. DC IN/TPM/M-sata/D-Resis
- 24. CPU CORE (OZ8293)
- 25. 25 EXT MIC / EXT LINE IN / EXT
- 26. 1.35VS/VTT\_1.8\_1.05\_1.5
- 27. +1.0VA/+5VA (OZ8153)
- 28. BATT IN/CHARGER(OZ8602)
- 29. iGPU Core(OZ8293)
- 30. TP/LED/USB CHARGER/RS-232 CON
- 31. VCC SW/+3.3VA/HIGH-SPEED CAP
- 32. USB HUB
- 33. History

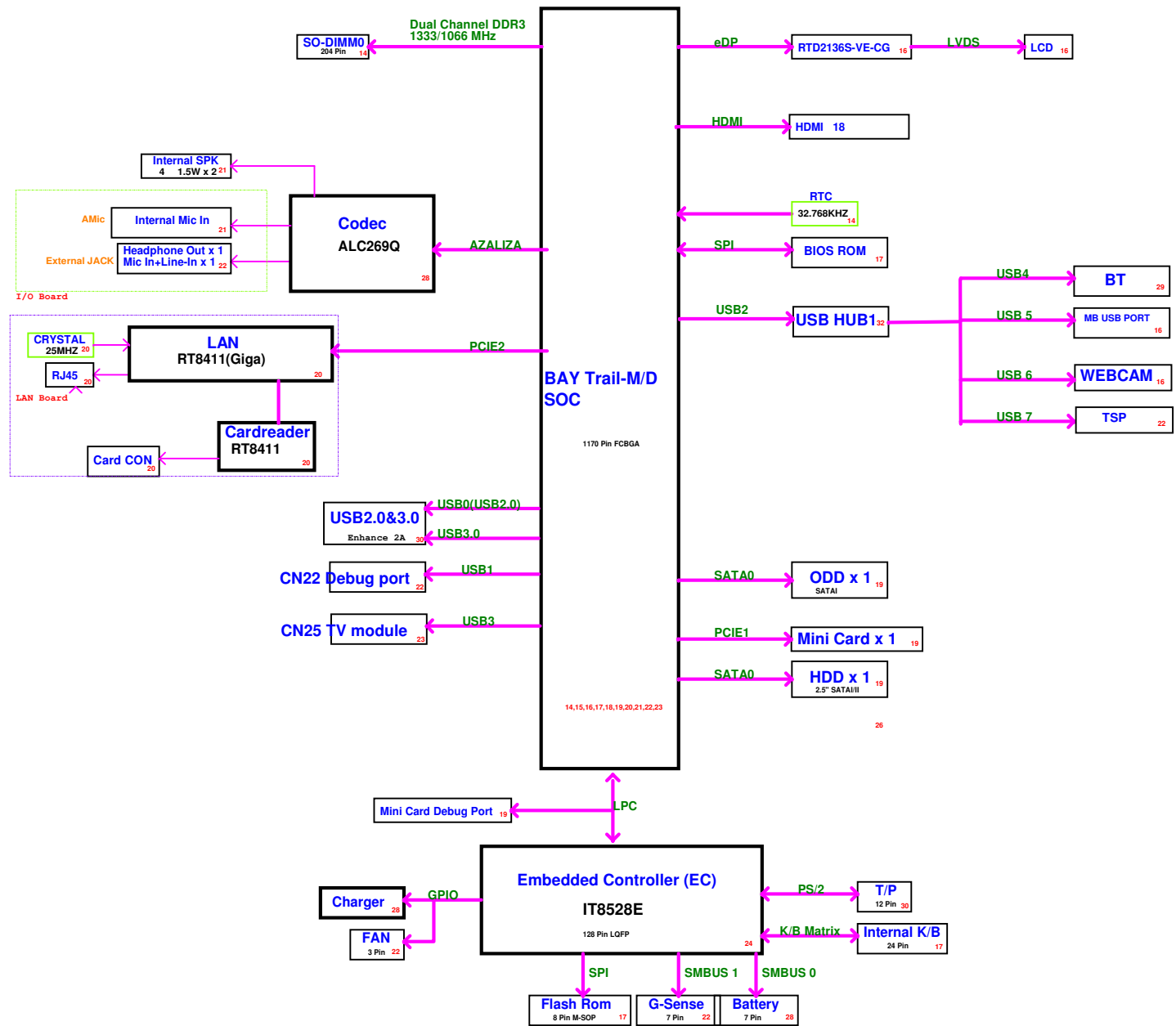
M/B Schematic Version Change List

Release Date	Version	PCB P/N	PCB Description	PCBA P/N	Note
2013-5-23	A	71R-H14BT4-T8A1			
2013-7-23	B	71R-H14BT4-T8B0			
2013-8-22	B1	71R-H14BT4-T8B1			

Daughter Board Schematic Version Change List

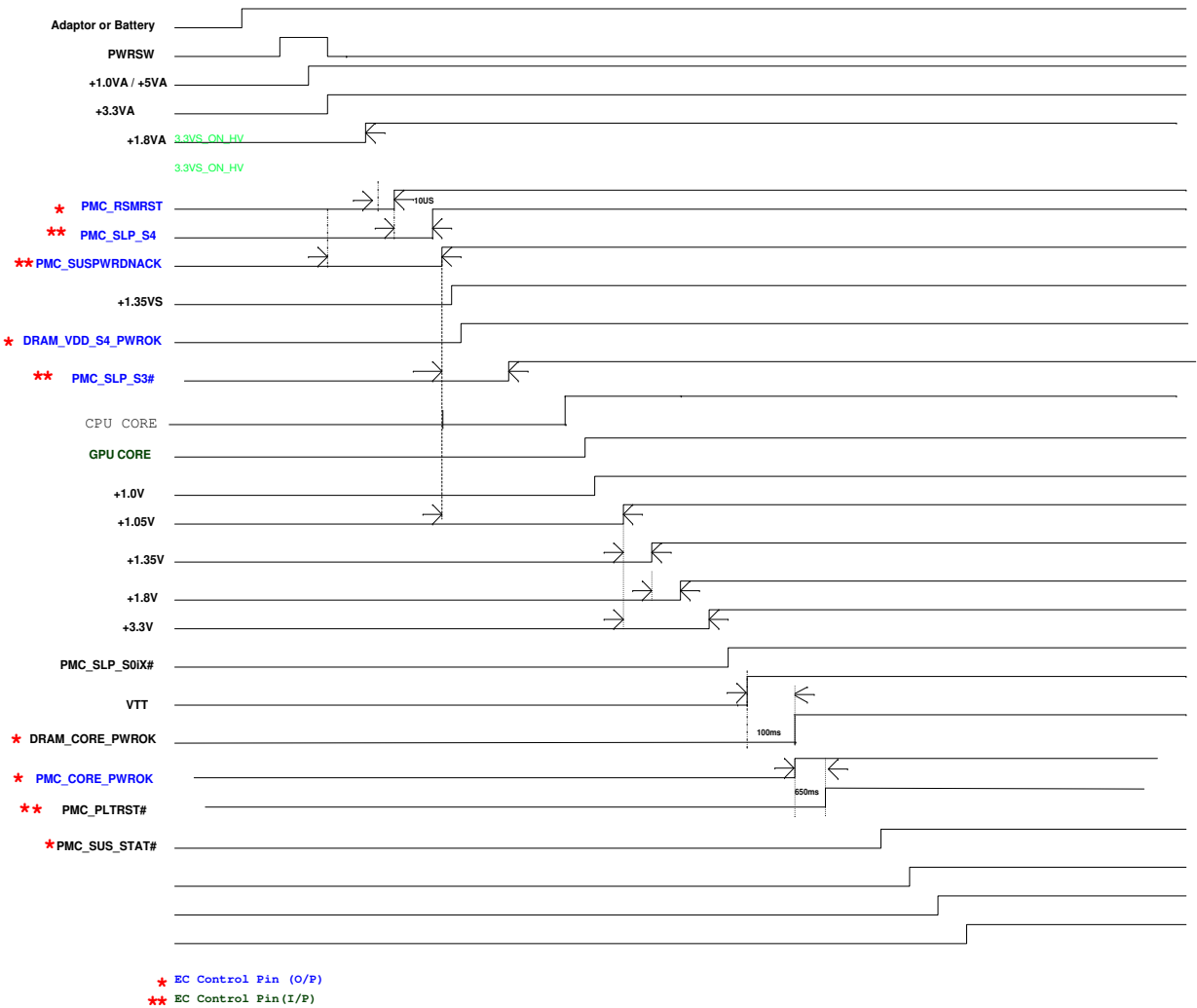
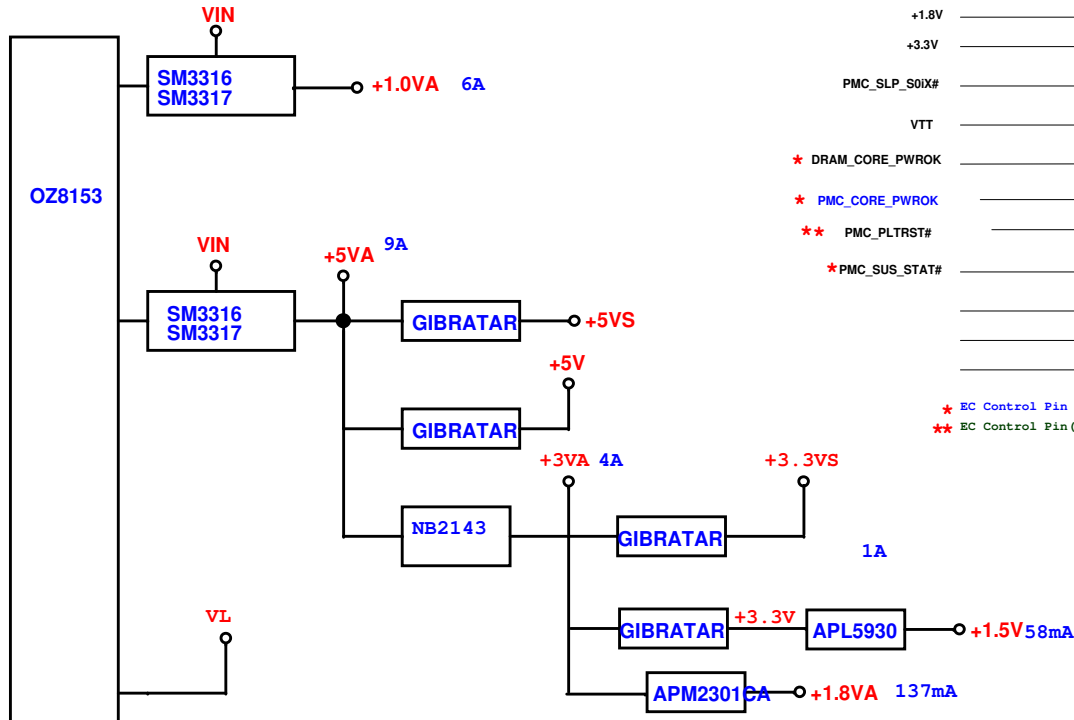
Release Date	Version	PCB P/N	PCB Description	PCBA P/N	Note

SYSTEM BLOCK DIAGRAM



USB0	USB3.0/2.0 ENHANCE
USB1	CN22 Debug port
USB2	USB HUB1
USB3	CN25 TV module
USB4	BT
USB5	MB USB PORT
USB6	webcam
USB7	TSP

## System Power On Sequence



SOC GPIO	
GPIO0	PM_BM_BUSY#
GPIO1	EC_EXTSMI#
GPIO2	INT_PIRQE#
GPIO3	INT_PIRQF#
GPIO4	INT_PIRQG#
GPIO5	INT_PIRQH#
GPIO6	BIOS_REC
GPIO7	<b>N.C</b> (TACH3)
GPIO8	<b>N.C</b>
GPIO9	<b>N.C</b> (WOL_EN)
GPIO10	<b>N.C</b> (ALERT#)
GPIO11	SMB_ALERT#
GPIO12	LAN_PHYPC
GPIO13	<b>N.C</b> (GLAN_DOCK#)
GPIO14	<b>N.C</b> (NETDETECT)
GPIO15	PM_STPPCI#
GPIO17	<b>N.C</b> (TACH0)
GPIO18	<b>N.C</b>
GPIO19	SATA1GP
GPIO21	SATA0GP
GPIO22	<b>N.C</b> (SCLOCK)
GPIO23	LDRQ1#
GPIO24	CRB_SV_DET
GPIO25	PM_STPCPU#
GPIO26	PM_SLP_S4_STATE#
GPIO27	QRT_STATE0
GPIO28	QRT_STATE1
GPIO29	USB_OC#5
GPIO30	USB_OC#6
GPIO31	USB_OC#7
GPIO32	PM_CLKRUN#
GPIO33	HDA_DOCK_EN
GPIO34	<b>N.C</b> (HDA_DOCK_RST#)
GPIO35	CLK_SATA_OE#
GPIO36	SATA2GP
GPIO37	SATA3GP
GPIO38	ODD_DET
GPIO39	ICH_GPIO39
GPIO40	USB_OC#1
GPIO41	USB_OC#2
GPIO42	USB_OC#3
GPIO43	USB_OC#4
GPIO48	MFG_MODE
GPIO49	H_PWRGD
GPIO50	PCI_REQ#1
GPIO51	PCI_GNT#1
GPIO52	PCI_REQ#2
GPIO53	PCI_GNT#2
GPIO54	PCI_REQ#3
GPIO55	PCI_GNT#3

ITE8528 GPIO		Default Pull/Mode
GPA0	PID_3_RF_LED_ON#	<b>UP / GPI</b>
GPA1	BATT_VA_OFF#	<b>UP / GPI</b>
GPA2	BT_L_BEEP	<b>UP / GPI</b>
GPA3	WLAN_PWR#	<b>UP / GPI</b>
GPA4	+1.05V_ON	<b>UP / GPI</b>
GPA5	SENBAT_V	<b>UP / GPI</b>
GPA6	PM_RSMRST#	<b>UP / GPI</b>
GPA7	EC_BL_PWM	<b>UP / GPI</b>
GPB0	PM_SLP_S4#	<b>UP / GPI</b>
GPB1	PM_SLP_S3#	<b>UP / GPI</b>
GPB2	<b>3G_PWR#</b>	<b>Dn / GPI</b>
GPB3	SMBCLK	<b>/ GPI</b>
GPB4	SMBDAT	<b>/ GPI</b>
GPB5	H_A20GATE	<b>/ GPO</b>
GPB6	H_RCIN#	<b>UP / Func1</b>
GPB7	SAFTY_PROTECT	<b>Dn / GPI</b>
GPC0	+1.5V_ON	<b>Dn / GPI</b>
GPC1	SMB_CLK_EC	<b>/ GPI</b>
GPC2	SMB_DAT_EC	<b>/ GPI</b>
GPC3	<b>PID_0_CHG_B_LED</b>	<b>Dn / GPI</b>
GPC4	PWRBTN3#	<b>Dn / GPI</b>
GPC5	PANEL_DETECT_2	<b>Dn / GPI</b>
GPC6	VCCSA_ON	<b>Dn / GPI</b>
GPC7	+1.5VS_ON	<b>UP / GPI</b>
GPD0	ADAP_IN	<b>UP / GPI</b>
GPD1	PWRBTN#	<b>UP / GPI</b>
GPD2	PLT_RST#	<b>UP / Func1</b>
GPD3	<b>PM_SUS_STAT#</b>	<b>UP / GPI</b>
GPD4	EC_EXTSMI#	<b>UP / GPI</b>
GPD5	Fastcharge_EN	<b>UP / GPI</b>
GPD6	<b>+5V_ON</b>	<b>Dn / GPI</b>
GPD7	SET_V	<b>Dn / GPI</b>
GPE0	LID#	<b>Dn / GPI</b>
GPE1	PWR_USB_LED	<b>Dn / GPI</b>
GPE2	ALL_SYS_PGD	<b>Dn / GPI</b>
GPE3	Vcore_ON	<b>Dn / GPI</b>
GPE4	PWRSW	<b>UP / GPI</b>
GPE5	LVDS_VIN	<b>Dn / GPI</b>
GPE6	WLAN_ON	<b>Dn / GPI</b>
GPE7	AMP_MUTE#	<b>UP / GPI</b>
GPF0	PCH_BL_EN	<b>UP / GPI</b>
GPF1	<b>+1.8V_ON</b>	<b>UP / GPI</b>
GPF2	<b>BT_ON</b>	<b>UP / GPI</b>
GPF3	<b>N.C</b>	<b>UP / GPI</b>
GPF4	TP_CLK	<b>UP / GPI</b>
GPF5	TP_DATA	<b>UP / GPI</b>
GPF6	<b>EC PECI</b>	<b>UP / GPI</b>
GPF7	<b>CHG_HI_VOLT#</b>	<b>UP / GPI</b>
GPG0	PWRBTN2#	<b>Dn/GPO/TM</b>
GPG1	+3.3VS_ON	<b>Dn/GPO/ID7</b>
GPG2	<b>EC PORST</b>	
GPG6	WEBCAN_ON	<b>Dn / GPI</b>
GPH0	PM_CLKRUN#	<b>Dn/GPI/ID0</b>
GPH1	PID_1_CHG_R_LED	<b>Dn/GPI/ID1</b>
GPH2	PID_2_PWR_LED	<b>Dn/GPI/ID2</b>
GPH3	EC_HSCS0#	<b>Dn/GPI/ID3</b>
GPH4	EC_HSCK	<b>Dn/GPI/ID4</b>
GPH5	EC_HMISO	<b>Dn/GPI/ID5</b>
GPH6	EC_HMOSI	<b>Dn/GPI/ID6</b>

ITE8528 GPIO		Default Pull/Mode
GPI0	<b>CRT_DETECT</b>	<b>/GPI/ADC</b>
GPI1	PANEL_DETECT	<b>/GPI/ADC</b>
GPI2	PLATFORM_ID	<b>/GPI/ADC</b>
GPI3	<b>CPPE#</b>	<b>/GPI/ADC</b>
GPI4	BAT_I	<b>/GPI/ADC</b>
GPI5	BATT_TEMP	<b>/GPI/ADC</b>
GPI6	ADAPTOR_1	<b>/GPI/ADC</b>
GPI7	BAT_V	<b>/GPI/ADC</b>
GPJ0	EC_BL_ON	<b>/GPI/DAC</b>
GPJ1	EC_PROCHOT	<b>/GPI/DAC</b>
GPJ2	FAN_CTRL0	<b>/GPI/DAC</b>
GPJ3	CHG_REF	<b>/GPI/DAC</b>
GPJ4	CHG_I	<b>/GPI/DAC</b>
GPJ5	PWR_USB#	<b>/GPI/DAC</b>

BAY TRAIL CPU				
	CPU CORE (V)	ICC (A)	W	TEMP ( )
Bay trail D-D1750	1.05	12	10	
Bay trail M-N2805	1.05	12	4.5	

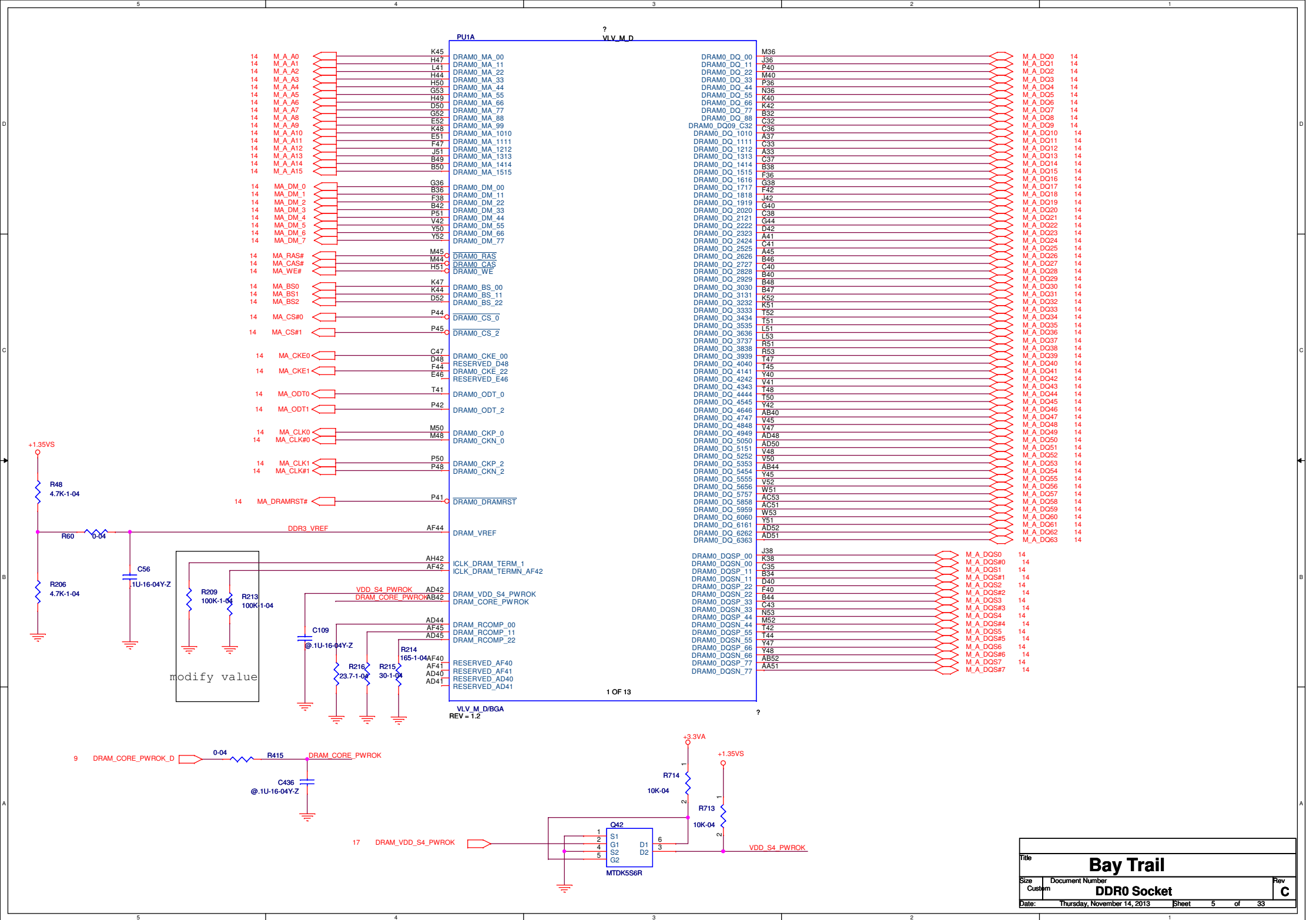
SOC				
VCC	ICC (mA)	W	TEMP ( )	
+1.0VA	202	0.2		
+1.05V	720	0.756		
+1.0V	5487	5.487		105
+1.2A	35	0.04		
+1.35VS	10000	1.43		TEMP ( )
+1.8VA	53	0.1		
+1.8V	84	0.15		
+1.5V_1.8V	58	0.09		
+3.3VA	10	0.033		
+3.3V	13	0.04		
CPU CORE1.1	12000	16.5		
GPU CORE1.0	14000	10		
RTC3.3	0.0016			

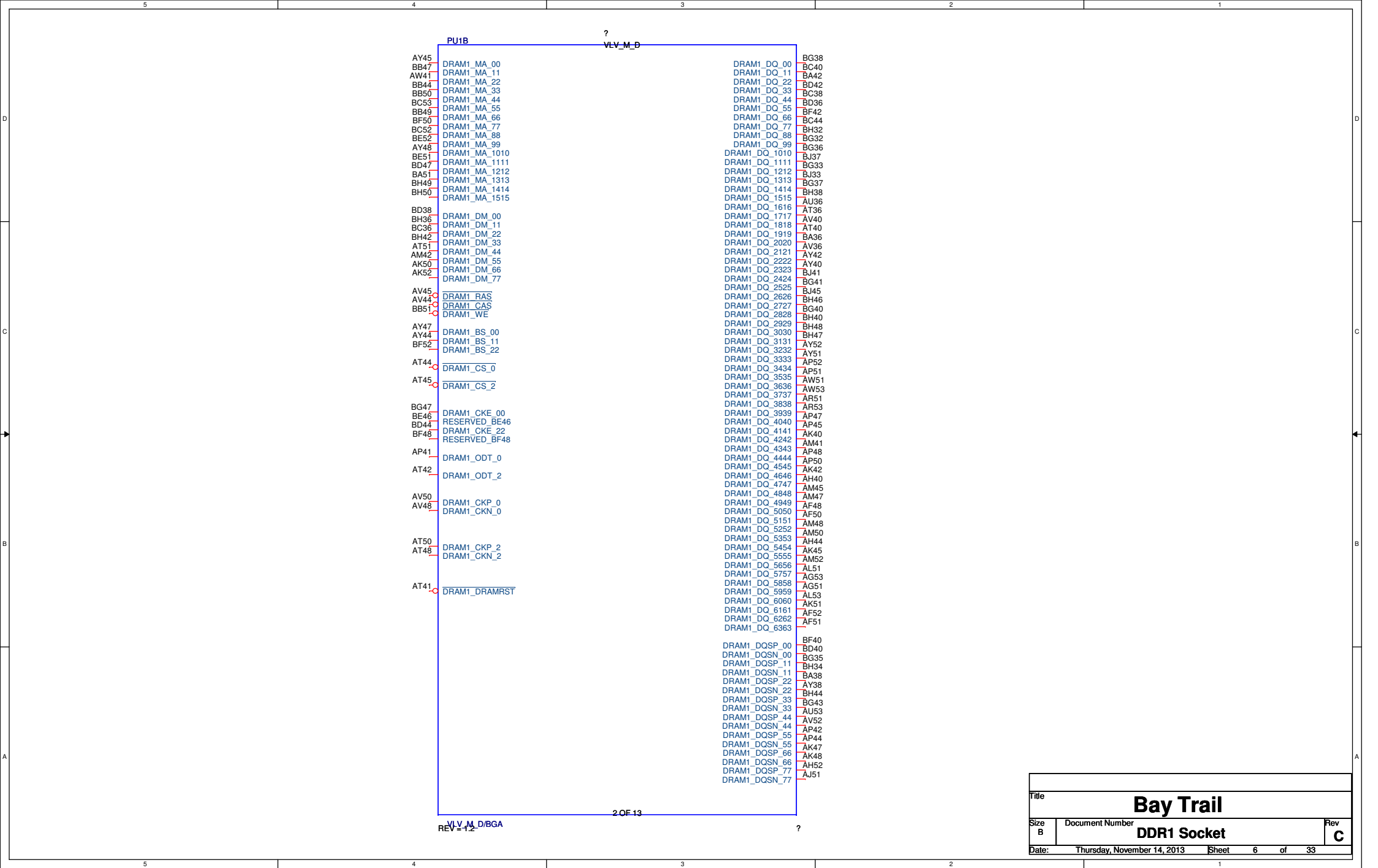
ITE8528			
VCC	ICC (mA)	mW	TEMP ( )
+3.3V	100	330	70

ALC269			
VCC	ICC (mA)	mW	TEMP ( )
+3.3V (DVDD)	200	660	
+5V (AVDD)	1000	5000	70

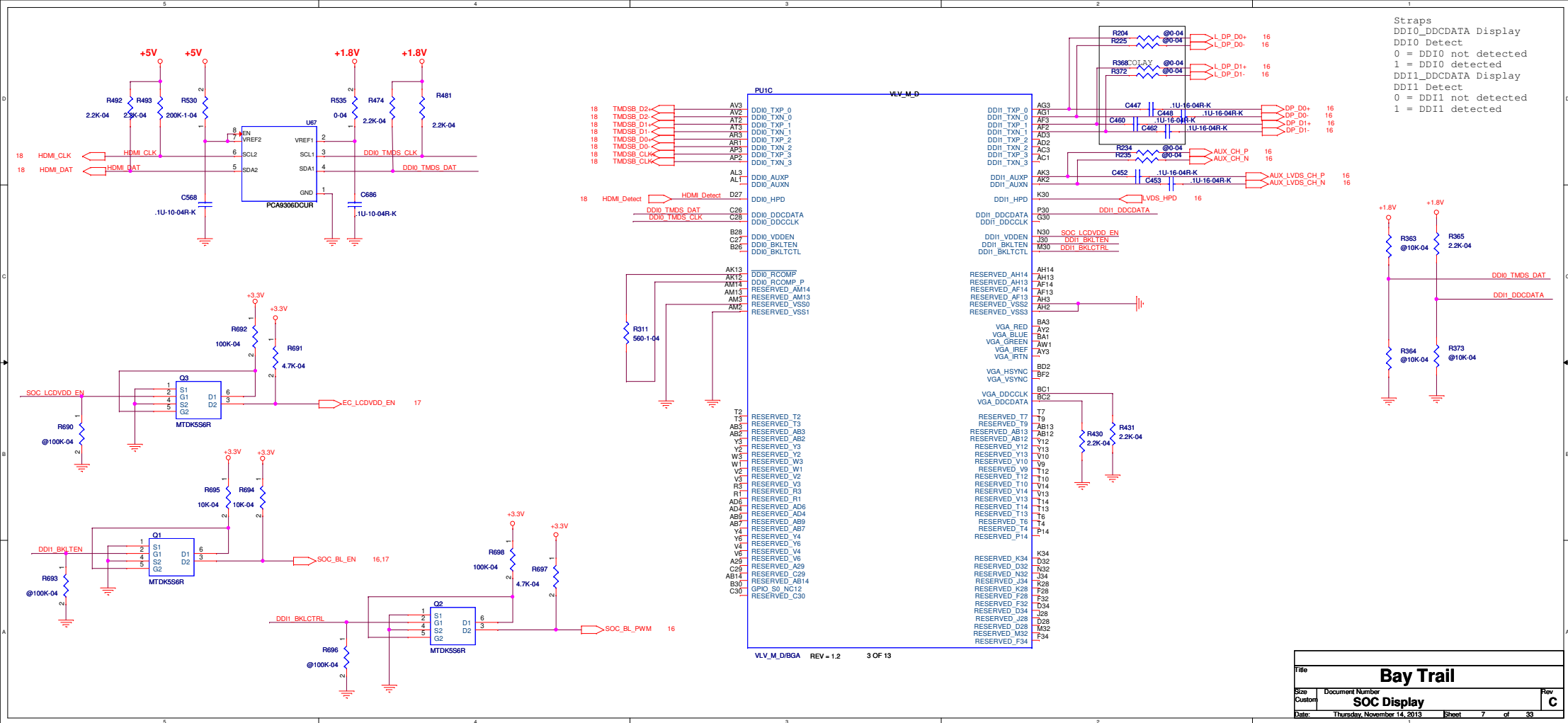
ADM1032			
VCC	ICC	mW	TEMP ( )
+3.3V	170uA	0.56	150

RT8411			
VCC	ICC (mA)	mW	TEMP ( )
+3.3VS	300	990	
+1.2VS	150	180	
			70

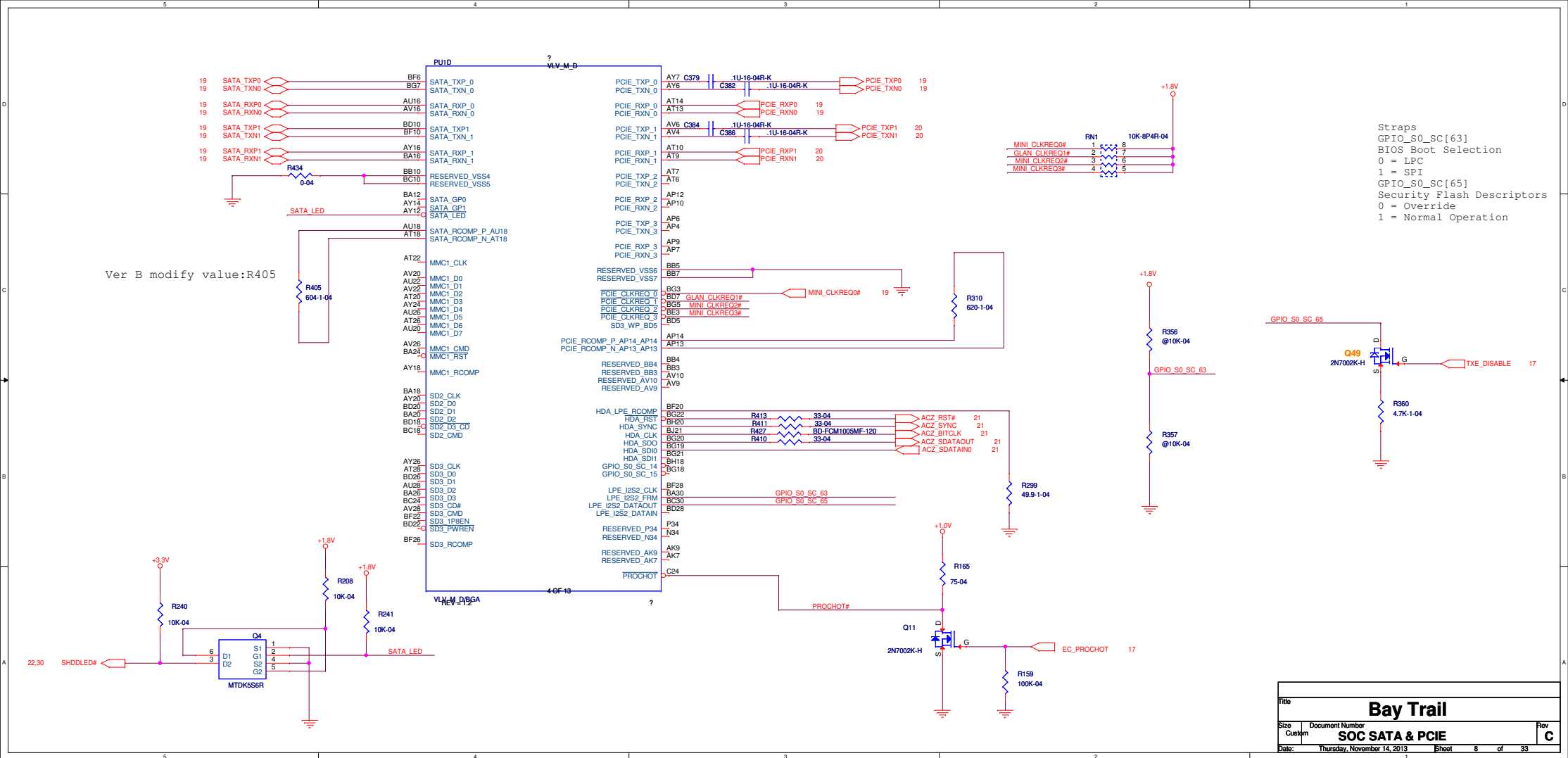




Title		
Bay Trail		
Size B	Document Number	Rev C
DDR1 Socket		
Date:	Thursday, November 14, 2013	Sheet 6 of 33



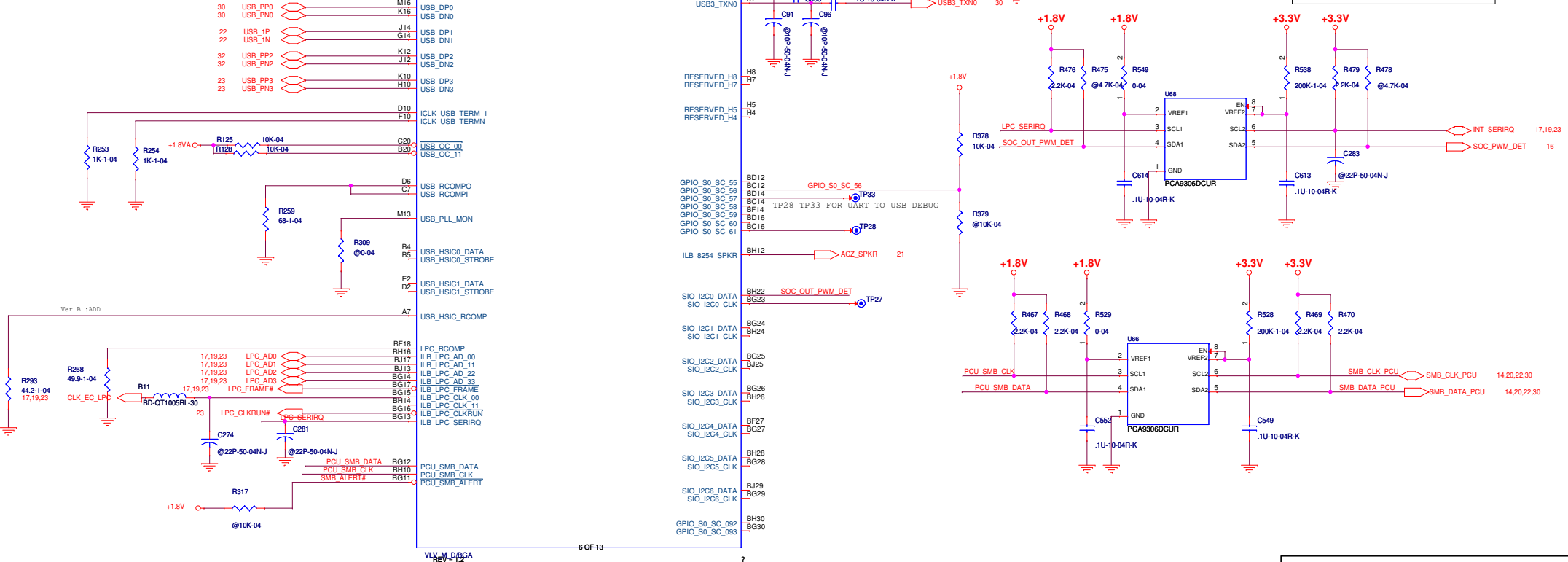
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Size Custom	Document Number <b>SOC Display</b>	Rev <b>C</b>	
Date: Thursday, November 14, 2013	Sheet	7 of	33



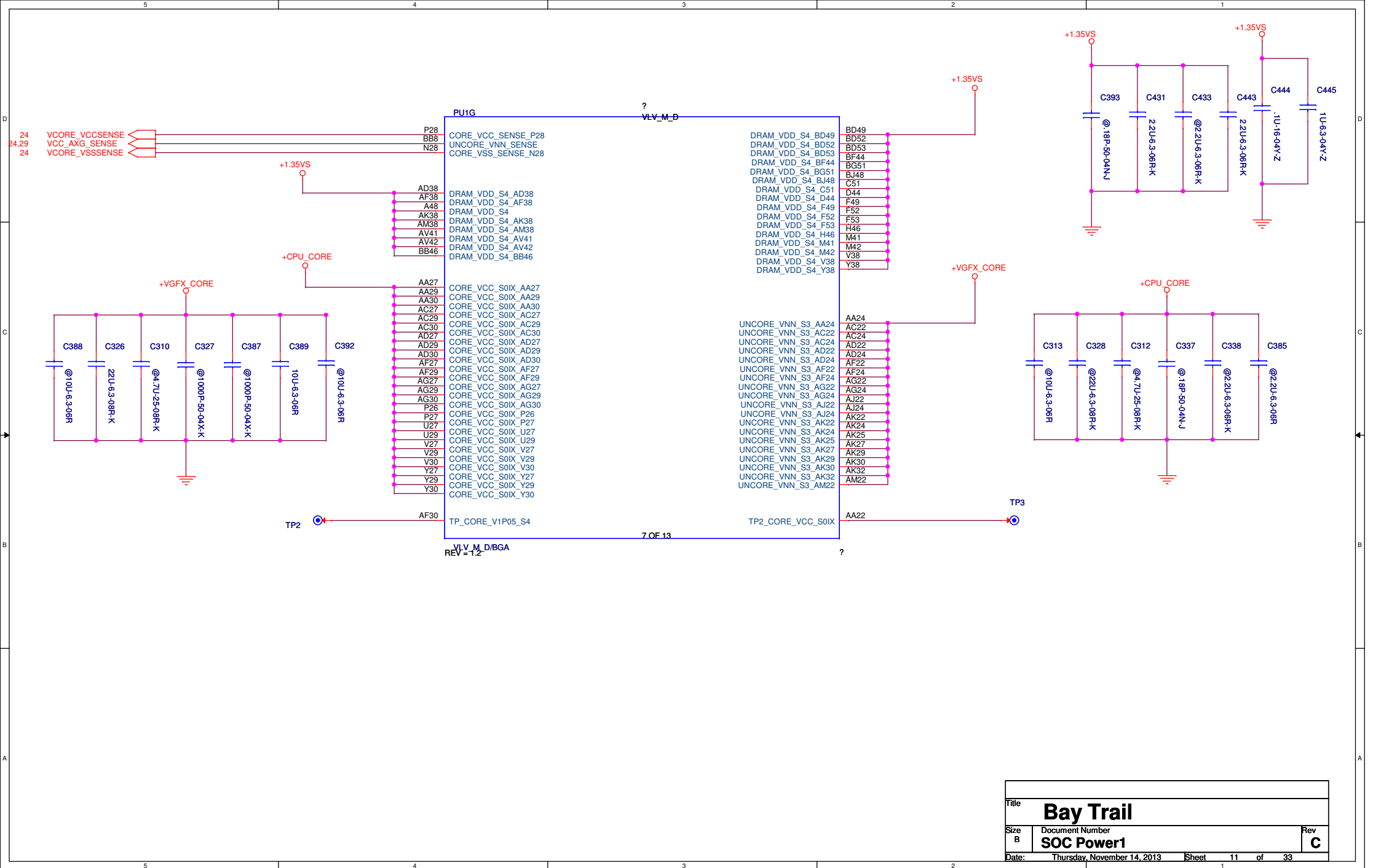


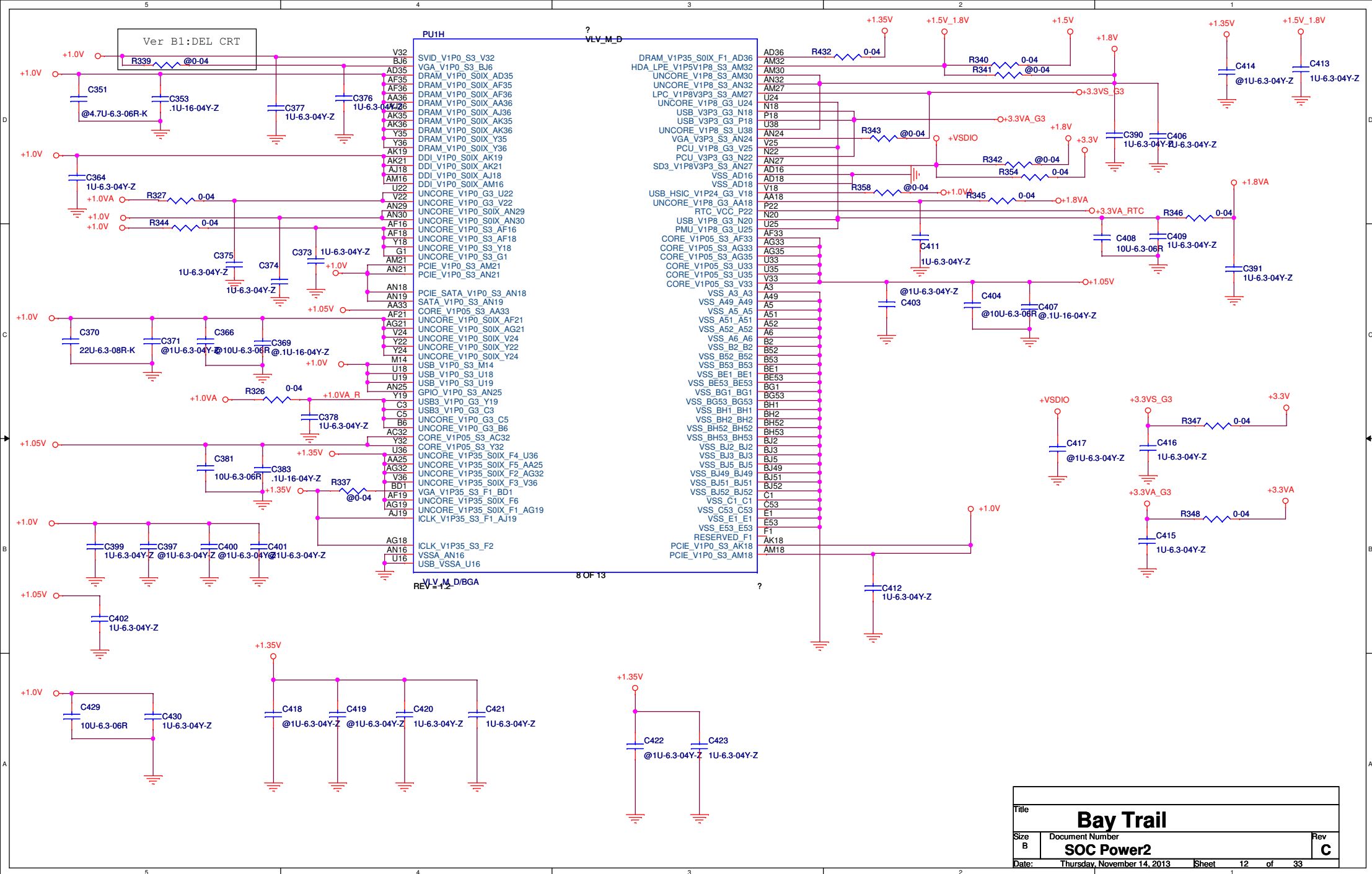


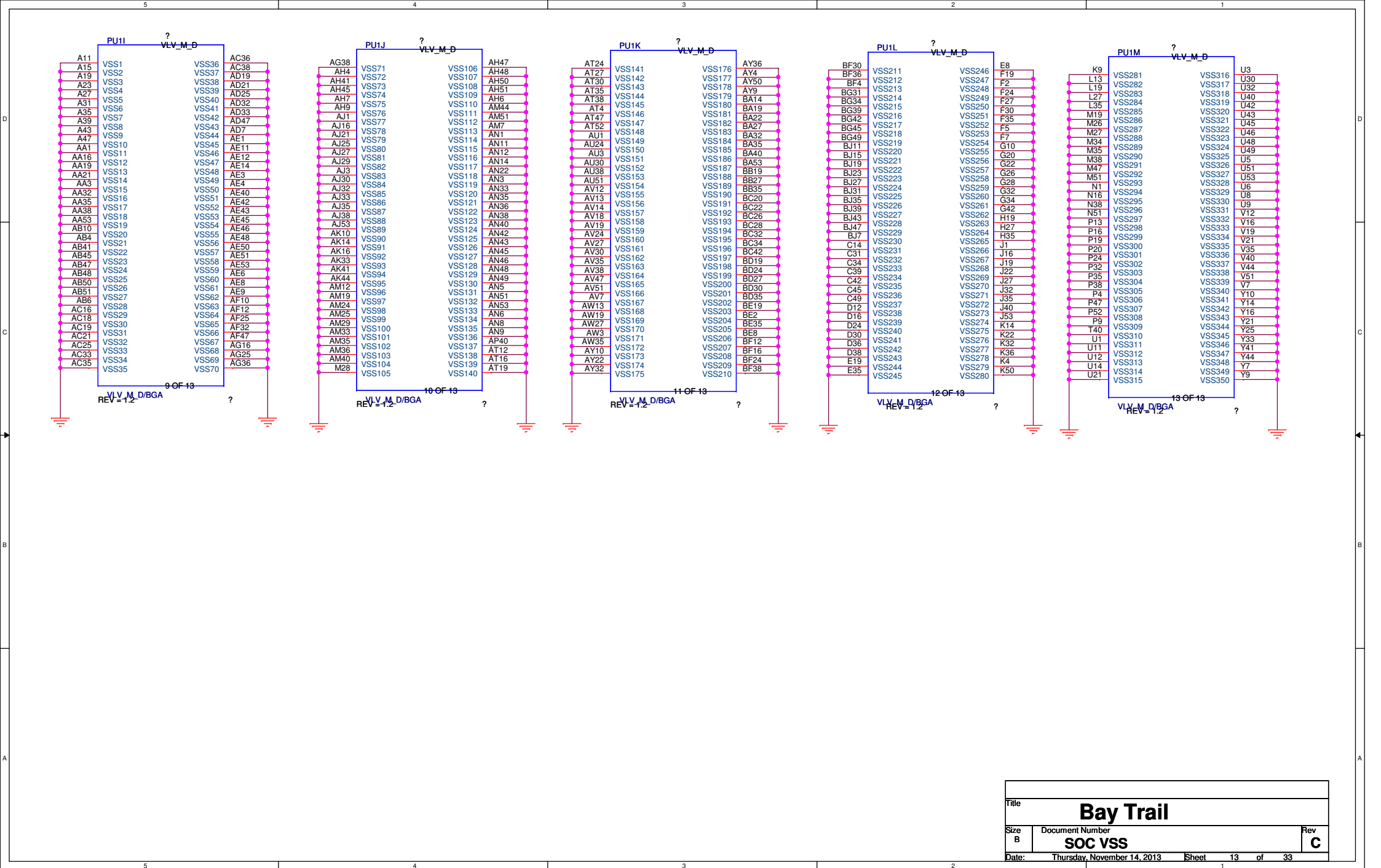
USB0	USB3.0/2.0 ENHANCE	30PIN)
	USB1 MB USB PORT(close to usb 3.0)	
	USB2 USB HUB 1	
	USB3 TV	
USB HUB1	USB1 BT	30PIN)
	USB2 MB USB PORT/(CARD READER	
	USB3 WEBCAM	
	USB4 TSP	



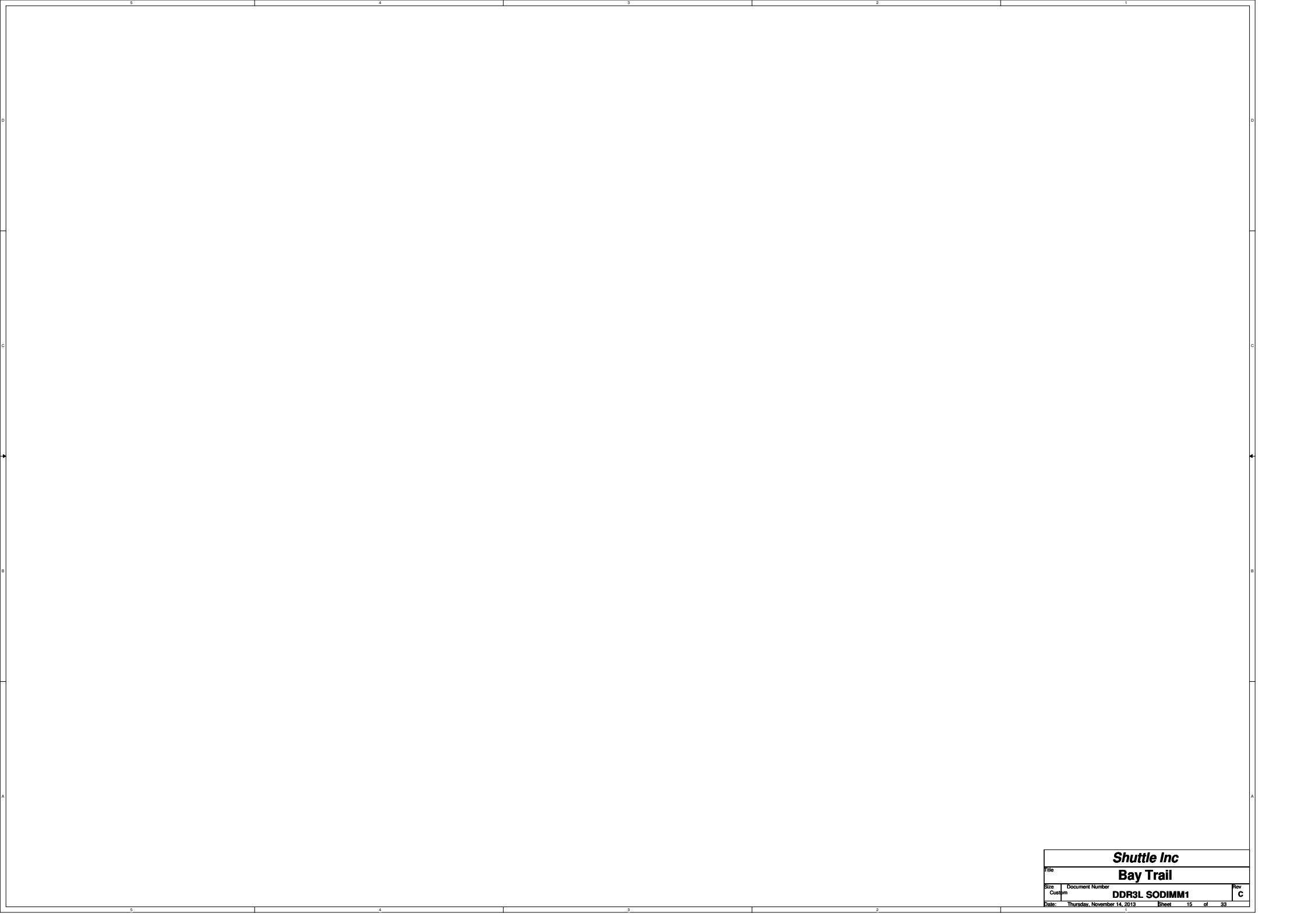
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Size	Document Number		soc USB		
Cuskm					
Date:	Thursday, November 14, 2013	Sheet	10	of	33



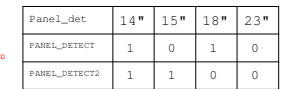




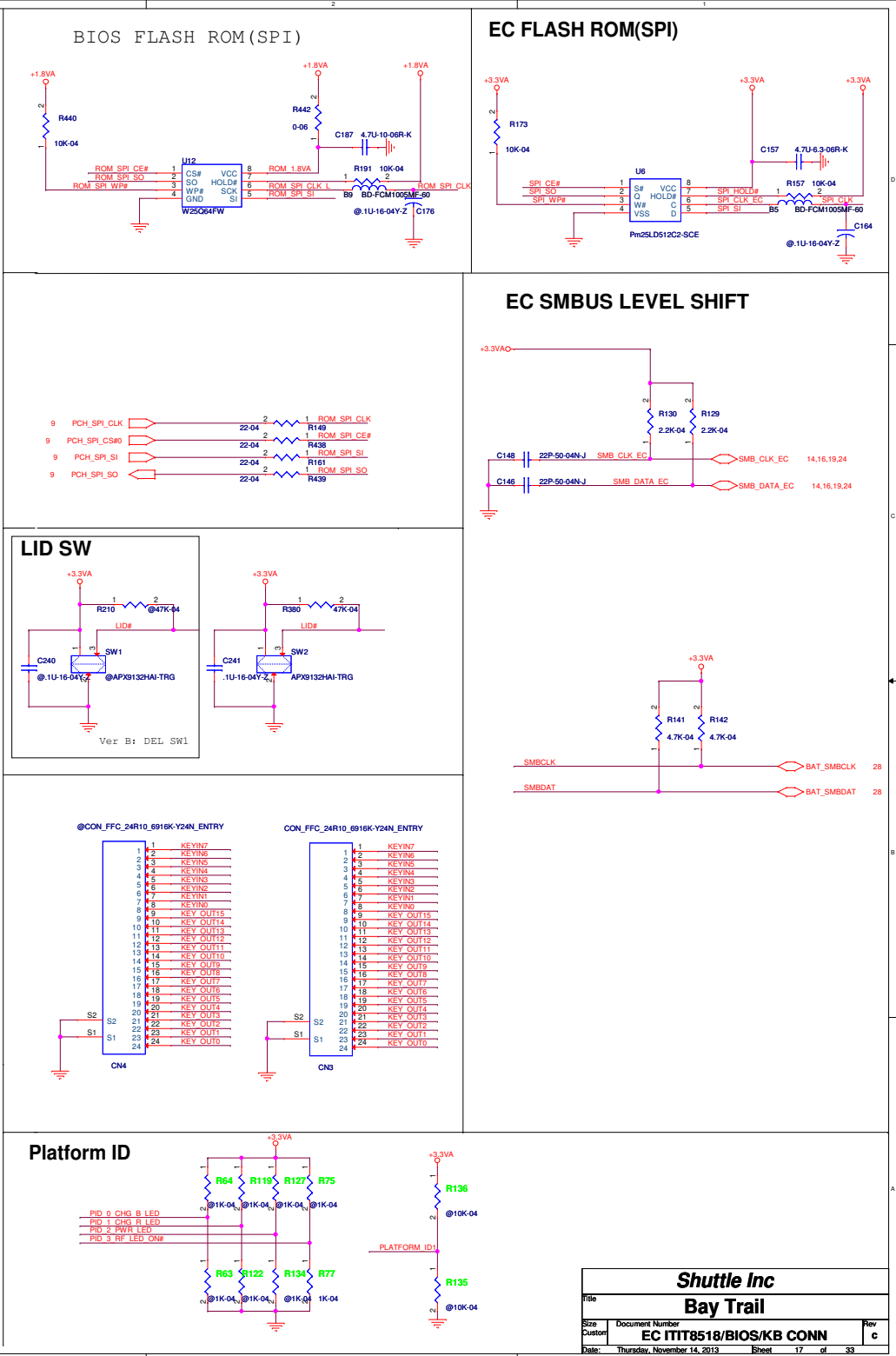
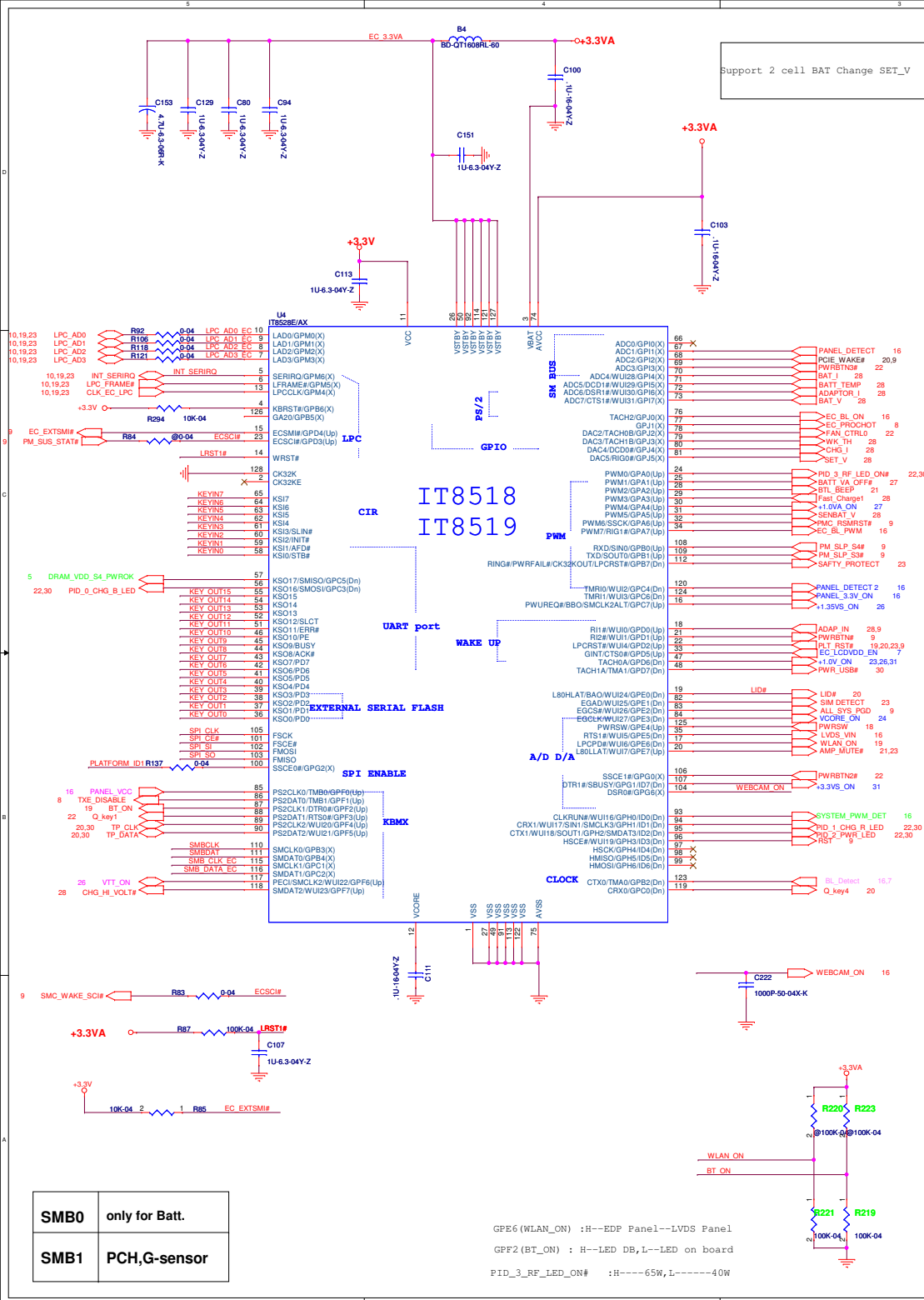




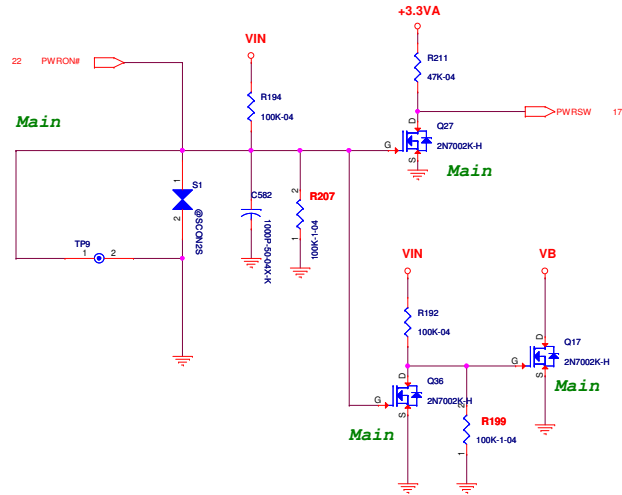
Shuttle Inc			
Title			
Bay Trail			
Size	Document Number		Rev
Custom	DDR3L SODIMM1		C
Date	Thursday, November 14, 2013		Sheet 15 of 33



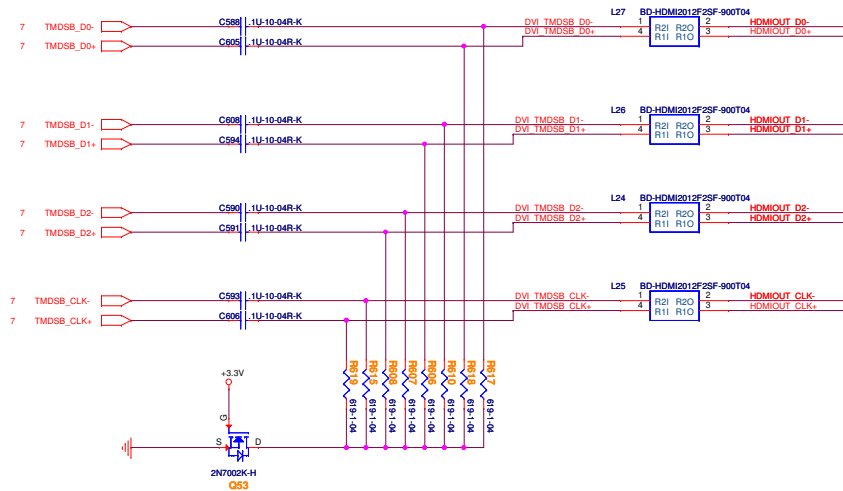




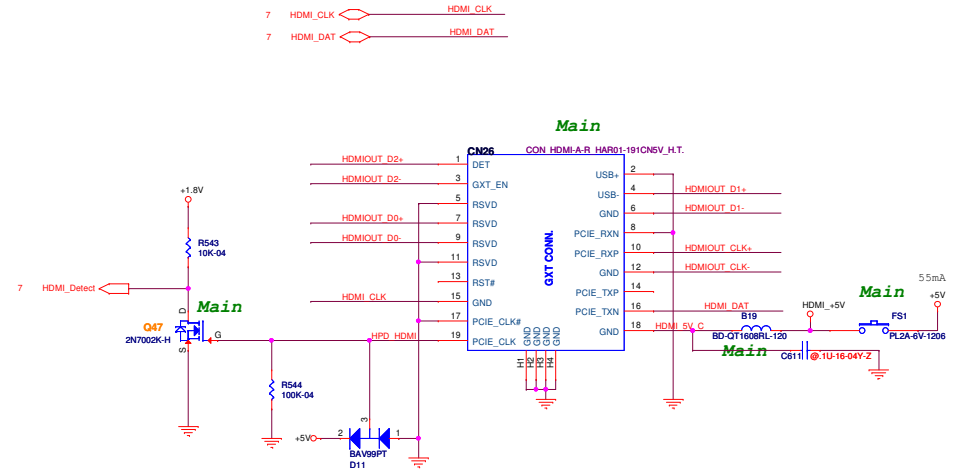
## PWR SW



## HDMI CONN



change HDMI Ver B1





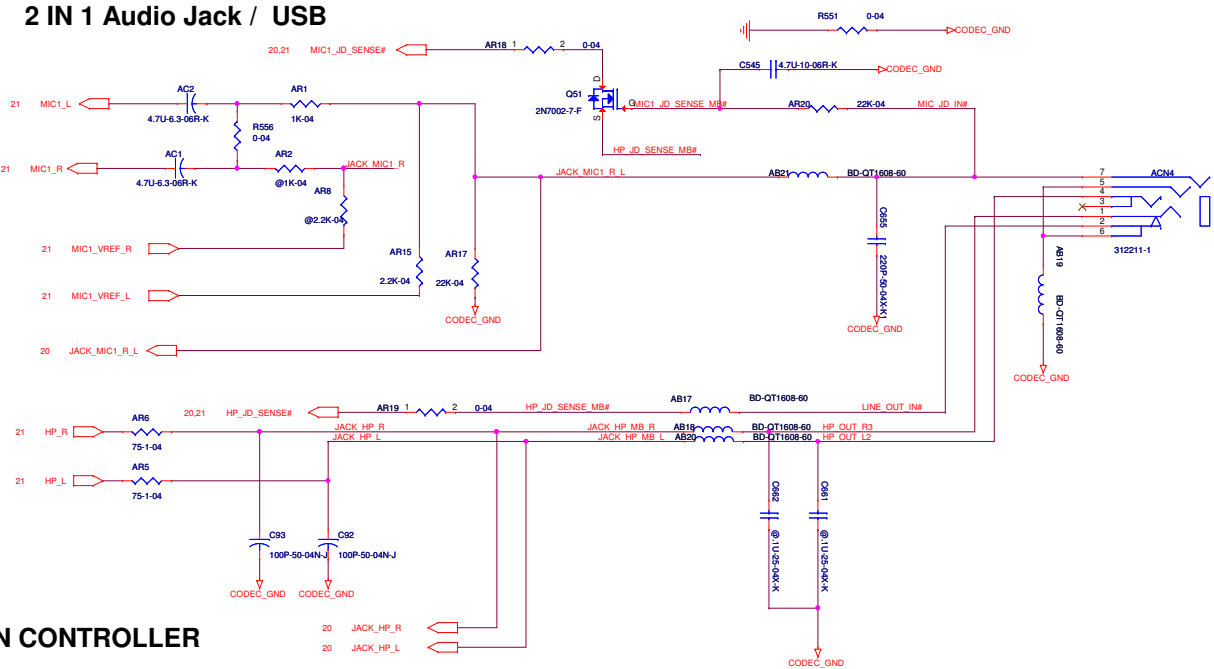


**AMP VDD**

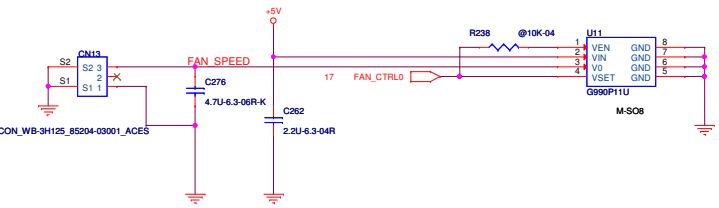


Title		<b>Bay Trail</b>	
Size	Document Number		
Custom	<b>CODEC(ALC269)/INT MIC/SPKR</b>		
Date:	Thursday, November 14, 2013	Sheet	21 of 33

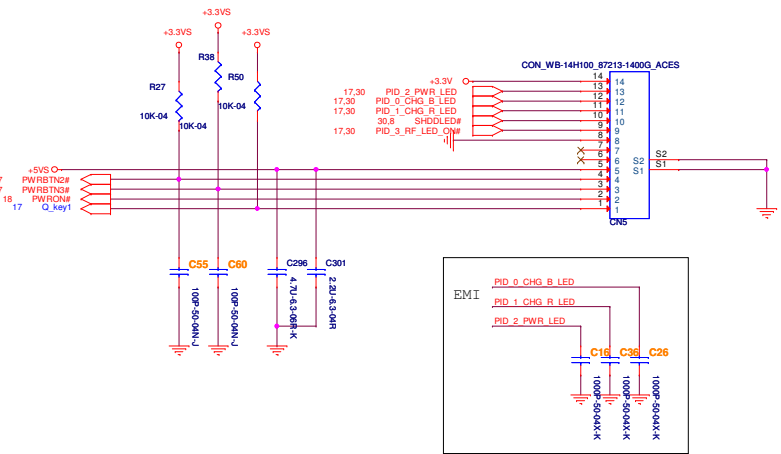
2 IN 1 Audio Jack / USB



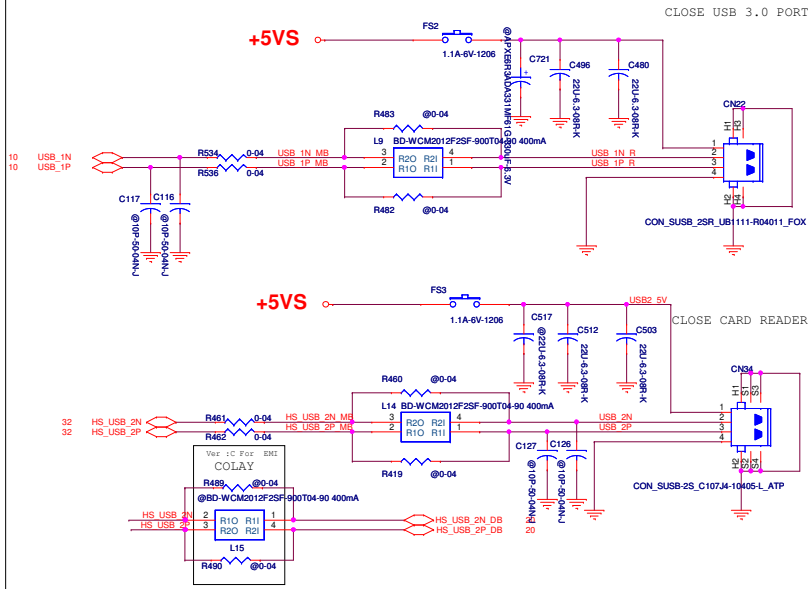
FAN CONTROLLER



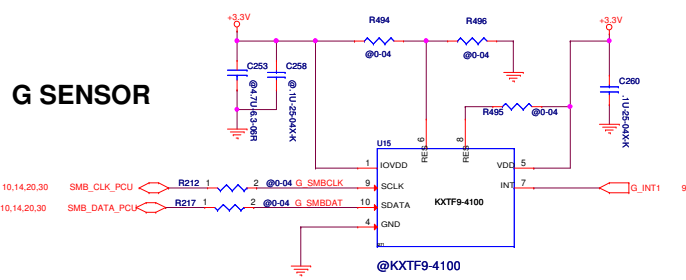
EXT USB PORT 4



USB2.0

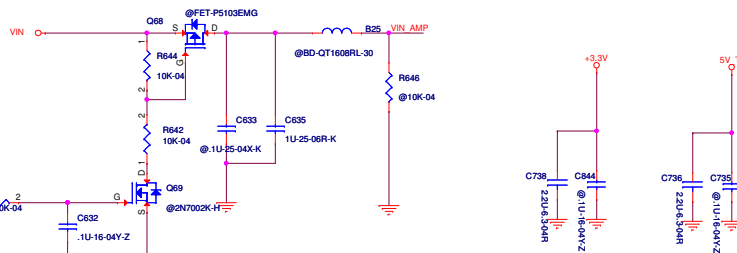
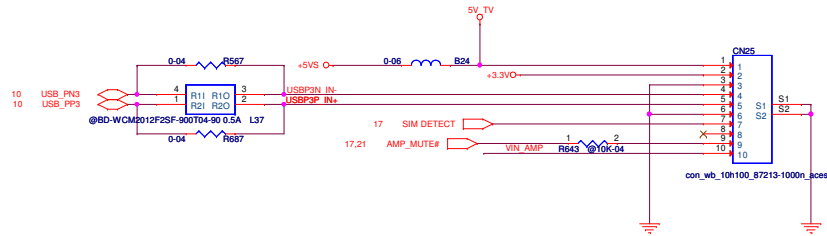
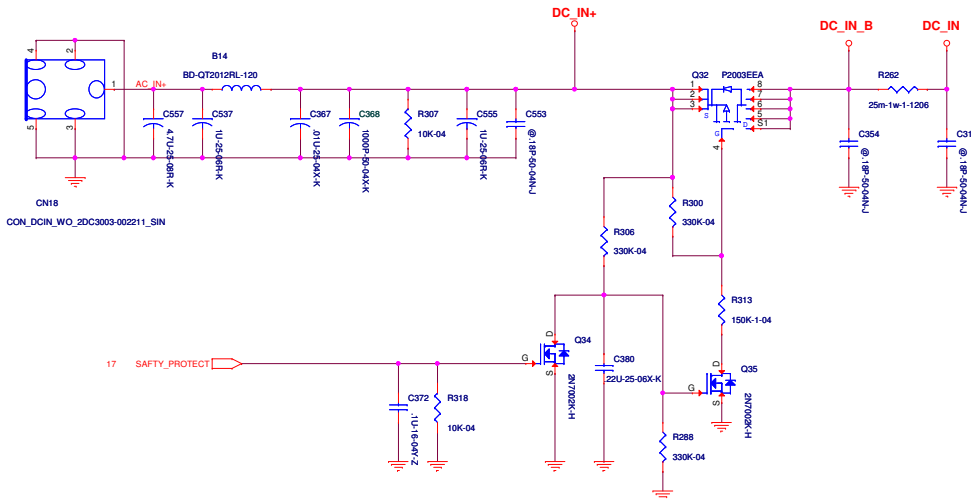


G SENSOR

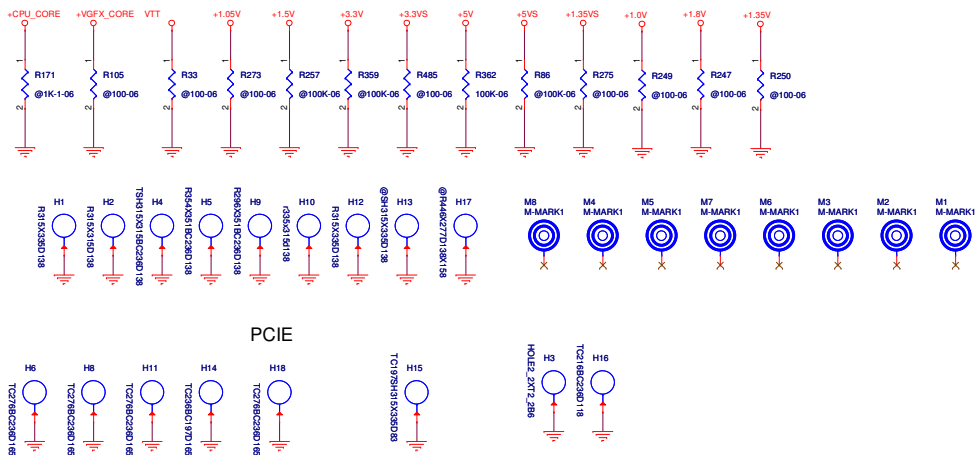
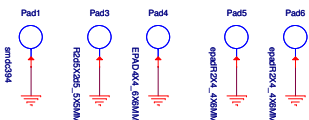


# DC IN

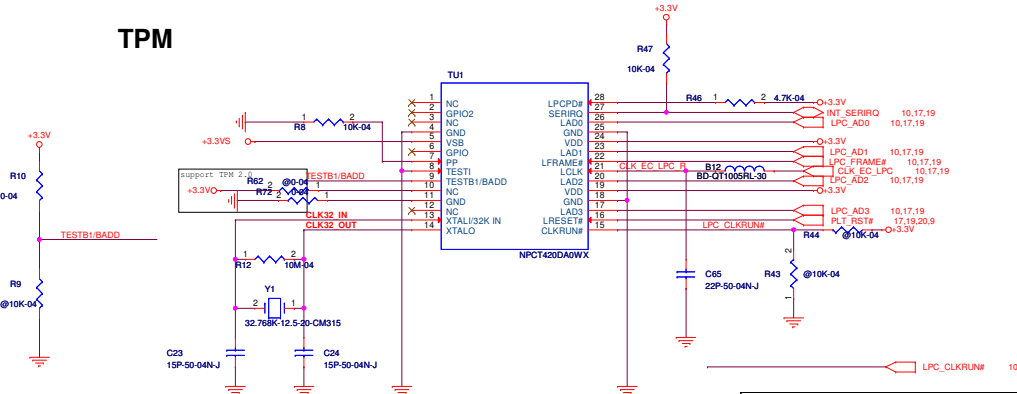
PROJECT	NH4CU		
Adaptor	40W		
Rsense	25m Ohm		
Stop Charger			



# Discharge Resistor



# TPM

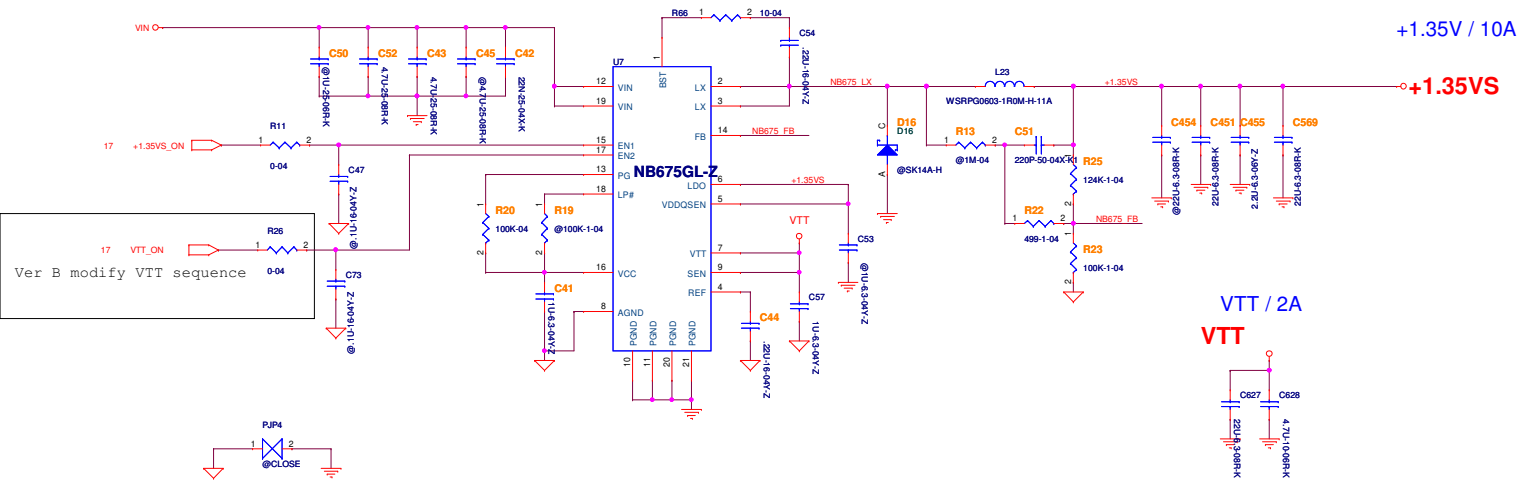


Shuttle Inc		
Bay Trail		
Title	Document Number	Rev
Size	Custom	C
Date	Thursday, November 14, 2013	Sheet 23 of 33

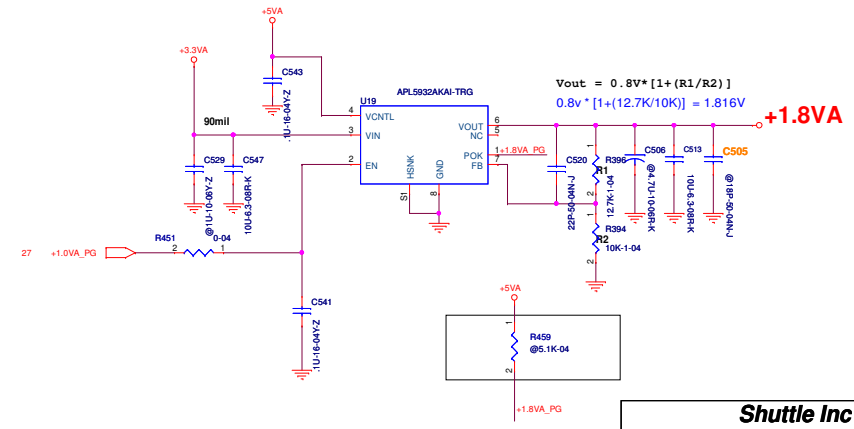
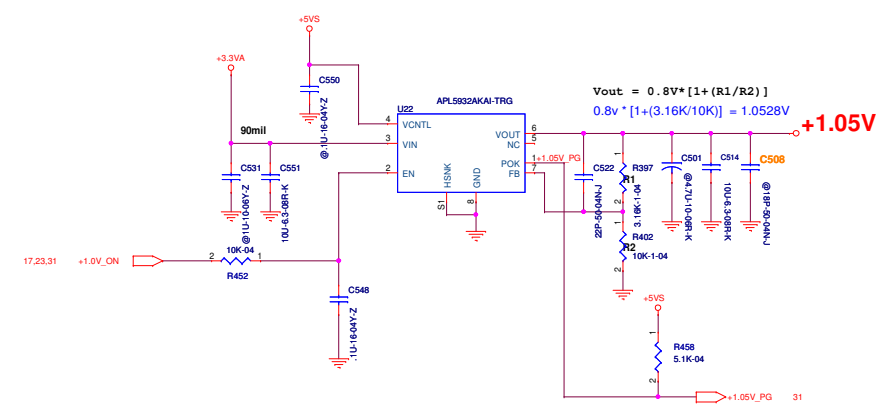
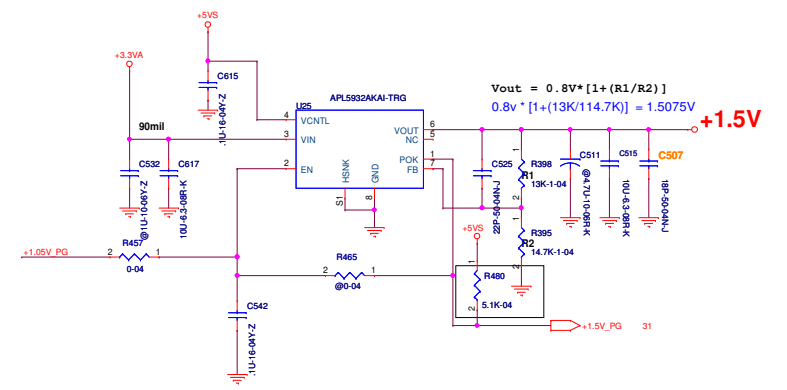




EXT MIC / EXT LINE IN / EXT USB JACK

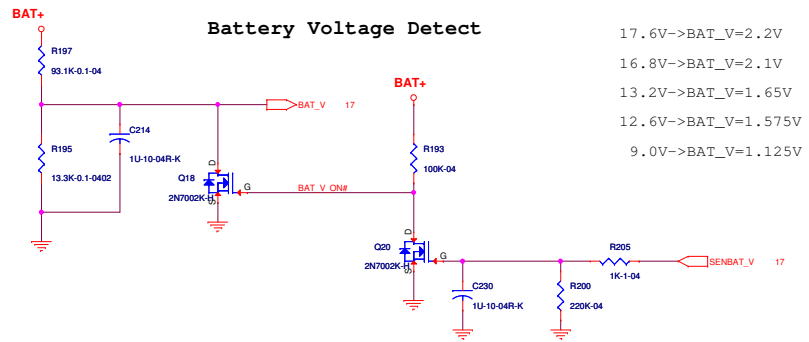
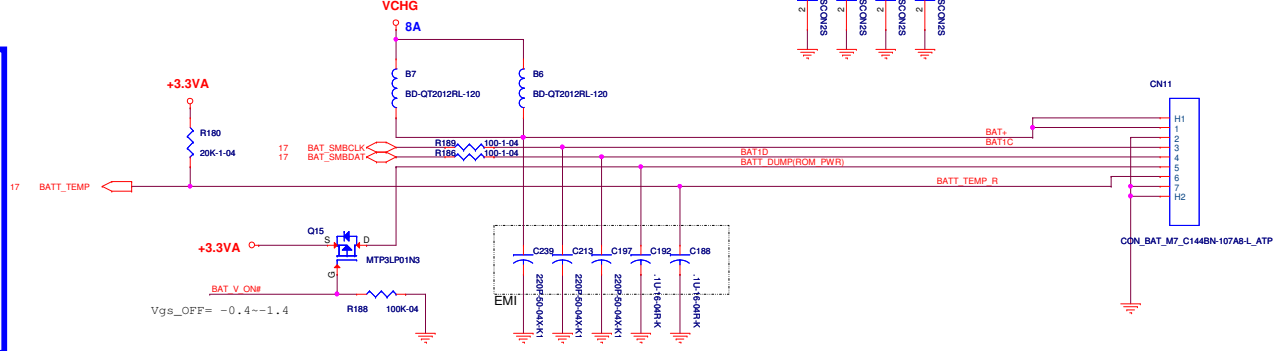


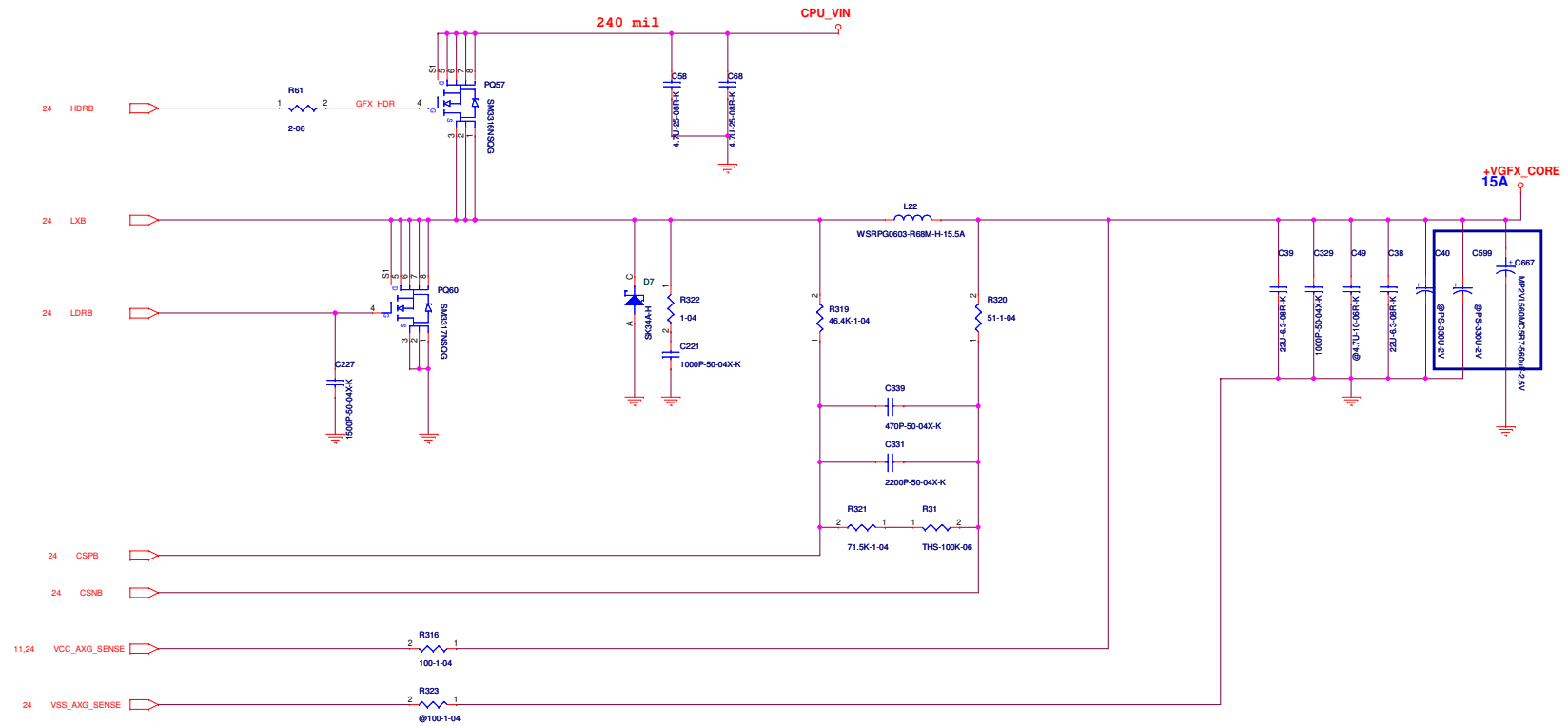
Ver B:DEL 1.2VA



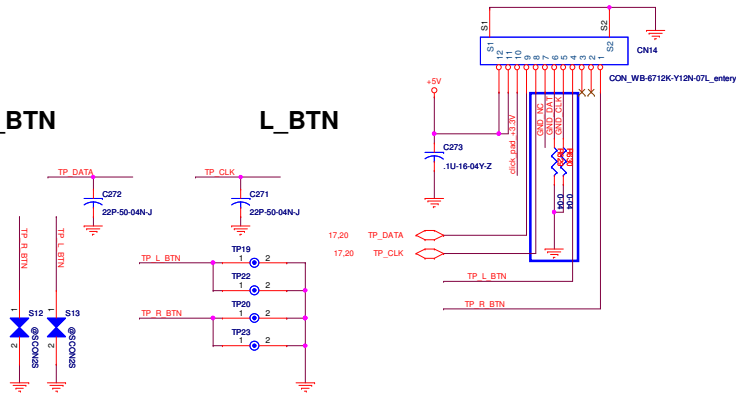


IAD MAX  
40W=>R266=34.8K  
65W=>R266=71.5K

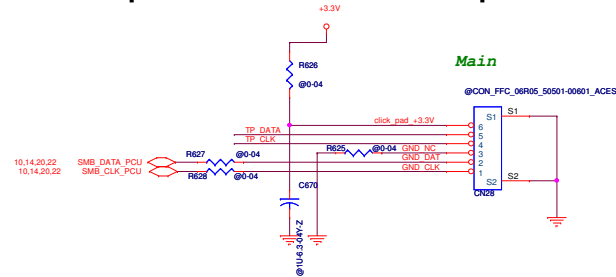




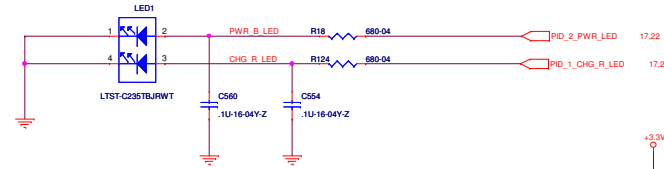
**L\_BTN**



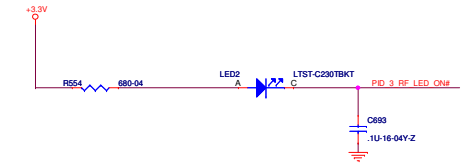
## Main



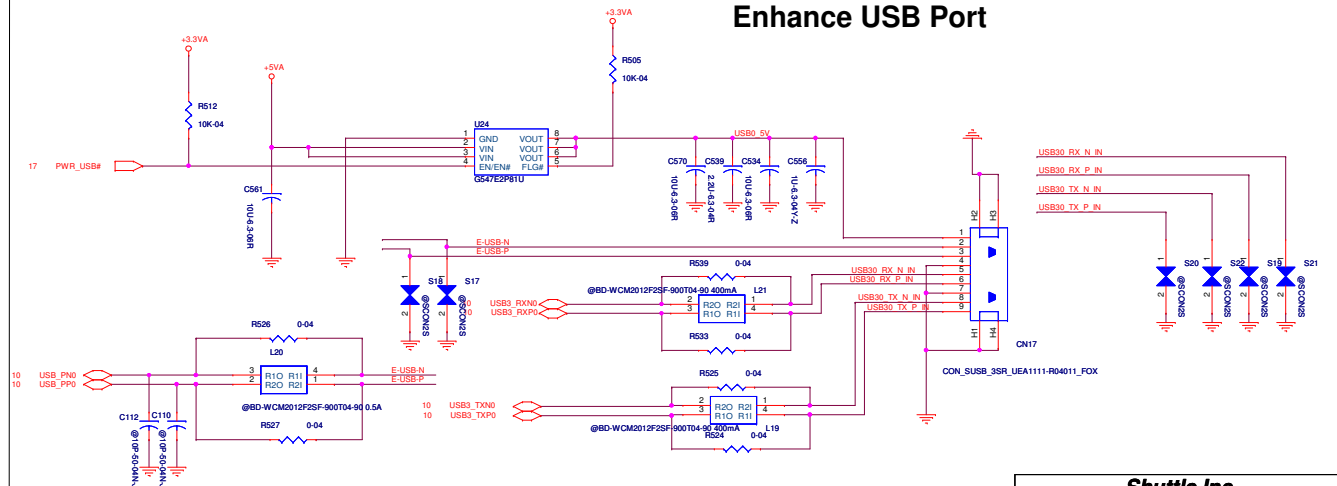
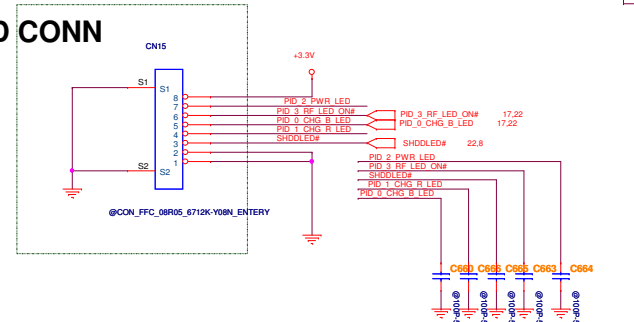
### Charge LED



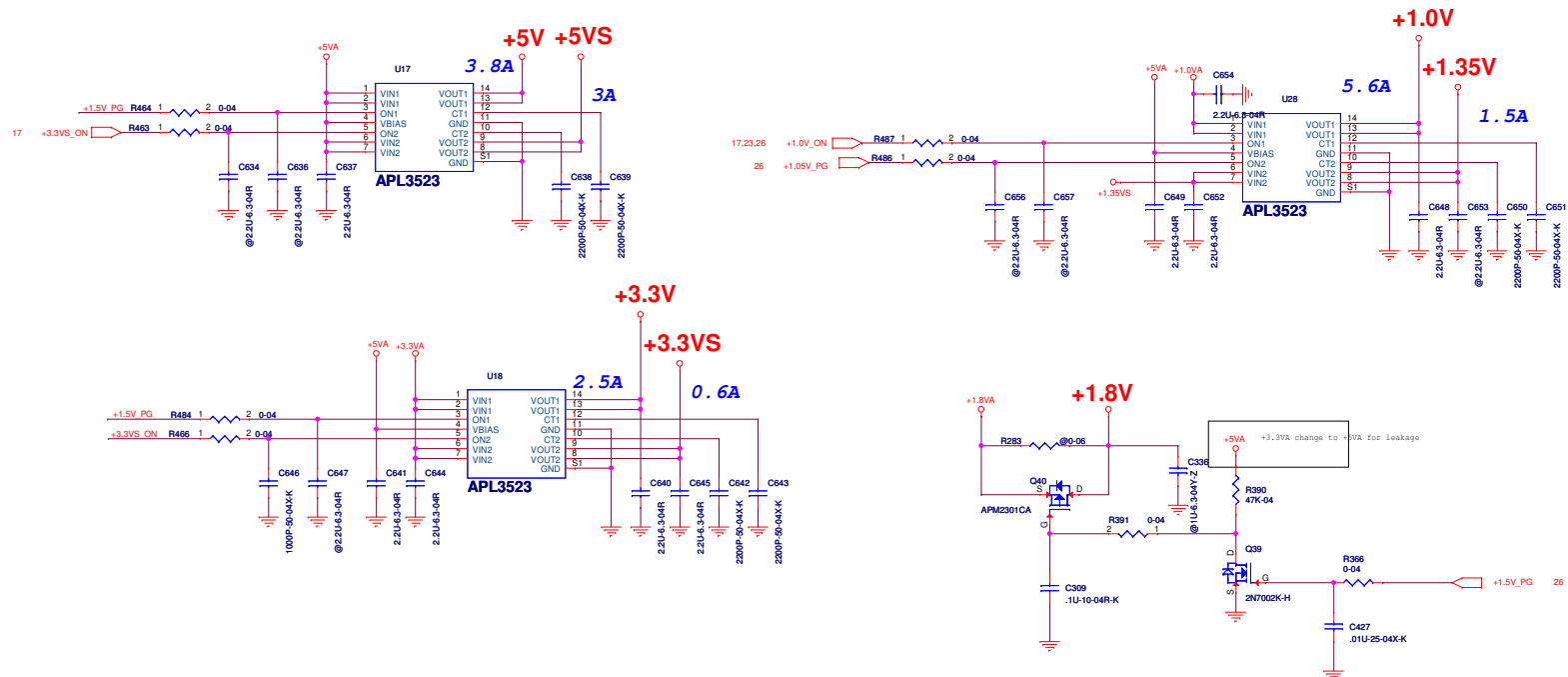
## WLAN LED



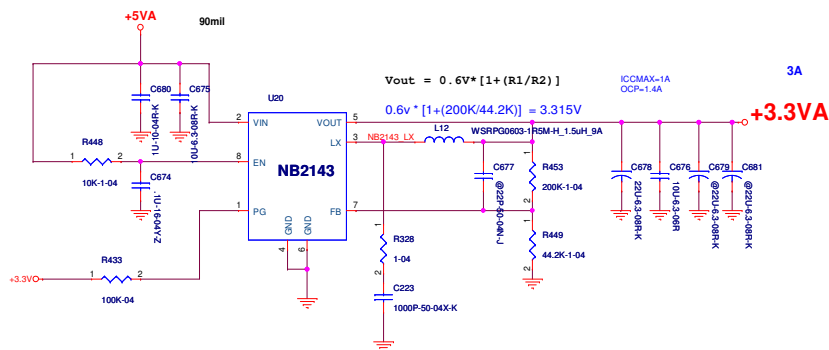
**LED CONN**



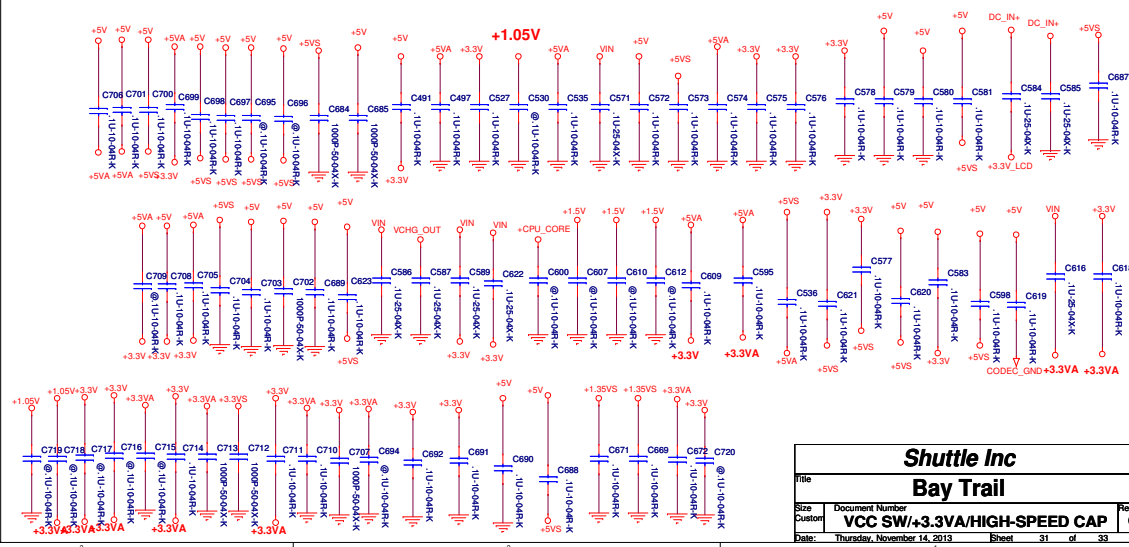
**VCCSW**



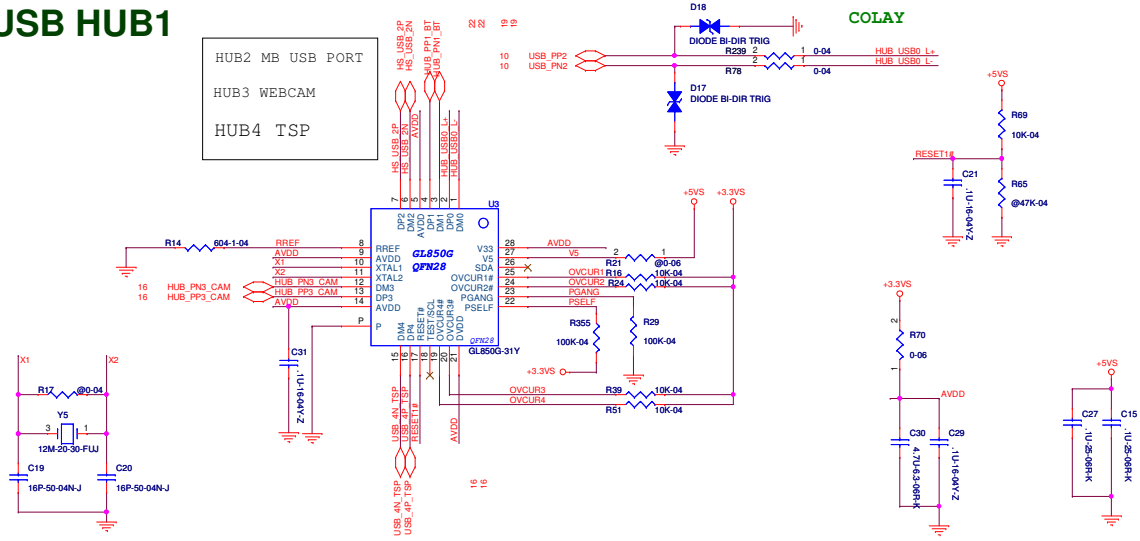
### 3.3VA Converter



## HIGH-SPEED CAP



## USB HUB1





A PHASE

MA1:Change R379 stuff for no boot issue  
MA2:Change R469,R470 stuff for SMBus power plane  
MA3:Change 3.3VS\_G3 to +3.3VS\_G3,change 3.3VA\_G3 to +3.3VA\_G3  
MA4:Change ACPRESENT to EC pin 88  
MA5:ADD 0R FOR 25MHZ CLK(R534)  
MA6:ADD 0R FOR PCH SATA POWER(B6)  
MA7:Sharing System BIOS ROM for KB & EC Codes(Del U7)  
MA8:ADD EC\_HSCK path for sharing ROM(ADD R540)  
MA9:ADD EC\_HSCS0# path for sharing ROM(ADD R484)  
MA10:ADD EC\_HMOSI path for sharing ROM(ADD R212)  
MA11:ADD EC\_HMISO path for sharing ROM(ADD R482)  
MA12:ADD 0R FOR AMP\_GND(ADD AB12)  
MA13:Change CN16 PIN DEFINE  
MA14:DEL R147 for PROCHOT issue  
MA15:ADD ISEN1 Pull Hi +5V(ADD R356)  
MA16:Change C203 SMD CAP TO DIP CAP  
MA17:ADD ASM1042\_SMI# path(ADD R683 )  
MA18:Change CN19 PIN DEFINE  
MA19:ADD EMI solution(ADD C251,C257,C357,C341,C684,C686,C25,C660,C677 DEL C99,C430)

B PHASE

MA1:U25,U19,U22 PIN S1&Pin3 OPEN,Change GND  
MA2:DEL CRT ADD HDMI  
MA3:HUB2 Change ;HS\_USB\_2P, HUB3 Change : HUB\_PN3\_CAM, HUB4Change: USB\_4N\_TSP  
MA4:ADD CLEAR CMOS Circuit  
MA5:ADD WLAN LED  
MA6:U66 U68 Change 3.3V for leakage  
MA7:EC #81 ADD Support 2 cell BAT  
MA8:ADD EMI Soutlion:C223, R427, C707, C684, C702, C27,C15, C260,C703,C704, C712,C713  
MA9:EC #86 ADD TXE\_DISABLE  
MA10:PCIE\_WAKE# pull high 3.3VA  
MA11:ADD thermal solution move U9 close to Q101  
MA12:ADD sopput 18 inch LCD ADD U23,R455,R456,R403,R374,R471  
MA13:ADD Platform R221,R219  
MA14:GPU core add C39,C389