

ZZZ
DAB@
DA80000QD10
PCB

ZZZ1
EL@
X76346BOL01

ZZZ2
HY@
X76346BOL02

Compal Confidential

QCJ00(LA-8111P) Schematics Document

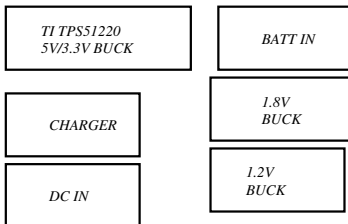
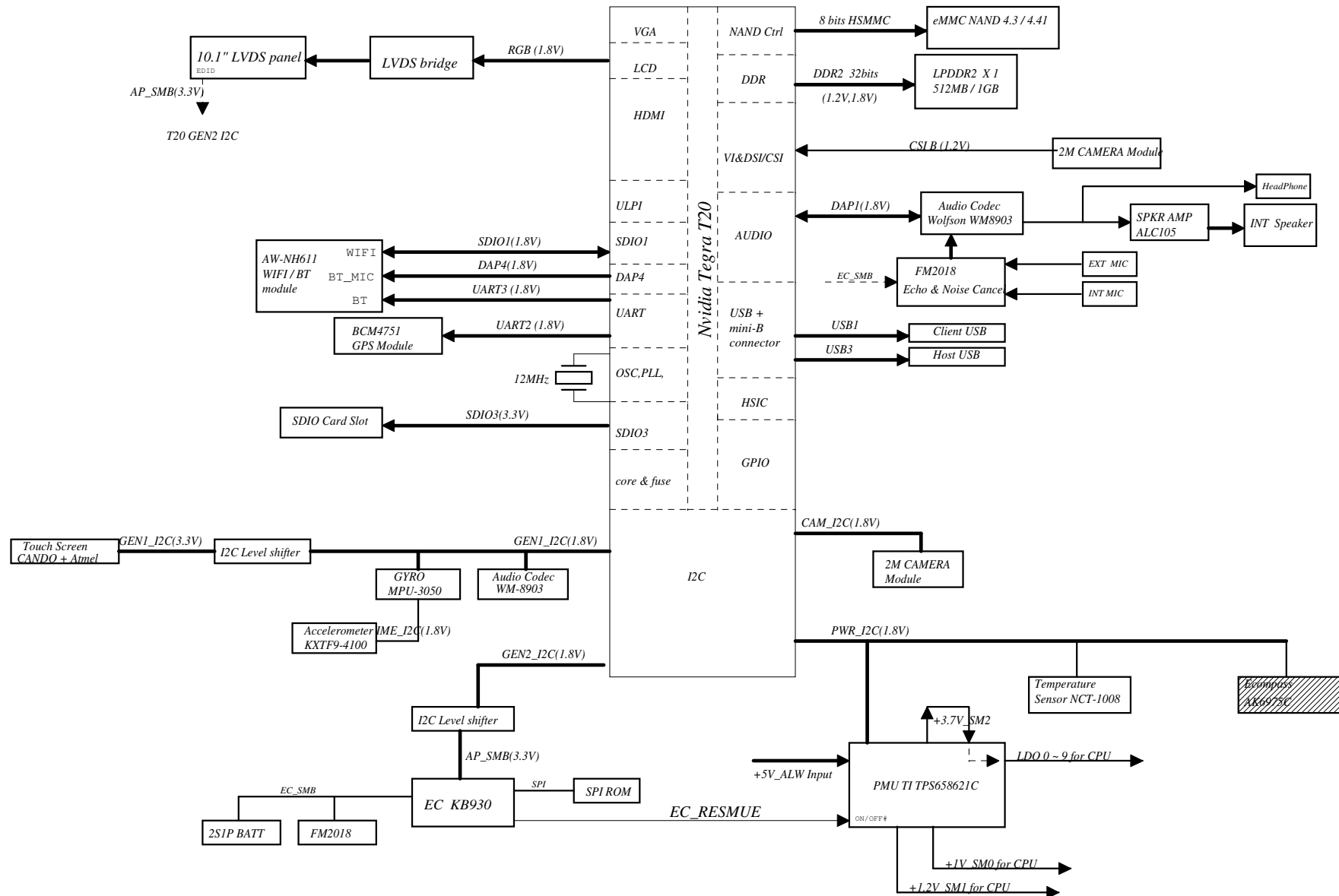
Nvdia(T20) + LPDDRII

2011-10-21

REV:1.0

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				Size C	Document Number PICASSO-E	Rev 0.1
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QCJ00 (Picasso-E) system block diagram



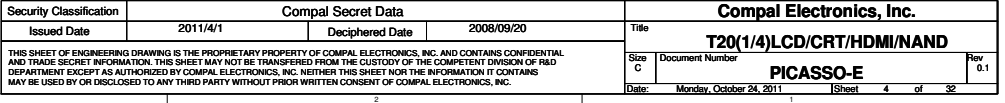
Voltage Rails

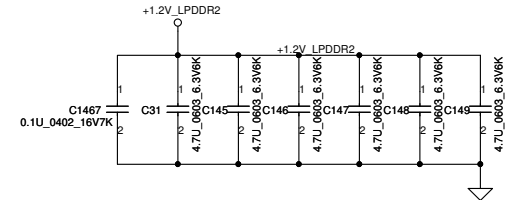
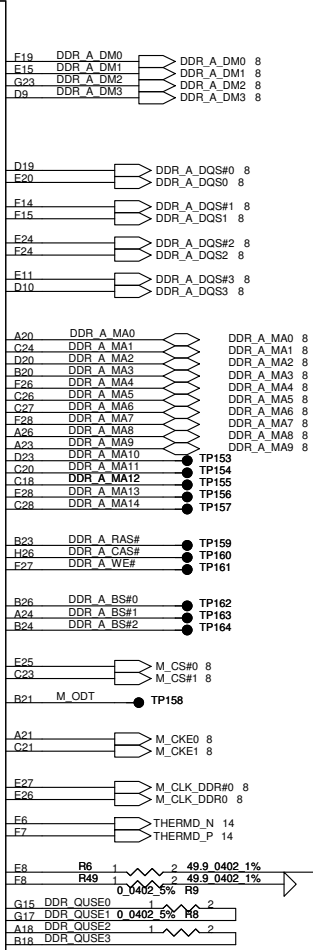
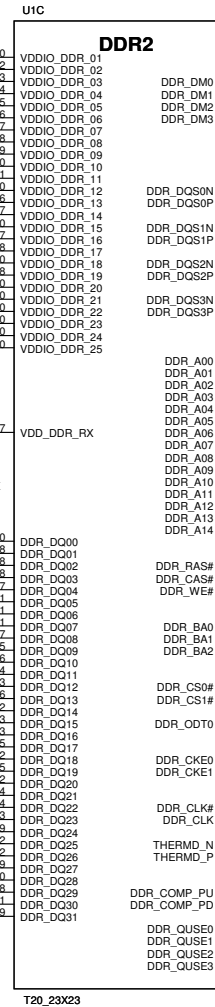
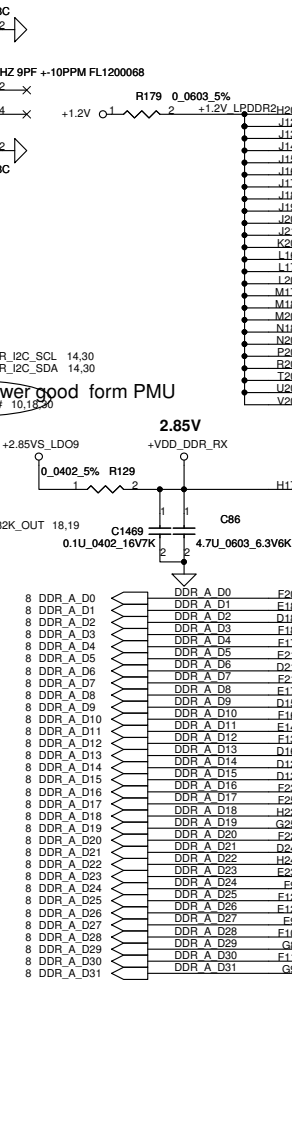
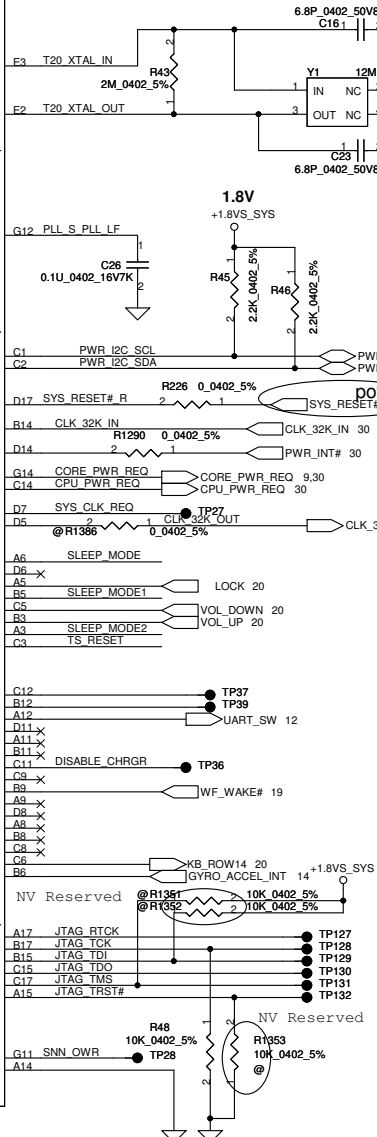
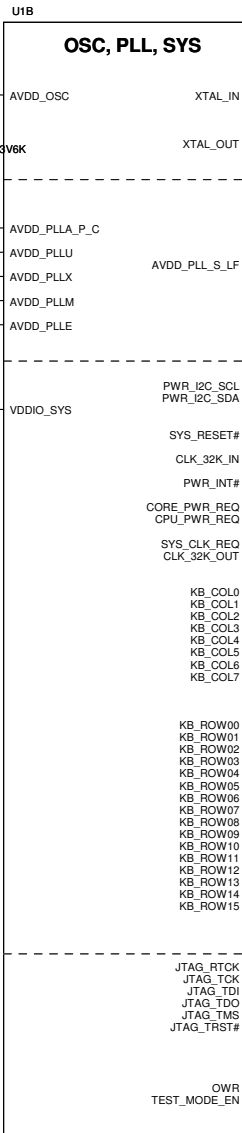
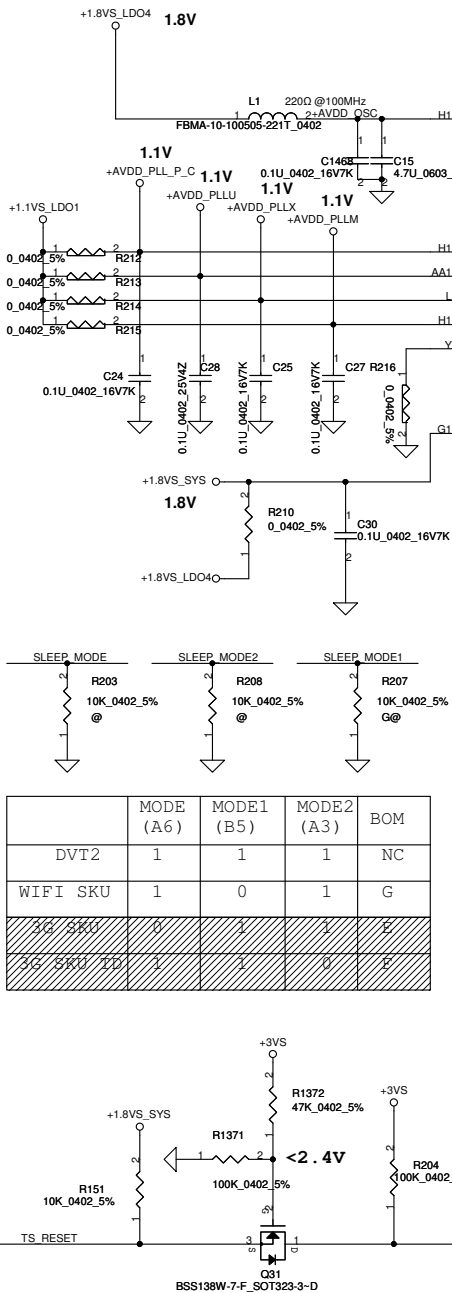
Power Plane	Description	IDLE	Standby
VIN	Adapter power supply (12V)	ON	ON
B+	AC or battery power rail for power circuit.	ON	ON
+1.2VS_SM0	Core voltage for CPU	ON	OFF
+1.0VS_SM1	CPU voltage for CPU	ON	OFF
+1.1VS_LDO1	AVDD_PLL power rail	ON	OFF
+1.2VS_LDO2	T20 RTC power rail	ON	OFF
+1.8VS_LDO4	T20 system power rail	ON	ON
+3.3VS_LDO3	T20 USB power rail	ON	OFF
+2.85VS_LDO5	Core voltage for EMMC	ON	OFF
+2.85VS_LDO6	Core voltage for CAMERA	ON	OFF
+3.3VS_LDO7	T20 HDMI power rail	ON	OFF
+1.8VS_LDO8	T20 HDMI PLL power rail	ON	OFF
+2.85VS_LDO9	T20 DDR RX power rail	ON	ON
+3VALW	3.3V always on power rail	ON	ON
+3VS	3.3V switched power rail for standby mode	ON	ON
+5VALW	5V always on power rail	ON	ON
+1.8V	1.8V always on power rail	ON	ON
+1.8VS	1.8V switched power rail for standby mode	ON	ON
+3.3VS_RTC	RTC power	ON	ON

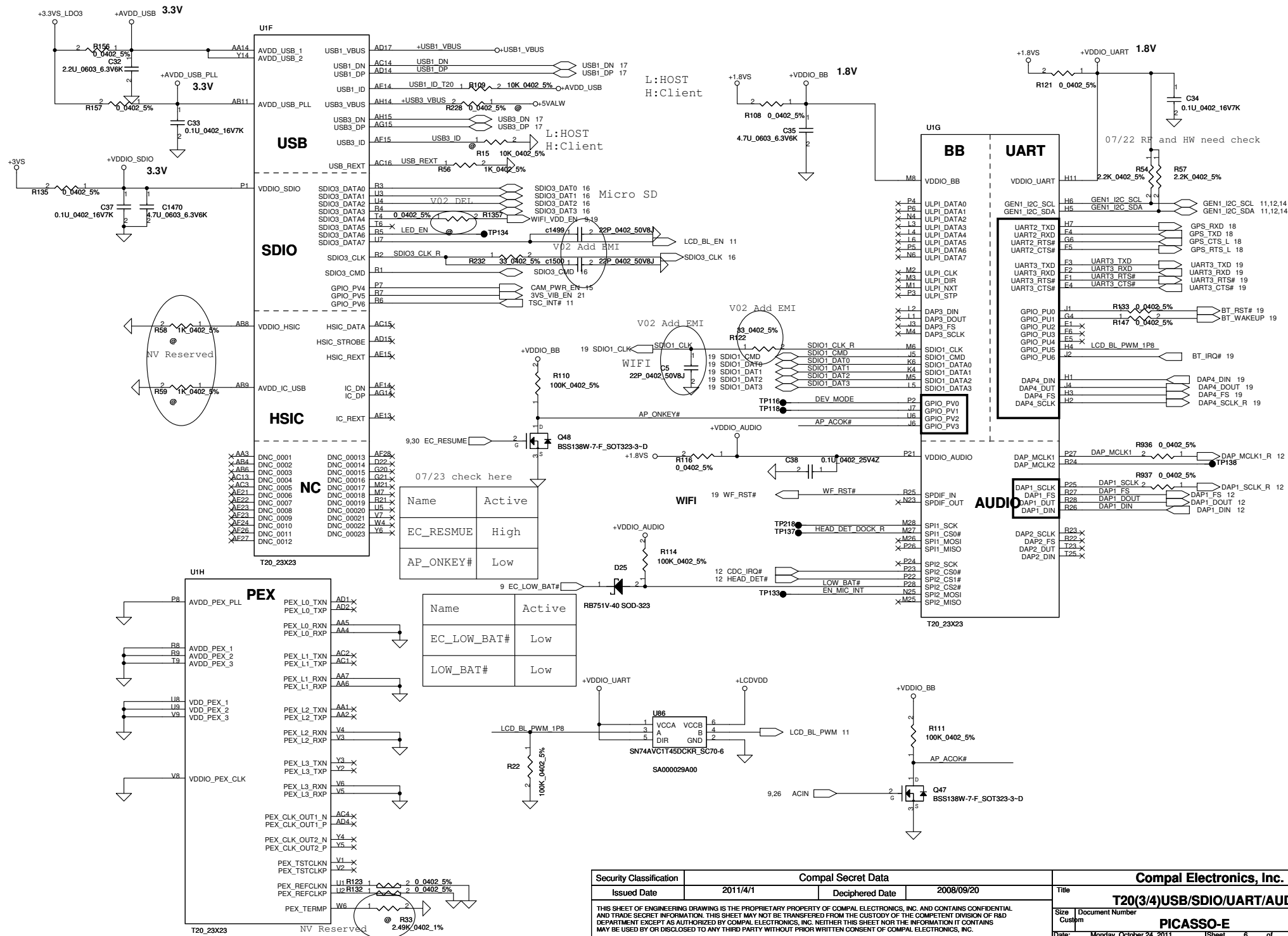
SIGNAL STATE	EC_SYS_STANDBY#	EN_VDD_+1.8VS_S3	EN_VDD_3V3	EN_VDD_1V8
Full ON	High	High	High	High
Standby	High	High	High	High

GEN1_I2C		TS_I2C	
Audio Codec	1001 010xb	Device	
G-sensor	0000 1111 b	Touch Panel	
Gyro	1101 000x b	0x4C or 0x4D	
GEN2_I2C		AP_SMB	
		Device	
		PANEL EDID	
EC_SMB		EC	
		Device	Address
Echo Cancellation		1011 111xb	
BATT			
CAM_I2C address			
		Device	Address
CAMERA 1.3M		1001 000X b	
PWR_I2C address			
		Device	Address
PMU		0110 100X b	
Temperature sensor		0101 110X b	
Ecompass			

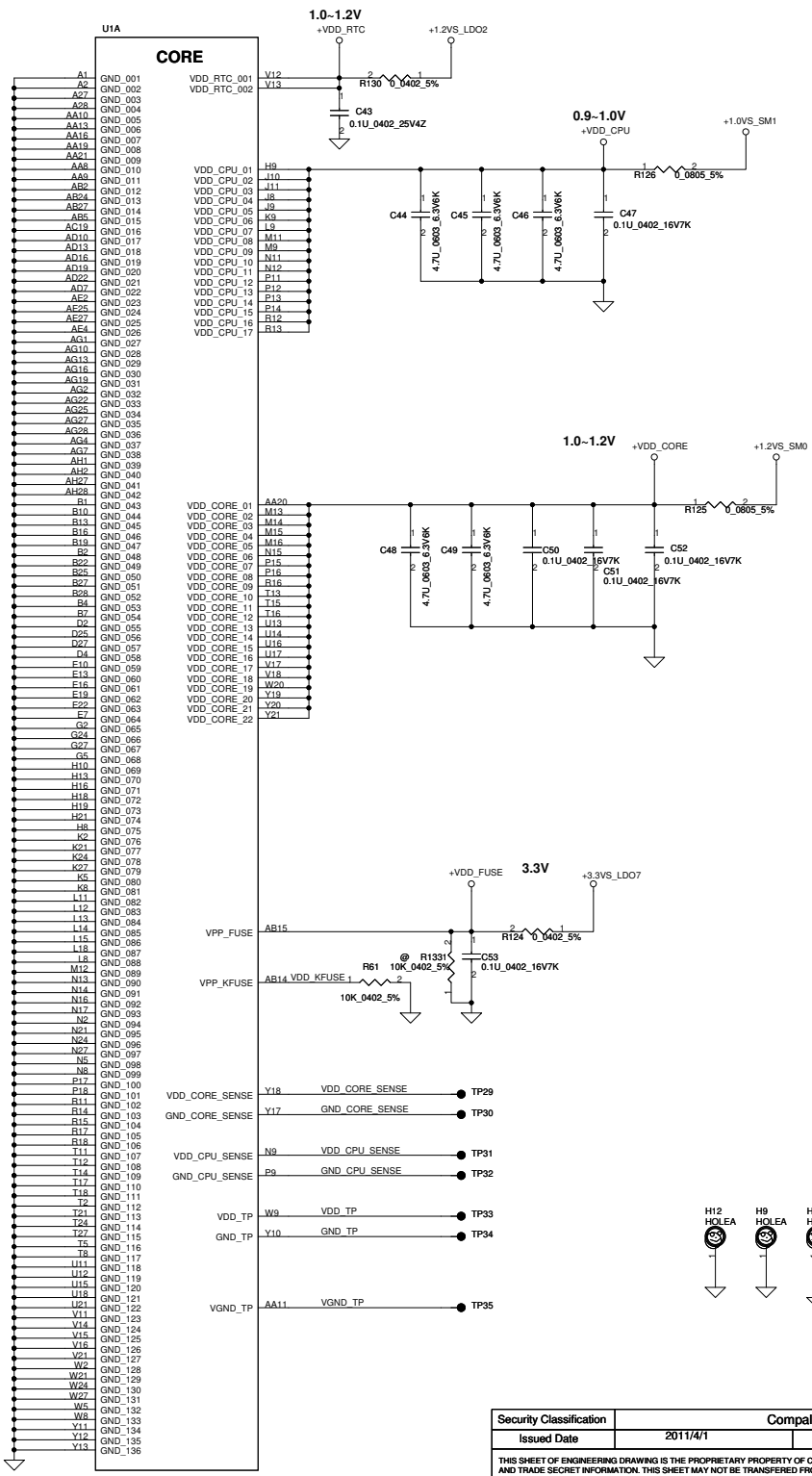
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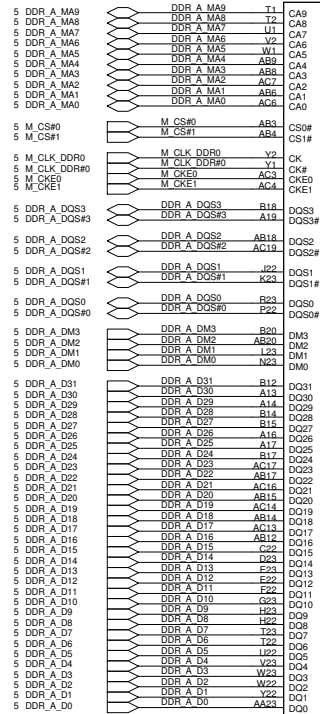


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Deciphered Date				2008/09/20				PICASSO-E			
Title				T20(3/4)USB/SDIO/UART/AUDIO				Rev 0.1			
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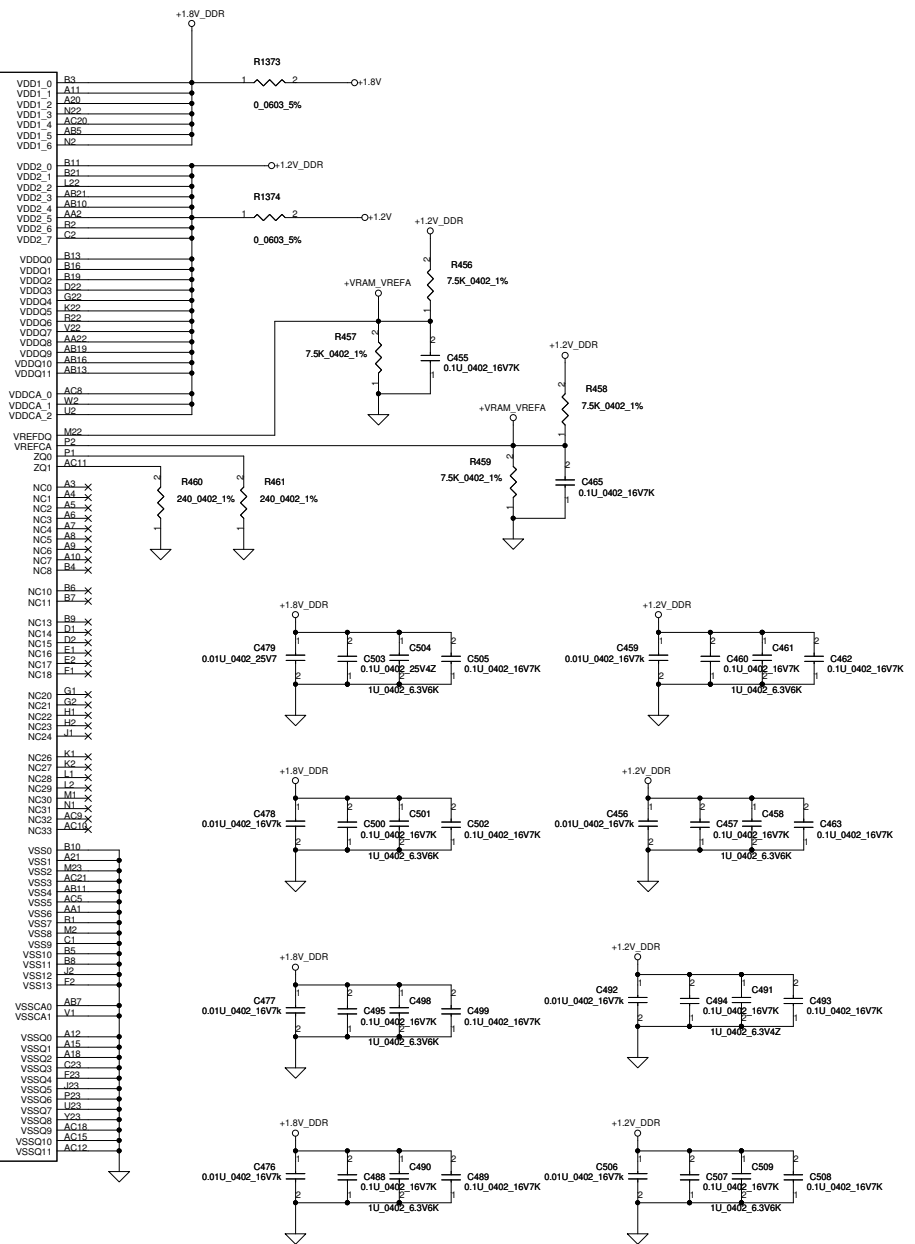
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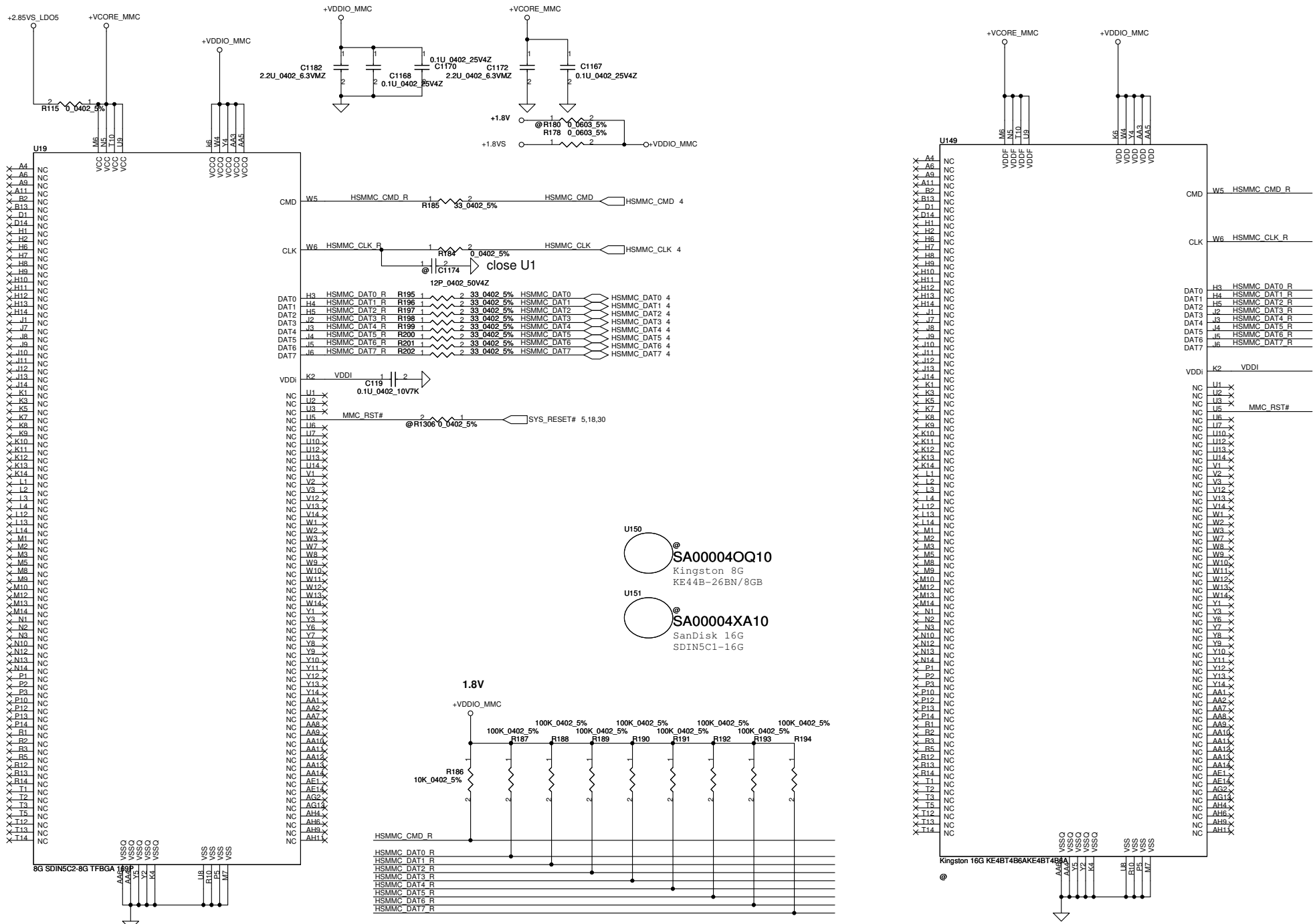


X_A1 DNU0
X_A2 DNU1
X_A22 DNU2
X_A23 DNU3
X_B1 DNU4
X_B2 DNU5
X_B22 DNU6
X_B23 DNU7
X_AB1 DNU8
X_AB2 DNU9
X_AB22 DNU10
X_AB23 DNU11
X_AC1 DNU12
X_AC2 DNU13
X_C22 DNU14
X_C23 DNU15

MT46H64M32L2JG-51T-A_FBG168
LPDDR2@



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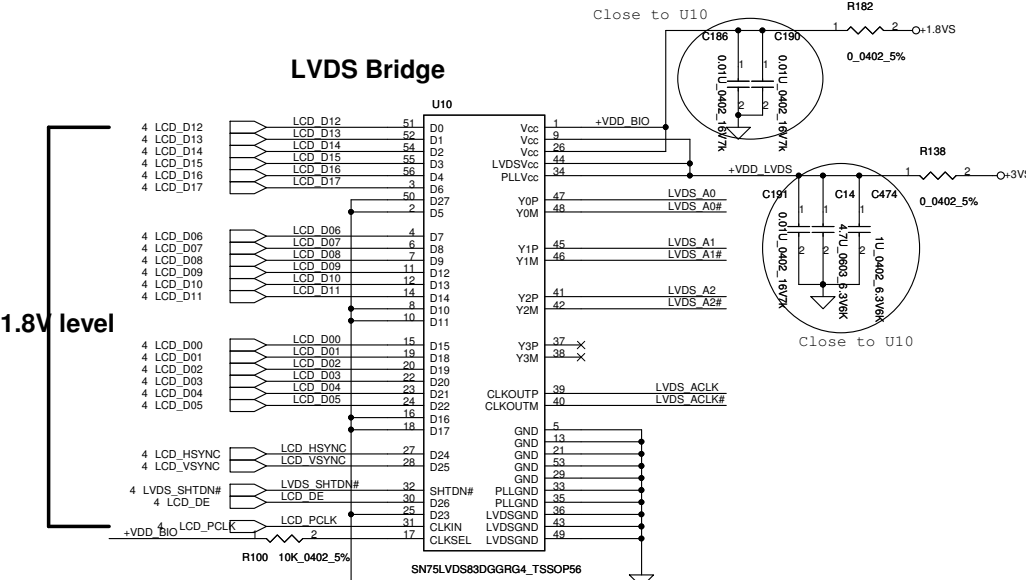


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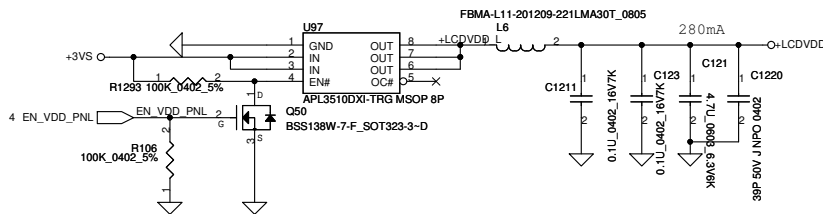
LED flash
7/1 del D26

LVDS Bridge

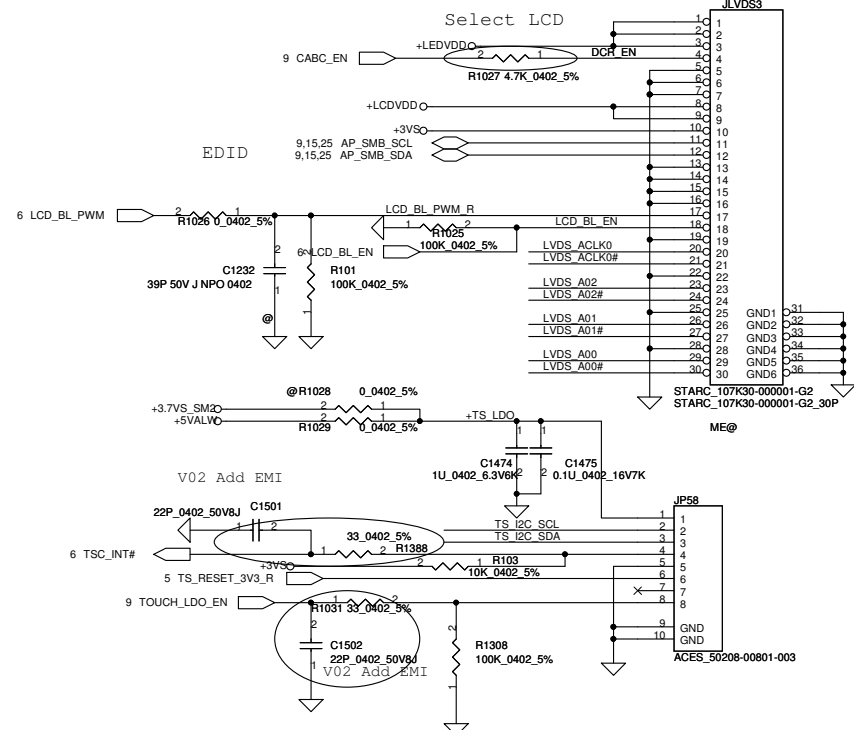
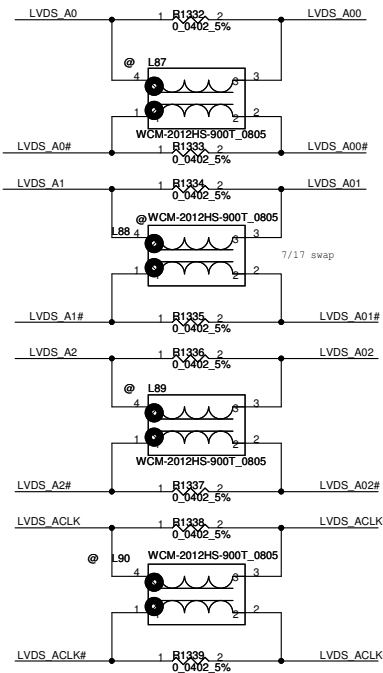
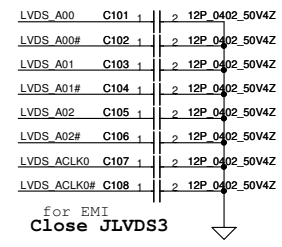
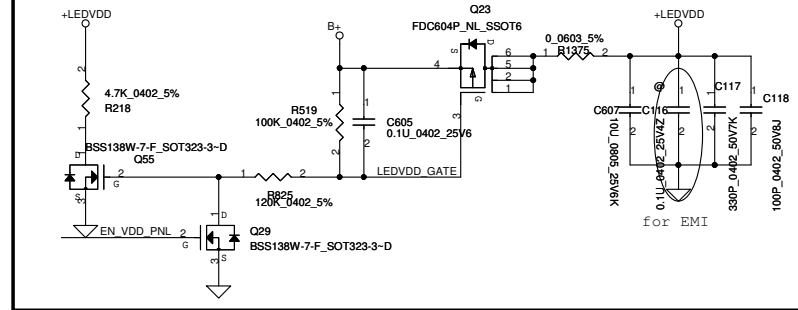
1.8V level



LCD POWER CIRCUIT

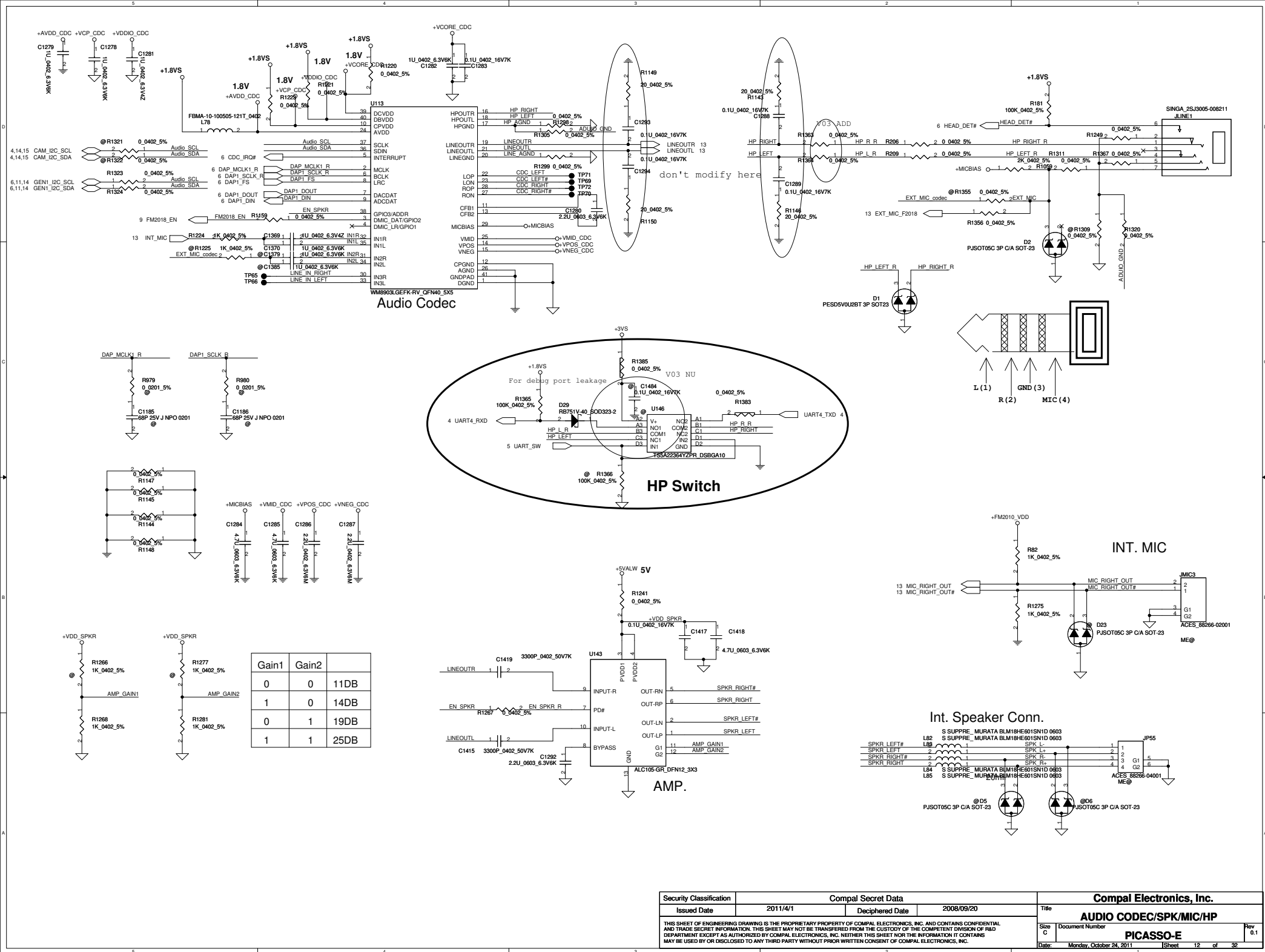


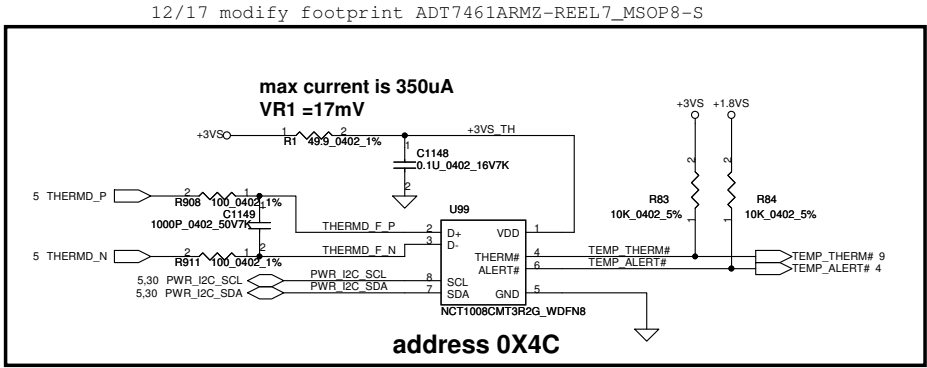
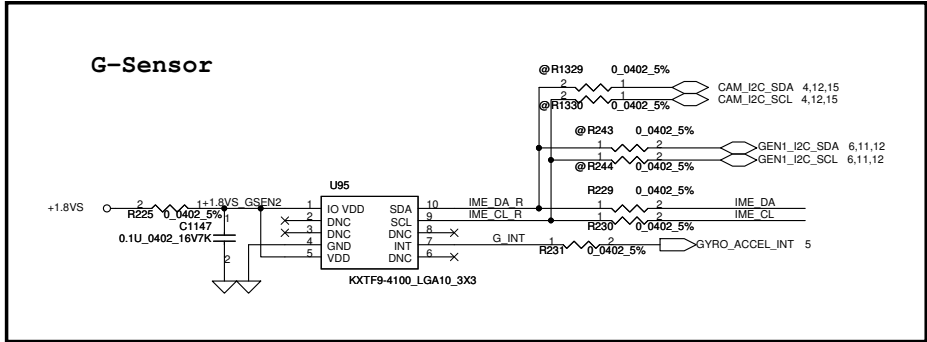
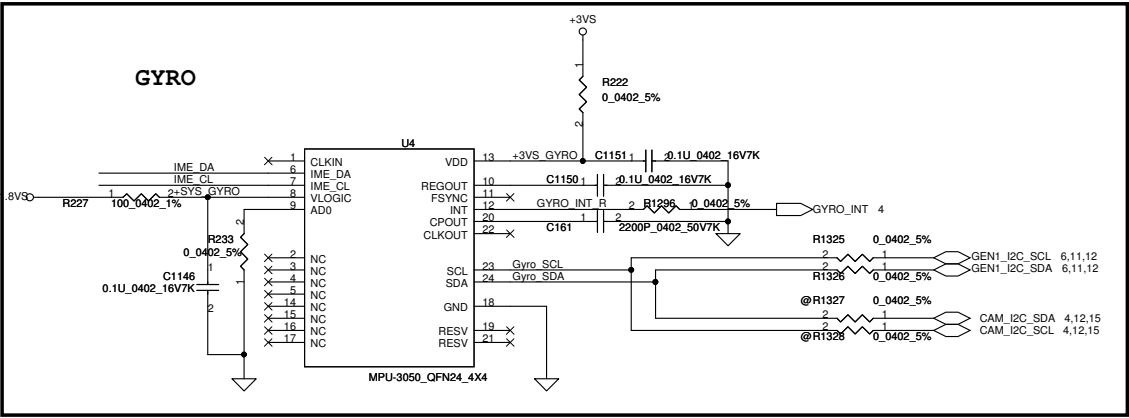
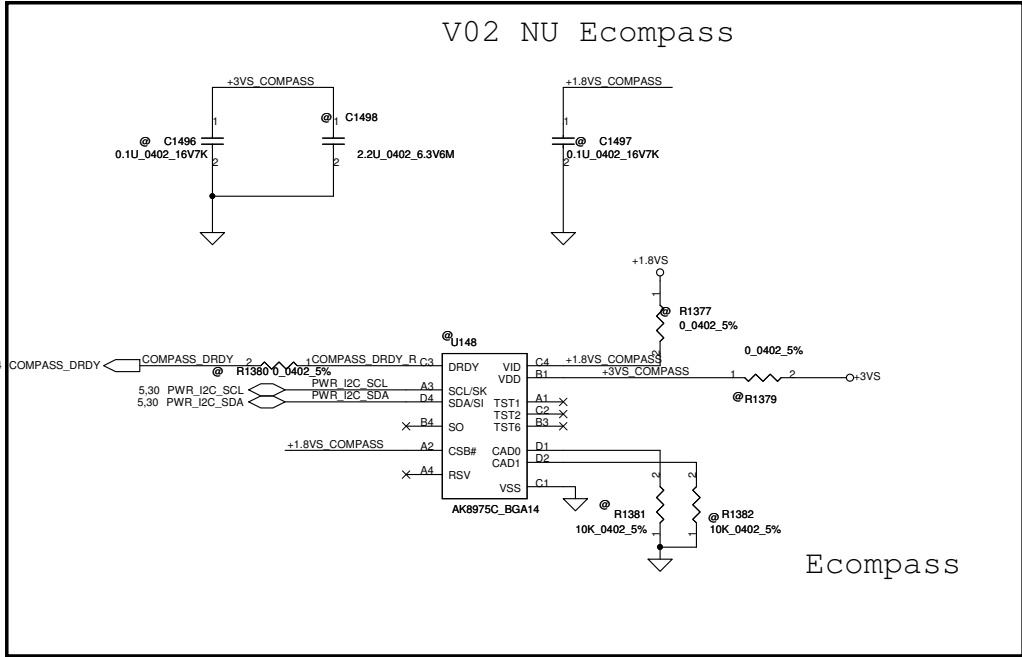
B+ to +LEDVDD Transfer



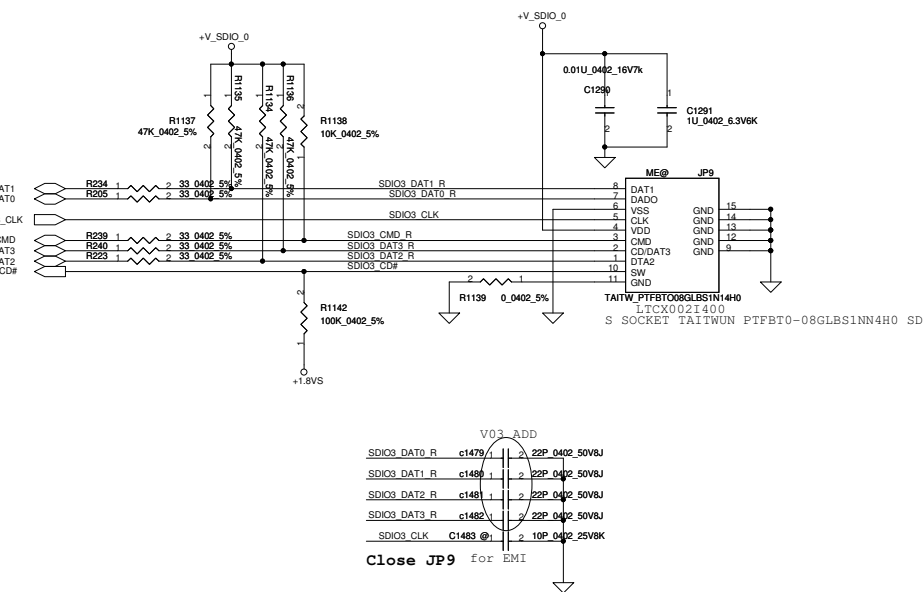
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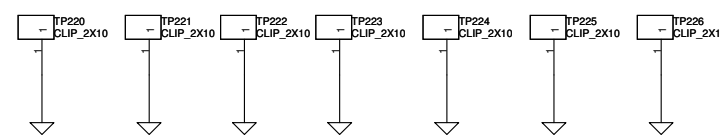
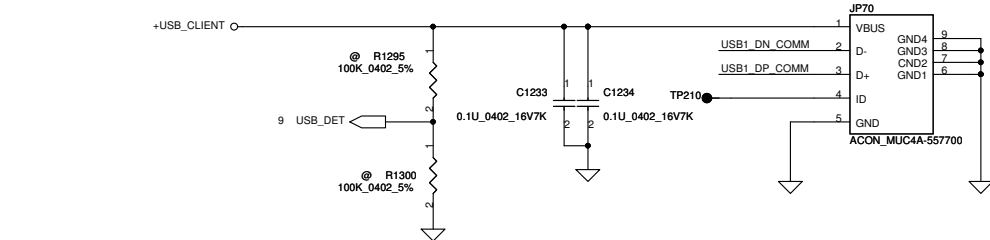
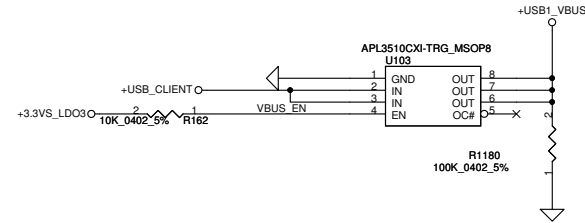
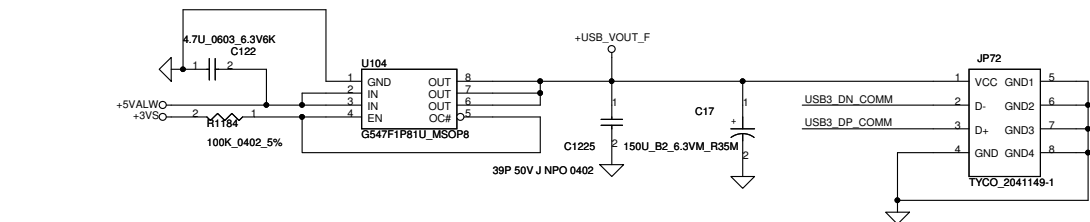
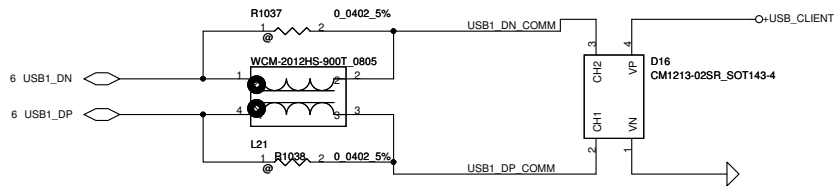
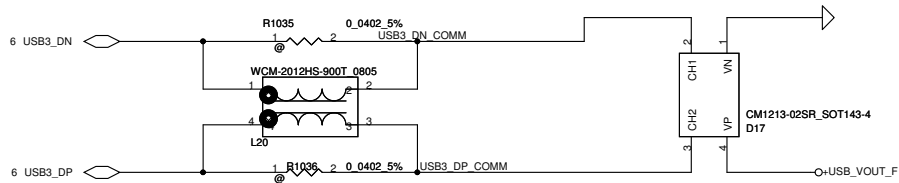
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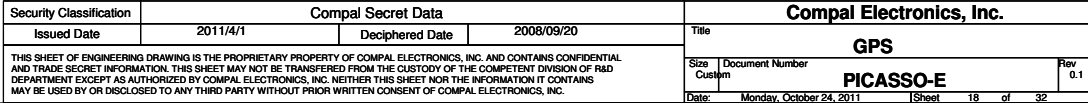


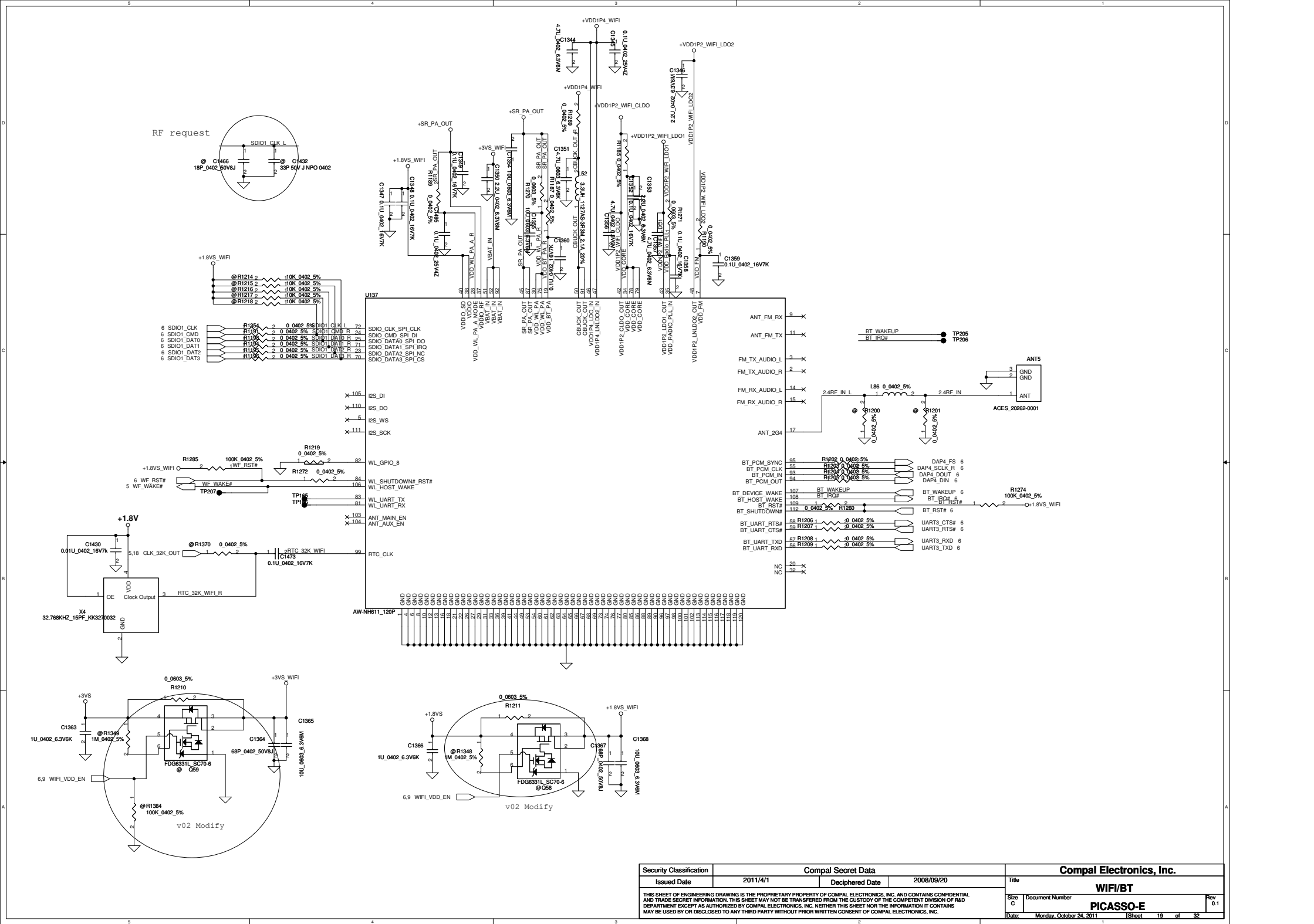
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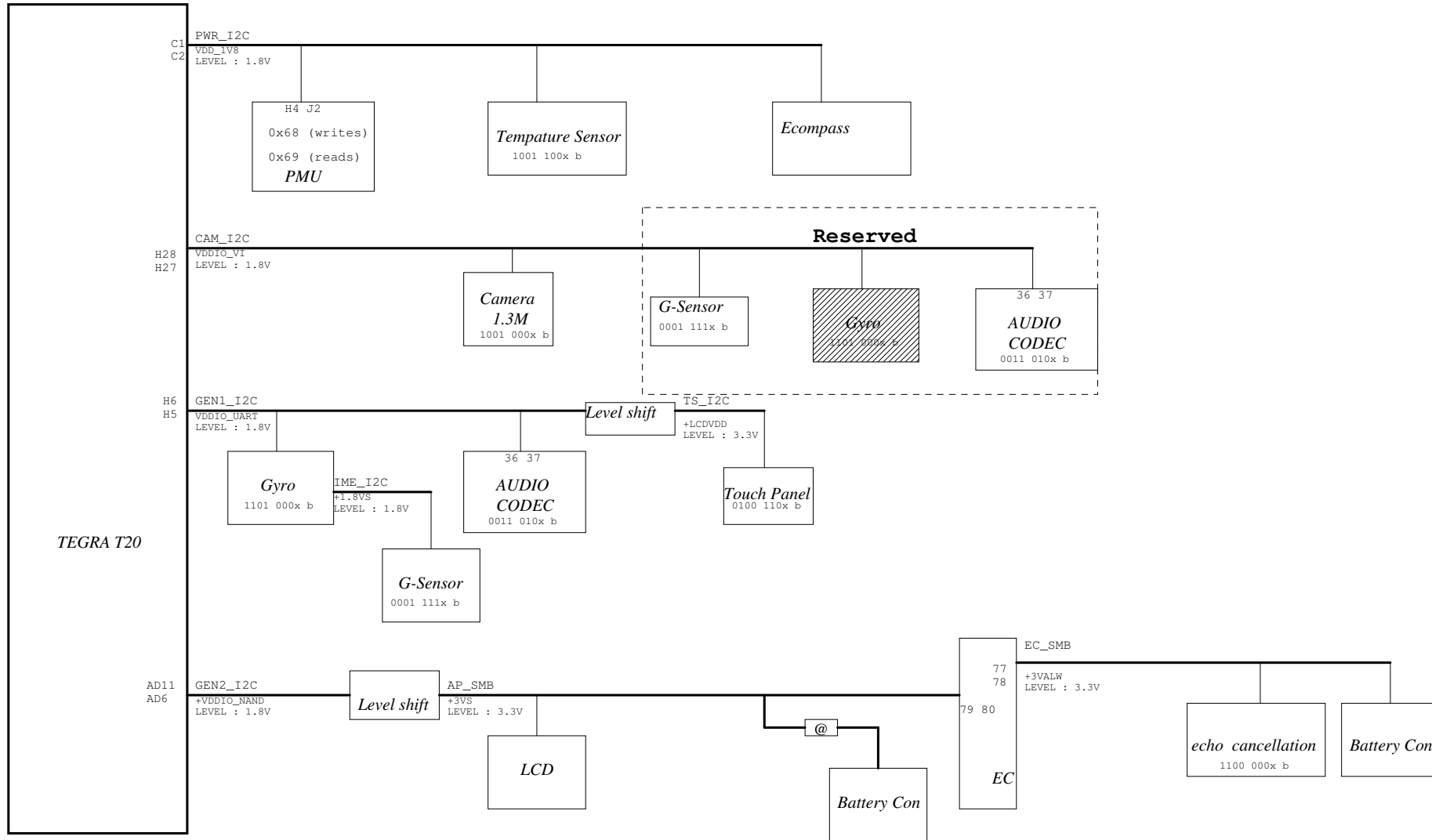


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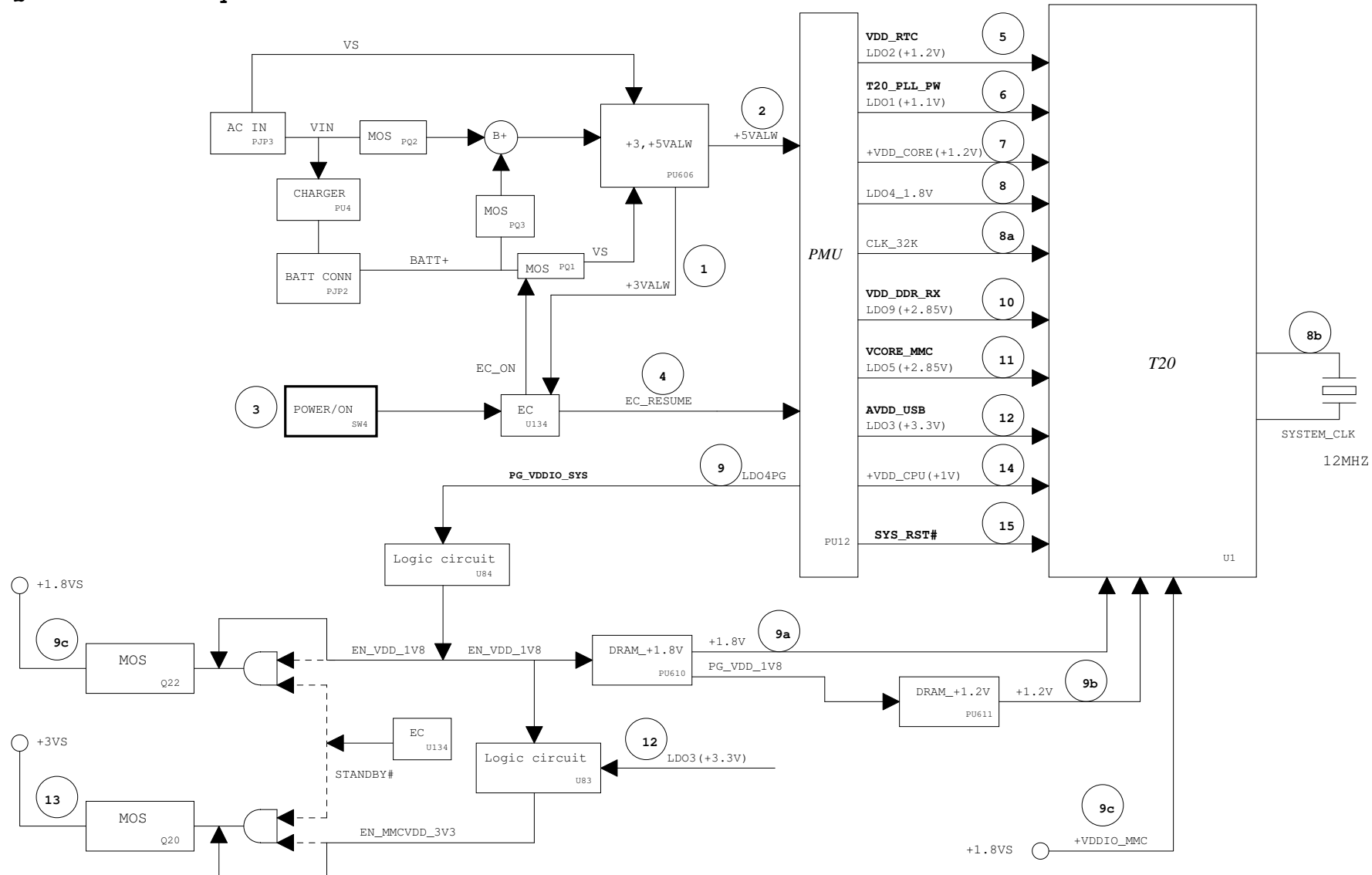




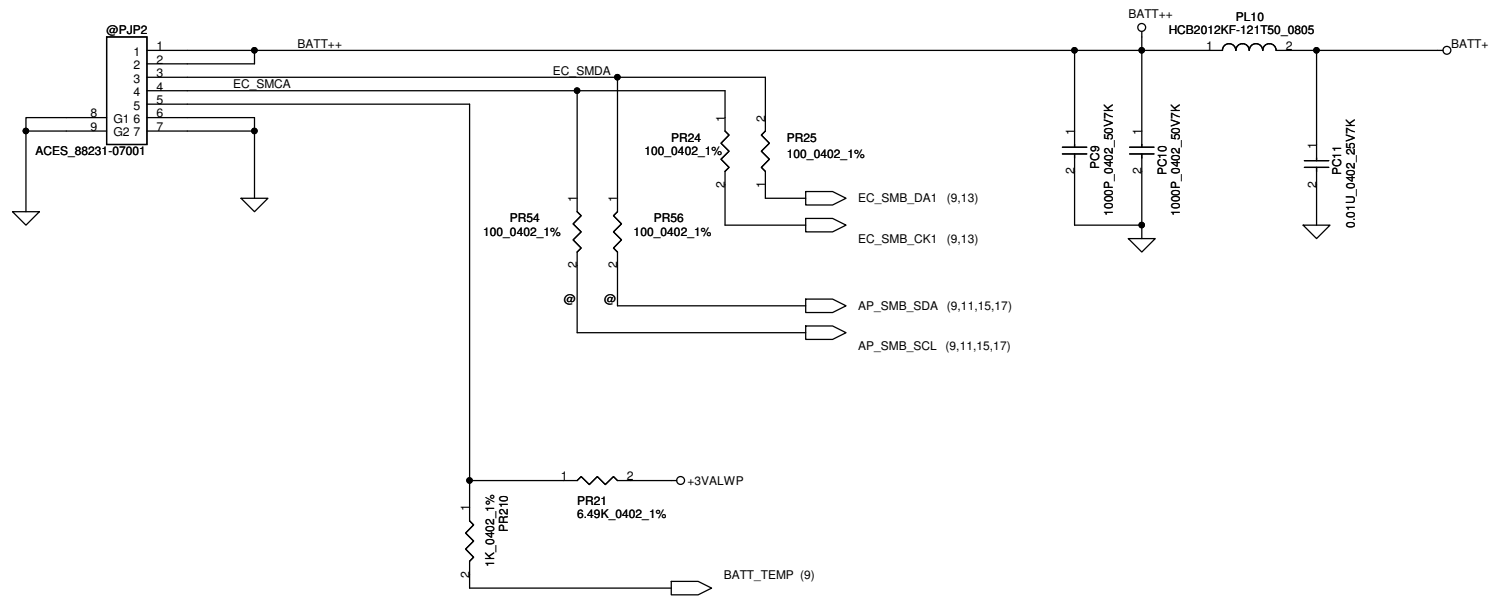
PICASSO-E I2C Routing



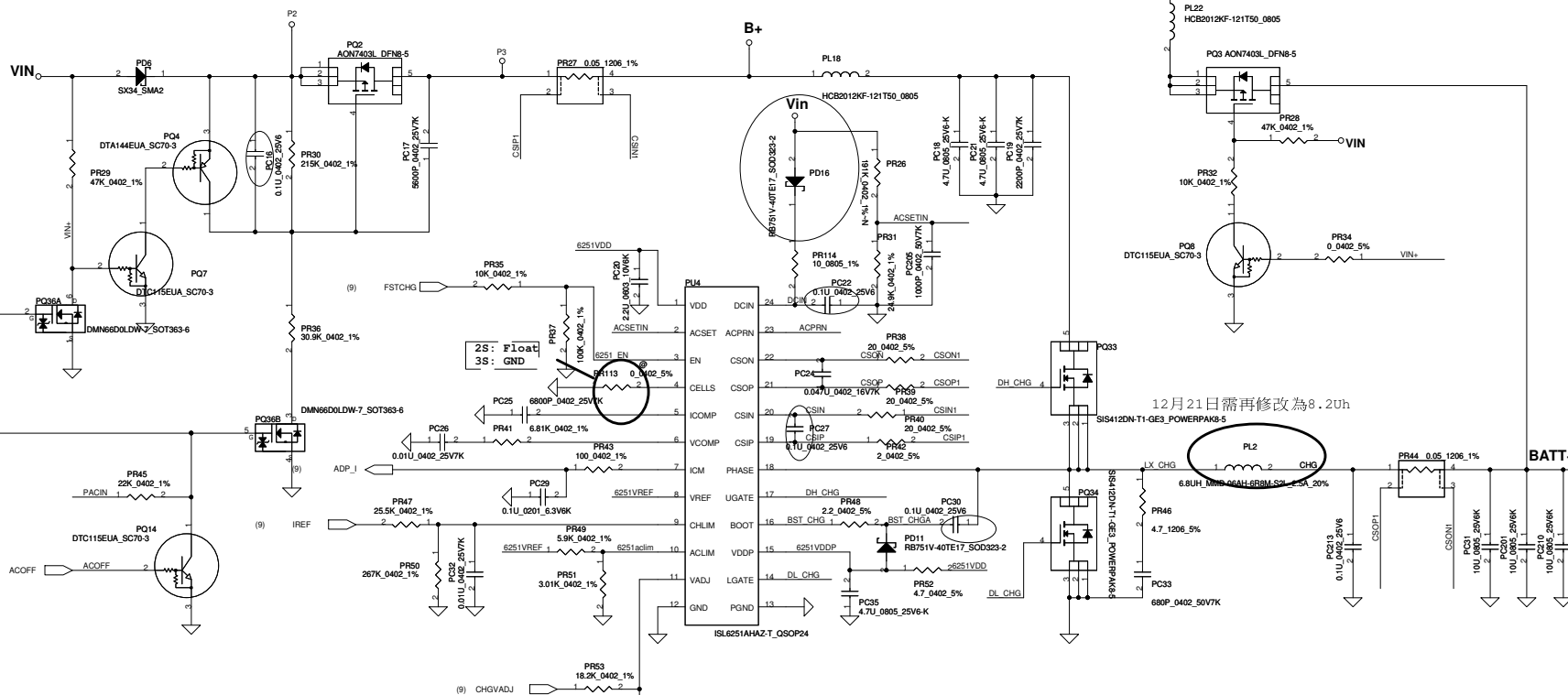
QCJ00 Power Sequence Flow Chart



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Size	Document Number	Picasso-E			Rev
Custom					0.2
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12月21日需再修改為8.2Uh

I_{ada}=0~1.5A (18W) , CP --> 15.3W

CP mode
 $V_{acim} = 2.39 \times (20K / (152K / (24.9K / (152K + 20K) / 152K)) = 1.0812V$
 $I_{input} = (1.0 / 0.05) \times ((0.05 \times V_{acim}) / (2.39 + 0.05)) = 1.4524$

CC=0.25~1.58A
 $I_{charge} = 0.165 / 0.05 \times V_{chlim} / 3.3$
 $I_{REF} = 1.57 \times I_{charge}$
 $I_{REF} = 0.7856V \sim 3.3V$
 $3.3V \Rightarrow 2.1A$

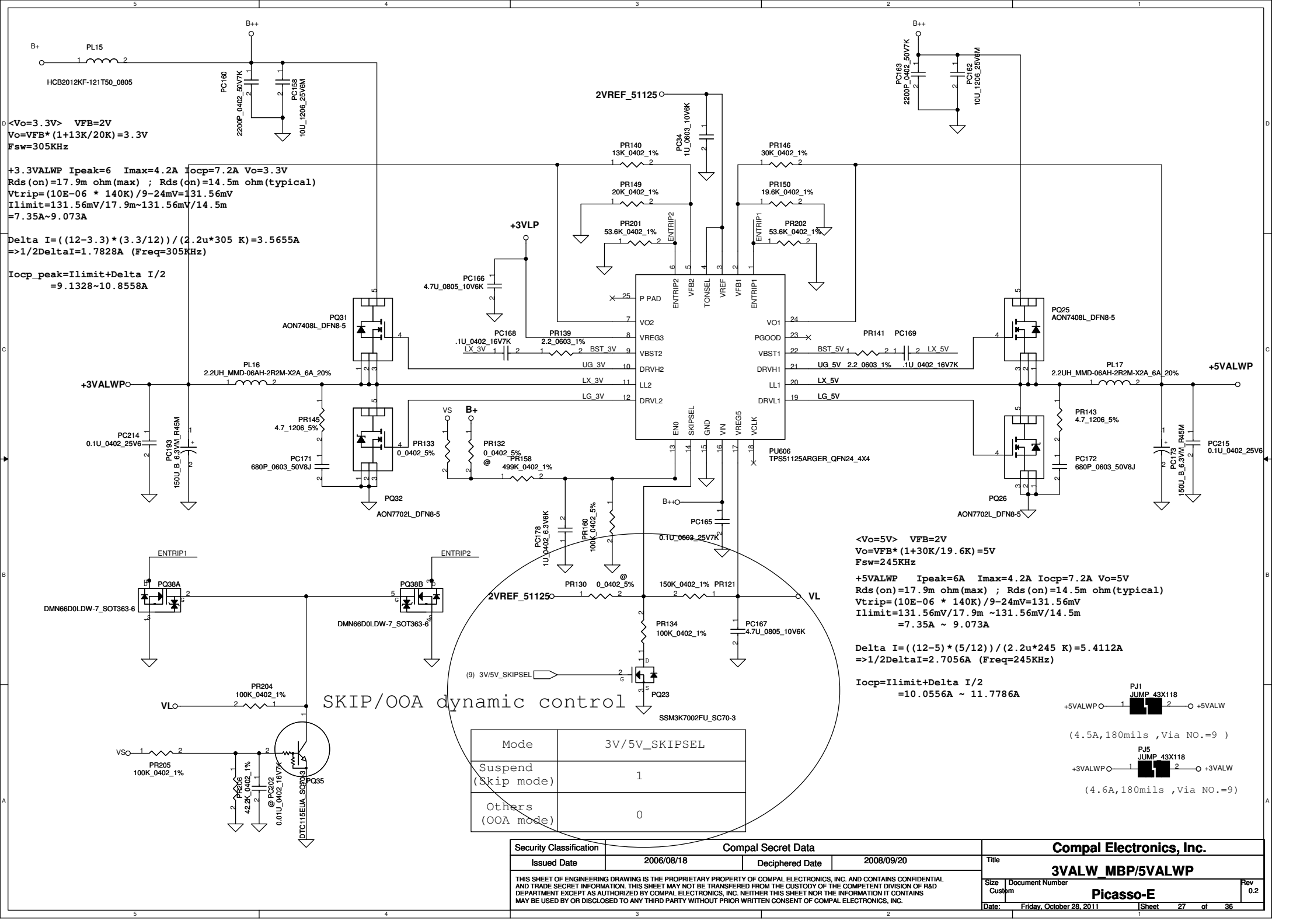
BATT Type	Charging Voltage (0x15)	CV mode
Normal 2S LI-ON Cells	8400mV	8.4V

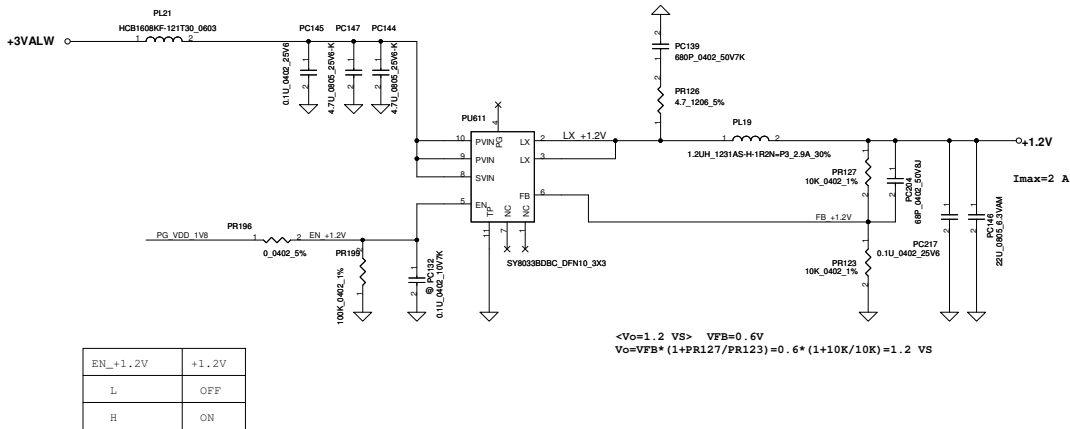
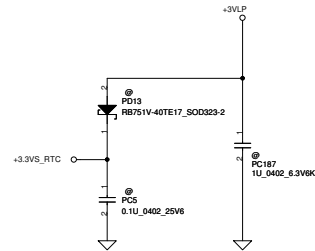
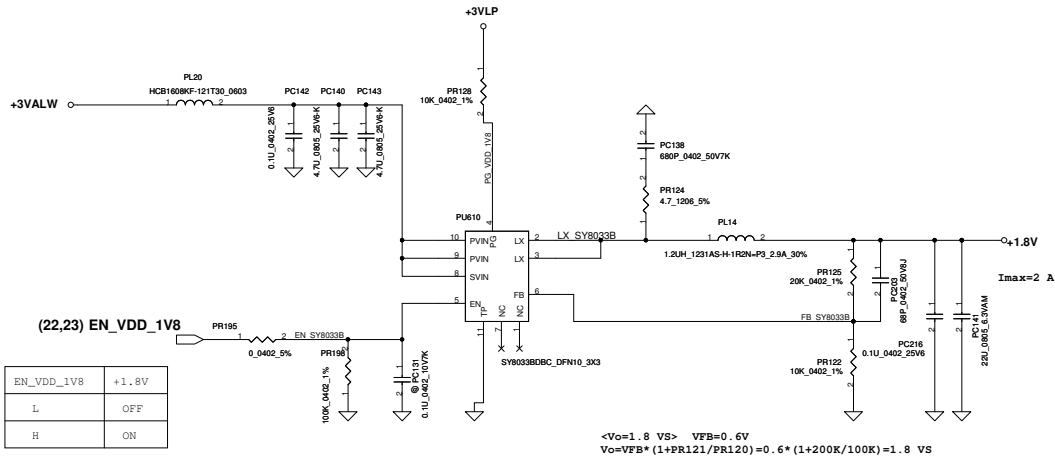
CHGVADJ	Per Cell
H	4.35V
L	3.99V

CHGVADJ	CV mode
0V	4V
1.885V	4.2V
3.3V	4.35V

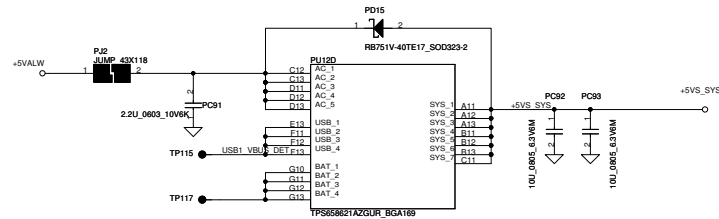
Vin Detector

High 11.358V
 Low 11.003V

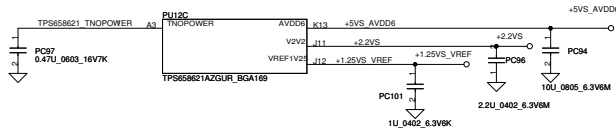
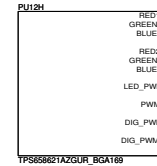




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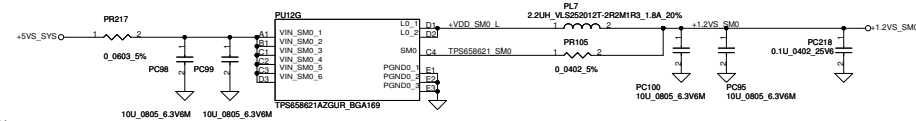
+VDD_SYS=5V
MAX current=1A



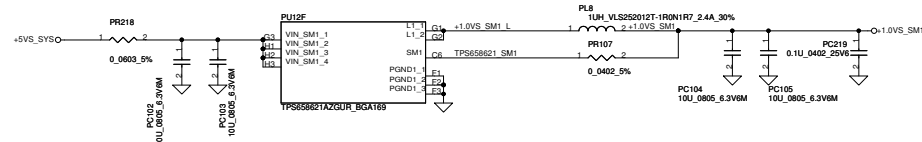
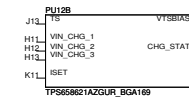
+VDD_AVDD6=5V
MAX current=0.01A

+VDD_V2V2=2.2V
MAX current=0.025A

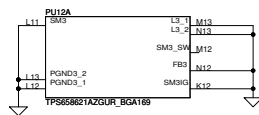
+VDD_VREF1V25=1.25V
MAX current=0.01A



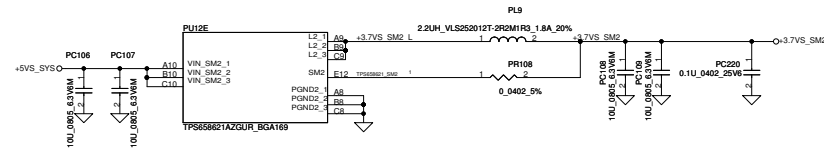
+VDD_SM0=1.2V
MAX current=0.6A



+VDD_SM1=1V
MAX current=1.5A



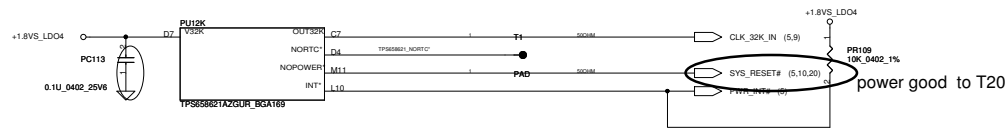
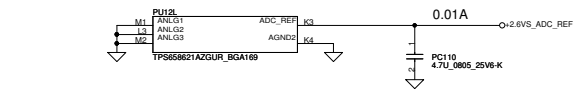
BOOST Converter



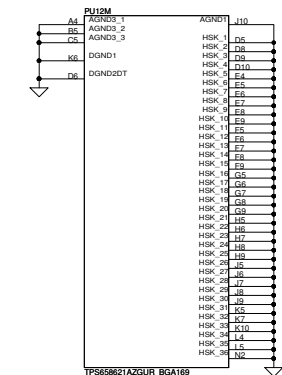
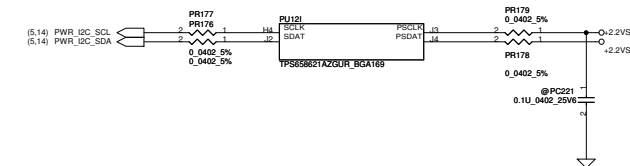
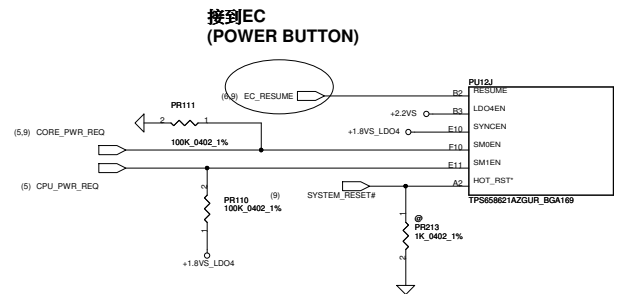
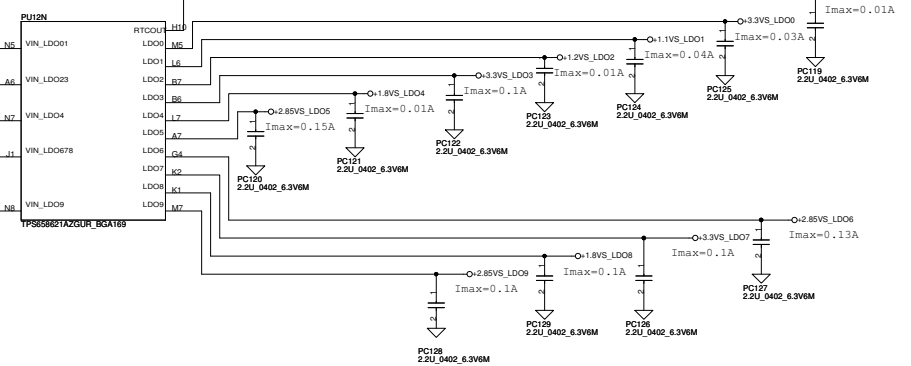
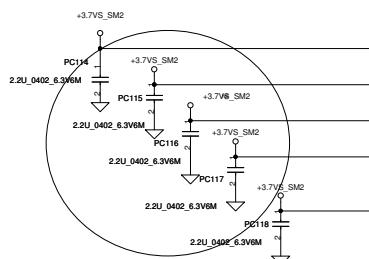
+VDD_SM2=3.7V
MAX current=0.75A

PMU #1

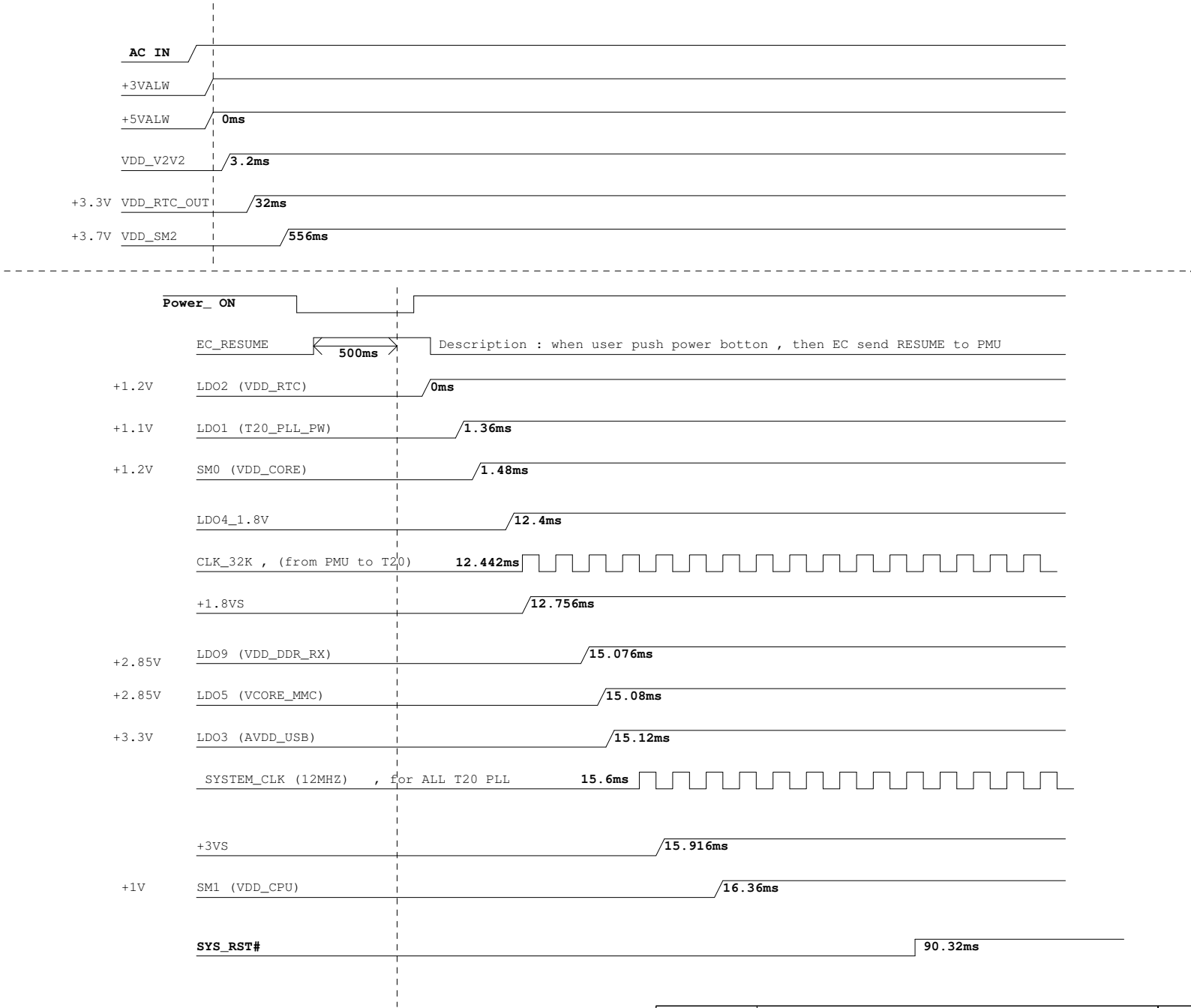
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				Sheet	29 of 38



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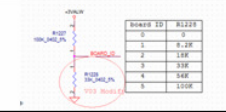
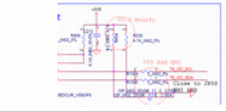
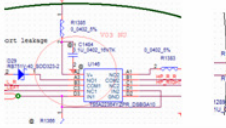
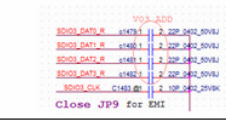


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				Size	Document Number	Rev
				Custom	LA-6531P	0.1
				Date:	Friday, October 28, 2011	Sheet 33 of 36

Version V0.3 change to V1.0 list (P.I.R. List)

Item	PCB No	Issues Description	Change & Modify List	EE
1	LA-8111P	PCB Version change R1228 18k --> 33k		V
2	LA-8111P	EMI Issue R160 R238 ADD 4.7k R1389,R1390 33 --> 0 C1503 C1504 22p --> 10p		
3	LA-8111P	Del UART SW DEL U146 , C1484		V
4	LA-8111P	RF issue C1479~C1482 Add 22p		
5	LA-8111P	PCB Version change DA80000QD03 --> DA80000QD10		

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