

[illegible]

					5	4	3	2	1
REVISION HISTORY									
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Revision	Description	Date	Drawn	Checked	Approved
PAD_APP4_STD_V1_10		2012-08-28	YT		

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1

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P15: AUDIO IN/OUT

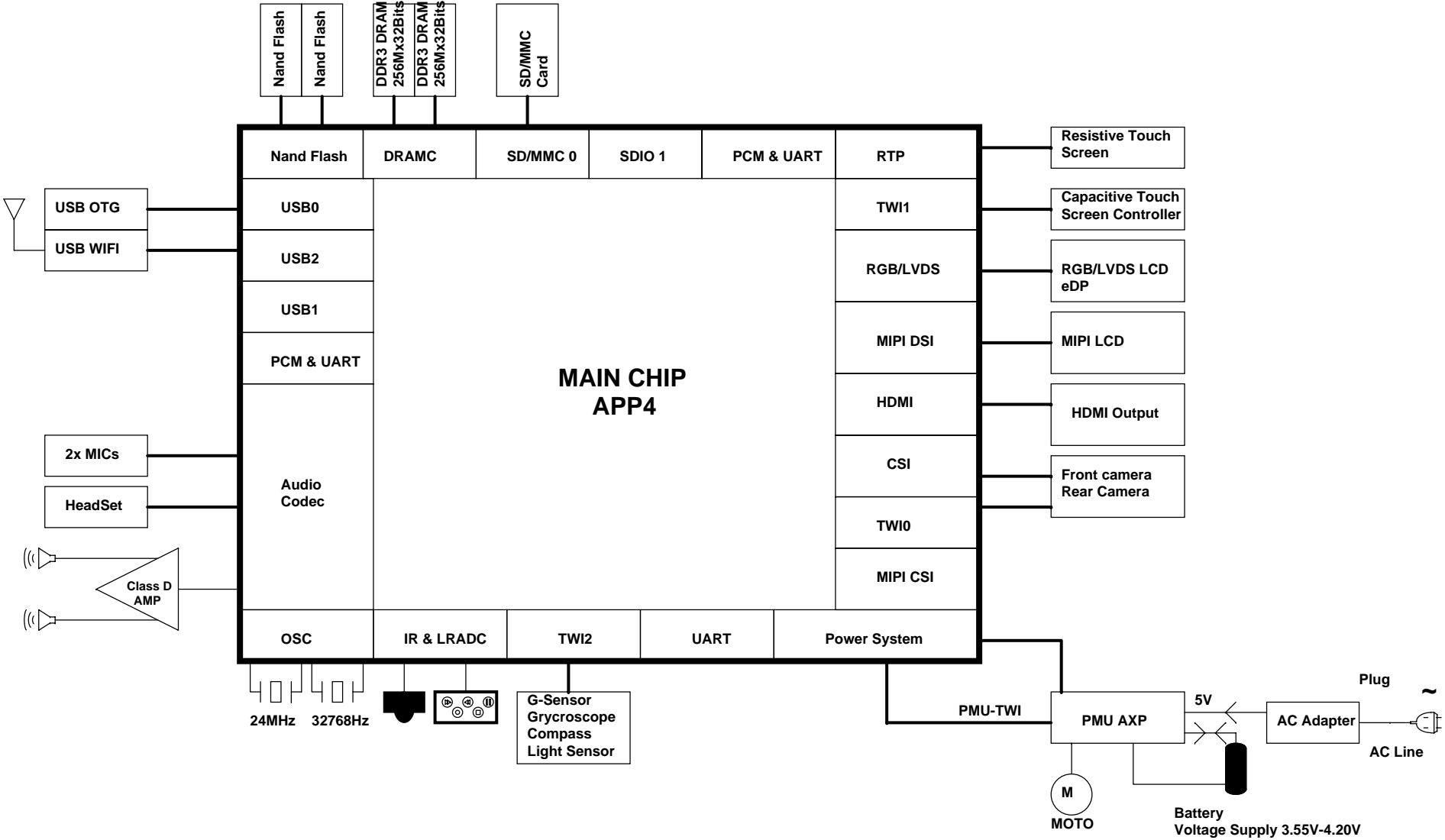
P16: KEY-IR-MISC

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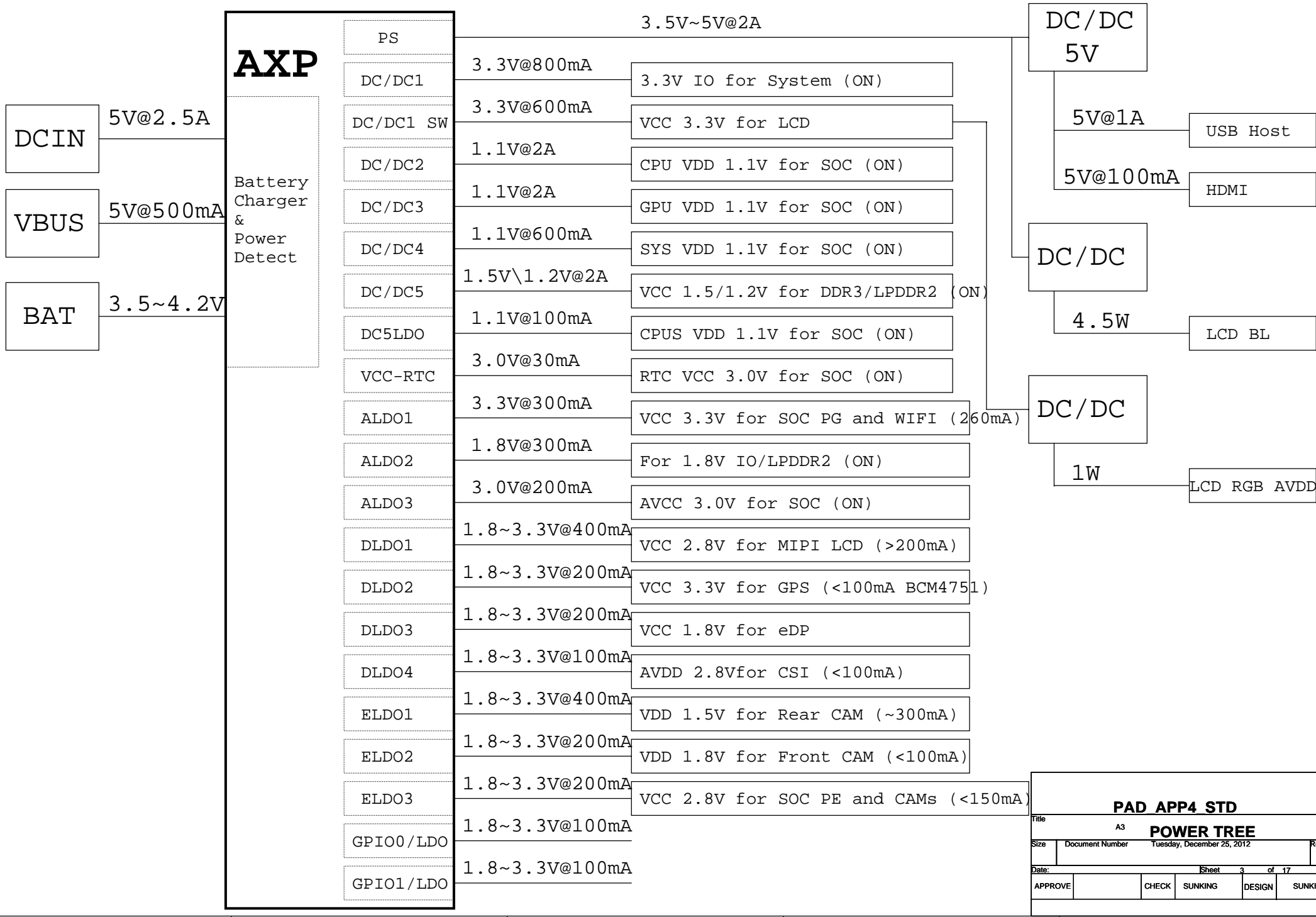
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PAD_APP4_STD_V1_10		2012-08-28	YT		

BLOCK



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POWER TREE



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GPIO ASSIGNMENT

No.	Define	Function	No.	Define	Function	No.	Define	Function	No.	Define	Function	No.	Define	Function
PA0	GPS-RST	GPS	PB0	BB-UART-RTS	BB	PG0	WL-SDIO-CLK	WIFI	PH0	NAND1-WE	NAND	PL0	PMU-SCK	PMU
PA1	GPS-PWR		PB1	BB-PCM-CLK		PG1	WL-SDIO-CMD		PH1	NAND1-ALE		PL1	PMU-SDA	
PA2	CTP-WAKE	CTP	PB2	BB-PCM-SYNC		PG2	WL-SDIO-D0		PH2	NAND1-CLE		PL2	SUART-TX	DEBUG
PA3	CTP-INT		PB3	BB-PCM-IN		PG3	WL-SDIO-D1		PH3	NAND1-CE1		PL3	BB-VBAT-EN	BB
PA4	GPS-UART-RX	GPS	PB4	BB-UART-CTS		PG4	WL-SDIO-D2	BT	PH4	NAND1-CE0		PL4	IR-RX	IR
PA5	GPS-UART-TX		PB5	BB-UART-RX		PG5	WL-SDIO-D3		PH5	NAND1-RE		PL5	STMS	DEBUG
PA6	GPS-UART-CTS		PB6	BB-UART-TX		PG6	BT-UART-RX		PH6	NAND1-RB0	DEBUG	PL6	STCK	
PA7	GPS-UART-RTS		PB7	BB-PCM-OUT		PG7	BT-UART-TX		PH7	NAND1-RB1		PL7	STDO	
PA8	SD0-DET	SD Card				PG8	BT-UART-CTS	WIFI	PH8	NAND1-DQS		PL8	STDI	
PA9	GS-INT	Sensors				PG9	BT-UART-RTS		PH9	TMS		PM0	BB-HOST-WAKE	BB
PA10	GY-INT					PG10	WL-ENABLE		PH10	TCK	LCD	PM1	BB-ON	
PA11	CP-INT					PG11	WL-WAKE	BT	PH11	TDO		PM2		
PA12	LS-INT					PG12	WL-HOST-WAKE		PH12	TDI		PM3	BB-PWRON	BB
PA13	USB0-DRV	USB				PG13	BT-PCM-CLK		PH13	LCD-PWM	CAMERA	PM4	BB-WAKE	
PA14	USB0-VBUSDET					PG14	BT-PCM-SYNC		PH14	TWI0-SCK	CTP	PM5	BB-RF-DIS	
PA15	USB0-IDDET					PG15	BT-PCM-OUT		PH15	TWI0-SDA		PM6	BB-RST-N	
PA16	DMIC-CLK	DMIC				PG16	BT-PCM-IN	Sensors	PH16	TWI1-SCK	DEBUG	PM7	CK32KO	CLOCK
PA17	DMIC-DIN					PG17	BT-ENABLE		PH17	TWI1-SDA				
PA18	SPK-SHDN	AUDIO				PG18	BT-WAKE		PH18	TWI2-SCK	NAND			
PA19	LCD-SDA	LCD-eDP							PH19	TWI2-SDA				
PA20	LCD-SCL								PH20	UART-TX				
PA21									PH21	UART-RX				
PA22									PH22					
PA23									PH23					
PA24									PH24					
PA25	LCD-BL-EN	LCD							PH25					
PA26	USB1-DRV	USB							PH26					
PA27	USB-ICTRL								PH27					
									PH28					
									PH29	NAND1-CE2	NAND			
									PH30	NAND1-CE3				

NOTE:
GPIO PA21、PA22、PA23、PA24、PH22、PH23、PH24、PH25、PH26、PH27、PH28 can be used.

Time

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APPROVE

CHECK

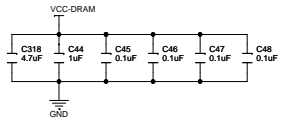
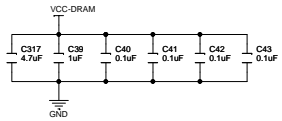
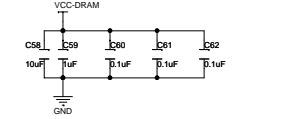
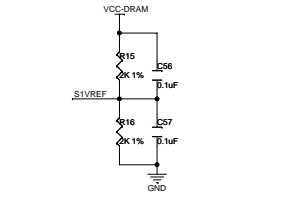
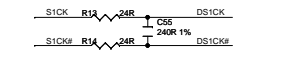
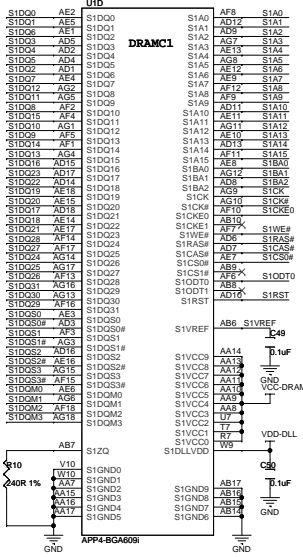
SUNKING

DESIGN

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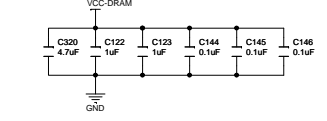
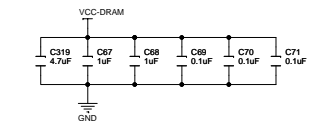
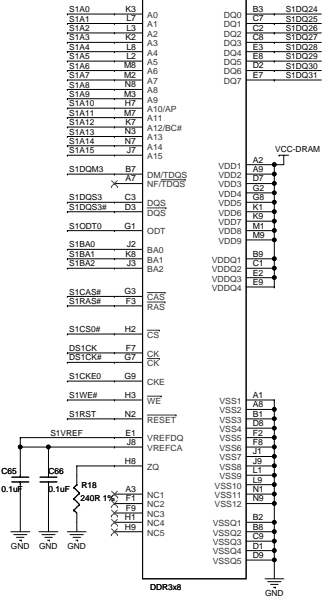
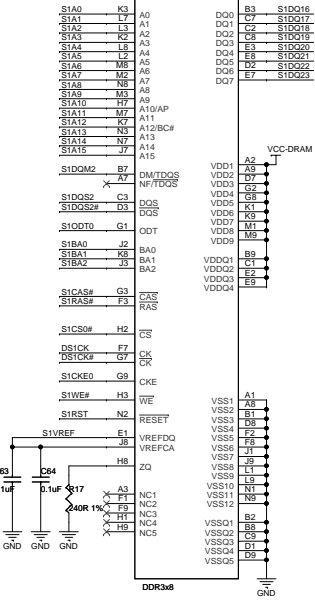
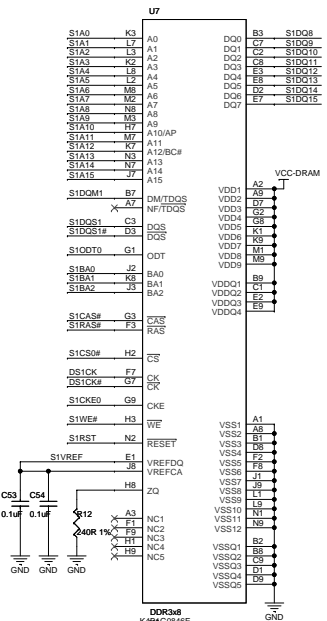
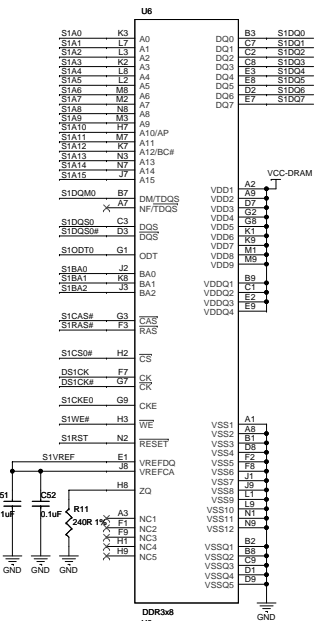
DDR3

1.5/1.35/1.2V
DDR3/LVDDR3/LPDDR2



DDR3 8bit x 4ea

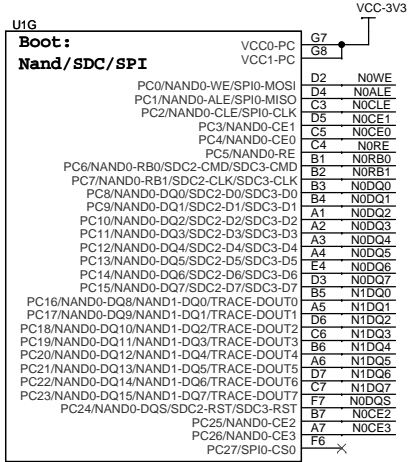
DDR TFBGA82



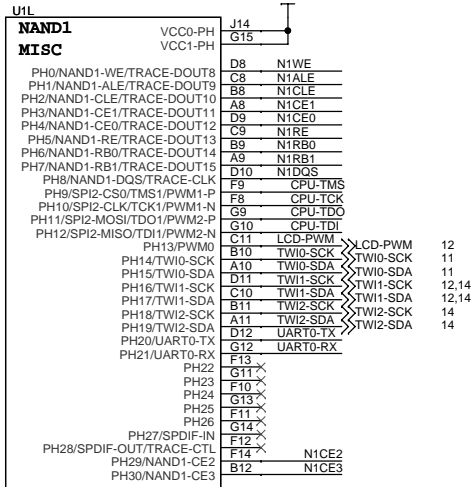
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A2		DDR3 256*84		
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NAND

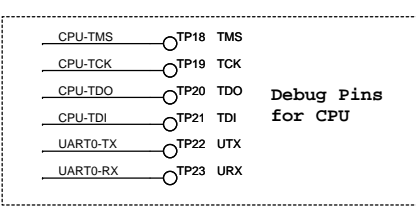
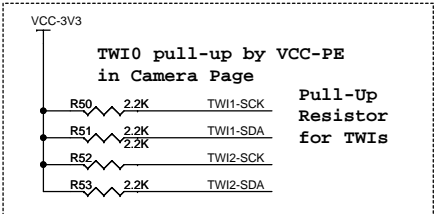
3.3V
Nand Flash, eMMC-NAND, etc



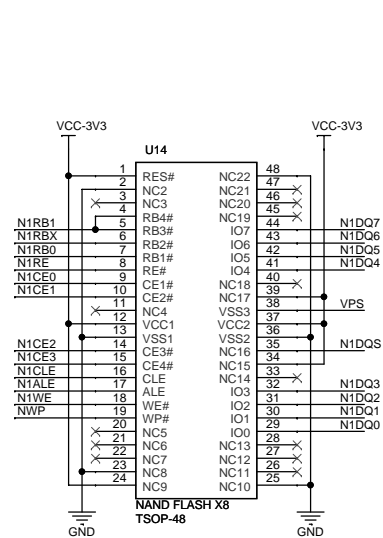
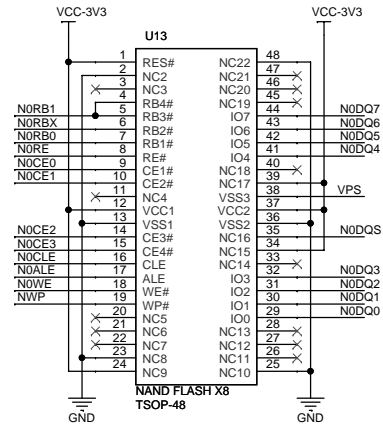
APP4-BGA609I



APP4-BGA609I

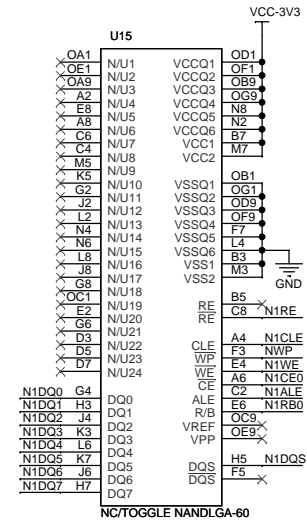


Both Toggle NAND and TSOP NAND layout together



TSSOP CE Count(1)	Resistor A	Resistor B
1	Disconnect	Disconnect
2	Connect	Disconnect
4	Disconnect	Connect

- (1) TSSOP CE Count: Chip Select Count of one TSSOP Nand Flash, can be 1/2/4.
- (2) Refer to the Datasheet of Nand Flash to determine VPS should be Pull-up or down.
- (3) Both Toggle NAND and TSOP NAND can be layout together.



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CAMERA

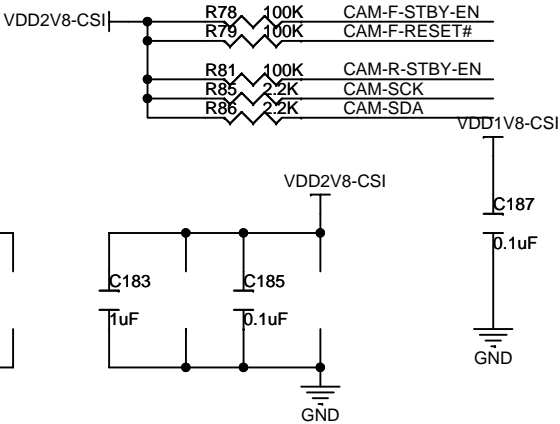
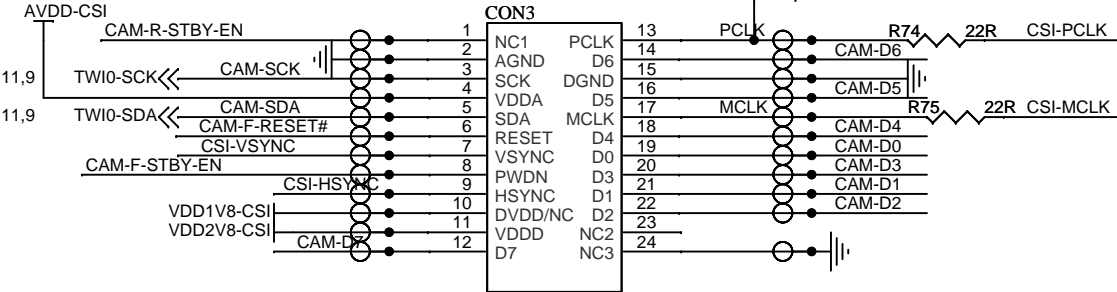
2.8V
CSI

U11	CSI	VCC-PE
TS	PE0/CSI-PCLK/TS-CLK/PE-EINT0	
	PE1/CSI-MCLK/TS-ERR/PE-EINT1	
	PE2/CSI-HSYNC/TS-SYNC/PE-EINT2	
	PE3/CSI-VSYNC/TS-DVLD/PE-EINT3	
	PE4/CSI-D0/UART5-TX/PE-EINT4	
	PE5/CSI-D1/UART5-RX/PE-EINT5	
	PE6/CSI-D2/UART5-RTS/PE-EINT6	
	PE7/CSI-D3/UART5-CTS/PE-EINT7	
	PE8/CSI-D4/TS-D0/PE-EINT8	
	PE9/CSI-D5/TS-D1/PE-EINT9	
	PE10/CSI-D6/TS-D2/PE-EINT10	
	PE11/CSI-D7/TS-D3/PE-EINT11	
	PE12/CSI-D8/TS-D4/PE-EINT12	
	PE13/CSI-D9/TS-D5/PE-EINT13	
	PE14/CSI-D10/TS-D6/PE-EINT14	
	PE15/CSI-D11/TS-D7/PE-EINT15	
	PE16/MCSI-MCLK/PE-EINT16	

APP4-BGA609i

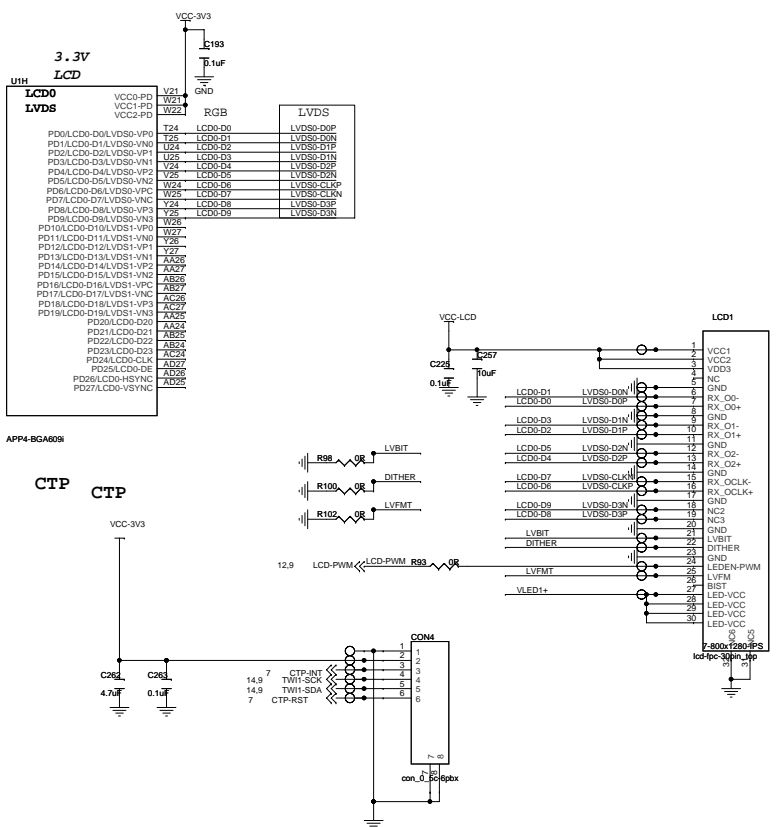
VDD2V8-CSI

C12	CSI-PCLK
D13	CSI-MCLK
D14	CSI-HSYNC
B13	CSI-VSYNC
B14	
C13	CAM-R-STBY-EN
C14	CAM-F-RESET#
A13	CAM-F-STBY-EN
A14	CAM-D0
D15	CAM-D1
C15	CAM-D2
B15	CAM-D3
A15	CAM-D4
D16	CAM-D5
A16	CAM-D6
B16	CAM-D7
C16	



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LCD-TP



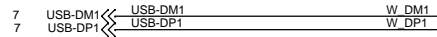
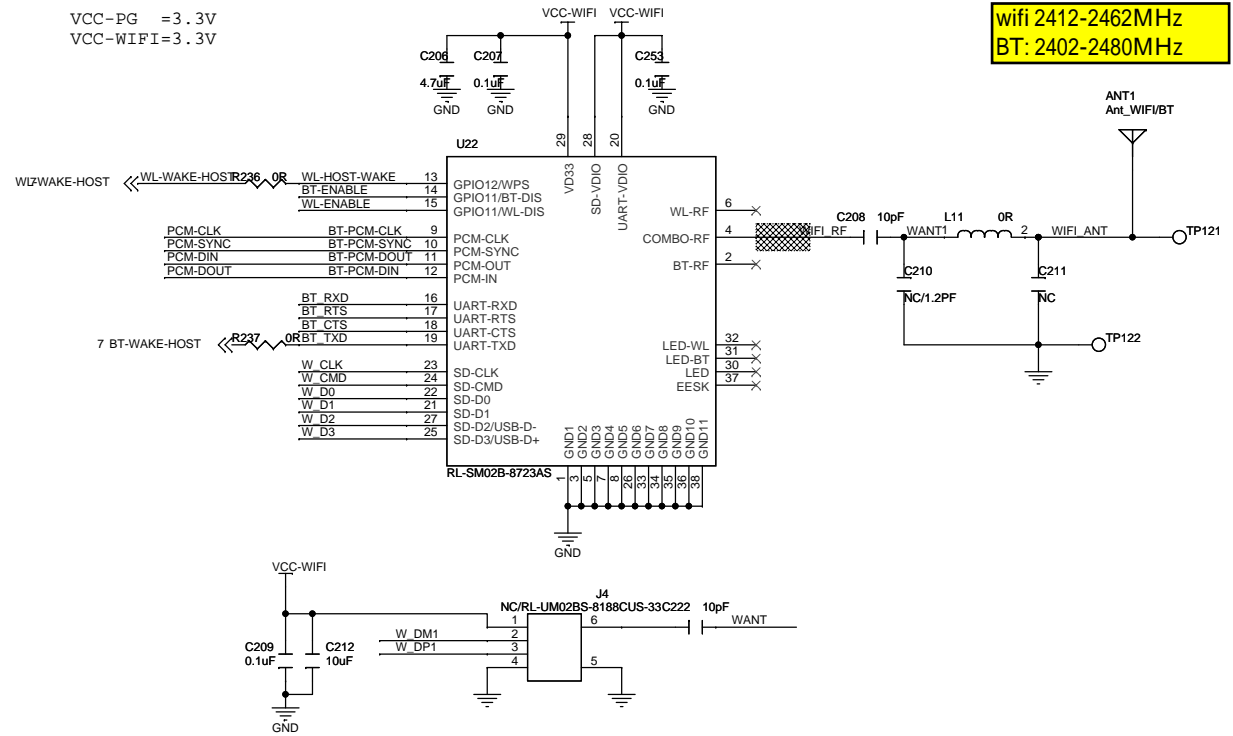
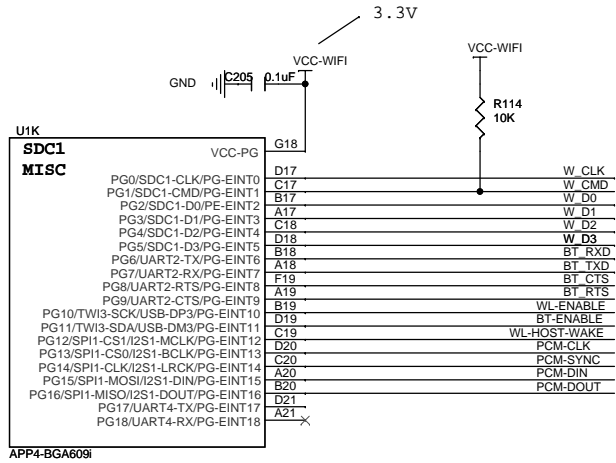
WIFI

NOTE:
PG0 to PG18 cannot be assigned to other uses!

2 in 1 WIFI and BT

VCC-PG =3.3V
VCC-WIFI=3.3V

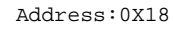
wifi 2412-2462MHz
BT: 2402-2480MHz



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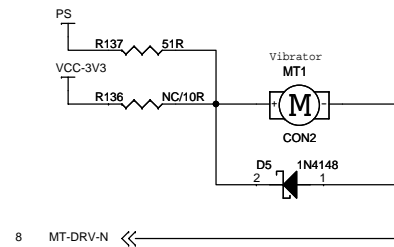
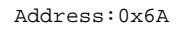
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A3 WIFI					
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SENSORS



Magnetic Sensor

Address: 0X0D



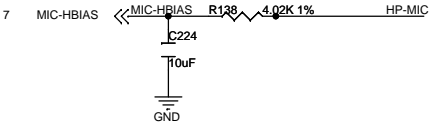
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Head Phone

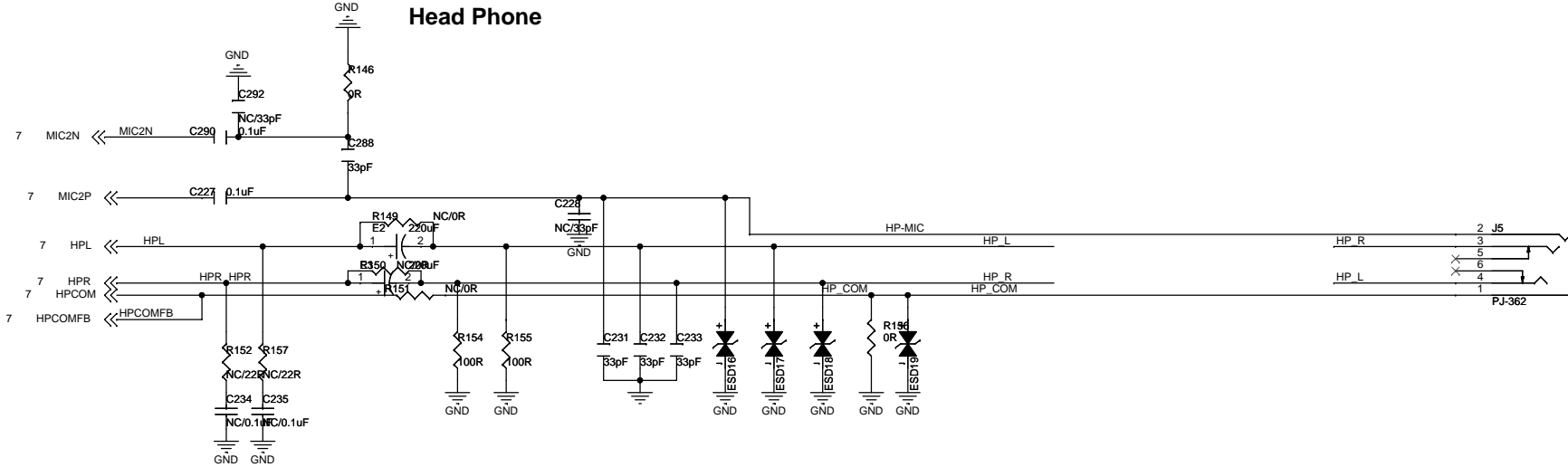
MIC-HBIAS with current detection function

AUDIO IN/OUT

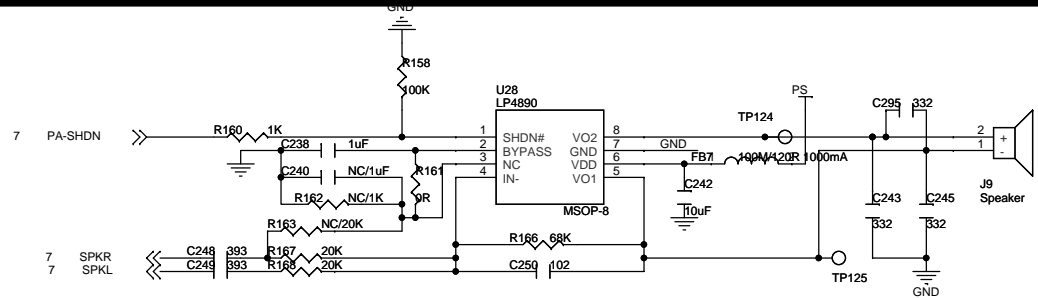
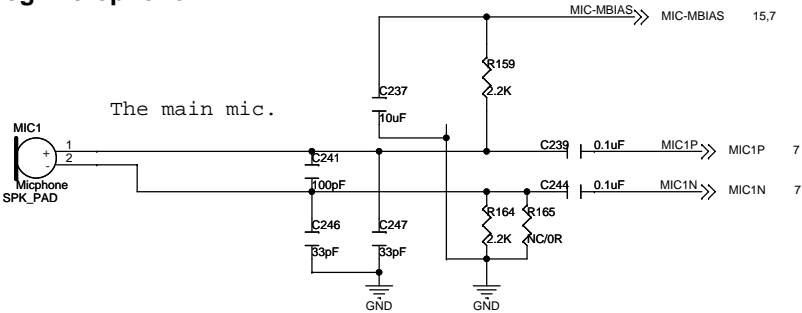
NOTE:
No external MIC recording and communication function.



Head Phone



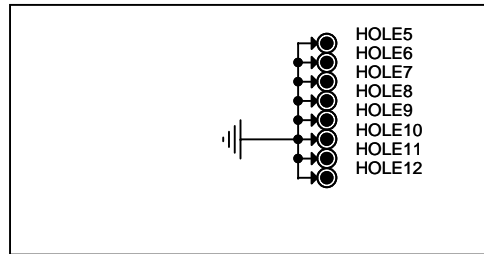
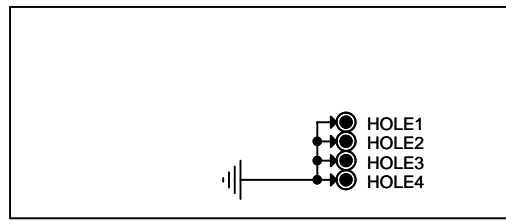
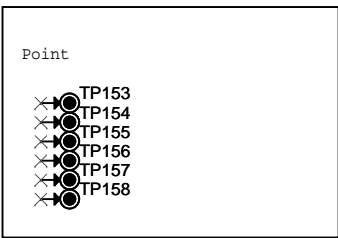
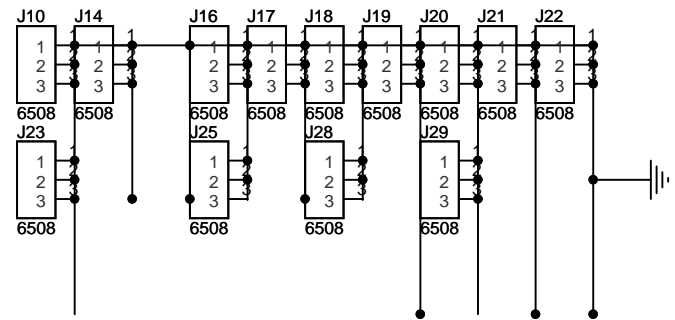
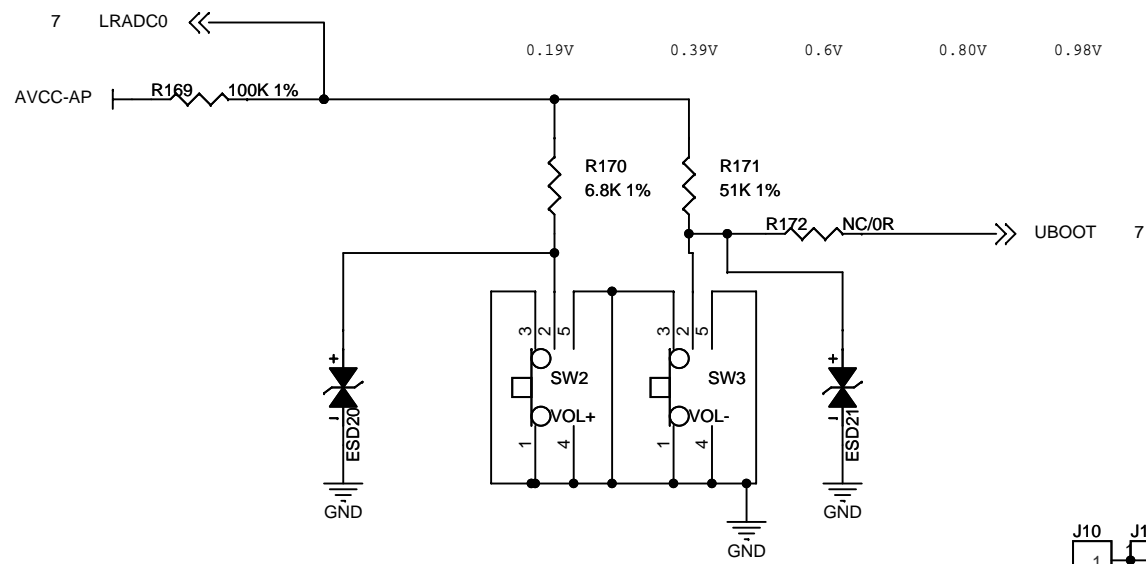
Analog Microphone



PAD_APP4_STD

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KEY-IR-MISC



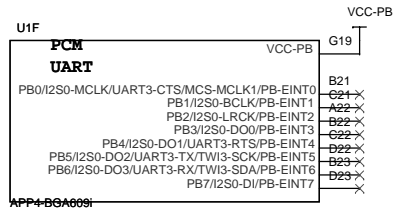
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A4 KEY-IR-MISC					
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BASEBAND

NOTE:
Not supported BASEBAND function !

Note:
VCCB>=VCCA.

Note:
VCCB>=VCCA.



<h1 style="text-align: center;">PAD_APP4_STD</h1>				
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<h2 style="margin: 0;">BASEBAND</h2>				
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