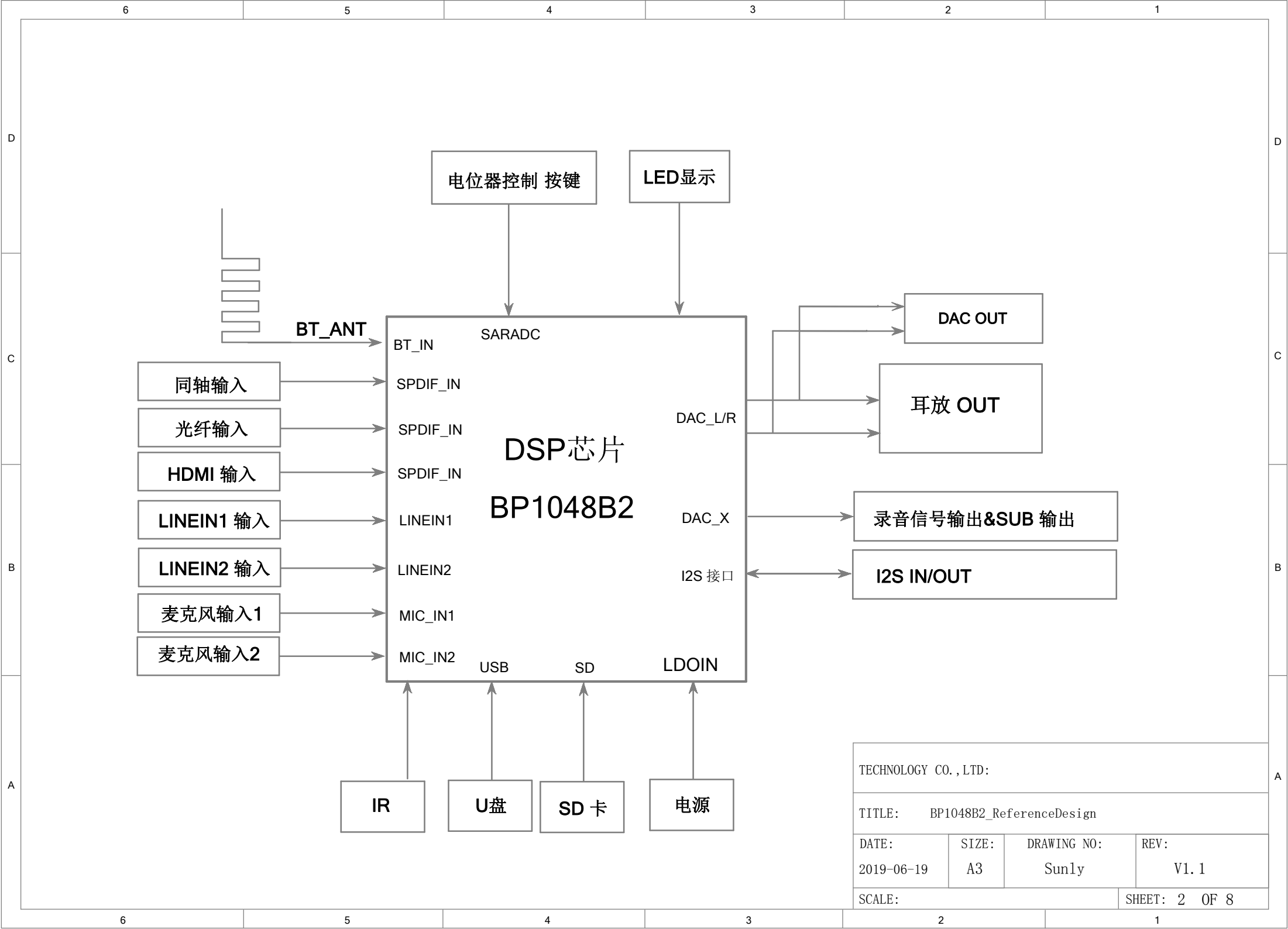


	6	5	4	3	2	1																									
D	<div>历史记录</div> <div>V1.0 版本 发布</div> <div>V1.1 修改Power Key设计电路；具体请参考附件电路参数调整</div>						D																								
C							C																								
B							B																								
A	<table><tr><td colspan="6">TECHNOLOGY CO.,LTD:</td></tr><tr><td colspan="6">TITLE: BP1048B2_ReferenceDesign</td></tr><tr><td>DATE: 2019-06-19</td><td>SIZE: A3</td><td colspan="2">DRAWING NO: Sunly</td><td colspan="2">REV: V1.1</td></tr><tr><td colspan="4">SCALE:</td><td>SHEET:</td><td>1 OF 8</td></tr></table>						TECHNOLOGY CO.,LTD:						TITLE: BP1048B2_ReferenceDesign						DATE: 2019-06-19	SIZE: A3	DRAWING NO: Sunly		REV: V1.1		SCALE:				SHEET:	1 OF 8	A
TECHNOLOGY CO.,LTD:																															
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DATE: 2019-06-19	SIZE: A3	DRAWING NO: Sunly		REV: V1.1																											
SCALE:				SHEET:	1 OF 8																										
	6	5	4	3	2	1																									



BP1048B2 IO基本信息

Pin Name	Pin No	Other Function Assignment
GPIO_A[0]	8	UART0_RXD / UART0_TXD / I2S0_MCLK_OUT / I2S0_MCLK_IN /TIM3_PWM
GPIO_A[1]	9	UART0_TXD / UART0_RXD / TIM4_PWM
GPIO_A[5]	17	LCD0/SPIM_MOSI / UART0_RXD / I2C_SDA
GPIO_A[6]	18	LCD1/SPIM_CLK / UART0_TXD / I2C_SCL
GPIO_A[7/8]	19	LCD2/SPIM_MISO / UART0_CTS / I2S1_MCLK_OUT / UART0_RTS / I2S1_LRCLK / TIM3_PWM / I2S1_MCLK_IN / I2S1_LRCLK / TIM3_PWM
GPIO_A[9]	20	LCD4/UART1_RXD / I2S1_BCLK / TIM4_PWM
GPIO_A[10]	21	LCD5/UART1_TXD / I2S1_DO / I2S1_DI / TIM5_PWM
GPIO_A[15]	23	LCD10/SD_DAT
GPIO_A[16]	24	LCD11/SD_CLK
GPIO_A[17]	25	LCD12/SD_CMD
GPIO_A[18]	26	USB_DM / UART1_RXD
GPIO_A[19]	27	USB_DP / UART1_TXD
GPIO_A[20]	28	AD0 / SD_DAT / SPIM_MOSI / SPIS_MOSI / I2S0_LRCLK /I2S1_LRCLK
GPIO_A[21]	29	AD1 / SD_CLK / SPIM_CLK / SPIS_CLK / I2S0_BCLK / I2S1_BCLK
GPIO_A[22]	30	AD2 / SD_CMD / SPIM_MISO / SPIS_MISO / I2S0_DO / I2S0_DI /TIM3_PWM
GPIO_A[23]	31	LCD13/AD0 / SPIS_CS/ I2S0_DI / I2S0_DO / TIM4_PWM
GPIO_A[24]	32	LCD14/AD1 / I2S0_MCLK_OUT I2S0_MCLK_IN / TIM5_PWM
GPIO_A[28]	33	AD5 / SPDIF_AI_0 / I2S1_LRCK / SPDIF_DI / SPDIF_DO /TIM4_PWM
GPIO_A[29]	34	AD6 / SPDIF_AI_1 / I2S1_BCLK / SPDIF_DI / SPDIF_DO / CLK_OUT/IR
GPIO_A[30]	35	AD7 / SPDIF_AI_2 / I2C_SDA / SPDIF_DI / SPDIF_DO / DMIC1_DAT
GPIO_A[31]	36	AD8 / SPDIF_AI_3 / I2C_SCL / I2S1_DI / I2S1_DO / SPDIF_DI /SPDIF_DO / DMIC1_CLK
GPIO_B[0]	38	LINEIN4_R / AD9 / TIM5_PWM / SW_CLK
GPIO_B[1]	39	LINEIN4_L / AD10 / TIM6_PWM / SW_D
GPIO_B[2]	40	LINEIN5_R / DMIC0_DAT
GPIO_B[3]	41	LINEIN5_L / DMIC0_CLK
GPIO_B[4]	8	I2C_SDA
GPIO_B[5]	9	I2C_SCL
GPIO_B[6]	37	EFUSE VDD / CLK_OUT / IR

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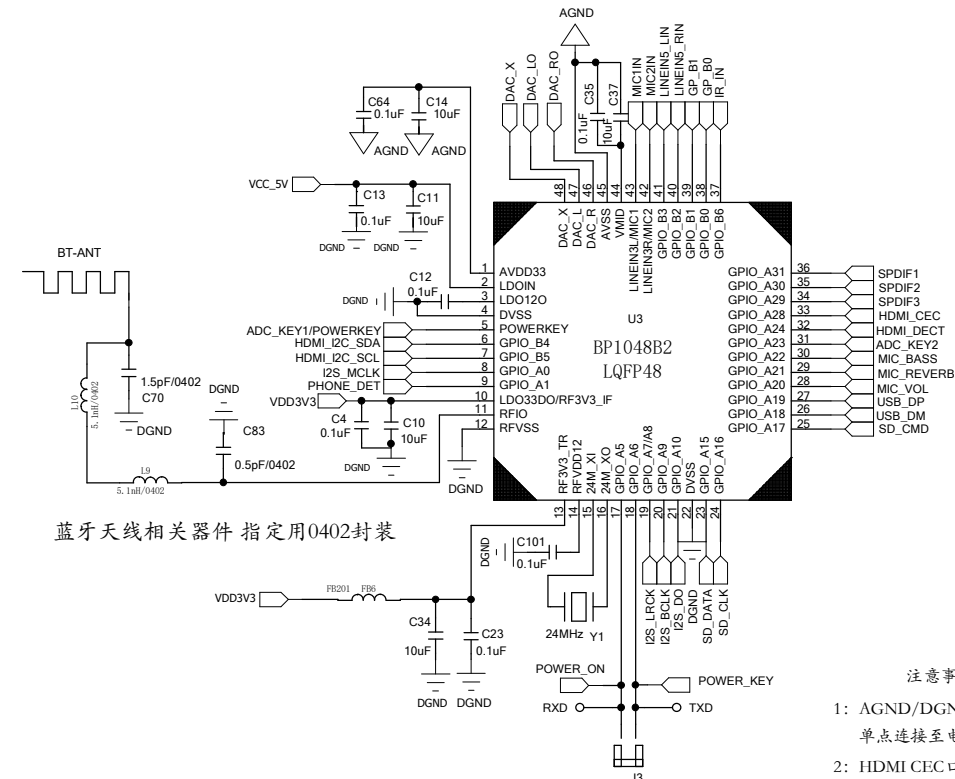
SCALE:	SHEET: 3 OF 8
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D

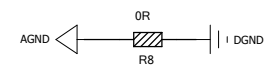
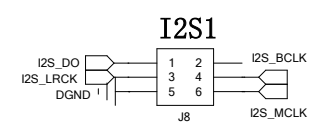
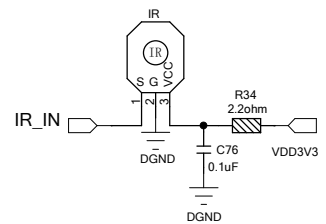
C

B

A

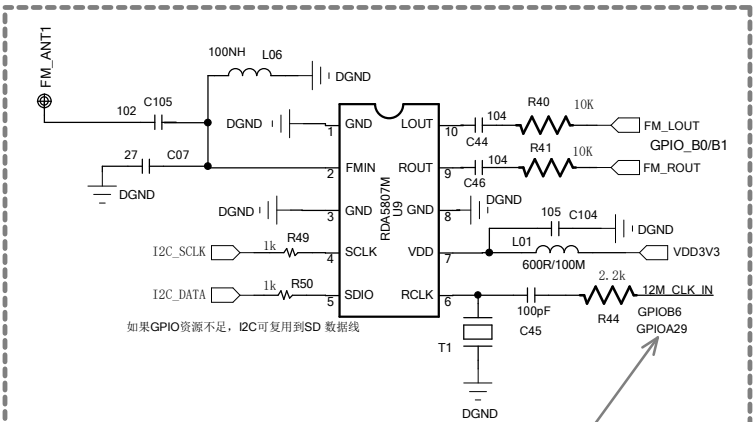


蓝牙天线相关器件 指定用0402封装

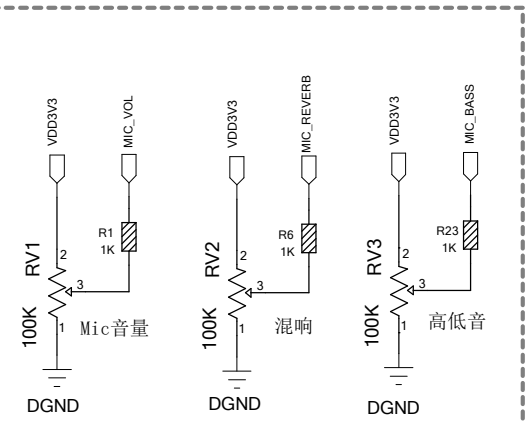


注意事项

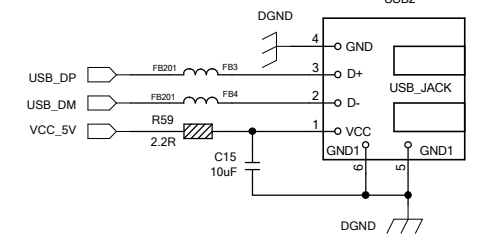
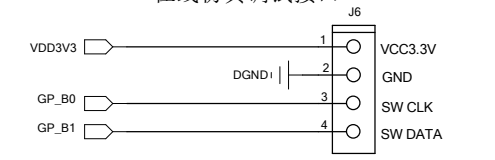
- 1: AGND/DGND Pcb Layout需独立分地 单点连接至电源地
- 2: HDMI CEC口 可复用在TIMER功能的 GPIO口



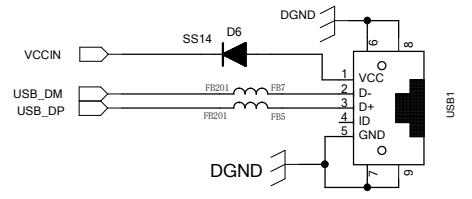
GPIOB6/A29 只能输出12M 时钟，不能输出32.768KHz时钟



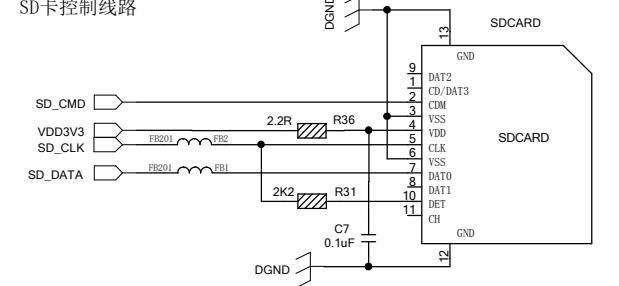
在线仿真调试接口



USB口同时复用调音接口 (调音走HID协议)



SD卡控制线路

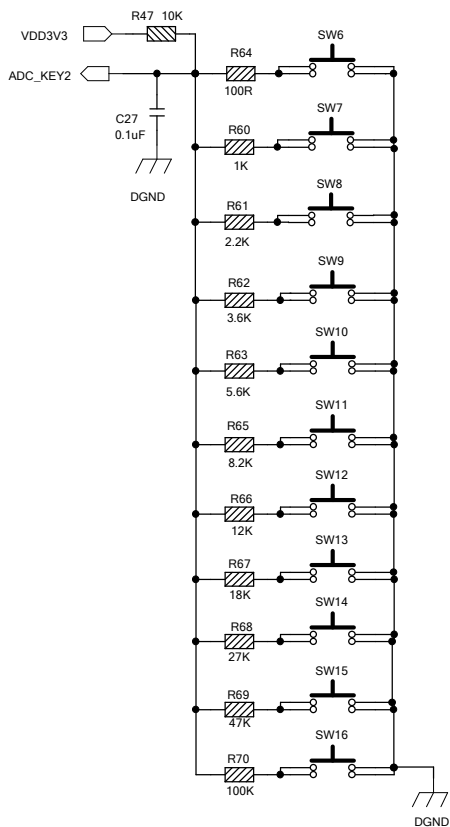


TECHNOLOGY CO., LTD:

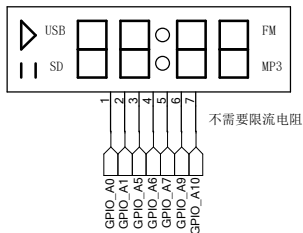
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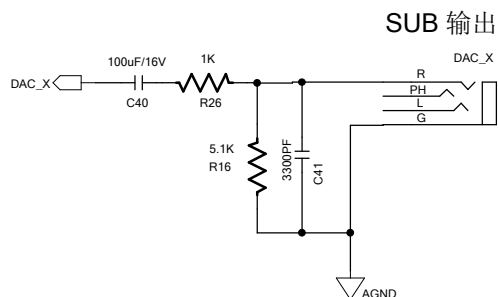
SCALE: SHEET: 4 OF 8



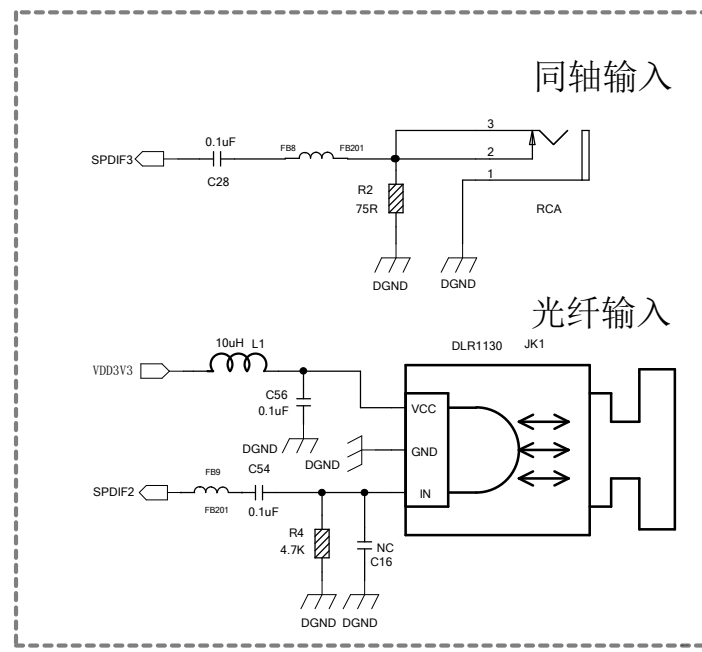
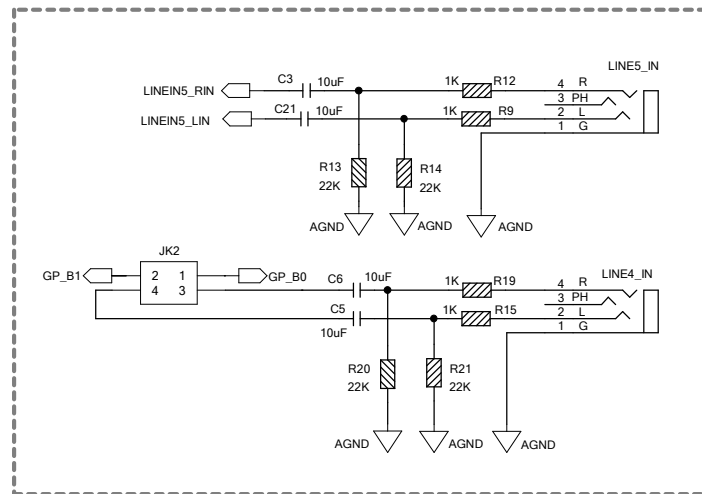
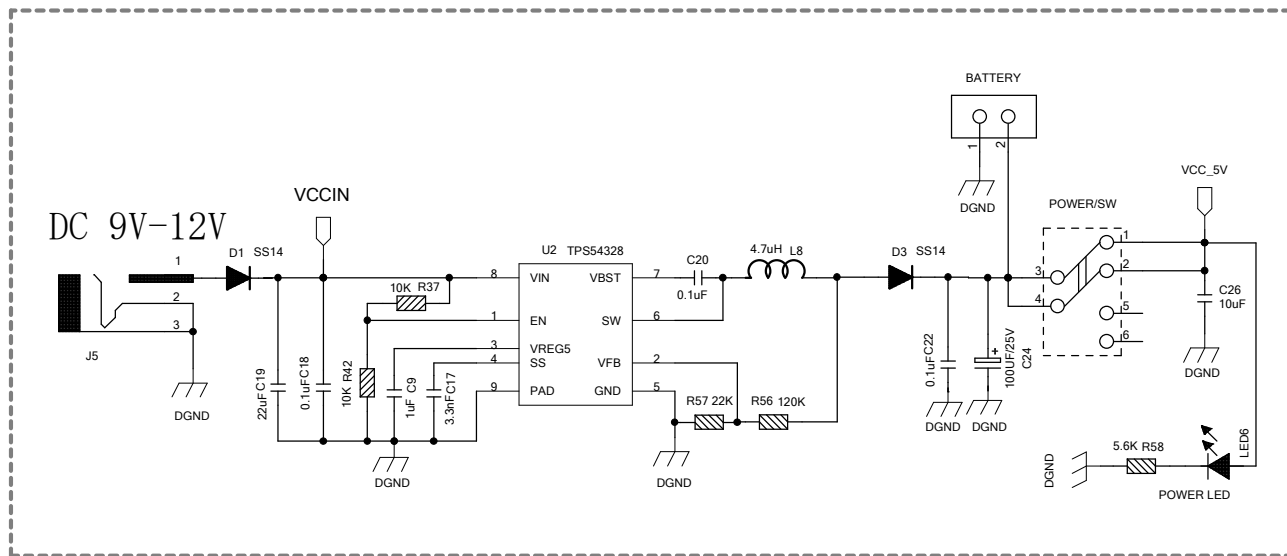
7PIN LED显示屏有指定选用的GPIO口  
GPIOA0/A1、A5~A10 只能驱动8mA 档电流



7Pin LED屏



SUB 输出

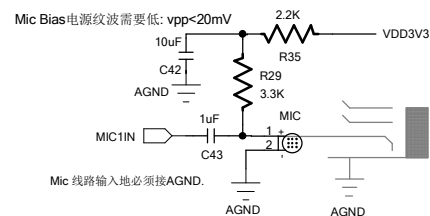
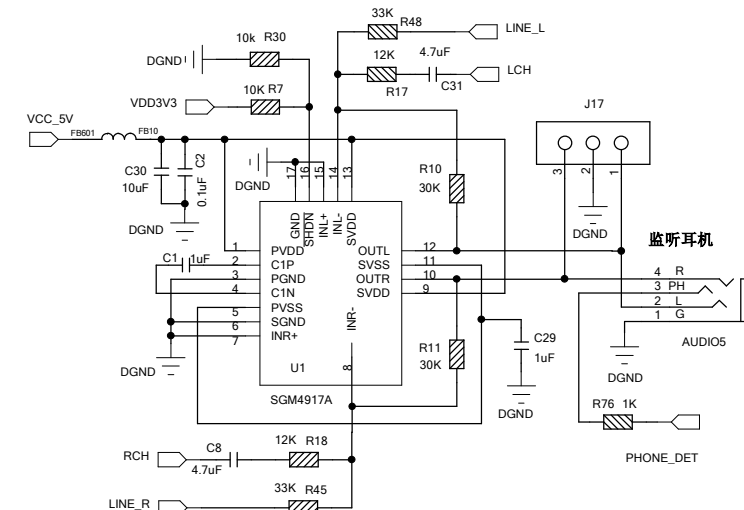
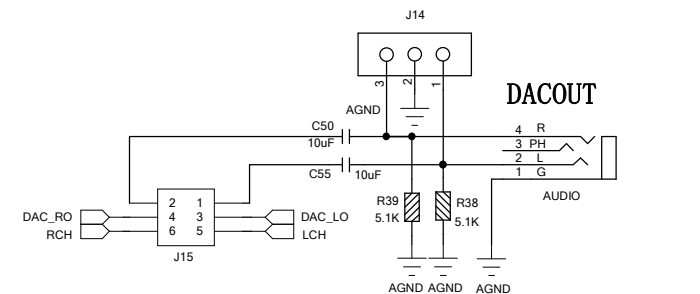
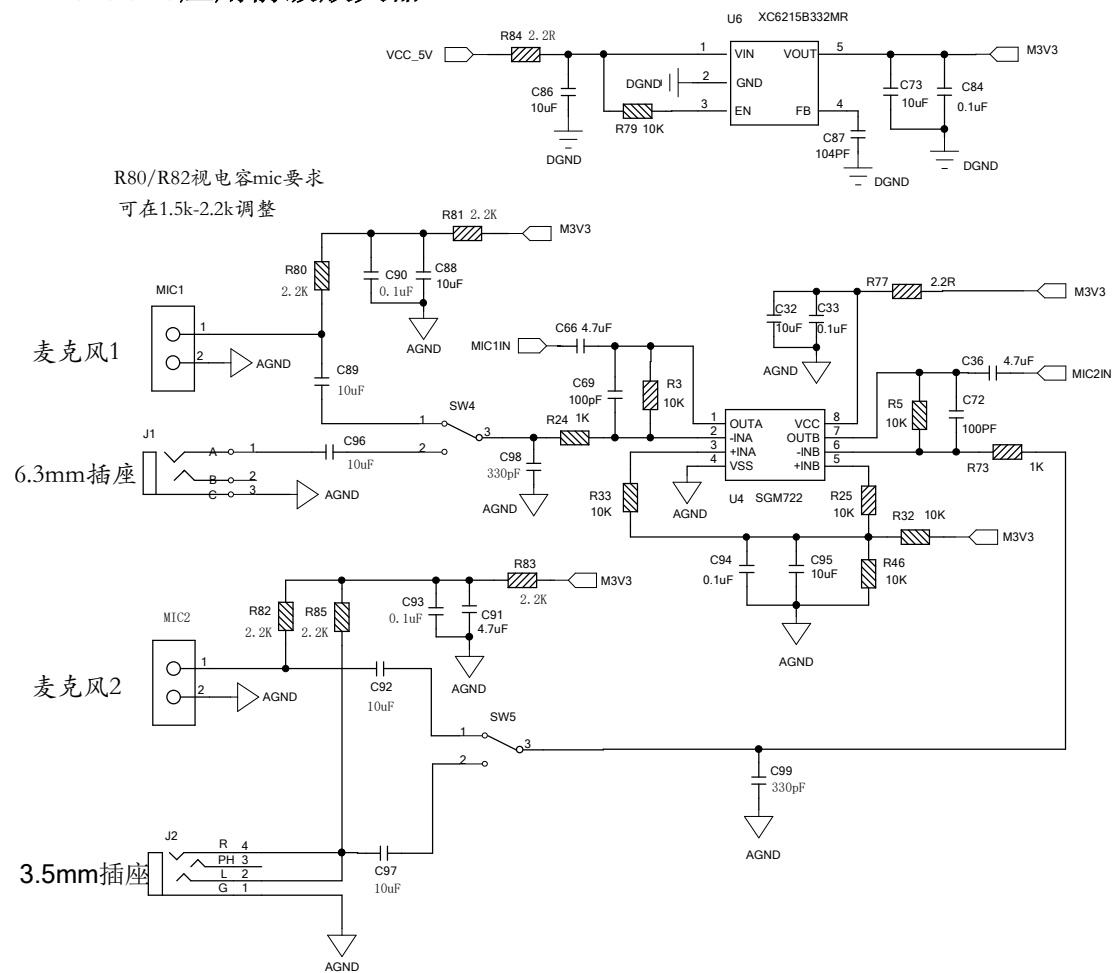


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TITLE: BP1048B2\_ReferenceDesign

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SCALE:	SHEET: 5 OF 8		

## Karaoke应用前级放大器



## 蓝牙通话应用的参考电路

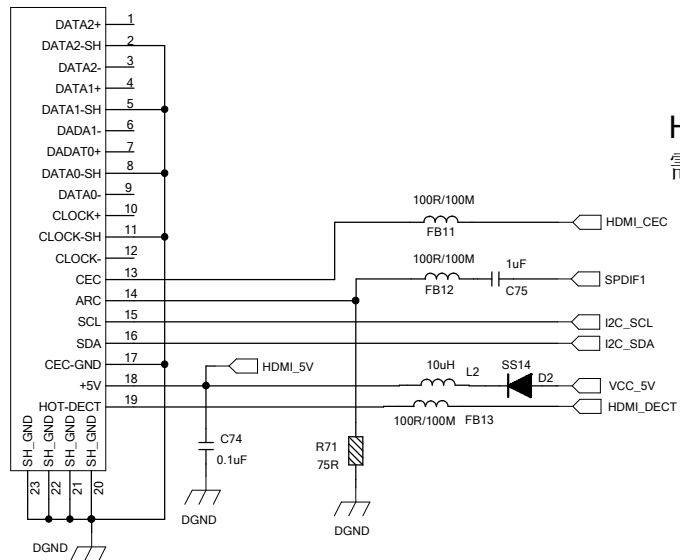
TECHNOLOGY CO., LTD:

TITLE: BP1048B2\_ReferenceDesign

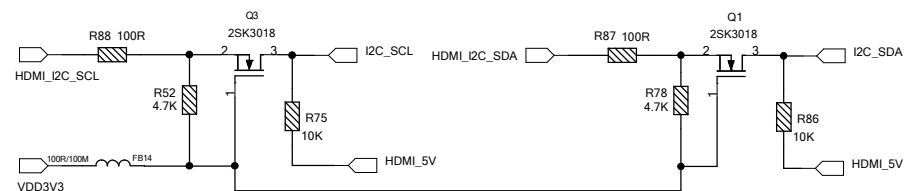
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2019-06-18	A3	Sunly	V1.1
SCALE:	SHEET: 6 OF 8		

# HDMI ARC

J7



HDMI CEC 属于高频数据线路，对外有辐射干扰  
需要增加铜箔地线对CEC线路进行屏蔽



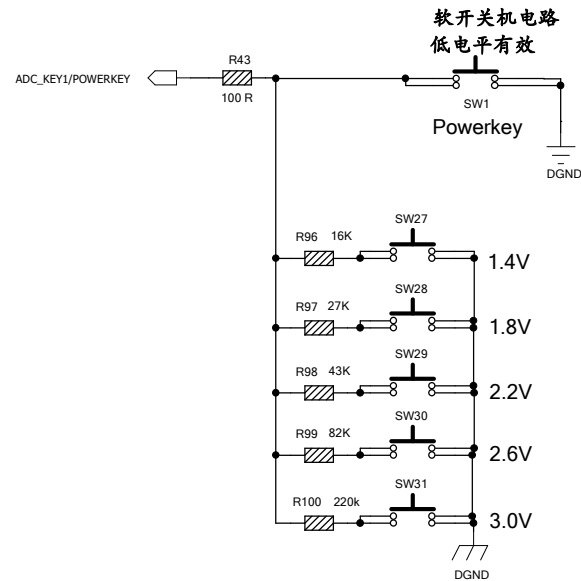
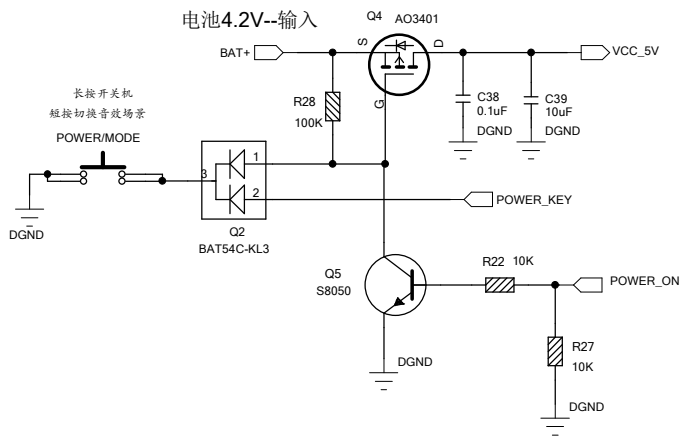
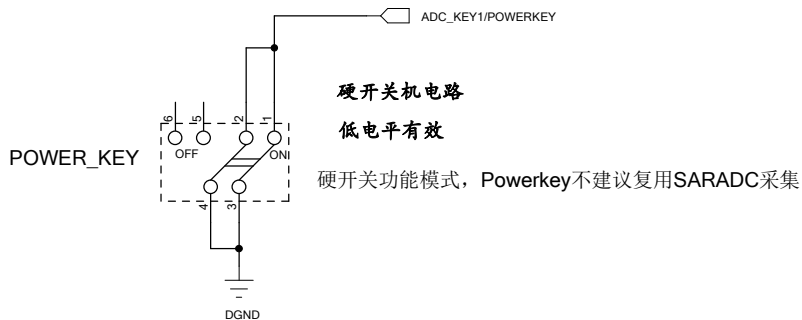
TECHNOLOGY CO., LTD:

TITLE: BP1048B2\_ReferenceDesign

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SCALE: SHEET: 7 OF 8

- 1、此POWERKEY管脚配置为POWERKEY功能并复用ADCKey时，采集电压为1.2~3.3v，采样精度是7bit
- 2、POWERKEY脚单独配置为SARADC，采集电压范围是：0~3.3v  
POWERKEY 管脚内部有上拉电阻值 22K / 高电平3.3V  
外部不需要加上拉电阻
- 3、不使用 POWERKEY 功能时，请保持 POWERKEY 管脚悬空，禁止将 POWERKEY 短接地或者连接到 5V
- 4、POWERKEY 管脚做硬开关功能时，不能复用做SARADC 采集电压



TECHNOLOGY CO., LTD:

TITLE: BP1048B2\_ReferenceDesign

DATE:

2019-06-19

SIZE:

A3

DRAWING NO:

Sunly

REV:

V1.1

SCALE:

SHEET: 8 OF 8