

	.....	1
	.....	1
	
1-1	.....
1-1	.....
1-	.....
1-	.....
1-	.....
1-	.....	11
1-	.....	1
1-	.....	1
1-	.....	1
1-	.....	1
1-10	.....	1
1-11	.....
1-1	.....
1-1	.....
1-1	.....
1-1	.....
1-1	.....	0
1-1	.....
1-1	.....
	
	
-1	.....
-1	.....
-	.....	0
-	.....	1
-	
-	
-	
-	
-	.....	1
-10	.....
-11	.....
-1	.....
-1	.....
-1	.....	1
-1	.....
-1	.....
-1	.....
-1	.....
	.....	0

[2014] 55

- 1.
- 2.
- 3.
- 4.

--

--

		1-1	1	1-1	1-1
		-1	1	-1	-1
		-1	1	-1	-1

1

I/O

C

/

Kei I C

2

1

/ /

Kei I C

MCU

/ /

2

6S (

)

/

3

120

4

20		10	0	
				1
				2
		10		3
				4
			5	

10

5

30

1



2

PCB

E

3

1



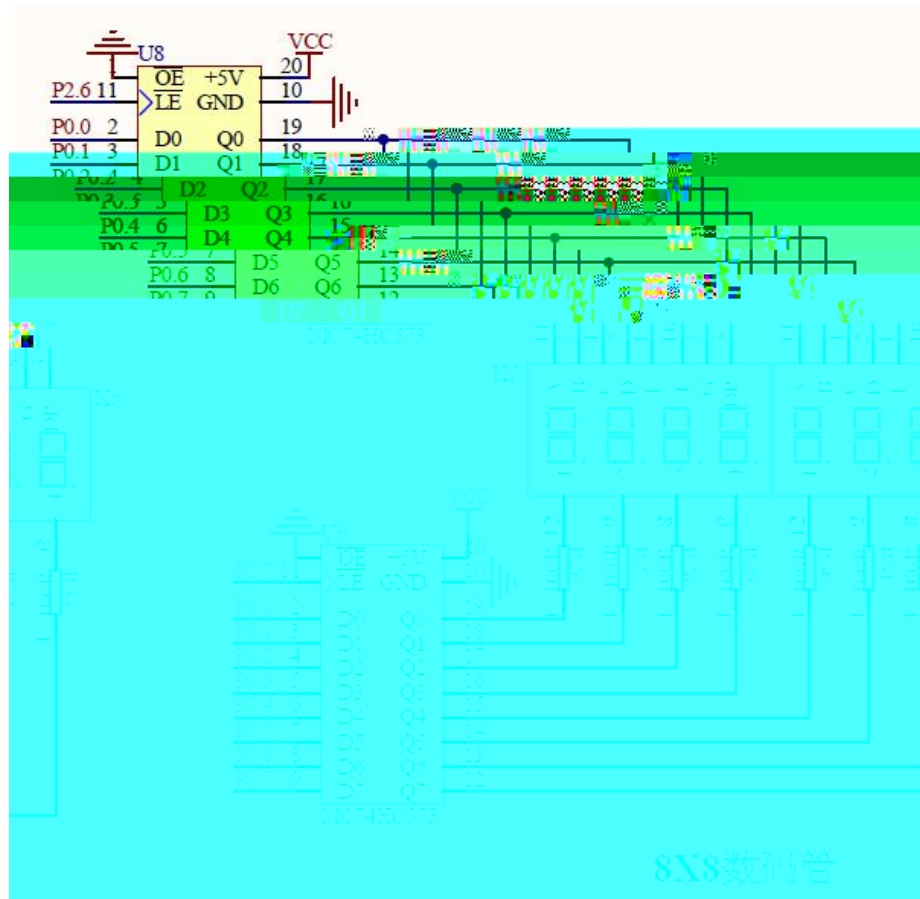
2

PCB

E

3

1



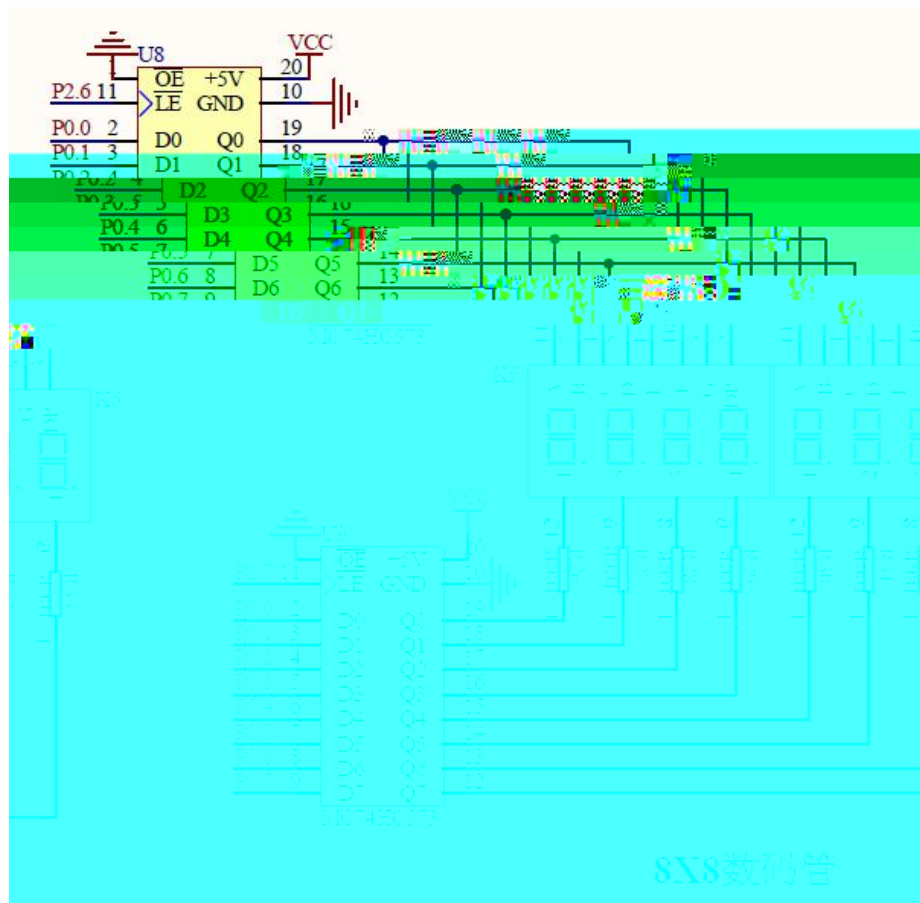
2

PCB

E

3

1



2

PCB

E

3

1

K1 8



2

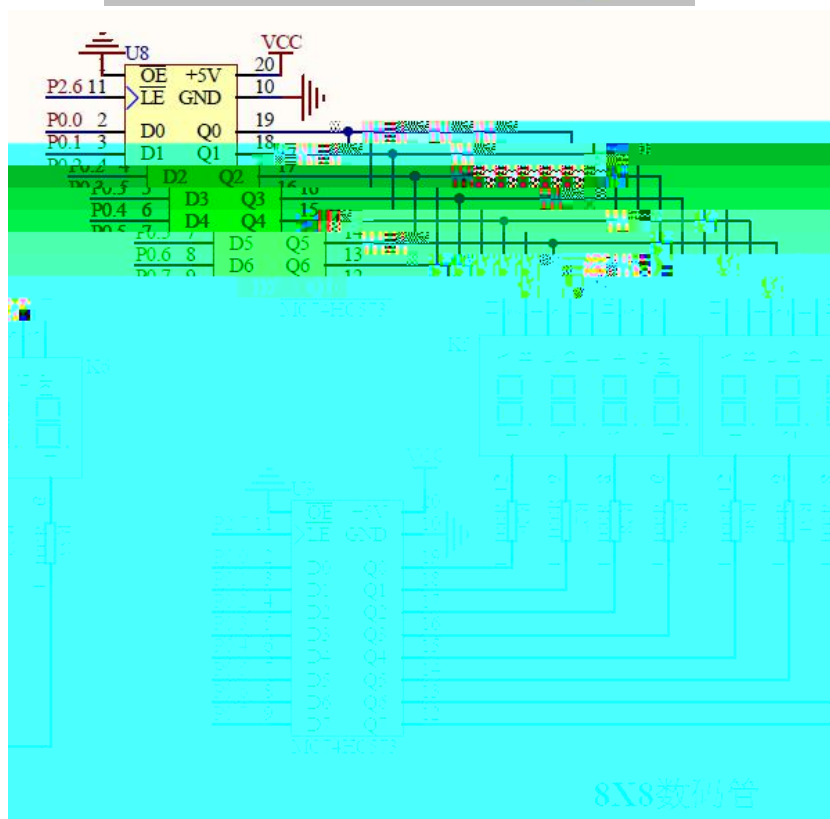
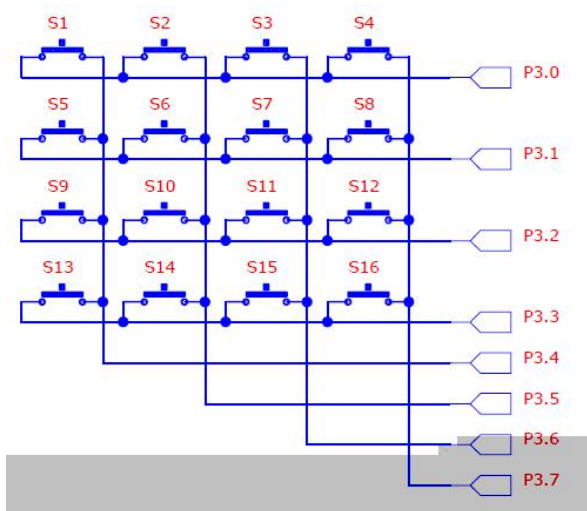
PCB
E

3

1

S1-S16

0-F



2

PCB

E

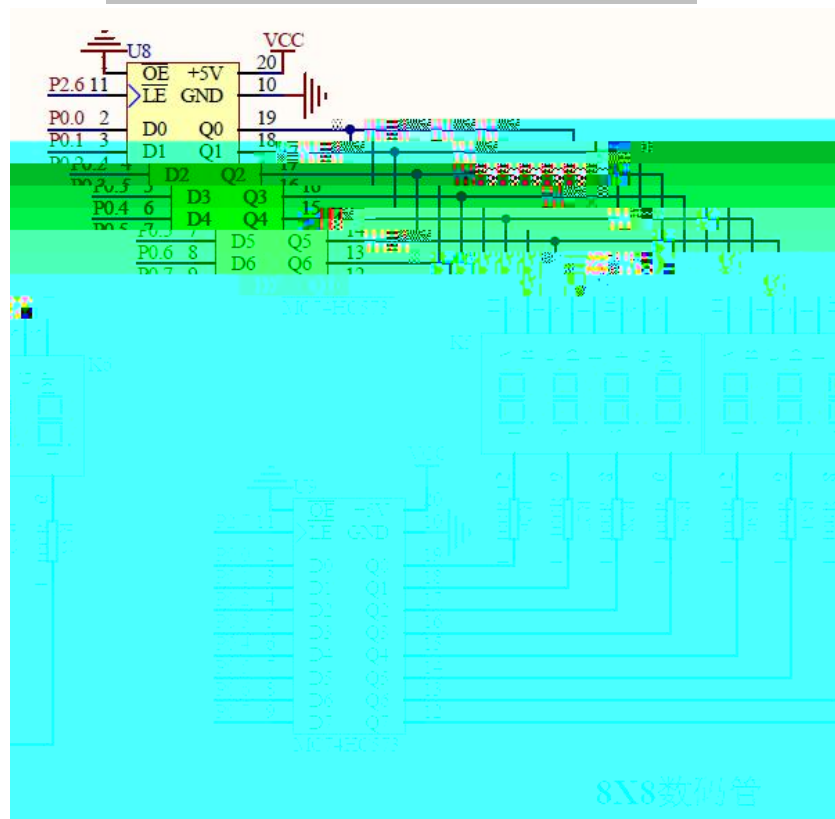
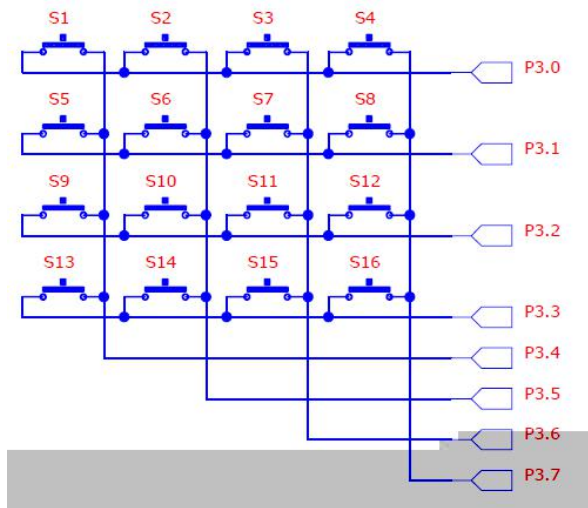
3

1

P3.2

1

9 0



1

2

PCB

E

3

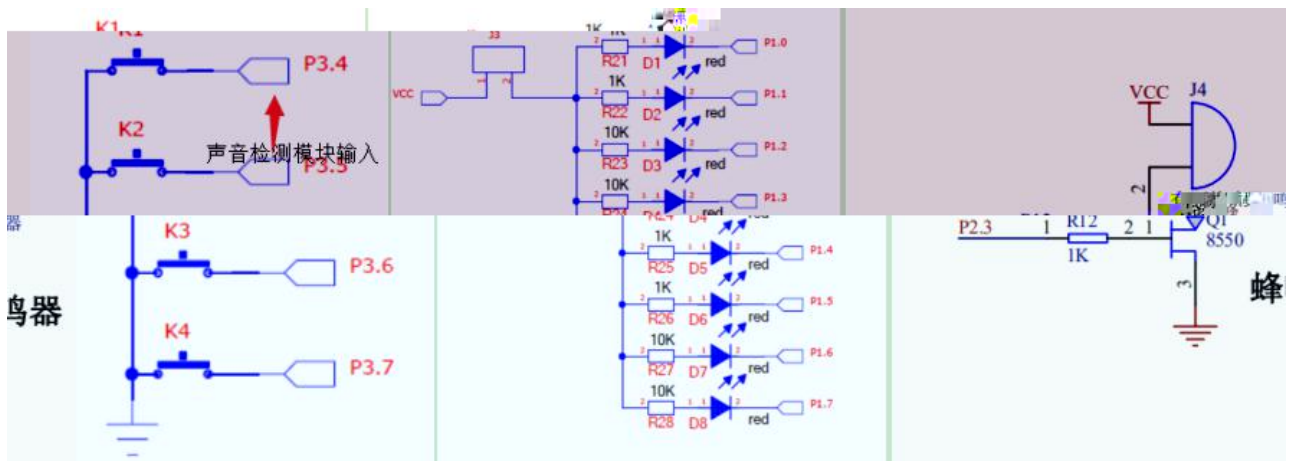
1

1

P3.4

P3.4

D1



1

2

PCB

E

3

1

P3.7

1

P3.7



1

2

PCB
E

3

1

1

K1

D1

K2

D2



1

2

PCB

E

3

1

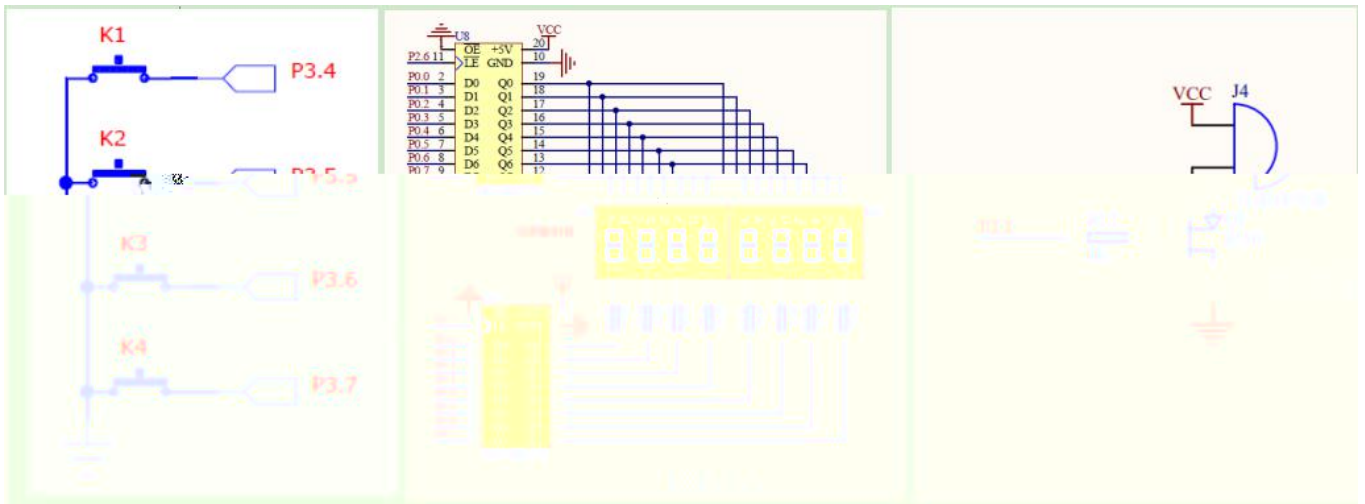
1

K1

K2 K3 K4

K1

" 1"



2

PCB

E

3

1

2



2

PCB

E

3

1

1

P3.6

P3.6



1

2

PCB

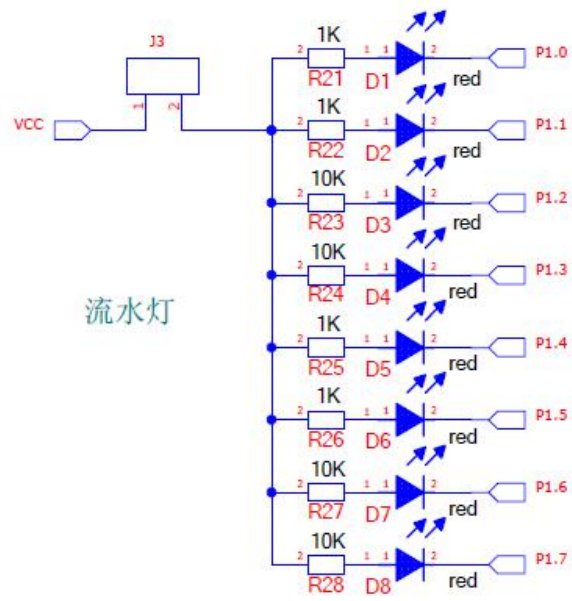
E

3

0

1

0.5S 0.5S



2

PCB

E

3

1

K1

D1-D4

K2

D5-D8



2

PCB

E

3

1

/ /

1

/ /

/ /

()

/

1 0

20		10			0	
			1			
		10	2			
			3			

			4	
			5	
30		10		
		5		
		5		
		10		
50		5		
		5	1 2	PCB
		10		
		15	1 2 3	
		15		

5

18

1



2

3

1



2

3

1



2

3

1



2

3

1



2



3

1

1	VBAT	VDD	64
2	PC13/ANT1	VSS	63
3	PC14/OSC32	PB9/TIM4_CH4/SDIO_D5	62
4	PC15/OSC32	PB8/TIM4_CH3/SDIO_D4	61
5	PD0/OSCIN	PA7/I2C1_SCL/TIM4_CH2	60
6	PD1/OSCOUT	PA7/I2C1_SDA/TIM4_CH2	59
7	NRES	PB6/I2C1_SCL/TIM4_CH1	58
8	PC0/ADC10	PB5/I2C1_SMB4/SPI3_MOSI/I2S3_SD	57
9	PC1/ADC11	PB4/JNTRST/SPI3_MISO	56
10	PC2/ADC12	PB3/JTDO/SPI3_SCK/I2S3_CK	55
11	PC3/ADC13	PC2/U5_RX/TIM3_ETR/SDIO_CMD	54
12	VSSA	PC12/U5_TX/SDIO_CK	53
13	VDDA	PC11/U4_RX/SDIO_D3	52
14	PA0/WKUP/ADC0/TIM2_CH1_ETR/TIM5_CH1/TIM8_ETR	PC10/U4_TX/SDIO_D2	51
15	PA1/ADC1/TIM2_CH2/TIM5_CH2	PA15/JTDI/SPI3_NSS/I2S3_WS	50
16	PA2/U2_TX/ADC2/TIM2_CH3/TIM5_CH3	PA14/JTCK/SWCLK	49
17	PA3/U2_RX/ADC3/TIM2_CH4/TIM5_CH4	VDD	48
18	VSS	VSS	47
19	VDD	PA13/JTMS/SWDIO	46
20	PA4/SPI1_NSS/ADC4/DAC1	PA12/CAN_TX/USBDP_TDM1_ETR	45
21	PA5/SPI1_SCK/ADC5/DAC1	PA11/CAN_RX/USBDP_TDM1_CH4	44
22	PA6/SPI1_MISO/ADC6/TIM2_CH1/TIM2_BKIN	PA10/J1_RX/TIM1_CH3	43
23	PA7/SPI1_MOSI/ADC7/TIM2_CH2/TIM2_CHN	PA9/J1_TX/TIM1_CH2	42
24	PC4/ADC14	PA8/TIM1_CH1/MCO	41
25	PC5/ADC15	PC9/TIM5_CH4/SPI2_S1	40
26	PB0/ADC8/TIM3_CH2/TIM2_CH2N	PC8/TIM5_CH3/SPI2_S0	39
27	PB1/ADC9/TIM3_CH4/TIM2_CH2N	PC7/I2S5_MCK/TIM5_CH3/SPI2_S0T	38
28	PB2/BOOT1	PC6/I2S3_MCK/TIM5_CH1/SDIO_C8	37
29	PB10/U3_TX/I2C2_SCL	PB15/SPI2_MOSI/I2S2_SD/TIM7_CH1N	36
30	PB11/U3_RX/I2C2_SDA	PB14/SPI2_MISO/TIM7_CH2N	35
31	VSS	PB13/SPI2_SCK/I2S3_CK/TIM7_CH1N	34
32	VDD	PB12/SPI2_NSS/I2S2_WS/I2C2_SMB4/TIM7_BKIN	33

2

3

1



2

3

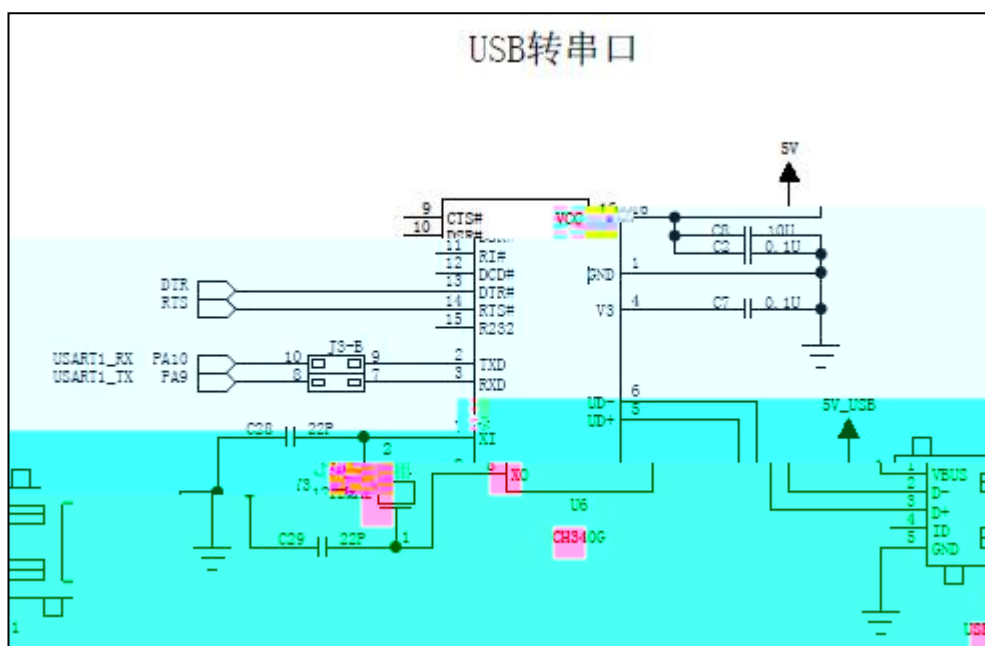
1

1	VBAT	VDD	64
2	PC13/ANT1	VSS	63
3	PC14/OSC32	PB9/TIM4_CH4/SDIO_D5	62
4	PC15/OSC32	PB8/TIM4_CH3/SDIO_D4	61
5	PD0/OSCIN		
6	PD1/OSCOUT		
7	NRS*		
8	PC0-ADC10		
9	PC1-ADC11		
10	PC2-ADC12		
11	PC3-ADC13		
12	VSSA		
13	VDDA		
14	PA0-WKUP-ADC0-TIM2_CH1-ETR-TIM5_CH1-TIM8-ETR		
15	PA1-ADC1-TIM2_CH2-TIM5_CH2		
16	PA2-I2C1-TX-ADC2-TIM2_CH3-TIM5_CH3		
17	PA3-I2C2-RX-ADC3-TIM2_CH4-TIM5_CH4		
18	VSS		
19	VDD		
20	PA4-SPI1-NSS-ADC4-DAC1		
21	PA5-SPI1-SCK-ADC5-DAC2		
22	PA6-SPI1-MISO-ADC6-TIM2_CH1-TIM2-BKIN		
23	PA7-SPI1-MOSI-ADC7-TIM2_CH2-TIM2-CHN		
24	PC4-ADC14		
25	PC5-ADC15		
26	PE0-ADC2-TIM3_CH2-TIM8-CH2N		
27	PE1-ADC9-TIM3_CH4-TIM8-CH3N		
28	PB2-BOOT1		
29	PE10-I2C3-TX-I2C2-SCL		
30	PE11-I2C3-RX-I2C2-SDA		
31	VSS		
32	VDD		
33			
34			
35			
36			
37			
38			
39			
40			
41			
42			
43			
44			
45			
46			
47			
48			
49			
50			
51			
52			
53			
54			
55			
56			
57			
58			
59			
60			
61			
62			
63			
64			

2

3

1

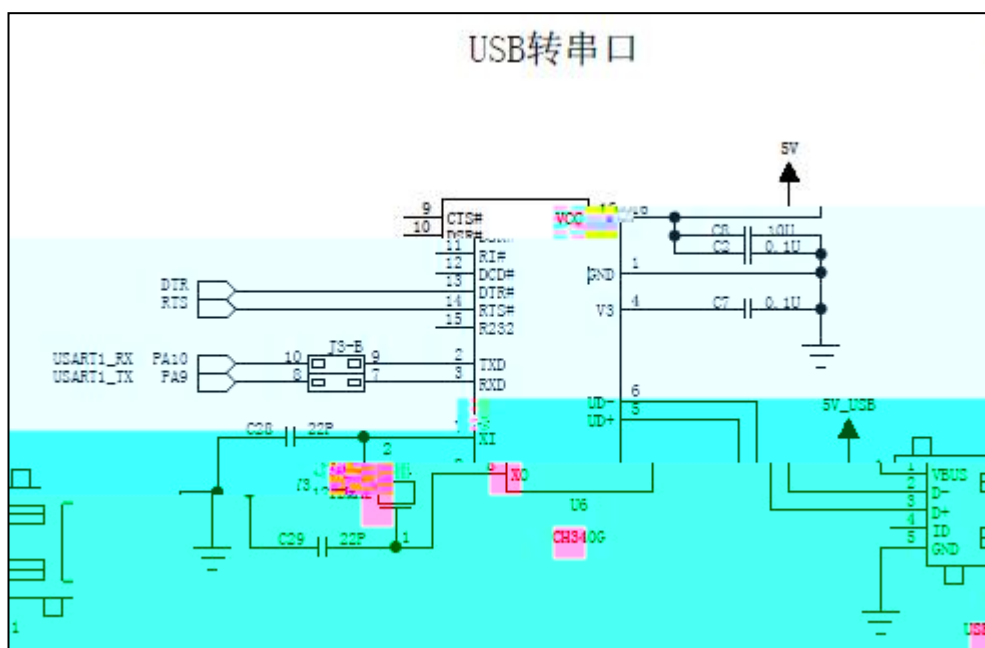


2

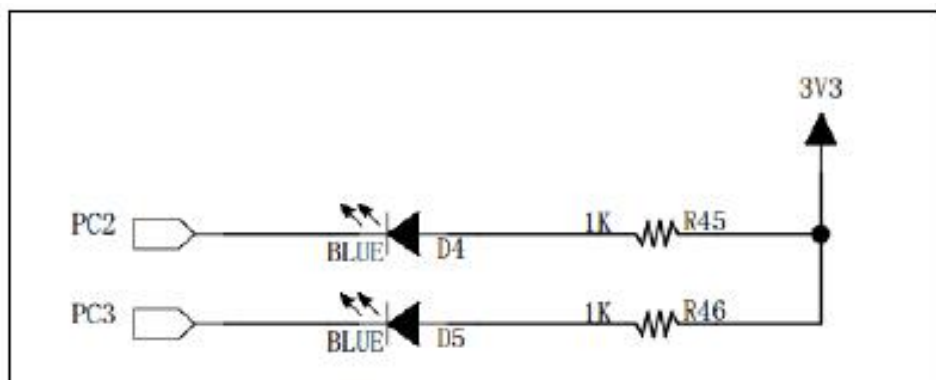
3

-

1



2



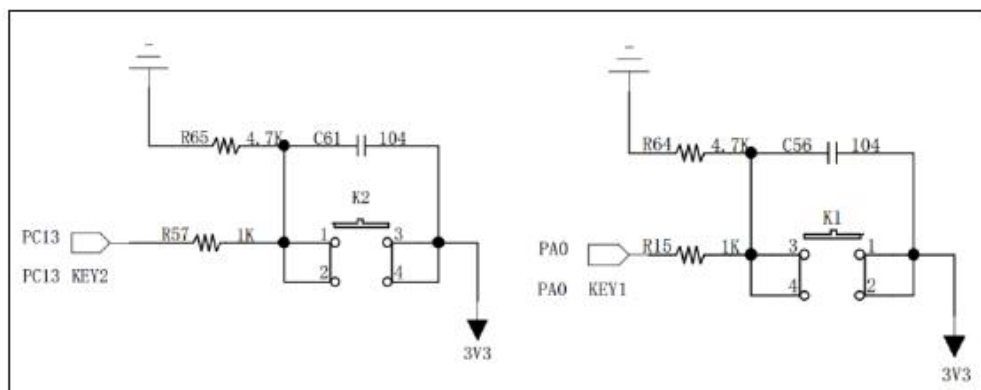
3

-

1

2

1



2

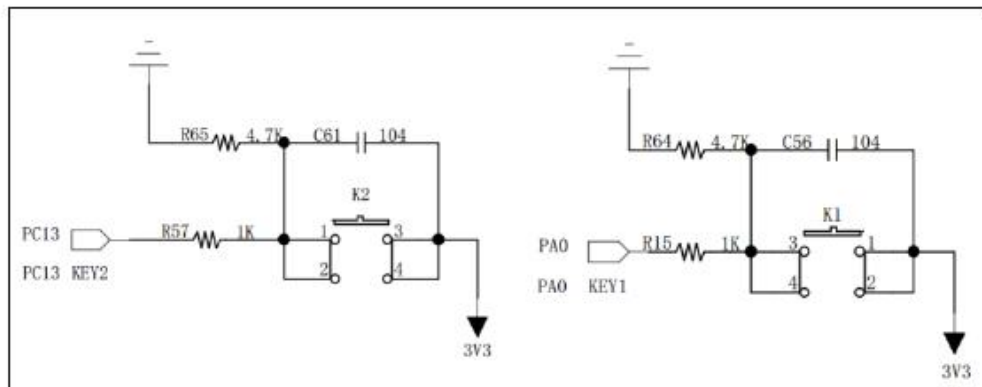
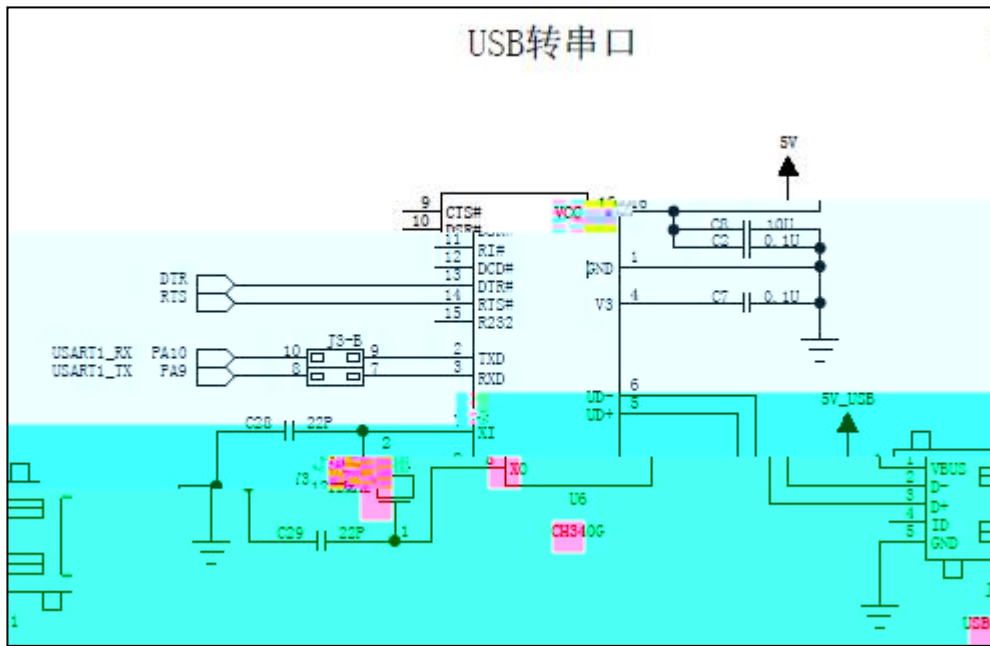
3

-

3

-

1



2

3

-



2

3

-

1



2

3

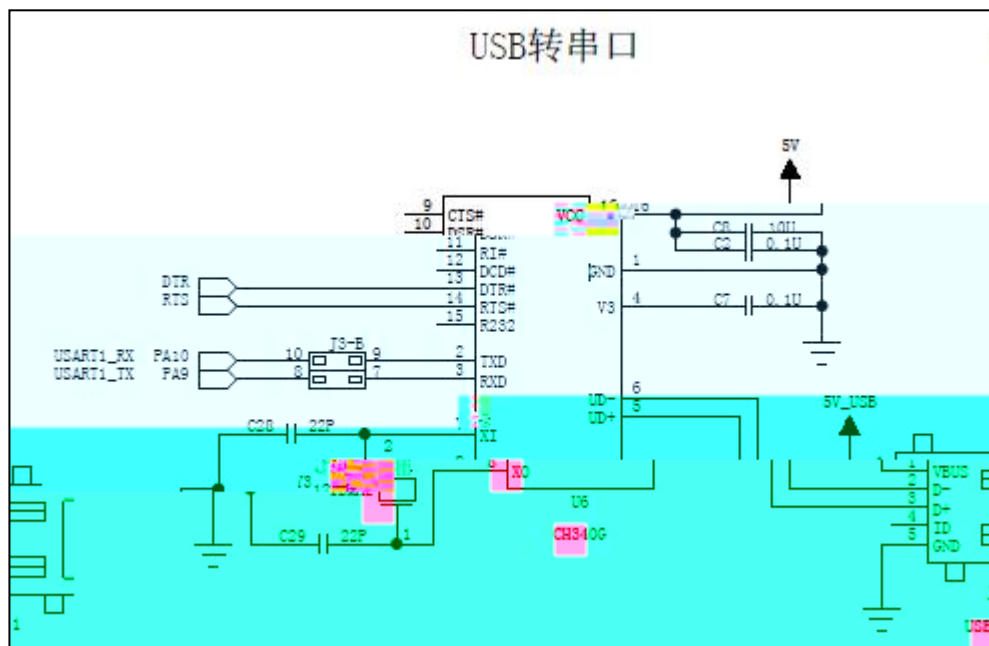


2

3

-

1



2

3

-

1

1

/ /

.0

/ /

()

/

1 0

20		10			0	
			6			
			7			
		10	8			
			9			

			10	
30				
		10		
		10		
50				
		10		

5

18

1
2

20sp

RGB #FF0000



3 :

2
1



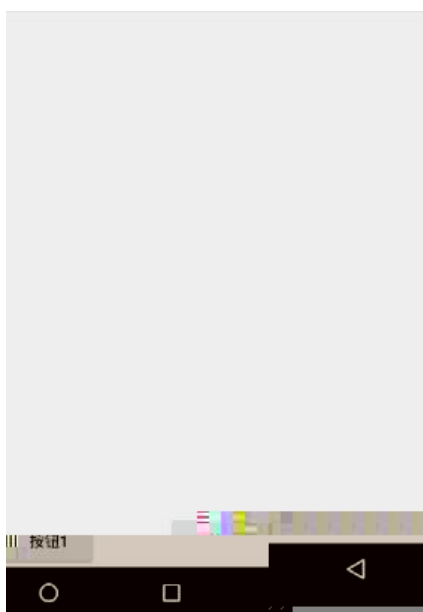
3 :

1

2

1

2



3

:

TextView

2

1



3

1

2



3

2

1

2



3

1

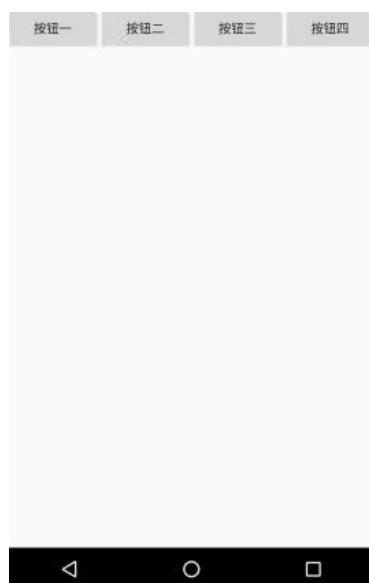
1 1 1 1

2

1

2

1 1 1 1



3

1

2

1



3

1

2

1

2



3

1

2

1

2

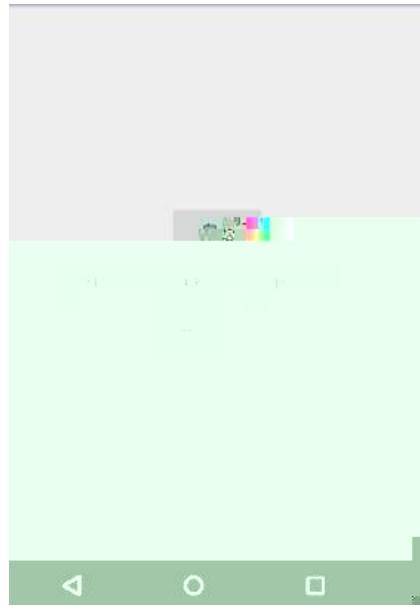


3

1

2

1



3

1

LED

2

1

2

3

TextView LED



3

1

LED

2

1

2

3

TextView LED



3

1

LED

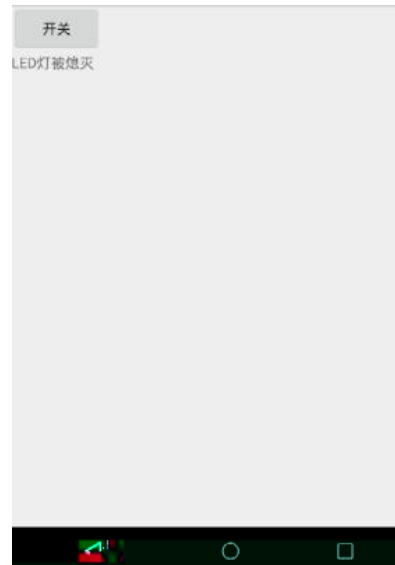
2

1

2

3

TextView LED



3

1

LED

2

1

2

3

4

TextVi ew



3

1

LED

2

1

2

3

4

ImageView

30dp*30dp



3

1

2

1

2



3

1

2

1

2



3