

- 01.Index
- 02.Change List
- 03.Block Diagram
- 04.Power Tree-RC5T620
- 05.Power Tree-RK808-B
- 06.Power Tree-RK818-1
- 10.RK3288 Power
- 11.RK3288 PMU Controler
- 12.RK3288 DDR Controler
- 13.RK3288 Flash Controler
- 14.RK3288 USB/HSIC Controler
- 15.RK3288 SARADC/Key Board
- 16.RK3288 DVP Interface
- 17.RK3288 Display Interface
- 18.RK3288 GPIO
- 20.USB Port
- 21.Power-RT5C620_1CELL (option)
- 22.Power-RK808-B_2CELL (option)
- 23.Power-RK818-1_1CELL (option)
- 30.RAM-DDR3 4x16bit
- 32.RAM-DDR3 2x32bit (option)
- 33.RAM-LPDDR2(168P) (option)
- 34.RAM-LPDDR2(216P) (option)
- 35.RAM-LPDDR2(220P) (option)
- 36.RAM-LPDDR3(178P) (option)
- 40.Memory-eMMC
- 41.Memory-Nand FLASH (option)
- 42.Memory-tSD (option)
- 45.DVP power and Flash LED
- 46.Camera-MIPI CSI
- 47.Camera-CIF (option)
- 50.LCM-eDP Panel
- 51.LCM-MIPI Panel (option)
- 52.LCM-Dual MIPI Panel (option)
- 53.LCM-LVDS Panel (option)
- 60.WIFI/BT-AP6210/AP6212/XZ3538
- 61.WIFI ac/BT-AP6335 (option)
- 62.WIFI/BT/GPS-AP6476 (option)
- 65.3G-UNA
- 66.3G-UNA LITE (option)
- 70.Audio Codec-ES8323
- 71.Audio Codec-ALC5631 (option)
- 72.Audio Codec-ALC5640 (option)
- 73.Audio Codec-ES8316 (option)
- 74.Audio Codec-ALC5672 (option)
- 75.TP COF
- 76.TP COB-CT363 (option)
- 77.TP COB-FT5506 (option)
- 78.TP COB-GSL3680 (option)
- 80.Sensor/VIB
- 81.TF Card
- 82.HDMI Port
- 84.eFUSE (option)

I2C address(7bit):

1.I2C0 Power:

RK808 0x1b
 CW2013 0x62
 RK818 0x1C
 RT5C620 0x32
 SYR837 0x40
 SYR838 0x41

2.I2C1 Sensor:

CM3218 0x10,0x0c
 LSM330TR G:0x6a A:0x1e
 MMA8452Q 0X1d
 MPU6500 0x34
 LIS3DH 0X19
 LSM303D 0X1d

3.I2C2 Audio Codec:

ALC5640 0x19
 ALC5623 0x1a
 ALC5631 0x1a
 ES8323 0x10
 ES8316 0x10

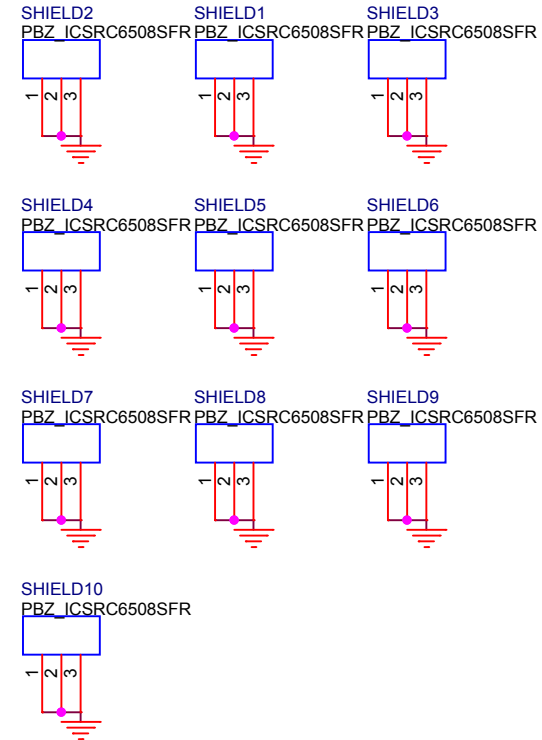
4.I2C3 Camera:

OV2659 0x30
 OV8825 0x36

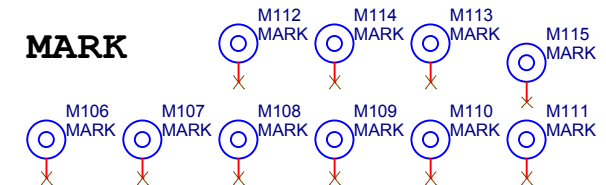
5.I2C4 Touch:

CT363 0x1b
 FT5506
 GSL3680 0x40

SHIELD



MARK



5


4

3

2

1

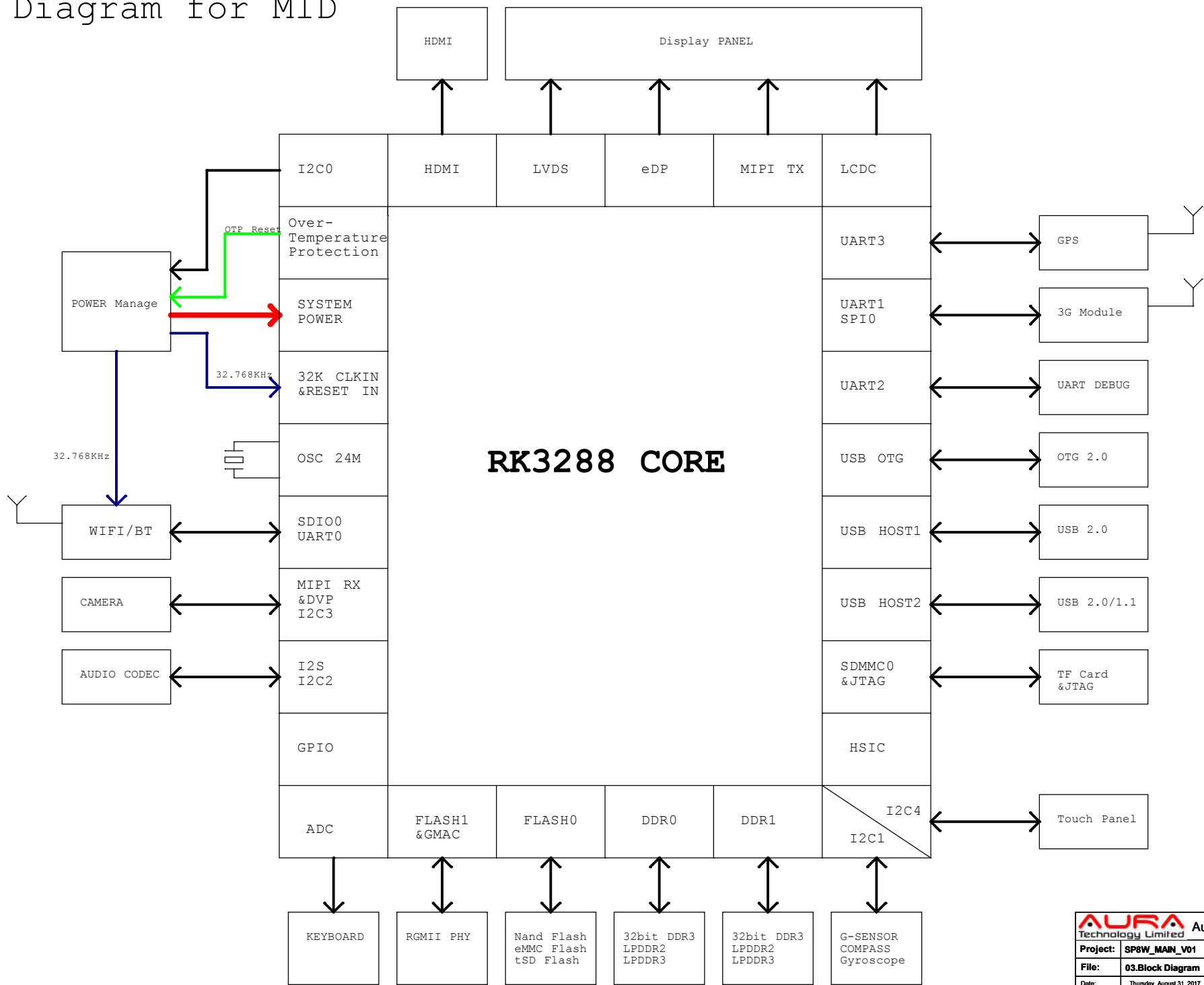
Version	Date	Author	Change Note	Approved
V01	20170814	CIMI	First edictor	

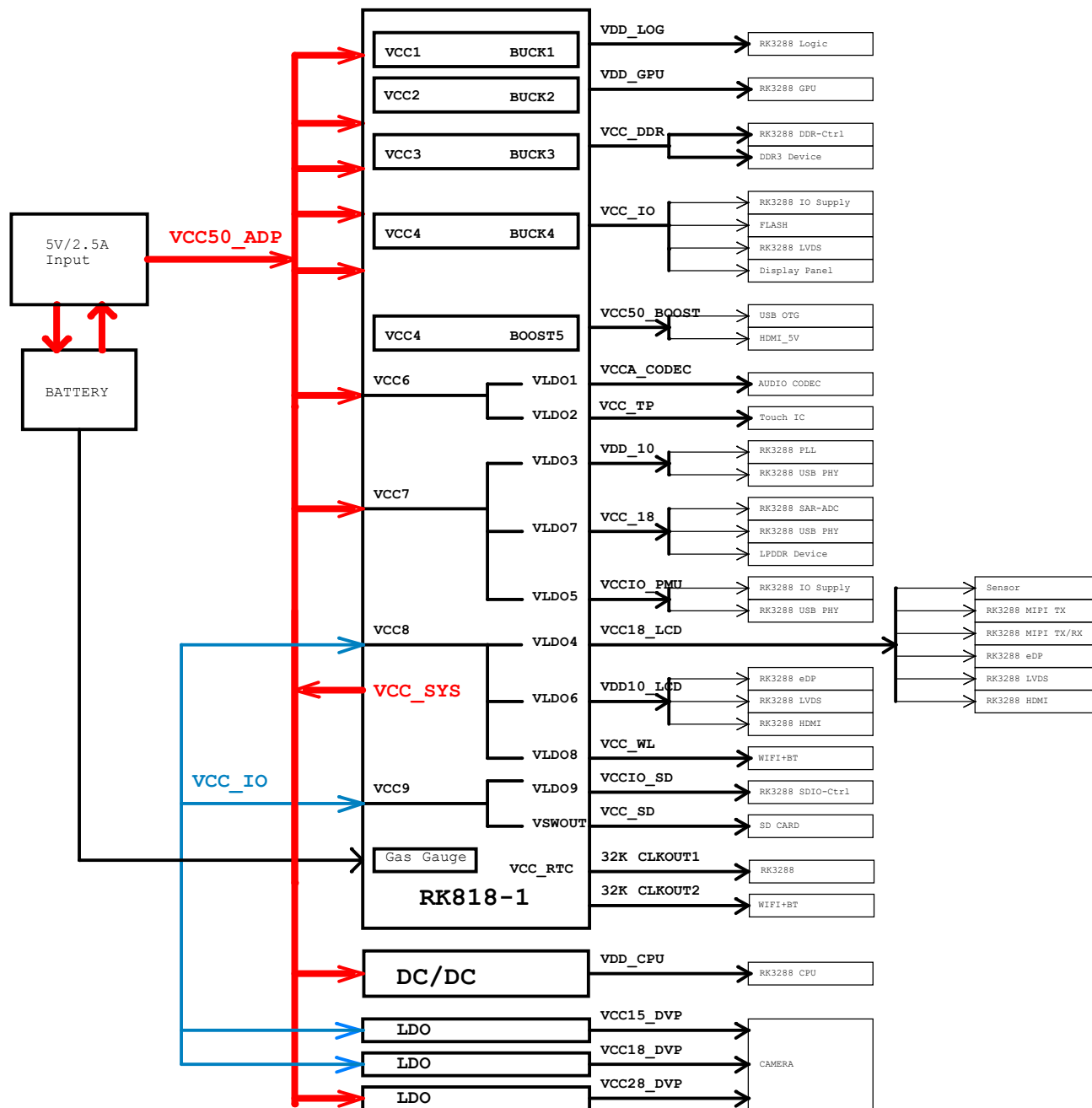


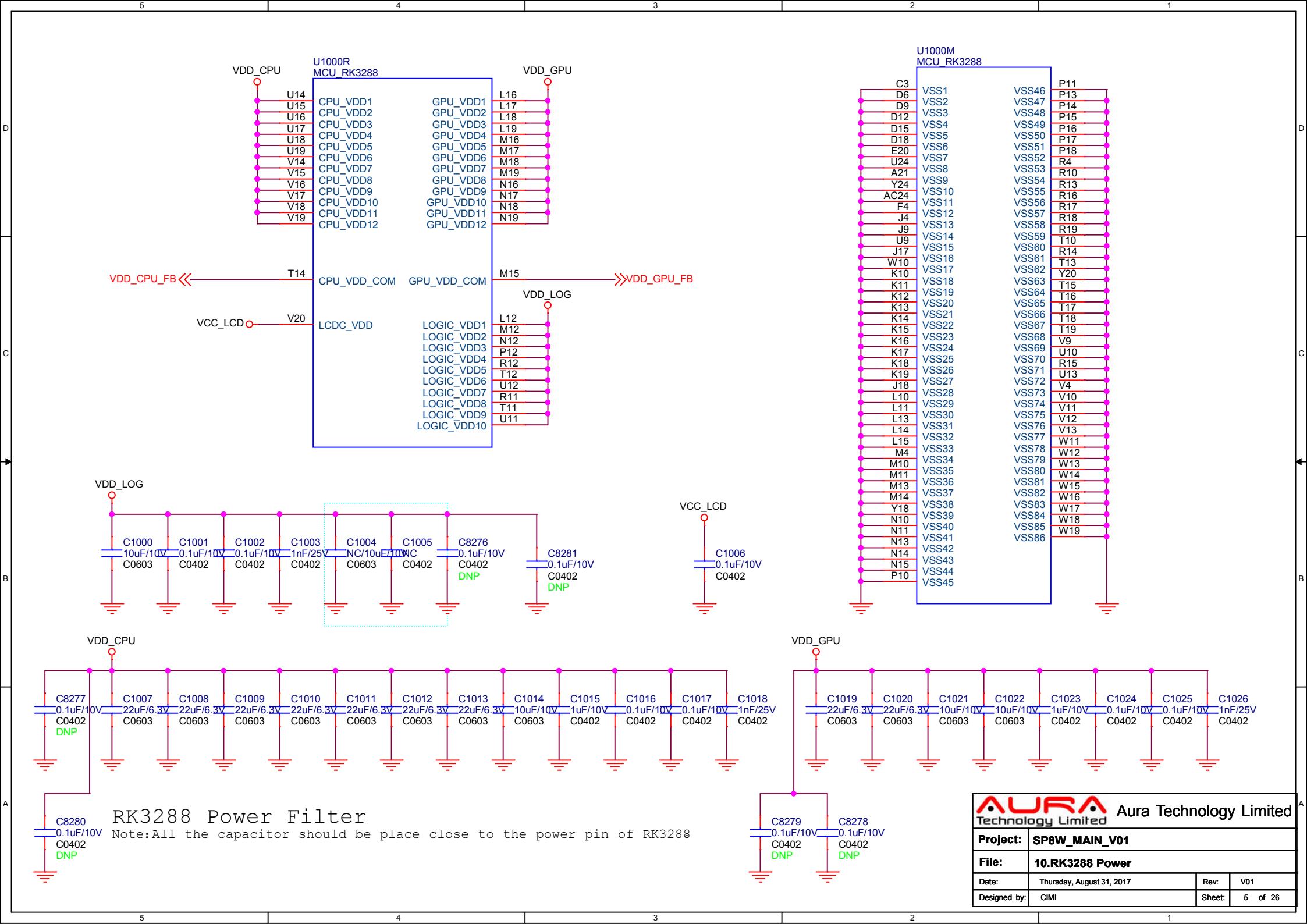
Aura Technology Limited

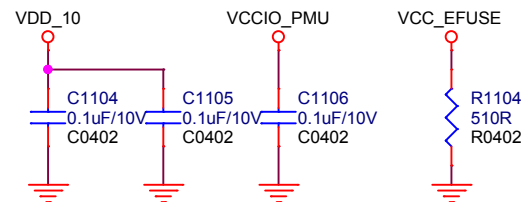
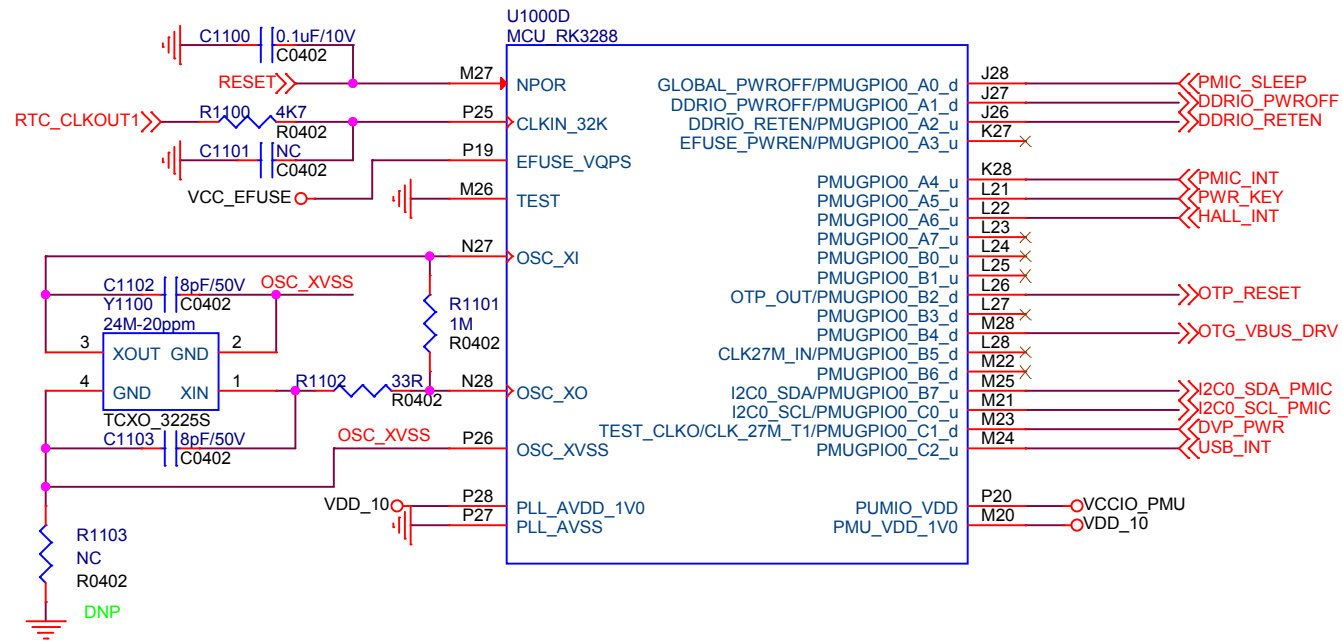
Project:	SP8W_MAIN_V01		
File:	02.Change List		
Date:	Thursday, August 31, 2017	Rev:	V01
Designed by:	CIMI	Sheet:	2 of 26

Block Diagram for MID





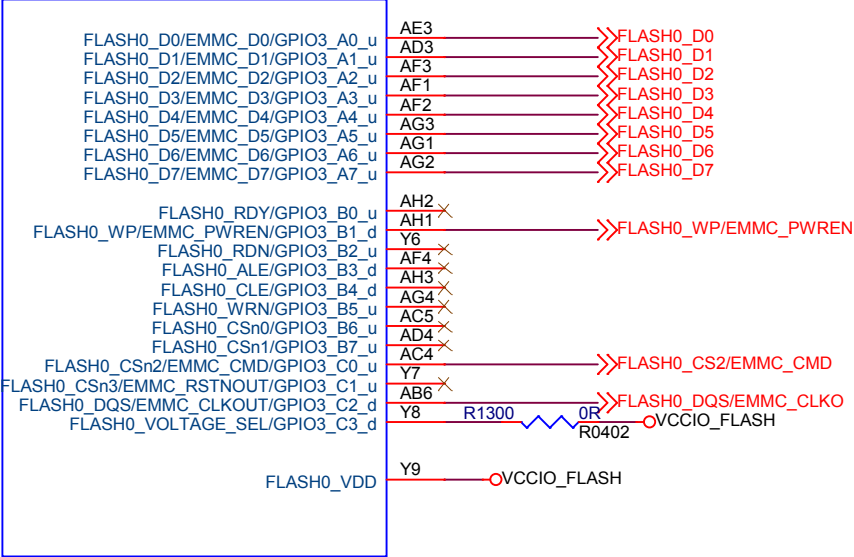




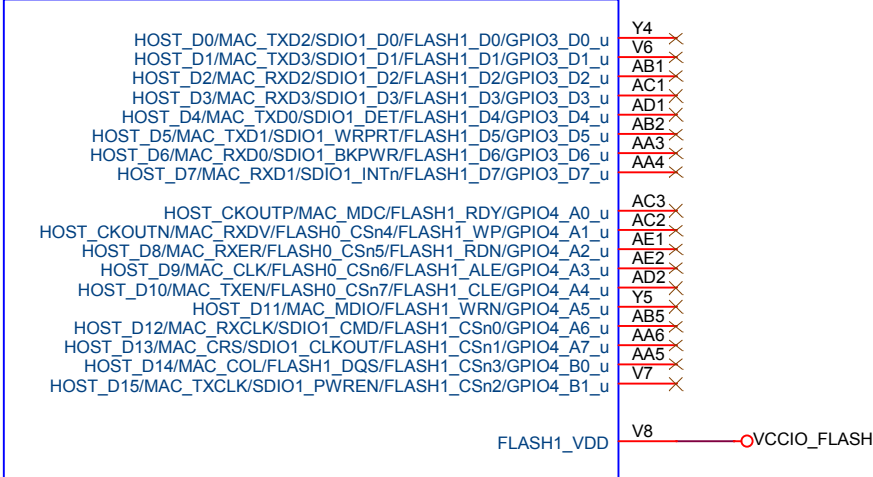
Note: All the capacitor should be place close to the power pin of RK3288.

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Project: SP8W_MAIN_V01			
File: 11.RK3288 PMU Controller			
Date:	Friday, September 01, 2017	Rev:	V01
Designed by:	CIMI	Sheet:	6 of 26

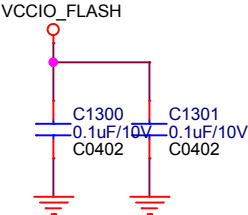
U1000P
MCU_RK3288



U1000Q
MCU_RK3288

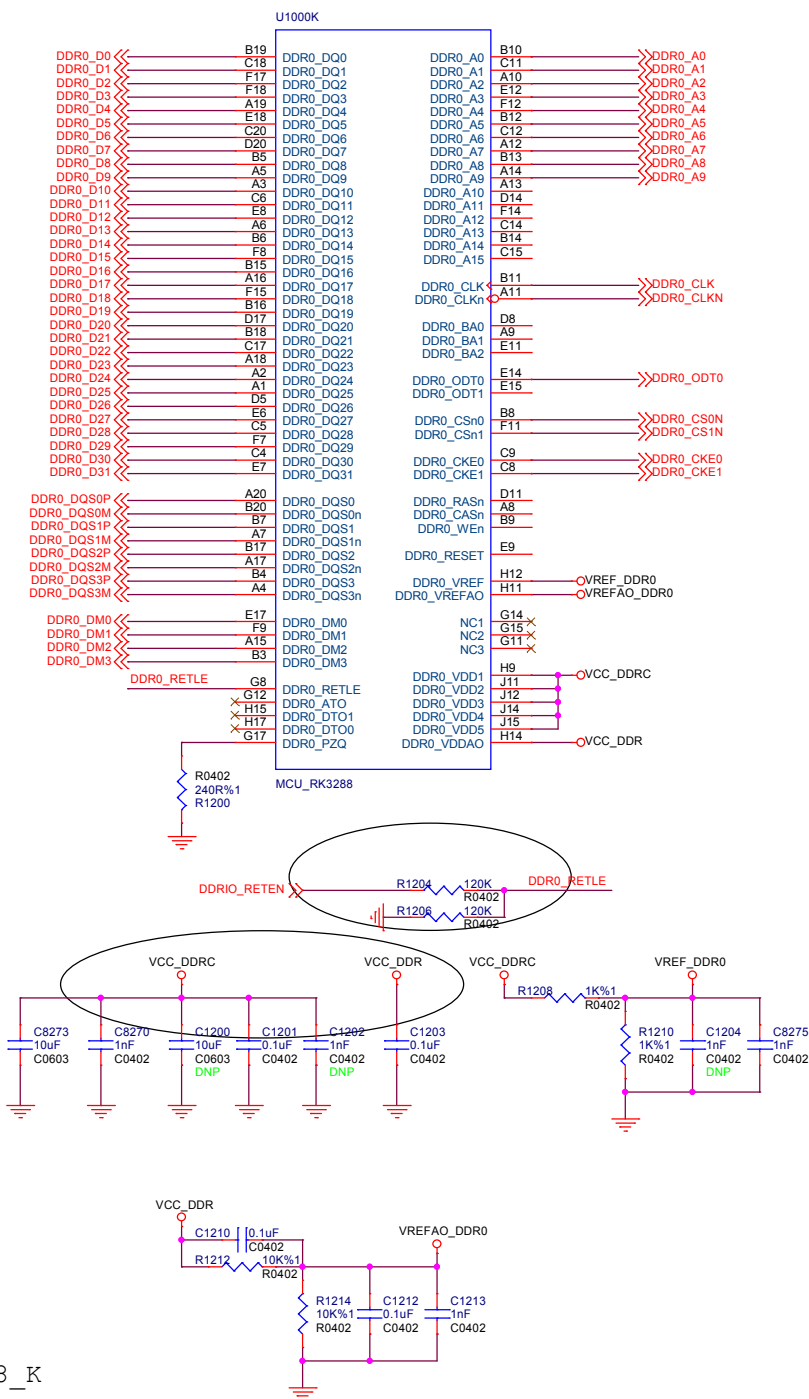


	VCCIO_FLASH=1.8V	VCCIO_FLASH=3.3V
FLASH0_VOLTAGE_SEL pin connect to	VCCIO_FLASH	Floating(Default)

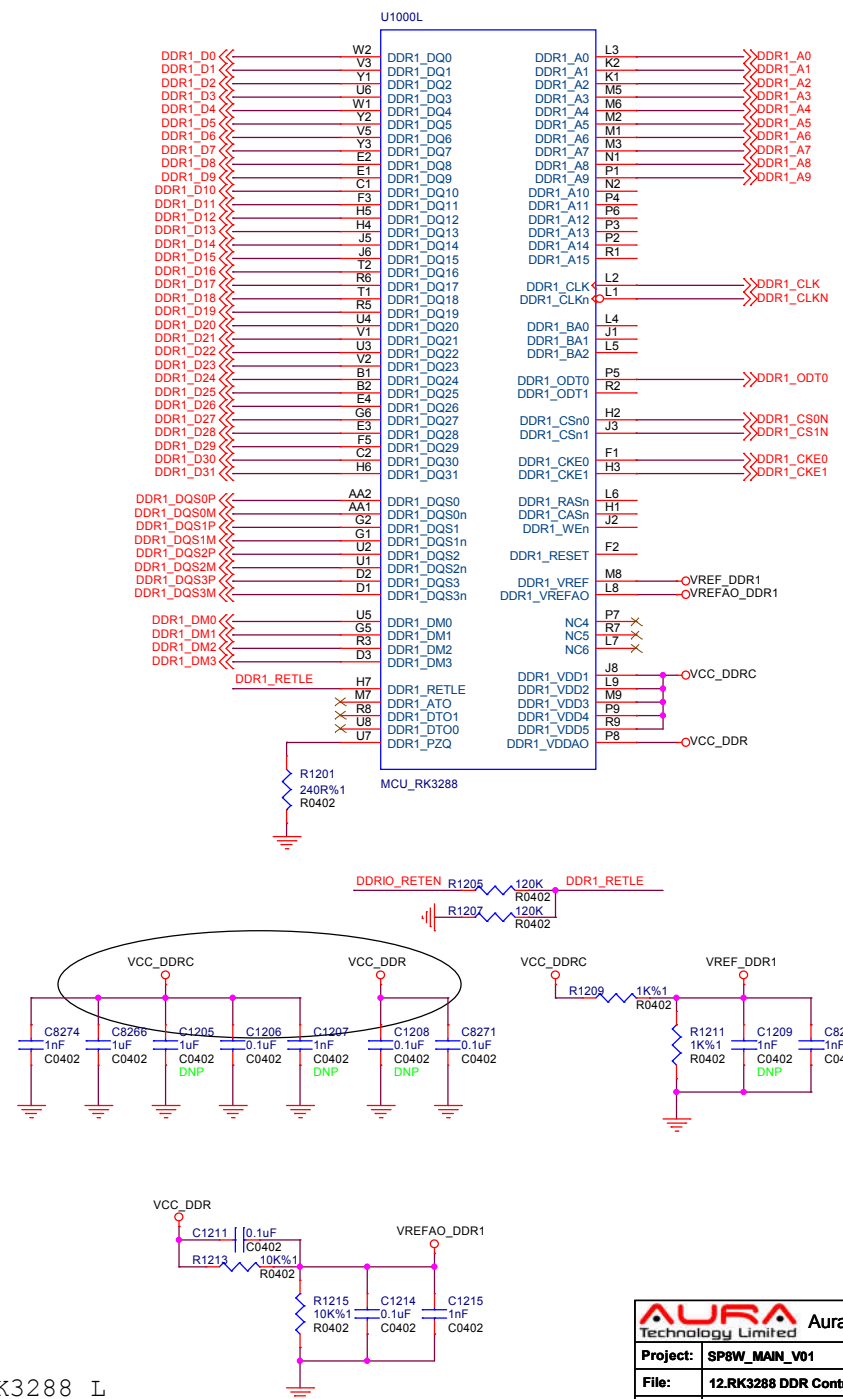


Note: All the capacitor should be place close to the power pin of RK3288.

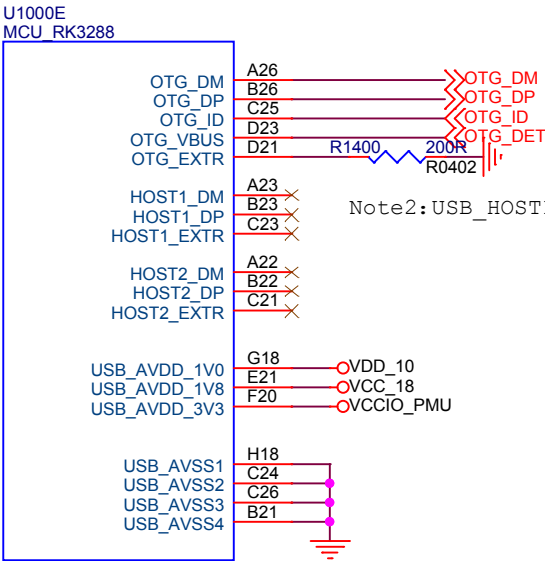
RK3288 DDR Channel-0



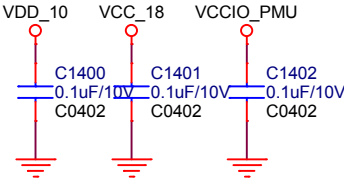
RK3288 DDR Channel-1



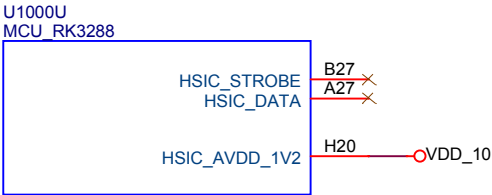
RK3288_E



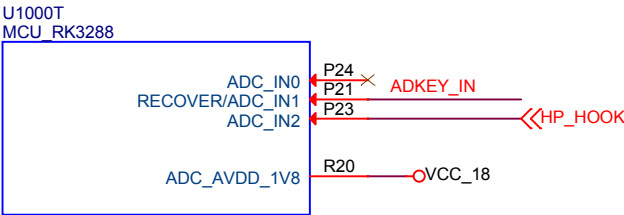
Note1:All the capacitor should be place close to the power pin of RK3288.



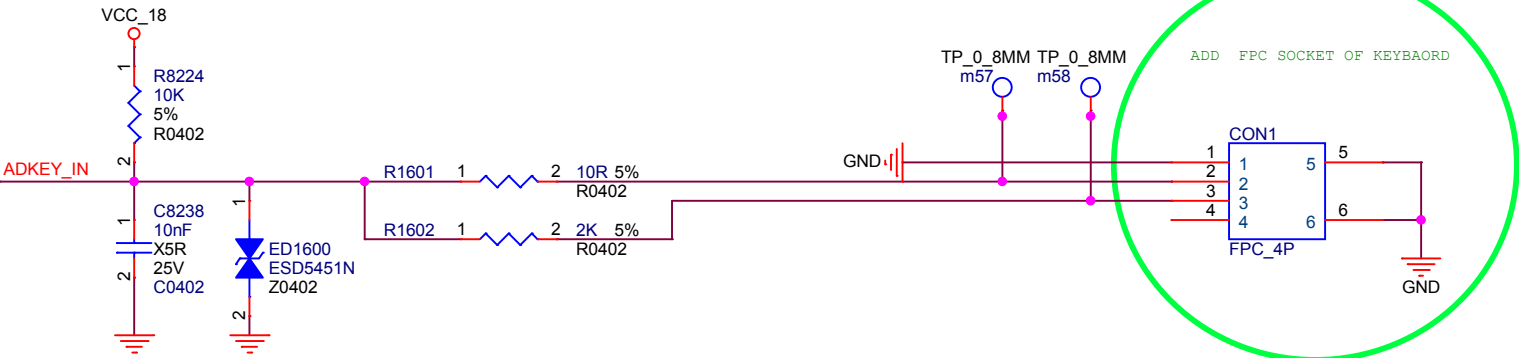
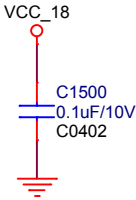
RK3288_U



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Project:	SP8W_MAIN_V01		
File:	14.RK3288 USB/HSIC Controller		
Date:	Thursday, August 31, 2017	Rev:	V01
Designed by:	CIMI	Sheet:	9 of 26

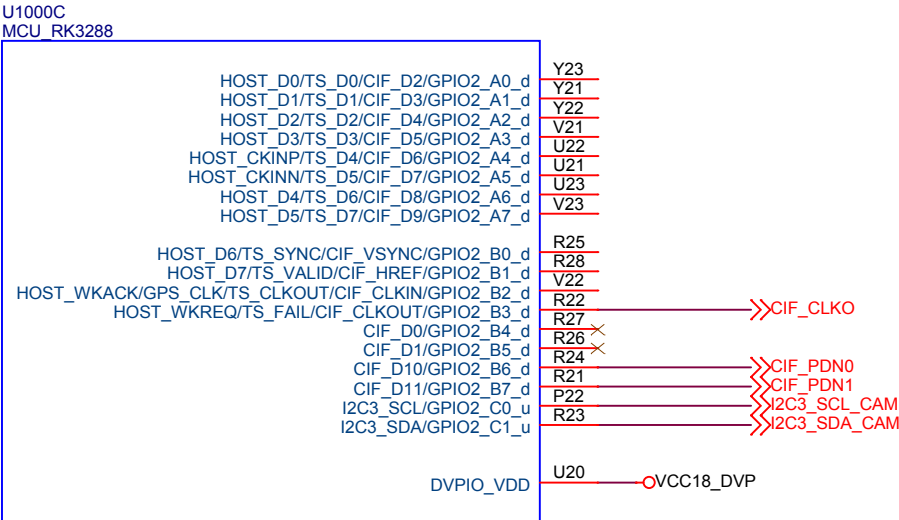


Note: All the capacitor should be place close to the power pin of RK3288.

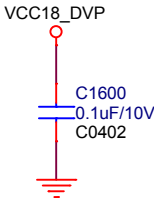


KEY BAORD

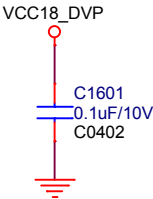
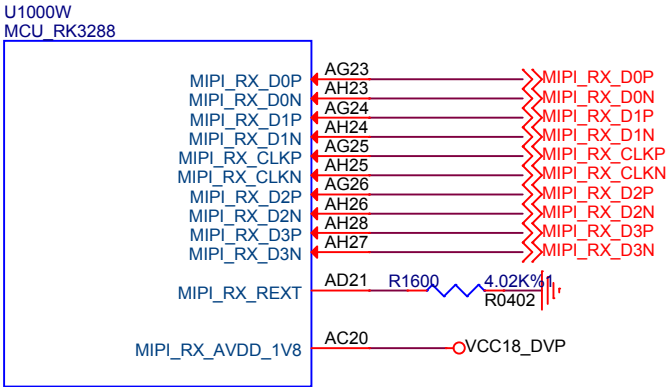
RK3288_C



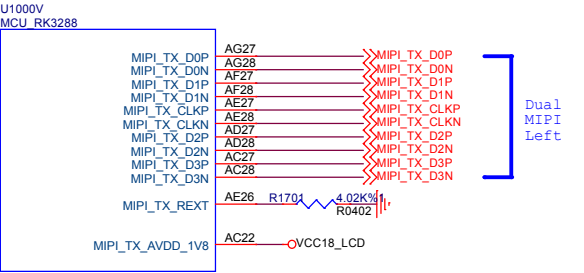
Note:All the capacitor should be place close to the power pin of RK3288.



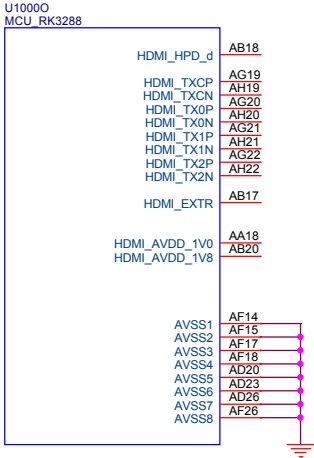
RK3288_W



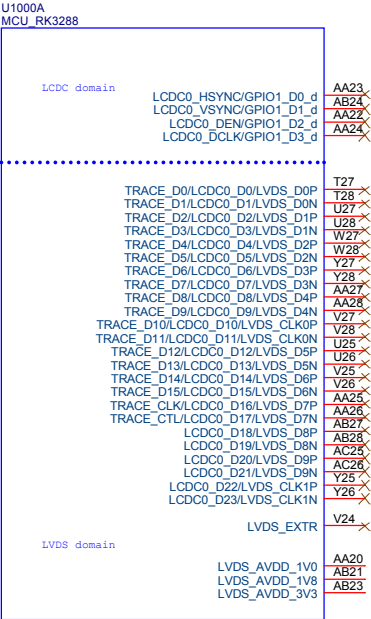
RK3288_V



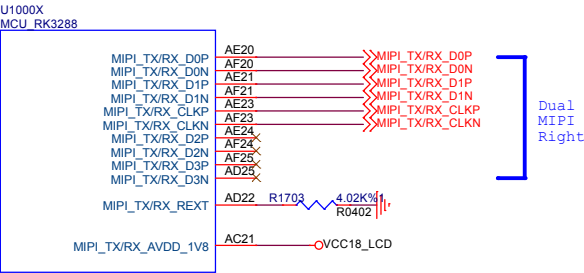
RK3288_O



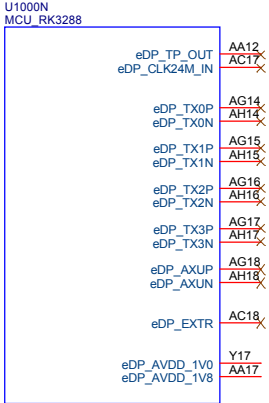
RK3288_A



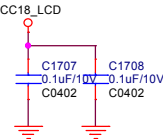
RK3288_X



RK3288_N

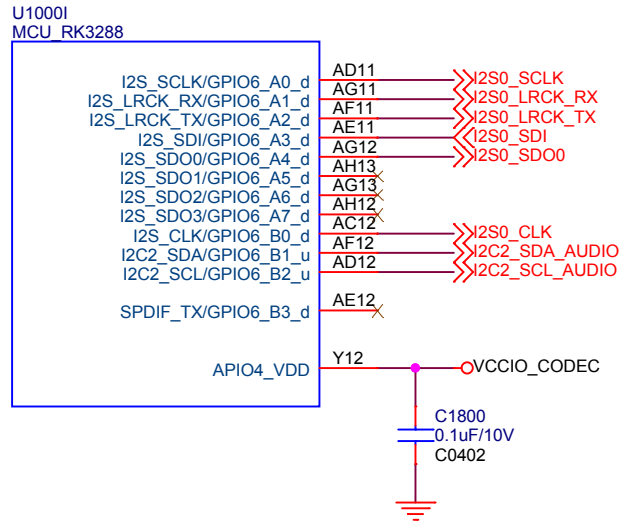
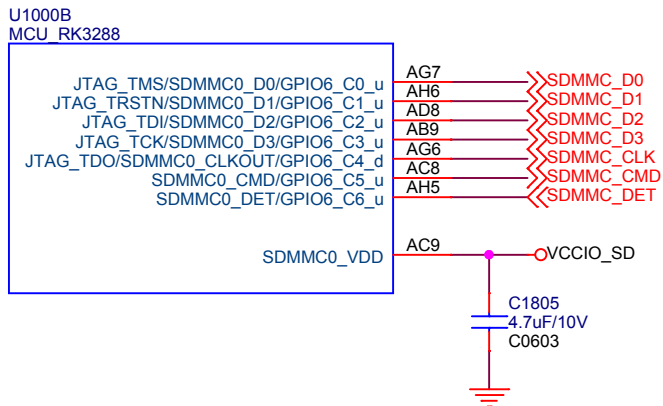
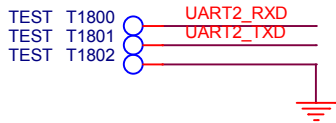
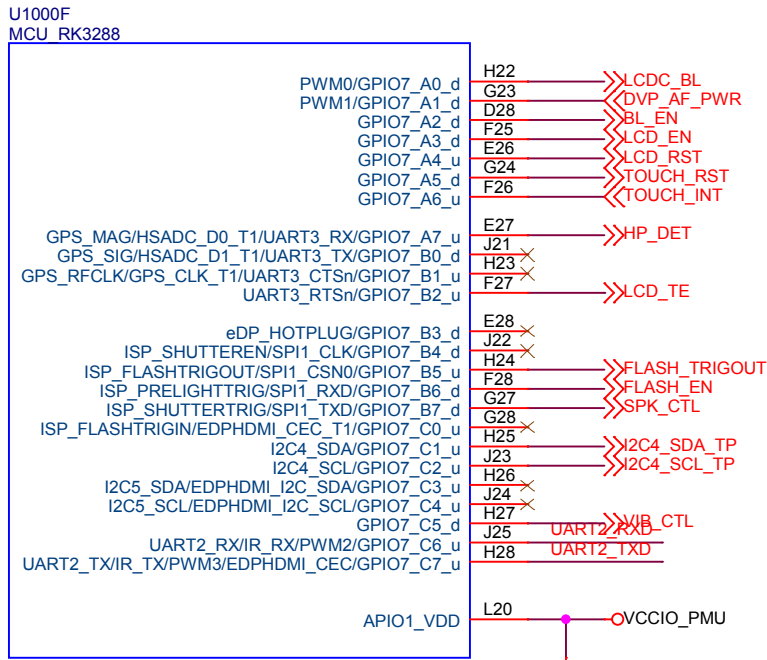


Note: All the capacitor should be place close to the power pin of RK3288.

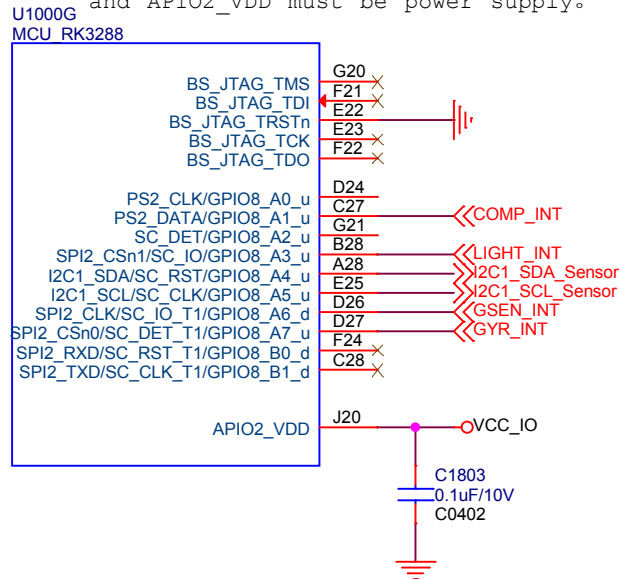


Correspondence between LCDC DATA and RGB

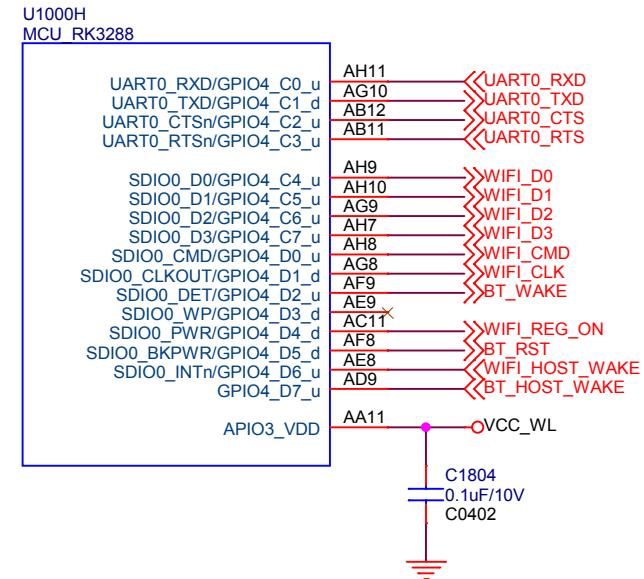
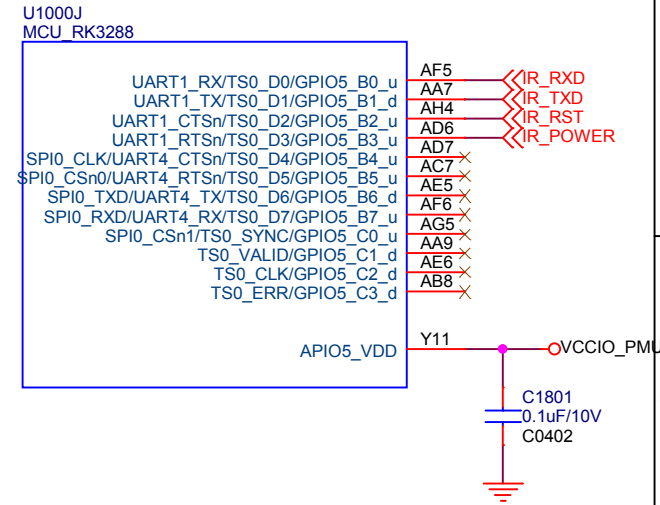
LCDC_D0	B0	LCDC_D8	G0	LCDC_D16	R0
LCDC_D1	B1	LCDC_D9	G1	LCDC_D17	R1
LCDC_D2	B2	LCDC_D10	G2	LCDC_D18	R2
LCDC_D3	B3	LCDC_D11	G3	LCDC_D19	R3
LCDC_D4	B4	LCDC_D12	G4	LCDC_D20	R4
LCDC_D5	B5	LCDC_D13	G5	LCDC_D21	R5
LCDC_D6	B6	LCDC_D14	G6	LCDC_D22	R6
LCDC_D7	B7	LCDC_D15	G7	LCDC_D23	R7



Note:BS_JTAG_TRSTn must be connected to VSS and APIO2_VDD must be power supply.

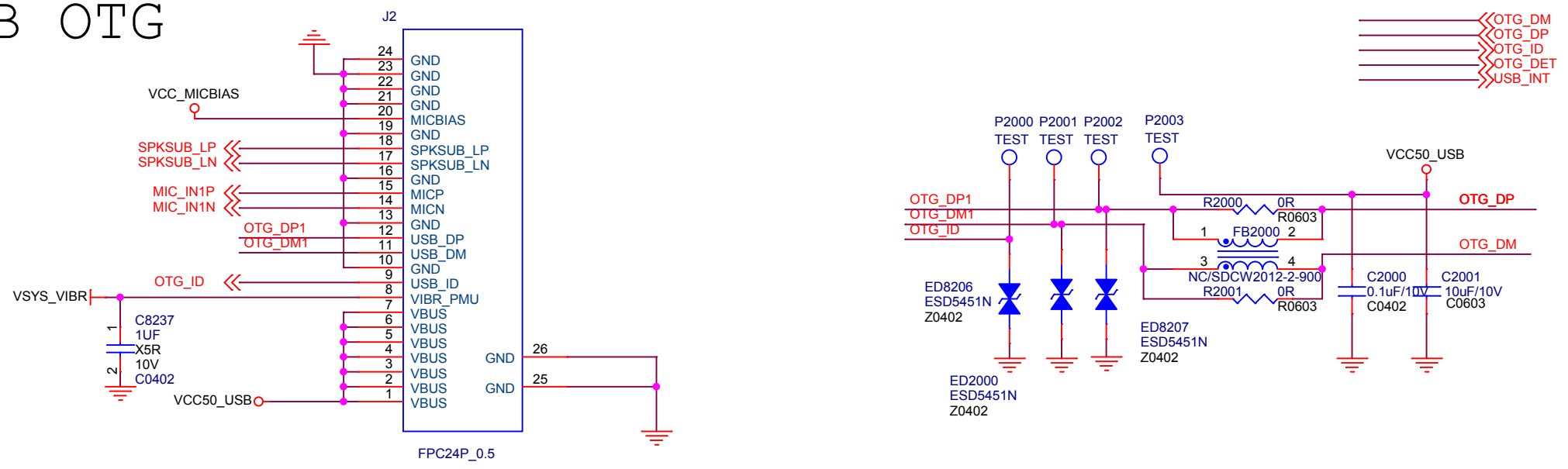


Note:All the capacitor should be place close to the power pin of RK3288.

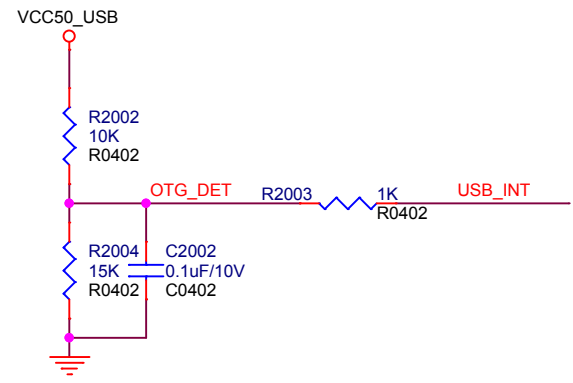


AURA Technology Limited			
Project:	SP8W_MAIN_V01		
File:	18.RK3288 GPIO		
Date:	Thursday, August 31, 2017	Rev:	V01
Designed by:	CIMI	Sheet:	13 of 26

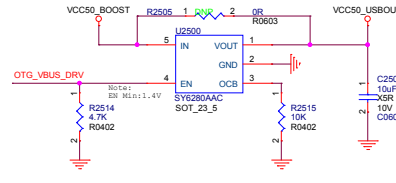
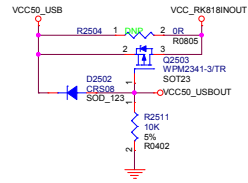
USB OTG



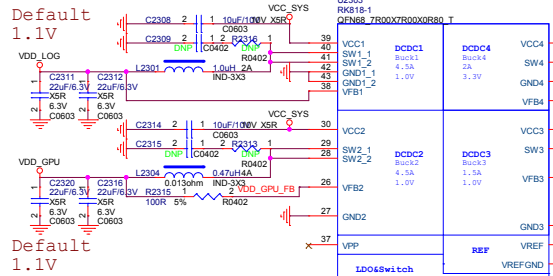
USB Detection



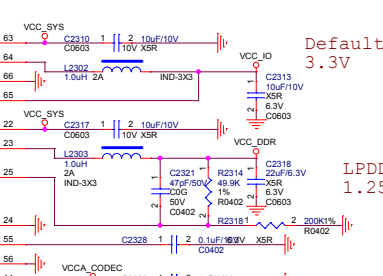
USB/OTG



Default
1.1V



Default
1.1V

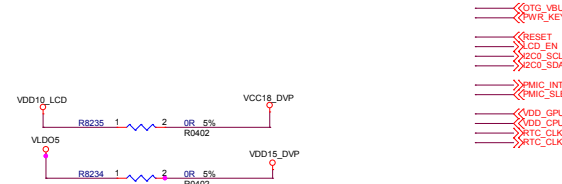
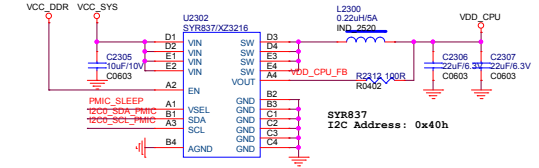


Default
3.3V

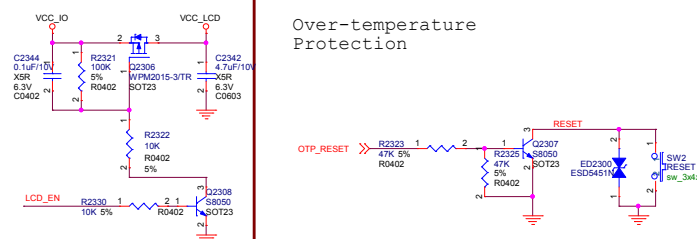
LPDDR3
1.25V

DDR Type	Output Voltage	R2314	R2318
DDR1	1.35V	100K	100K
DDR2	1.15V	47K	47K
LPDDR2	1.25V	47K	47K

PowerName	PMU Channel	PMU Channel	Output Voltage
VCC_SYS	PMU1	PMU1	1.1V
VCC_GPU	PMU2	PMU2	1.1V
VCC_IO	PMU3	PMU3	1.1V
VCC_DDR	PMU4	PMU4	1.1V
VCC_LCD	PMU5	PMU5	1.1V
VCC_WL	PMU6	PMU6	1.1V
VCC_PMU	PMU7	PMU7	1.1V
VCC_BAT	PMU8	PMU8	1.1V
VCC_OTG	PMU9	PMU9	1.1V
VCC_OTG_VBUS	PMU10	PMU10	1.1V
VCC_OTG_DM	PMU11	PMU11	1.1V
VCC_OTG_DP	PMU12	PMU12	1.1V
VCC_OTG_VBUS_DRV	PMU13	PMU13	1.1V
VCC_OTG_VBUS_PKEY	PMU14	PMU14	1.1V
VCC_OTG_VBUS_RESET	PMU15	PMU15	1.1V
VCC_OTG_VBUS_SLEEP	PMU16	PMU16	1.1V
VCC_OTG_VBUS_WAKE	PMU17	PMU17	1.1V
VCC_OTG_VBUS_FB	PMU18	PMU18	1.1V
VCC_OTG_VBUS_CPU_FB	PMU19	PMU19	1.1V
VCC_OTG_VBUS_RTC_CLKOUT1	PMU20	PMU20	1.1V
VCC_OTG_VBUS_RTC_CLKOUT2	PMU21	PMU21	1.1V



Over-temperature
Protection

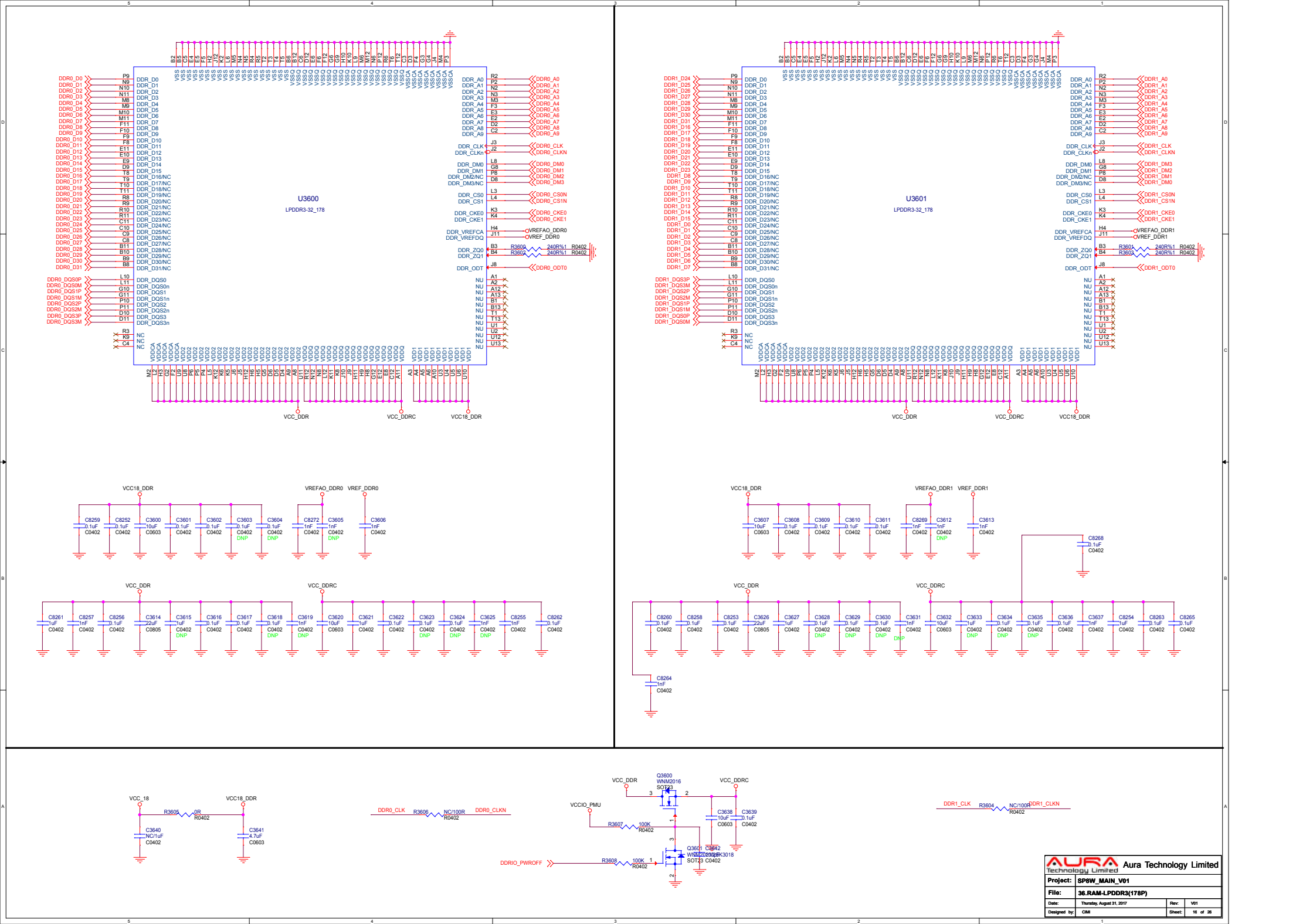


Power for WIFI+BT

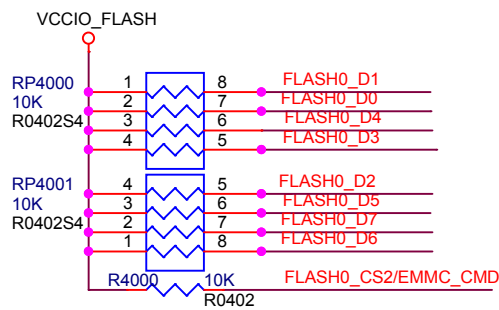
Power for VCCIO_PMU

Power for DVP power VCC_20

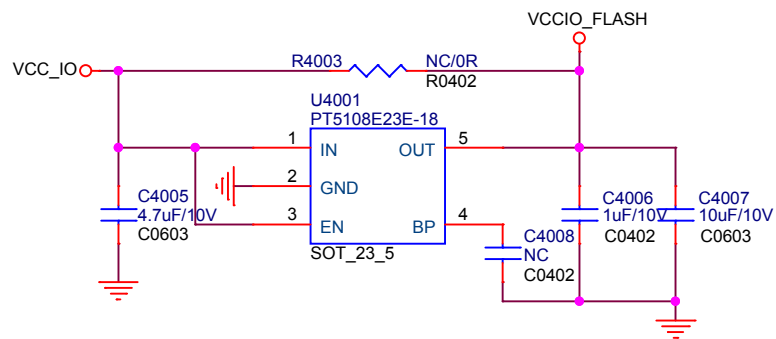
Battery



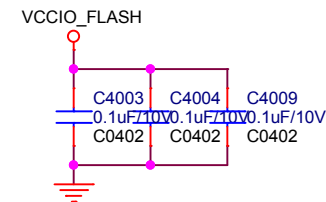
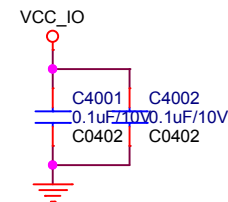
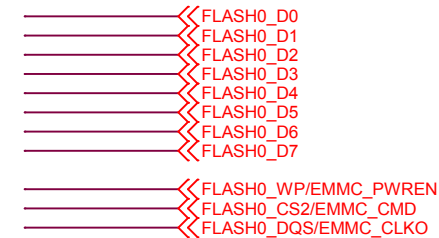
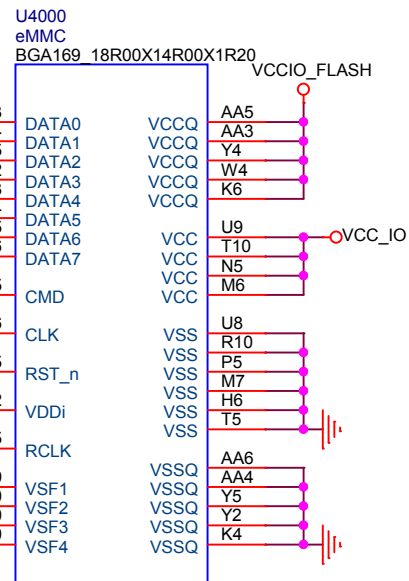
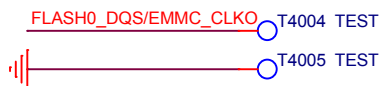
eMMC FLASH



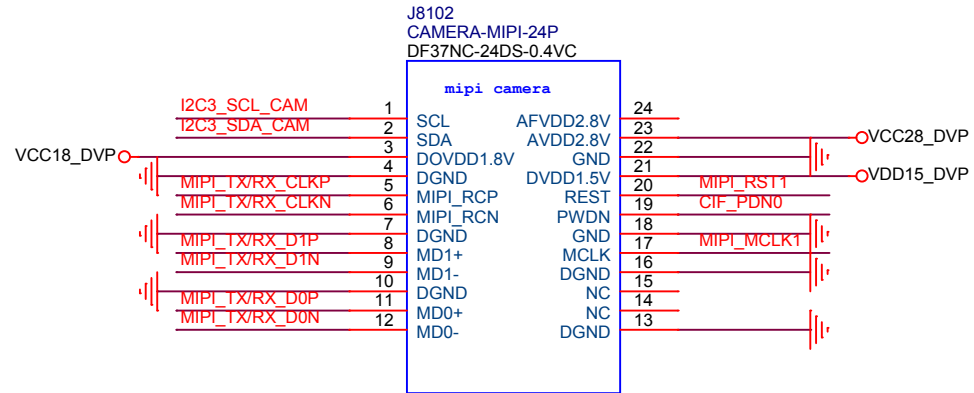
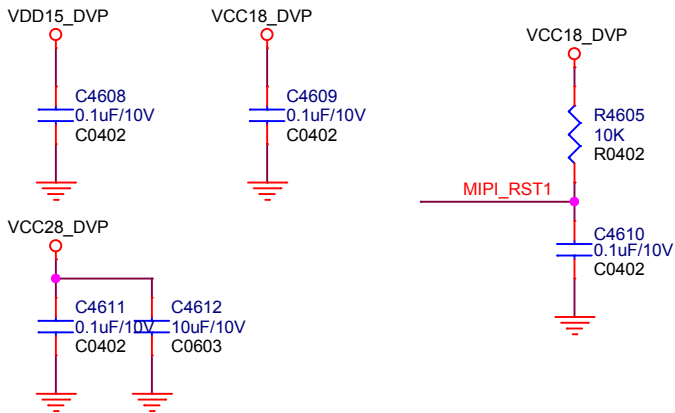
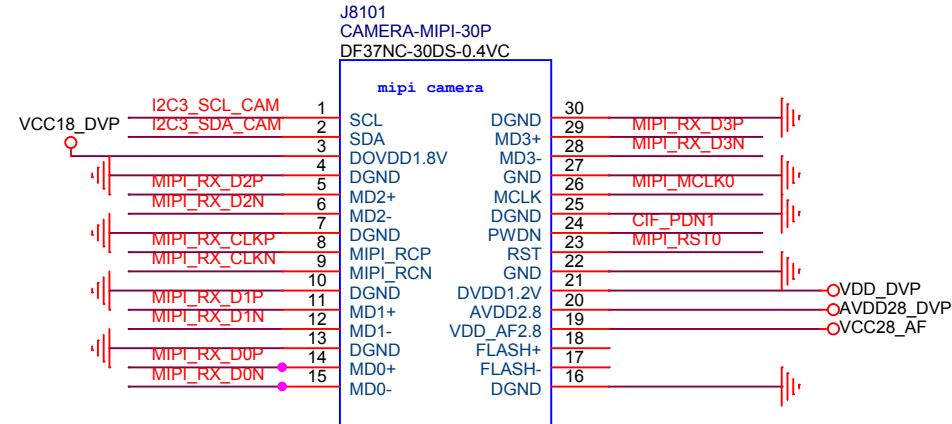
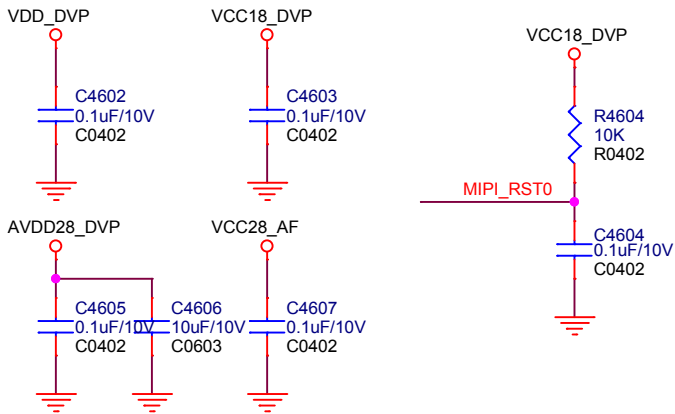
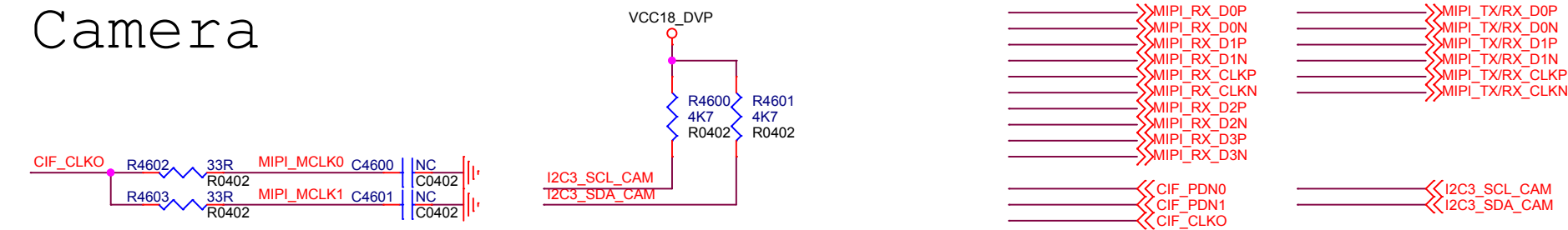
Note:
U4001 must be use for Sandisk 5.0 TLC eMMC,
because it support only 1.8V VCCQ power supply.



Note:
Reserve PAD for Update.

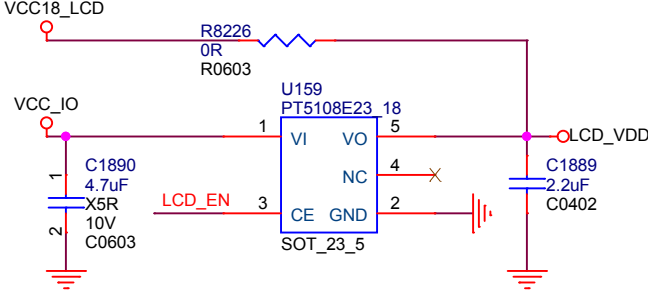
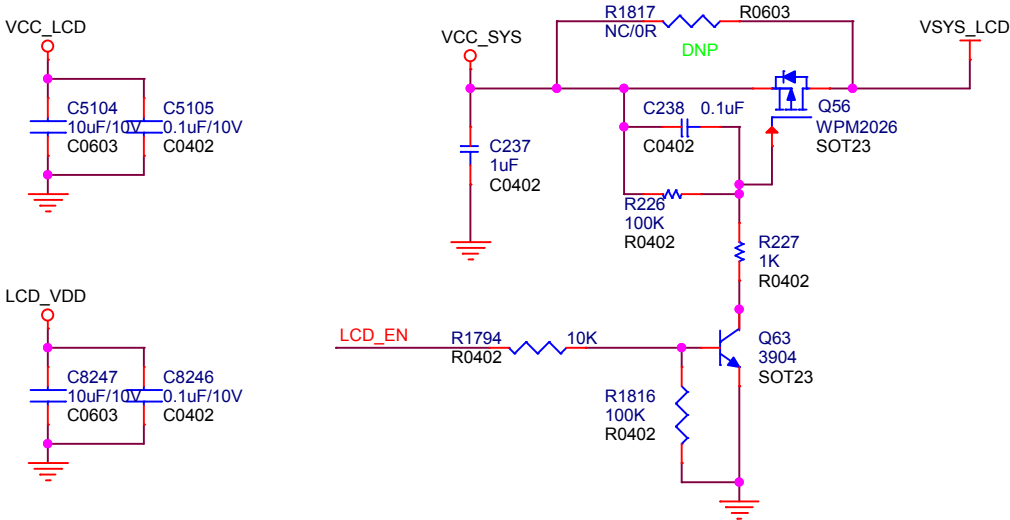
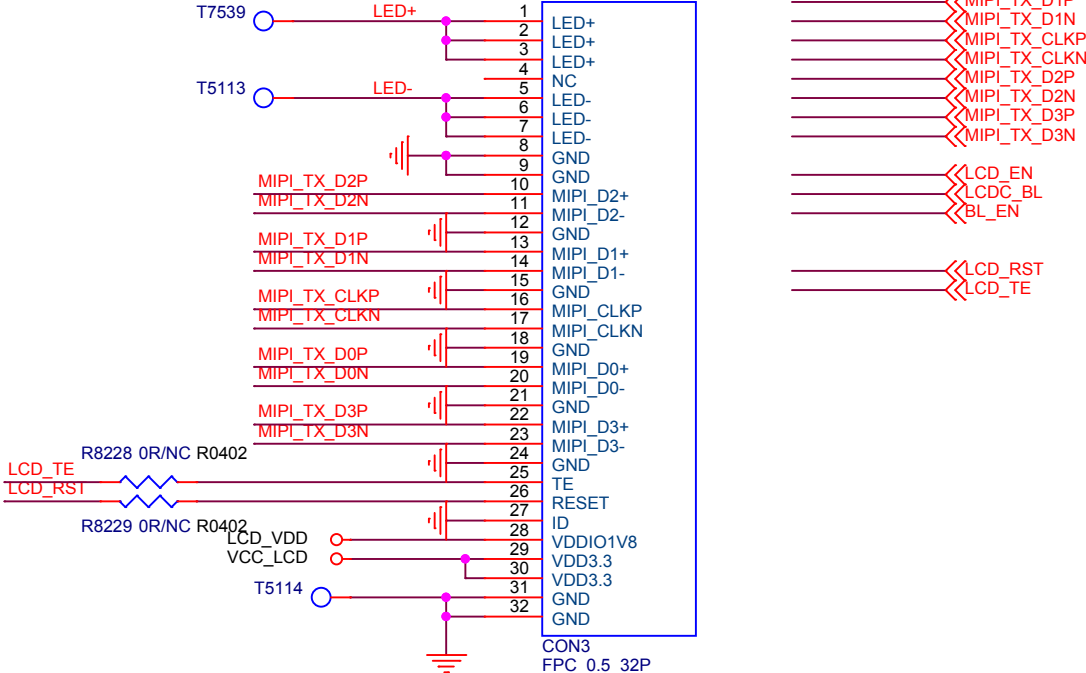
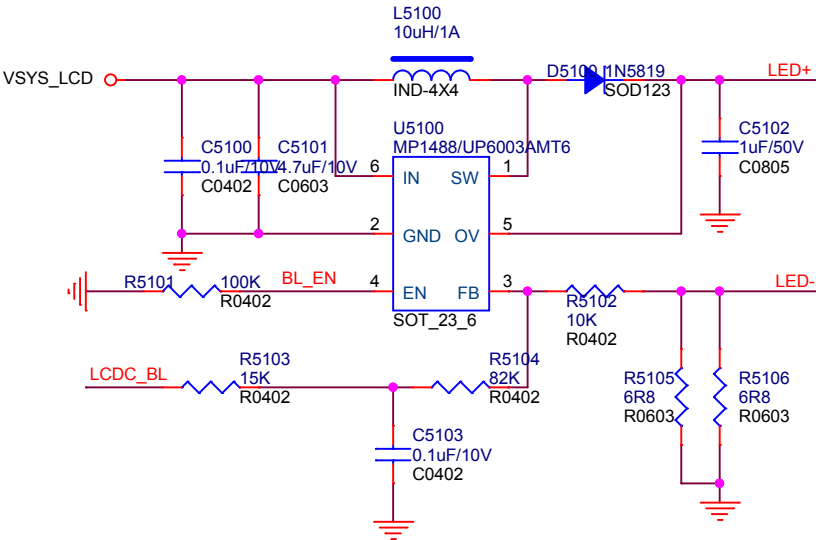


MIPI Camera



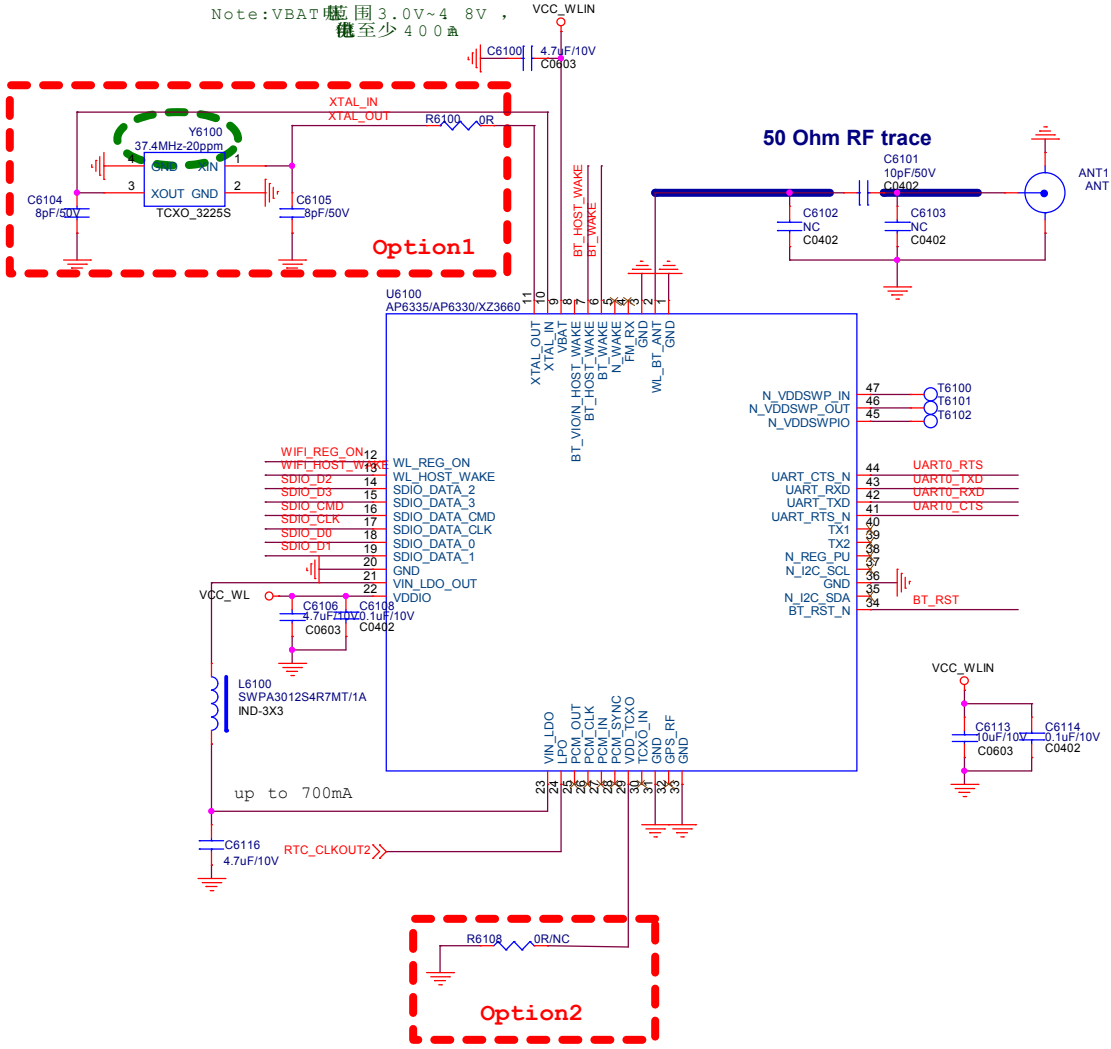
MIPI Panel

Note:Single MIPI LCM must be connected to MIPI_TX controller

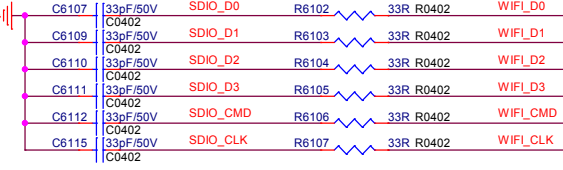
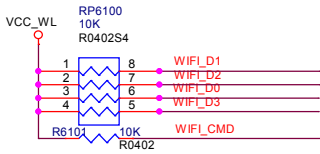


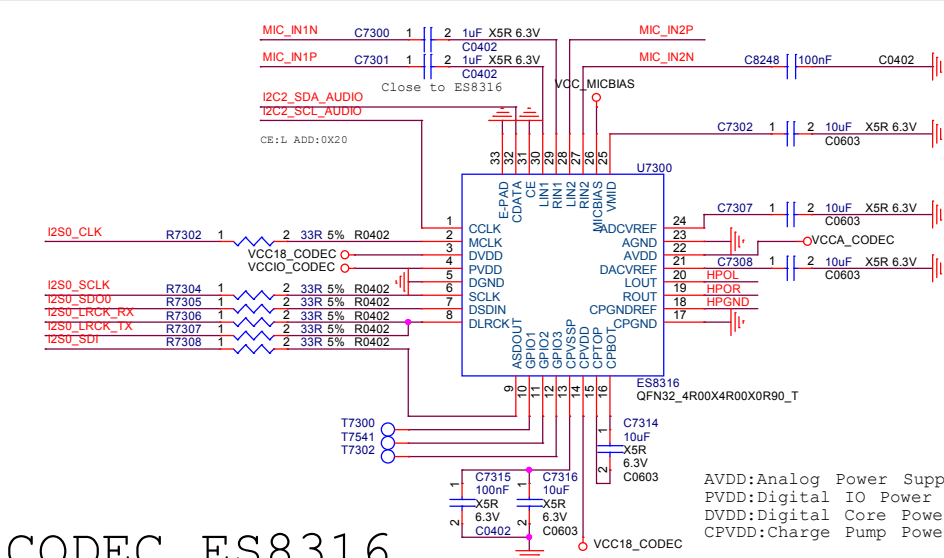
WIFI/WIFI ac/BT MODULE

	Option1	Option2	Y6100	Default:AP6335
AP6335	YES	YES	37.4MHz	Note:
AP6330	YES	NO	26MHz	YES: 框内要贴
XZ3660	YES	NO	26MHz	NO: 框内不贴
AP6255	YES	YES	37.4MHz	



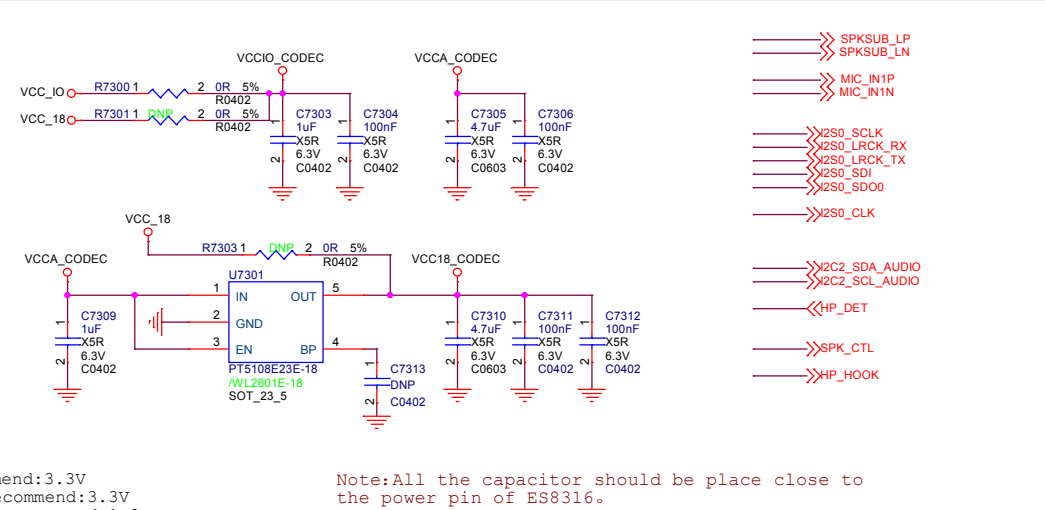
- WIFI_D0
- WIFI_D1
- WIFI_D2
- WIFI_D3
- WIFI_CMD
- WIFI_CLK
- WIFI_REG_ON
- WIFI_HOST_WAKE
- BT_RST
- UART0_RTS
- UART0_TXD
- UART0_RXD
- UART0_CTS
- BT_HOST_WAKE
- BT_WAKE





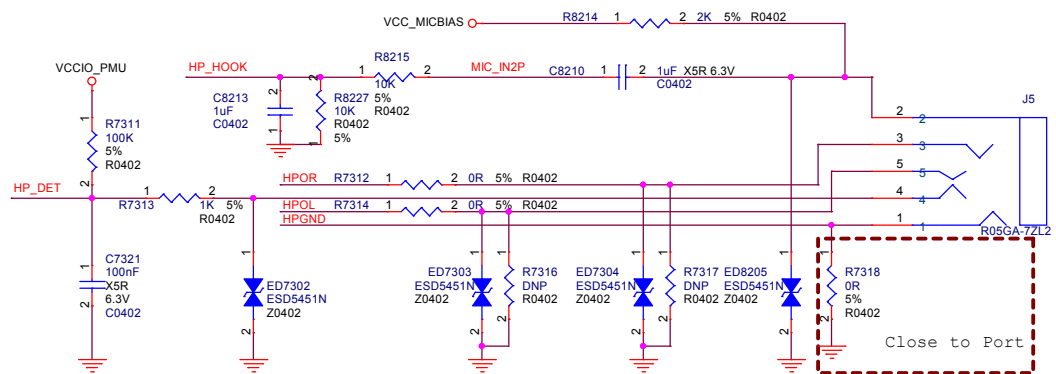
CODEC ES8316

AVDD: Analog Power Supply (1.6-3.3V) Recommend: 3.3V
PVDD: Digital IO Power Supply (1.6-3.3V) Recommend: 3.3V
DVDD: Digital Core Power Supply (1.6-3.3V) Recommend: 1.8V
CPVDD: Charge Pump Power Supply (1.6-2.0V) Recommend: 1.8V

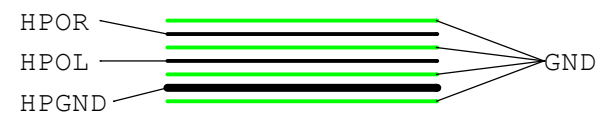


Note: All the capacitor should be place close to the power pin of ES8316.

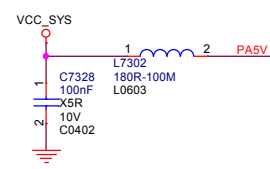
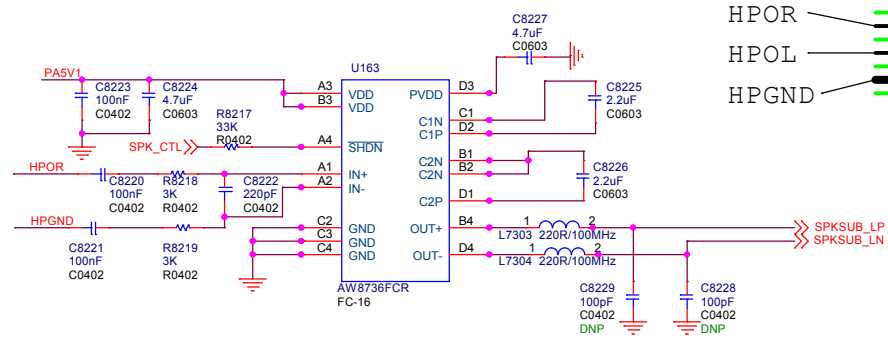
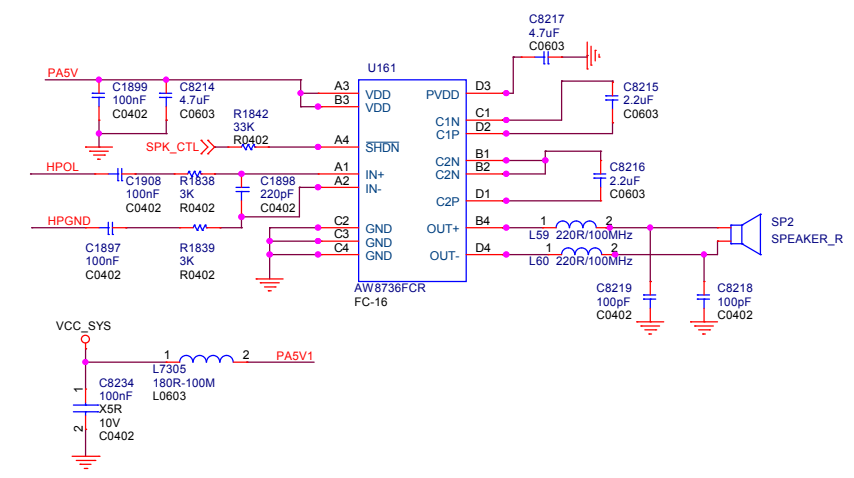
Ear Phone

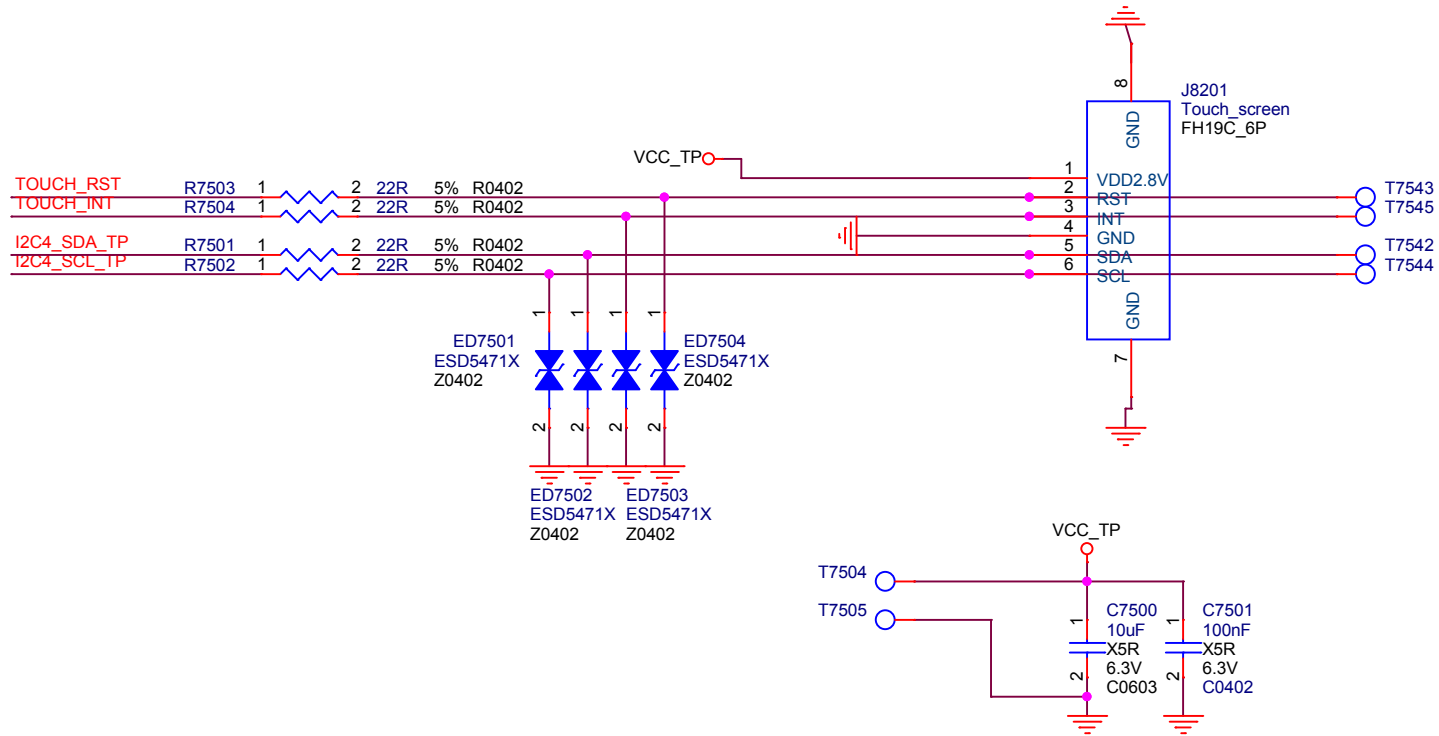


Note: HPOR/HPOL/HPGND LAYOUT



SPEAKER





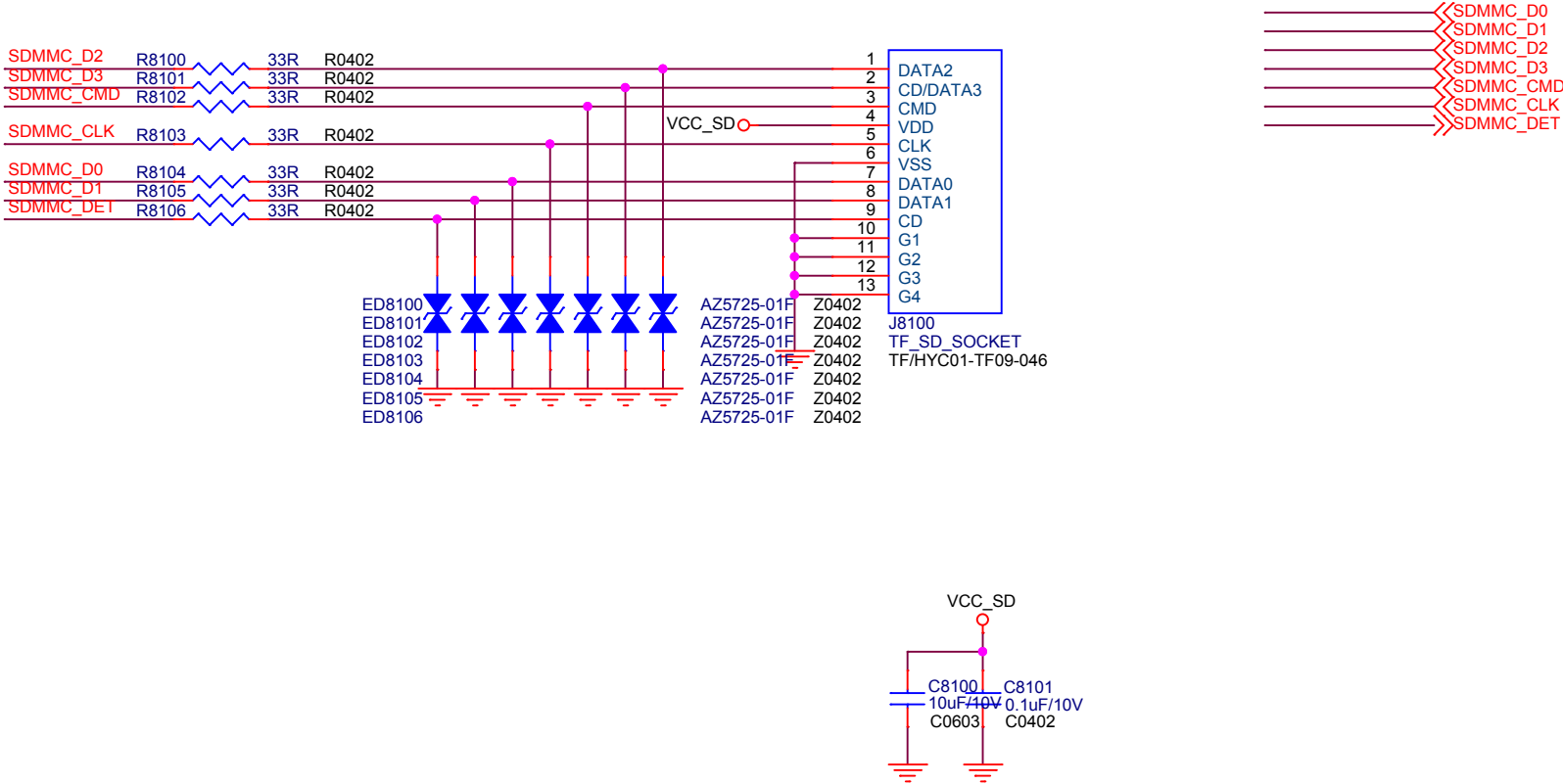
Note: All devices should be placed close to the power pin of TP Port.

AURA Aura Technology Limited Technology Limited			
Project:	SP8W_MAIN_V01		
File:	75.TP COF		
Date:	Thursday, August 31, 2017	Rev:	V01
Designed by:	CIMI	Sheet:	23 of 26

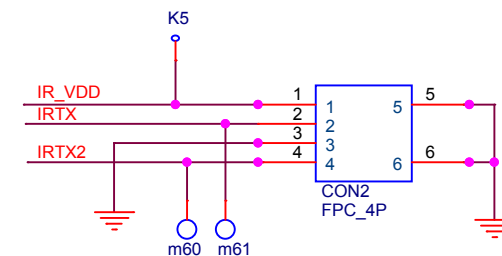
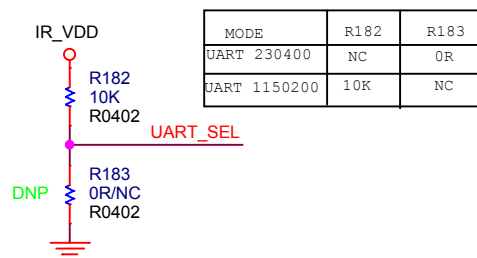
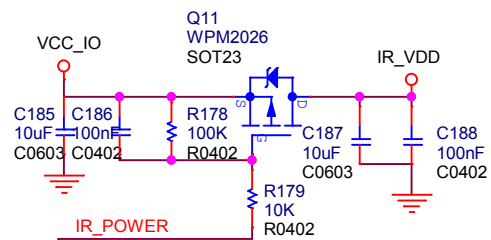
LSM303D with 3D Gsensor and E-compass

Note:
The first pin of AK8963C must be
place on the lower left corner of
PCB.

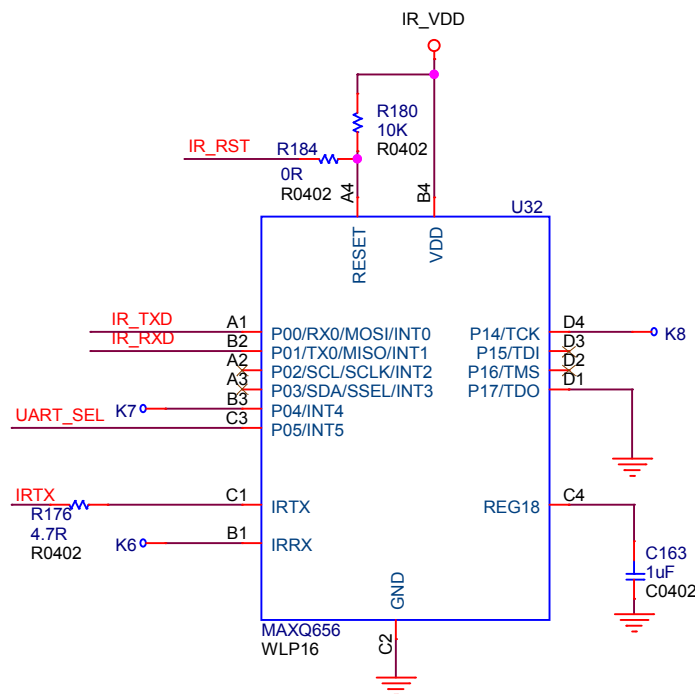
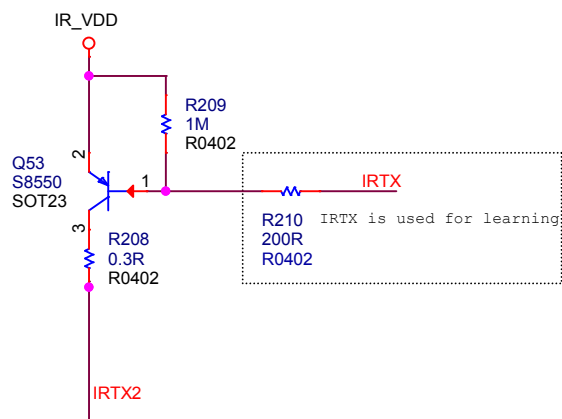
TF CARD



D



C



Note: All the capacitor should be place close to the power pin of Sensor.

A