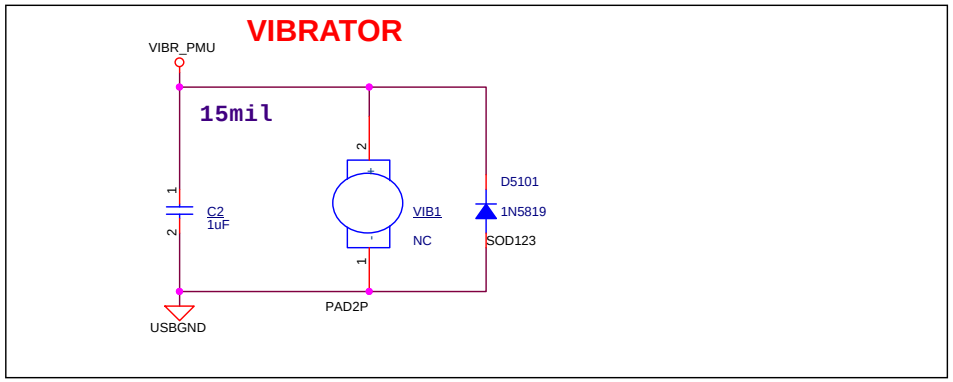
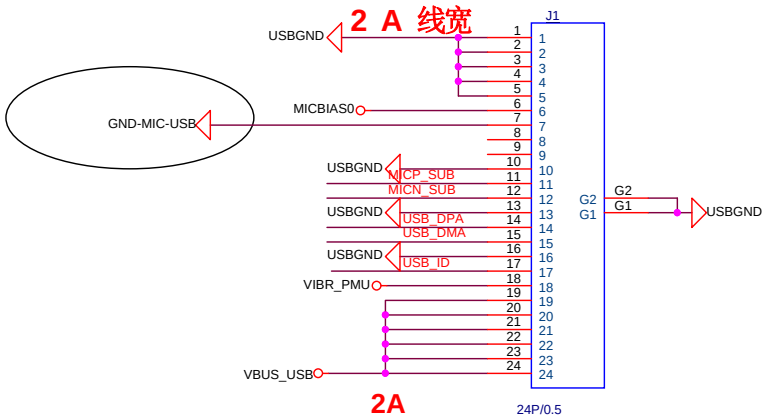
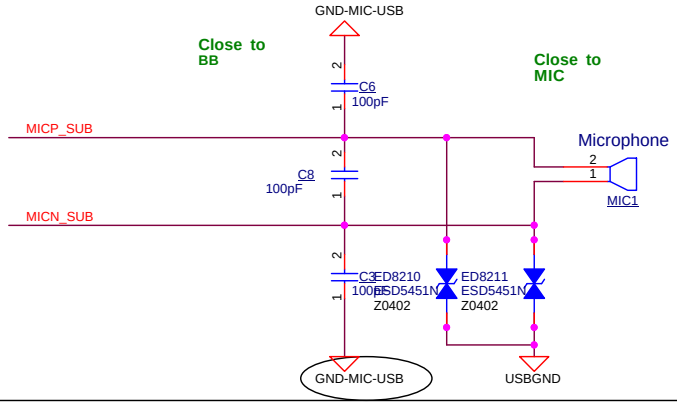
VIBRATOR



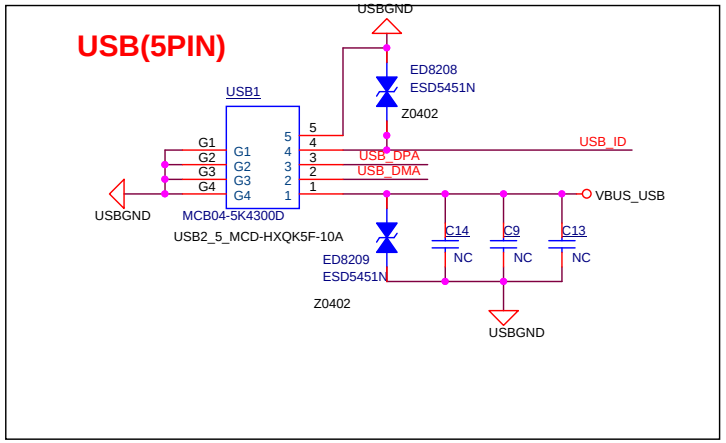
MAIN CONNECTER

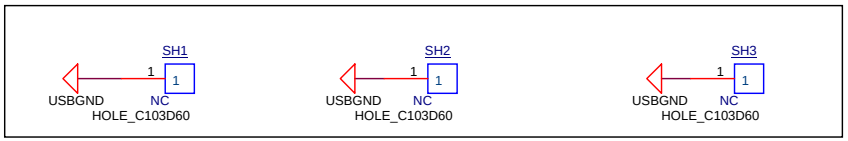


MIC



USB(5PIN)





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

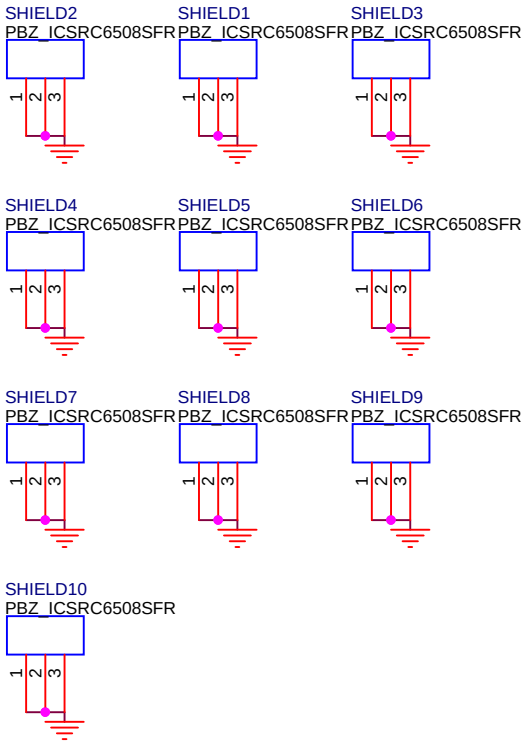
4.I2C3 Camera:

OV2659	0x30
OV8825	0x36

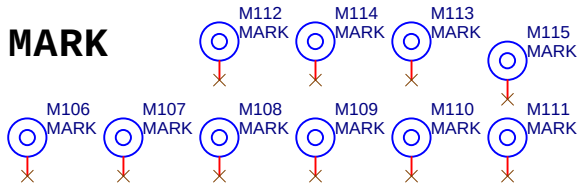
5.I2C4 Touch:

CT363	0x1b
FT5506	
GSL3680	0x40

SHIELD



MARK

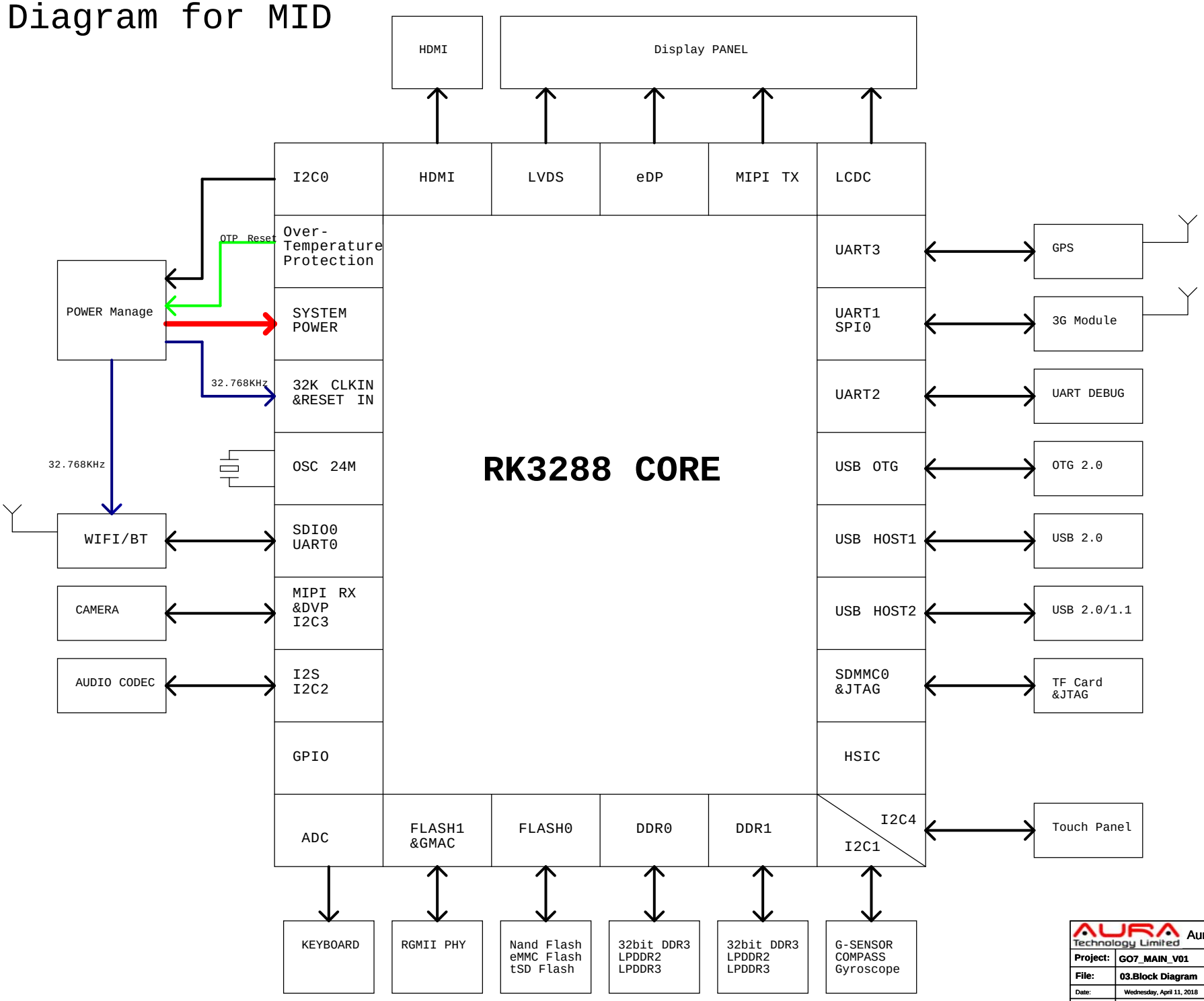


Aura Technology Limited			
Project:	GO7_MAIN_V01		
File:	01.Index		
Date:	Wednesday, April 11, 2018	Rev:	V01
Designed by:	Kobe	Sheet:	1 of 26

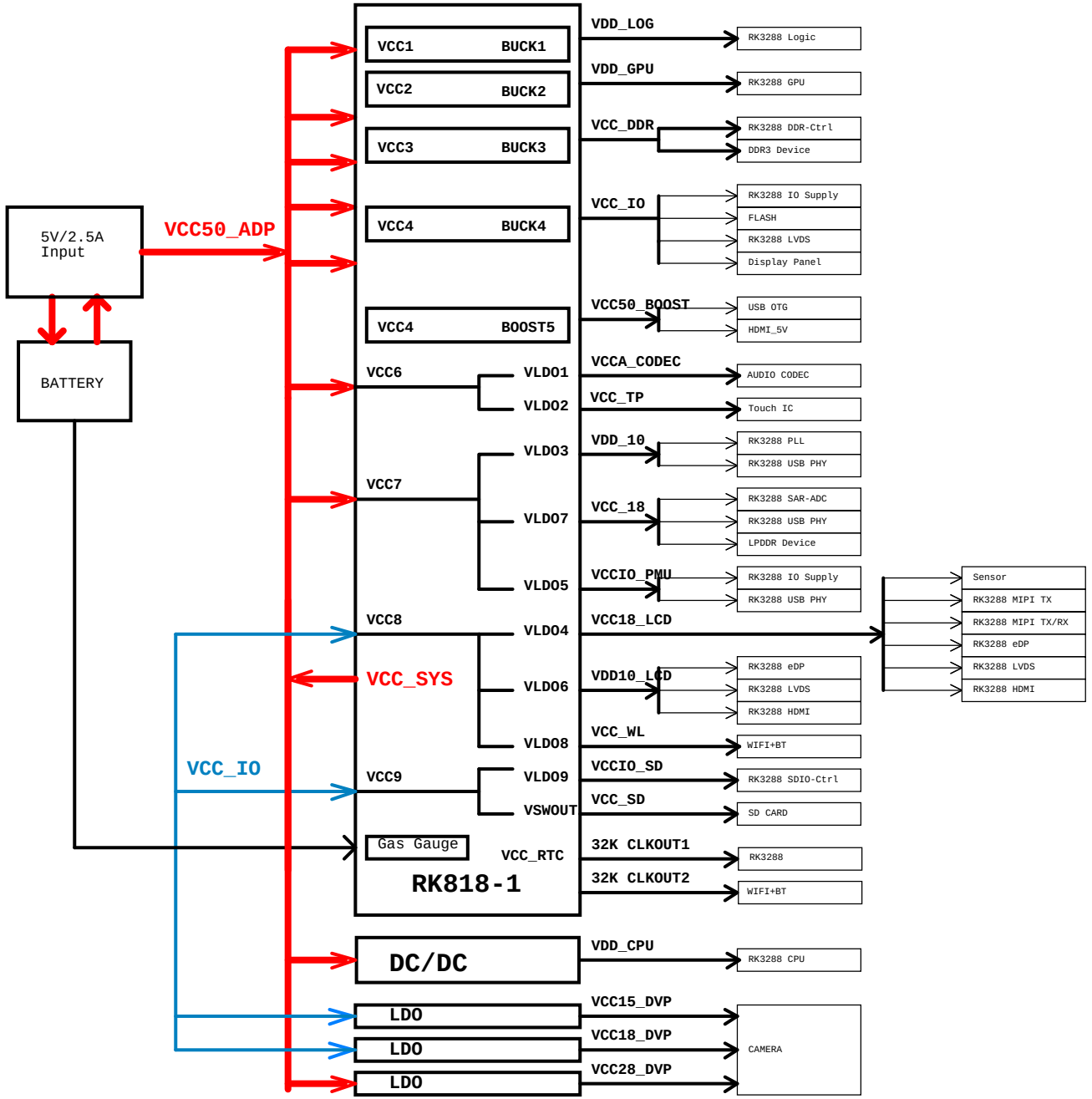
Version	Date	Author	Change Note	Approved
V01	20170814	CIMI	First edictor	
V02	20170915	CIMI	1.Changed pin defined of USB Socket.	

Aura Technology Limited			
Project:	GO7_MAIN_V01		
File:	02.Change List		
Date:	Wednesday, April 11, 2018	Rev:	V01
Designed by:	Kobe	Sheet:	2 of 26

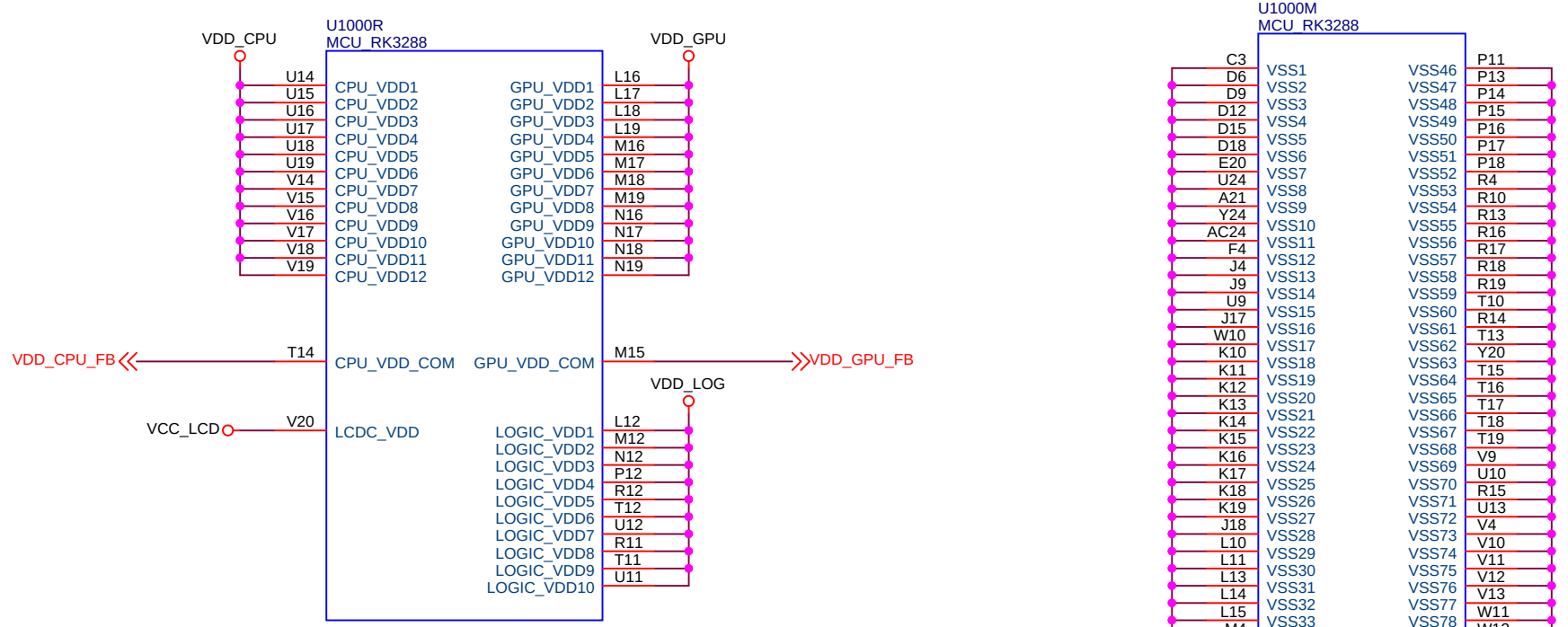
Block Diagram for MID

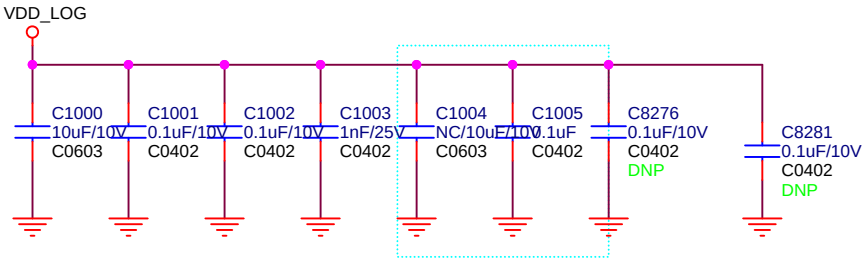


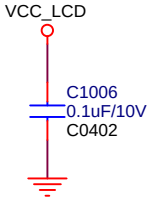
Aura Technology Limited			
Project:	GO7_MAIN_V01		
File:	03.Block Diagram		
Date:	Wednesday, April 11, 2018	Rev:	V01
Designed by:	Kobe	Sheet:	3 of 26

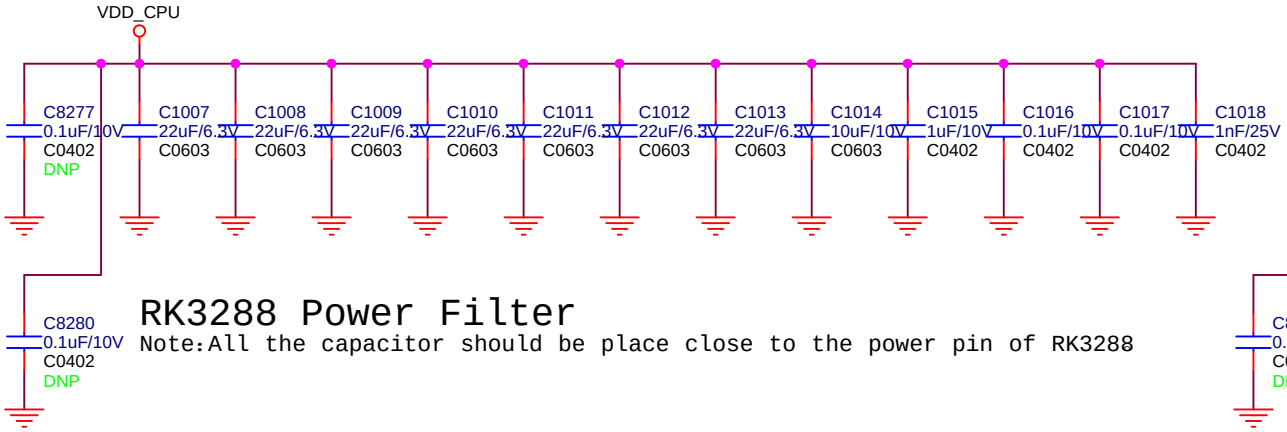


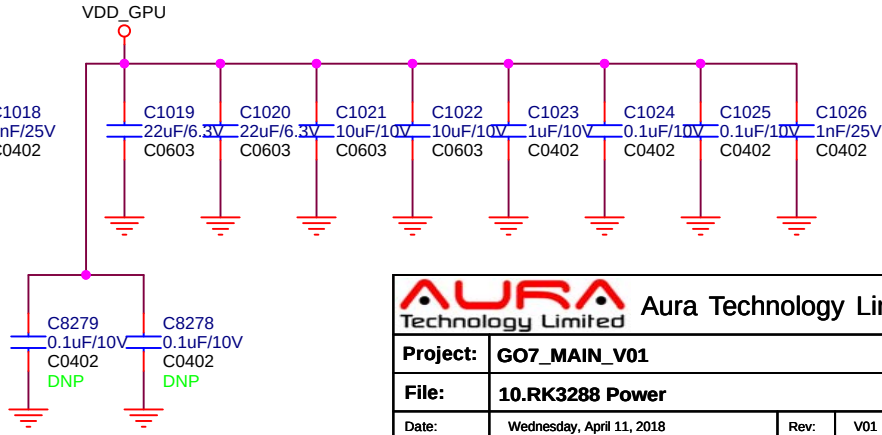
Aura Technology Limited	
Project:	GO7_MAIN_V01
File:	06.Power Tree-RK818-1
Date:	Wednesday, April 11, 2018
Rev:	V01
Designed by:	Kobe
Sheet:	4 of 26







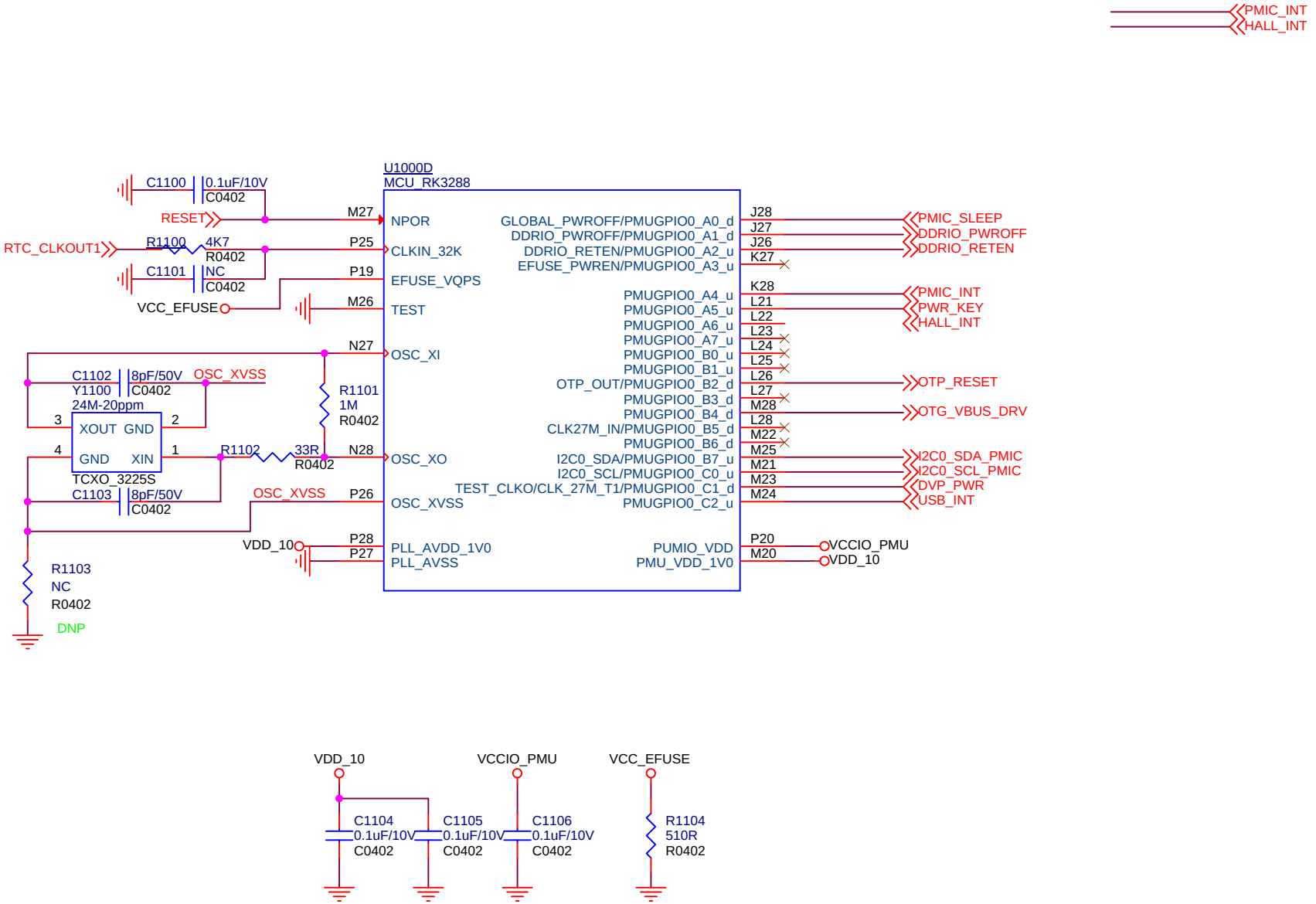




RK3288 Power Filter

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

Aura Technology Limited			
Project:	GO7_MAIN_V01		
File:	10.RK3288 Power		
Date:	Wednesday, April 11, 2018	Rev:	V01
Designed by:	Kobe	Sheet:	5 of 26

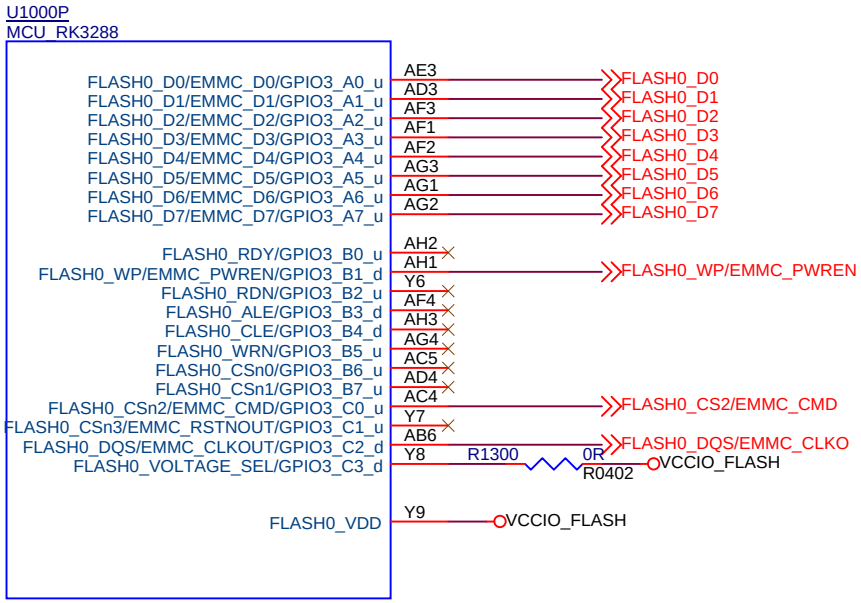


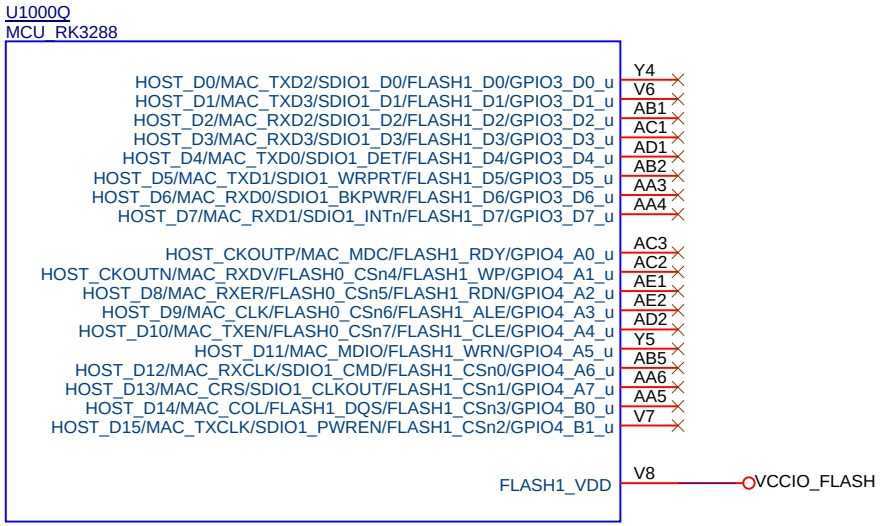
Note:All the capacitor should be place close to the power pin of RK3288。

Aura Technology Limited			
Project:	GO7_MAIN_V01		
File:	11.RK3288 PMU Controler		
Date:	Wednesday, April 11, 2018	Rev:	V01
Designed by:	Kobe	Sheet:	6 of 26

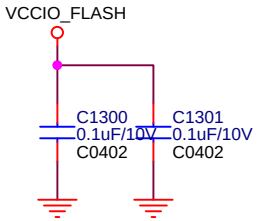
RK3288_P

RK3288_Q





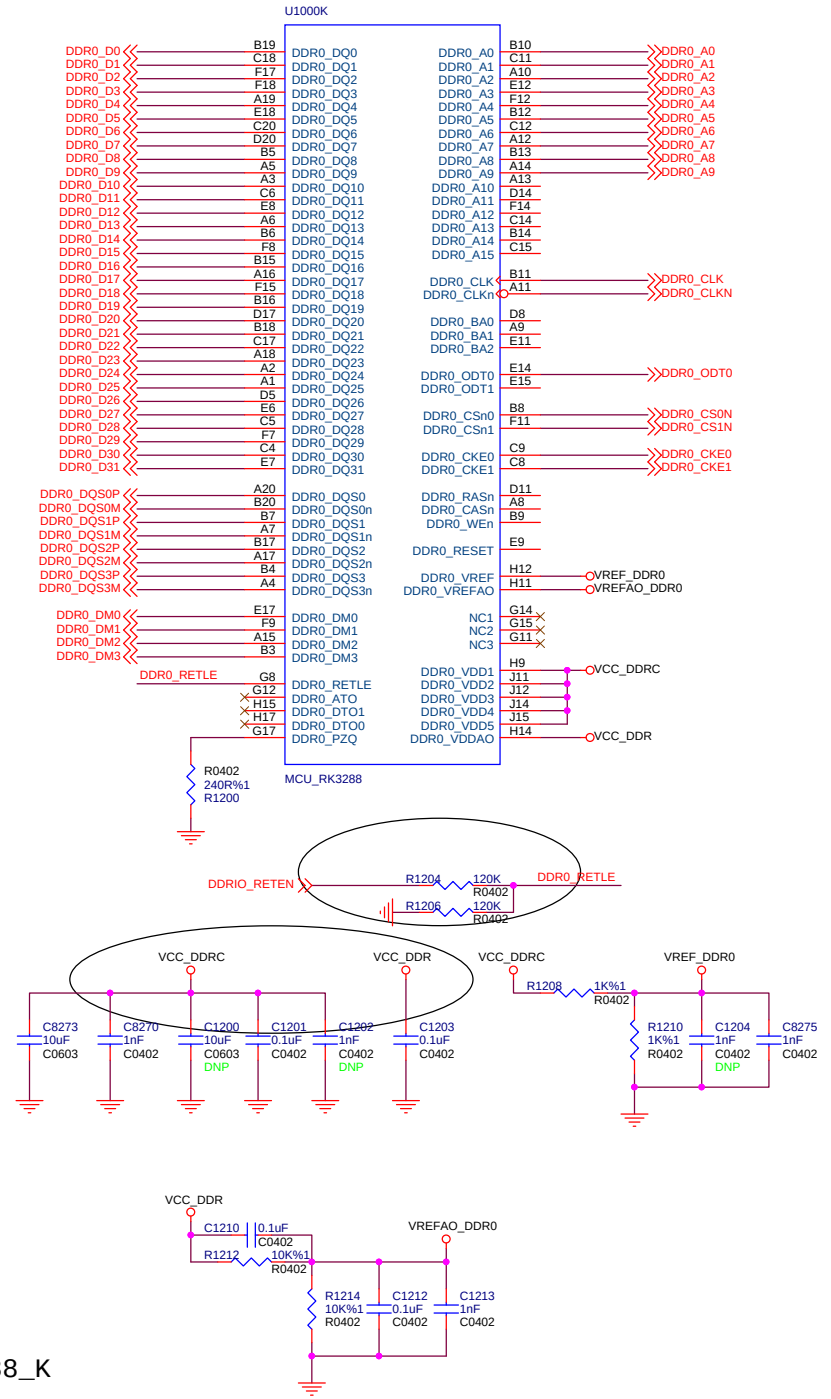
	VCCIO_FLASH=1.8V	VCCIO_FLASH=3.3V
FLASH0_VOLTAGE_SEL pin connect to	VCCIO_FLASH	Floating(Default)



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

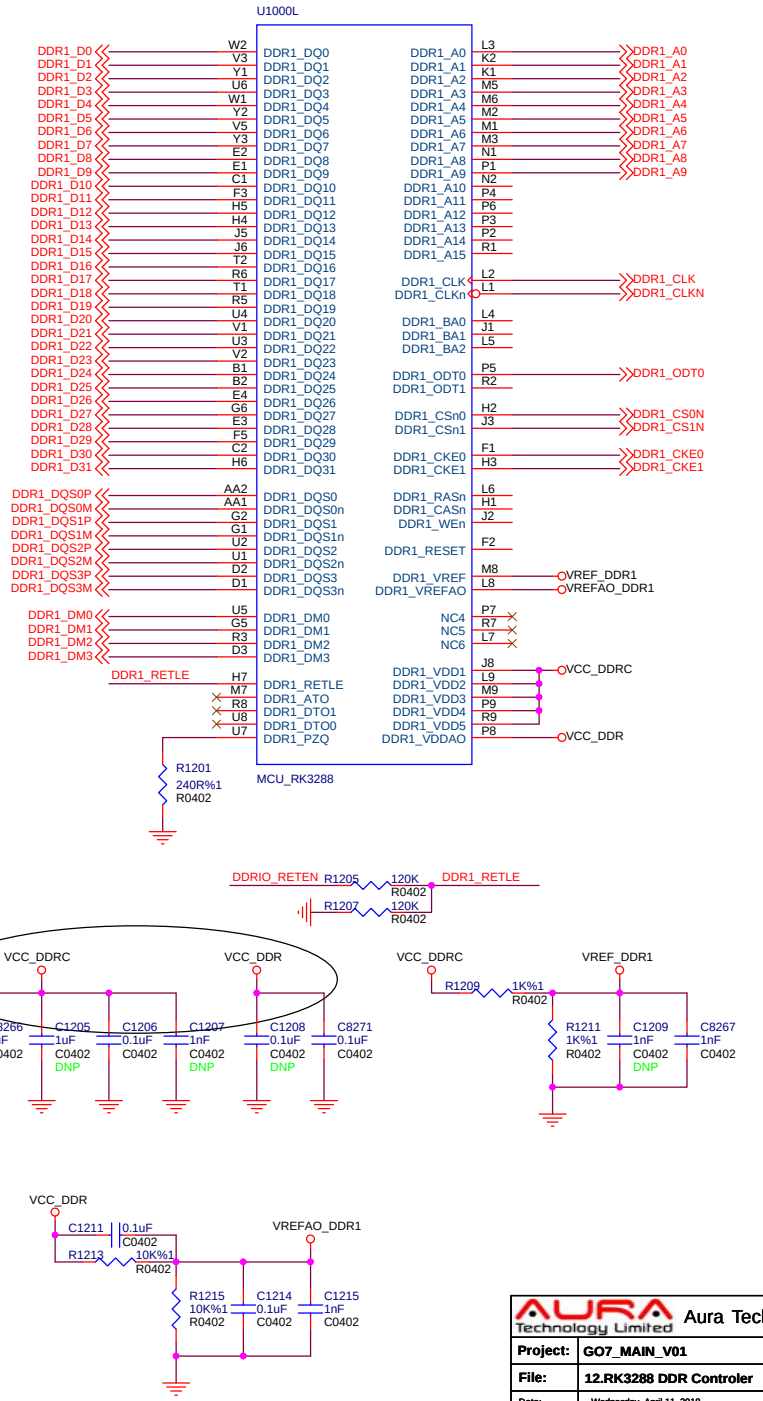
Aura Technology Limited			
Project:	GO7_MAIN_V01		
File:	13.RK3288 Flash Controler		
Date:	Wednesday, April 11, 2018	Rev:	V01
Designed by:	Kobe	Sheet:	8 of 26

RK3288 DDR Channel-0



RK3288_K

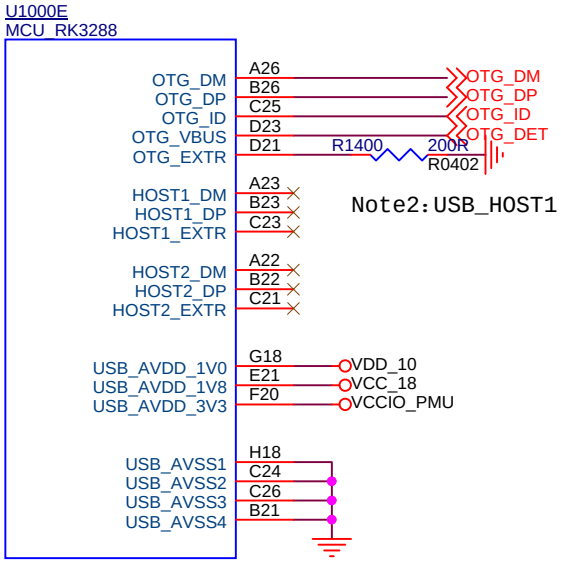
RK3288 DDR Channel-1



RK3288_L

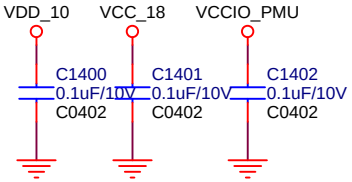
AURA Technology Limited	Aura Technology Limited		
Project:	GO7_MAIN_V01		
File:	12.RK3288 DDR Controler		
Date:	Wednesday, April 11, 2018	Rev:	V01
Designed by:	Kobe	Sheet:	8 of 26

RK3288_E

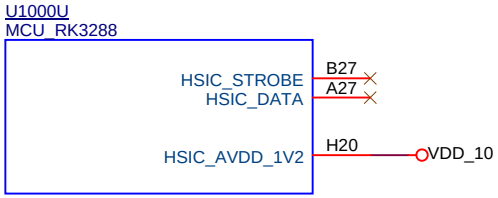


Note2:USB_HOST1 don't support USB1.1;

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

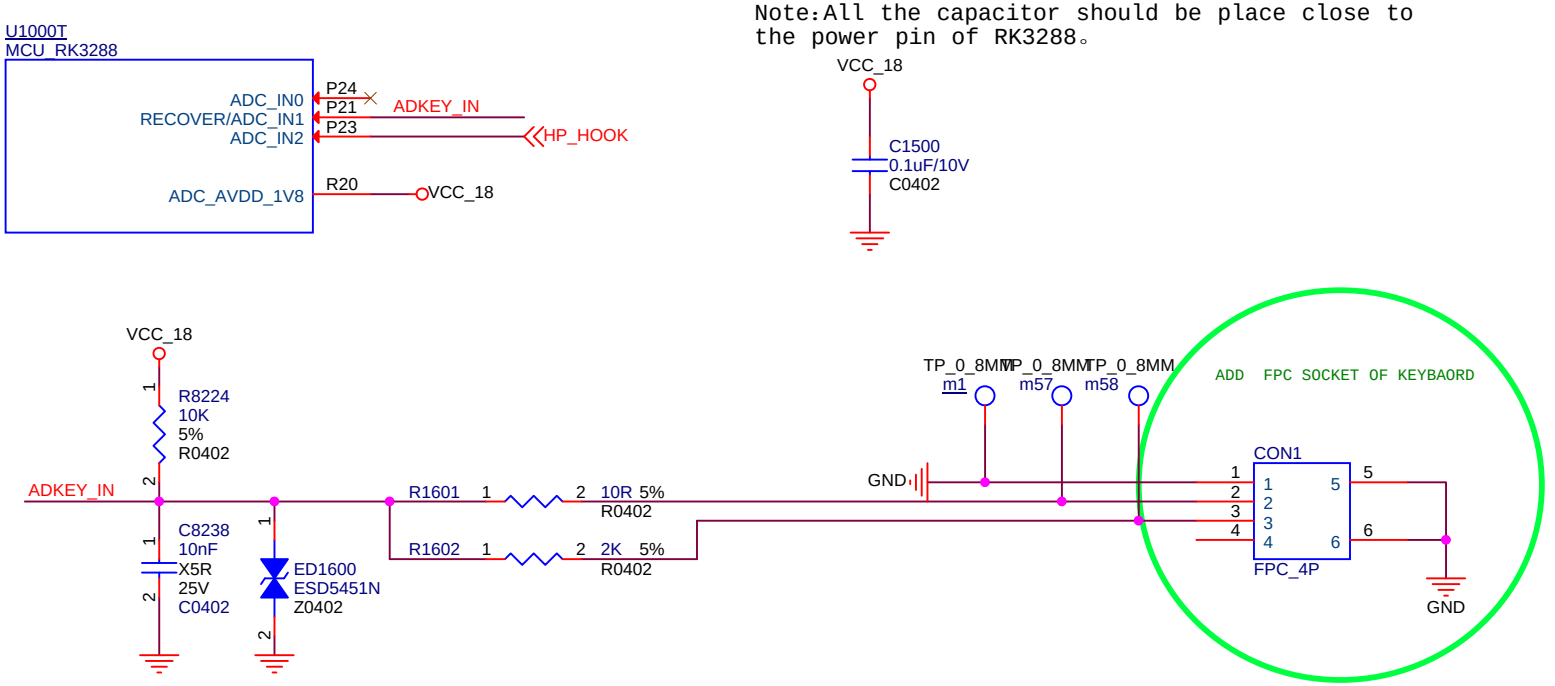


RK3288_U



Aura Technology Limited			
Project:	GO7_MAIN_V01		
File:	14.RK3288 USB/HSIC Controler		
Date:	Wednesday, April 11, 2018	Rev:	V01
Designed by:	Kobe	Sheet:	9 of 26

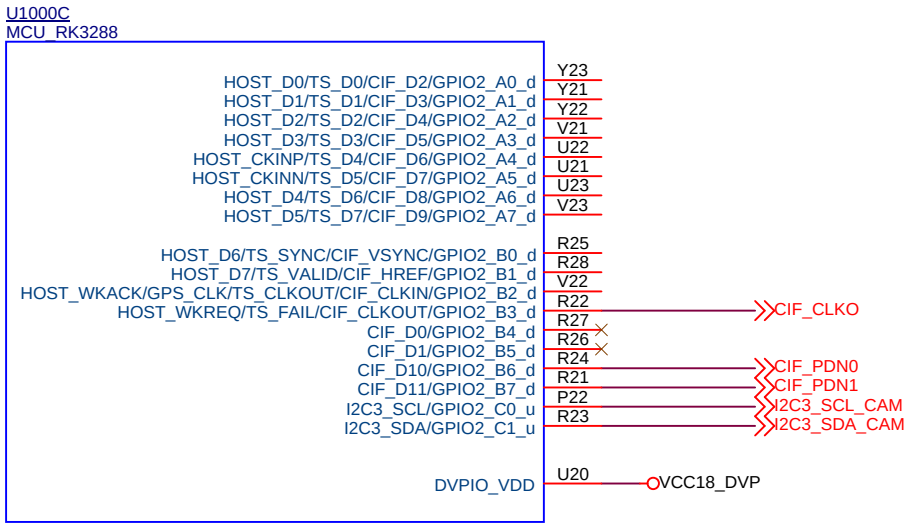
RK3288_T



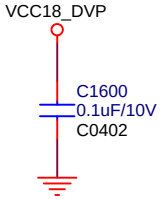
KEY BAORD

Aura Technology Limited			
Project:	GO7_MAIN_V01		
File:	15.RK3288 SARADC/Key Board		
Date:	Wednesday, April 11, 2018	Rev:	V01
Designed by:	Kobe	Sheet:	10 of 26

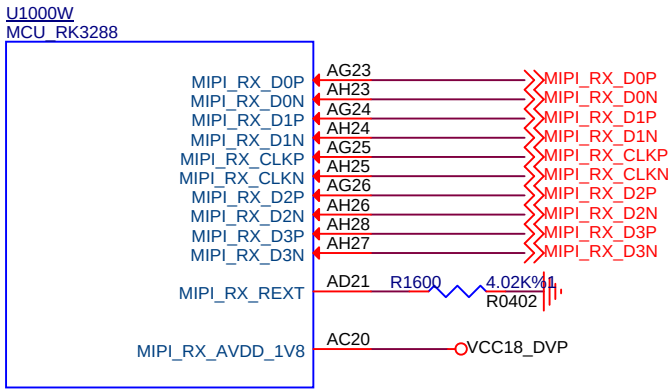
RK3288_C

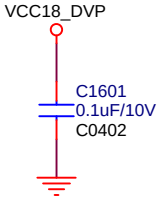


Note:All the capacitor should be place close to the power pin of RK3288。



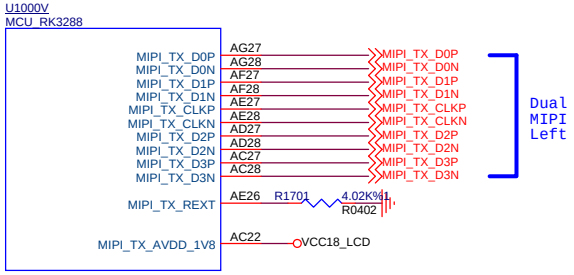
RK3288_W



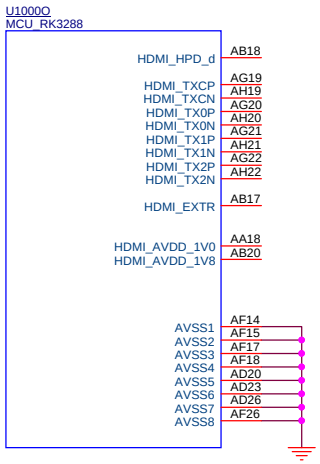


Aura Technology Limited			
Project:	GO7_MAIN_V01		
File:	16.RK3288 DVP Interface		
Date:	Wednesday, April 11, 2018	Rev:	V01
Designed by:	Kobe	Sheet:	11 of 26

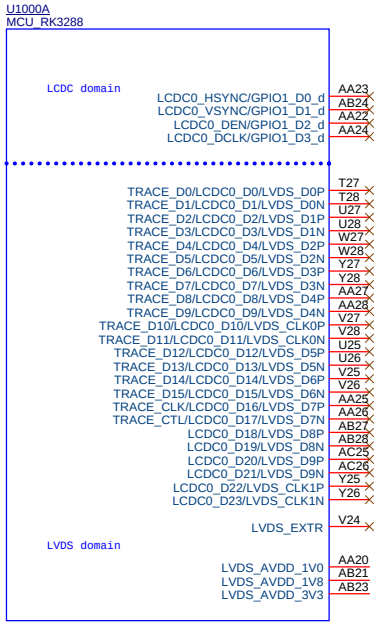
RK3288_V



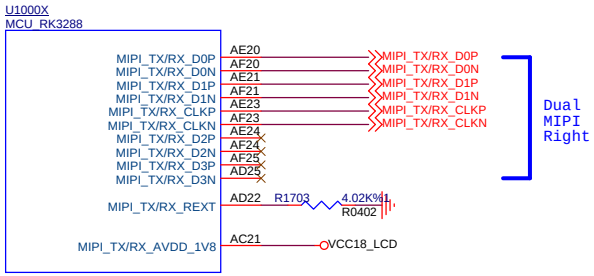
RK3288_O



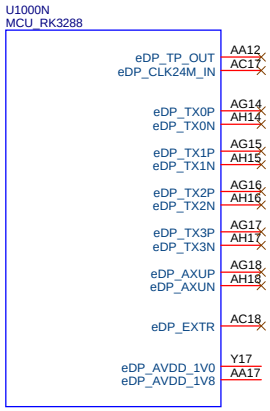
RK3288_A



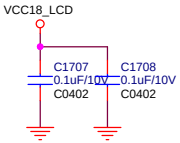
RK3288_X



RK3288_N



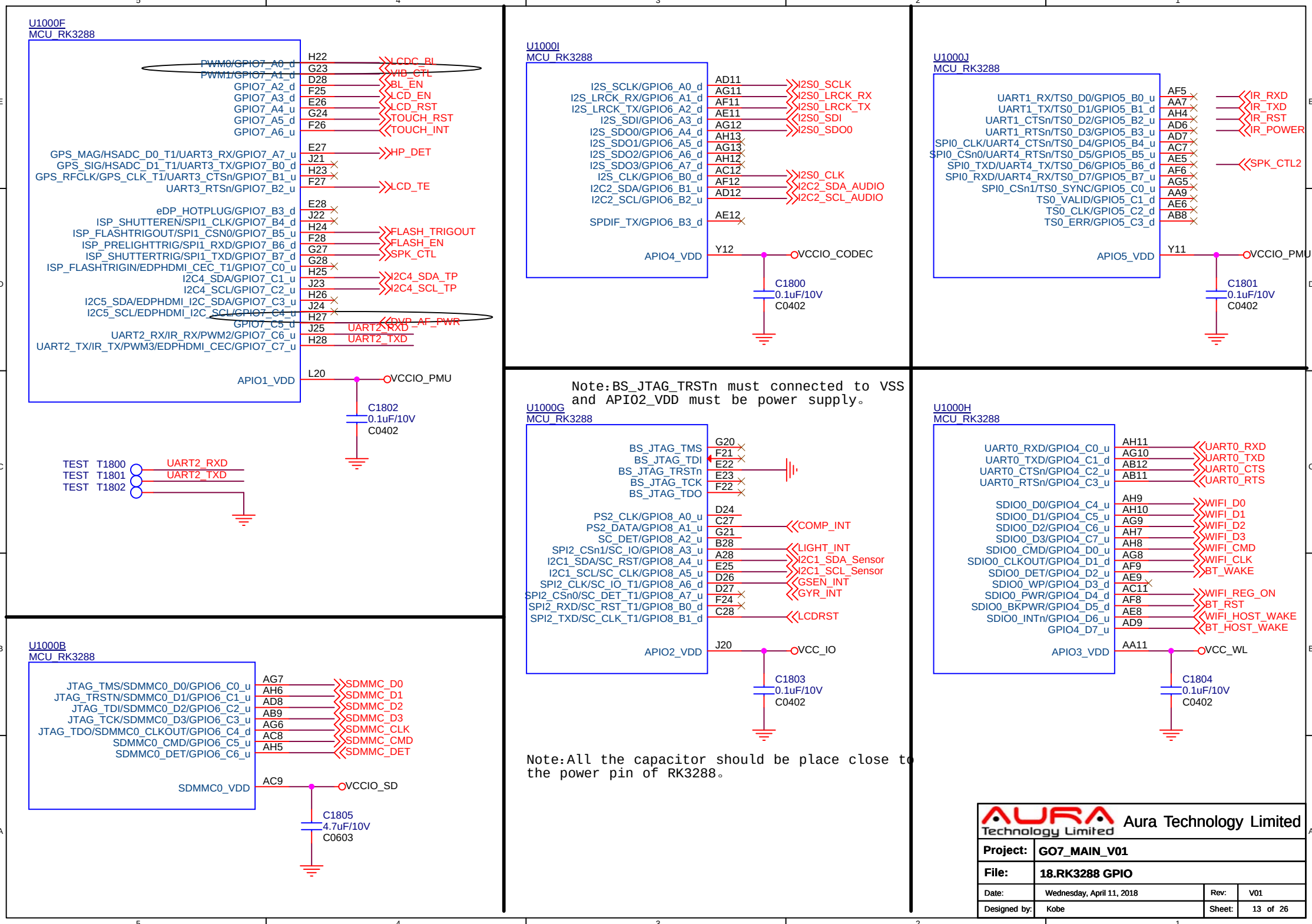
Note:All the capacitor should be place close to the power pin of RK3288。



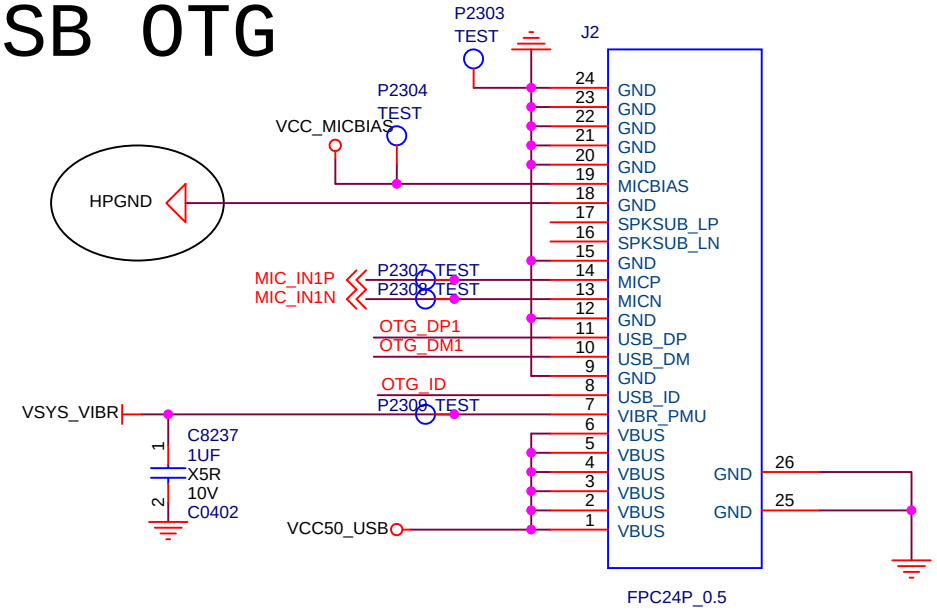
Correspondence between LCDC DATA and RGB

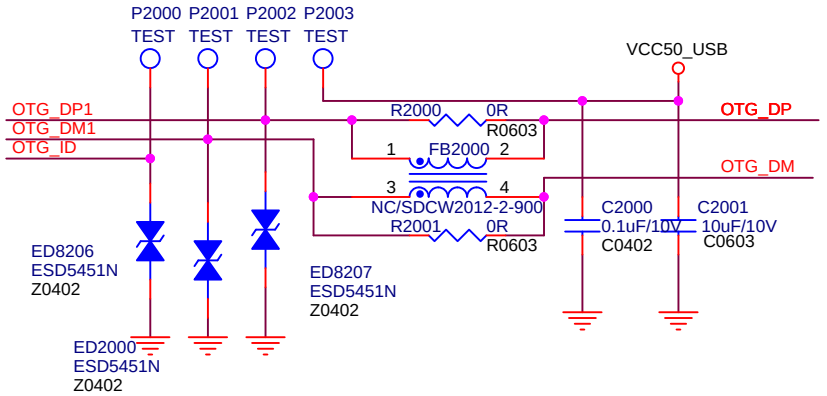
LCDC_D0	B0	LCDC_D8	G0	LCDC_D16	R0
LCDC_D1	B1	LCDC_D9	G1	LCDC_D17	R1
LCDC_D2	B2	LCDC_D10	G2	LCDC_D18	R2
LCDC_D3	B3	LCDC_D11	G3	LCDC_D19	R3
LCDC_D4	B4	LCDC_D12	G4	LCDC_D20	R4
LCDC_D5	B5	LCDC_D13	G5	LCDC_D21	R5
LCDC_D6	B6	LCDC_D14	G6	LCDC_D22	R6
LCDC_D7	B7	LCDC_D15	G7	LCDC_D23	R7

Aura Technology Limited			
Project:	GO7_MAIN_V01		
File:	17.RK3288 Display Interface		
Date:	Wednesday, April 11, 2018	Rev:	V01
Designed by:	Kobe	Sheet:	12 of 26

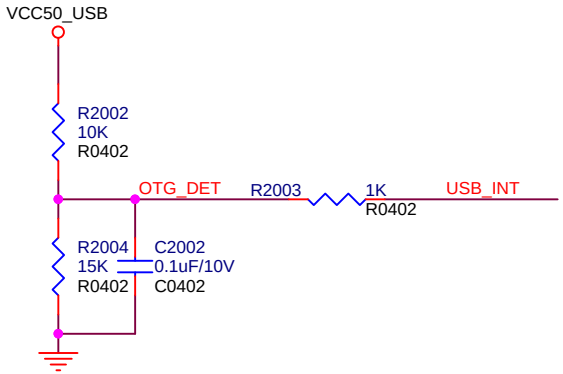

U1000F
MCU_RK3288
PWM0/GPIO7_A0_d
PWM1/GPIO7_A1_d
GPIO7_A2_d
GPIO7_A3_d
GPIO7_A4_u
GPIO7_A5_d
GPIO7_A6_u
GPS_MAG/HSADC_D0_T1/UART3_RX/GPIO7_A7_u
GPS_SIG/HSADC_D1_T1/UART3_TX/GPIO7_B0_d
GPS_RFCLK/GPS_CLK_T1/UART3_CTSn/GPIO7_B1_u
UART3_RTSn/GPIO7_B2_u
eDP_HOTPLUG/GPIO7_B3_d
ISP_SHUTTEREN/SPI1_CLK/GPIO7_B4_d
ISP_FLASHTRIGOUT/SPI1_CSN0/GPIO7_B5_u
ISP_PRELIGHTTRIG/SPI1_RXD/GPIO7_B6_d
ISP_SHUTTERTRIG/SPI1_TXD/GPIO7_B7_d
ISP_FLASHTRIGIN/EDPHDMI_CEC_T1/GPIO7_C0_u
I2C4_SDA/GPIO7_C1_u
I2C4_SCL/GPIO7_C2_u
I2C5_SDA/EDPHDMI_I2C_SDA/GPIO7_C3_u
I2C5_SCL/EDPHDMI_I2C_SCL/GPIO7_C4_u
GPIO7_C5_u
UART2_RX/IR_RX/PWM2/GPIO7_C6_u
UART2_TX/IR_TX/PWM3/EDPHDMI_CEC/GPIO7_C7_u
APIO1_VDD
H22
G23
D28
F25
E26
G24
F26
E27
J21
H23
F27
E28
J22
H24
F28
G27
G28
H25
J23
H26
J24
H27
J25
H28
L20
LCDC_BL
VIB_CTL
BL_EN
LCD_EN
LCD_RST
TOUCH_RST
TOUCH_INT
HP_DET
LCD_TE
FLASH_TRIGOUT
FLASH_EN
SPK_CTL
I2C4_SDA_TP
I2C4_SCL_TP
DVP_AF_PWR
UART2_RXD
UART2_TXD
VCCIO_PMU
C1802
0.1uF/10V
C0402
TEST T1800
TEST T1801
TEST T1802
UART2_RXD
UART2_TXD
U1000I
MCU_RK3288
I2S_SCLK/GPIO6_A0_d
I2S_LRCK_RX/GPIO6_A1_d
I2S_LRCK_TX/GPIO6_A2_d
I2S_SDI/GPIO6_A3_d
I2S_SDO0/GPIO6_A4_d
I2S_SDO1/GPIO6_A5_d
I2S_SDO2/GPIO6_A6_d
I2S_SDO3/GPIO6_A7_d
I2S_CLK/GPIO6_B0_d
I2C2_SDA/GPIO6_B1_u
I2C2_SCL/GPIO6_B2_u
SPDIF_TX/GPIO6_B3_d
APIO4_VDD
AD11
AG11
AF11
AE11
AG12
AH13
AG13
AH12
AC12
AF12
AD12
AE12
Y12
I2S0_SCLK
I2S0_LRCK_RX
I2S0_LRCK_TX
I2S0_SDI
I2S0_SDO0
I2S0_CLK
I2C2_SDA_AUDIO
I2C2_SCL_AUDIO
VCCIO_CODEC
C1800
0.1uF/10V
C0402
U1000J
MCU_RK3288
UART1_RX/TS0_D0/GPIO5_B0_u
UART1_TX/TS0_D1/GPIO5_B1_d
UART1_CTSn/TS0_D2/GPIO5_B2_u
UART1_RTSn/TS0_D3/GPIO5_B3_u
SPI0_CLK/UART4_CTSn/TS0_D4/GPIO5_B4_u
SPI0_CSn0/UART4_RTSn/TS0_D5/GPIO5_B5_u
SPI0_TXD/UART4_TX/TS0_D6/GPIO5_B6_d
SPI0_RXD/UART4_RX/TS0_D7/GPIO5_B7_u
SPI0_CSn1/TS0_SYNC/GPIO5_C0_u
TS0_VALID/GPIO5_C1_d
TS0_CLK/GPIO5_C2_d
TS0_ERR/GPIO5_C3_d
APIO5_VDD
AF5
AA7
AH4
AD6
AD7
AC7
AE5
AF6
AG5
AA9
AE6
AB8
Y11
IR_RXD
IR_TXD
IR_RST
IR_POWER
SPK_CTL2
VCCIO_PMU
C1801
0.1uF/10V
C0402
Note:BS_JTAG_TRSTn must connected to VSS and APIO2_VDD must be power supply。
U1000G
MCU_RK3288
BS_JTAG_TMS
BS_JTAG_TDI
BS_JTAG_TRSTn
BS_JTAG_TCK
BS_JTAG_TDO
PS2_CLK/GPIO8_A0_u
PS2_DATA/GPIO8_A1_u
SC_DET/GPIO8_A2_u
SPI2_CSn1/SC_IO/GPIO8_A3_u
I2C1_SDA/SC_RST/GPIO8_A4_u
I2C1_SCL/SC_CLK/GPIO8_A5_u
SPI2_CLK/SC_IO_T1/GPIO8_A6_d
SPI2_CSn0/SC_DET_T1/GPIO8_A7_u
SPI2_RXD/SC_RST_T1/GPIO8_B0_d
SPI2_TXD/SC_CLK_T1/GPIO8_B1_d
APIO2_VDD
G20
F21
E22
E23
F22
D24
C27
G21
B28
A28
E25
D26
D27
F24
C28
J20
COMP_INT
LIGHT_INT
I2C1_SDA_Sensor
I2C1_SCL_Sensor
GSEN_INT
GYR_INT
LCDRST
VCC_IO
C1803
0.1uF/10V
C0402
U1000H
MCU_RK3288
UART0_RXD/GPIO4_C0_u
UART0_TXD/GPIO4_C1_d
UART0_CTSn/GPIO4_C2_u
UART0_RTSn/GPIO4_C3_u
SDIO0_D0/GPIO4_C4_u
SDIO0_D1/GPIO4_C5_u
SDIO0_D2/GPIO4_C6_u
SDIO0_D3/GPIO4_C7_u
SDIO0_CMD/GPIO4_D0_u
SDIO0_CLKOUT/GPIO4_D1_d
SDIO0_DET/GPIO4_D2_u
SDIO0_WP/GPIO4_D3_d
SDIO0_PWR/GPIO4_D4_d
SDIO0_BKPWR/GPIO4_D5_d
SDIO0_INTn/GPIO4_D6_u
GPIO4_D7_u
APIO3_VDD
AH11
AG10
AB12
AB11
AH9
AH10
AG9
AH7
AH8
AG8
AF9
AE9
AC11
AF8
AE8
AD9
AA11
UART0_RXD
UART0_TXD
UART0_CTS
UART0_RTS
WIFI_D0
WIFI_D1
WIFI_D2
WIFI_D3
WIFI_CMD
WIFI_CLK
BT_WAKE
WIFI_REG_ON
BT_RST
WIFI_HOST_WAKE
BT_HOST_WAKE
VCC_WL
C1804
0.1uF/10V
C0402
U1000B
MCU_RK3288
JTAG_TMS/SDMMC0_D0/GPIO6_C0_u
JTAG_TRSTN/SDMMC0_D1/GPIO6_C1_u
JTAG_TDI/SDMMC0_D2/GPIO6_C2_u
JTAG_TCK/SDMMC0_D3/GPIO6_C3_u
JTAG_TDO/SDMMC0_CLKOUT/GPIO6_C4_d
SDMMC0_CMD/GPIO6_C5_u
SDMMC0_DET/GPIO6_C6_u
SDMMC0_VDD
AG7
AH6
AD8
AB9
AG6
AC8
AH5
AC9
SDMMC_D0
SDMMC_D1
SDMMC_D2
SDMMC_D3
SDMMC_CLK
SDMMC_CMD
SDMMC_DET
VCCIO_SD
C1805
4.7uF/10V
C0603
Note:All the capacitor should be place close to the power pin of RK3288。
Aura Technology Limited
Project: GO7_MAIN_V01
File: 18.RK3288 GPIO
Date: Wednesday, April 11, 2018
Rev: V01
Designed by: Kobe
Sheet: 13 of 26

USB OTG



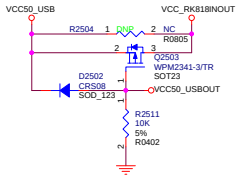


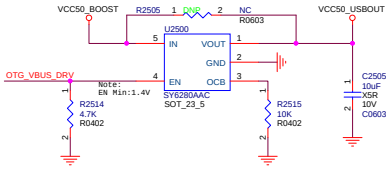
USB Detection

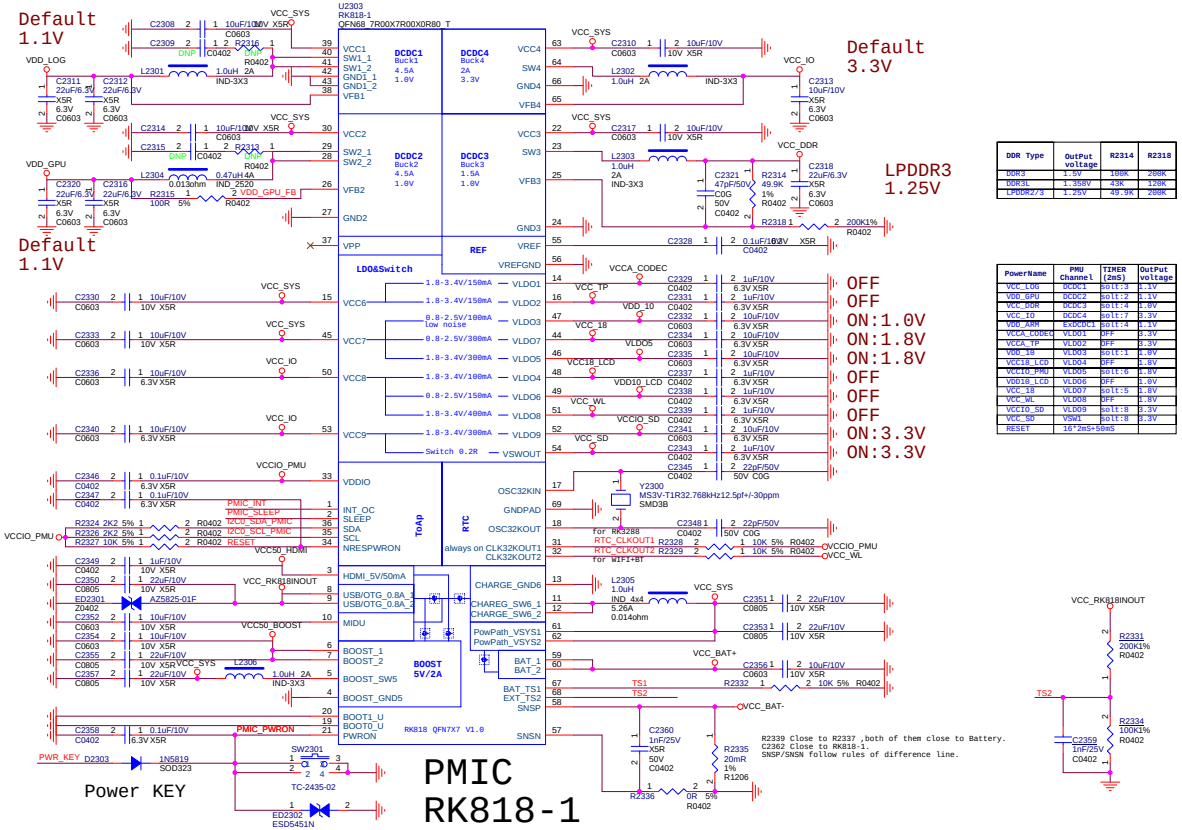


Aura Technology Limited			
Project:	GO7_MAIN_V01		
File:	20.USB Port		
Date:	Wednesday, April 11, 2018	Rev:	V01
Designed by:	Kobe	Sheet:	14 of 26

USB/OTG

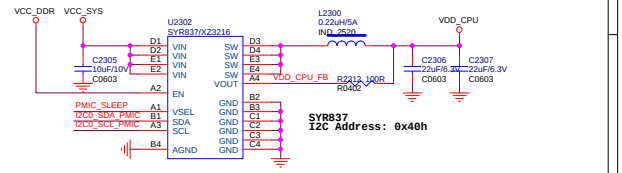


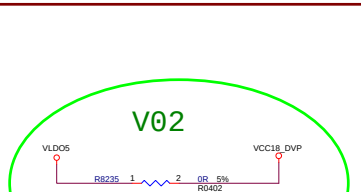


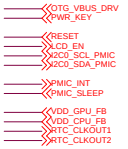


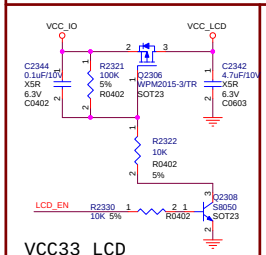
DDR Type	OutPut voltage	R2314	R2318
DDR3	1.5V	180K	200K
DDR3L	1.358V	43K	120K
LPDDR2/3	1.25V	49.9K	200K

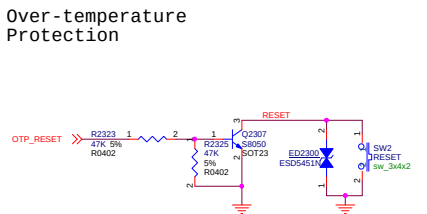
PowerName	PMU Channel	TIMER (2mS)	OutPut voltage
VCC_LOG	DCDC1	⧀3	1.1V
VDD_GPU	DCDC2	⧀2	1.1V
VCC_DDR	DCDC3	⧀4	1.8V
VCC_IO	DCDC4	⧀7	3.3V
VDD_ARM	ExDCDC1	⧀4	1.1V
VCCA_CODEC	VLDO1	OFF	3.3V
VCCA_TP	VLDO2	OFF	3.3V
VDD_10	VLDO3	⧀1	1.0V
VCC18_LCD	VLDO4	OFF	1.8V
VCCIO_PMU	VLDO5	⧀6	1.8V
VDD10_LCD	VLDO6	OFF	1.0V
VCC_18	VLDO7	⧀5	1.8V
VCC_WL	VLDO8	OFF	1.8V
VCCIO_SD	VLDO9	⧀8	3.3V
VCC_SD	VSW1	⧀8	3.3V
RESET	16*2mS+50mS		

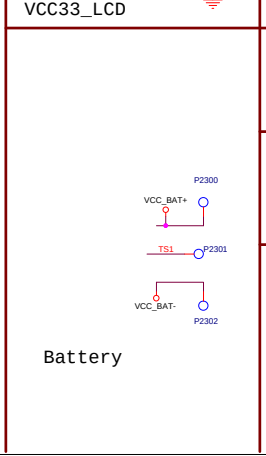


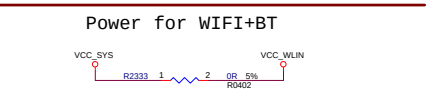


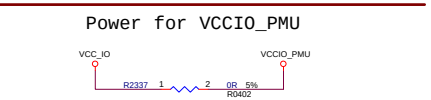


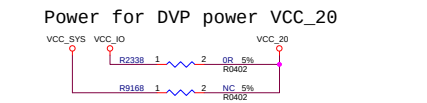




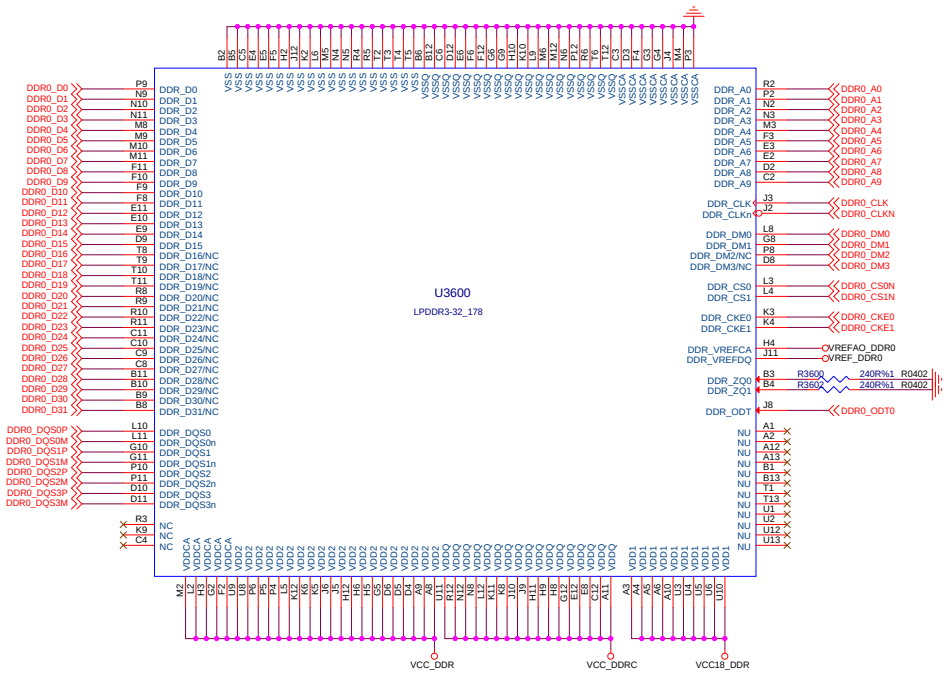


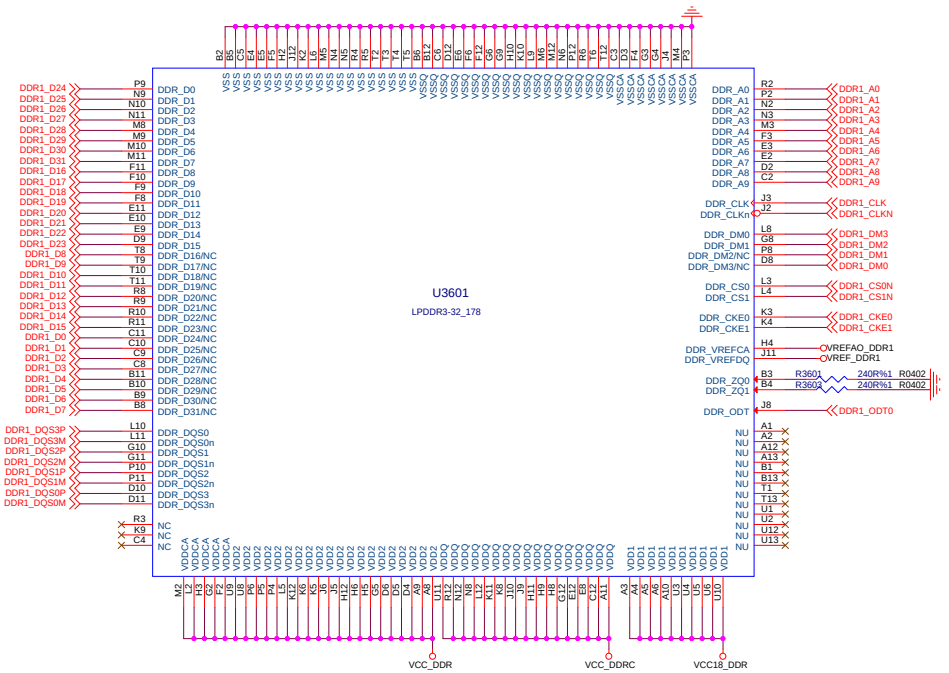


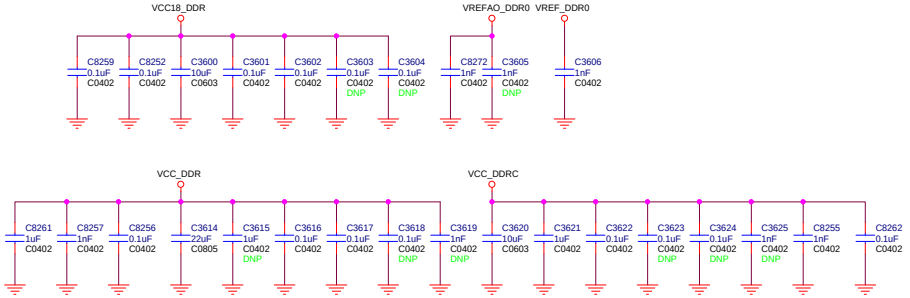


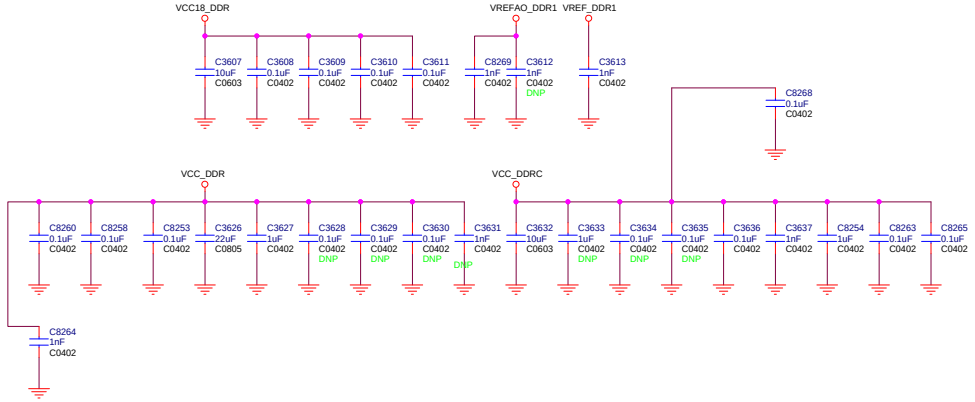


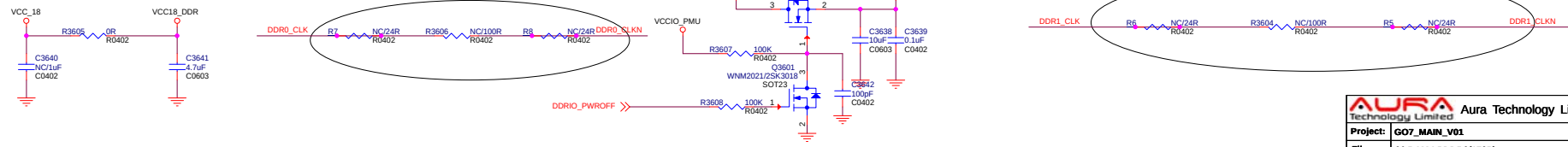
Aura Technology Limited	
Project:	GO7_MAIN_V01
File:	23.Power-RK818-1_1CELL
Date:	Wednesday, April 11, 2018
Rev:	V01
Designed by:	Kobe
Sheet:	15 of 36





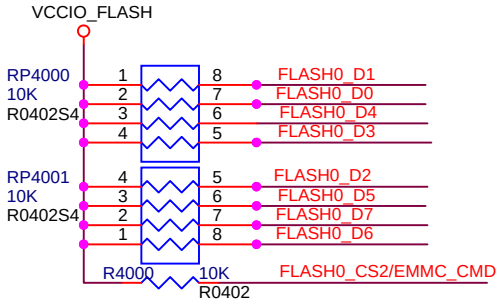


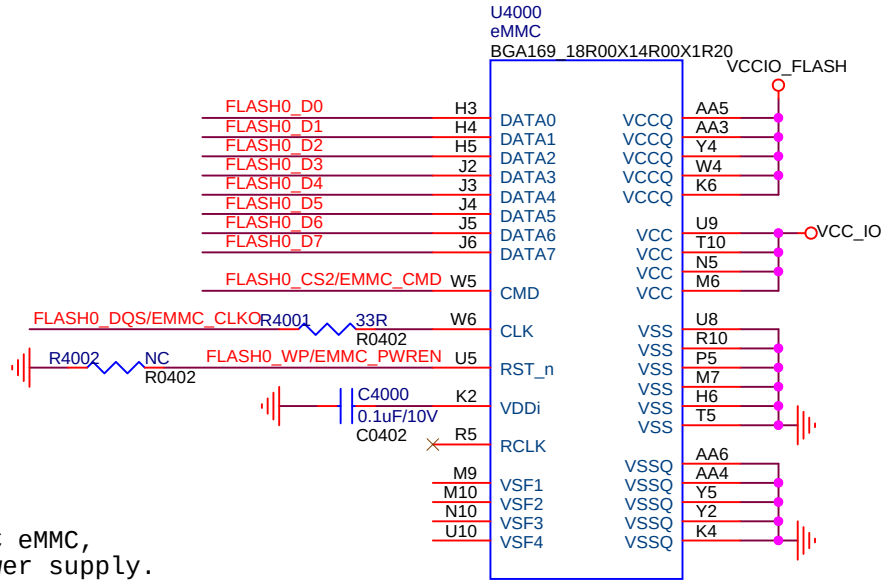


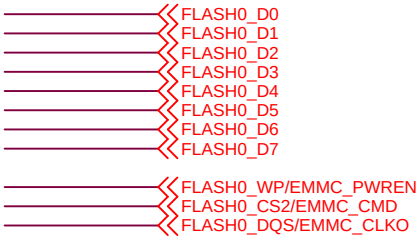


Aura Technology Limited	
Project:	GO7_MAIN_V01
File:	36.RAM-LPDDR3(178P)
Date:	Wednesday, April 11, 2018
Rev:	V01
Designed by:	Kobe
Sheet:	16 of 26

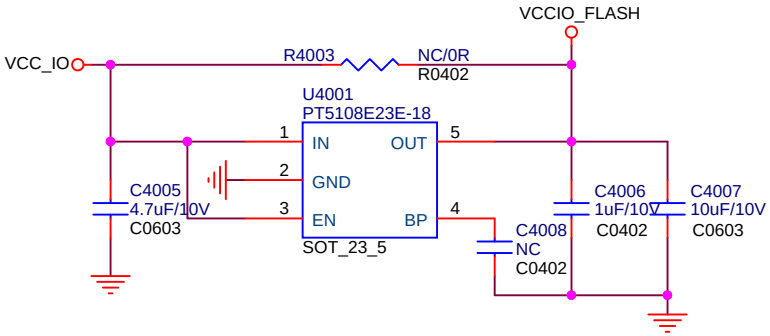
eMMC FLASH

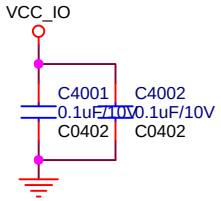


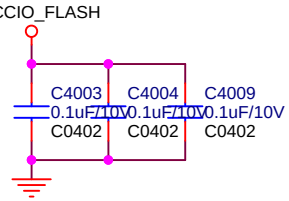




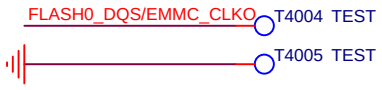
Note:
U4001 must be use for Sandisk 5.0 TLC eMMC,
because it support only 1.8V VCCQ power supply.





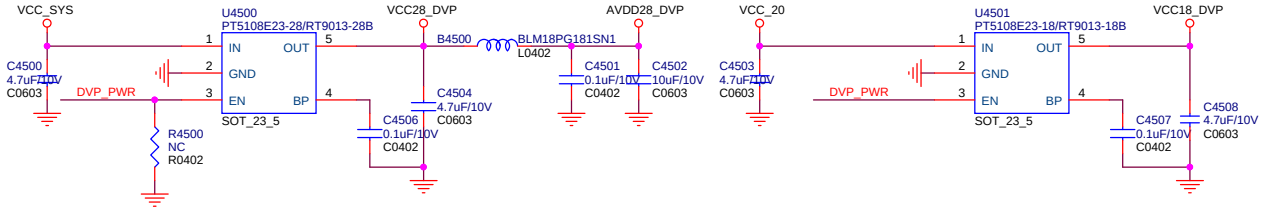


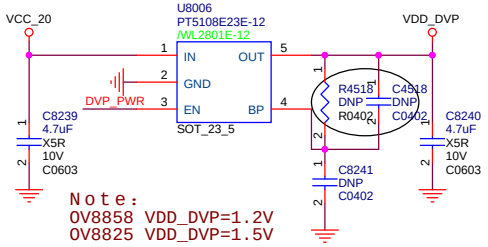
Note:
Reserve PAD for Update.



Aura Technology Limited			
Project:	GO7_MAIN_V01		
File:	40.Memory-eMMC		
Date:	Wednesday, April 11, 2018	Rev:	V01
Designed by:	Kobe	Sheet:	17 of 26

DVP Power

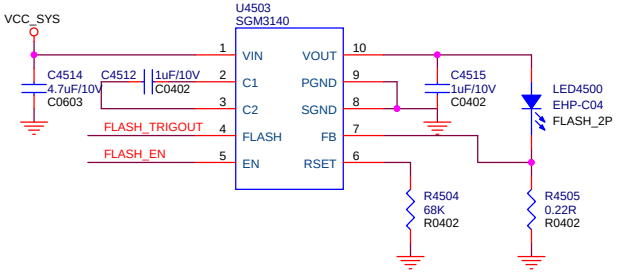


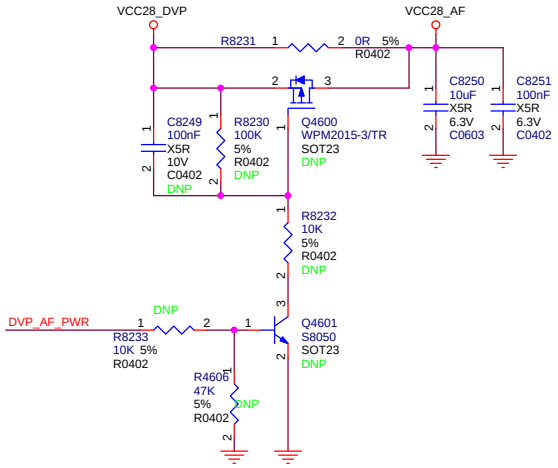


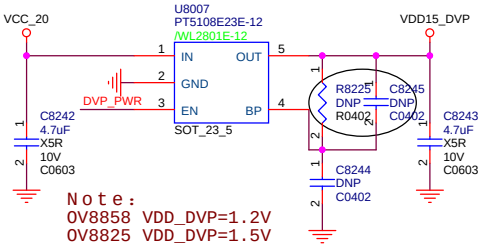
FLASH LED Drive

OPTION2

note:Drive up to 1A

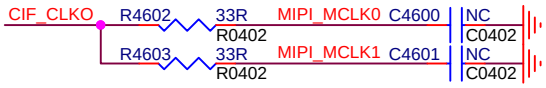


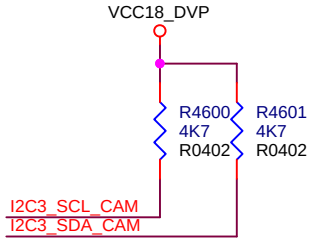


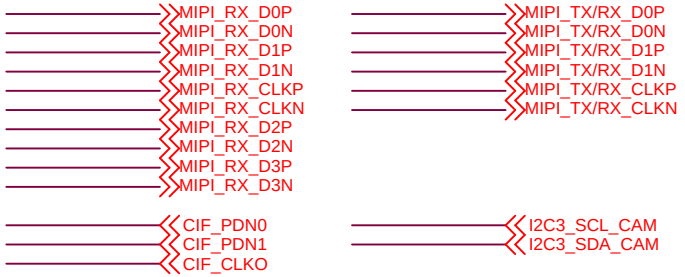


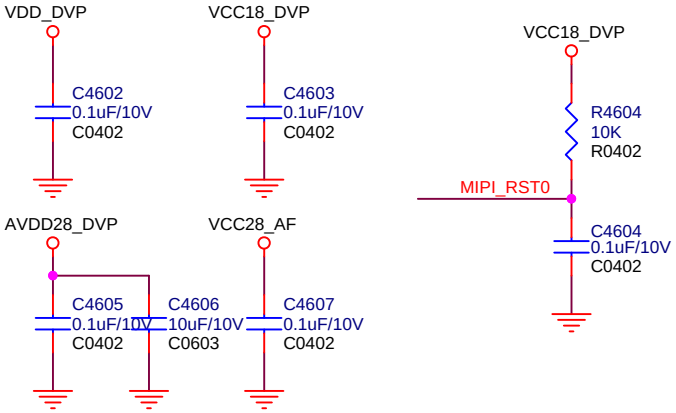
Aura Technology Limited			
Project:	GO7_MAIN_V01		
File:	45.DVP power and Flash LED		
Date:	Wednesday, April 11, 2018	Rev:	V01
Designed by:	Kobe	Sheet:	18 of 26

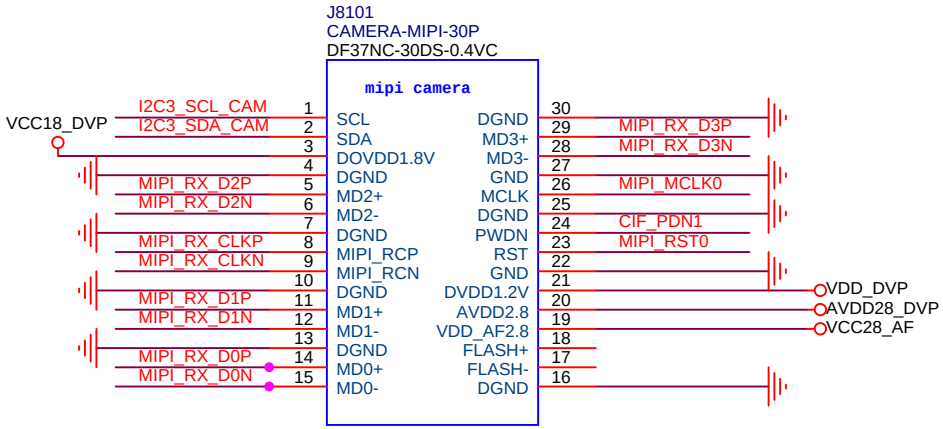
MIPI Camera

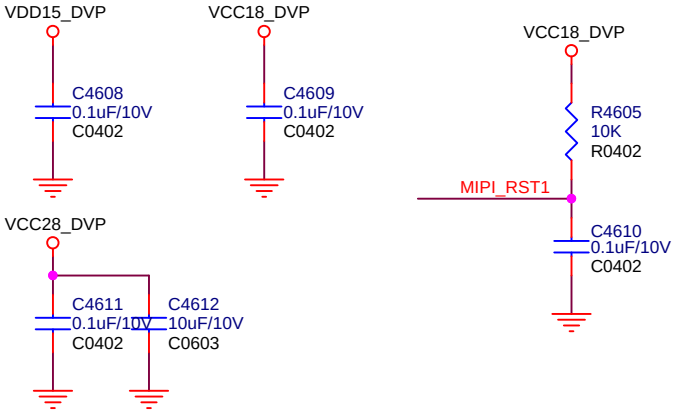


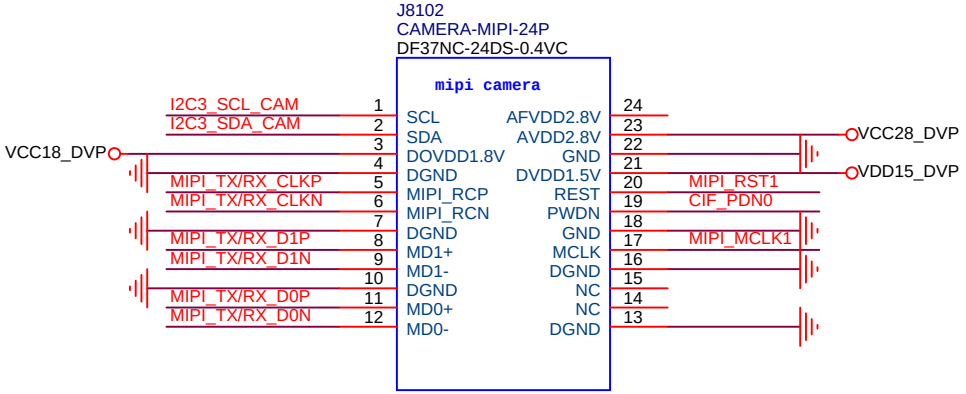








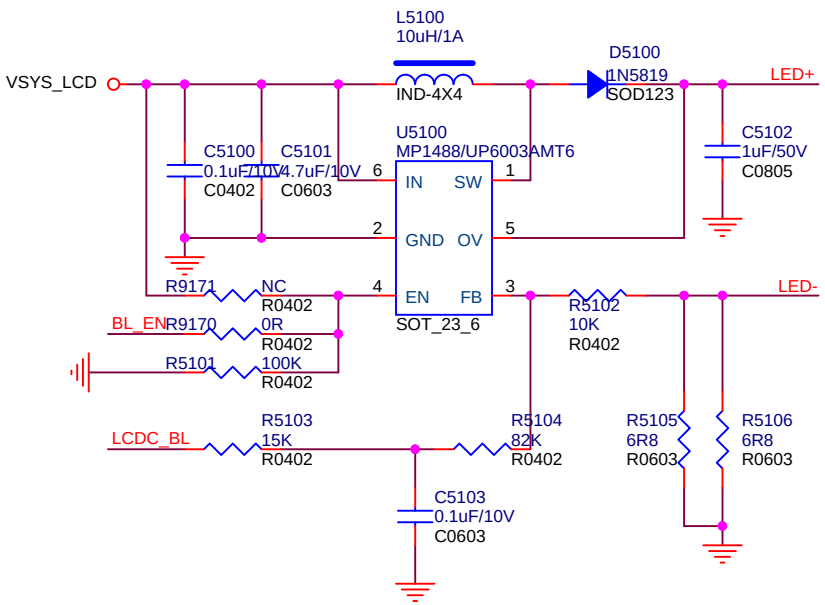


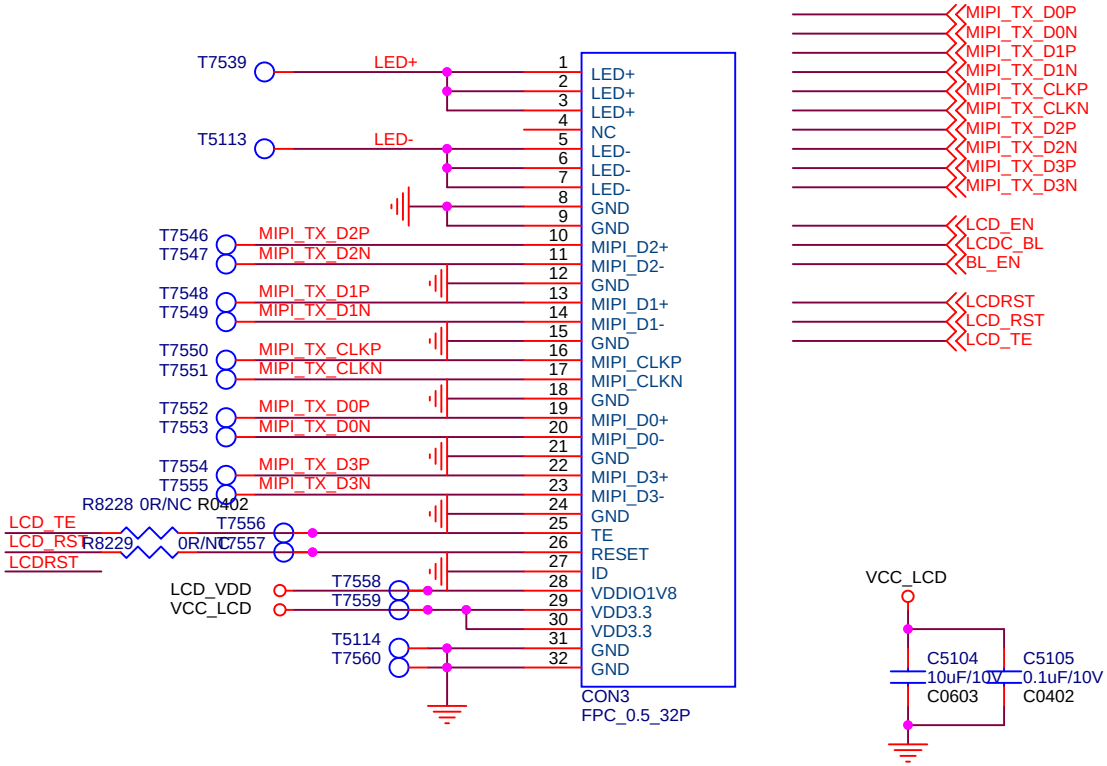


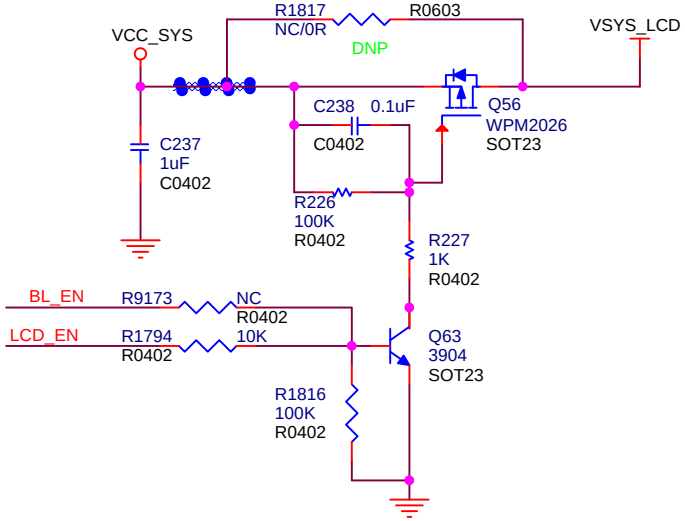
Aura Technology Limited			
Project:	**GO7_MAIN_V01**		
File:	**46.Camera-MIPI CSI**		
Date:	Wednesday, April 11, 2018	Rev:	V01
Designed by:	Kobe	Sheet:	19 of 26

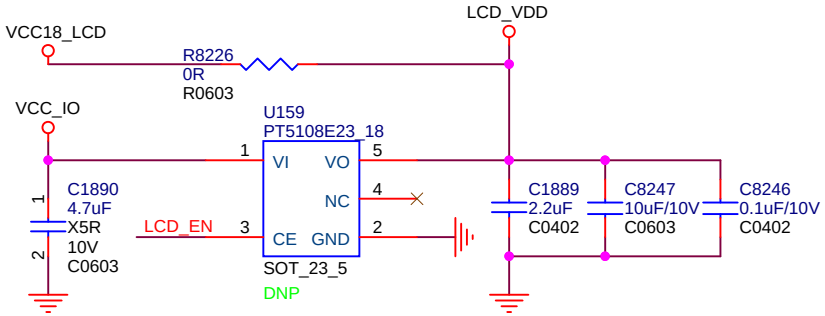
MIPI Panel

Note:Single MIPI LCM must be connected to MIPI_TX controler





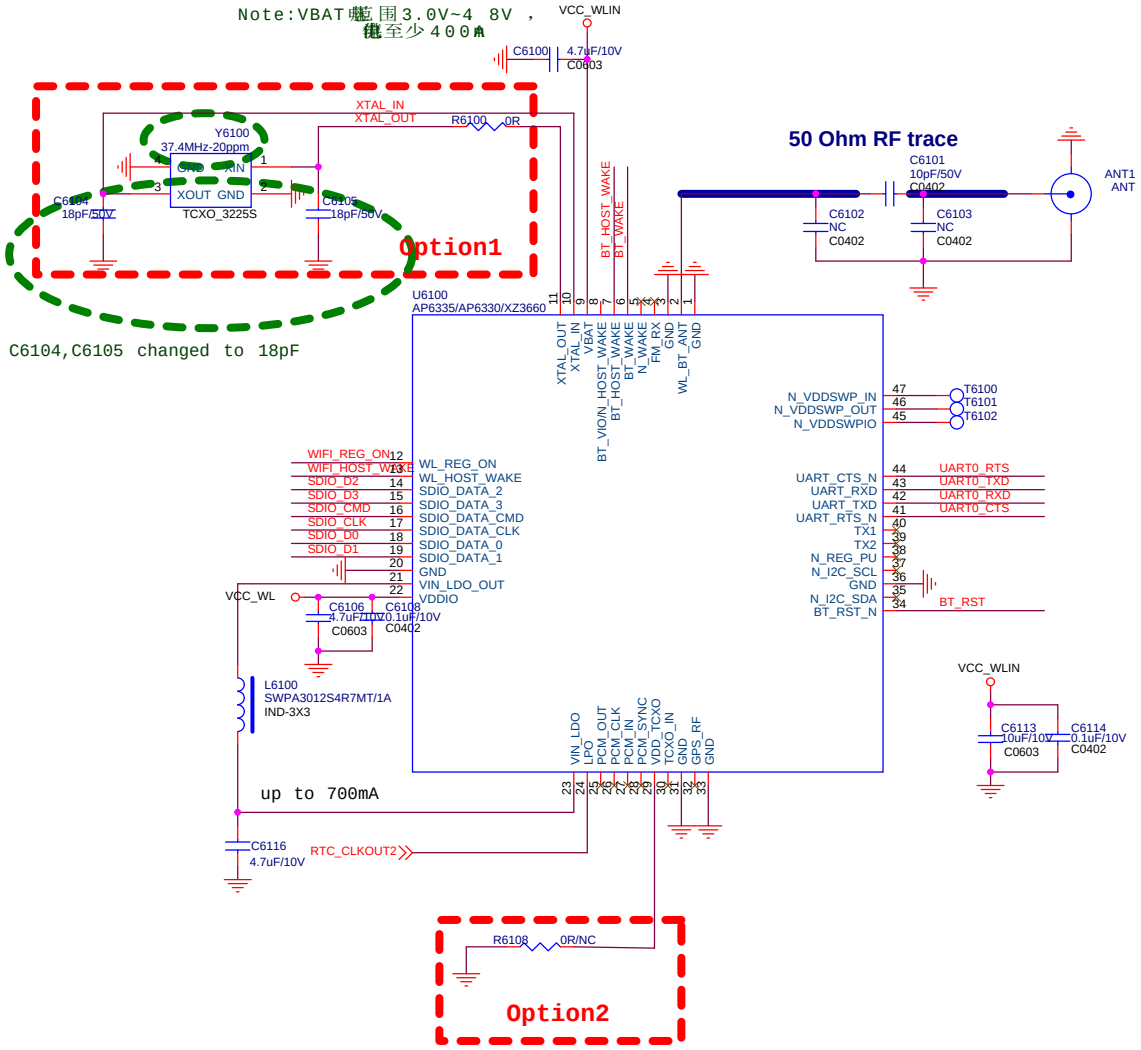


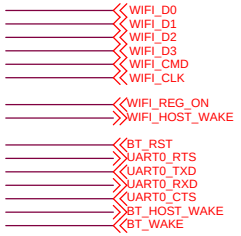


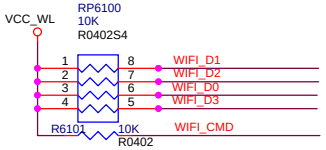
Aura Technology Limited			
Project:	GO7_MAIN_V01		
File:	51.LCM-MIPI Panel		
Date:	Thursday, April 12, 2018	Rev:	V01
Designed by:	Kobe	Sheet:	20 of 26

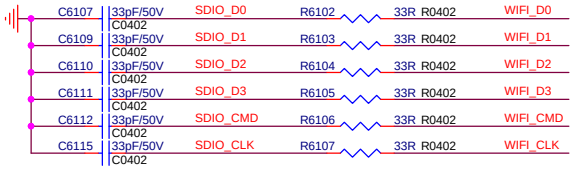
WIFI/WIFI ac/BT MODULE

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



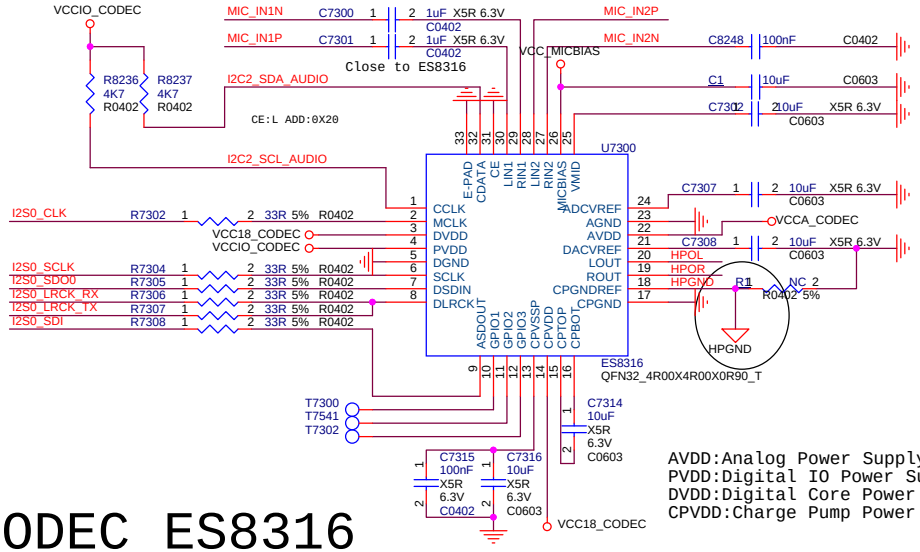






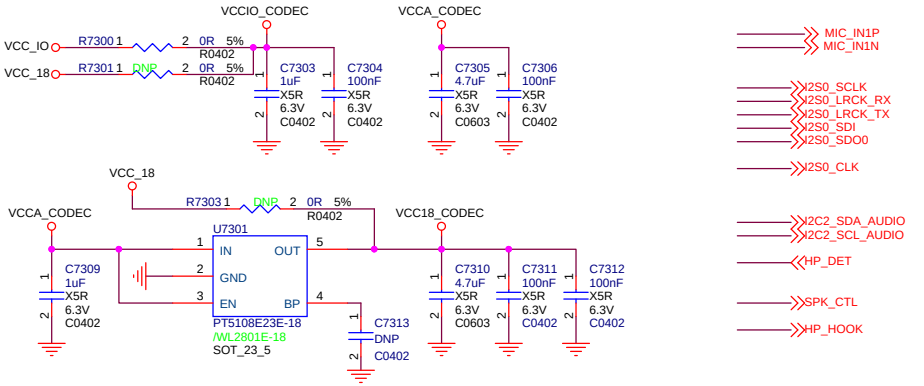
Aura Technology Limited	
Project:	GO7_MAIN_V01
File:	61.WIFI ac/BT-AP6255
Date:	Wednesday, April 11, 2018
Rev:	V01
Designed by:	Kobe
Sheet:	21 of 26

CODEC ES8316

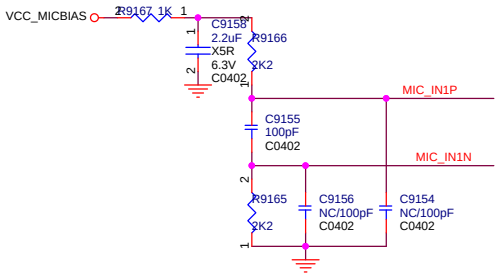


AVDD:Analog Power Supply(1.6-3.3V)Recommend:3.3V
PVDD:Digital IO Power Supply(1.6-3.3V)Recommend:3.3V
DVDD:Digital Core Power Supply(1.6-3.3V)Recommend:1.8V
CPVDD:Charge Pump Power Supply(1.6-2.0V)Recommend:1.8V

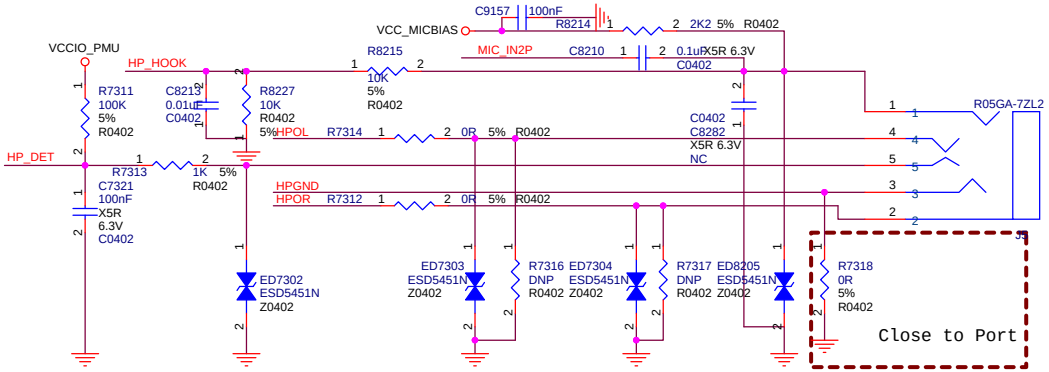
Note:All the capacitor should be place close to the power pin of ES8316。



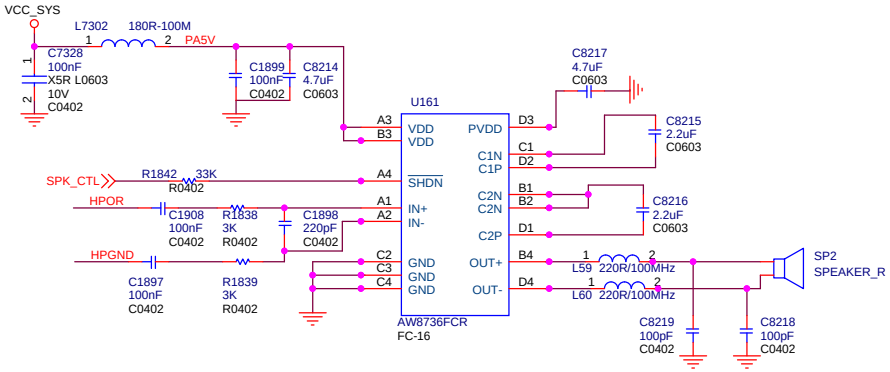
MIC



Ear Phone

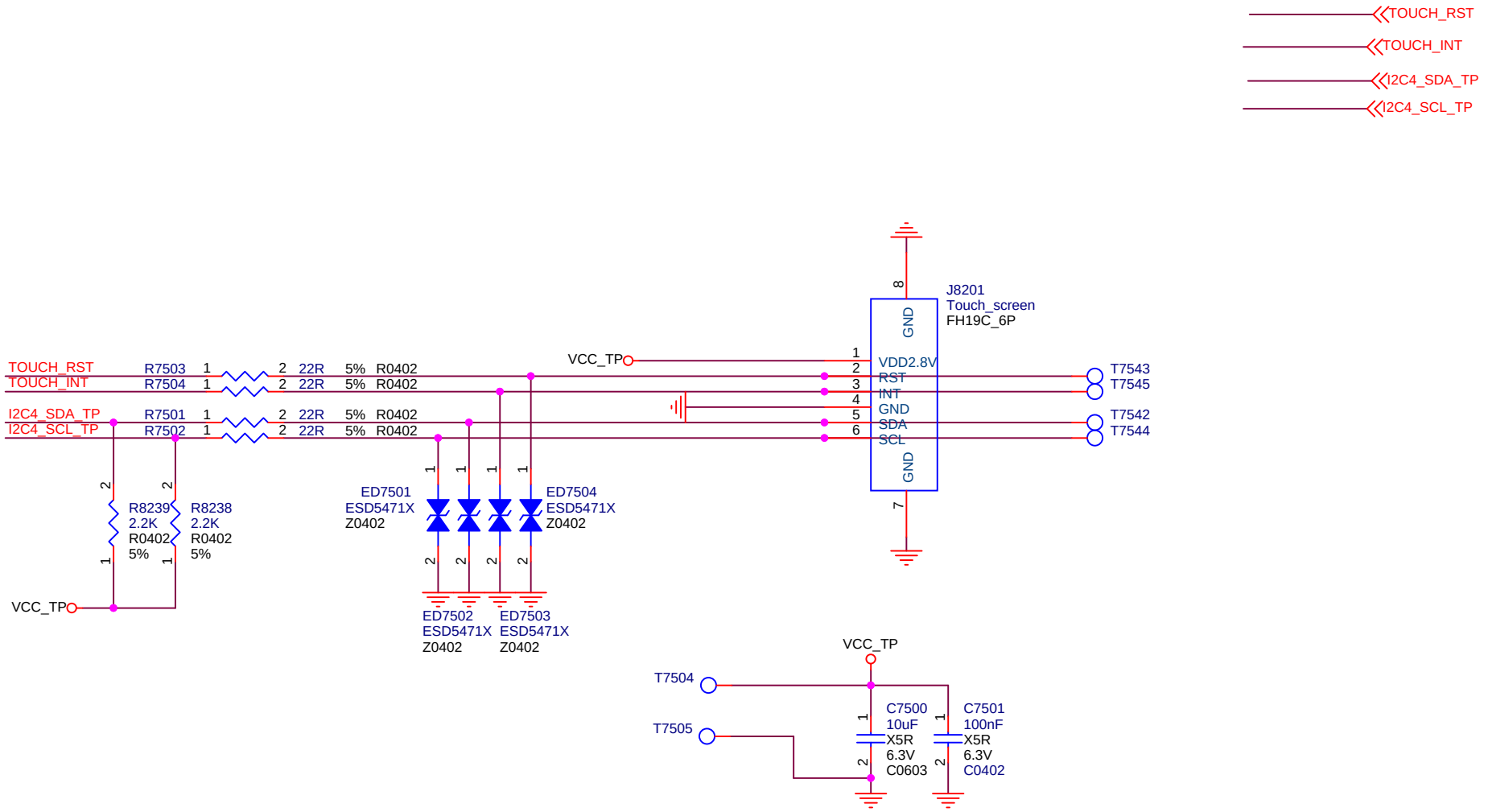


SPEAKER



Note:HPOR/HPOL/HPGND LAYOUT

Aura Technology Limited	
Project:	GO7_MAIN_V01
File:	73.Audio Codec-ES8316
Date:	Wednesday, April 11, 2018
Rev:	V01
Designed by:	Kobe
Sheet:	22 of 26



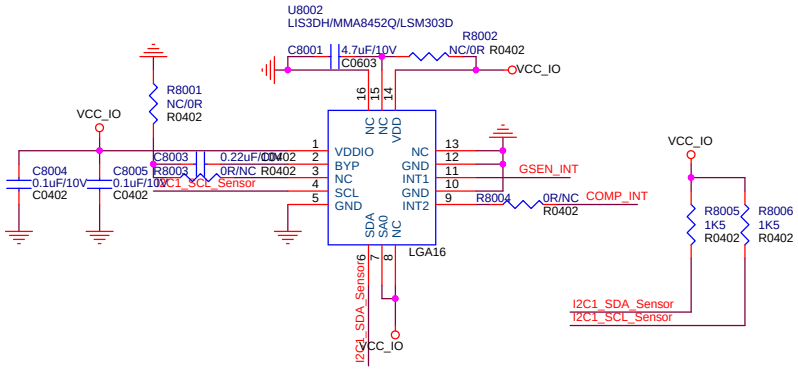
Note:All devices should be place close to the power pin of TP Port。

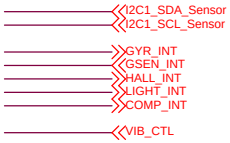
Aura Technology Limited			
Project:	GO7_MAIN_V01		
File:	75.TP COF		
Date:	Wednesday, April 11, 2018	Rev:	V01
Designed by:	Kobe	Sheet:	23 of 26

G-sensor

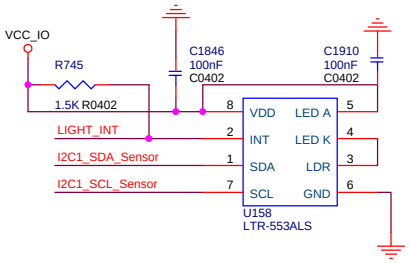
LSM303D with 3D Gsensor and E-compass

	LIS3DH	MMA8452Q	LSM303D
C8001	NC	NC	4.7uF
R8002	0ohm	NC	NC
R8001	NC	0ohm	NC
C8003	NC	0.1uF	0.22uF
R8003	NC	NC	0R
R8004	NC	NC	0R

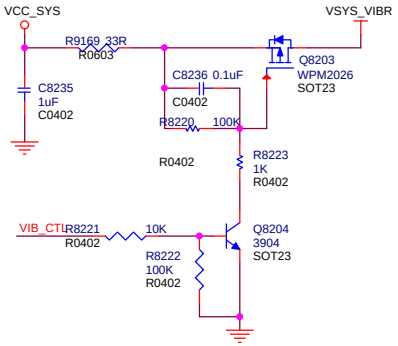




LIGHT-Sensor

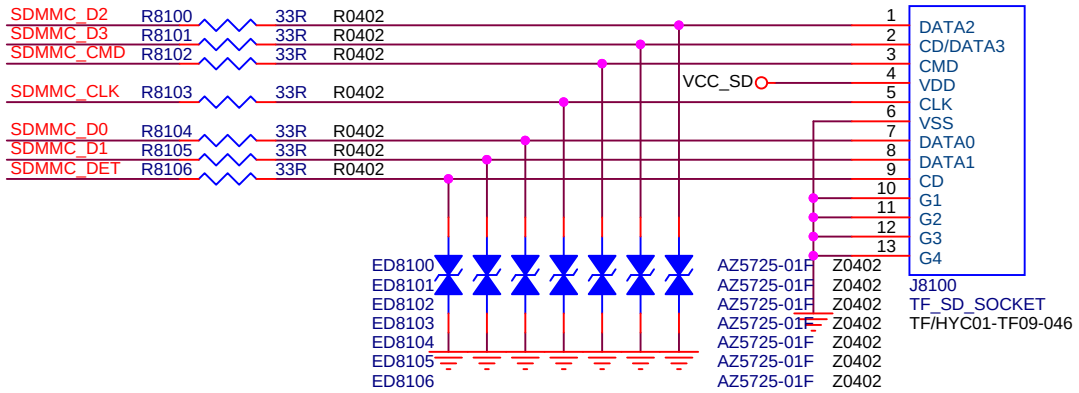


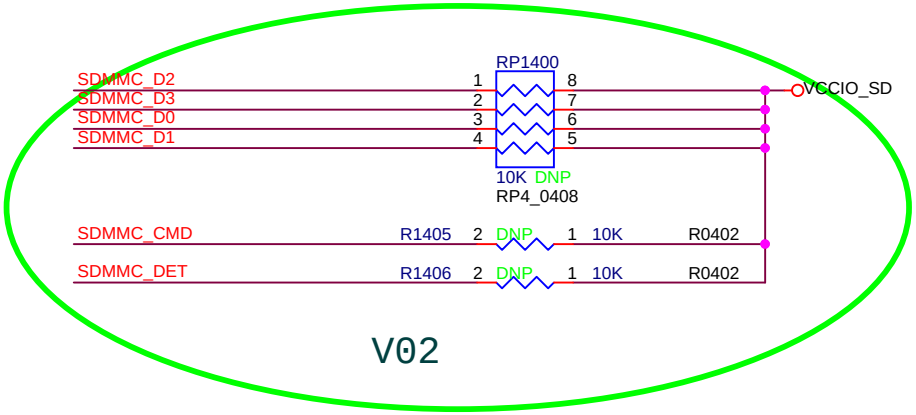
VIBRATION

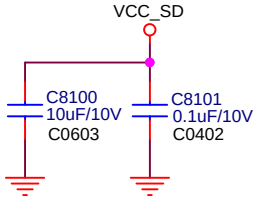


Aura Technology Limited	
Project:	GO7_MAIN_V01
File:	80.Sensor/VIB
Date:	Wednesday, April 11, 2018
Rev:	V01
Designed by:	Kobe
Sheet:	24 of 26

TF CARD







Aura Technology Limited			
Project:	GO7_MAIN_V01		
File:	81.TF Card		
Date:	Wednesday, April 11, 2018	Rev:	V01
Designed by:	Kobe	Sheet:	25 of 26