Content Indexing

RK3368H_Tablet_REF_V1.0

I2C address(7Bit)

1: I2C0 POWER

RK818-1	0x1c
SYR827	0x40
XZ3216	0x60
HYM8563	0x51

2: I2C1 CODEC

ES8316	0x20
ALC5631	0x38

3: I2C2 Touch Panel

CT363	0x1b
FT5506	
GSL3680	0x40

4: I2C3 Camera

OV2659	0x30
OV8858	

5: I2C4 Sensor

CM3218	0x10,0x0c
LSM330TR	G:0x6a,A:0x1e
MMA8452Q	0x1d
MPU6500	0x34
LIS3DH	0x19
LSM303D	0x1d

Note:
器件参数说明
1：DNP代表时 不 贴 。
2：如果 Value和option是DNP说明是预留位不贴。
3：Flash兼容选择时， 要注 意
如果选 择 eMMC时， option是eMMC都 要贴;Nand 不贴
如果选 择 Nand时， option是Nand都 要贴;eMMC 不贴
4： WIFI+BT模块时 ,要 注 意
如果选 择 RTL8723模组， 那么 option是DNP2 1器 件 不 贴
如果选 择 AP6212模组 时， 那么 option是DNP212器件 要 贴上

Bill of Materials

Header:

Item\tPart\tDescription\tPCB Footprint\tReference\tQuantity\tOption

Combined property string:

{Item}\t{Value}\t{Description}\t{PCB Footprint}\t{Reference}\t{Quantity}\t{Option}

MARK

Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics
Project:	RK3368H_demo
File:	Index
Date:	Tuesday, April 03, 2018
Rev:	V1.0
Designed by:	wjx
Sheet:	1 of 27

Version	Date	Author	Change Note	Approved
V1.0	20170320	wjx	First edit	

Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	RK3368H_demo		
File:	Change List		
Date:	Tuesday, April 03, 2018	Rev:	V1.0
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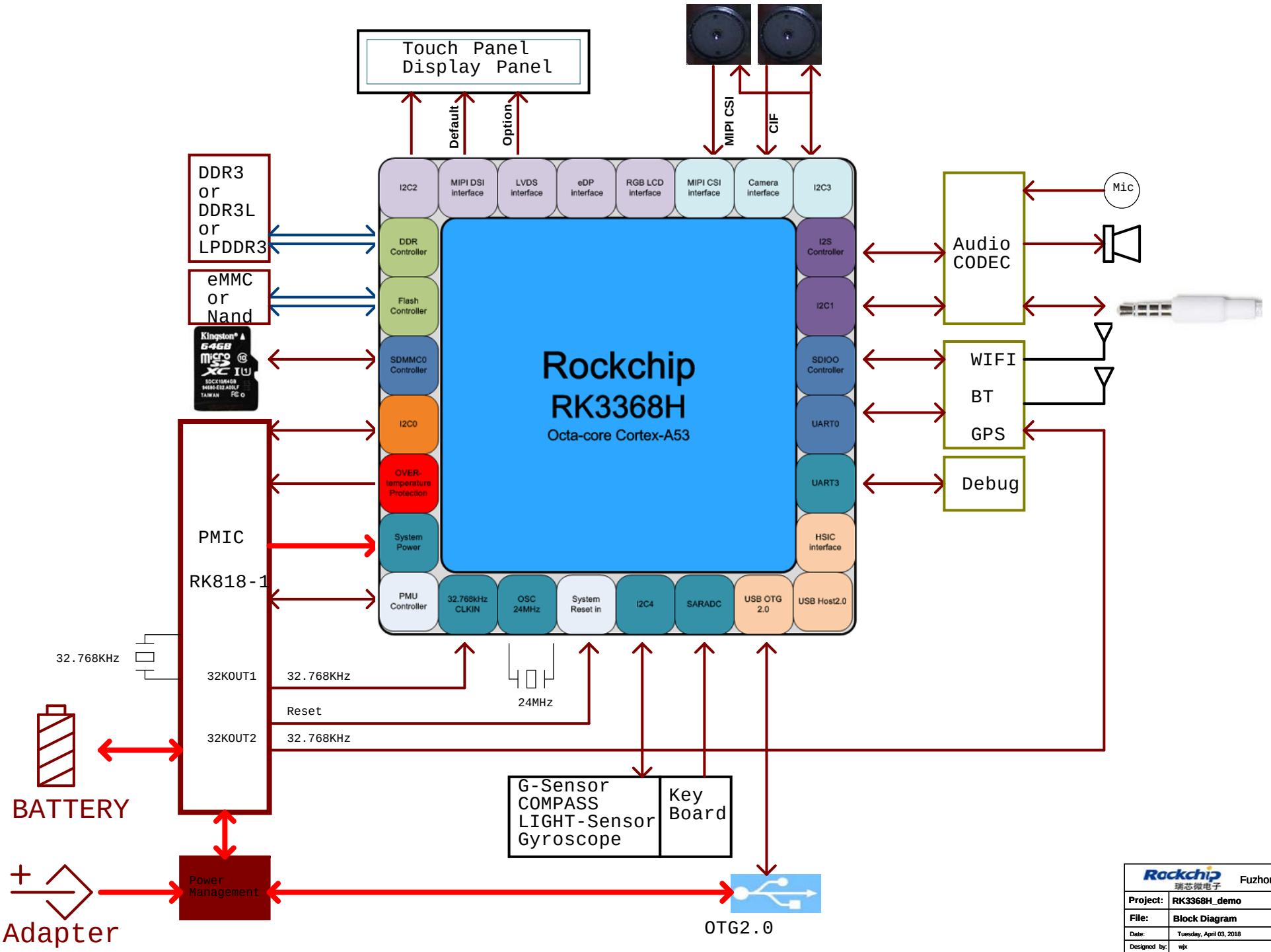
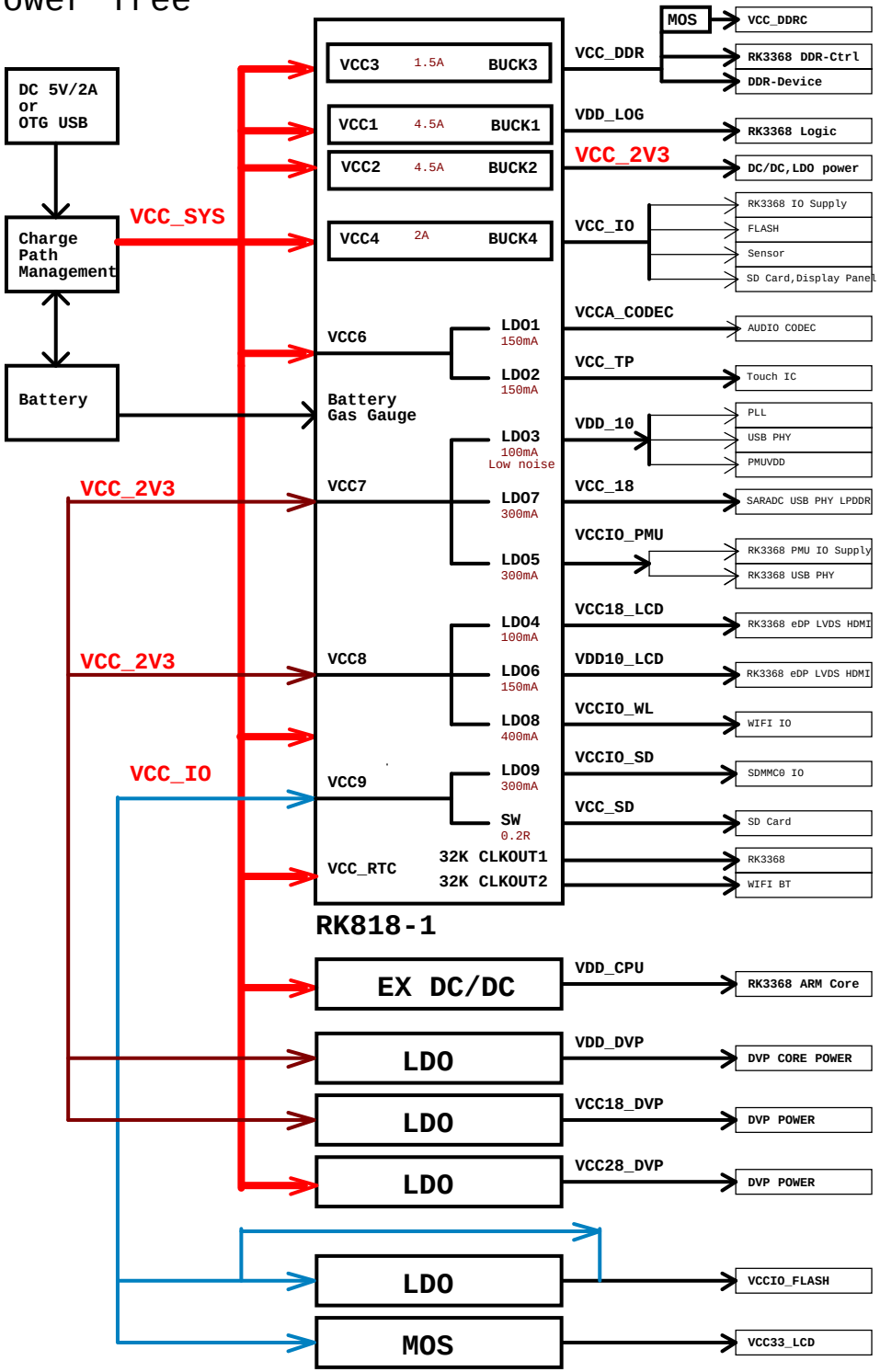
Block Diagram for MID



Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	RK3368H_demo		
File:	Block Diagram		
Date:	Tuesday, April 03, 2018	Rev:	V1.0
Designed by:	wjx	Sheet:	3 of 27

Power Tree



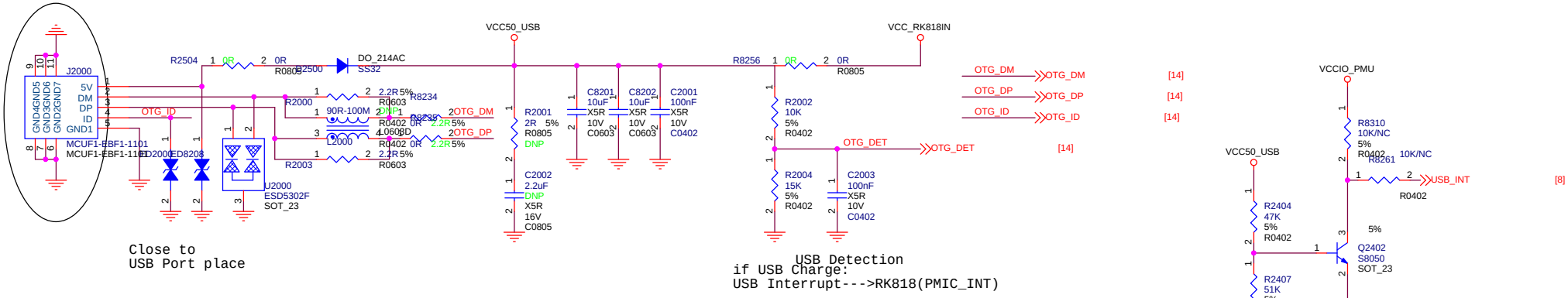
Power up Timing

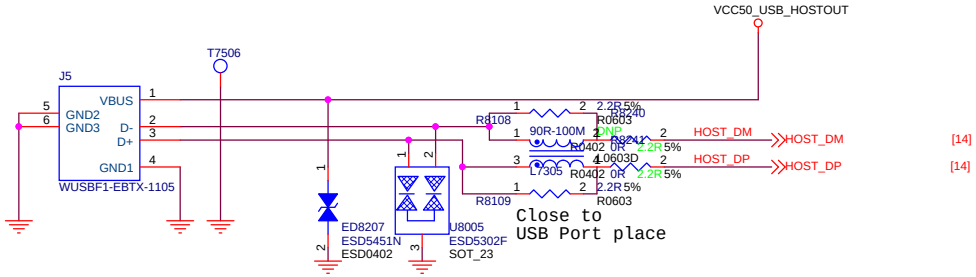
PowerName	PMIC Channel	timer(2mS)	Default voltage	Normal voltage
VCC_2V3	DCDC2	Slot:1	2.3V	2.3V
VDD_10	VLDO3	Slot:2	1.0V	1.0V
VDD_LOG	DCDC1	Slot:3	1.1V	DVFS
VCC_DDR	DCDC3	Slot:3	1.25V LPDDR 1.25V	1.25V
VDD_CPU	EX DCDC	Slot:3A	1.0V	DVFS
VCC_18	VLDO7	Slot:3	1.8V	1.8V
VCCIO_PMU	VLDO5	Slot:4	1.8V	1.8V
VCC_IO	DCDC4	Slot:4	3.3V	3.3V
VCCIO_FLASH	EX LDO(1.8V) or VCC_IO	Slot:4A	1.8V or 3.3V	1.8V or 3.3V
VCCIO_SD	VLDO9	Slot:5	3.3V	1.8V or 3.3V
VCC_SD	VSWOUT1	Slot:5	3.3V	3.3V
Reset	(16*2mS)+50mS			
VDD10_LCD	VLDO6	OFF	0V	1.0V
VCC18_LCD	VLDO4	OFF	0V	1.8V
VCC33_LCD	EX MOS	OFF	0V	3.3V
VCCA_CODEC	VLDO1	OFF	0V	3.0V
VCC_TP	VLDO2	OFF	0V	3.3V
VCCIO_WL	VLDO8	OFF	0V	1.8V
VDD_DVP	EX LDO	OFF	0V	1.2V or 1.5V
VCC18_DVP	EX LDO	OFF	0V	1.8V
VCC28_DVP	EX LDO	OFF	0V	2.8V

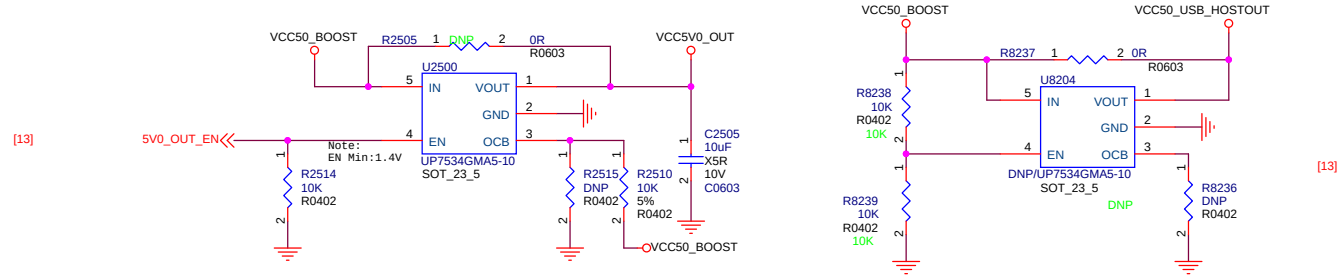
Rockchip 瑞芯微电子 Fuzhou Rockchip Electronics

Project:	RK3368H_demo		
File:	Power tree-RK818-1		
Date:	Tuesday, April 03, 2018	Rev:	V1.0
Designed by:	wjx	Sheet:	4 of 27

USB OTG







Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	RK3368H_demo		
File:	USB Port		
Date:	Tuesday, April 03, 2018	Rev:	V1.0
Designed by:	wjx	Sheet:	5 of 27

PMIC RK818-1

Default 1.1V

FB=1.1V

Default 3.3V

DDR3:1.5V
DDR3L:1.35V
LPDDR:1.25V
Default:LPDDR3

	R2521	R2522
DDR3	100K	200K
DDR3L	43K	120K
LPDDR	51K	200K

Default
OFF
OFF
ON:1.0V
ON:1.8V
ON:1.8V
OFF
OFF
OFF
ON:3.3V
ON:3.3V

AZ5825-01F不贴时，必须贴0R。

电感L2505和L2504标示布局时，间距须保证1.5mm以上。

BOOT10=00

Close to RK818

Close to BAT

VDD_CPU

Default 1.0V

VCCIO_PMU	
1.8V	XZ3216/SYR837
3.3V	XZ3216/SYR827/SYR837

DC充电，USB设置接：
OTG_VBUS_DRV为低，MOS全部不导通DCDC对电池充电。

DC充电，USB当HOST：
OTG_VBUS_DRV为高，VCC50_USBIN=0V,VCC50_USBOUT=5V
VCC50_USB=5V对外供电

DC没插，USB连接PC或充电器：
OTG_VBUS_DRV为高，
VCC50_USB=5V,VCC50_USBOUT=0V,VCC50_USBIN=5V
对电池充电。

Power KEY(Power on/off)

Over-temperature Protection

VCCIO_PMU select

1.8V

3.3V

Battery

Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics
Project:	RK3368H_demo
File:	25.PMIC_RK818-1_USB/ADP CHG-OPT
Date:	Tuesday, April 03, 2018
Rev:	V1.0
Designed by:	wjx
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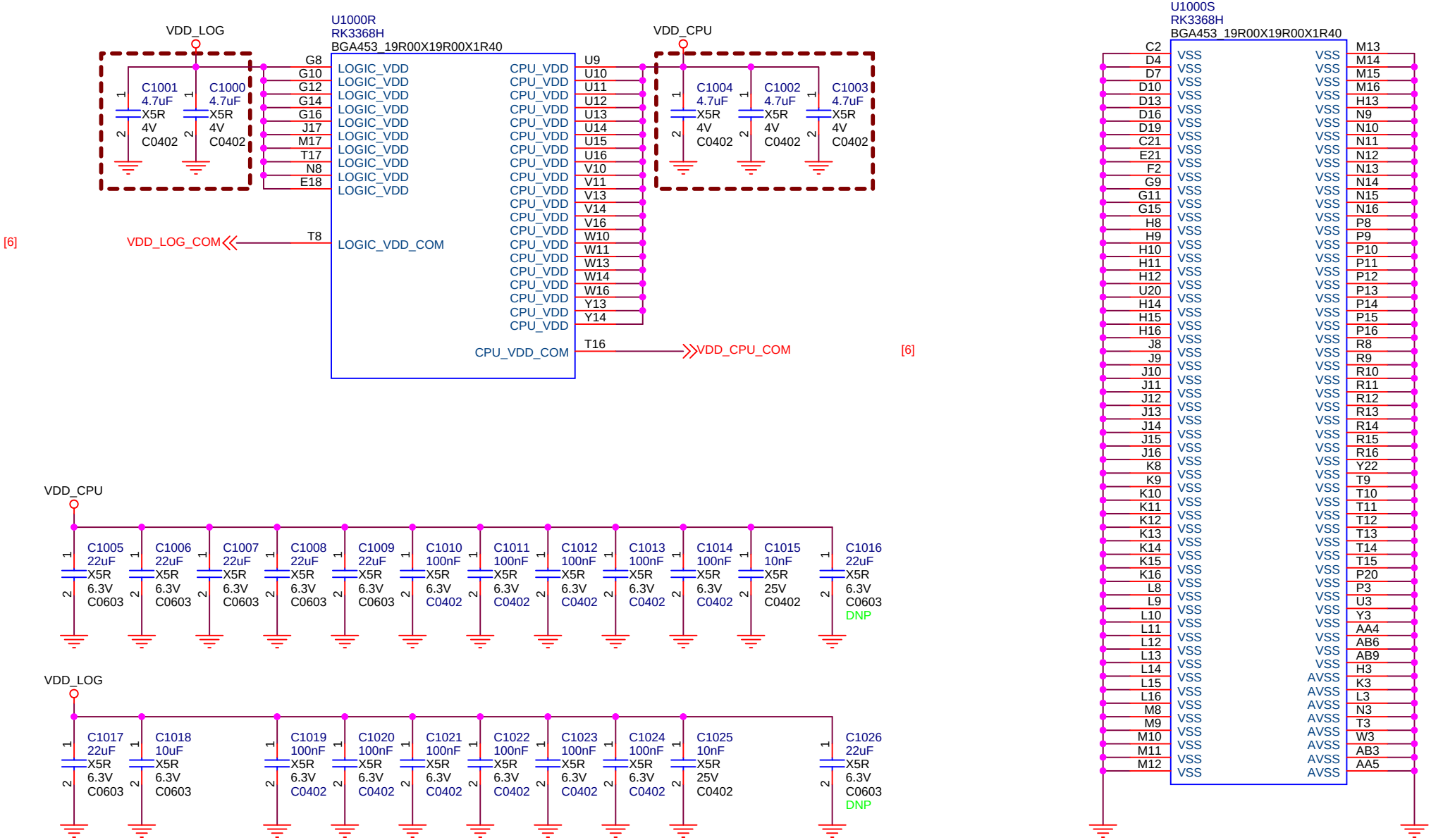
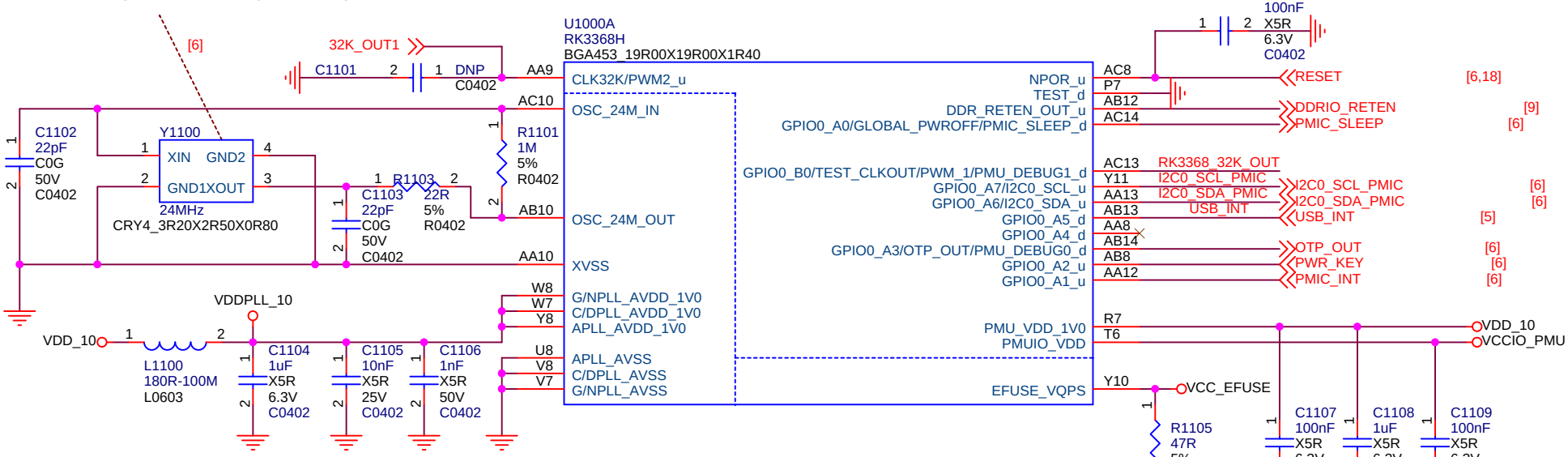


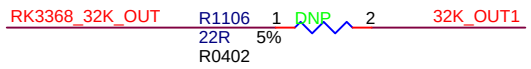
Note:All the capacitor should be place close to the power pin of RK3368。

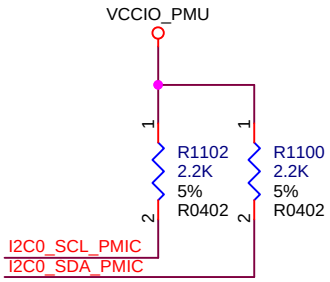
Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	RK3368H_demo		
File:	RK3368 Power		
Date:	Tuesday, April 03, 2018	Rev:	V1.0
Designed by:	wjx	Sheet:	7 of 27

Note:
Adjusted the load capacitance
according to the crystal specification.

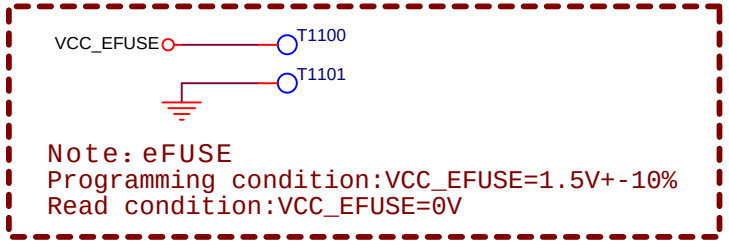


Note:All the capacitor should be place close to the power pin of RK3368。

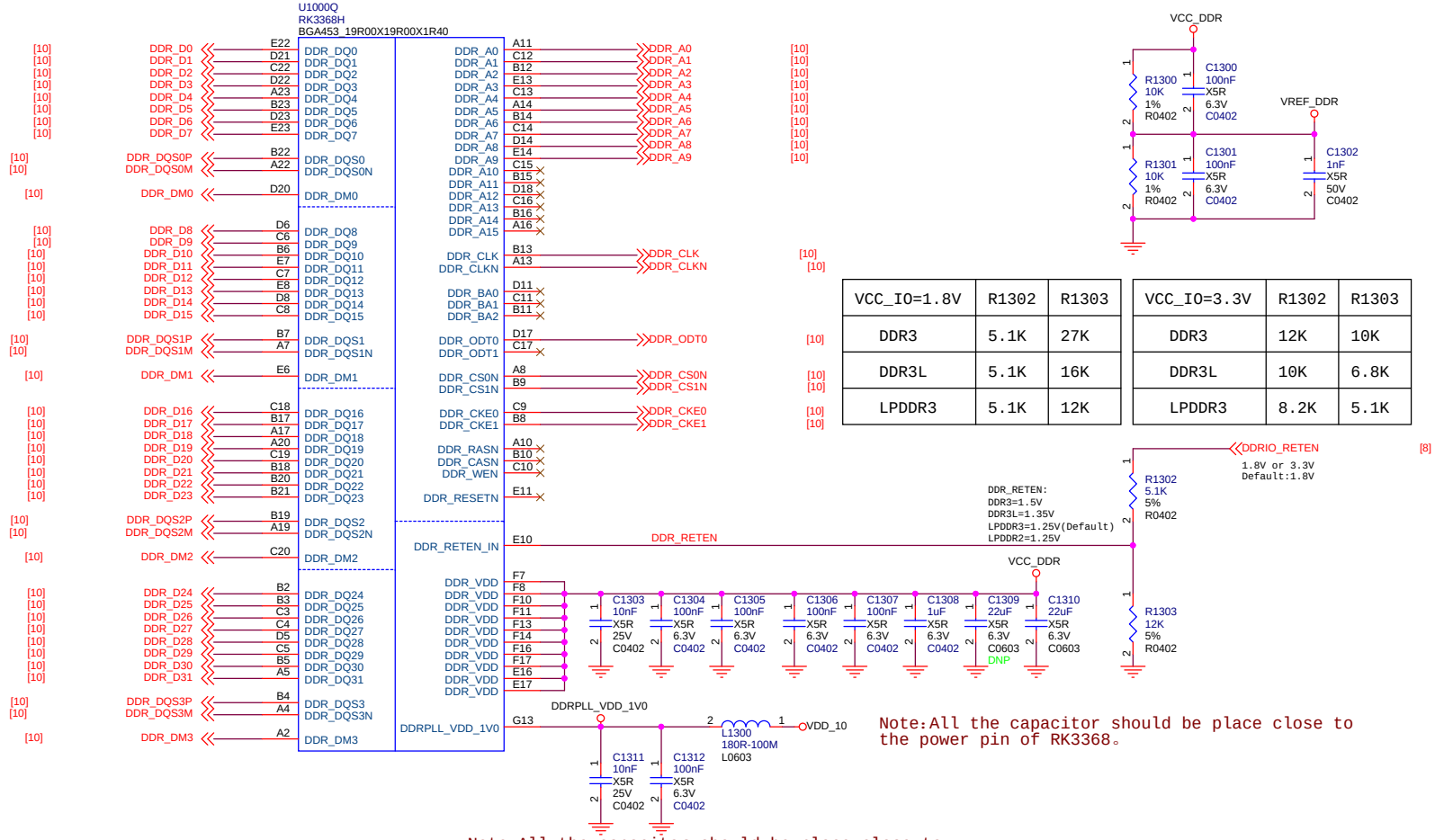




Note:All the capacitor should be place close to the power pin of RK3368。

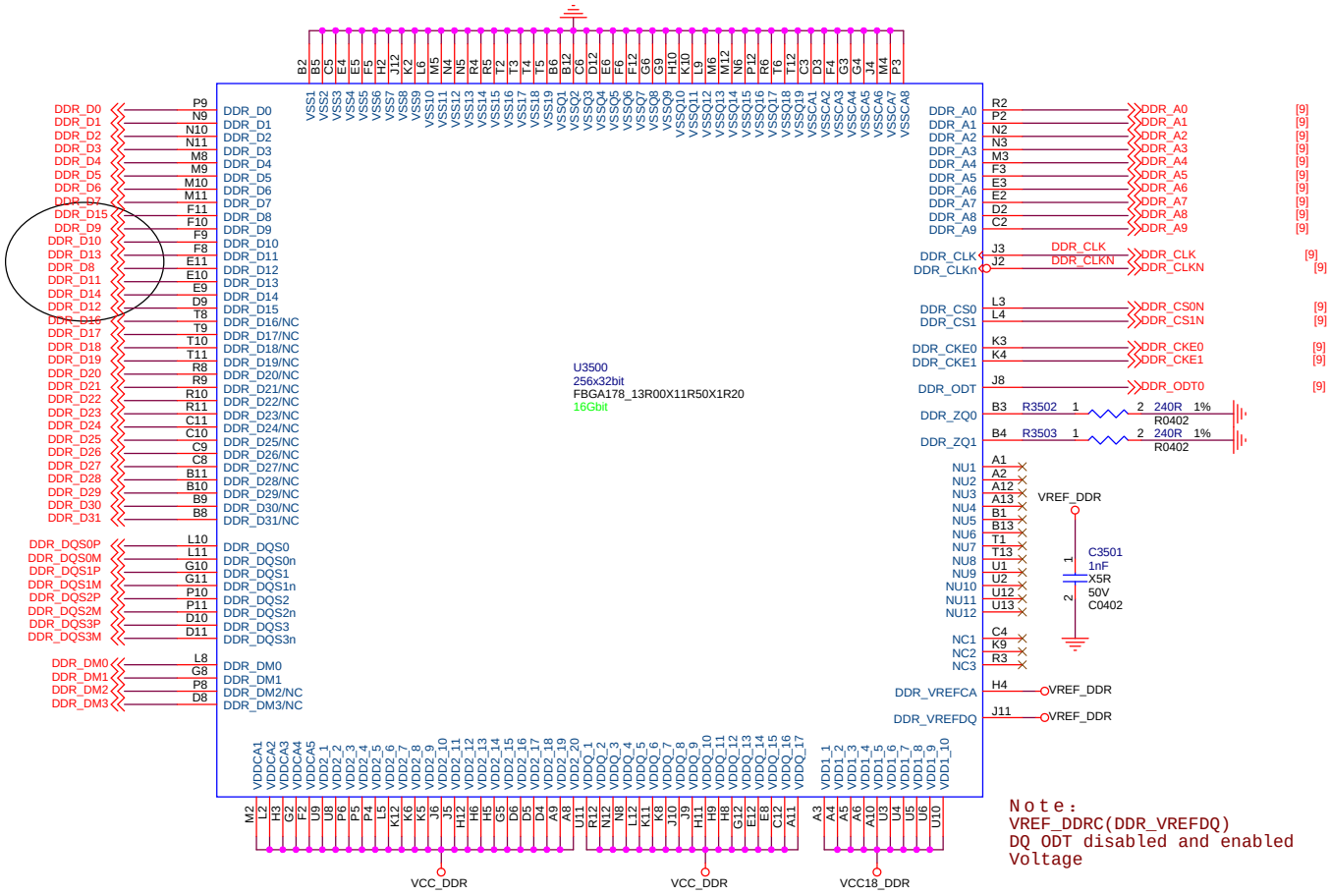


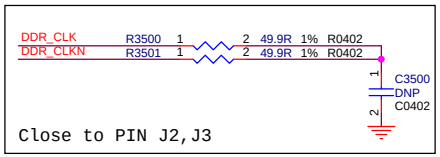
Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	RK3368H_demo		
File:	RK3368 OSC/PMUIO Controler		
Date:	Tuesday, April 03, 2018	Rev:	V1.0
Designed by:	wjx	Sheet:	8 of 27



Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics	
Project:	RK3368H_demo	
File:	RK3368 DDR Controler	
Date:	Tuesday, April 03, 2018	Rev: V1.0
Designed by:	wjx	Sheet: 9 of 27

LPDDR3





Symbol	Parameter	Min	Max	Unit	Notes
V_{IHDQ}(AC)	AC input logic high	V_{Ref} + 0.150	Note 2	V	1, 2, 5
V_{ILDQ}(AC)	AC input logic low	Note 2	V_{Ref} - 0.150	V	1, 2, 5
V_{IHDQ}(DC)	DC input logic high	V_{Ref} + 0.100	V_{DDQ}	V	1
V_{ILDQ}(DC)	DC input logic low	V_{SSQ}	V_{Ref} - 0.100	V	1
$V_{RefDQ(DC)}$ (DQ ODT disabled)	Reference Voltage for DQ, DM inputs	0.49 * V_{DDQ}	0.51 * V_{DDQ}	V	3, 4
$V_{RefDQ(DC)}$ (DQ ODT enabled)	Reference Voltage for DQ, DM inputs	V_{ODTR}/2 - 0.01 * V_{DDQ}	V_{ODTR}/2 + 0.01 * V_{DDQ}	V	3, 5, 6

NOTE 1 For DQ input only pins. $V_{Ref} = V_{RefDQ(DC)}$.

NOTE 2 See "Overshoot and Undershoot Specifications" on page 92

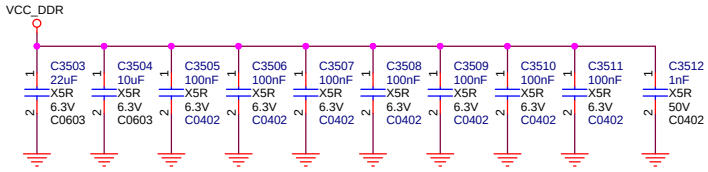
NOTE 3 The ac peak noise on V_{RefDQ} may not allow V_{RefDQ} to deviate from $V_{RefDQ(DC)}$ by more than +/-1% V_{DDQ} (for reference: approx. +/- 12 mV).

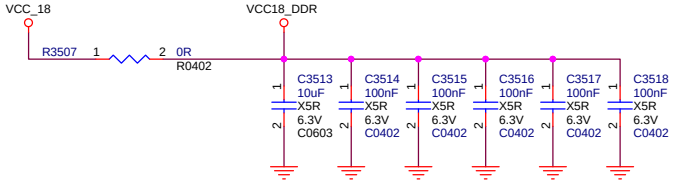
NOTE 4 For reference: approx. V_{DDQ}/2 +/- 12 mV.

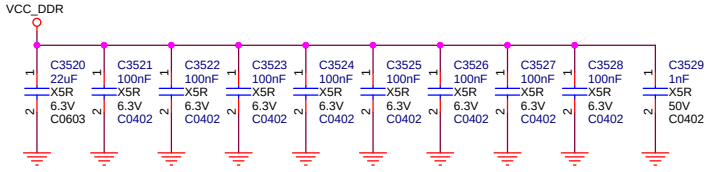
NOTE 5 For reference: approx. V_{ODTR}/2 +/- 12 mV.

NOTE 6 R_{ON} and R_{ODT} nominal mode register programmed values are used for the calculation of V_{ODTR}.

$$V_{ODTR} = \frac{2R_{ON} + R_{TT}}{R_{ON} + R_{TT}} \times V_{DDQ}$$







LPDDR3 FILTER

Note:All the capacitor should be place close to the power pin of LPDDR3。

PMIC_SLEEP [6,8]

Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	RK3368H_demo		
File:	DRAM-LPDDR3-178P-Default		
Date:	Tuesday, April 03, 2018	Rev:	V1.0
Designed by:	wjx	Sheet:	10 of 27

U1000H
RK3368H
BGA453_19R00X19R00X1R40

GPIO2_A3/FLASH_CSN3/EMMC_RSTNOUT_u — Y16 — FLASH_CS3/EMMC_RST
GPIO2_A2/FLASH_CSN2_u — AB15
GPIO2_A1/FLASH_CSN1_u — AA14
GPIO2_A0/FLASH_CSN0_u — AA16
GPIO2_A4/FLASH_DQS/EMMC_CLKOUT_u — AA15 — FLASH_DQS/EMMC_CLKO
GPIO1_D2/FLASH_RDY/EMMC_CMD/SFC_CLK_u — AC16 — FLASH_RDY/EMMC_CMD
GPIO1_D3/FLASH_WP/EMMC_PWREN_d — AB16 — FLASH_WP/EMMC_PWREN
GPIO1_D4/FLASH_RDN/SFC_CSN1_u — AB17
GPIO1_D5/FLASH_ALE/SPI0_CLK_d — W17
GPIO1_D6/FLASH_CLE_d — AC17 — T3900
GPIO1_D7/FLASH_WRN/SFC_CSN0_u — Y17 — T7909
GPIO1_C2/FLASH_D0/EMMC_D0/SFC_SIO0_u — AB18 — FLASH_D0 [12]
GPIO1_C3/FLASH_D1/EMMC_D1/SFC_SIO1_u — AA17 — FLASH_D1 [12]
GPIO1_C4/FLASH_D2/EMMC_D2/SFC_SIO2_u — AA18 — FLASH_D2 [12]
GPIO1_C5/FLASH_D3/EMMC_D3/SFC_SIO3_u — W18 — FLASH_D3 [12]
GPIO1_C6/FLASH_D4/EMMC_D4/SPI0_RXD_u — Y18 — FLASH_D4 [12]
GPIO1_C7/FLASH_D5/EMMC_D5/SPI0_TXD_u — AC19 — FLASH_D5 [12]
GPIO1_D0/FLASH_D6/EMMC_D6/SPI0_CSN0_u — Y19 — FLASH_D6 [12]
GPIO1_D1/FLASH_D7/EMMC_D7/SPI0_CSN1_u — AA19 — FLASH_D7 [12]

FLASH_VDD — V17 — VCCIO_FLASH

C1401 100nF X5R 6.3V C0402

Note:All the capacitor should be place close to the power pin of RK3368。

U1000D
RK3368H
BGA453_19R00X19R00X1R40

[12] GPIO0_B2/SPI2_RXD/GPUJTAG_TMS_u — F21
GPIO0_B3/SPI2_TXD/GPUJTAG_TDI_u — G21
GPIO0_B4/SPI2_CLK/GPUJTAG_TDO_u — G22
[12] GPIO0_B5/SPI2_CSN0/FLASH_VOL_SEL_u — F22 — FLASH_VOL_SEL
[12] GPIO0_B1/I2C2_SCL/GPUJTAG_TRSTN_u — F20 — I2C2_SCL_TP
[12] GPIO3_D7/I2C2_SDA/GPUJTAG_TCK_u — E20 — I2C2_SDA_TP

APIO4_VDD — G18 — VCCIO_PMU

C1400 100nF X5R 6.3V C0402

Note:All the capacitor should be place close to the power pin of RK3368。

R1400 1 R0402 2 47K 5% — VCCIO_PMU
FLASH_VOL_SEL — R1401 1 R0402 2 6.8K 5% DNP

FLASH0_VOLTAGE_SEL=0 FLASH_IO=3.3V
FLASH0_VOLTAGE_SEL=1 FLASH_IO=1.8V

FLASH Driver IO SEL

FLASH_VOL_SEL	FLASH_IO Voltage
1.8V or 3.3V	1.8V Driver IO
0V	3.3V Driver IO

U1000M
RK3368H
BGA453_19R00X19R00X1R40

GPIO2_A5/SDMMC0_D0/UART2_TX_u — P18 — SDMMC_D0 — SDMMC_D0 [26]
GPIO2_A6/SDMMC0_D1/UART2_RX_u — P22 — SDMMC_D1 — SDMMC_D1 [26]
GPIO2_A7/SDMMC0_D2/JTAG_TCK_u — R22 — SDMMC_D2 — SDMMC_D2 [26]
GPIO2_B0/SDMMC0_D3/JTAG_TMS_u — P23 — SDMMC_D3 — SDMMC_D3 [26]
GPIO2_B1/SDMMC0_CLKOUT/MCUJTAG_TCK_d — N22 — SDMMC_CLK — SDMMC_CLK [26]
GPIO2_B2/SDMMC0_CMD/MCUJTAG_TMS_u — N19 — SDMMC_CMD — SDMMC_CMD [26]
GPIO2_B3/SDMMC0_DECTN_u — M21 — SDMMC_DET — SDMMC_DET [26]

SDMMC_VDD — N21 — VCCIO_SD

C1402 100nF X5R 6.3V C0402

Note:All the capacitor should be place close to the power pin of RK3368。

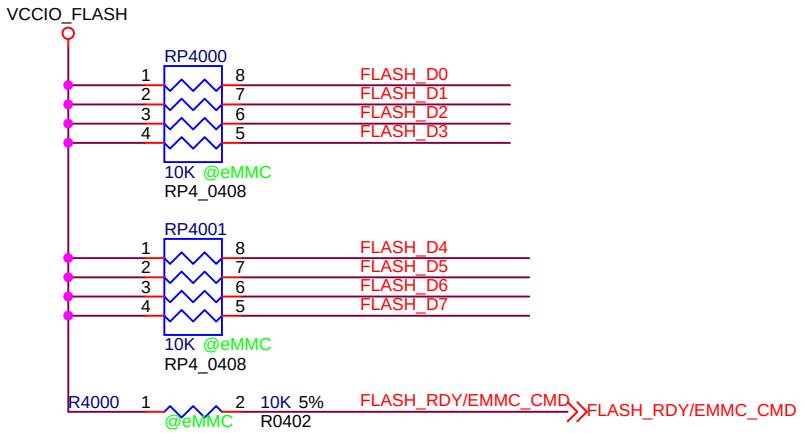
SDMMC_D0 — R8228 2 DNP 1 10K R0402
SDMMC_D1 — R8227 2 DNP 1 10K R0402
SDMMC_D2 — R8226 2 DNP 1 10K R0402
SDMMC_D3 — R8225 2 DNP 1 10K R0402
SDMMC_CMD — R1405 2 DNP 1 10K R0402
SDMMC_DET — R1406 2 1 10K R0402
VCCIO_SD

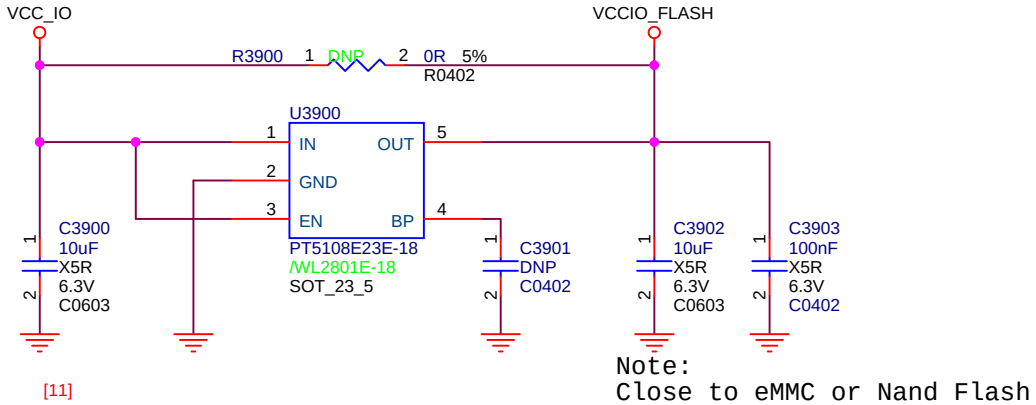
VCCIO_PMU — R8262 2.2K 5% R0402 — I2C2_SCL_TP
VCC_IO — R8264 1.5K 5% R0402
Q8205 WNM3018 SOT_323
I2C2_SCL_TP_OUT [27]

VCCIO_PMU — R8263 2.2K 5% R0402 — I2C2_SDA_TP
VCC_IO — R8265 1.5K 5% R0402
Q8204 WNM3018 SOT_323
I2C2_SDA_TP_OUT [27]

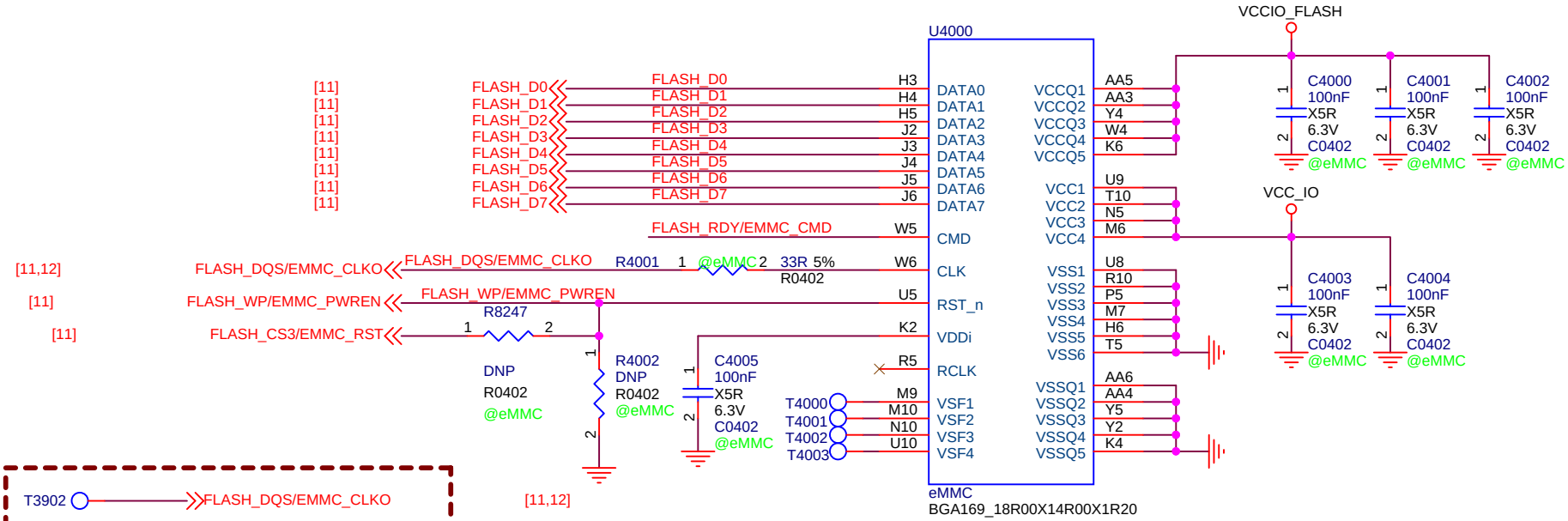
Fuzhou Rockchip Electronics			
Project:	RK3368H_demo		
File:	RK3368 FLASH/SDMMC Controler		
Date:	Tuesday, April 03, 2018	Rev:	V1.0
Designed by:	wjx	Sheet:	11 of 27

eMMC





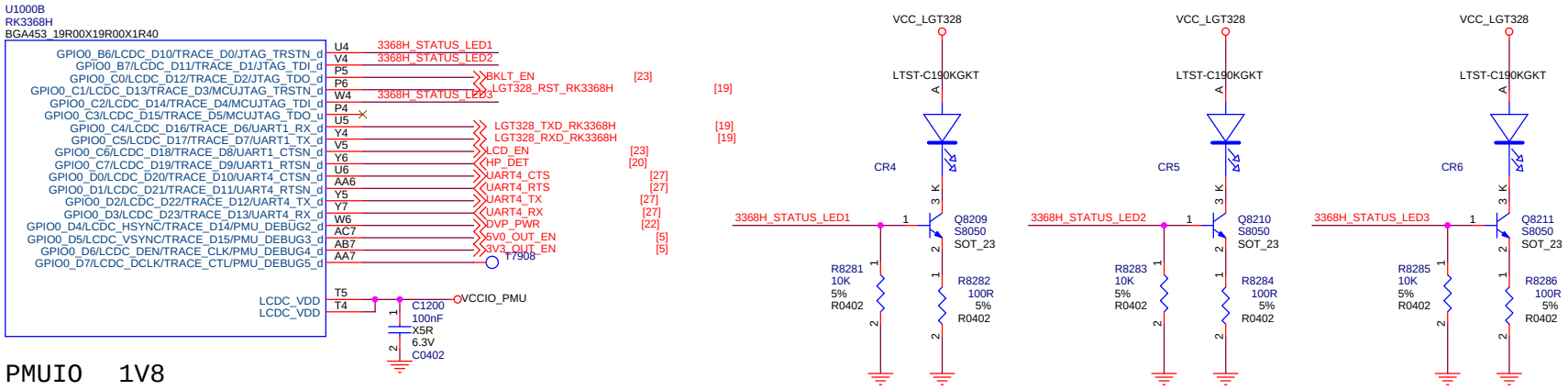
Note:
Close to eMMC or Nand Flash



Note:
Reserve PAD for eMMC or tSD Update.

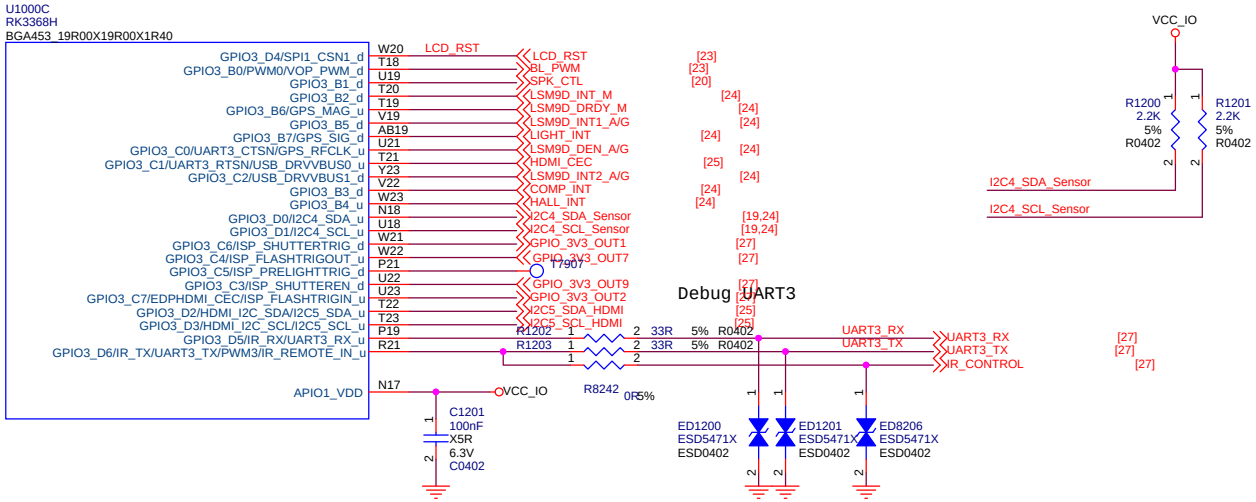
Note:All the capacitor should be place close to the power pin of eMMC。

Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	RK3368H_demo		
File:	Flash-eMMC-Default		
Date:	Tuesday, April 03, 2018	Rev:	V1.0
Designed by:	wjx	Sheet:	12 of 27



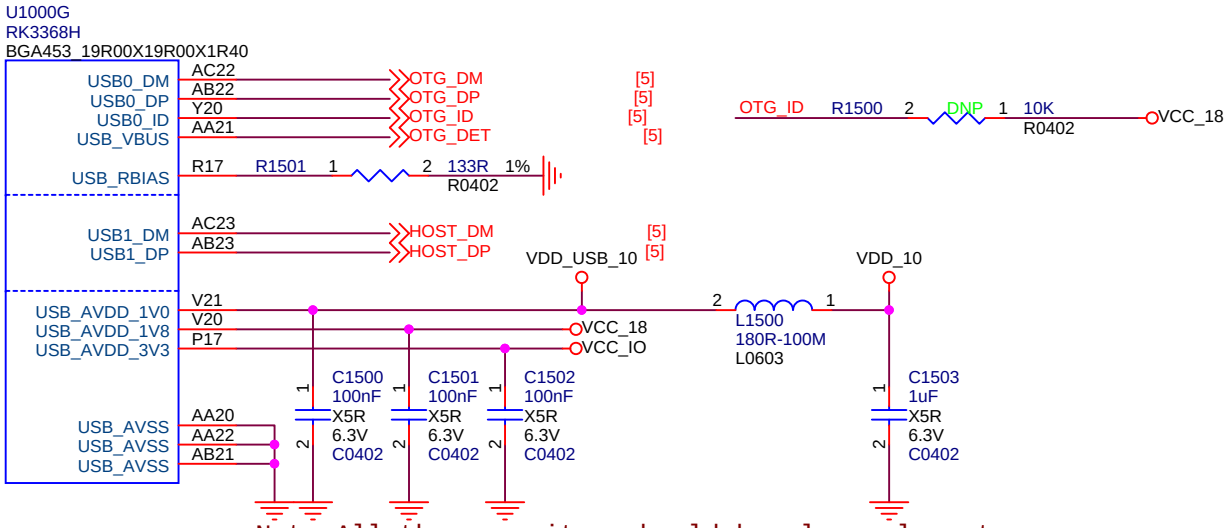
PMUIO 1V8

Note:All the capacitor should be place close to the power pin of RK3368。



Note:All the capacitor should be place close to the power pin of RK3368。

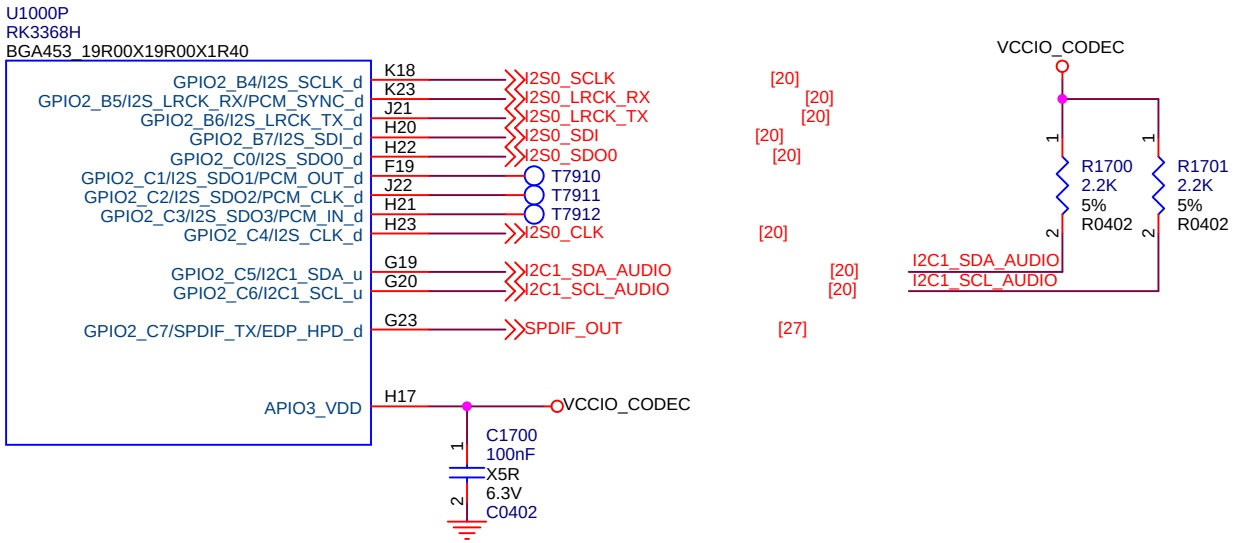
Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	RK3368H_demo		
File:	RK3368 GPIO Interface		
Date:	Tuesday, April 03, 2018	Rev:	V1.0
Designed by:	wjx	Sheet:	13 of 27



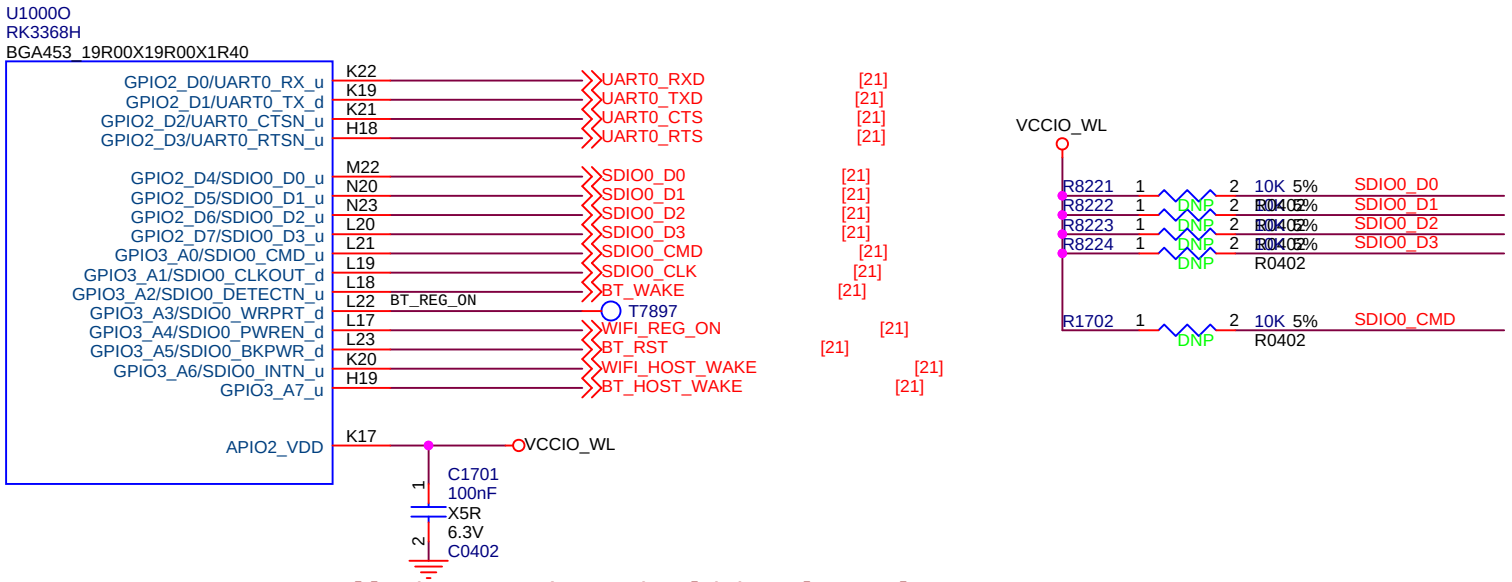
Note:All the capacitor should be place close to the power pin of RK3368。

if using HSIC,
Y21 Pin must be supply 1.2V.

Rockchip 瑞芯微电子 Fuzhou Rockchip Electronics			
Project:	RK3368H_demo		
File:	RK3368 USB/HSIC Controler		
Date:	Tuesday, April 03, 2018	Rev:	V1.0
Designed by:	wjx	Sheet:	14 of 27



Note:All the capacitor should be place close to the power pin of RK3368。



Note:All the capacitor should be place close to the power pin of RK3368。

Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	RK3368H_demo		
File:	RK3368 SDIO0/UART0/I2C1		
Date:	Tuesday, April 03, 2018	Rev:	V1.0
Designed by:	wjx	Sheet:	15 of 27

LVDS/MIPI_DSI

U1000I
RK3368H
BGA453_19R00X19R00X1R40

MIPI_DSI_DN0/LCDC_D9/LVDS_DN0 M2
MIPI_DSI_DP0/LCDC_D8/LVDS_DP0 M3
MIPI_DSI_DN1/LCDC_D7/LVDS_DN1 N1
MIPI_DSI_DP1/LCDC_D6/LVDS_DP1 N2
MIPI_DSI_CLKN/LCDC_D5/LVDS_CLKN P1
MIPI_DSI_CLKP/LCDC_D4/LVDS_CLKP P2
MIPI_DSI_DN2/LCDC_D2/LVDS_DN2 R2
MIPI_DSI_DP2/LCDC_D3/LVDS_DP2 R3
MIPI_DSI_DN3/LCDC_D0/LVDS_DN3 T1
MIPI_DSI_DP3/LCDC_D1/LVDS_DP3 T2

M2 → LVDS/MIPI_TX_D0N [23]
M3 → LVDS/MIPI_TX_D0P [23]
N1 → LVDS/MIPI_TX_D1N [23]
N2 → LVDS/MIPI_TX_D1P [23]
P1 → LVDS/MIPI_TX_CLKN [23]
P2 → LVDS/MIPI_TX_CLKP [23]
R2 → LVDS/MIPI_TX_D2N [23]
R3 → LVDS/MIPI_TX_D2P [23]
T1 → LVDS/MIPI_TX_D3N [23]
T2 → LVDS/MIPI_TX_D3P [23]

MIPI_DSI_RBIAS: K6 — R1900 1 — 2K 1% R0402

LVDS/MIPI_AVDD_1V0 K5
LVDS/MIPI_AVDD_1V8 K4
LVDS/MIPI_AVDD_3V3 K7

K5 — R1905 2 — 1 1R 5% R0603 — VDD10_LCD

C1900 100nF X5R 6.3V C0402
C1901 100nF X5R 6.3V C0402
C1902 100nF X5R 6.3V C0402
C1908 1uF X5R 6.3V C0402

K7 — L1900 2 — 1 180R-100M L0603 — VCC18_LCD
K7 — L1901 2 — 1 180R-100M L0603 — VCC33_LCD

Note:All the capacitor should be place close to the power pin of RK3368。

EDP

U1000J
RK3368H
BGA453_19R00X19R00X1R40

EDP_TX0P U1
EDP_TX0N U2
EDP_TX1P V2
EDP_TX1N V3
EDP_TX2P W1
EDP_TX2N W2
EDP_TX3P Y1
EDP_TX3N Y2
EDP_AUXP AA2
EDP_AUXN AA3
EDP_DC_TP M7
EDP_CLKI_24M L7
EDP_RBIAS L5
EDP_AVDD_1V0 L4
EDP_AVDD_1V8 L6

U1000K
RK3368H
BGA453_19R00X19R00X1R40

HDMI_HPD N4 — HDMI_HPD_IN — R1901 1 — 2 1K 5% R0402 — HDMI_HPD — HDMI_HPD [25]

HDMI_TCP AB1
HDMI_TCN AC1
HDMI_TX0P AB2
HDMI_TX0N AC2
HDMI_TX1P AB4
HDMI_TX1N AC4
HDMI_TX2P AB5
HDMI_TX2N AC5

AB1 → HDMI_TX_C+ [25]
AC1 → HDMI_TX_C- [25]
AB2 → HDMI_TX_D0+ [25]
AC2 → HDMI_TX_D0- [25]
AB4 → HDMI_TX_D1+ [25]
AC4 → HDMI_TX_D1- [25]
AB5 → HDMI_TX_D2+ [25]
AC5 → HDMI_TX_D2- [25]

HDMI_RBIAS: N5 — R1902 1 — 2 1.62K 1% R0402

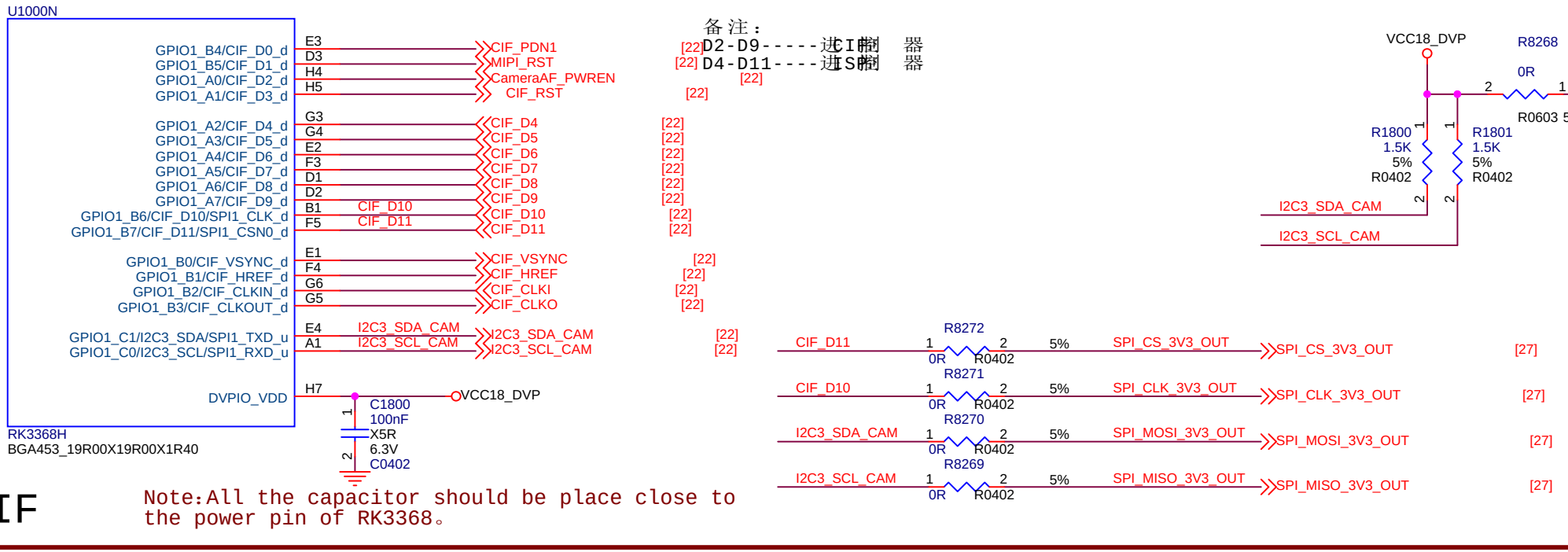
HDMI_AVDD_1V0 N7
HDMI_AVDD_1V8 N6

N7 → VDD10_LCD
N6 → VCC18_LCD

C1903 100nF X5R 6.3V C0402
C1904 4.7uF X5R 6.3V C0603
C1905 100nF X5R 6.3V C0402
C1906 4.7uF X5R 6.3V C0603

VCC18_LCD
R8248 4.7K/NC R0402 5%
HDMI_HPD — R8249 1 — 2 5% 47K/NC R0402 — 1 Q8203 S8050/NC SOT_23
R8250 20K/NC 5% R0402
HDMI_HPD_IN
R8251 47K/NC R0402 5%

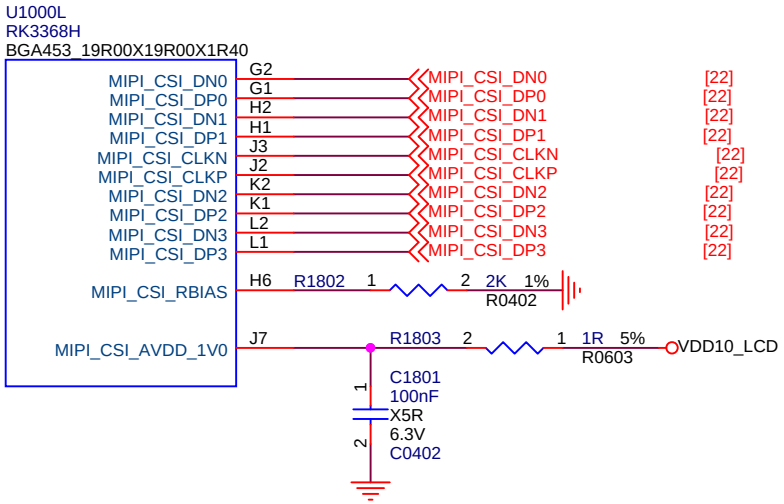
Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	RK3368H_demo		
File:	RK3368 Display Interface		
Date:	Tuesday, April 03, 2018	Rev:	V1.0
Designed by:	wjx	Sheet:	16 of 27



CIF

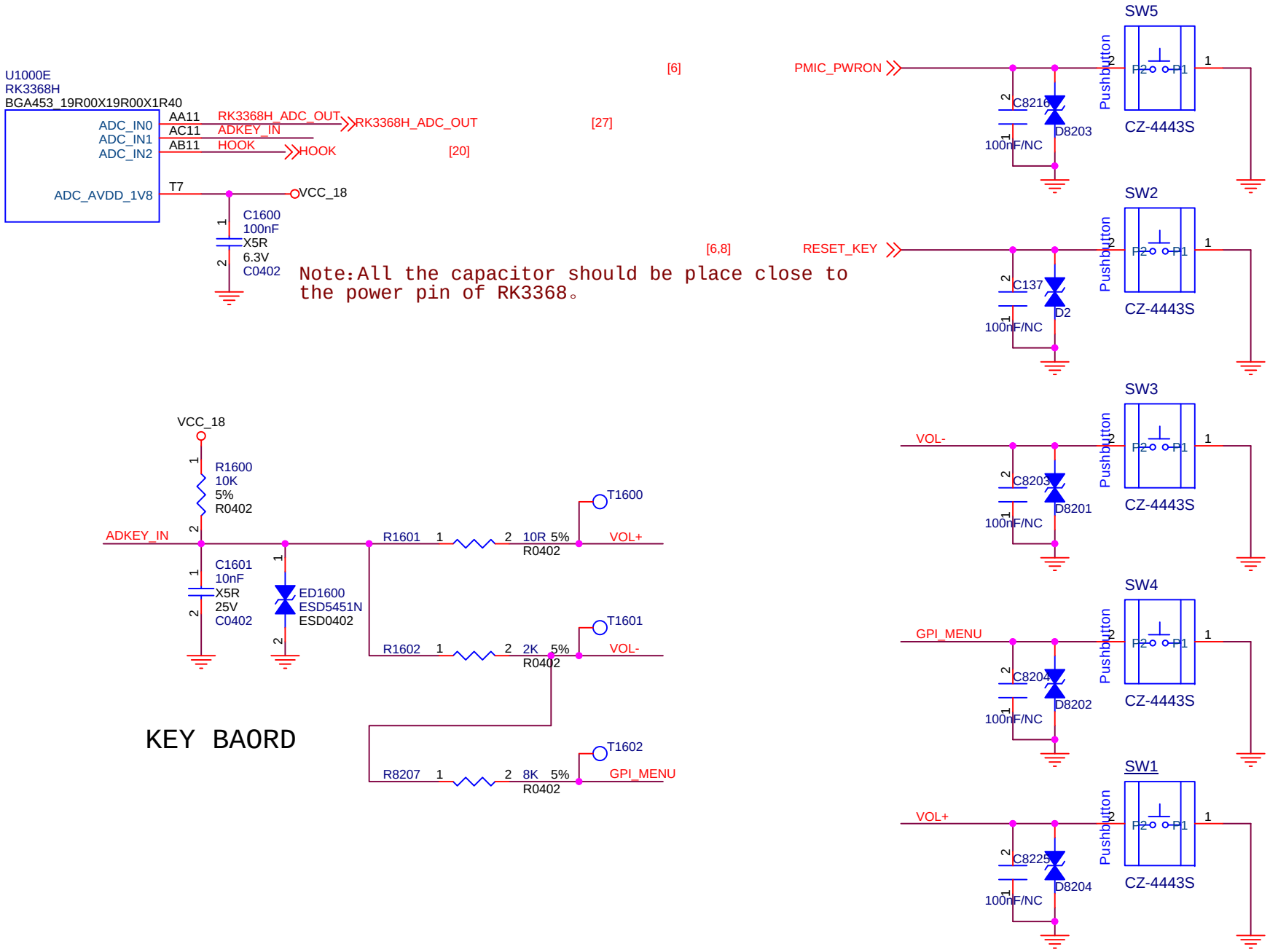
Note:All the capacitor should be place close to the power pin of RK3368。

MIPI_CSI

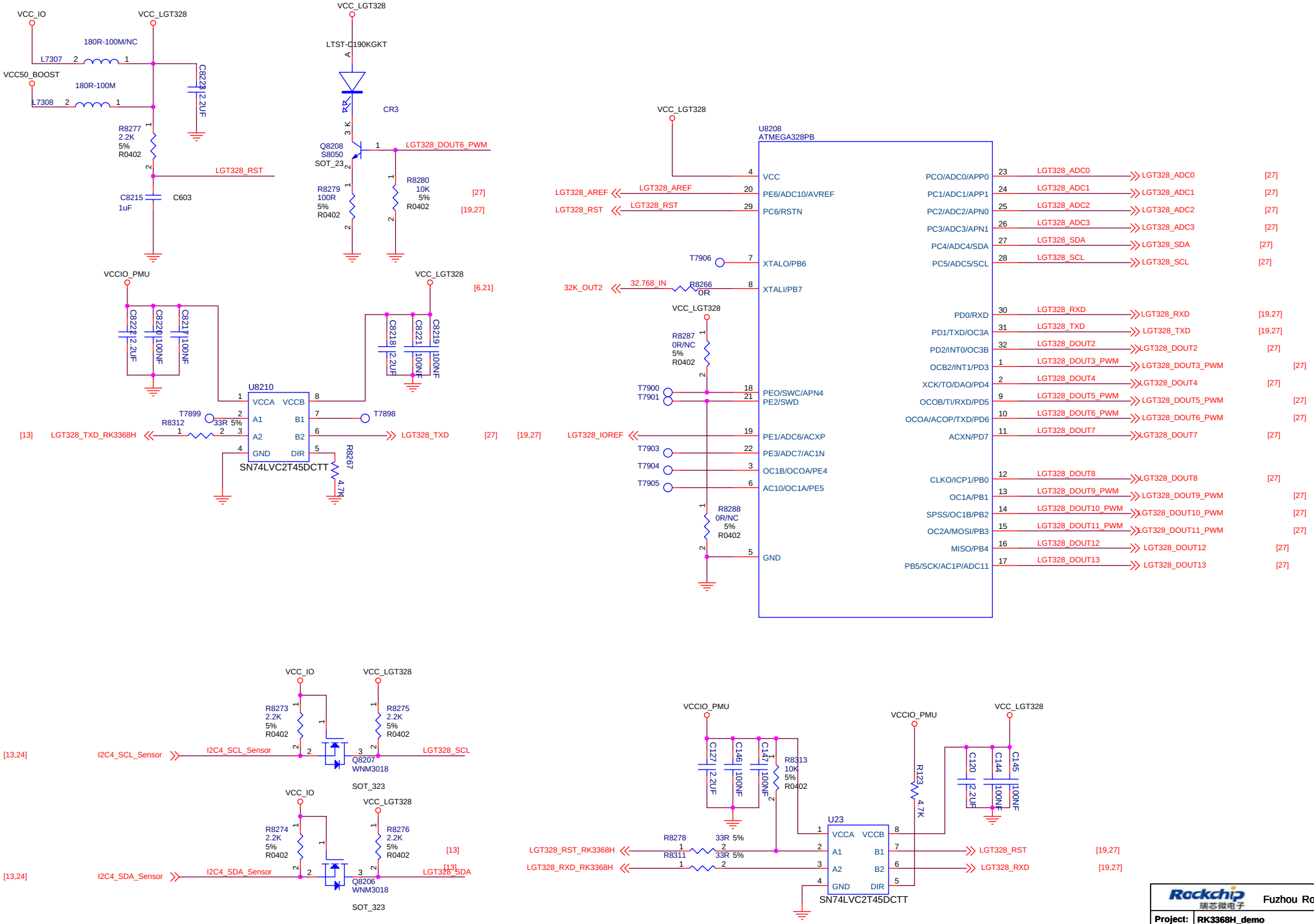


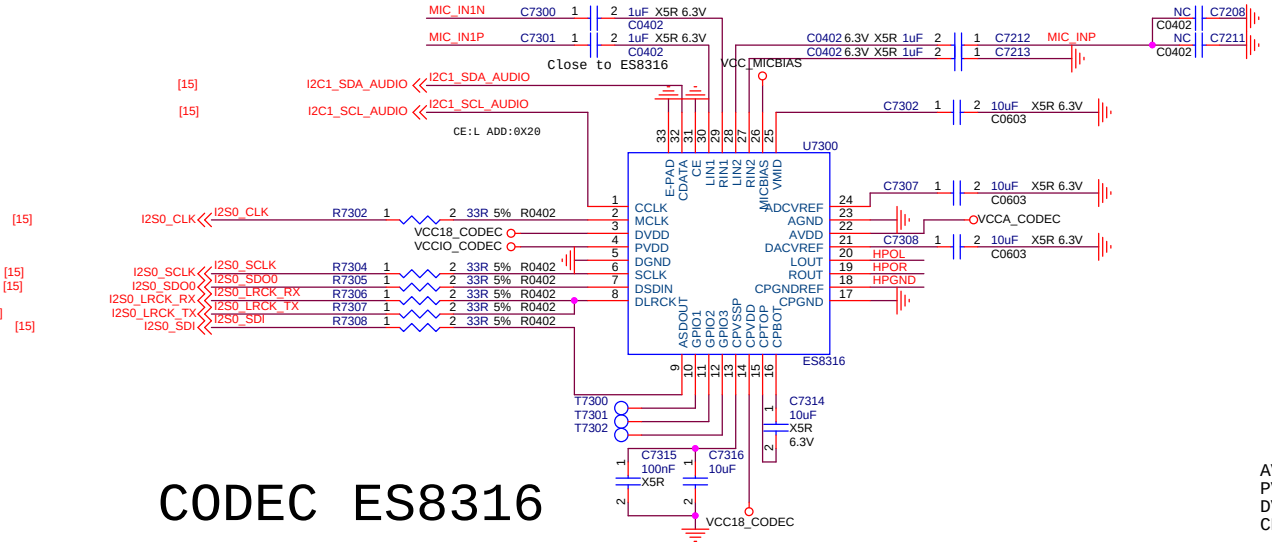
Note:All the capacitor should be place close to the power pin of RK3368。

Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	RK3368H_demo		
File:	RK3368 DVP/MIPICSI Interface		
Date:	Tuesday, April 03, 2018	Rev:	V1.0
Designed by:	wjx	Sheet:	17 of 27



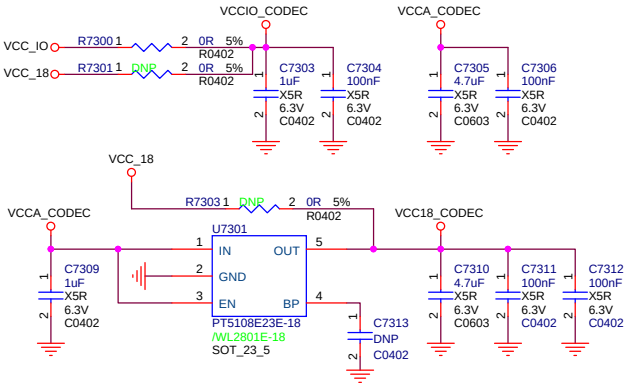
Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	RK3368H_demo		
File:	RK3368 SARADC/KEY Controler		
Date:	Tuesday, April 03, 2018	Rev:	V1.0
Designed by:	wjx	Sheet:	18 of 27


VCC_IO
VCC_LGT328
180R-100M/NC
L7307
VCC50_BOOST
180R-100M
L7308
C8223 2.2UF
R8277 2.2K 5% R0402
LGT328_RST
C8215 1uF
C603
VCC_LGT328
LTST-C190KGKT
CR3
Q8208 S8050 SOT_23
LGT328_DOUT6_PWM
R8279 100R 5% R0402
R8280 10K 5% R0402
[27]
[19,27]
VCCIO_PMU
VCC_LGT328
[6,21]
C8222 2.2UF
C8220 100NF
C8217 100NF
C8218 2.2UF
C8221 100NF
C8219 100NF
U8210
VCCA VCCB
A1 B1
A2 B2
GND DIR
SN74LVC2T45DCTT
T7899
R8312 33R 5%
T7898
[13]
LGT328_TXD_RK3368H
LGT328_TXD
[27]
R8267 4.7K
VCC_LGT328
U8208
ATMEGA328PB
VCC
PE6/ADC10/AVREF
PC6/RSTN
XTALO/PB6
XTALI/PB7
PE0/SWC/APN4
PE2/SWD
PE1/ADC6/ACXP
PE3/ADC7/AC1N
OC1B/OCOA/PE4
AC10/OC1A/PE5
GND
LGT328_AREF
LGT328_RST
T7906
32K_OUT2
32.768_IN
R8266 0R
R8287 0R/NC 5% R0402
T7900
T7901
T7903
T7904
T7905
R8288 0R/NC 5% R0402
[19,27]
LGT328_IOREF
PCO/ADC0/APP0
PC1/ADC1/APP1
PC2/ADC2/APN0
PC3/ADC3/APN1
PC4/ADC4/SDA
PC5/ADC5/SCL
PD0/RXD
PD1/TXD/OC3A
PD2/INT0/OC3B
OCB2/INT1/PD3
XCK/TO/DAO/PD4
OCOB/TI/RXD/PD5
OCOA/ACOP/TXD/PD6
ACXN/PD7
CLKO/ICP1/PB0
OC1A/PB1
SPSS/OC1B/PB2
OC2A/MOSI/PB3
MISO/PB4
PB5/SCK/AC1P/ADC11
LGT328_ADC0
LGT328_ADC1
LGT328_ADC2
LGT328_ADC3
LGT328_SDA
LGT328_SCL
LGT328_RXD
LGT328_TXD
LGT328_DOUT2
LGT328_DOUT3_PWM
LGT328_DOUT4
LGT328_DOUT5_PWM
LGT328_DOUT6_PWM
LGT328_DOUT7
LGT328_DOUT8
LGT328_DOUT9_PWM
LGT328_DOUT10_PWM
LGT328_DOUT11_PWM
LGT328_DOUT12
LGT328_DOUT13
VCC_IO
VCC_LGT328
R8273 2.2K 5% R0402
R8275 2.2K 5% R0402
[13,24]
I2C4_SCL_Sensor
LGT328_SCL
Q8207 WNM3018
SOT_323
R8274 2.2K 5% R0402
R8276 2.2K 5% R0402
[13]
I2C4_SDA_Sensor
LGT328_SDA
Q8206 WNM3018
VCCIO_PMU
C127 2.2UF
C146 100NF
C147 100NF
R8313 10K 5% R0402
U23
R8278 33R 5%
R8311 33R 5%
LGT328_RST_RK3368H
LGT328_RXD_RK3368H
R123 4.7K
C120 2.2UF
C144 100NF
C145 100NF
Rockchip 瑞芯微电子
Fuzhou Rockchip Electronics
Project: RK3368H_demo
File: Flash-Power manage
Date: Tuesday, April 03, 2018
Rev: V1.0
Designed by: wjx
Sheet: 19 of 27



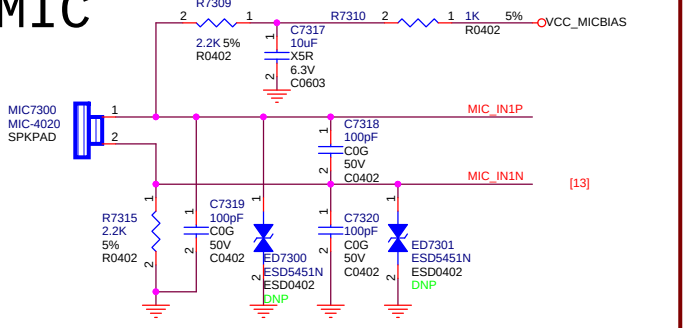
CODEC ES8316

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

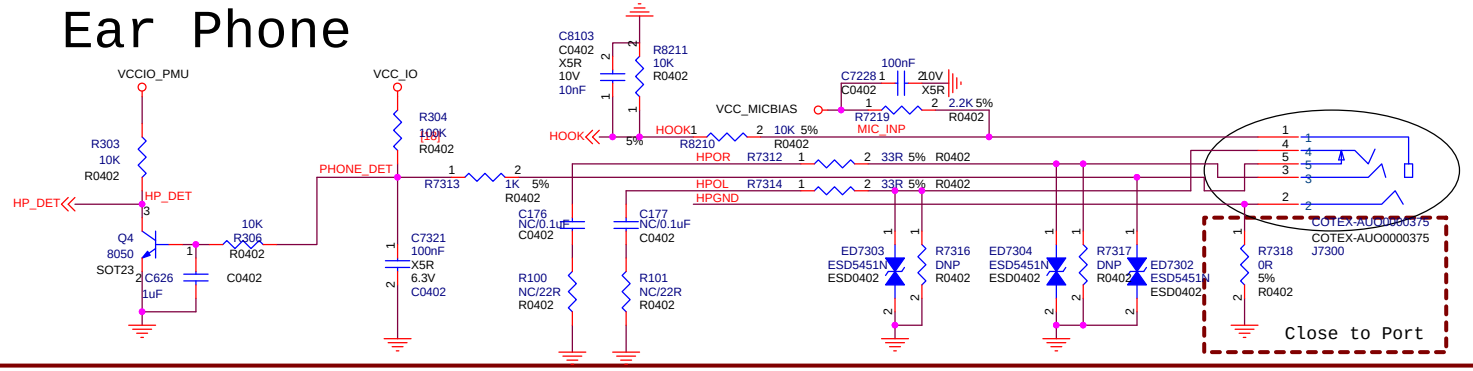


AVDD:Analog Power Supply(1.6-3.3V)Recommend:3.3V
PVDD:Digital IO Power Supply(1.6-3.3V)Recommend:3.3V
DVDD:Digital Core Power Supply(1.6-3.3V)Recommend:1.8V
CPVDD:Charge Pump Power Supply(1.6-2.0V)Recommend:1.8V

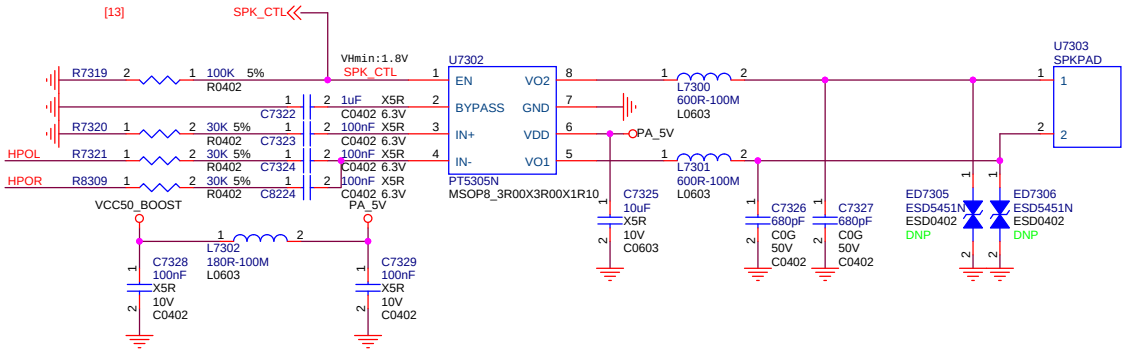
MIC



Ear Phone



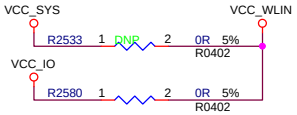
Note:HPOR/HPOL/HPGND LAYOUT



SPEAKER

Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	RK3368H_demo		
File:	Audio Codec-ES8316-Default		
Date:	Tuesday, April 03, 2018	Rev:	V1.0
Designed by:	wjx	Sheet:	20 of 27

Power for WIFI+BT

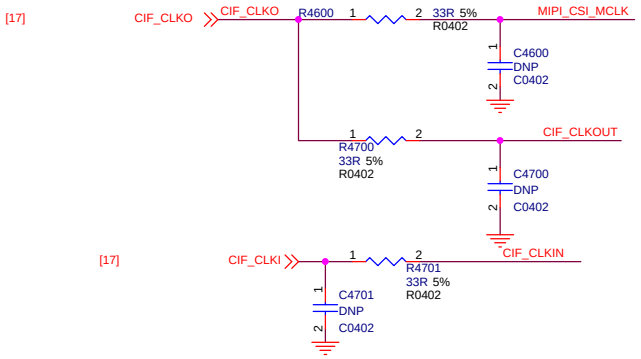


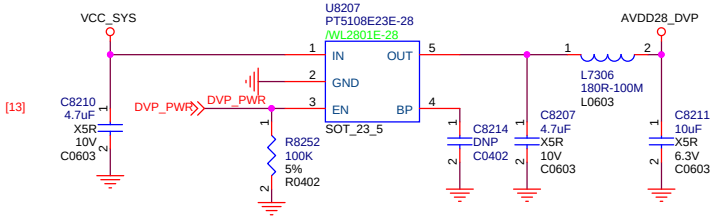
WIFI/BT MODULE

WiFi 802.11b/g/n+BT4.0

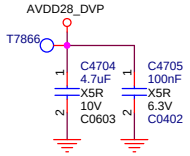
Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	RK3368H_demo		
File:	WIFI/BT-RTL8723BS/AP6212		
Date:	Tuesday, April 03, 2018	Rev:	V1.0
Designed by:	wjx	Sheet:	21 of 27

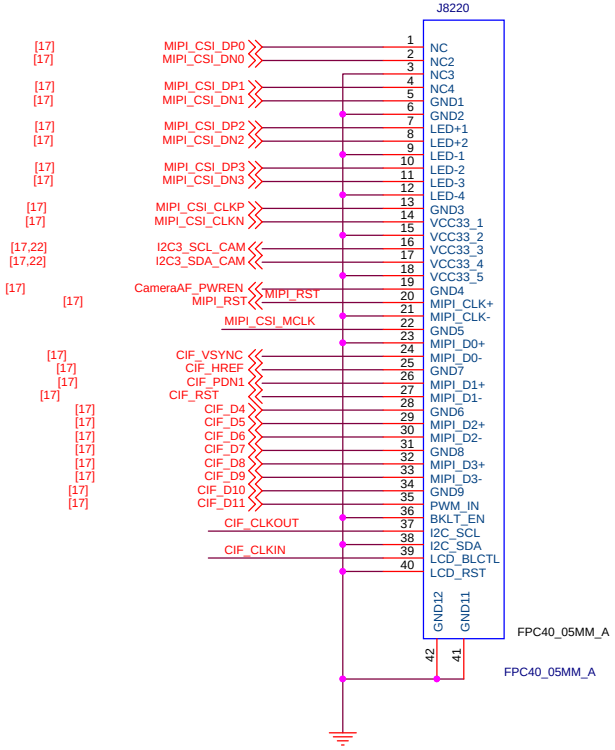
Carmera(MIPI CSI)
MAX 8MP





DVP Power

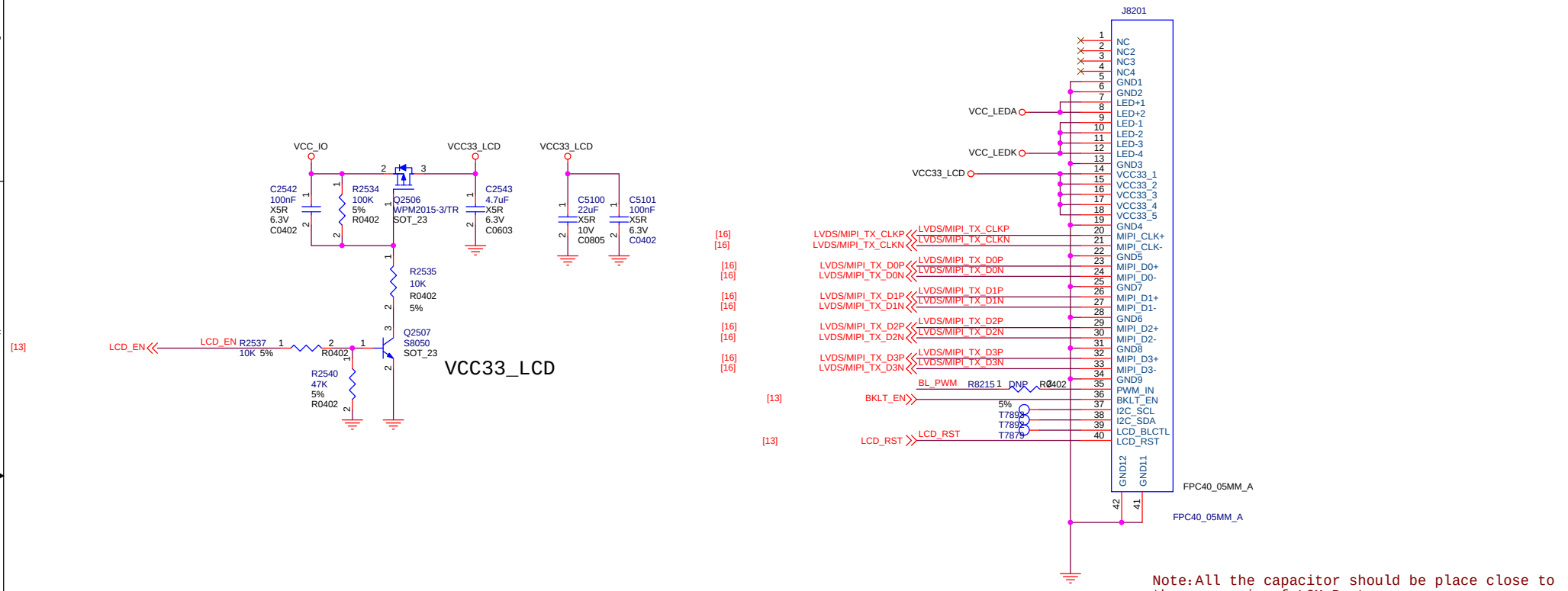




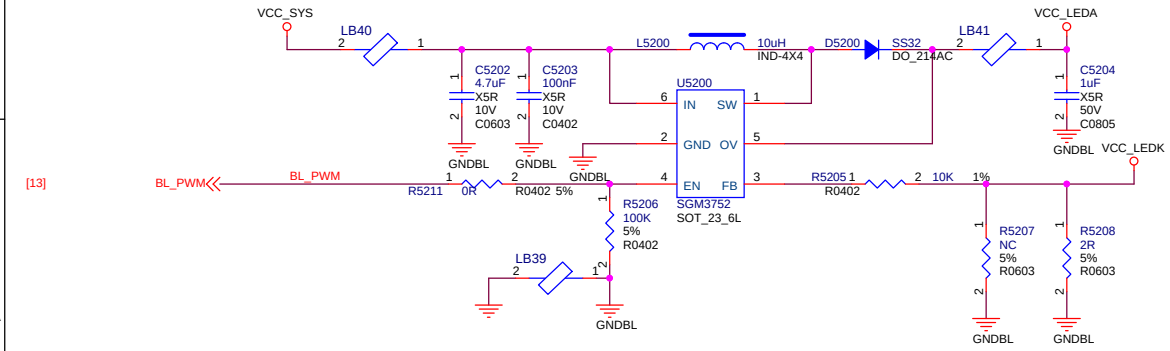
Note:All the capacitor should be place close to the power pin of Camera Port。

Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	RK3368H_demo		
File:	Camera-MIPI CSI		
Date:	Tuesday, April 03, 2018	Rev:	V1.0
Designed by:	wjx	Sheet:	22 of 27

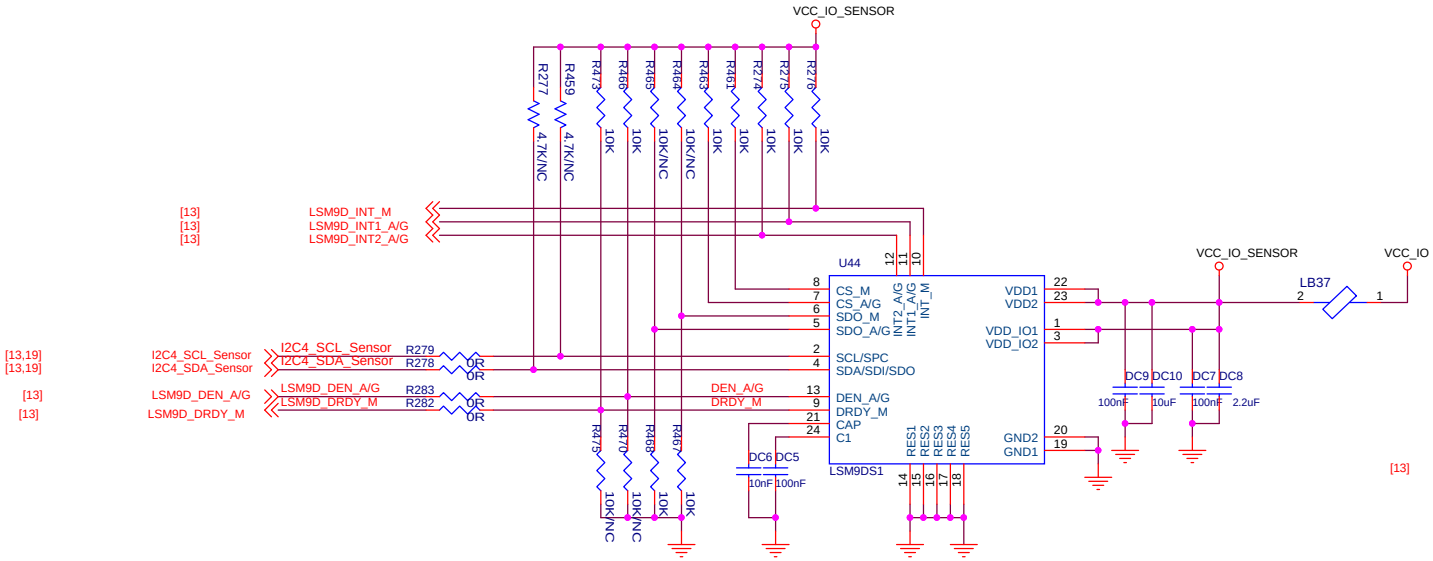
MIPI DSI Panel (1920*1200)



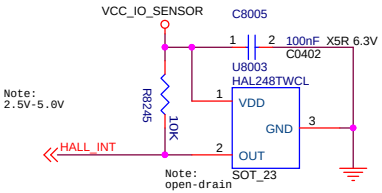
Note:All the capacitor should be place close to the power pin of LCM Port。



Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	RK3368H_demo		
File:	LCM-MIPI Panel-Default		
Date:	Tuesday, April 03, 2018	Rev:	V1.0
Designed by:	wjx	Sheet:	23 of 27

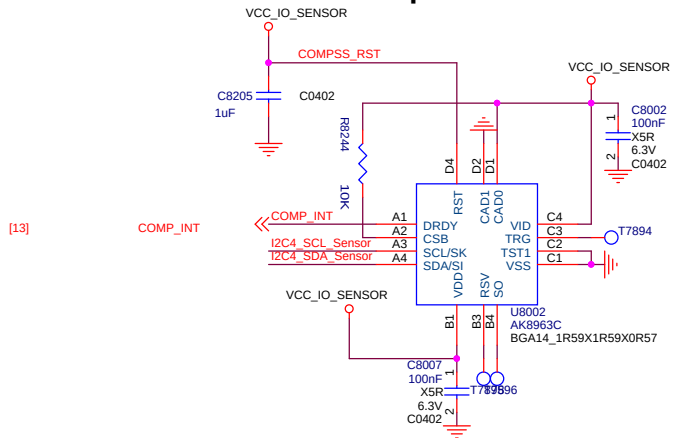


Hall-Sensor



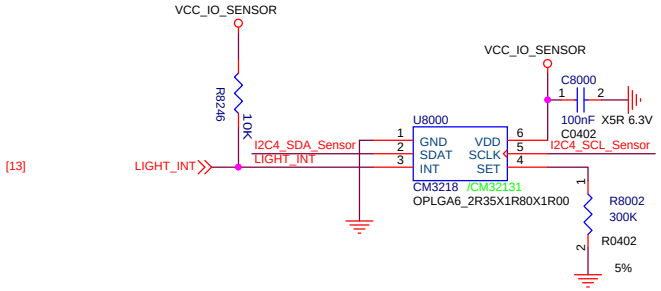
ACCELEROMETER/GYROSCOPE/MAGNETIC

Compass

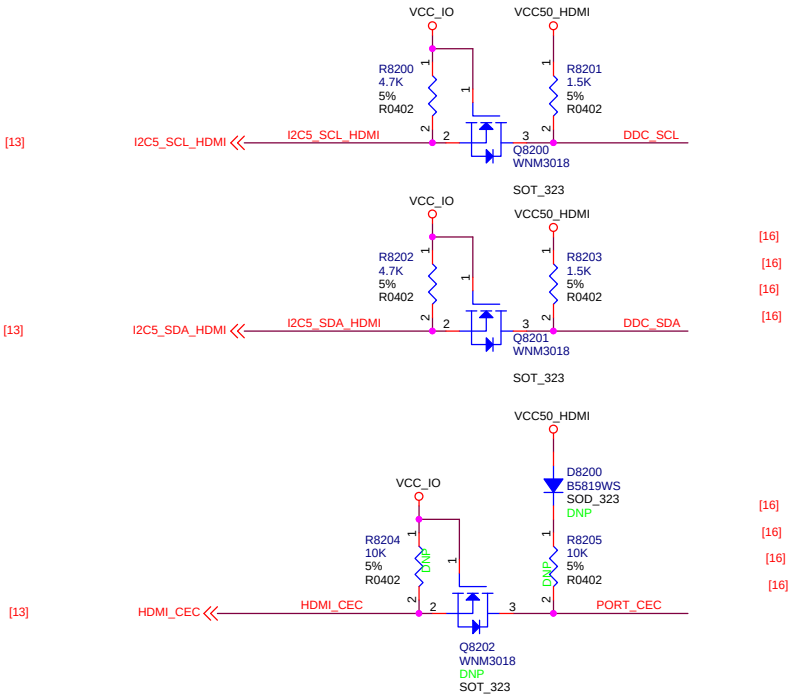


Note:
The first pin of AK8963C must be place on the lower left corner of PCB.

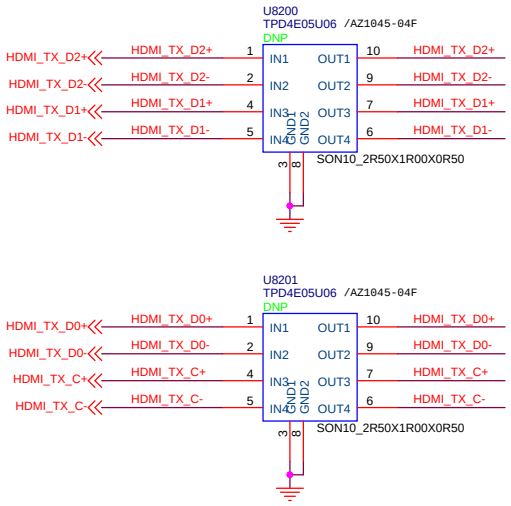
LIGHT-Sensor



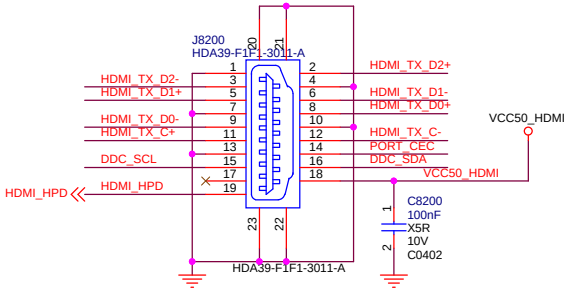
Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	RK3368H_demo		
File:	Sensor/VIB		
Date:	Tuesday, April 03, 2018	Rev:	V1.0
Designed by:	wjx	Sheet:	24 of 27



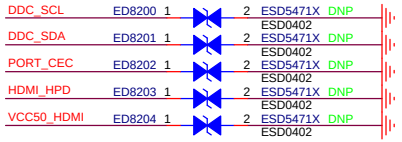
[16]
[16]
[16]
[16]



[16]

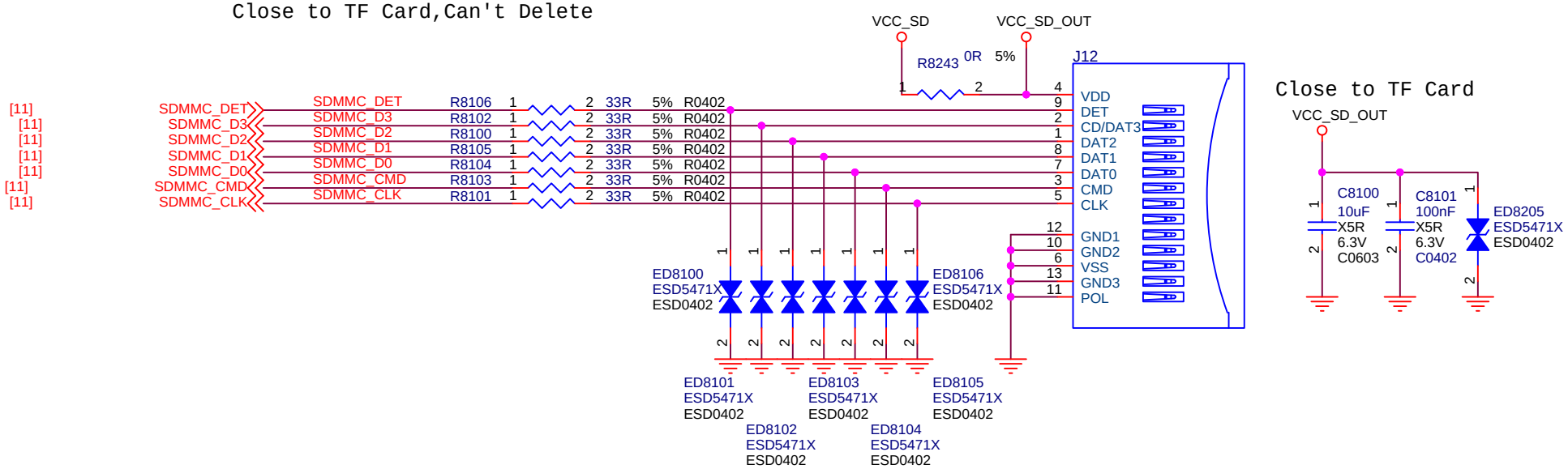


HDMI OUT



Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	RK3368H_demo		
File:	HDMI OUT Port		
Date:	Tuesday, April 03, 2018	Rev:	V1.1
Designed by:	Zhangdz	Sheet:	25 of 27

Close to TF Card,Can't Delete



Close to TF Card

Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	RK3368H_demo		
File:	TF Card		
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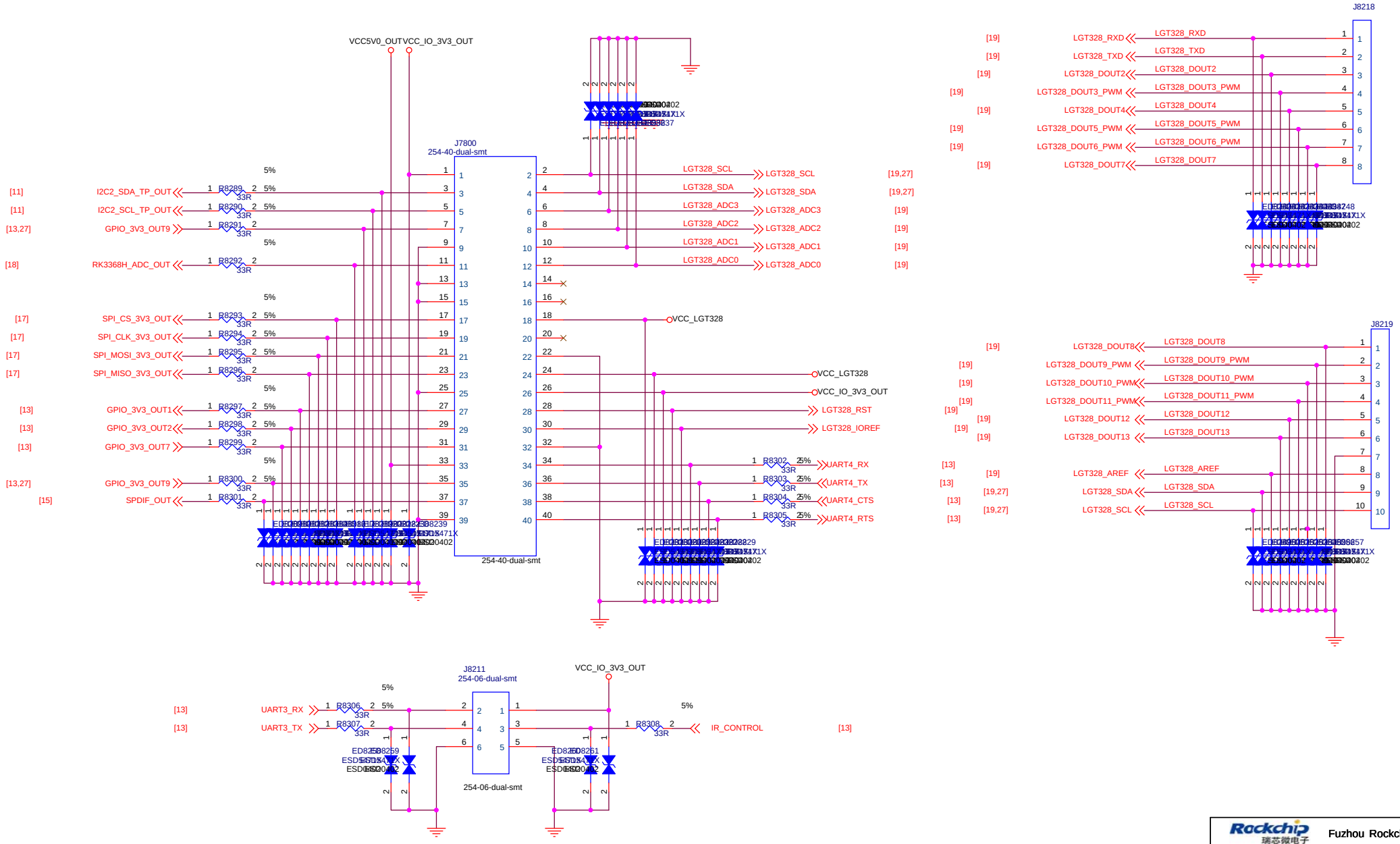

Note:All devices should be place close to the power pin of TP Port。

Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	RK3368H_demo		
File:	TP COF-Default		
Date:	Tuesday, April 03, 2018	Rev:	V1.0
Designed by:	wjx	Sheet:	27 of 27