Version	Date	Author	Change Note	Approved
V1.0	20180709	HXS	First edition	
V1.1	20180806	HXS		

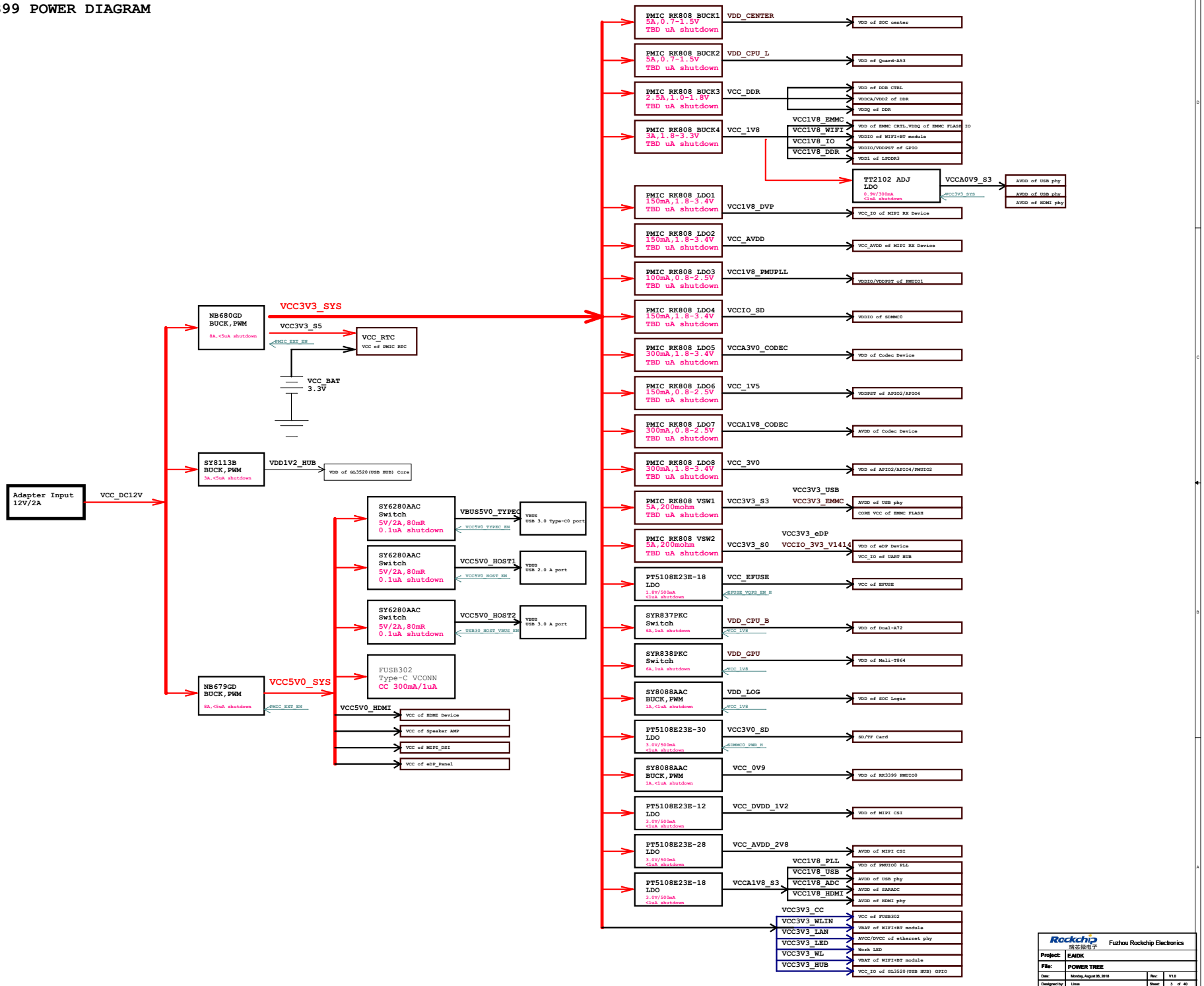
Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	**EAIDK**		
File:	**modify note**		
Date:	Monday, August 06, 2018	Rev:	V1.0
Designed by:	Linus	Sheet:	1 of 40

RK3399 I2C MAP

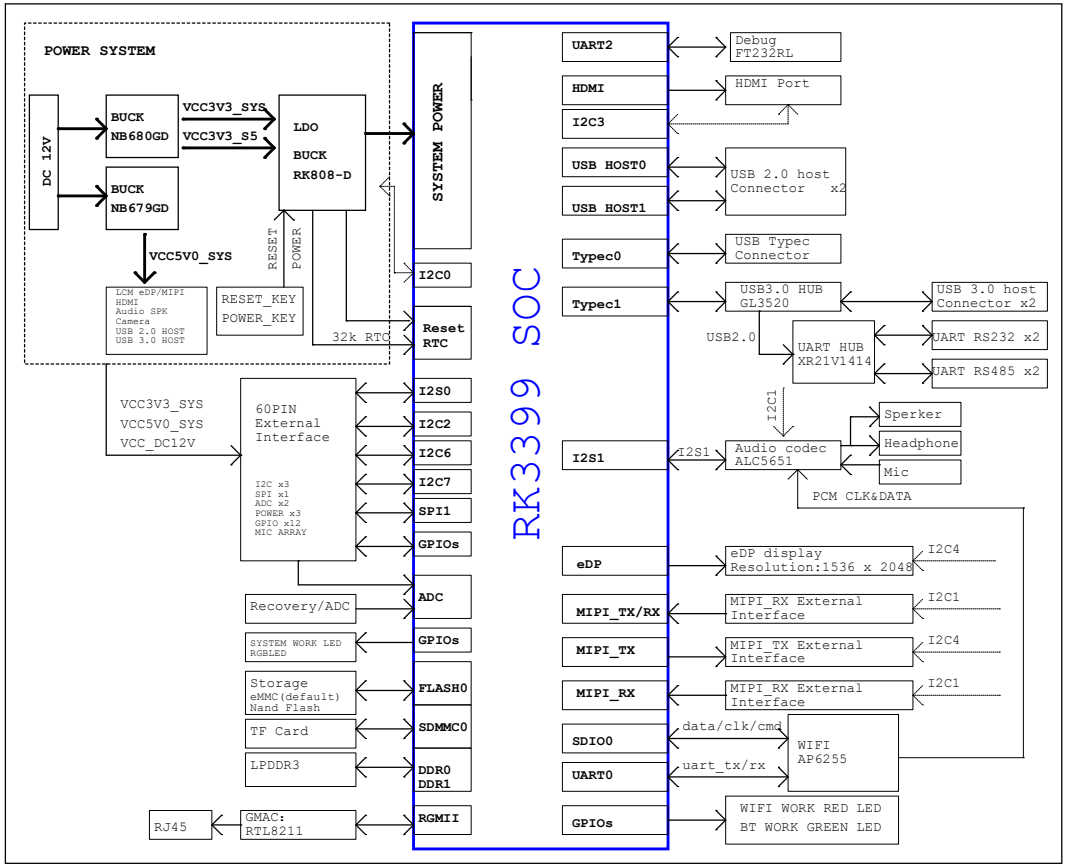
Port	Pin name	Domain	Bus name	Pull-up voltage	Slave Device	Note
I2C0	N30: GPIO1_C0/SPI3_TXD/I2C0_SCL M26: GPIO1_B7/SPI3_RXD/I2C0_SDA	VCC_3V0 PMUIO2	I2C_SDA_PMIC I2C_SCL_PMIC	VCC_3V0	Rockchip RK808-D	PMIC 0x1B
					SYR837/SYR838	DCDC 0x40/0x41
I2C1 I2C4(OPTION)	AG1:GPIO4_A1/I2C1_SDA Y6:GPIO4_A2/I2C1_SCL	APIO5 VCC1V8_IO	I2C_SDA_AUDIO I2C_SCL_AUDIO	VCCA1V8_CODEC	ALC5651/MIC ARRAY	Audio codec 0x1A
			I2C_SDA_3V0_CAM1 I2C_SCL_3V0_CAM1	VCCA1V8_CODEC	Extend Interface	MIPI Camera 0x36
I2C2	G31:GPIO2_A0/VOP_D0/CIF_D0/I2C2_SDA H25:GPIO2_A1/VOP_D1/CIF_D1/I2C2_SCL	APIO2 VCC3V0_IO	GPIO2_A0/I2C2_SDA GPIO2_A1/I2C2_SCL	VCC_3V0	Extend Interface	Reserve
I2C3	AG6:GPIO4_C0/I2C3_SDA/UART2B_RX AL2:GPIO4_C1/I2C3_SCL/UART2B_TX	APIO4 VCC3V0_IO	I2C_SDA_HDMI I2C_SCL_HDMI	VCC_3V0	HDMI OUT	HDMI
I2C1 I2C4(OPTION)			I2C_SDA_3V0_CAM2 I2C_SCL_3V0_CAM2	VCC_3V0	Extend Interface	MIPI Camera 0x10
I2C4	P31:GPIO1_B3/I2C4_SDA P30:GPIO1_B4/I2C4_SCL	PMUIO2 VCC_3V0	I2C_SDA_CC I2C_SCL_CC	VCC_3V0	FUSB302B	USB-TypeC 0x22
			I2C_SDA_TP I2C_SCL_TP	VCC_3V0	Extend Interface	Touch panel 0x28
I2C6	F30:GPIO2_B1/SPI2_RXD/CIF_HREF/I2C6_SDA H24:GPIO2_B2/SPI2_TXD/CIF_CLKIN/I2C6_SCL	APIO2 VCC3V0_IO	GPIO2_B1/I2C6_SDA GPIO2_B2/I2C6_SCL	VCC_3V0	Extend Interface	Reserve
I2C7	G30:GPIO2_A7/VOP_D7/CIF_D7/I2C7_SDA H28:GPIO2_B0/VOP_CLK/CIF_VSYNC/I2C7_SCL	APIO2 VCC3V0_IO	GPIO2_A7/I2C7_SDA GPIO2_B0/I2C7_SCL	VCC_3V0	Extend Interface	Reserve

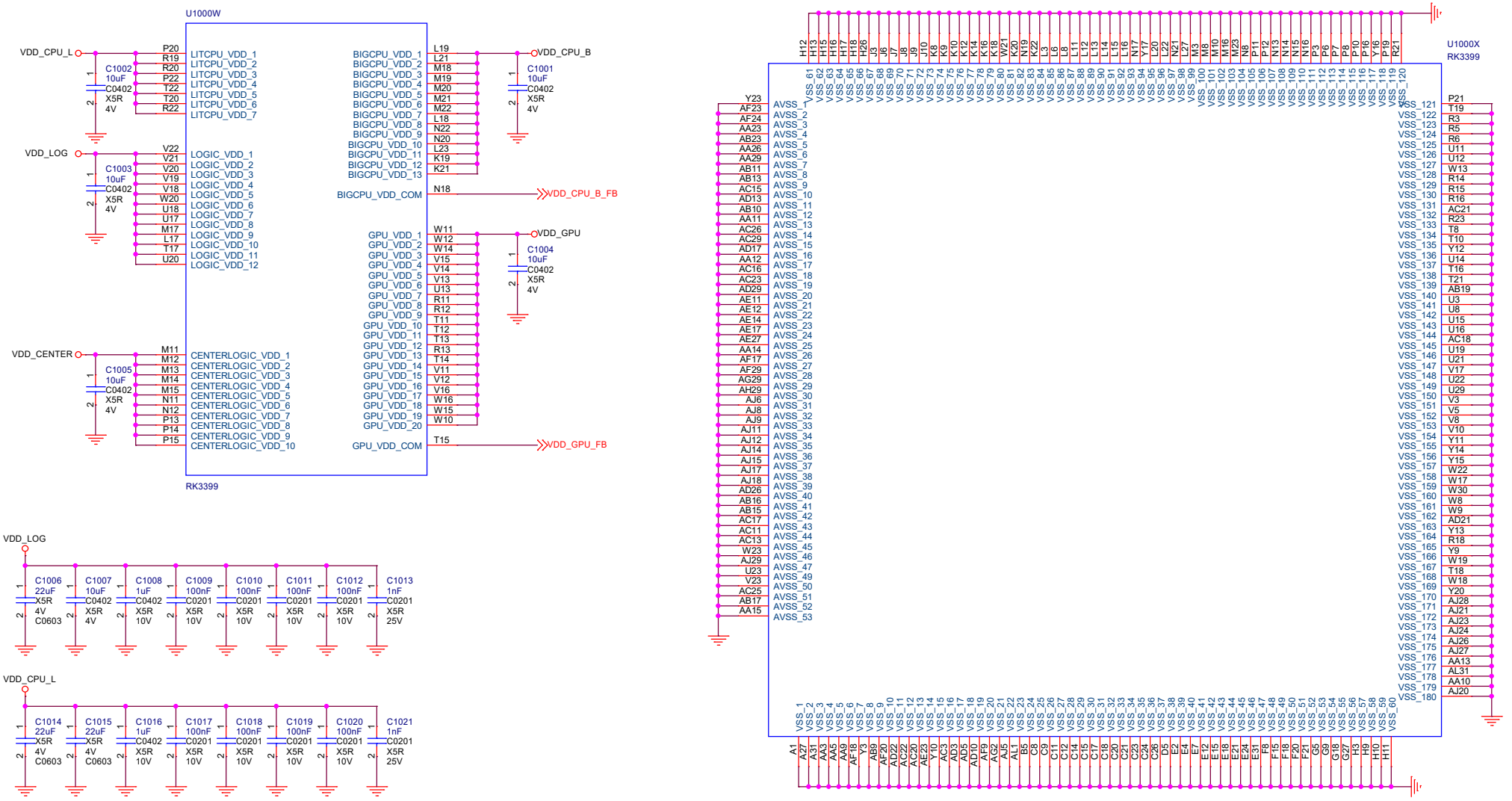
Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	EAIDK		
File:	I2C MAP		
Date:	Monday, August 06, 2018	Rev:	V1.0
Designed by:	Linus	Sheet:	2 of 40

RK3399 POWER DIAGRAM

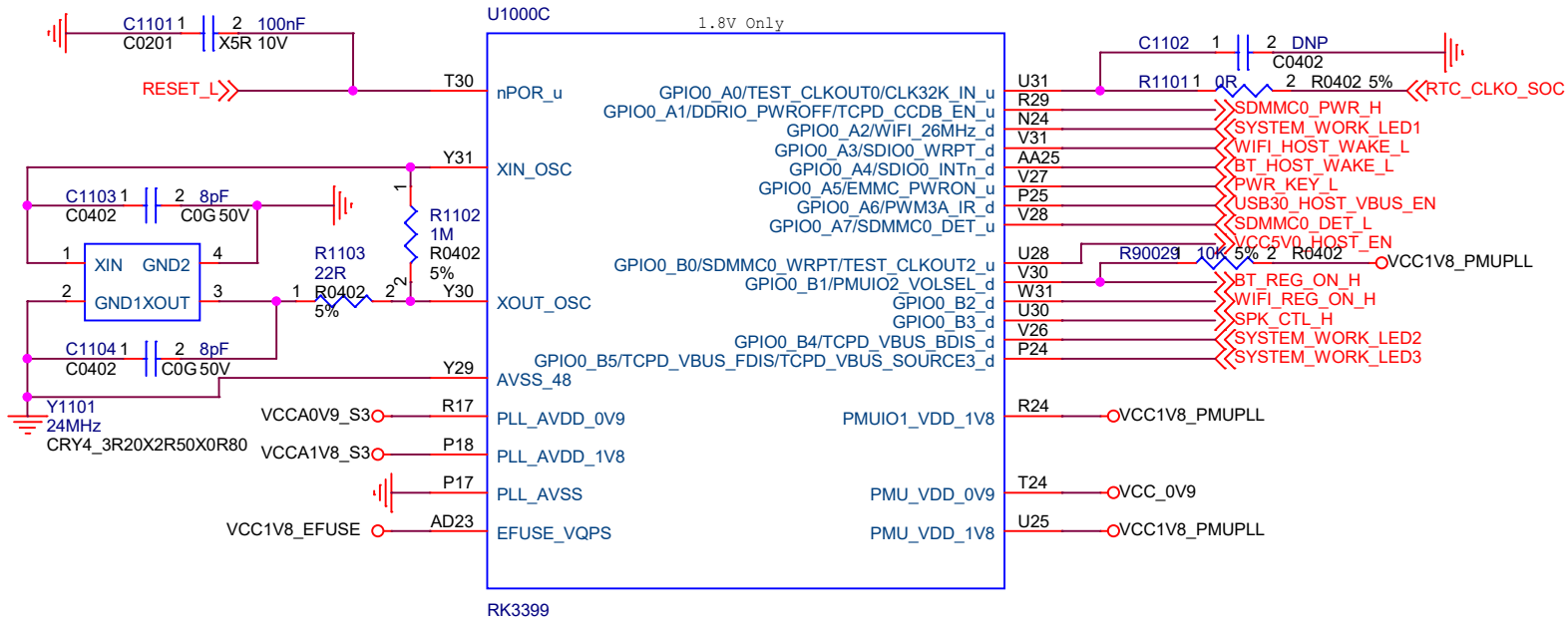


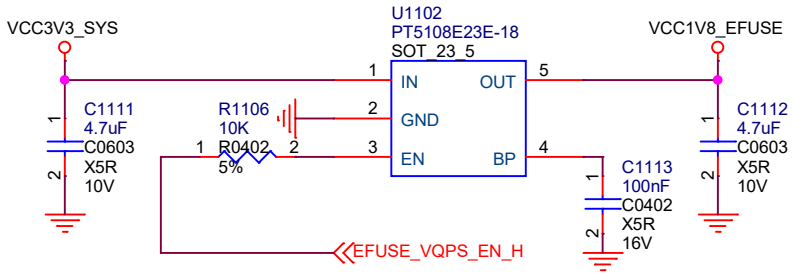
Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics
Project:	EAIDK
File:	POWER TREE
Date:	Monday, August 06, 2018
Rev:	V1.0
Designed by:	Linus
Sheet:	3 of 40

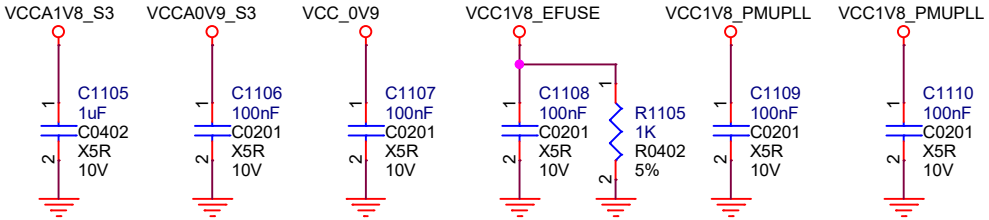

POWER SYSTEM
DC 12V
BUCK
NB680GD
BUCK
NB679GD
VCC3V3_SYS
VCC3V3_S5
LDO
BUCK
RK808-D
VCC5V0_SYS
RESET
POWER
LCM eDP/MIPI
HDMI
Audio SPK
Camera
USB 2.0 HOST
USB 3.0 HOST
RESET_KEY
POWER_KEY
32k RTC
SYSTEM POWER
I2C0
Reset
RTC
I2S0
I2C2
I2C6
I2C7
SPI1
GPIOs
ADC
GPIOs
FLASH0
SDMMC0
DDR0
DDR1
RGMII
VCC3V3_SYS
VCC5V0_SYS
VCC_DC12V
60PIN
External
Interface
I2C x3
SPI x1
ADC x2
POWER x3
GPIO x12
MIC ARRAY
Recovery/ADC
SYSTEM WORK LED
RGBLED
Storage
eMMC(default)
Nand Flash
TF Card
LPDDR3
RJ45
GMAC:
RTL8211
RK3399 SOC
UART2
HDMI
I2C3
USB HOST0
USB HOST1
Typec0
Typec1
I2S1
eDP
MIPI_TX/RX
MIPI_TX
MIPI_RX
SDIO0
UART0
GPIOs
Debug
FT232RL
HDMI Port
USB 2.0 host
Connector x2
USB Typec
Connector
USB3.0 HUB
GL3520
USB 3.0 host
Connector x2
USB2.0
UART HUB
XR21V1414
UART RS232 x2
UART RS485 x2
I2C1
Sperker
Headphone
Mic
I2S1
Audio codec
ALC5651
PCM CLK&DATA
eDP display
Resolution:1536 x 2048
I2C4
MIPI_RX External
Interface
I2C1
MIPI_TX External
Interface
I2C4
MIPI_RX External
Interface
I2C1
data/clk/cmd
uart_tx/rx
WIFI
AP6255
WIFI WORK RED LED
BT WORK GREEN LED



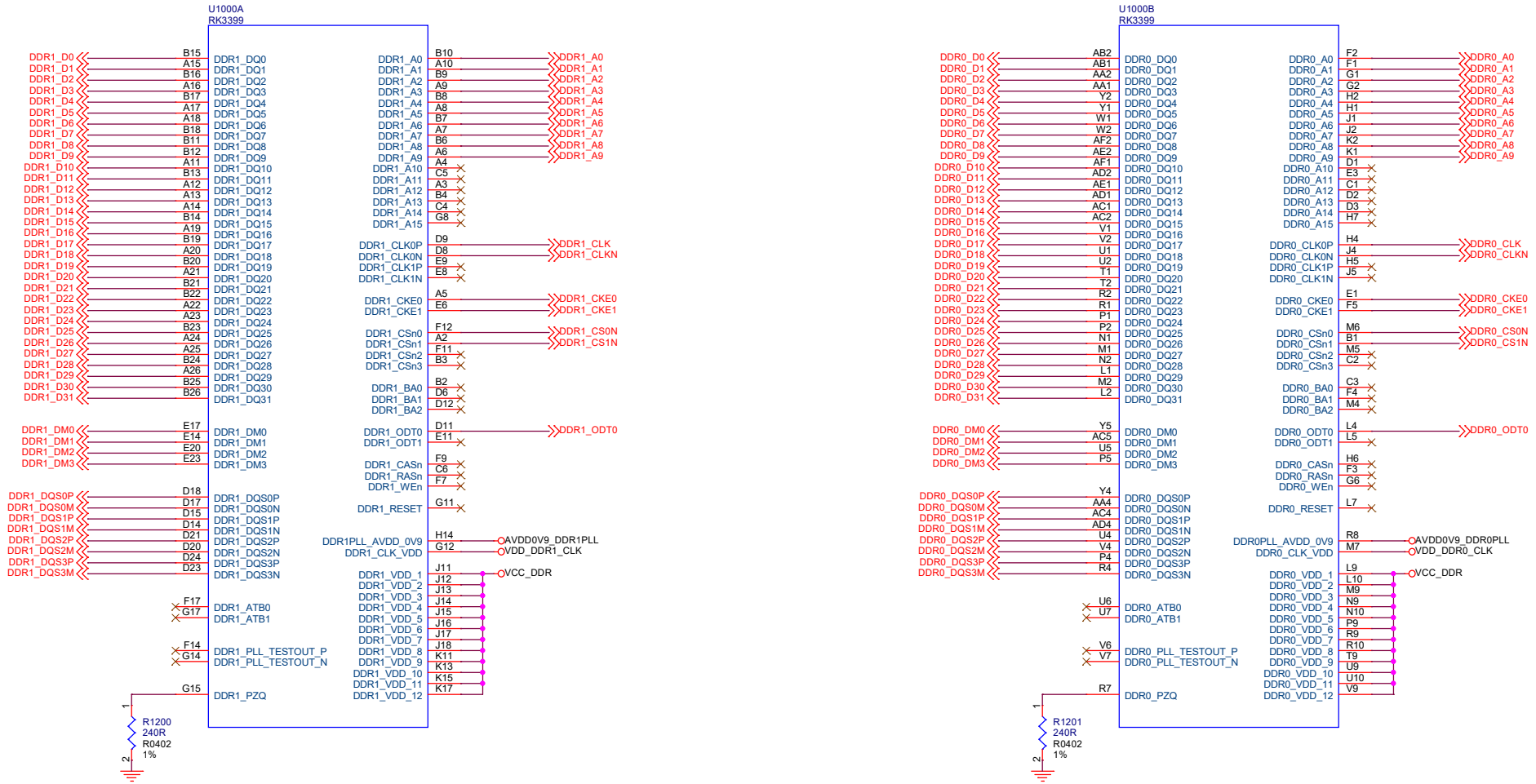
Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	EAIDK		
File:	POWER		
Date:	Monday, August 06, 2018	Rev:	V1.0
Designed by:	Linus	Sheet:	10 of 40



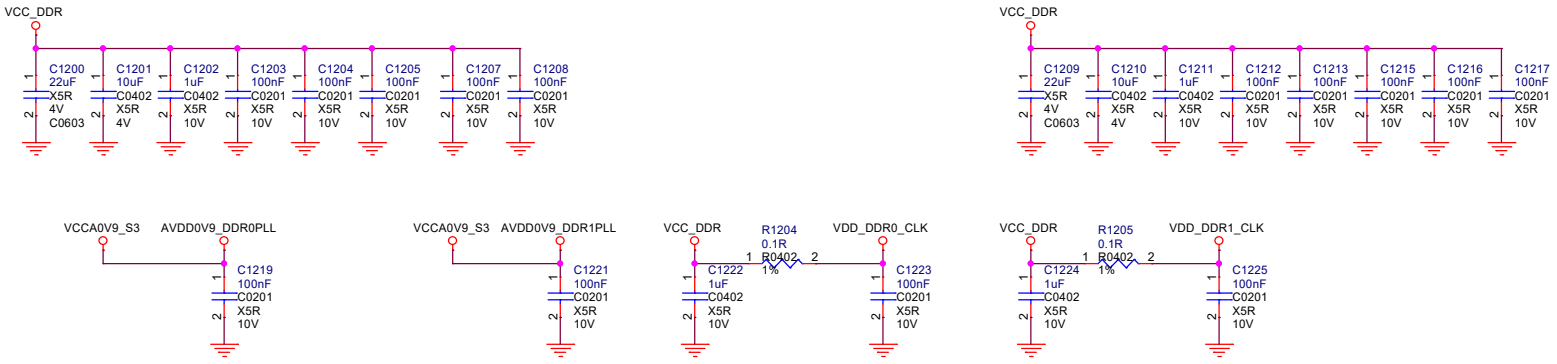




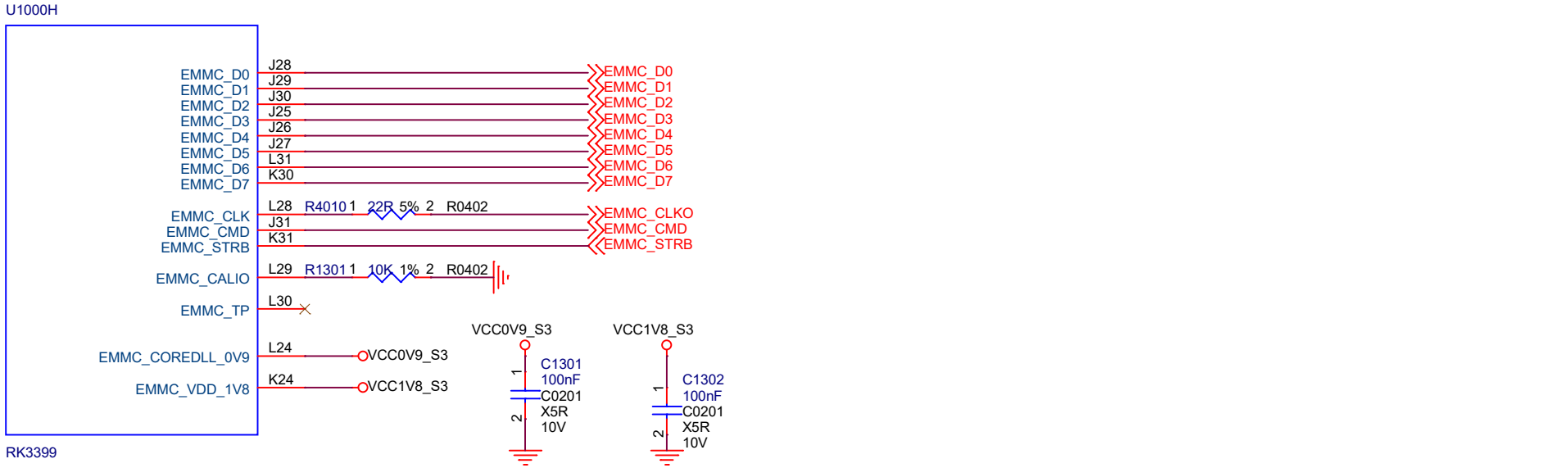
Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	EAIDK		
File:	PMU		
Date:	Monday, August 06, 2018	Rev:	V1.0
Designed by:	Linus	Sheet:	11 of 40

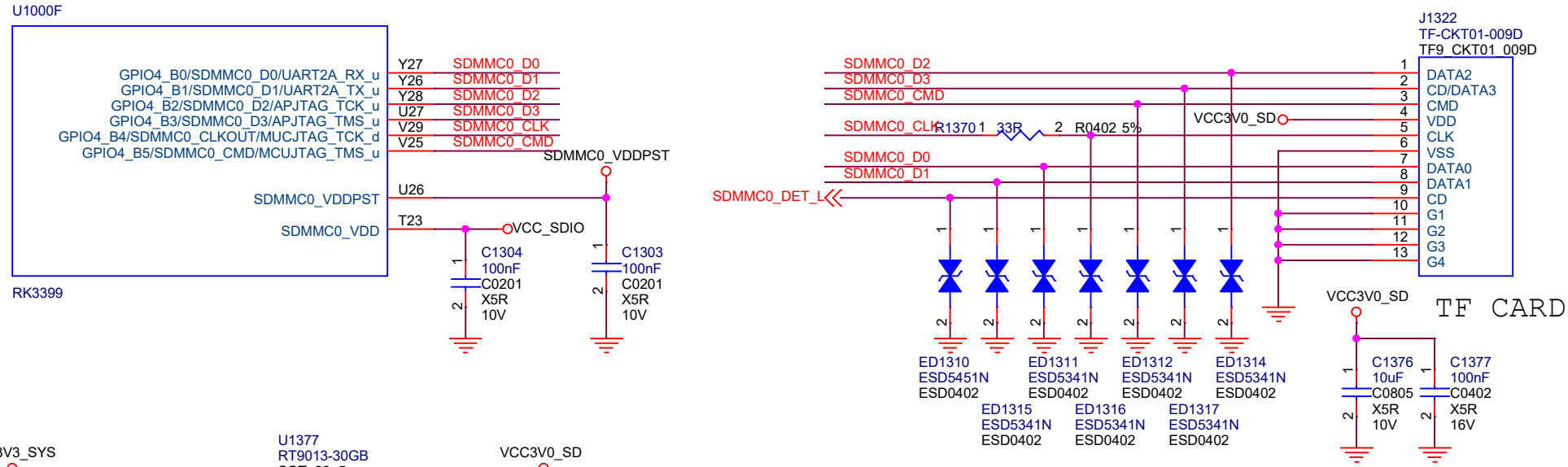


DDR FILTER

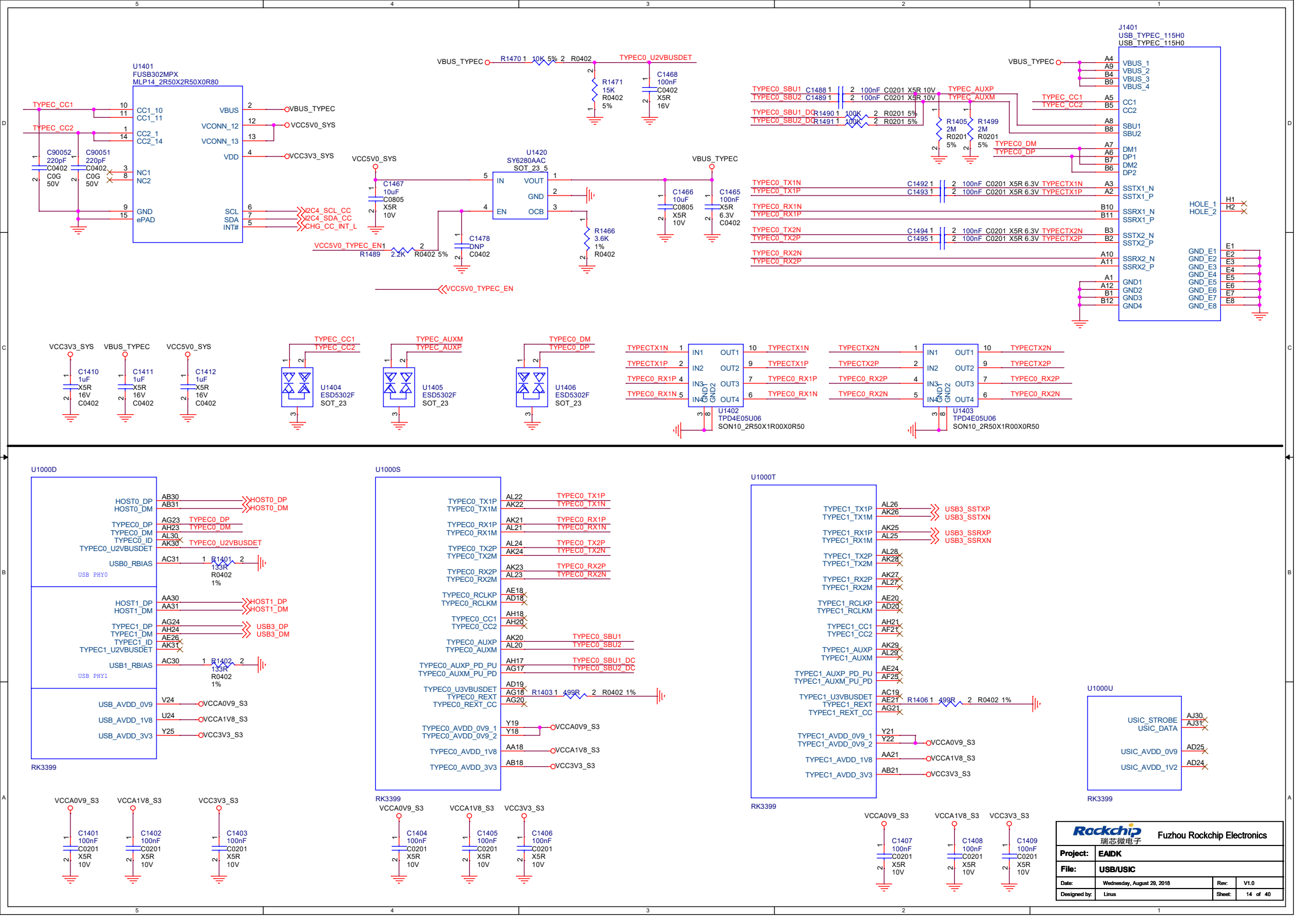


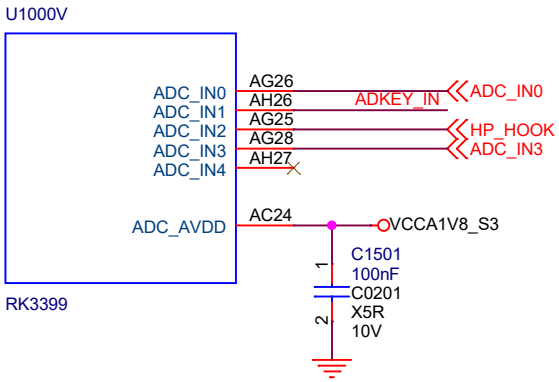
Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	EAIDK		
File:	12.RK3399 DDR Controler		
Date:	Monday, August 06, 2018	Rev:	V1.0
Designed by:	Linus	Sheet:	12 of 40

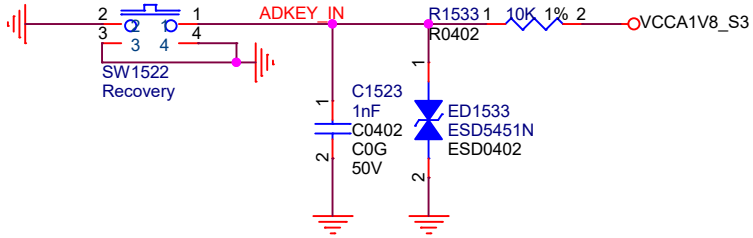




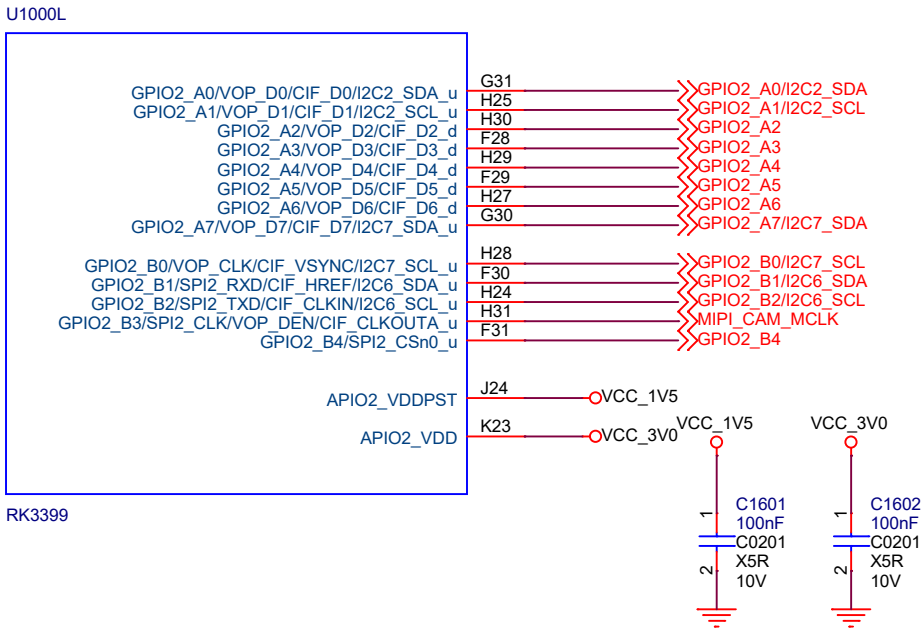
Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	EAIDK		
File:	FLASH/SMMC		
Date:	Monday, August 06, 2018	Rev:	V1.0
Designed by:	Linus	Sheet:	13 of 40

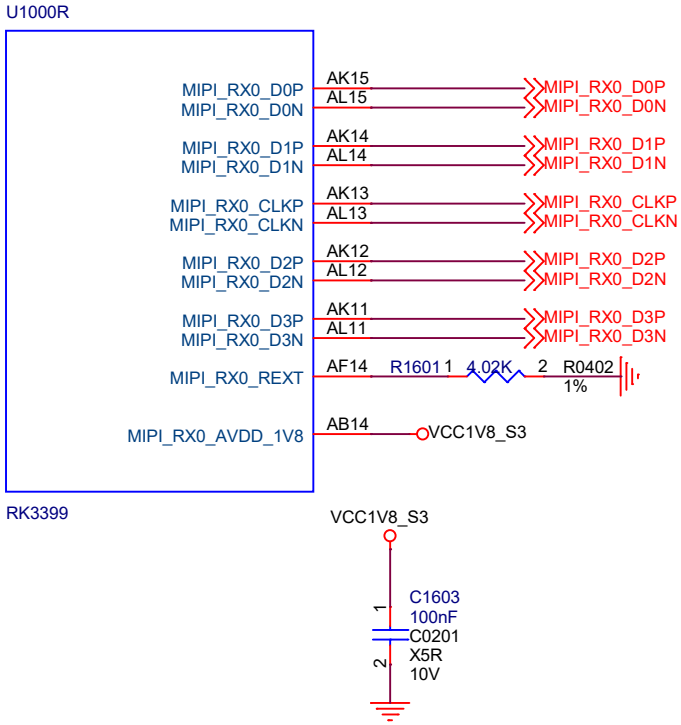

U1401
FUSB302MPX
MLP14_2R50X2R50X0R80
TYPEC_CC1
TYPEC_CC2
CC1_10
CC1_11
CC2_1
CC2_14
NC1
NC2
GND
ePAD
VBUS
VCONN_12
VCONN_13
VDD
SCL
SDA
INT#
VBUS_TYPEC
VCC5V0_SYS
VCC3V3_SYS
I2C4_SCL_CC
I2C4_SDA_CC
CHG_CC_INT_L
C90052 220pF C0402 C0G 50V
C90051 220pF C0402 C0G 50V
U1420
SY6280AAC
SOT_23_5
IN
VOUT
GND
EN
OCB
C1467 10uF C0805 X5R 10V
C1478 DNP C0402
R1489 2.2K R0402 5%
VCC5V0_TYPEC_EN
R1466 3.6K 1% R0402
C1466 10uF C0805 X5R 10V
C1465 100nF X5R 6.3V C0402
R1470 10K 5% R0402
R1471 15K R0402 5%
C1468 100nF C0402 X5R 16V
TYPEC0_U2VBUSDET
J1401
USB_TYPEC_115H0
VBUS_1
VBUS_2
VBUS_3
VBUS_4
CC1
CC2
SBU1
SBU2
DM1
DP1
DM2
DP2
SSTX1_N
SSTX1_P
SSRX1_N
SSRX1_P
SSTX2_N
SSTX2_P
SSRX2_N
SSRX2_P
GND1
GND2
GND3
GND4
HOLE_1
HOLE_2
GND_E1
GND_E2
GND_E3
GND_E4
GND_E5
GND_E6
GND_E7
GND_E8
TYPEC0_SBU1
TYPEC0_SBU2
TYPEC_AUXP
TYPEC_AUXM
TYPEC0_DM
TYPEC0_DP
TYPEC0_TX1N
TYPEC0_TX1P
TYPEC0_RX1N
TYPEC0_RX1P
TYPEC0_TX2N
TYPEC0_TX2P
TYPEC0_RX2N
TYPEC0_RX2P
C1410 1uF X5R 16V C0402
C1411 1uF X5R 16V C0402
C1412 1uF X5R 16V C0402
U1404 ESD5302F SOT_23
U1405 ESD5302F SOT_23
U1406 ESD5302F SOT_23
U1402 TPD4E05U06 SON10_2R50X1R00X0R50
U1403 TPD4E05U06 SON10_2R50X1R00X0R50
U1000D
HOST0_DP
HOST0_DM
HOST1_DP
HOST1_DM
USB3_DP
USB3_DM
USB0_RBIAS
USB1_RBIAS
USB PHY0
USB PHY1
USB_AVDD_0V9
USB_AVDD_1V8
USB_AVDD_3V3
VCCA0V9_S3
VCCA1V8_S3
VCC3V3_S3
RK3399
U1000S
TYPEC0_RCLKP
TYPEC0_RCLKM
TYPEC0_CC1
TYPEC0_CC2
TYPEC0_AUXP
TYPEC0_AUXM
TYPEC0_AUXP_PD_PU
TYPEC0_AUXM_PU_PD
TYPEC0_U3VBUSDET
TYPEC0_REXT
TYPEC0_REXT_CC
TYPEC0_AVDD_0V9_1
TYPEC0_AVDD_0V9_2
TYPEC0_AVDD_1V8
TYPEC0_AVDD_3V3
U1000T
TYPEC1_TX1P
TYPEC1_TX1M
TYPEC1_RX1P
TYPEC1_RX1M
TYPEC1_TX2P
TYPEC1_TX2M
TYPEC1_RX2P
TYPEC1_RX2M
TYPEC1_RCLKP
TYPEC1_RCLKM
TYPEC1_CC1
TYPEC1_CC2
TYPEC1_AUXP
TYPEC1_AUXM
TYPEC1_AUXP_PD_PU
TYPEC1_AUXM_PU_PD
TYPEC1_U3VBUSDET
TYPEC1_REXT
TYPEC1_REXT_CC
TYPEC1_AVDD_0V9_1
TYPEC1_AVDD_0V9_2
TYPEC1_AVDD_1V8
TYPEC1_AVDD_3V3
USB3_SSTXP
USB3_SSTXN
USB3_SSRXP
USB3_SSRXN
U1000U
USIC_STROBE
USIC_DATA
USIC_AVDD_0V9
USIC_AVDD_1V2
C1401 100nF C0201 X5R 10V
C1402 100nF C0201 X5R 10V
C1403 100nF C0201 X5R 10V
C1404 100nF C0201 X5R 10V
C1405 100nF C0201 X5R 10V
C1406 100nF C0201 X5R 10V
C1407 100nF C0201 X5R 10V
C1408 100nF C0201 X5R 10V
C1409 100nF C0201 X5R 10V
Rockchip 瑞芯微电子
Fuzhou Rockchip Electronics
Project: EAIDK
File: USB/USIC
Date: Wednesday, August 29, 2018
Rev: V1.0
Designed by: Linus
Sheet: 14 of 40

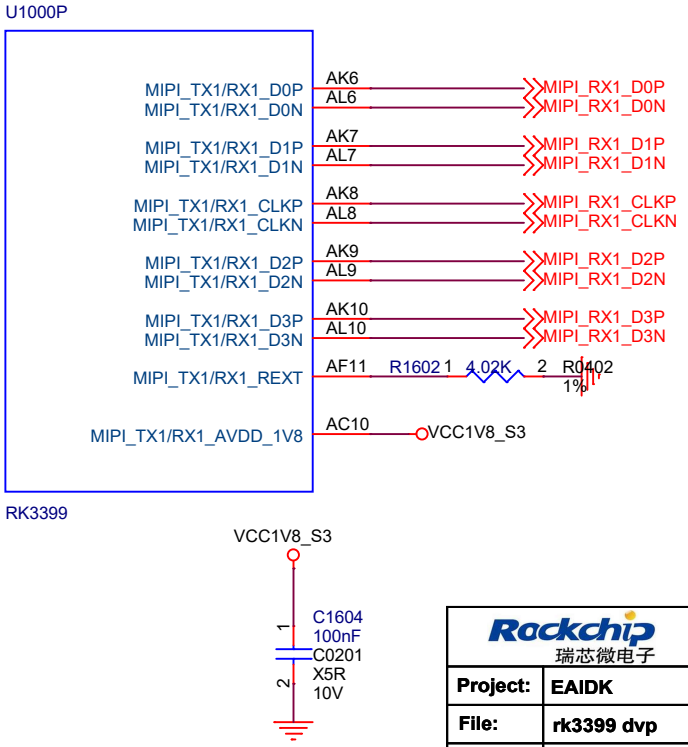




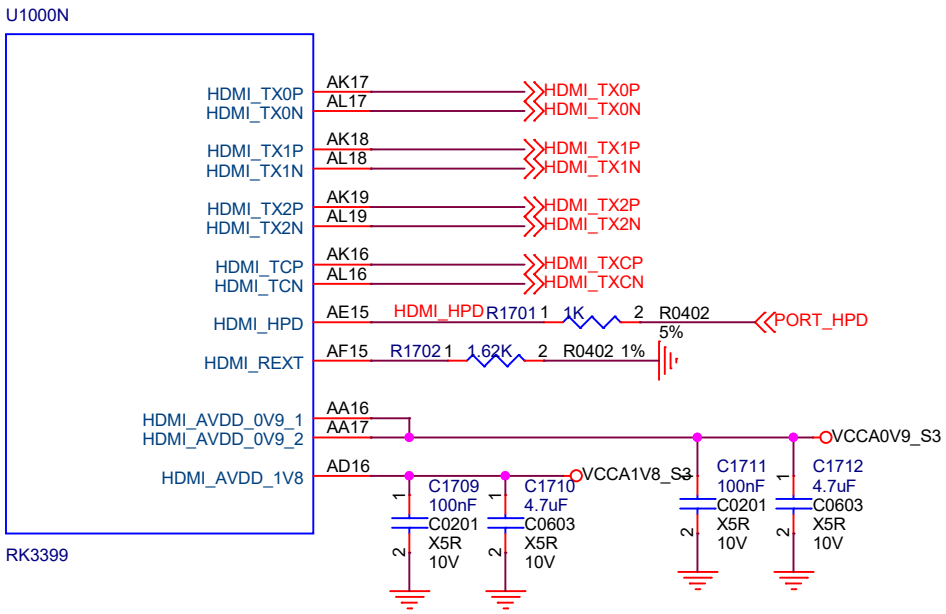
Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	EAIDK		
File:	SARADC		
Date:	Monday, August 06, 2018	Rev:	V1.0
Designed by:	Linus	Sheet:	15 of 40

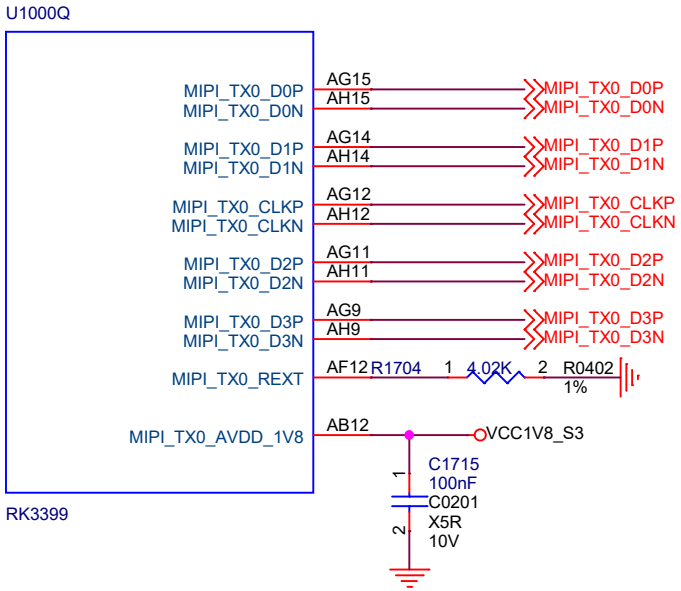


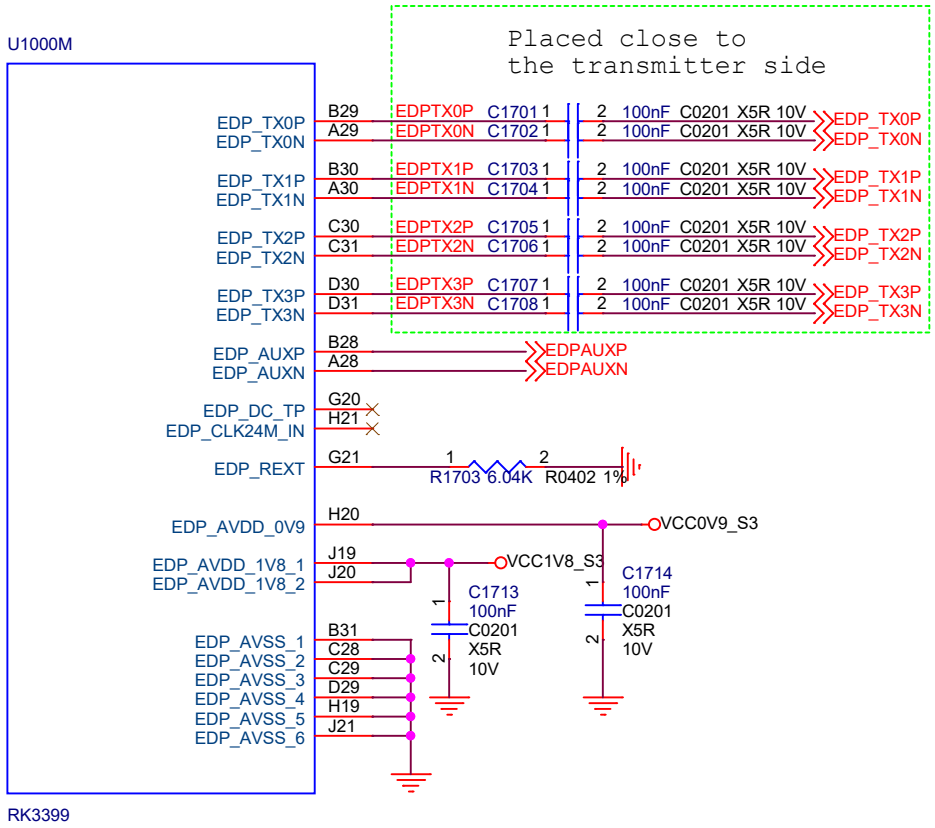




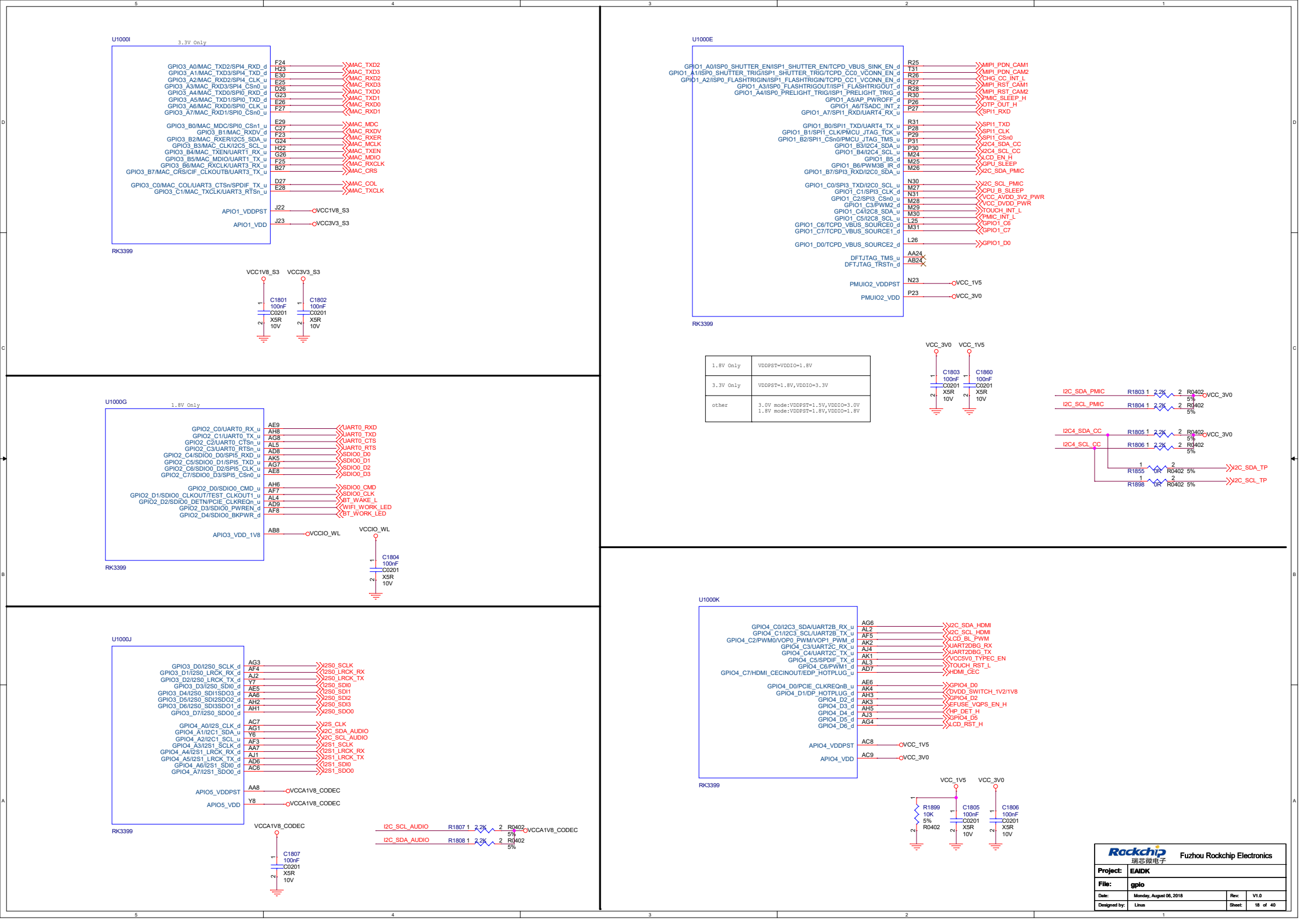
Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	EAIDK		
File:	rk3399 dvp		
Date:	Monday, August 06, 2018	Rev:	V1.0
Designed by:	Linus	Sheet:	16 of 40



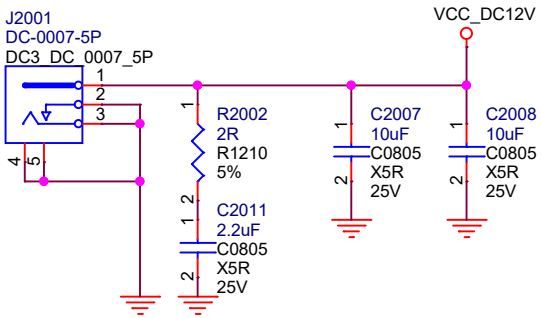


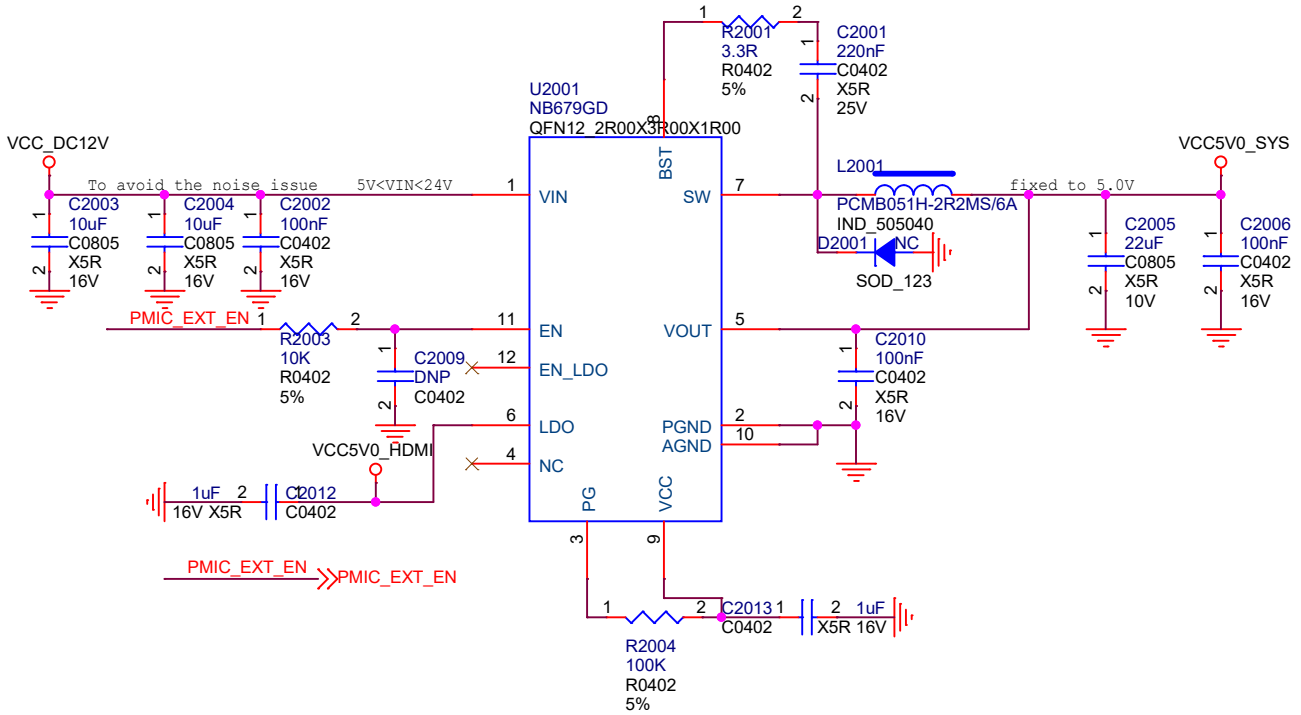


Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	EAIDK		
File:	rk3399 display		
Date:	Monday, August 06, 2018	Rev:	V1.0
Designed by:	Linus	Sheet:	17 of 40

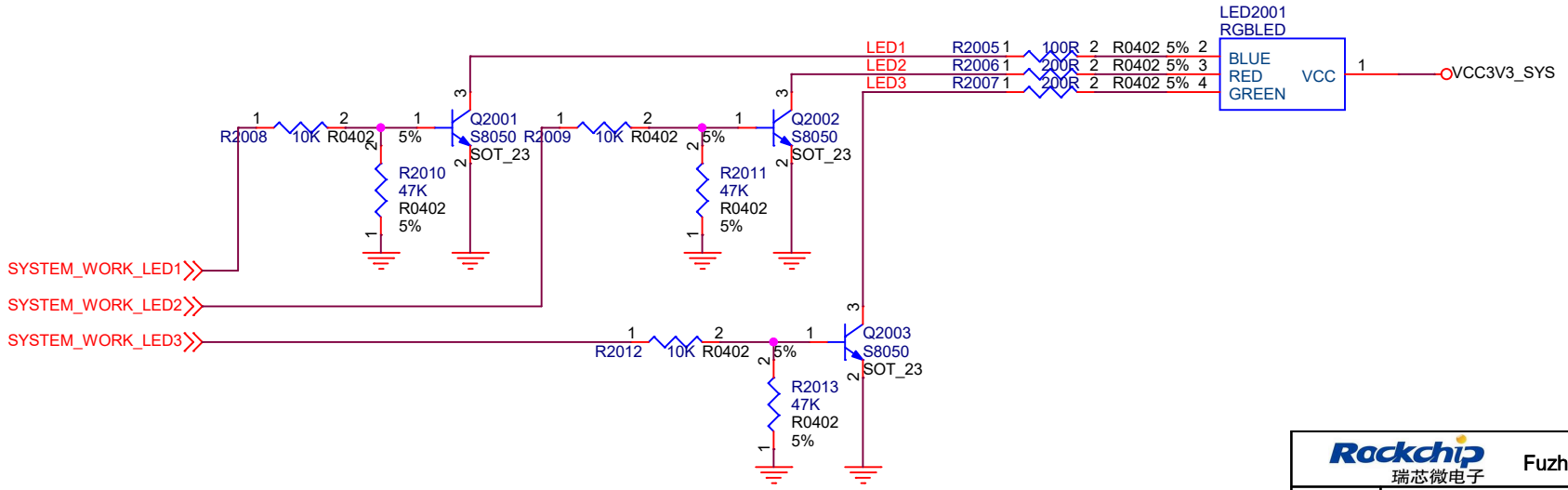

U1000I
3.3V Only
GPIO3_A0/MAC_TXD2/SPI4_RXD_d
GPIO3_A1/MAC_TXD3/SPI4_TXD_d
GPIO3_A2/MAC_RXD2/SPI4_CLK_u
GPIO3_A3/MAC_RXD3/SPI4_CSn0_u
GPIO3_A4/MAC_TXD0/SPI0_RXD_d
GPIO3_A5/MAC_TXD1/SPI0_TXD_d
GPIO3_A6/MAC_RXD0/SPI0_CLK_u
GPIO3_A7/MAC_RXD1/SPI0_CSn0_u
GPIO3_B0/MAC_MDC/SPI0_CSn1_u
GPIO3_B1/MAC_RXDV_d
GPIO3_B2/MAC_RXER/I2C5_SDA_u
GPIO3_B3/MAC_CLK/I2C5_SCL_u
GPIO3_B4/MAC_TXEN/UART1_RX_u
GPIO3_B5/MAC_MDIO/UART1_TX_u
GPIO3_B6/MAC_RXCLK/UART3_RX_u
GPIO3_B7/MAC_CRS/CIF_CLKOUTB/UART3_TX_u
GPIO3_C0/MAC_COL/UART3_CTSn/SPDIF_TX_u
GPIO3_C1/MAC_TXCLK/UART3_RTSn_u
APIO1_VDDPST
APIO1_VDD
F24 H23 E30 E25 D26 G23 E26 F27
MAC_TXD2 MAC_TXD3 MAC_RXD2 MAC_RXD3 MAC_TXD0 MAC_TXD1 MAC_RXD0 MAC_RXD1
E29 C27 F23 G24 H22 G26 F25 B27
MAC_MDC MAC_RXDV MAC_RXER MAC_MCLK MAC_TXEN MAC_MDIO MAC_RXCLK MAC_CRS
D27 E28
MAC_COL MAC_TXCLK
J22 J23
VCC1V8_S3 VCC3V3_S3
RK3399
VCC1V8_S3 VCC3V3_S3
C1801 100nF C0201 X5R 10V
C1802 100nF C0201 X5R 10V
U1000E
GPIO1_A0/ISP0_SHUTTER_EN/ISP1_SHUTTER_EN/TCPD_VBUS_SINK_EN_d
GPIO1_A1/ISP0_SHUTTER_TRIG/ISP1_SHUTTER_TRIG/TCPD_CC0_VCONN_EN_d
GPIO1_A2/ISP0_FLASHTRIGIN/ISP1_FLASHTRIGIN/TCPD_CC1_VCONN_EN_d
GPIO1_A3/ISP0_FLASHTRIGOUT/ISP1_FLASHTRIGOUT_d
GPIO1_A4/ISP0_PRELIGHT_TRIG/ISP1_PRELIGHT_TRIG_d
GPIO1_A5/AP_PWROFF_d
GPIO1_A6/TSADC_INT_z
GPIO1_A7/SPI1_RXD/UART4_RX_u
GPIO1_B0/SPI1_TXD/UART4_TX_u
GPIO1_B1/SPI1_CLK/PMCU_JTAG_TCK_u
GPIO1_B2/SPI1_CSn0/PMCU_JTAG_TMS_u
GPIO1_B3/I2C4_SDA_u
GPIO1_B4/I2C4_SCL_u
GPIO1_B5_d
GPIO1_B6/PWM3B_IR_d
GPIO1_B7/SPI3_RXD/I2C0_SDA_u
GPIO1_C0/SPI3_TXD/I2C0_SCL_u
GPIO1_C1/SPI3_CLK_d
GPIO1_C2/SPI3_CSn0_u
GPIO1_C3/PWM2_d
GPIO1_C4/I2C8_SDA_u
GPIO1_C5/I2C8_SCL_u
GPIO1_C6/TCPD_VBUS_SOURCE0_d
GPIO1_C7/TCPD_VBUS_SOURCE1_d
GPIO1_D0/TCPD_VBUS_SOURCE2_d
DFTJTAG_TMS_u
DFTJTAG_TRSTn_d
PMUIO2_VDDPST
PMUIO2_VDD
R25 T31 R26 R27 R28 R30 P26 P27
MIPI_PDN_CAM1 MIPI_PDN_CAM2 CHG_CC_INT_L MIPI_RST_CAM1 MIPI_RST_CAM2 PMIC_SLEEP_H OTP_OUT_H SPI1_RXD
R31 P28 P29 P31 P30 M24 M25 M26
SPI1_TXD SPI1_CLK SPI1_CSn0 I2C4_SDA_CC I2C4_SCL_CC LCD_EN_H GPU_SLEEP I2C_SDA_PMIC
N30 M27 N31 M28 M29 M30 L25 M31
I2C_SCL_PMIC CPU_B_SLEEP VCC_AVDD_3V2_PWR VCC_DVDD_PWR TOUCH_INT_L PMIC_INT_L GPIO1_C6 GPIO1_C7
L26
GPIO1_D0
AA24 AB24
N23 P23
VCC_1V5 VCC_3V0
RK3399
1.8V Only | VDDPST=VDDIO=1.8V
3.3V Only | VDDPST=1.8V,VDDIO=3.3V
other | 3.0V mode:VDDPST=1.5V,VDDIO=3.0V 1.8V mode:VDDPST=1.8V,VDDIO=1.8V
VCC_3V0 VCC_1V5
C1803 100nF C0201 X5R 10V
C1860 100nF C0201 X5R 10V
I2C_SDA_PMIC R1803 2.2K R0402 5% VCC_3V0
I2C_SCL_PMIC R1804 2.2K R0402 5%
I2C4_SDA_CC R1805 2.2K R0402 5% VCC_3V0
I2C4_SCL_CC R1806 2.2K R0402 5%
R1855 0R R0402 5% I2C_SDA_TP
R1898 0R R0402 5% I2C_SCL_TP
U1000G
1.8V Only
GPIO2_C0/UART0_RX_u
GPIO2_C1/UART0_TX_u
GPIO2_C2/UART0_CTSn_u
GPIO2_C3/UART0_RTSn_u
GPIO2_C4/SDIO0_D0/SPI5_RXD_u
GPIO2_C5/SDIO0_D1/SPI5_TXD_u
GPIO2_C6/SDIO0_D2/SPI5_CLK_u
GPIO2_C7/SDIO0_D3/SPI5_CSn0_u
GPIO2_D0/SDIO0_CMD_u
GPIO2_D1/SDIO0_CLKOUT/TEST_CLKOUT1_u
GPIO2_D2/SDIO0_DETN/PCIE_CLKREQn_u
GPIO2_D3/SDIO0_PWREN_d
GPIO2_D4/SDIO0_BKPWR_d
APIO3_VDD_1V8
AE9 AH8 AG8 AL5 AD8 AK5 AG7 AE8
UART0_RXD UART0_TXD UART0_CTS UART0_RTS SDIO0_D0 SDIO0_D1 SDIO0_D2 SDIO0_D3
AH6 AF7 AL4 AD9 AF8
SDIO0_CMD SDIO0_CLK BT_WAKE_L WIFI_WORK_LED BT_WORK_LED
AB8
VCCIO_WL
RK3399
VCCIO_WL
C1804 100nF C0201 X5R 10V
U1000K
GPIO4_C0/I2C3_SDA/UART2B_RX_u
GPIO4_C1/I2C3_SCL/UART2B_TX_u
GPIO4_C2/PWM0/VOP0_PWM/VOP1_PWM_d
GPIO4_C3/UART2C_RX_u
GPIO4_C4/UART2C_TX_u
GPIO4_C5/SPDIF_TX_d
GPIO4_C6/PWM1_d
GPIO4_C7/HDMI_CECINOUT/EDP_HOTPLUG_u
GPIO4_D0/PCIE_CLKREQnB_u
GPIO4_D1/DP_HOTPLUG_d
GPIO4_D2_d
GPIO4_D3_d
GPIO4_D4_d
GPIO4_D5_d
GPIO4_D6_d
APIO4_VDDPST
APIO4_VDD
AG6 AL2 AF5 AK2 AJ4 AK1 AL3 AD7
I2C_SDA_HDMI I2C_SCL_HDMI LCD_BL_PWM UART2DBG_RX UART2DBG_TX VCC5V0_TYPEC_EN TOUCH_RST_L HDMI_CEC
AE6 AK4 AH3 AK3 AH5 AJ3 AG4
GPIO4_D0 DVDD_SWITCH_1V2/1V8 GPIO4_D2 EFUSE_VQPS_EN_H HP_DET_H GPIO4_D5 LCD_RST_H
AC8 AC9
VCC_1V5 VCC_3V0
RK3399
VCC_1V5 VCC_3V0
R1899 10K 5% R0402
C1805 100nF C0201 X5R 10V
C1806 100nF C0201 X5R 10V
U1000J
GPIO3_D0/I2S0_SCLK_d
GPIO3_D1/I2S0_LRCK_RX_d
GPIO3_D2/I2S0_LRCK_TX_d
GPIO3_D3/I2S0_SDI0_d
GPIO3_D4/I2S0_SDI1SDO3_d
GPIO3_D5/I2S0_SDI2SDO2_d
GPIO3_D6/I2S0_SDI3SDO1_d
GPIO3_D7/I2S0_SDO0_d
GPIO4_A0/I2S_CLK_d
GPIO4_A1/I2C1_SDA_u
GPIO4_A2/I2C1_SCL_u
GPIO4_A3/I2S1_SCLK_d
GPIO4_A4/I2S1_LRCK_RX_d
GPIO4_A5/I2S1_LRCK_TX_d
GPIO4_A6/I2S1_SDI0_d
GPIO4_A7/I2S1_SDO0_d
APIO5_VDDPST
APIO5_VDD
AG3 AF4 AJ2 Y7 AE5 AA6 AH2 AH1
I2S0_SCLK I2S0_LRCK_RX I2S0_LRCK_TX I2S0_SDI0 I2S0_SDI1 I2S0_SDI2 I2S0_SDI3 I2S0_SDO0
AC7 AG1 Y6 AF3 AA7 AJ1 AD6 AC6
I2S_CLK I2C_SDA_AUDIO I2C_SCL_AUDIO I2S1_SCLK I2S1_LRCK_RX I2S1_LRCK_TX I2S1_SDI0 I2S1_SDO0
AA8 Y8
VCCA1V8_CODEC VCCA1V8_CODEC
RK3399
VCCA1V8_CODEC
C1807 100nF C0201 X5R 10V
I2C_SCL_AUDIO R1807 2.2K R0402 5% VCCA1V8_CODEC
I2C_SDA_AUDIO R1808 2.2K R0402 5%
Rockchip 瑞芯微电子 Fuzhou Rockchip Electronics
Project: EAIDK
File: gpio
Date: Monday, August 06, 2018 Rev: V1.0
Designed by: Linus Sheet: 18 of 40

DC12V INPUT

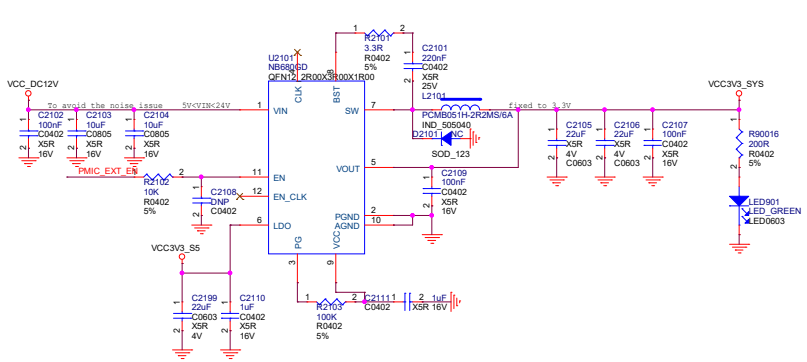


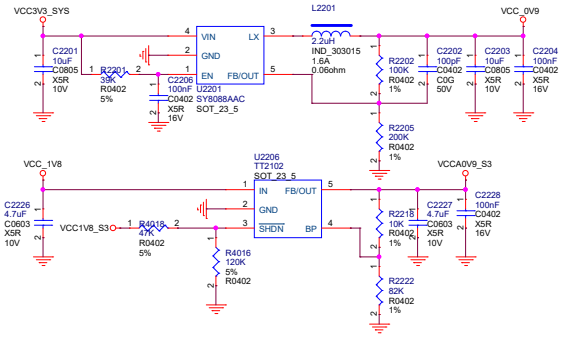


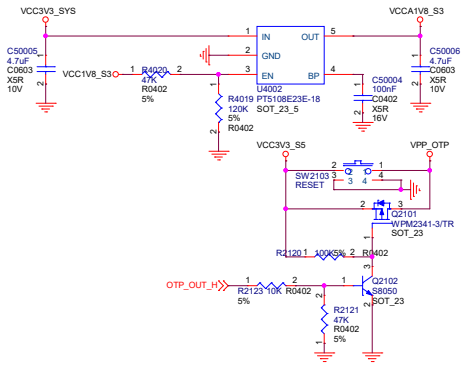
SYSTEM WORK LED



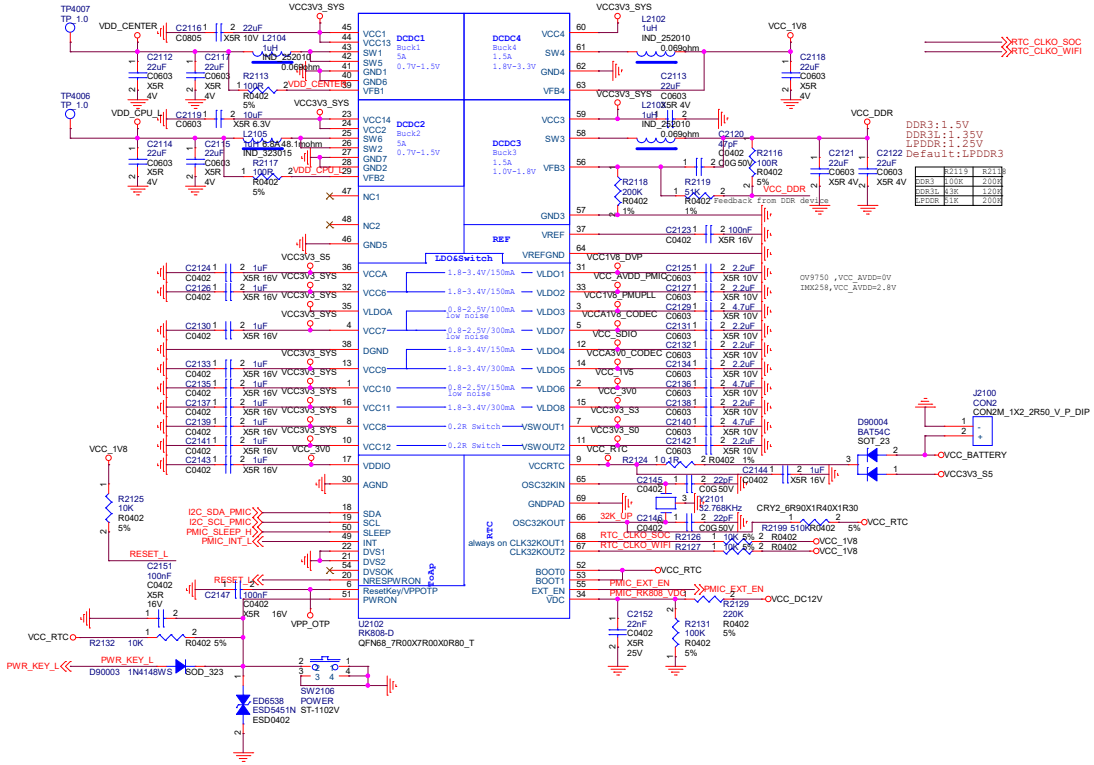
Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	EAIDK		
File:	SARADC		
Date:	Monday, August 06, 2018	Rev:	V1.0
Designed by:	Linus	Sheet:	20 of 40



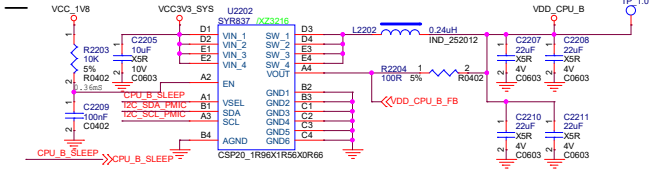




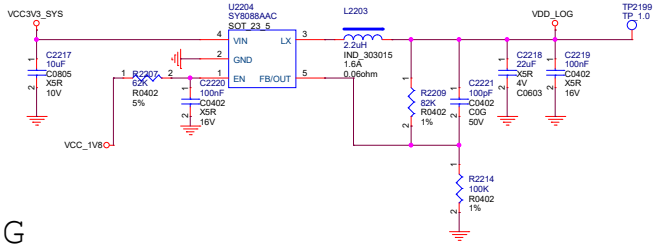
PMIC RK808-D



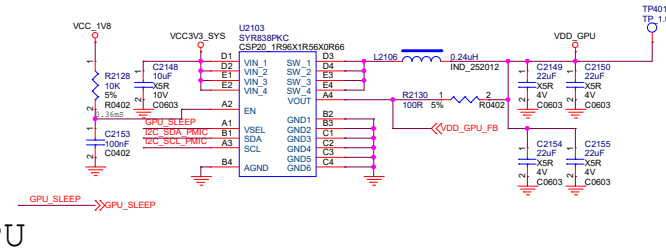
VDD_CPU_B

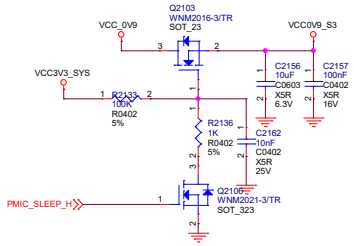


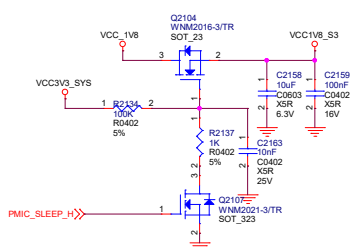
VDD_LOG

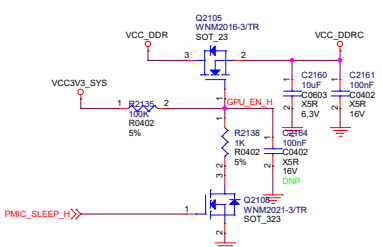


VDD_GPU



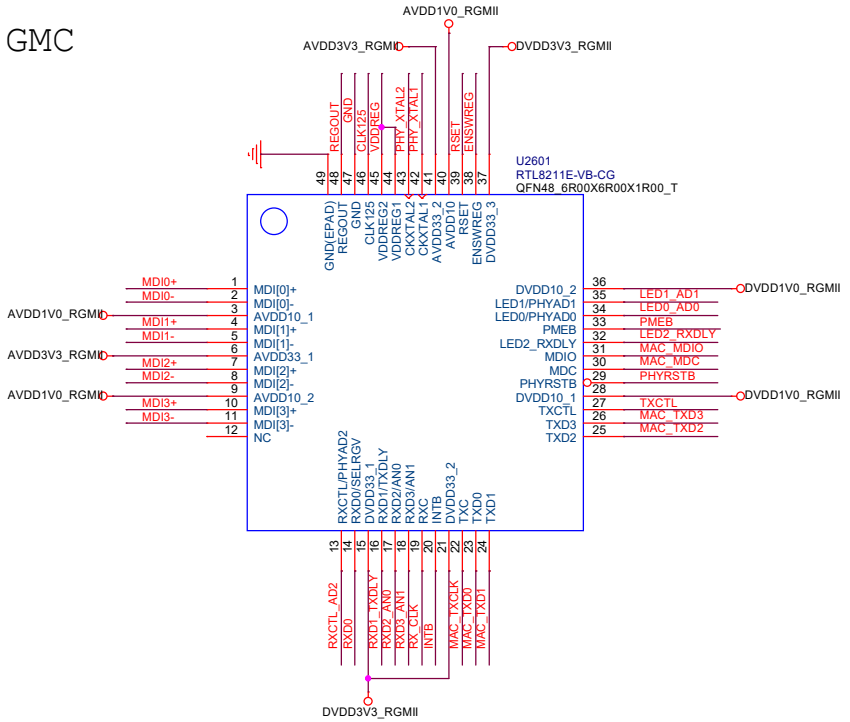


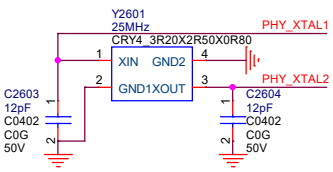


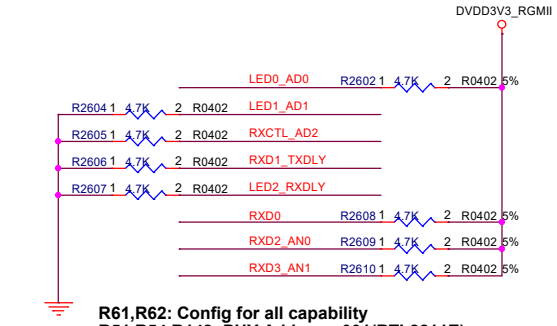


Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	EAIDK		
File:	POWER		
Date:	Wednesday, August 29, 2018	Rev:	V1.0
Designed by:	Linus	Sheet:	21 of 40

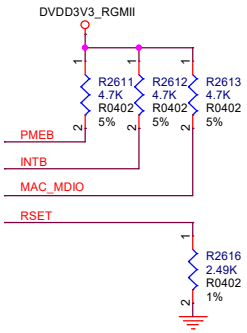
GMC

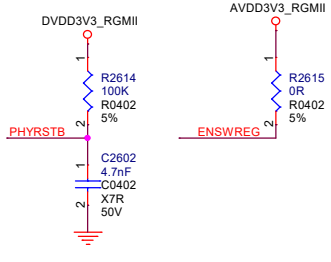


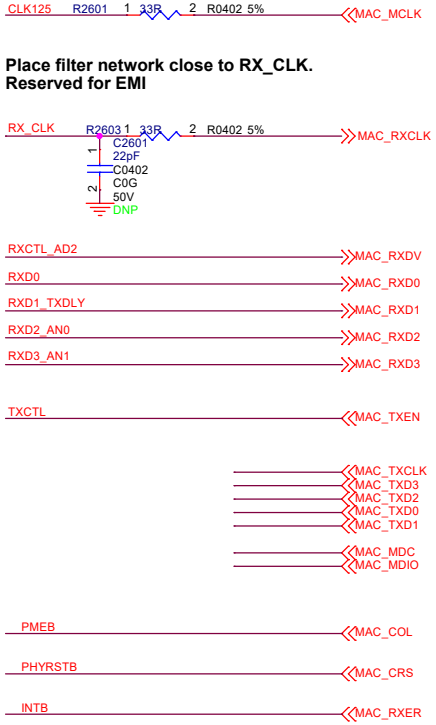


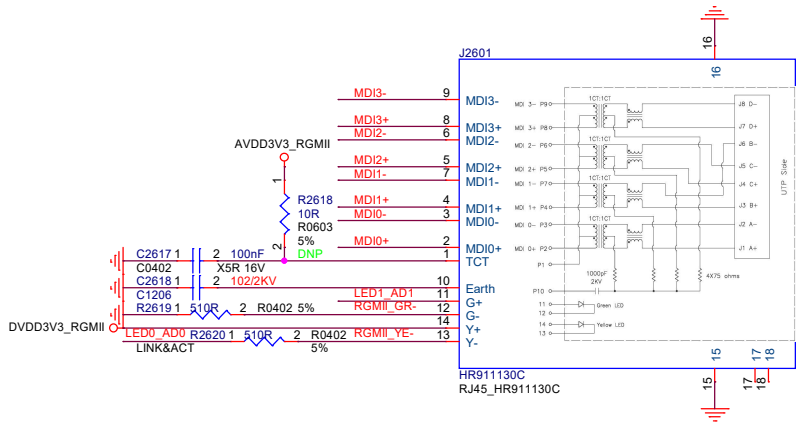


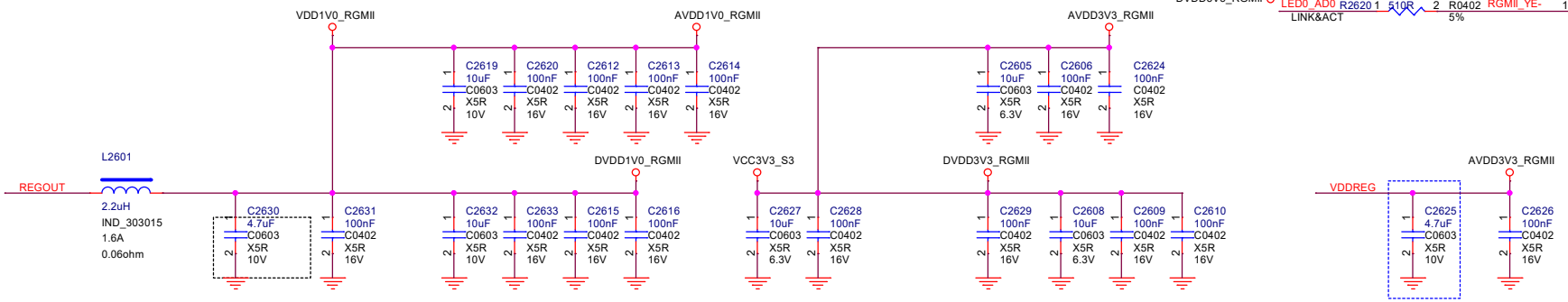
R61,R62: Config for all capability
R51,R54,R148: PHY Address=001(RTL8211E)
R64,R50: Without TX/RX Delay





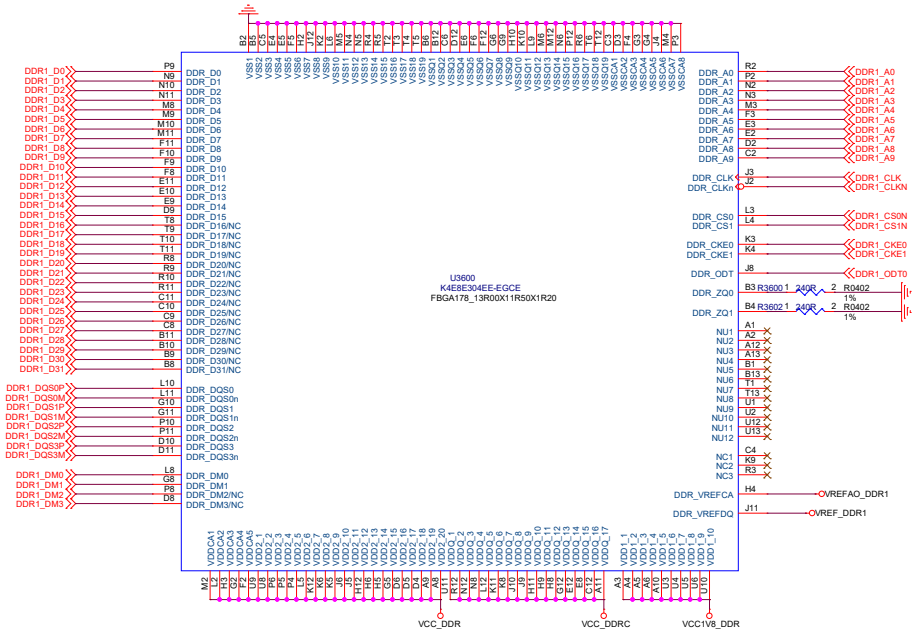


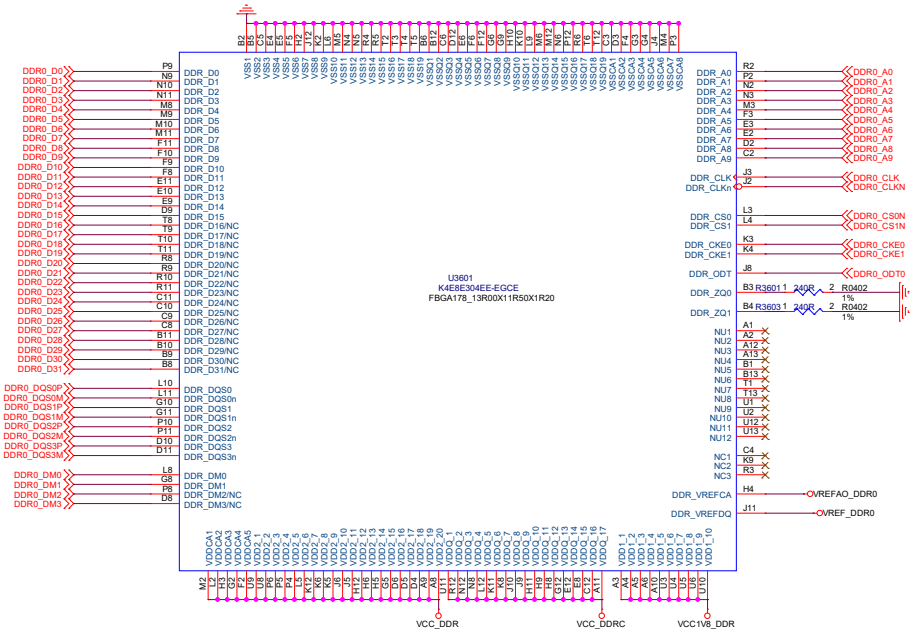


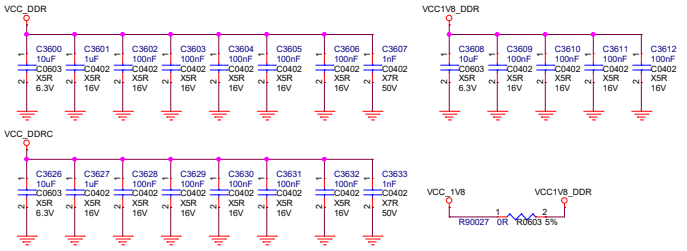


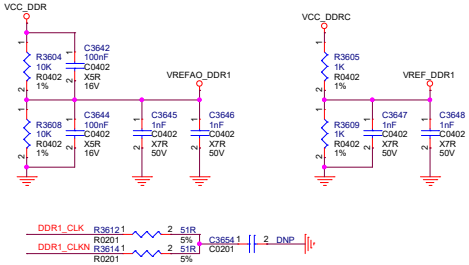
Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	EAIDK		
File:	26.RGMII-10/100/1000M		
Date:	Monday, August 06, 2018	Rev:	V1.0
Designed by:	JJJ	Sheet:	26 of 40

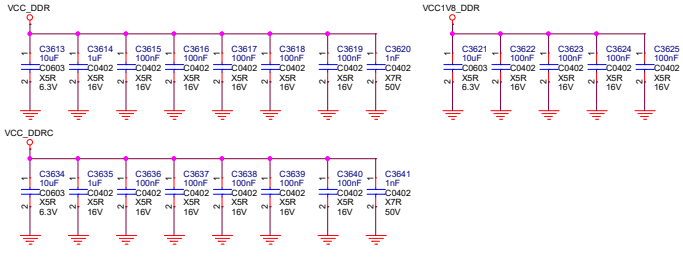
LPDDR3

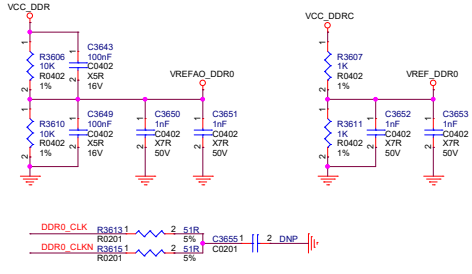






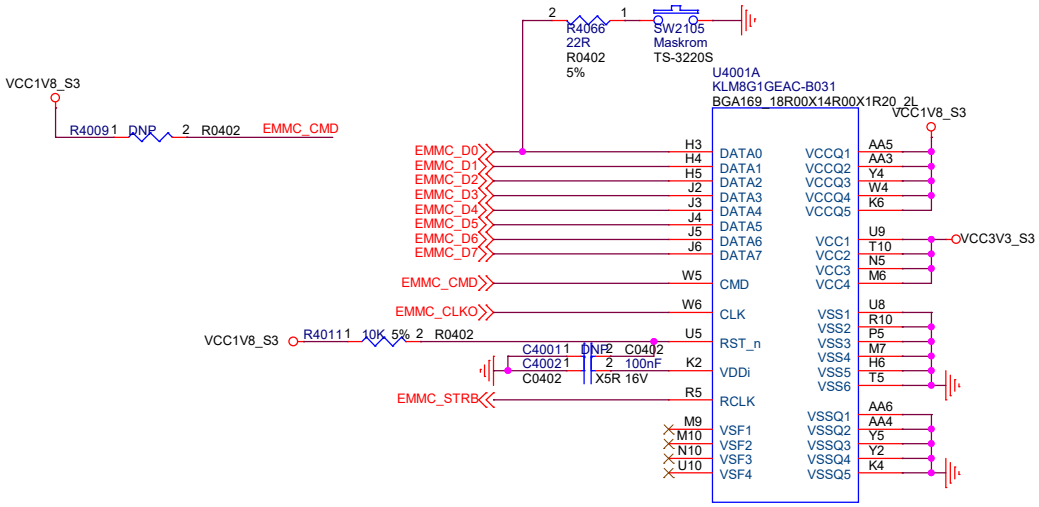


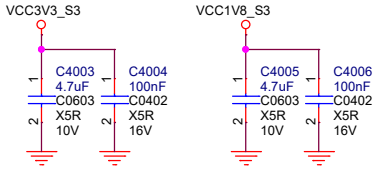




Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	EAIDK		
File:	36.RAM-LPDDR3(178P)		
Date:	Monday, August 08, 2016	Rev:	V1.0
Designed by:	Linus	Sheet:	36 of 40

eMMC FLASH

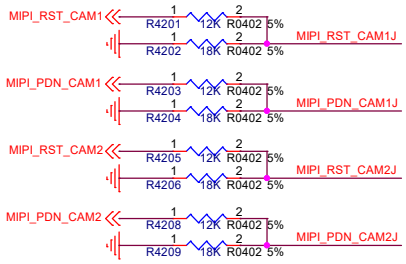


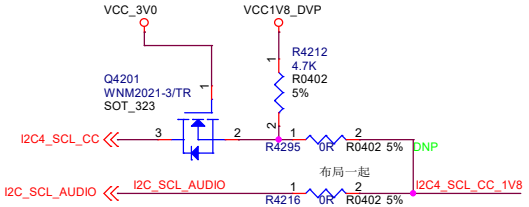


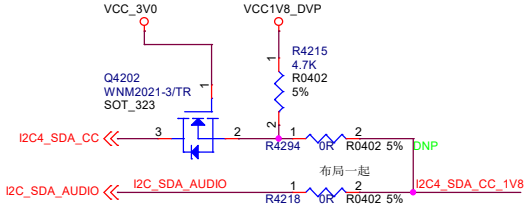
Rockchip 瑞芯微电子 Fuzhou Rockchip Electronics			
Project:	EAIDK		
File:	EMMC		
Date:	Wednesday, August 29, 2018	Rev:	V1.0
Designed by:	Linus	Sheet:	40 of 40

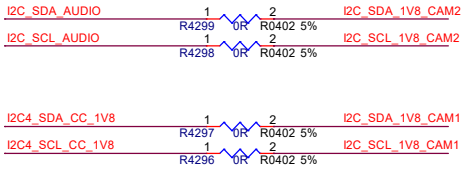
Dual MIPI Camera

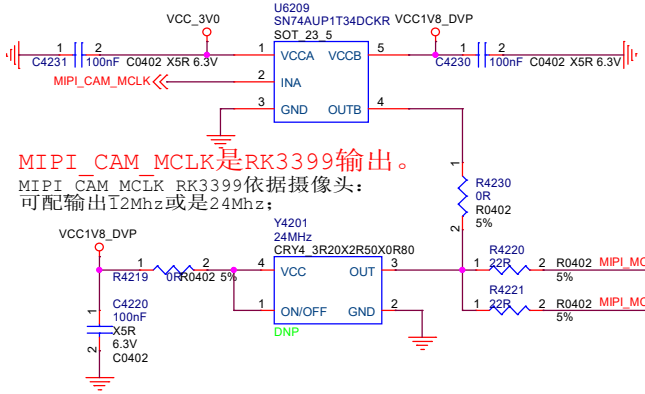
支持：
低配720P OV9750，双摄同时工作。
高配4K IMX258。

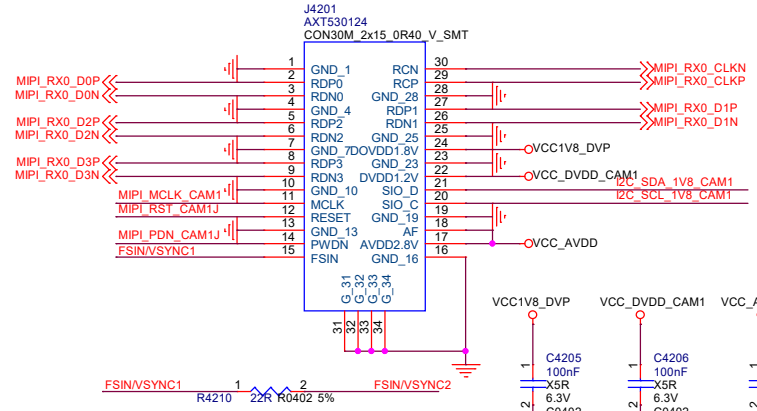


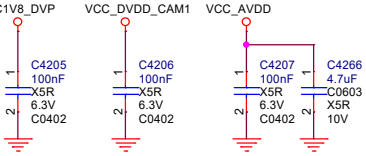


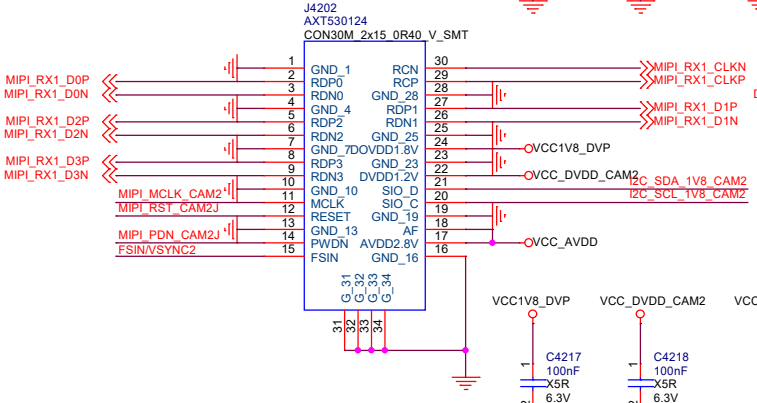


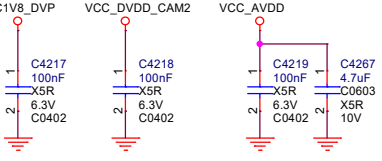


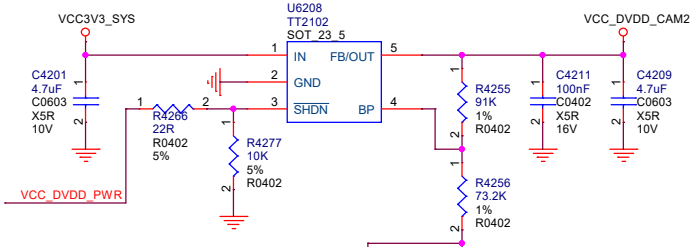


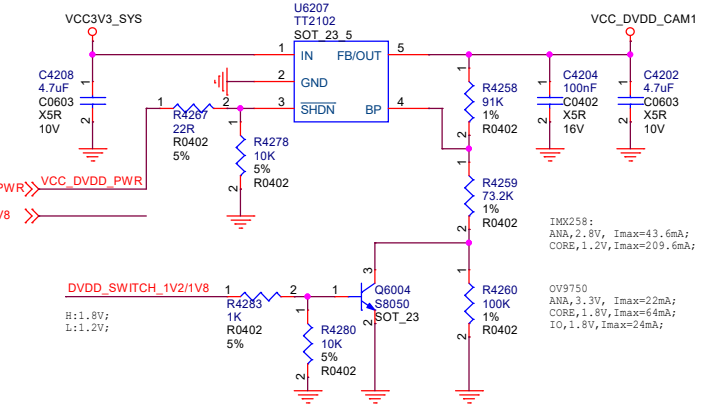


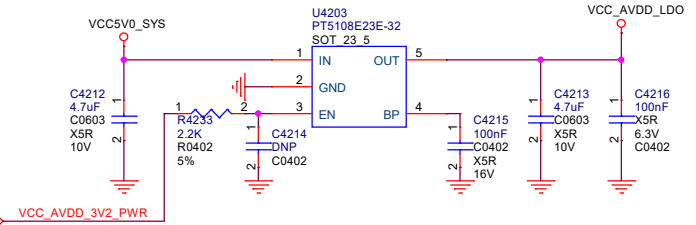












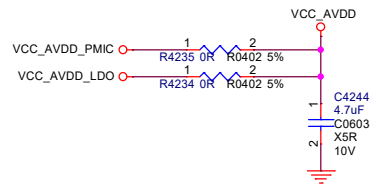
IMX258:
IO电压：1.8V;　//VCC1V8_DVP，PMIC控制
CORE电压：1.2V;　//VCC_DVDD_CAM1,VCC_DVDD_CAM2，GPIO控制
模拟电压：2.8V;　//VCC_AVDD，GPIO控制+PMIC控制

代码配置：
1、拉高LDO使能VCC_DVDD_PWR（GPIO1_C3），拉低DVDD_SWITCH_12V/18V（GPIO4_D1），输出CORE电压1.2V；
//默认必须配置GPIO1_C3，GPIO4_D1都为拉低；
2、PMIC VLDO1输出 1.8V；
3、PMIC VLDO2输出 2.8V；VCC_AVDD_3V2_PWR（GPIO1_C2）拉低 ；　//说明默认PMIC VLDO1,VLDO2输出电压为0,GPIO1_C2拉低；
4、其他的RST、PDN不变。

OV9750:
IO电压：1.8V;　//VCC1V8_DVP，PMIC控制
CORE电压：1.8V;　//VCC_DVDD_CAM1,VCC_DVDD_CAM2，GPIO控制
模拟电压：3.2V;　//VCC_AVDD，GPIO控制+PMIC控制

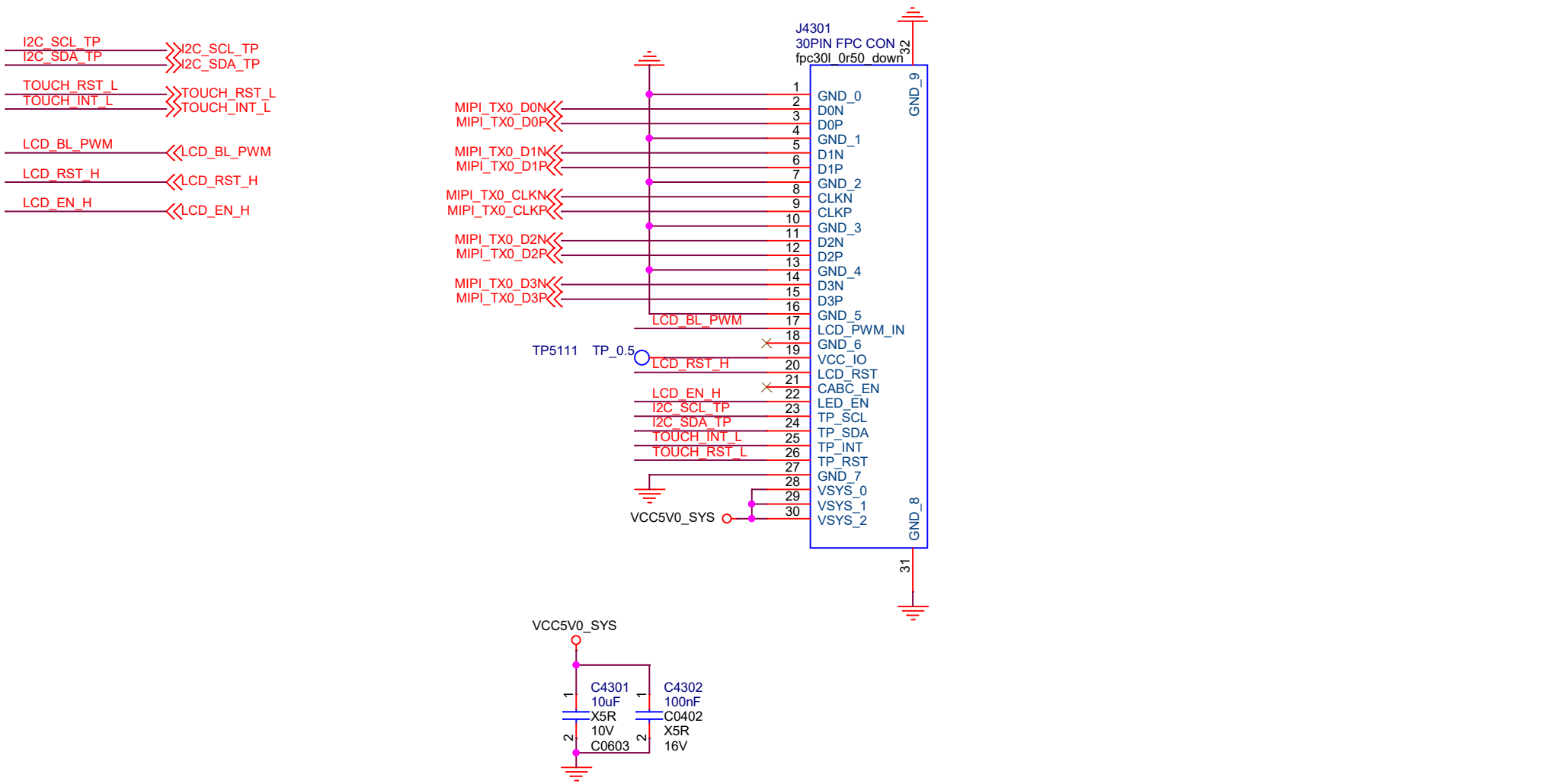
代码配置：
1、拉高LDO使能VCC_DVDD_PWR（GPIO1_C3），拉高DVDD_SWITCH_12V/18V（GPIO4_D1），输出CORE电压1.8V；
//默认必须配置GPIO1_C3，GPIO4_D1都为拉低；

2、PMIC VLDO1输出 1.8V；
3、PMIC VLDO2输出 0V，VCC_AVDD_3V2_PWR（GPIO1_C2）拉高；　//说明默认PMIC VLDO1,VLDO2输出电压为0，GPIO1_C2拉低；
4、其他的RST、PDN不变



Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	EAIDK		
File:	MIPI CSI		
Date:	Wednesday, August 29, 2018	Rev:	V1.0
Designed by:	Linus	Sheet:	40 of 40

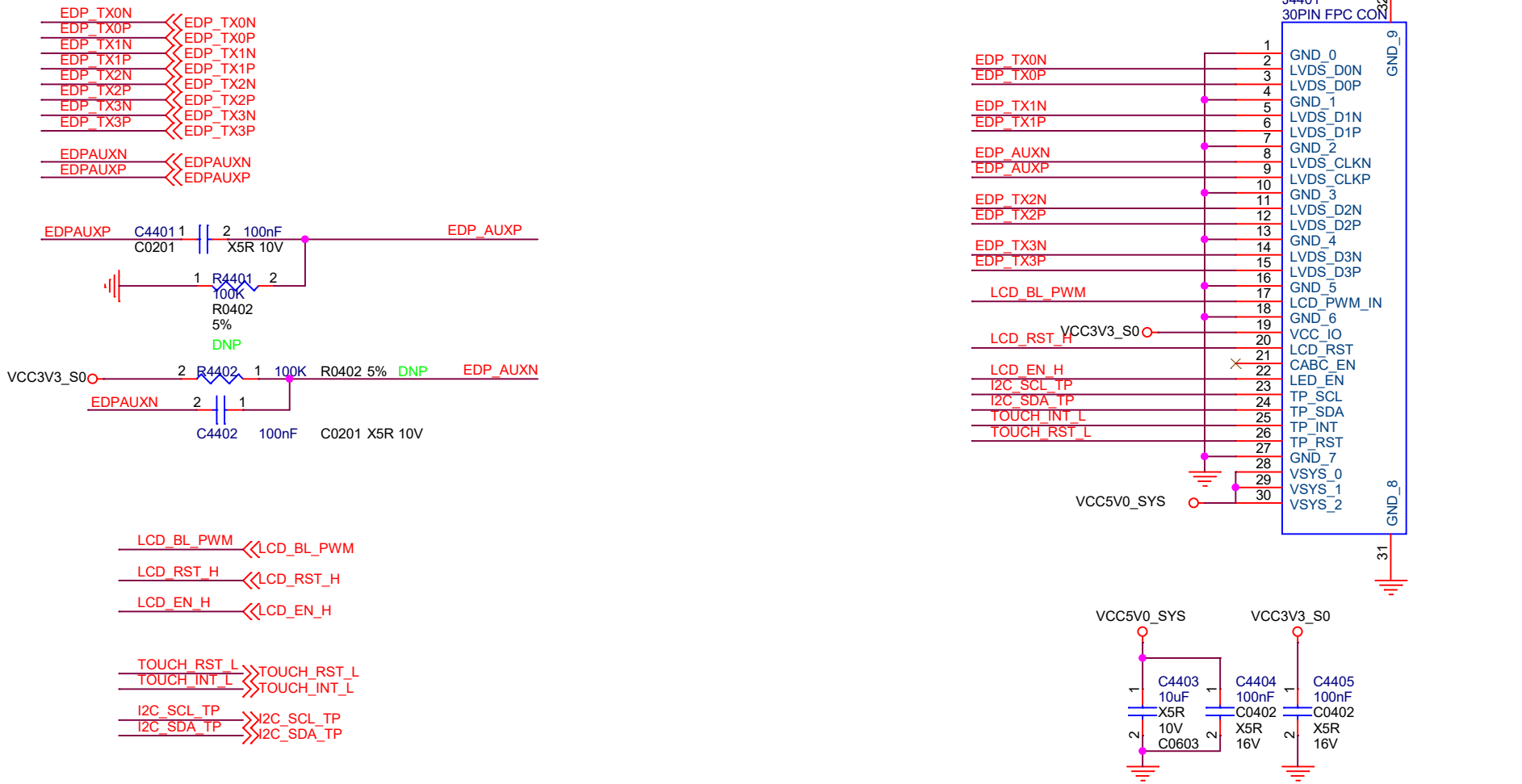
MIPI Panel



Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	EAIDK		
File:	DUALE-LCM-MIPI		
Date:	Monday, August 06, 2018	Rev:	V1.0
Designed by:	Linus	Sheet:	43 of 40

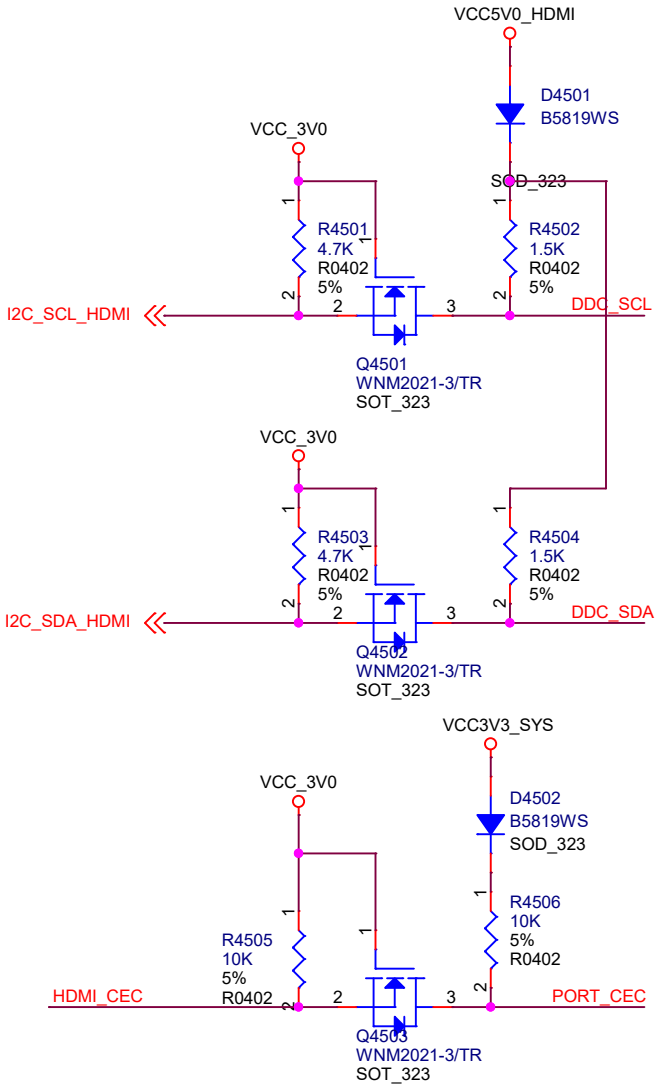
eDP Panel

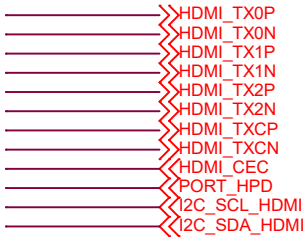
分辨率：1536x2048； 7.85寸eDP；

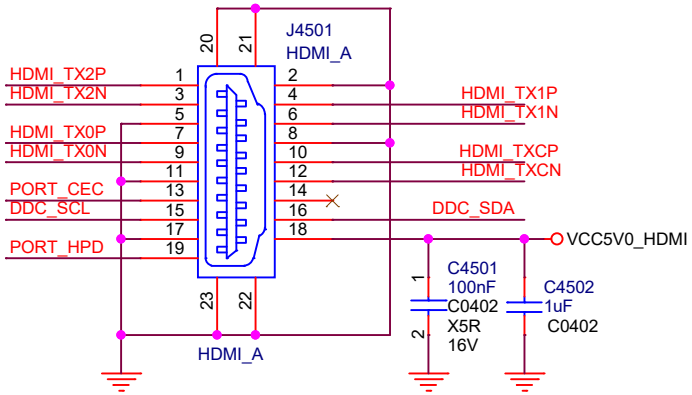


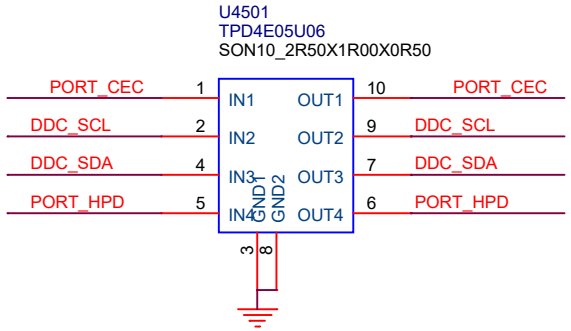
Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	EAIDK		
File:	eDP		
Date:	Monday, August 06, 2018	Rev:	V1.0
Designed by:	Linus	Sheet:	44 of 40

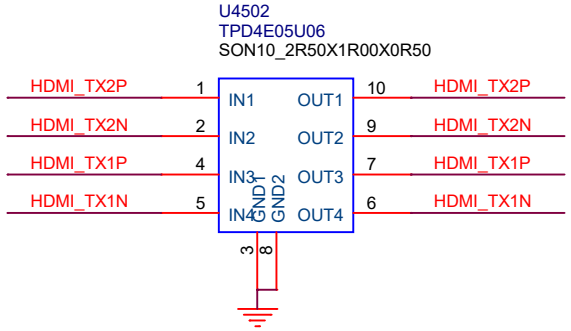
HDMI Port

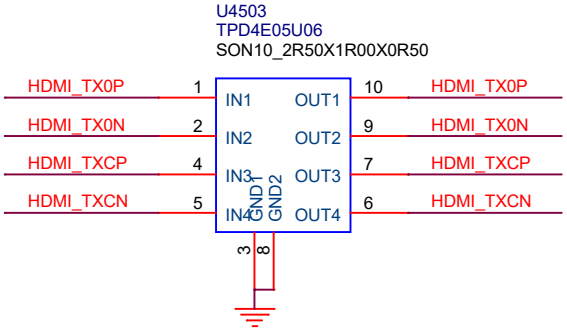






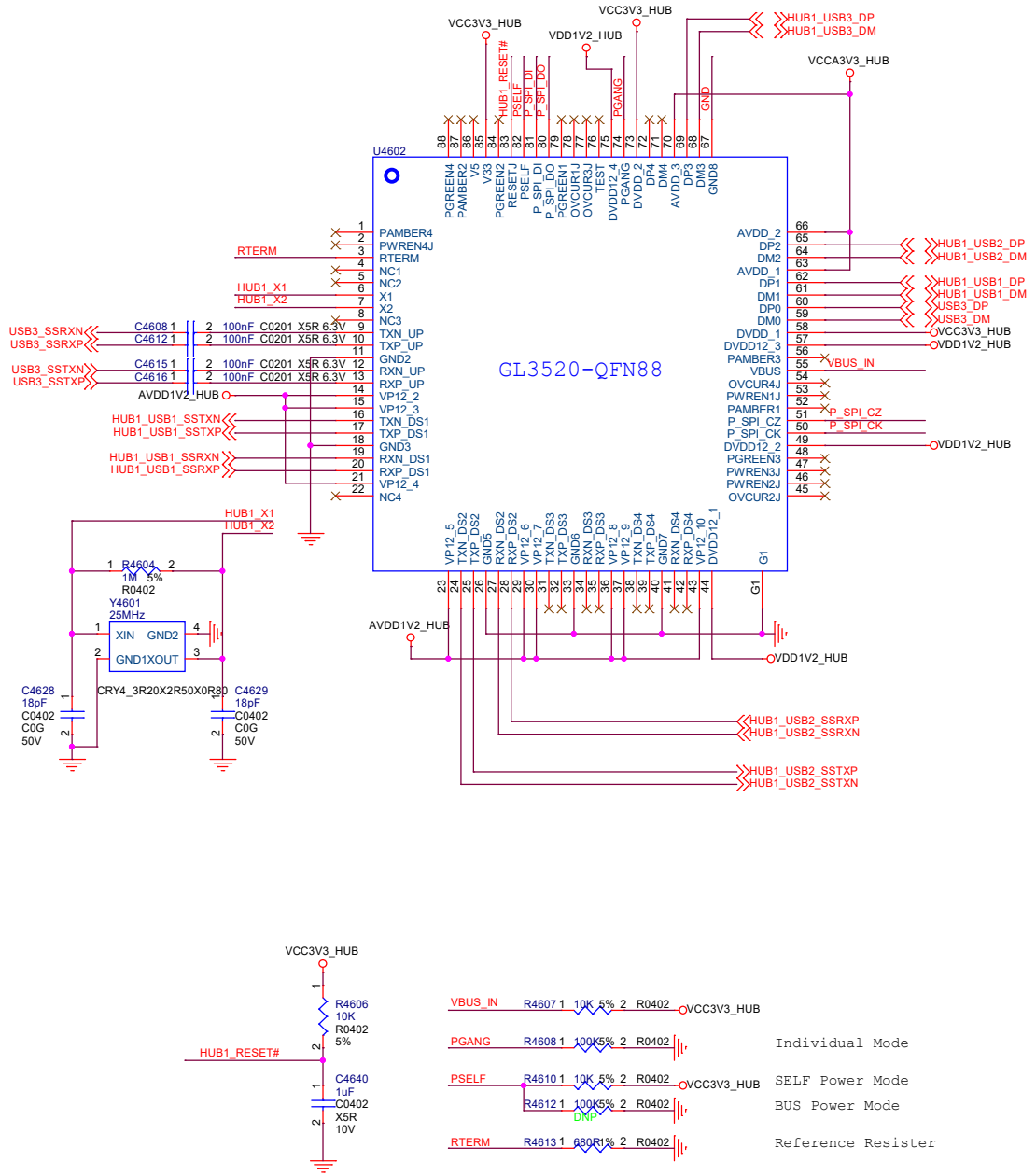




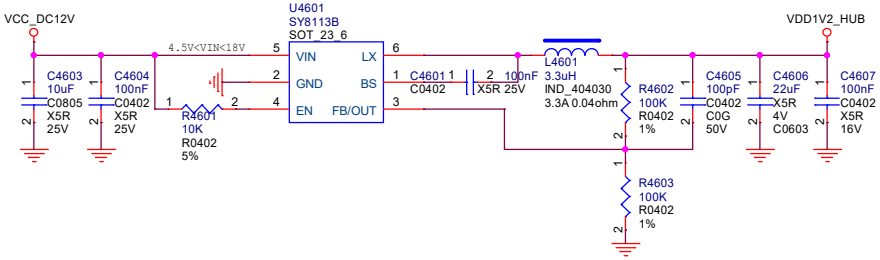


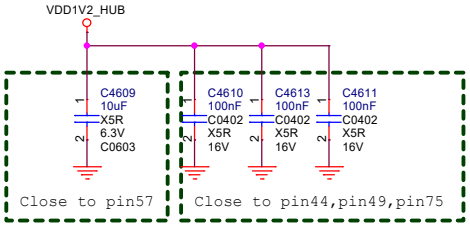
Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	EAIDK		
File:	HDMI OUT		
Date:	Monday, August 06, 2018	Rev:	V1.0
Designed by:	Linus	Sheet:	45 of 40

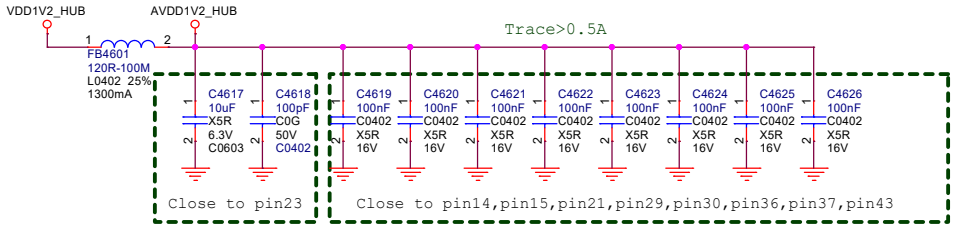
USB3.0 HUB

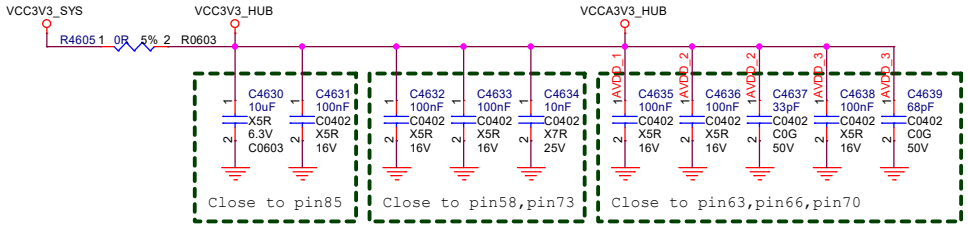


HUB Power

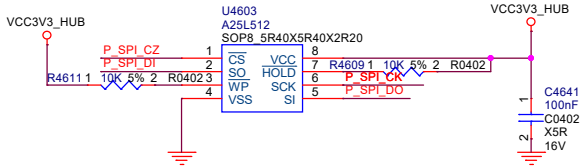






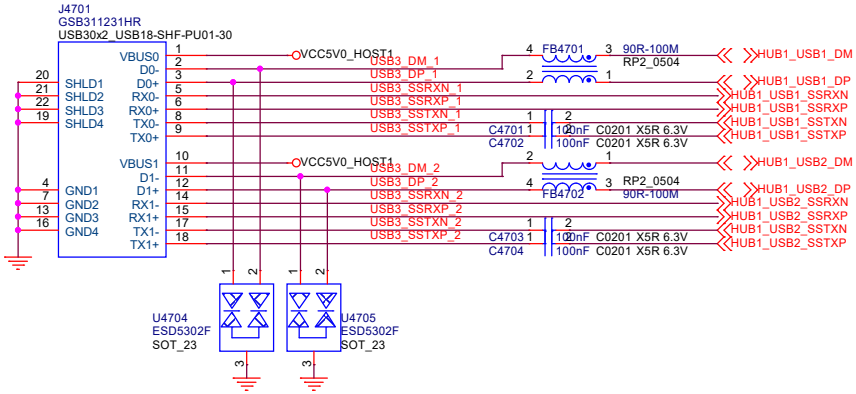


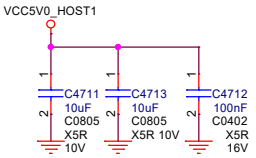
SPI Flash

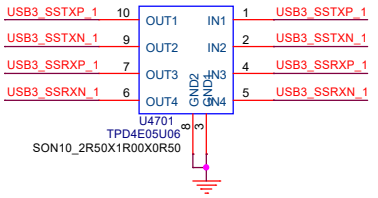


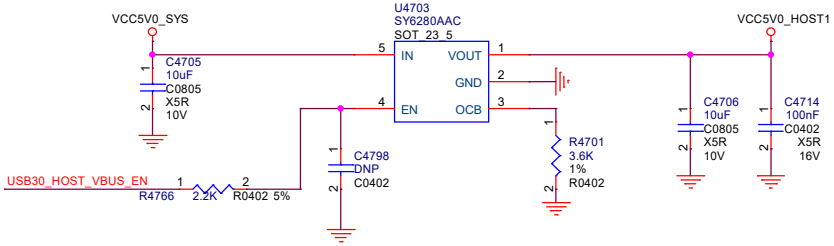
Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	EAIDK		
File:	46.USB3.0 HUB-GL3523		
Date:	Monday, August 06, 2018	Rev:	V1.0
Designed by:	Linus	Sheet:	46 of 40

USB3.0 Port1&Port2



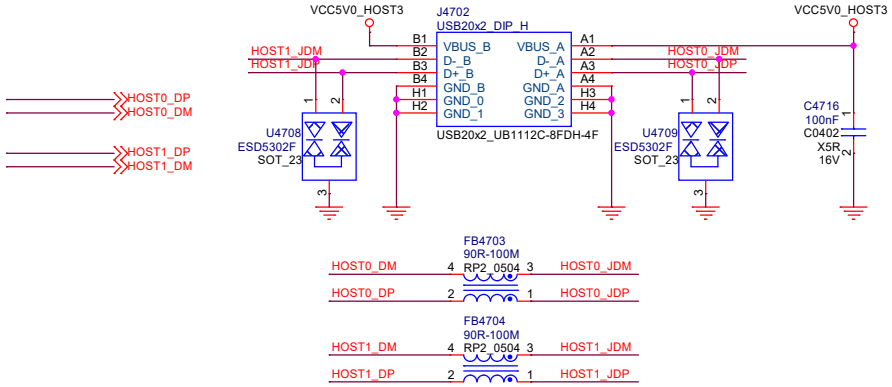


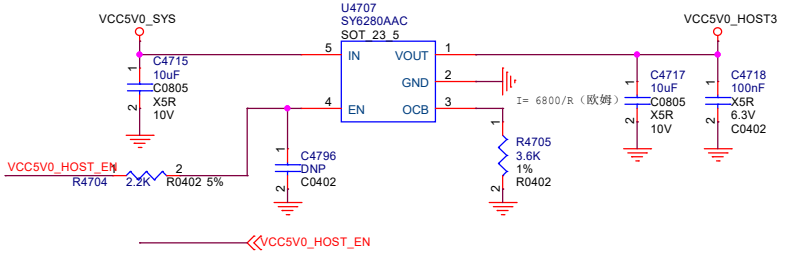




支持待机下， USB鼠标、键盘唤醒系统。

USB2.0 Port1&Port2

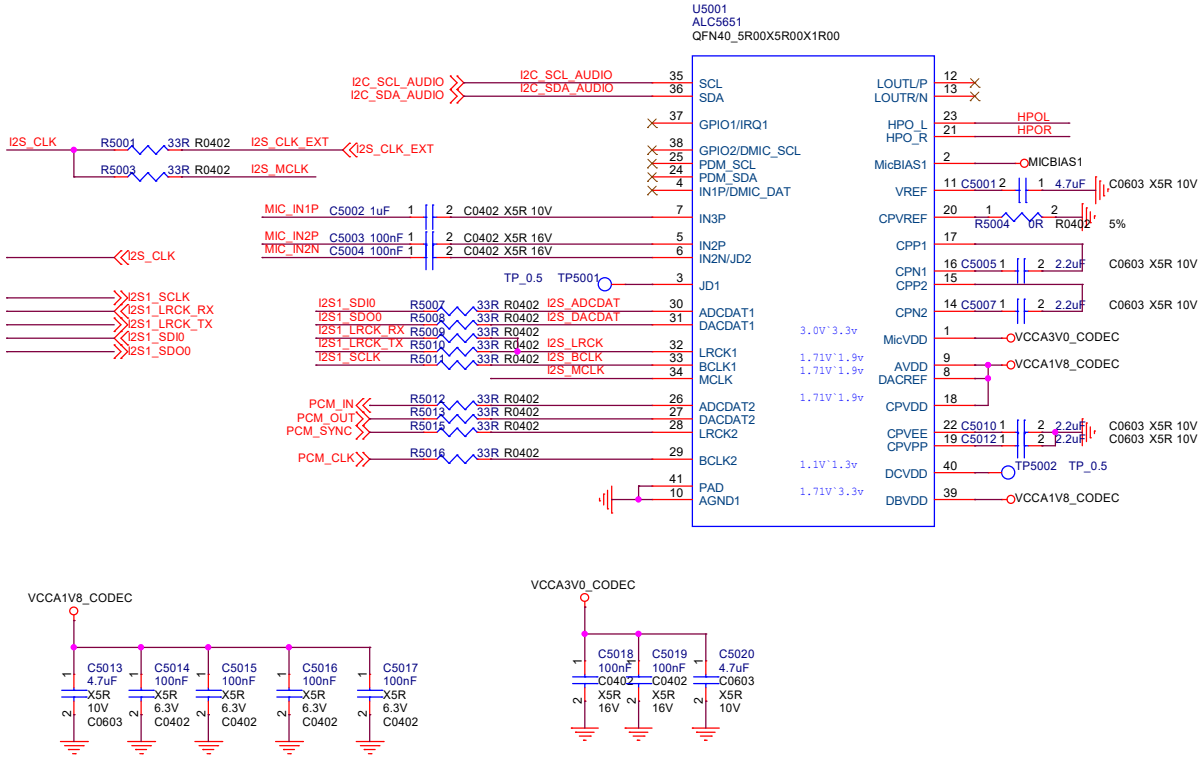




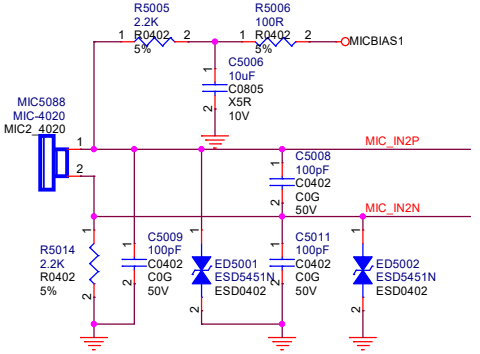
支持待机下，USB鼠标、键盘唤醒系统。

Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	EAIDK		
File:	47.USB3.0/USB2.0 Interface		
Date:	Monday, August 06, 2018	Rev:	V1.0
Designed by:	Linus	Sheet:	47 of 40

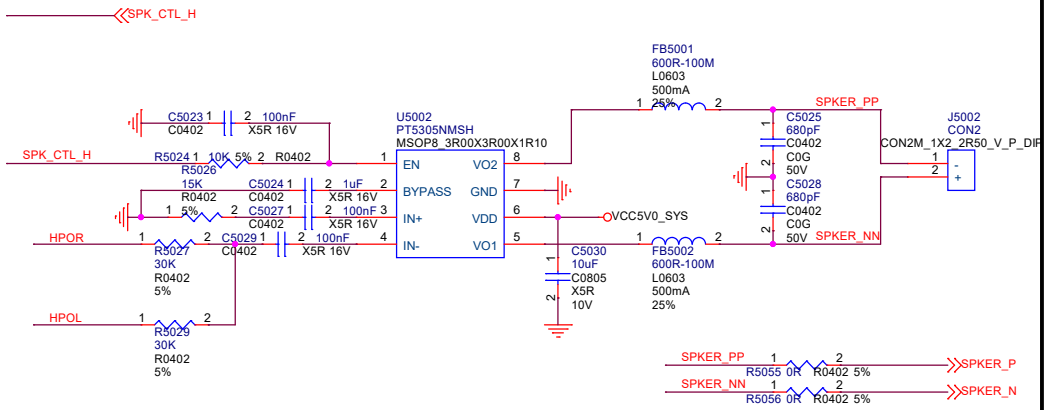
Audio Codec



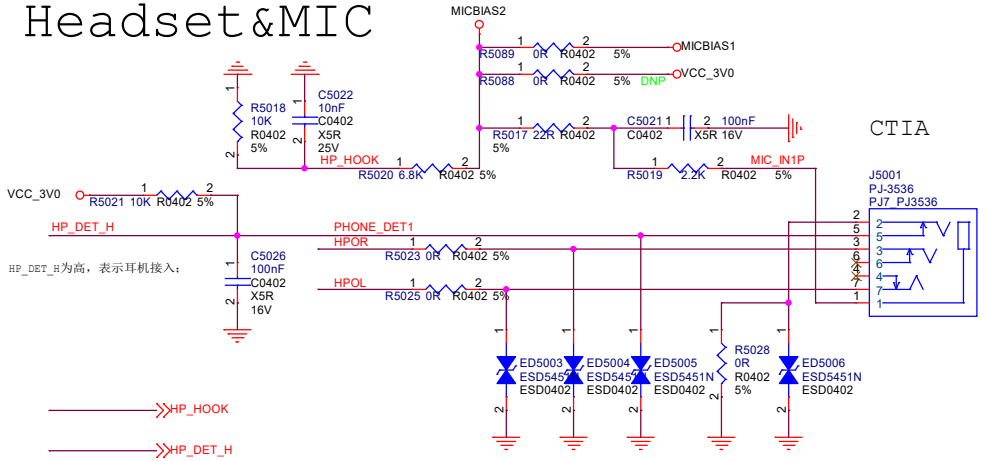
MIC



Speaker

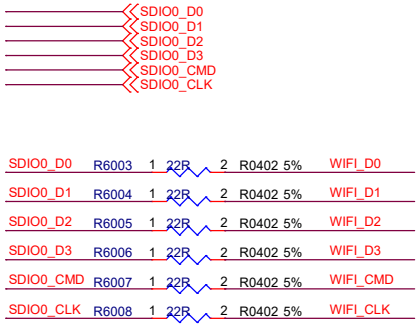


Headset&MIC

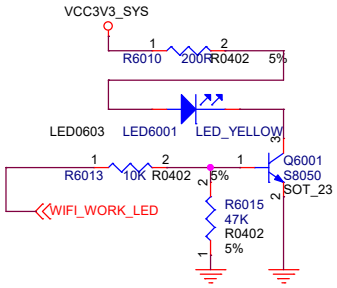


Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	EAIDK		
File:	AUDIO		
Date:	Monday, August 06, 2018	Rev:	V1.0
Designed by:	Linus	Sheet:	50 of 40

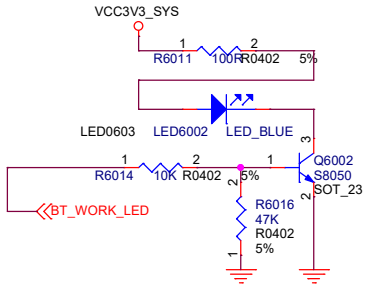
WIFI/BT Module

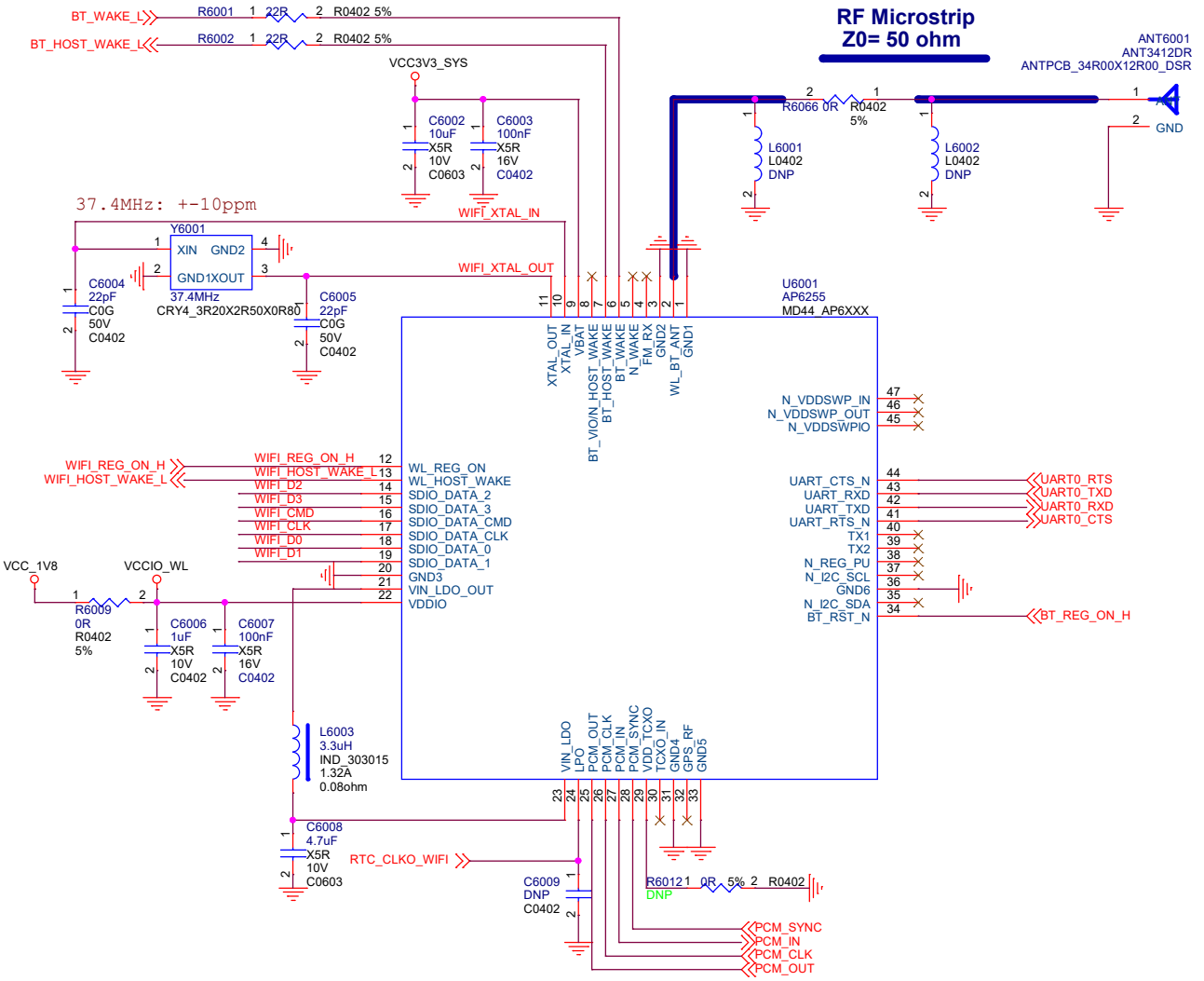


WIFI WORK LED



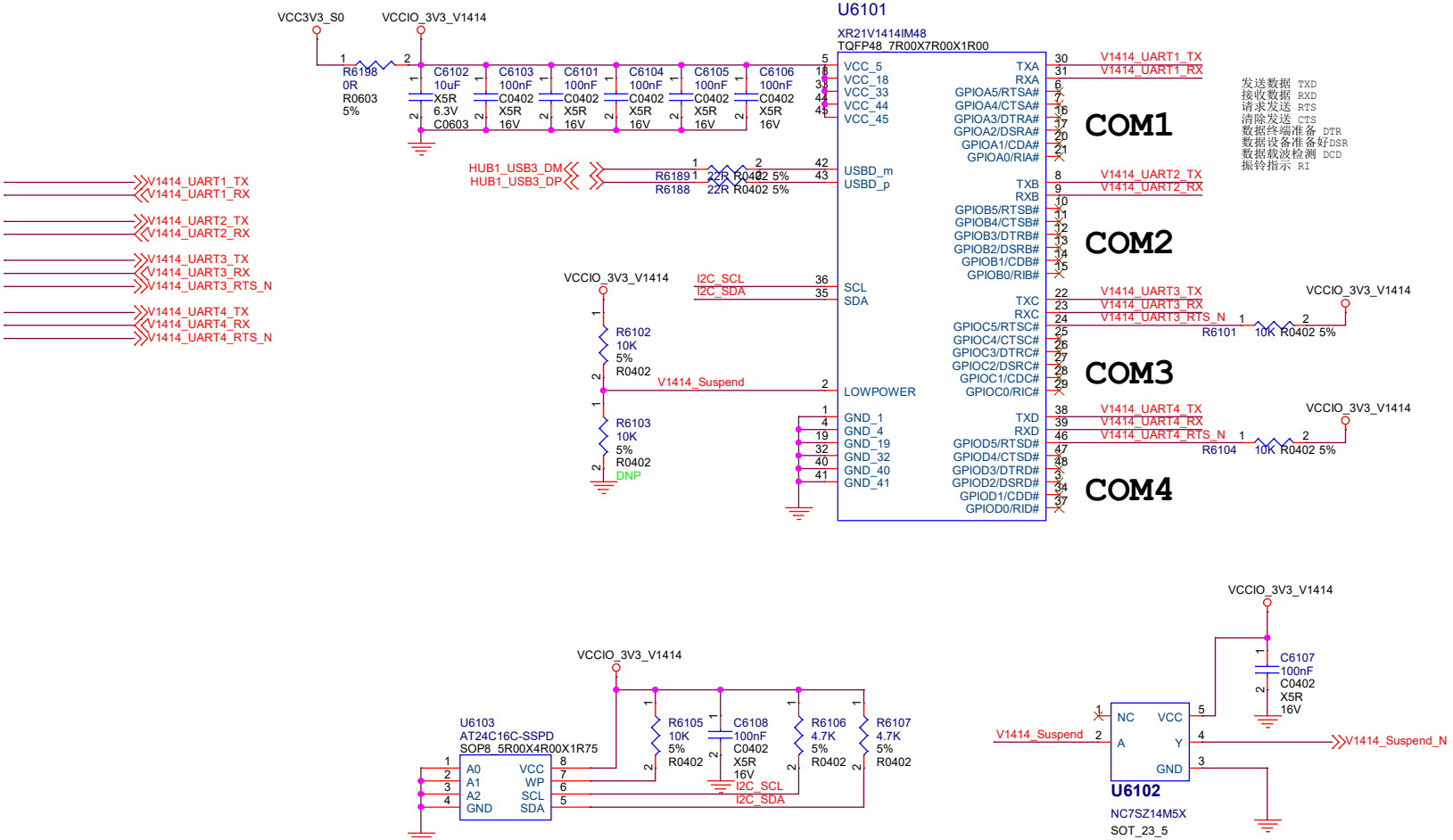
BT WORK LED





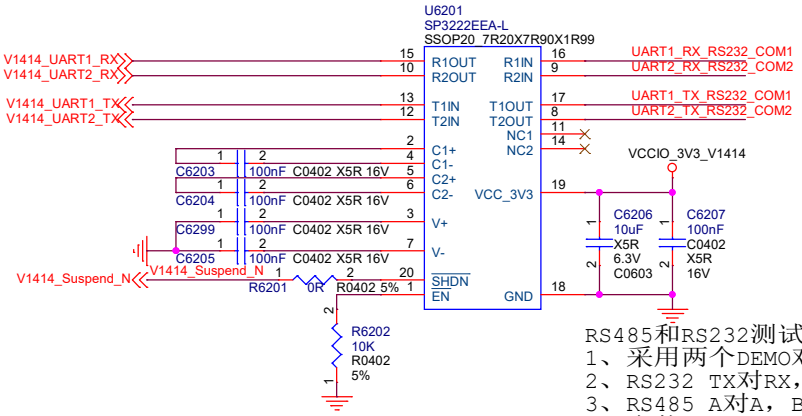
Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	EAIDK		
File:	60.WIFI/BT-AP6255		
Date:	Monday, August 06, 2018	Rev:	V1.0
Designed by:	Joseph	Sheet:	60 of 40

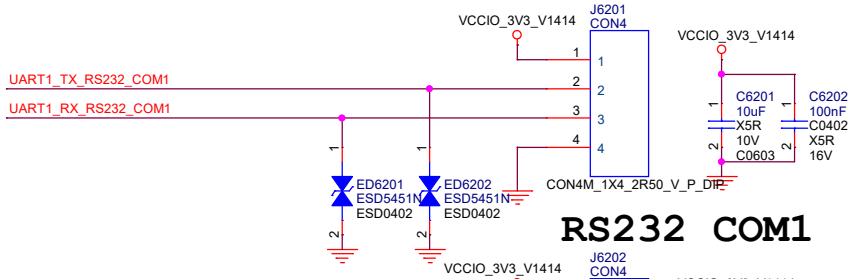
USB TO UART HUB



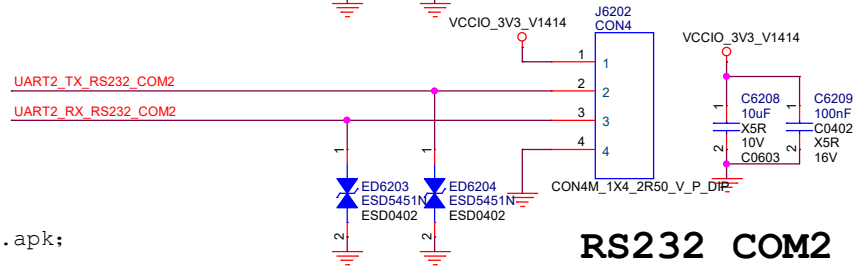
Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	EAIDK		
File:	61.UART HUB-XR21V1414IM48		
Date:	Monday, August 06, 2018	Rev:	V1.0
Designed by:	Linus	Sheet:	61 of 40

UART RS232 Port1&Port2





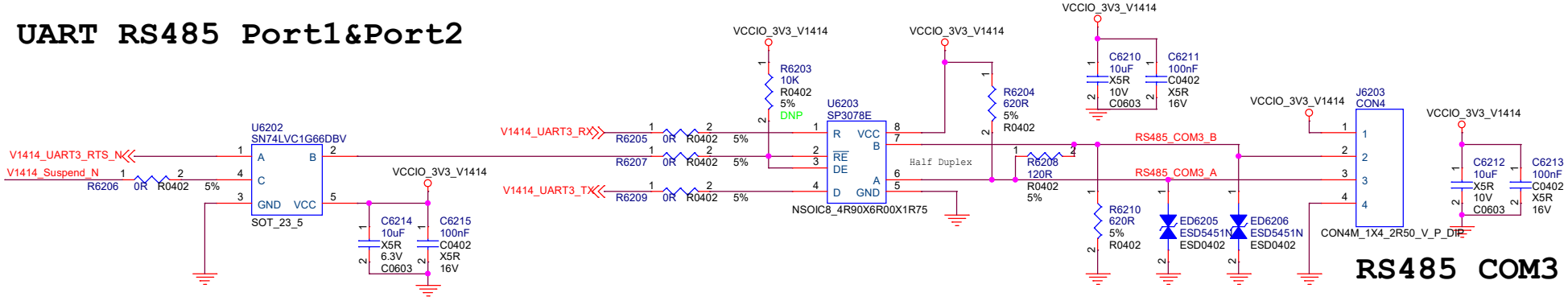
RS232 COM1



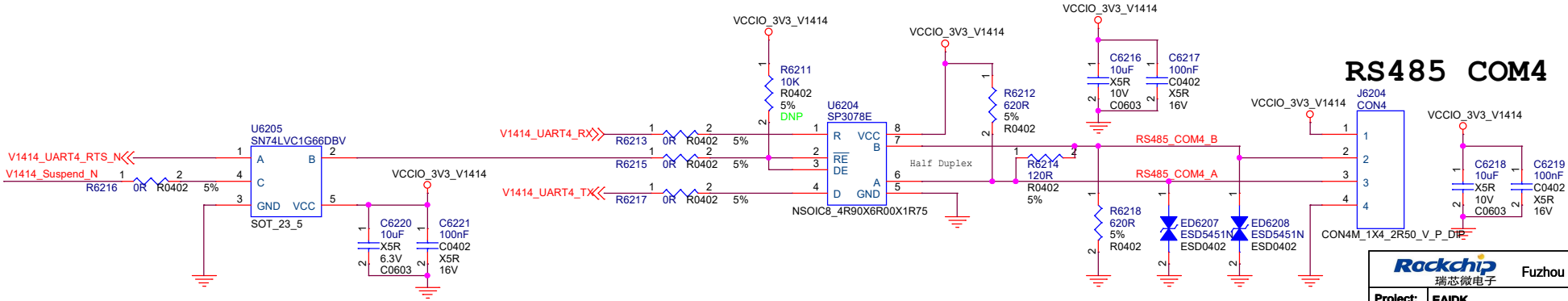
RS232 COM2

RS485和RS232测试方式：
1、采用两个DEMO对接相互通信；
2、RS232 TX对RX，RX对TX；
3、RS485 A对A，B对B；
5、安装ExarUSB_android_app_ver1C.apk；
6、UART1..4分别对应COM1..4；

UART RS485 Port1&Port2



RS485 COM3

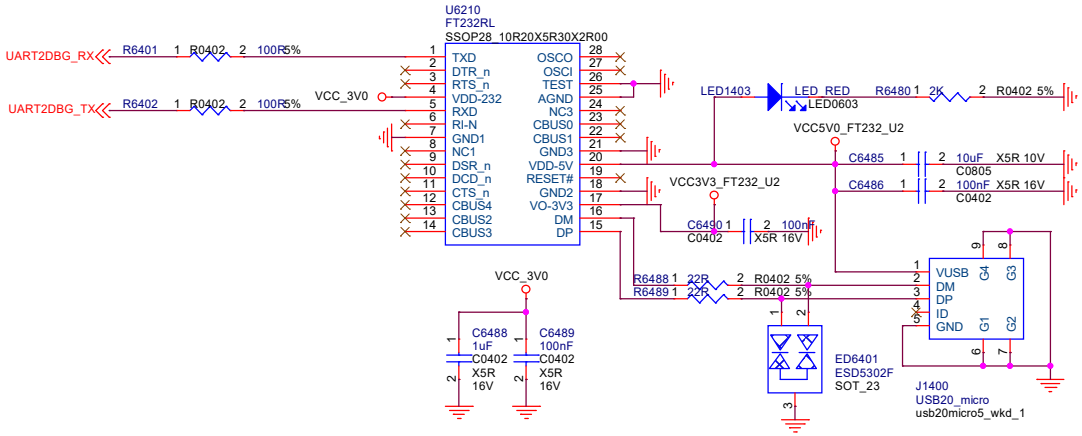


RS485 COM4

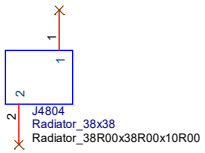
Rockchip 瑞芯微电子 Fuzhou Rockchip Electronics

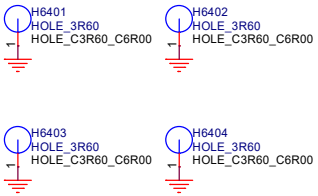
Project:	EAIDK		
File:	62.UART RS232/RS485		
Date:	Monday, August 06, 2018	Rev:	V1.0
Designed by:	Linus	Sheet:	62 of 40

USB Debug port



Heat sink





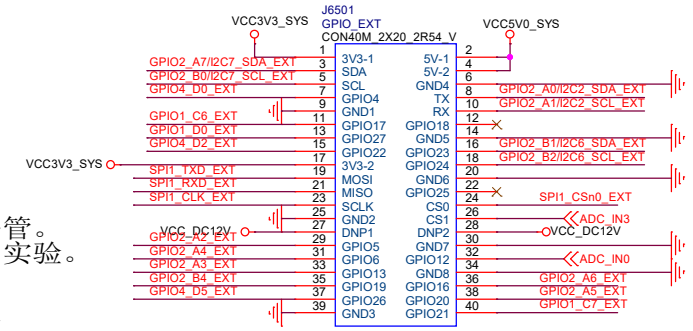
Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	EAIDK		
File:	lpddr3		
Date:	Monday, August 06, 2018	Rev:	V1.0
Designed by:	Linus	Sheet:	64 of 40

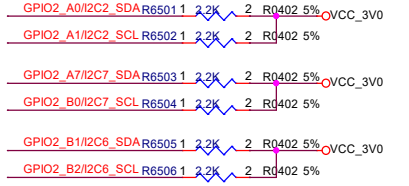
Ext Interface

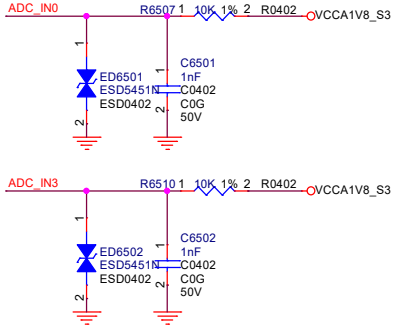
MIC ARRAY

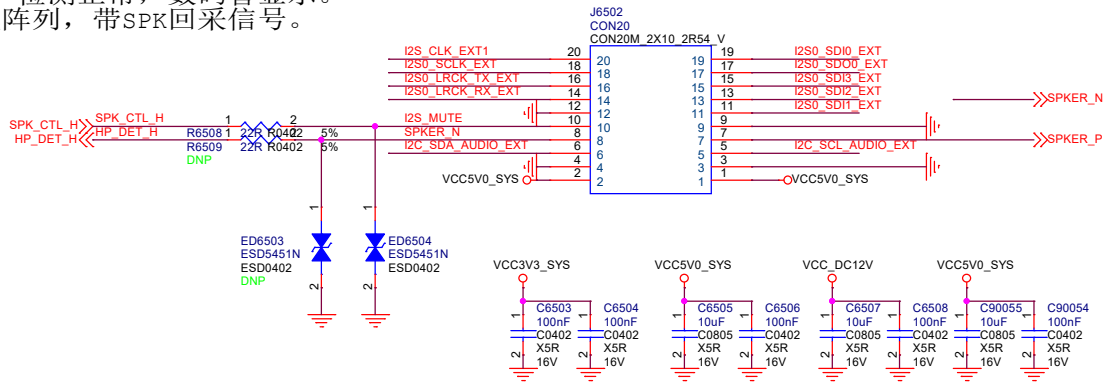
测试规范：

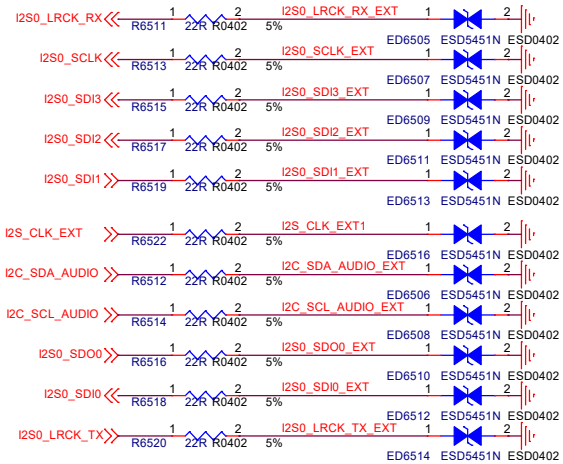
1、SPI_FLASH数据读写比对，比对成功，点亮数码管。
2、数码管可以显示0~9，还可以做定时器显示时间实验。
3、GPIO按键， 做GPIO中断编程实验，中断函数
可以处理开始SPI_FLASH实验和电压采集实验。
4、ADC输入实验，一外接按键。对应点亮一个LED灯。
5、3个I2C通道，检测3路电压，检测正常，数码管显示。
6、I2S信号，外接6麦的麦克风阵列，带SPK回采信号。











Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	EAIDK		
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