

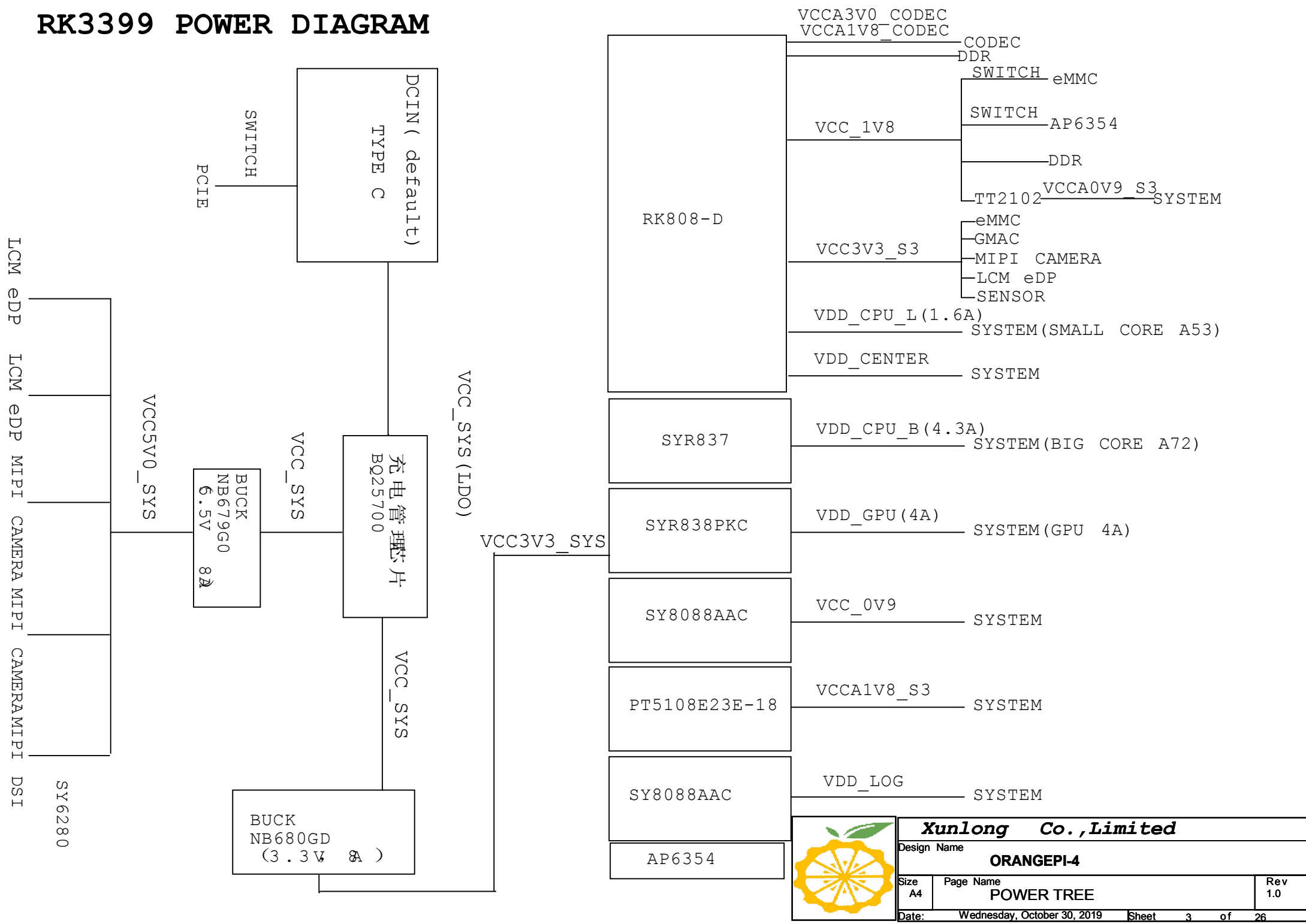
RK3399 I2C MAP

Port	Pin name	Domain	Bus name	Pull-up voltage	Slave Device	Slave Addr (MS 7Bits)	Note	Slave Bus Capability
I2C0	GPIO1_B7/SPI3_RXD/I2C0_SDA GPIO1_C0/SPI3_TXD/I2C0_SCL	PMUIO2 VCC1V8_PMU	I2C_SDA_PMIC I2C_SCL_PMIC	VCC1V8_PMU	TI LP8752-Q1	0x60	DC regulator	100kHz,400KHz,1MHz fast mode+ 3.4MHz high-speed mode
					Rockchip RK808	0x1b	PMIC	
					Fairchild FUSB302B	0x44,0x46	USB-TypeC Mux	100kHz,400KHz,1MHz fast mode+
I2C1	GPIO4_A1/I2C1_SDA GPIO4_A2/I2C1_SCL	APIO5 VCC1V8_IO	I2C_SDA_AUDIO I2C_SCL_AUDIO	VCCA1V8_CODEC	Everest ES8316	0x10	Audio codec	
			I2C_SDA_CAM I2C_SCL_CAM	VCCA1V8_CODEC	Omnivision OV8858	0x6c,0x20	MIPI Camera	
I2C2	GPIO2_A0/VOP_D0/CIF_D0/I2C2_SDA GPIO2_A1/VOP_D1/CIF_D1/I2C2_SCL	APIO2 VCC1V8_IO	Other pin function					
I2C3	GPIO4_C0/I2C3_SDA/UART2B_RX GPIO4_C1/I2C3_SCL/UART2B_TX	APIO4 VCC3V0_IO	I2C_SDA_HDMI I2C_SCL_HDMI	VCC3V0_IO				
I2C4	GPIO1_B3/I2C4_SDA GPIO1_B4/I2C4_SCL	PMUIO2 VCC1V8_IO	I2C_SDA_MEMS I2C_SCL_MEMS	VCC1V8_PMU	Capellamicro CM3218	0x10,0x0c	ALS Sensor	
					AsahiKasei AK8963C		Compass	
					InverSense MPU6500	0x34	Accer+Gyro	
			I2C_SDA_TOUCH I2C_SCL_TOUCH	VCC1V8_TOUCH	Silead GSL3680	0x40	Touch panel	
I2C5	GPIO3_B2/MAC_RXER/I2C5_SDA GPIO3_B3/MAC_CLK/I2C5_SCL	APIO1 VCC3V3_LAN	I2C_SDA_PCIE I2C_SCL_PCIE	VCC3V3_IO				
I2C6	GPIO2_B1/SPI2_RXD/CIF_HREF/I2C6_SDA GPIO2_B2/SPI2_TXD/CIF_CLKIN/I2C6_SCL	APIO2 VCC1V8_IO	I2C_SDA_BAT I2C_SCL_BAT	VCC1V8_DVP	Chrome Battery	0x19	Battery	100KHz
					TI BQ25700	0x6a (I2C) 0x09 (SMBus)	Charger	
					Fairchild FUSB302B	0x44,0x46	USB-TypeC Mux	100kHz,400KHz,1MHz fast mode+
I2C7	GPIO2_A7/VOP_D7/CIF_D7/I2C7_SDA GPIO2_B0/VOP_CLK/CIF_VSYNC/I2C7_SCL	APIO2 VCC1V8_IO	Other pin function					

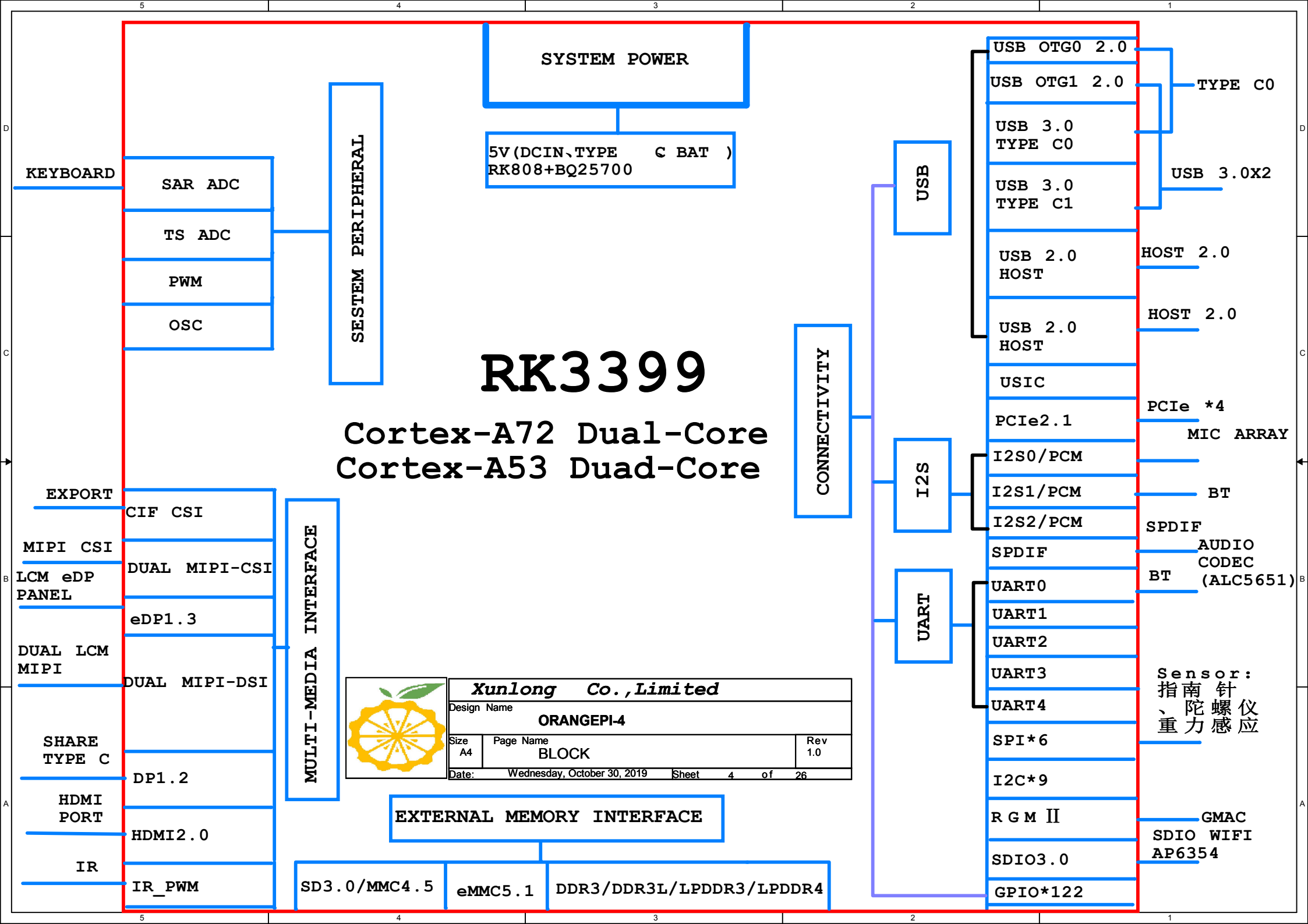


Xunlong Co., Limited			
Design Name			
ORANGEPI-4			
Size A4	Page Name I2C MAP		Rev 1.0
Date:	Wednesday, October 30, 2019		Sheet 2 of 26

RK3399 POWER DIAGRAM



Xunlong Co., Limited		
Design Name ORANGEPI-4		
Size A4	Page Name POWER TREE	Rev 1.0
Date: Wednesday, October 30, 2019	Sheet 3	of 26



SYSTEM POWER

5V(DCIN、TYPE C BAT)
RK808+BQ25700

SESTEM PERIPHERAL

SAR ADC

TS ADC

PWM

OSC

RK3399

Cortex-A72 Dual-Core
Cortex-A53 Duad-Core

CONNECTIVITY

USB

USB OTG0 2.0

USB OTG1 2.0

USB 3.0
TYPE C0

USB 3.0
TYPE C1

USB 2.0
HOST

USB 2.0
HOST

USIC

PCIe2.1

I2S0/PCM

I2S1/PCM

I2S2/PCM

SPDIF

SPDIF

UART0

UART1

UART2

UART3

UART4

SPI*6

I2C*9

RGM II

SDIO3.0

GPIO*122

TYPE C0

USB 3.0X2

HOST 2.0

HOST 2.0

PCIe *4

MIC ARRAY

BT

SPDIF

AUDIO
CODEC
(ALC5651)

BT

Sensor:
指南针
、陀螺仪
重力感应

GMAC

SDIO WIFI
AP6354

MULTI-MEDIA INTERFACE

EXPORT

CIF CSI

MIPI CSI

DUAL MIPI-CSI

LCM eDP
PANEL

eDP1.3

DUAL LCM
MIPI

DUAL MIPI-DSI

SHARE
TYPE C

DP1.2

HDMI
PORT

HDMI2.0

IR

IR_PWM

EXTERNAL MEMORY INTERFACE

SD3.0/MMC4.5

eMMC5.1

DDR3/DDR3L/LPDDR3/LPDDR4



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Design Name

ORANGEPI-4

Size
A4

Page Name

BLOCK

Rev
1.0

Date:

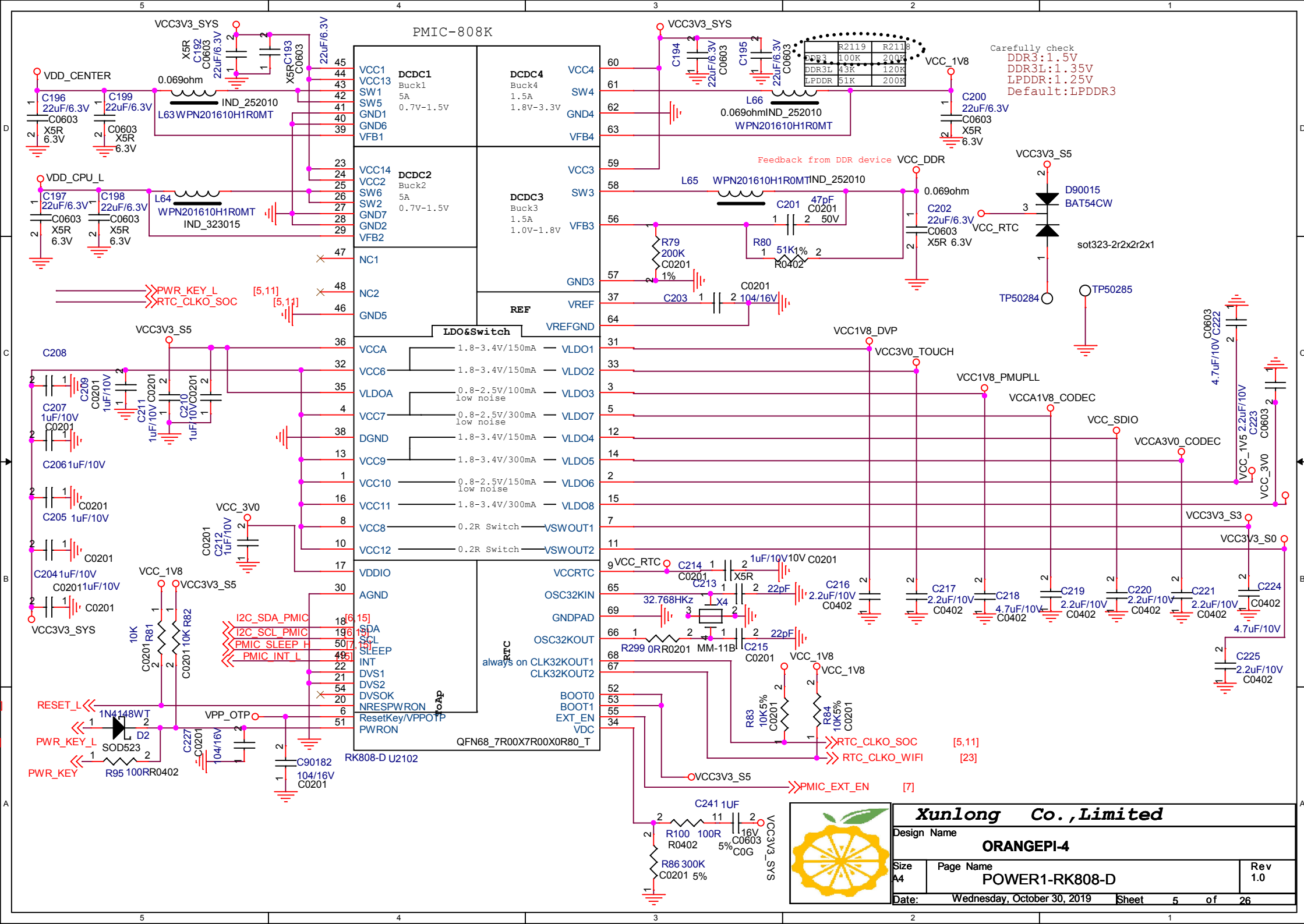
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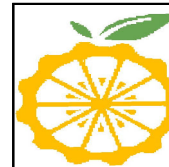
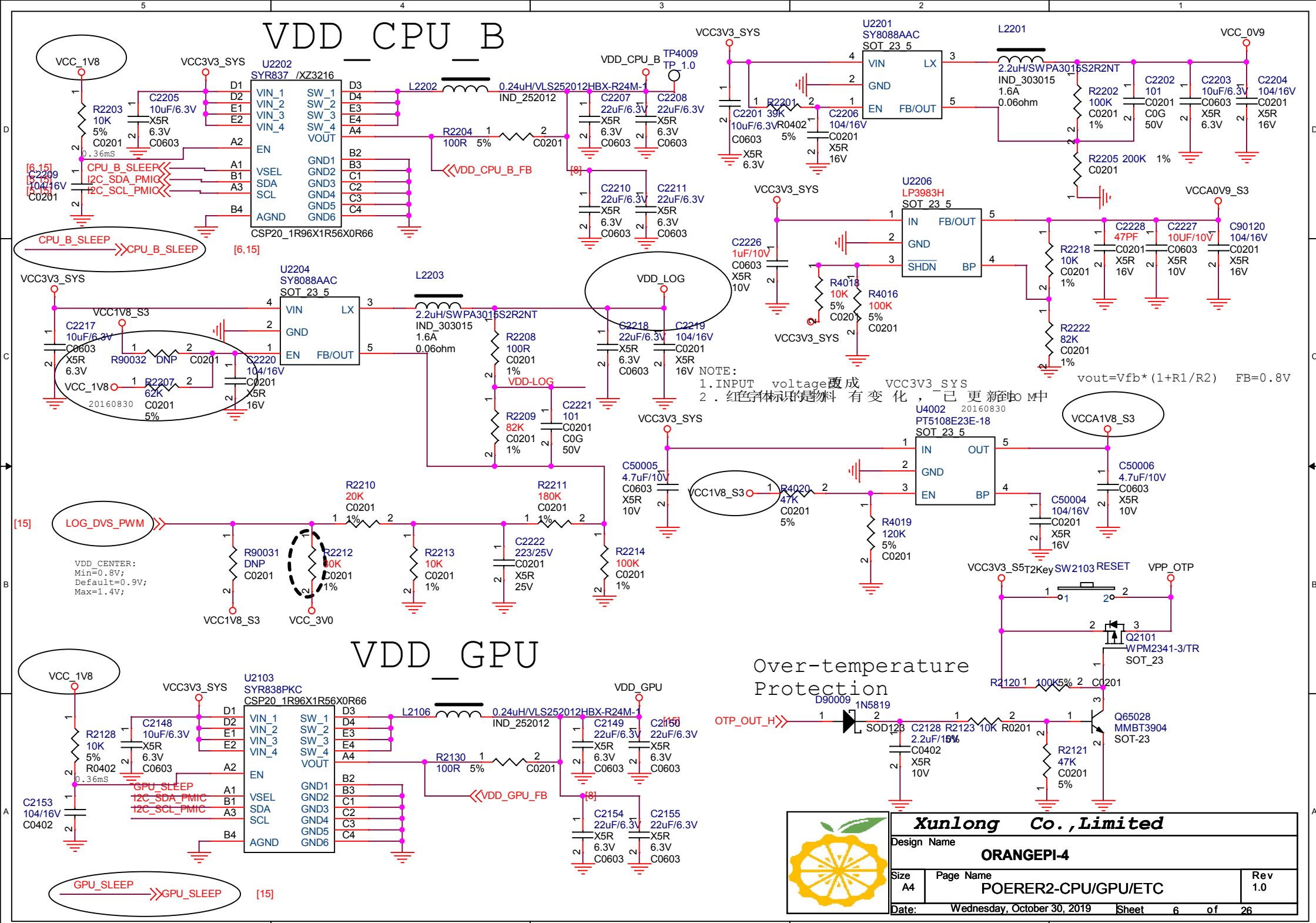
Sheet

4

of

26





Xunlong Co., Limited

Design Name	
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ORANGEPI-4

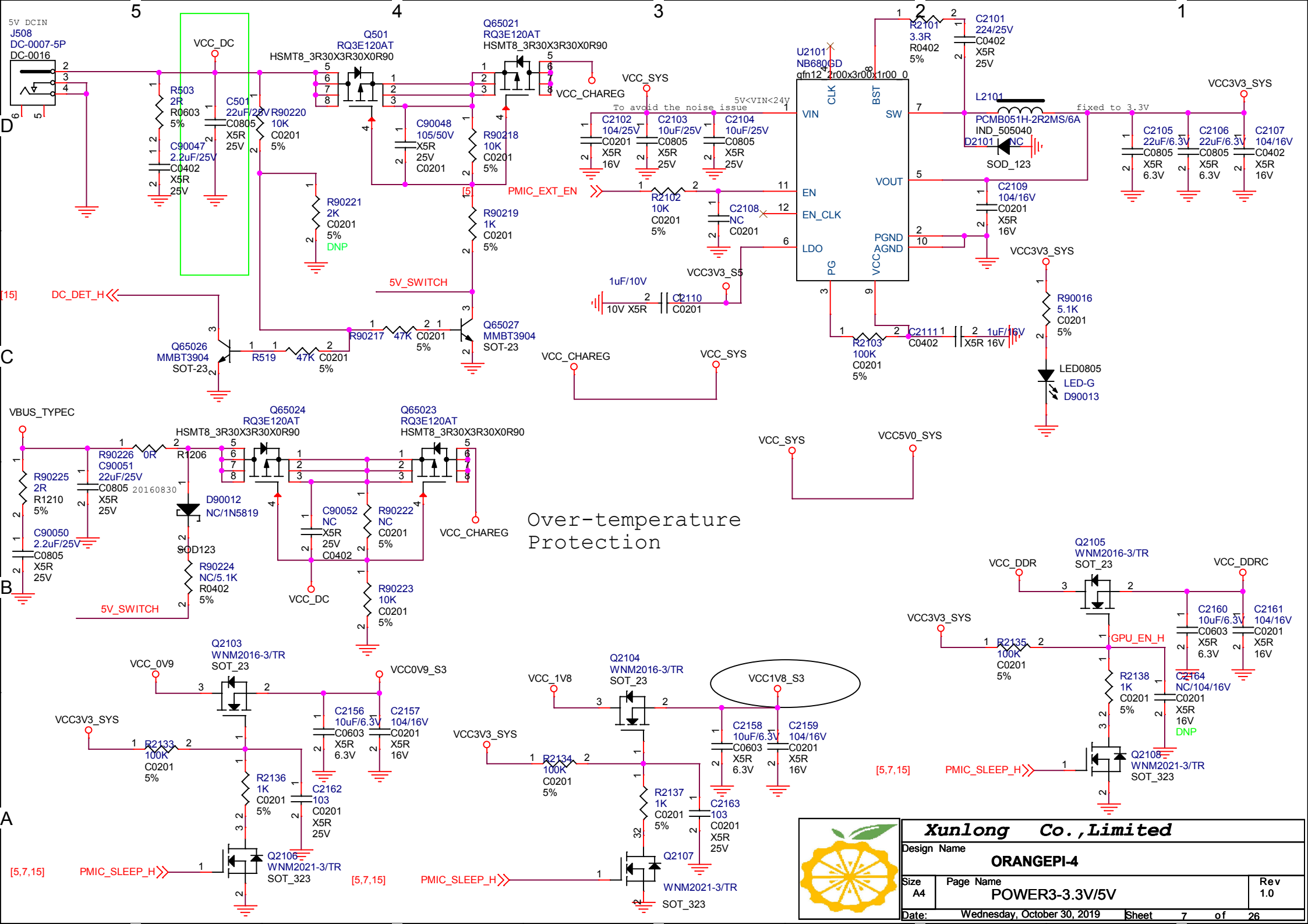
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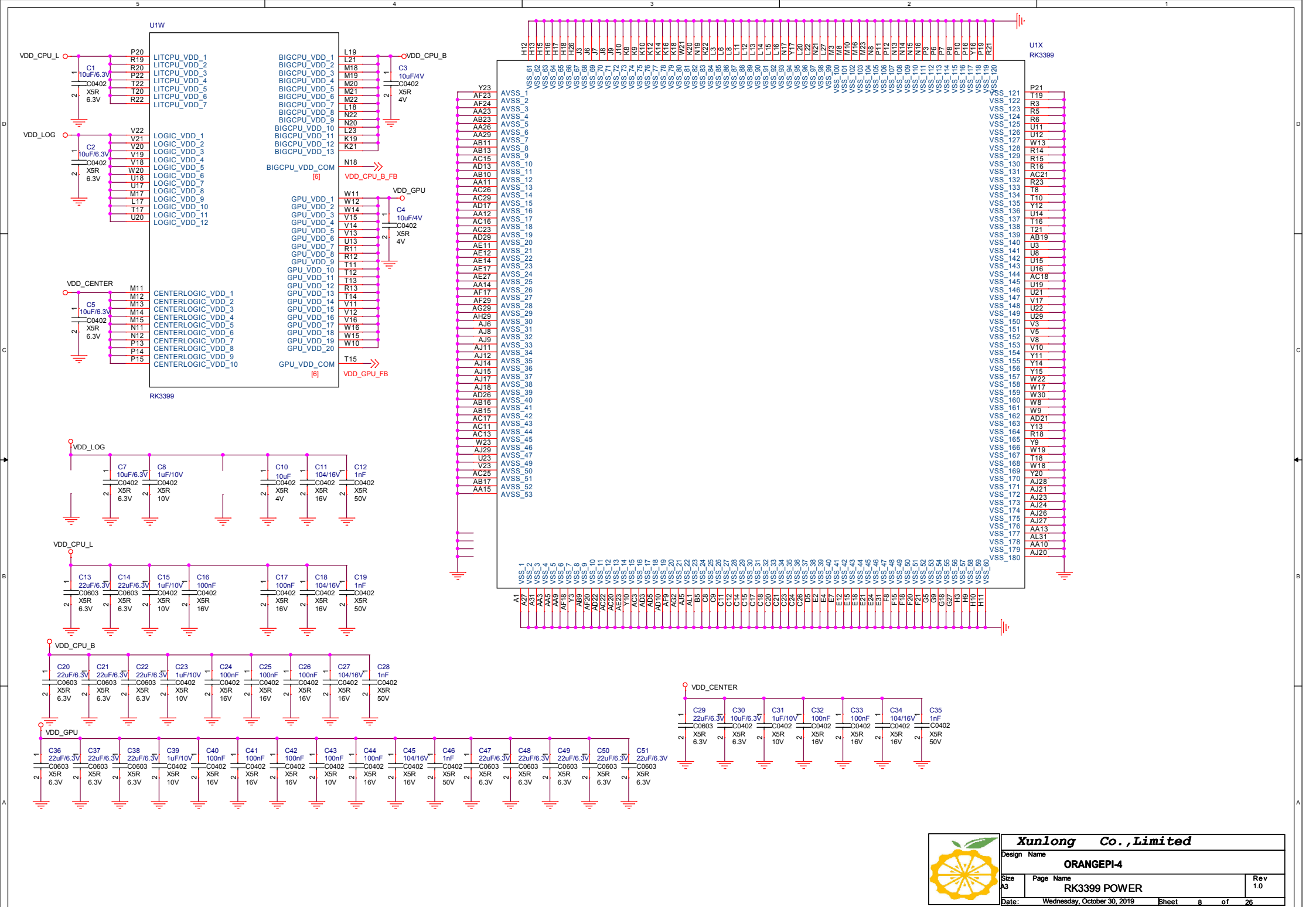
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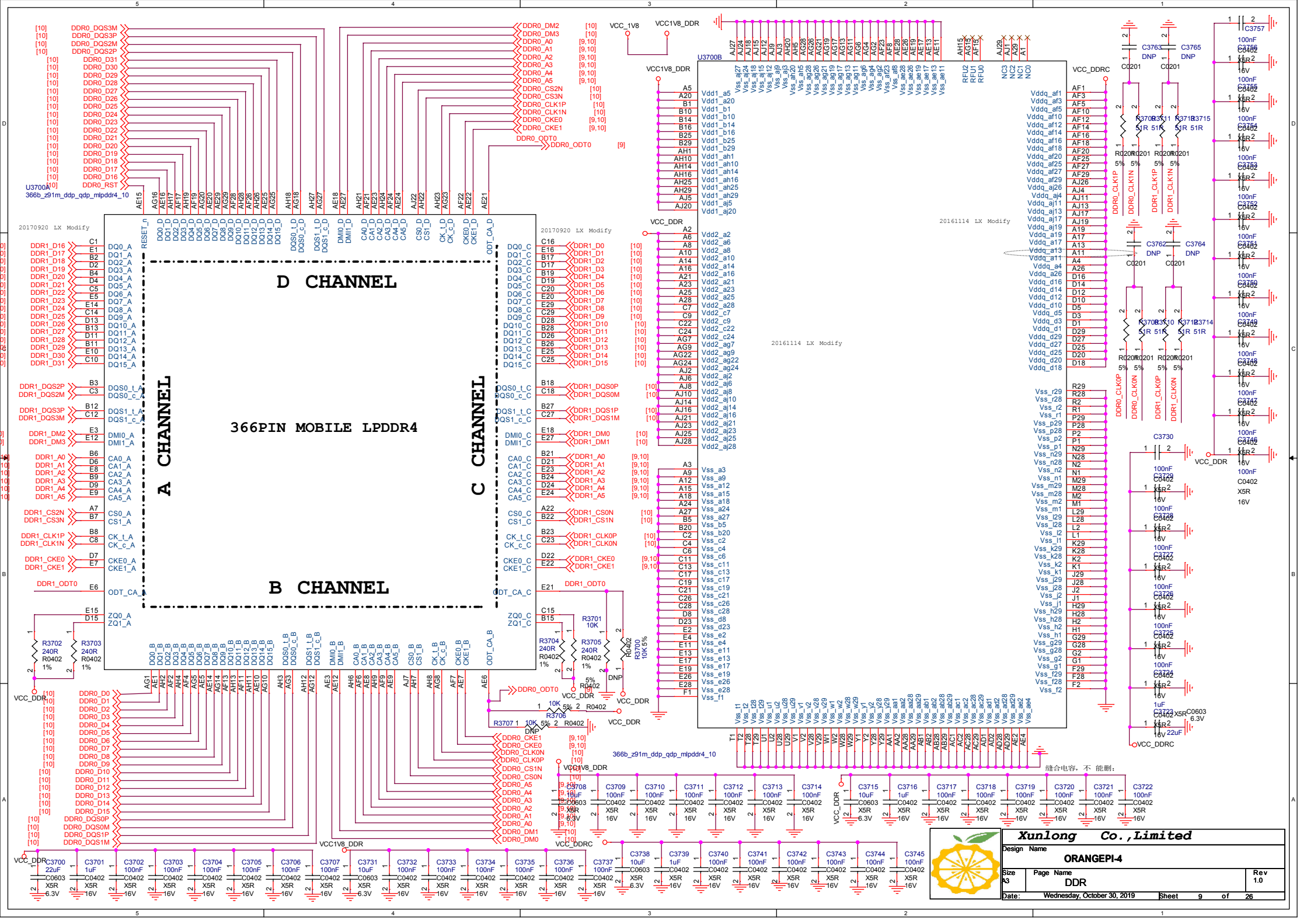
Name
POERER2-CPU/GPU/ETC

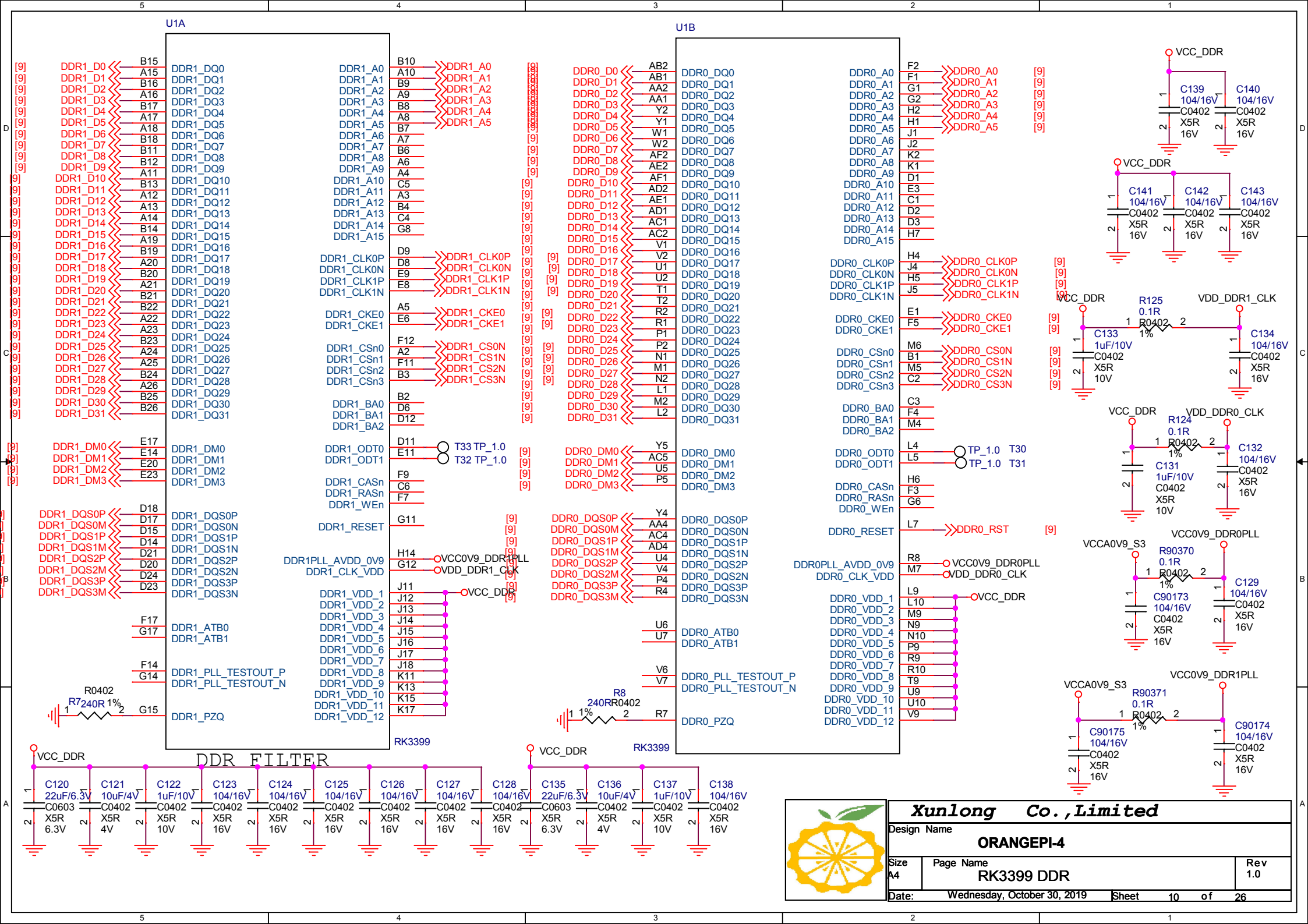
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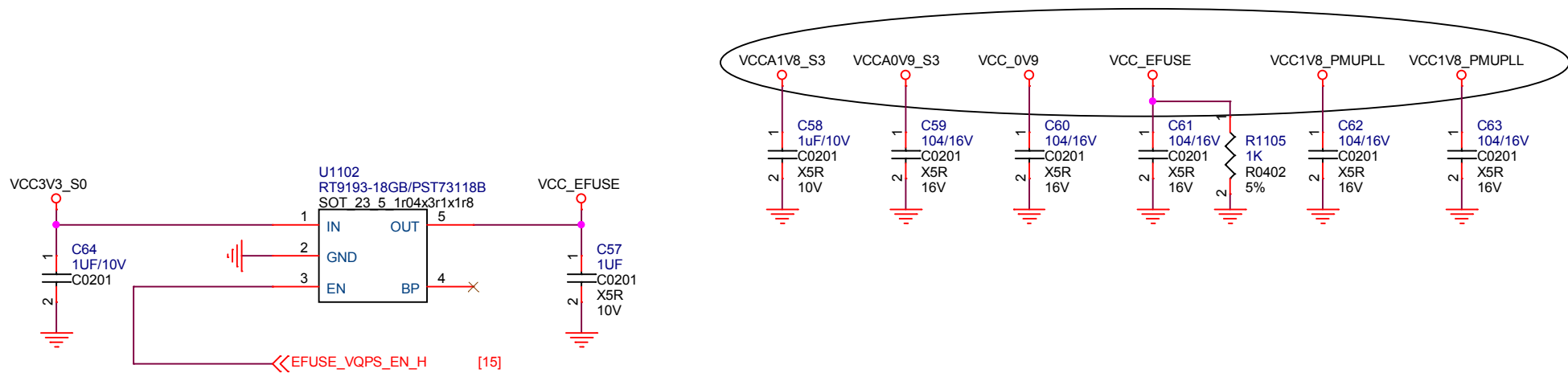
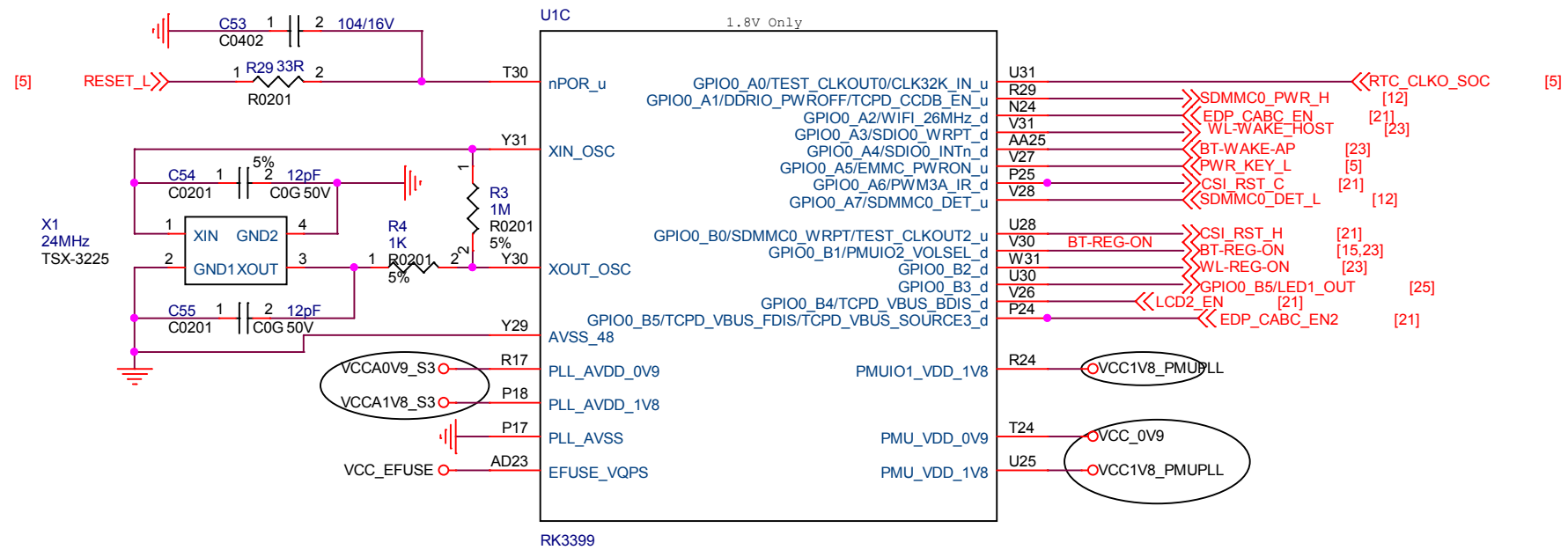
Date: Wednesday, October 30, 2019 Sheet 6 of 26



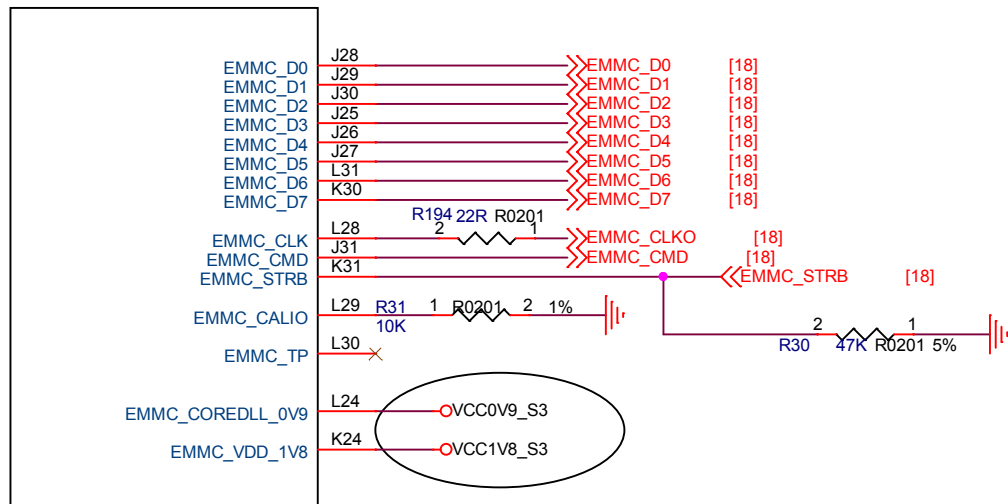




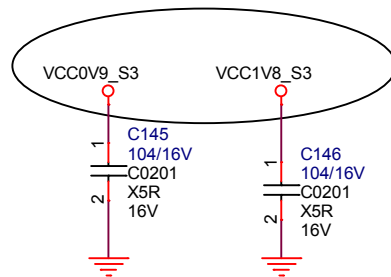




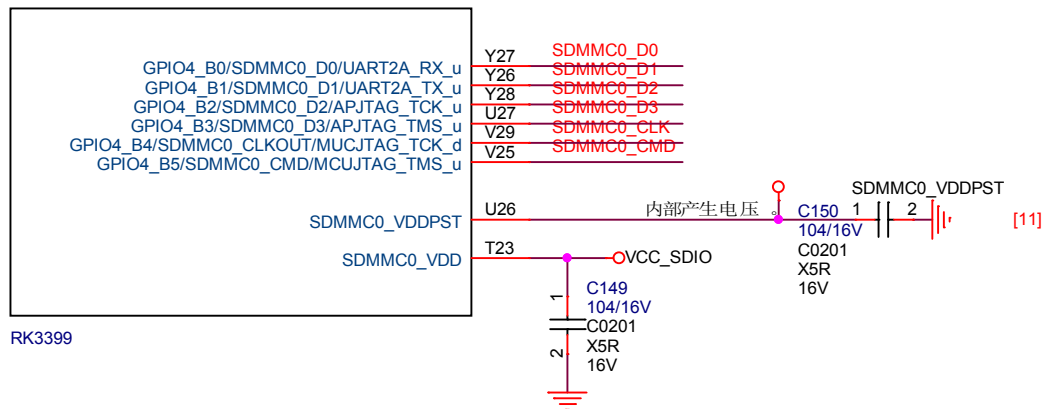
U1H



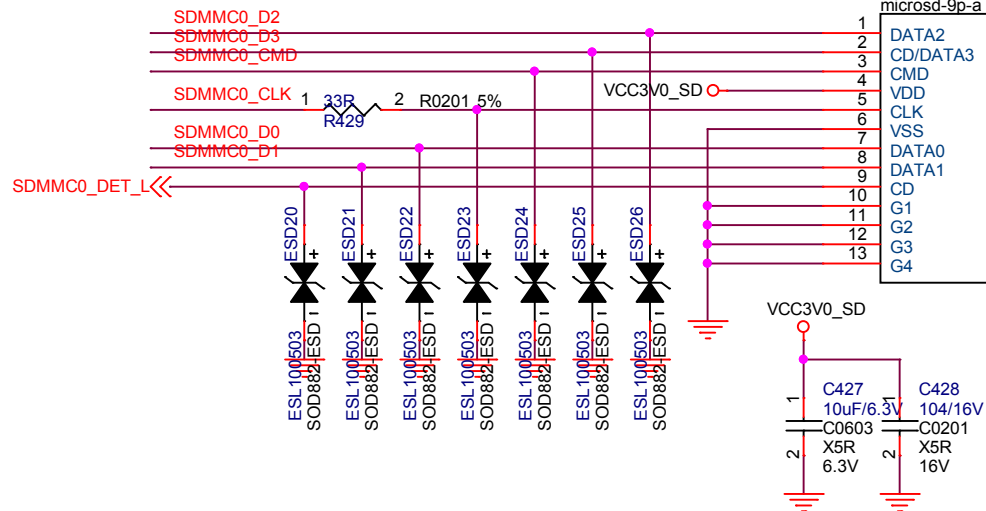
RK3399



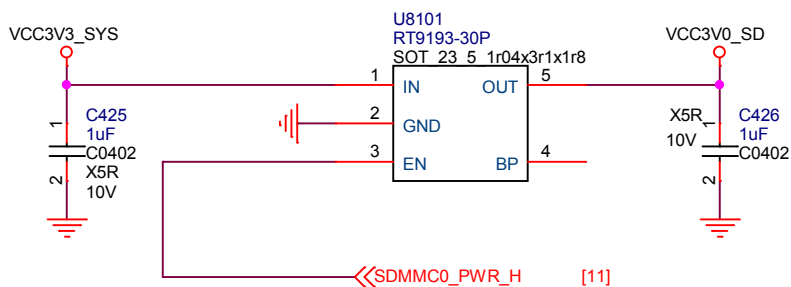
U1F



RK3399



TF CARD



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Design Name

ORANGEPI-4

Size

A4

Page Name

RK3399 eMMC TF

Rev

1.0

Date:

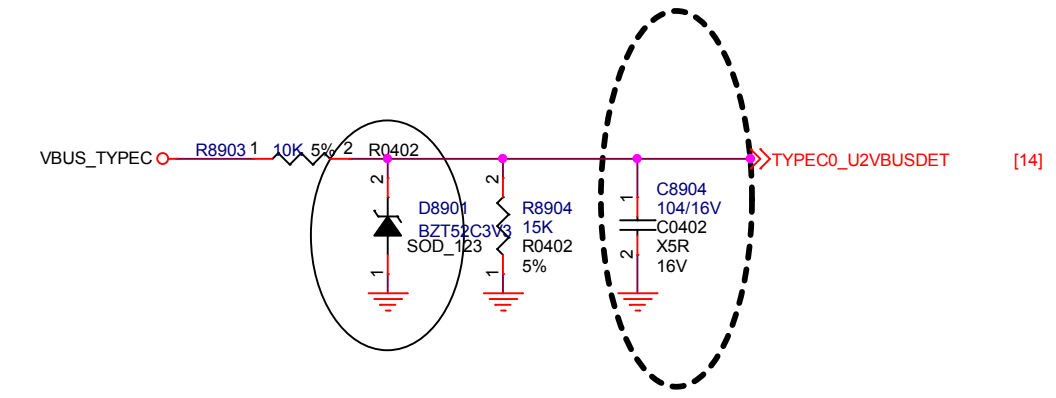
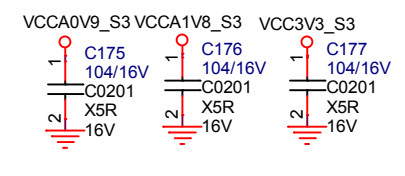
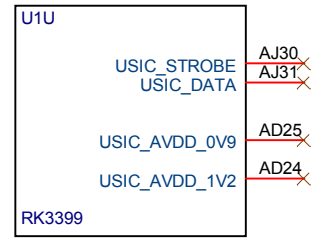
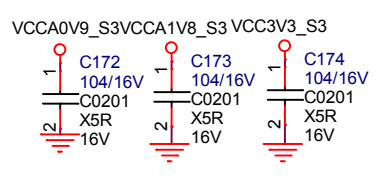
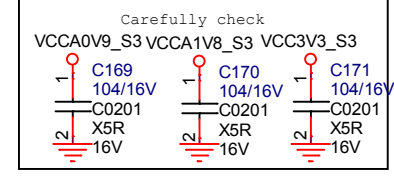
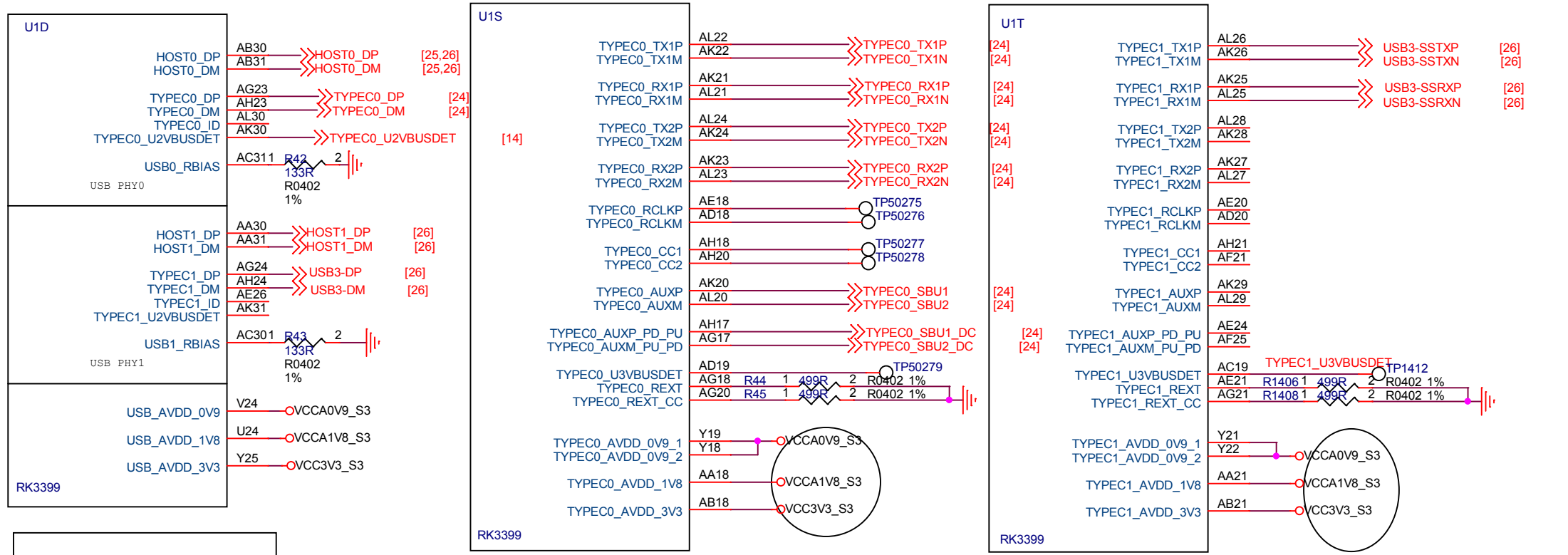
Wednesday, October 30, 2019

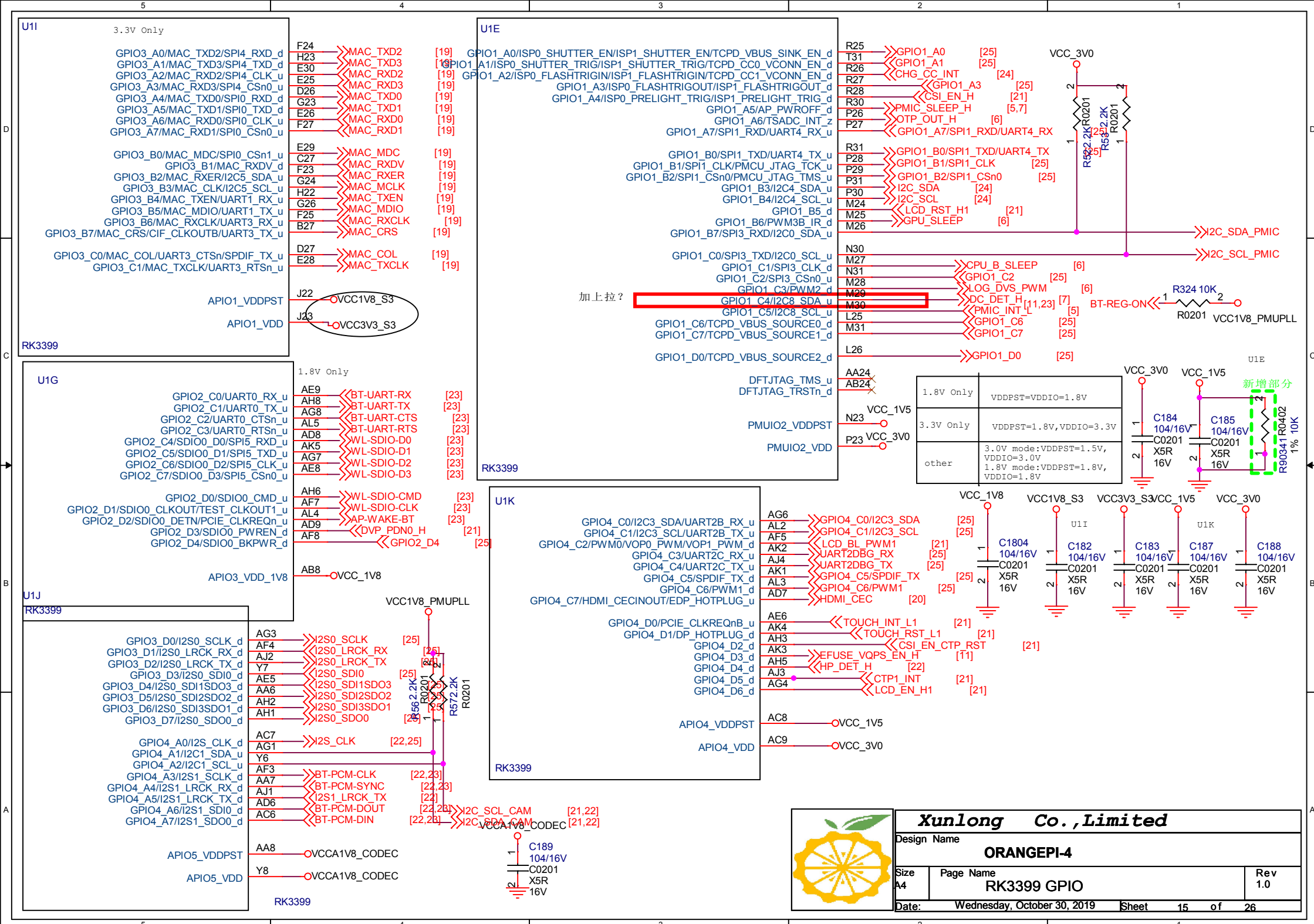
Sheet

12

of

26



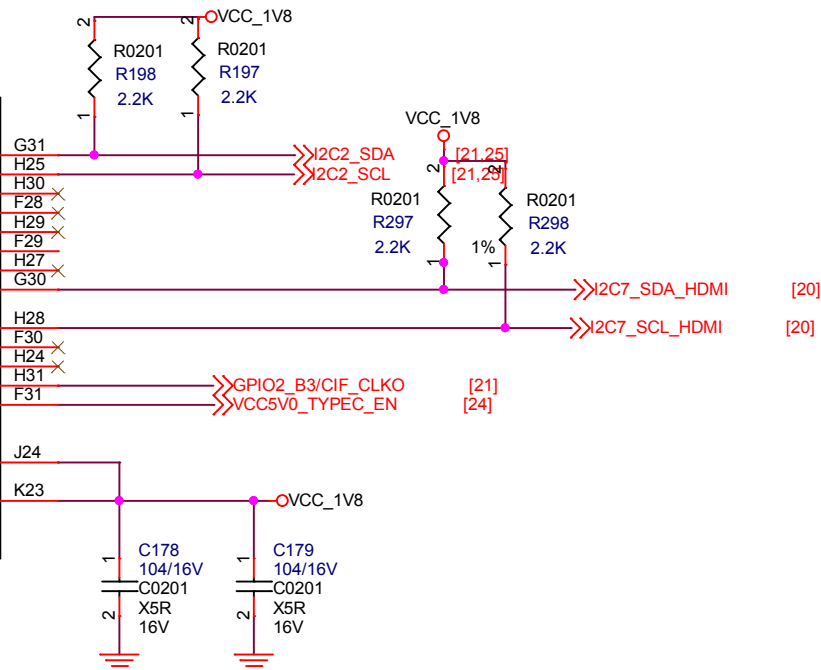


U1L

GPIO2_A0/VOP_D0/CIF_D0/I2C2_SDA_u
 GPIO2_A1/VOP_D1/CIF_D1/I2C2_SCL_u
 GPIO2_A2/VOP_D2/CIF_D2_d
 GPIO2_A3/VOP_D3/CIF_D3_d
 GPIO2_A4/VOP_D4/CIF_D4_d
 GPIO2_A5/VOP_D5/CIF_D5_d
 GPIO2_A6/VOP_D6/CIF_D6_d
 GPIO2_A7/VOP_D7/CIF_D7/I2C7_SDA_u
 GPIO2_B0/VOP_CLK/CIF_VSYNC/I2C7_SCL_u
 GPIO2_B1/SPI2_RXD/CIF_HREF/I2C6_SDA_u
 GPIO2_B2/SPI2_TXD/CIF_CLKIN/I2C6_SCL_u
 GPIO2_B3/SPI2_CLK/VOP_DEN/CIF_CLKOUTA_u
 GPIO2_B4/SPI2_CSn0_u

APIO2_VDDPST
 APIO2_VDD

RK3399



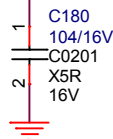
func1	func2	func3
GPIO2_A0/CIF_D0		I2C2_SDA
GPIO2_A1/CIF_D1		I2C2_SCL
GPIO2_A7/CIF_D7		I2C7_SDA
GPIO2_B0/CIF_VSYNC		I2C7_SCL
GPIO2_B1/CIF_HREF	SPI2_RXD	I2C6_SDA
GPIO2_B2/CIF_CLKI	SPI2_TXD	I2C6_SCL
GPIO2_B3/CIF_CLKO	SPI2_CLK	
GPIO2_B4/DVP_PDN0_H	SPI2_CSN	

U1R

MIPI_RX0_D0P AK15 >>> MIPI_RX0_D0P [21]
 MIPI_RX0_D0N AL15 >>> MIPI_RX0_D0N [21]
 MIPI_RX0_D1P AK14 >>> MIPI_RX0_D1P [21]
 MIPI_RX0_D1N AL14 >>> MIPI_RX0_D1N [21]
 MIPI_RX0_CLKP AK13 >>> MIPI_RX0_CLKP [21]
 MIPI_RX0_CLKN AL13 >>> MIPI_RX0_CLKN [21]
 MIPI_RX0_D2P AK12 >>> MIPI_RX0_D2P [21]
 MIPI_RX0_D2N AL12 >>> MIPI_RX0_D2N [21]
 MIPI_RX0_D3P AK11 >>> MIPI_RX0_D3P [21]
 MIPI_RX0_D3N AL11 >>> MIPI_RX0_D3N [21]
 MIPI_RX0_REXT AF14 R50 1 4.02K 2 R0402 1% >>> MIPI_RX0_REXT [21]
 MIPI_RX0_AVDD_1V8 AB14 >>> VCC1V8_S3 [21]

RK3399

VCC1V8_S3

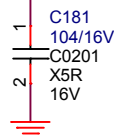


U1P

MIPI_TX1/RX1_D0P AK6 >>> MIPI_TX1/RX1_D0P [21]
 MIPI_TX1/RX1_D0N AL6 >>> MIPI_TX1/RX1_D0N [21]
 MIPI_TX1/RX1_D1P AK7 >>> MIPI_TX1/RX1_D1P [21]
 MIPI_TX1/RX1_D1N AL7 >>> MIPI_TX1/RX1_D1N [21]
 MIPI_TX1/RX1_CLKP AK8 >>> MIPI_TX1/RX1_CLKP [21]
 MIPI_TX1/RX1_CLKN AL8 >>> MIPI_TX1/RX1_CLKN [21]
 MIPI_TX1/RX1_D2P AK9 >>> MIPI_TX1/RX1_D2P [21]
 MIPI_TX1/RX1_D2N AL9 >>> MIPI_TX1/RX1_D2N [21]
 MIPI_TX1/RX1_D3P AK10 >>> MIPI_TX1/RX1_D3P [21]
 MIPI_TX1/RX1_D3N AL10 >>> MIPI_TX1/RX1_D3N [21]
 MIPI_TX1/RX1_REXT AF11 R51 1 4.02K 2 R0402 1% >>> MIPI_TX1/RX1_REXT [21]
 MIPI_TX1/RX1_AVDD_1V8 AC10 >>> VCC1V8_S3 [21]

RK3399

VCC1V8_S3

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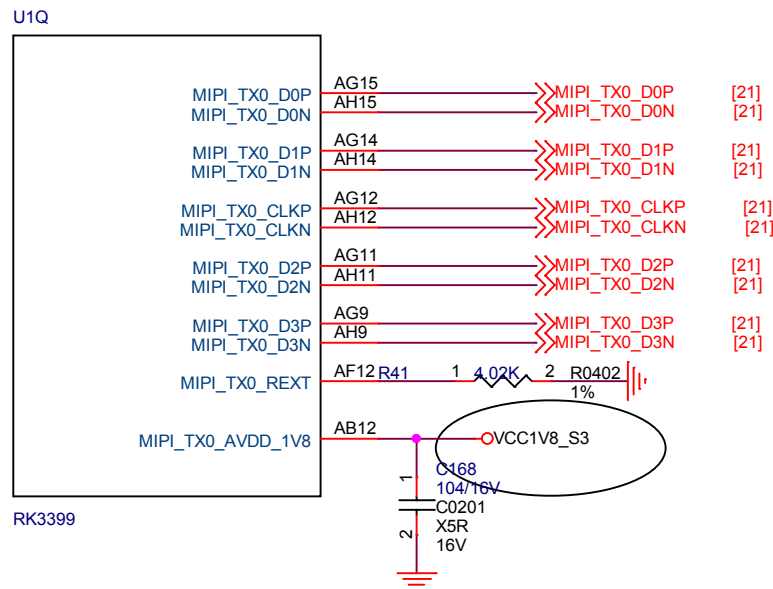
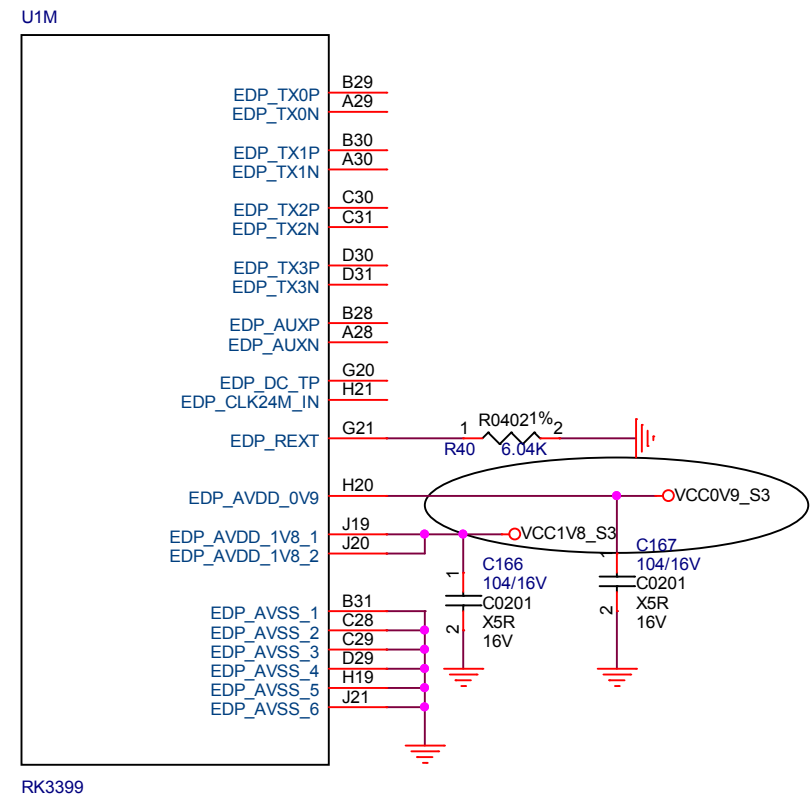
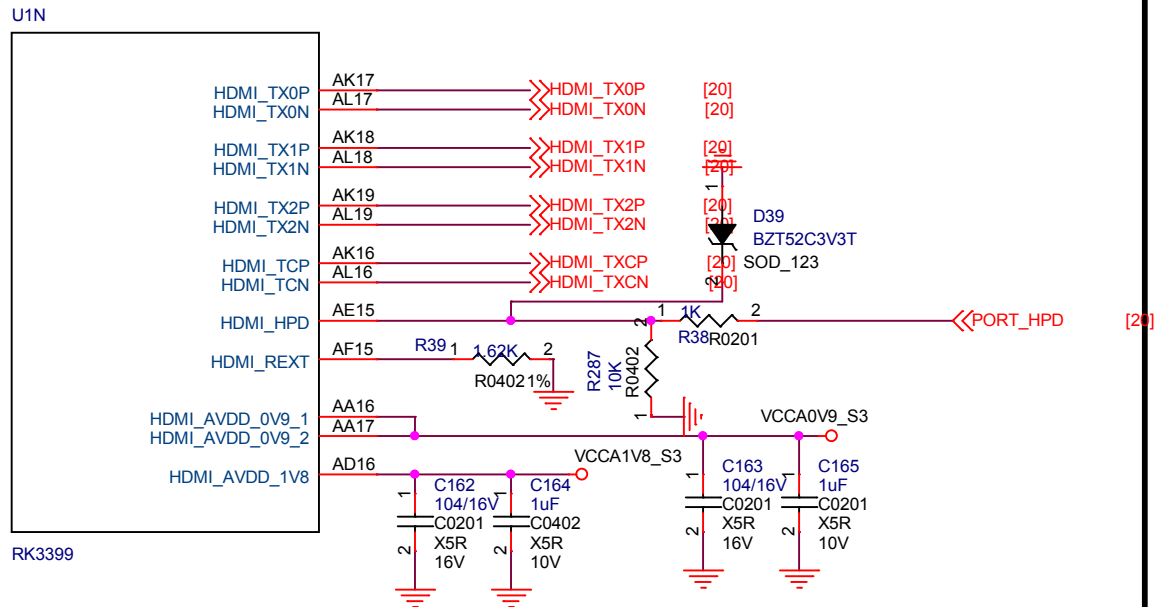
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ORANGEPI-4Size
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Page Name

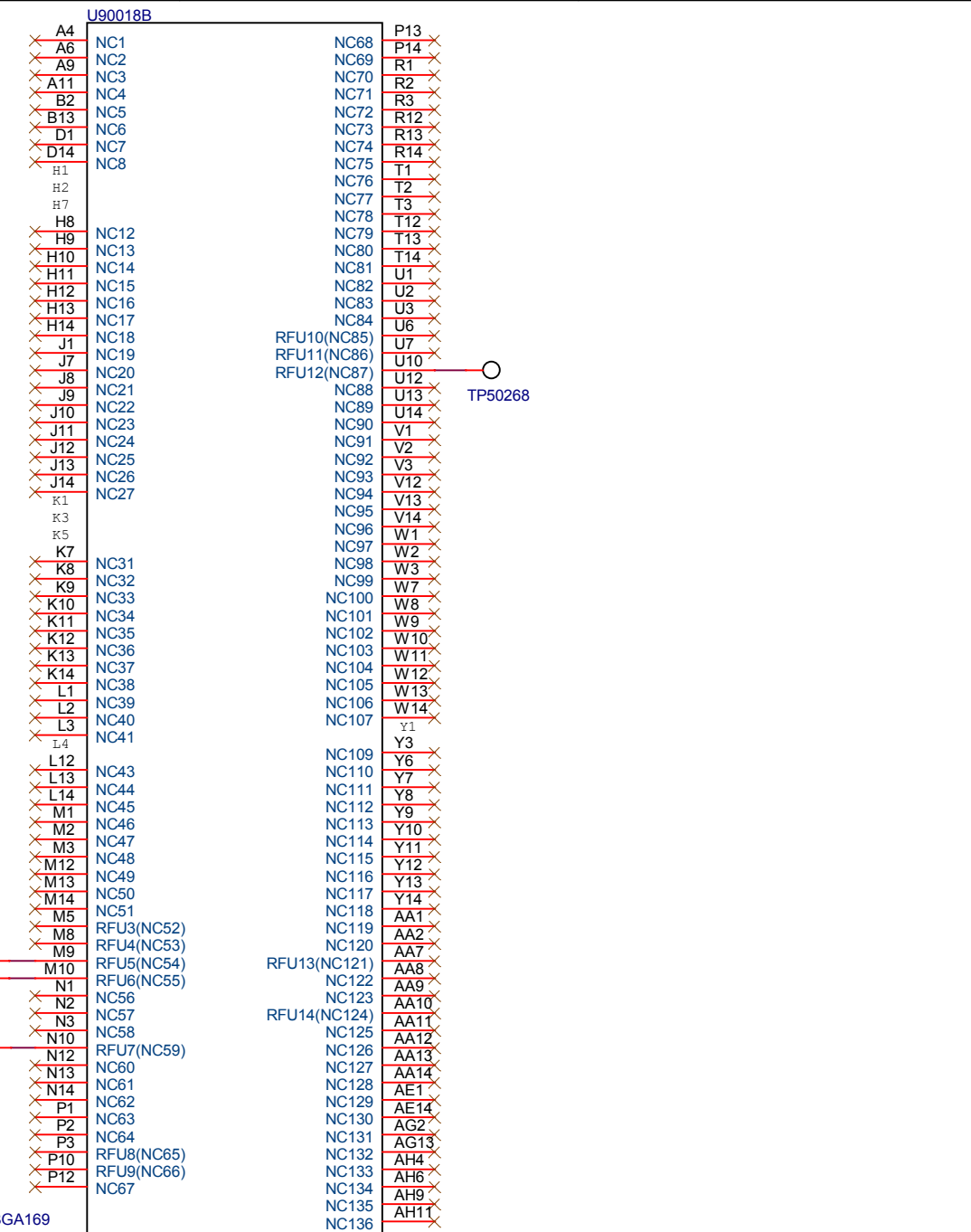
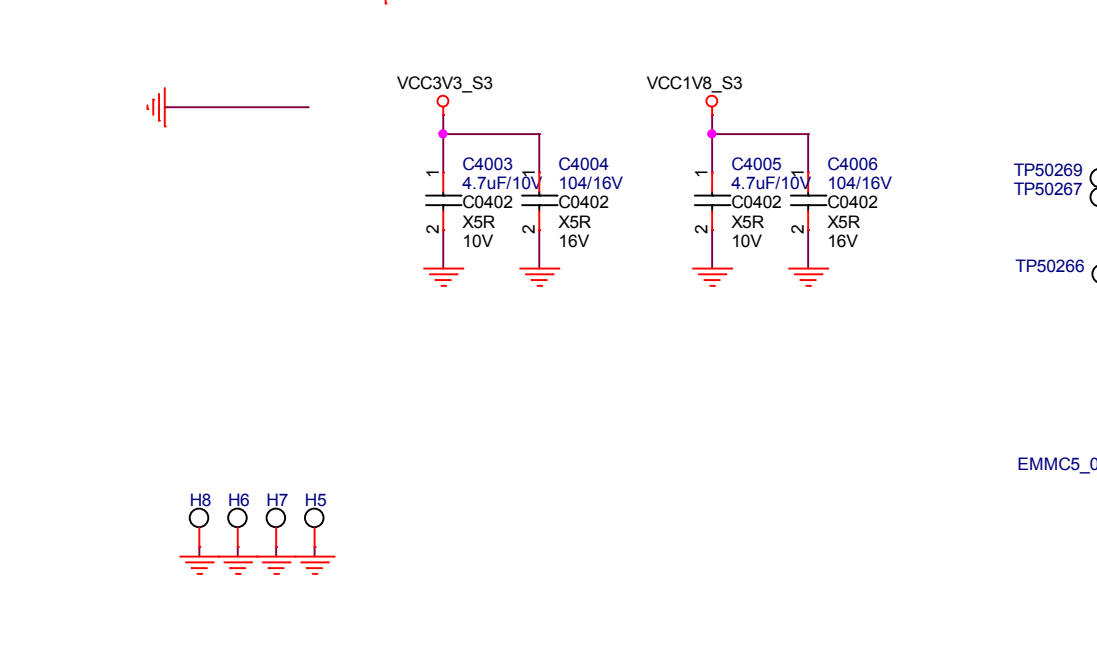
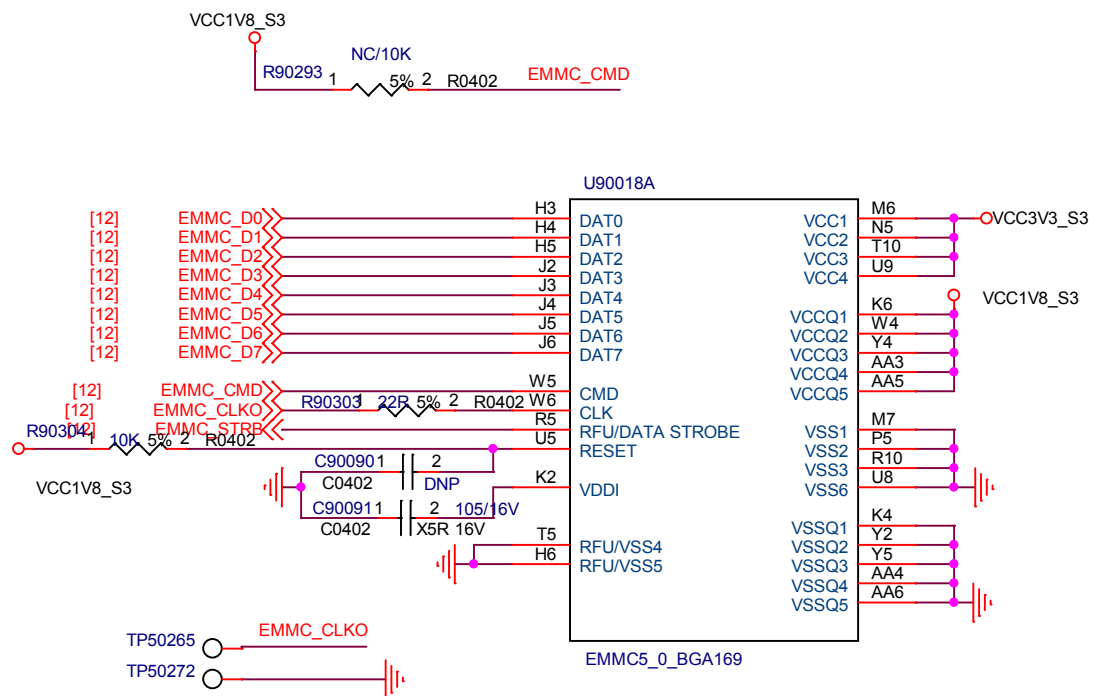
RK3399 DVPRev
1.0

Date: Wednesday, October 30, 2019 Sheet 16 of 26



Xunlong Co., Limited			
Design Name			
ORANGEPI-4			
Size	Page Name		Rev
A4	RK3399 display		1.0
Date:	Wednesday, October 30, 2019	Sheet	17 of 26

eMMC FLASH



Xunlong Co., Limited			
Design Name			
ORANGEPI-4			
Size	Page Name		Rev
A4	EMMC Flash		1.0
Date:	Wednesday, October 30, 2019		Sheet 18 of 26

HDMI Port

VCC5V0_SYS

D90011
1N5819

R8401
4.7K
C0201
5%

R8402
1.5K
C0201
5%

Q8401
WNM2021-3/TR
SOT_323

Q8402
WNM2021-3/TR
SOT_323

R8403
4.7K
C0201
5%

R8404
1.5K
C0201
5%

J8401
HDMI_A

SMD0603

HDMI-TYPE-A

HDMI_TX2P
HDMI_TX2N
HDMI_TX0P
HDMI_TX0N
PORT_CEC
DDC_SCL
PORT_HPD

HDMI_TX1P
HDMI_TX1N
HDMI_TXCP
HDMI_TXCN
DDC_SDA

VCC_1V8

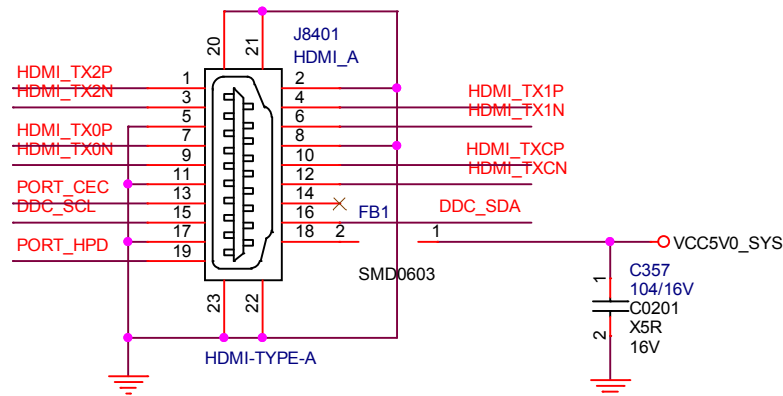
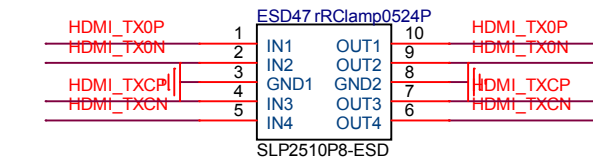
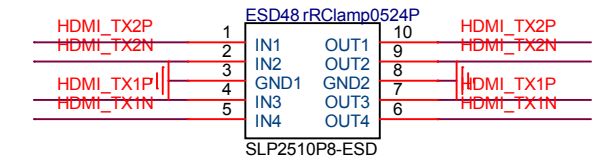
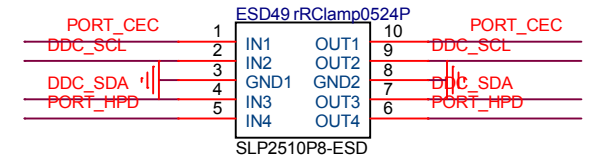
VCC_1V8

I2C7_SCL_HDMI

I2C7_SDA_HDMI

DDC_SCL

DDC_SDA



Design Name			
ORANGEPI-4			
Size	Page Name		Rev
A4	HDMI		1.0
Date:	Wednesday, October 30, 2019	Sheet	20 of 26

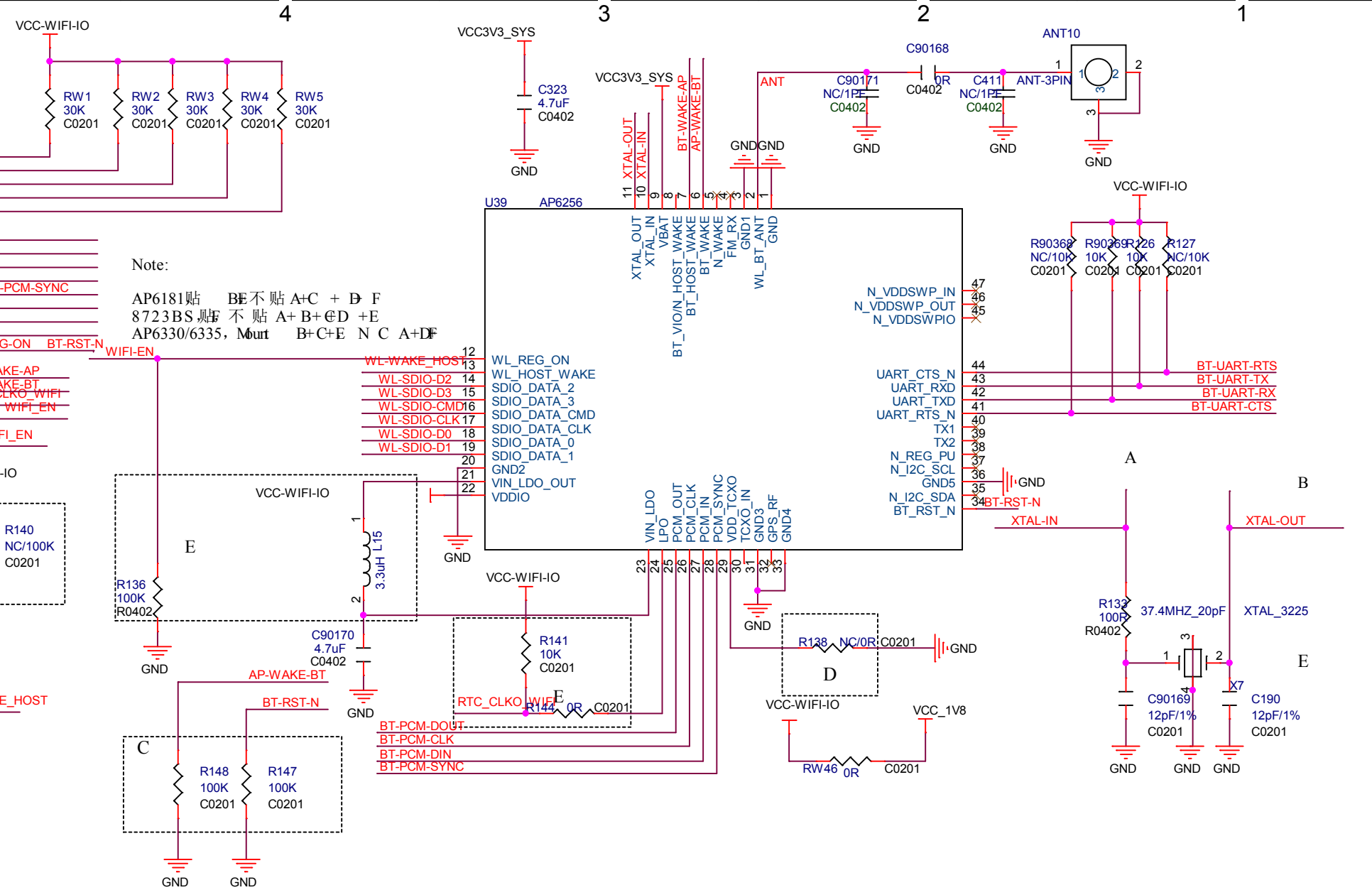
WIFI+BT

D

C

B

A

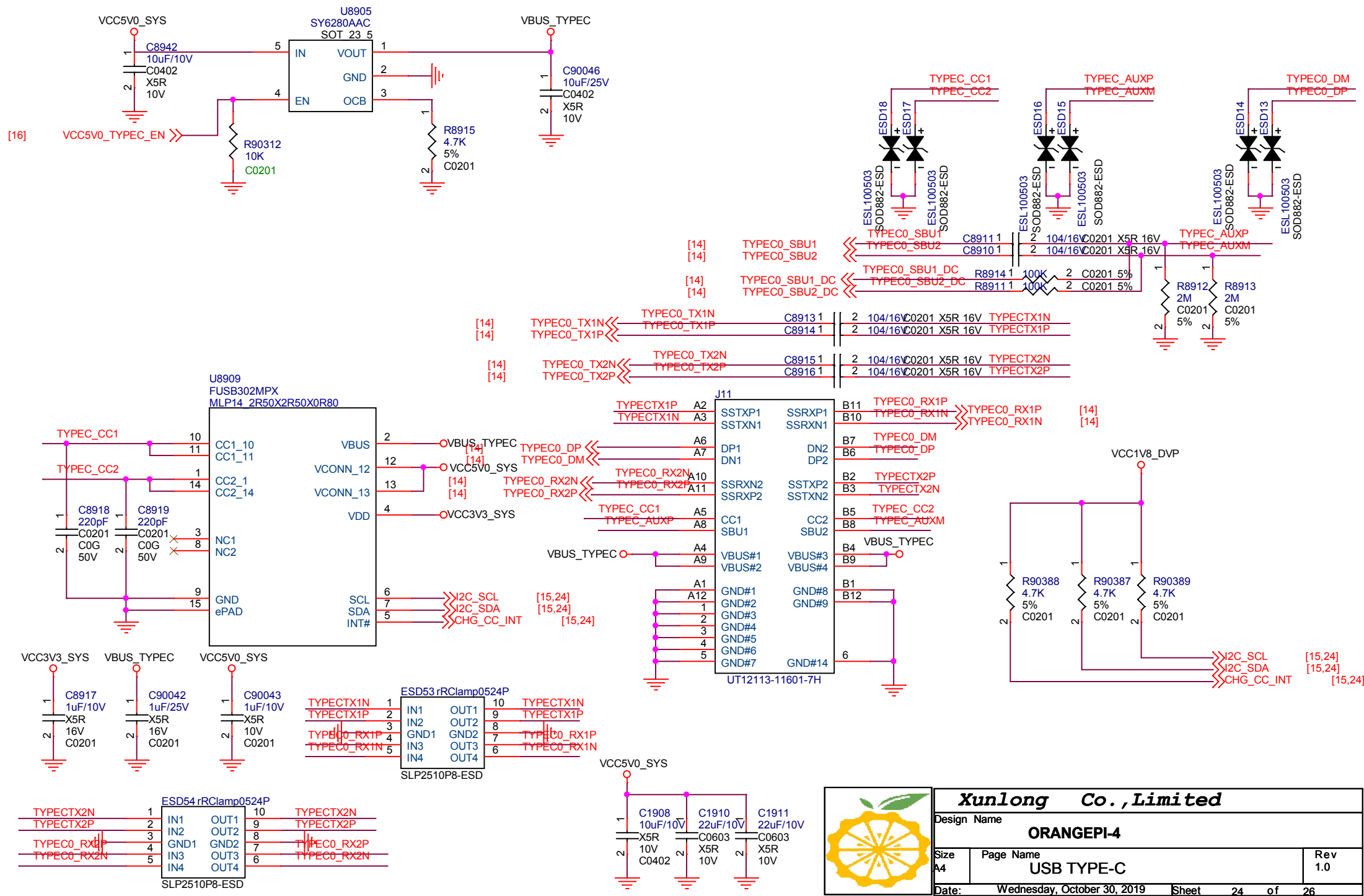


RW51 RW45 RW46 RW50 RW52 RW53

不帶蓝牙 遥控	IO为1.8V	NC	NC	NC	0R	NC	0R
	IO为3.3V	NC	NC	NC	0R	0R	NC
帶蓝牙遥控	IO为1.8V	0R	NC	NC	NC	NC	NC
	IO为3.3V	0R	0R	0R	NC	NC	NC



Xunlong Co., Limited		
Design Name		
ORANGEPI-4		
Size A4	Page Name	Rev 1.0
WIFI-BT 2T2R		
Date:	Wednesday, October 30, 2019	Sheet 23 of 26



1

