

Version	Date		Change Note	Approved
v1.0	20190102		<p>NOTE: 1. 增加SATA,HD接口 2. 增加DVI接口</p>	
v1.0	20190308		<p>NOTE: 1. Page 21, 新增 LO 接口, 原 A 模式更改为使之兼容并新增 CM 及 C 的自动识别电路。 2. Page 25, 原 24PIN PCI 插针改为此侧插 (ZINIZI 变更后封装) ; 删除了 USB 连接;</p>	
v1.0	20190311		<p>NOTE: 1. Page 25, PCIE 复杂接口连接;</p>	
v1.0	20190312		<p>NOTE: 1. Page 25, PCIE 删除接口连接; 2. 12C1 上拉脚开关电容 跳选电阻; 3. PCIE 插头 立式 24PIN;</p>	
v1.0	20190313		<p>NOTE: 1. Page 25, PCIE 删除接口连接; 2. 12C1 上拉脚开关电容 跳选电阻; 3. Page 21, 去除的 3.3V 及 1.8V 脚删除, 改由 PMU 输出的 VCC3_V3 取消 NDP 电源; 4. Page 21, 2C2 脚删除, 改由 PMU 输出的 VCC_V0_TOUCH 及 VCC_MCU 脚; 5. Page 21, T14 脚删除, 因为 PMU 不能控制脚; 6. Page 13, 温度检测 D/C; 7. Page 24, FUSB302 的 2QS1_N 做上拉脚; 8. Page 21, 去除 VREF 关, 使 VCC_SYS 与 VCC_QSS 处在同一网络;</p>	
v1.0	20190708		<p>1. Page 23, AP6256 41 引脚CTS、RTS 调; 2. Page 9, LPDDR4 铜线络 VCC1V8 DR 接到 VCC 8 铜线; 3. Page 8, CPU 铜线群部分 : C6, C9 脚, 改为 L0 正 C16, C17, C24, C25, C26, C40, C41, C42, C43, C44, C32, C33 改 100nF C8, C10, C11, C12, C16, C17, C18, C19, C23, C24, C25, C26, C27, C28, C31, C32, C33, C34, C35, C39, C40, C41, C42, C43, C44, C45, C46 数为 02</p>	
	20190717		<p>4. Page 13, 增加复位键电路: R8D2、S107、S55、E5B; 5. Page 15, 删除 BOR ADD 电路 S74、R5、R9、S9; 6. Page 15, TOUCH_RST_L 改用 GPIO4D; 7. Page 21, 去除 LCD& 显示识别电路 Q65033\Q65034\Q3\R90380\R90390 384, 改用 IC FSA457P6X(U919);</p>	
	20190722		<p>8. Page 21, 去除电平切换电路 U919, R906; 9. Page 15, I2C 振荡器改为 VCC1V8 PMU; 10. Page 23, 37.4MHz 高频配电容 901K C1 改 5pF; 11. Page 15, 剩余网络 WL-WAKE-AP 与 的连接, 同时去除 436, GND_D 改 CTP1_INT 网络; 12. Page 15, VCC5V0_TYPEC_E 直接由 GPIO_D2 改为 S102_B4, S104_D2 改接 CSIE_N_CTP_RST;</p>	
	20190725		<p>13. Page 23, 去除电容 R134、R59 优化晶振线; 14. Page 25, GPIO 座 PIN 14 改 GPIO4_C6_PWM1; PC 座 S23 脚 改为 QA_A</p>	
	20190726		<p>15. Page 21, CAN 子 J4 顶层信号 CSI_RST_ 共用, 改为独立 GPIO0_A6 控制 CSI_RST_C; 16. Page 21, CAN 子 J4 改为与 S701 共用; 17. Page 21, 去除 R9030、R9051; 18. Page 21, J4701 EDP CABE 改接 GPIO0_B</p>	
	20190821		<p>19. Page 23, C90169 C1 改为 2pF; 20. Page 26, 位号 P3 USB 座子 PIN1 重新定义重新调整脚连接;</p>	
	20190822		<p>21. Page 23, 去除电容 S5; 22. Page 05, U9001 为焊盘 P50284、S0 为 23. Page 25, 调整串接 R90406、R90407 电容;</p>	
	20190930	V1.2	<p>24. Page 23, WiFi 天线匹配 C9171、C411、S016 改为 02; 25. Page 23, R138 脚拉改为预留留下插孔; 26. Page 26, C32 改为 4.0V;</p>	
	20191030	V1.3	<p>27. Page 26, 去除电容 R9410、R9411 串联 SMD M 铜 28. Page 25, 去除电容 R9408、R9409 IE 座子 新增 B0 DM DP 连接</p>	



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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	API05 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	API02 VCC1V8_IO	Other pin function					
I2C3	GPIO4_C0/I2C3_SDA/UART2B_RX GPIO4_C1/I2C3_SCL/UART2B_TX	API04 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	API01 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	API02 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	API02 VCC1V8_IO	Other pin function					



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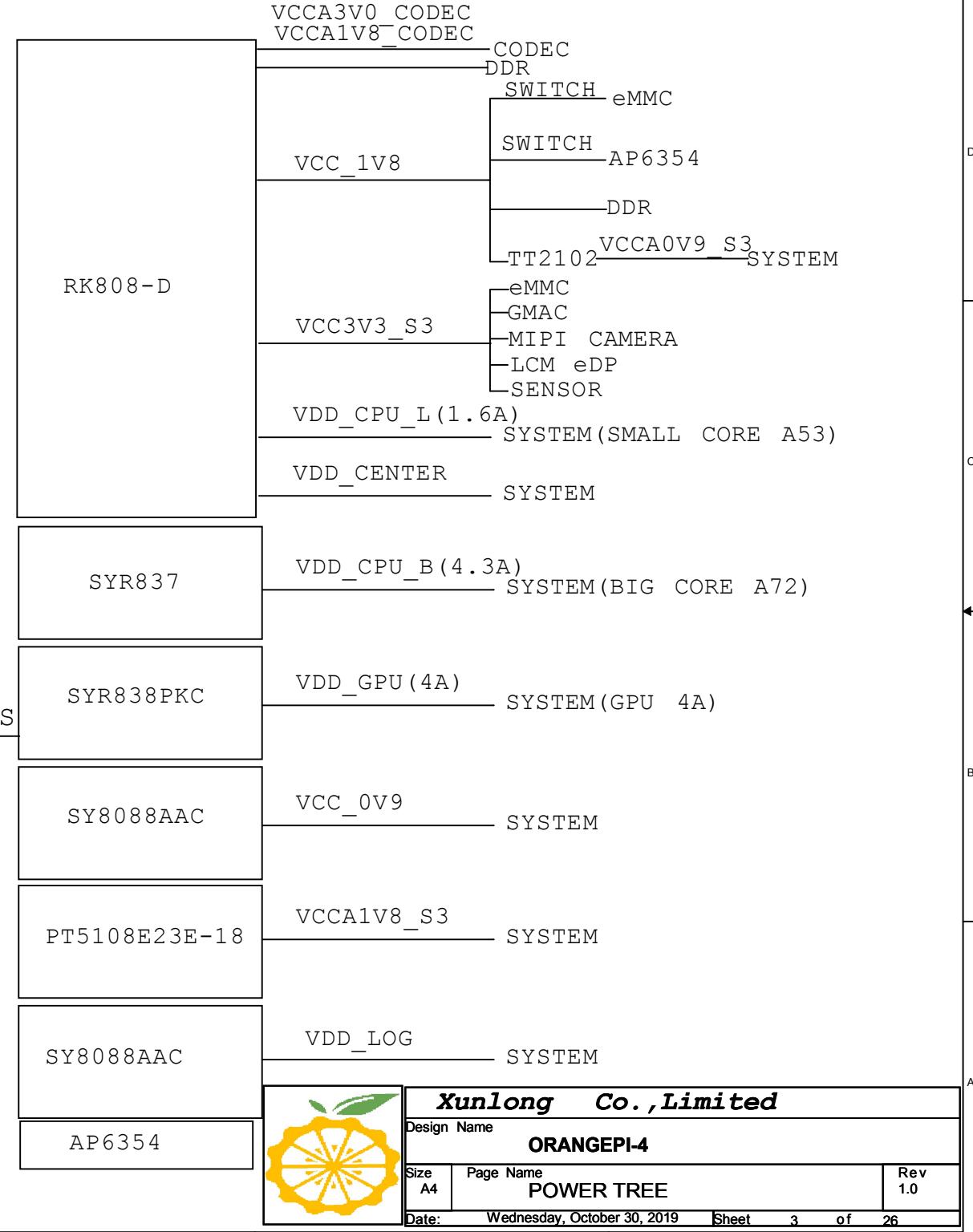
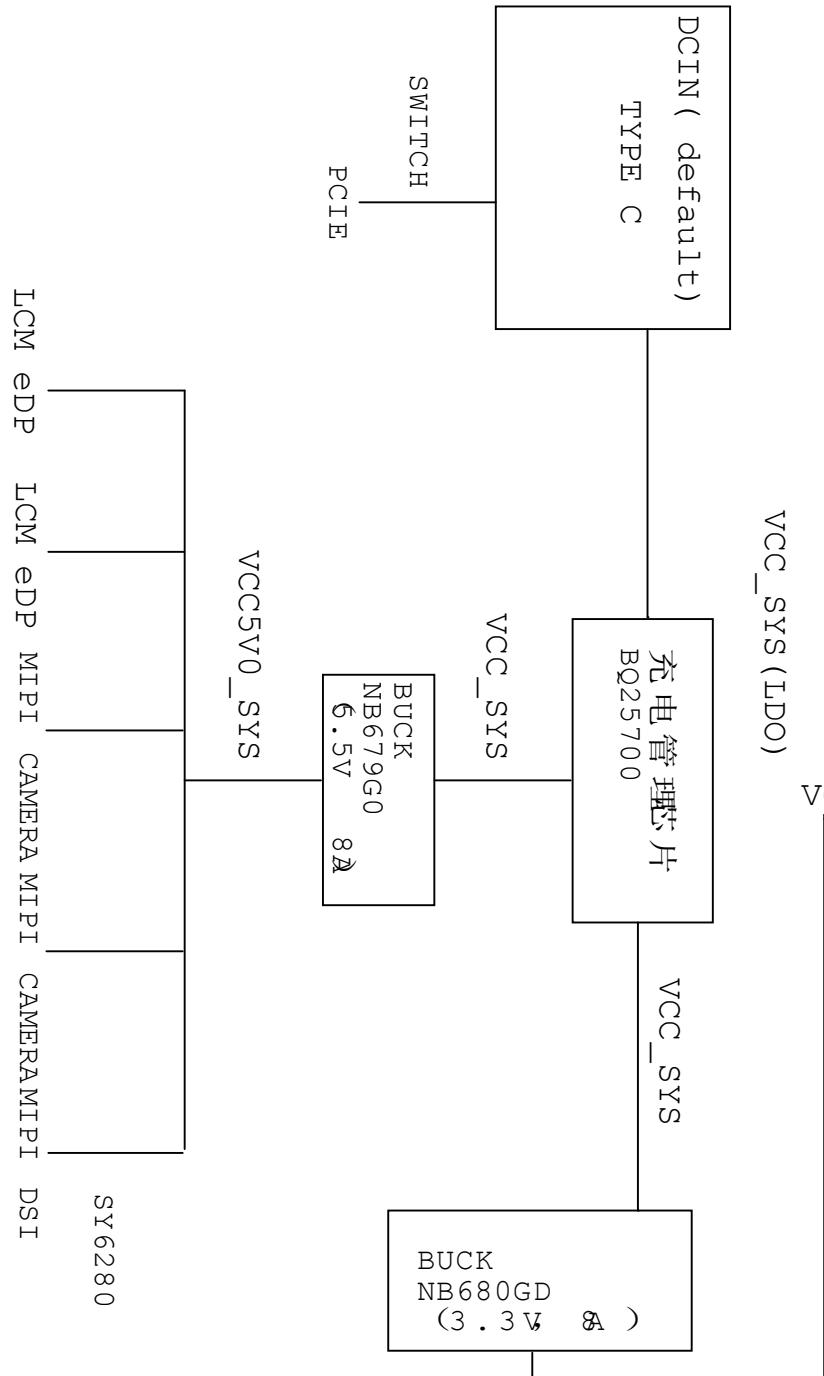
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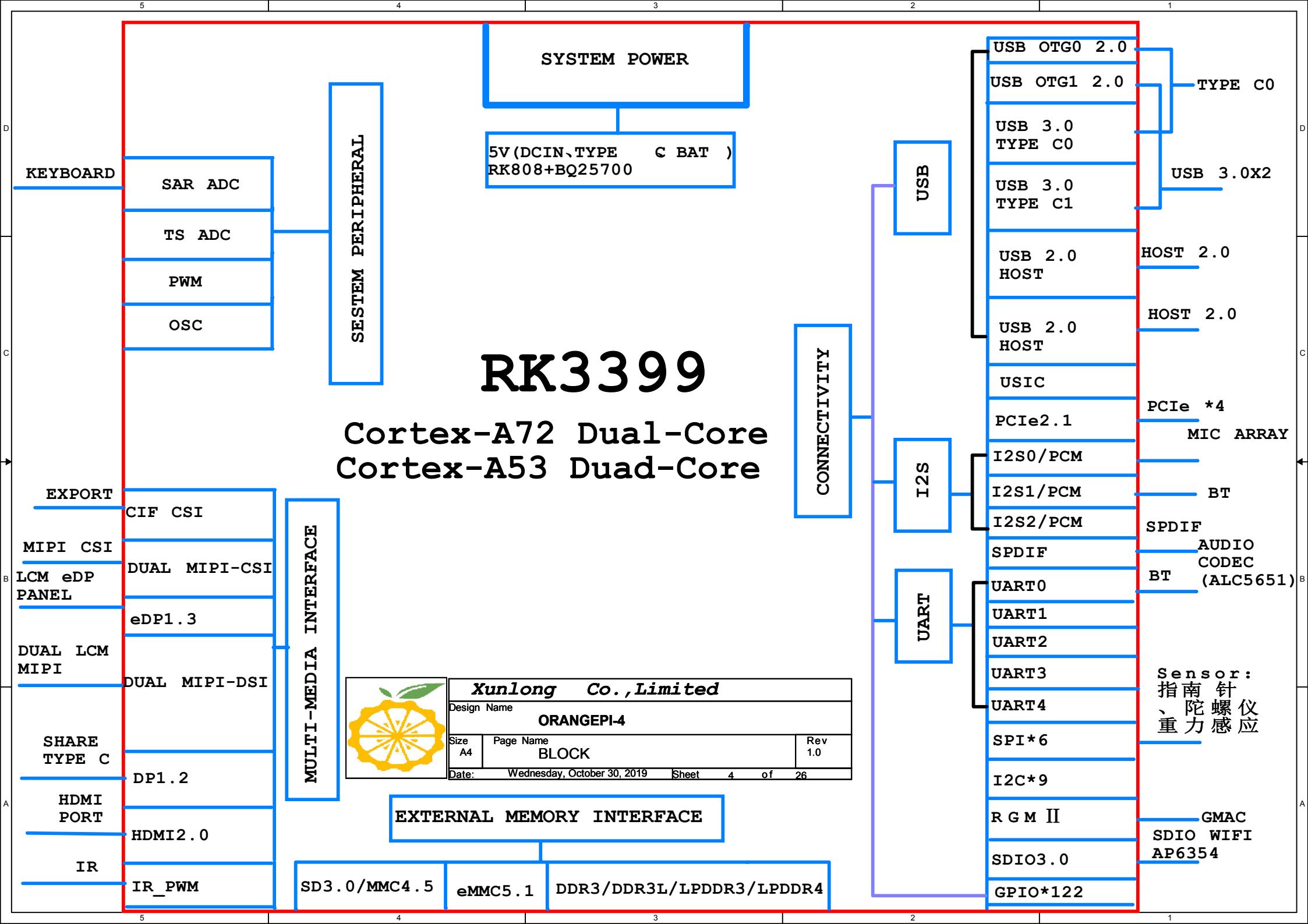
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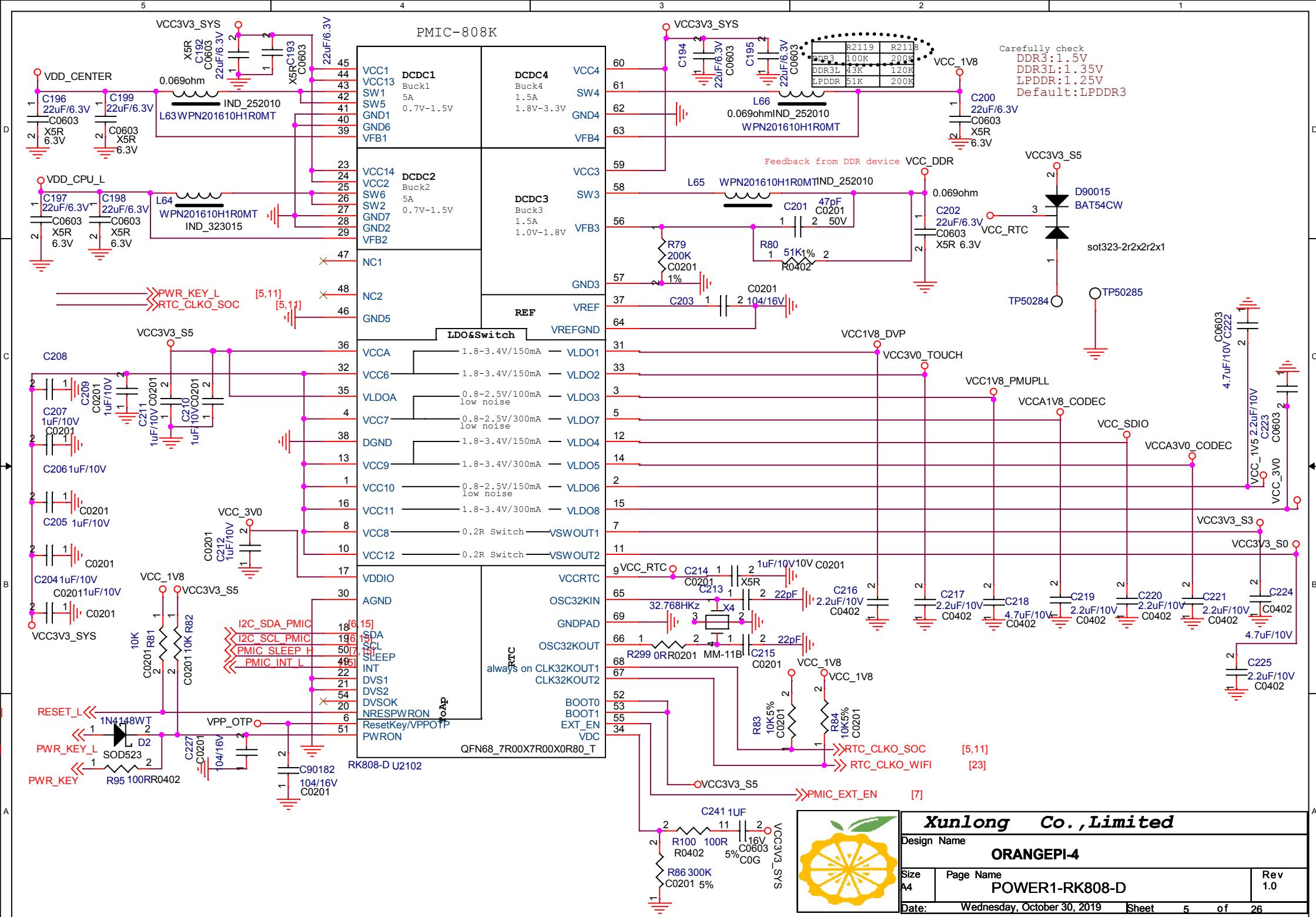
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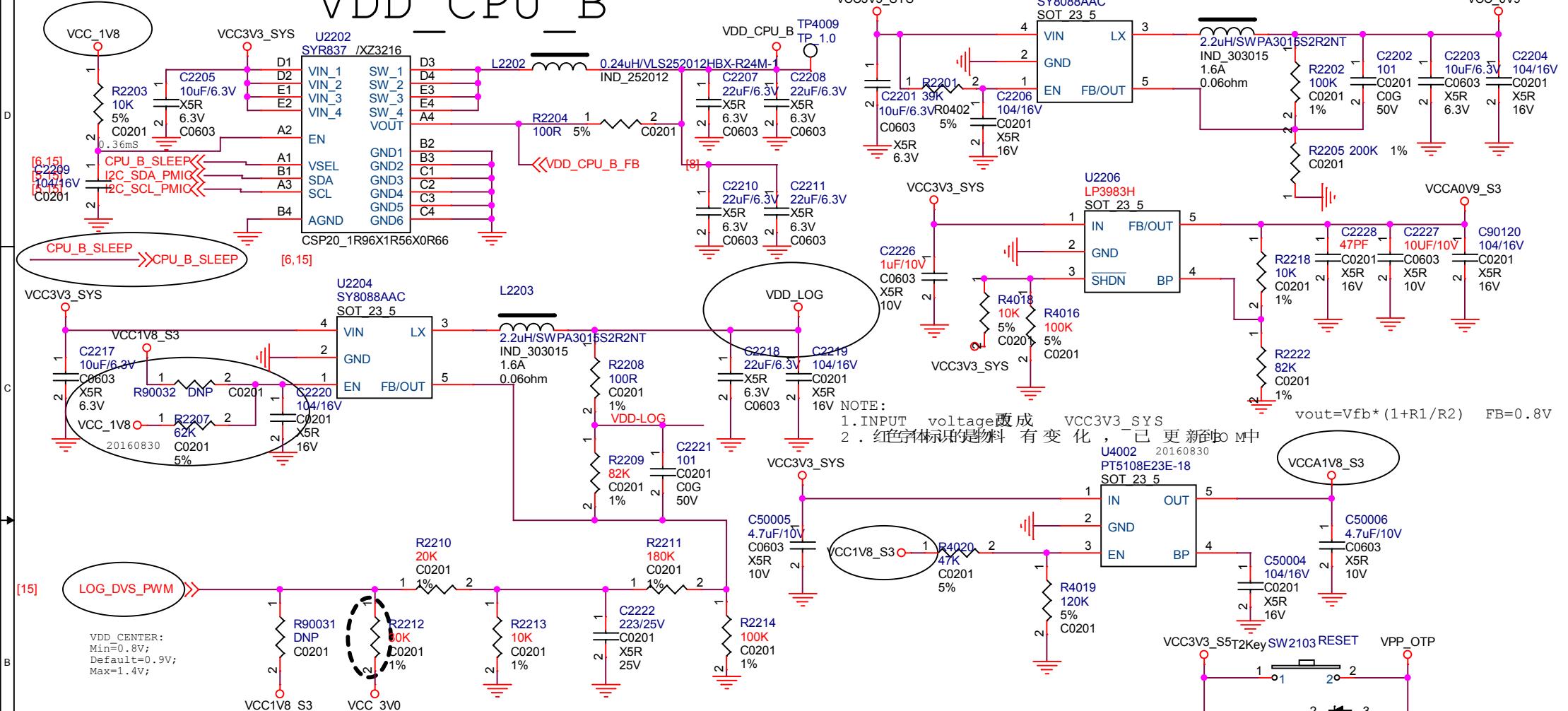
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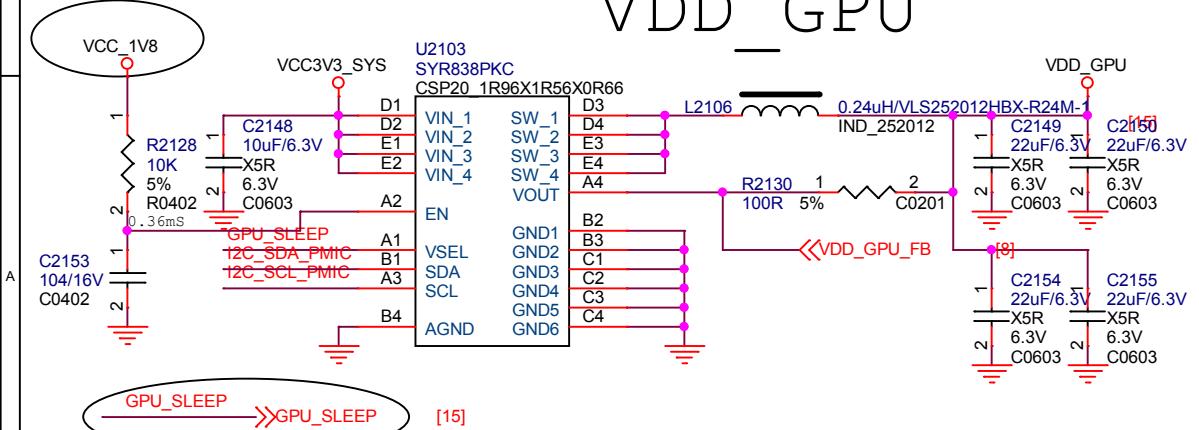




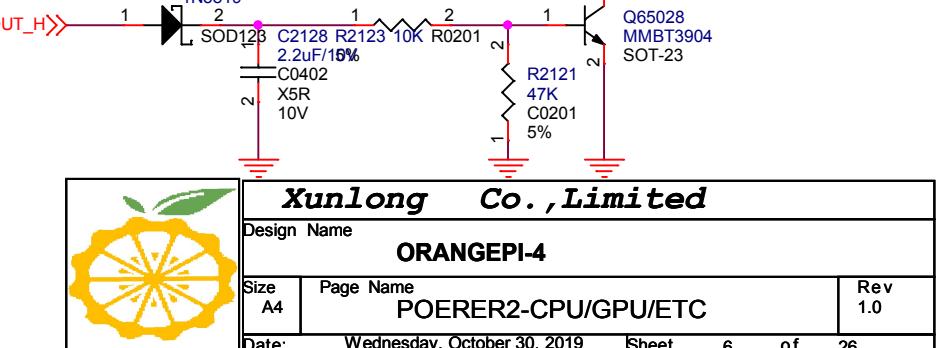
VDD_CPU_B



VDD_GPU



Over-temperature Protection



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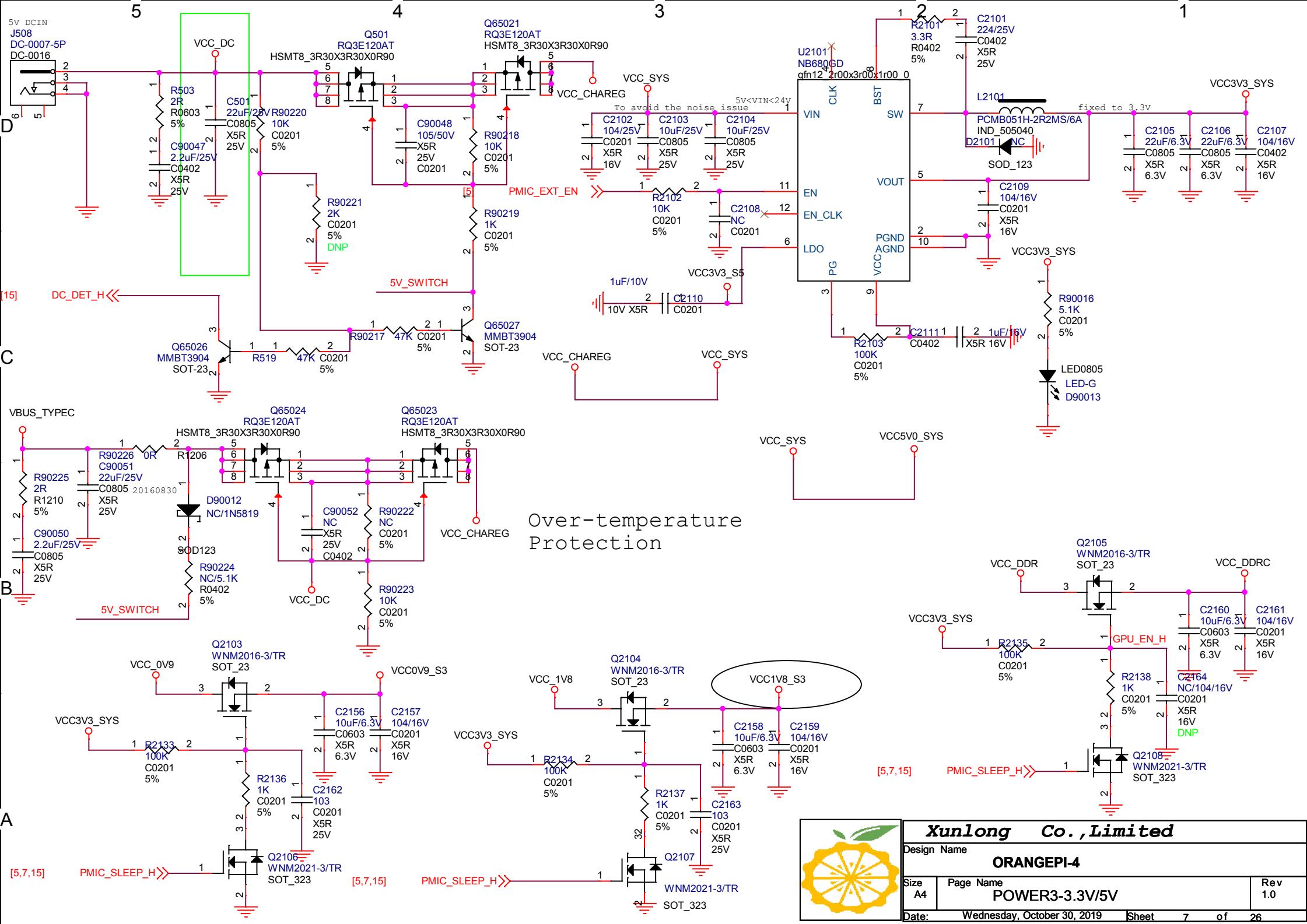
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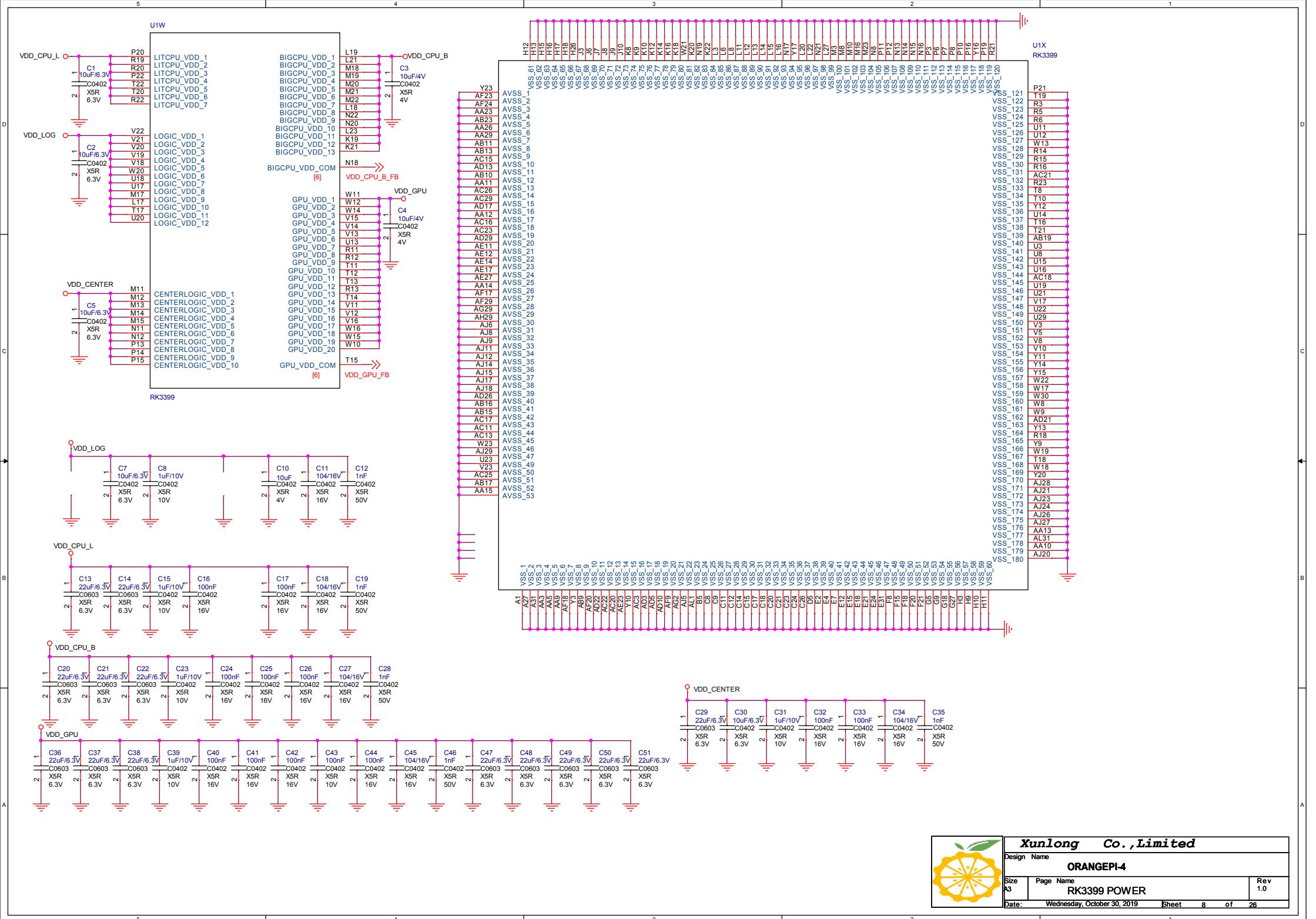
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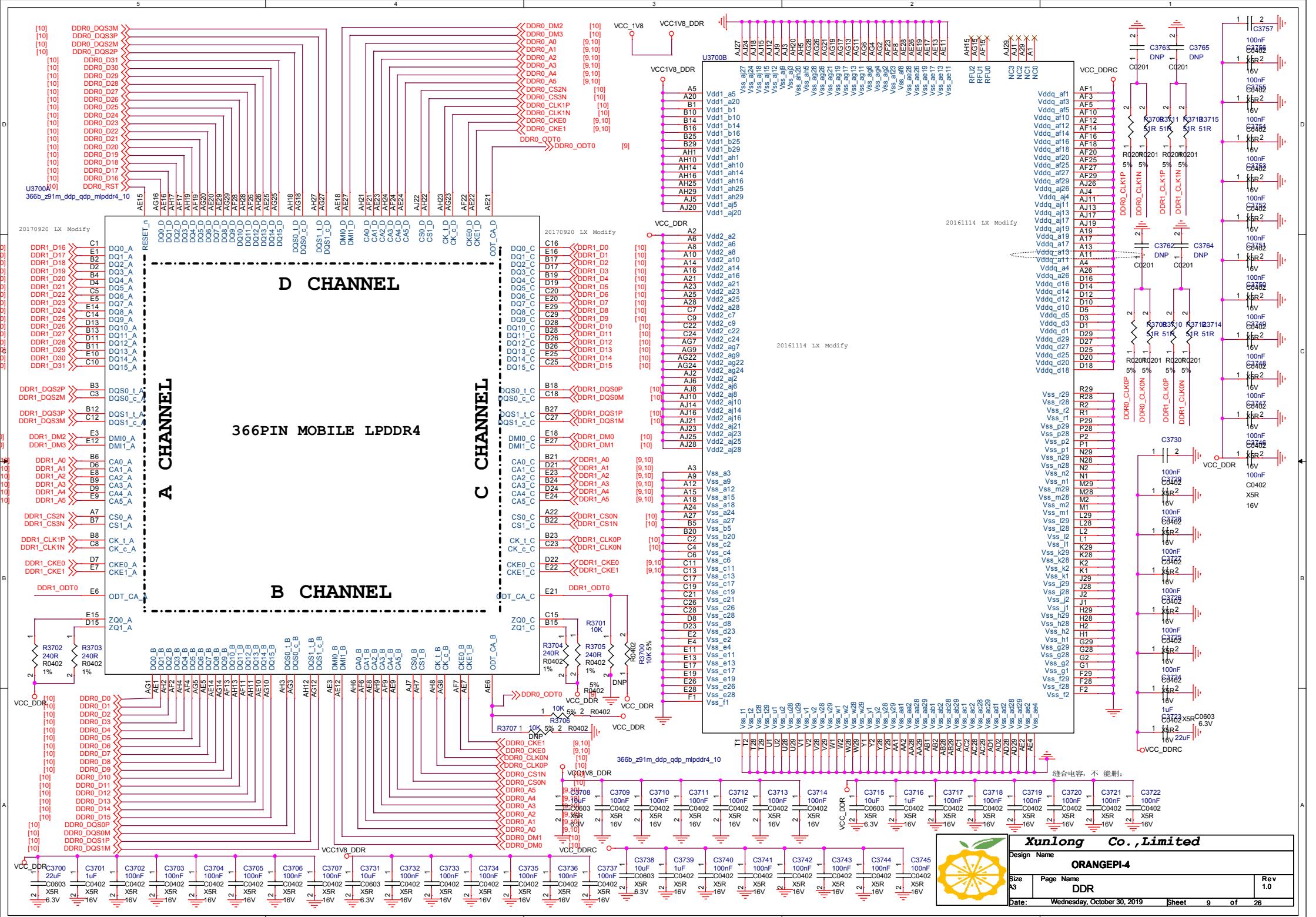
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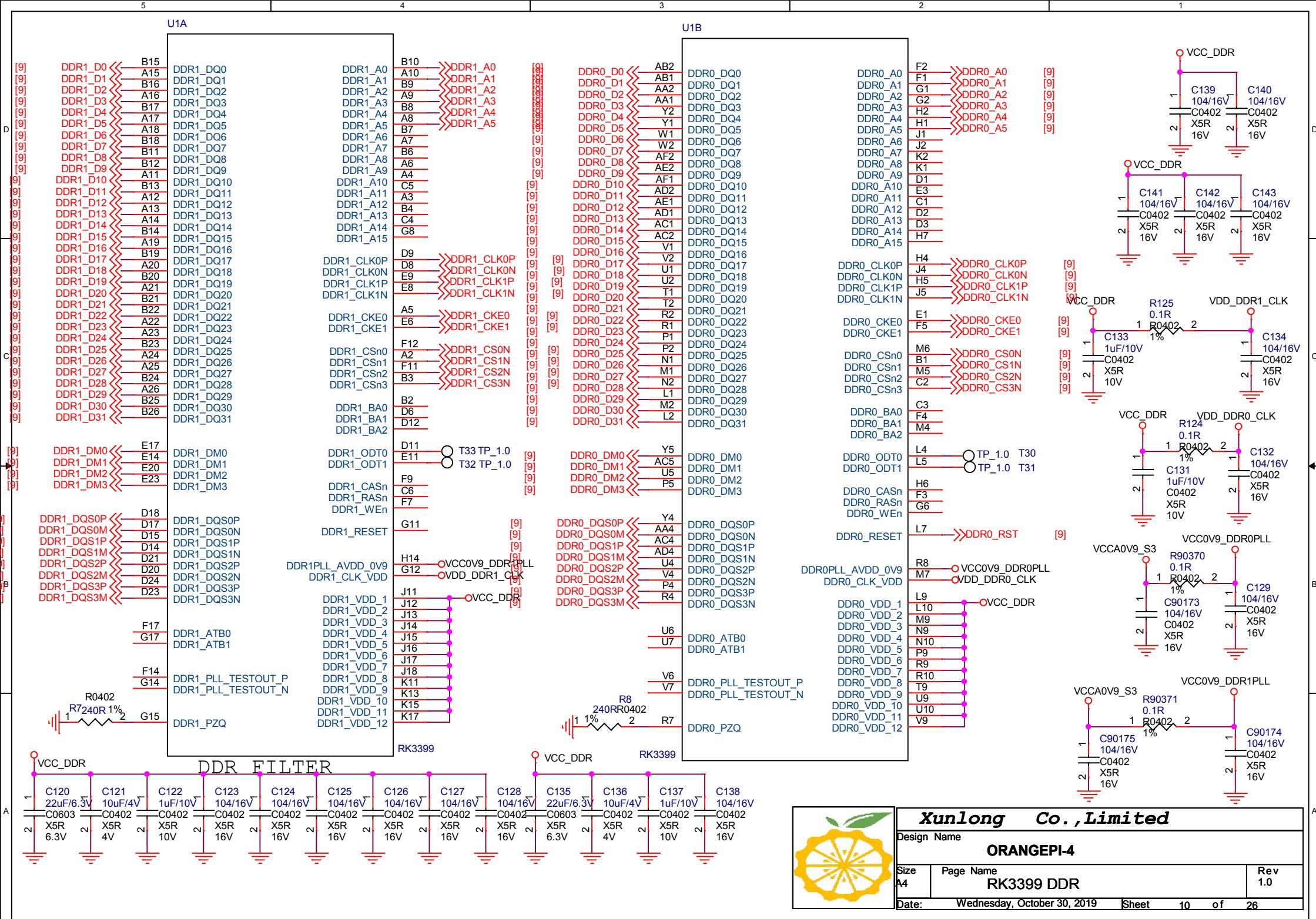
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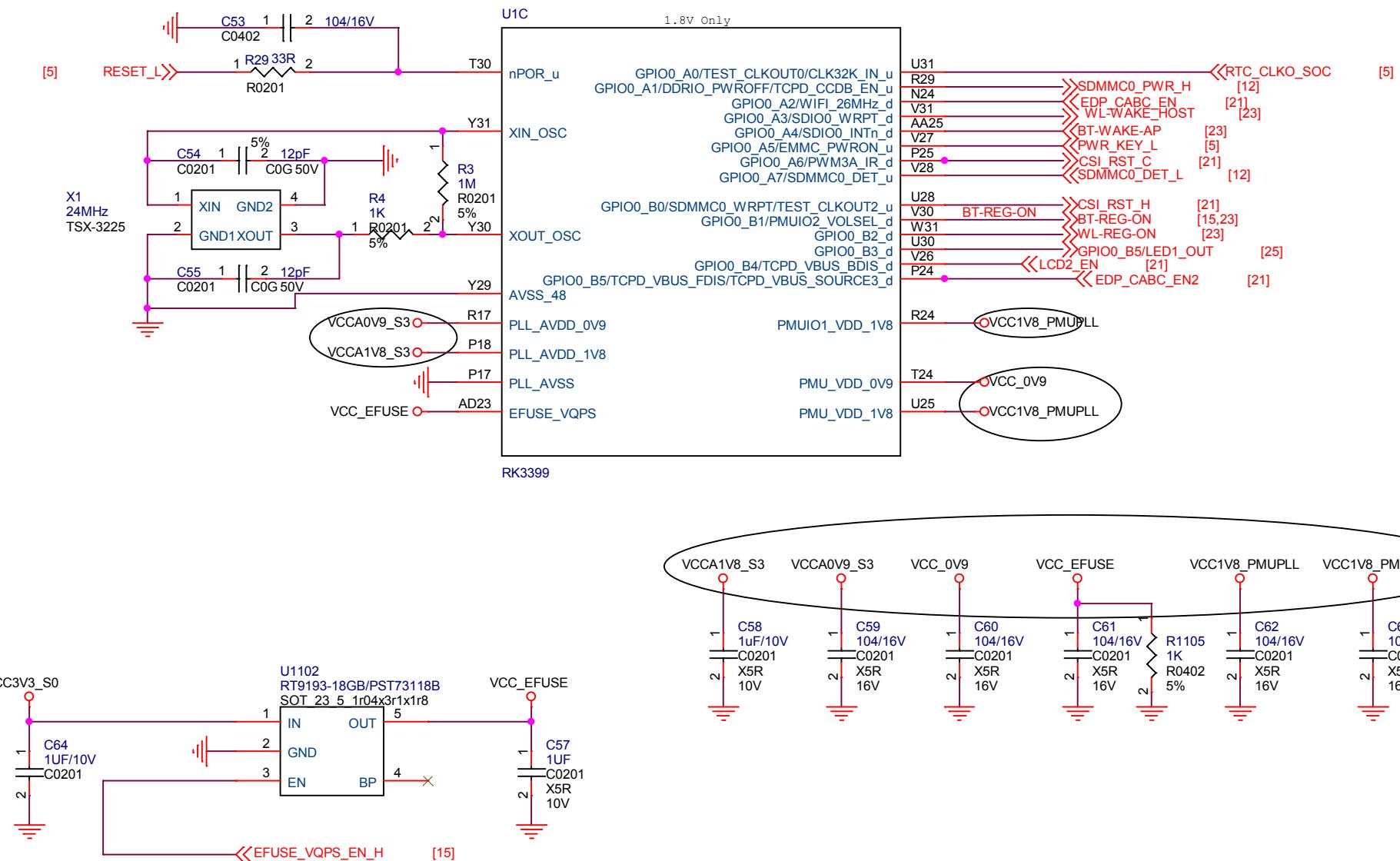
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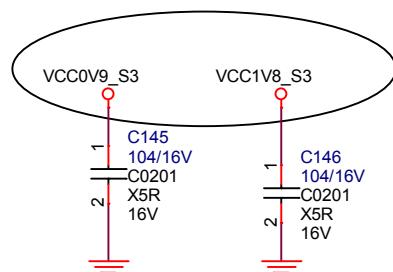
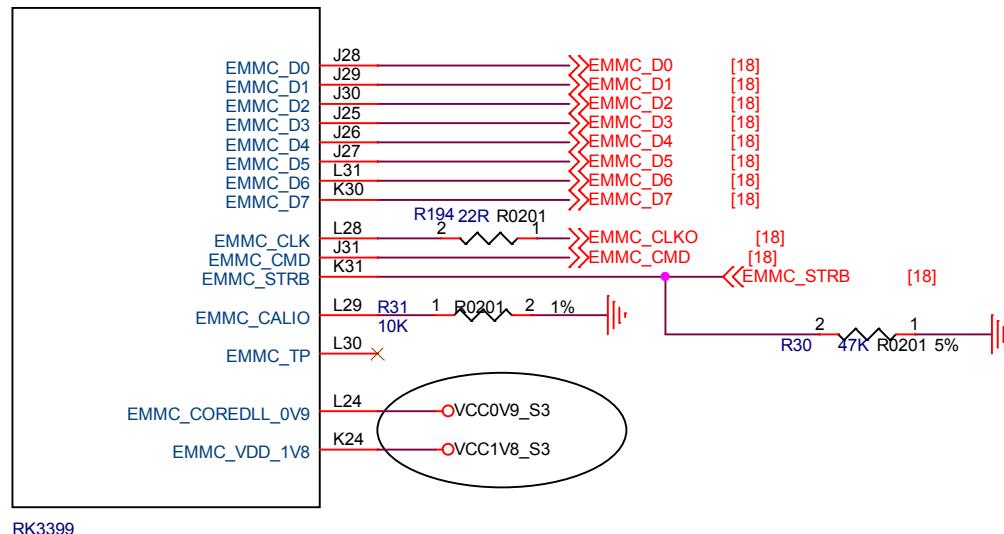
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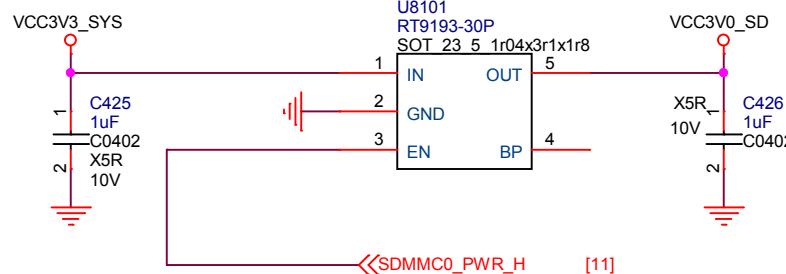
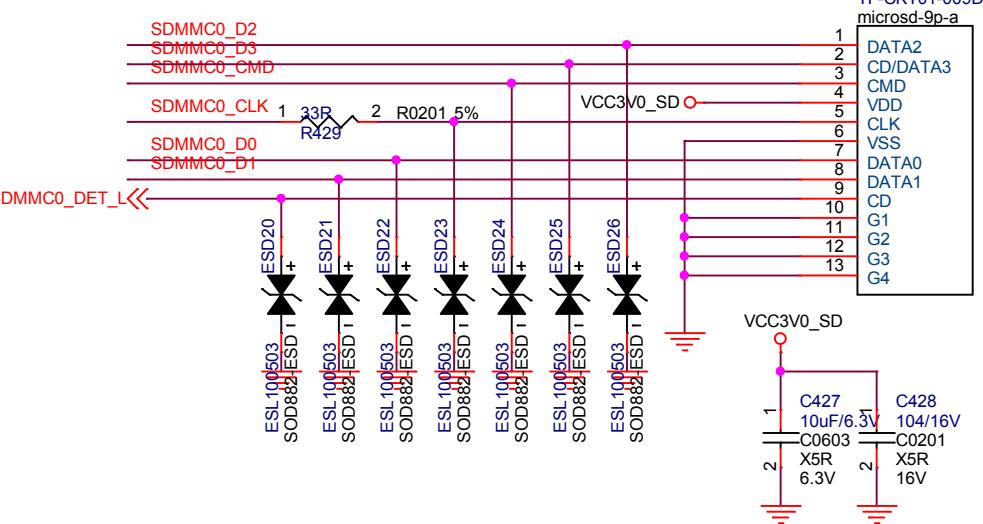
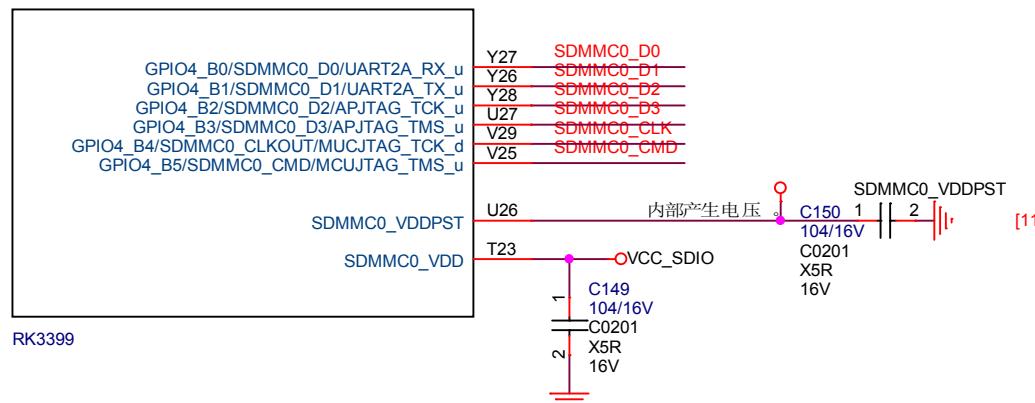
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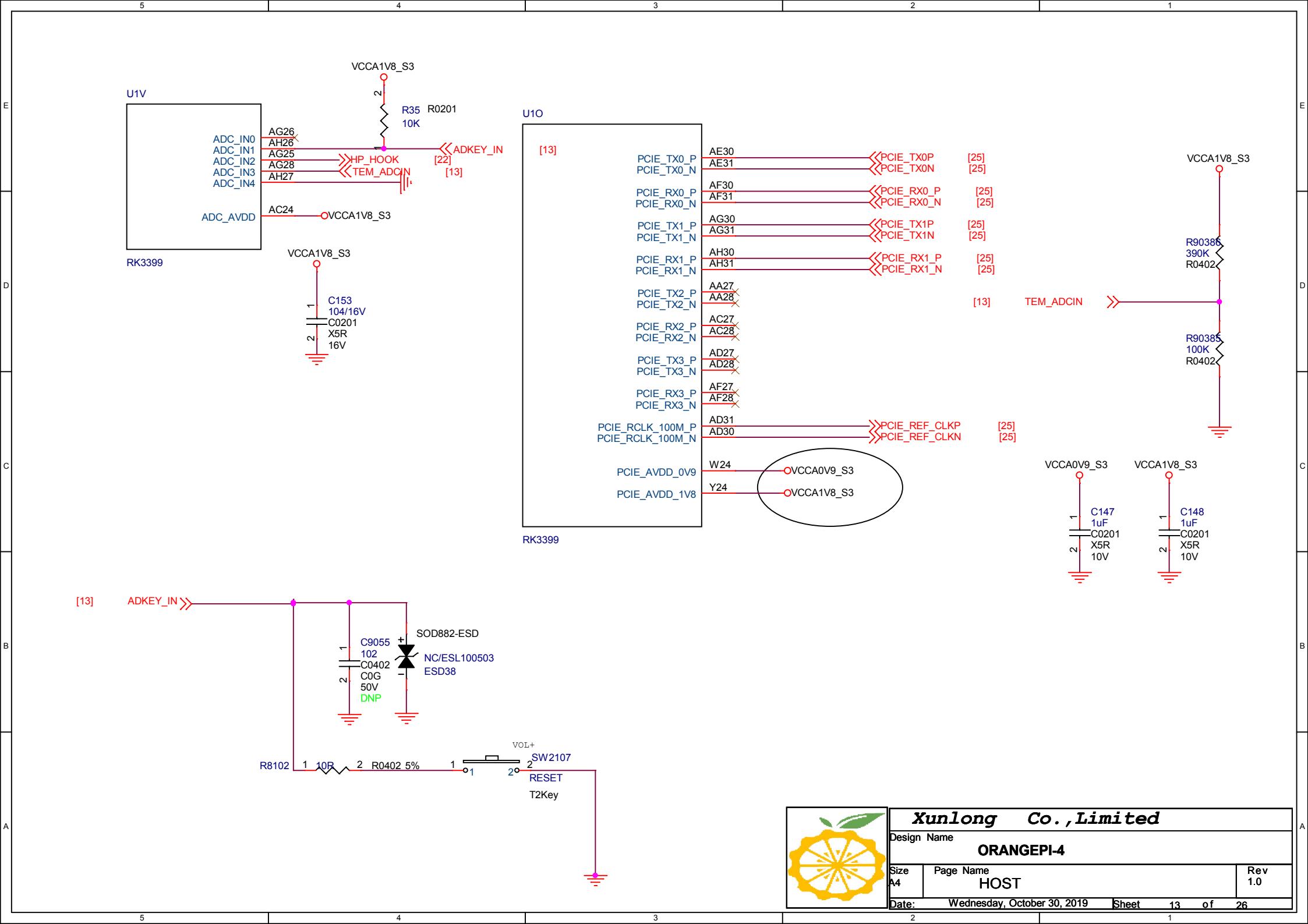
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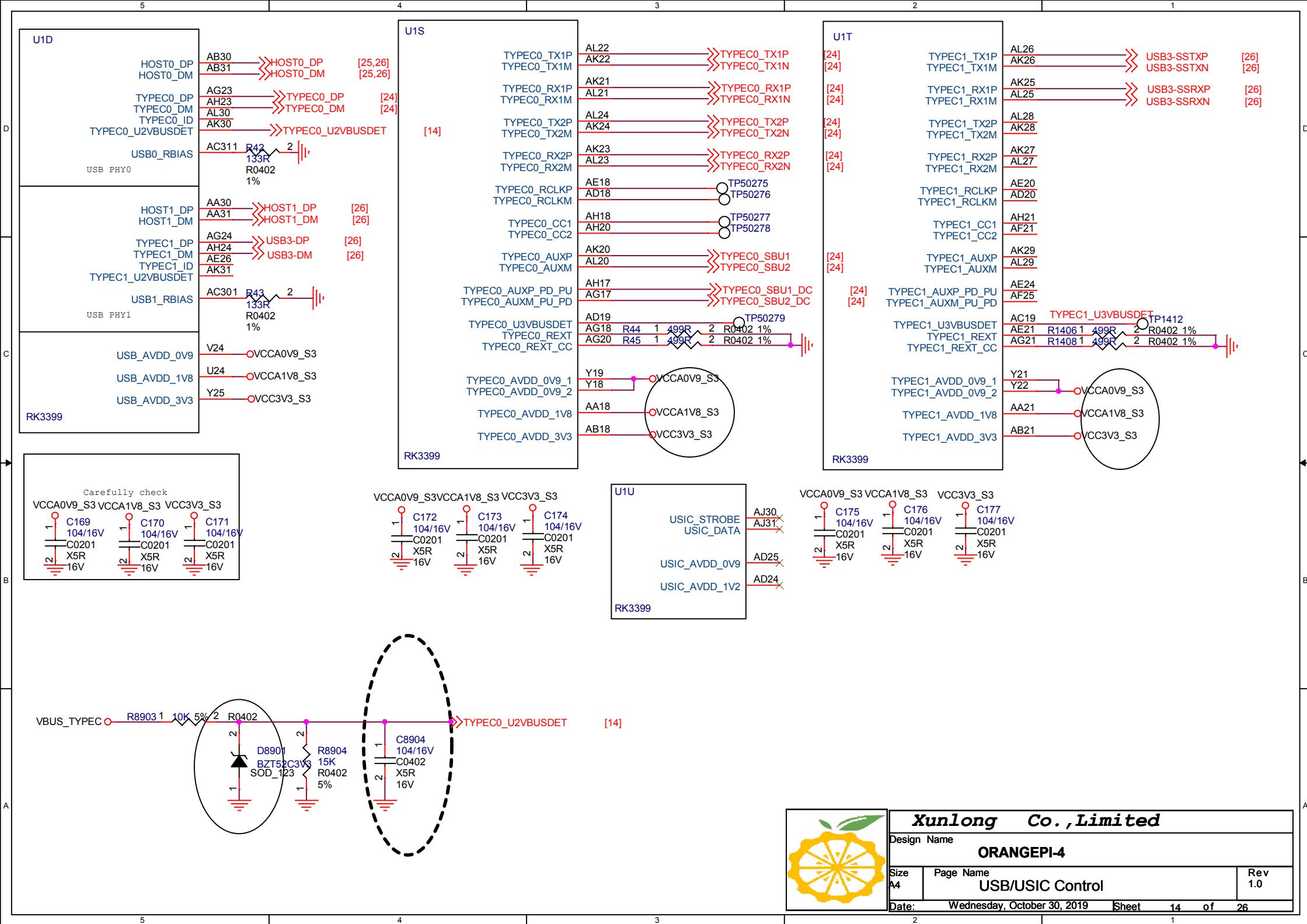
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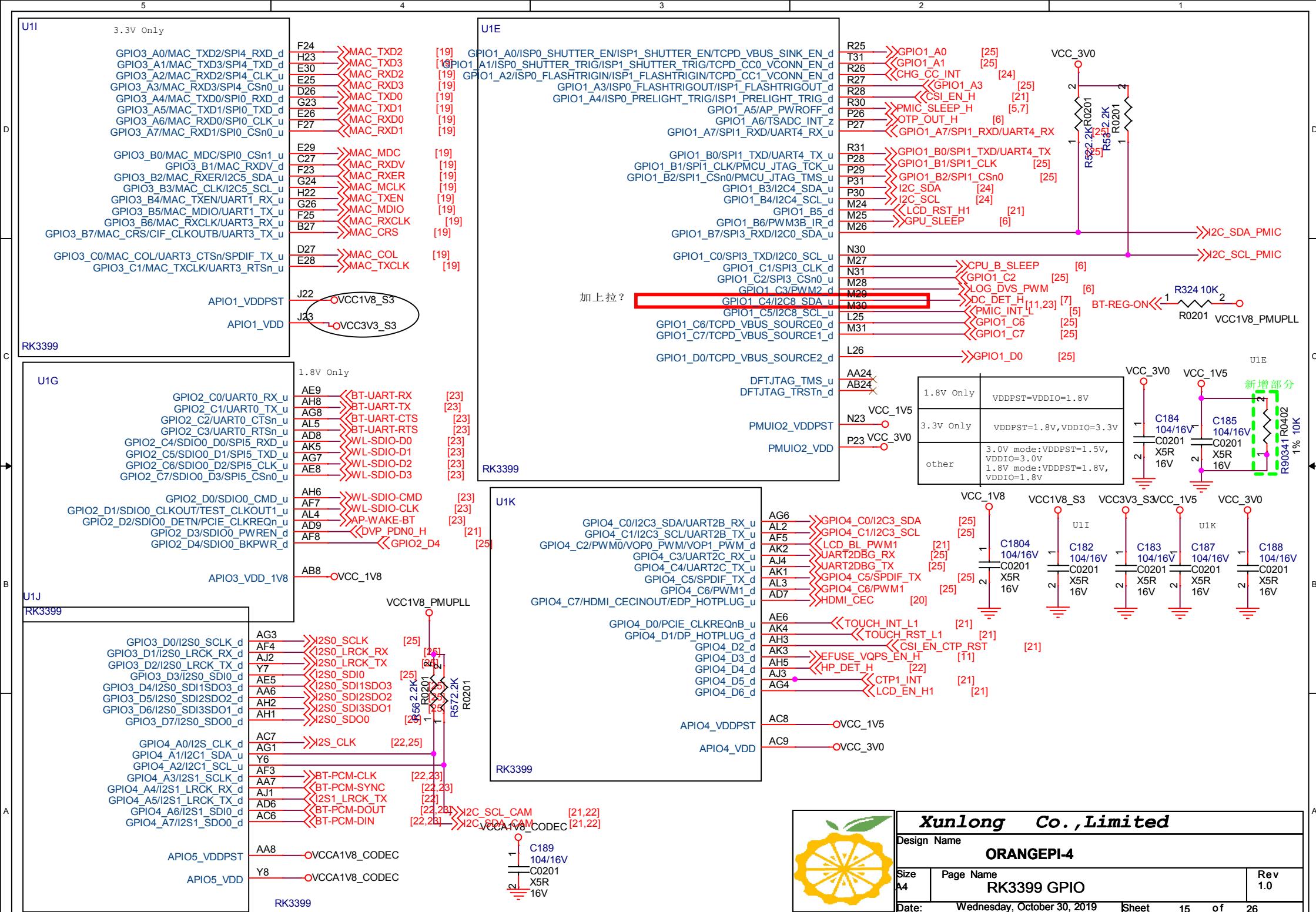
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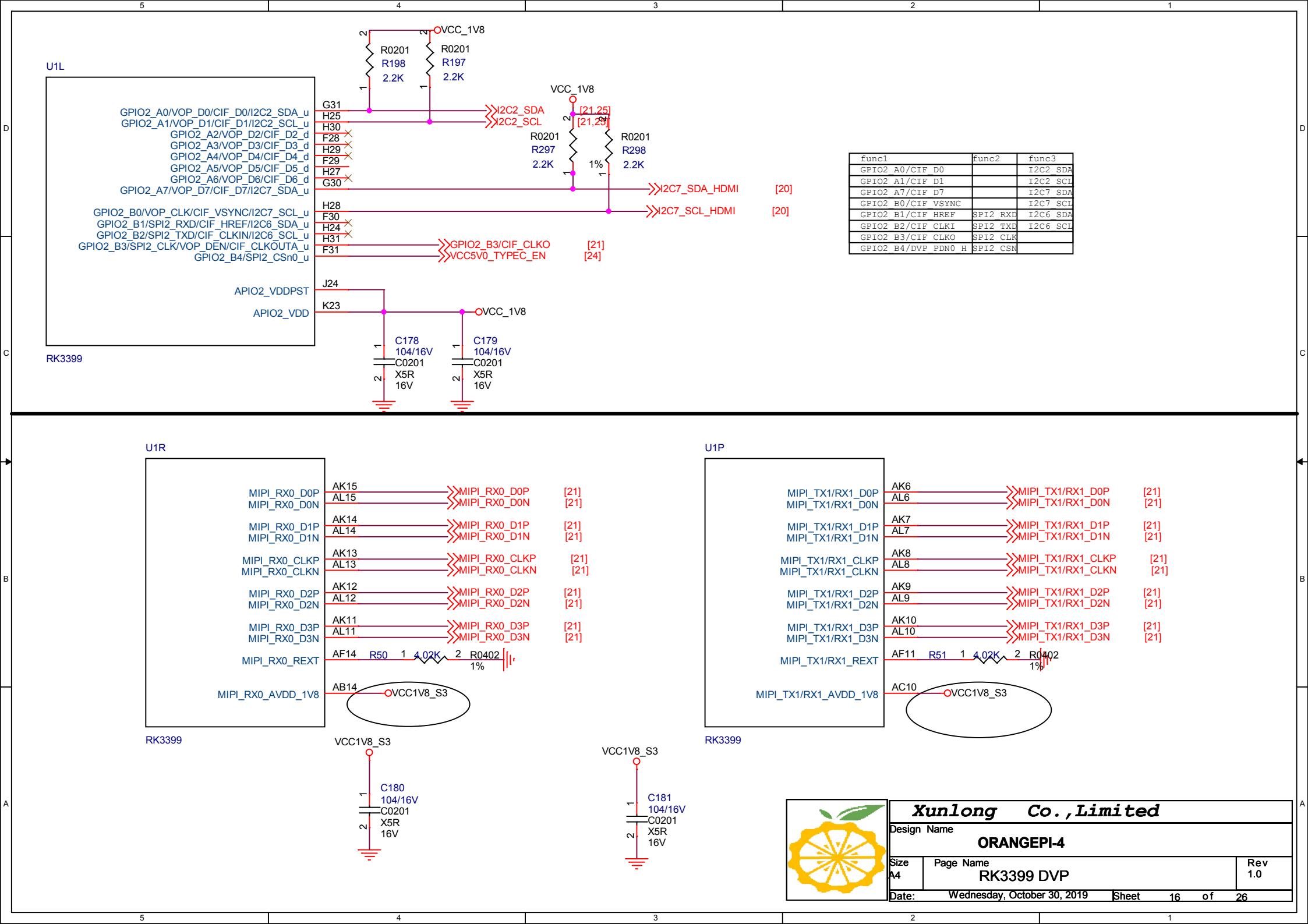
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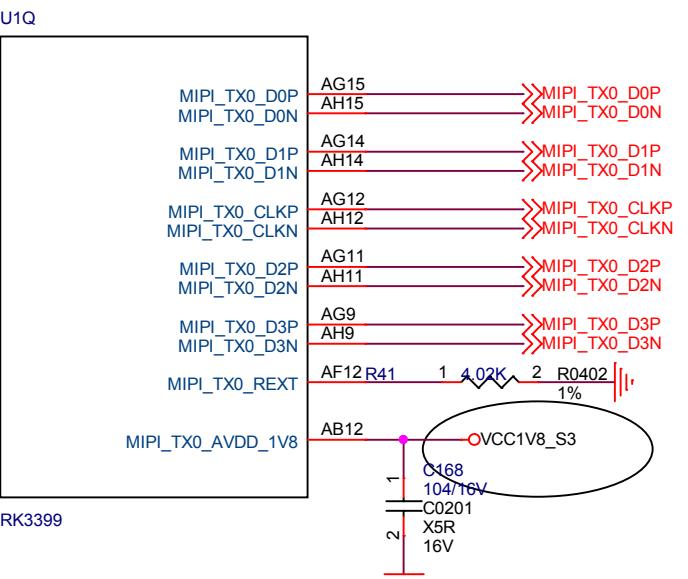
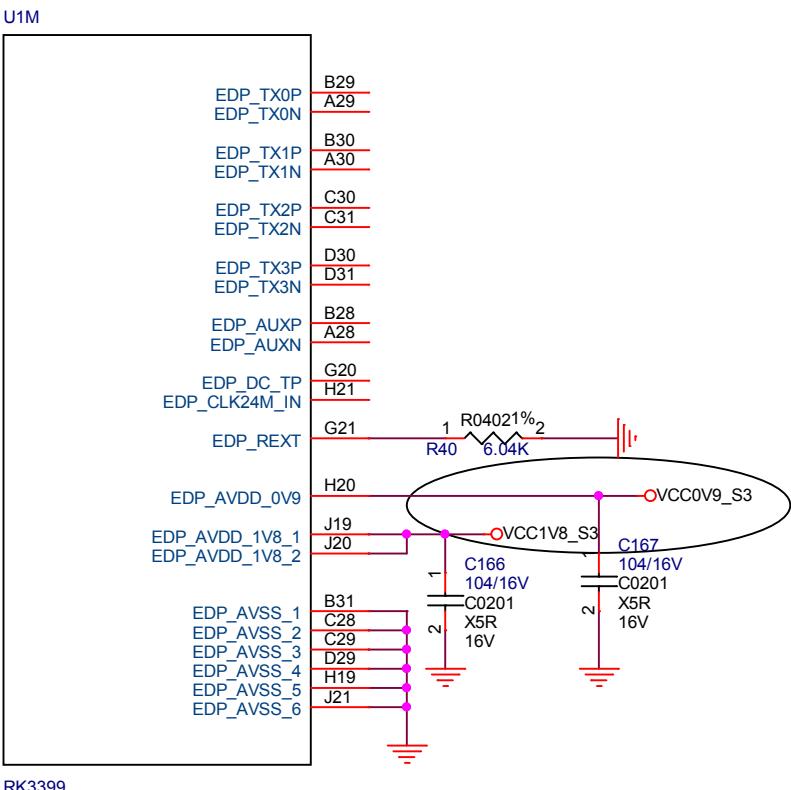
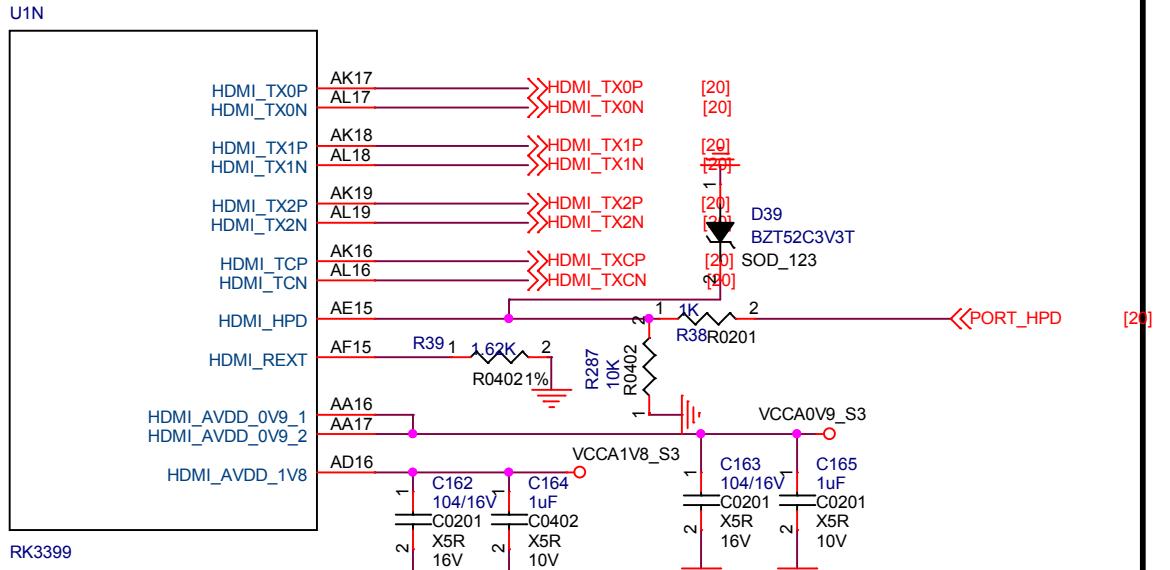
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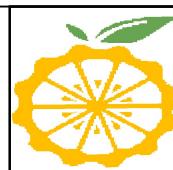
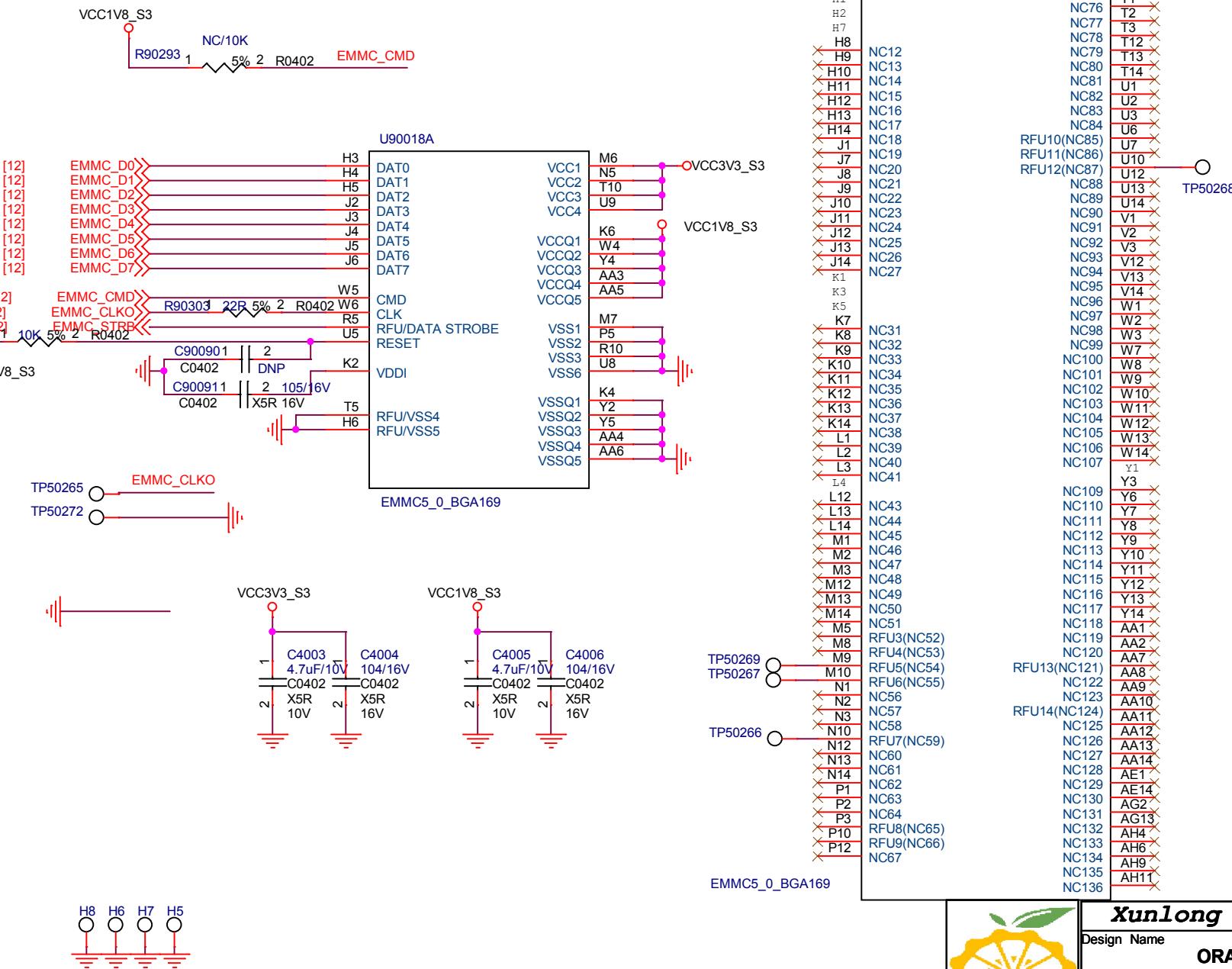
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eMMC FLASH



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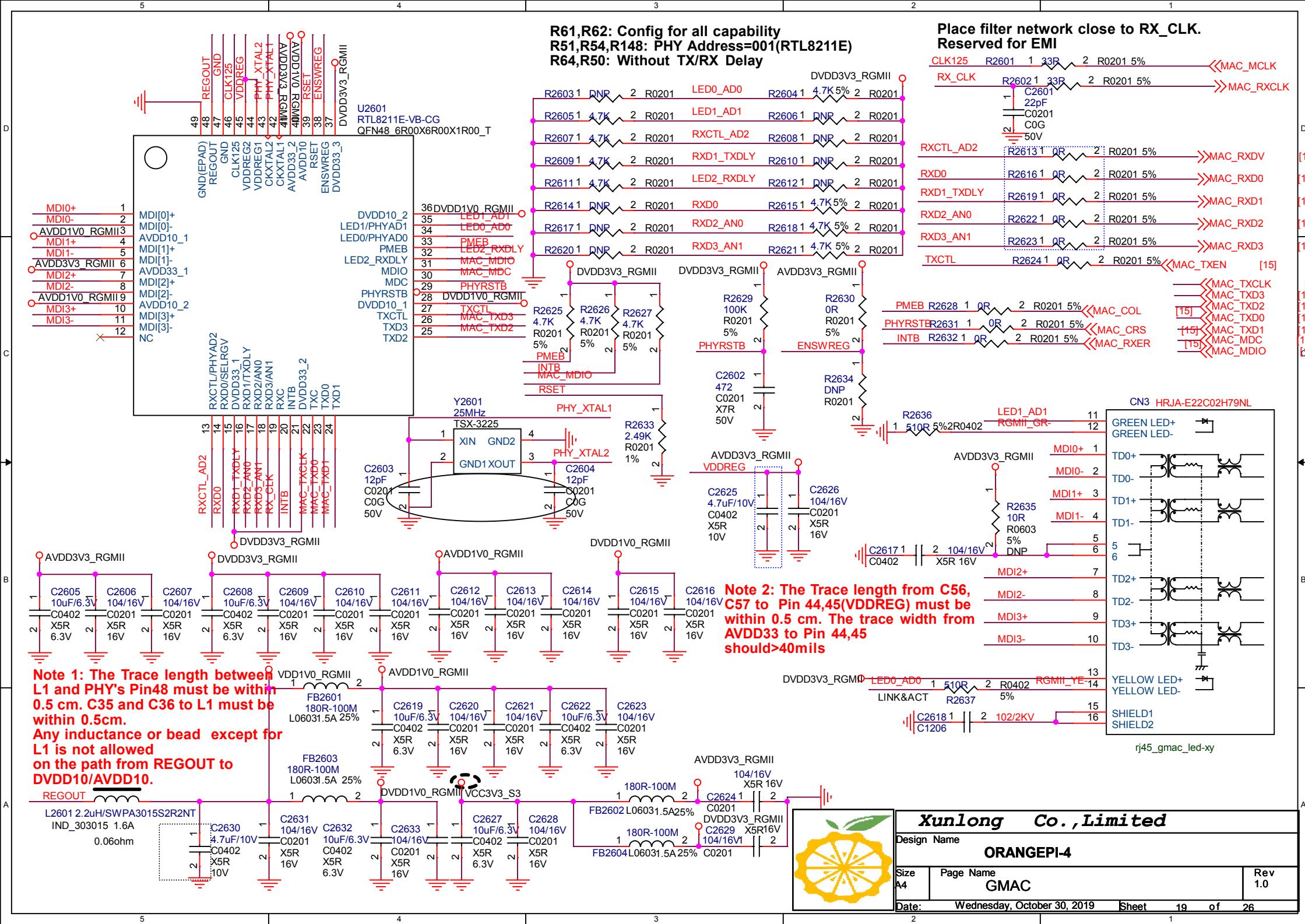
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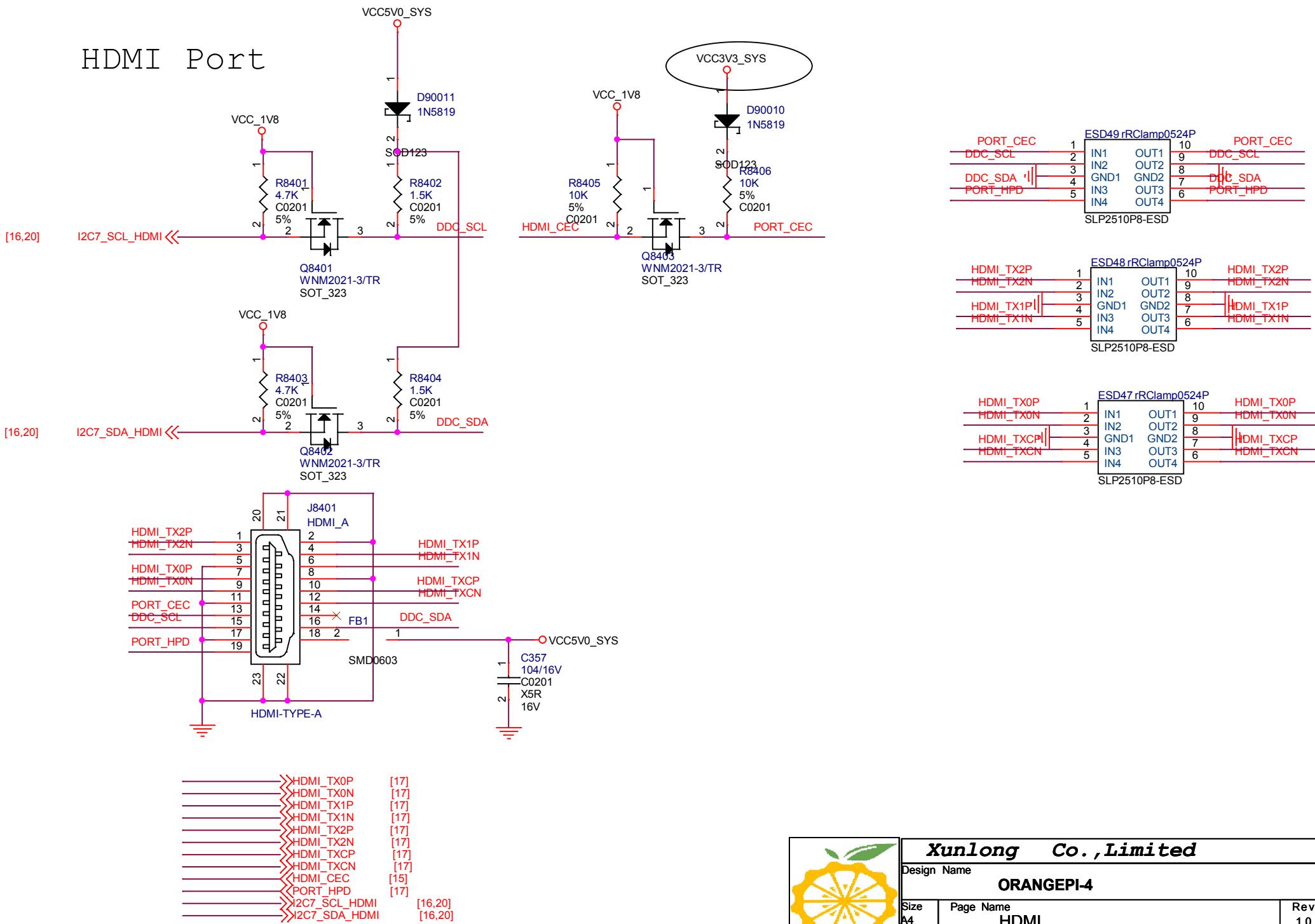
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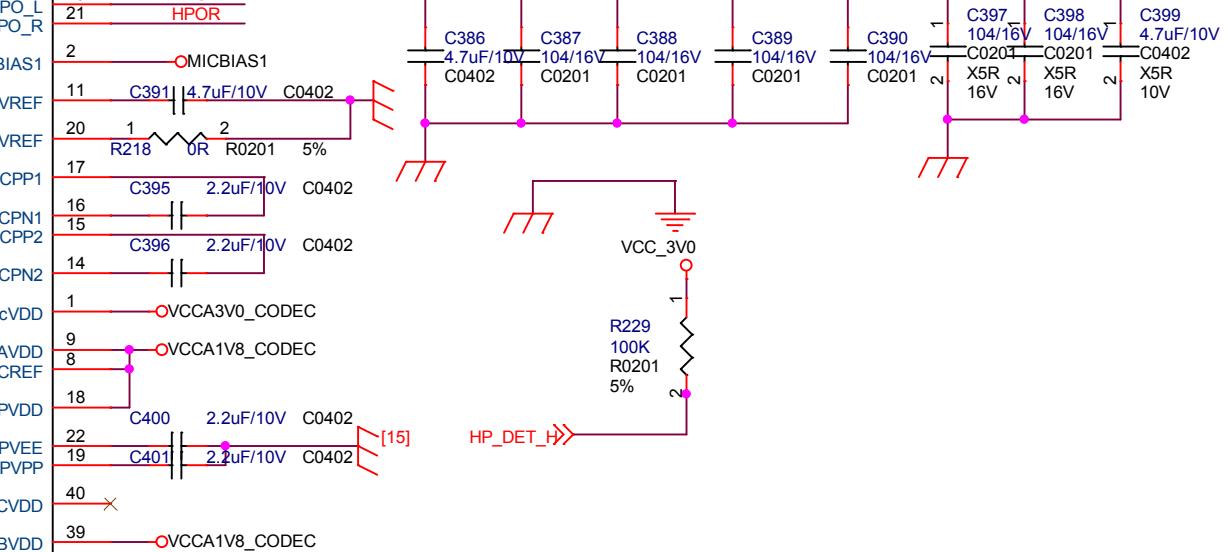
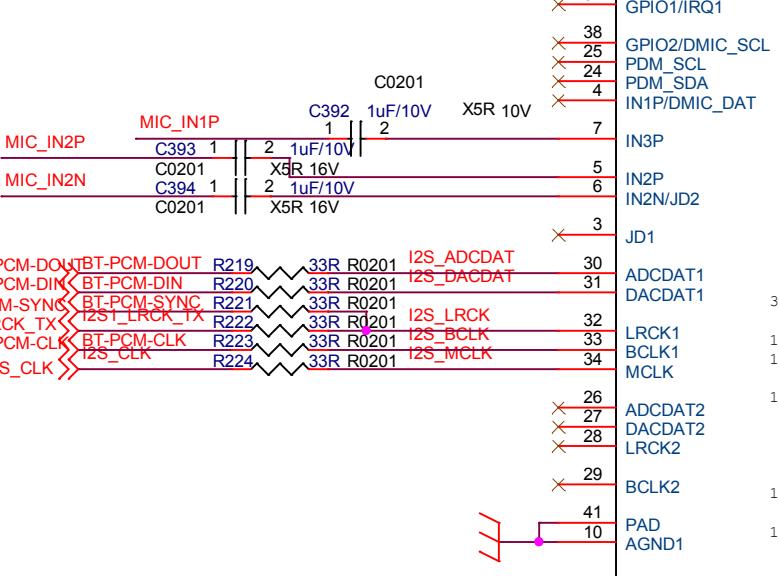
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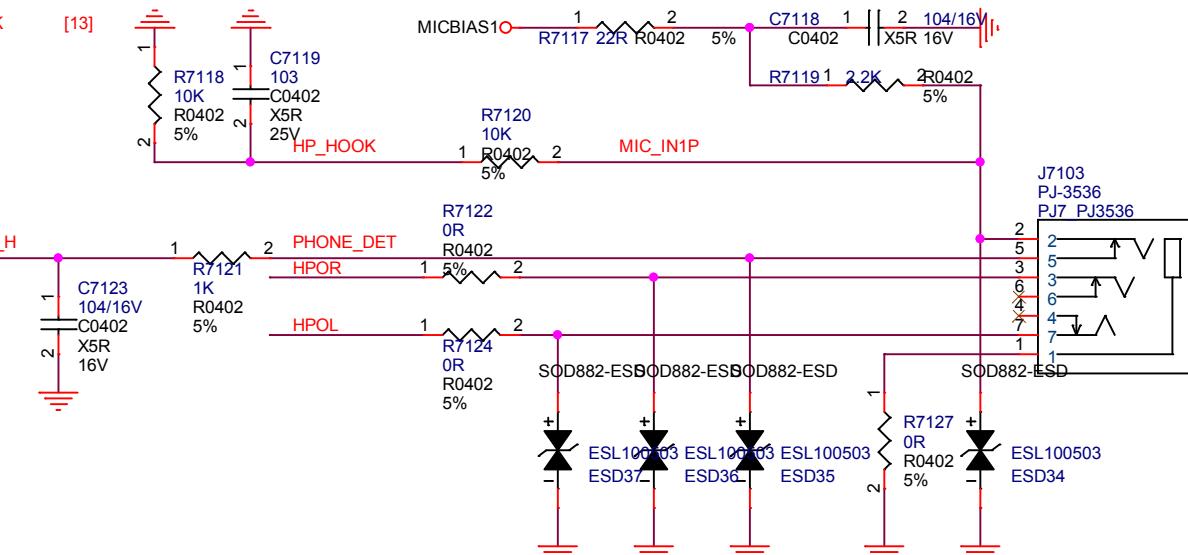
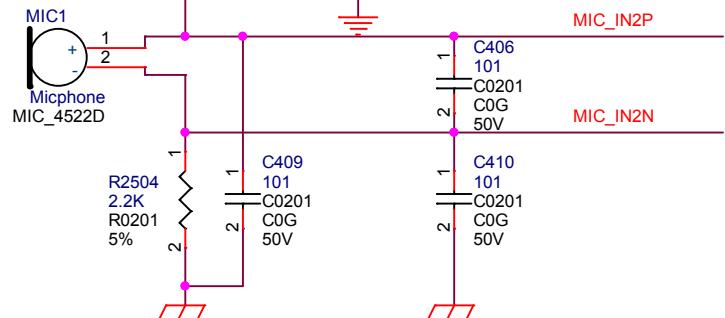
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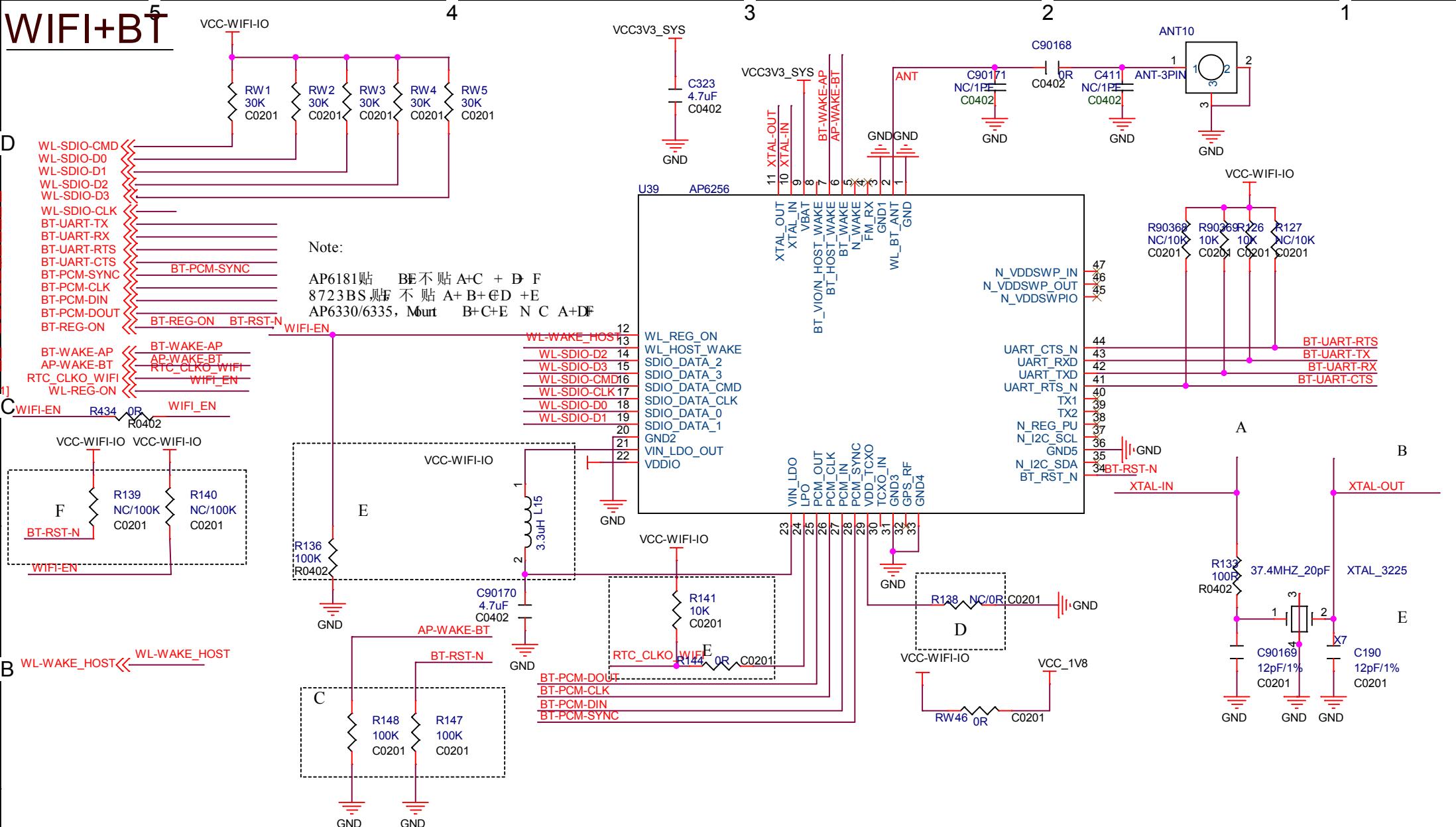
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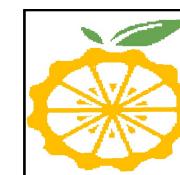
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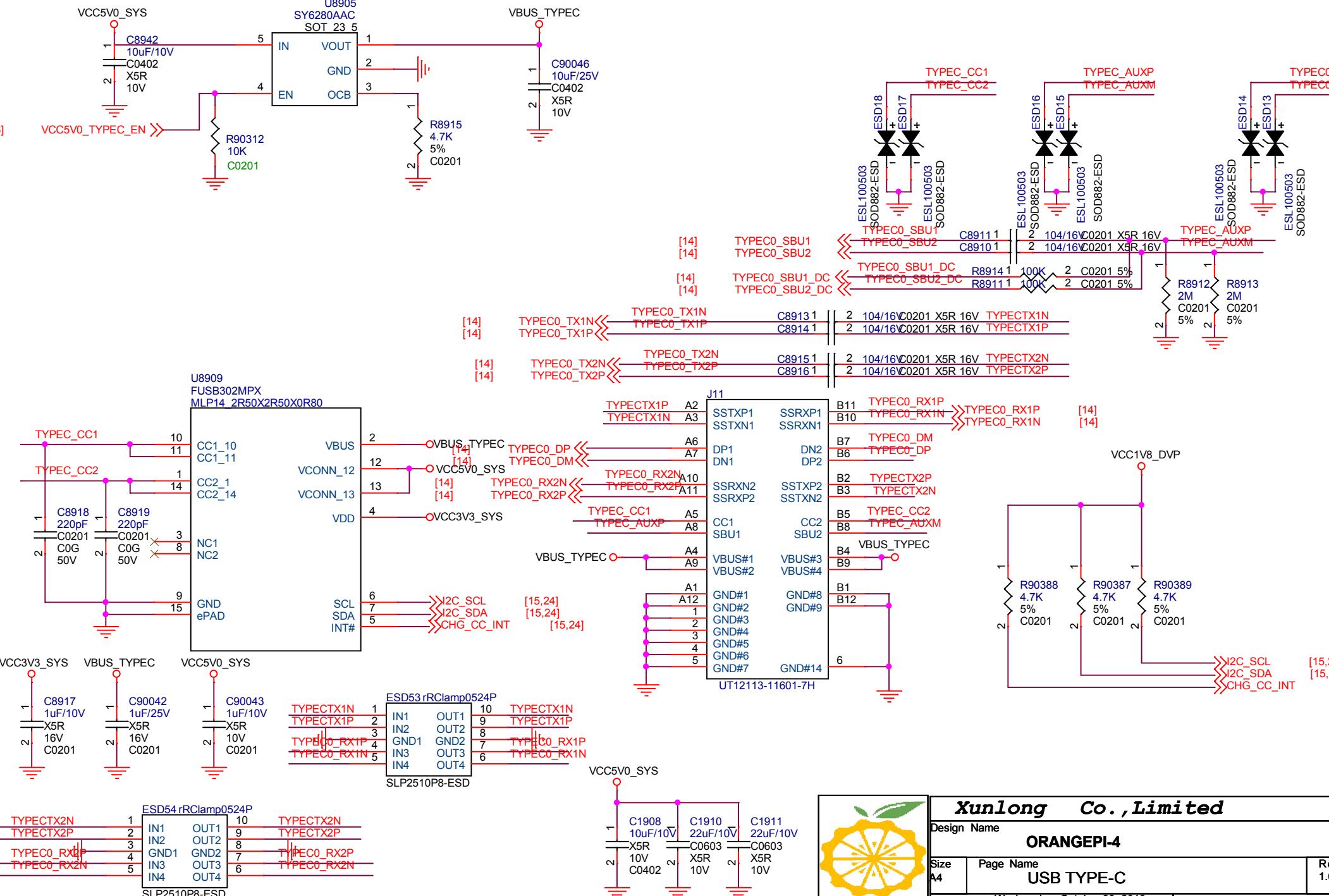


RW51 RW45 RW46 RW50 RW52 RW53

不带蓝牙 遥控	IO 为 1.8V	NC	NC	NC	0R	NC	0R
	IO 为 3.3V	NC	NC	NC	0R	0R	NC
带蓝牙遥控	IO 为 1.8V	0R	NC	NC	NC	NC	NC
	IO 为 3.3V	0R	0R	0R	NC	NC	NC



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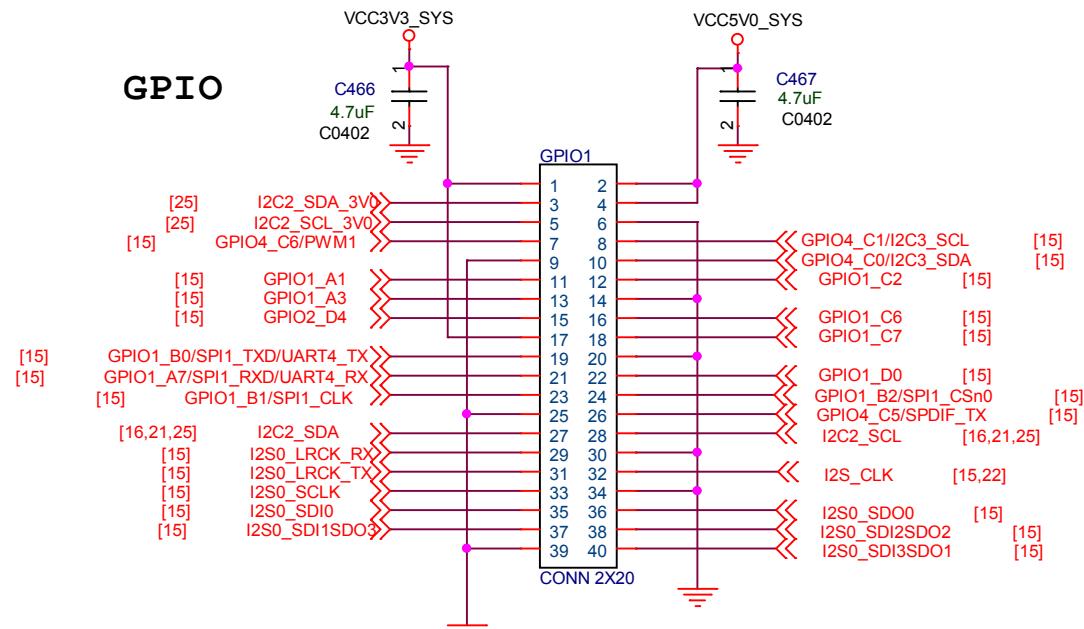
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PCIE , USB**GPIO**

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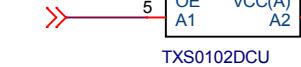
I2C2_SCL_3V0

I2C2_SCL

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[16,21,25]

VCC_1V8 VCC_3V0



I2C2_SDA_3V0

[25]

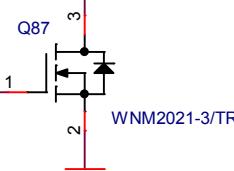
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VCC5V0_SYS

R259
4.7K

R0201

LED10
LED GREEN_90C STAT

VCC3V3_S3

R286
1K

R0201

VCC3V3_SYS

D78
IN4148WT SOD-523R501
15K

R0201

LED12
LED Red_90C PWRR501
15K

R0201

VCC_3V0

RC25
10K

R0402

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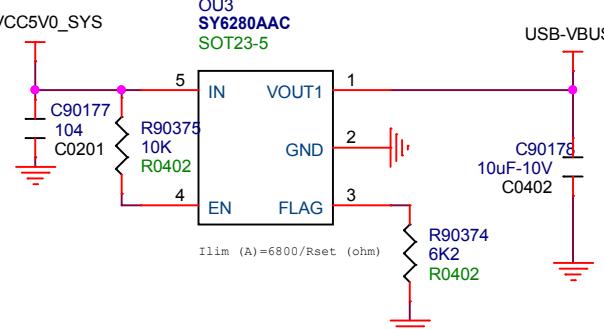
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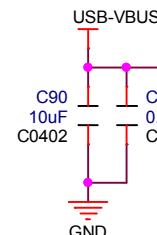
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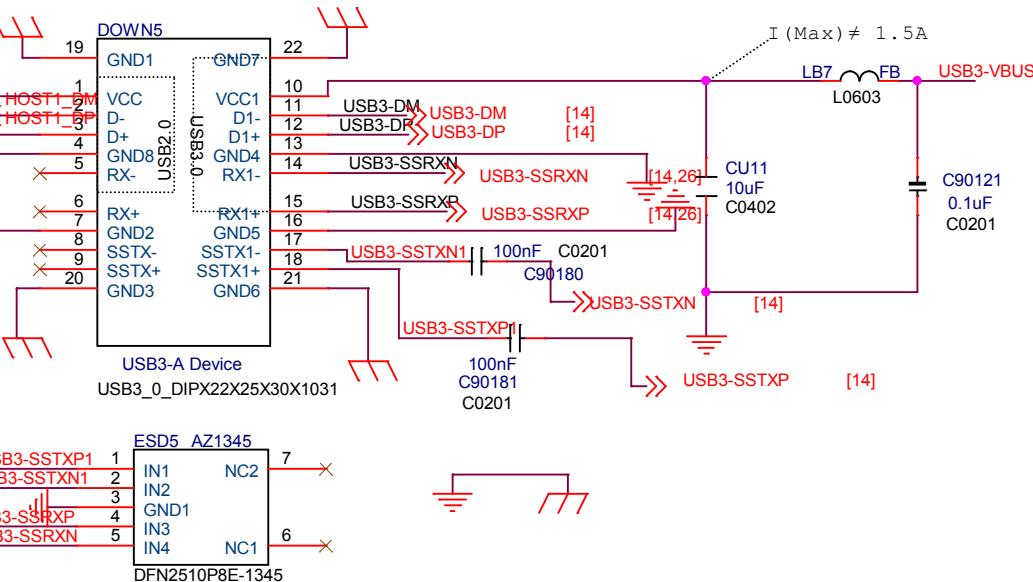
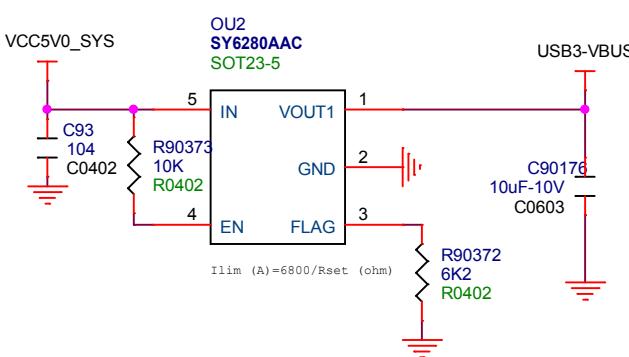
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$$I_{lim} (A) = 6800/R_{set} \text{ (ohm)}$$



$$I_{Max} \neq 1.5A$$


Xunlong Co., Limited

Design Name

ORANGEPI-4

Size

A4

Page Name

USB Ports

Rev

1_0

Date:

Wednesday, October 30, 2019

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