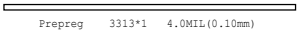

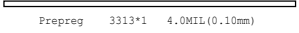
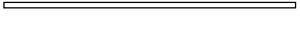


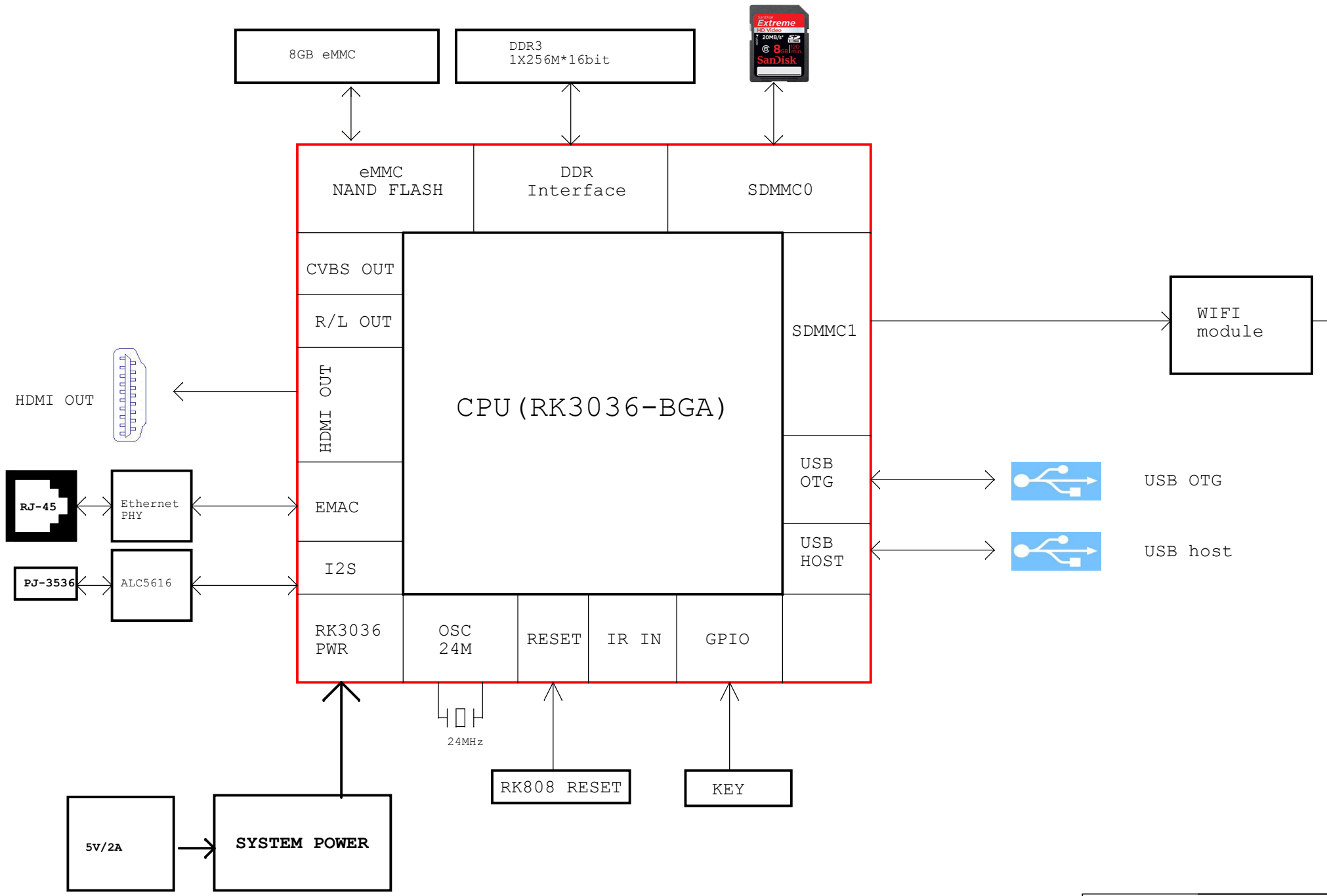
# CONTENT INDEXING

01. INDEX
02. MODIFY NOTE
03. BLOCK DIAGRAM
04. Power Tree
05. SYSTEM POWER
06. CPU(RK3036)
07. DDR3
08. EMMC /TF card
09. USB HOST
10. HDMI OUT
11. Audio Codec-ALC5616
12. Ethernet
13. AP6212
14. DEBUG
15. GPIO

## 4 LAYERS PCB STACK

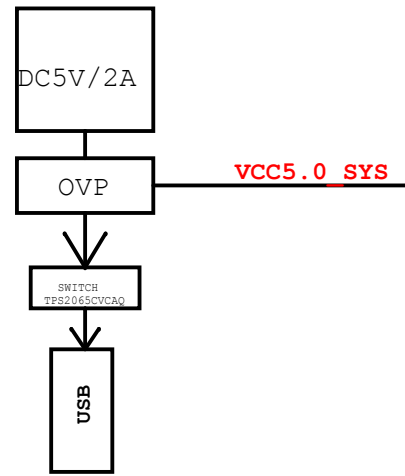
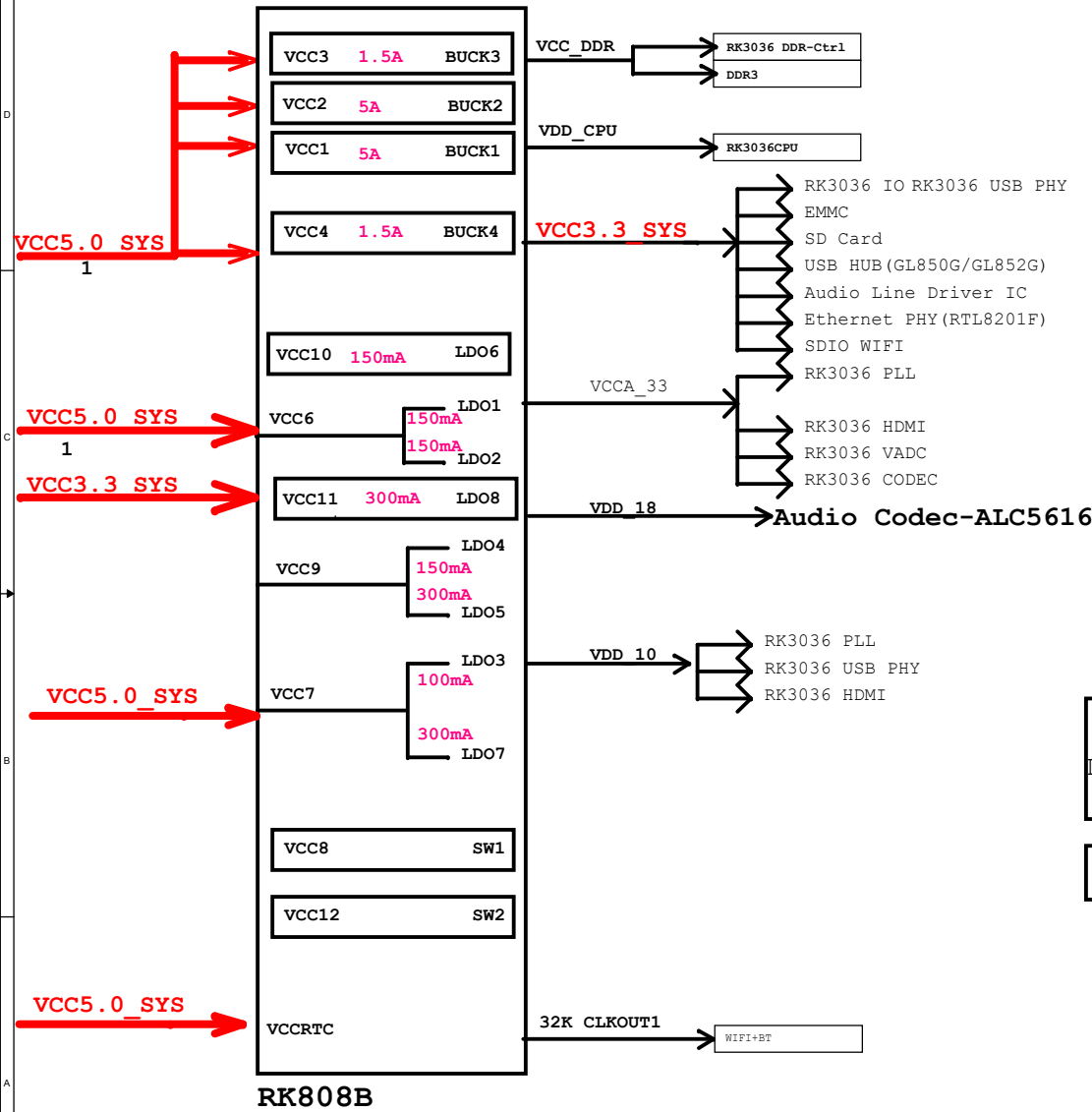
TOP		Hor(18um) + plating copper(18um)
GND		1oz(35um)
POWER		1oz(35um)
BOTTOM		Hor(18um) + plating copper(18um)

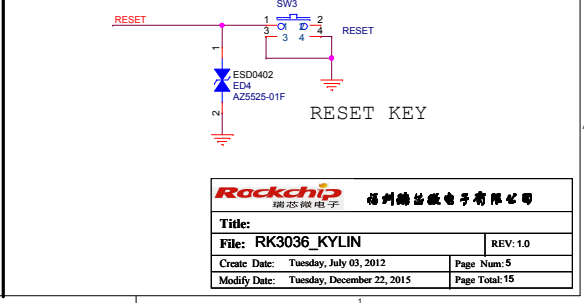
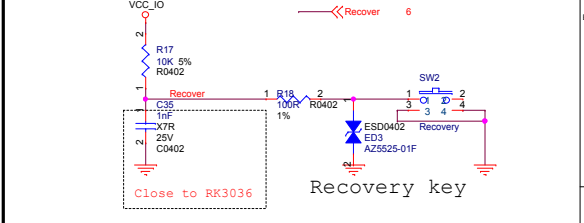
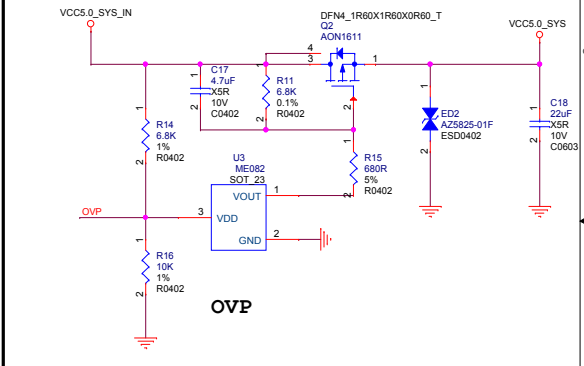
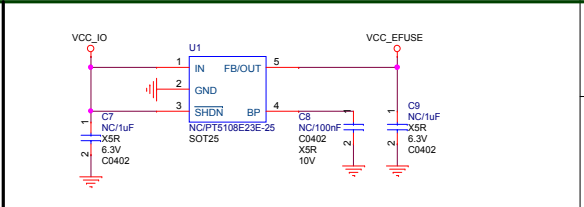
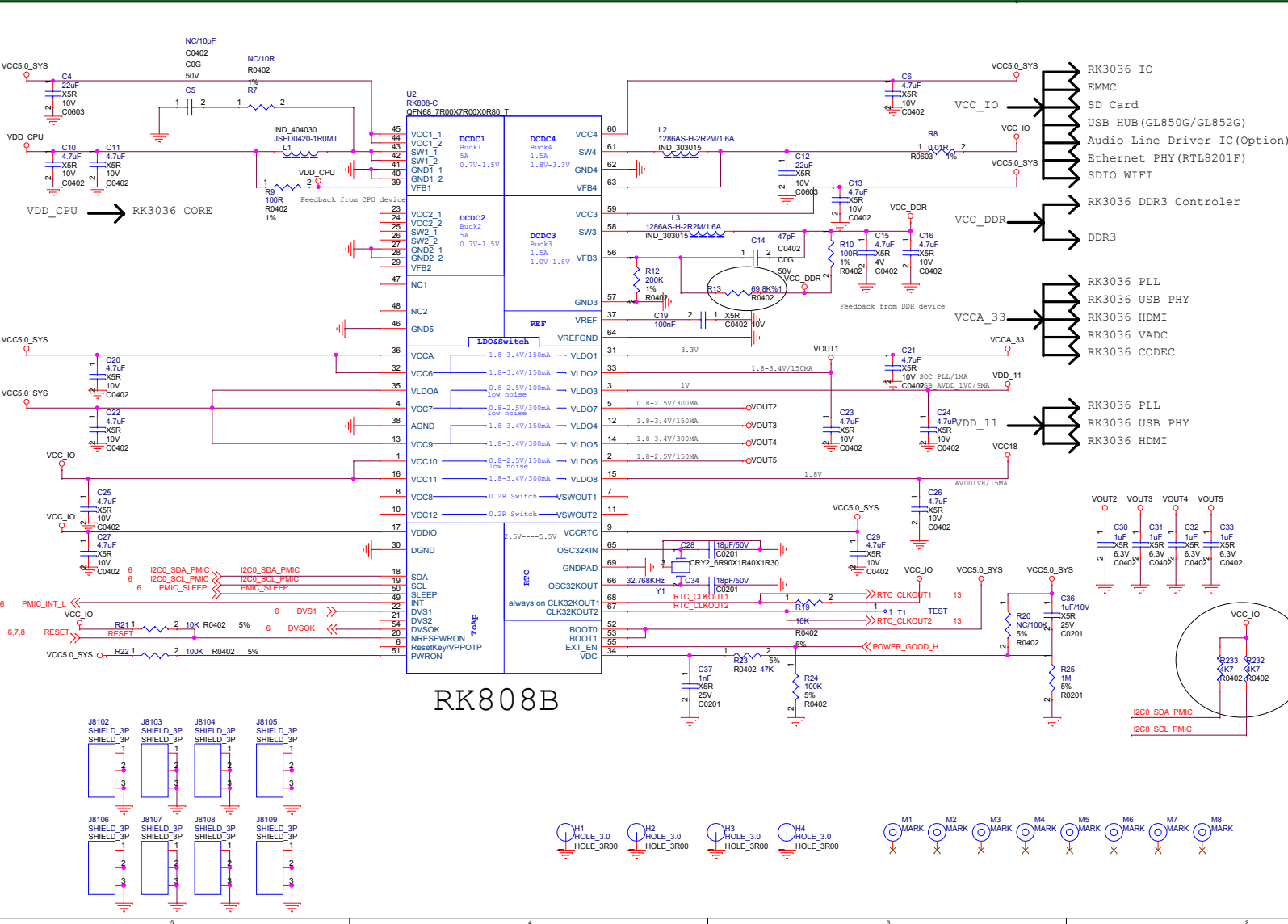
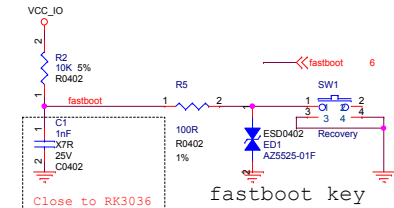
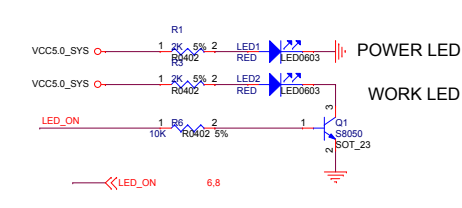
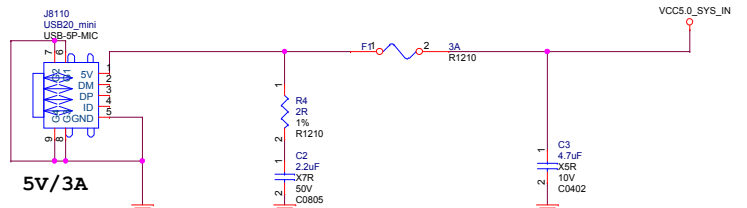
Version	Date	Author	Change Note	Note
V1.0	20151021			
V2.0	20151210		<ol style="list-style-type: none"> <li>1. ADD RK808 I2C pull-up resistor R232 R233</li> <li>2. CHANGE I2C2_SCL_AUDIO I2C2_SDA_AUDIO</li> <li>3. DELETE RK808 PWRON KEY AND RESET KEY</li> <li>4. Change VCCA_33 on resistance R40 to DCDC4 output(VCC_IO/ Fixed 3.3V output )</li> <li>5. USB OTG -----MICRO USB</li> <li>6. Change USB OTG to USB MIRCRO</li> <li>7. Update socket footprint</li> <li>8. Update PJ-3536 footprint</li> <li>9. Update pcb antenna footprint</li> <li>10.C183 changed to 1210 chip package</li> <li>11.Add the pull on resistor in sd</li> </ol>	

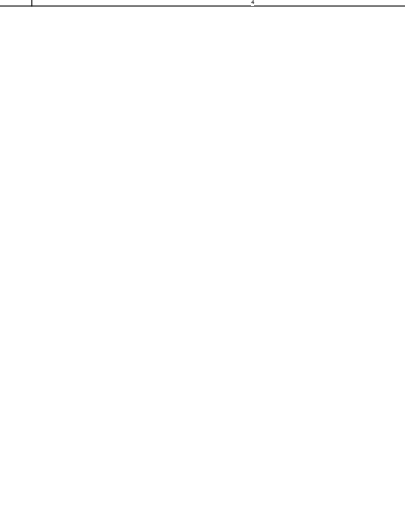
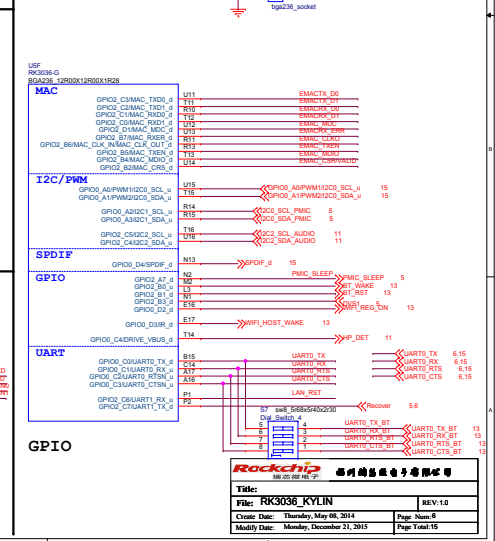
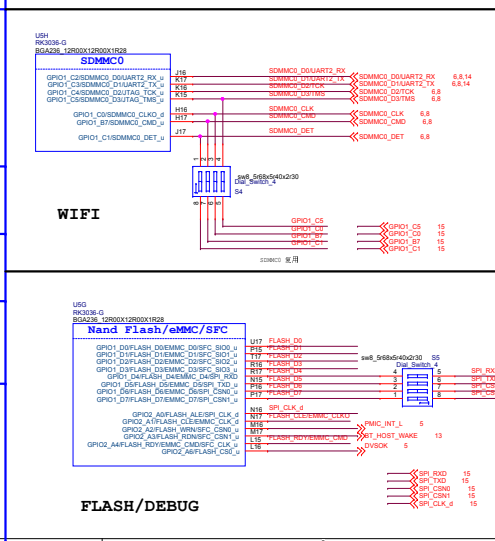
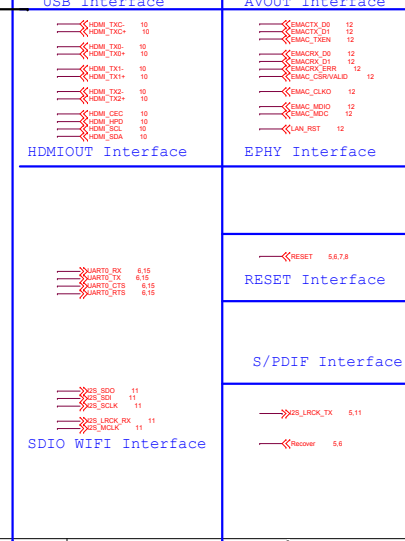
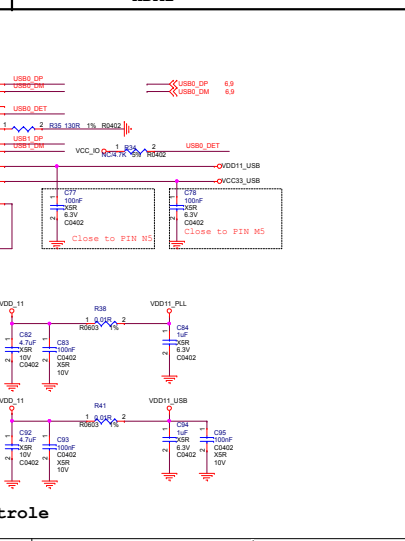
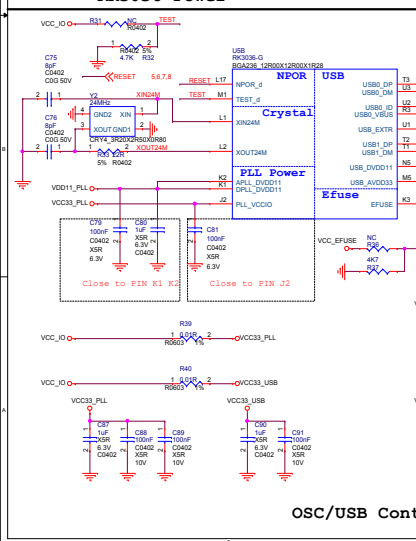
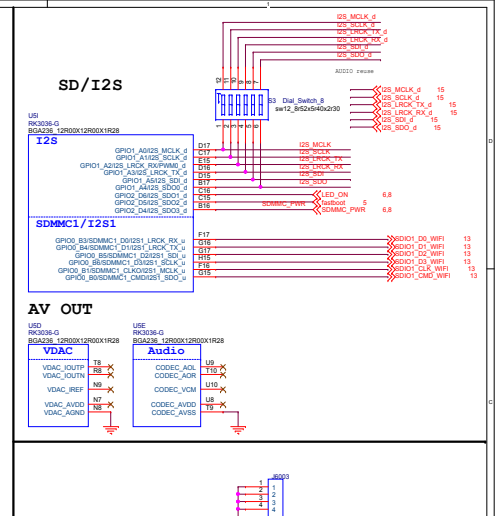
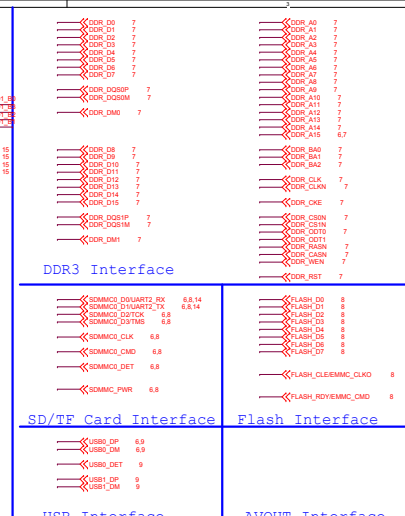
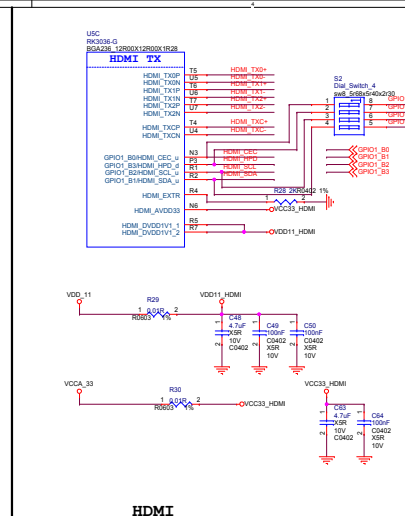
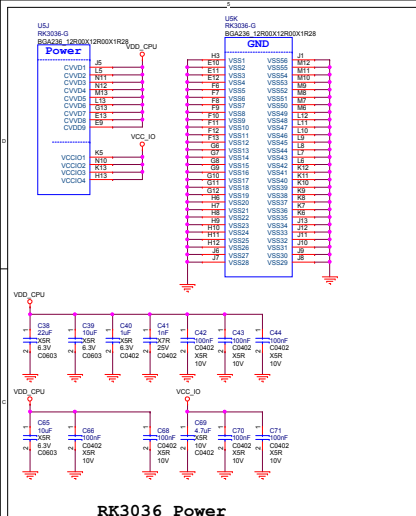


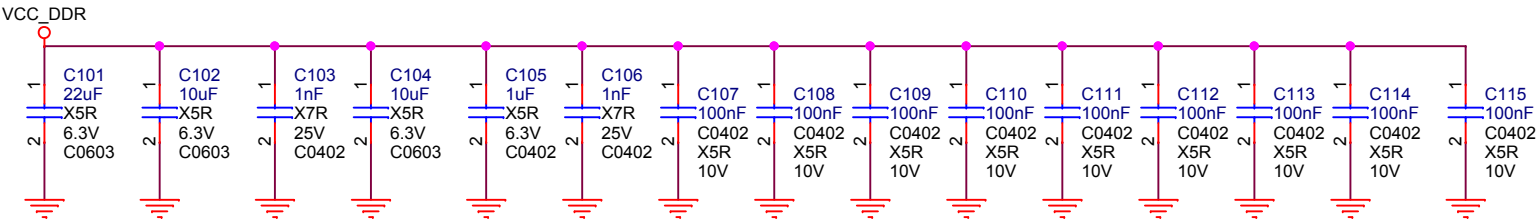
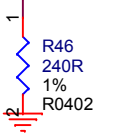
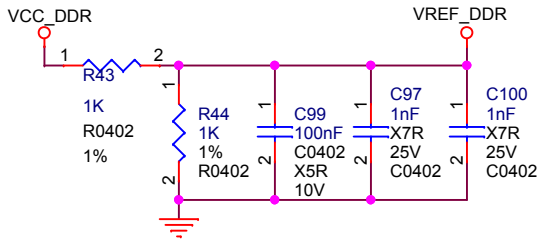
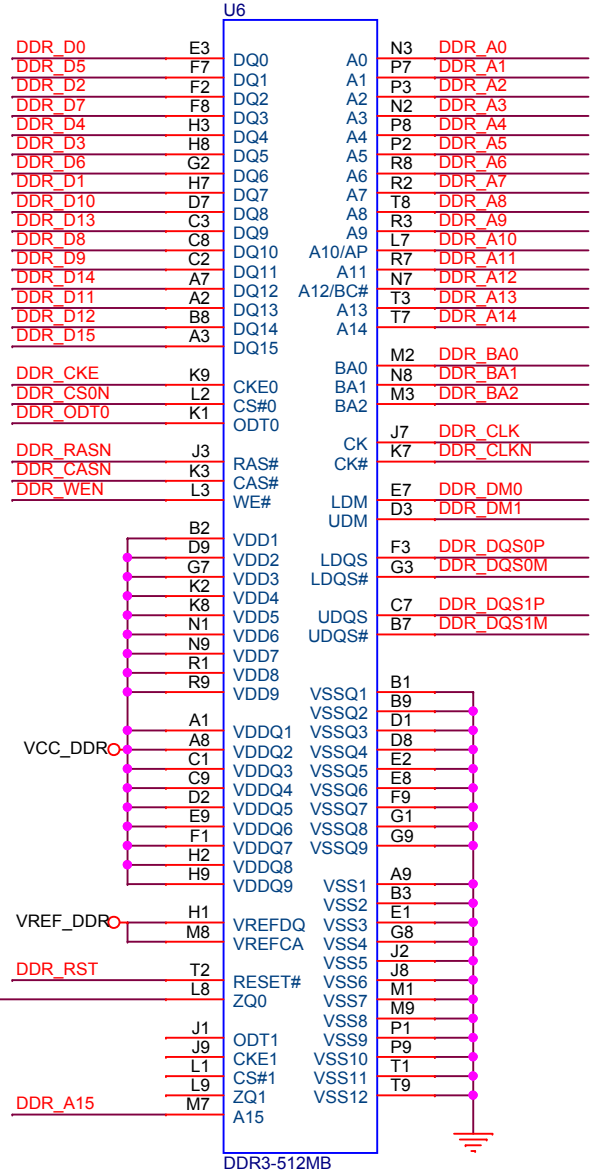
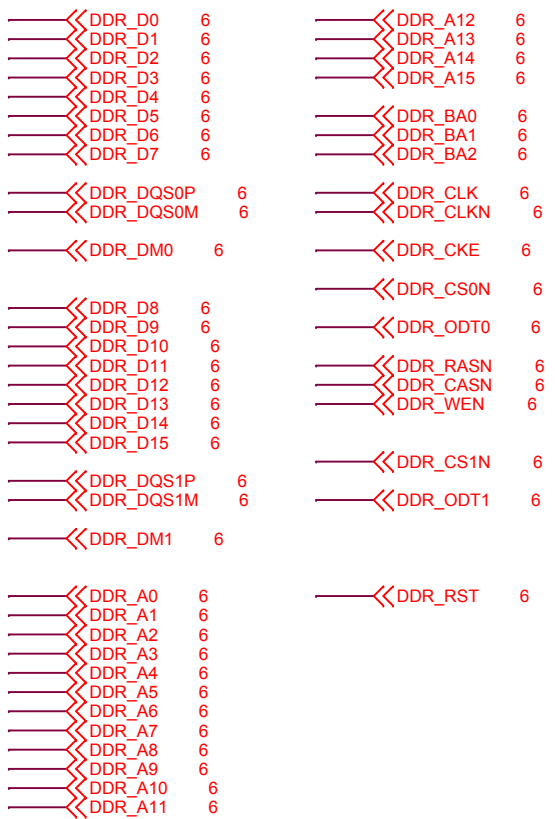
PMU TIMING

	Power On Sequence	Preset Voltage	Power On Sequence	Preset Voltage	Power On Sequence	Preset Voltage	Power On Sequence	Preset Voltage		
Boot1, Boot0	00		01		10		11			
	B*	C*	B*	C*	B*	C*	B*	C*		
BUCK1	4	1.1V/ON	4	1.2V/ON	4	1.0V/ON	2	2	1.0V/ON	1.0V/ON
BUCK2	5	1.1V/ON	5	1.2V/ON	4	1.0V/ON	3	3	1.0V/ON	1.0V/ON
BUCK3	2	X*/ON	2	X*/ON	3	X*/ON	4	4	X*/ON	X*/ON
BUCK4	1	3.0V/ON	1	3.0V/ON	1	3.0V/ON	7	6	3.3V/ON	1.8V/ON
LDO1		3.3V/OFF		3.3V/OFF	1	3.3V/ON	6	7	3.3V/ON	3.3V/ON
LDO2		3.3V/OFF	2	3.3V/ON		3.3V/OFF			1.8V/OFF	1.8V/OFF
LDO3	3	1.1V/ON	3	1.2V/ON	2	1.0V/ON	1	1	1.0V/ON	1.0V/ON
LDO4	3	2.5V/ON		2.5V/OFF	2	1.8V/ON			3.3V/OFF	3.3V/OFF
LDO5		2.8V/OFF		2.8V/OFF		2.8V/OFF	8		3.3V/ON	3.3V/OFF
LDO6		1.2V/OFF		1.2V/OFF		1.2V/OFF			1.8V/OFF	1.8V/OFF
LDO7		1.8V/OFF		1.8V/OFF		1.8V/OFF	5		1.8V/ON	1.8V/OFF
LDO8		3.3V/OFF		1.8V/OFF		3.3V/OFF			3.3V/OFF	3.3V/OFF
SWITCH1	1	3.0V/ON	1	3.0V/ON	5	3.0V/ON	8		3.3V/ON	3.3V/OFF
SWITCH2		3.0V/OFF		3.0V/OFF		3.0V/OFF			1.8V/OFF	1.8V/OFF









**Rackchip** 瑞芯微电子 福州瑞芯微电子股份有限公司

**Title:** DDR3

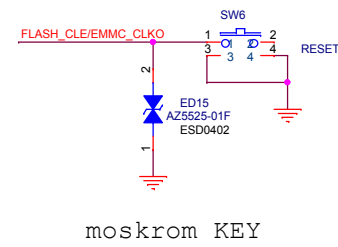
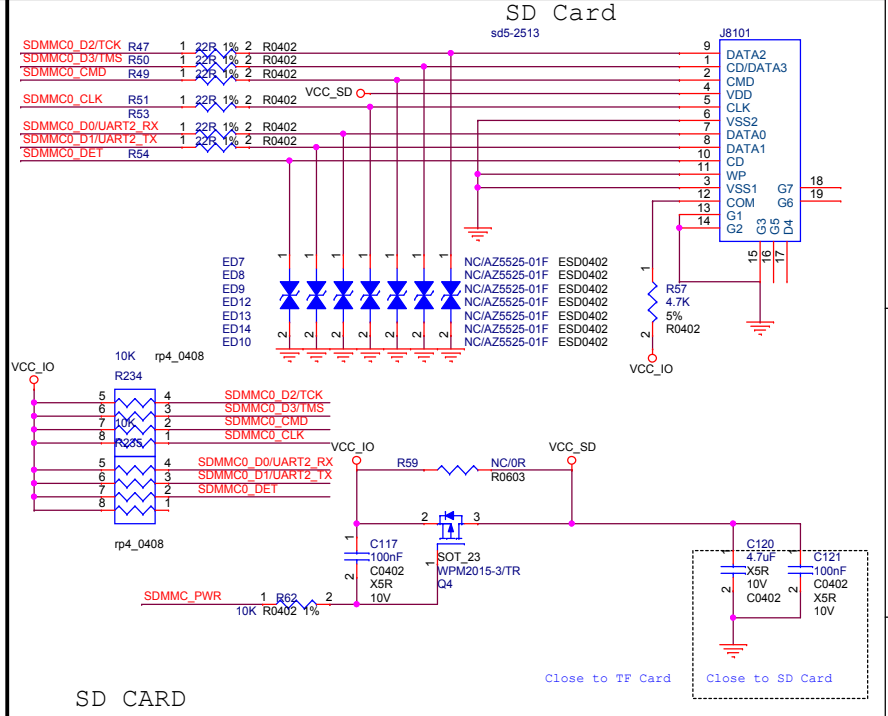
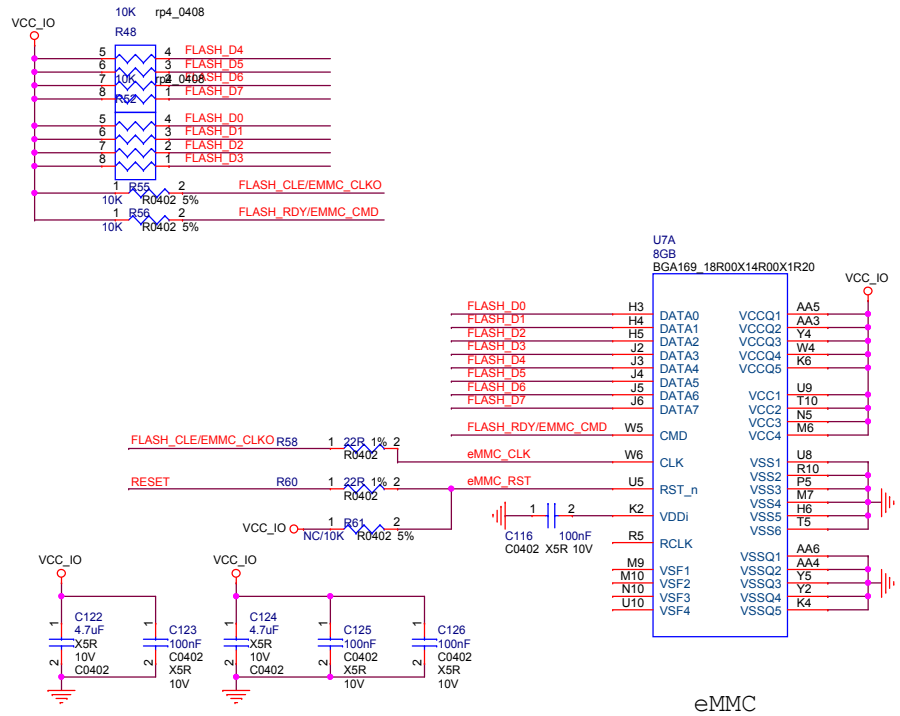
**File:** RK3036\_KYLIN

REV:1.0

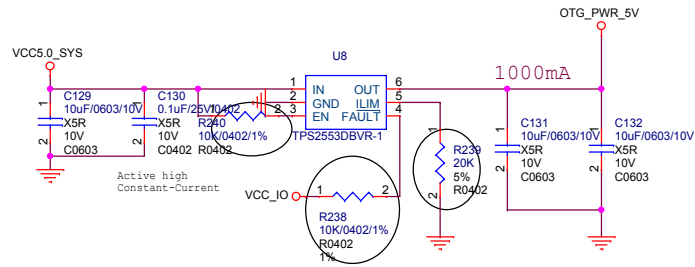
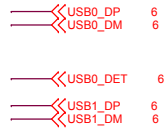
Create Date: Tuesday, November 09, 2010 Page Num:7

Modify Date: Monday, December 21, 2015 Page Total:15

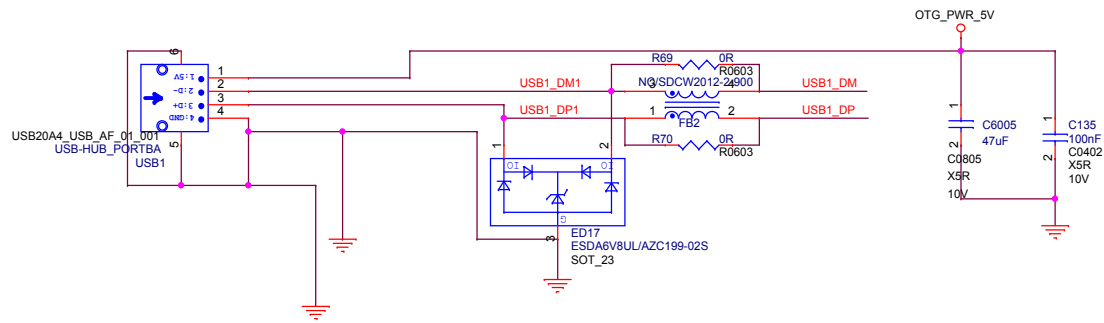
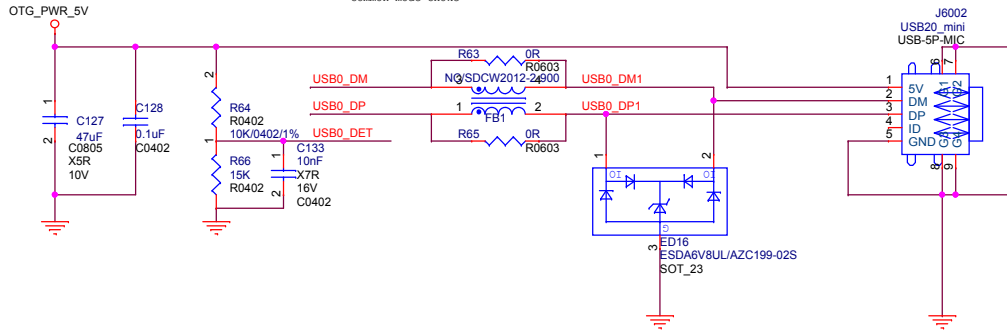
- << SDMMC0\_D0/UART2\_RX 6,14
- << SDMMC0\_D1/UART2\_TX 6,14
- << SDMMC0\_D2/TCK 6
- << SDMMC0\_D3/TMS 6
- << SDMMC0\_CLK 6
- << SDMMC0\_CMD 6
- << SDMMC0\_DET 6
- << SDMMC0\_PWR 6
- << FLASH\_D0 6
- << FLASH\_D1 6
- << FLASH\_D2 6
- << FLASH\_D3 6
- << FLASH\_D4 6
- << FLASH\_D5 6
- << FLASH\_D6 6
- << FLASH\_D7 6
- << FLASH\_CLE/EMMC\_CLKO 6
- << FLASH\_RDY/EMMC\_CMD 6
- << RESET 5,6,7

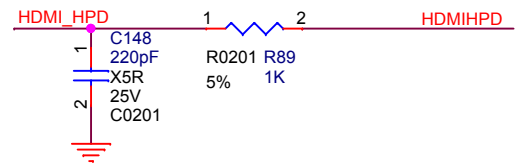
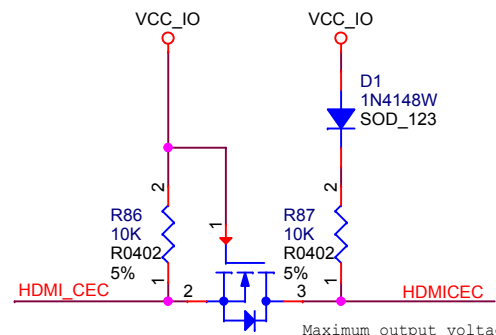
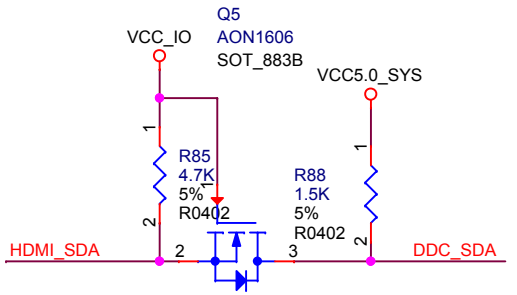
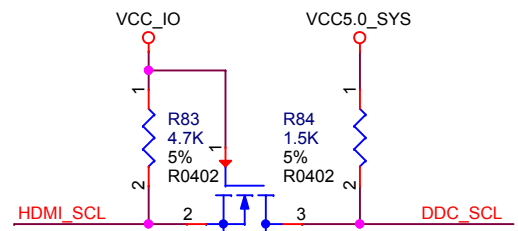
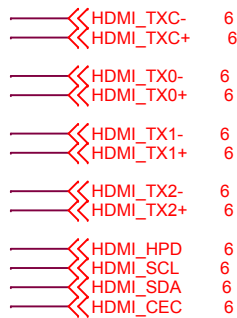




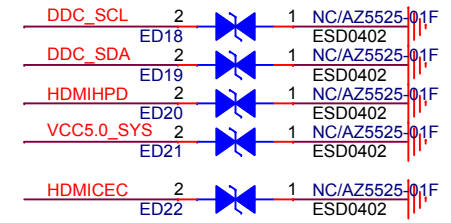
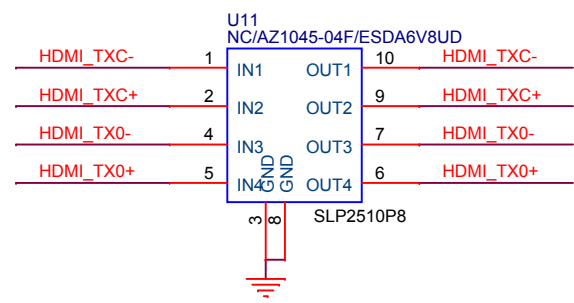
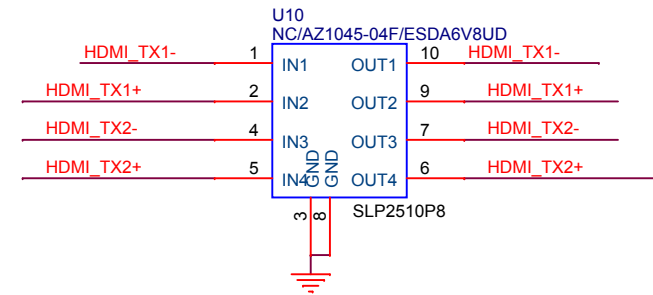
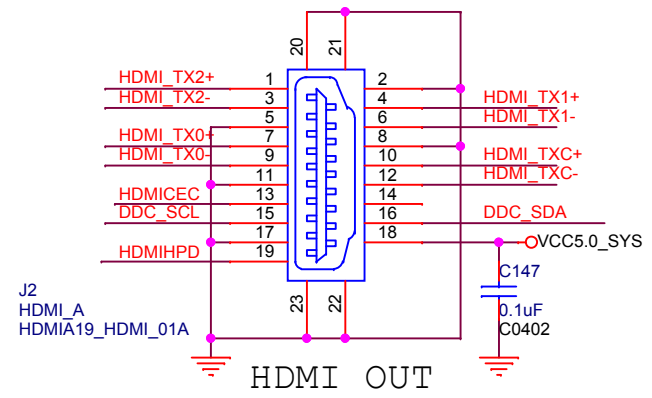


If consider EMI, which requires soldering  
Common mode Choke





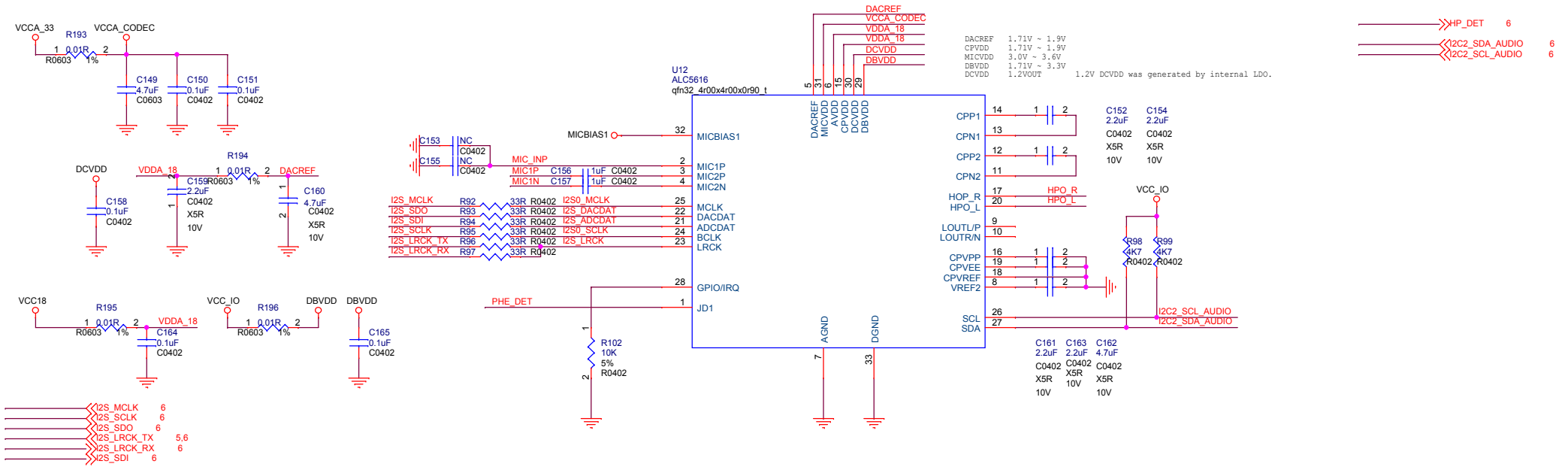
**HDMI-detect**



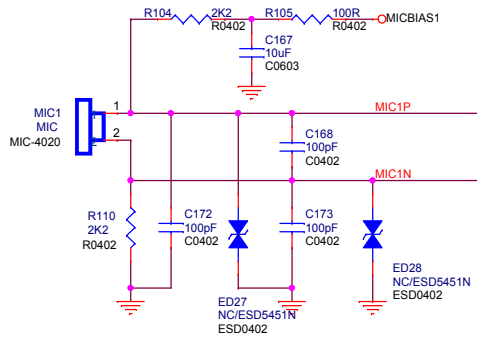
**Rackchip**  
 瑞芯微电子  
 福州瑞芯微电子技术有限公司

<b>Title: HDMI OUT</b>	
<b>File: RK3036_KYLIN</b>	REV:1.0
Create Date: Monday, July 02, 2012	Page Num:10
Modify Date: Monday, December 21, 2015	Page Total:15

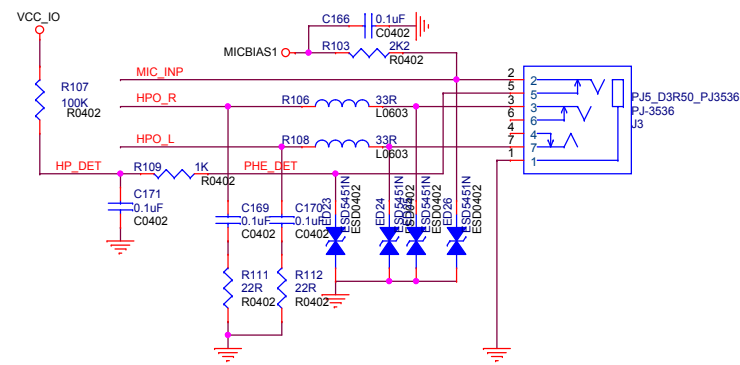
# CODEC

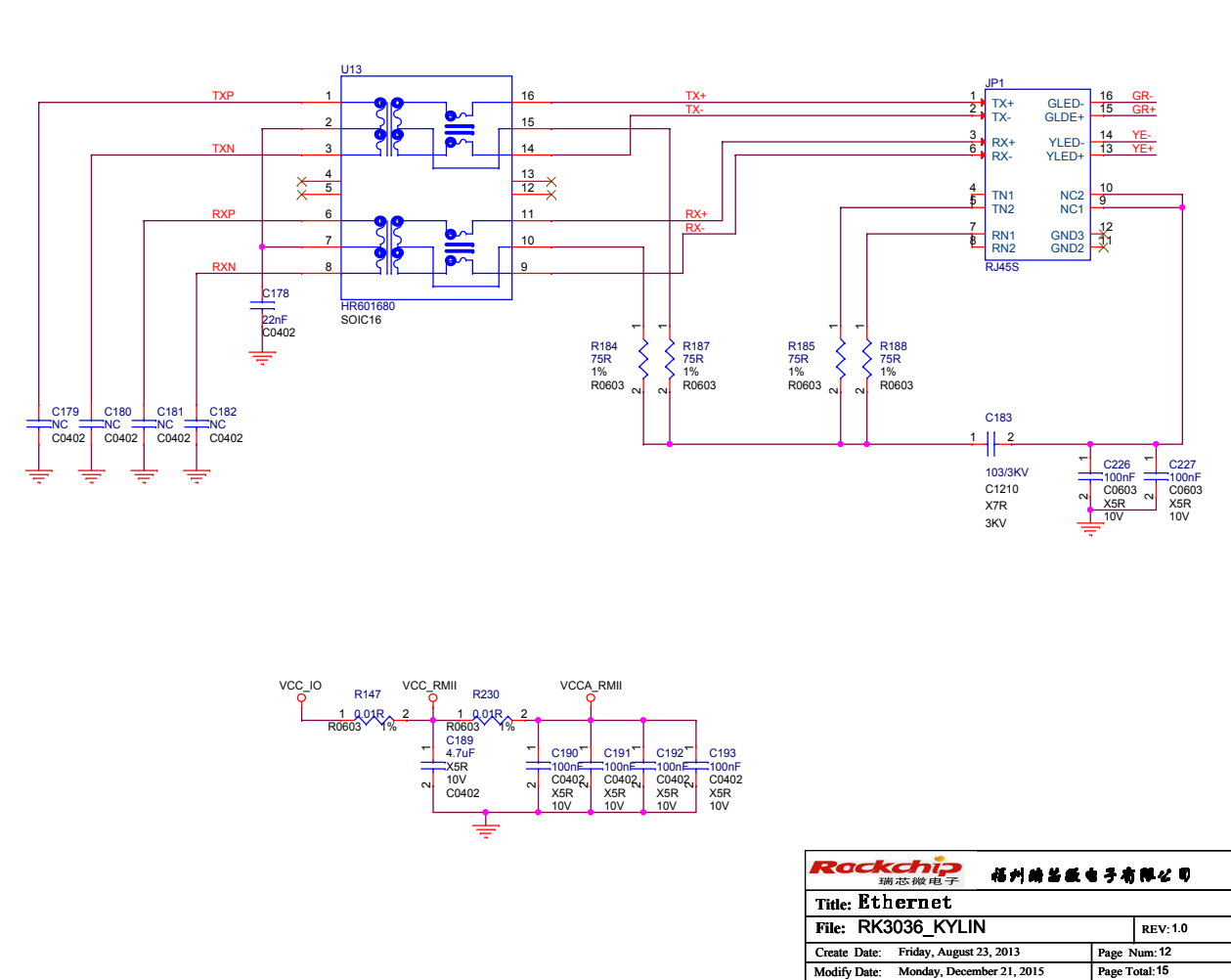
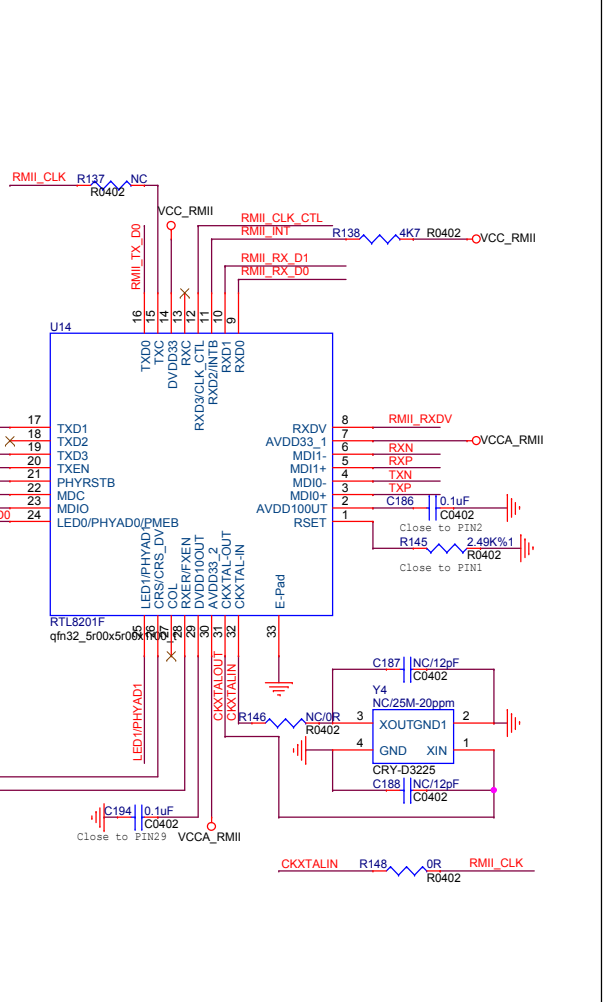
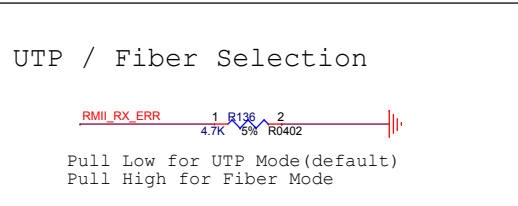
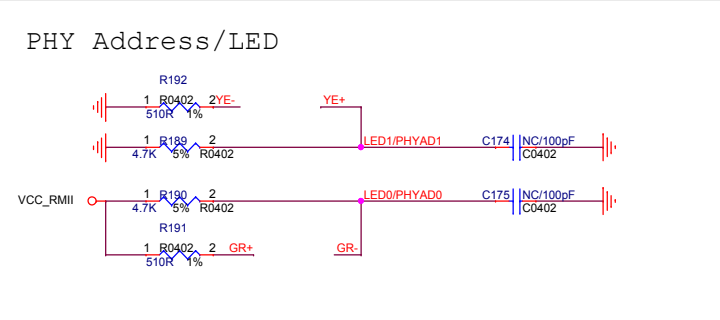
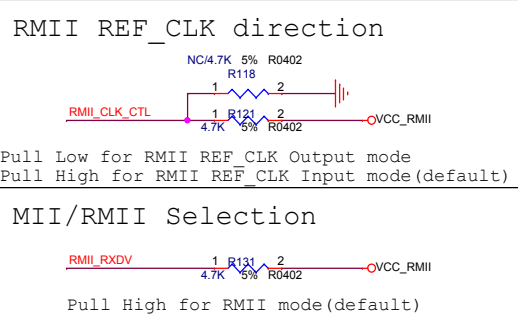
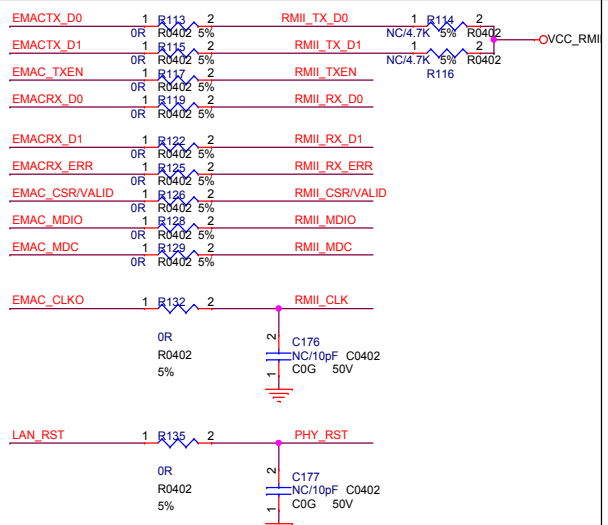


# MIC

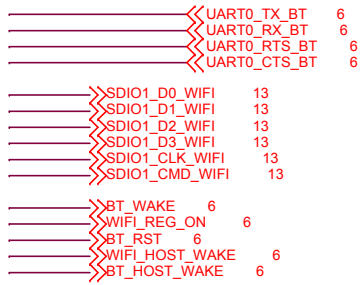


# EARPHONE

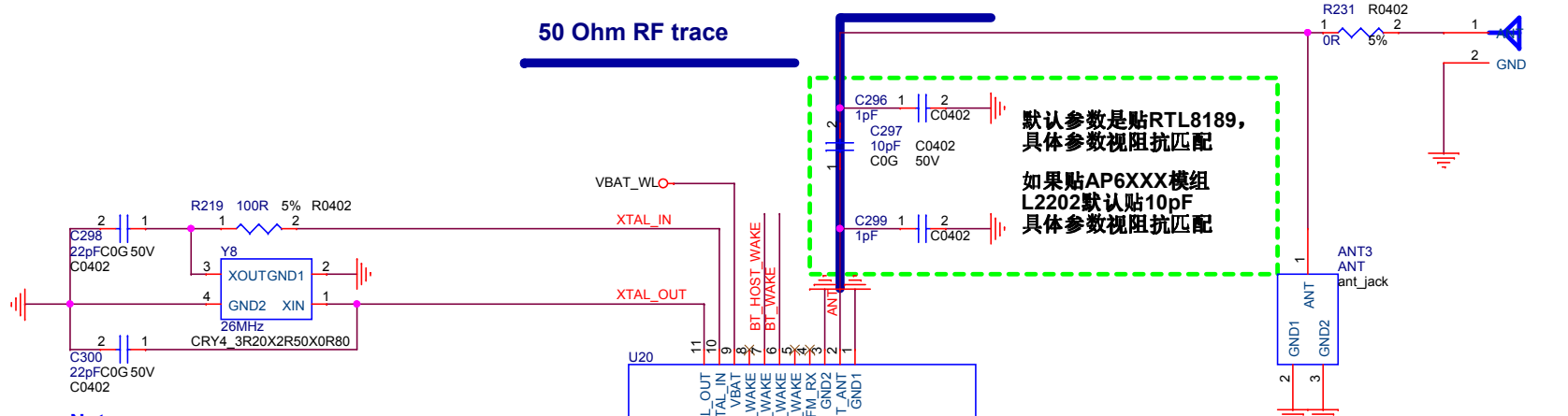




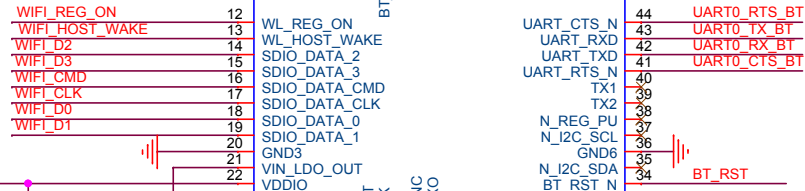
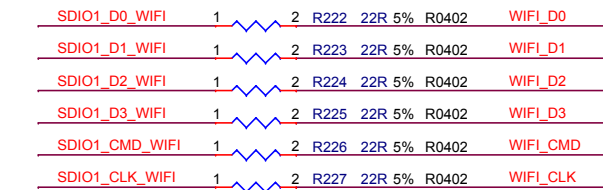
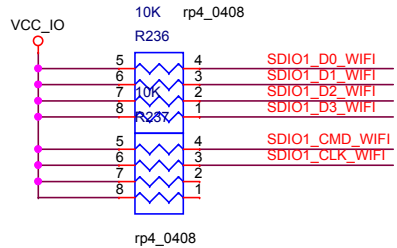
RTL8201F



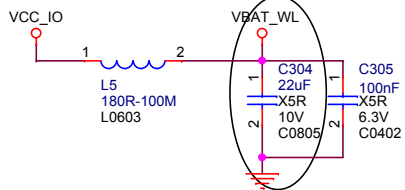
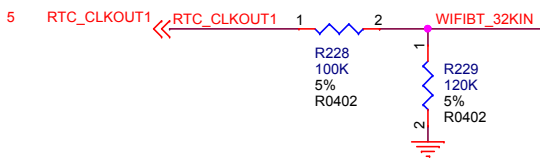
**50 Ohm RF trace**



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

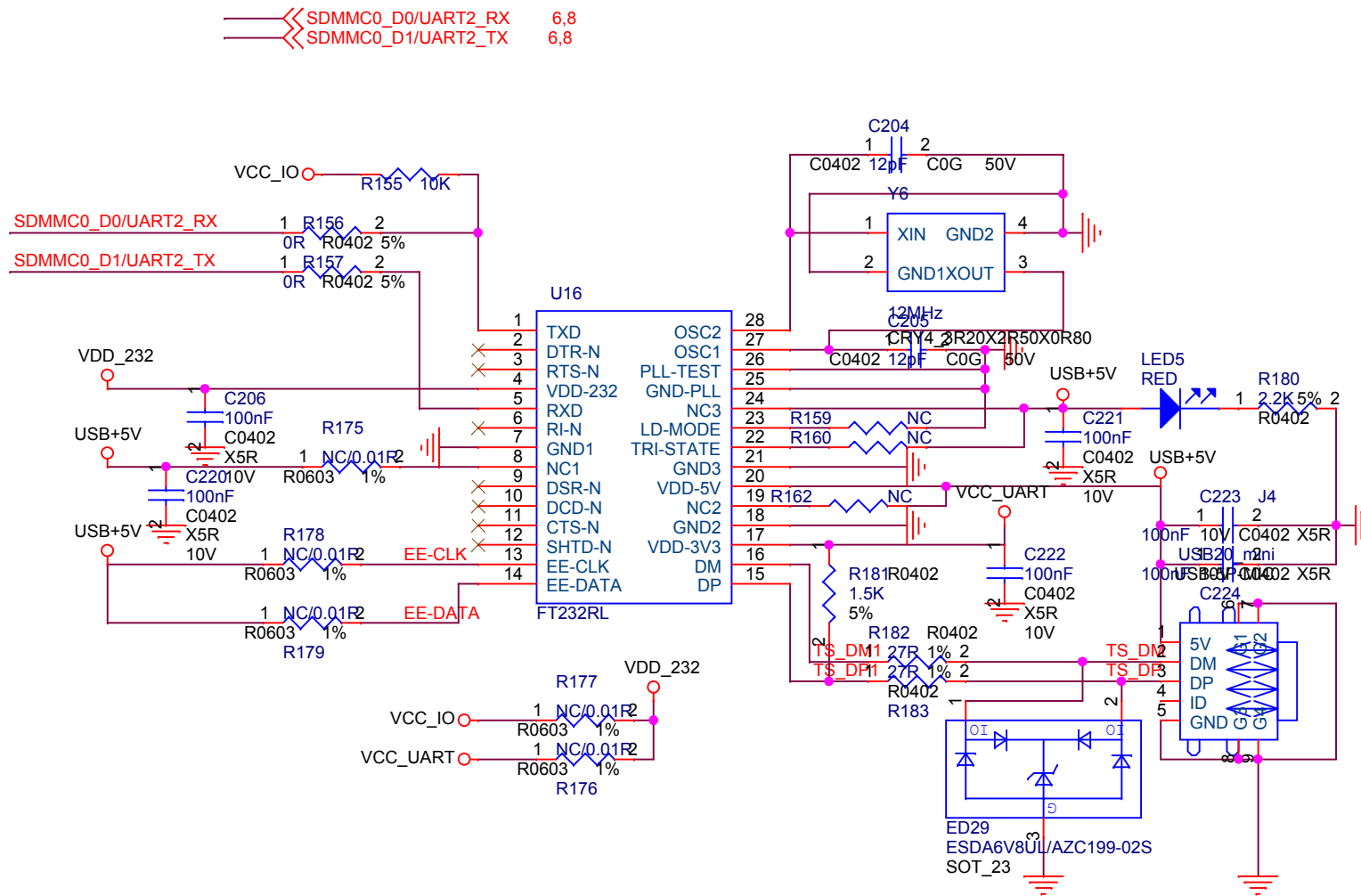


**Note:**  
RTL8189时  
PIN34是WIFI CS功能.  
PIN12是悬空脚.



峰值最大有600mA

<b>Rockchip</b> 瑞芯微电子		福州瑞芯微电子股份有限公司	
<b>Title: WIFI+BT-AP6212</b>			
<b>File: RK3036_KYLIN</b>			REV:1.0
Create Date: Wednesday, November 11, 2015	Page Num:13		
Modify Date: Monday, December 21, 2015	Page Total:15		



SDMMC0\_D0/UART2\_RX 6,8  
 SDMMC0\_D1/UART2\_TX 6,8

**Rockchip** 福州瑞芯微电子股份有限公司  
 瑞芯微电子

**Title: Debug**

**File: RK3036\_KYLIN** REV:1.0

Create Date: Tuesday, May 20, 2014 Page Num:14

Modify Date: Monday, December 21, 2015 Page Total:15

