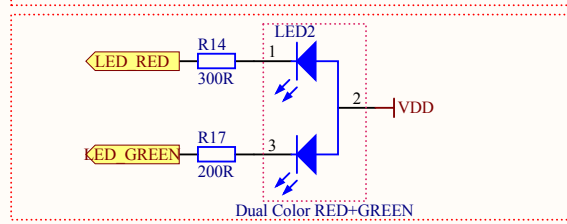
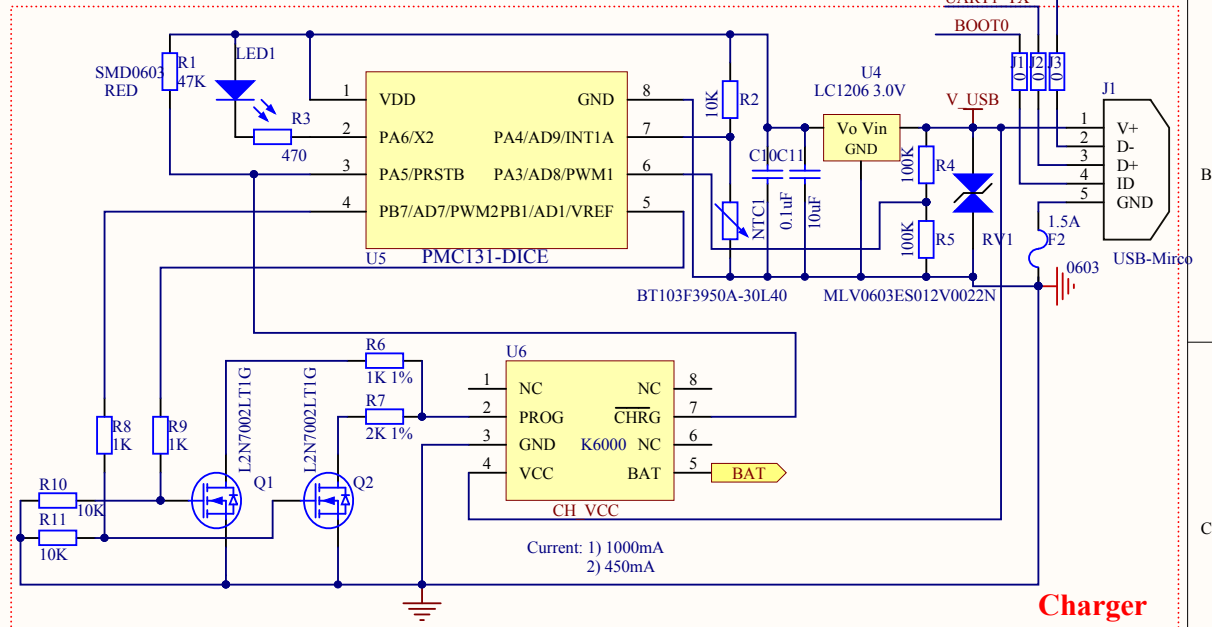
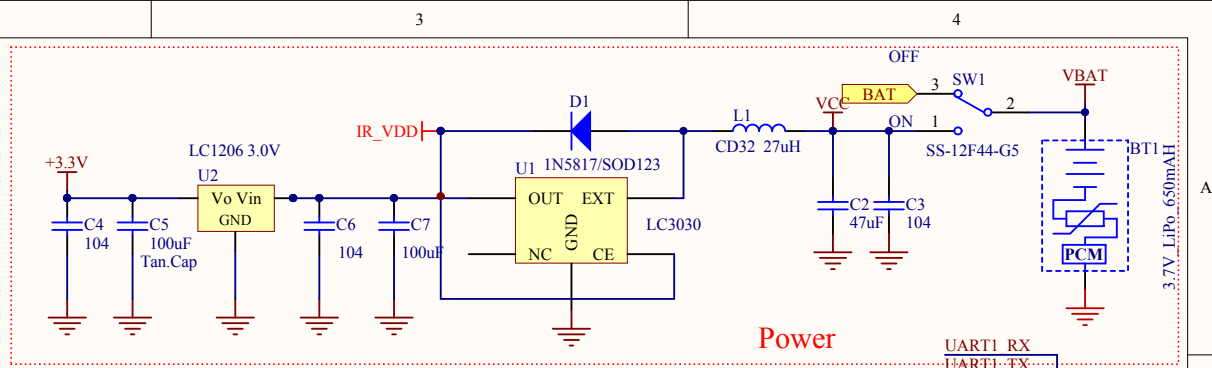
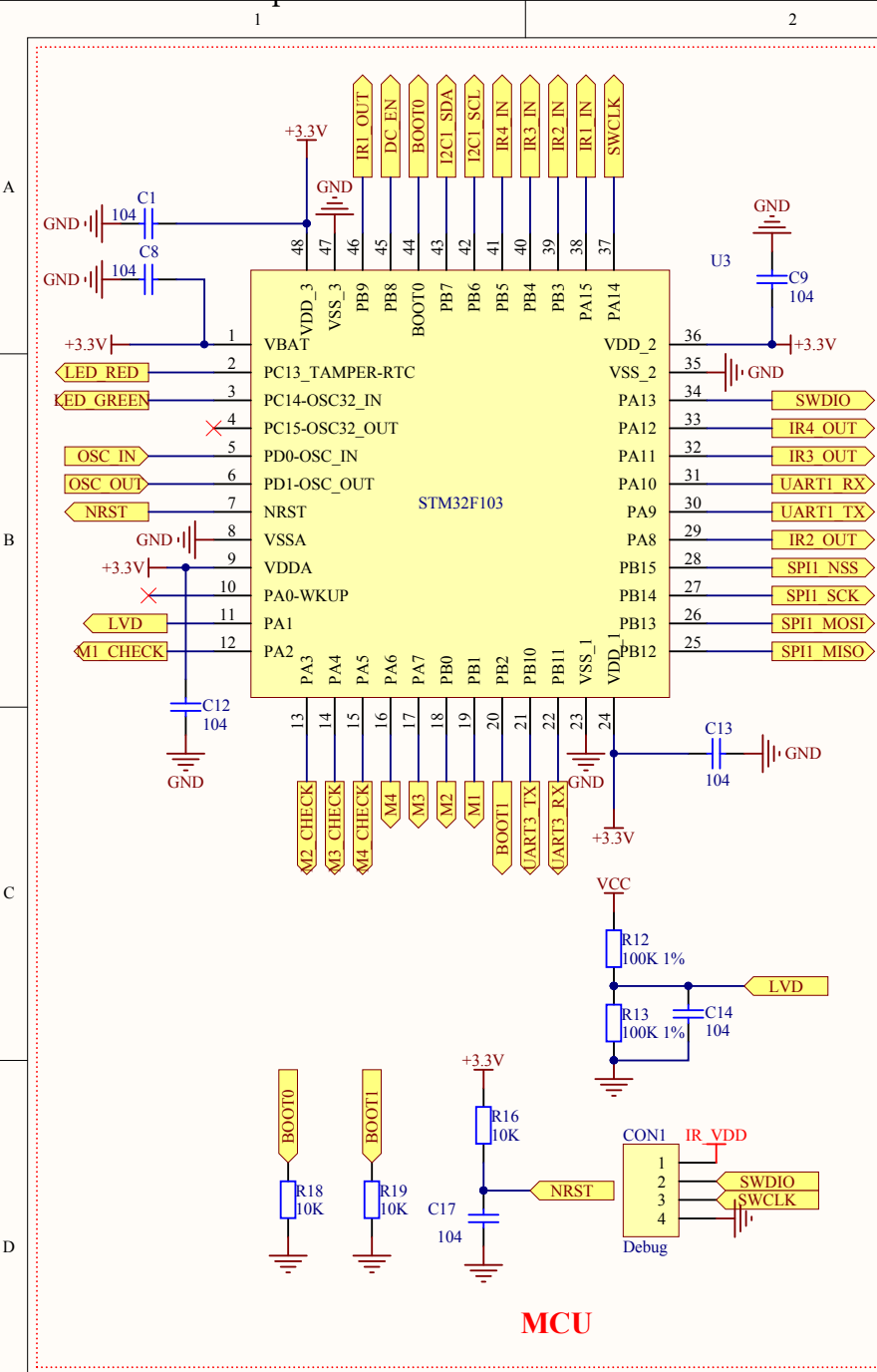
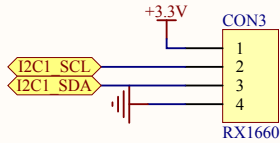


2.4GHz RF portion

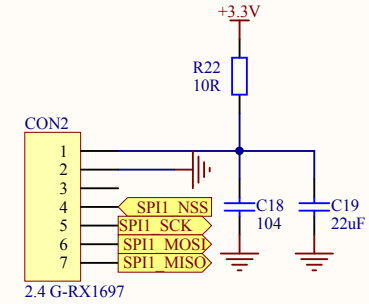


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Spin Master DongGuan Technical Consultancy Servicing Co. Ltd

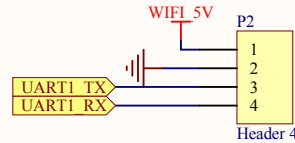
Drawing By: Owen Lu	Date: 2016-3-19	Title: Helix Sentinel RX
Checked By:	Date:	Model NO. #44578
Approved By:	Date:	Size
		Sheet 1 of 4
		Revision R06



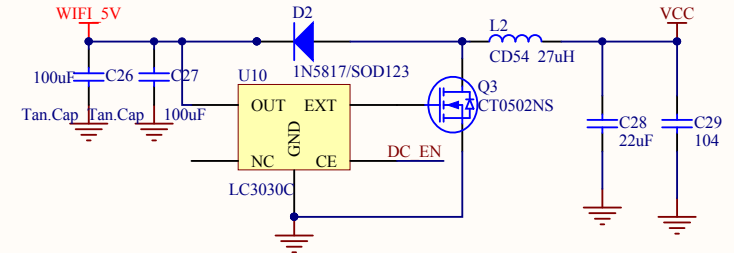
Gyro+Pressure Sensor module



2.4g RF module



WIFI Power



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Spin Master DongGuan Technical Consultancy Servicing Co. Ltd

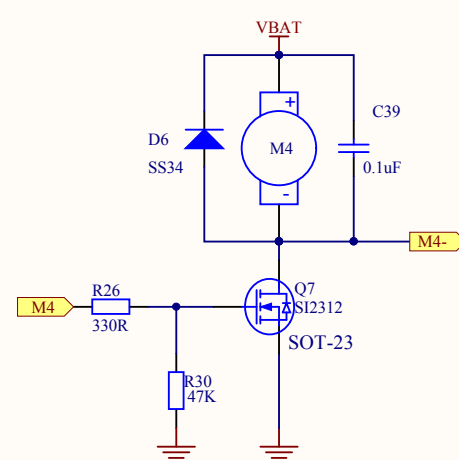
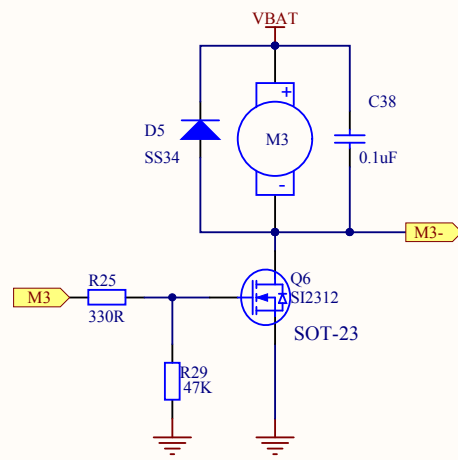
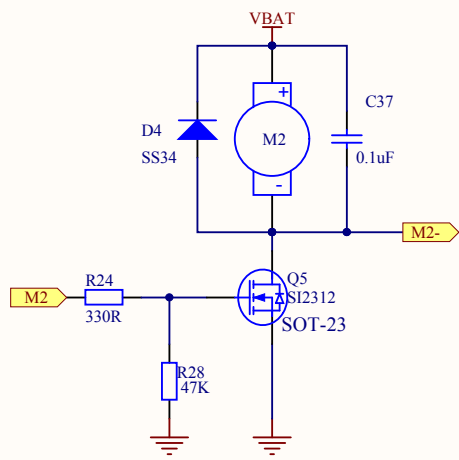
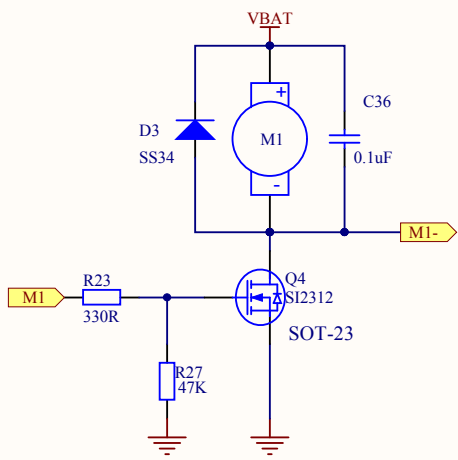
Drawing By: Owen Lu	Date: 2016-3-19	Title: Helix Sentinel RX	
Checked By:	Date:	Model NO. #44578	
Approved By:	Date:	Size	Sheet 2 of 4 Revision R06

1

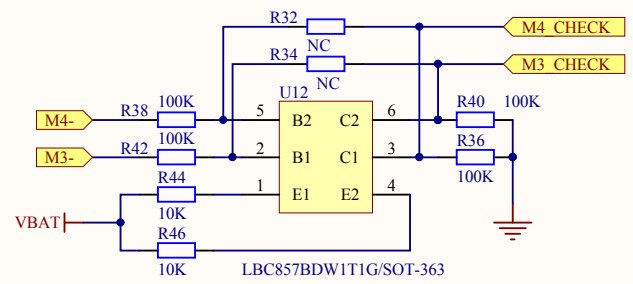
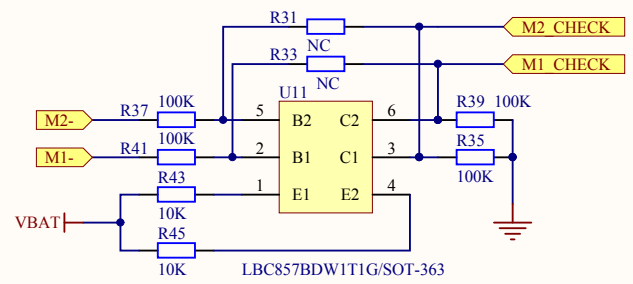
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3

4



Motor output



Stall protection

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Spin Master DongGuan Technical Consultancy Servicing Co. Ltd

Drawing By: Owen Lu	Date: 2016-3-19	Title: Helix Sentinel RX	
Checked By:	Date:	Model NO. #44578	
Approved By:	Date:	Size	Sheet 3 of 4
			Revision R06

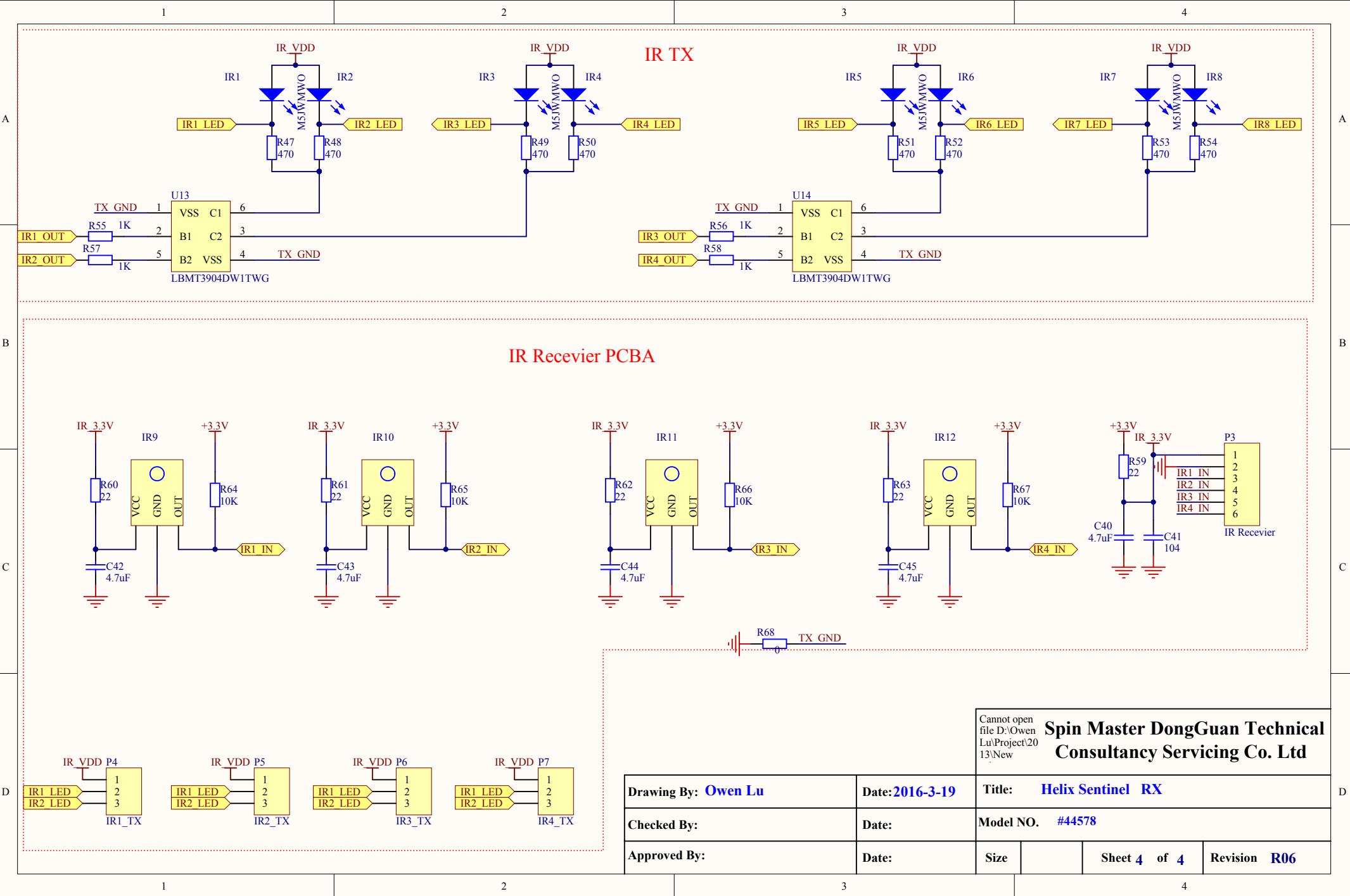
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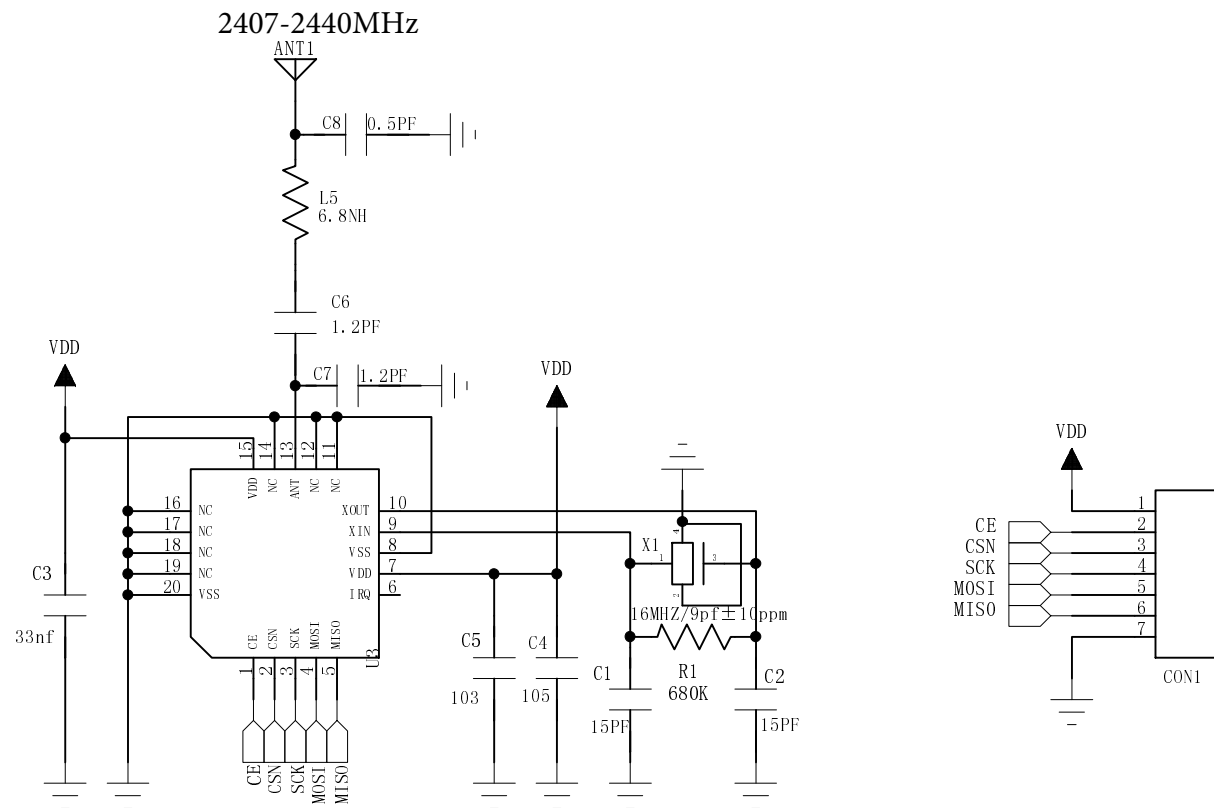
2.4GHz RF portion



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Spin Master DongGuan Technical Consultancy Servicing Co. Ltd

Drawing By: Owen Lu	Date: 2016-3-19	Title: Helix Sentinel RX	
Checked By:	Date:	Model NO. #44578	
Approved By:	Date:	Size	Sheet 4 of 4
			Revision R06

2.4GHz RF portion



RUIXING TECHNOLOGY CO, LTD

TEL:0755-25327583

FAX: 0755-83798209

www.ruixingtech.com

sunnyeung@ruixingtech.com

Project Name: 2.4G Program

Part Name:

Revision: 1.0

Project No:

Prat No:

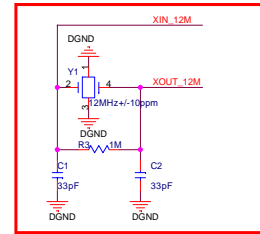
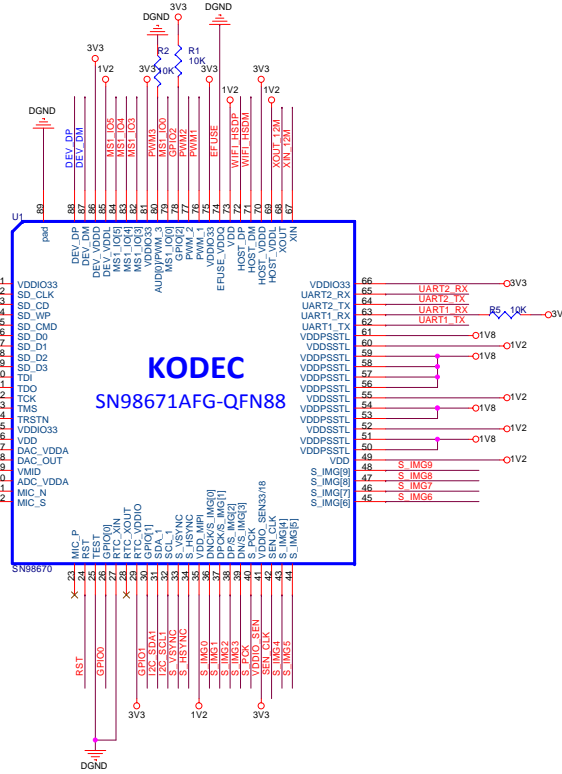
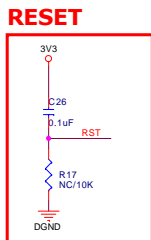
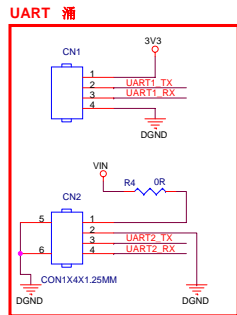
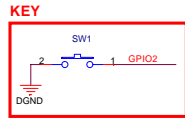
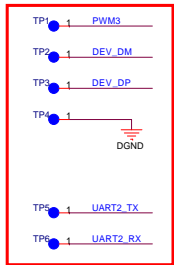
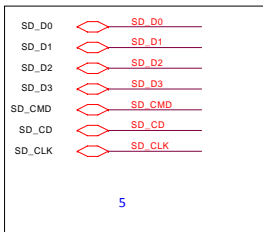
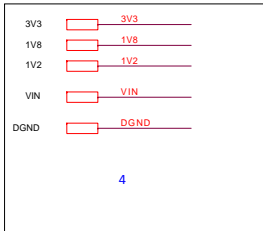
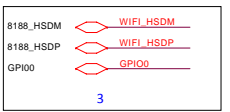
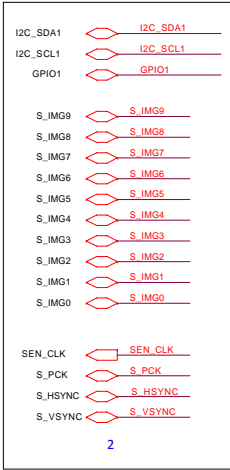
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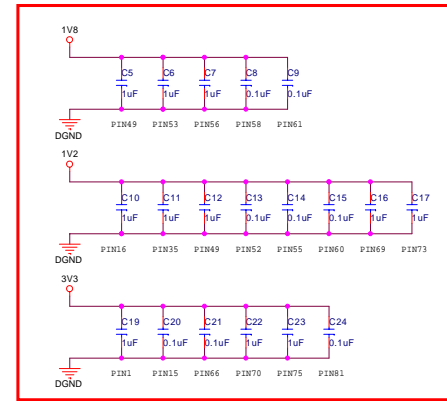
Drawn By: Liboyi

Date: 2015-5-16

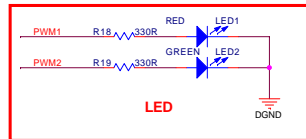
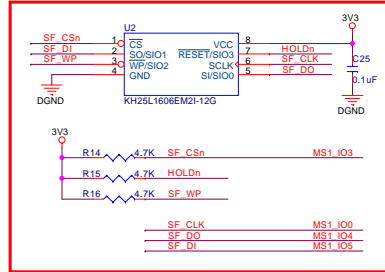
Wifi Portion



Close to IC

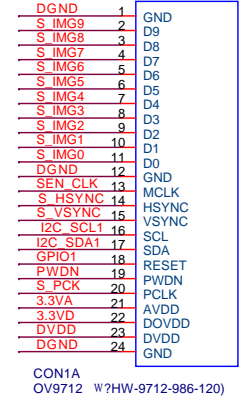
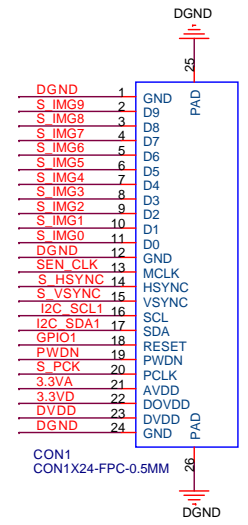
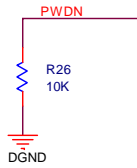
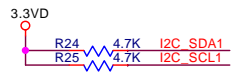
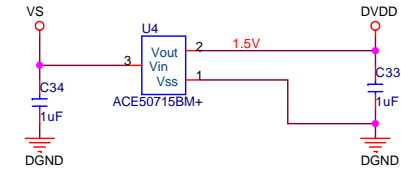
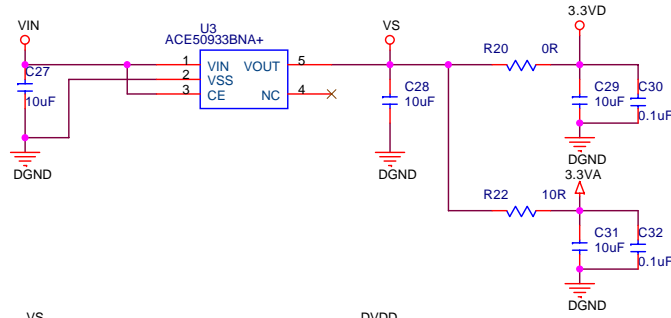
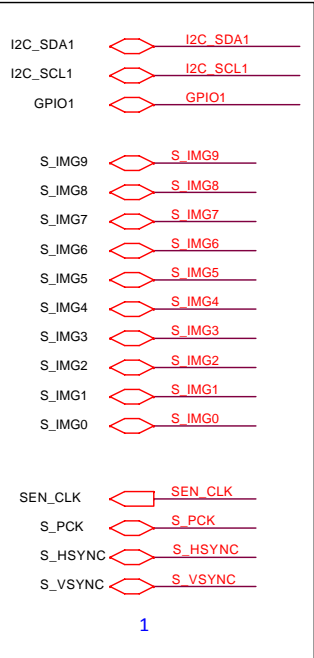
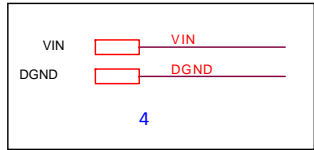


MS1 Serial Flash

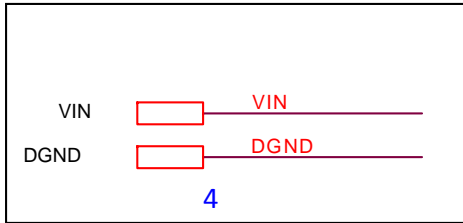
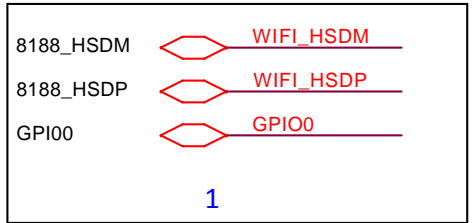
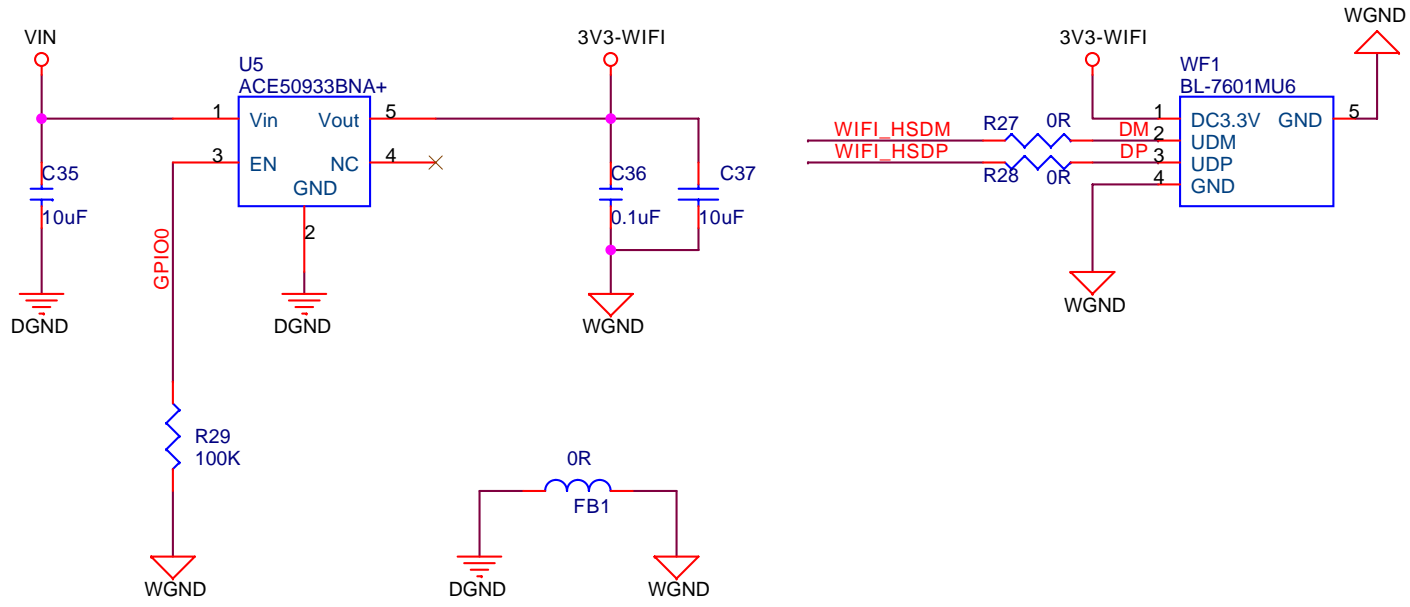


SN98670 IO口说明			
脚 槐味	I/O 口	设 兵δ	±缸
26	GPIO0	WiFi电源控制	H:Enable L:Disable
30	GPIO1	Sensor Reset	H:Enable L:Disable
78	GPIO2	系统参数重置	H:Disable L:Enable
76	PWM1	系 持甘键	H:Enable L:Disable
77	PWM2	系 持甘键	H:Enable L:Disable
80	PWM3	0 5	
79	MS1_IO0	SF_CLK	
82	MS1_IO3	SF_CSn	
83	MS1_IO4	SF_DO	
84	MS1_IO5	SF_DI	

Wifi Portion

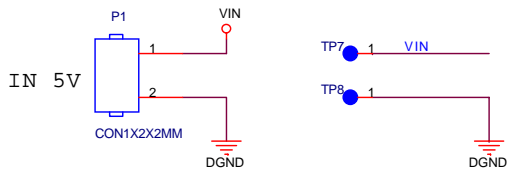
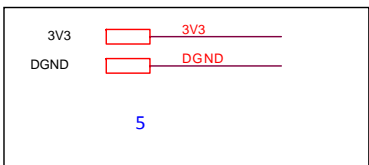
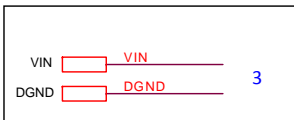
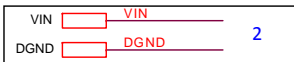
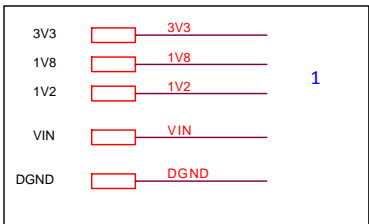


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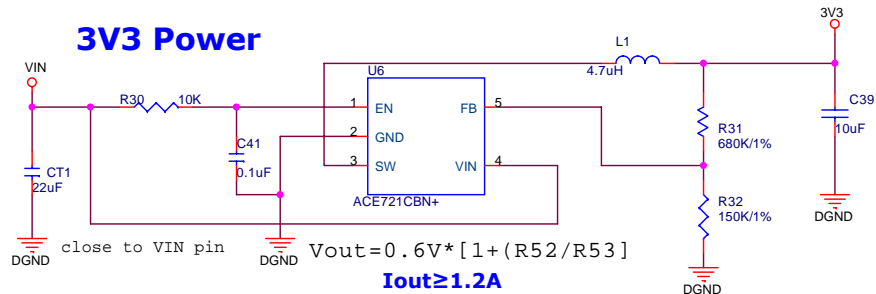


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Size	Document Number	Rev
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Date:	Tuesday, May 24, 2016	Sheet 3 of 5

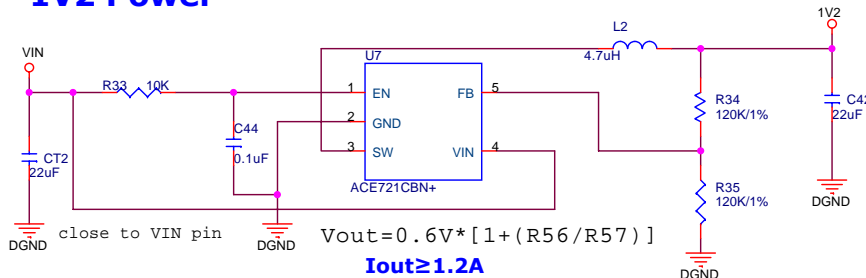
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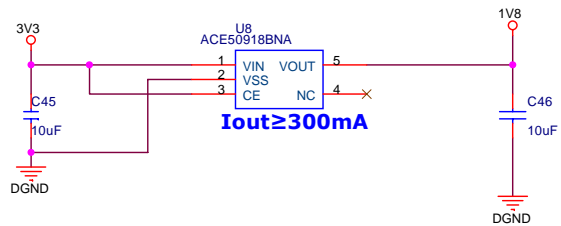
3V3 Power



1V2 Power

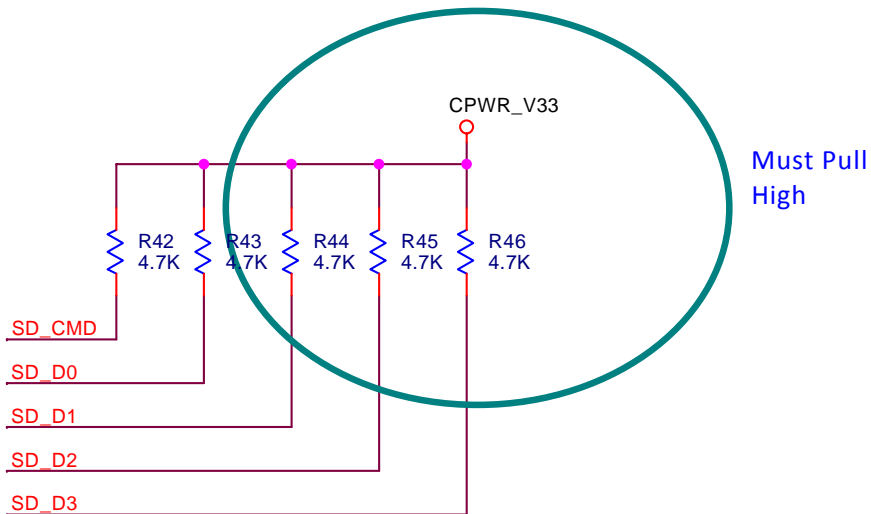
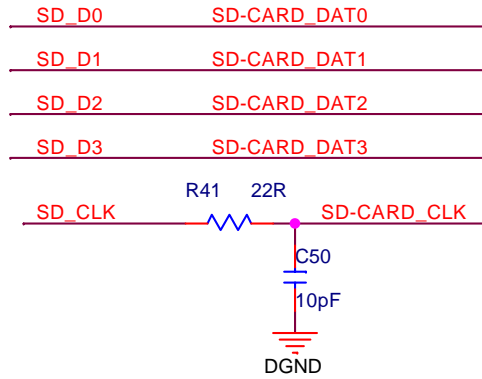
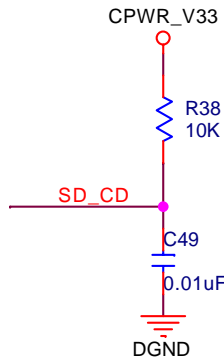
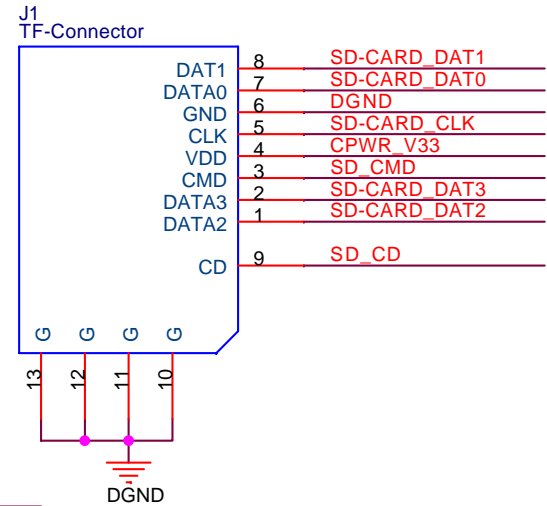
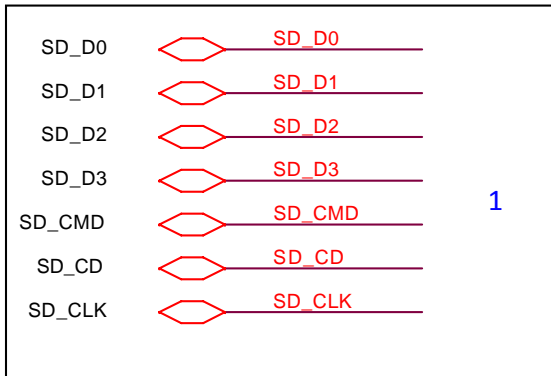
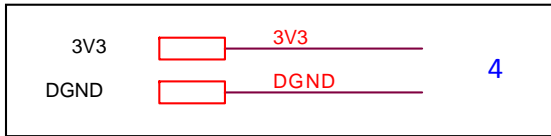


1V8 Power



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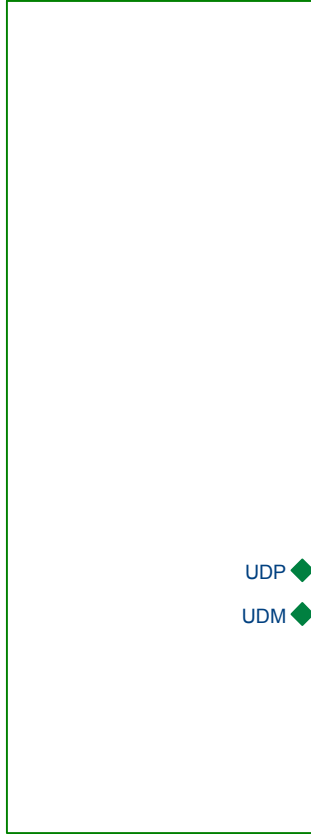
Wifi Portion



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Size	Document Number	Rev
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Date:	Tuesday, May 24, 2016	Sheet 5 of 5

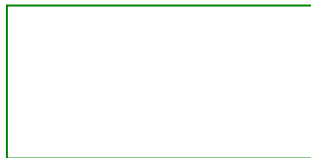
Wifi Portion

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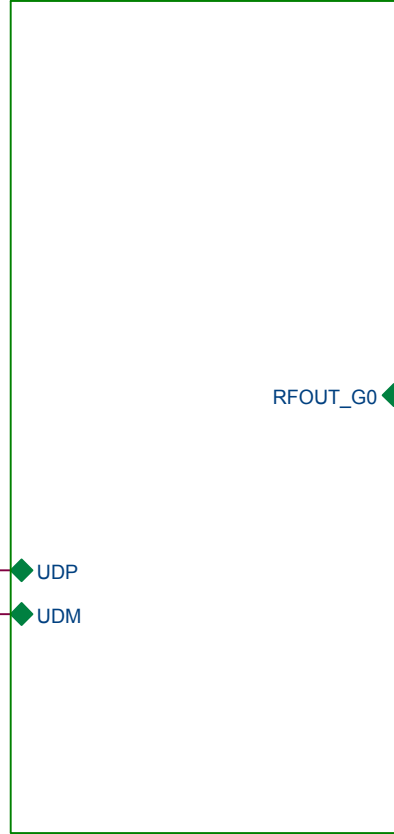
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4-BLOCK-1X1-24G



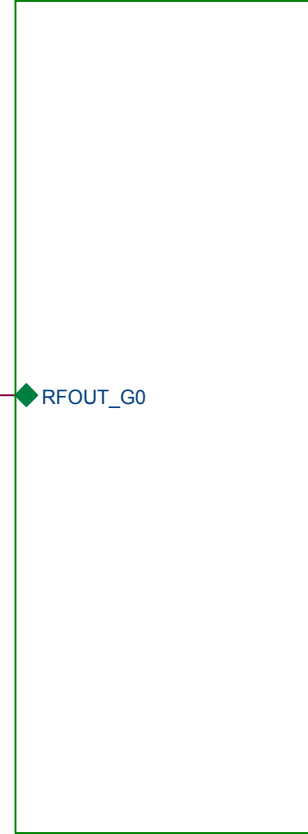
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2-MT7601-WLAN



2-MT7601-WLAN

1-FrontEnd



1-FrontEnd

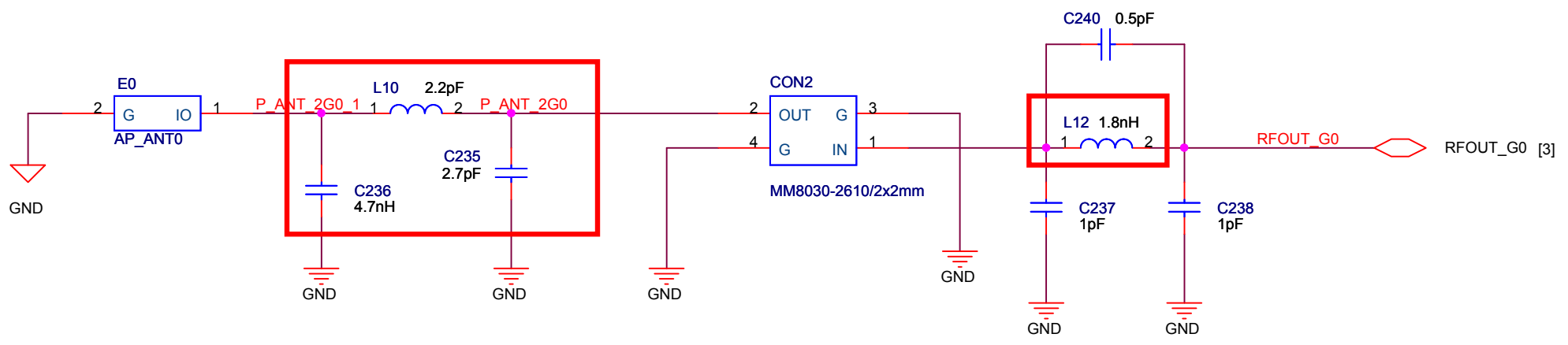


Filename: **MediaTek Confidential**

PEN-MT7601U-V32-QFN40-11X17-20130322.DSN

MediaTek Inc.		<small>No.1, Dusing Rd. 1, Hsinchu Science Park Hsinchu, Taiwan 300, R.O.C.</small>		<small>TEL:+886-3-567-0766 Fax:+886-3-578-7610</small>	
		PEN-MT7601U			
MEDIA TEK	Size	Document Number	Drawn	Rev	
	A	PEN-MT7601U-V32-11X17.SCH	Alex	3.2	
Date: Friday, March 22, 2013			Sheet	1 of	5

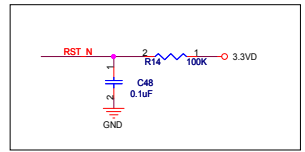
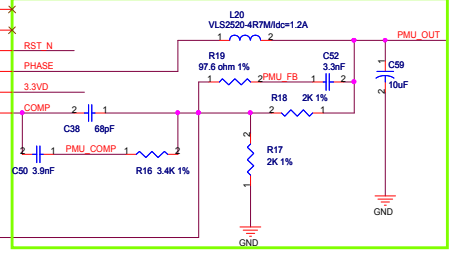
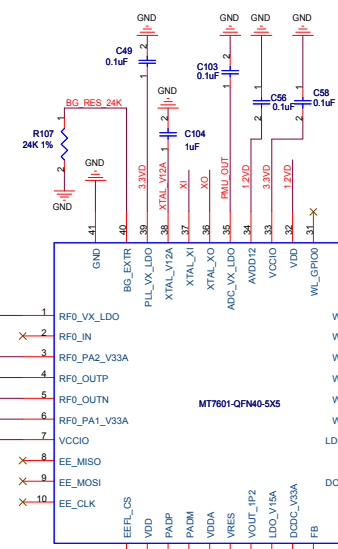
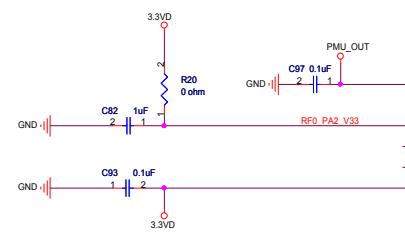
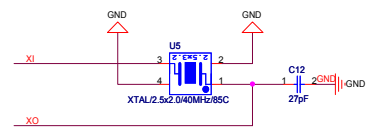
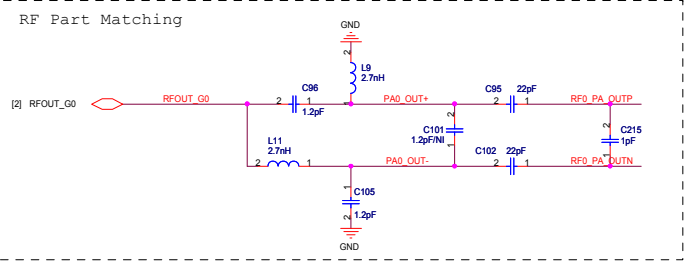
Wifi Portion



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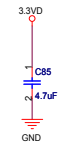
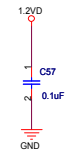
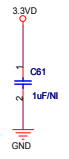
MediaTek Inc.		No.1, Dusing Rd. 1, Hsinchu Science Park Hsinchu, Taiwan 300, R.O.C.		TEL:+886-3-567-0766 Fax:+886-3-578-7610	
MEDIA/TEK		Title Mini MT7601U			
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		Date: Friday, March 22, 2013	Sheet 2	of 5	

Wifi Portion



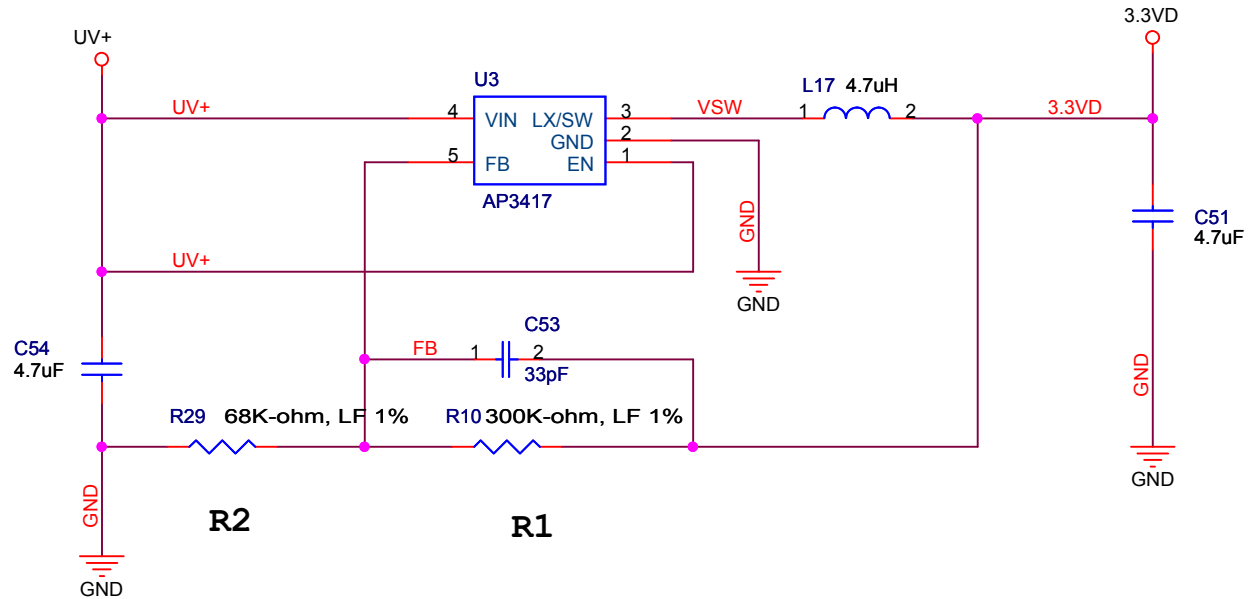
Boot Strapping (Internal Pull High/Low)

EE_MISO	0 : 40MHz Xtal 1 : 20MHz Xtal
WL_GPIO4	0 : E-fuse 1 : EEPROM
WL_GPIO6	USB Mode
EE_CLK	001: Normal Boot from ROM
EE_MOSI	010: Normal Boot from Serial Flash 011: Normal Boot from Serial EEPROM 100: SPI mode Boot from RAM 101: Scan mode + bypass PLL 110: Test mode 111: Test mode + bypass PLL



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Wifi Portion



$$V_o = 0.6 * (1 + R1/R2) = 0.6 * (1 + 300K / 68K) = 3.3V$$
 Step-Down Regulator, Vfb=0.6V, 1A, 1.8MHz, ADJ, LF



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MediaTek Inc.		No.1, Dusing Rd. 1, Hsinchu Science Park Hsinchu, Taiwan 300, R.O.C.		TEL: +886-3-567-0766 Fax: +886-3-578-7610	
MEDIA TEK	Title MT7601U				
	Size A	Document Number 3-USB.SCH	Drawn Alex	Rev 3.2	
	Date: Friday, March 22, 2013			Sheet	4 of 5