

01.Index
 02.Change List
 03.Block Diagram
 04.Power Tree-BaseBD
 05.Power
 06.RK3288 Power
 07.Camera-MIPI
 08.Camera-CIF
 09.LCM-eDP Panel
 10.LCM-MIPI Panel
 11.LCM-LVDS Panel
 12.AP6XXX-WIFI/BT
 13.3G-UNA
 14.Audio Codec-ALC3224
 15.TP COF
 16.TP COB-CT363
 17.TF Card
 18.HDMI
 19.AX88178A(USB-ETH)
 20.JM23029(USB-SATA)
 21.MXM-CONNECTOR

I2C address(7bit):

1.I2C0 POWER:
 ACT8846 0x5a
 CW2013 0x62
 HYM8563 0x51
 RT5C619 0x32
 SYR827 0x40
 SYR828 0x41

2.I2C1 Sensor:
 CM3218 0x10,0x0c
 LSM330TR G:0x6a A:0x1e
 MMA8452Q 0X1d
 MPU6050C 0x68
 LIS3DH 0X19
 LSM303D 0X1d

3.I2C2 Audio Codec:
 ALC3224 0x19
 ALC5623 0x1a
 ALC5631 0x1a
 ES8323 0x10

4.I2C3 Camera:
 OV2659 0x30
 OV8825 0x36

5.I2C4 Touch:
 CT363 0x1b
 FT5506
 GSL3680 0x40



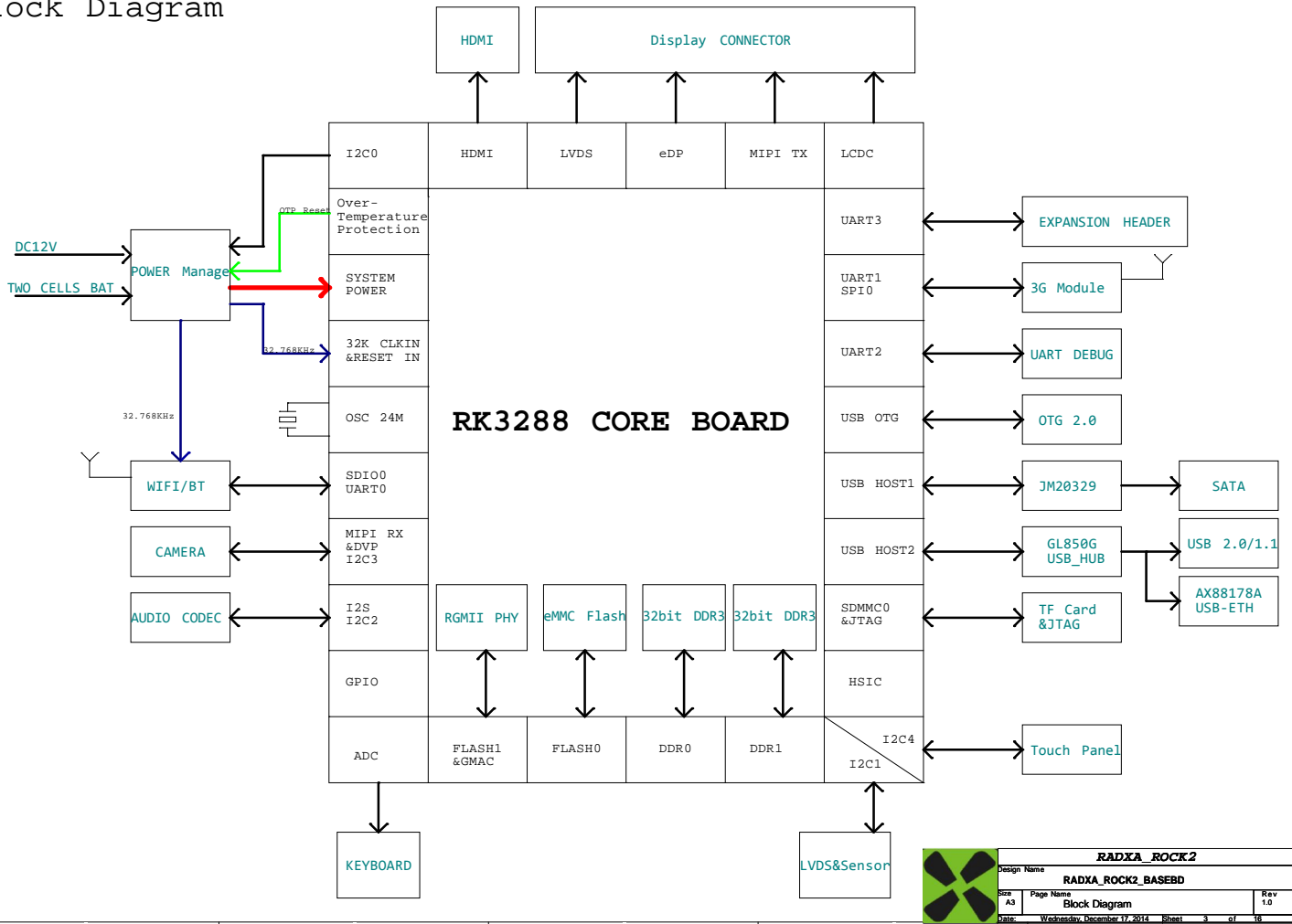
RADXA_ROCK2			
Design Name			
RADXA_ROCK2_BASEBD			
Size	Page Name		Rev
A4	Index		1.0
Date:	Wednesday, December 17, 2014	Sheet	1 of 16

Version	Date	Author	Change Note	Approved
V1.0	20140930	Prince	First edictor	Prince

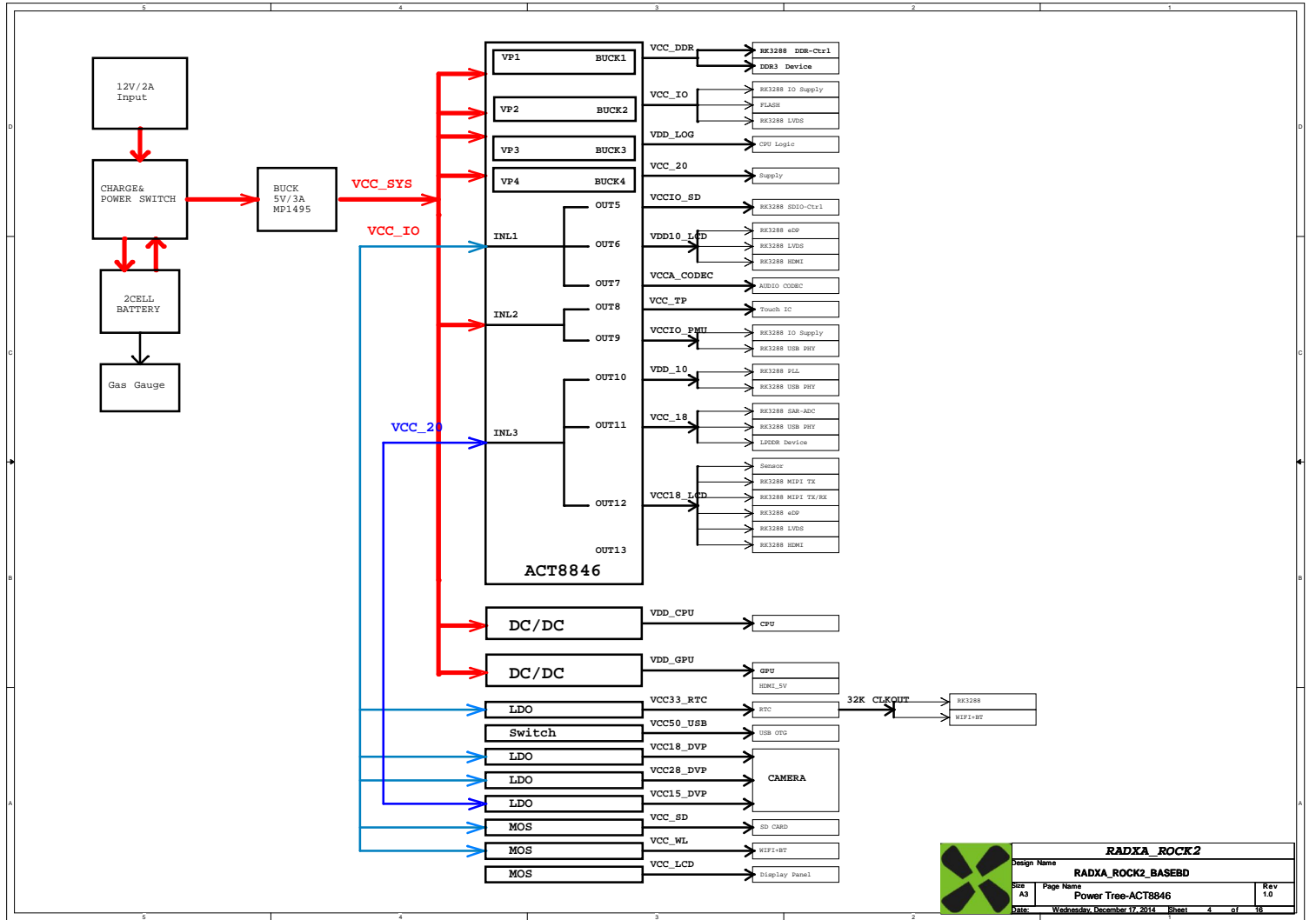


RADXA_ROCK2		
Design Name		
RADXA_ROCK2_BASEBD		
Size A4	Page Name Change List	Rev 1.0
Date: Wednesday, December 17, 2014		Sheet 2 of 16

Block Diagram

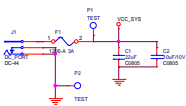


RADXA_ROCK2			
Design Name			
RADXA_ROCK2_BASEBD			
Size	Page Name	Rev	
A3	Block Diagram	1.0	
Date: Wednesday, December 17, 2014 Sheet 3 of 16			



RADXA_ROCK2			
Design Name			
RADXA_ROCK2_BASEBD			
Size	Page Name	Rev	
A3	Power Tree-ACT8846	1.0	
Date	Wednesday, December 17, 2014	Sheet	4 of 16

DC IN

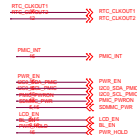
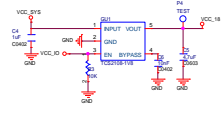
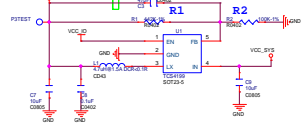


Note: Please use a 12V DC.

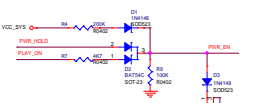
BATTERY

LDO

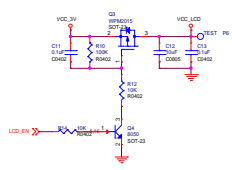
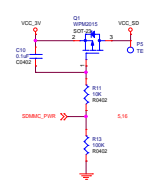
VCC-3V $V_{out} = 0.6 * (1 + R1/R2)$



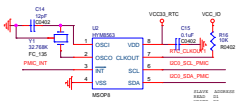
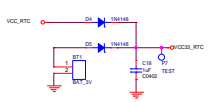
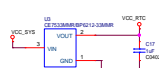
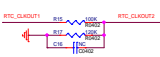
PWR&RST KEY



PWR CTL

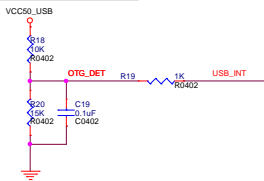


RTC

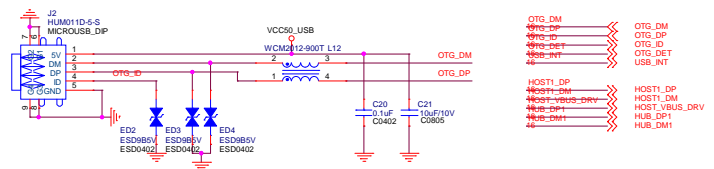


RADXA_ROCK2	
Chip Name	RADXA_ROCK2_BASBD
Part No.	Power-AC7846_0CELL
Rev.	Rev. 1.0

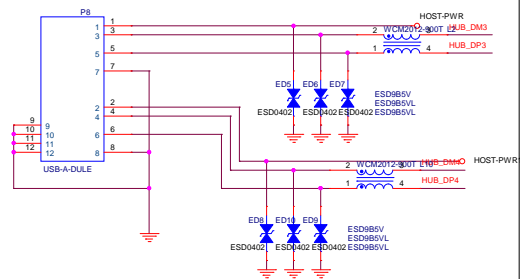
USB Detection



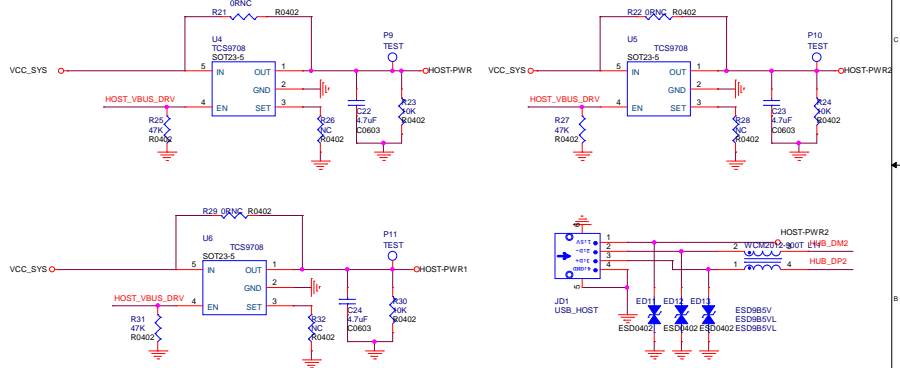
USB OTG



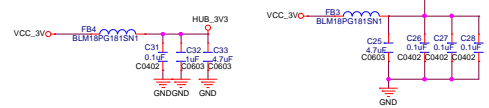
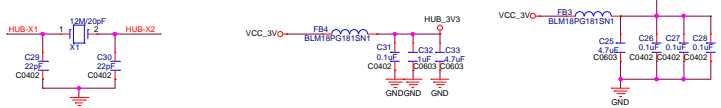
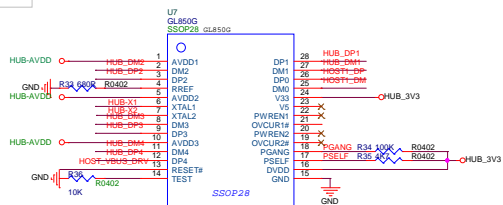
USB HOST



HOST PWR

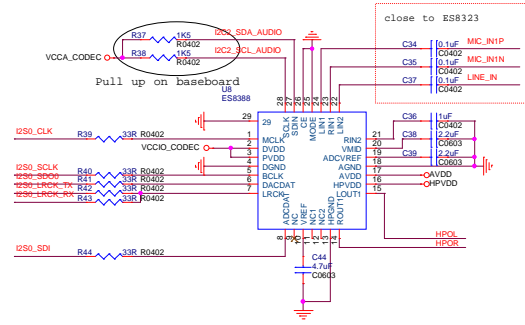


USB HUB

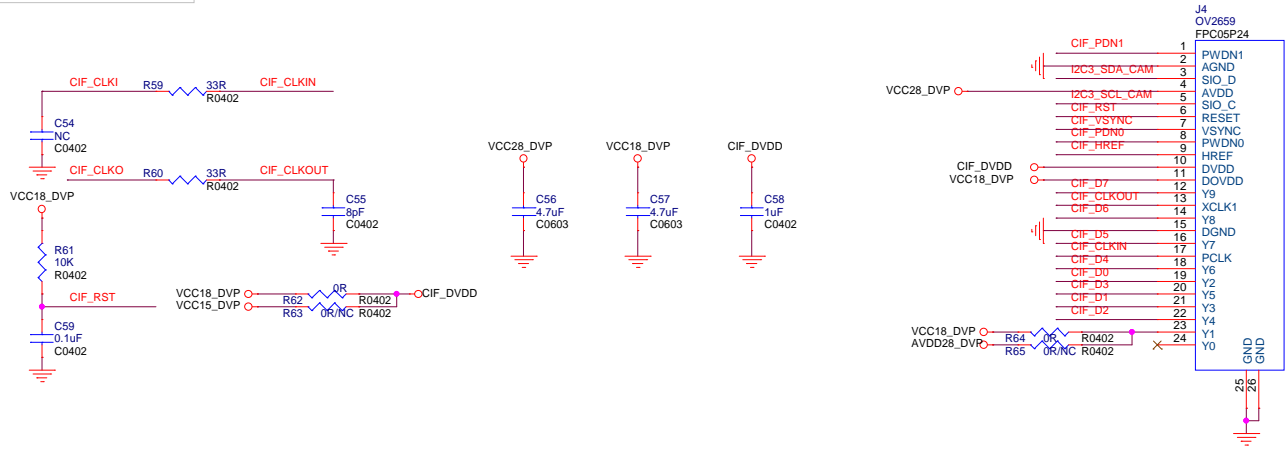


RADXA_ROCK2			
Design Name	RADXA_ROCK2_BASEBD		
Rev	A3	Page Name	USB_PORT
Date	Wednesday, December 17, 2014	Sheet	8 of 18

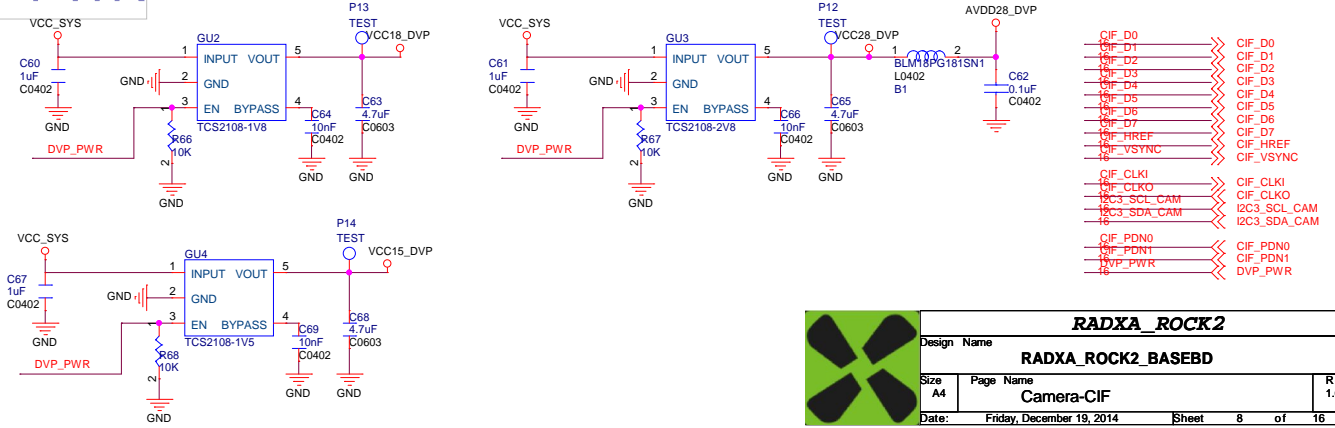
CODEC



CIF Camera

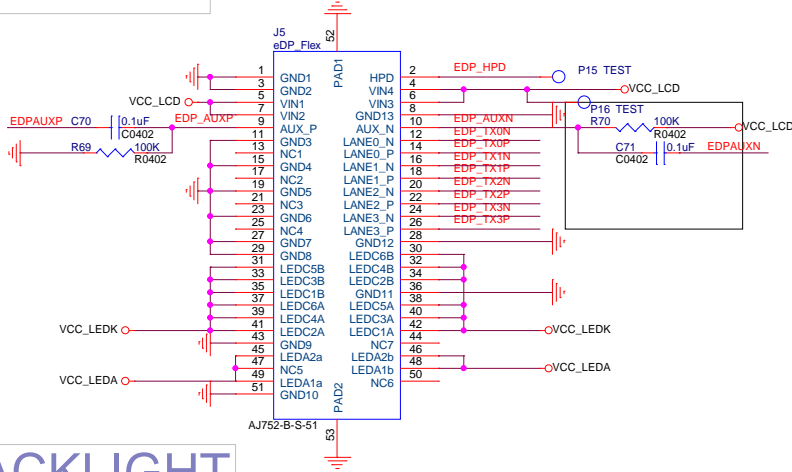


CIF PWR



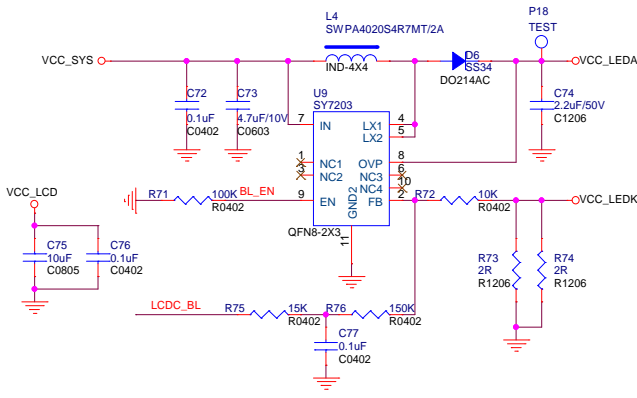
RADXA_ROCK2			
Design Name			
RADXA_ROCK2_BASEBD			
Size	Page Name		Rev
A4	Camera-CIF		1.0
Date:	Friday, December 19, 2014	Sheet	8 of 16

eDP Panel



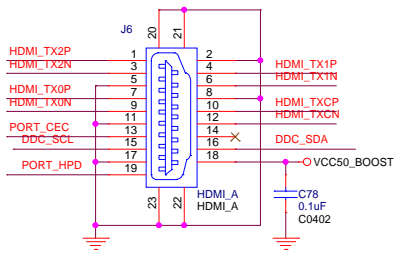
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EDP_TX0P	16	EDP_TX0P
EDP_TX1N	16	EDP_TX1N
EDP_TX1P	16	EDP_TX1P
EDP_TX2N	16	EDP_TX2N
EDP_TX2P	16	EDP_TX2P
EDP_TX3N	16	EDP_TX3N
EDP_TX3P	16	EDP_TX3P
EDPAUXP	16	EDPAUXP
EDPAUXN	16	EDPAUXN
BL_EN	16	BL_EN
LCDC_BL	16	LCDC_BL

BACKLIGHT

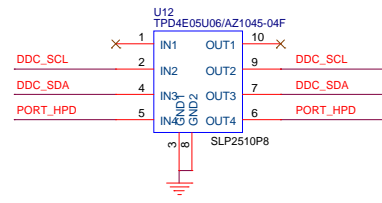
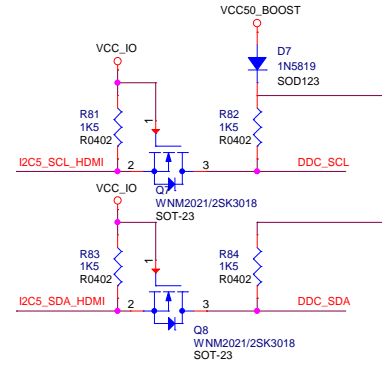
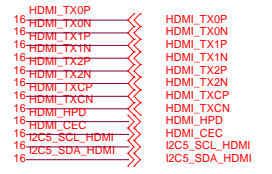
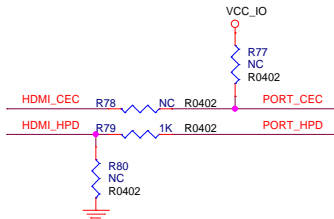
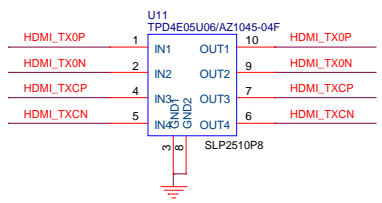
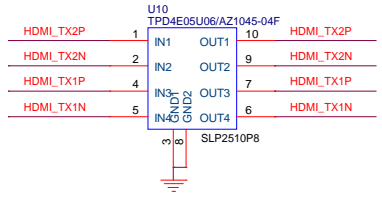


RADXA_ROCK2			
Design Name			
RADXA_ROCK2_BASEBD			
Size	A4	Page Name	LCM-eDP Panel
Date:	Friday, December 19, 2014	Sheet	9 of 16
			Rev 1.0

HDMI

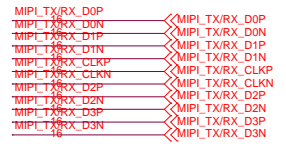
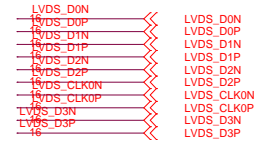
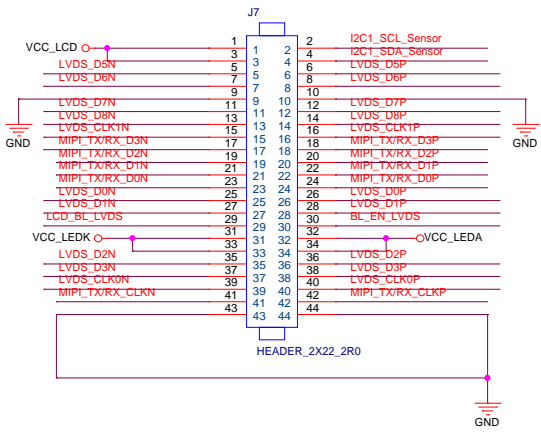


HDMI OUT



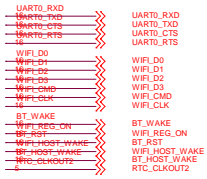
RADXA_ROCK2			
Design Name			
RADXA_ROCK2_BASEBD			
Size	Page Name		Rev
A4	HDMI		1.0
Date:	Wednesday, December 17, 2014	Sheet	10 of 16

LVDS Panel

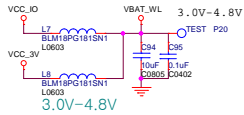
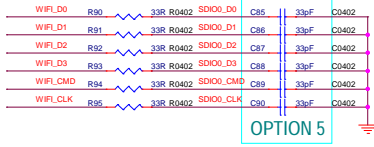
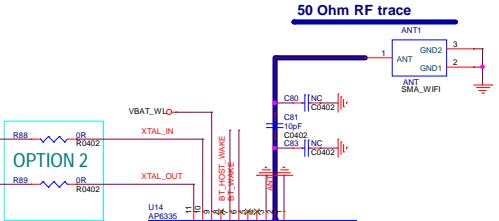
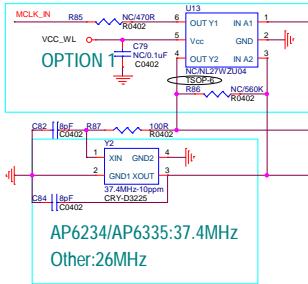


RADXA_ROCK2			
Design Name			
RADXA_ROCK2_BASEBD			
Size	A4	Page Name	LCM-LVDS Panel
Date:	Wednesday, December 17, 2014	Sheet	11 of 16
		Rev	1.0

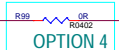
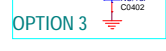
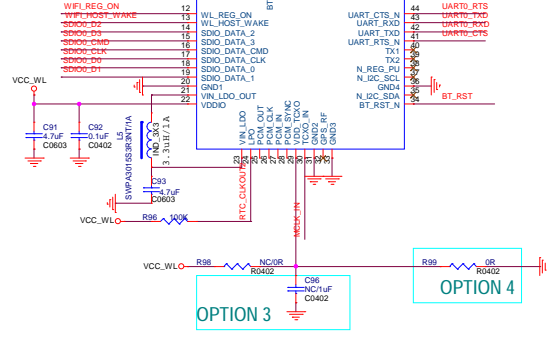
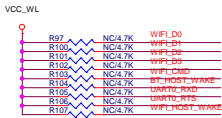
AP6335



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



Minimum current supply:480ma



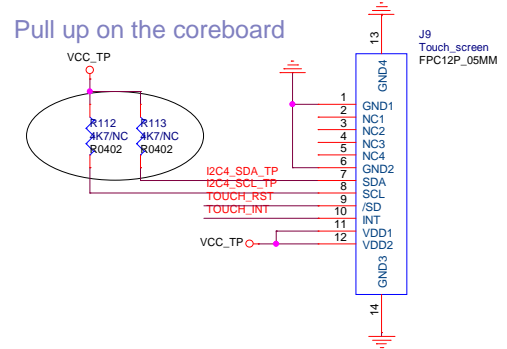
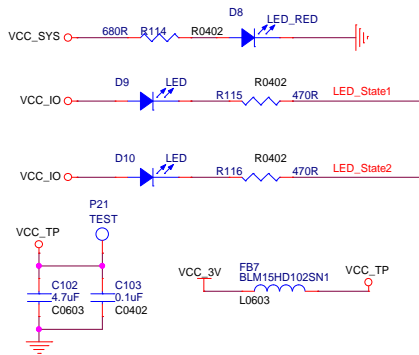
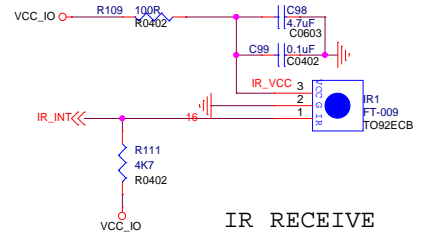
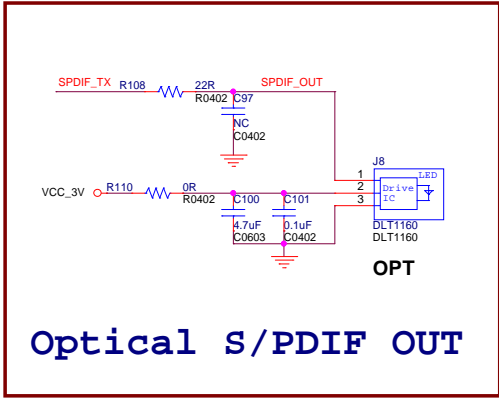
OPTION	WiFi1				BT4.0	Crystals	VDDIO
	a	b/g/n	ac	5GHz			
AP6181		Yes				26MHz	1.71-3.6V
AP6210		Yes			Yes	26MHz	1.71-3.6V
AP6234	Yes	Yes		Yes	Yes	37.4MHz	1.6-3.4V
AP6330	Yes	Yes		Yes	Yes	26MHz	1.2-2.9V
AP6335 (Default)	Yes	Yes	Yes	Yes	Yes	37.4MHz	1.71-3.63V

OPTION	WiFi1				
	1	2	3	4	5
AP6181	No	Yes	No	No	No
AP6210	Yes	No	Yes	No	No
AP6234	No	Yes	No	No	No
AP6330	No	Yes	No	No	No
AP6335 (Default)	No	Yes	No	Yes	Yes

Note:
Yes:Components need to patch
No:Components not patch

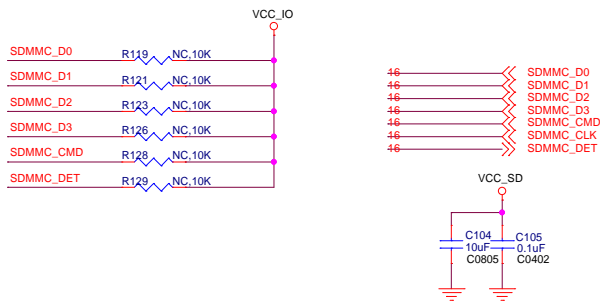
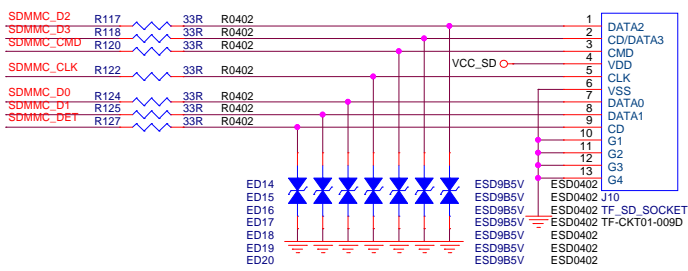


RADXA_ROCK2			
Design Name	RADXA_ROCK2_BASEBD		
Rev	A3	Page Name	12.AP6XXX-WIFI/BT
Date	March, January 08, 2015	Sheet	12 of 16

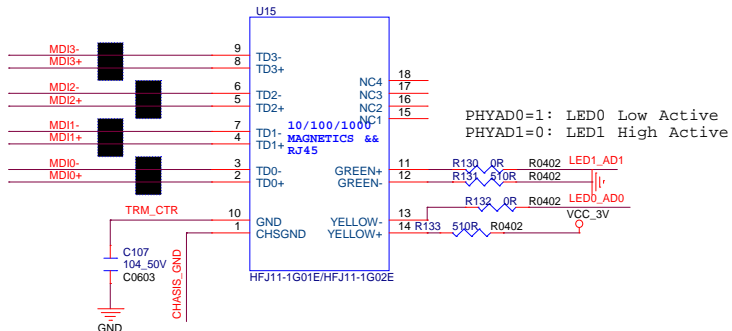


RADXA_ROCK2			
Design Name		RADXA_ROCK2_BASEBD	
Size	Page Name	Rev	
A4	TP COF	1.0	
Date:	Wednesday, December 17, 2014	Sheet	13 of 16

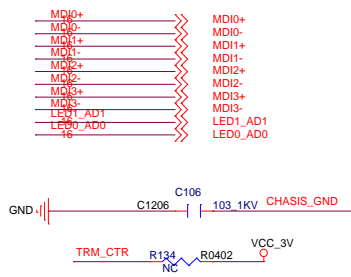
TF CARD



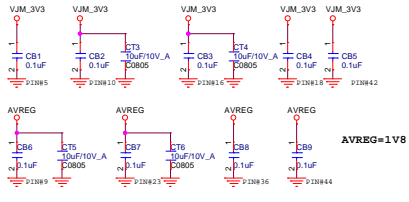
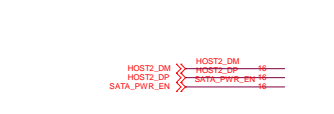
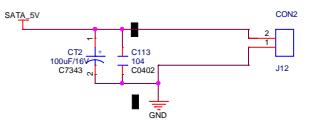
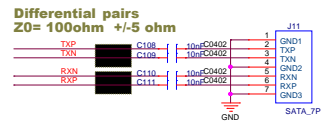
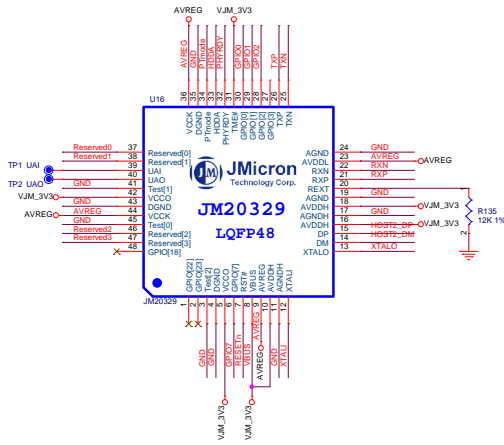
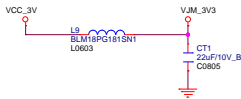
GBIT_ETH



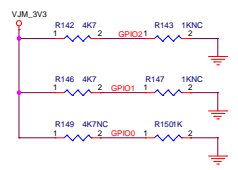
ETH



RADXA_ROCK2		
Design Name		
RADXA_ROCK2_BASEBD		
Size A4	Page Name TF Card	Rev 1.0
Date: Sunday, December 21, 2014		Sheet 14 of 16



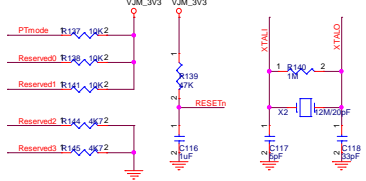
Option function :
Switch circuit



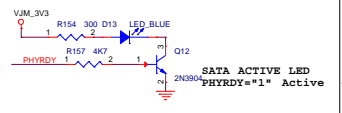
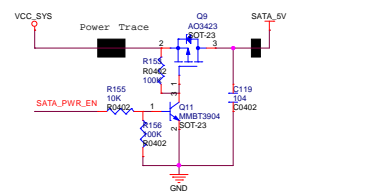
One touch backup If there aren't switch circuit don't use GPIO0(SW3) care R_SET2,R8 and R_SET4

R_SET1(4K7)	R_SET2 (1K)	Power On Detection Sequence.
1-2 (P0)	2-3 (P0)	0: Enable USB before detecting attached device.
2-3 (P0)	1-2 (P0)	1: Enable USB after detecting attached device.
Default GPIO2 Pull High		
R_SET3(4K7)	R_SET4(1K)	GPIO2 ATA power down mode
1-2 (P0)	2-3 (P0)	0: Enable
2-3 (P0)	1-2 (P0)	1: Disable

In ATA Power Down Mode, GPIO0 should be pull-down.



Option function :



RADXA_ROCK2			
Design Name			
RADXA_ROCK2_BASEBD			
Size	A3	Page Name	JM20329(USB-SATA)
Rev	1.0	Rev	1.0
Date	Saturday, 3 December 2014	Sheet	15 of 16

