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- 22.WIFI+BT
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- 24.AX88772B-USB2.0-Ethernet
- 25.USB HUB
- 26.EXTERNAL CODEC

PCB POWER WIRE WIDTH INDICATE



No indicate

above 80 miles

above 50 miles

above 30 miles

above 16 miles

Under needs

SYSTEM CONNECTION S.R.L

Title: Index

File: SCHEMATIC BOARD PX3-SE REV 1.2 REV: V1.2

Create Date:

Page Num:

Modify Date: Thursday, January 03, 2019

Page Total:

5					4					3					2					1				
D	Version	Date	Author	Change Note												Note								
	V1.0	20171120	Awing	First Edit																				
	V1.1	20181205	Awing	Second Edit																				
	V1.2	20181214	Awing	Third Edit																				
C																								
B																								
A																								

SYSTEM CONNECTION S.R.L

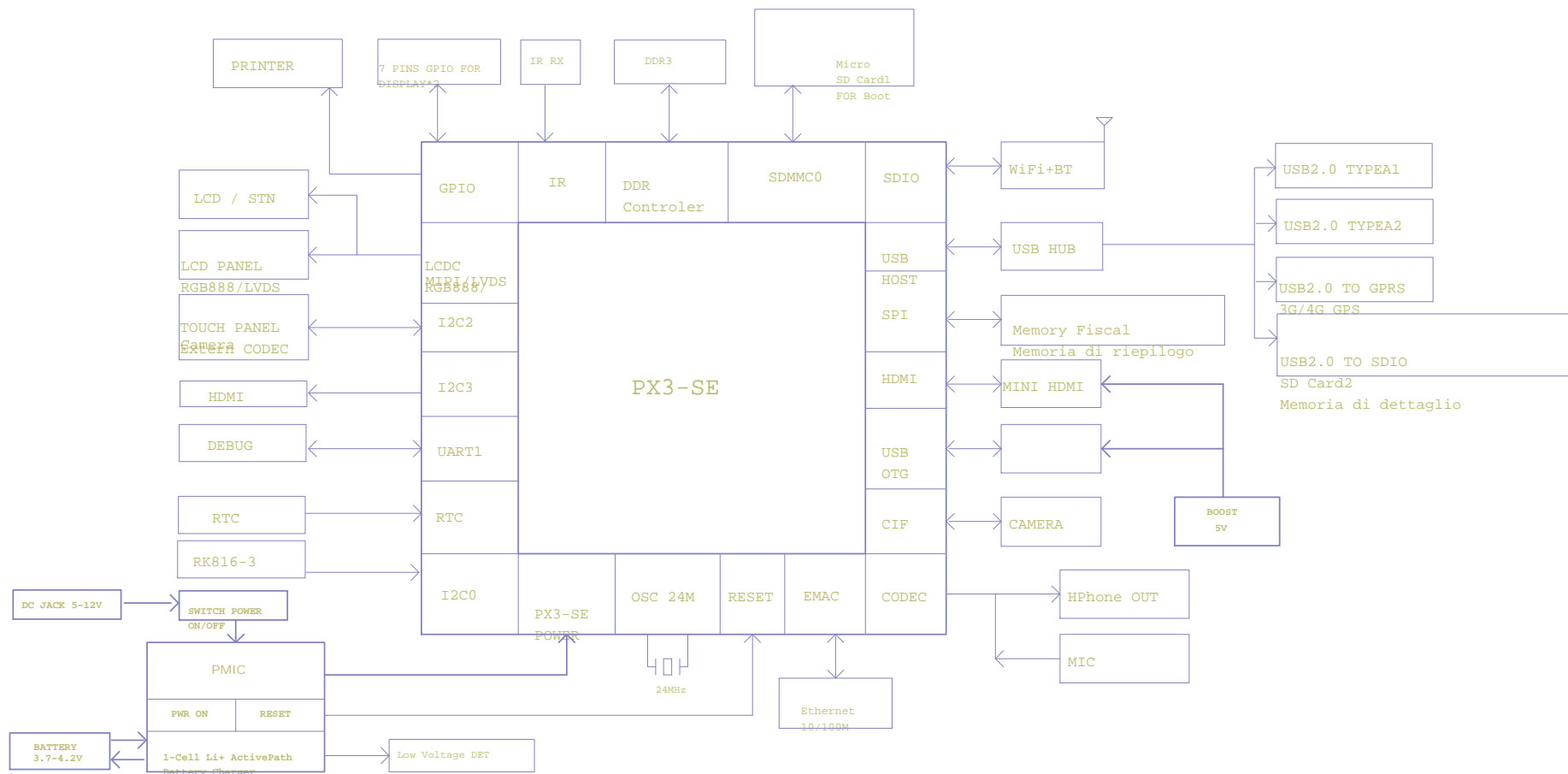
Title: Change List

File: SCHEMATIC BOARD PX3-SE REV 1.2REV: V1.2

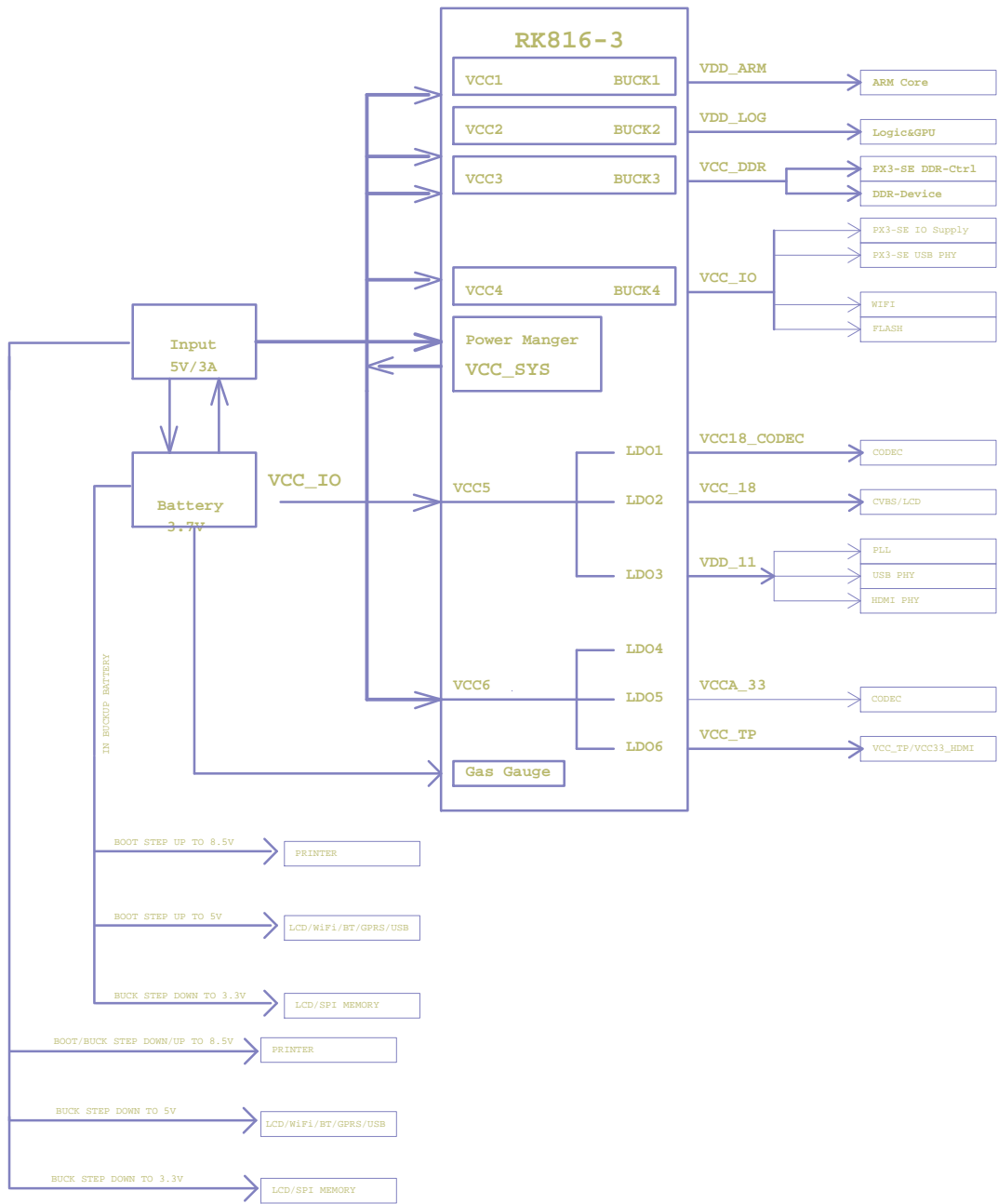
Create Date:Page Num:

Modify Date: Thursday, January 03, 2019Page Total:

5					4					3					2					1				
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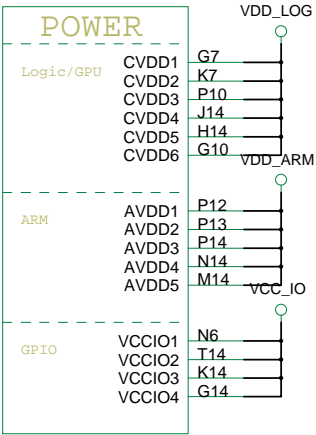
POWER DIAGRAM



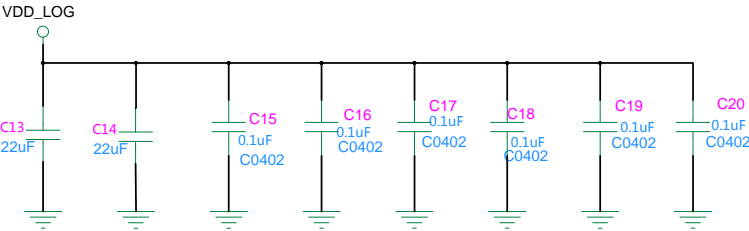
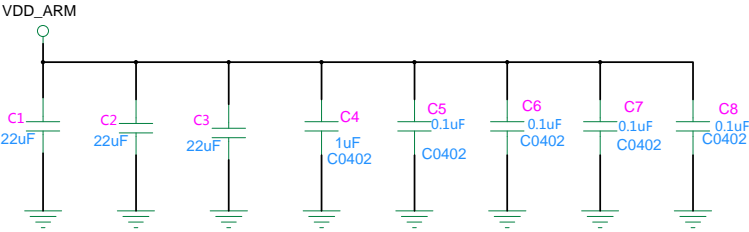
PMU	TIMER	default	default	PX3-SE
Channel1	(2ms)	ON/OFF	VolVage	VDD_ARM
DCDC2	soft:11	ON	1.1V	VDD_LOG
DCDC4	soft:11	ON	3.3V	VCC_10/VCC10_ML/VCC_8D
DCDC3	soft:13	ON	DDR3 1.5V DDR3L 1.35V LPDDR 1.245V	FLASH/VCC_FCB VCC_DDR
VLD01	X	OFF		VCC18_CODEC
VLD02	soft:11	ON	1.8V	VCC_18
VLD03	soft:11	ON	1.1V	VDD_11
VLD04	X	OFF	3.3V	VCC_CVBS_33
VLD05	soft:14	ON	3.3V	VCCA_33
VLD06	soft:14	ON	3.3V	VCC_TP
RESET	58ms	ON	OD	RESET

PX3-SE-K

U1-K
PX3-SE BGA316_14R00X14R00X1R20

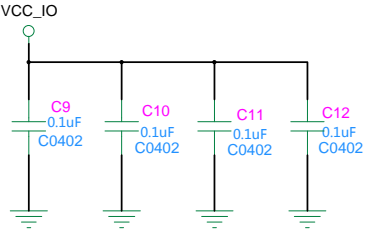
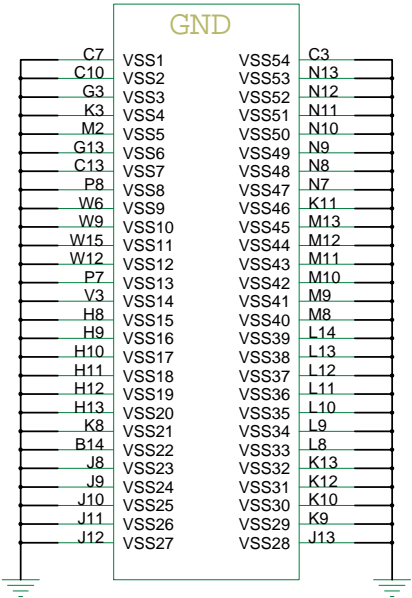


Note:
Place these filter capacitors under CPU.

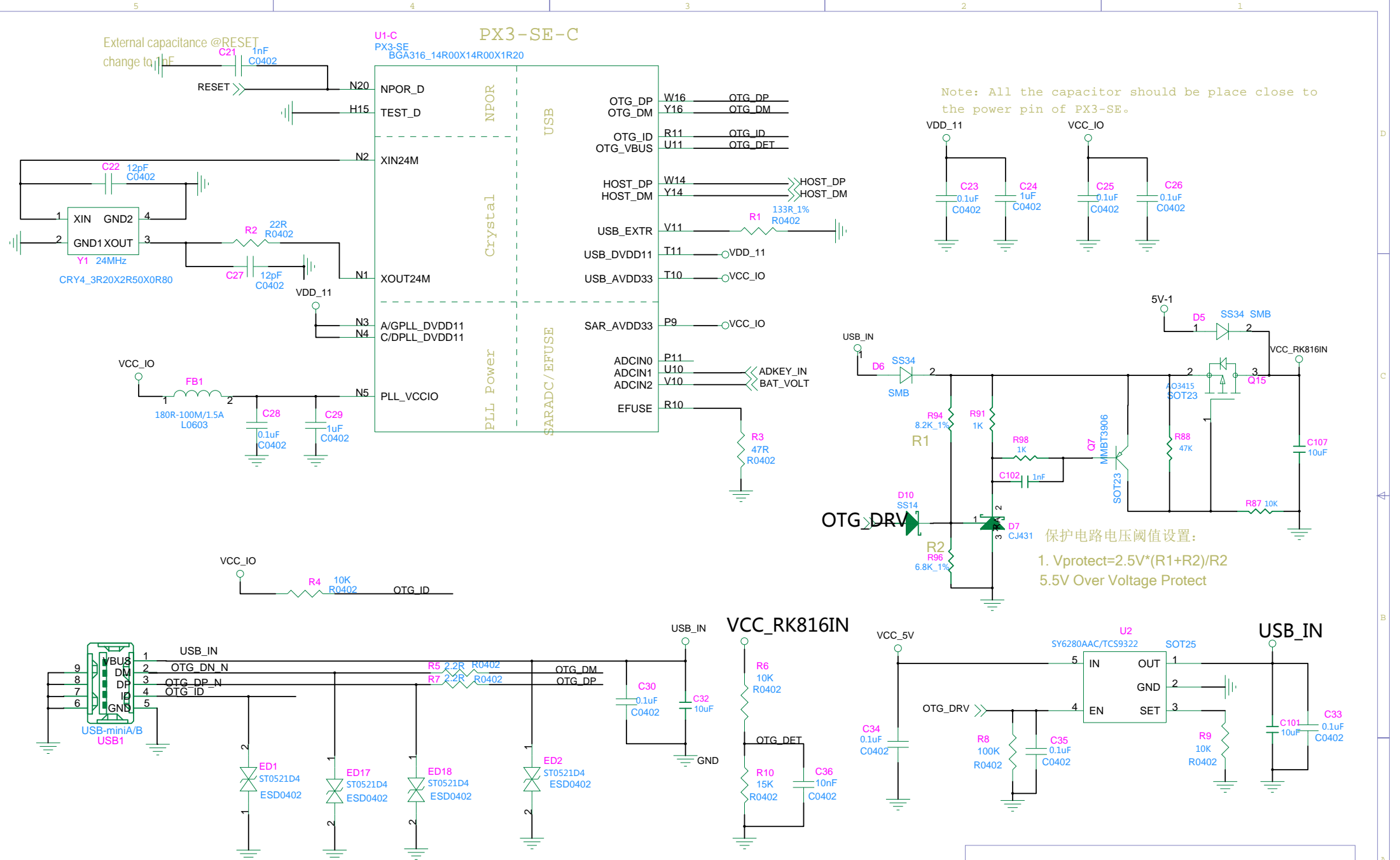


PX3-SE-L

U1-L
PX3-SE BGA316_14R00X14R00X1R20



SYSTEM CONNECTION S.R.L	
Title: PX3-SE Power	
File: SCHEMATIC BOARD PX3-SE REV 1.2	
Create Date:	Page Num:
Modify Date: Thursday, January 03, 2019	Page Total:



Note: All the capacitor should be place close to the power pin of PX3-SE.

保护电路电压阈值设置:
1. $V_{protect} = 2.5V * (R1 + R2) / R2$
5.5V Over Voltage Protect

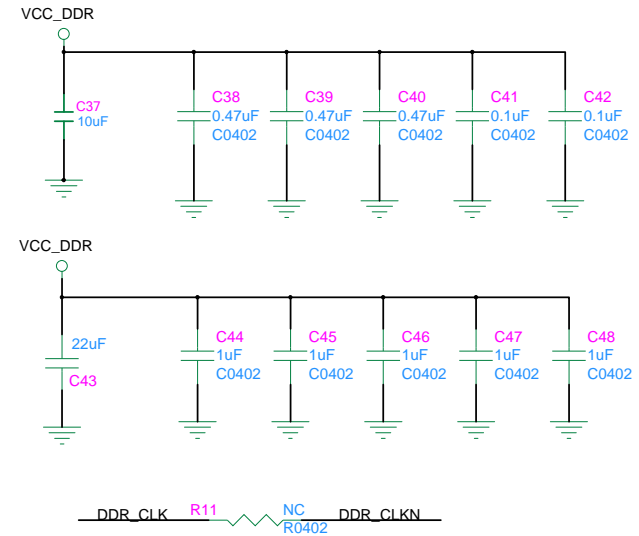
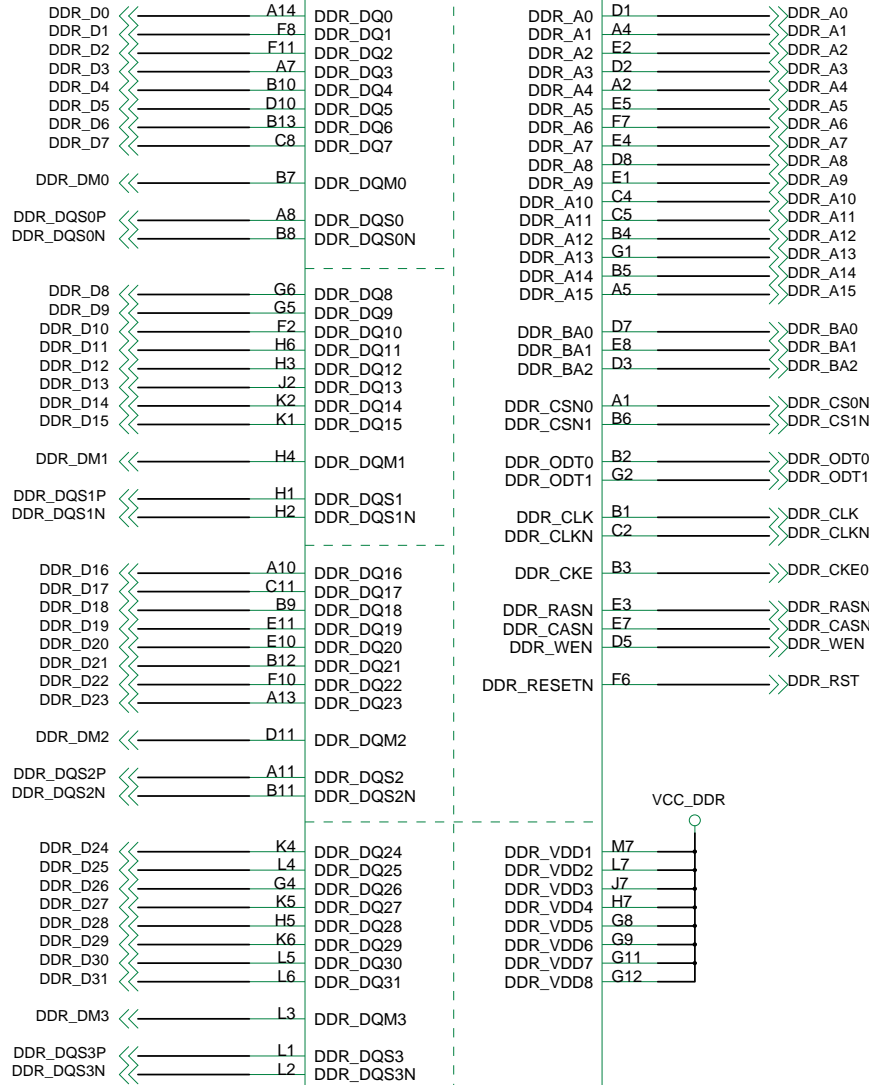
30PF ?

SYSTEM CONNECTION S.R.L	
Title: PX3-SE MISC&USB	
File: SCHEMATIC BOARD PX3-SE REV 1.2	
Create Date:	Page Num:
Modify Date: Thursday, January 03, 2019	Page Total:

PX3-SE-J

U1-J
PX3-SE
BGA316_14R00X14R00X1R20

Memory



SYSTEM CONNECTION S.R.L

Title: PX3-SE DDR Controller

File: SCHEMATIC BOARD PX3-SE REV 1.2 REV: V1.2

Create Date:

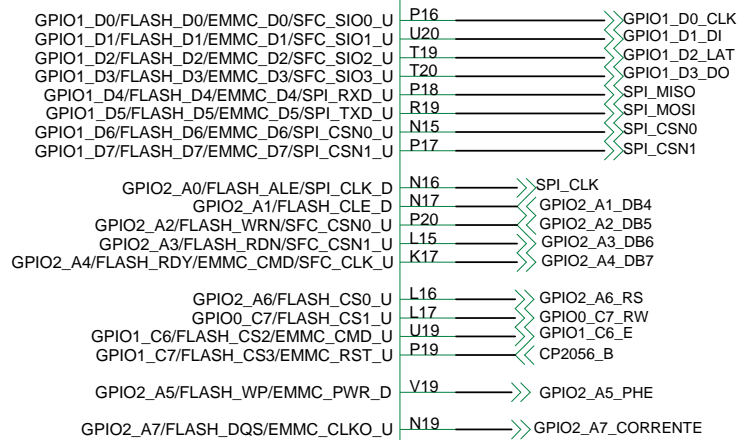
Page Num:

Modify Date: Thursday, January 03, 2019

Page Total:

U1-E
PX3-SE
BGA316_14R00X14R00X1R20

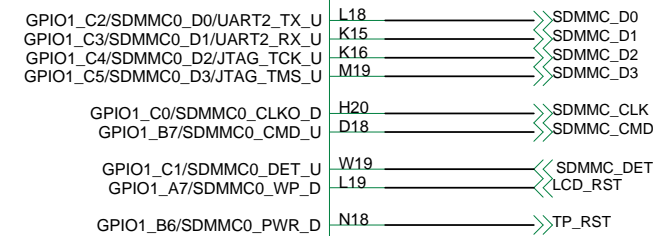
Nand Flash/eMMC/SFC/SPI



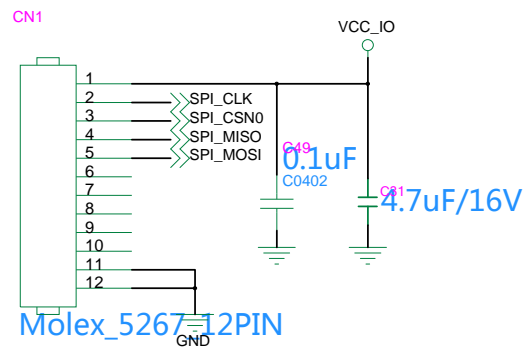
PX3-SE-D

U1-D
PX3-SE
BGA316_14R00X14R00X1R20

SDMMC0



GPIO FOR SPI:memory fiscal



SYSTEM CONNECTION S.R.L

Title: PX3-SE Flash/SD Controller

File: SCHEMATIC BOARD PX3-SE REV 1.2 REV: V1.2

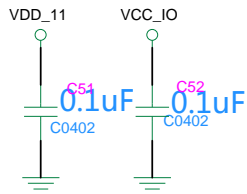
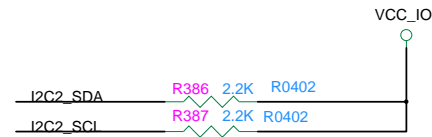
Create Date: Thursday, January 03, 2019 Page Num:

Modify Date: Thursday, January 03, 2019 Page Total:

U1-A
PX3-SE
BGA316_14R00X14R00X1R20

PX3-SE-A

LCDC/LVDS/MIPI/GMAC/EMAC



SYSTEM CONNECTION S.R.L

Title: PX3-SE Display

File: SCHEMATIC BOARD PX3-SE REV 1.2 REV: V1.2

Create Date:

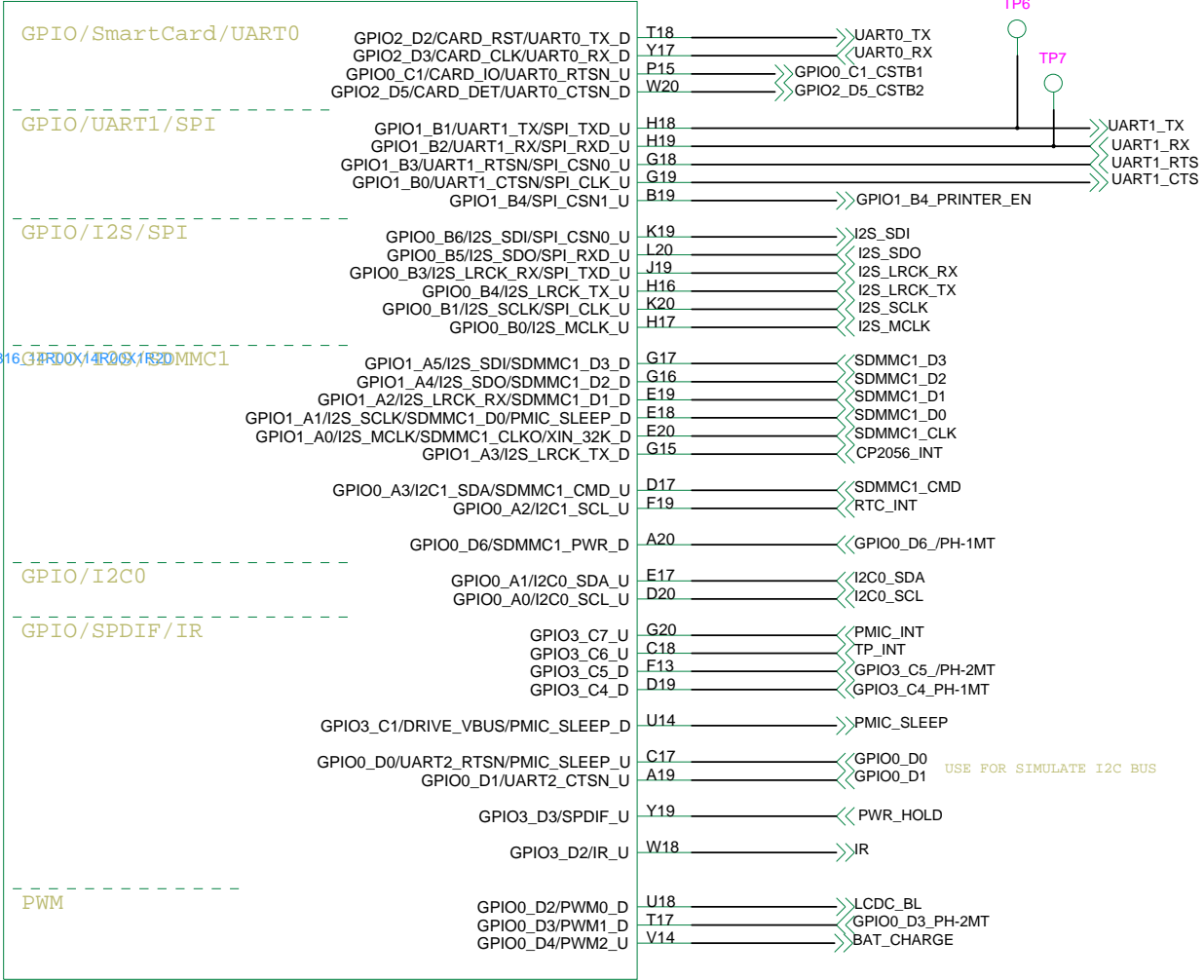
Page Num:

Modify Date: Thursday, January 03, 2019

Page Total:

PX3-SE-I

U1-I
PX3-SE
BGA316_14R00X14R00X1R20



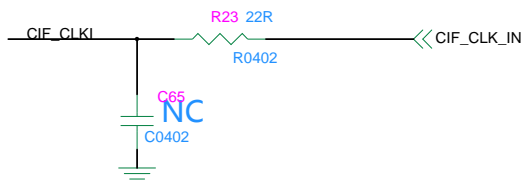
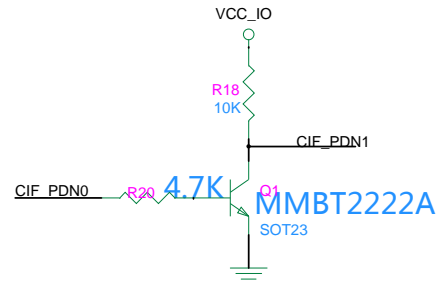
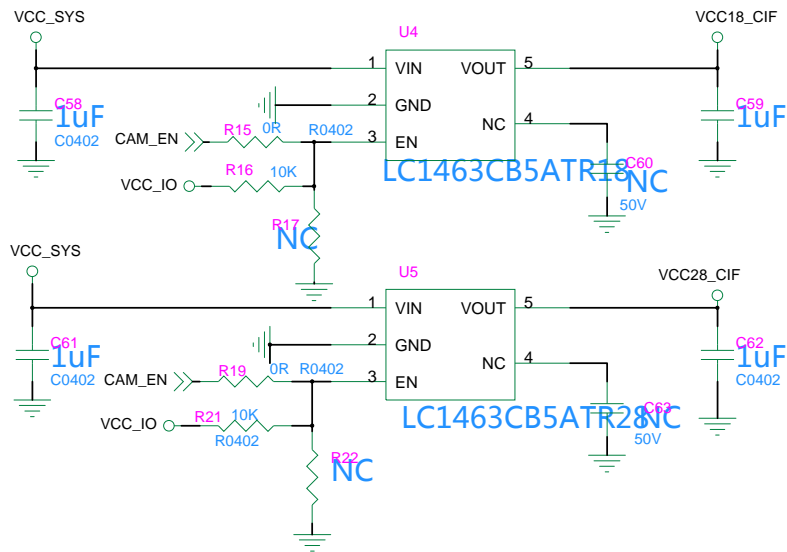
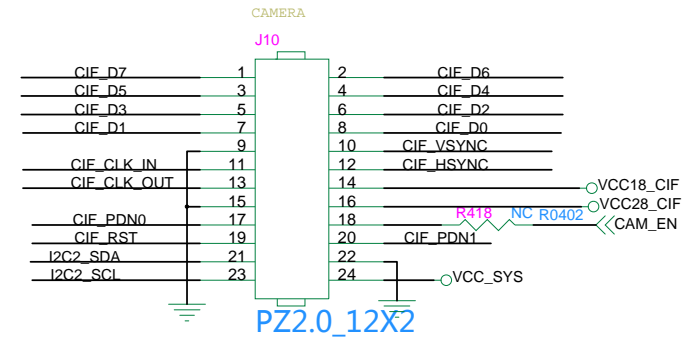
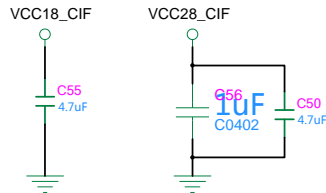
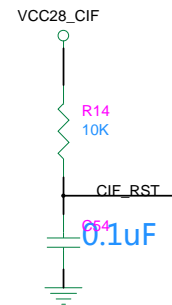
UART0 IS For BT

UART1 IS For UART SYSTEM/Debug

USE FOR SIMULATE I2C BUS

SYSTEM CONNECTION S.R.L	
Title: PX3-SE GPIO	
File: SCHEMATIC BOARD PX3-SE REV 1.2	
Create Date:	Page Num:
Modify Date: Thursday, January 03, 2019	Page Total:

U1-B
PX3-SE
BGA316_14R00X14R00X1R20



此部份没用可 删

Note:四个 器件, 根据调试结果, 可 选 择 是否NC。

Title: PX3-SE CIF-Camera

File: SCHEMATIC BOARD PX3-SE REV 1.2 REV: V1.2

Create Date:	
Modify Date:	Thursday, January 03, 2019

Page Num:	
Page Total:	

PCB POWER WIRE WIDTH INDICATE



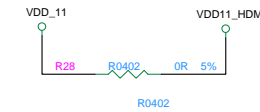
No indicate

above 80 miles
above 50 miles
above 30 miles
above 12 miles
Under needs

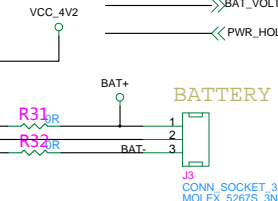
Default DDR3L

R27	R26	VCC_DDR	RAM
150K	137K	1.53V	DDR3
150K	107K	1.37V	DDR3L

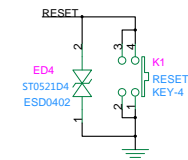
PMU	TIMER	Default	default	RK3126
Channel1	(solt):2 ON/OFF	voltage		VDD_ARM
DCDC2	solt:1 ON	1.1V		VDD_LOG
DCDC4	solt:1 ON	3.3V		VDD_10/VDDIO_ML/VDDC_50
DCDC3	solt:3 ON	0.8V	DDR3 1.5V DDR3L 1.35V LEDDR 1.245V	VCC_DDR
VLD01	X OFF	1.8V		VDD18_CODEC
VLD02	solt:1 ON	1.8V		VCC18
VLD03	solt:1 ON	1.1V		VDD_11/VDD11_HDMI
VLD04	X OFF	3.3V		VCC_CVBS
VLD05	solt:14 ON	3.3V		VCCA_33
VLD06	solt:14 ON	3.3V		VCC_TP_33/VCC33_HDMI
RESET	58ms ON	OD		RESET



- I2C0_SDA
- I2C0_SCL
- RESET
- PMIC_SLEEP
- PMIC_INT
- RTC_CLKOUT
- PWRON
- BAT_VOLT
- PWR_HOLD



REST KEY



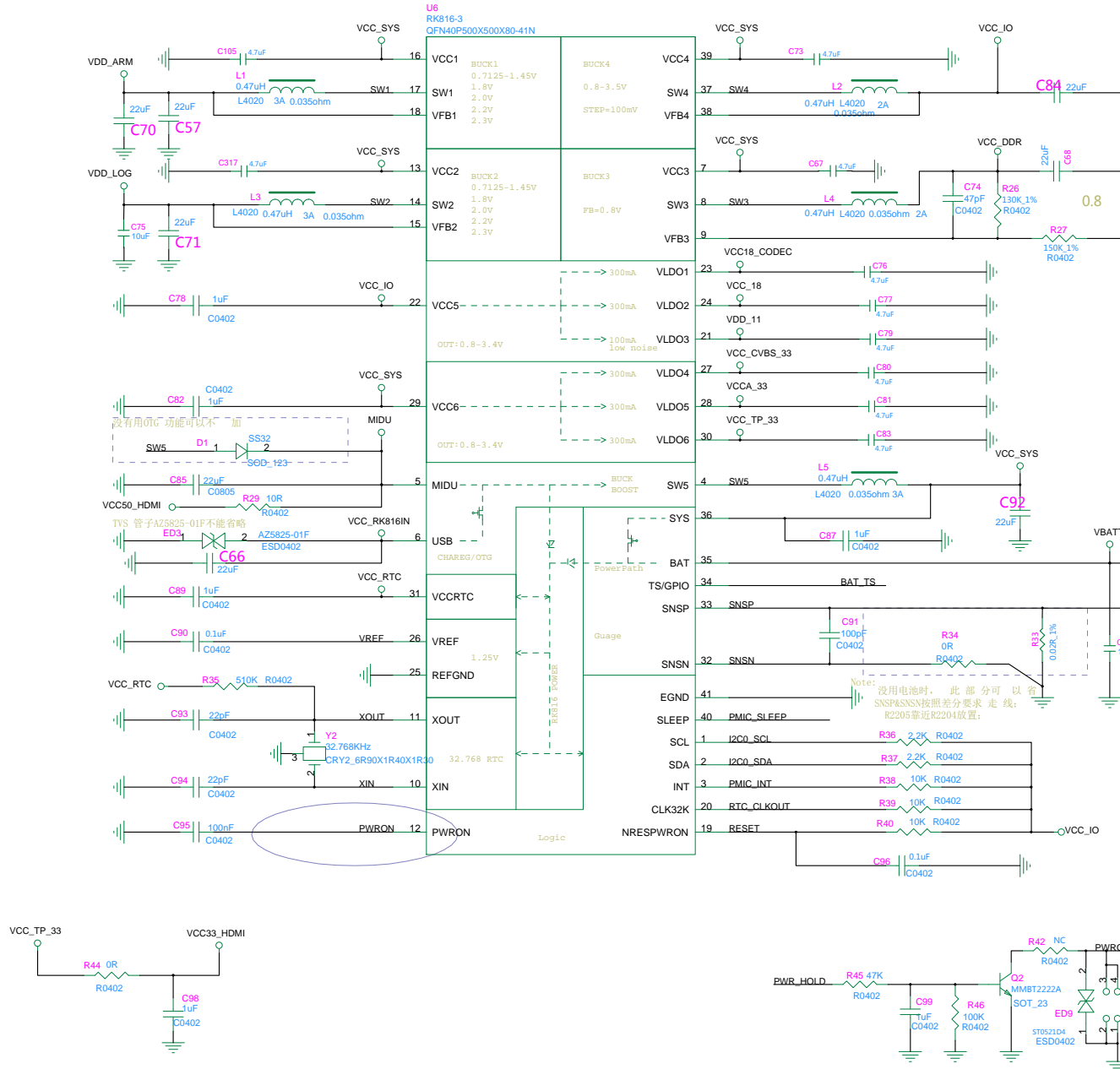
SYSTEM CONNECTION S.R.L

Title: Power-RK816-3

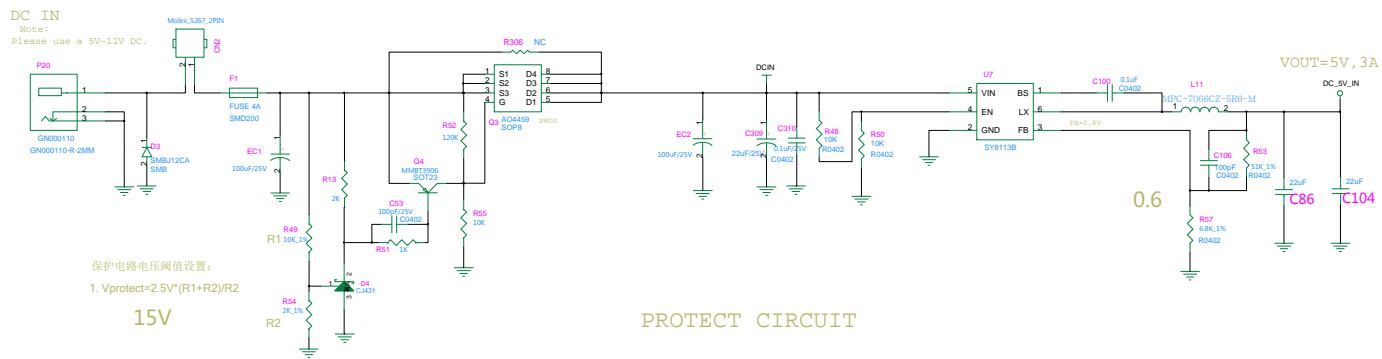
File: SCHEMATIC BOARD PX3-SE REV 1.2 REV: V1.2

Create Date: Thursday, January 03, 2019 Page Num:

Modify Date: Thursday, January 03, 2019 Page Total:



DC IN
Note:
Please use a 5V-12V DC.



LED Indication:

GREEN ON

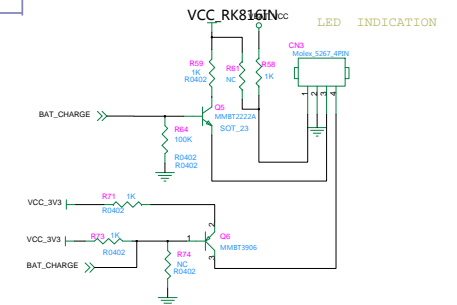
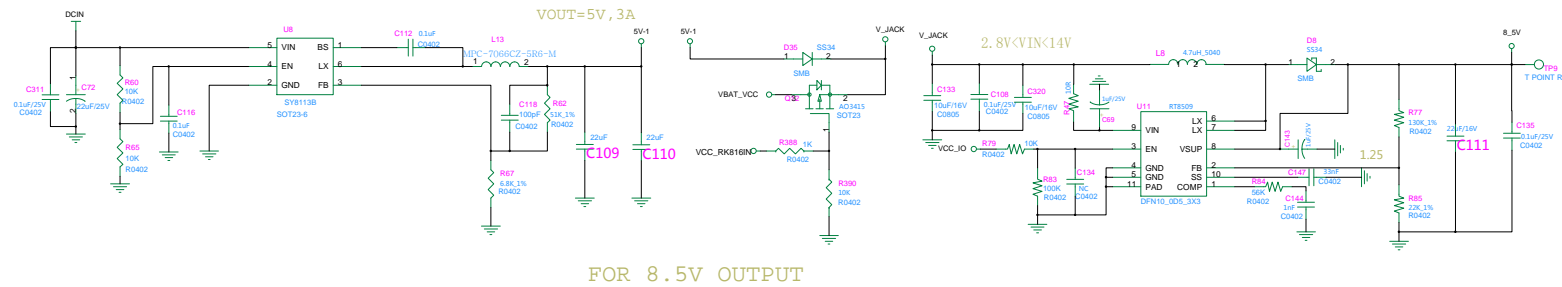
WHEN DCIN POWER

RED ON

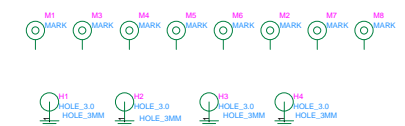
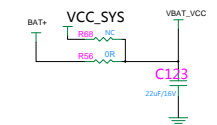
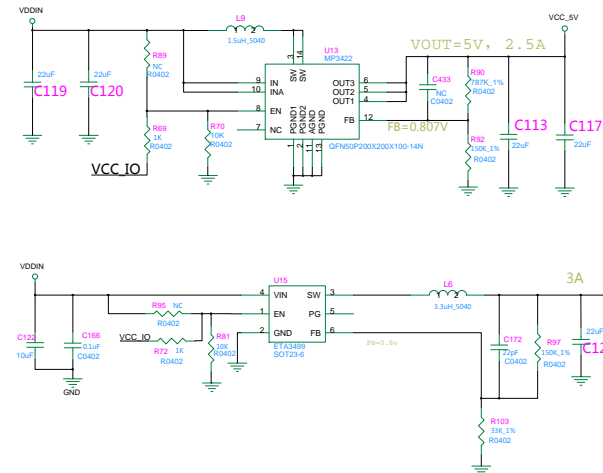
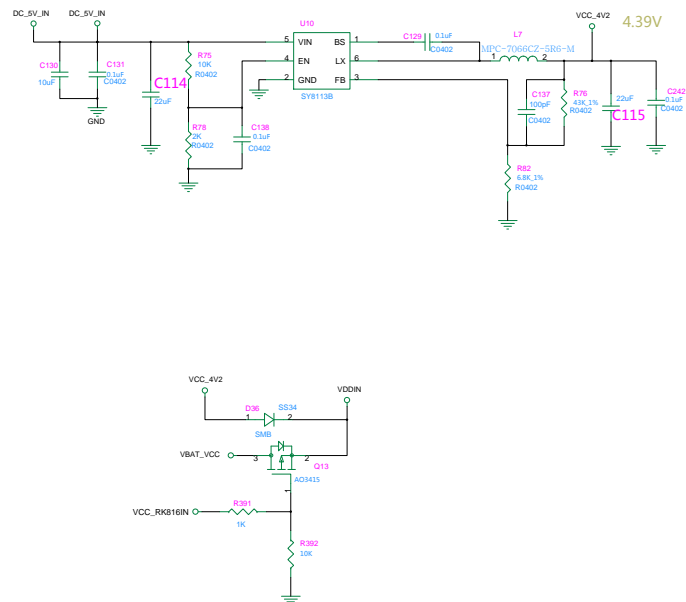
WHEN BATTERY POWER

YELLOW ON

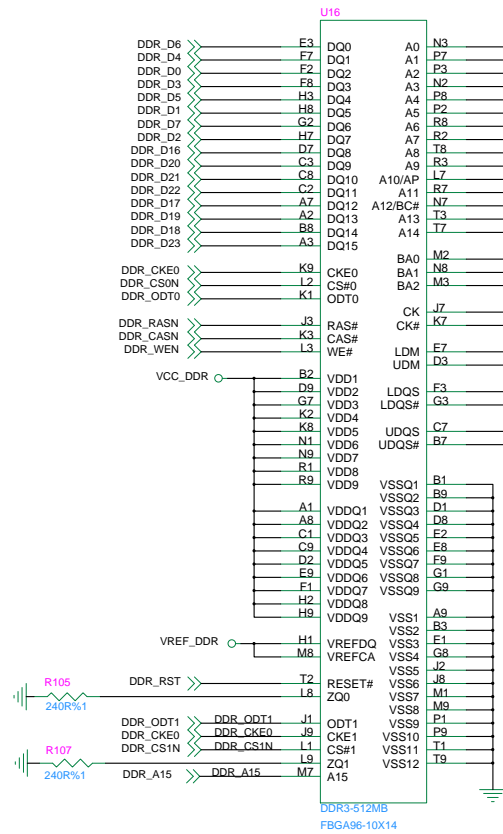
WHEN BATTERY CHARGED



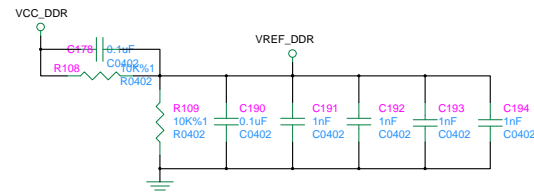
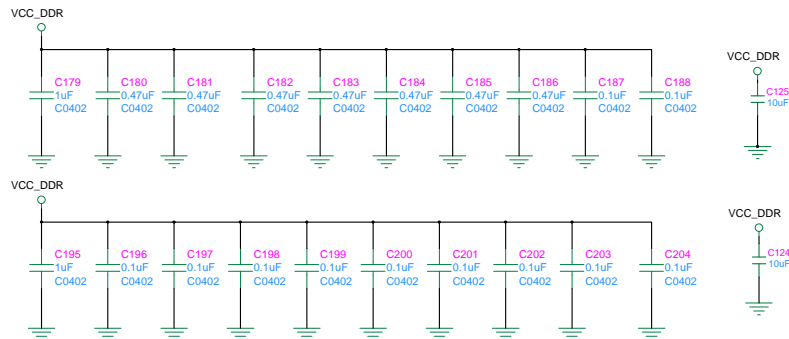
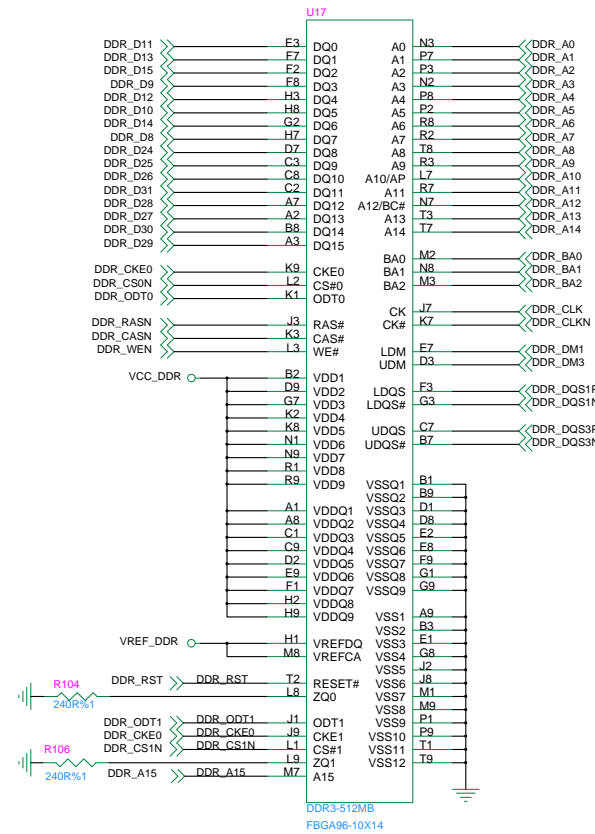
POWERED BY DCIN



DDR3/L



DDR3



SYSTEM CONNECTION S.R.L.

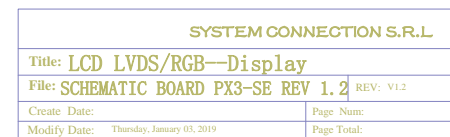
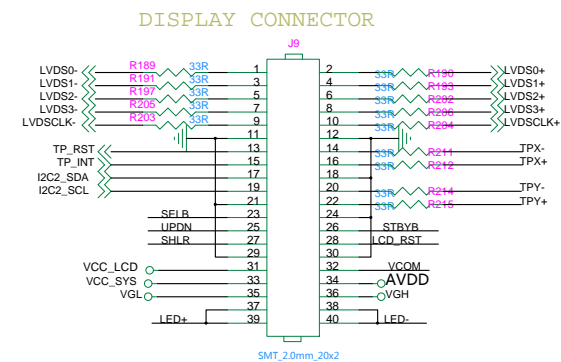
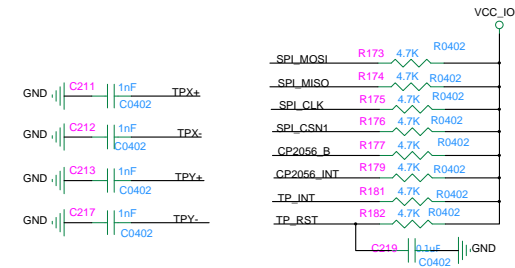
Title: RAM-DDR3 2x16bit

File: SCHEMATIC BOARD PX3-SE REV 1.2 REV: V1.2

Create Date: Thursday, January 03, 2019 Page Num:

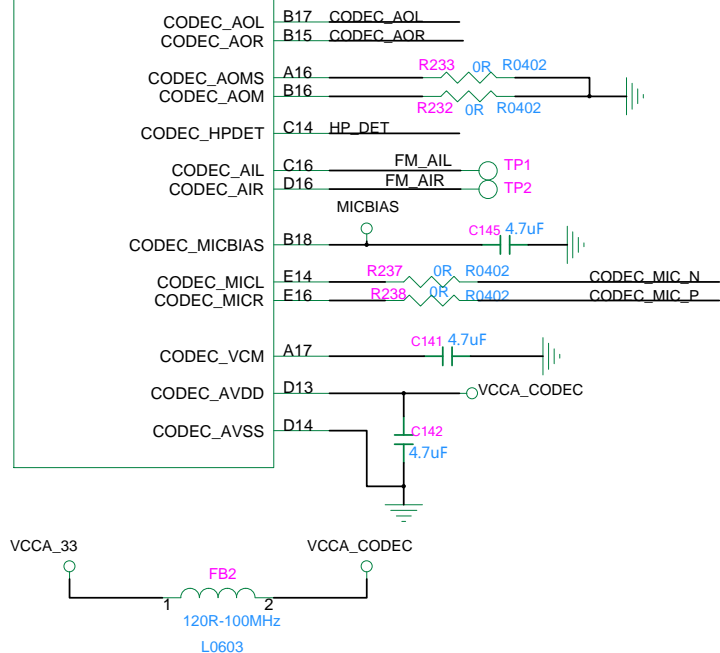
Modify Date: Thursday, January 03, 2019 Page Total:

CONVERT THE RESISTER SCREEN SIGNAL TO SPI



U1-F
PX3-SE
BGA316_14R00X14R00X1R20

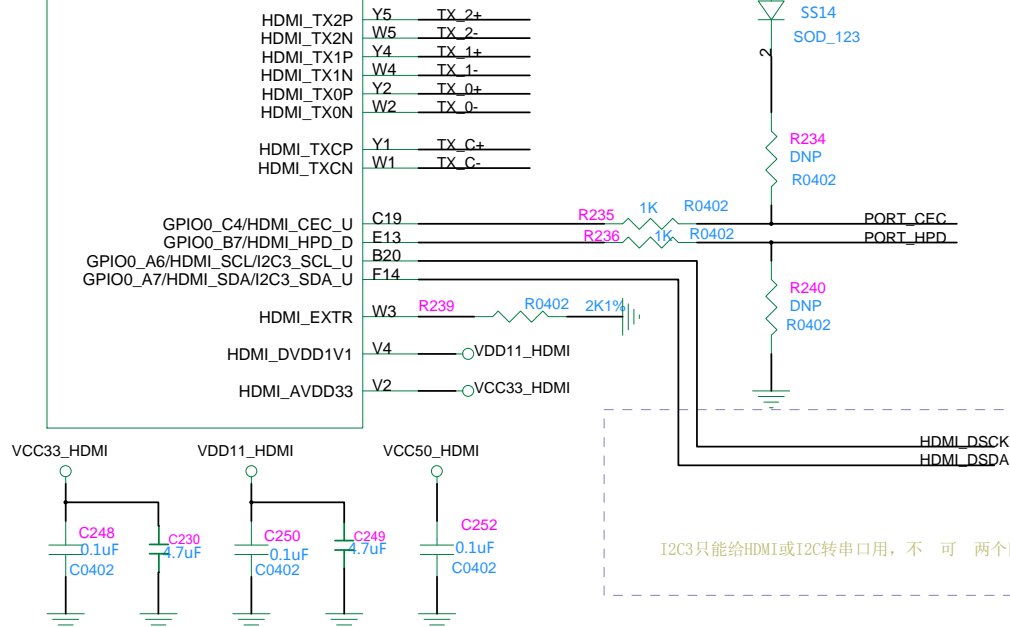
Codec



HDMI

U1-H
PX3-SE
BGA316_14R00X14R00X1R20

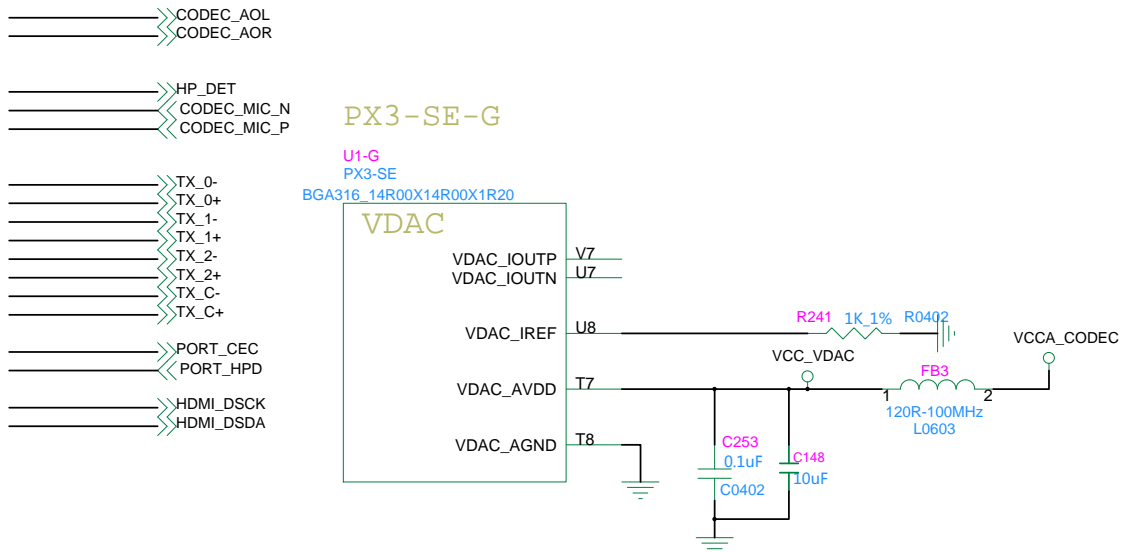
HDMI TX



PX3-SE-G

U1-G
PX3-SE
BGA316_14R00X14R00X1R20

VDAC



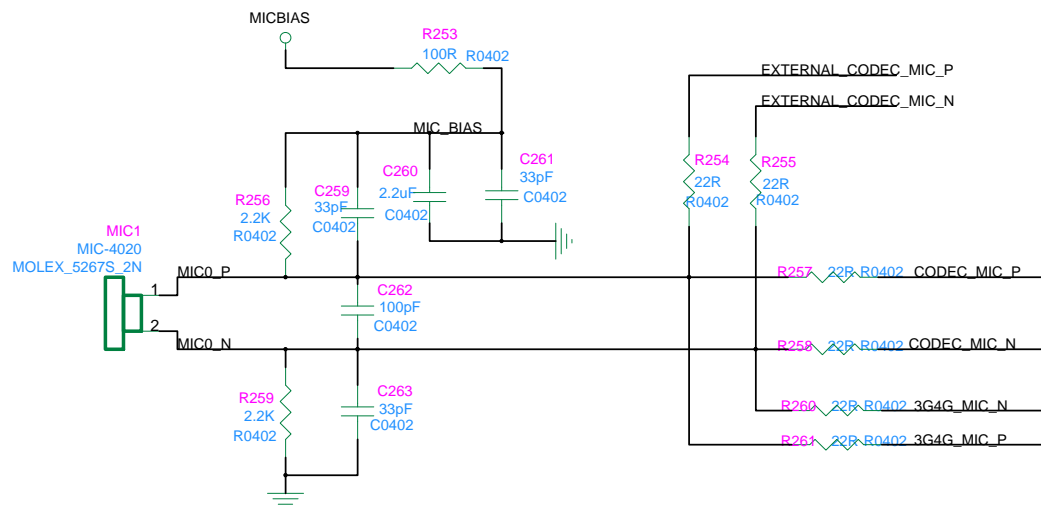
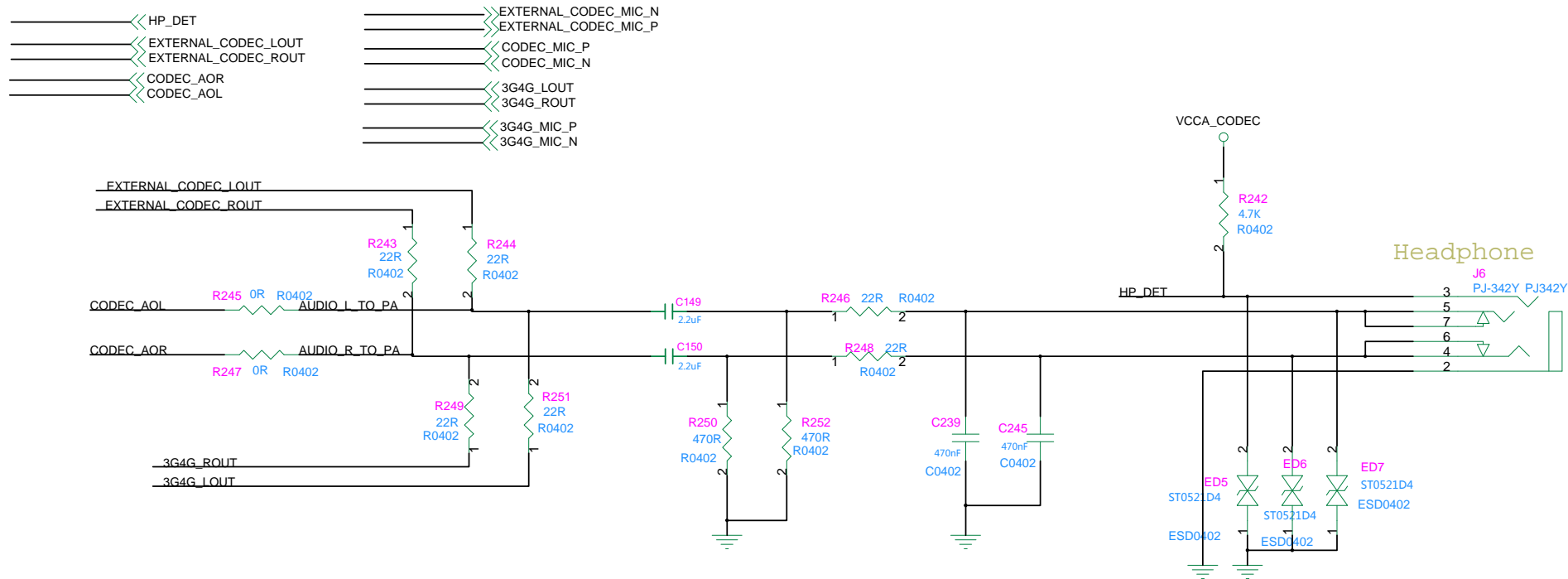
SYSTEM CONNECTION S.R.L

Title: PX3 CODEC/CVBS OUT/HDMI

File: SCHEMATIC BOARD PX3-SE REV 1.2 REV: V1.2

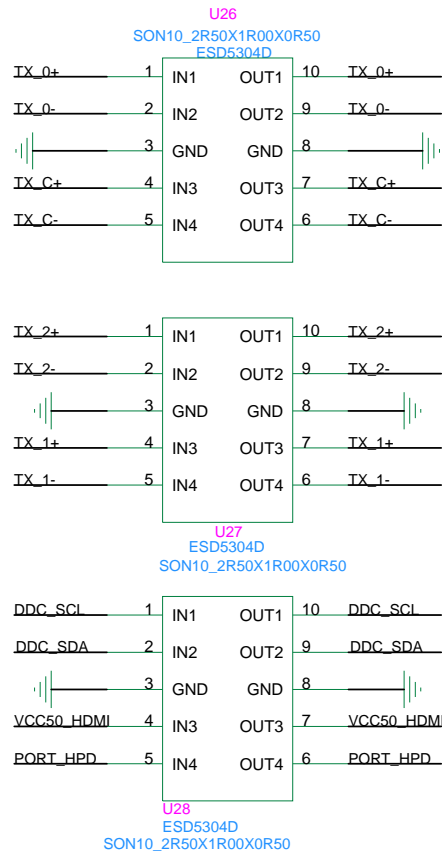
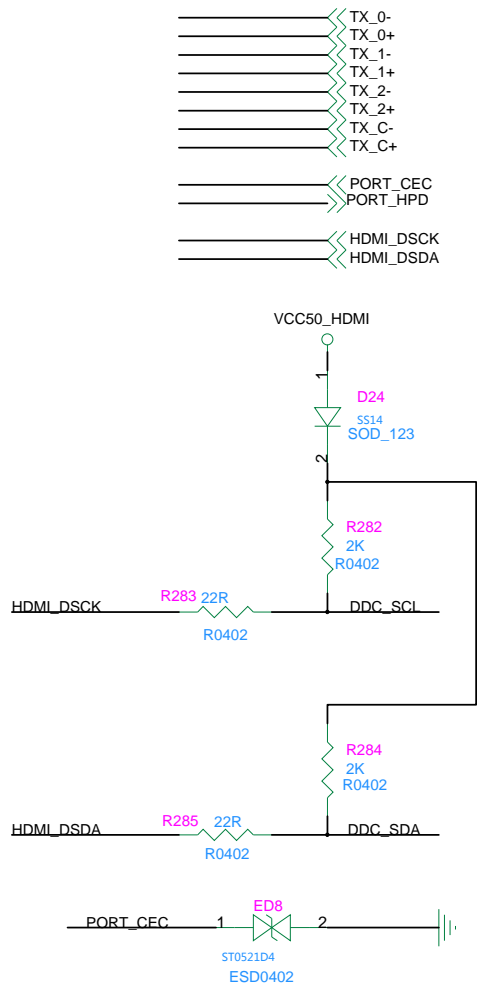
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Page Num:
Page Total:

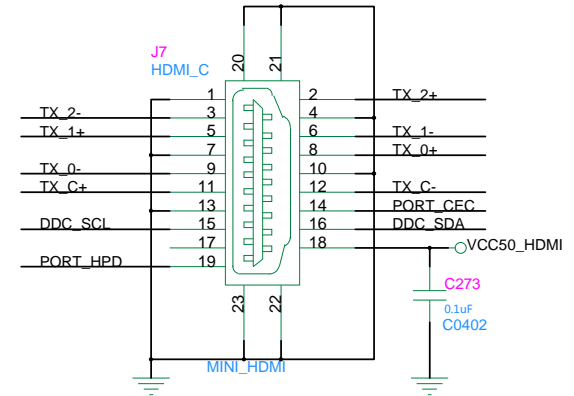


SYSTEM CONNECTION S.R.L		
Title: HEADPHONE/MIC		
File: SCHEMATIC BOARD PX3-SE REV 1.2		REV: V1.2
Create Date:	Page Num:	
Modify Date: Thursday, January 03, 2019	Page Total:	





MINI-HDMI PORT



SYSTEM CONNECTION S.R.L

Title: HDMI OUT

File: SCHEMATIC BOARD PX3-SE REV 1.2 REV: V1.2

Create Date:

Page Num:

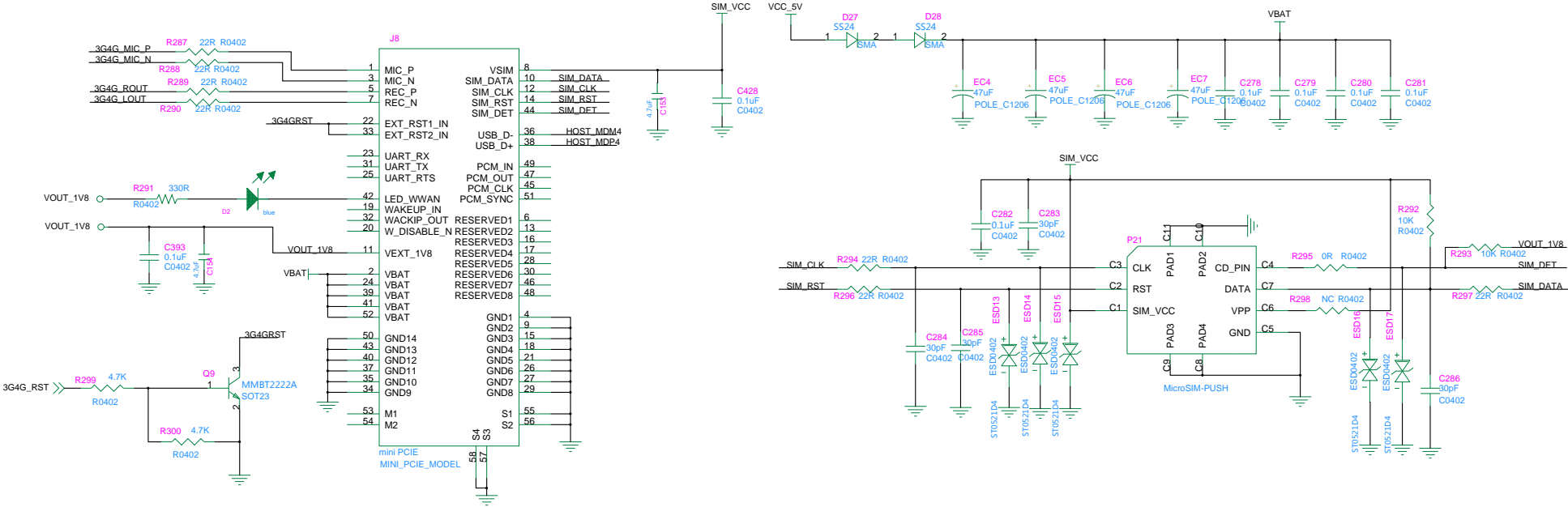
Modify Date: Thursday, January 03, 2019

Page Total:

3G/4G/GPS/GPRS MODEL



3G/4G-GPS-GPRS BM817C Mini PCI-e - Model



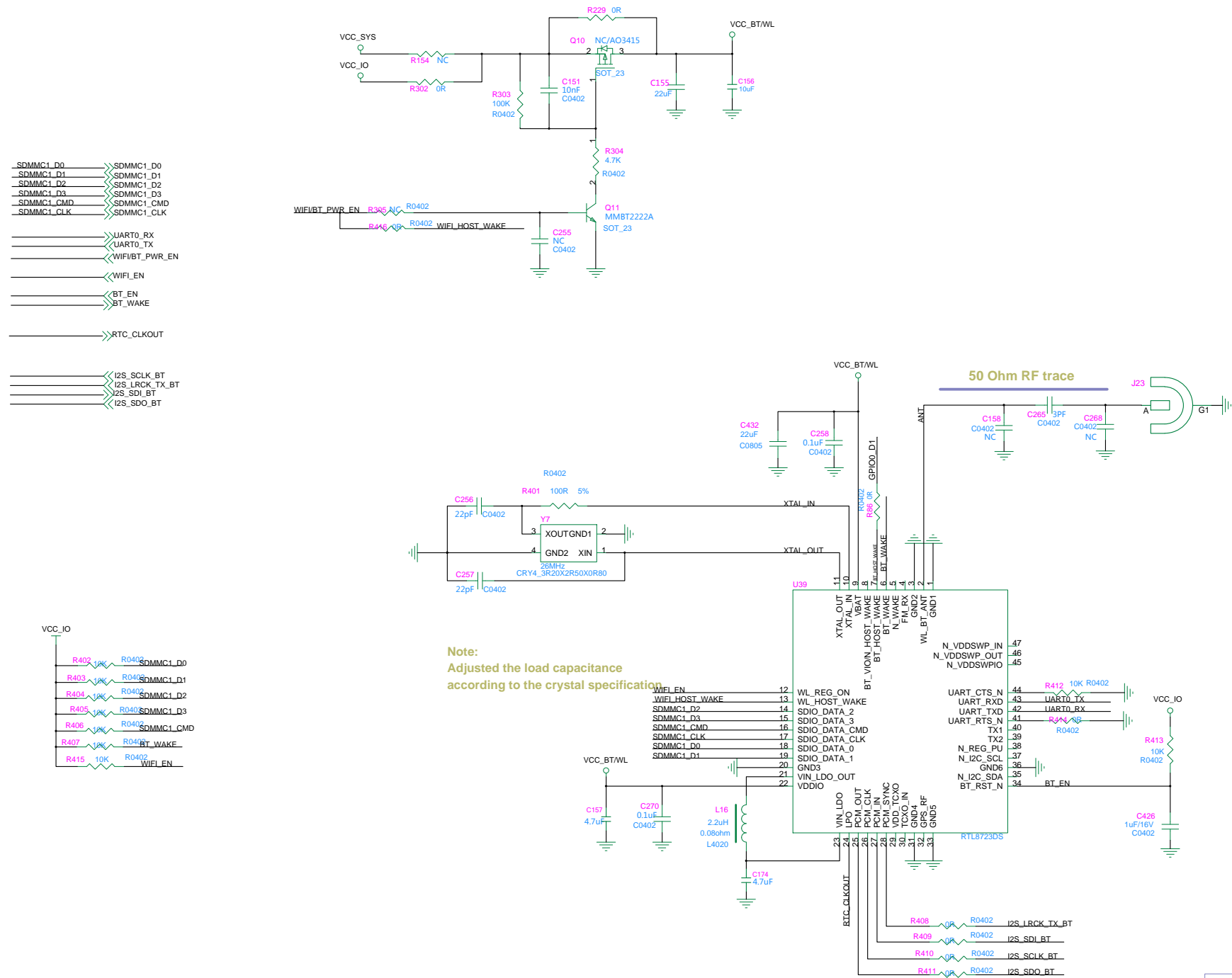
SYSTEM CONNECTION S.R.L

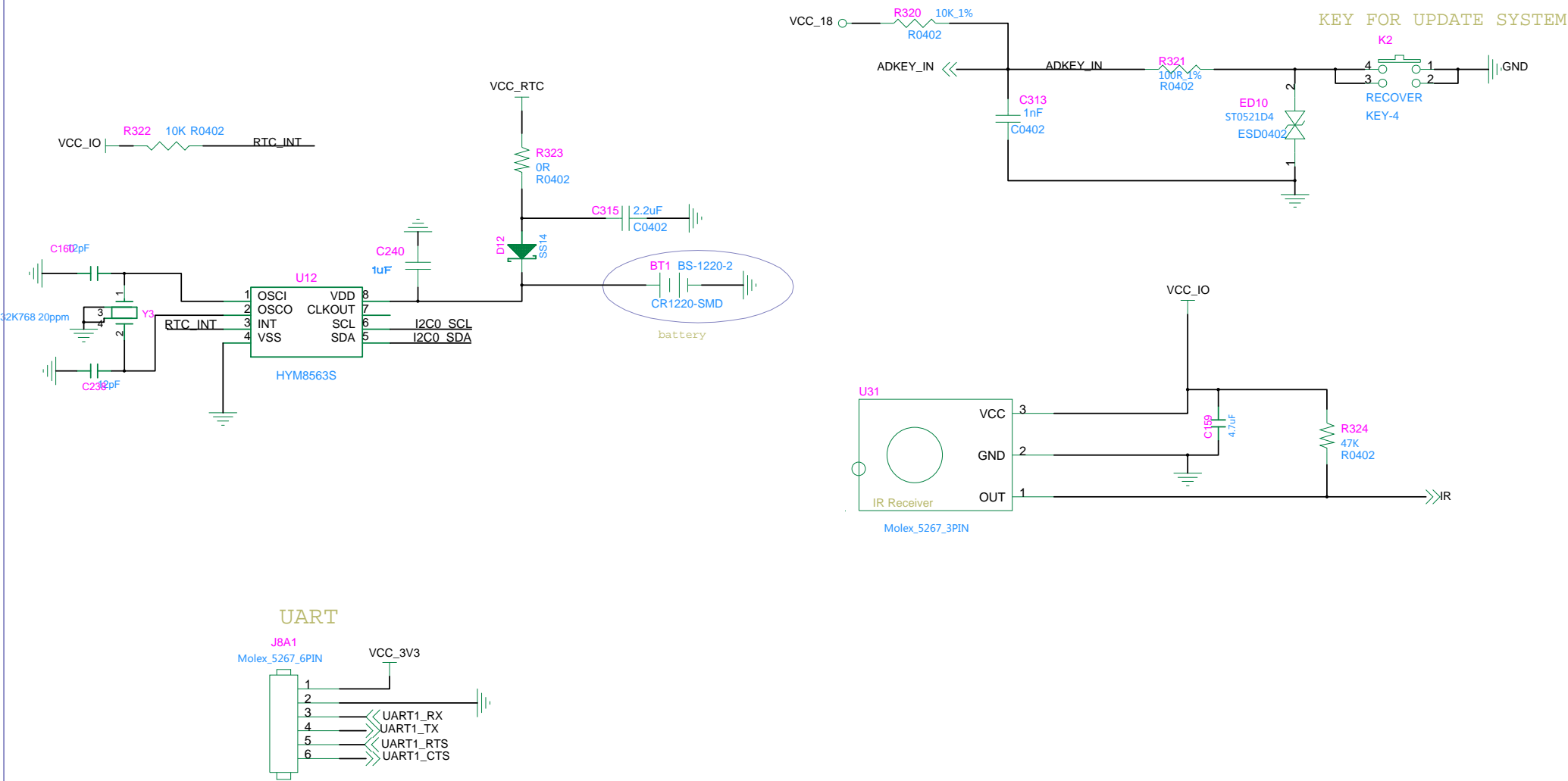
Title: 3G/4G+GPRS+GPS

File: SCHEMATIC BOARD PX3-SE REV 1.2 REV: V1.2

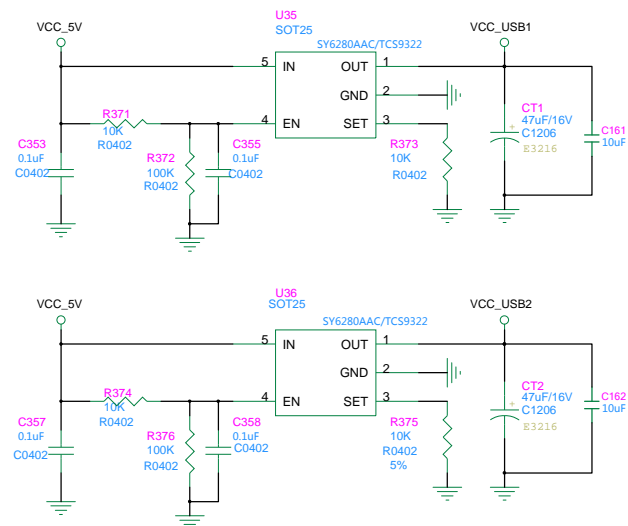
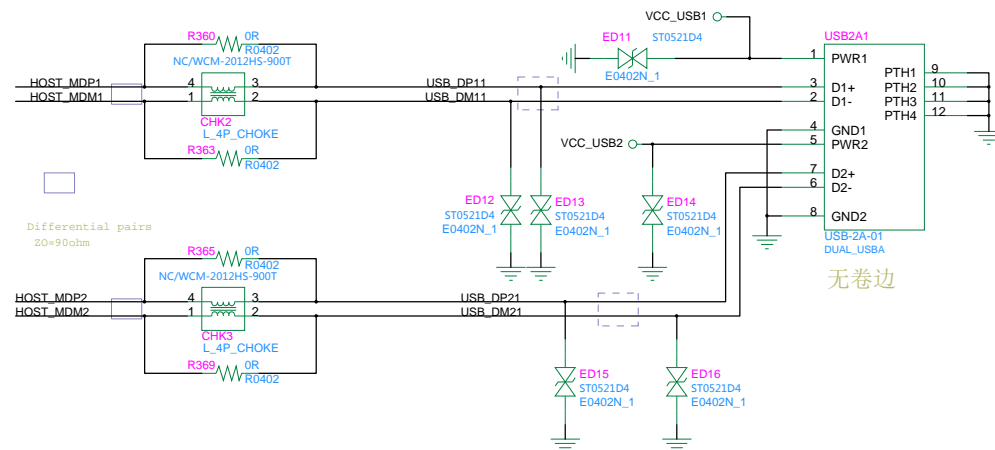
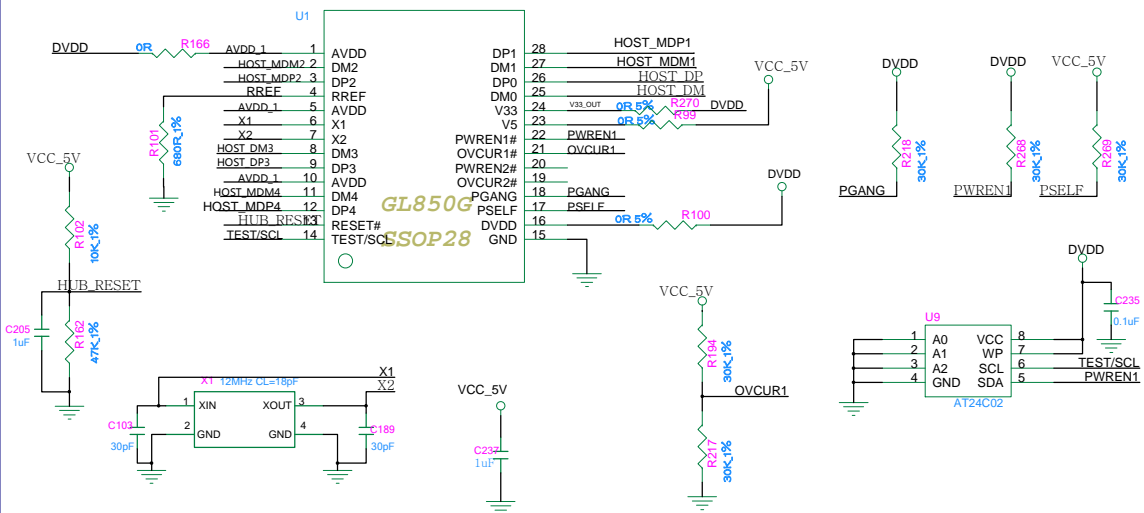
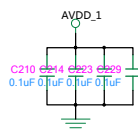
Create Date: Thursday, January 03, 2019 Page Num:

Modify Date: Thursday, January 03, 2019 Page Total:





SYSTEM CONNECTION S.R.L		
Title: RTC+KEY+IR+UART		
File: SCHEMATIC BOARD PX3-SE REV 1.2		REV: V1.2
Create Date:	Page Num:	
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SYSTEM CONNECTION S.R.L

Title: USB HUB

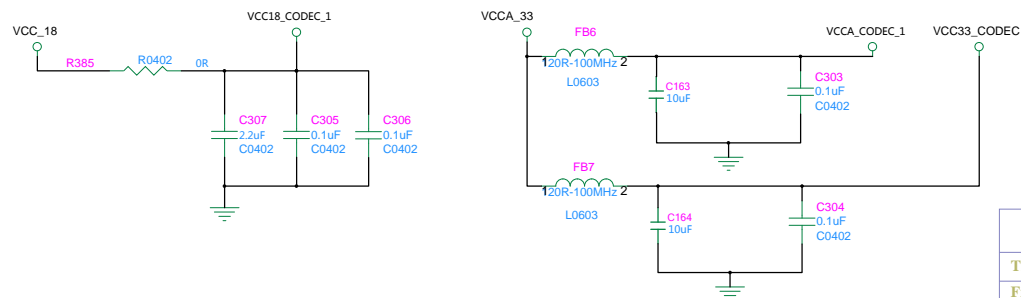
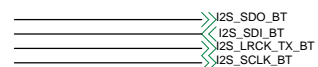
File: SCHEMATIC BOARD PX3-SE REV 1.2

Create Date: Thursday, January 03, 2019

Modify Date: Thursday, January 03, 2019

Page Num:

Page Total:



Page Total: