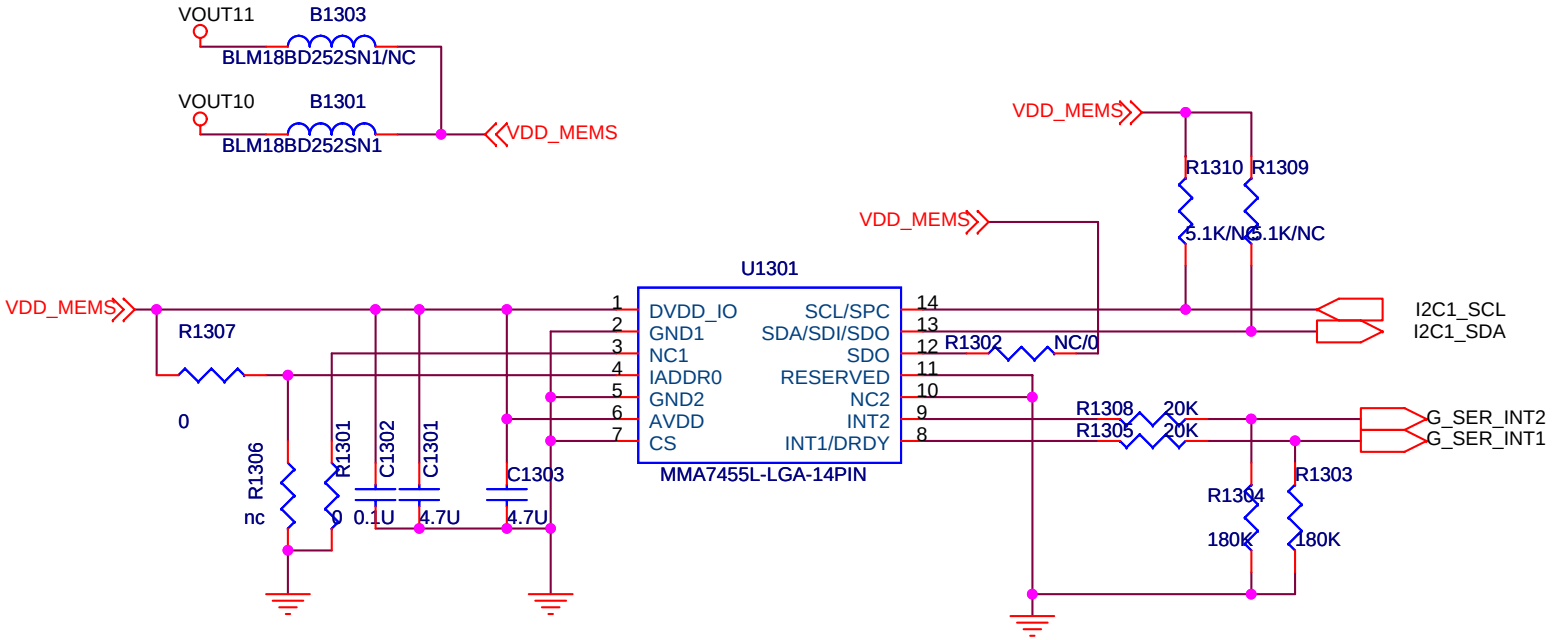

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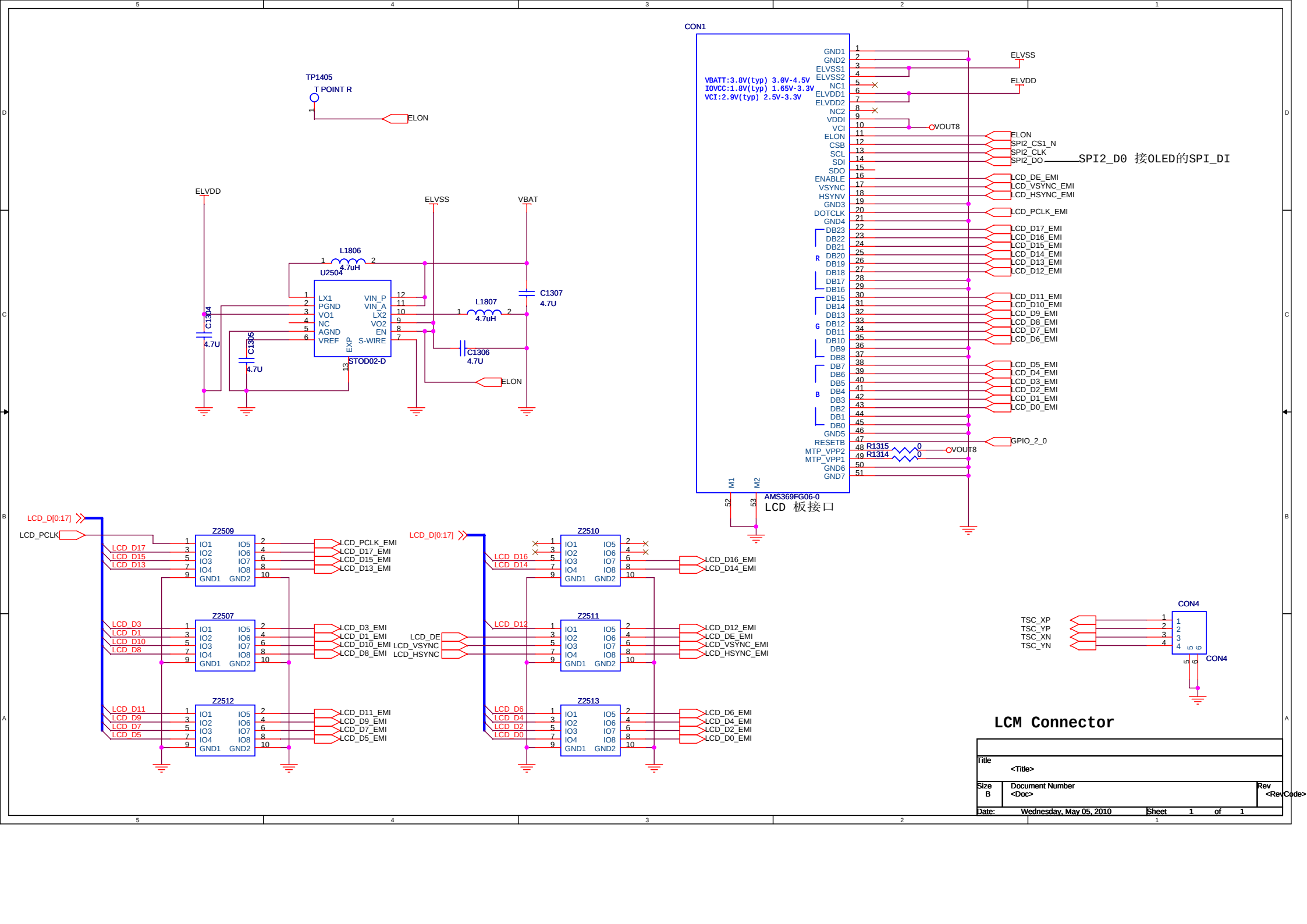
Size A	Document Number 55555555	Rev 666666666
Date: Tuesday, March 30, 2010	Sheet 1 of 1	


TP1405
T POINT R
ELON
ELVDD
ELVSS
VBAT
L1806
4.7uH
U2504
LX1
PGND
VO1
NC
AGND
VREF
VIN_P
VIN_A
LX2
VO2
EN
S-WIRE
EXP
STOD02-D
C1304
4.7U
C1305
4.7U
C1307
4.7U
L1807
4.7uH
C1306
4.7U
ELON
CON1
VBATT:3.8V(typ) 3.0V-4.5V
IOVCC:1.8V(typ) 1.65V-3.3V
VCI:2.9V(typ) 2.5V-3.3V
GND1
GND2
ELVSS1
ELVSS2
NC1
ELVDD1
ELVDD2
NC2
VDDI
VCI
ELON
CSB
SCL
SDI
SDO
ENABLE
VSYNC
HSYNV
GND3
DOTCLK
GND4
R
G
B
RESETB
MTP_VPP2
MTP_VPP1
GND6
GND7
M1
M2
AMS369FG06-0
LCD 板接口
ELVSS
ELVDD
VOUT8
ELON
SPI2_CS1_N
SPI2_CLK
SPI2_DO
SPI2_D0 接OLED的SPI_DI
LCD_DE_EMI
LCD_VSYNC_EMI
LCD_HSYNC_EMI
LCD_PCLK_EMI
LCD_D17_EMI
LCD_D16_EMI
LCD_D15_EMI
LCD_D14_EMI
LCD_D13_EMI
LCD_D12_EMI
LCD_D11_EMI
LCD_D10_EMI
LCD_D9_EMI
LCD_D8_EMI
LCD_D7_EMI
LCD_D6_EMI
LCD_D5_EMI
LCD_D4_EMI
LCD_D3_EMI
LCD_D2_EMI
LCD_D1_EMI
LCD_D0_EMI
GPIO_2_0
R1315
R1314
0
0
LCD_D[0:17]
LCD_PCLK
Z2509
Z2507
Z2512
Z2510
Z2511
Z2513
IO1
IO2
IO3
IO4
IO5
IO6
IO7
IO8
GND1
GND2
LCD_D17
LCD_D15
LCD_D13
LCD_D3
LCD_D1
LCD_D10
LCD_D8
LCD_D11
LCD_D9
LCD_D7
LCD_D5
LCD_D16
LCD_D14
LCD_D12
LCD_DE
LCD_VSYNC
LCD_HSYNC
LCD_D6
LCD_D4
LCD_D2
LCD_D0
CON4
TSC_XP
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TSC_XN
TSC_YN
LCM Connector
Title
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Size
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Rev
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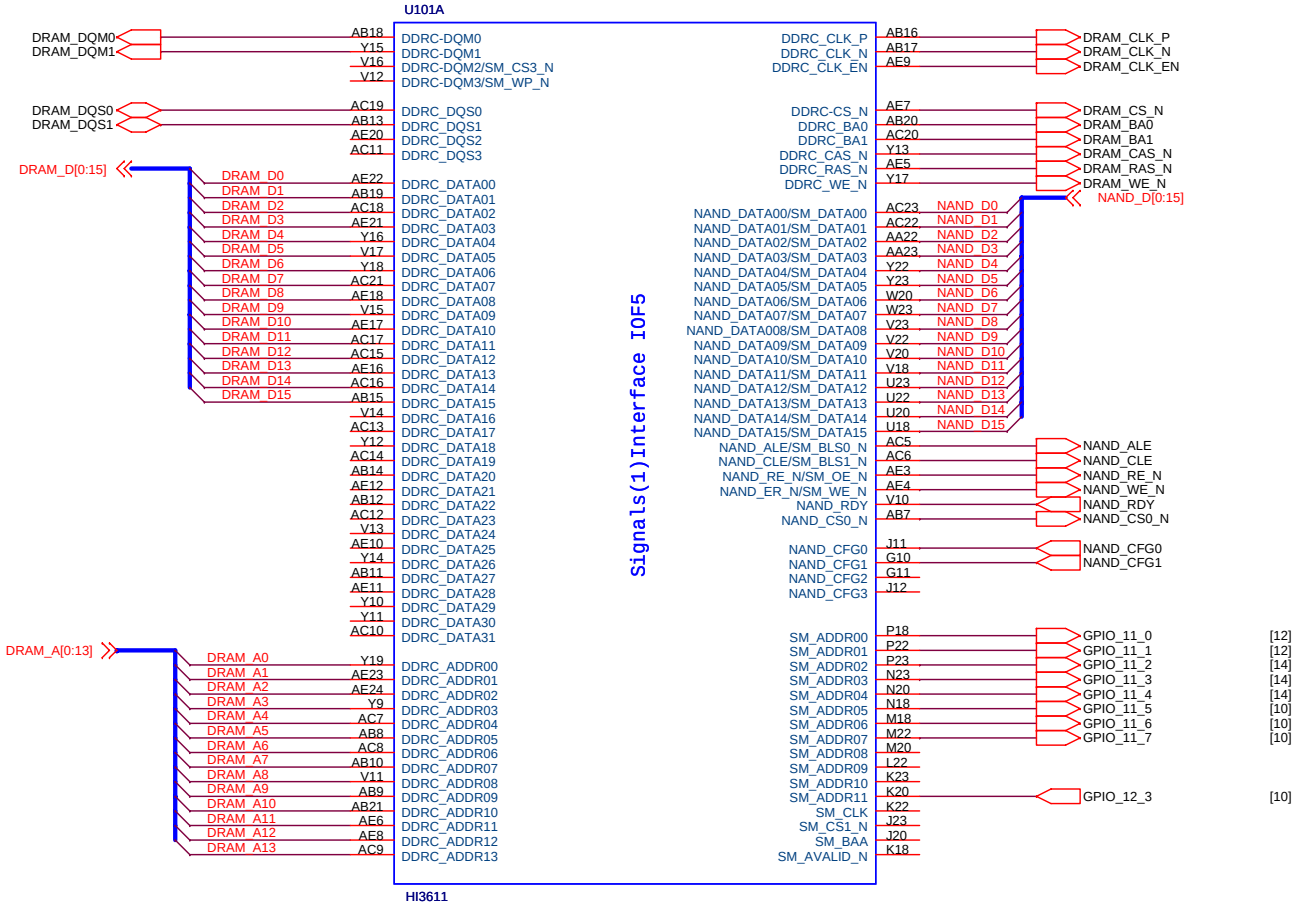
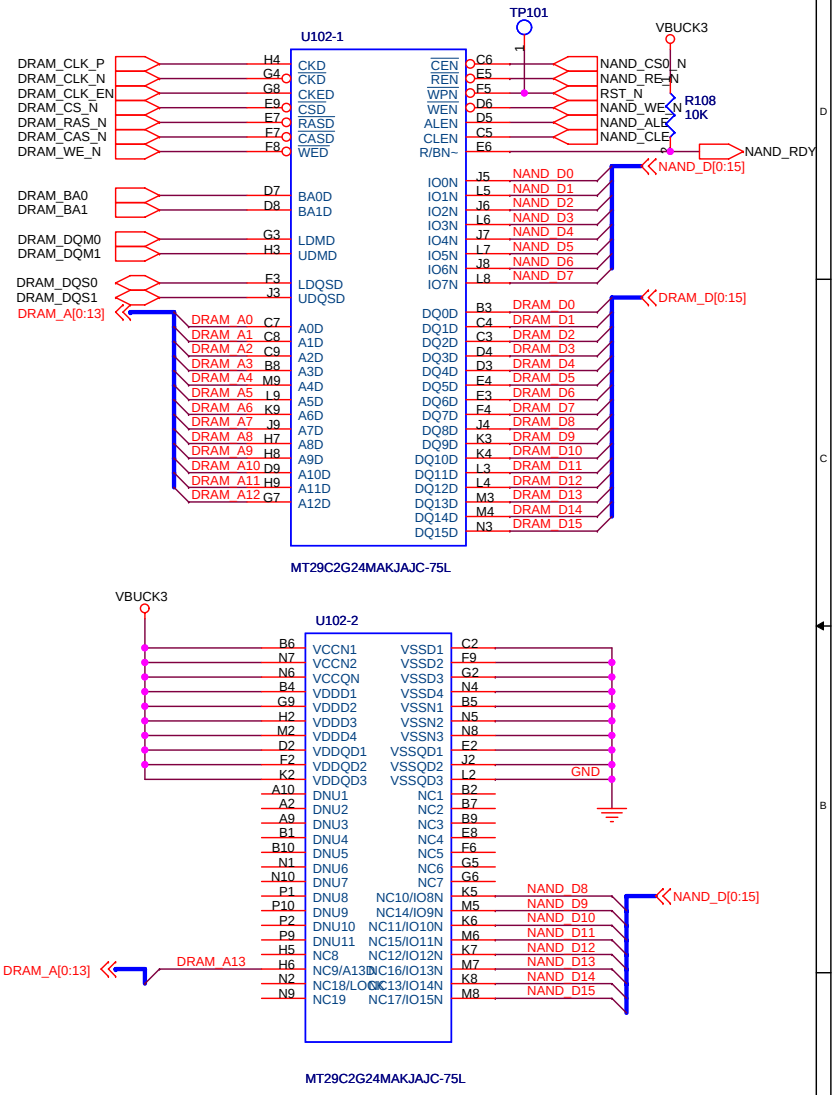
Date:
Wednesday, May 05, 2010
Sheet
1
of
1

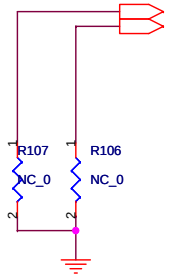
Hi3611_Memory IF



Memory(2Gbit NAND+1Gbit Mobile DDR)

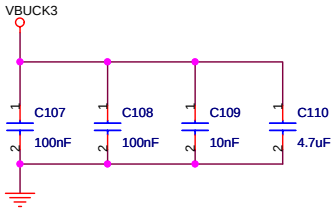


NAND Configuration



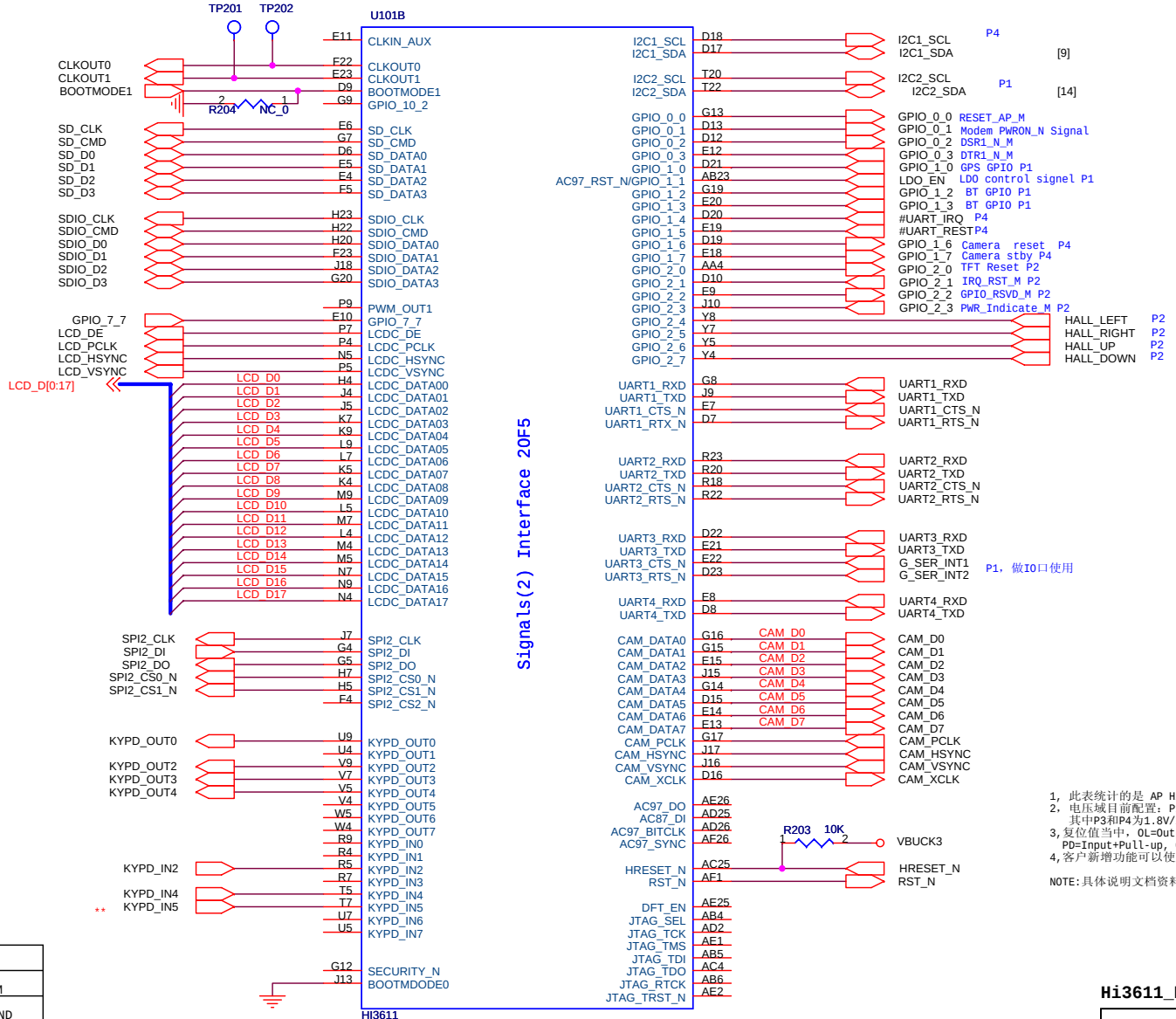
NAND_CFG[3:0]	DATAWIDTH	PAGESIZE	ADDRESS CYCLE
1000	8	512	3
1001	8	512	4
1010	16	512	3
1011	16	512	4
1100	8	2K	4
1101	8	2K	5
1110	16	2K	4
1111	16	2K	5

Decoupling Cap of Memory



Hi3611_Memory

Title: HI3611_C2		
P/N: <>		Rev: 1.0
Design by: Qinyx	Checked by: tanghui	Approved by: zhangjiong
Date: 2009-06-30	Date: 2009-06-30	Date: 2009-06-30
Scale: <xxxx>	Size: B	Sheet: 3 of 20



SECURITY_N	Description
0	Security Mode
1	Non-Security Mode

BOOTMODE1	BOOTMODE0	Description
0	0	Download via BootROM
0	1	Boot from External NAND
1	0	Boot from BootROM with NAND
1	1	Boot from External NOR

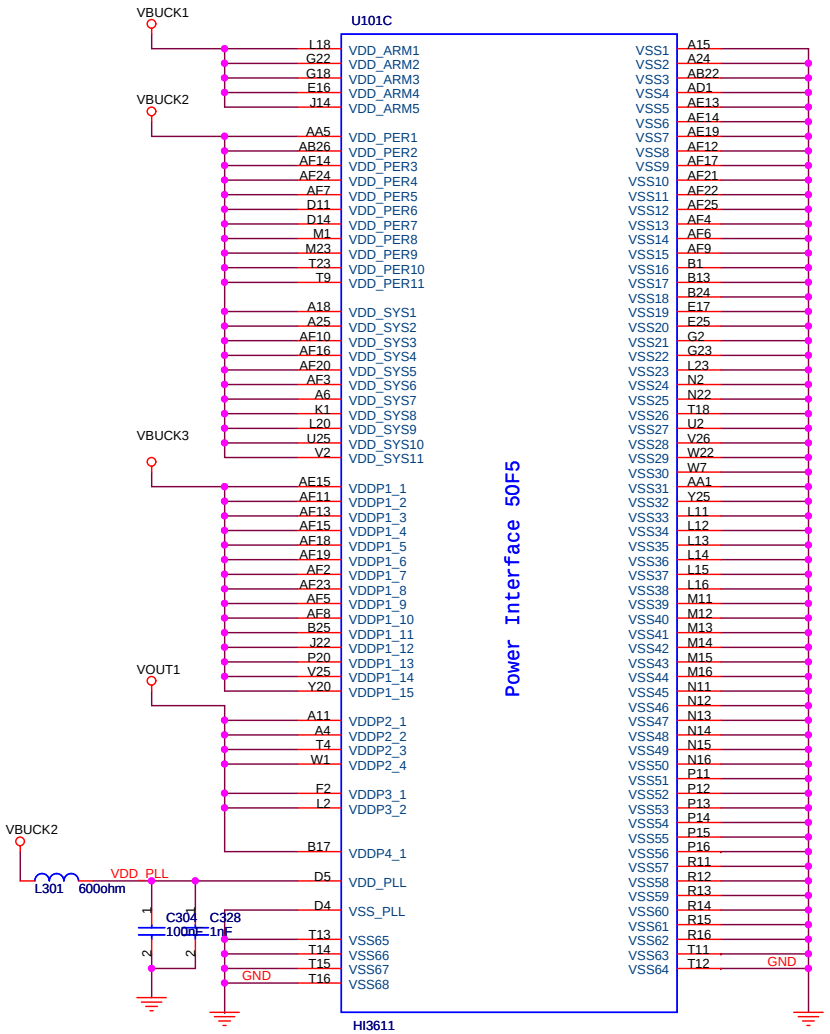
说 明

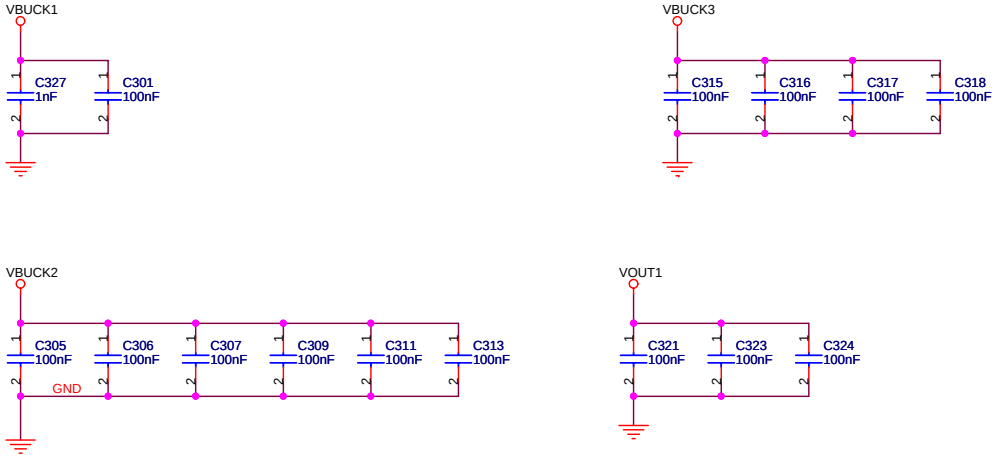
1, 此表统计的是 AP Hi3611的GPIO使用情况，芯片的封装形式为单封；
2, 电压域目前配置：P1=1.8V；P2=2.6V；P3=2.6V；P4=2.6V。
其中P3和P4为1.8V/2.5V可配
3,复位值当中，OL=Output Low Level，OH=Output High Level，PD=Input+Pull-down
PD=Input+Pull-up，OZ=高阻；IX如无特殊说明，则表示Input+Pull-down
4,客户新增功能可以使用的GPIO已填充为蓝色,并备注为"客户新增功能可使用"

NOTE:具体说明文档资料是：K3V100R001 GPIO分配列表(V01).xls

Hi3611_Digital IF

Title: HI3611_C2		
P/N: <>		Rev: 1.0
Design by: Qinyx	Checked by: tanghui	Approved by: zhangjiong
Date: 2009-06-30	Date: 2009-06-30	Date: 2009-06-30
Scale: <xxxx>	Size: B	Sheet: 4 of 20

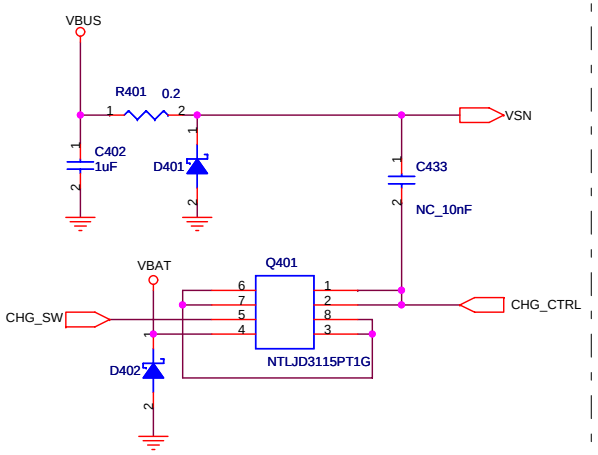




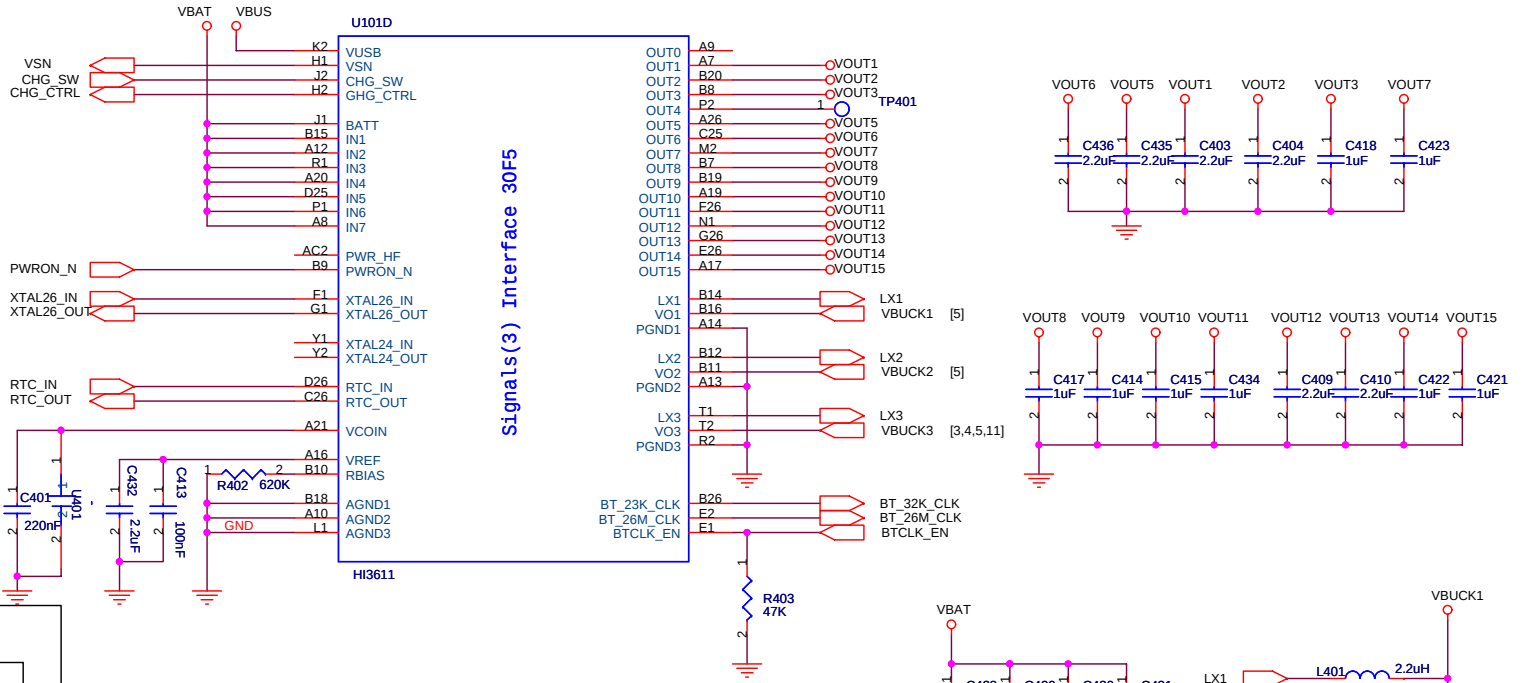
Hi3611_Power IF

Title: HI3611_C2		
P/N: <>		Rev: 1.0
Design by: Qinyx	Checked by: tanghui	Approved by: zhangjiong
Date: 2009-06-30	Date: 2009-06-30	Date: 2009-06-30
Scale: <xxxx>	Size: B	Sheet: 5 of 20

Charger



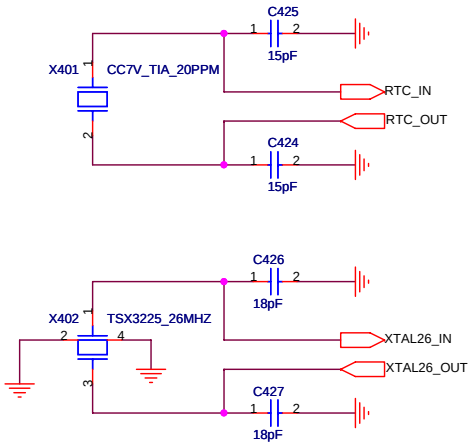
Power Management

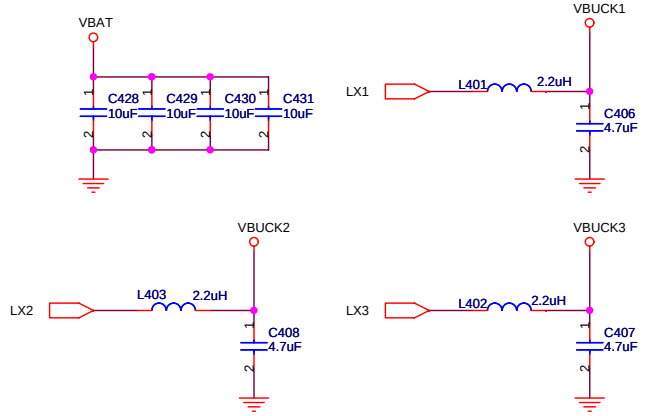


Power management Table

Name	Value	Current	Function
VBUCK1	1.2V	500mA	Hi3611 ARM Core
VBUCK2	1.2V	500mA	Hi3611 Peripheral Subsystem
VBUCK3	1.8V	270mA	Hi3611 IO & Memory
VOUT1	2.6V	145mA	Hi3611 IO & JOG
VOUT2	2.8V	190mA	2 Mega Camera AVDD
VOUT3	2.85V	80mA	Micro-SD
VOUT4	2.6V	200mA	CMMB
VOUT5	1.8V	164mA	WiFi VDD & IO
VOUT6	3.0V	110mA	WiFi PA & IO
VOUT7	2.8V	10mA	26MHz Clock
VOUT8	2.8V	15mA	LCD
VOUT9	1.5V	50mA	2Mega Camera Core
VOUT10	2.8V	20mA	2Mega Camera IO
VOUT11	3.0V	25mA	CMMB CA
VOUT12	3.3V	150mA	USB Transceiver
VOUT13	3.3V	300mA	Audio & HKADC
VOUT14	1.8V	5mA	RTC
VOUT15	3.0V	5mA	PMU Logic

Crystal

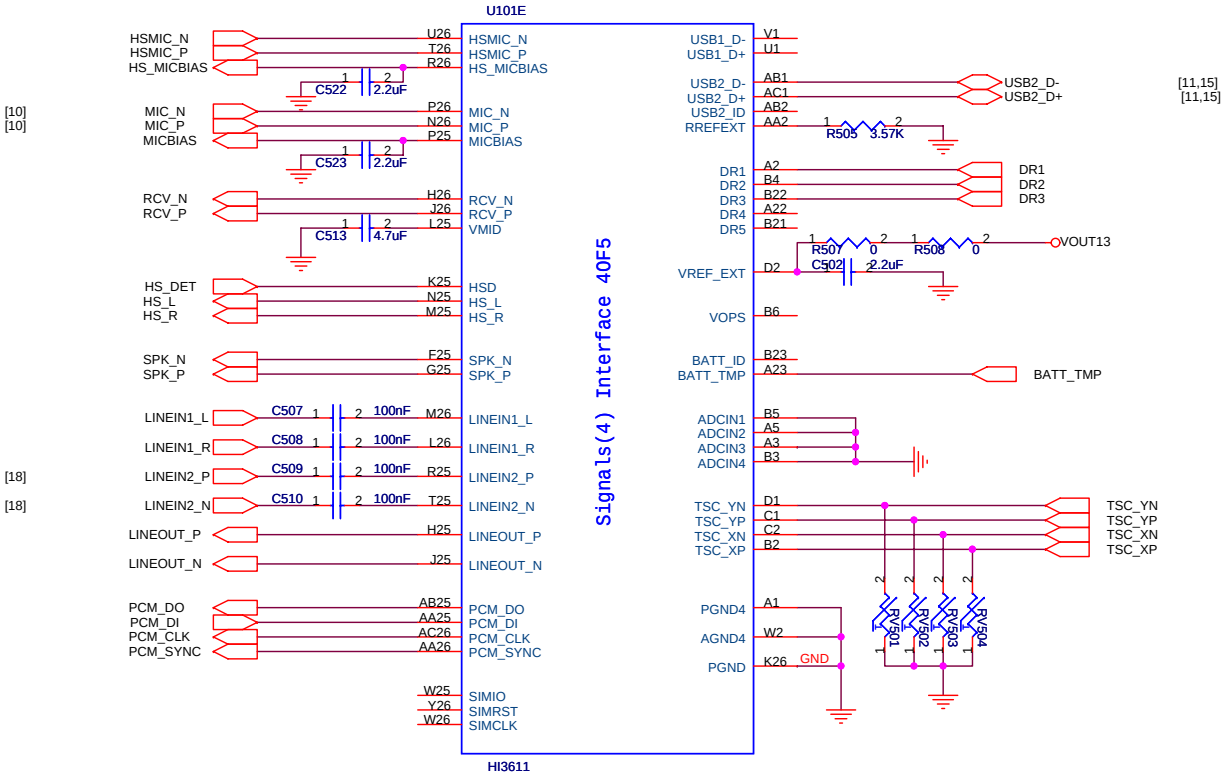




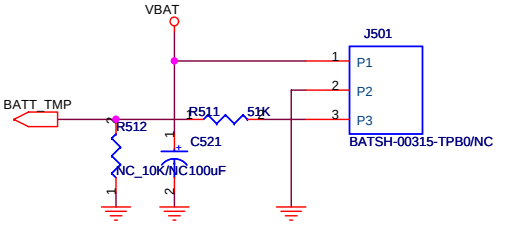
Hi3611_PMU1

Title: HI3611_C2		
P/N: <>		Rev: 1.0
Design by: Qinyx	Checked by: tanghui	Approved by: zhangjiong
Date: 2009-06-30	Date: 2009-06-30	Date: 2009-06-30
Scale: <xxxx>	Size: B	Sheet: 6 of 20

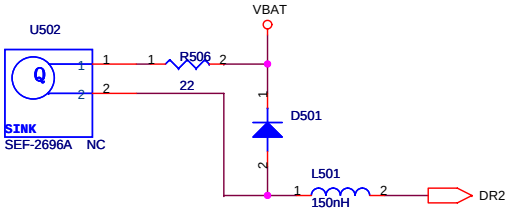
Audio & Misc

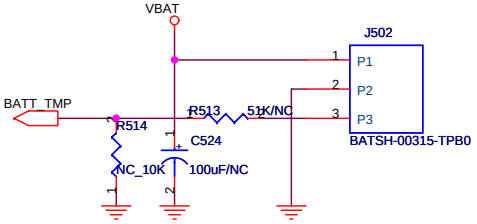


Battery Connector



Motor





Hi3611_PMU2

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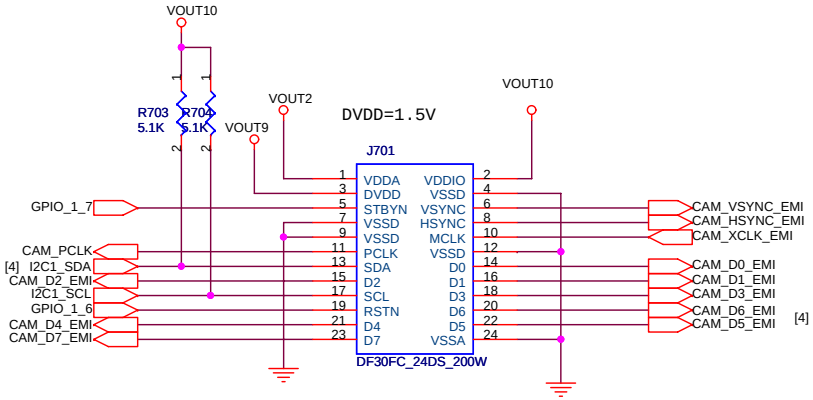
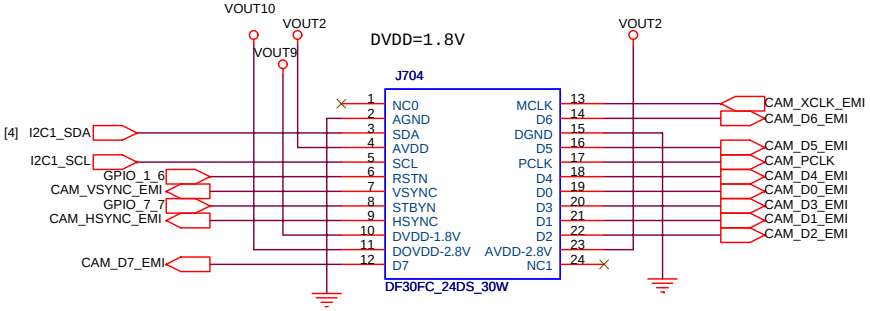
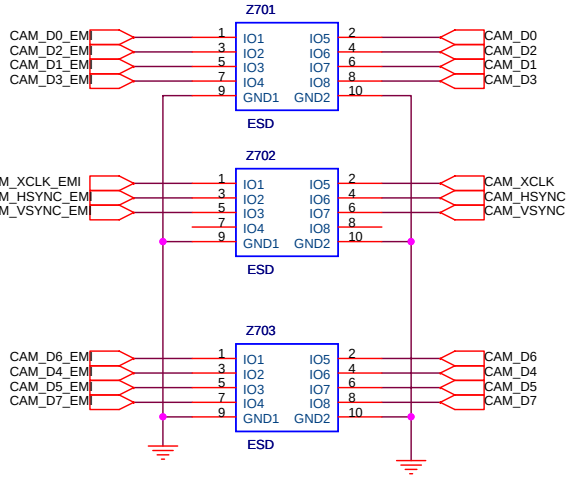
Design by: Qinyx	Checked by: tanghui	Approved by: zhangjiong
Date: 2009-06-30	Date: 2009-06-30	Date: 2009-06-30
Scale: <xxxx>	Size: B	Sheet: 7 of 20

2Mega Camera Connector

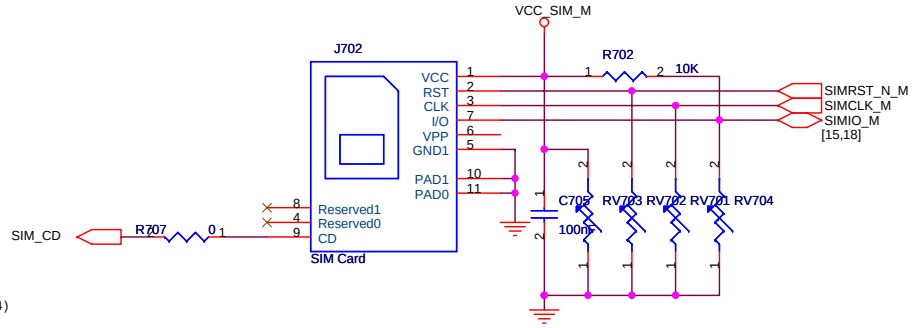


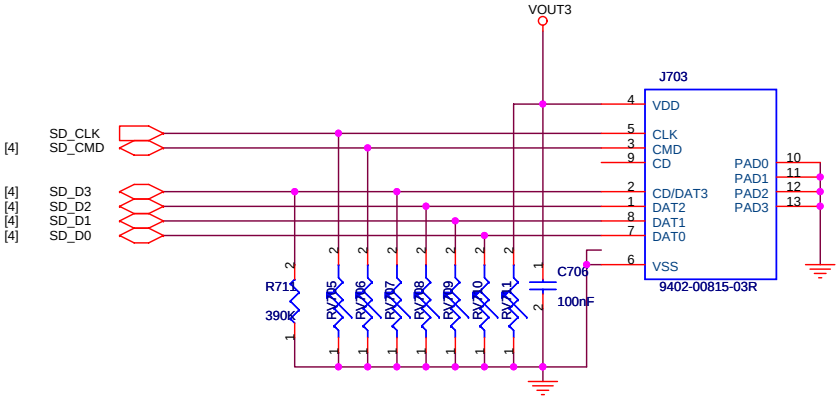
0.3Mega Camera Connector



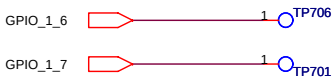


Micro SD & SIM Card



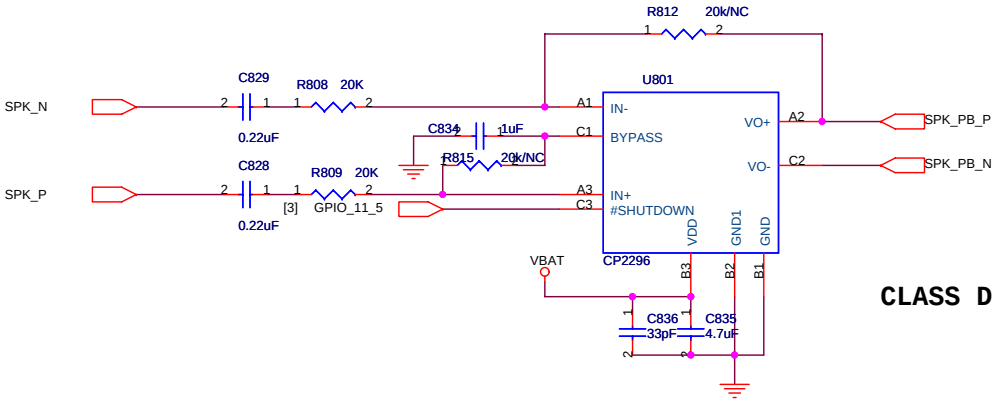


Test Point

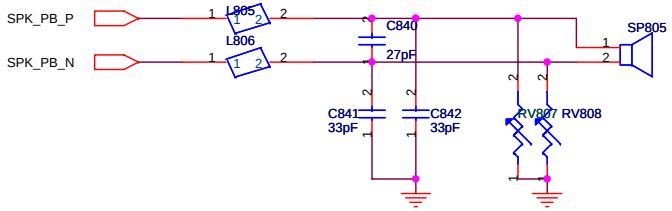


Camera Module

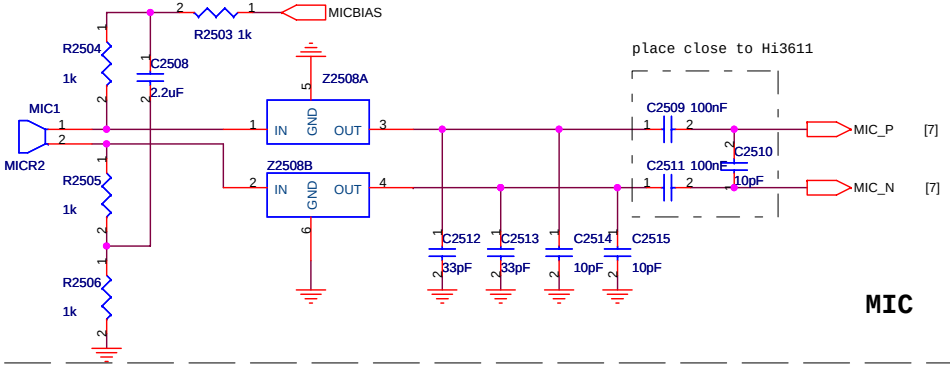
Title: HI3611_C2		
P/N: <>		Rev: 1.0
Design by: Qinyx	Checked by: tanghui	Approved by: zhangjiong
Date: 2009-06-30	Date: 2009-06-30	Date: 2009-06-30
Scale: <xxxx>	Size: B	Sheet: 8 of 20



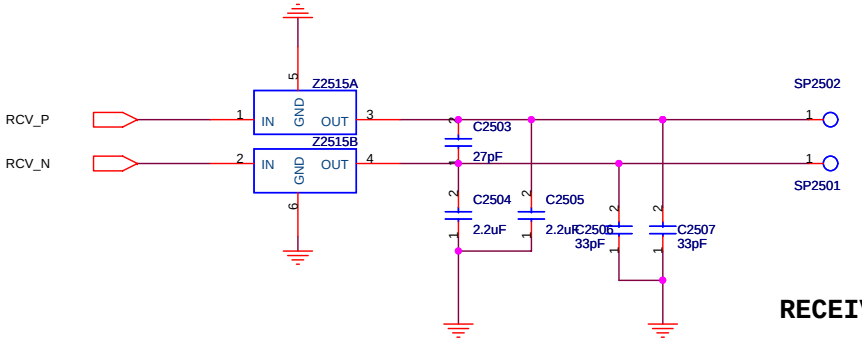
CLASS D



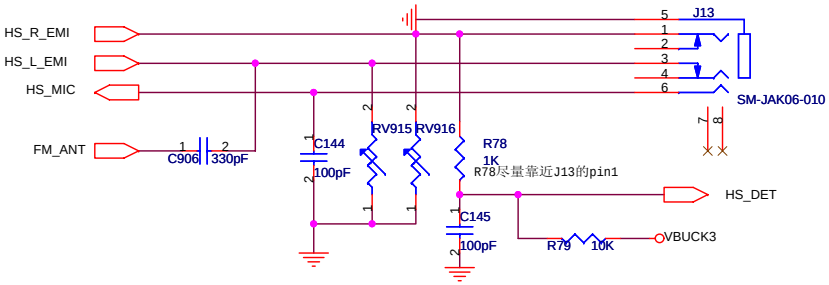
Speaker



MIC



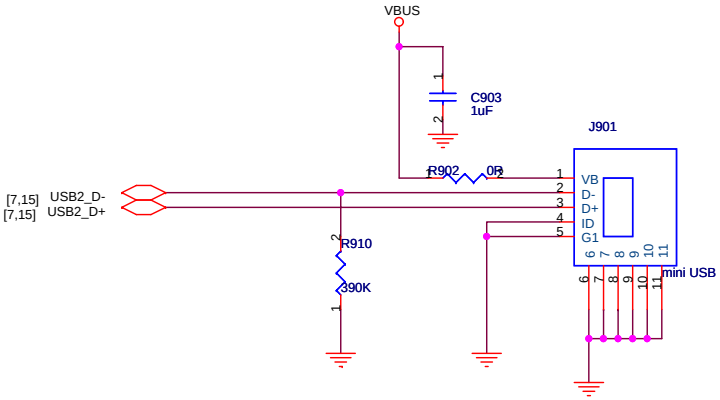
RECEIVE



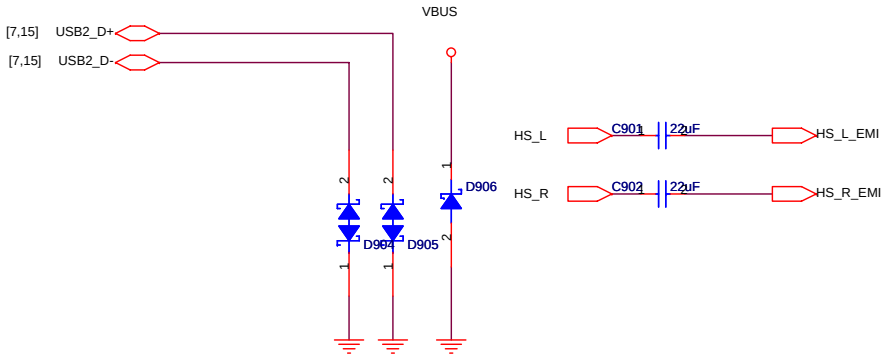
Single End Input/Output

Title: HI3611_C2		
P/N: <>		Rev: 1.0
Design by: Qinyx	Checked by: tanghui	Approved by: zhangjiong
Date: 2009-06-30	Date: 2009-06-30	Date: 2009-06-30
Scale: <xxxx>	Size: B	Sheet: 9 of 20

USB & UART &Headset



ESD/EMI Circuit



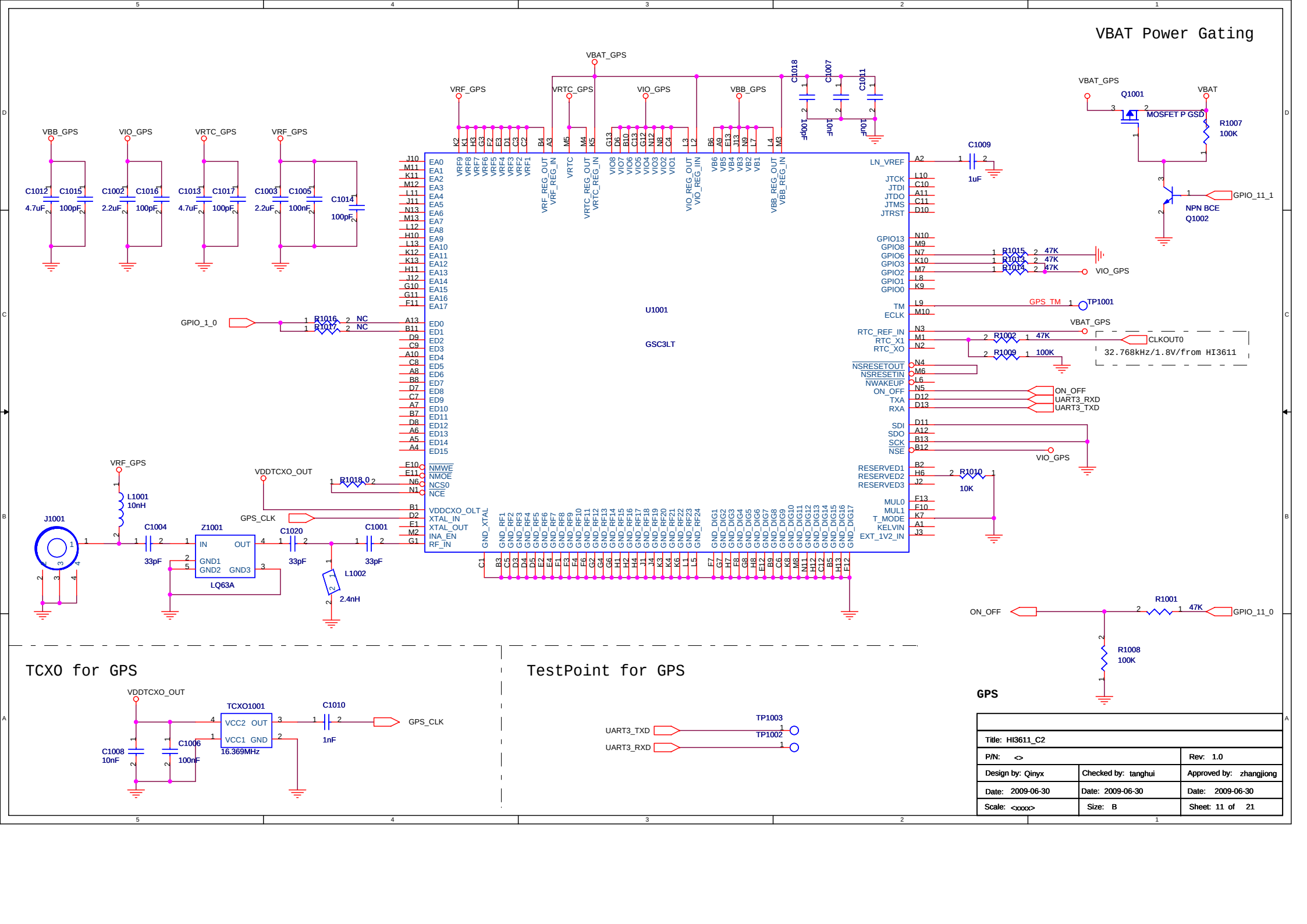
Keyboard Decoder

	KYPD_IN0	KYPD_IN1	KYPD_IN2	KYPD_IN3
KYPD_OUT0	OK1	Side_down	Side_up	/
KYPD_OUT1	Capture	VOL-	VOL+	/
KYPD_OUT2	Left Key	UP	Right Key	/
KYPD_OUT3	Left	OK2	Right	Home
KYPD_OUT4	Call	Down	End	OK3

MISC

Title: HI3611_C2		
P/N: <>		Rev: 1.0
Design by: Qinyx	Checked by: tanghui	Approved by: zhangjiong
Date: 2009-06-30	Date: 2009-06-30	Date: 2009-06-30
Scale: <xxxx>	Size: B	Sheet: 10 of 20

VBAT Power Gating



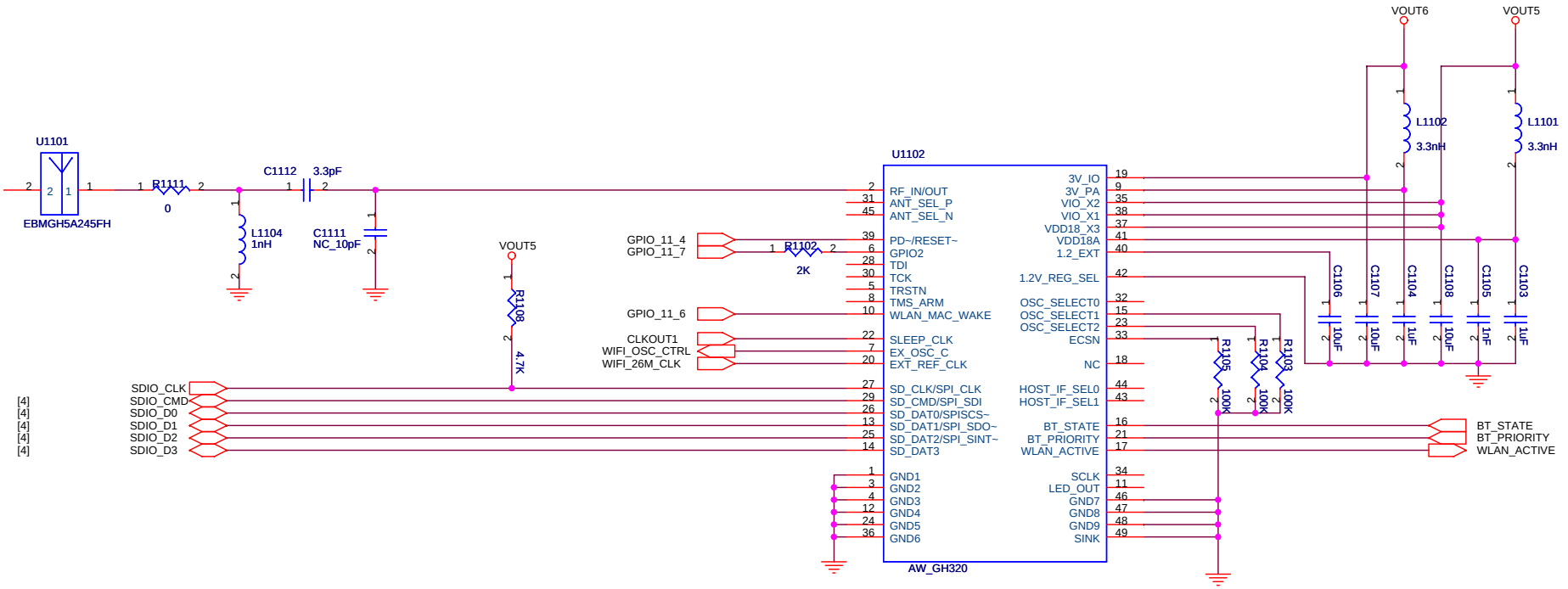
TCXO for GPS

TestPoint for GPS

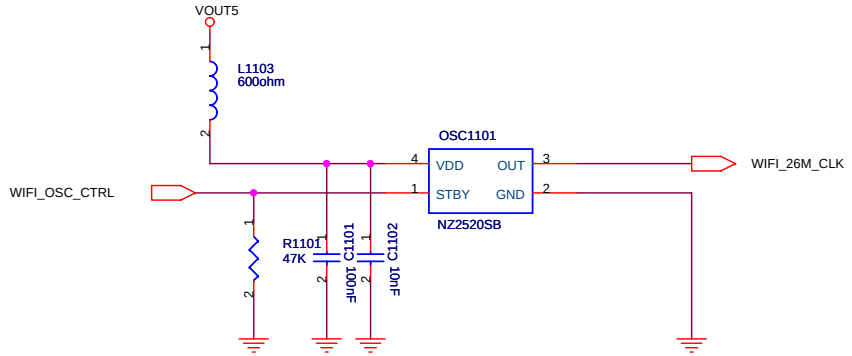
GPS

Title: HI3611_C2		
P/N: <>		Rev: 1.0
Design by: Qinyx	Checked by: tanghui	Approved by: zhangjiong
Date: 2009-06-30	Date: 2009-06-30	Date: 2009-06-30
Scale: <xxxx>	Size: B	Sheet: 11 of 21

WiFi



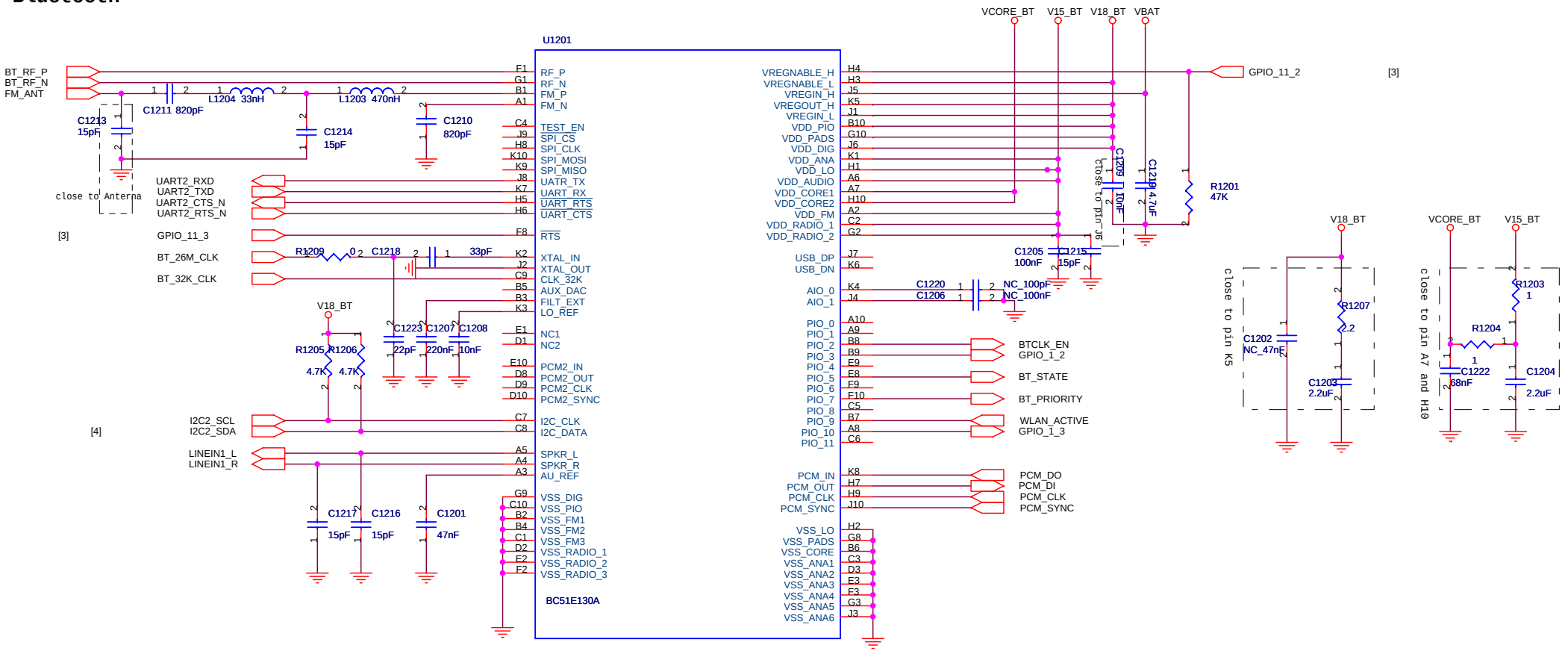
26MHz OSC For WiFi



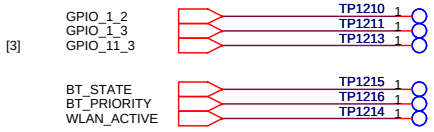
WiFi

Title: HI3611_C2		
P/N: <>		Rev: 1.0
Design by: Qinyx	Checked by: tanghui	Approved by: zhangjiong
Date: 2009-06-30	Date: 2009-06-30	Date: 2009-06-30
Scale: <xxxx>	Size: B	Sheet: 12 of 20

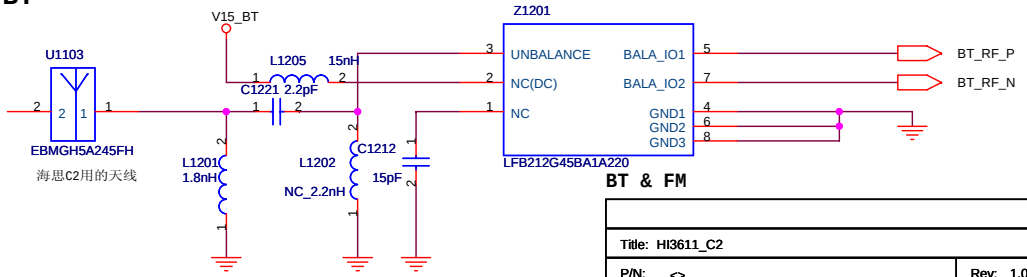
Bluetooth



Test Point



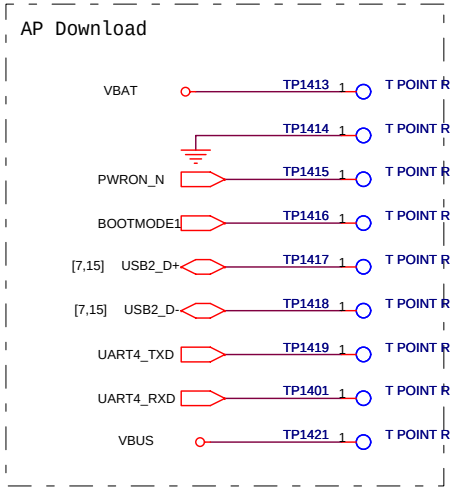
RF FOR BT

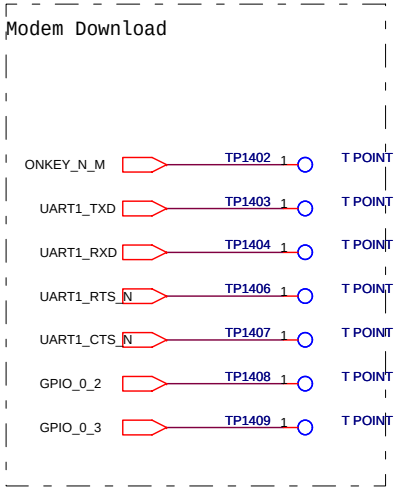


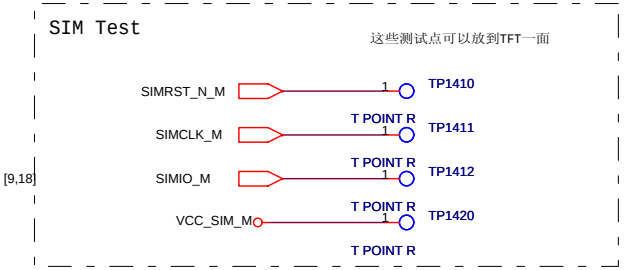
BT & FM

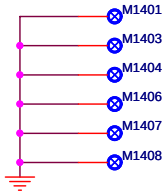
Title: HI3611_C2		
P/N: <>		Rev: 1.0
Design by: Qinyx	Checked by: tanghui	Approved by: zhangjiong
Date: 2009-06-30	Date: 2009-06-30	Date: 2009-06-30
Scale: <xxxx>	Size: B	Sheet: 13 of 20

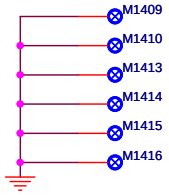
Test Point

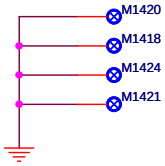


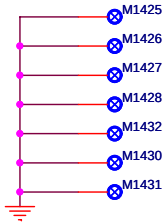






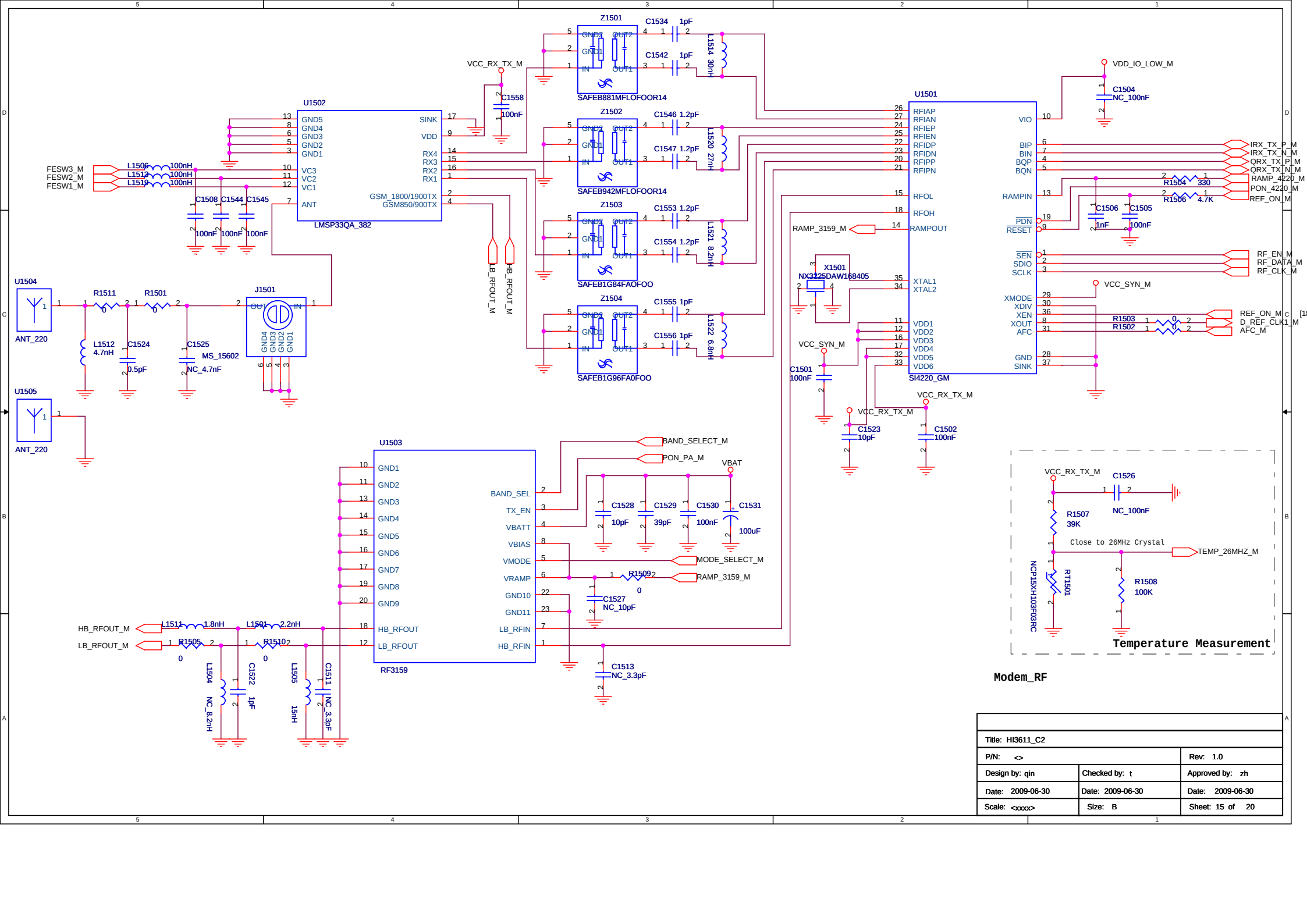




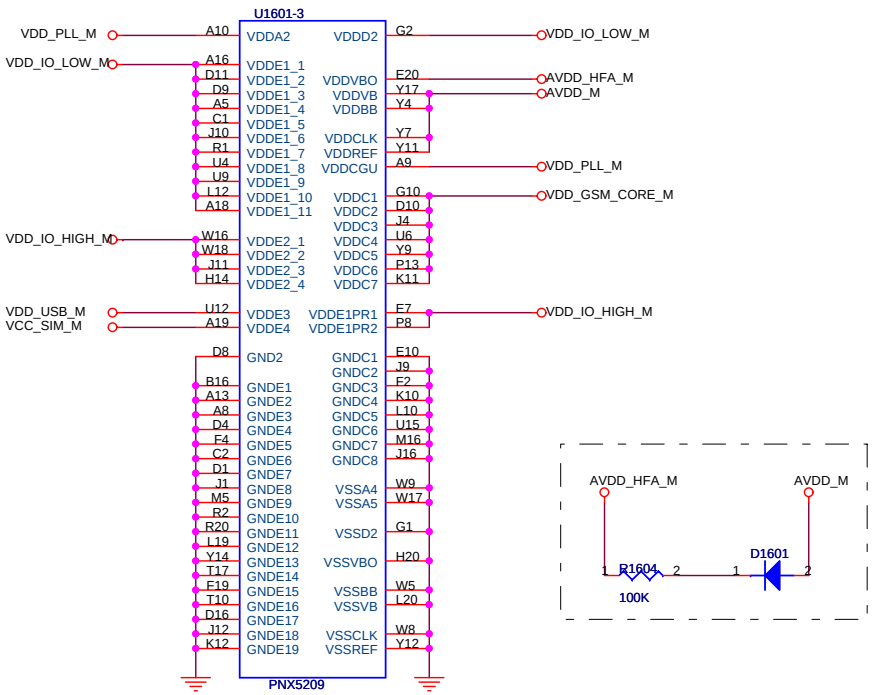


TestPoint & Shielding Case

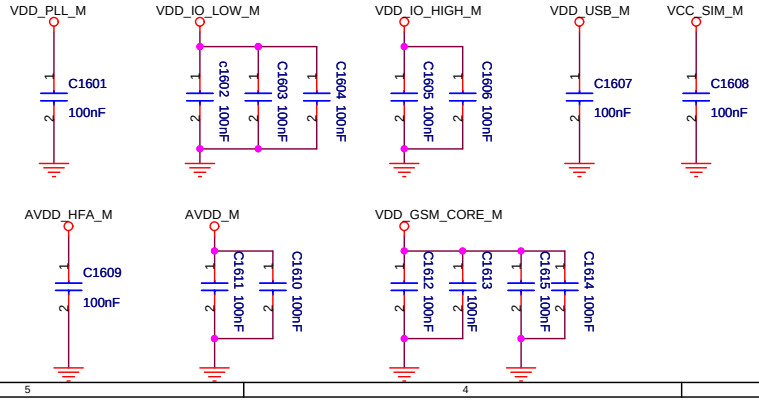
Title: HI3611_C2		
P/N: <>		Rev: 1.0
Design by: Qinyx	Checked by: tanghui	Approved by: zhangjiong
Date: 2009-06-30	Date: 2009-06-30	Date: 2009-06-30
Scale: <xxxx>	Size: B	Sheet: 14 of 20


U1502
LMSP33QA_382
GND5
GND4
GND3
GND2
GND1
VC3
VC2
VC1
ANT
SINK
VDD
RX4
RX3
RX2
RX1
GSM_1800/1900TX
GSM850/900TX
FESW3_M
FESW2_M
FESW1_M
L1506 100nH
L1512 100nH
L1519 100nH
C1508 C1544 C1545
100nF 100nF 100nF
VCC_RX_TX_M
C1558 100nF
Z1501
SAFEB881MFLOFOOR14
C1534 1pF
C1542 1pF
L1514 30nH
Z1502
SAFEB942MFLOFOOR14
C1546 1.2pF
C1547 1.2pF
L1520 27nH
Z1503
SAFEB1G84FAOFOO
C1553 1.2pF
C1554 1.2pF
L1521 8.2nH
Z1504
SAFEB1G96FA0FOO
C1555 1pF
C1556 1pF
L1522 6.8nH
LB_RFOUT_M
HB_RFOUT_M
U1501
SI4220_GM
RFIAP
RFIAN
RFIEP
RFIEN
RFIDP
RFIDN
RFIPP
RFIPN
RFOL
RFOH
RAMPOUT
XTAL1
XTAL2
VDD1
VDD2
VDD3
VDD4
VDD5
VDD6
VIO
BIP
BIN
BQP
BQN
RAMPIN
PDN
RESET
SEN
SDIO
SCLK
XMODE
XDIV
XEN
XOUT
AFC
GND
SINK
RAMP_3159_M
X1501
NX3225DAW168405
VDD_IO_LOW_M
C1504 NC_100nF
C1506 1nF
C1505 100nF
R1504 330
R1506 4.7K
IRX_TX_P_M
IRX_TX_N_M
QRX_TX_P_M
QRX_TX_N_M
RAMP_4220_M
PON_4220_M
REF_ON_M
RF_EN_M
RF_DATA_M
RF_CLK_M
VCC_SYN_M
R1503 0
R1502 0
REF_ON_M
D_REF_CLK1_M
AFC_M
C1501 100nF
C1523 10pF
C1502 100nF
VCC_RX_TX_M
U1504
ANT_220
R1511 0
R1501 0
L1512 4.7nH
C1524 0.5pF
C1525 NC_4.7nF
J1501
MS_15602
U1505
ANT_220
U1503
RF3159
BAND_SELECT_M
PON_PA_M
VBAT
TX_EN
VBATT
VBIAS
VMODE
VRAMP
GND10
GND11
LB_RFIN
HB_RFIN
MODE_SELECT_M
RAMP_3159_M
C1528 10pF
C1529 39pF
C1530 100nF
C1531 100uF
R1509 0
C1527 NC_10pF
C1513 NC_3.3pF
HB_RFOUT_M
LB_RFOUT_M
L1511 1.8nH
L1501 2.2nH
R1505 0
R1510 0
L1504 NC_8.2nH
C1522 1pF
L1505 15nH
C1511 NC_3.3pF
C1526 NC_100nF
R1507 39K
Close to 26MHz Crystal
TEMP_26MHZ_M
NCP15XH103F03RC
RT1501
R1508 100K
Temperature Measurement
Modem_RF
Title: HI3611_C2
P/N: <>
Rev: 1.0
Design by: qin
Checked by: t
Approved by: zh
Date: 2009-06-30
Date: 2009-06-30
Date: 2009-06-30
Scale: <xxxx>
Size: B
Sheet: 15 of 20

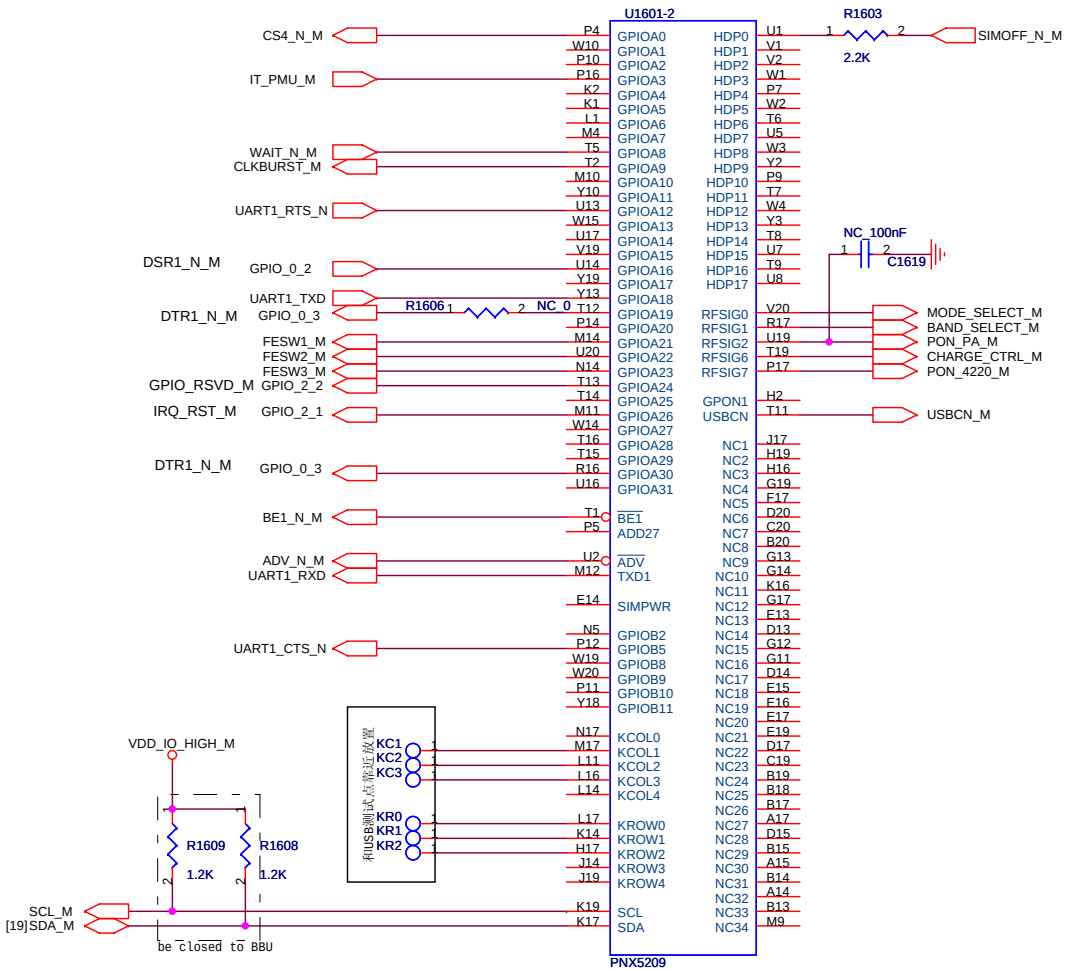
BBU Power



Power Decouple Capacitor

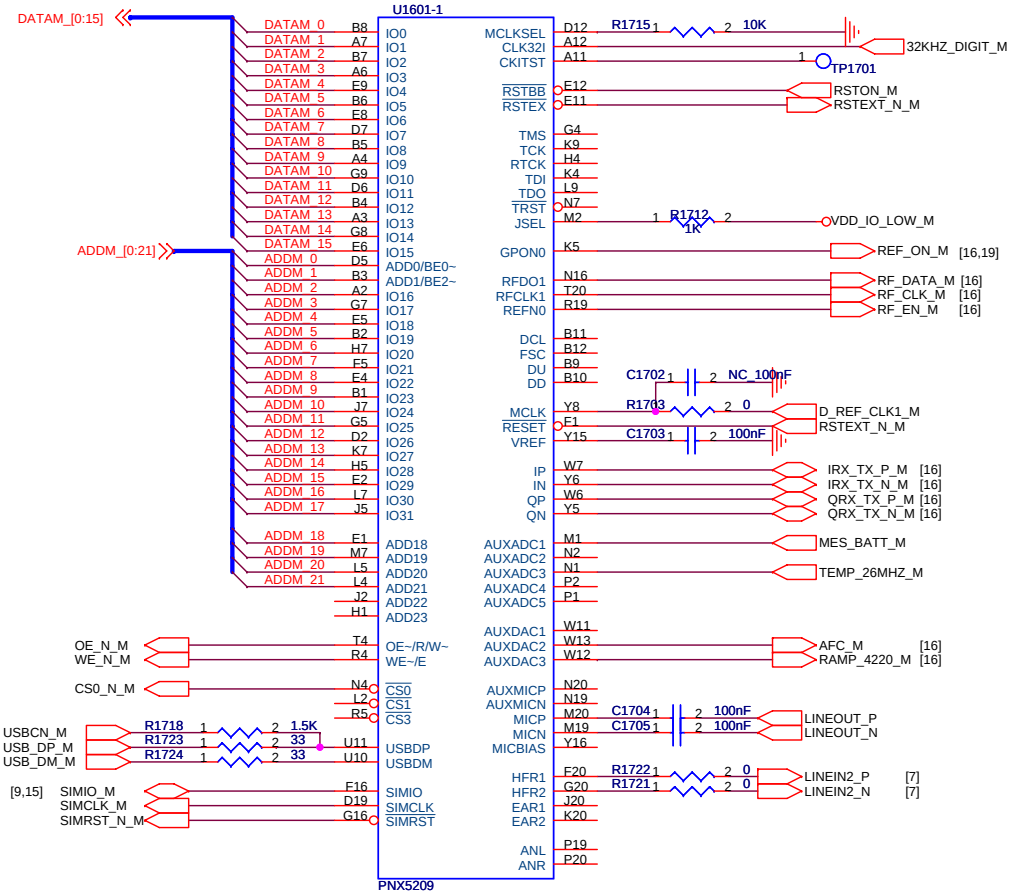


BBU IO

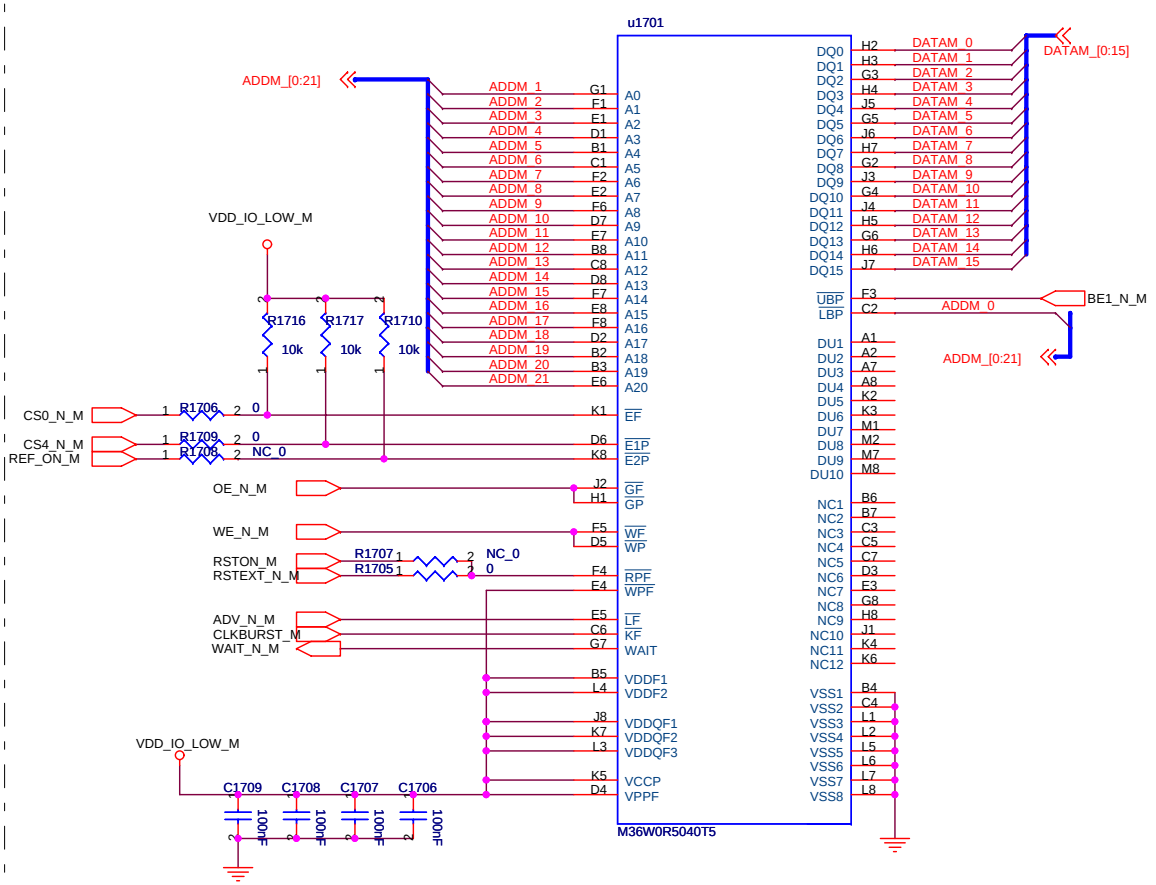


Modem_BBU		
Title: HI3611_C2		
P/N: <>		Rev: 1.0
Design by: Qinyx	Checked by: tanghui	Approved by: zhangjiong
Date: 2009-06-30	Date: 2009-06-30	Date: 2009-06-30
Scale: <xxxx>	Size: B	Sheet: 16 of 20

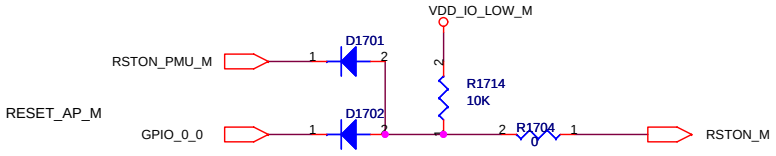
BBU Memory & Misc signal



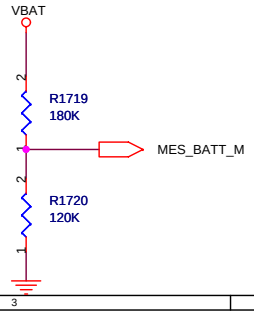
Memory(32Mbit NOR Flash+16Mbit PSRAM)



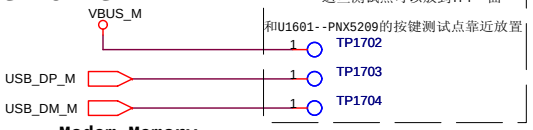
Reset Signal



Battery Measurement

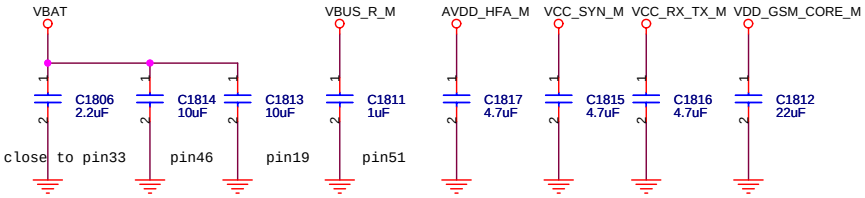


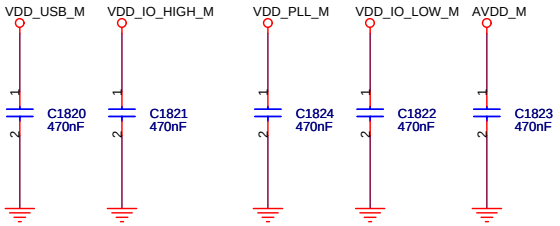
Signal Test Point

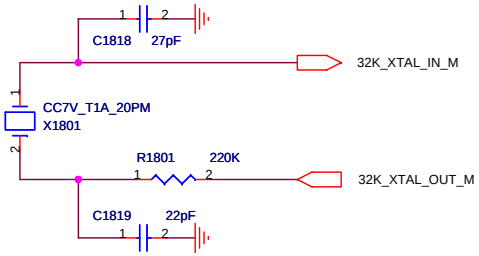


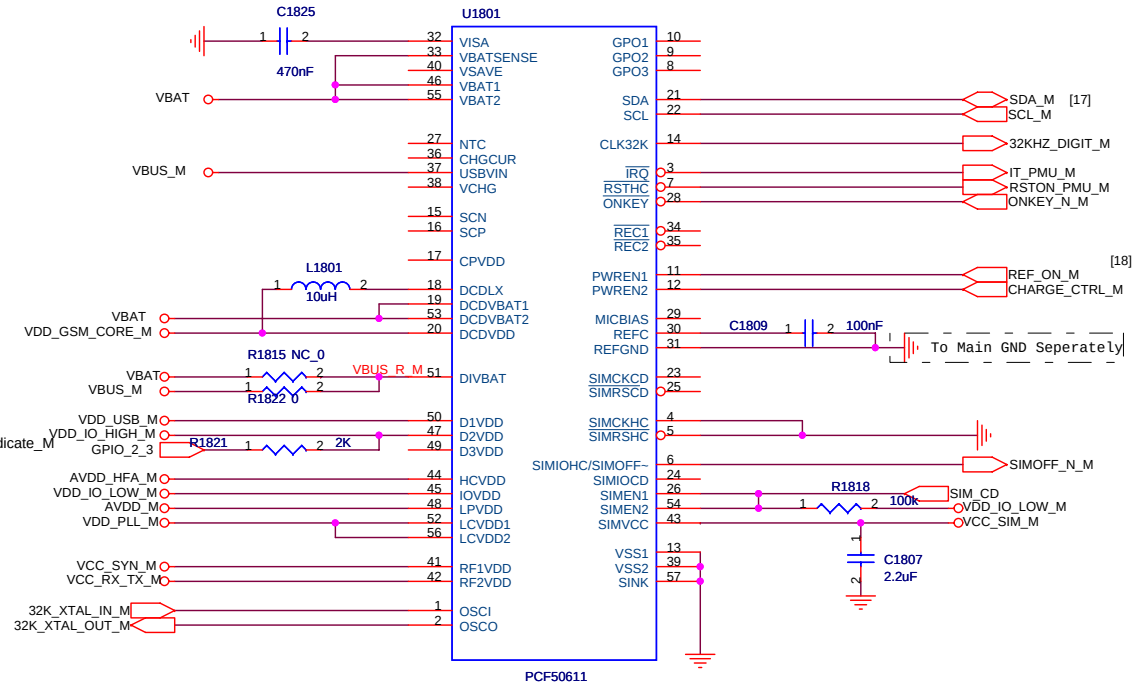
Modem_Memory

Title: HI3611_C2		
P/N: <>		Rev: 1.0
Design by: Qinyx	Checked by: tanghui	Approved by: zhangjiong
Date: 2009-06-30	Date: 2009-06-30	Date: 2009-06-30
Scale: <xxxx>	Size: B	Sheet: 17 of 20

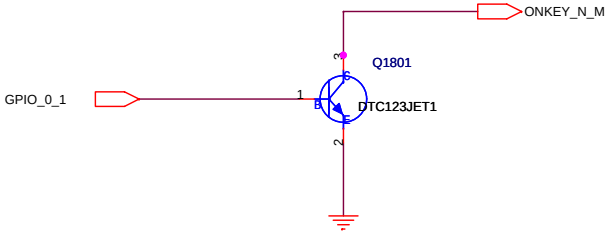








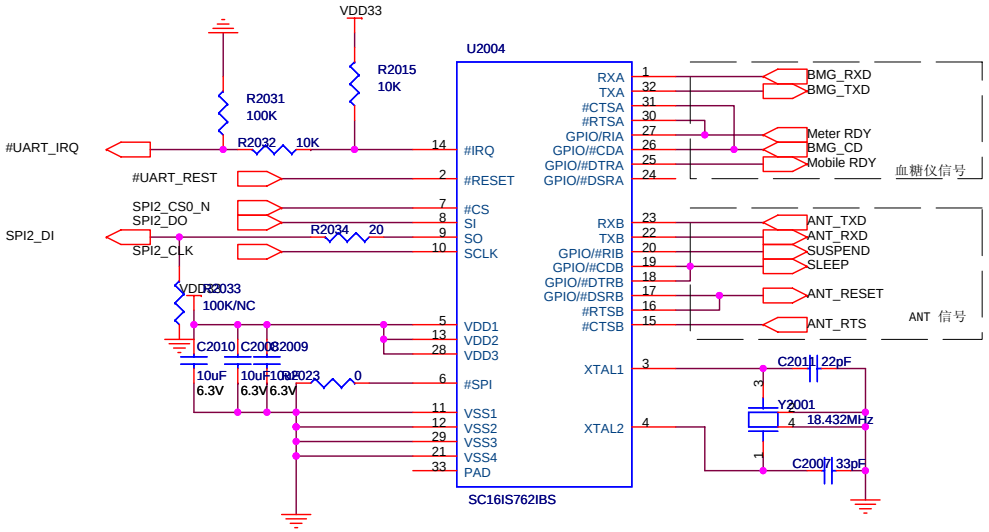
Modem PWRON_N Signal



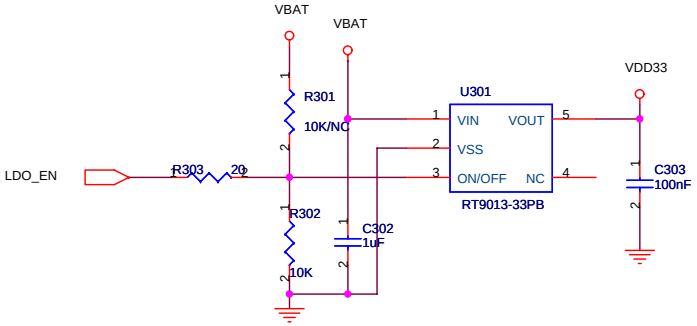
POWER MANAGEMENT TABLE			
Name	Value	Current	Function
VDD_IO_HIGH	2.90V	mA	PNX5209 High IO
VDD_GSM_CORE	1.25V	mA	PNX5209 Core
VDD_IO_LOW	1.80V	mA	PNX5209 Low IO
AVDD	2.60V	mA	PNX5209 Anlog
AVDD_HFA_M	2.60V	mA	PNX5209 Vioceband PA
VDD_PLL_M	1.2V	mA	PNX5209 CLK/PLL
VDD_USB_M	3.30V	mA	PNX5209 USB IO
VCC_SIM_M	1.8/3.0V	mA	PNX5209 SIM IO
VCC_RX_TX_M	2.8V	mA	RF Transceiver(Si4220) VDD
VCC_SYN_M	2.8V	mA	RF Transceiver VDD
VBAT	3.7V	mA	Battery Supply

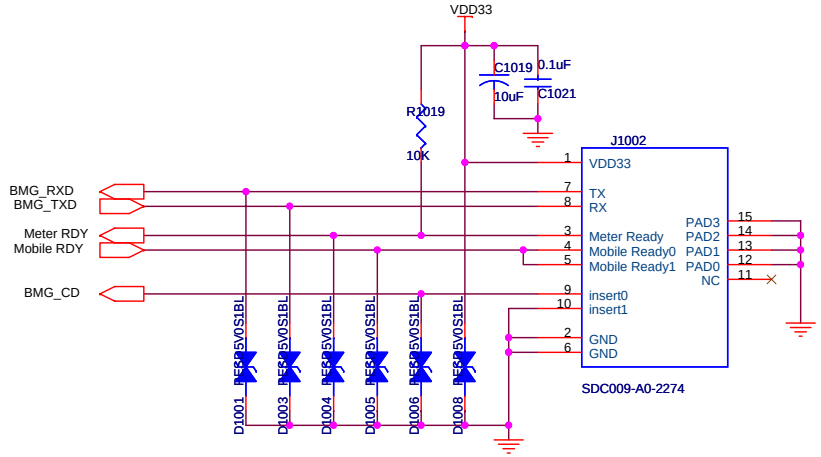
Modem_PMU

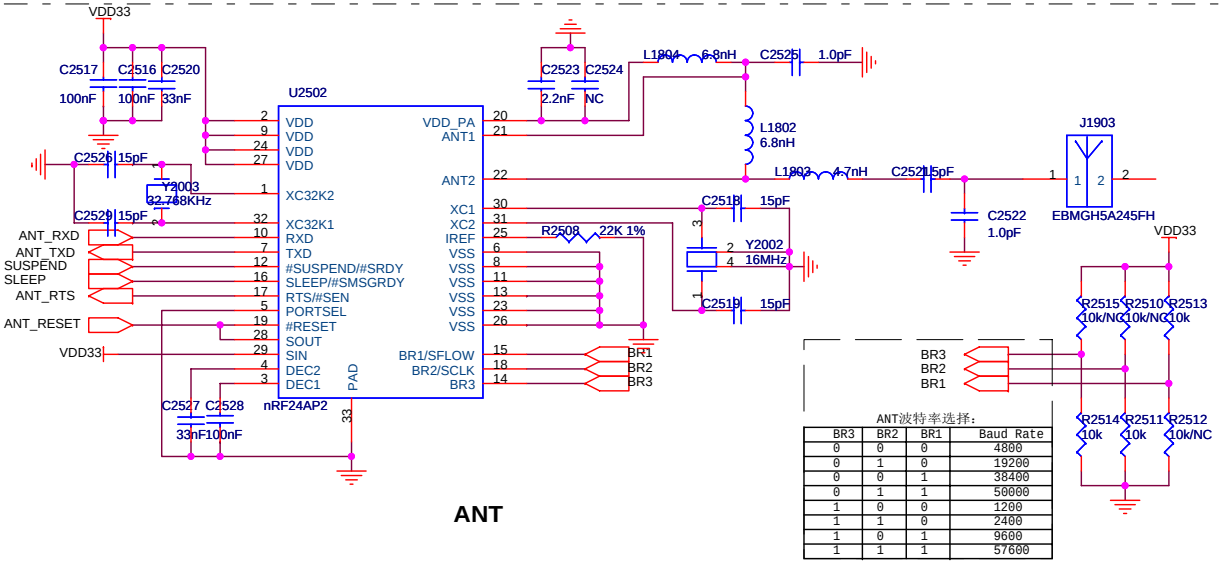
Title: HI3611_C2		
P/N: <>		Rev: 1.0
Design by: Qinyx	Checked by: tanghui	Approved by: zhangjiong
Date: 2009-06-30	Date: 2009-06-30	Date: 2009-06-30
Scale: <xxxx>	Size: B	Sheet: 18 of 20



SPI





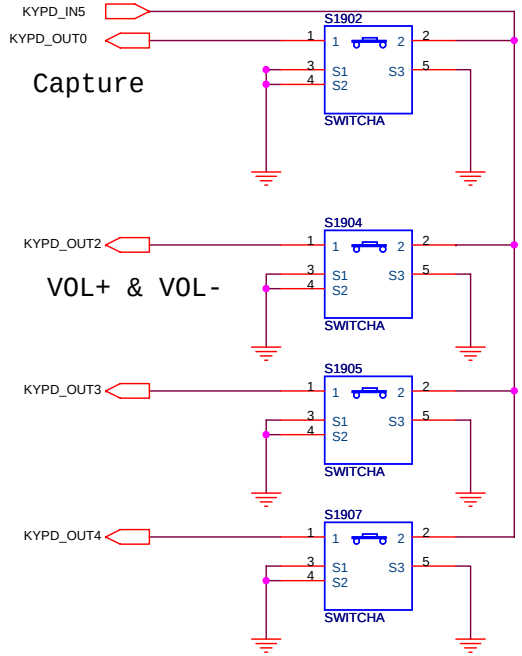


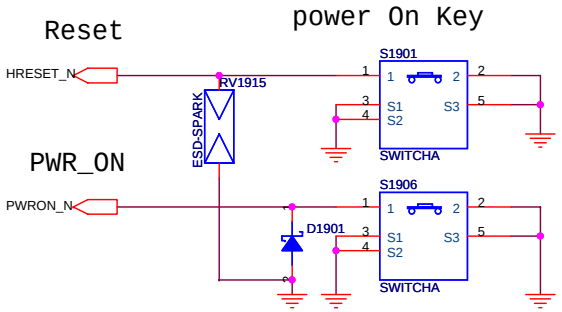
ANT

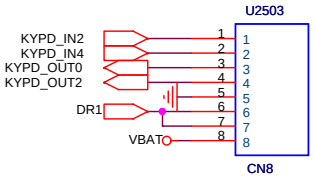
ANT波特率选择：

BR3	BR2	BR1	Baud Rate
0	0	0	4800
0	1	0	19200
0	0	1	38400
0	1	1	50000
1	0	0	1200
1	1	0	2400
1	0	1	9600
1	1	1	57600

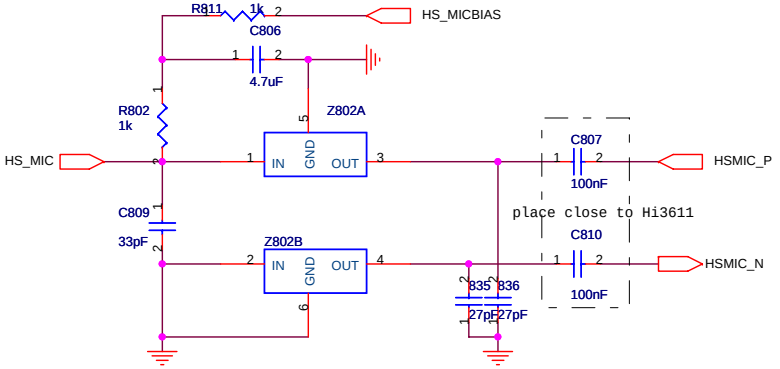
Title: HI3611_C2		
P/N: <>		Rev: 1.0
Design by: Qinyx	Checked by: tanghui	Approved by: zhangjiong
Date: 2009-06-30	Date: 2009-06-30	Date: 2009-06-30
Scale: <xxxx>	Size: B	Sheet: 19 of 20

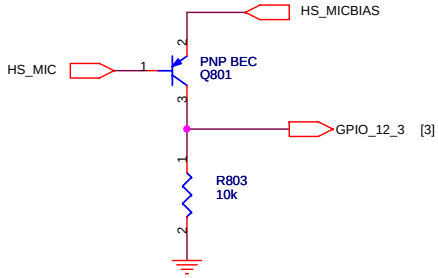


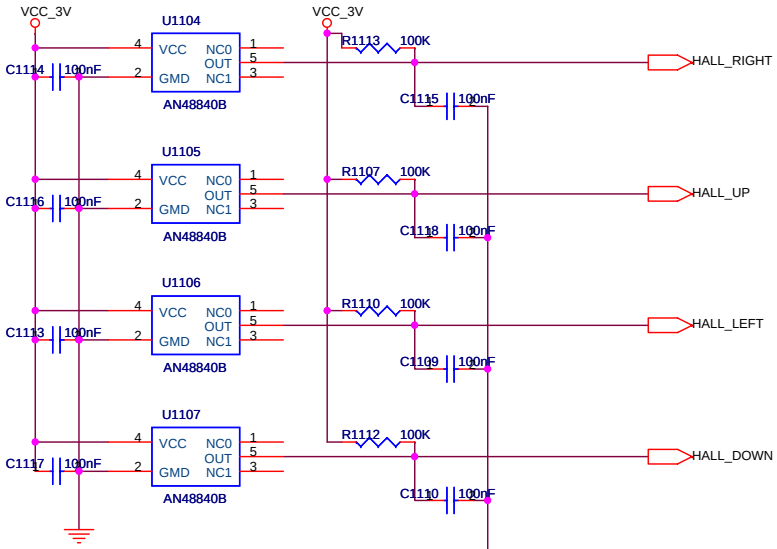


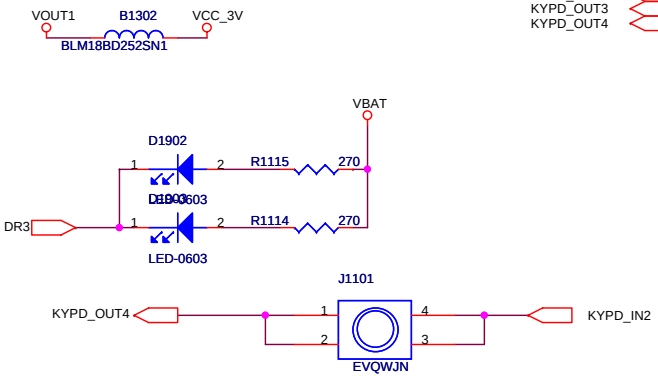


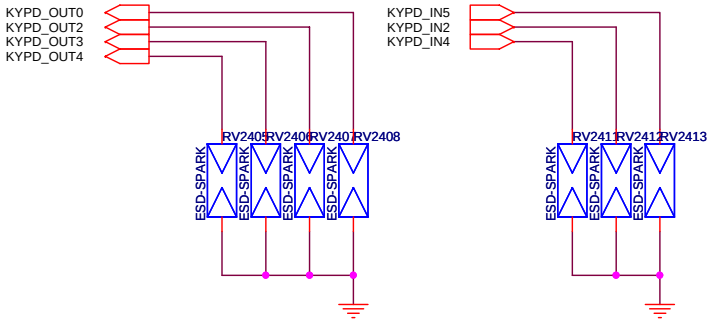
KEY 板接口











轨迹球

深圳市佳音时代科技有限公司		
Title: HI3611_C2		
P/N: <>		Rev: 1.0
Design by: Qinyx	Checked by: tanghui	Approved by: zhangjiong
Date: 2009-06-30	Date: 2009-06-30	Date: 2009-06-30
Scale: <xxxx>	Size: B	Sheet: 20 of 20