Openmoko, Inc
GTA01B-NEO1973
Schematics

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Version	Date	Signed off / Comment
GTA01BV4-RC0	2008-08-06	jOERG (ACK) / generic GTA01BV4 based, no cleanup, added component names, calypso GSM + Hammerhead GPS NDA
		schematics for board revisions prior to BV4 available on request: joerg@openmoko.org

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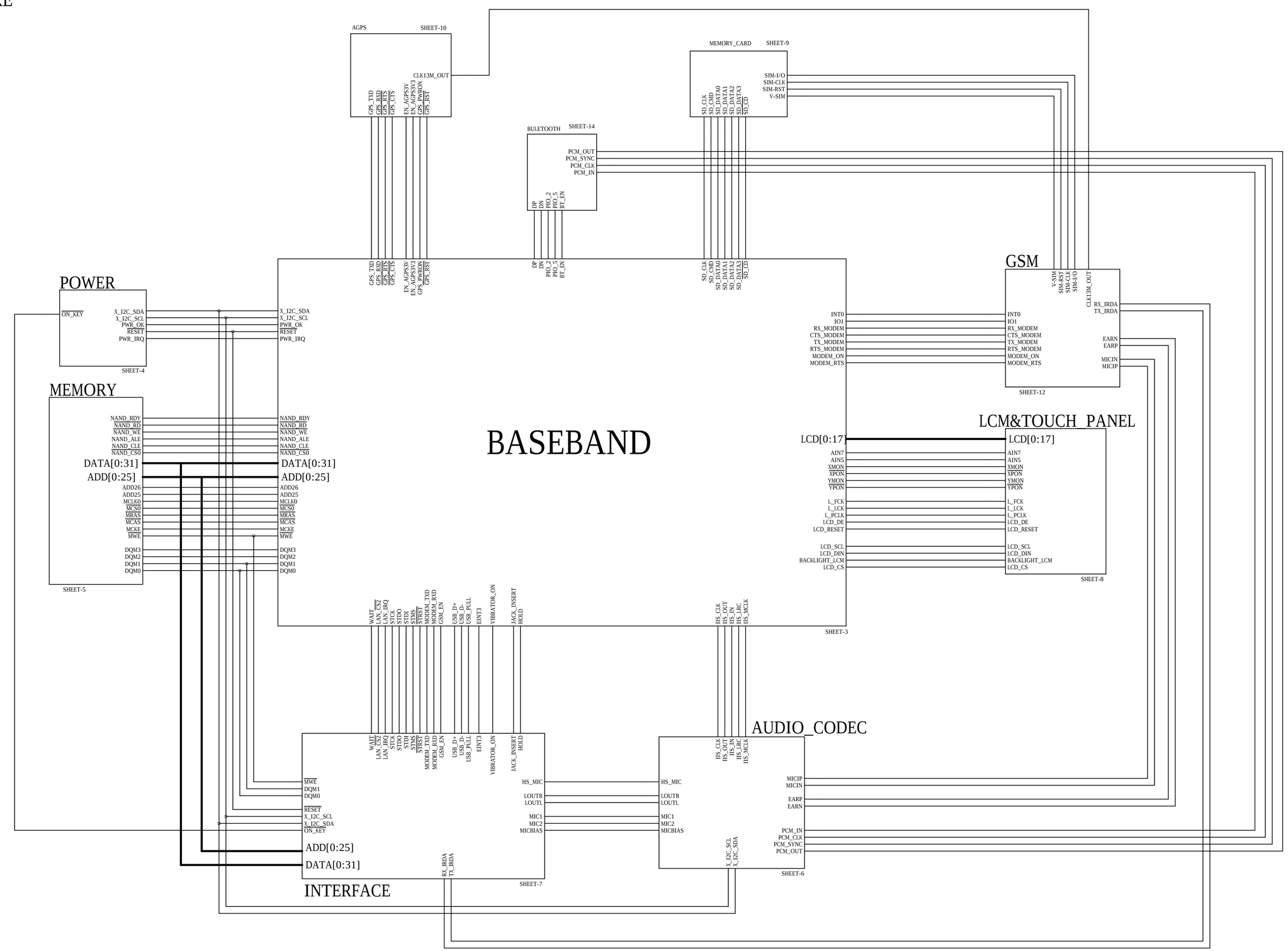
MODEL	GTA01B		
TITLE	COVER		
NUMBER	A4		
DWG.	Allen Chang	SHEET	1
		DATE	2008/08/05

STRUCTURE



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MODEL	GTA01B		
TITLE	STRUCTURE		
NUMBER	A4		
DWG.	Allen Chang	SHEET	2
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BASEBAND
LOCATION:15XX

OM[1:0] : Clock Mode
00 : NAND Boot
01 : 16 Bit
10 : 32 Bit
11 : Test Mode

OM[3:2] : Clock Mode
00 : MPLL=Xtal, UPLL=Xtal
01 : MPLL=Xtal, UPLL=EXTCLK
10 : MPLL=EXTCLK, UPLL=Xtal
11 : MPLL=EXTCLK,
UPLL=EXTCLK

From Modem

From Modem

911 KEY

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TITTLE	BASEBAND
NUMBER	A4
DWG.	Allen Chang
SHEET	3
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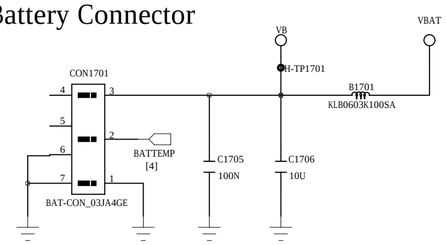
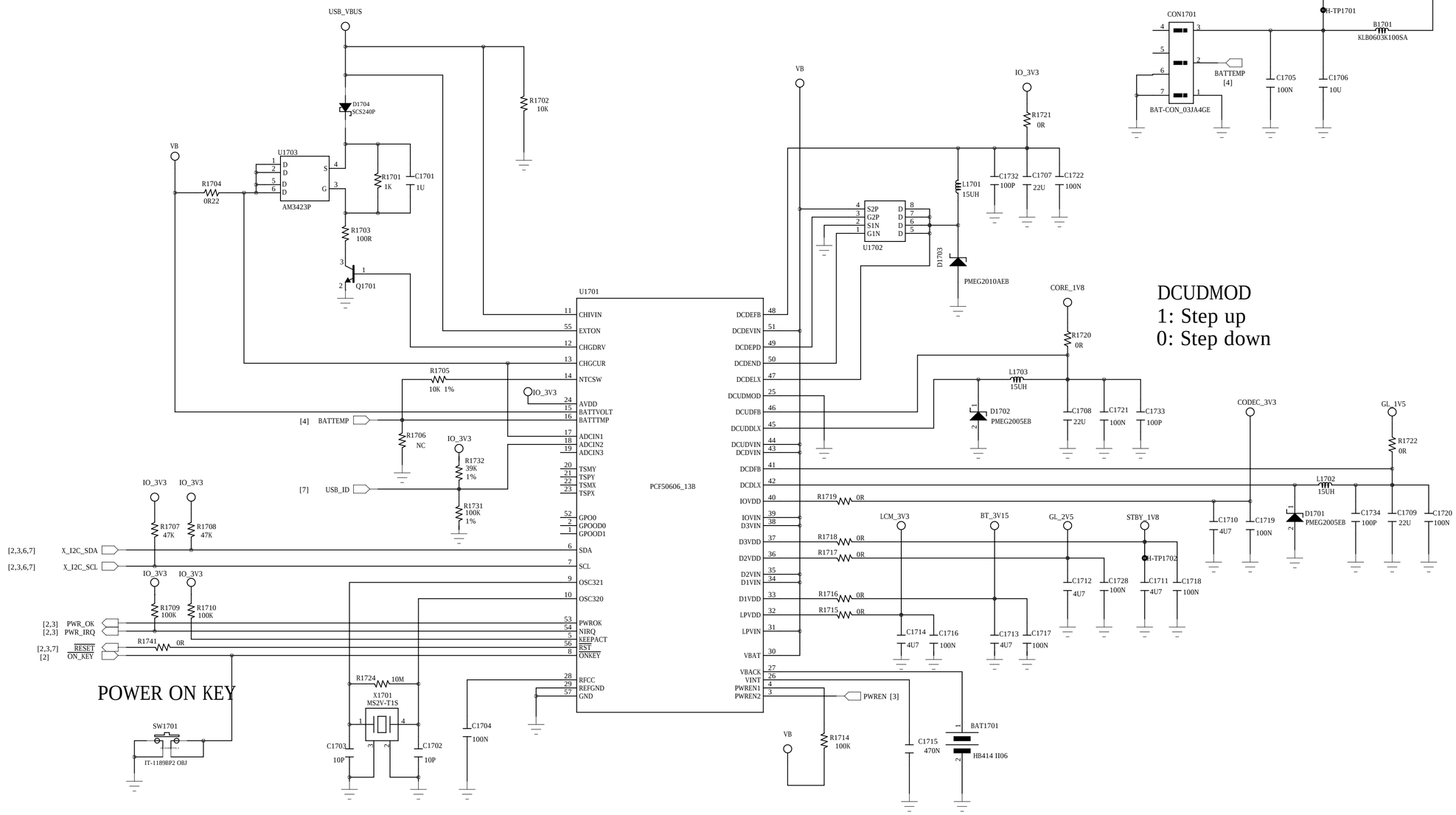
POWER
LOCATION:17XX

Battery Connector



DCUDMOD
1: Step up
0: Step down



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MODEL	GTA01B		
TITTLE	POWER		
NUMBER	A4		
DWG.	Allen Chang	SHEET	4
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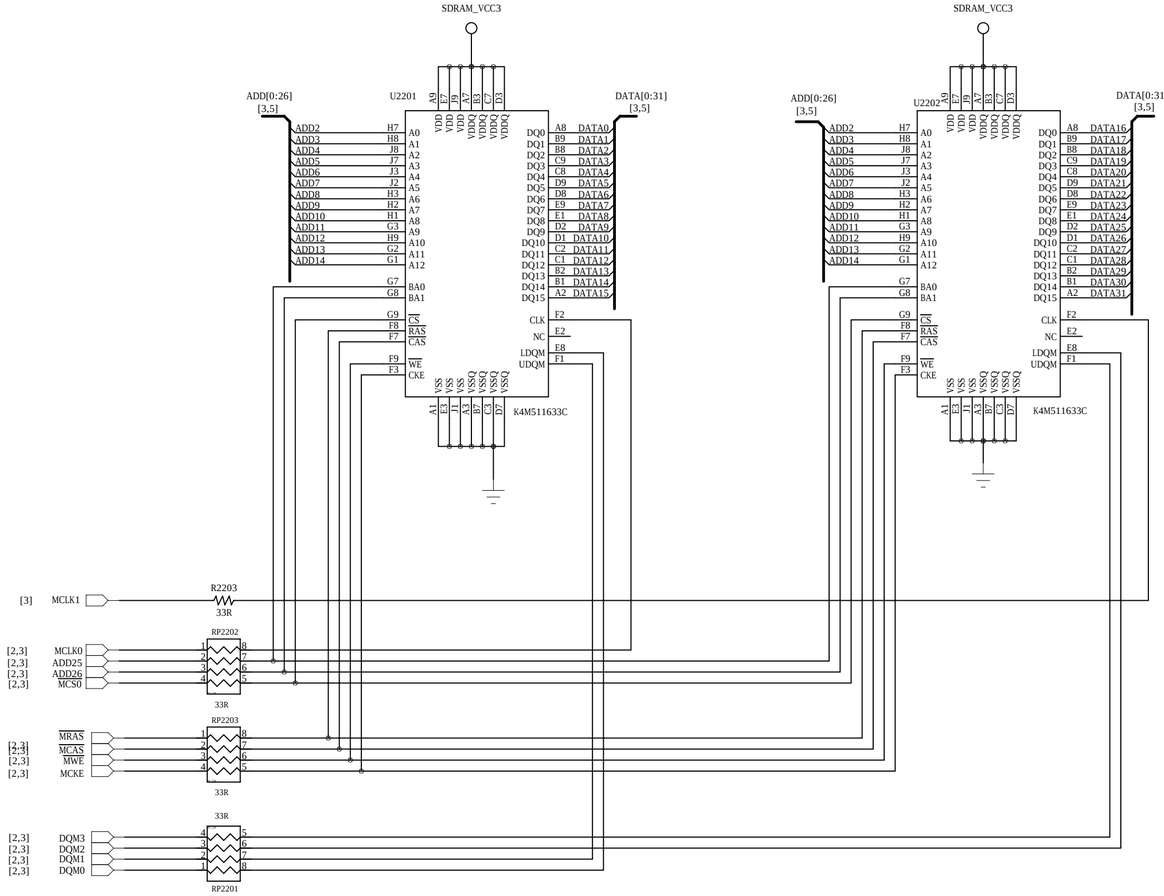
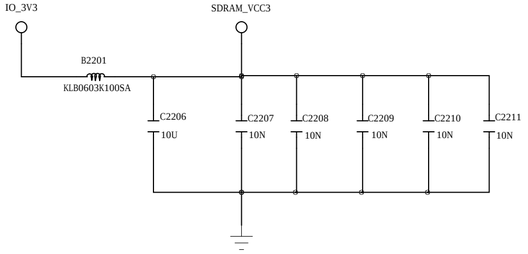
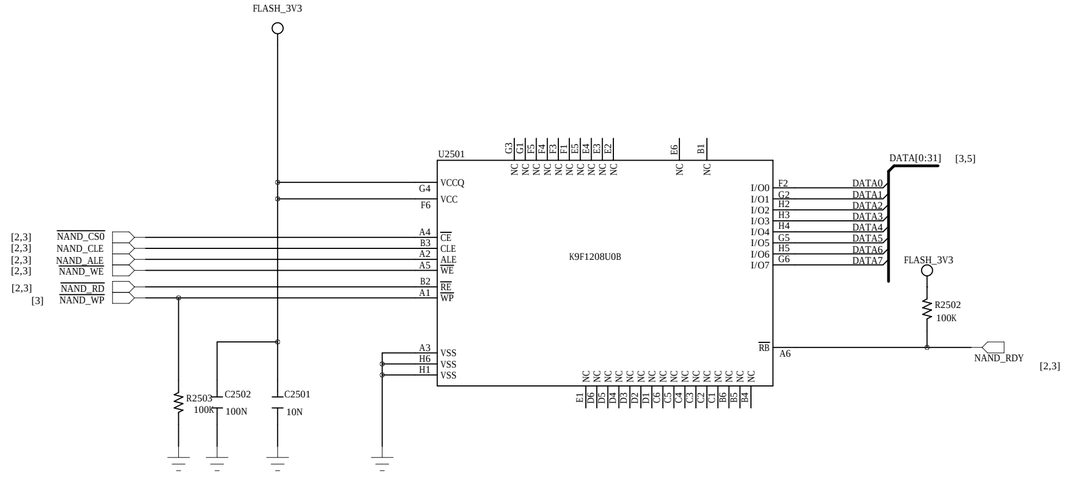
SDRAM_ATLAS
LOCATION:22XX





NAND_ATLAS
LOCATION:25XX



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MODEL	GTA01B		
TITLE	MEMORY		
NUMBER	A4		
DWG.	Allen Chang	SHEET	5
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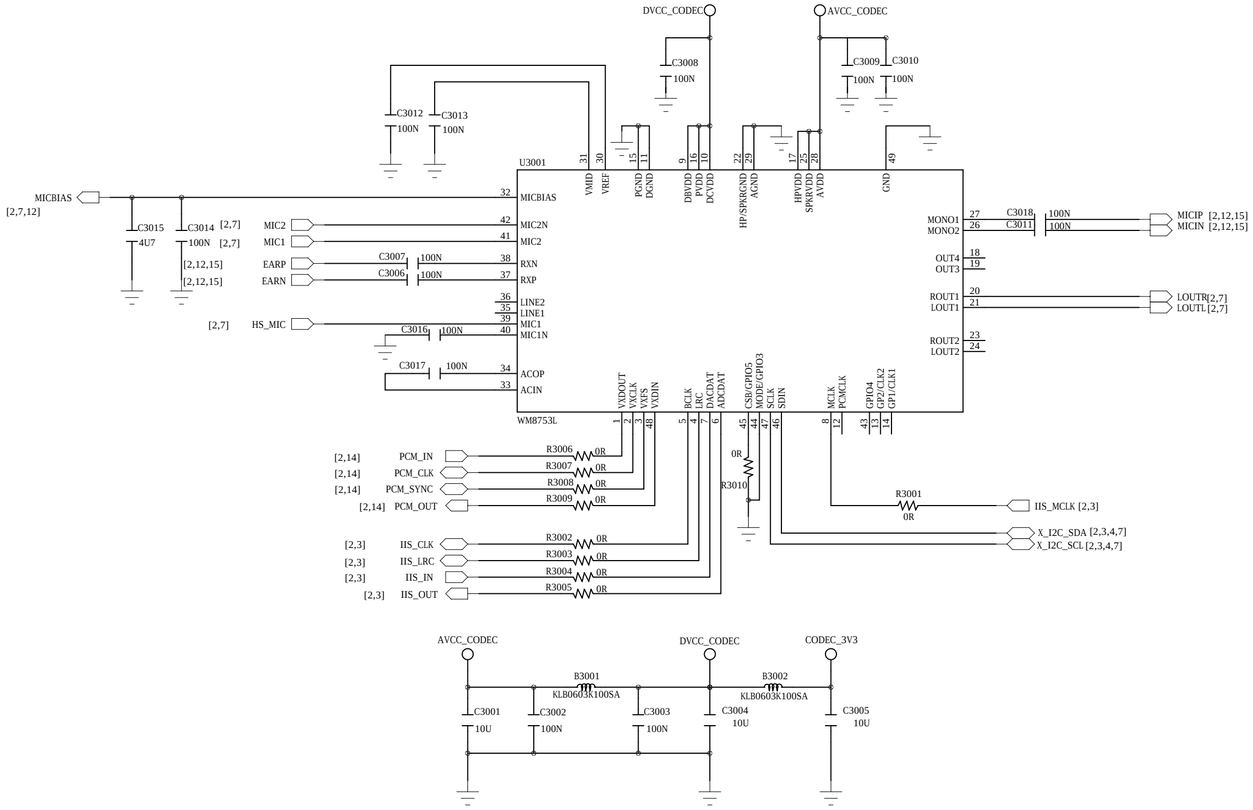
AUDIO_CODEC
LOCATION:30XX



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MODEL	GTA01B		
TITLE	AUDIO CODEC		
NUMBER	A4		
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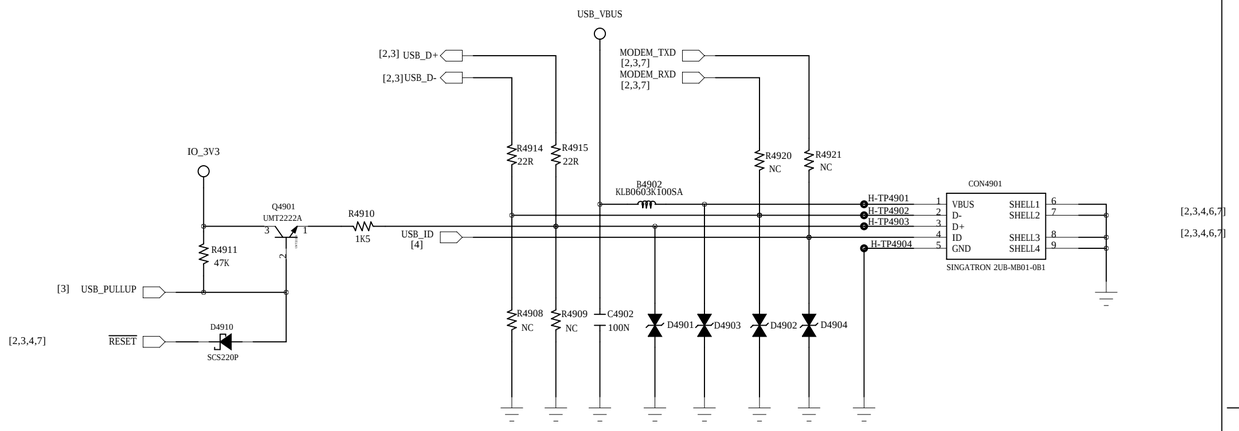
USB
LOCATION:49XX

USB_ID function

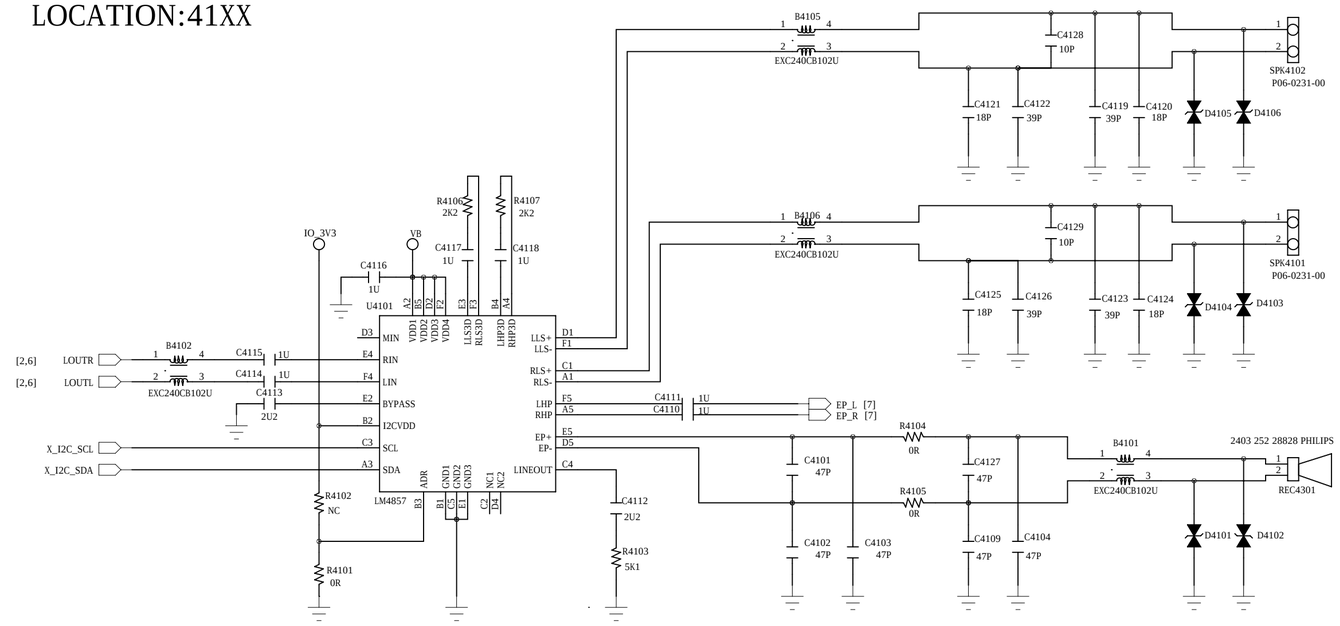
Assuming infinite ADCIN2 input resistance:

1) USB Device Mode: Rext > 100k
   =>Vacd will be > 1.85V (2.4V max)
2)USB Host Mode : Rext < 10
   => Vacd will be < 330uV
3) Change Mode: Rext = 48K 1%
   => Vacd will be =1.5V

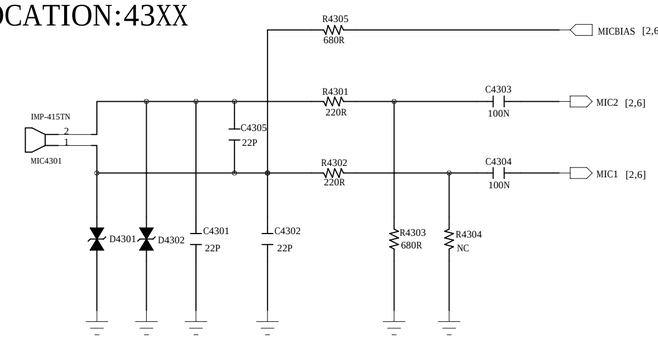


All varistors:
KEV040209151A KARMAX

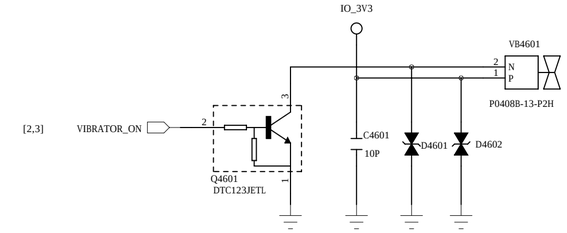
SPK
LOCATION:41XX



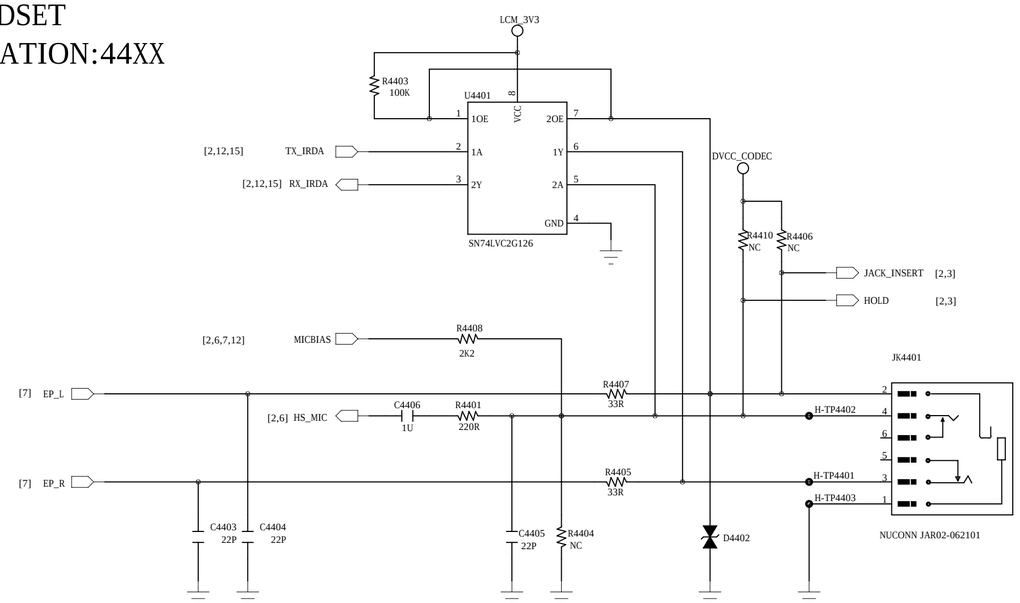
MIC
LOCATION:43XX



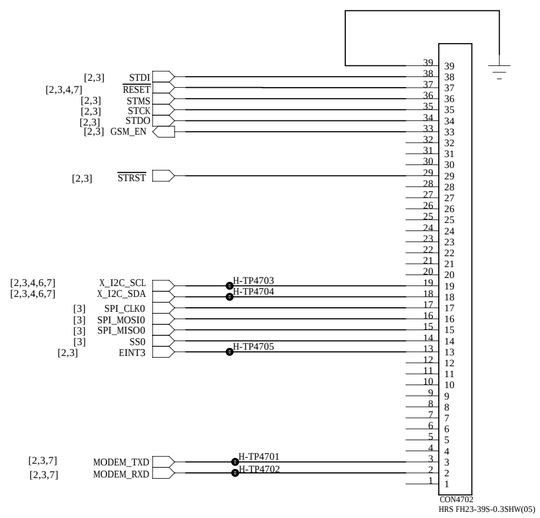
VIBRATOR
LOCATION:46XX



HEADSET
LOCATION:44XX



DEBUG
LOCATION:47XX



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TITLE	INTERFACE		
NUMBER	A4		
DWG.	Allen Chang	SHEET	7
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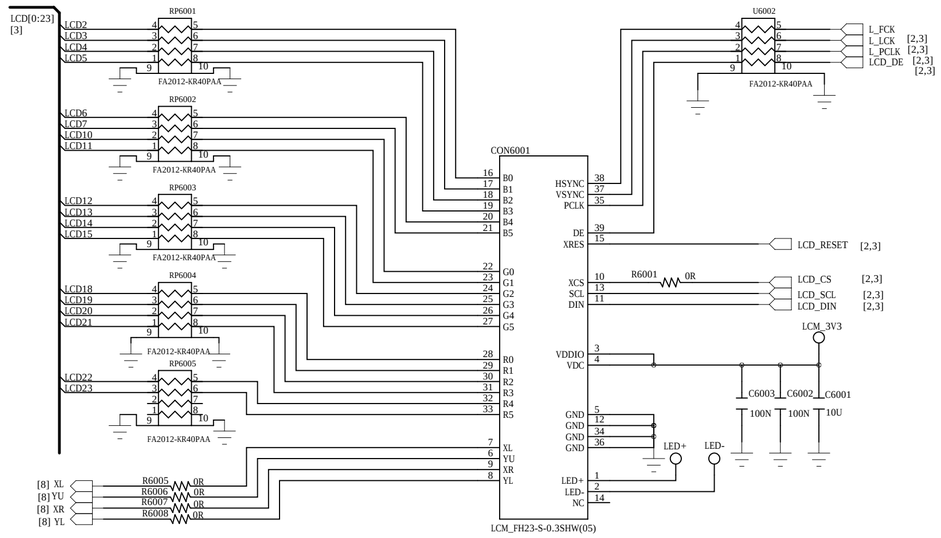
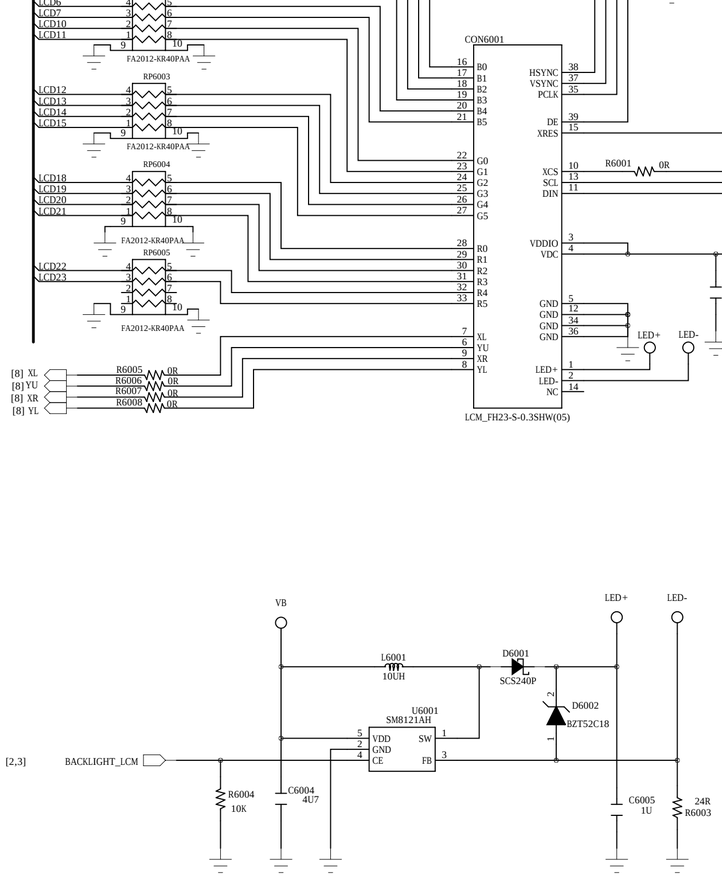
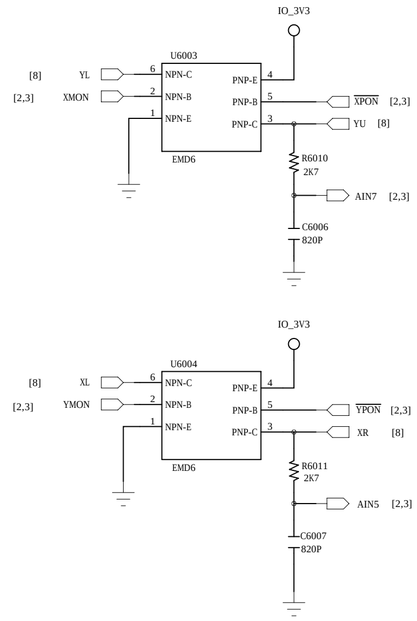
LCM_TOUCH_PANEL
LOCATION:6XXX







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TITLE	LCM		
NUMBER	A4		
DWG.	Allen Chang	SHEET	8
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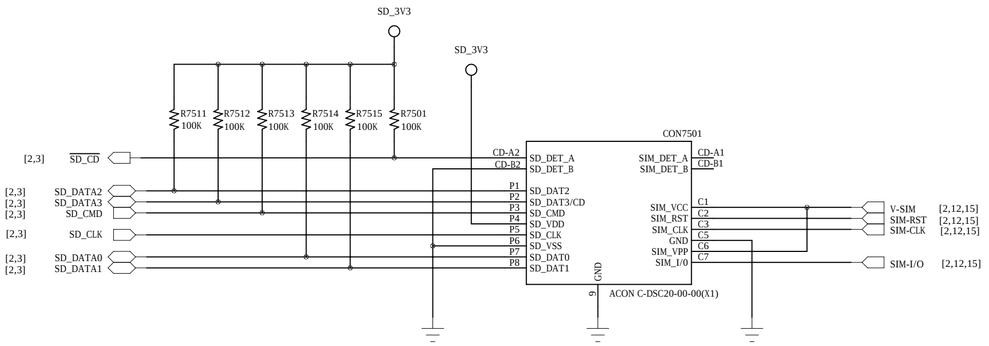
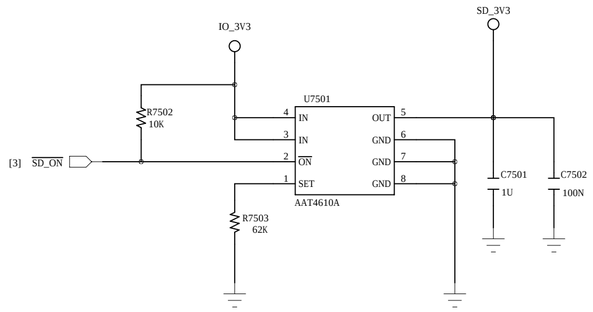
MEMORY_CARD
LOCATION:75XX





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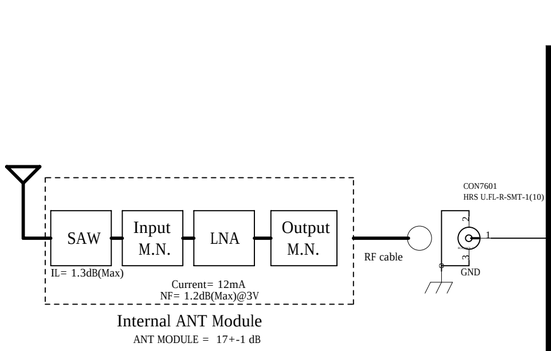
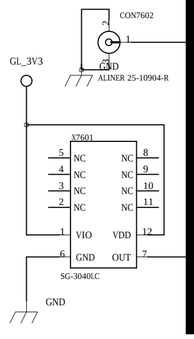
MODEL	GTA01B		
TITLE	MEMORY CARD		
NUMBER	A4		
DWG.	Allen Chang	SHEET	9
		DATE	2008/08/05

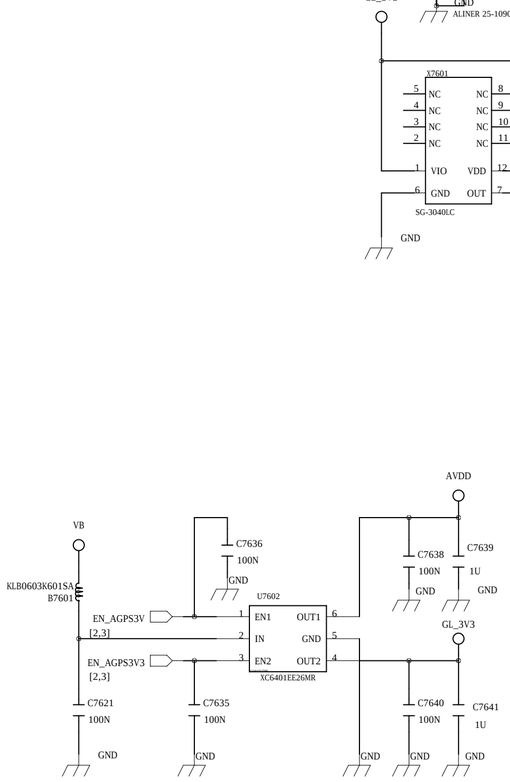
AGPS_GL_HAMMERHEAD2520
LOCATION:76XX

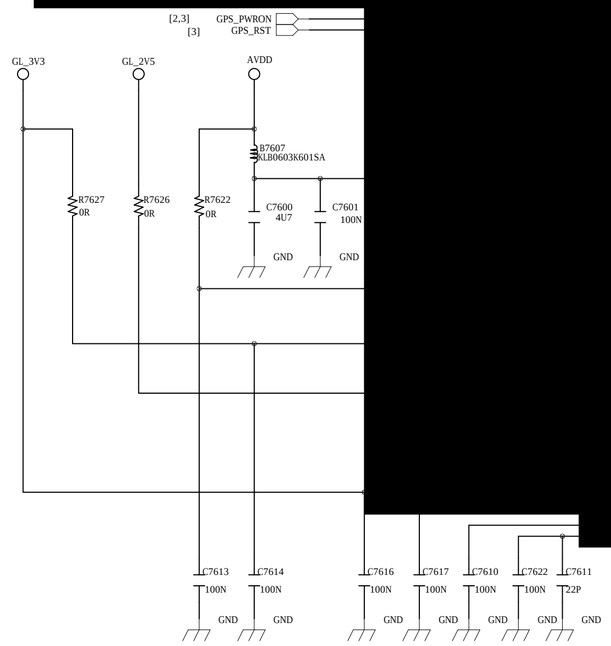
NDA

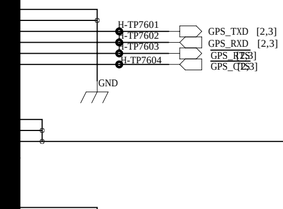
In fineon RX_HAMMERHEAD OMB2520-V01
On Main Board design
GPS RF Module,use Infineon chip

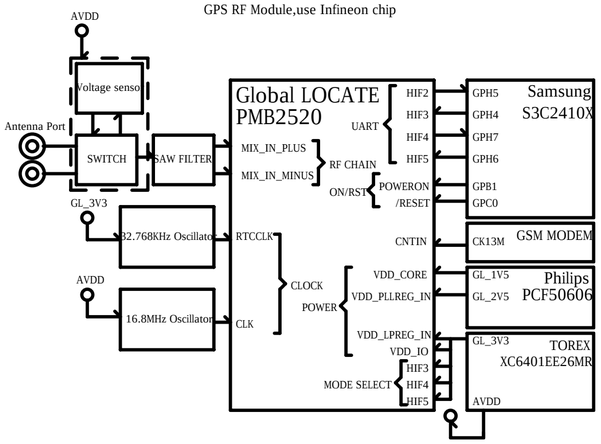












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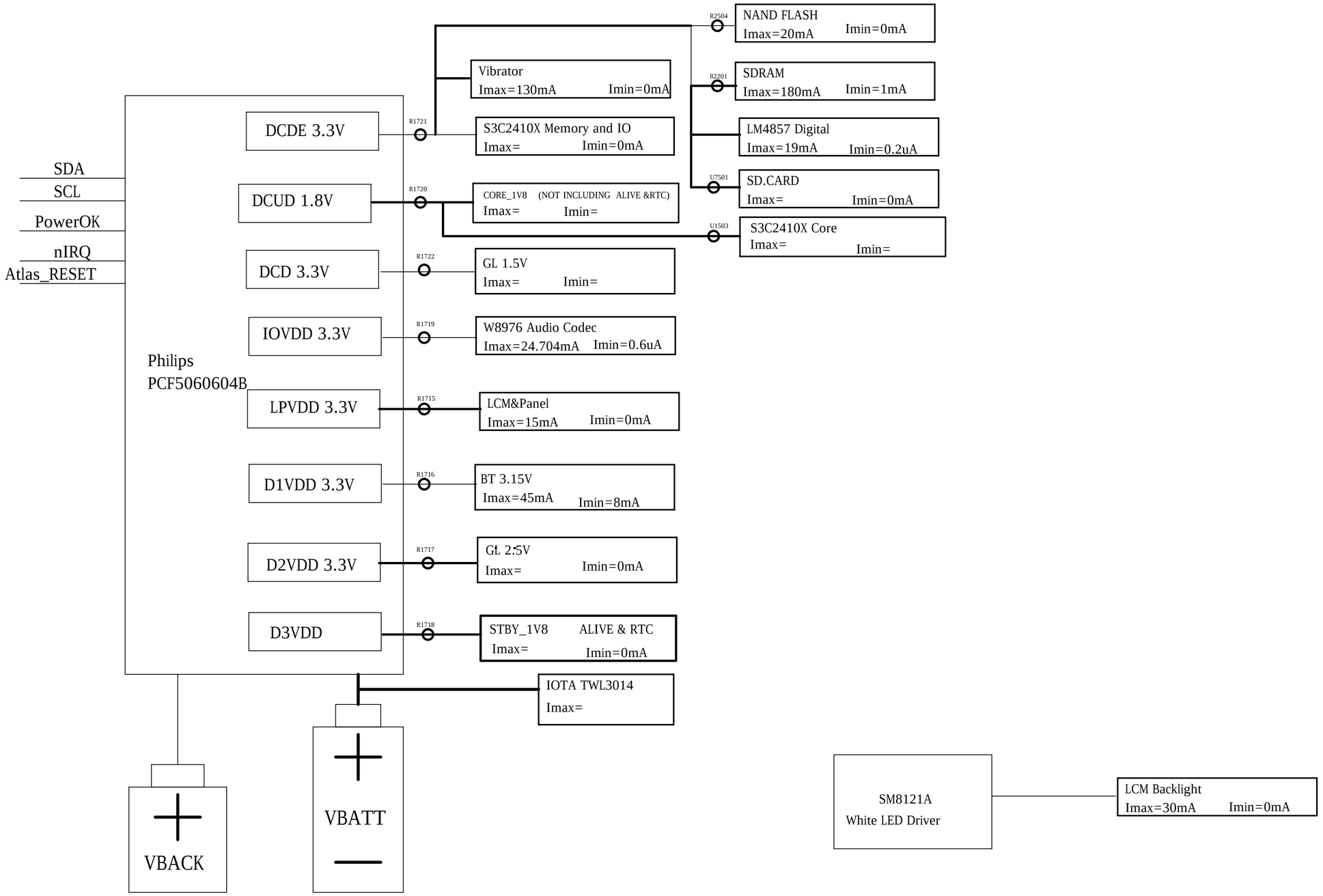
MODEL	GTA01B		
TITLE	AGPS		
NUMBER	A4		
DWG.	Shawn Lin	SHEET	10
		DATE	2008/08/05



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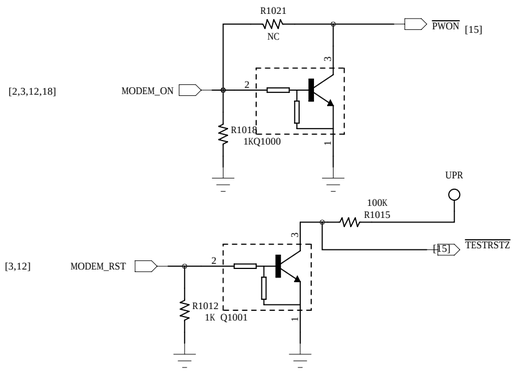
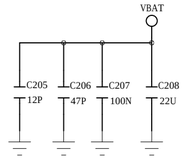
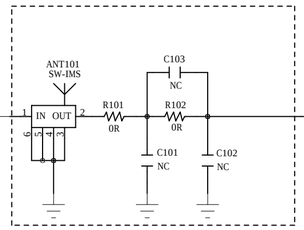
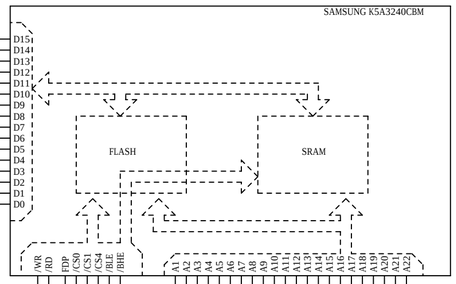
MODEL	GTA01B		
TITLE	POWER BLOCK		
NUMBER	A4		
DWG.	Allen Chang	SHEET	11
		DATE	2008/08/05

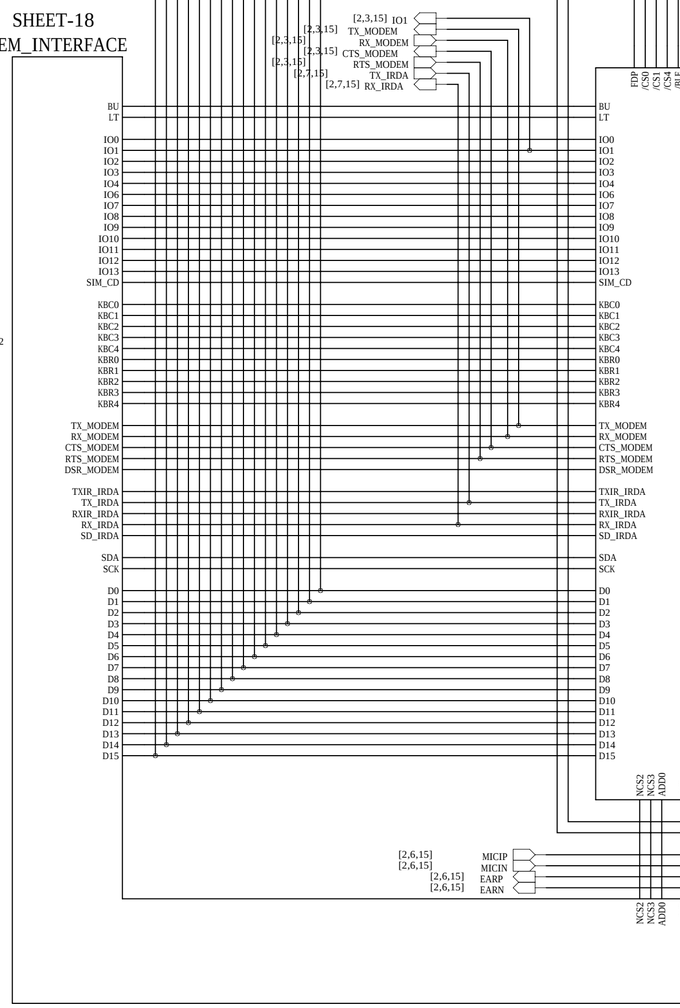






LOCATION:01XX

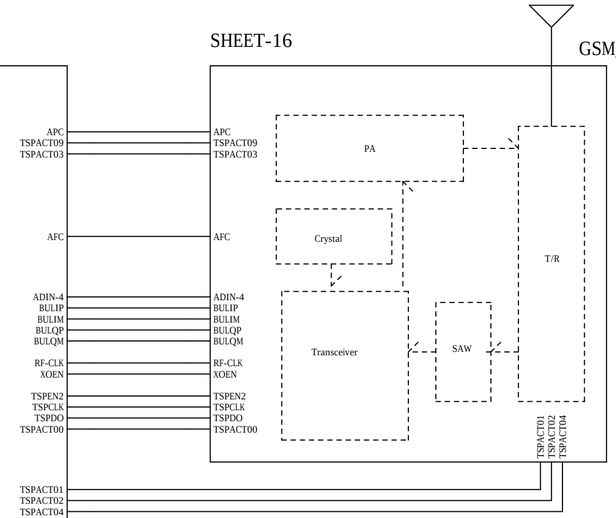


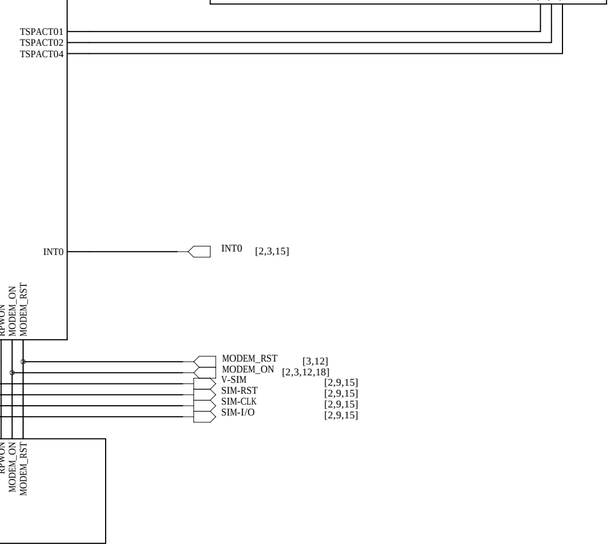


BASEBAND_CHIP-SET

TI CALYPSO HERCROM400G2+IOTA TWL3025

SHEET-15





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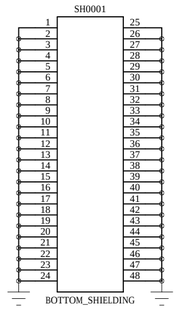
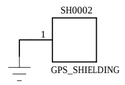
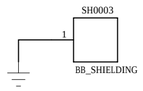
MODEL	GTA01B
TITTLE	GSM
NUMBER	A4
DWG.	Shawn Lin
SHEET	12
DATE	2008/08/05







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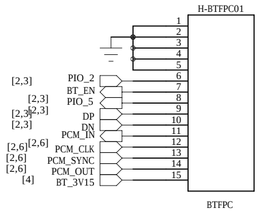
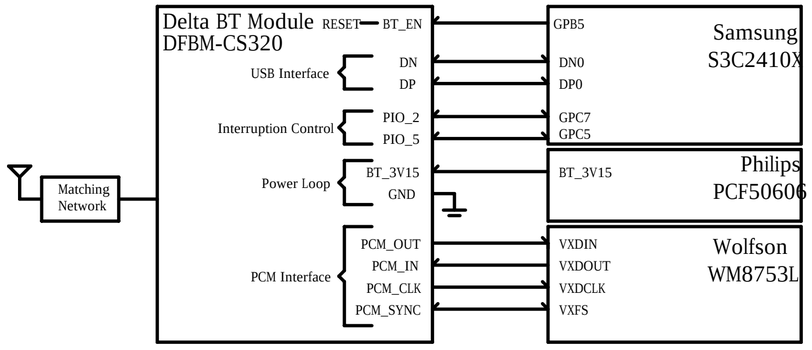
MODEL	GTA01B		
TITLE	TABLE		
NUMBER	A4		
DWG.	Allen Chang	SHEET	13
		DATE	2008/08/05

Bluetooth
LOCATION:77XX





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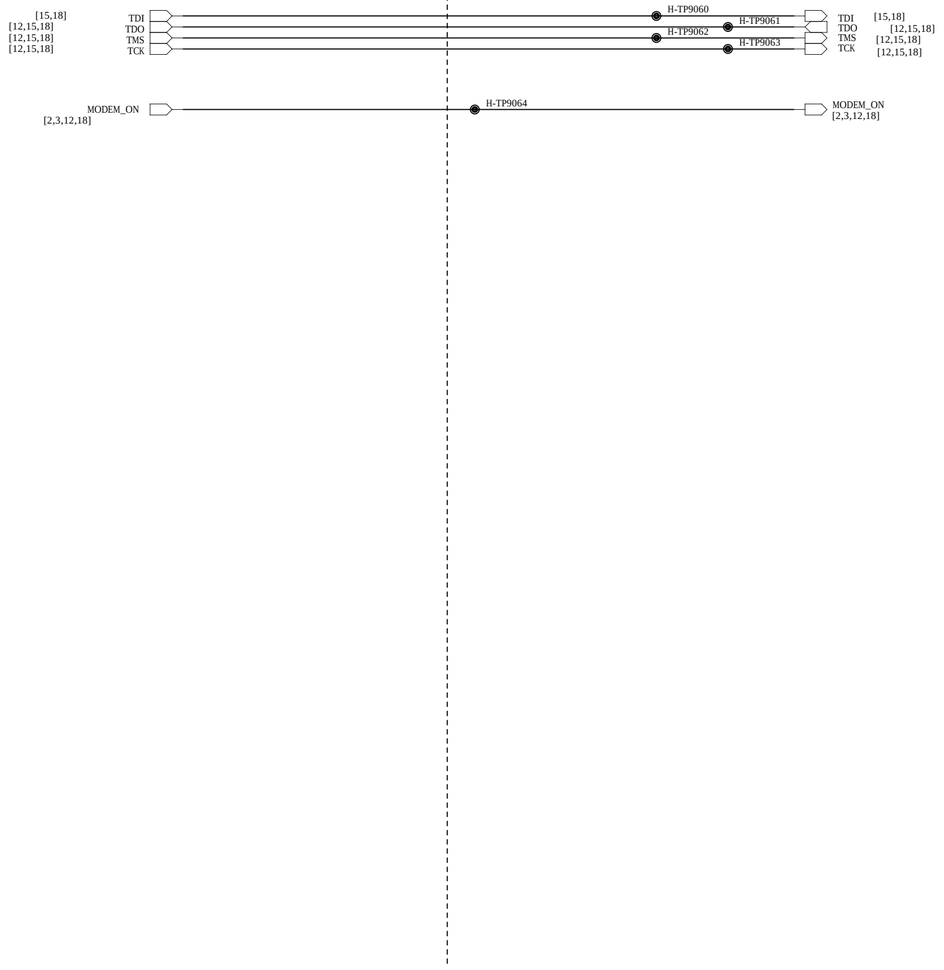
MODEL	GTA01B		
TITTLE	BULETOOTH		
NUMBER	A4		
DWG.	Shawn Lin	SHEET	14
		DATE	2008/08/05



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MODEL	GTA01B		
TITLE	MODEM INTERFACE		
NUMBER	A4		
DWG.	Shawn Lin	SHEET	18
		DATE	2008/08/05