

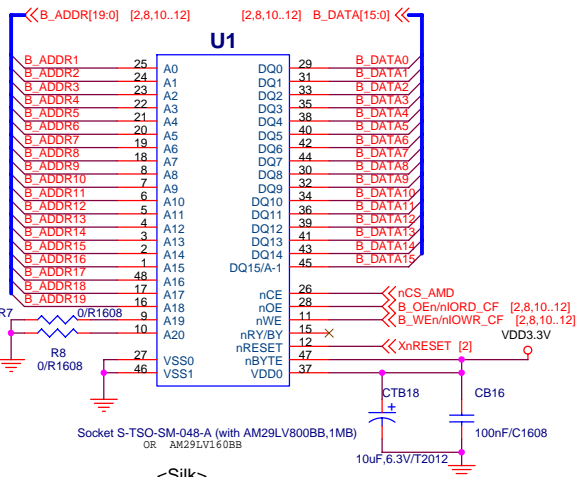
# SMDK6410 Base B'd (S3C6410 Evaluation Board) Schematics

Revision	Date	Description
Rev 0.0	2008. 02.22	Preliminary Version
Rev 0.1	2008. 04.02	Second Version (Changed sheet 3 ~ 10, 12, 13, 15, 16 and 17)
Rev 0.2	2008. 04.30	Third Version (Changed sheet 3, 5, 14 and 17)

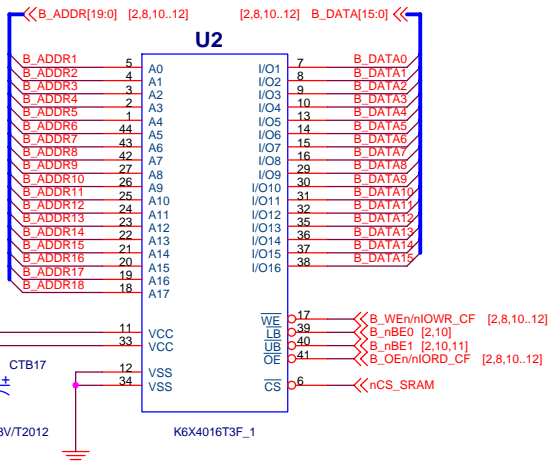
Table of Contents		Part Reference
<b>Page</b>	<b>Function</b>	<b>&lt;Component&gt;&lt;Number&gt;</b>
01	Revision History	U : Component or Regurator IC
02	B2B Connector(Base)	C : Capacitor
03	NOR/SRAM/NAND/Config	CB : Capacitor Bypass
04	Audio(General0)	CT : Capacitor Tantal
05	Audio(Jack)/Multi-IIC/PWM	CTB : Capacitor Tantal Bypass
06	Audio(WM9713_AC97)	J : Jumper
07	Audio(WM8580_IIS5.1CH)	JB : CPU or Base connector
08	CF Socket (ATA)	JP : Jumper Power
09	UART/IrDA	R : Resistor
10	Ext. Bus/ Modem I/F	RA : Resistor Array
11	Ethernet 10Mbps(CS8900)	RP : Resistor Power
12	Ethernet 100Mbps(LAN9115)	VR : Variable Resistor
13	Keypad	L : Inductor
14	Module Connector1_2	FB : Ferrite Bead
15	Module Connector3_4	OSC : Oscillator
16	Module Connector5 (LCD)/TV	X : X-tal (Crystal)
17	Power	Q : Transistor or FET
		D : Diode
		ZD : Zener Diode
		LED : LED Diode
		SW : SWitch Tact/Push
		CON : CONnector
		CFG : ConFiGure switch (DIP/Slide)
		TP : Test Point (SMD)
		TPH : Test Point Hole (Through Hole)
		MTH: Mount Through Hole
		M (MOD) : MODule Interface connector



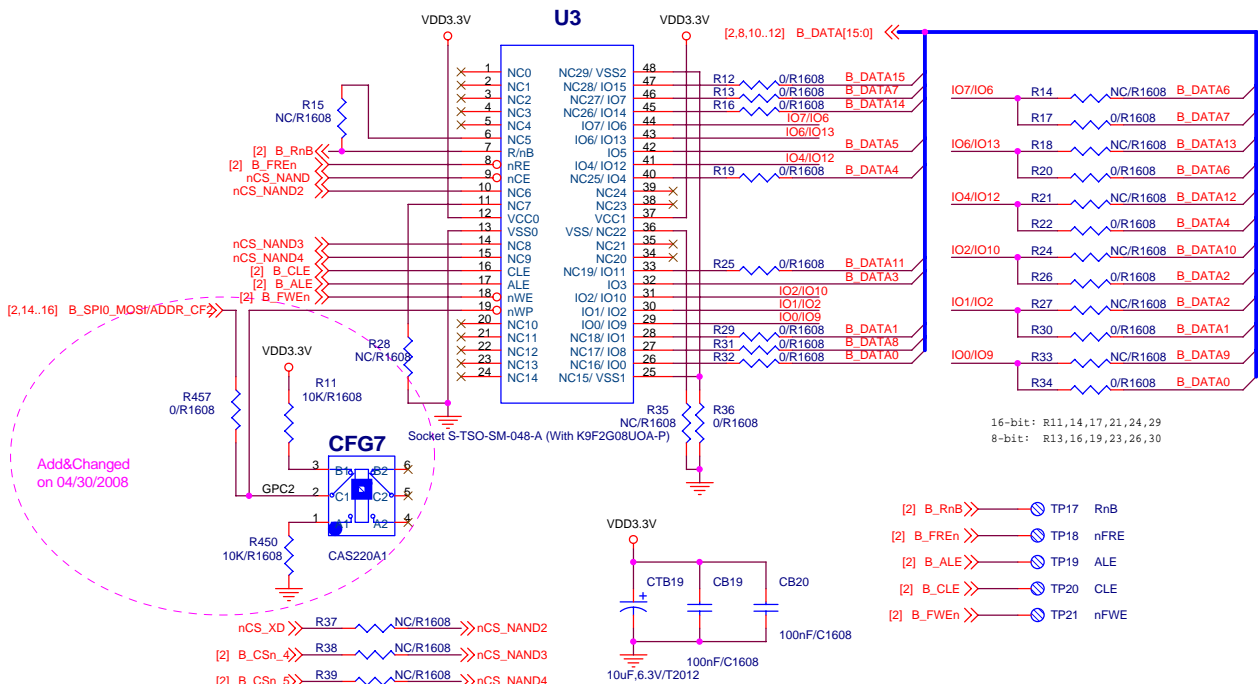
**AMD Flash Memory (SOCKET)**



**SRAM**

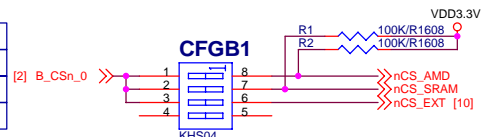


**NAND Flash memory (SOCKET)**

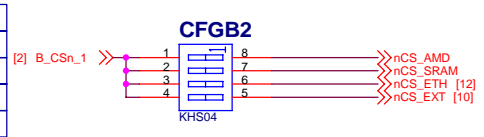


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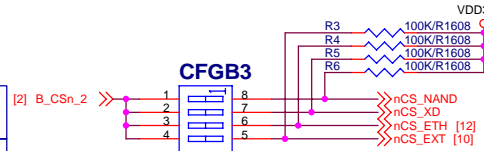
CFGB1:nCS0	SROM Selector
[3]	External
[2]	SRAM
[1]	NOR (AMD)



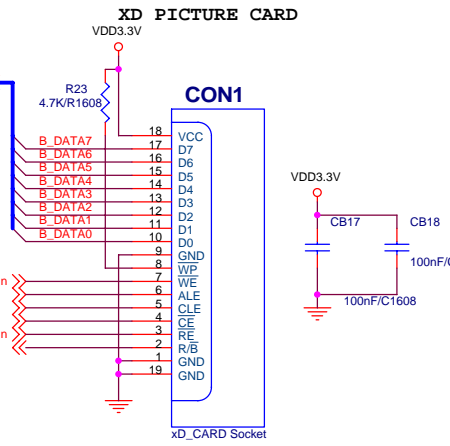
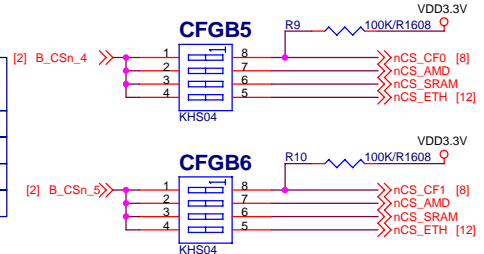
CFGB2:nCS1	SROM Selector
[4]	External
[3]	Ethernet
[2]	SRAM
[1]	NOR (AMD)



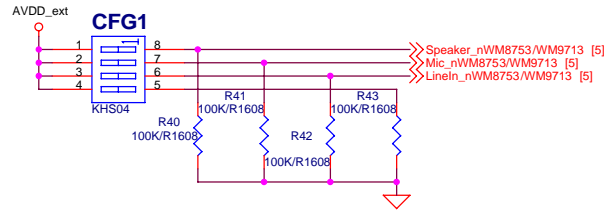
CFGB3:nCS2	SROM Selector
[4]	External
[3]	Ethernet
[2]	XD card
[1]	NAND



CFGB5:nCS4	SROM Selector
[4]	Ethernet
[3]	SRAM
[2]	NOR (AMD)
[1]	CF card

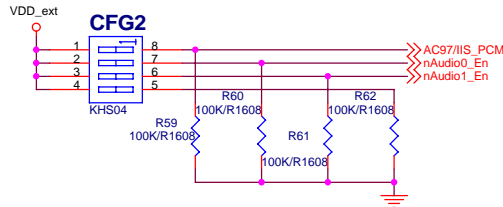


- [2] B\_RnB >>> TP17 RnB
- [2] B\_FREn >>> TP18 nFRE
- [2] B\_ALE >>> TP19 ALE
- [2] B\_CLE >>> TP20 CLE
- [2] B\_FWE >>> TP21 nFWE



<silks>

CFG1:Audio Connector	Selector
[1] : Speaker	Off: WM8580 (IIS) On: WM9713 (AC97)/PMIC
[2] : Mic	
[3] : LineIn	
[4] : Reserved	

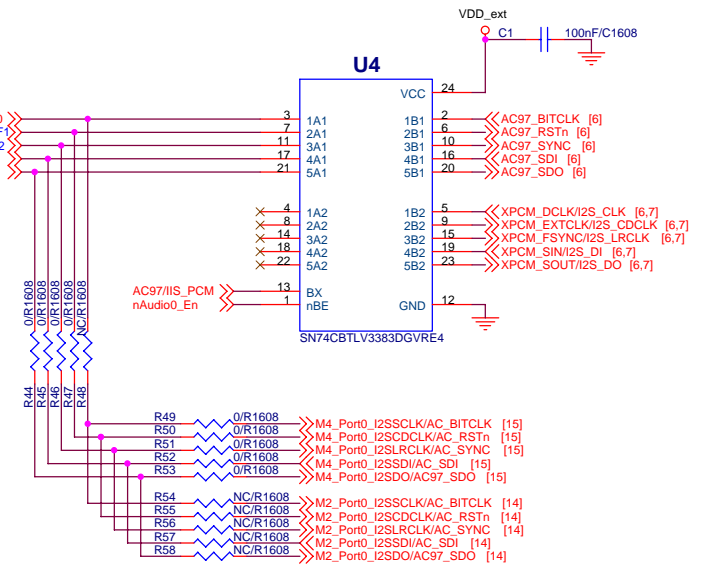


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CFG2	[1]	[2]	[3]	[4]
Off	Port 0 : AC97 Port 1 : IIS/PCM	Port 0 : Internal	Port 1 : Internal	
On	Port 0 : IIS/PCM Port 1 : AC97	Port 0 : External	Port 1 : External	Reserved

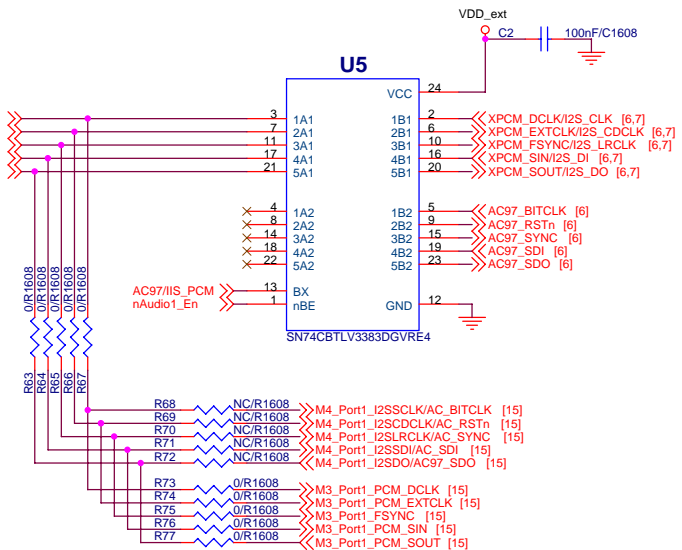
- [2] E\_XPCM\_DCLK0/I2S\_CLK0/AC97\_BITCLK0/ADDR\_CF0
- [2] E\_XPCM\_EXTCLK0/I2S\_CDCLK0/AC97\_RSTn0/ADDR\_CF1
- [2] E\_XPCM\_FSYNCO/I2S\_LRCLK0/AC97\_SYNC0/ADDR\_CF2
- [2] E\_XPCM\_SIN0/I2S\_DIO/AC97\_SDIO
- [2] E\_XPCM\_SOUT0/I2S\_DO0/AC97\_SDO0

### Audio Port 0

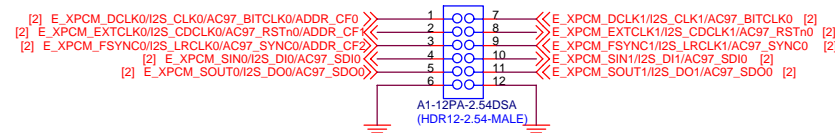


- [2] E\_XPCM\_DCLK1/I2S\_CLK1/AC97\_BITCLK0
- [2] E\_XPCM\_EXTCLK1/I2S\_CDCLK1/AC97\_RSTn0
- [2] E\_XPCM\_FSYNCO/I2S\_LRCLK1/AC97\_SYNC0
- [2] E\_XPCM\_SIN1/I2S\_DI1/AC97\_SDIO
- [2] E\_XPCM\_SOUT1/I2S\_DO1/AC97\_SDO0

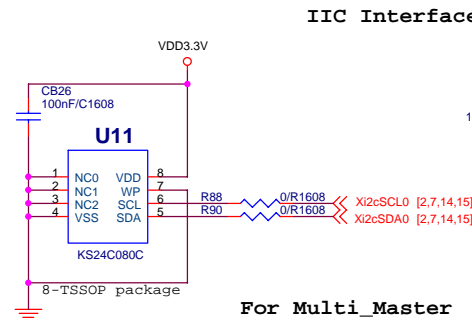
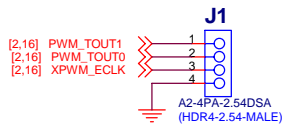
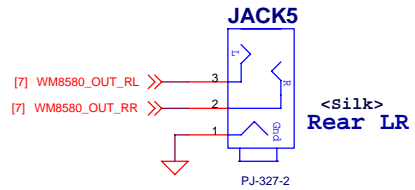
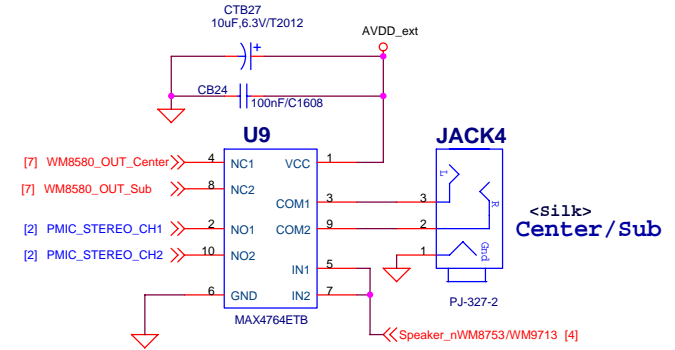
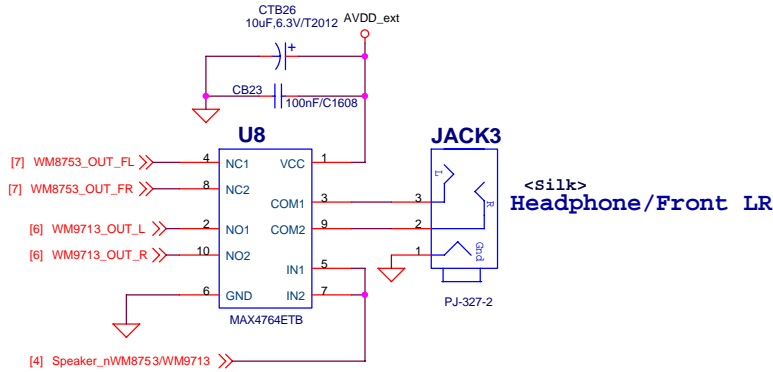
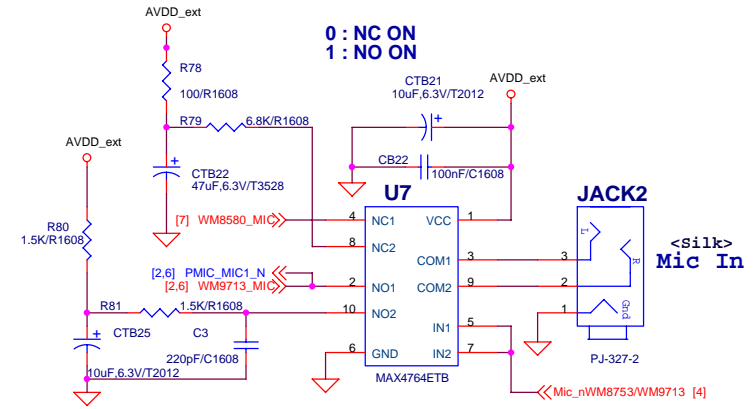
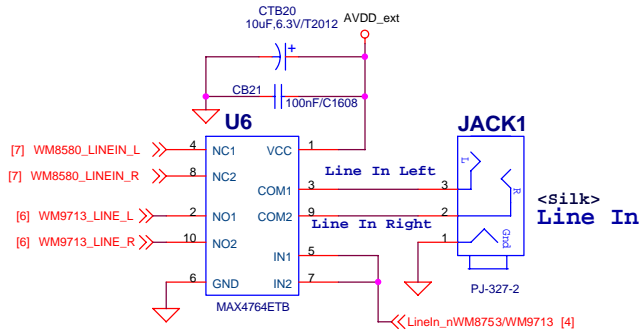
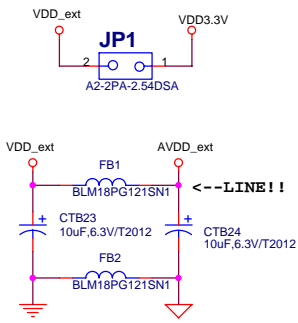
### Audio Port 1



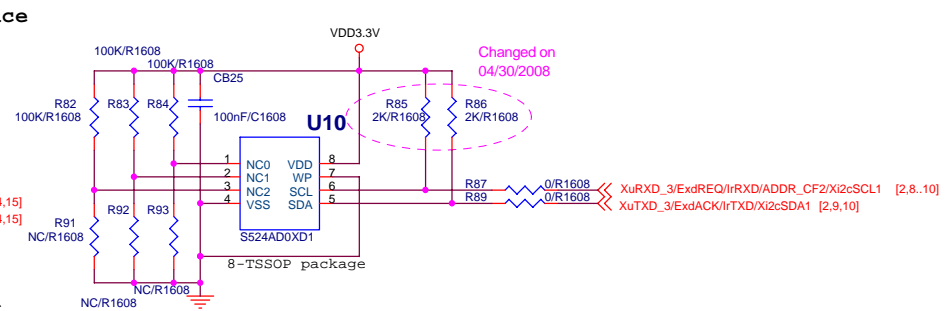
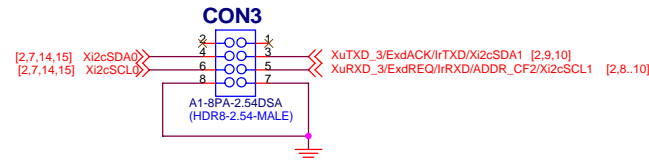
### CON2



<b>SAMSUNG ELECTRONICS CO.,LTD</b>		
Title SMDK6410 Base Board (S3C6410 Evaluation Board)		
Size A3	Document Number Audio(General0)	Rev 0.2
Date: Wednesday, April 30, 2008	Sheet 4	of 17

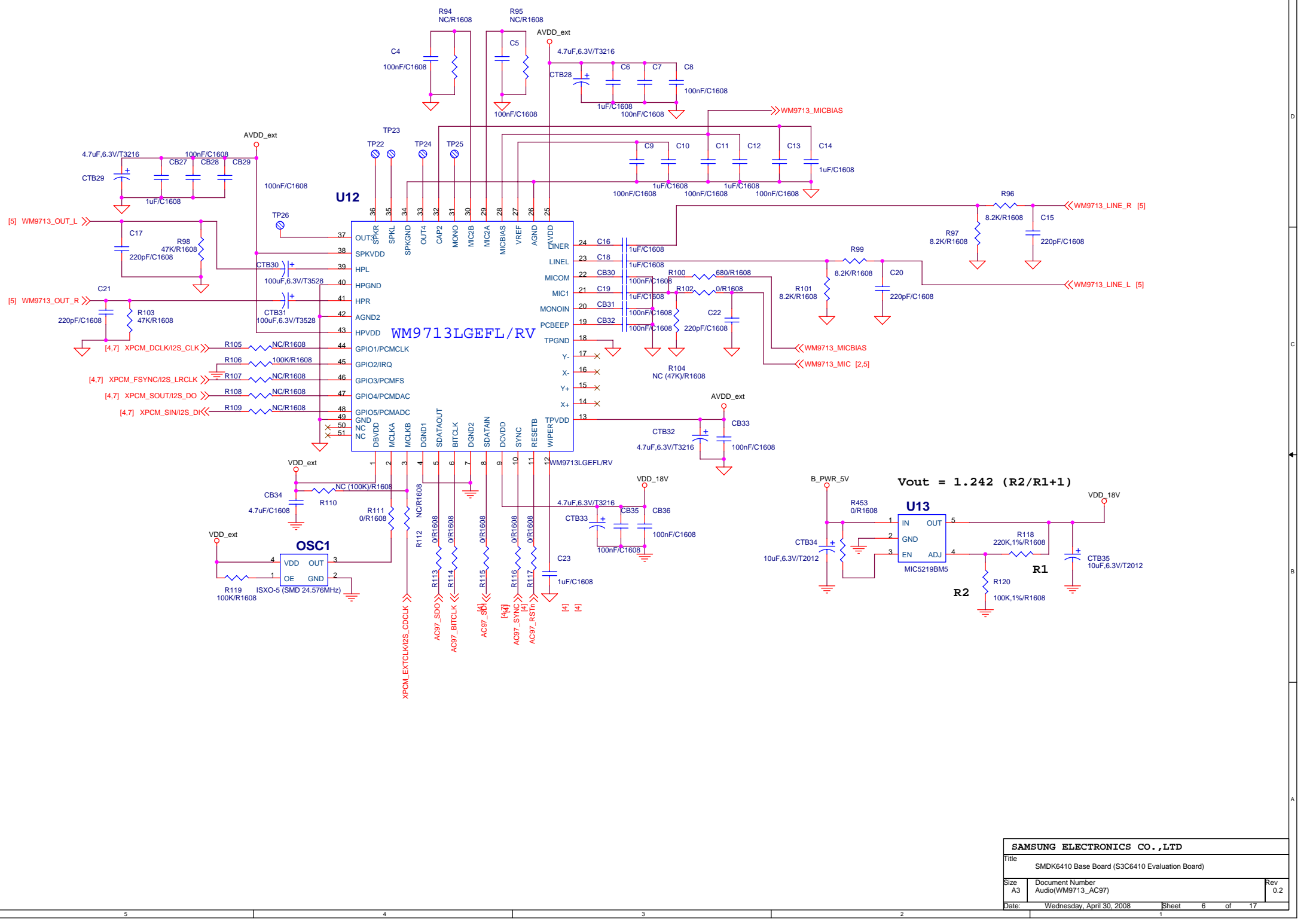


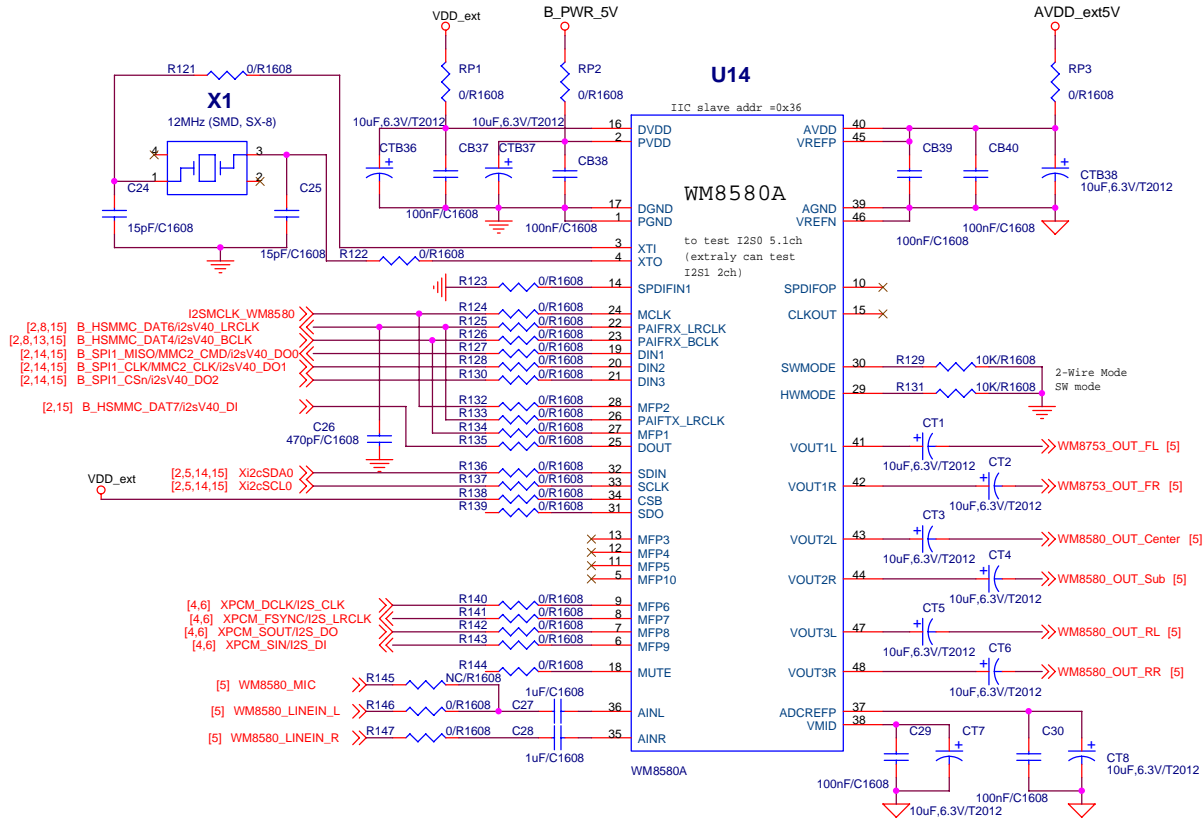
For Multi\_Master



Changed on 04/30/2008

SAMSUNG ELECTRONICS CO.,LTD		
Title SMDK6410 Base Board (S3C6410 Evaluation Board)		
Size A3	Document Number Audio(Jack)/Multi-I2C/PWM	Rev 0.2
Date: Wednesday, April 30, 2008	Sheet 5	of 17



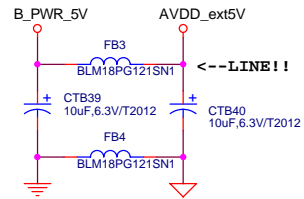
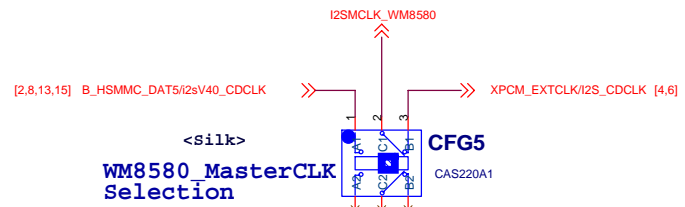


- [2,8,15] B\_HSMMC\_DAT6/I2Sv40\_LRCLK
- [2,8,13,15] B\_HSMMC\_DAT4/I2Sv40\_BCLK
- [2,14,15] B\_SPI1\_MISO/MMC2\_CMD/I2Sv40\_DO0
- [2,14,15] B\_SPI1\_CLK/MMC2\_CLK/I2Sv40\_DO1
- [2,14,15] B\_SPI1\_CS/I2Sv40\_DO2
- [2,15] B\_HSMMC\_DAT7/I2Sv40\_DI

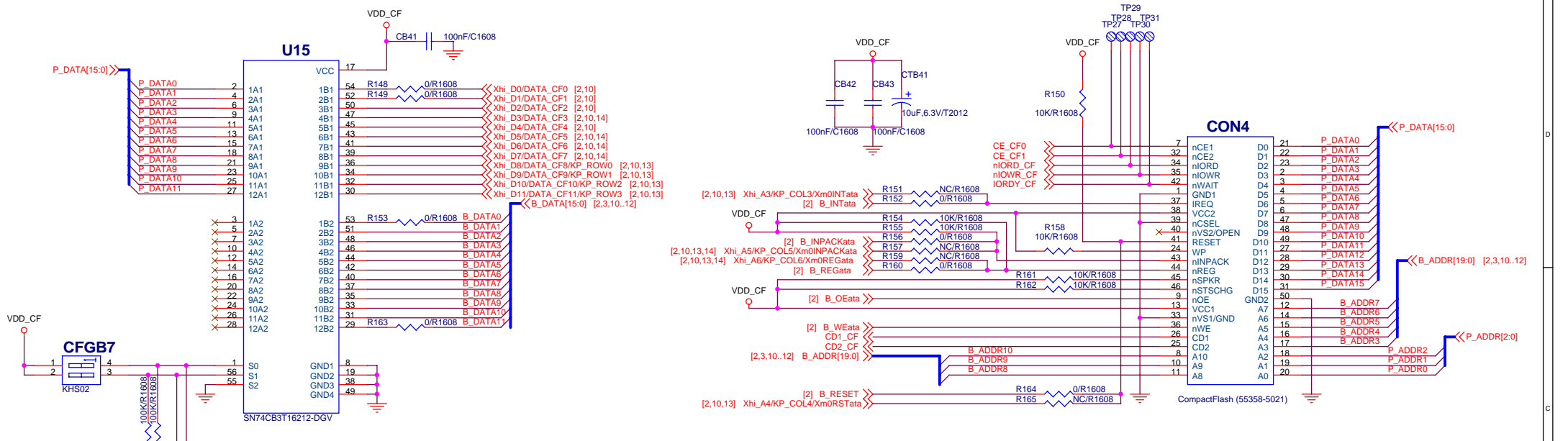
- [4,6] XPCM\_DCLK/I2S\_CLK
- [4,6] XPCM\_FSYNC/I2S\_LRCLK
- [4,6] XPCM\_SOUT/I2S\_DO
- [4,6] XPCM\_SIN/I2S\_DI

- [5] WM8580\_MIC
- [5] WM8580\_LINEIN\_L
- [5] WM8580\_LINEIN\_R

\* Note:  
CT1 ~ 6  
should be  
placed as  
close as to  
the codec  
chip

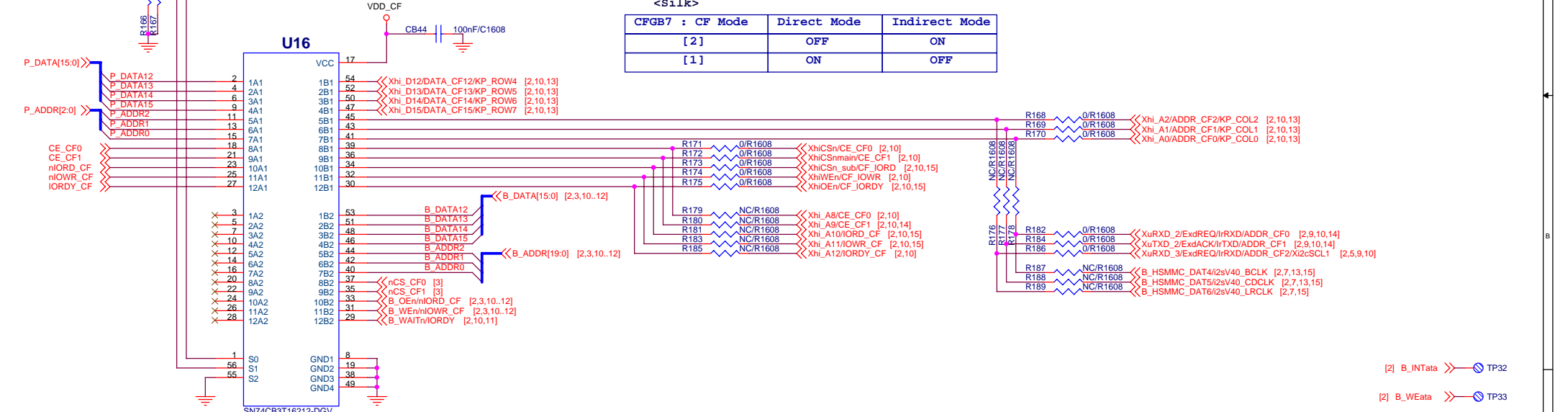


<b>SAMSUNG ELECTRONICS CO.,LTD</b>		
Title SMDK6410 Base Board (S3C6410 Evaluation Board)		
Size A3	Document Number Audio(WM8580_IIS5.1CH)	Rev 0.2
Date: Wednesday, April 30, 2008	Sheet 7	of 17

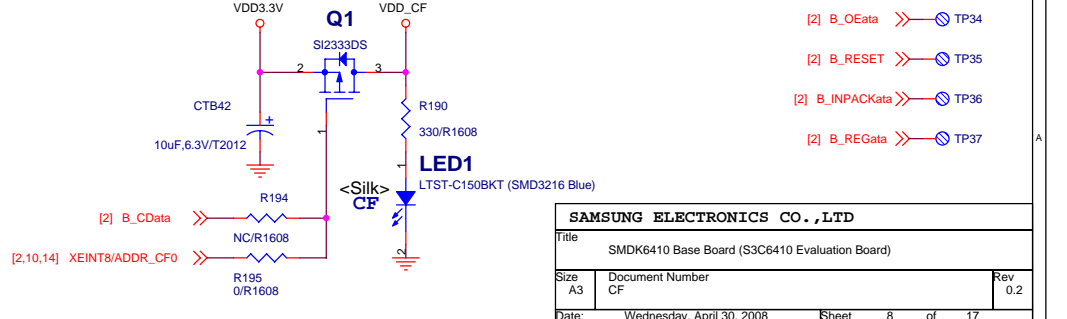


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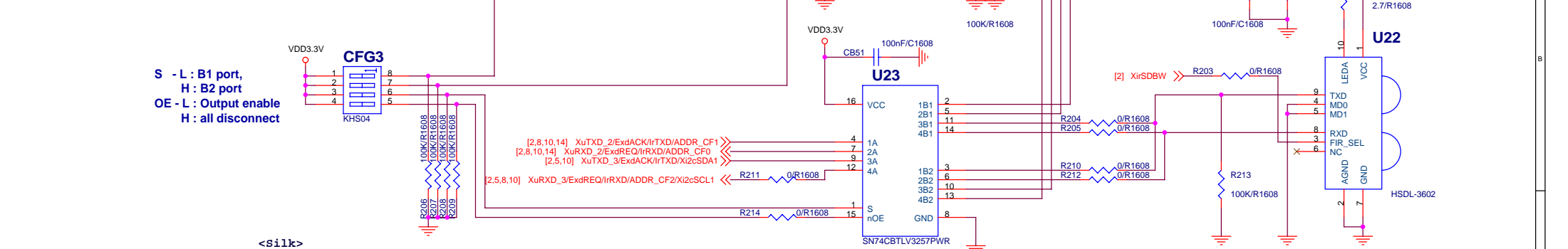
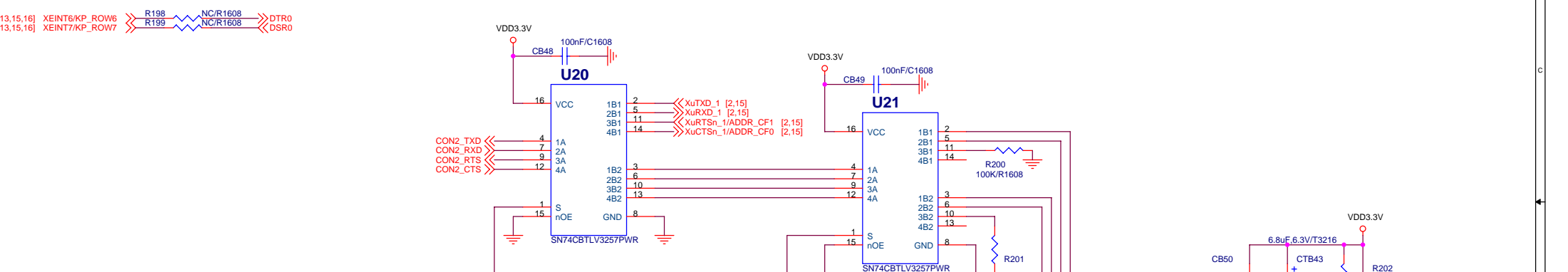
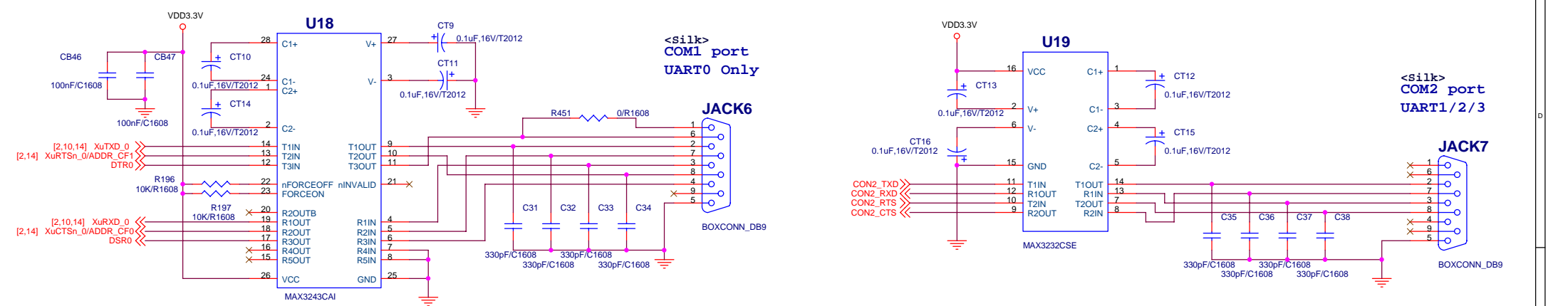
CFGB7 : CF Mode	Direct Mode	Indirect Mode
[ 2 ]	OFF	ON
[ 1 ]	ON	OFF



- [ 2 ] B\_INTata >> TP32
- [ 2 ] B\_WEata >> TP33
- [ 2 ] B\_OEata >> TP34
- [ 2 ] B\_RESET >> TP35
- [ 2 ] B\_INPACKata >> TP36
- [ 2 ] B\_REGata >> TP37



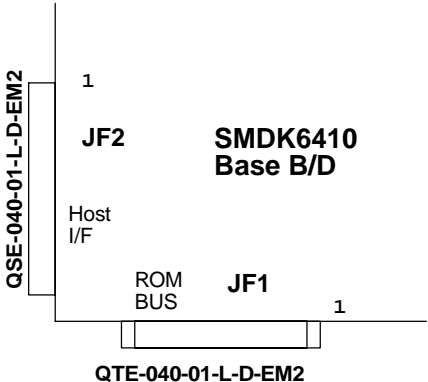
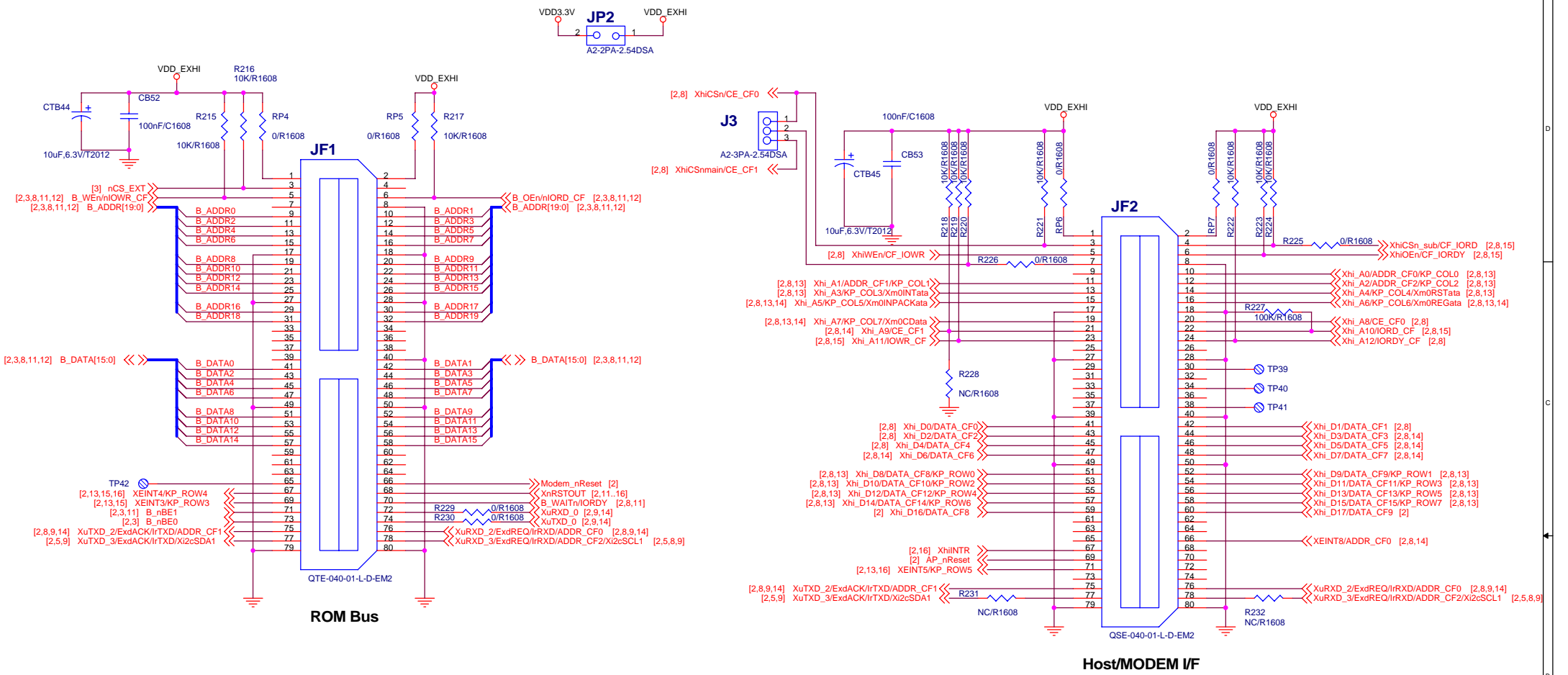




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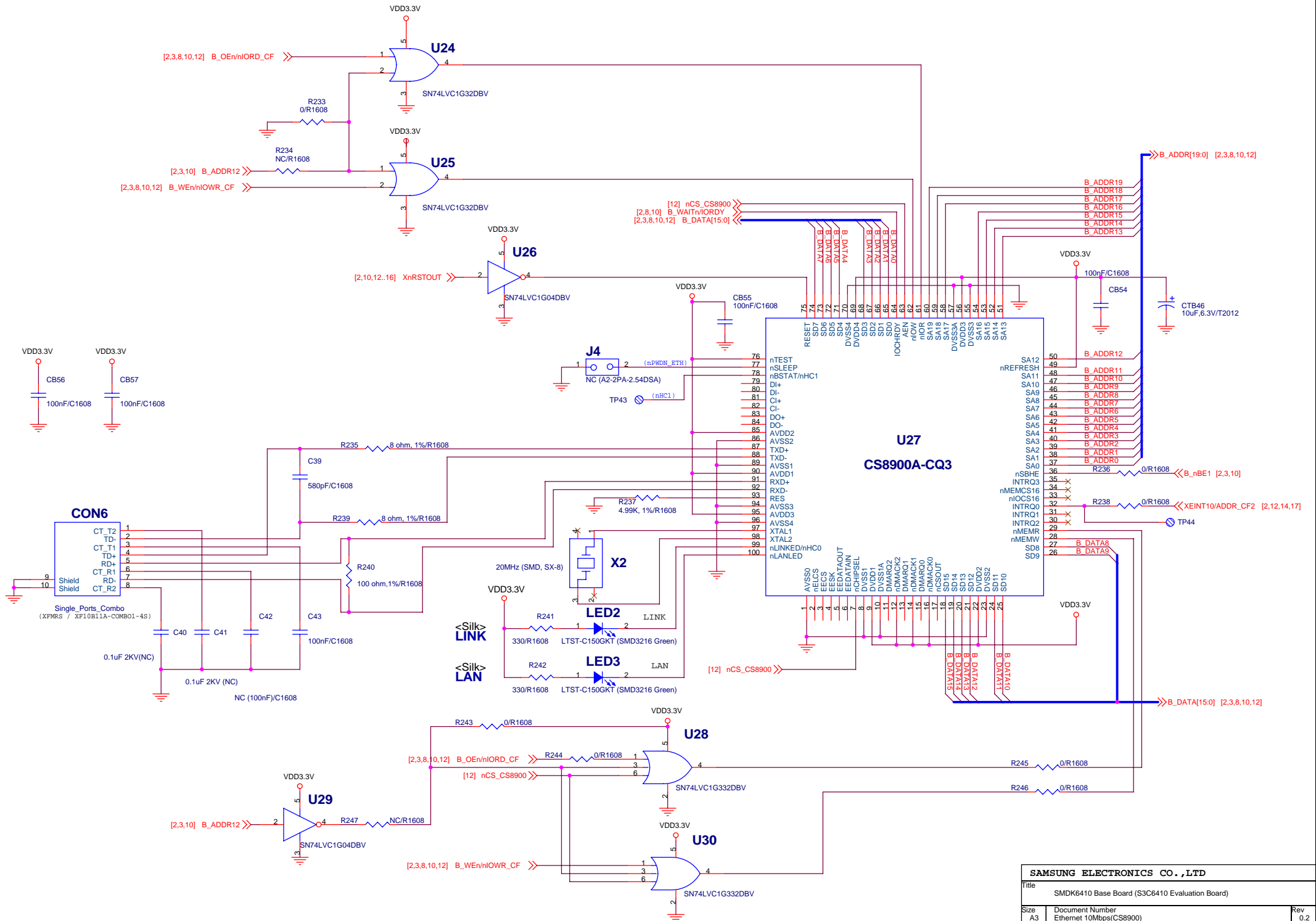
CFG3 :	PIN1	PIN2	PIN3	PIN4
COM2 port				
UART1	OFF	X	X	X
UART2	ON	OFF	OFF	OFF
UART3	ON	ON	ON	OFF
IrDA(U2)	X	X	ON	OFF
IrDA(U3)	X	X	OFF	OFF

SIR mode only

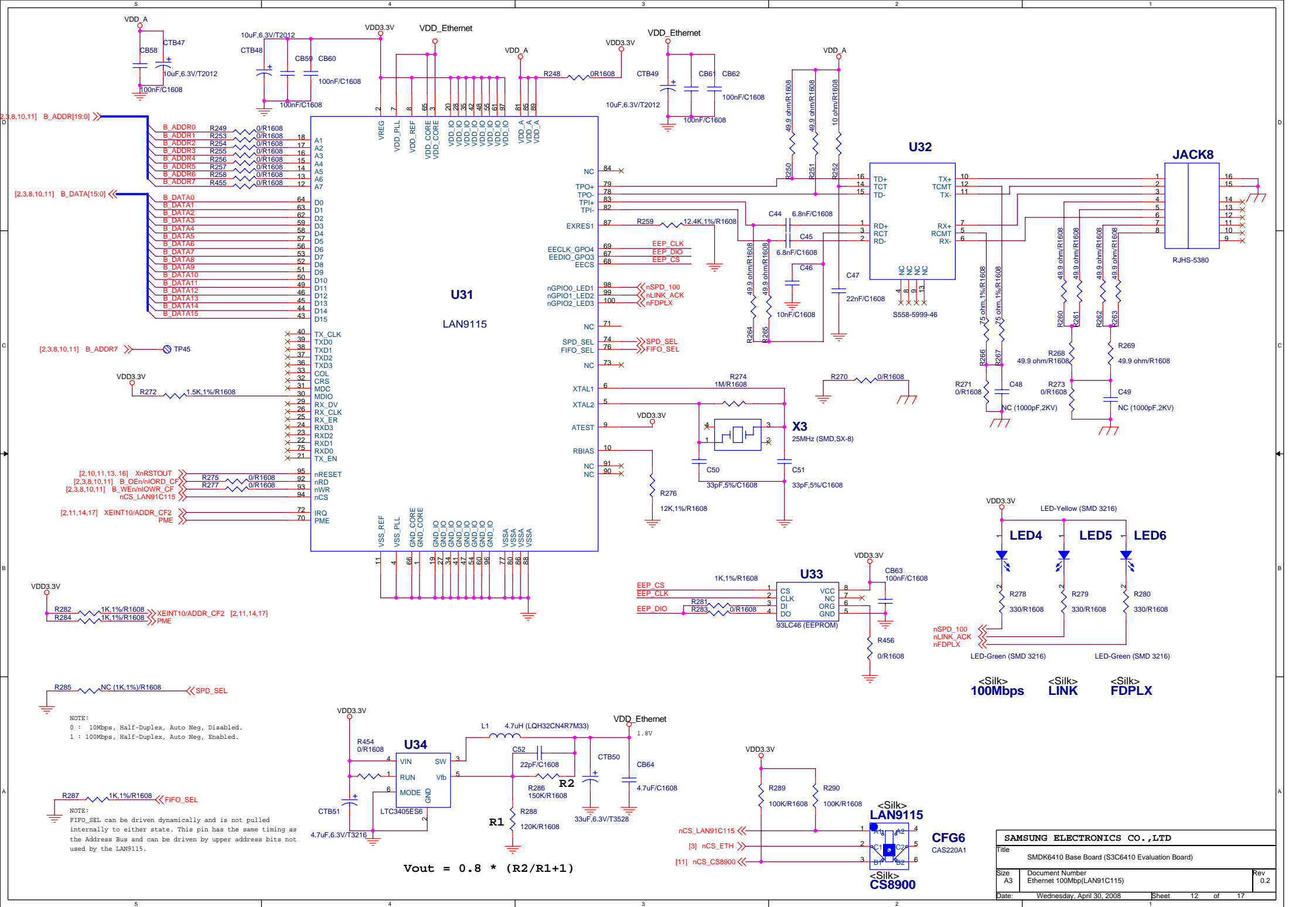


**SMDK6410  
Base B/D**

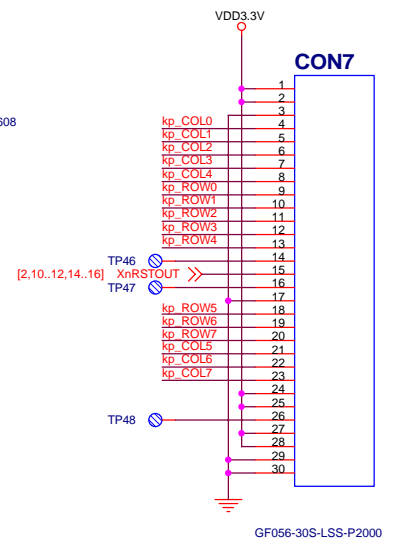
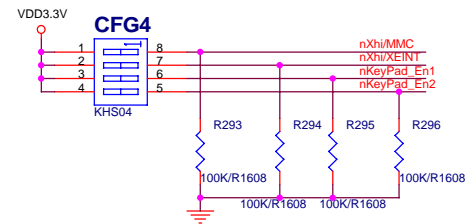
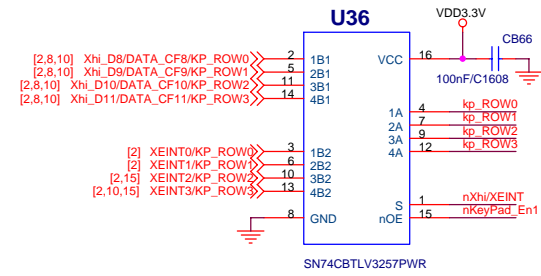
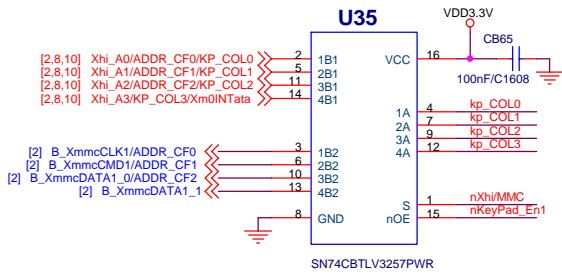
<b>SAMSUNG ELECTRONICS CO., LTD</b>		
Title SMDK6410 Base Board (S3C6410 Evaluation Board)		
Size A3	Document Number Ext. Bus/ Modem I/F	Rev 0.2
Date: Wednesday, April 30, 2008	Sheet 10	of 17



<b>SAMSUNG ELECTRONICS CO., LTD</b>		
Title		
SMDK6410 Base Board (S3C6410 Evaluation Board)		
Size	Document Number	Rev
A3	Ethernet 10Mbps(CS8900)	0.2
Date:	Wednesday, April 30, 2008	Sheet 11 of 17

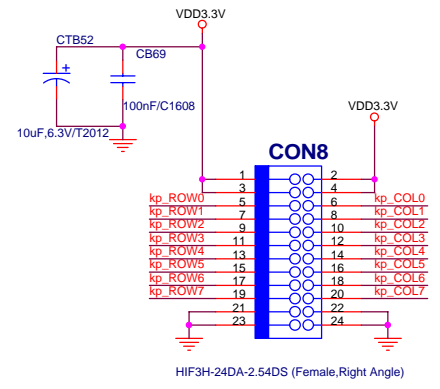
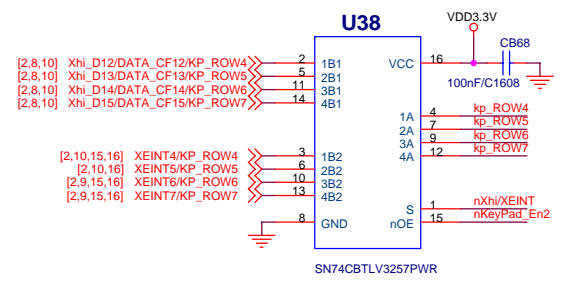
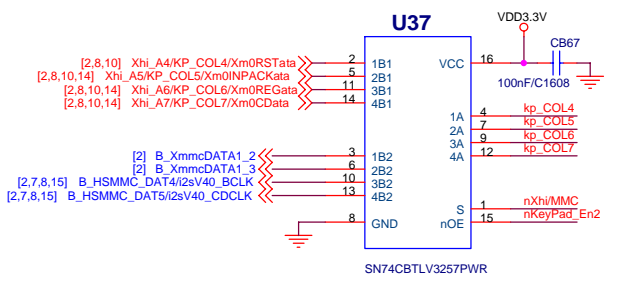


<b>SAMSUNG ELECTRONICS CO., LTD</b>		
Title SMDK6410 Base Board (S3C6410 Evaluation Board)		
Size A3	Document Number Ethernet 100Mbps(LAN91C115)	Rev 0.2
Date: Wednesday, April 30, 2008	Sheet 12	of 17

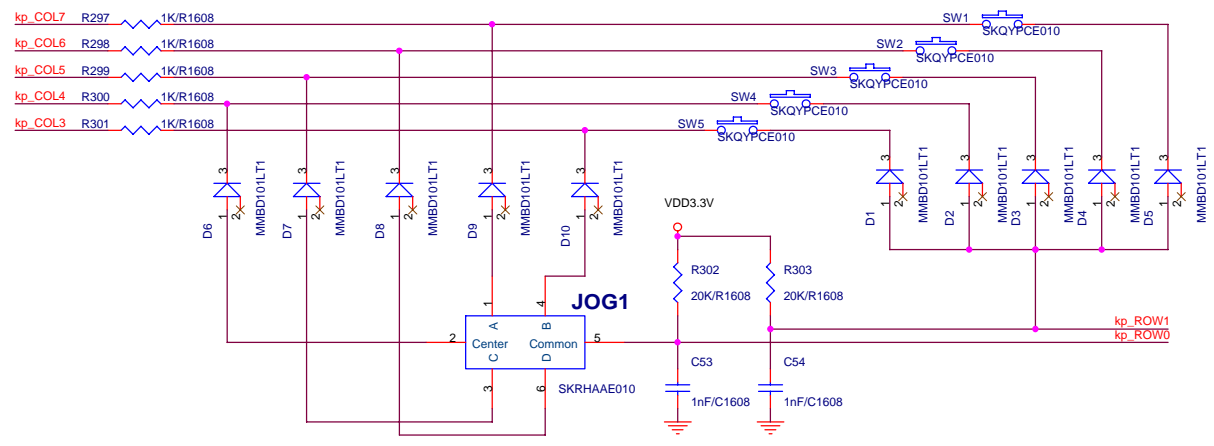
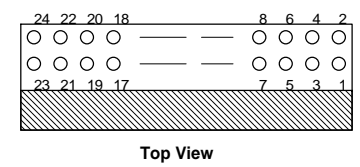


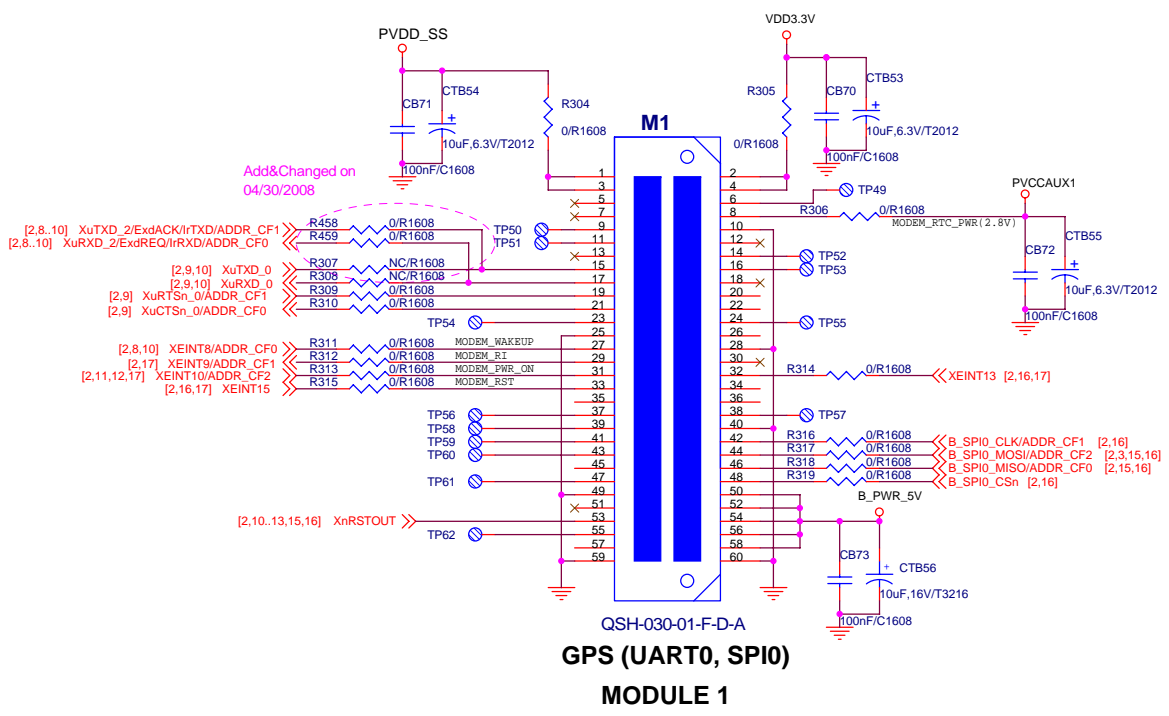
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CFG4 :	Func
Keypad	
1 (Column)	OFF : Host I/F ON : MMC
2 (Row)	OFF : Host I/F ON : XEINT
3 (Key_En1)	OFF : Key Enable(Low 4x4) ON : Key Disable(Low 4x4)
4 (Key_En2)	OFF : Key Enable(High 4x4) ON : Key Disable(High 4x4)

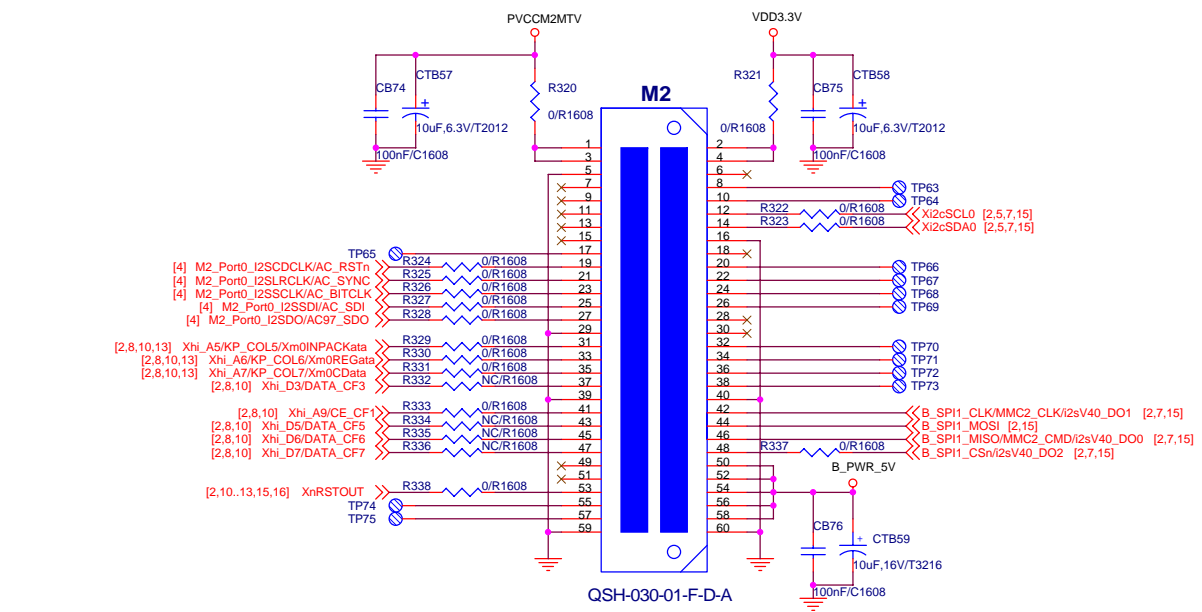


\* Note: HIF3H-24DA-2.54DS PCB footprint (Decal)

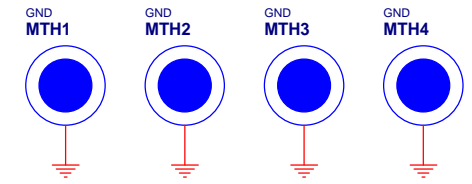




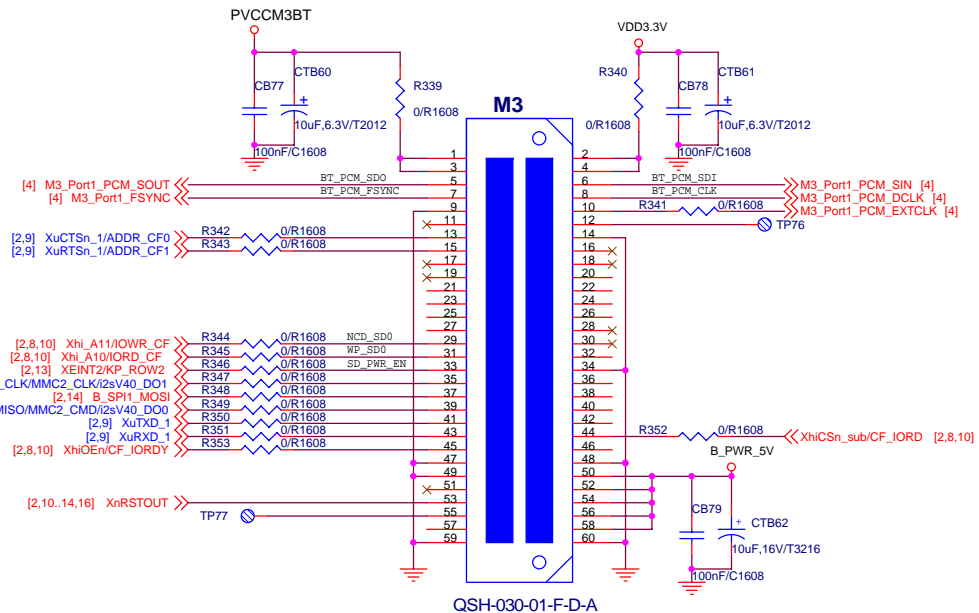
**GPS (UART0, SPI0)  
MODULE 1**



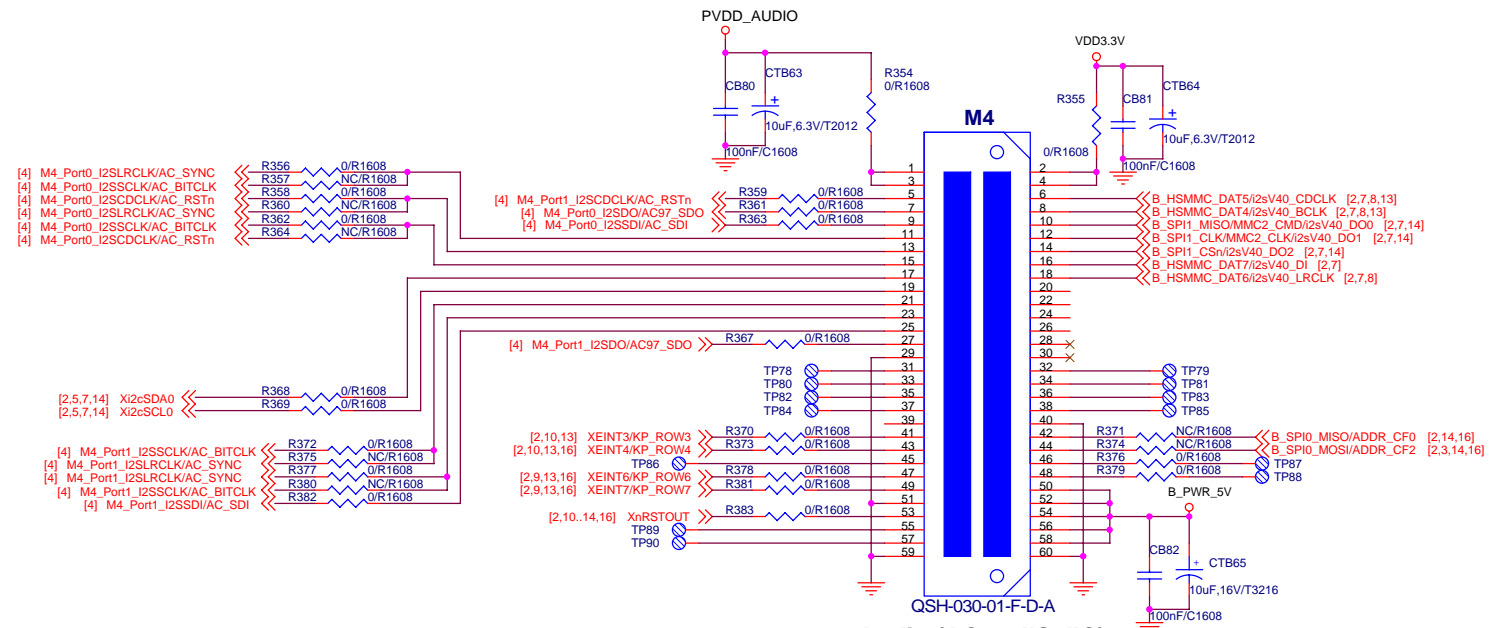
**Mobile TV (SPI1, IIC)  
HD Radio (SPI1, IIS for Module 4)  
MODULE 2**



<b>SAMSUNG ELECTRONICS CO., LTD</b>		
Title SMDK6410 Base Board (S3C6410 Evaluation Board)		
Size A3	Document Number Module Connector1&2	Rev 0.2
Date: Wednesday, April 30, 2008	Sheet 14	of 17

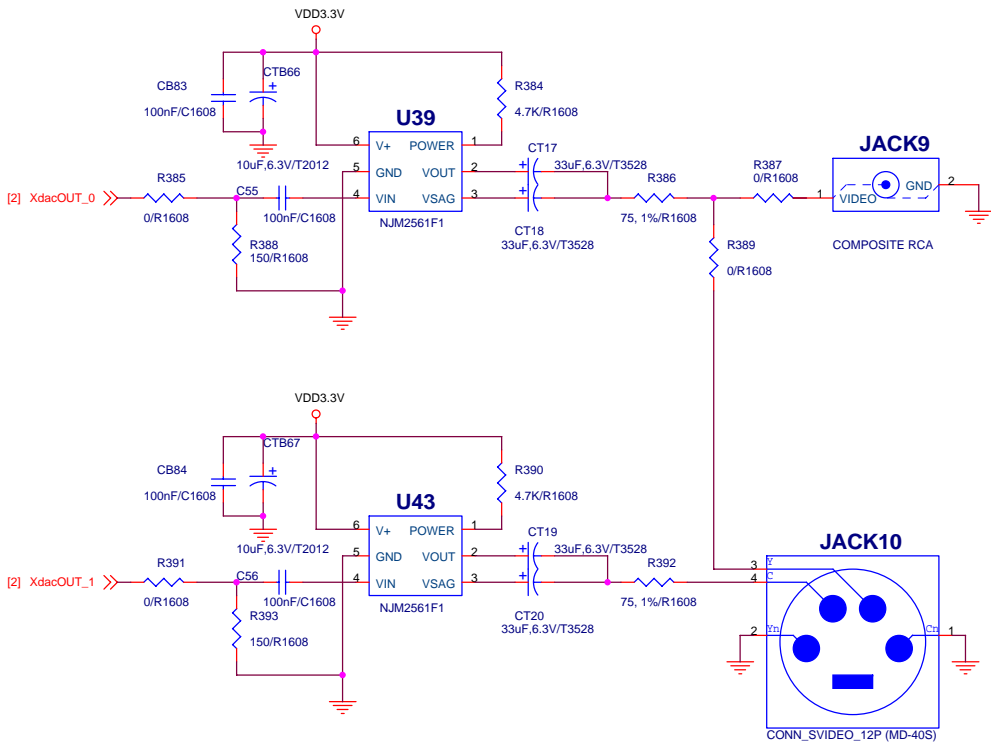


**BT (UART1, PCM for PMIC Audio Codec)  
MODULE 3**

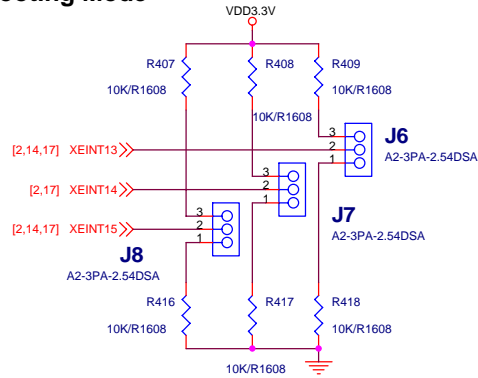


**Audio (AC97, IIS, IIC)  
MODULE 4**

<b>SAMSUNG ELECTRONICS CO.,LTD</b>		
Title SMDK6410 Base Board (S3C6410 Evaluation Board)		
Size A3	Document Number Module Connector3&4	Rev 0.2
Date: Wednesday, April 30, 2008	Sheet 15	of 17



### IROM Booting Mode



IROM Booting	Page	Address	J8	J7	J6
SD/MMC CH0			1-2	1-2	1-2
OneNand			1-2	1-2	2-3
Nand	512	3	1-2	2-3	1-2
		4	1-2	2-3	2-3
	2048	4	2-3	1-2	1-2
		5	2-3	1-2	2-3
	4096	5	2-3	2-3	1-2
SD/MMC CH1			2-3	2-3	2-3

