

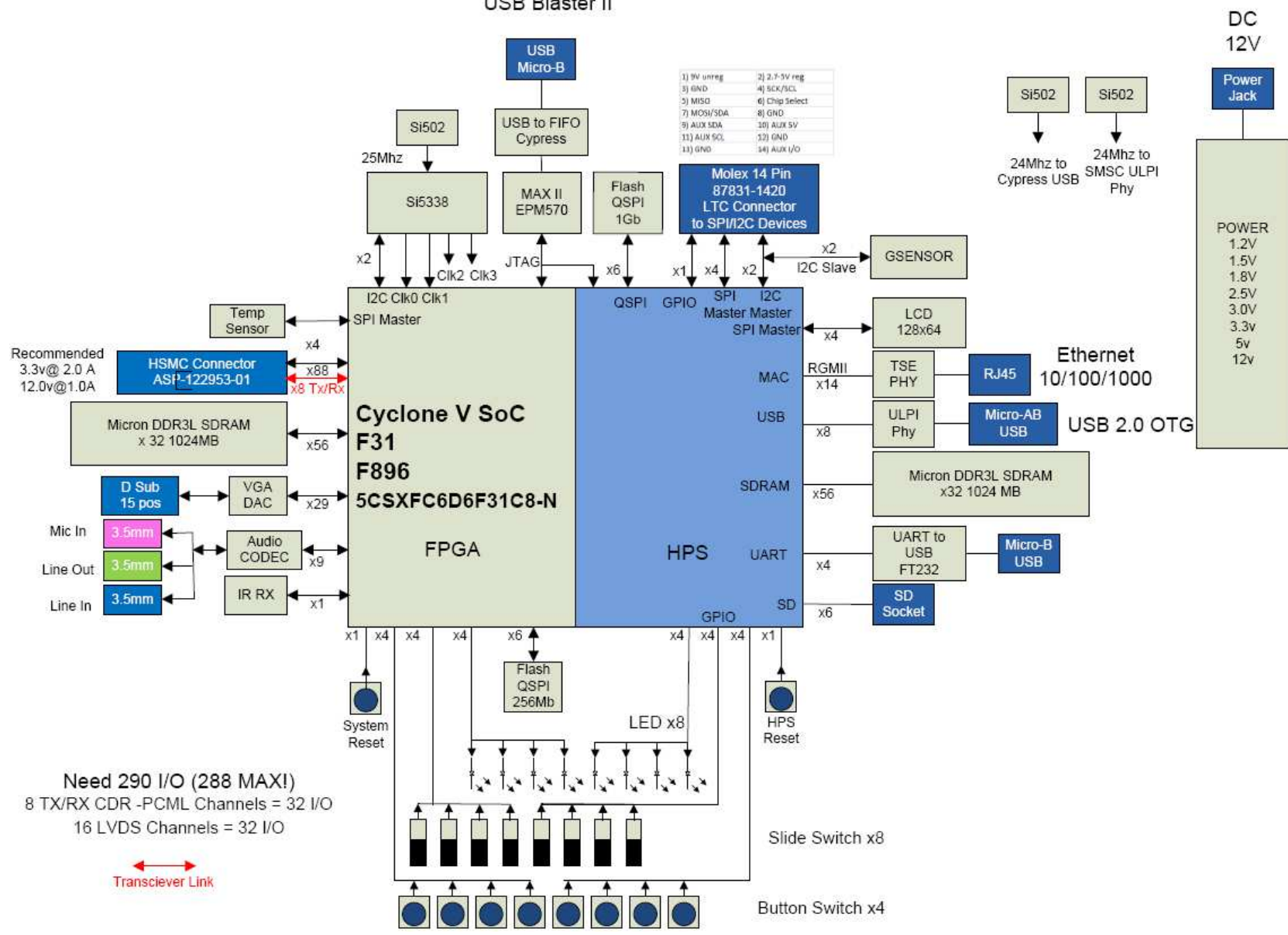
SoCKit

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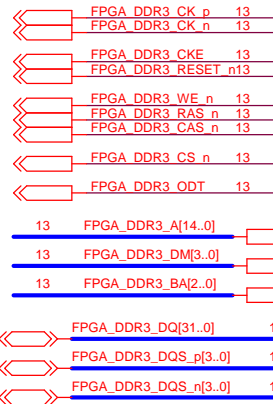
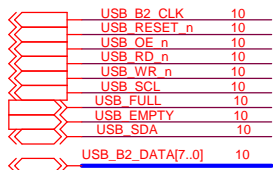
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USB Blaster II



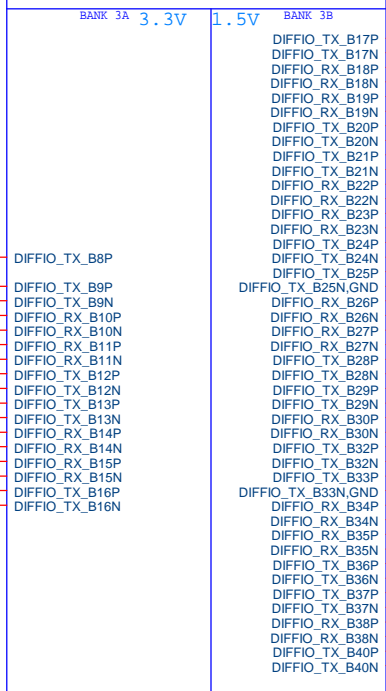
Need 290 I/O (288 MAX!)
 8 TX/RX CDR -PCML Channels = 32 I/O
 16 LVDS Channels = 32 I/O

↔ Transceiver Link



U25C

BANK 3

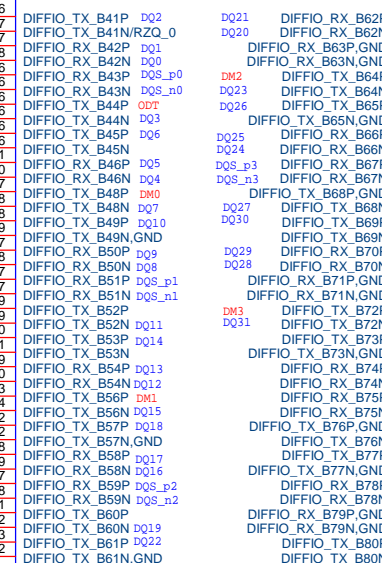


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GND

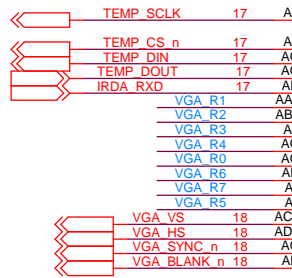
U25D

BANK 4A 1.5V



5CSXF6DF31

GND

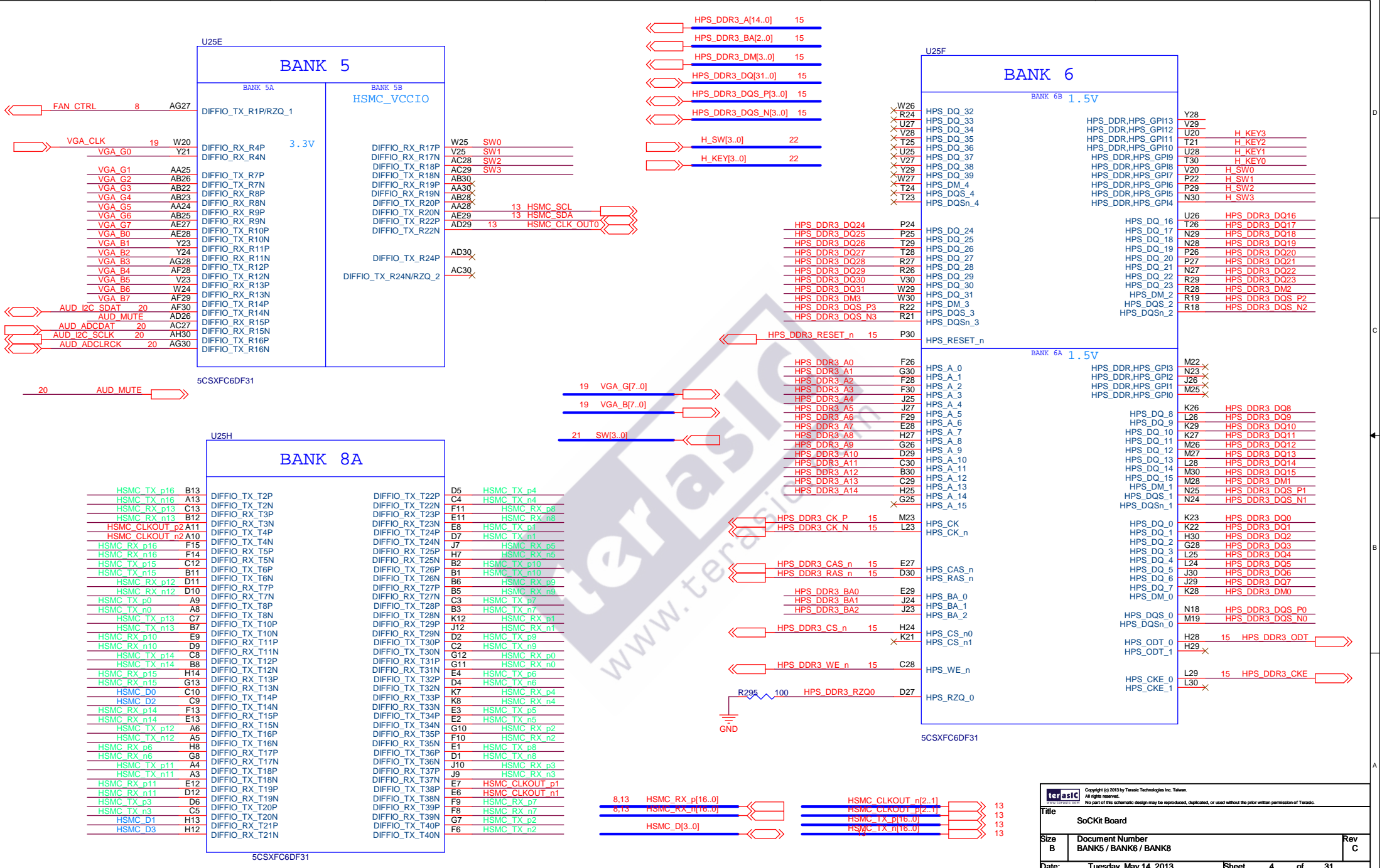


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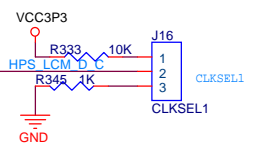
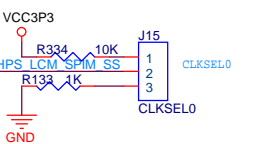
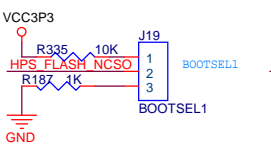
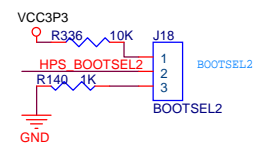
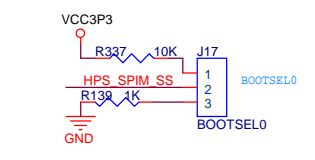
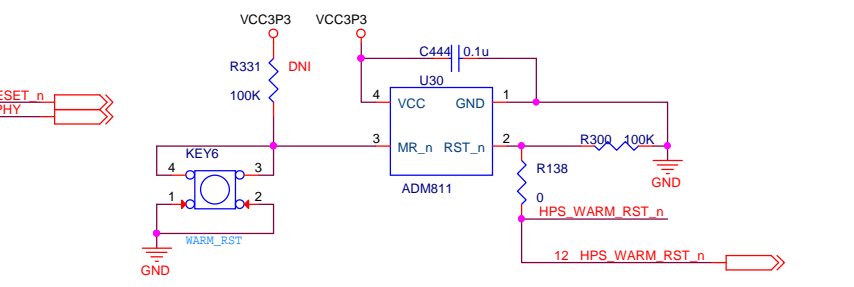
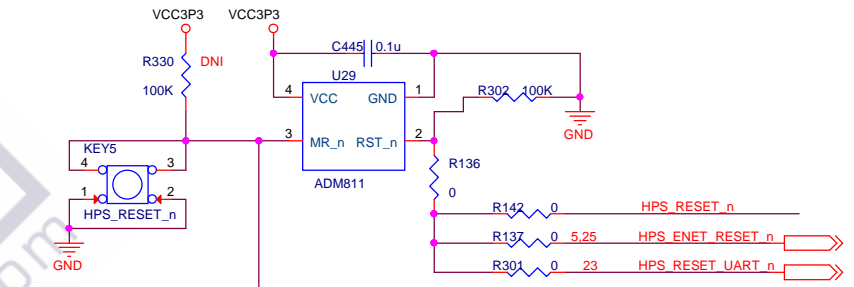
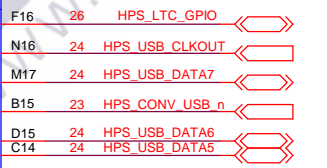
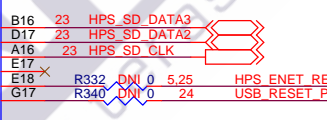
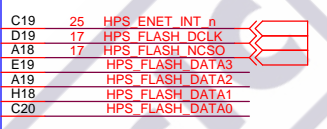
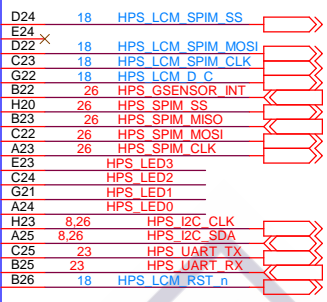
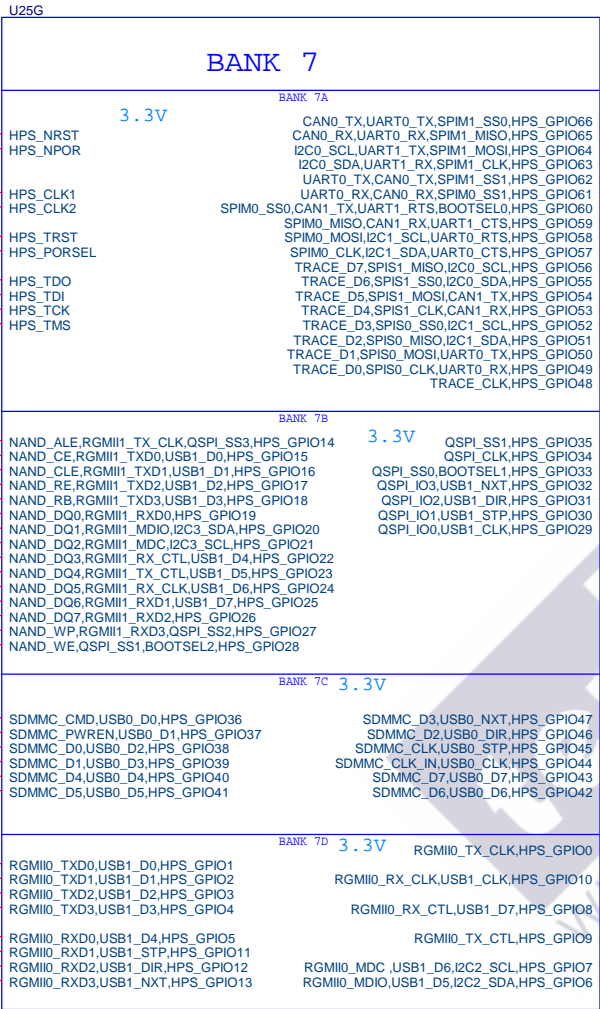
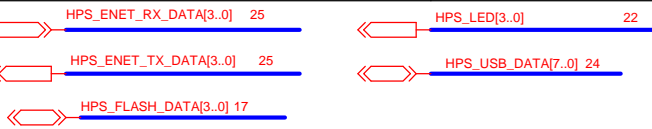
Title SoCKit Board

Size B	Document Number BANK3 & BANK4	Rev C
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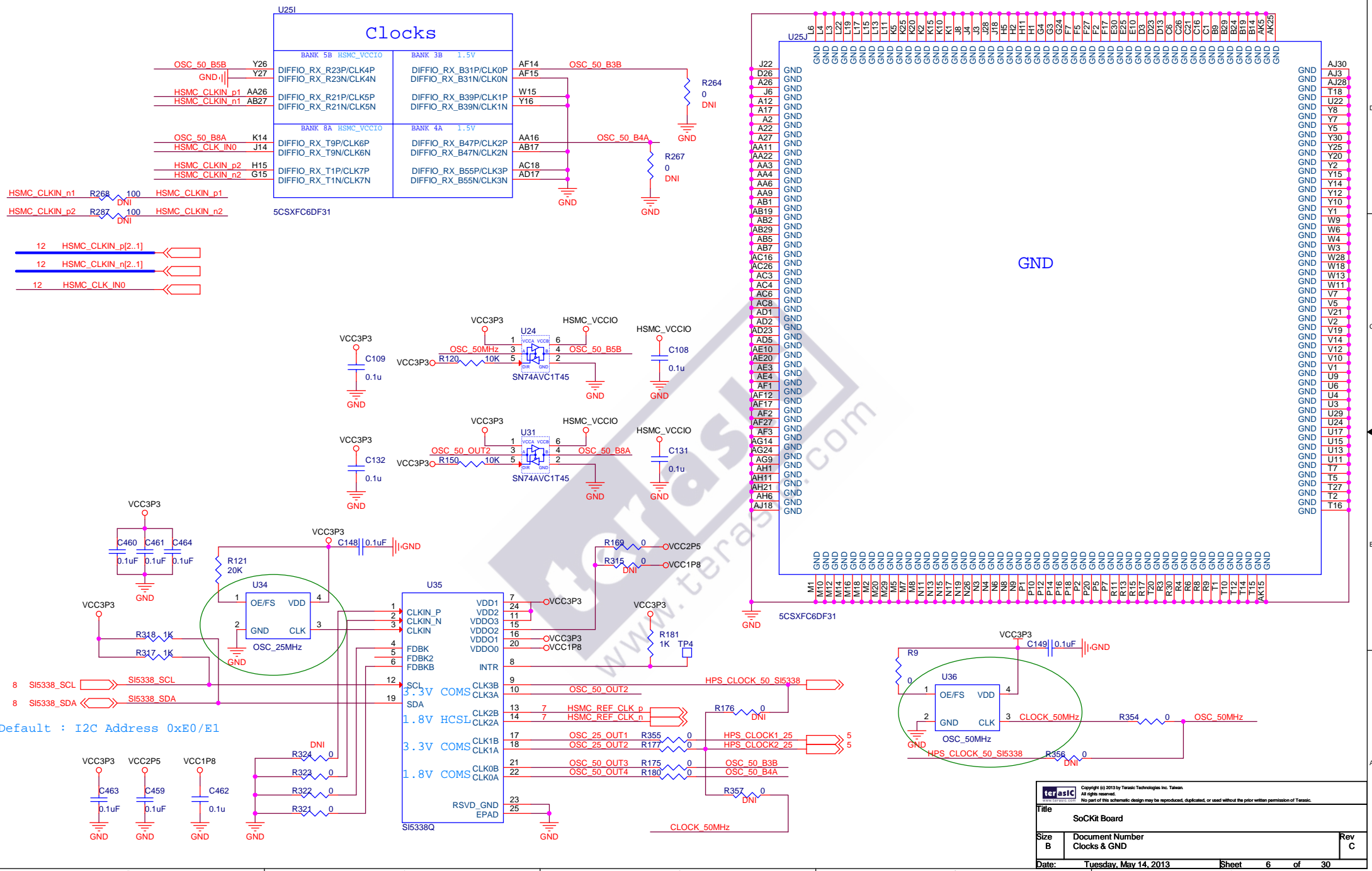
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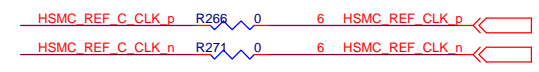
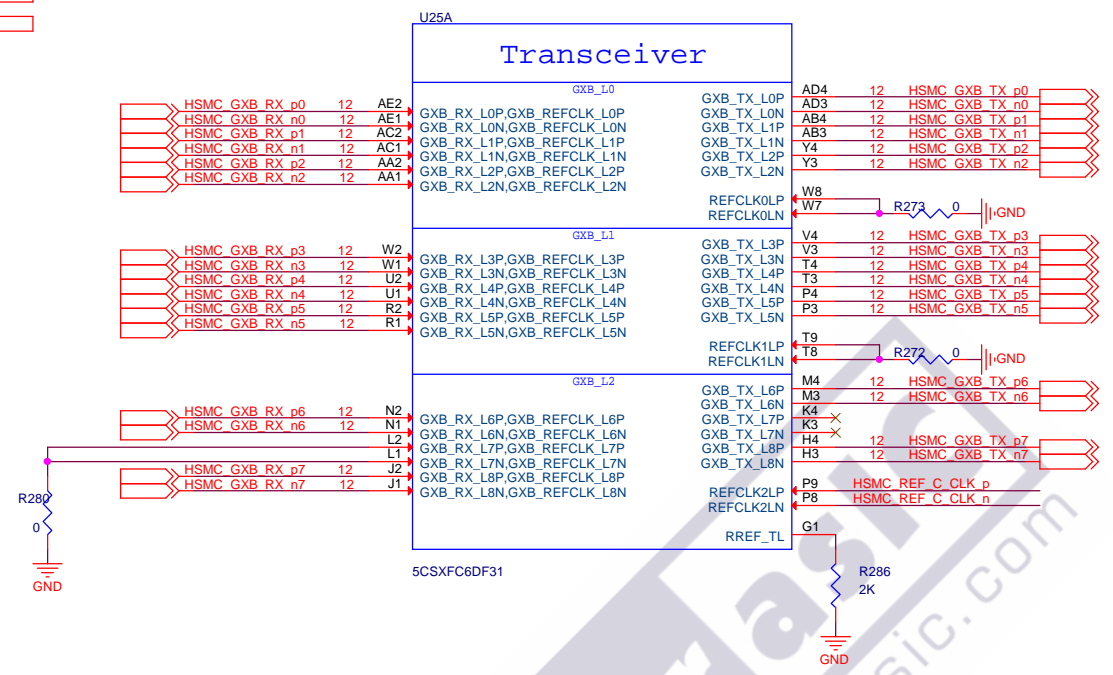
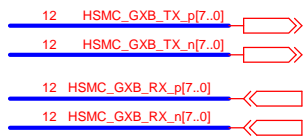


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Title		
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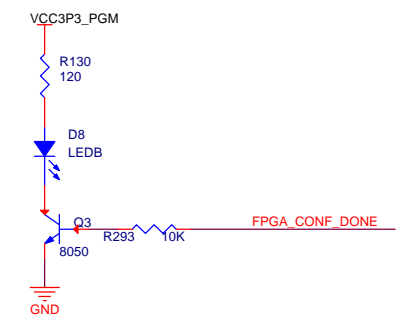
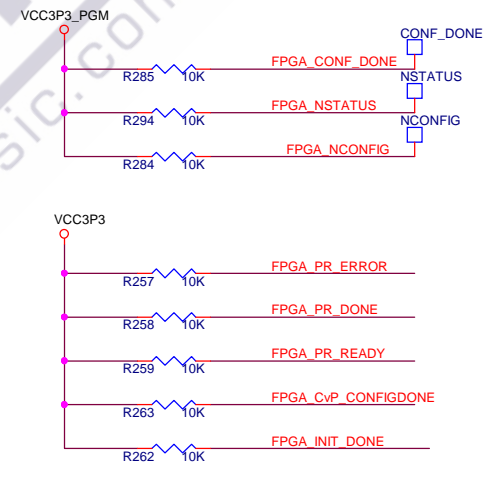
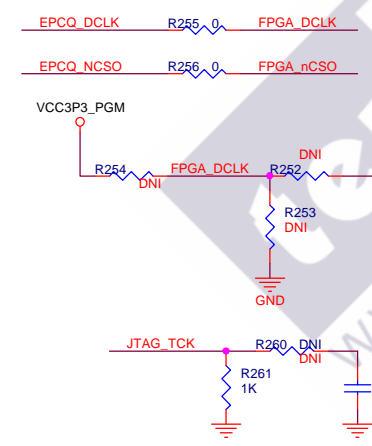
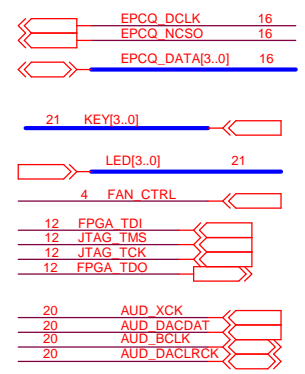
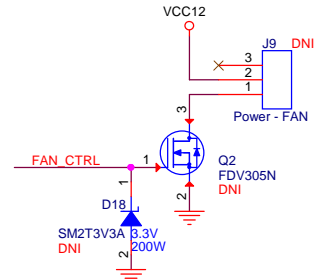
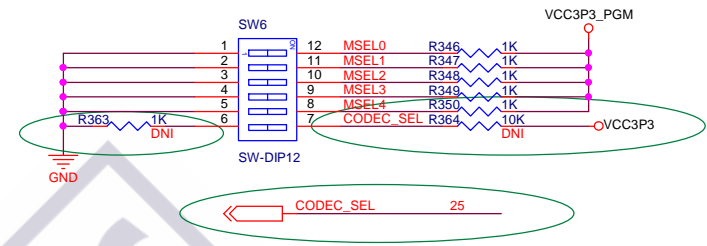
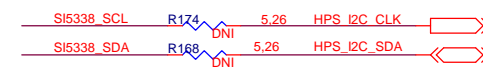
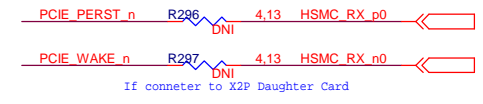
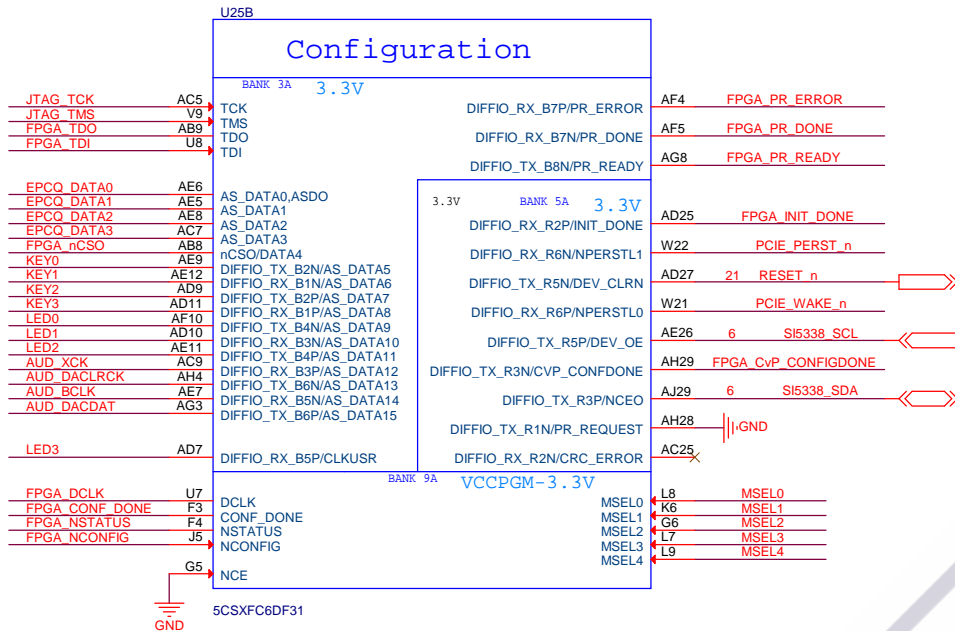


GND

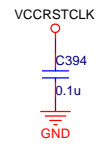
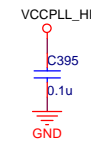
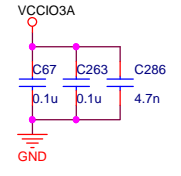
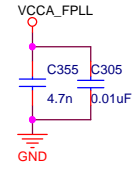
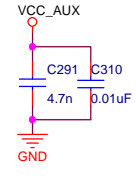
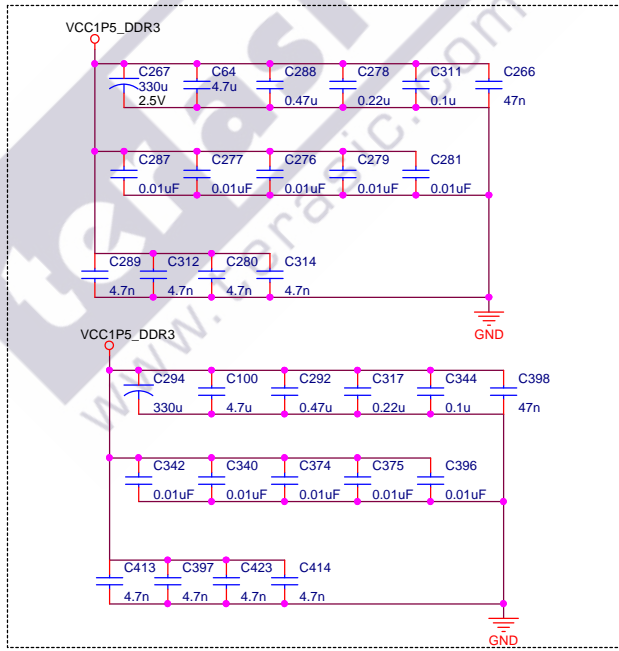
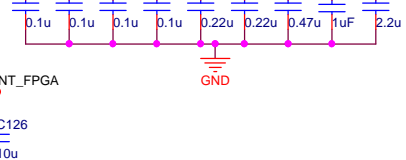
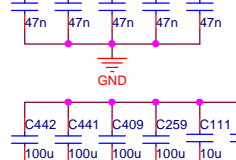
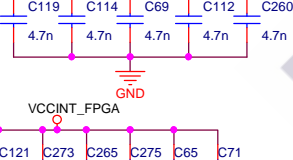
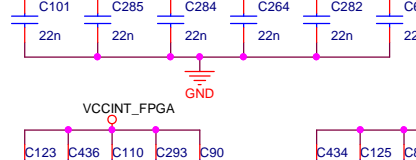
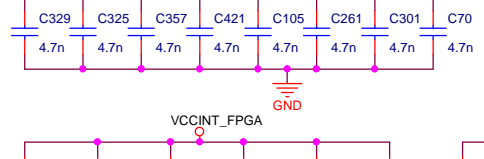
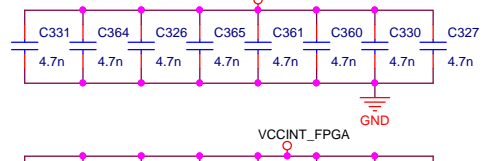
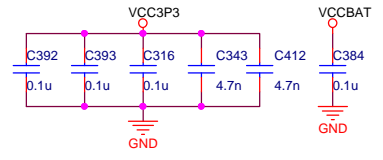
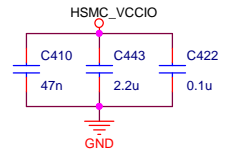
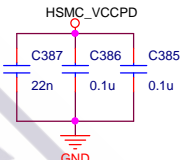
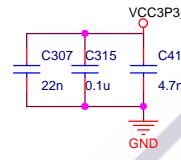
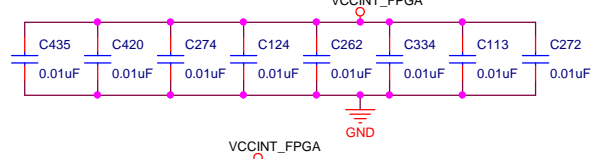
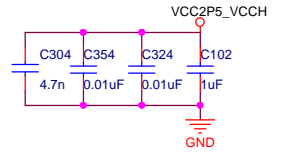
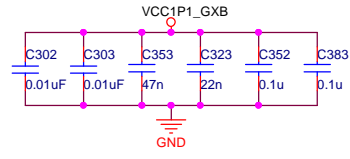
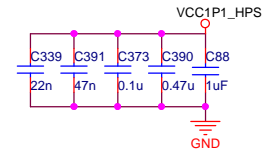
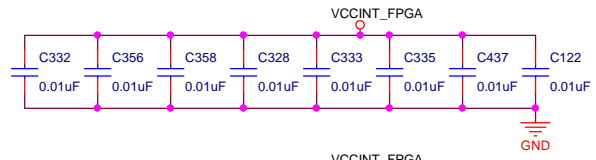
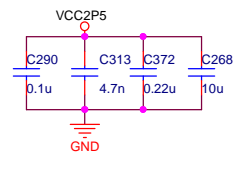
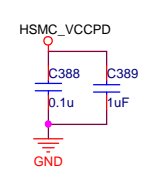
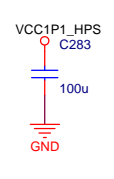
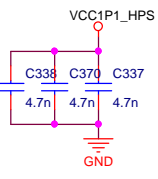
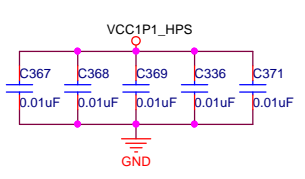
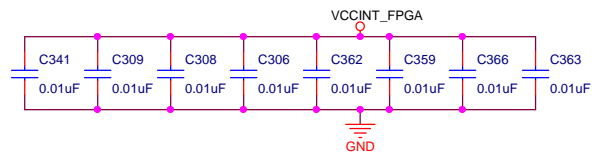
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Title	
SoCKit Board	
Size	Document Number
B	Clocks & GND
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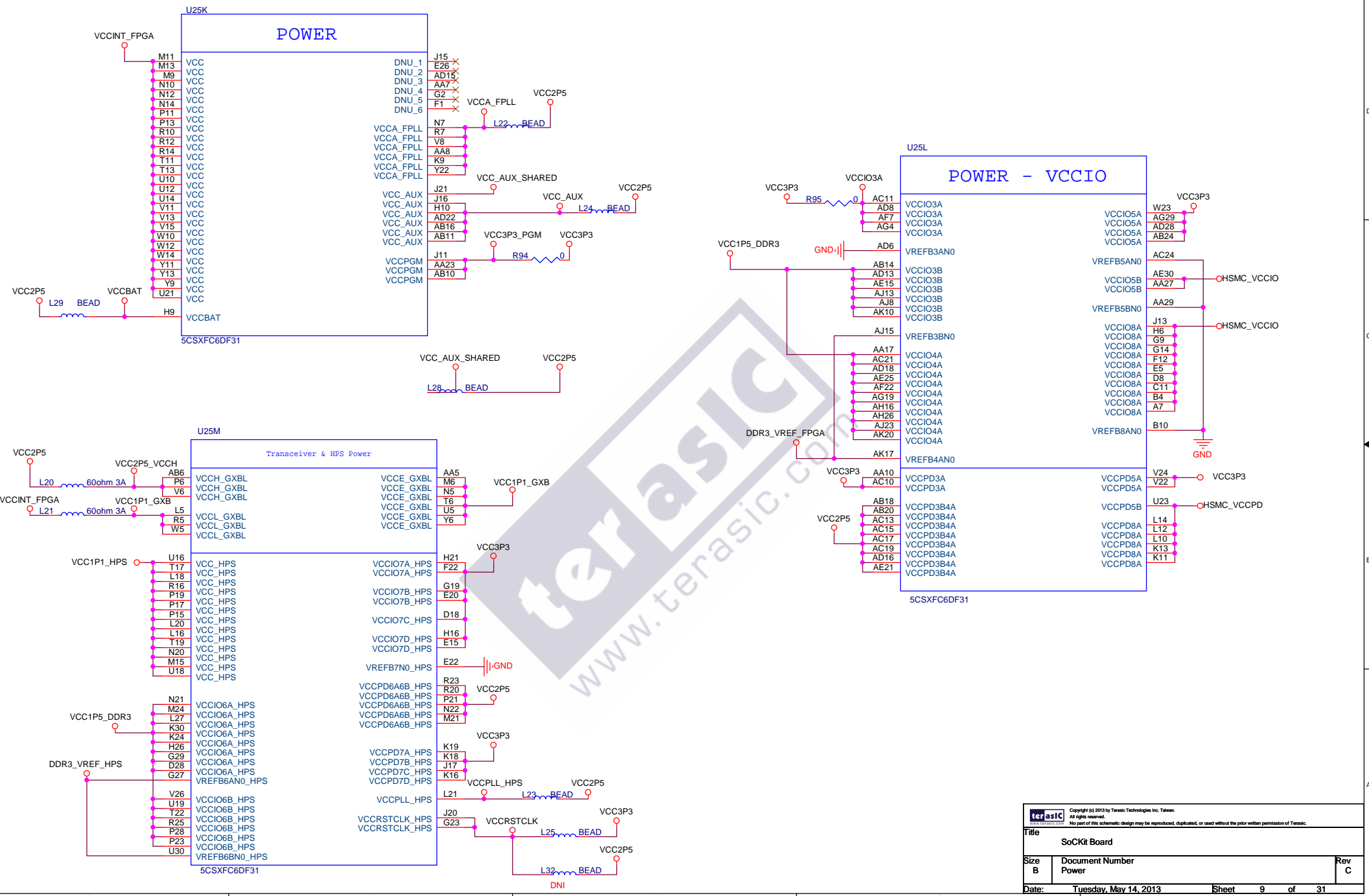
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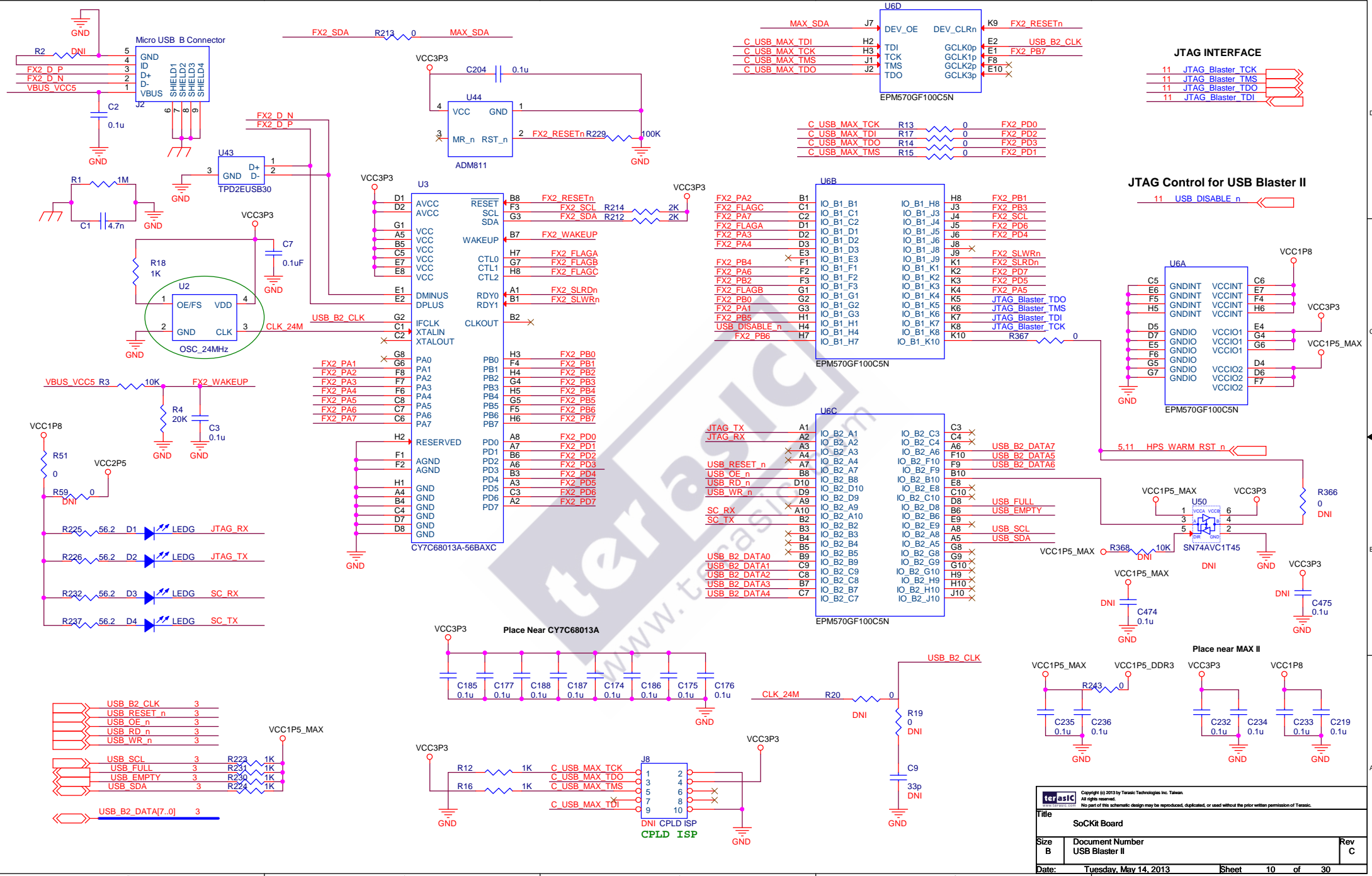
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B	Decoupling	C
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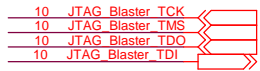


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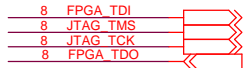


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USB Blaster



FPGA JTAG INTERFACE



HSMC JTAG INTERFACE

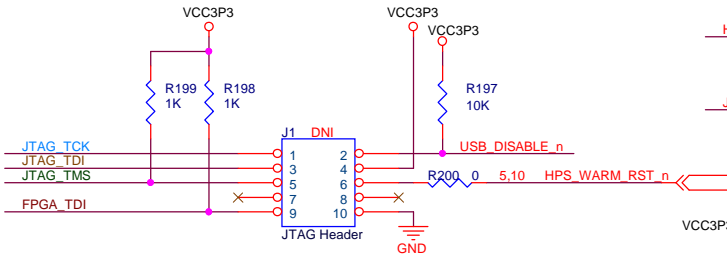


HPS JTAG INTERFACE

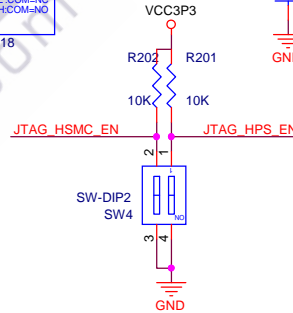
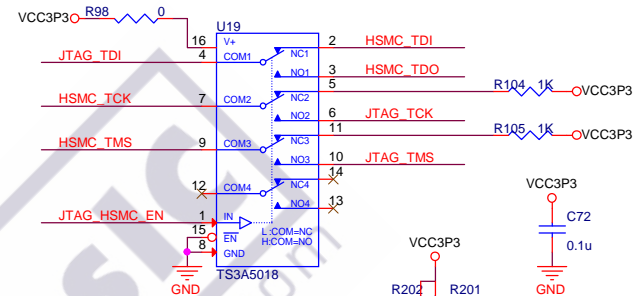
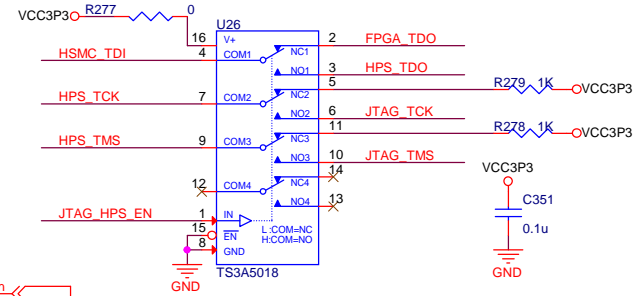


FPGA_TDO R123 0 5,11 HPS_TDI

JTAG_Blaster_TDO R71 0 FPGA_TDI
JTAG_Blaster_TMS R72 0 JTAG_TMS
JTAG_Blaster_TCK R74 0 JTAG_TCK
JTAG_Blaster_TDI R73 0 JTAG_TDI



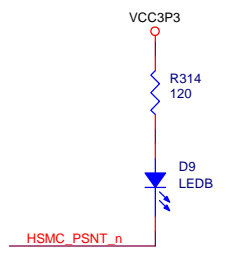
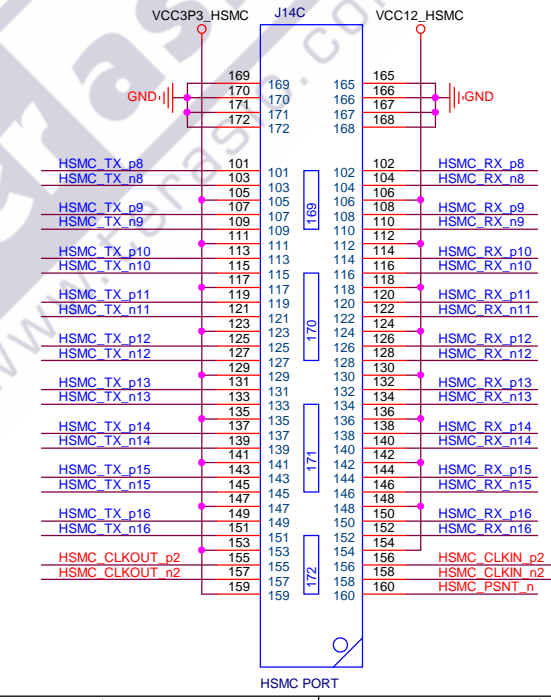
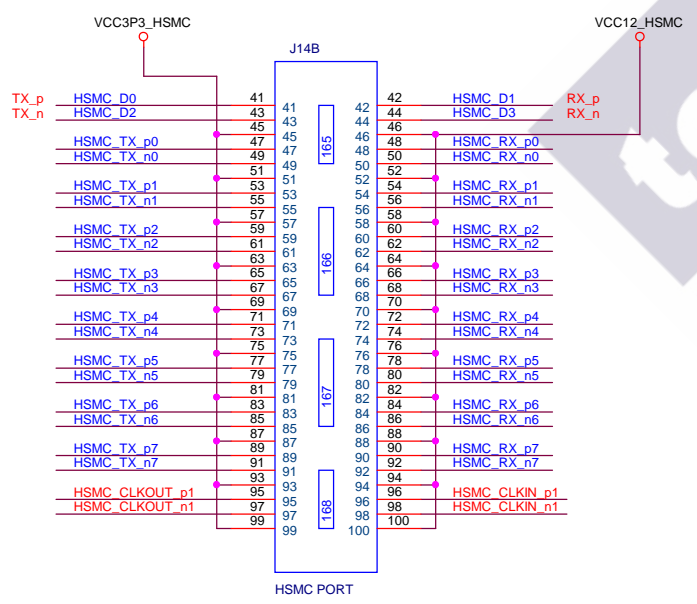
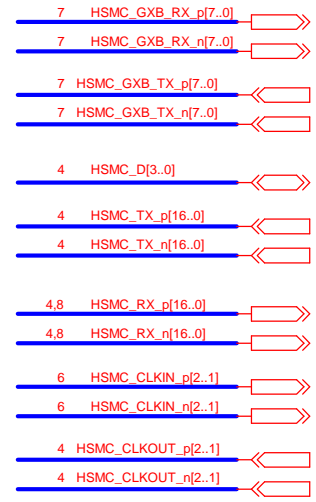
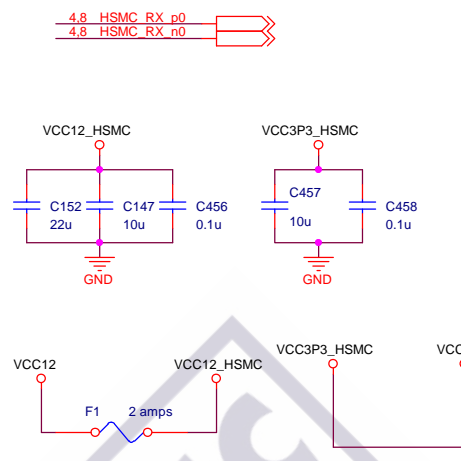
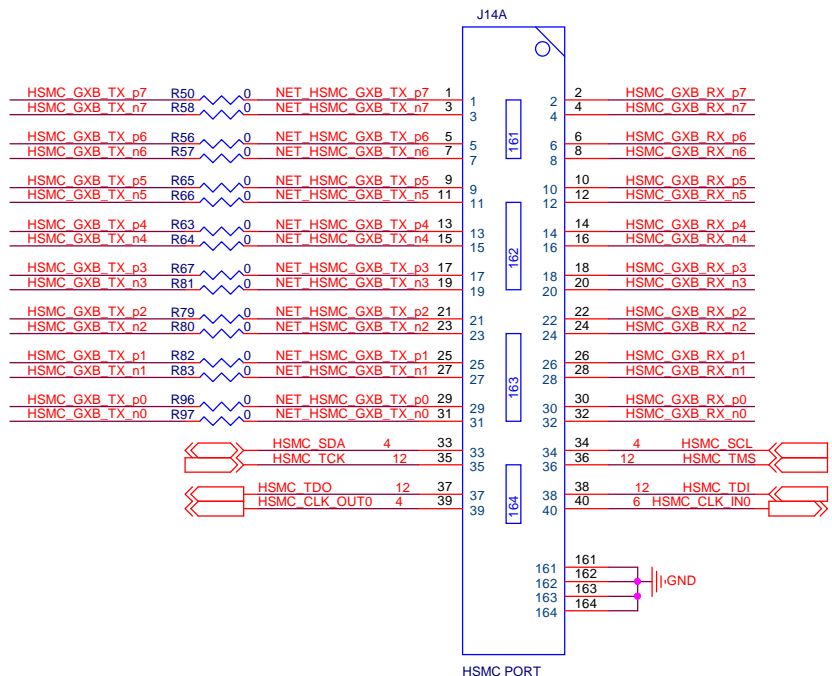
10 USB_DISABLE_n



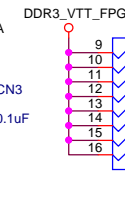
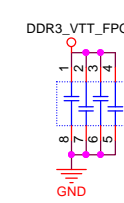
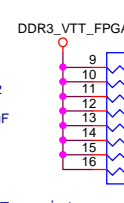
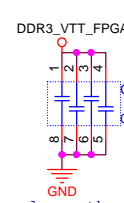
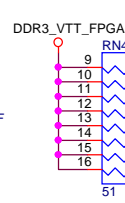
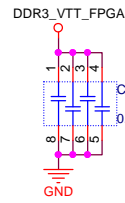
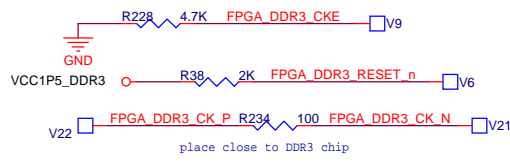
Default Disable (switch OFF)

OFF = in-chain
ON = not-in-chain

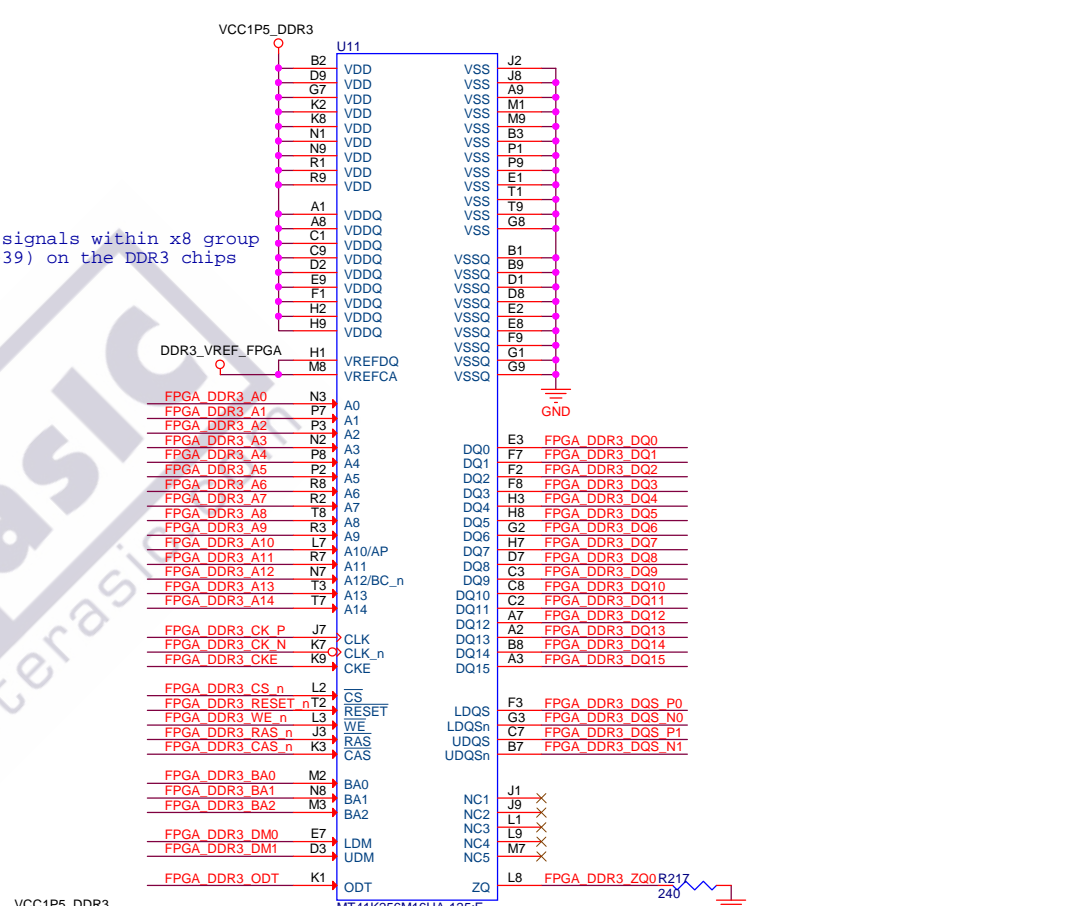
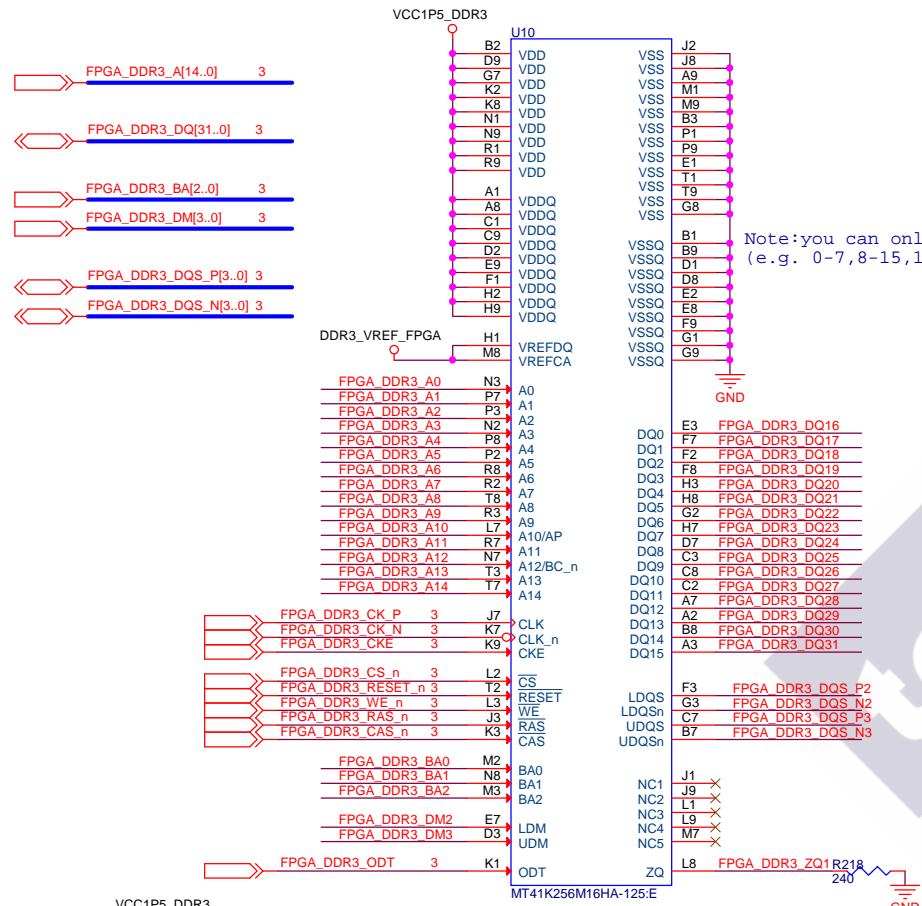
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Title	
SoCKit Board	
Size	Document Number
B	JTAG Chain
Date:	Tuesday, May 14, 2013
Sheet	11 of 30
Rev	C



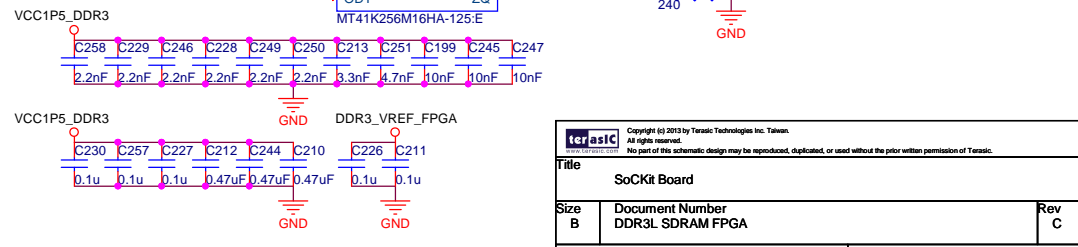
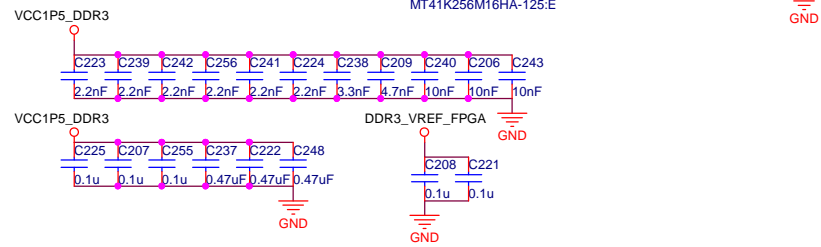
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Title		
SoCKit Board		
Size	Document Number	Rev
B	HSMC	C
Date:	Tuesday, May 14, 2013	Sheet 12 of 30



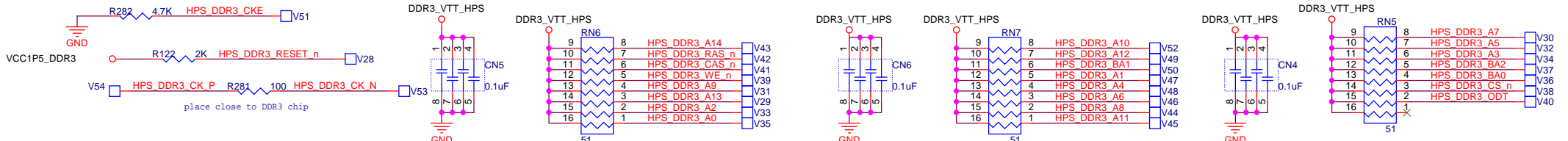
Note: you can swap the signals on the OCT resistor array (include NC pin)



Note: you can only swap the DQ signals within x8 group (e.g. 0-7,8-15,16-23,24-31,32-39) on the DDR3 chips

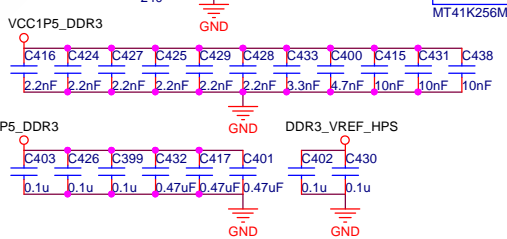
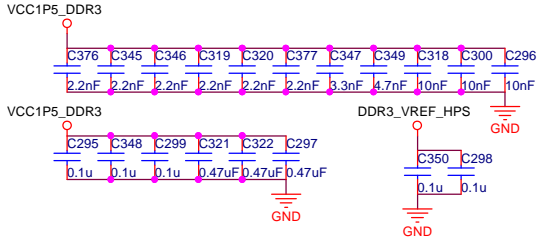
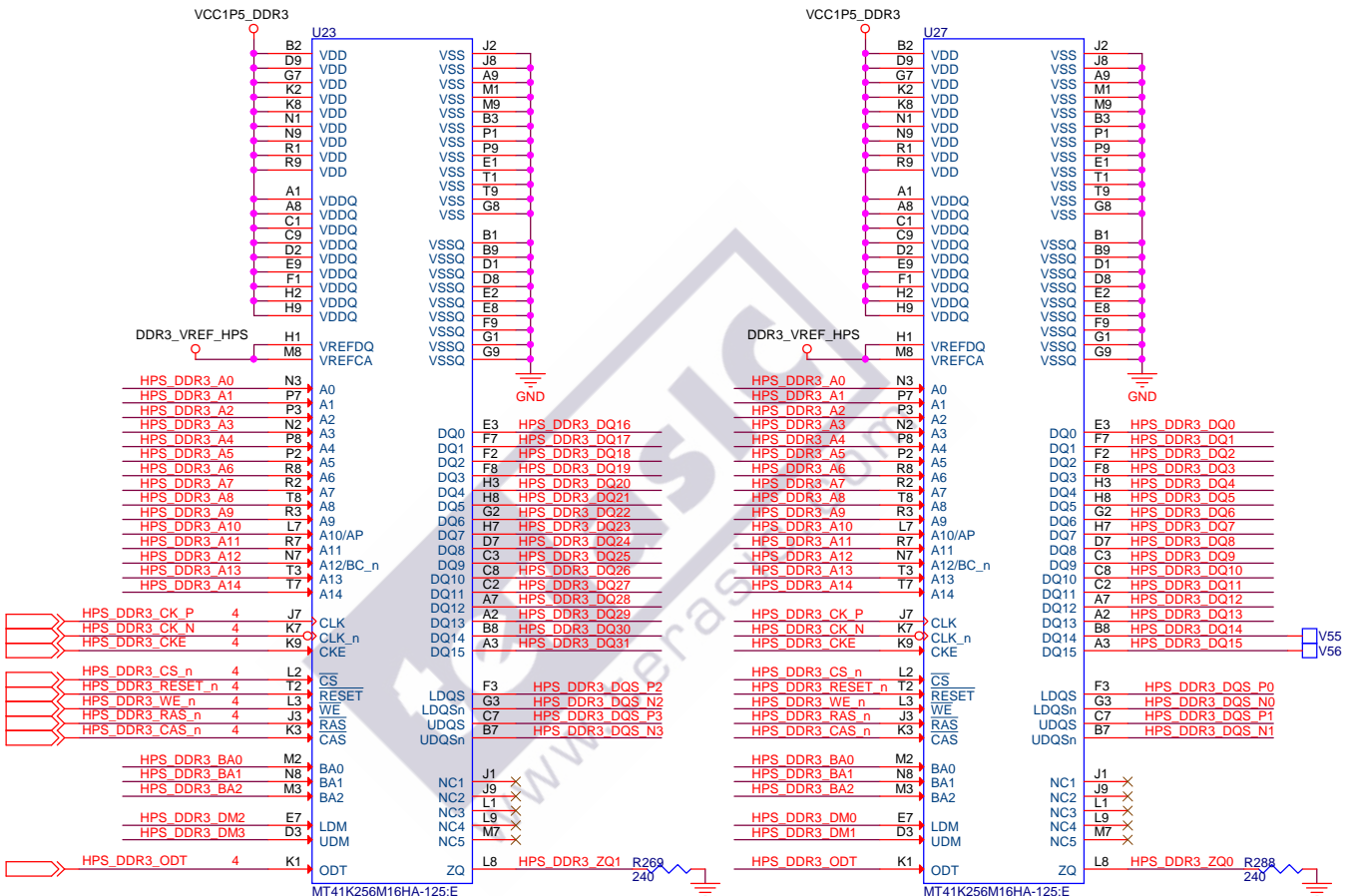
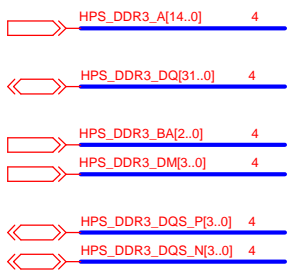


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Title SoCKit Board		
Size B	Document Number DDR3L-SDRAM-FPGA	Rev C
Date: Tuesday, May 14, 2013		
Sheet 13		of 30

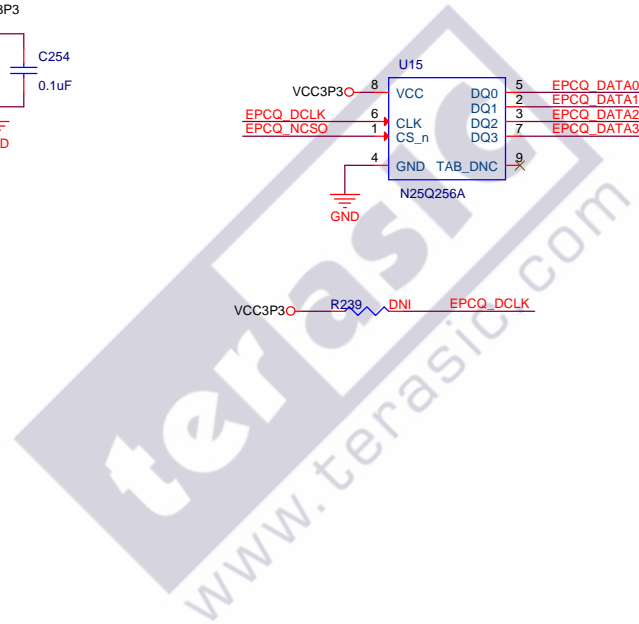
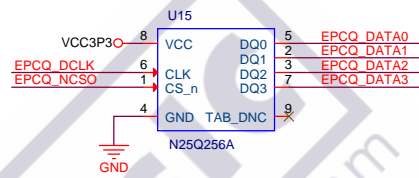
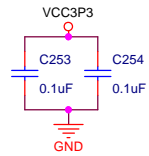
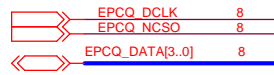


Note: you can only swap the DQ signals within x8 group (e.g. 0-7,8-15,16-23,24-31) on the DDR3 chips

Note: you can swap the signals on the OCT resistor array(include NC pin)

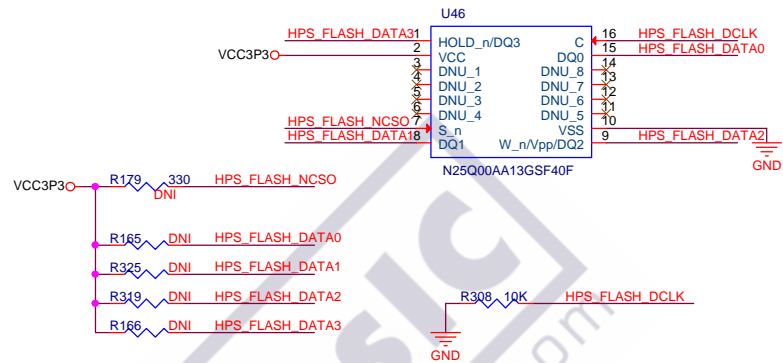
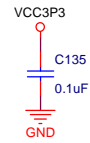


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Title	
SoCKit Board	
Size	Document Number
B	DDR3L SDRAM HPS
Date:	Tuesday, May 14, 2013
Sheet	14 of 30
Rev	C

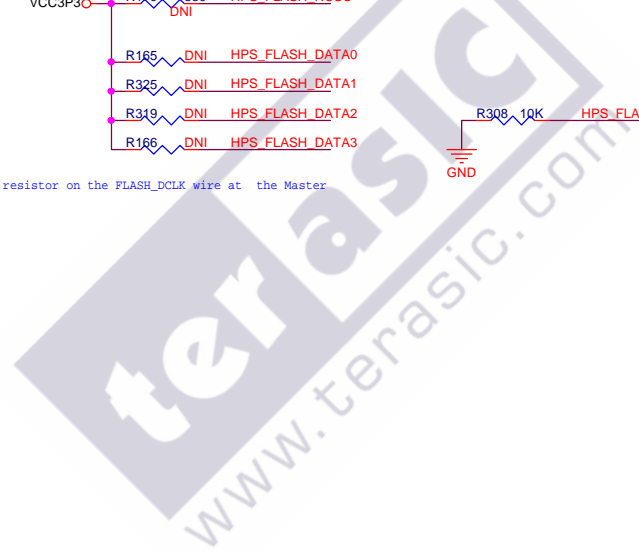


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Title SoCKit Board			
Size B	Document Number EPCQ		Rev C
Date:	Tuesday, May 14, 2013	Sheet	15 of 30

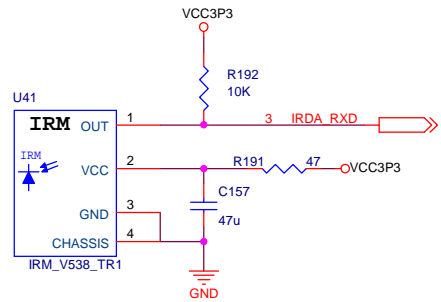
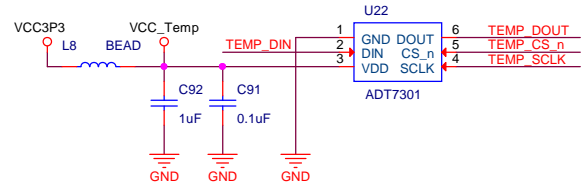
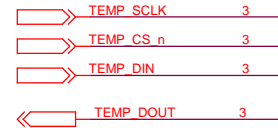
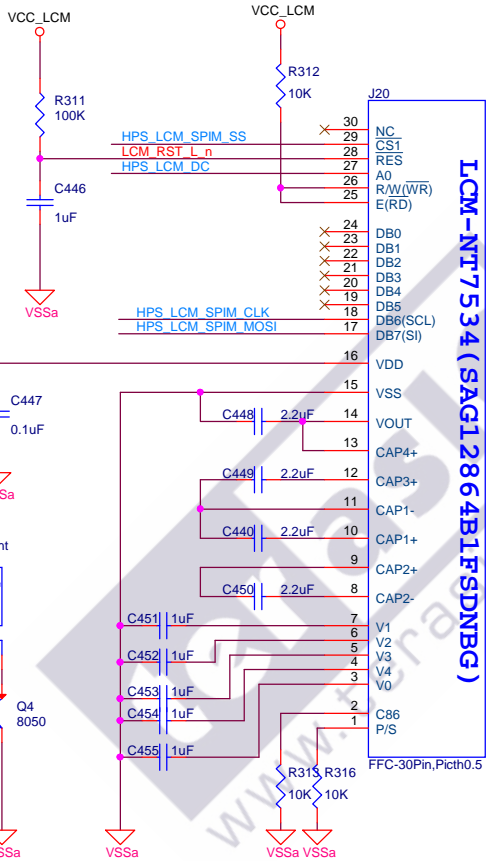
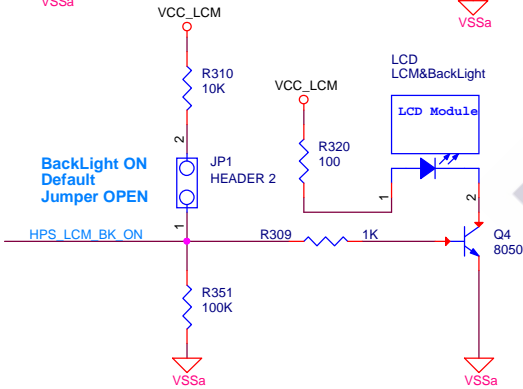
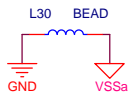
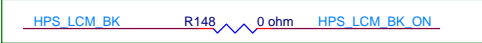
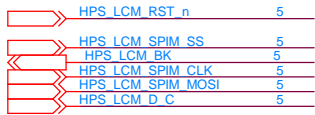
HPS_FLASH_DCLK 5
 HPS_FLASH_NCSO 5
 HPS_FLASH_DATA[3..0] 5



Note: place a pull down resistor on the FLASH_DCLK wire at the Master

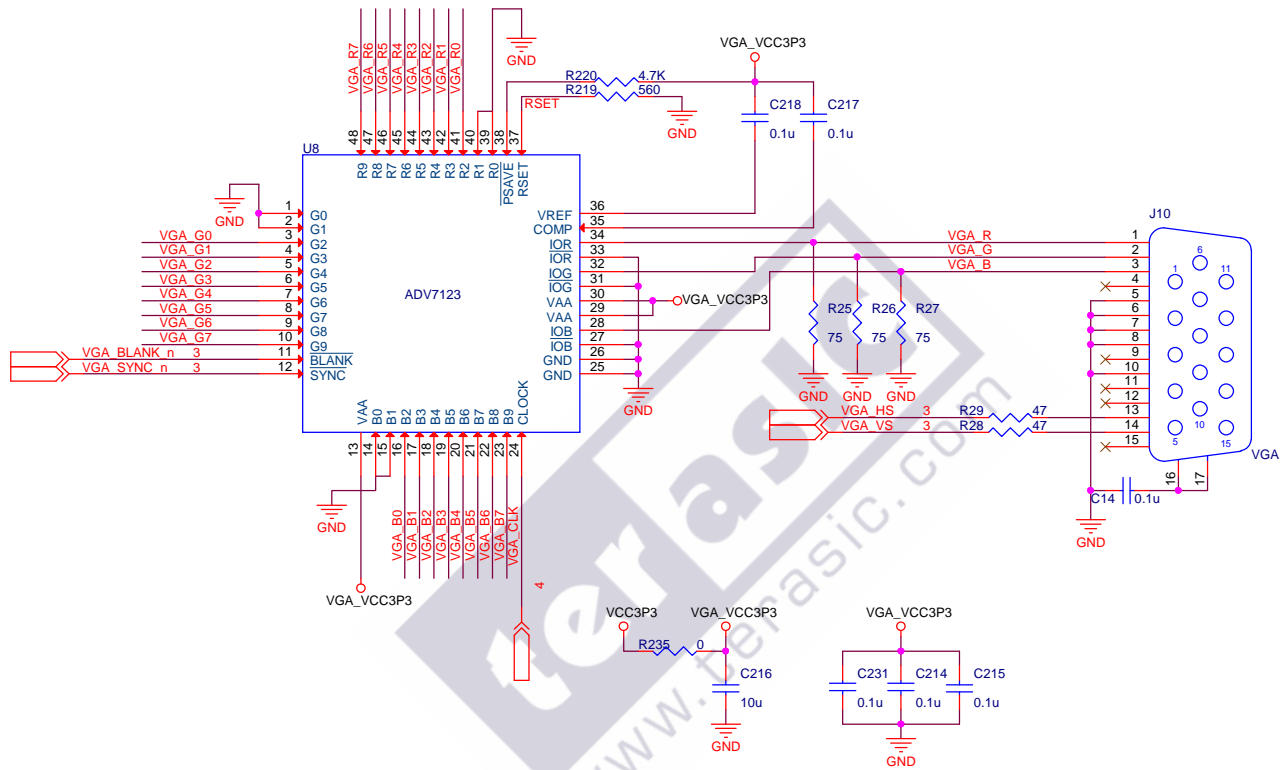



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Title		
SoCKit Board		
Size	Document Number	Rev
B	QSPI FLASH HPS	C
Date:	Tuesday, May 14, 2013	Sheet 16 of 30

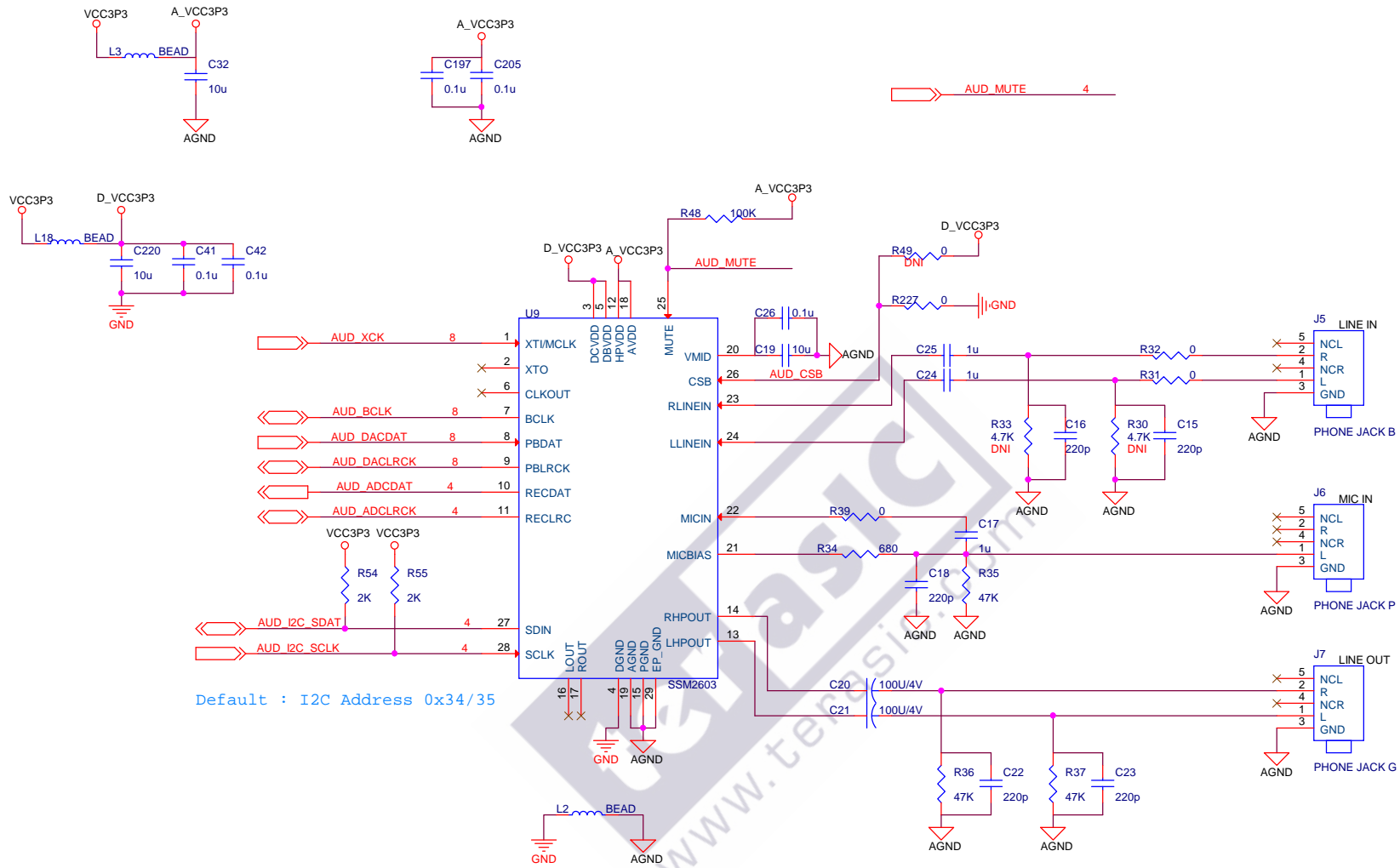



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Title		
SoCKit Board		
Size	Document Number	Rev
B	LCD & Temp sensor & IRM	C
Date:	Tuesday, May 14, 2013	Sheet 17 of 30

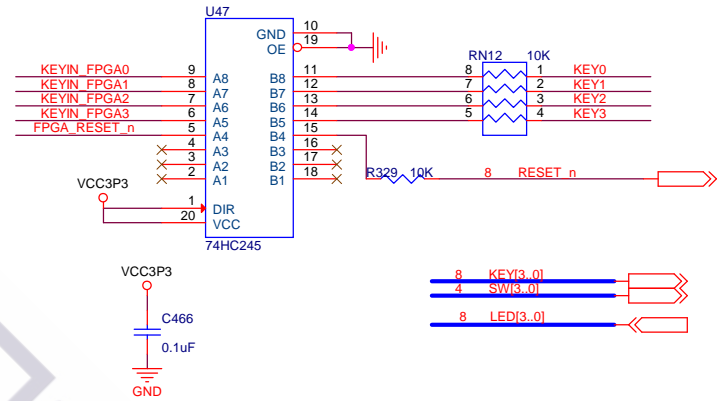
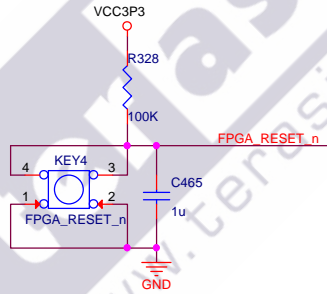
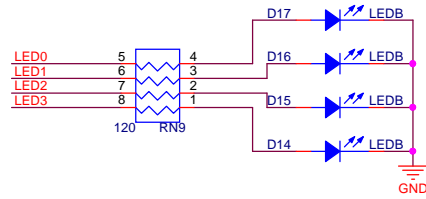
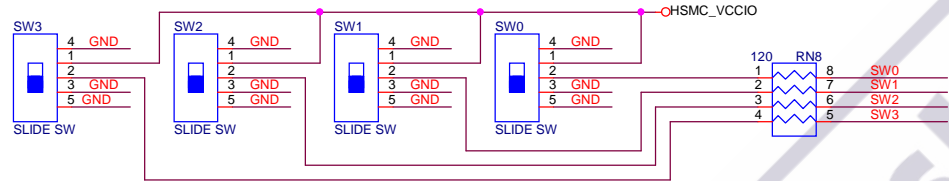
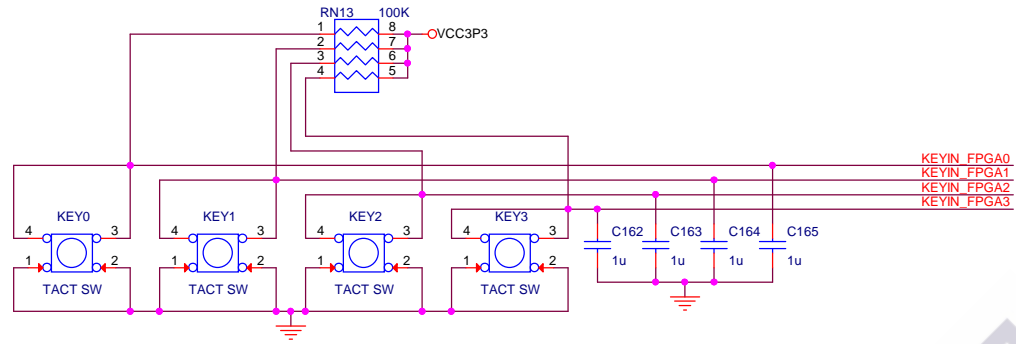
VGA_R[7..0] 3
 VGA_G[7..0] 4
 VGA_B[7..0] 4



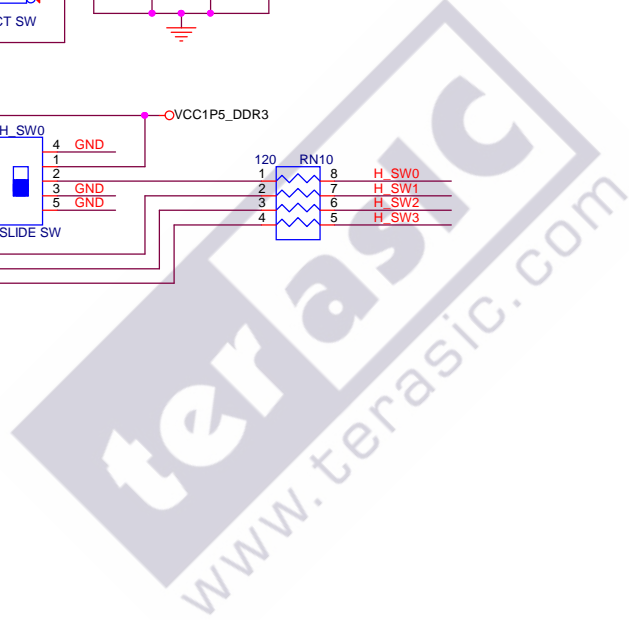
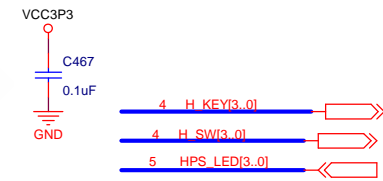
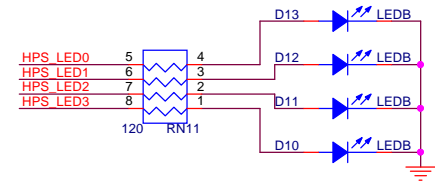
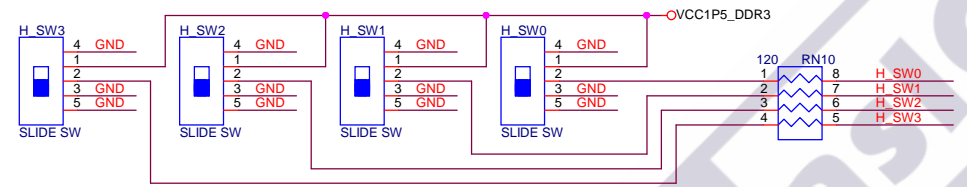
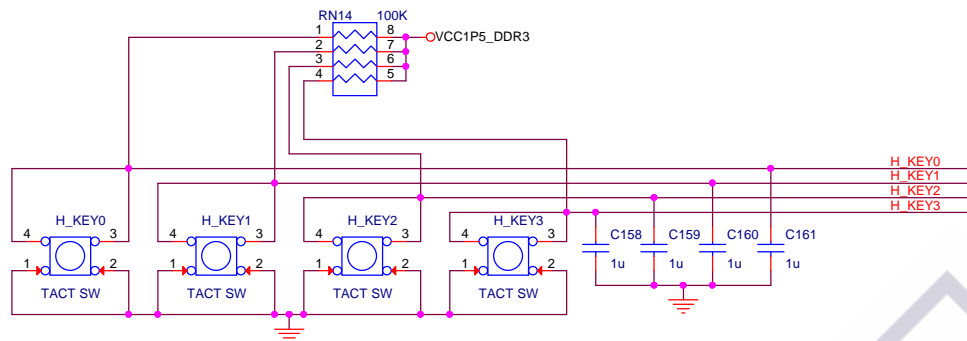
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Title		
SoCKit Board		
Size	Document Number	Rev
B	VGA ADV7123	C
Date:	Tuesday, May 14, 2013	Sheet 18 of 30



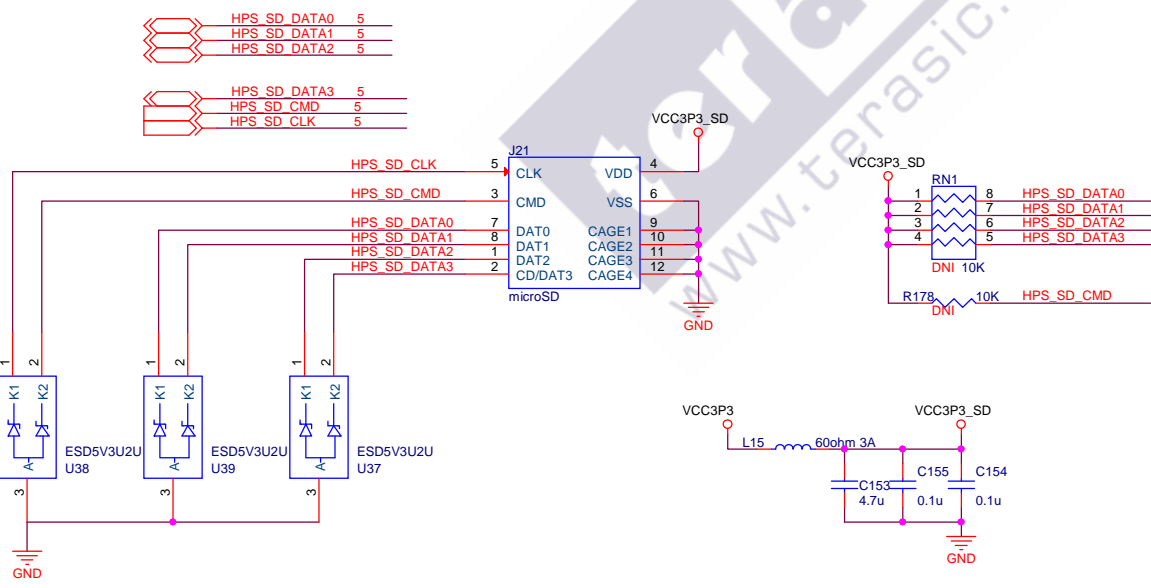
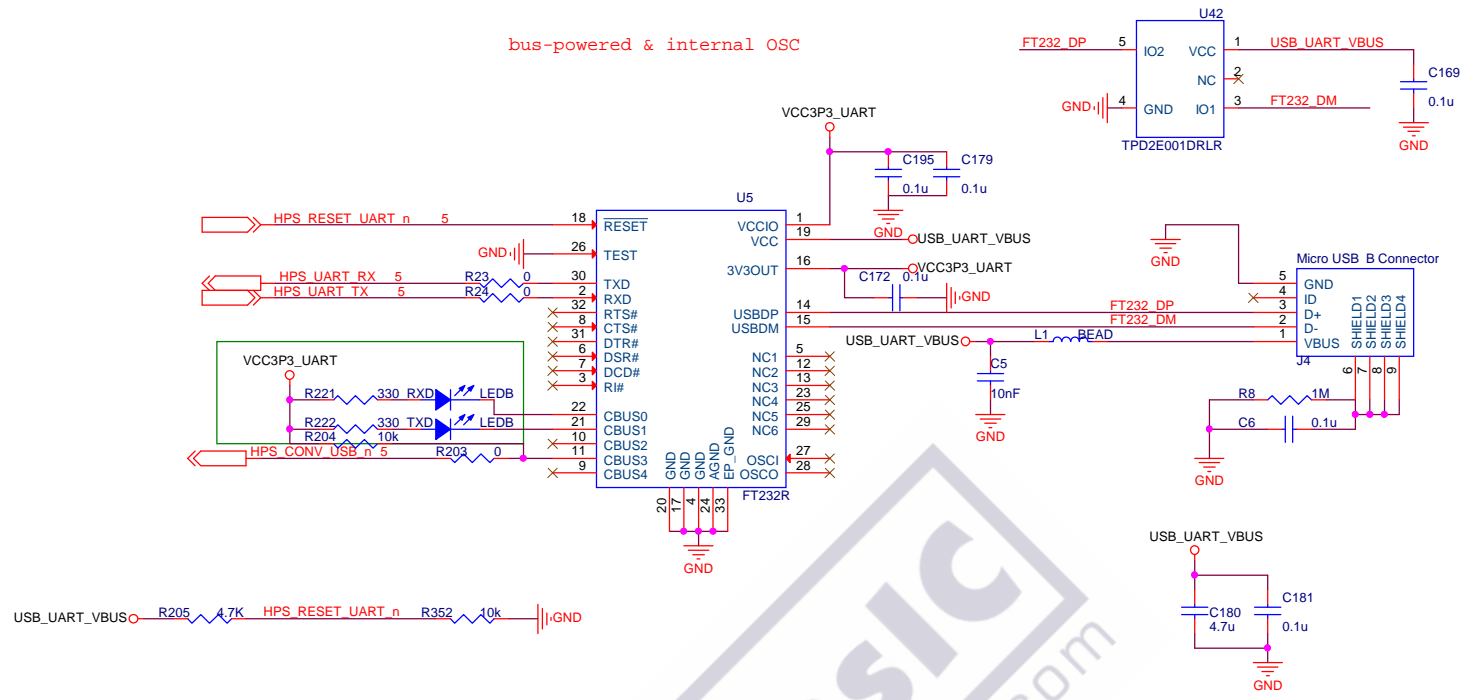
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Title		
SoCKit Board		
Size	Document Number	Rev
B	Audio DAC	C
Date:	Tuesday, May 14, 2013	Sheet 19 of 30



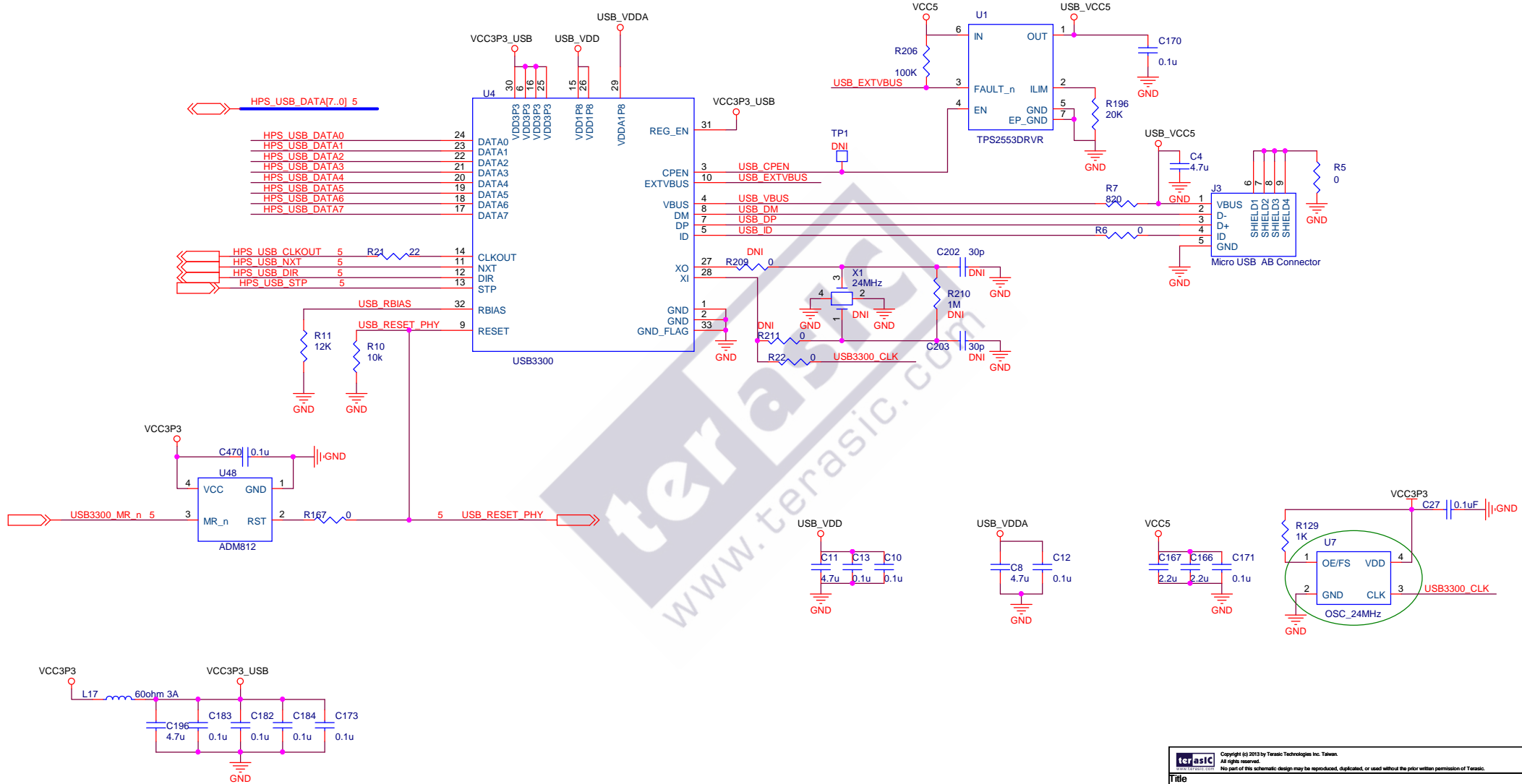
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Title	
SoCKit Board	
Size	Document Number
B	FPGA BUTTON & SW
Date:	Tuesday, May 14, 2013
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Rev	C



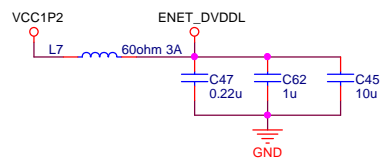
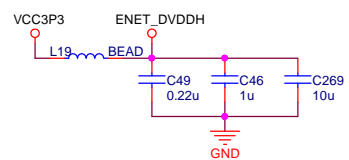
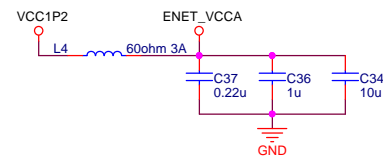
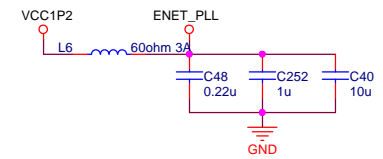
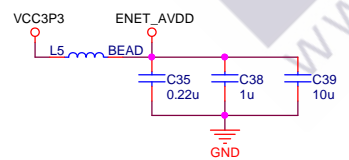
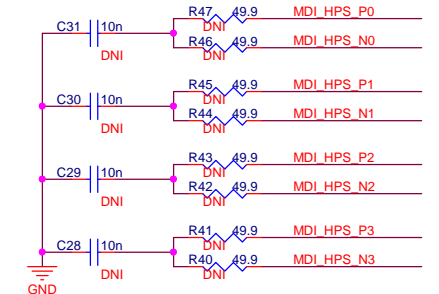
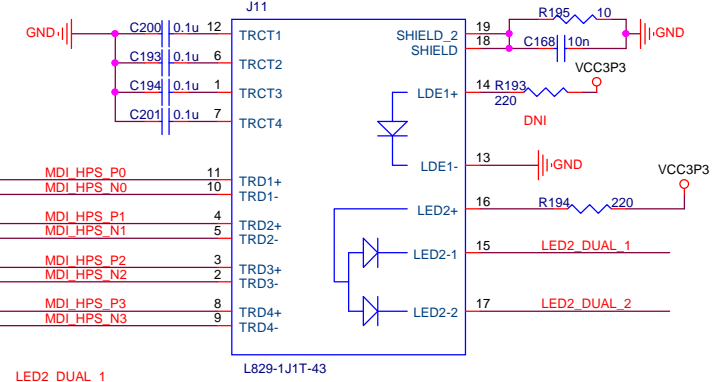
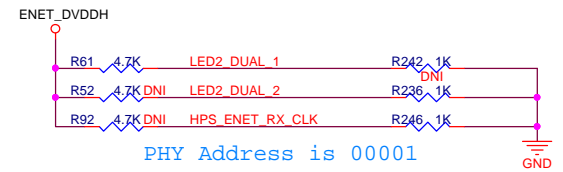
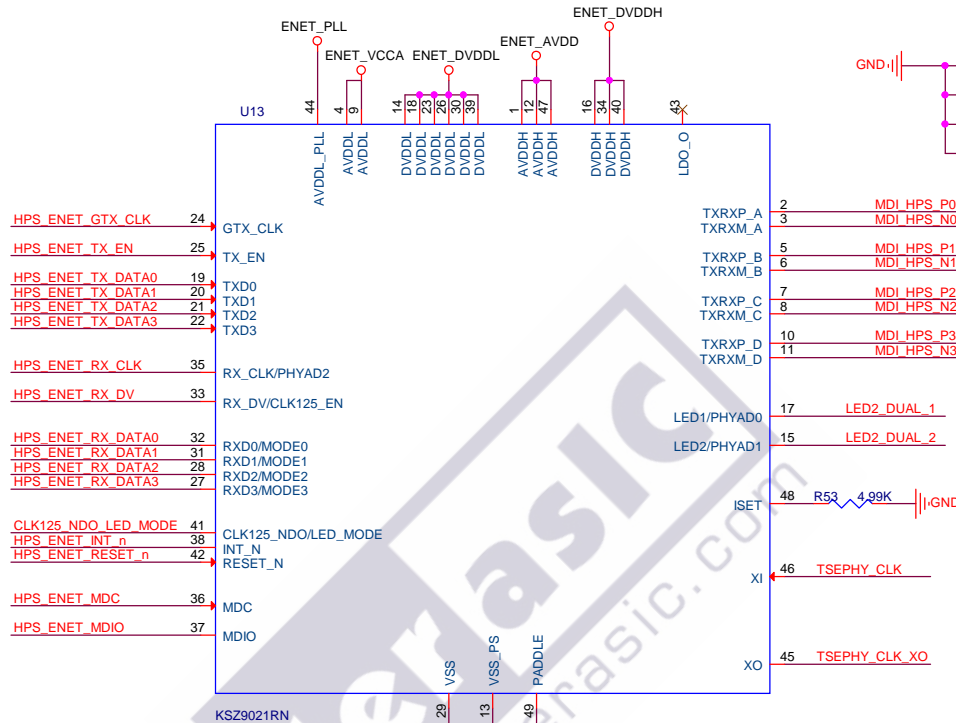
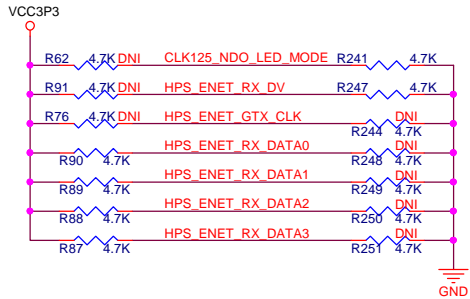
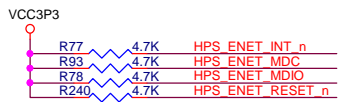
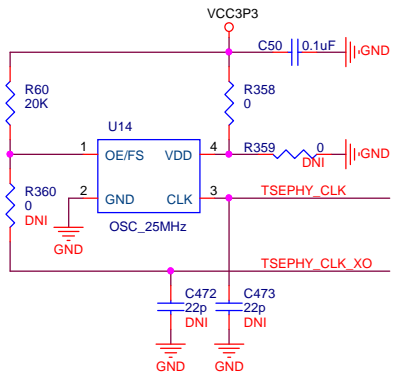
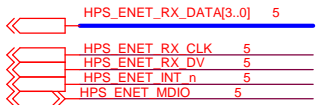
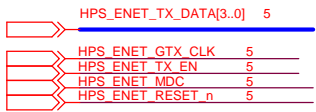
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Title		
SoCKit Board		
Size	Document Number	Rev
B	HPS BUTTON & SW	C
Date:	Tuesday, May 14, 2013	Sheet 21 of 30



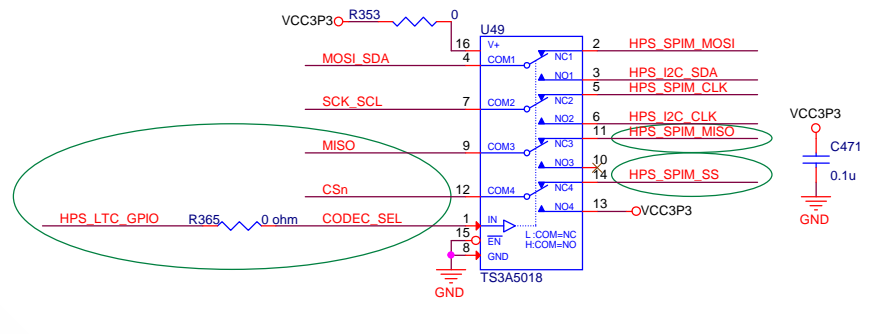
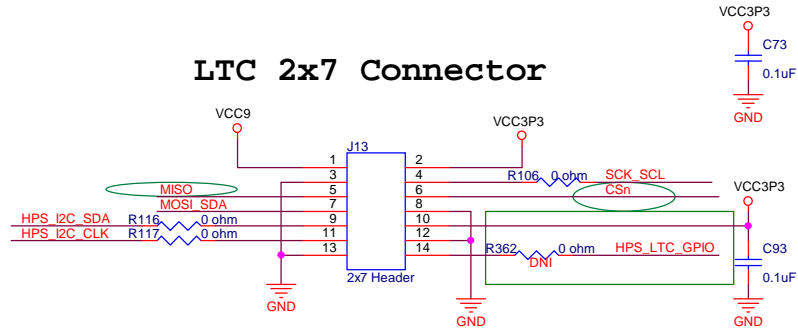
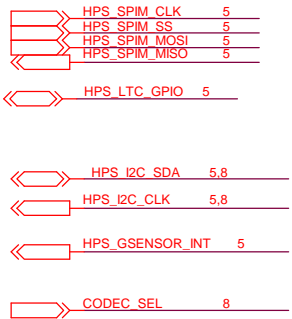
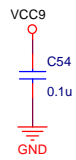
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Title		
SoCKit Board		
Size	Document Number	Rev
B	USB to UART & SD CARD	C
Date:	Tuesday, May 14, 2013	Sheet 22 of 30



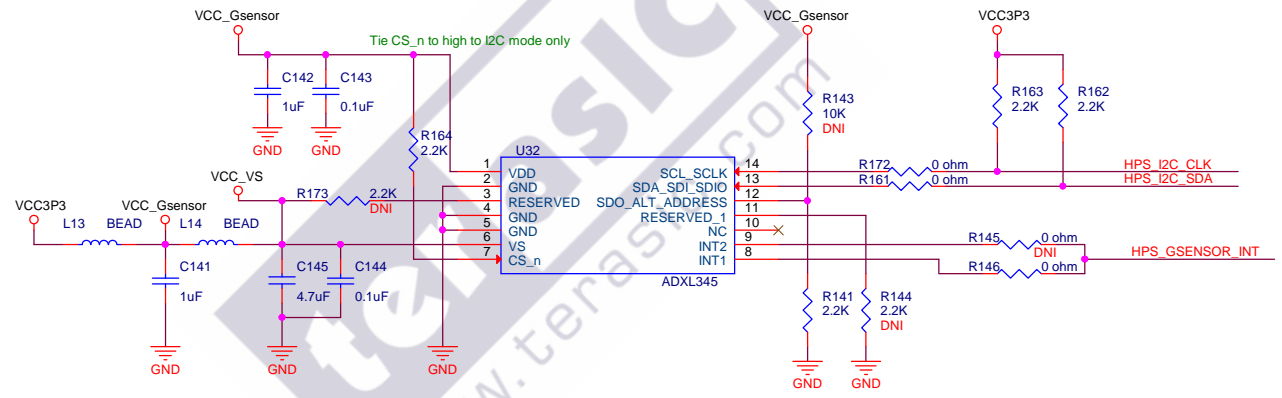
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Title		
SoCKit Board		
Size	Document Number	Rev
B	USB3300	C
Date:	Tuesday, May 14, 2013	Sheet 23 of 30



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Title		
SoCKit Board		
Size	Document Number	Rev
B	TSE PHY	C
Date:	Tuesday, May 14, 2013	Sheet 24 of 30

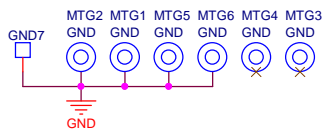


Digital Accelerometer

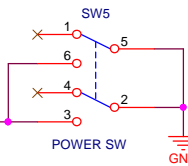
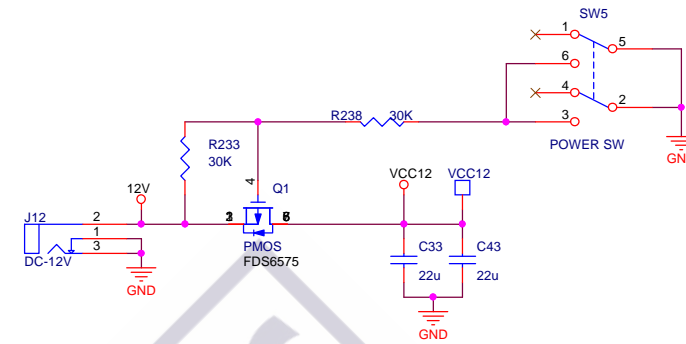
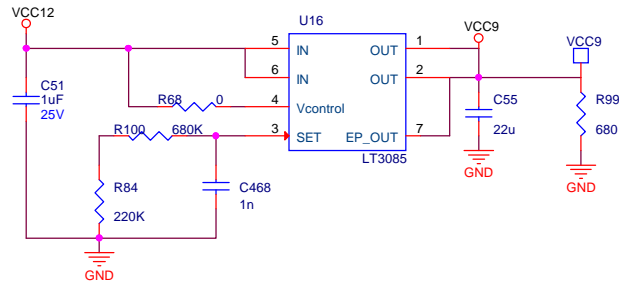


Default : I2C Address 0xA6/0xA7

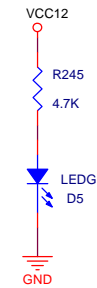
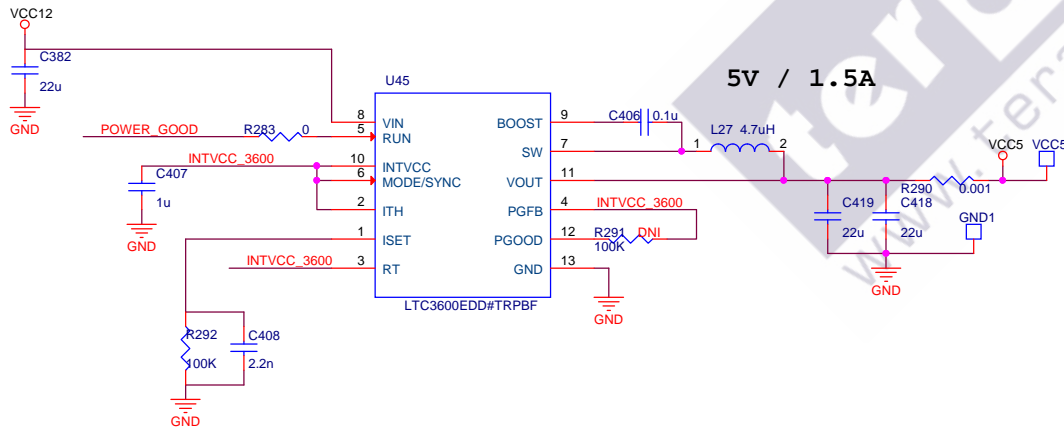
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Title		
SoCKit Board		
Size	Document Number	Rev
B	LTC Connector & G sensor	C
Date:	Tuesday, May 14, 2013	Sheet 25 of 30



9V / 50mA

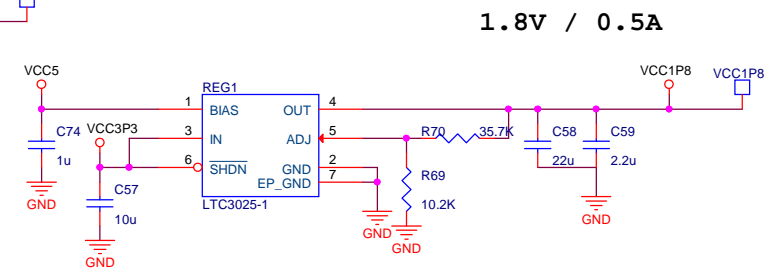
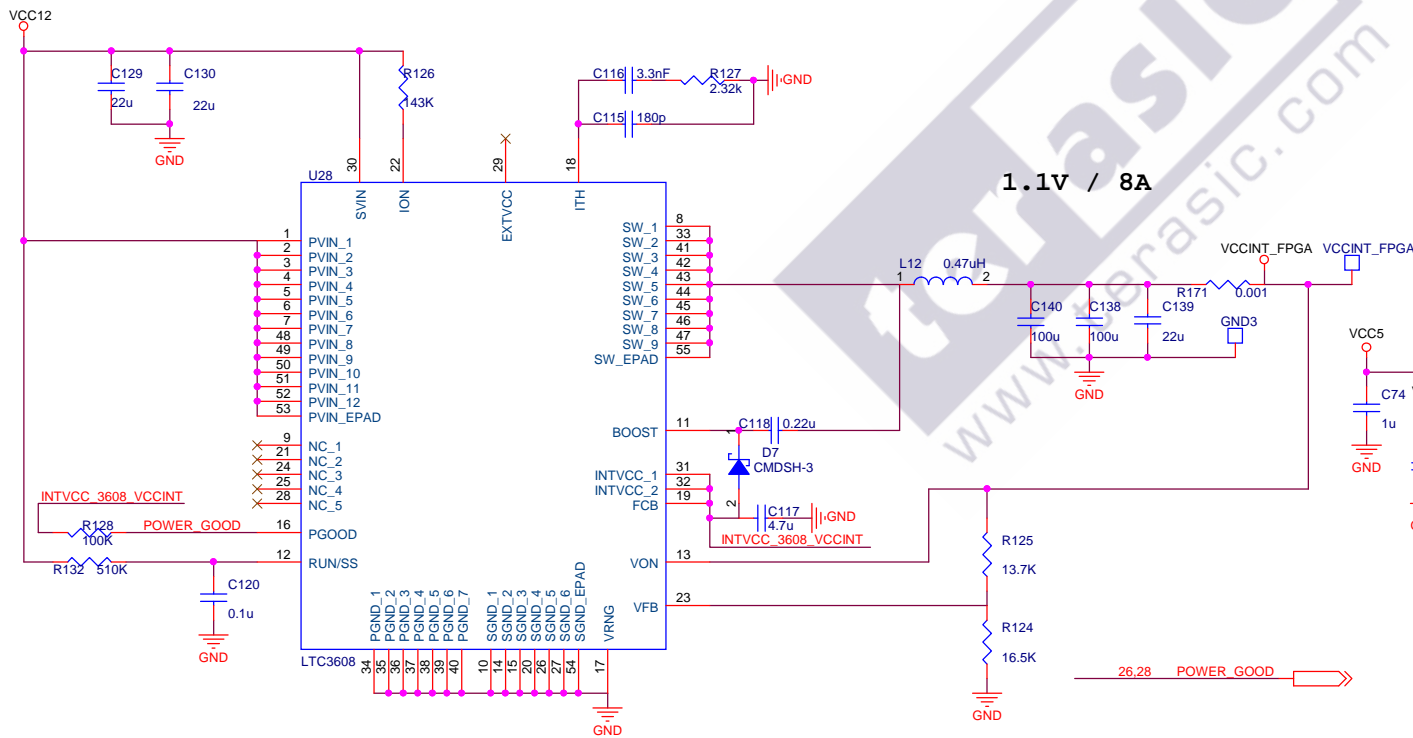
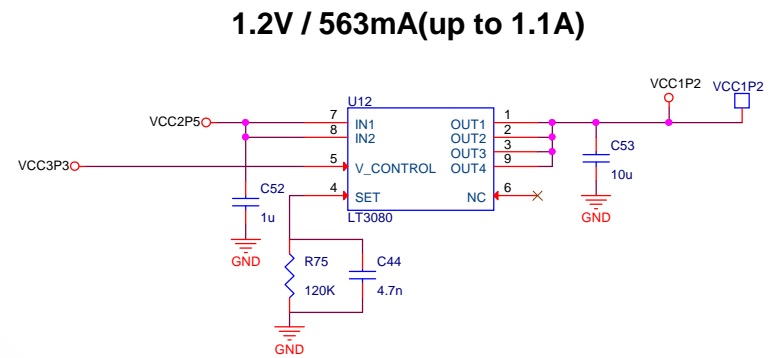
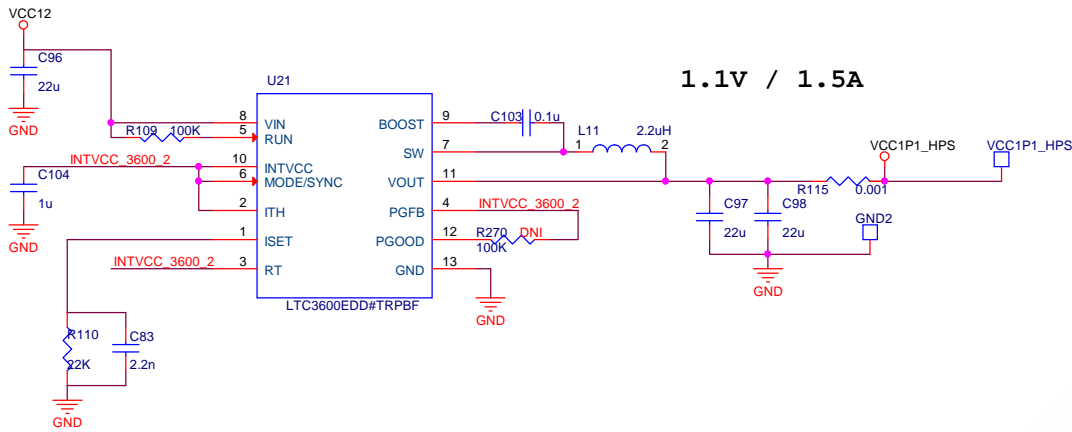


5V / 1.5A



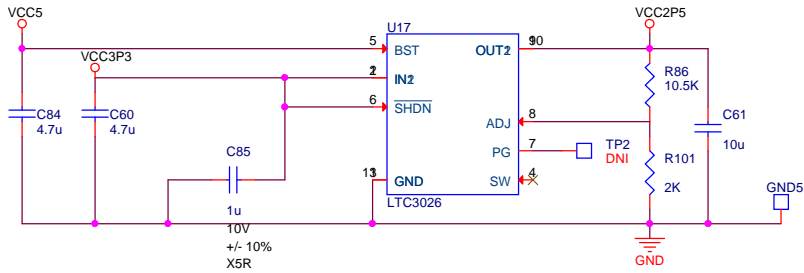
POWER_GOOD 27,28

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Title		
SoCKit Board		
Size	Document Number	Rev
B	Power - 9V & 5V	C
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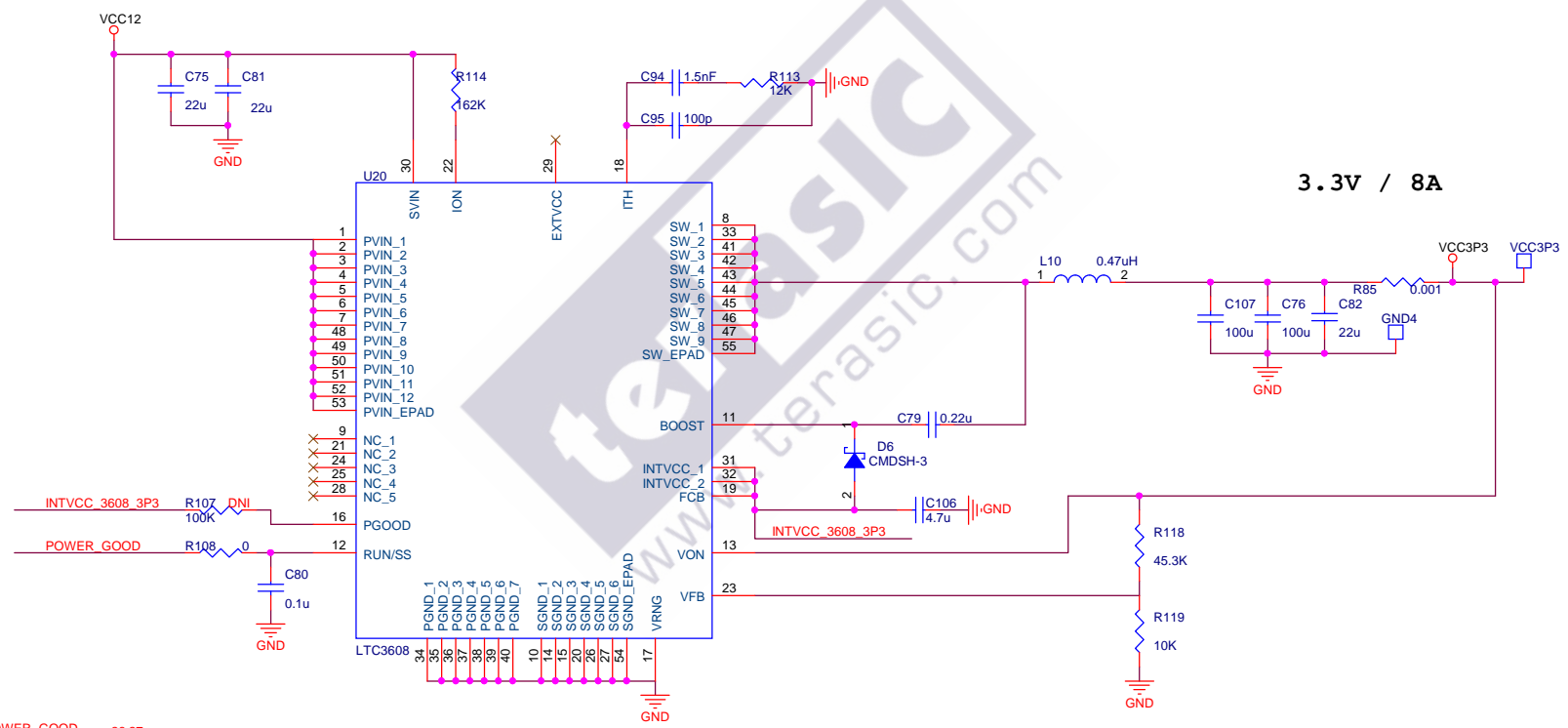


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Title		
SoCKit Board		
Size	Document Number	Rev
B	Power - 1.1V & 1.2V	C
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2.5V / 1.5A

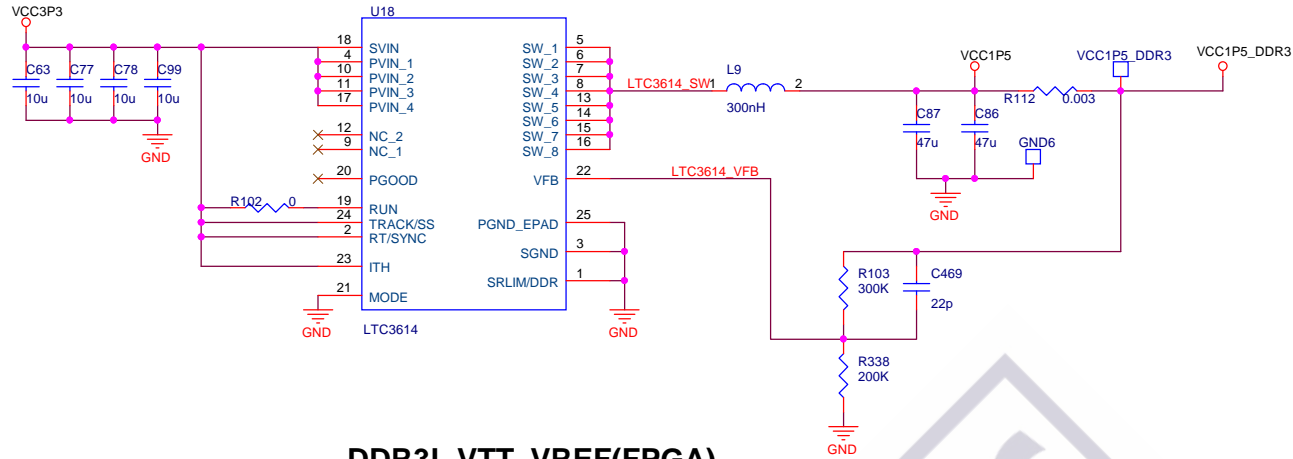


3.3V / 8A



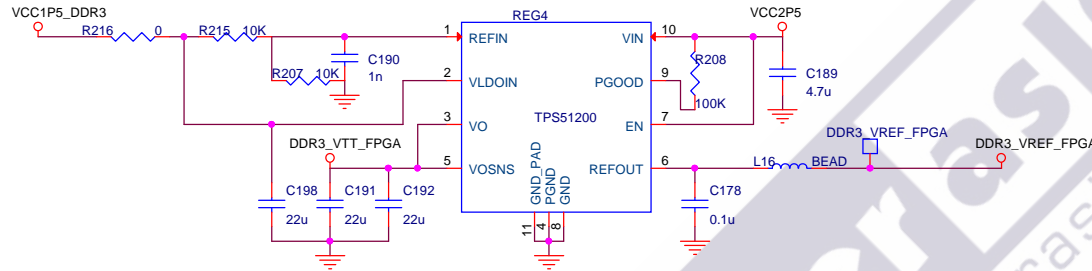
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Title		
SoCKit Board		
Size	Document Number	Rev
B	Power - 3.3V & 2.5V	C
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DDR3L VDD,VDDQ

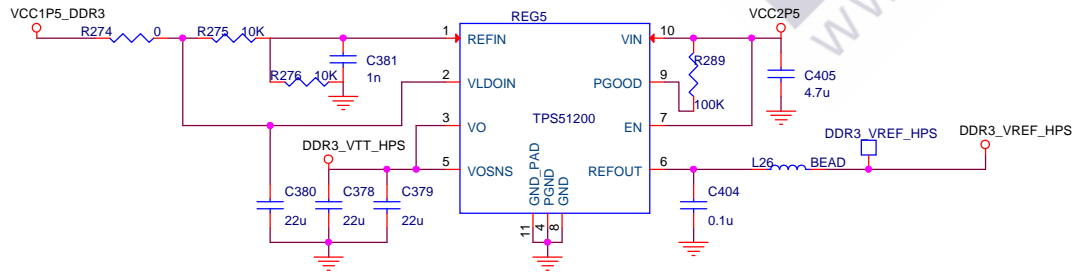



1.5V / 4A

DDR3L VTT, VREF(FPGA)

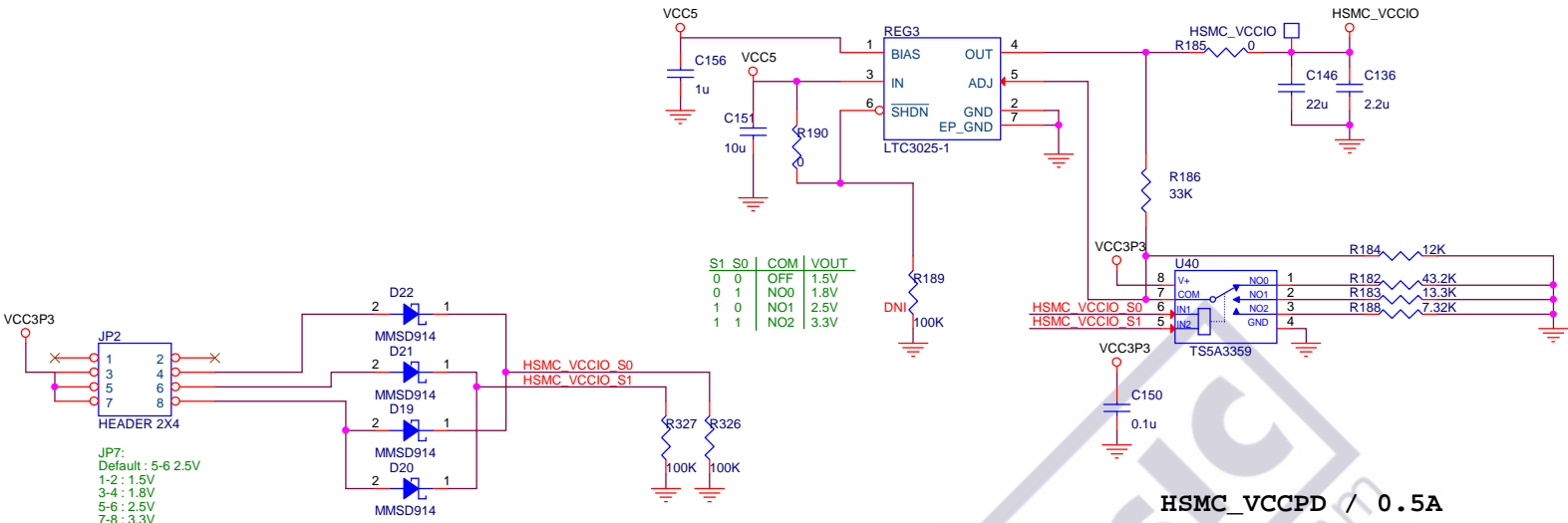


DDR3L VTT, VREF(HPS)

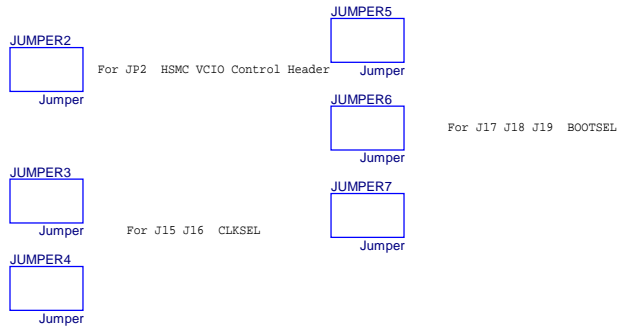
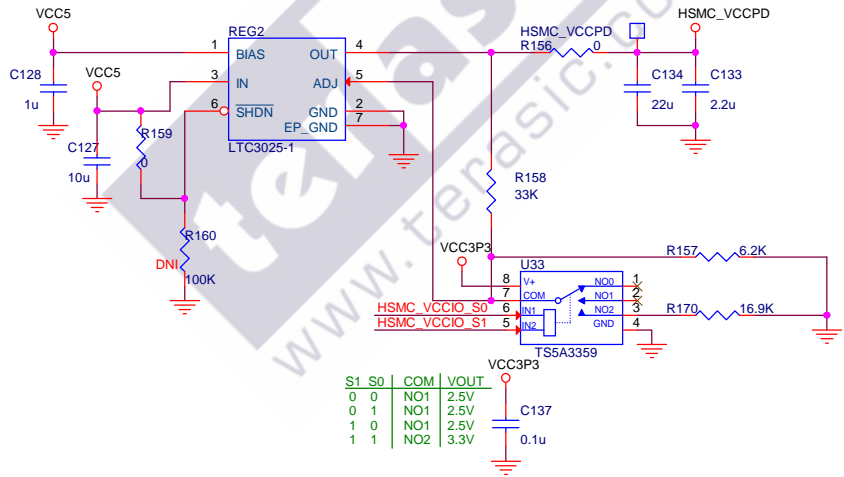



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Title		
SoCKit Board		
Size	Document Number	Rev
B	Power - 1.5V	C
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HSMC_VCCIO / 0.5A



HSMC_VCCPD / 0.5A



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Title: SoCKit Board		
Size B	Document Number: Power - VCCIO_HSMC	Rev C
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