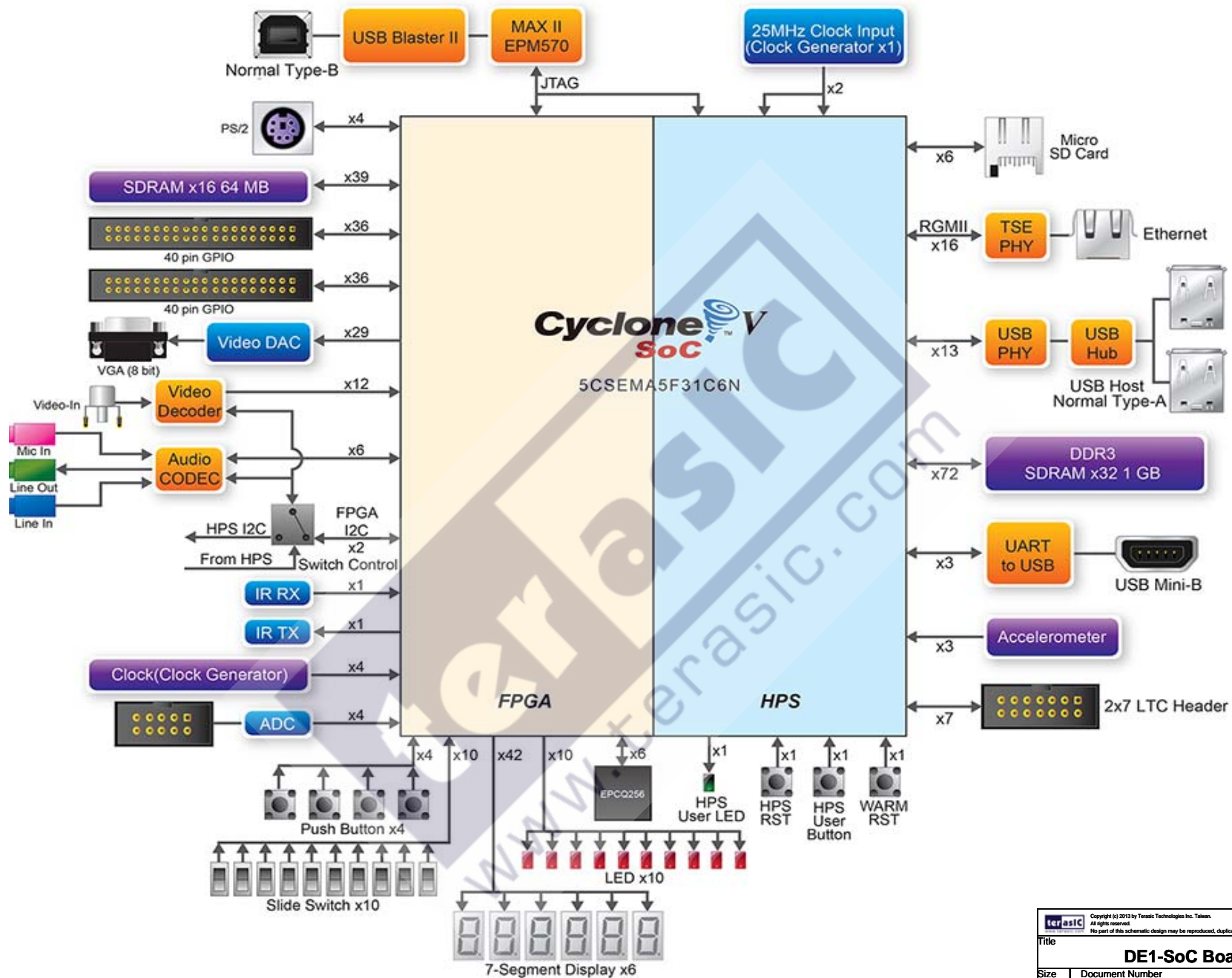
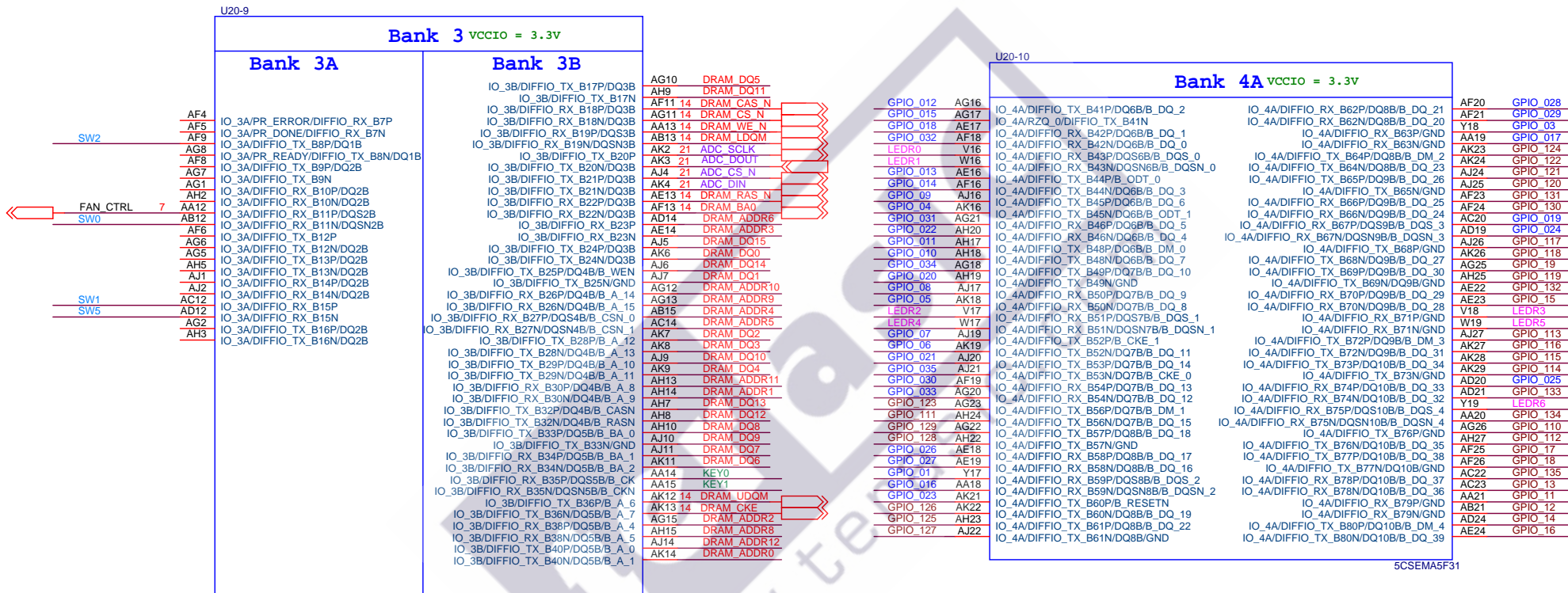


ALTERA Cyclone V SoC Development & Education Board (DE1-SoC)

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Title

DE1-SoC Board

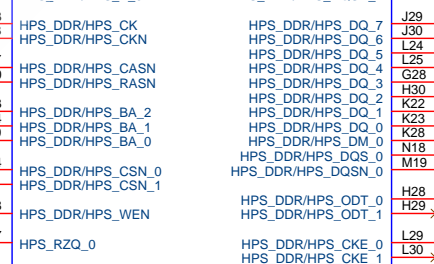
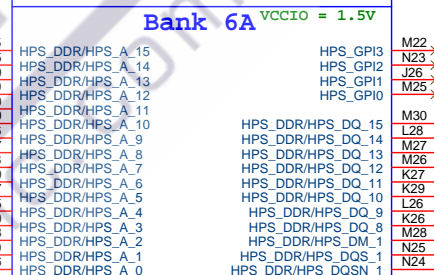
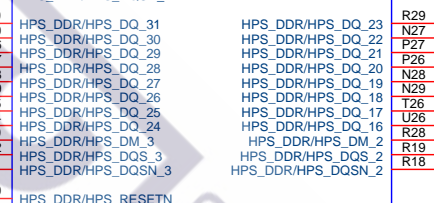
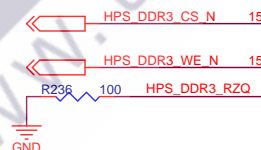
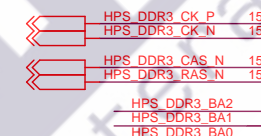
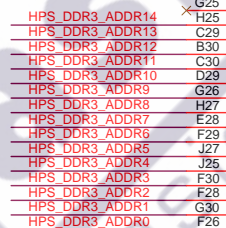
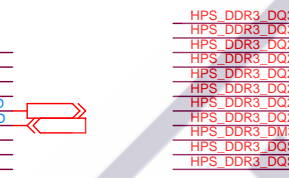
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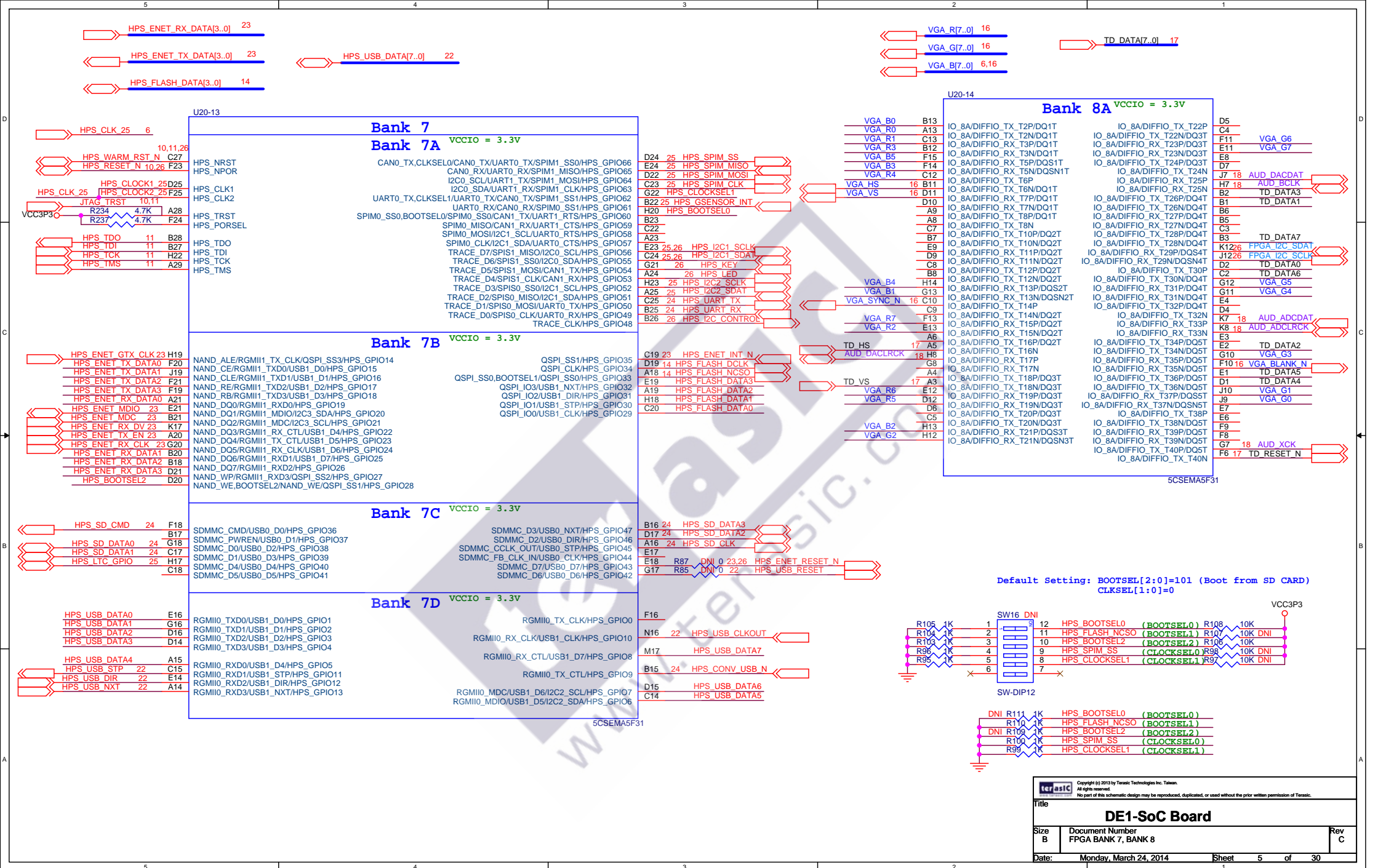
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FPGA BANK 3, BANK 4

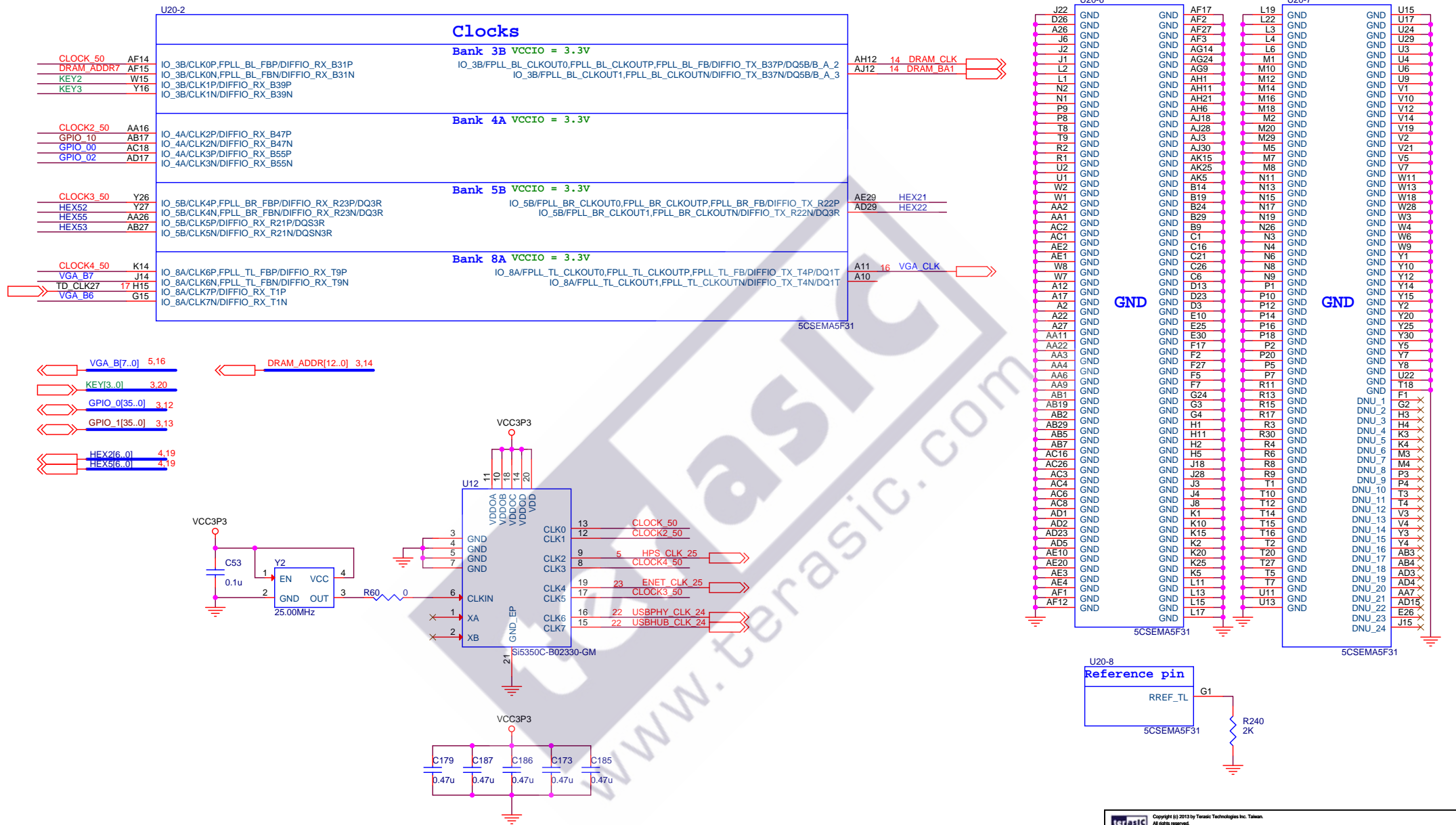
Rev C

Date: Monday, March 24, 2014

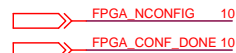
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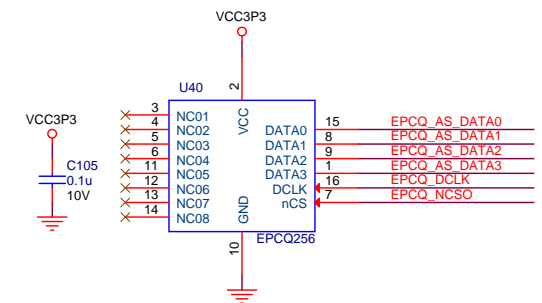
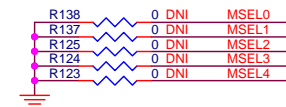


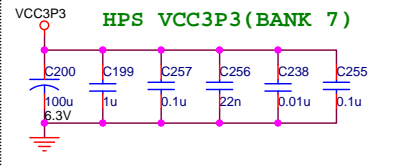
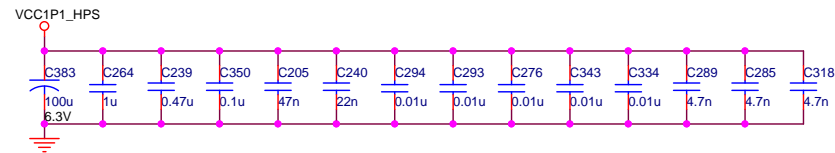
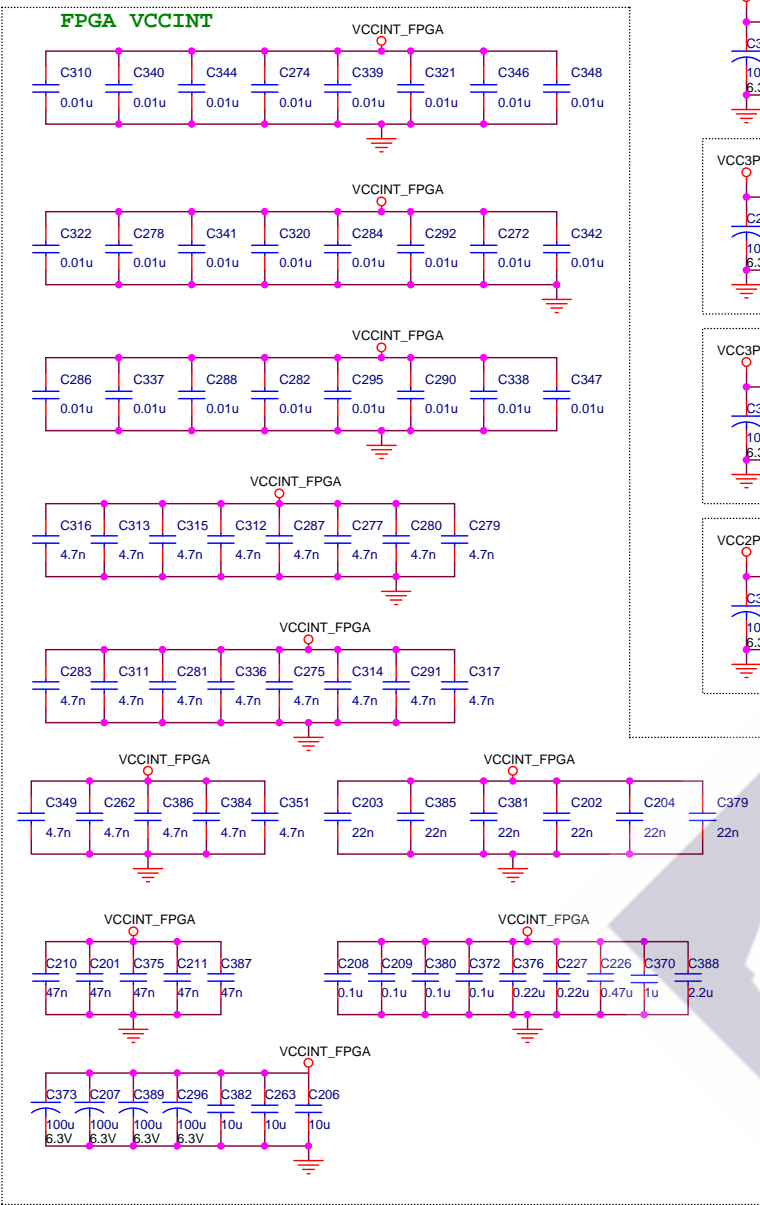
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	JTAG_TMS	11
	JTAG_TCK	11
	FPGA_TDO	11



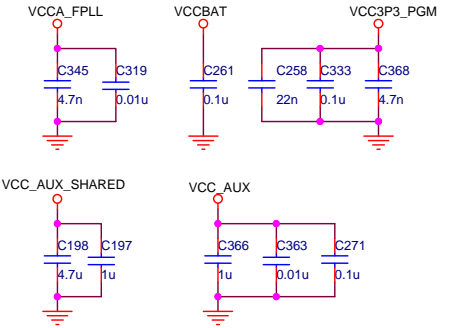
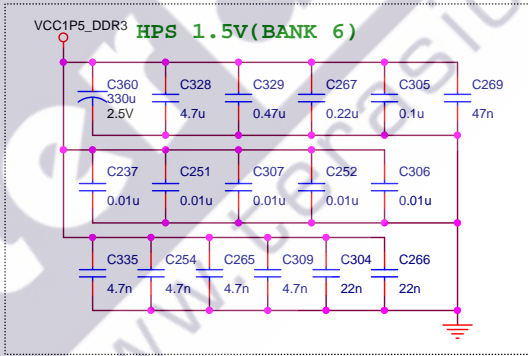
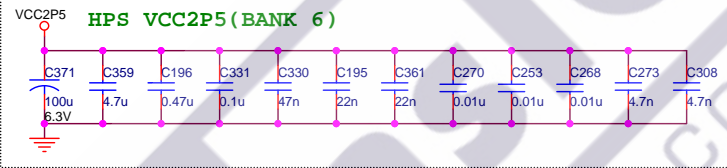
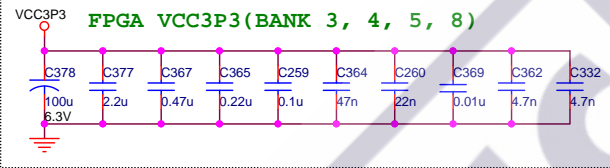
5CSEMA5F3


MSEL0	L8	MSEL0
MSEL1	K6	MSEL1
MSEL2	G6	MSEL2
MSEL3	L7	MSEL3
MSEL4	L9	MSEL4

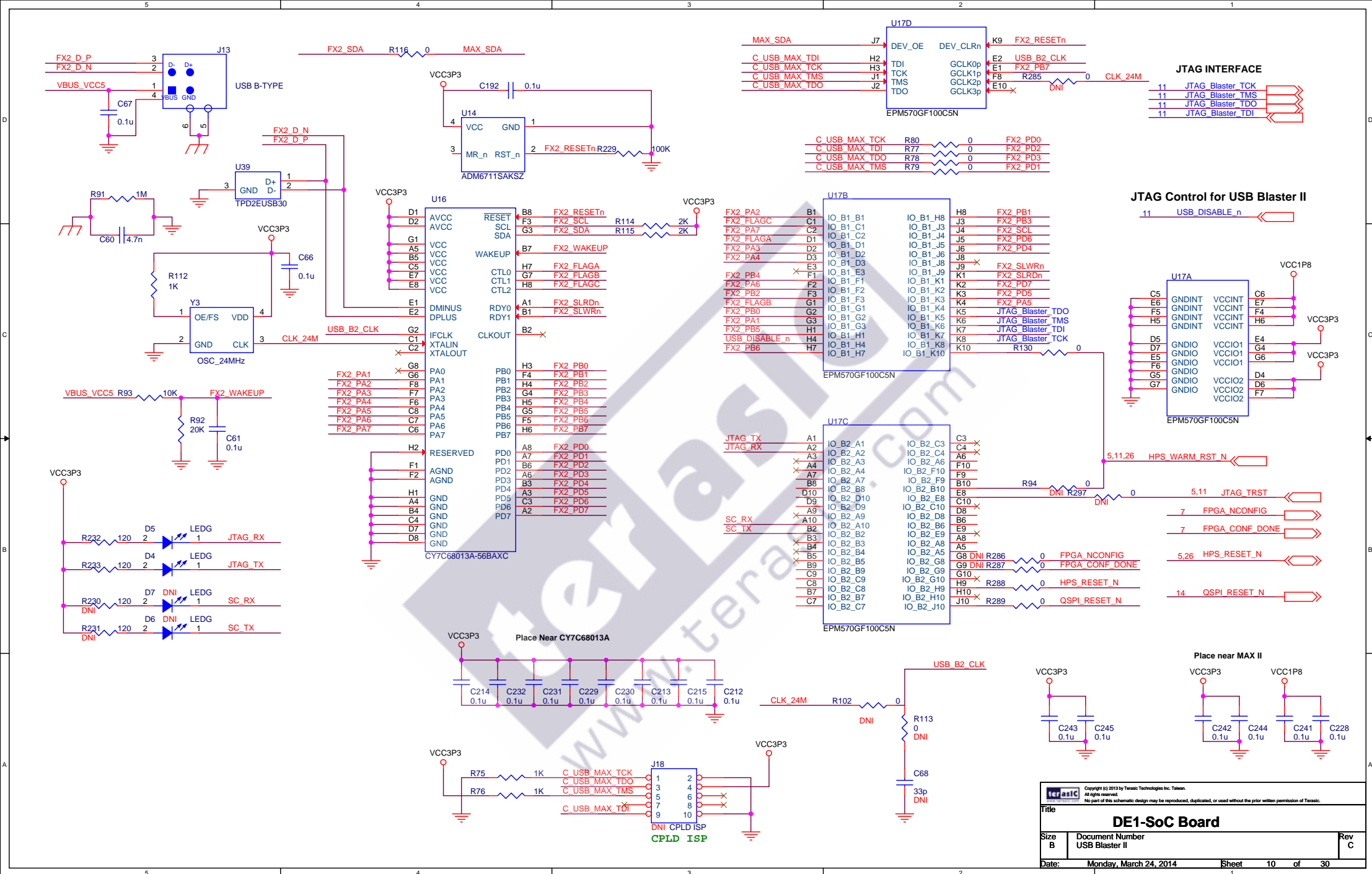


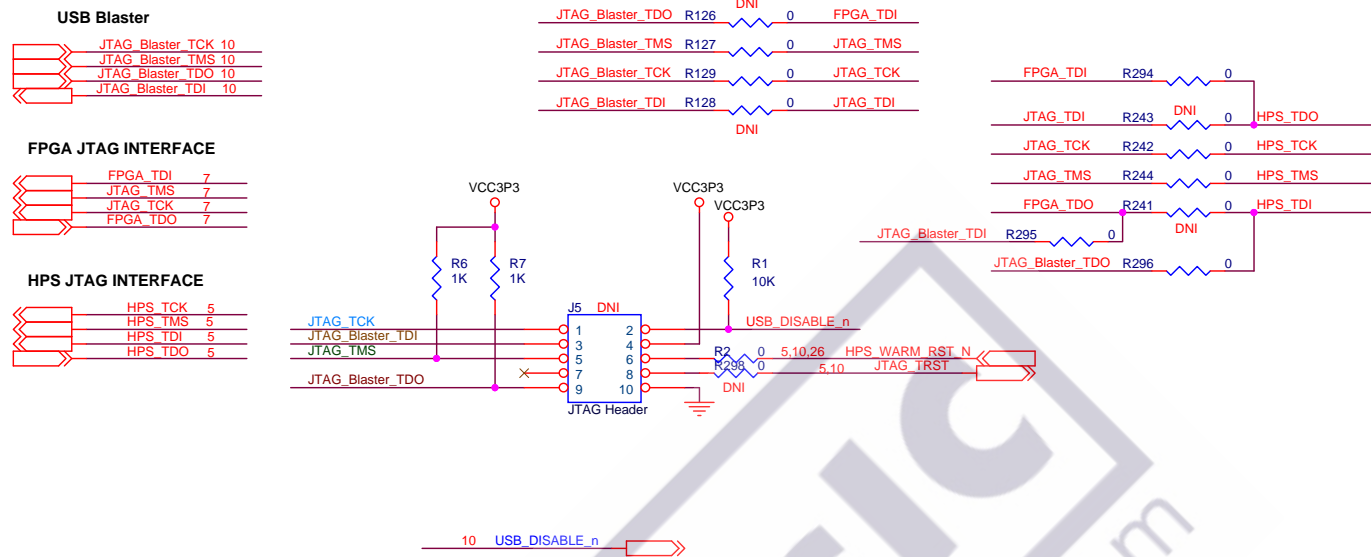


Place C394 close to J20/G23 pin

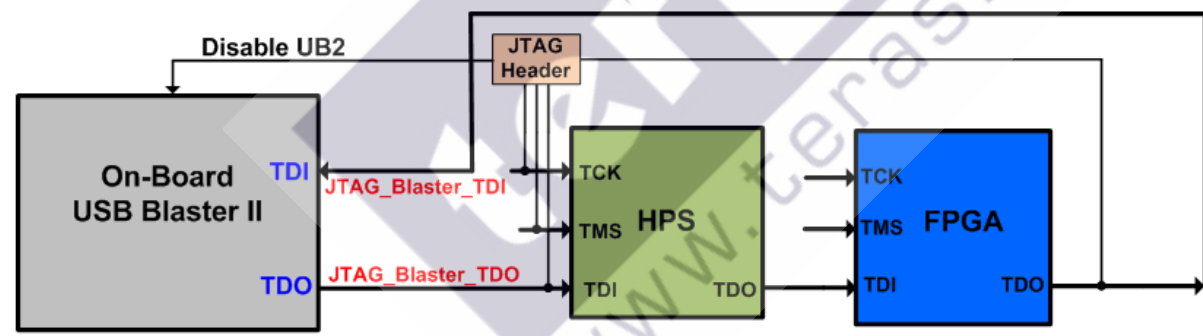


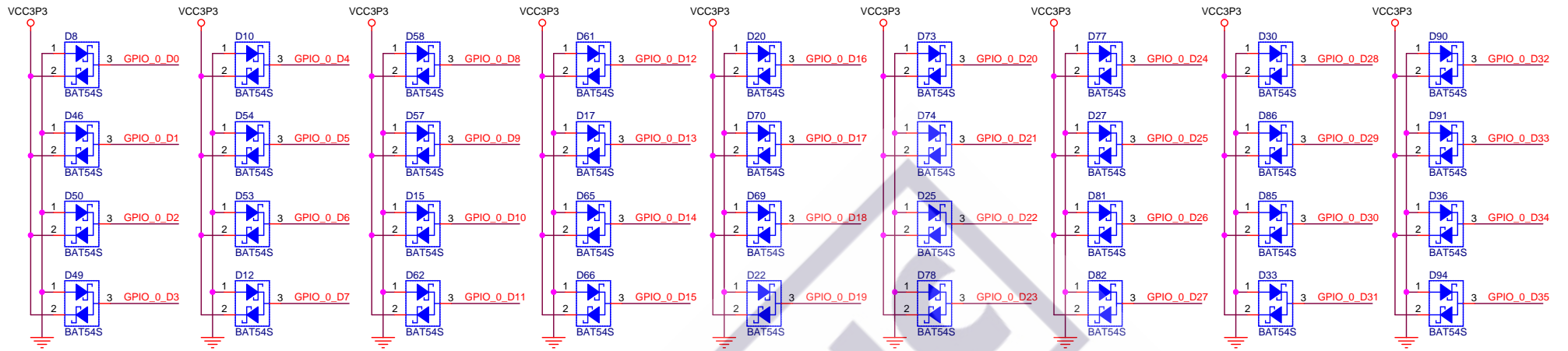
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Title			
DE1-SoC Board			
Size B	Document Number FPGA Decoupling		Rev C
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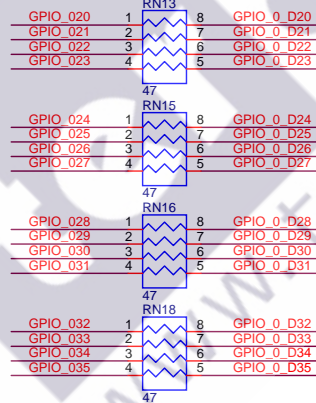
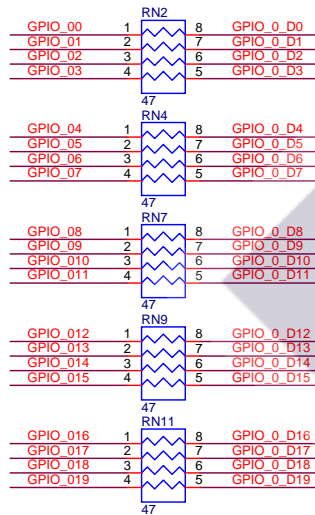


JTAG Chain

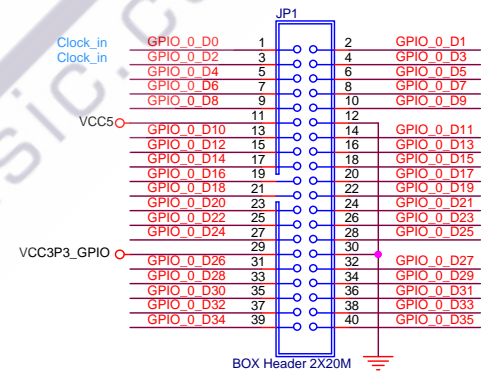


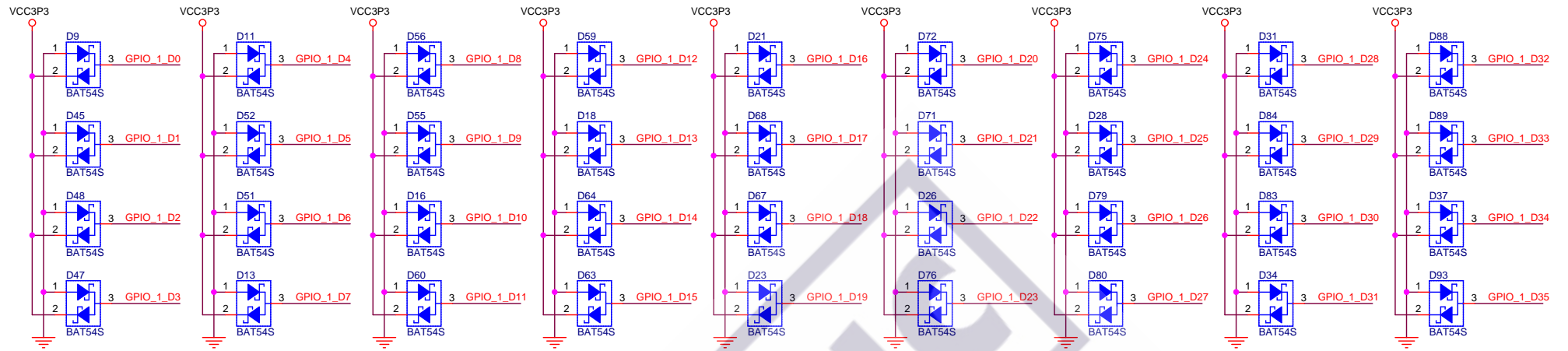


GPIO 0



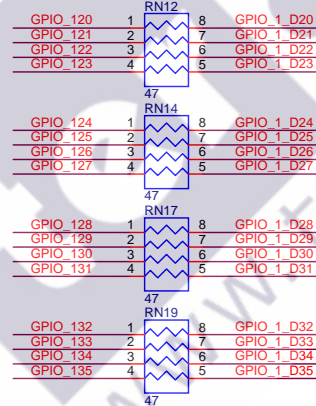
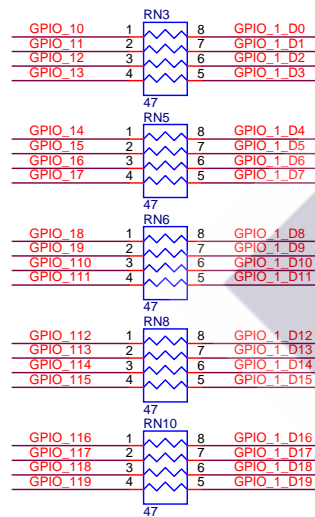
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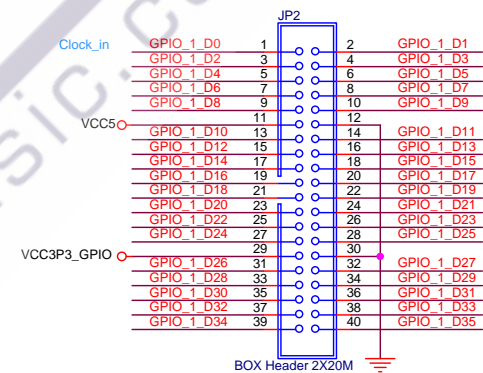


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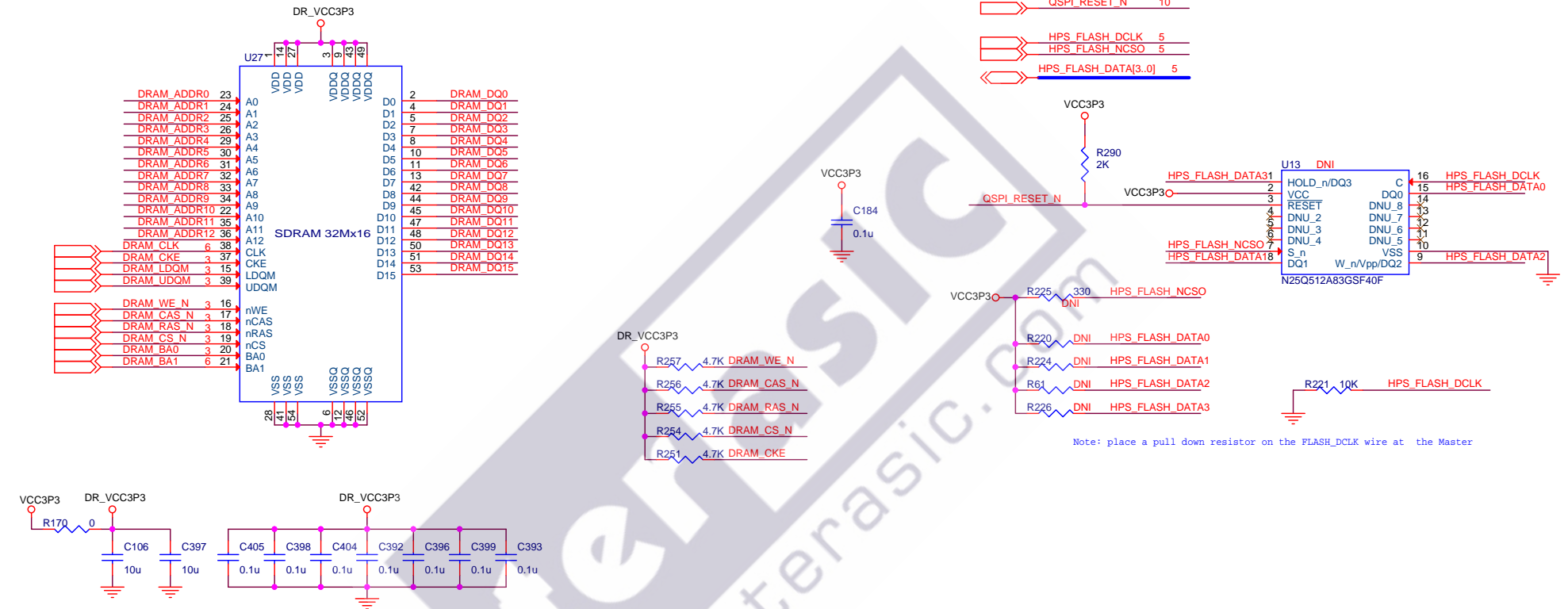
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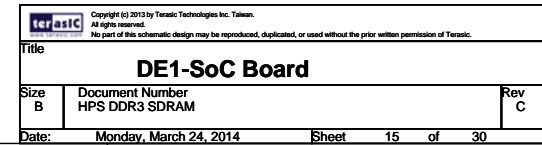


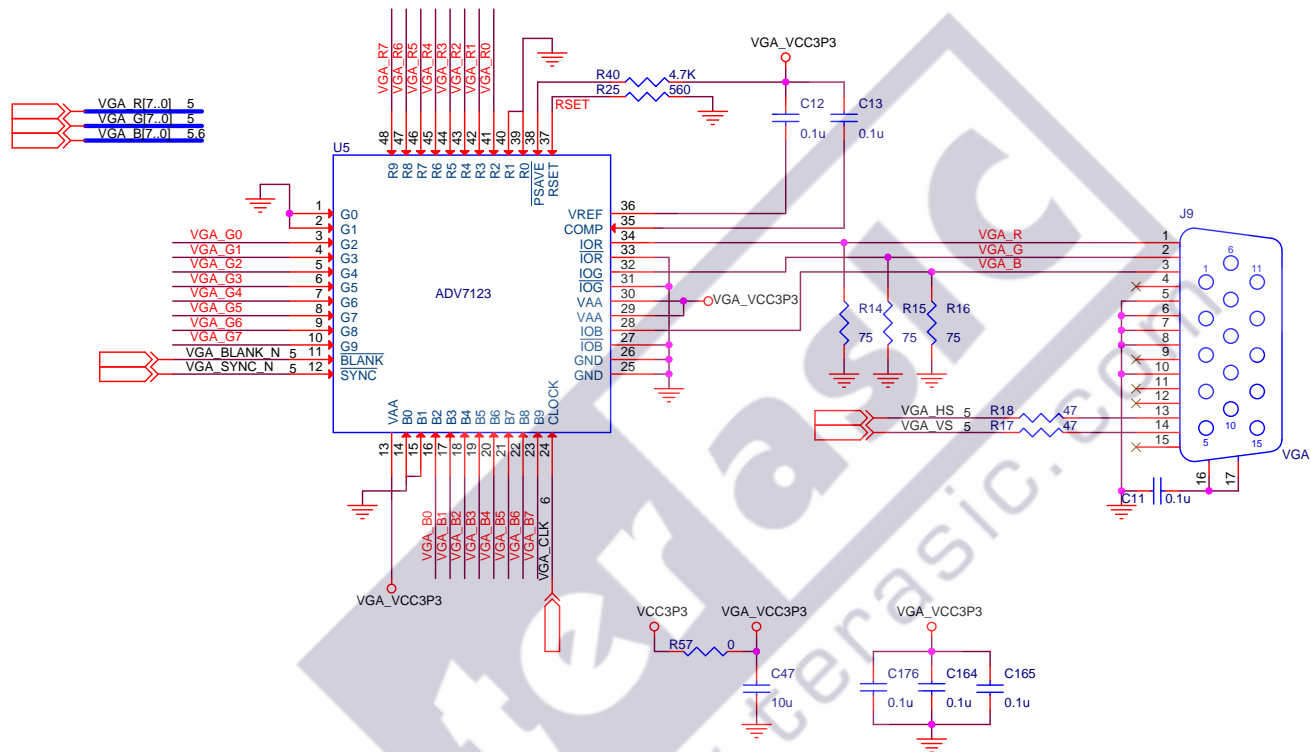
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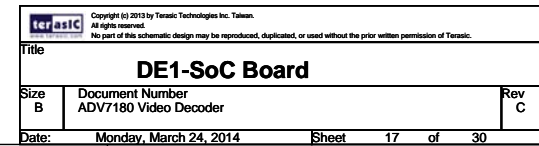


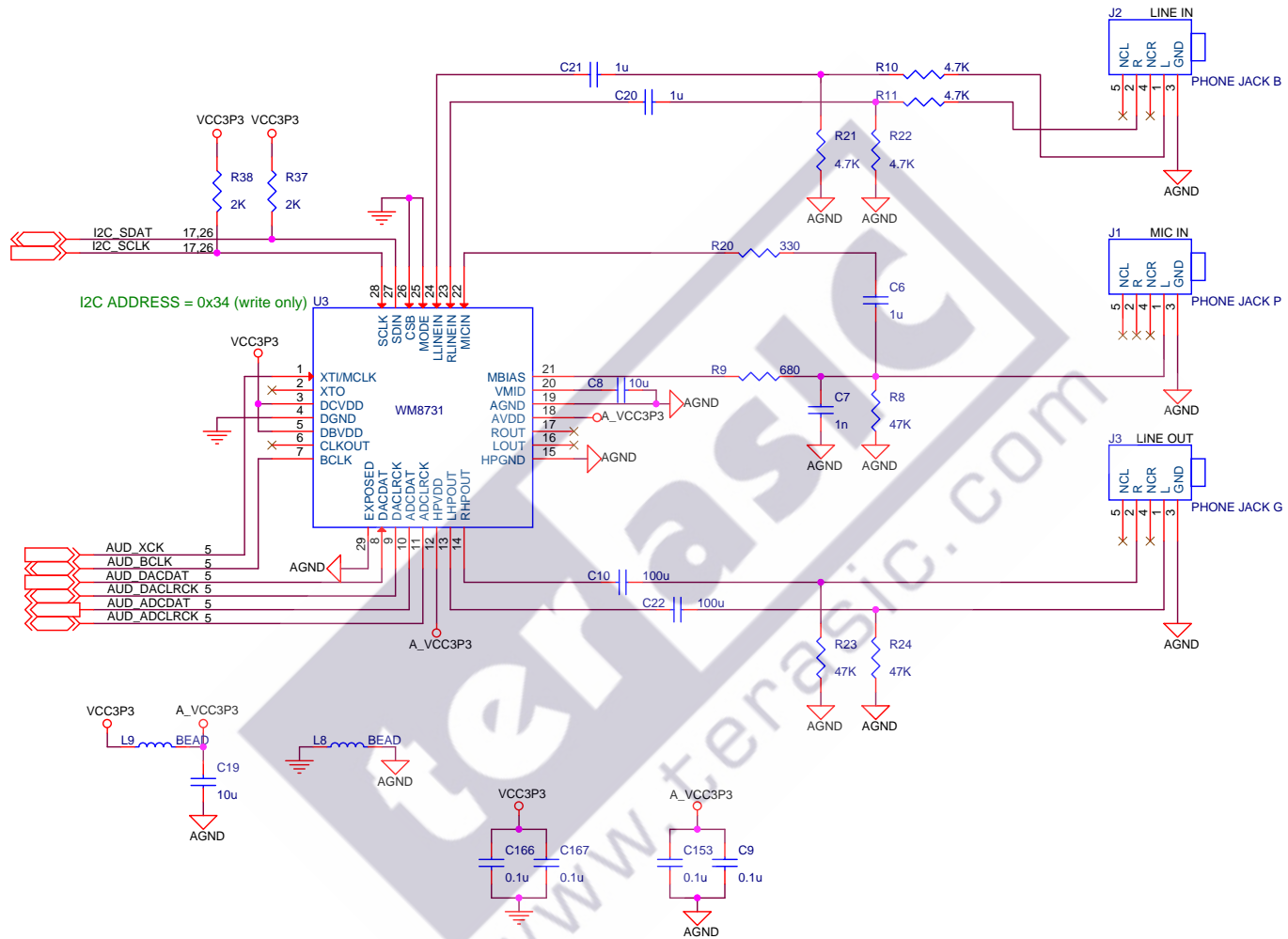
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DRAM_ADDR[12..0] 3,6




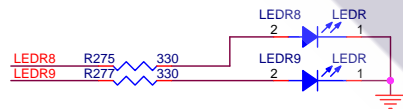
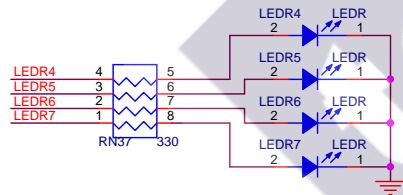
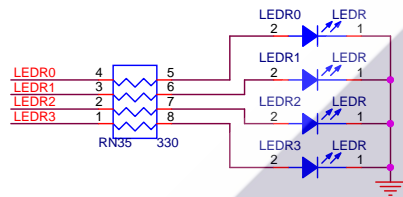
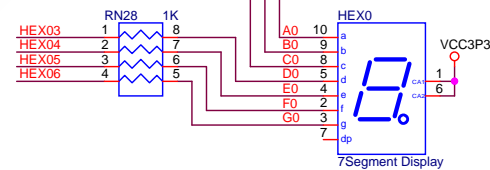
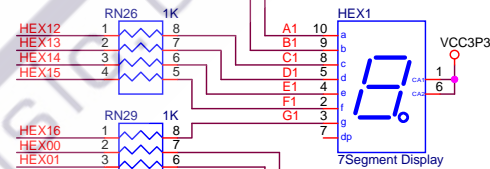
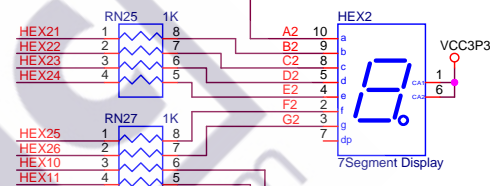
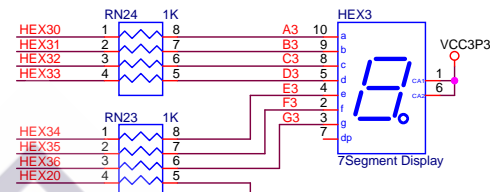
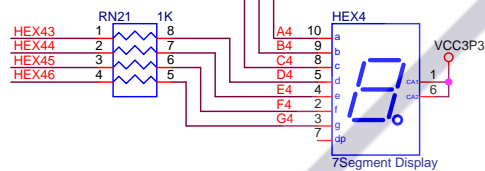
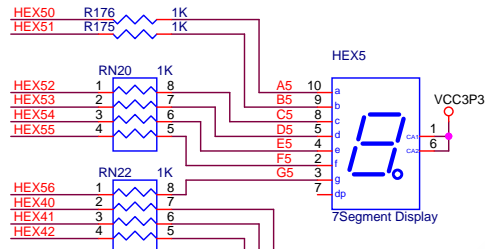
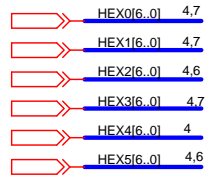




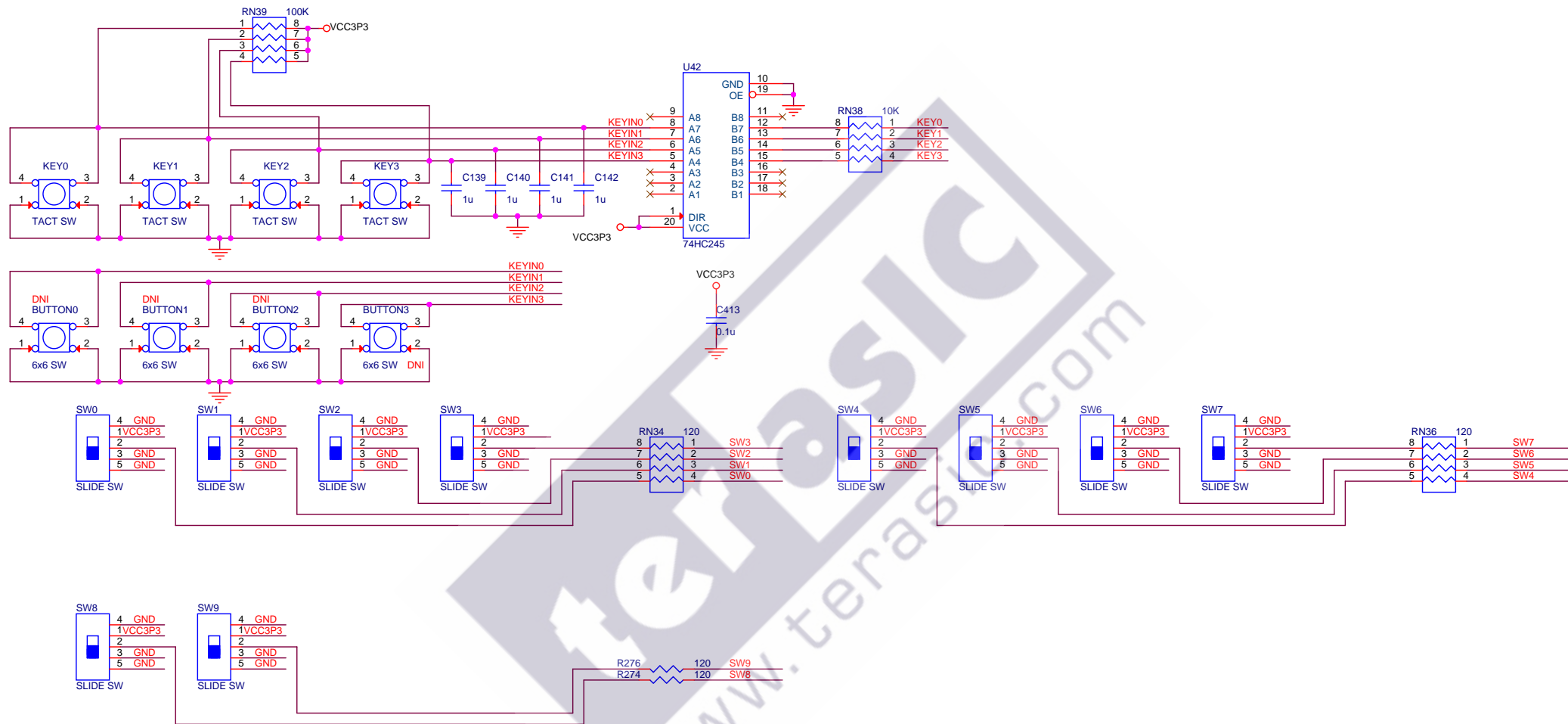





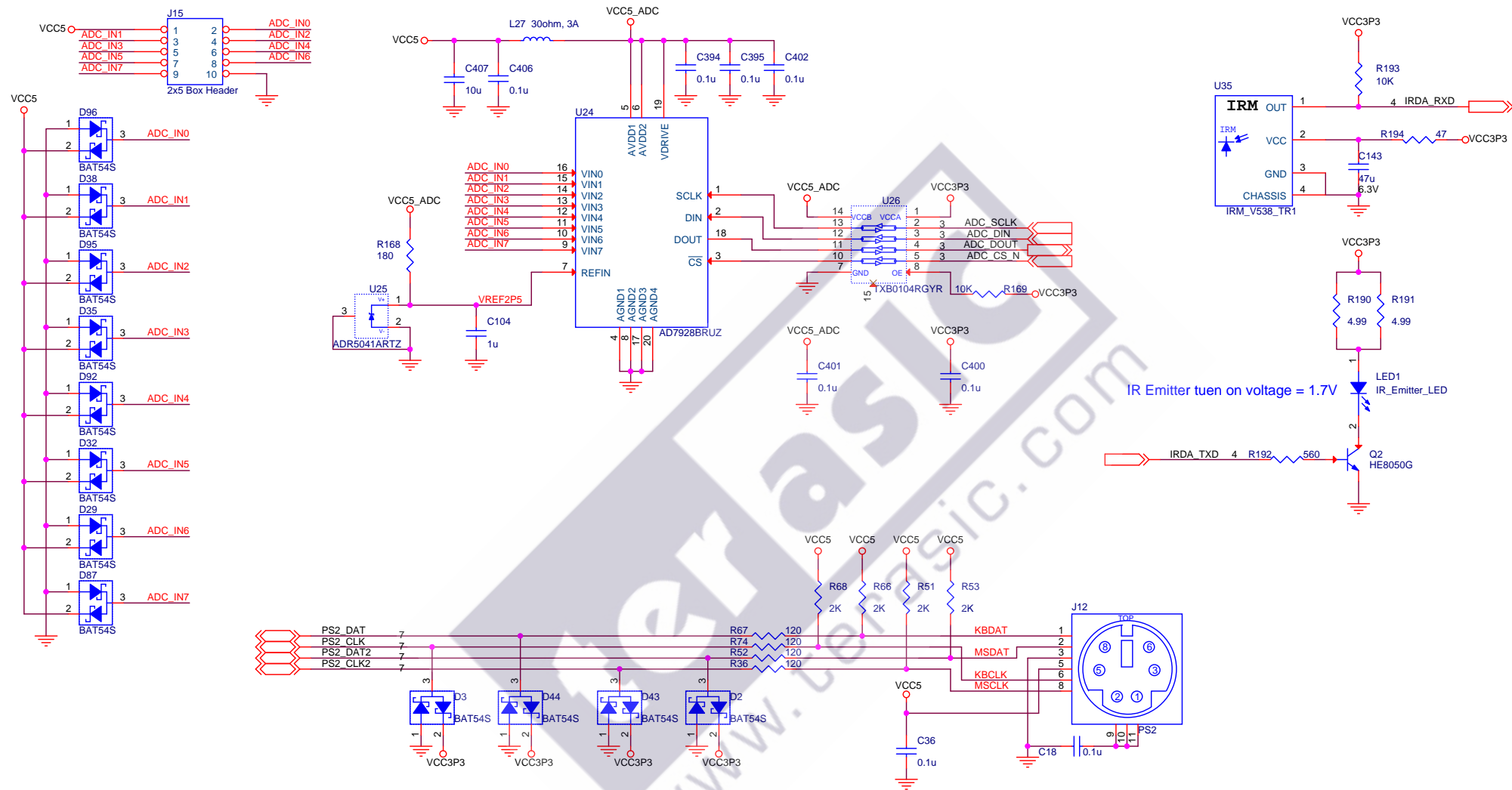
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Title		
DE1-SoC Board		
Size	Document Number	Rev
B	Audio CODEC	C
Date:	Monday, March 24, 2014	Sheet 18 of 30

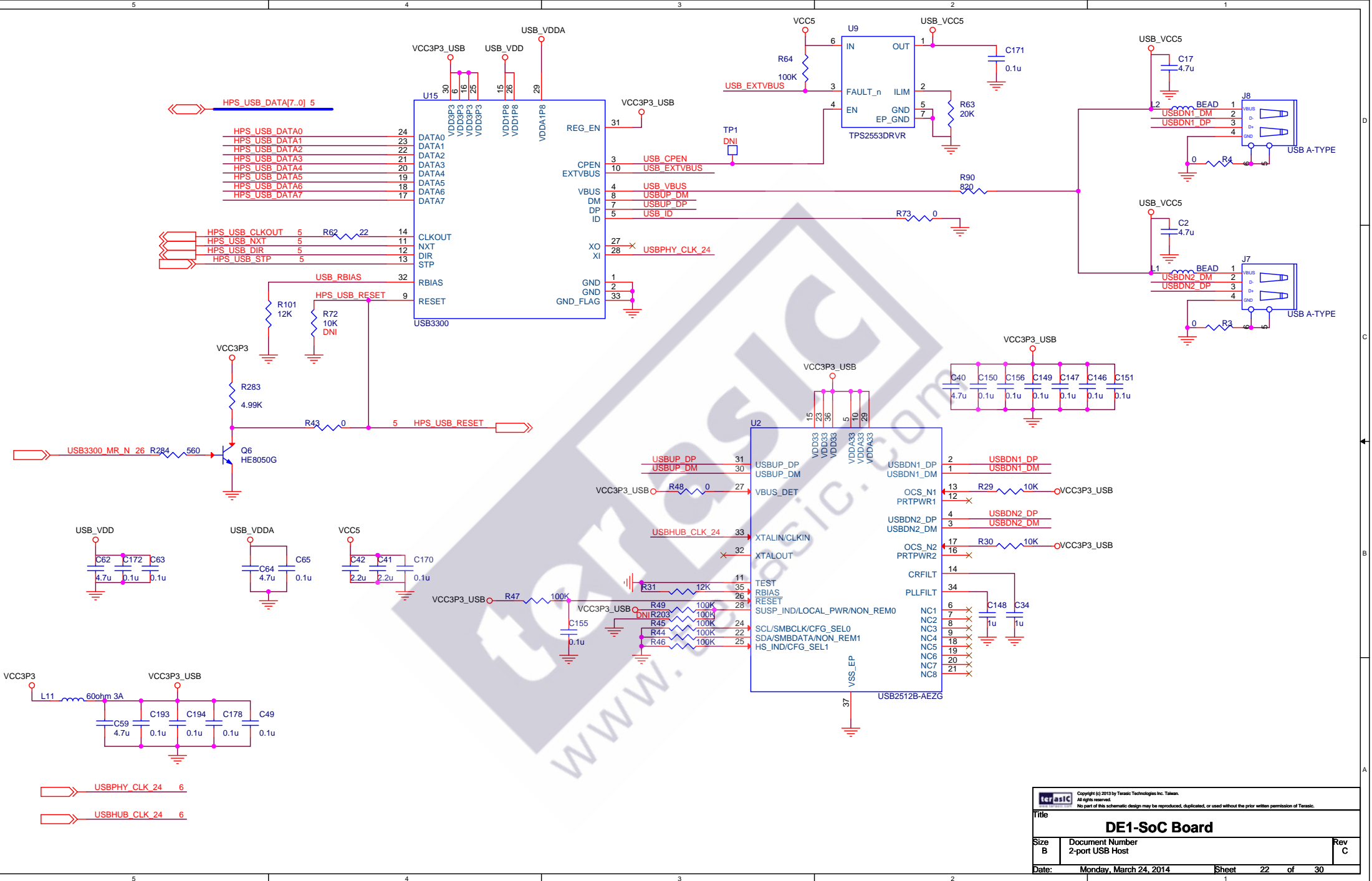


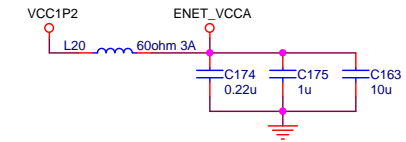
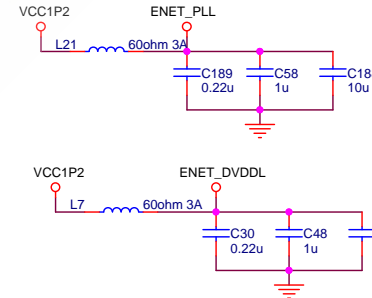
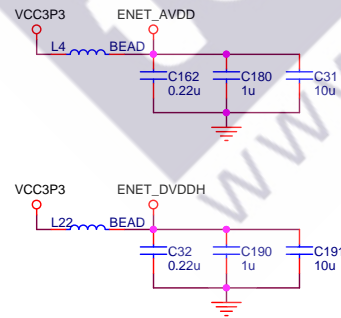
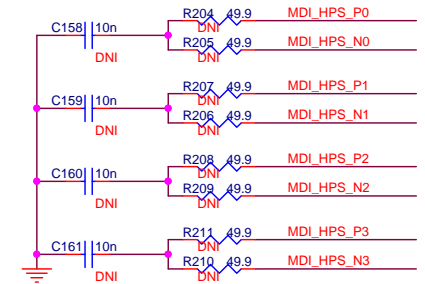
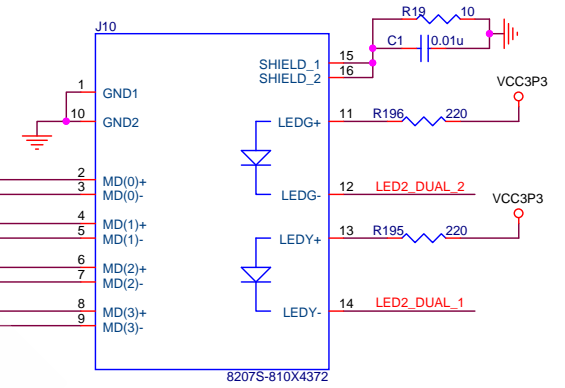
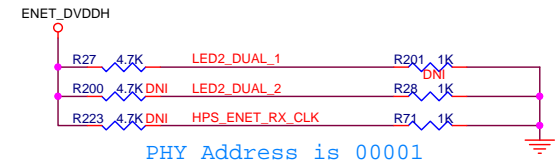
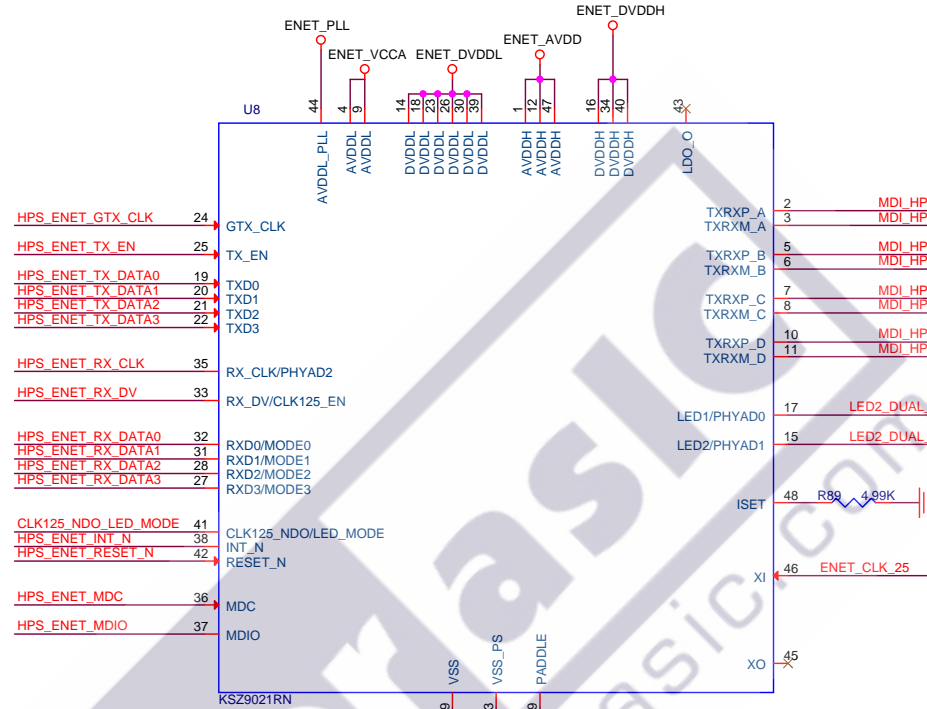
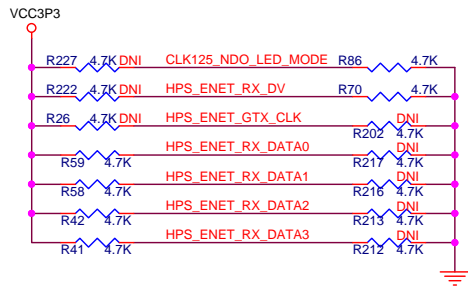
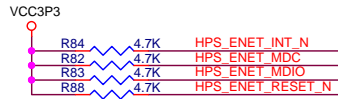
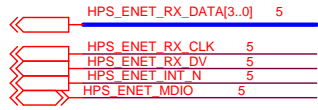
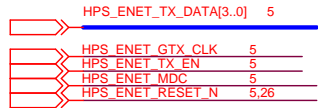
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SW[9..0] 3.7




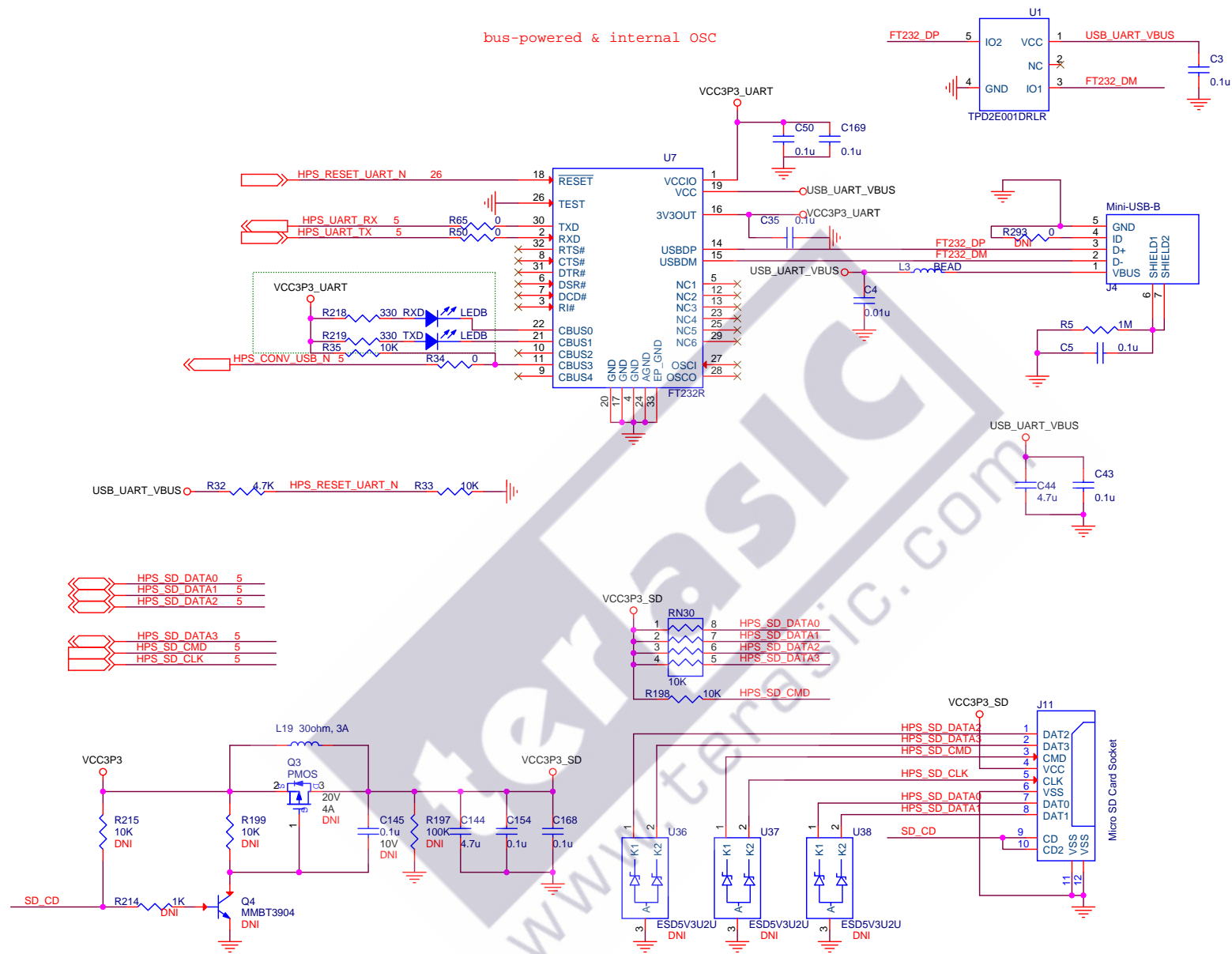
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Title		
DE1-SoC Board		
Size	Document Number	Rev
B	FPGA BUTTON, Switch	C
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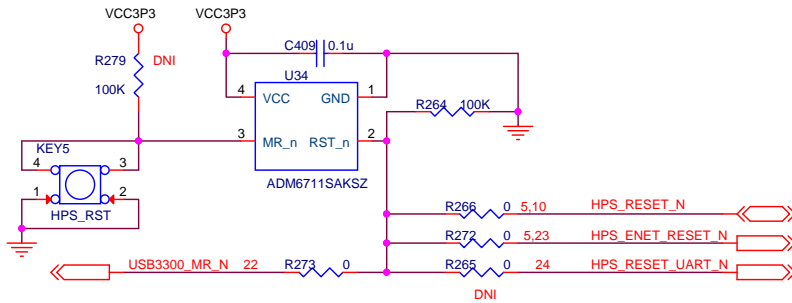




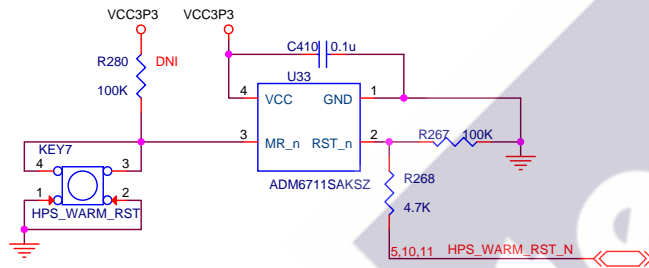
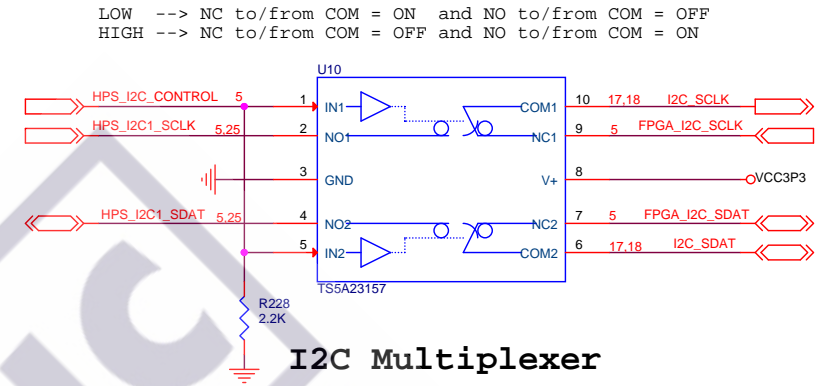


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Title			
DE1-SoC Board			
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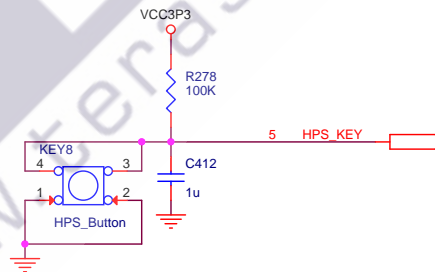




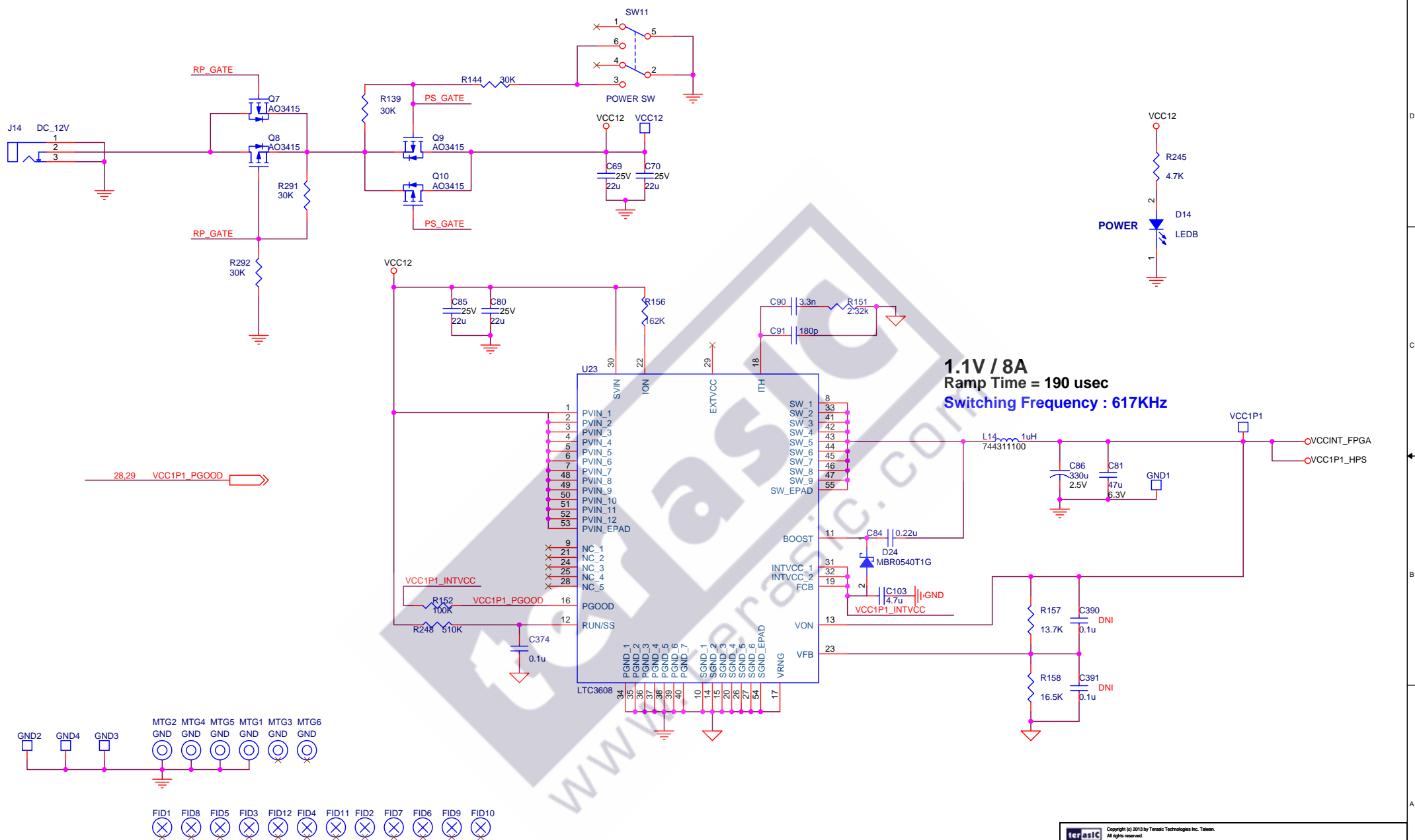
HPS Cold Reset

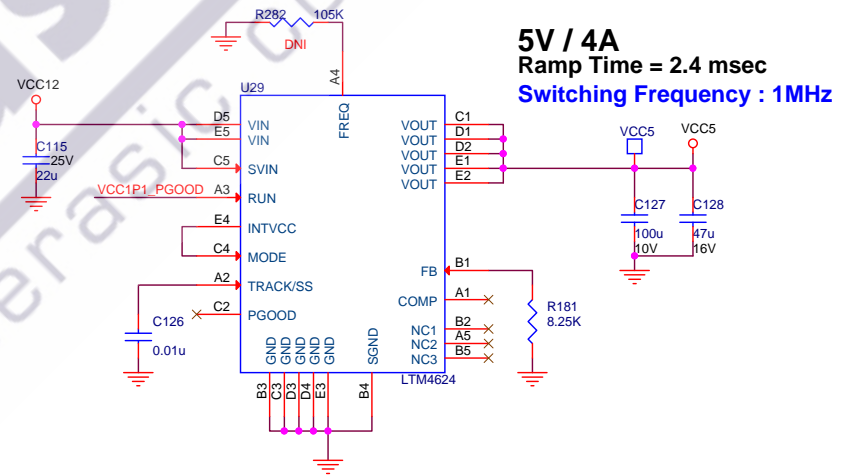
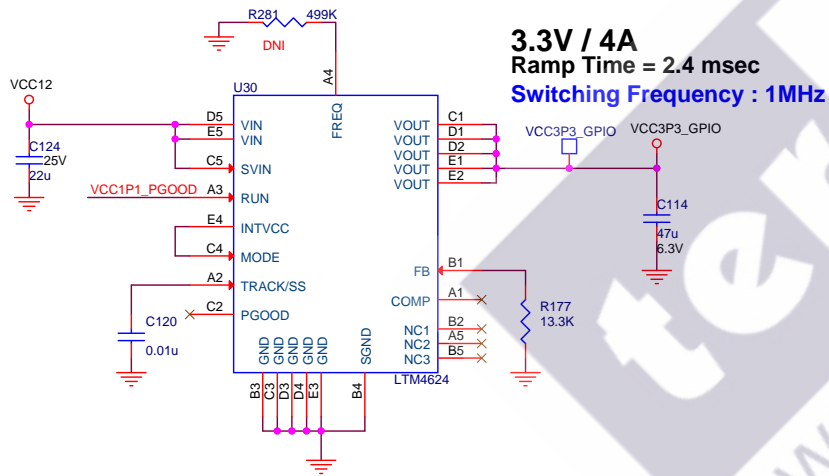
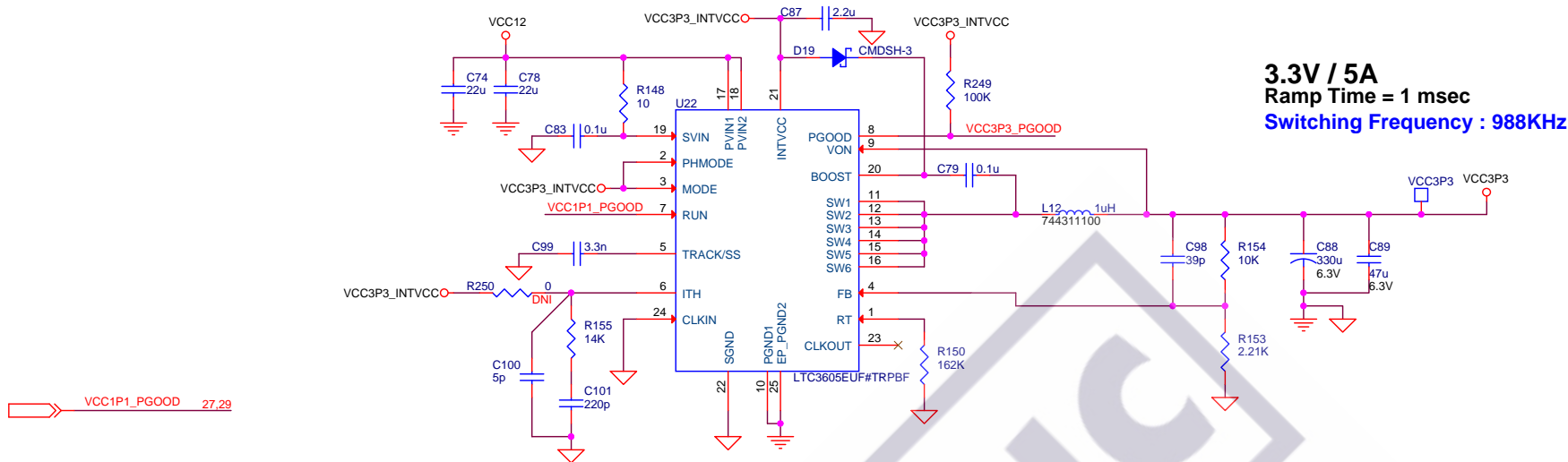


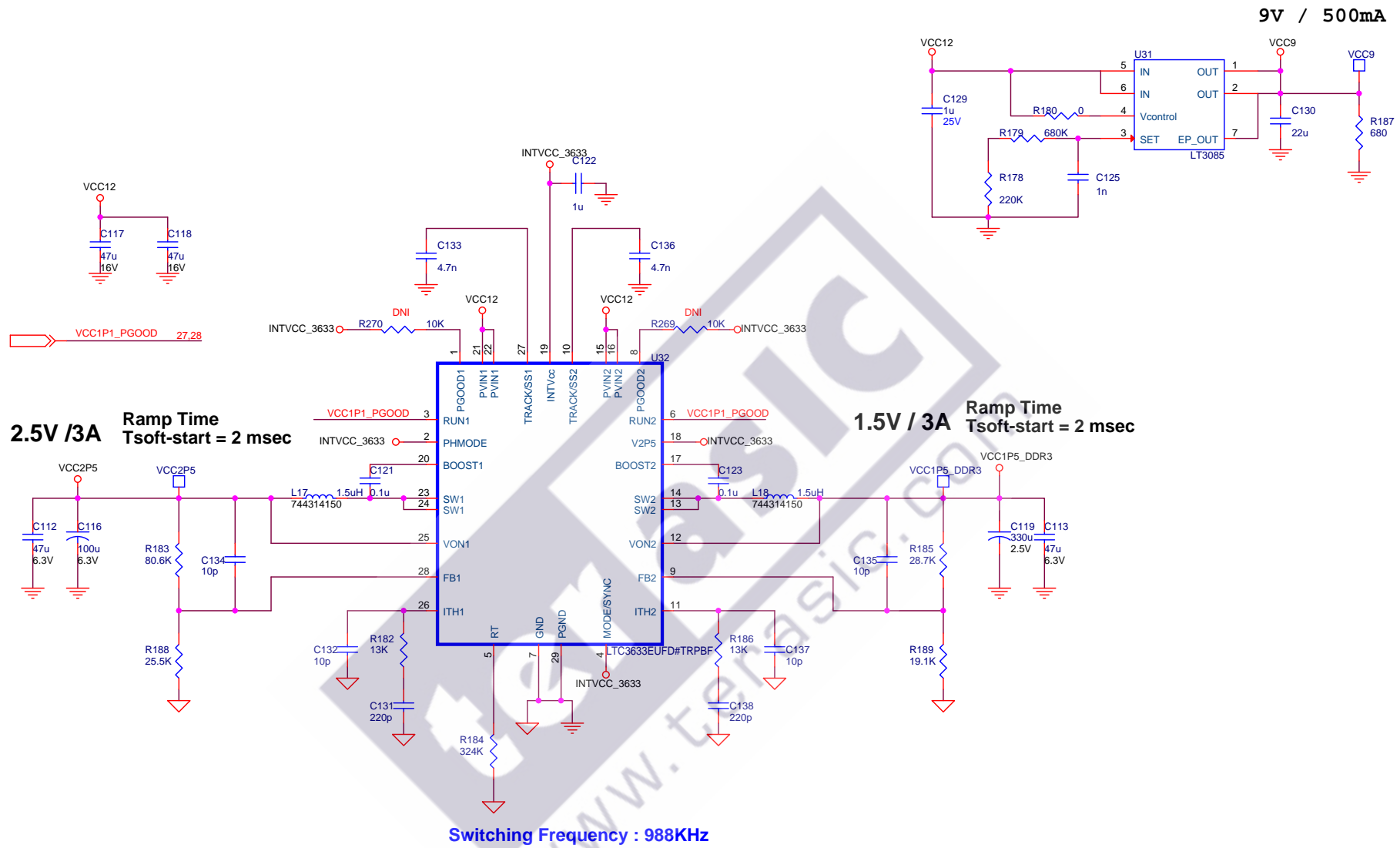
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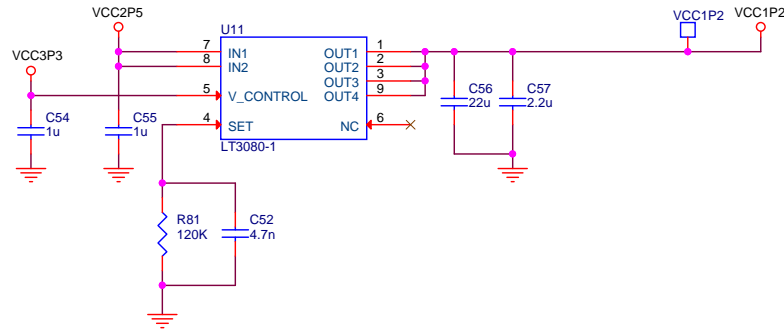
HPS User Button



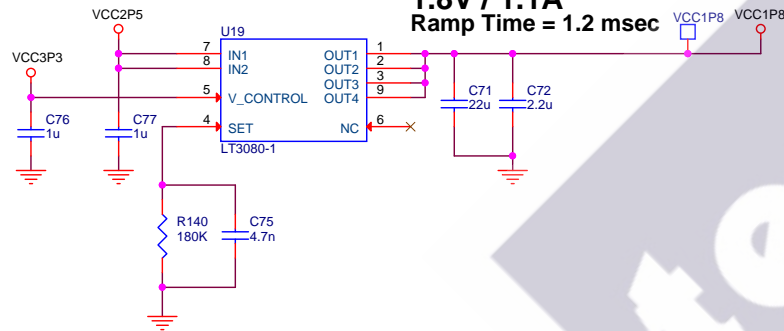




1.2V / 1.1A
Ramp Time = 0.8msec



1.8V / 1.1A
Ramp Time = 1.2 msec



DDR3 VTT, VREF

