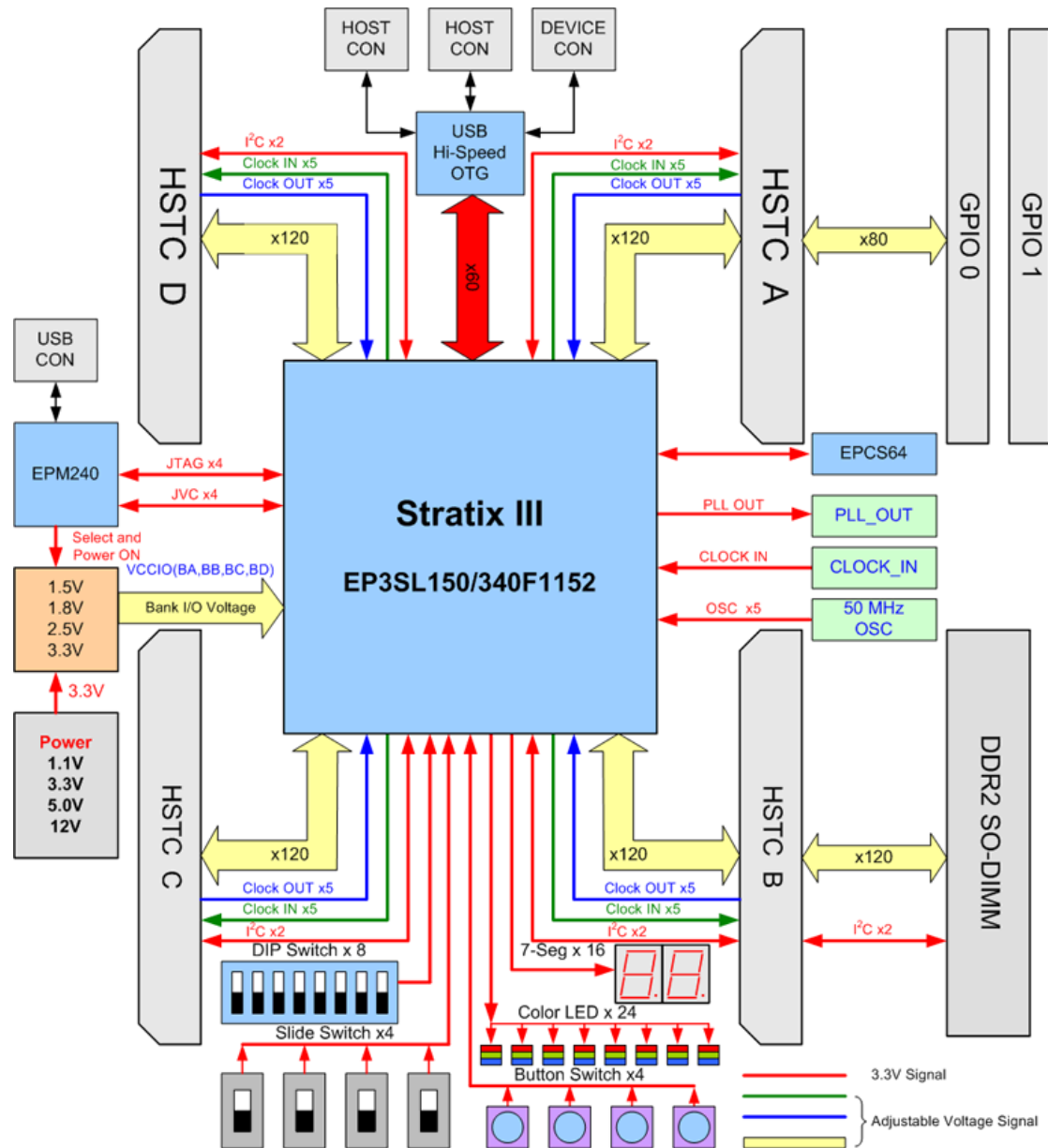

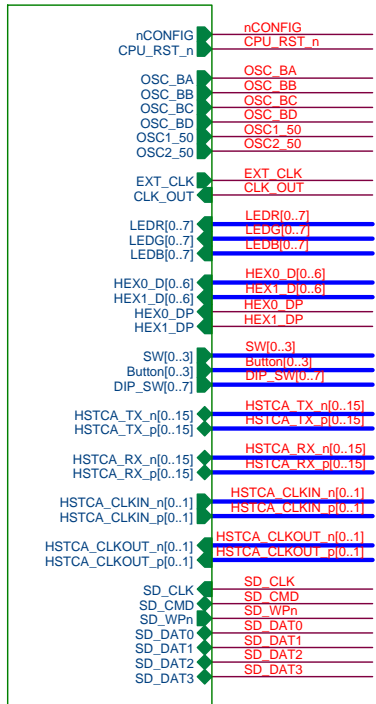


# ALTERA Stratix III EP3SL150 Development & Education Board

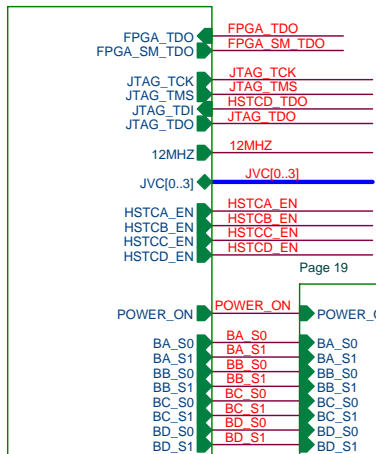
SCHEMATIC	CONTENT	PAGE
01 TOP	Cover Page, Placement, TOP	01 ~ 03
02 HSTC Connector A	HSTC Connector A	04
03 HSTC Connector B	HSTC Connector B	05
04 HSTC Connector C	HSTC Connector C	06
05 HSTC Connector D	HSTC Connector D	07
06 DDR2 SO-DIMM	DDR2 SO-DIMM	08 ~ 09
07 IN/OUT	CLOCK, LED, 7-Segment, Button, GPIO Connector	10 ~ 15
08 USB DEVICE	ISP 1761 USB Hi-Speed OTG	16
09 EP3SL150	EP3SL150 BANK1...BANK8, POWER, CONFIG	17 ~ 21
10 Power	POWER 1.1V, 3.3V, 5V, 12V	22



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Title		
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Size	Document Number	Rev
B	Placement	1.1
Date:	Thursday, September 04, 2008	Sheet 2 of 32

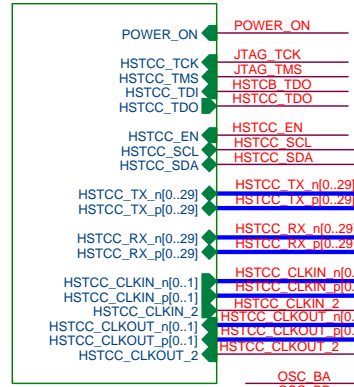


07 IN/OUT Port Onboard USB-Blaster

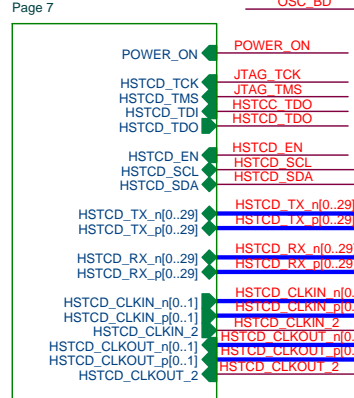


USB-Blaster

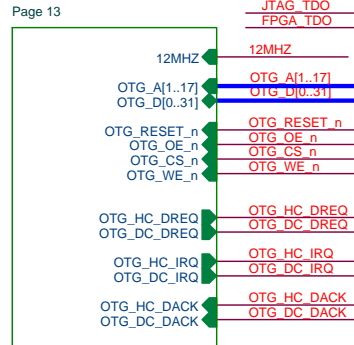
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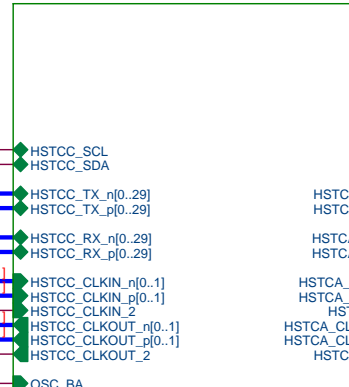
04 HSTC Connector C



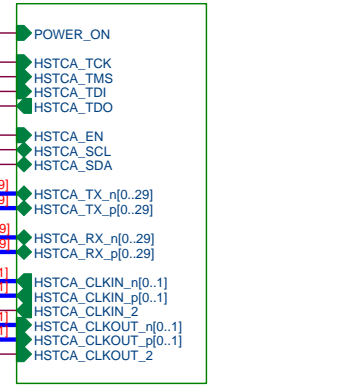
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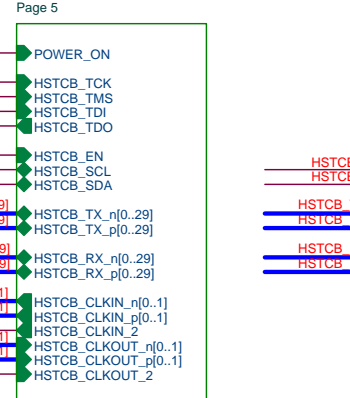
08 USB DEVICE



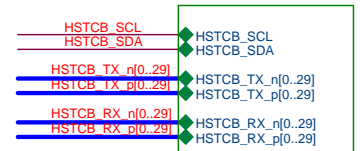
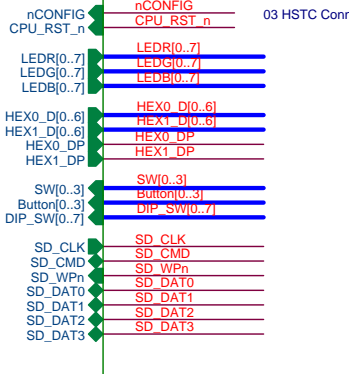
09 EP3SL150



02 HSTC Connector A

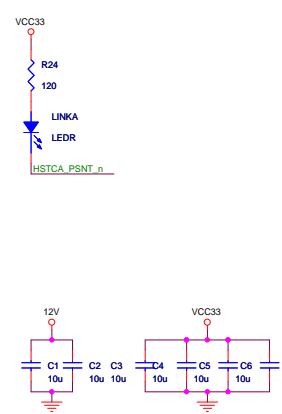
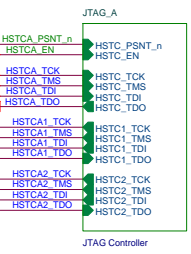
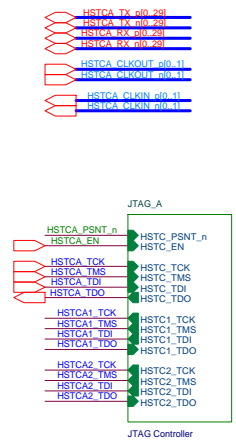
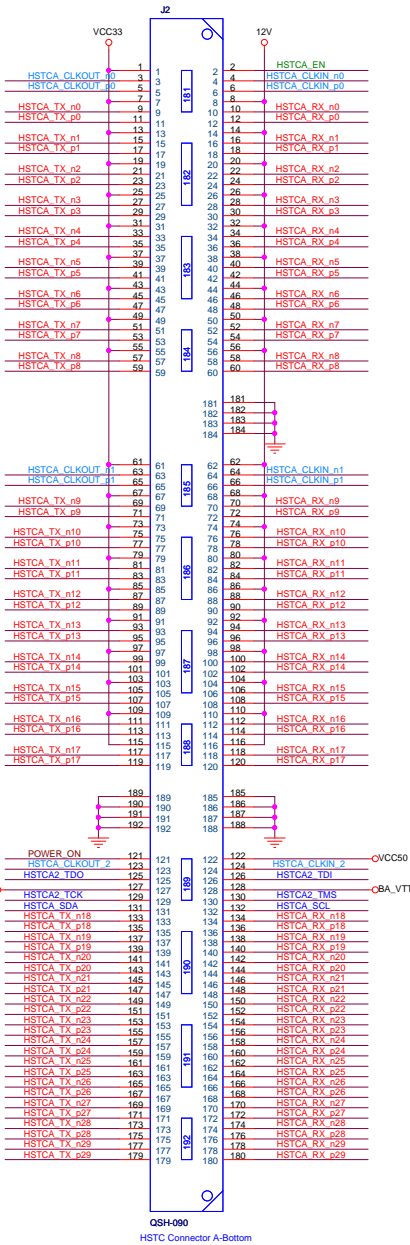


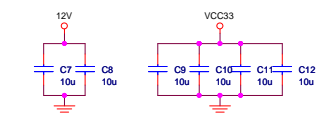
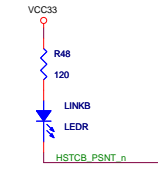
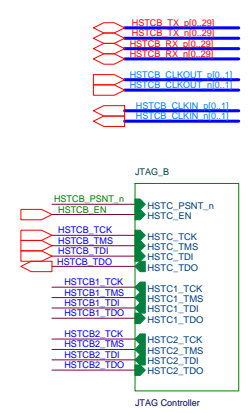
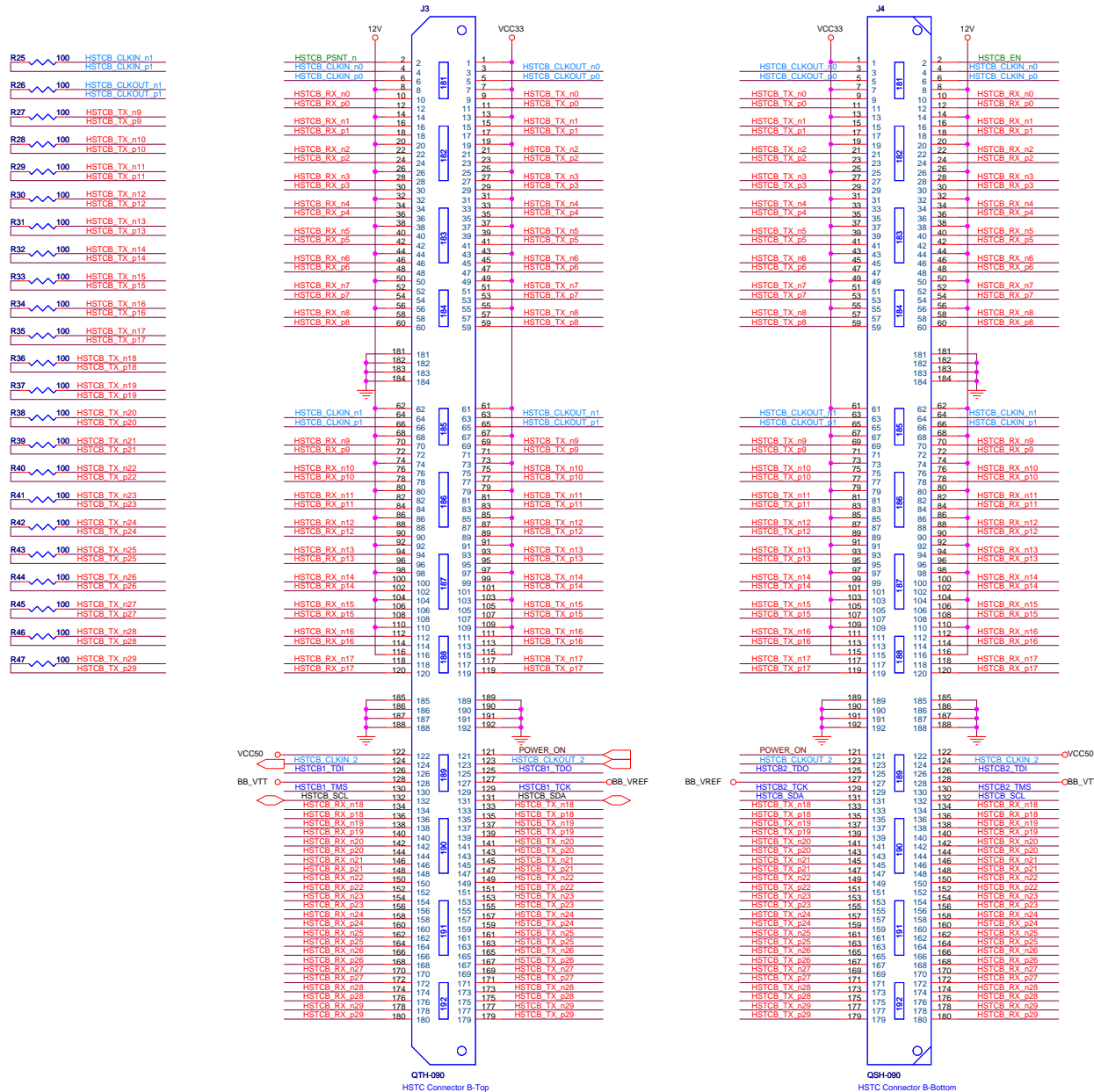
03 HSTC Connector B



06 DDR2 SO-DIMM

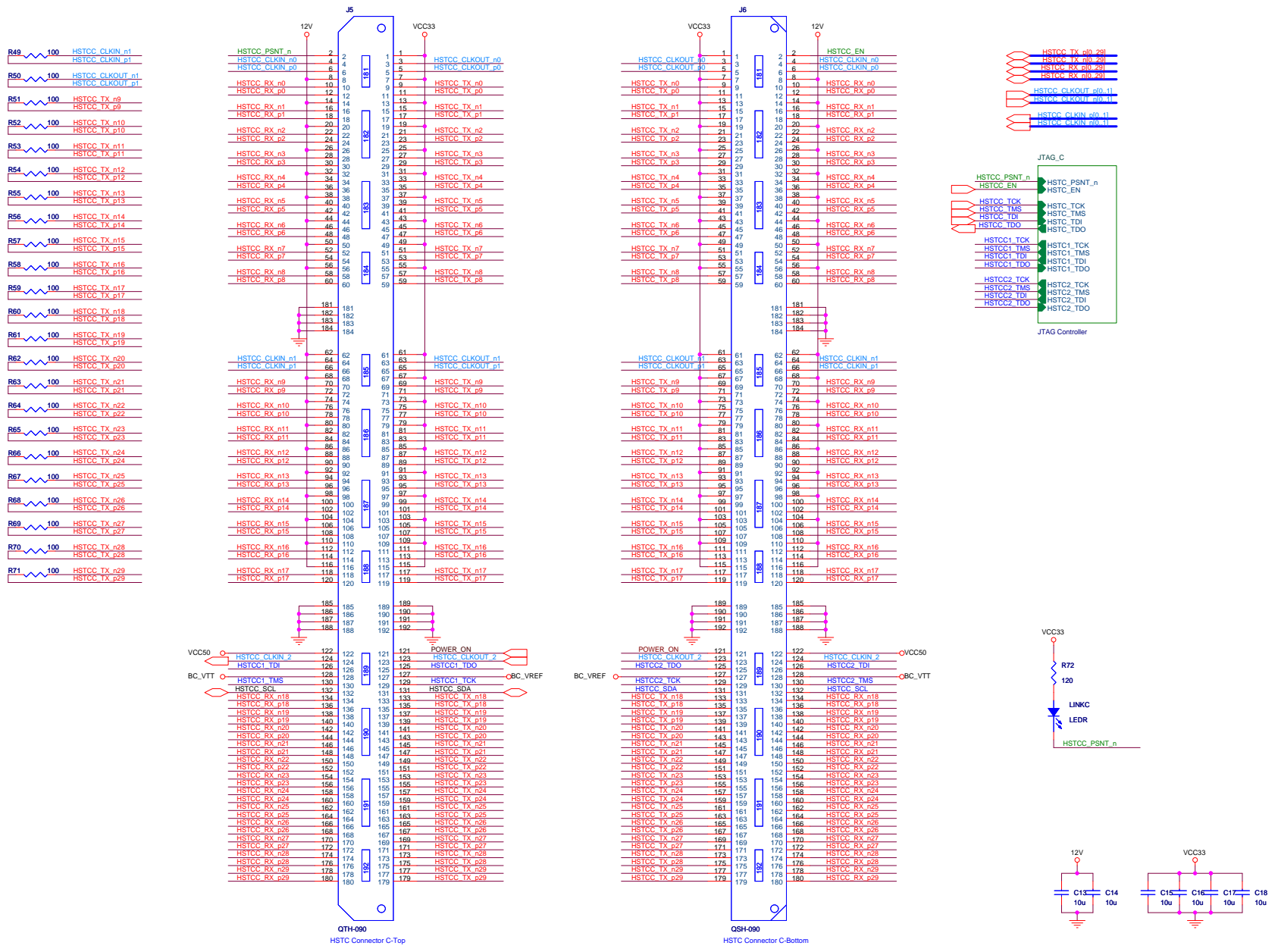
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Title		
DE3 Base Board		
Size	Document Number	Rev
B	DE3 Base Board - Top	1.1
Date:	Thursday, September 04, 2008	Sheet 3 of 32

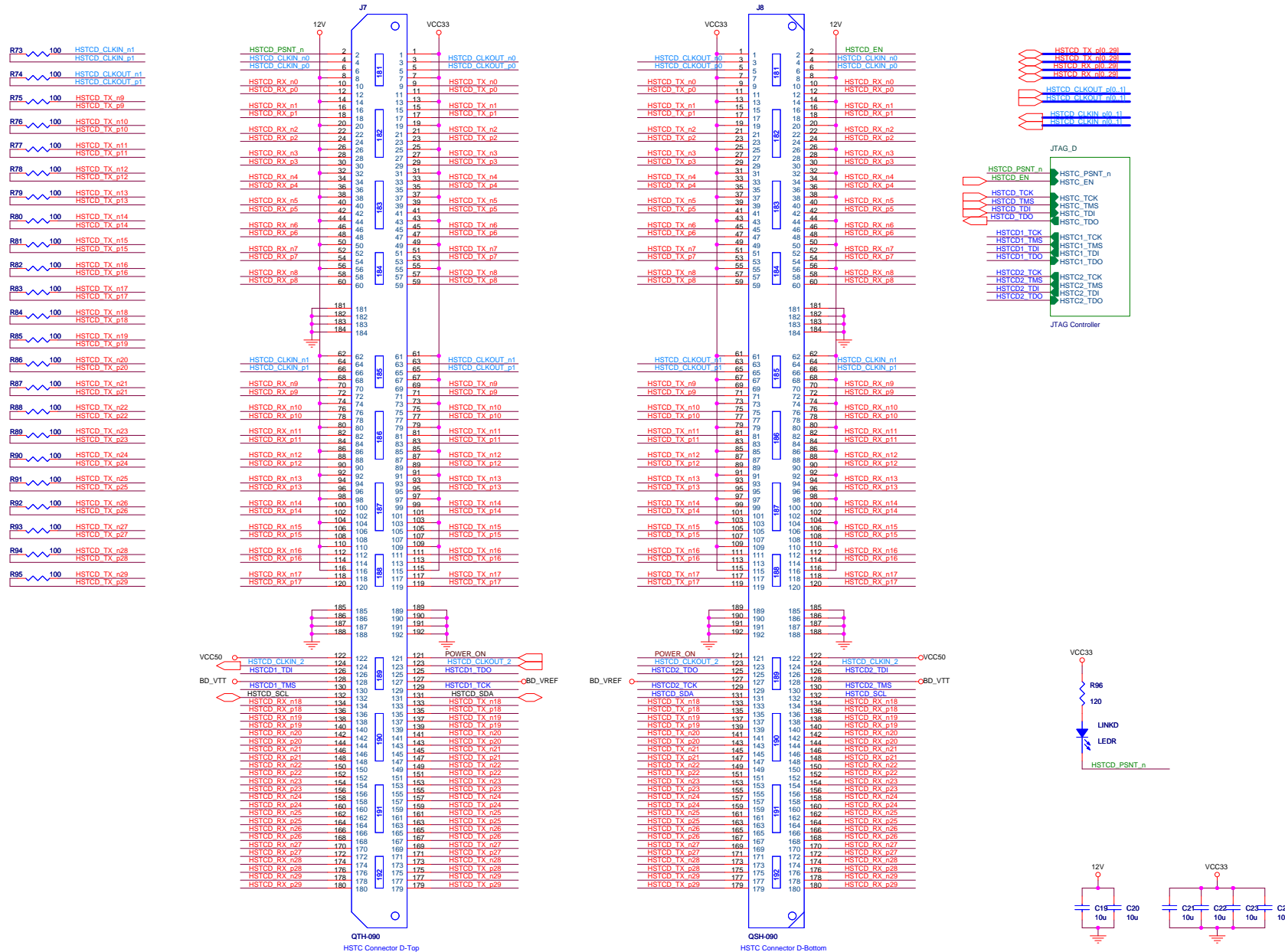


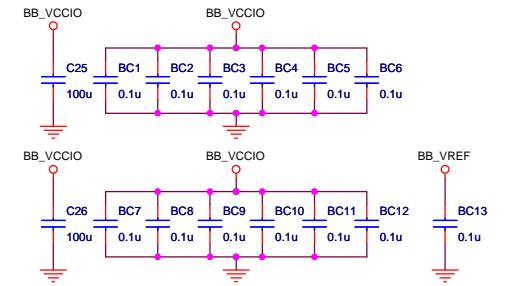
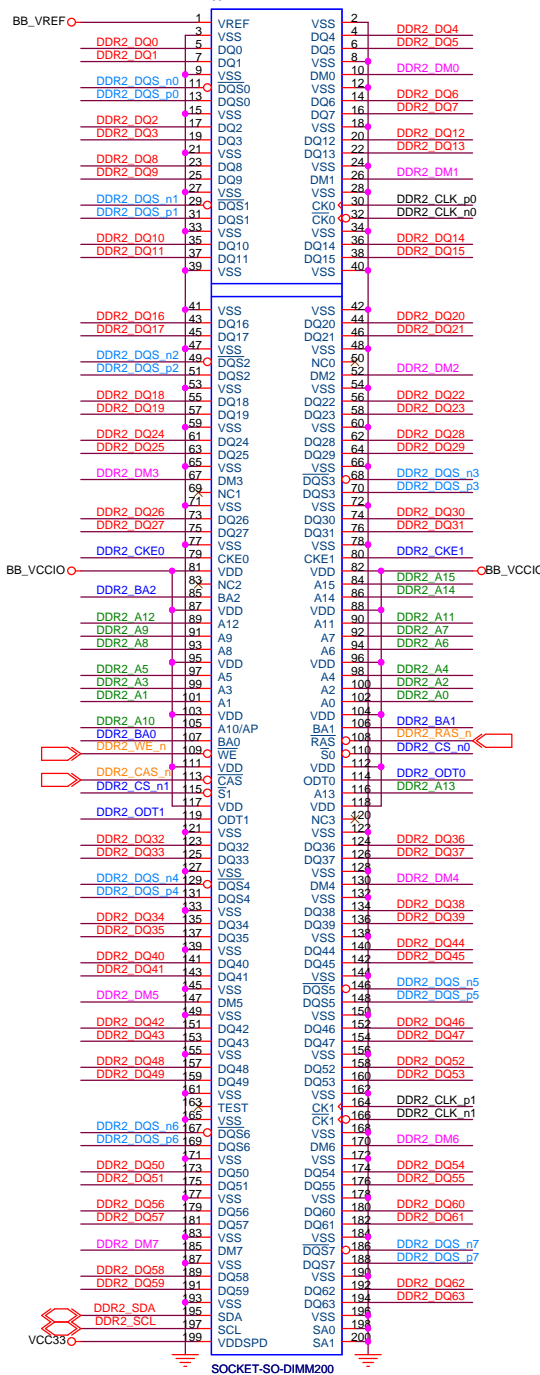
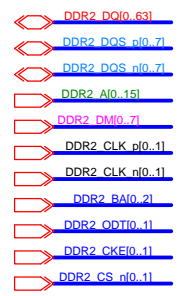


QTH-090 HSTC Connector B-Top

QSH-090 HSTC Connector B-Bottom







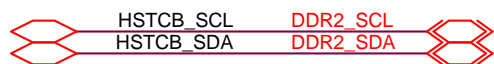
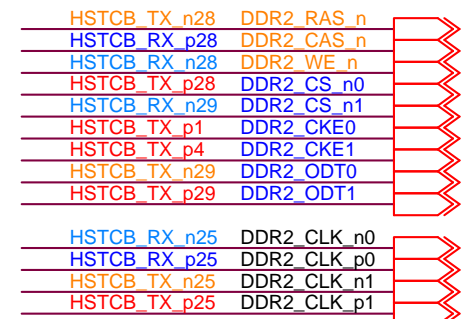
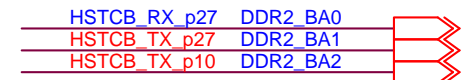
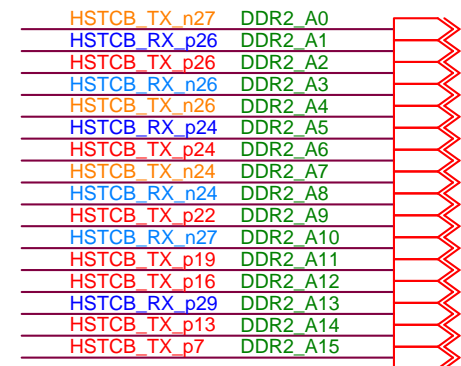
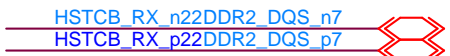
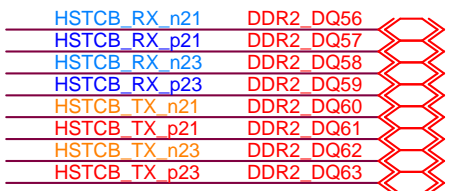
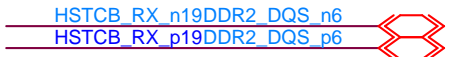
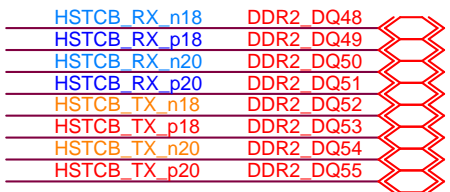
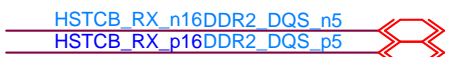
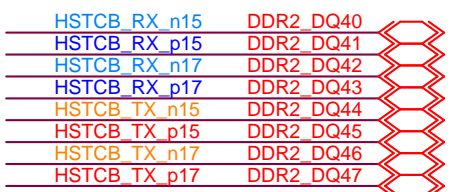
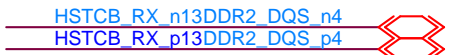
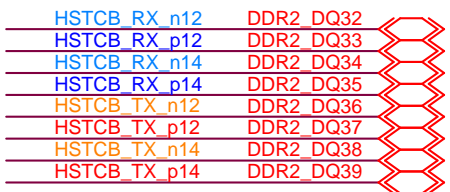
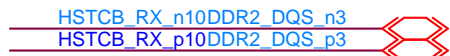
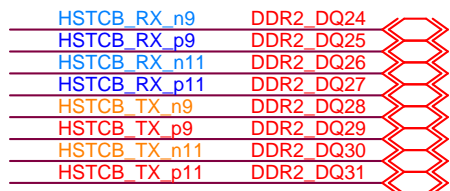
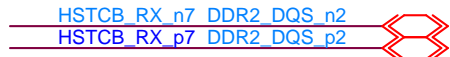
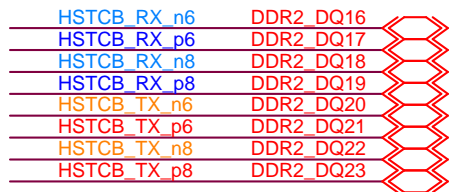
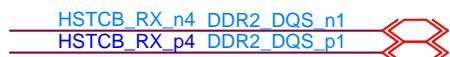
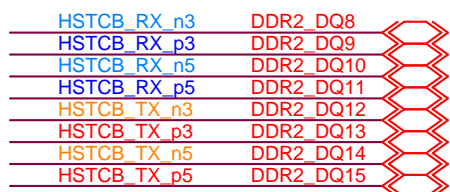
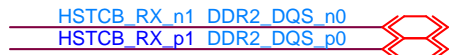
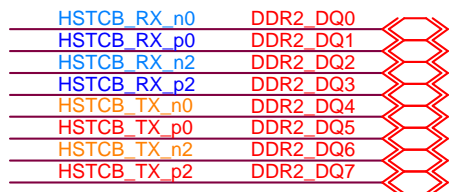
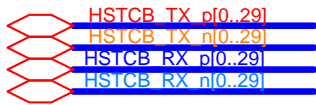
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Title: **DE3 Base Board**

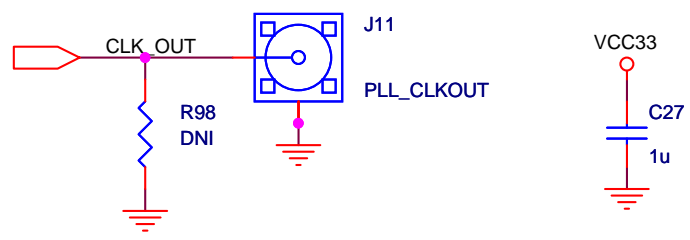
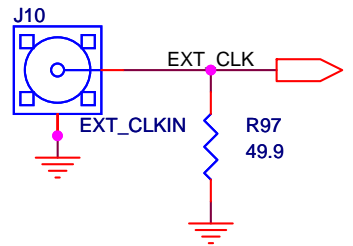
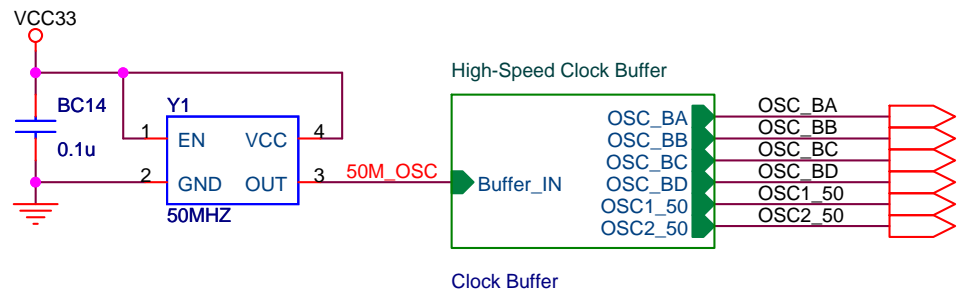
Size: Document Number: **DDR2 SO-DIMM** Rev: **1.1**


Date: **Thursday, September 04, 2008** Sheet: **8** of **32**



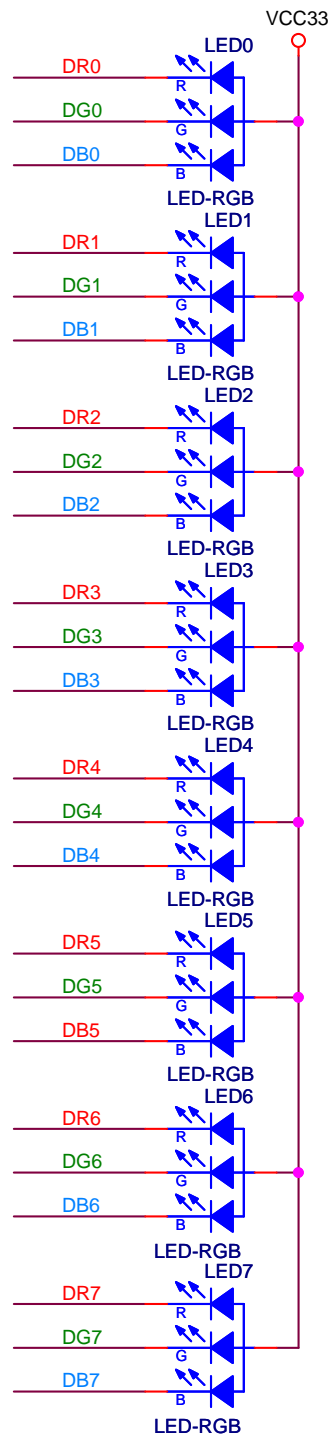
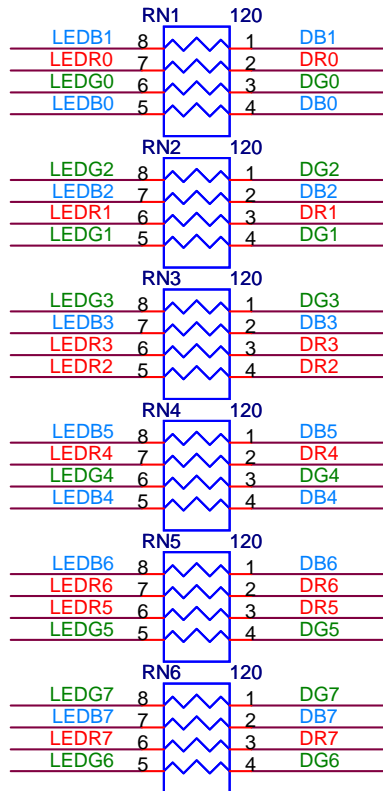


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Title		
<b>DE3 Base Board</b>		
Size	Document Number HSTC B to DDR2 SO-DIMM	Rev 1.1
Date:	Thursday, September 04, 2008	Sheet 9 of 32

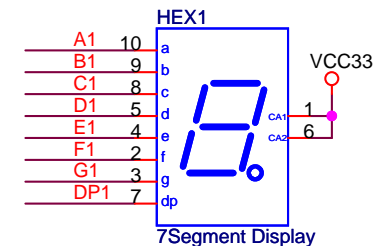
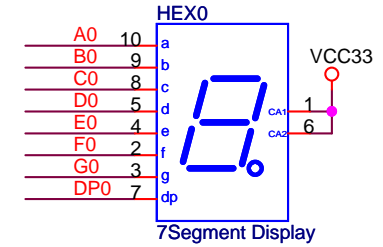
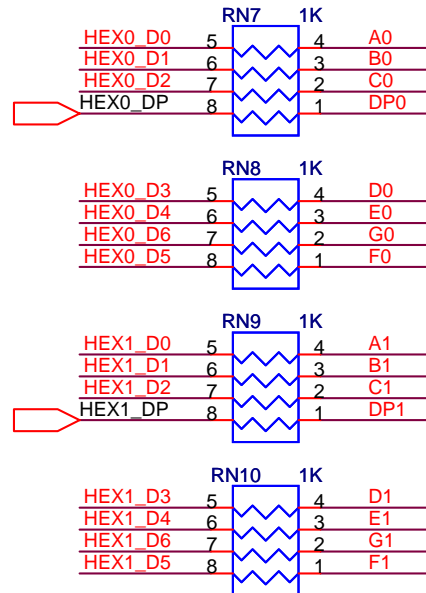


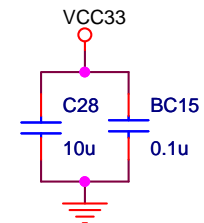
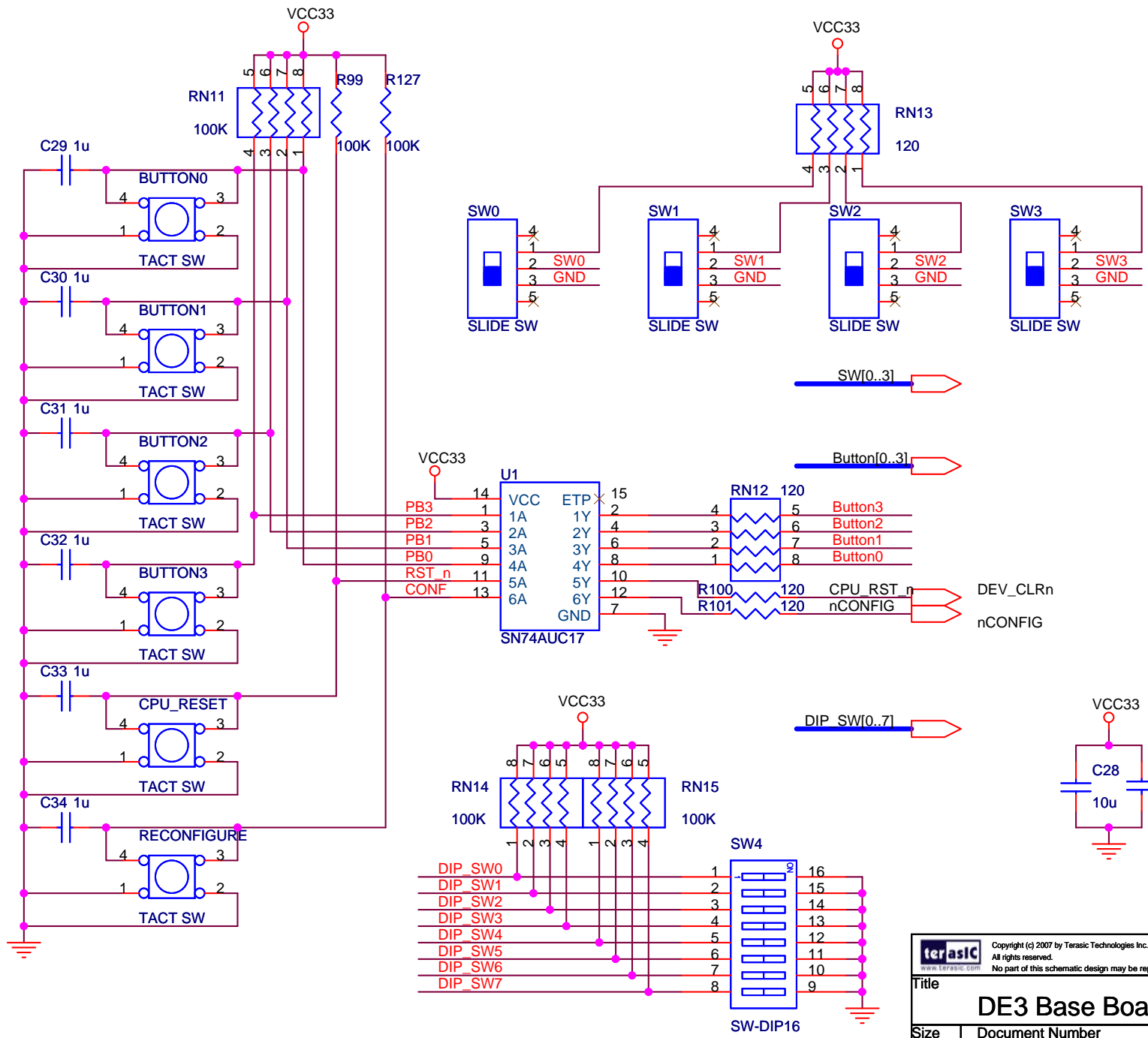
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Title		
<h2>DE3 Base Board</h2>		
Size	Document Number	Rev
A	Onboard OSC and EXTERNAL CLOCK	1.1
Date:	Thursday, September 04, 2008	Sheet 10 of 32

LEDR[0..7]  
LEDG[0..7]  
LEDB[0..7]



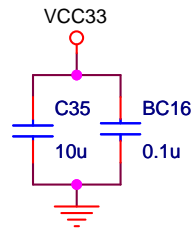
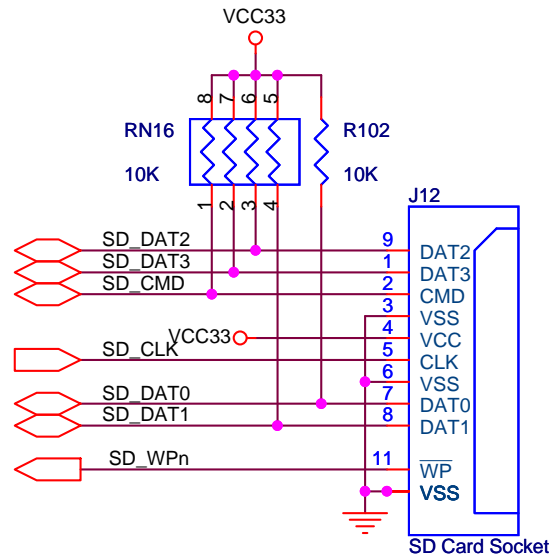
HEX0 DI[0..6]  
HEX1 DI[0..6]




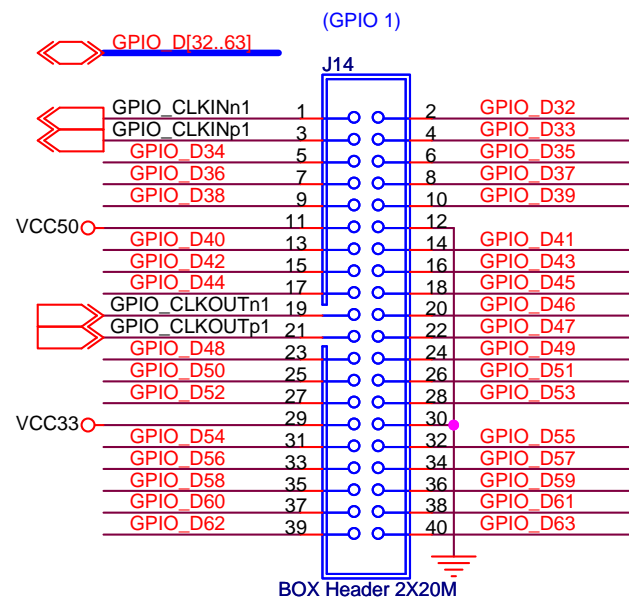
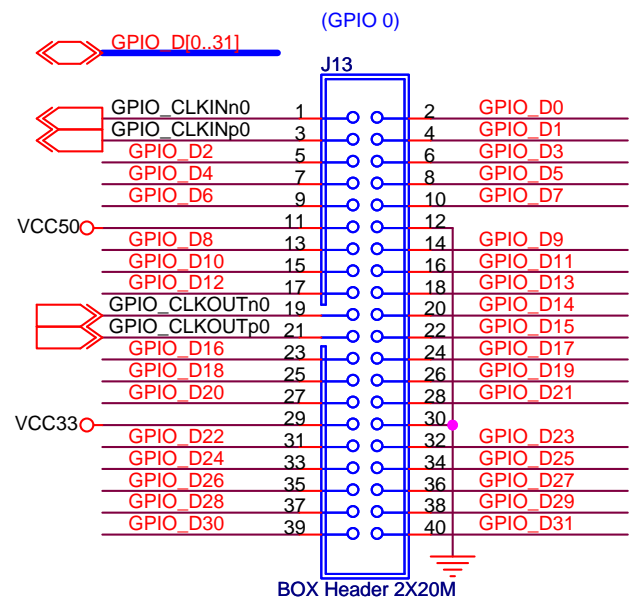



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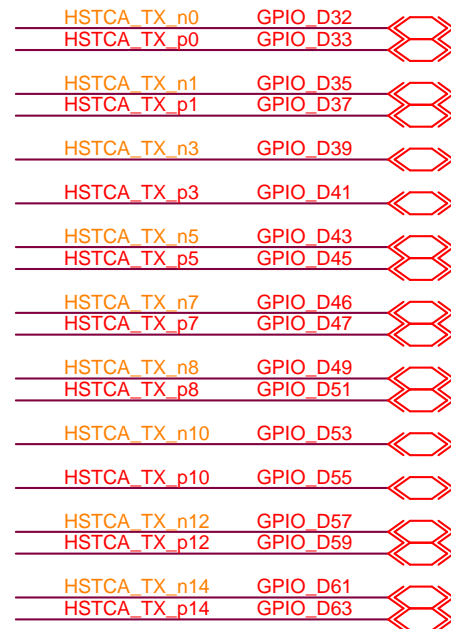
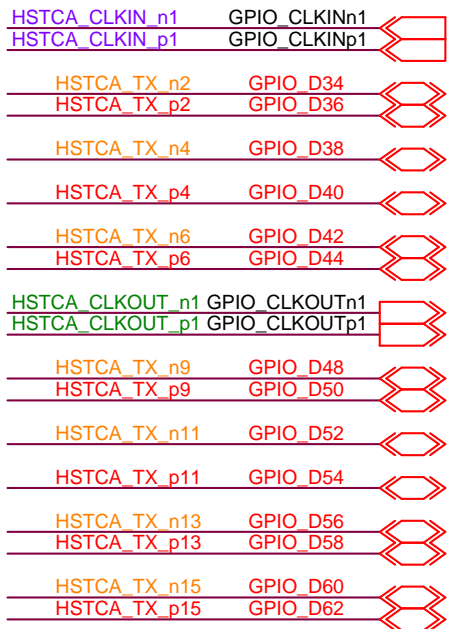
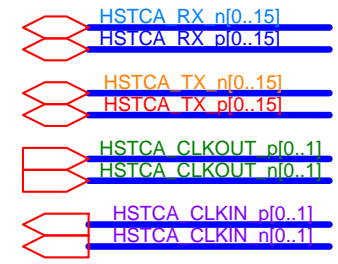
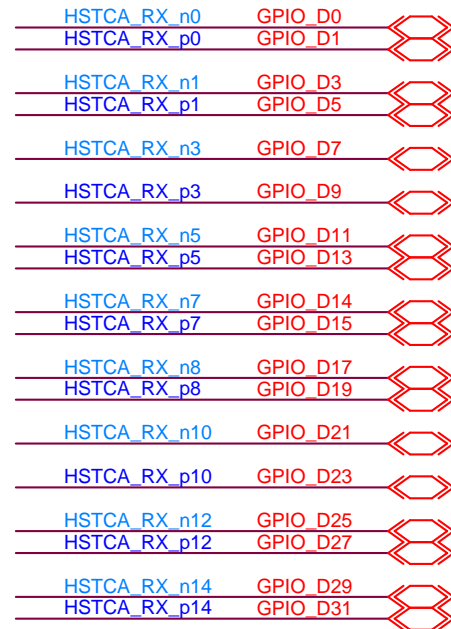
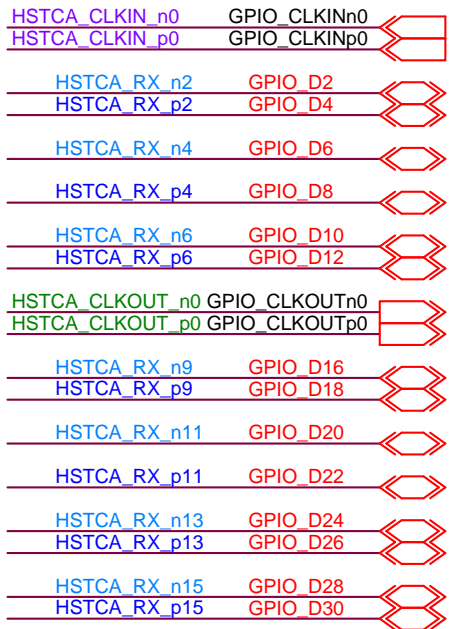
Title <b>DE3 Base Board</b>		
Size A	Document Number DIP Switc, Toggle Switch, Button Switch, CPU Reset, ReConfigure	Rev 1.1
Date:	Thursday, September 04, 2008	Sheet 12 of 32




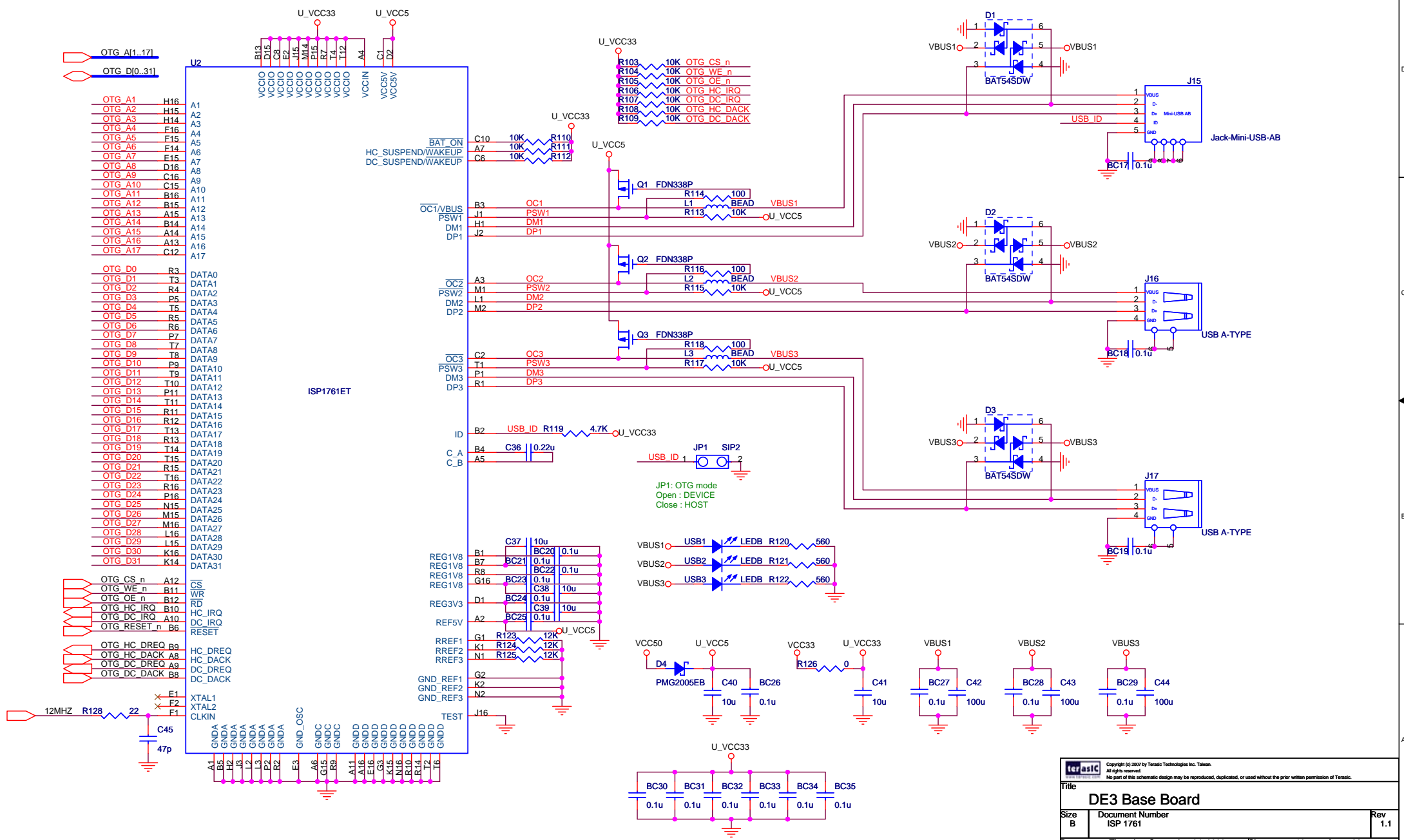
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Title		
<b>DE3 Base Board</b>		
Size	Document Number	Rev
A	SD Card Socket	1.1
Date:	Thursday, September 04, 2008	Sheet 13 of 32



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Title		
<b>DE3 Base Board</b>		
Size	Document Number	Rev
A	GPIO Connector	1.1
Date:	Thursday, September 04, 2008	Sheet 14 of 32

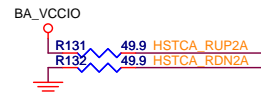
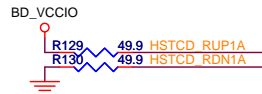
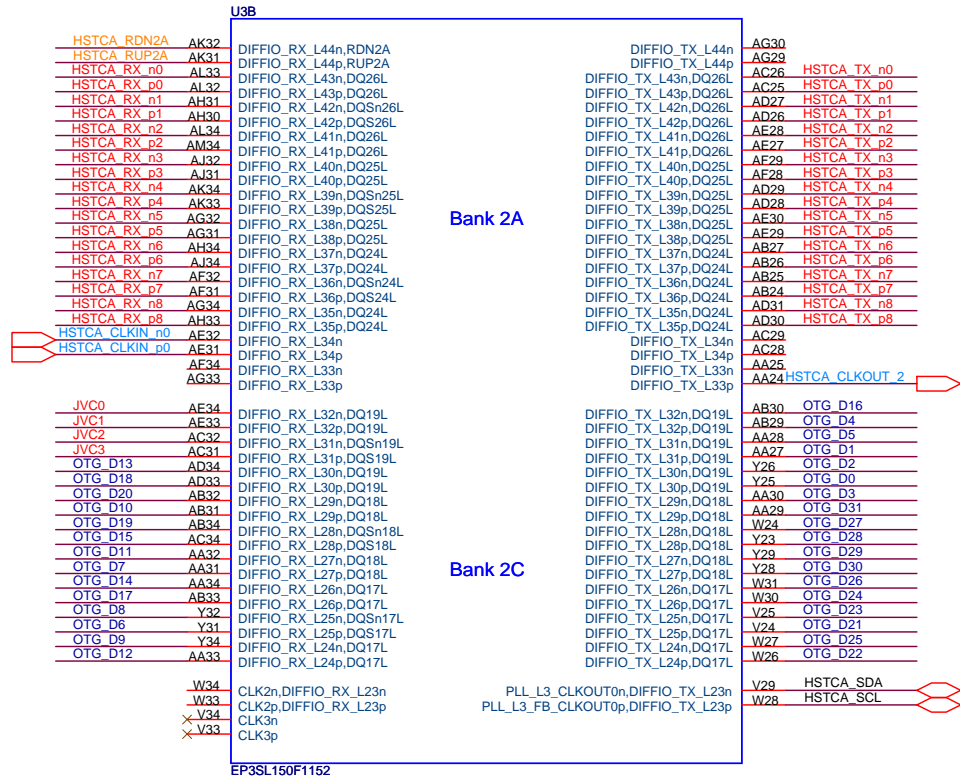
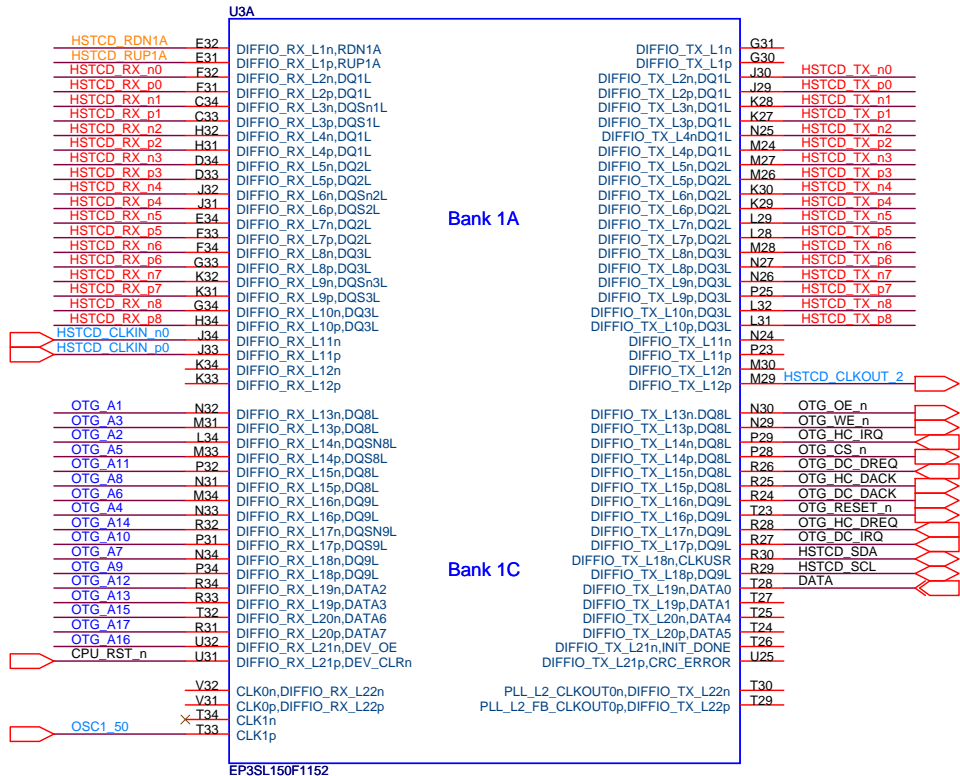
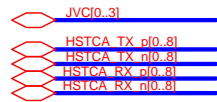
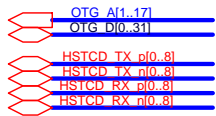


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<b>Title</b> <b>DE3 Base Board</b>		
<b>Size</b>	<b>Document Number</b> HSTC A to GPIO	<b>Rev</b> 1.1
<b>Date:</b>	Thursday, September 04, 2008	<b>Sheet</b> 15 <b>of</b> 32

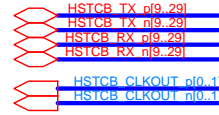
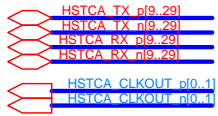


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Title		
DE3 Base Board		
Size	Document Number	Rev
B	ISP 1761	1.1
Date:	Thursday, September 04, 2008	Sheet 16 of 32





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Title	
DE3 Base Board	
Size	Document Number
B	EP2C70 BANK1 AND BANK 2
Date:	Thursday, September 04, 2008
Sheet	17 of 32
Rev	1.1

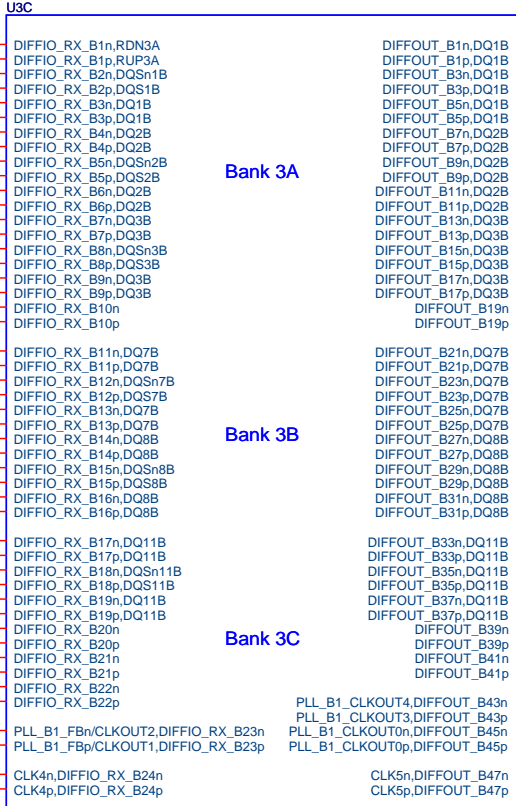
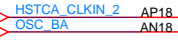


**HSTCA RDN3A** AK28  
**HSTCA RUP3A** AJ28  
**HSTCA RX n25** AM32  
**HSTCA RX p25** AM31  
**HSTCA RX n24** AN30  
**HSTCA RX p24** AM30  
**HSTCA RX n23** AH24  
**HSTCA RX p23** AG24  
**HSTCA RX n22** AP33  
**HSTCA RX p22** AP33  
**HSTCA RX n21** AP31  
**HSTCA RX p21** AN31  
**HSTCA RX n20** AL27  
**HSTCA RX p20** AL26  
**HSTCA RX n19** AP28  
**HSTCA RX p19** AN28  
**HSTCA RX n18** AP27  
**HSTCA RX p18** AN27  
**HSTCA RX n27** AD22  
**HSTCA RX p27** AC22

**HSTCA RX n17** AJ22  
**HSTCA RX p17** AH22  
**HSTCA RX n16** AM24  
**HSTCA RX p16** AL24  
**HSTCA RX n15** AM23  
**HSTCA RX p15** AL23  
**HSTCA RX n14** AG21  
**HSTCA RX p14** AP21  
**HSTCA RX n13** AP25  
**HSTCA RX p13** AN25  
**HSTCA RX n12** AP24  
**HSTCA RX p12** AN24

**HSTCA RX n11** AL21  
**HSTCA RX p11** AK21  
**HSTCA RX n10** AP22  
**HSTCA RX p10** AN22  
**HSTCA RX n9** AP21  
**HSTCA RX p9** AN21  
**HSTCA RX n26** AM19  
**HSTCA RX p26** AL19  
**HSTCA RX n29** AF20  
**HSTCA RX p29** AF19

**HSTCA RX n28** AK19  
**HSTCA RX p28** AJ19



**DIFFOUT\_B1n,DQ1B**  
**DIFFOUT\_B1p,DQ1B**  
**DIFFOUT\_B3n,DQ1B**  
**DIFFOUT\_B3p,DQ1B**  
**DIFFOUT\_B5n,DQ1B**  
**DIFFOUT\_B5p,DQ1B**  
**DIFFOUT\_B7n,DQ2B**  
**DIFFOUT\_B7p,DQ2B**  
**DIFFOUT\_B9n,DQ2B**  
**DIFFOUT\_B9p,DQ2B**  
**DIFFOUT\_B11n,DQ2B**  
**DIFFOUT\_B11p,DQ2B**  
**DIFFOUT\_B13n,DQ3B**  
**DIFFOUT\_B13p,DQ3B**  
**DIFFOUT\_B15n,DQ3B**  
**DIFFOUT\_B15p,DQ3B**  
**DIFFOUT\_B17n,DQ3B**  
**DIFFOUT\_B17p,DQ3B**  
**DIFFOUT\_B19n**  
**DIFFOUT\_B19p**

**DIFFOUT\_B21n,DQ7B**  
**DIFFOUT\_B21p,DQ7B**  
**DIFFOUT\_B23n,DQ7B**  
**DIFFOUT\_B23p,DQ7B**  
**DIFFOUT\_B25n,DQ7B**  
**DIFFOUT\_B25p,DQ7B**  
**DIFFOUT\_B27n,DQ8B**  
**DIFFOUT\_B27p,DQ8B**  
**DIFFOUT\_B29n,DQ8B**  
**DIFFOUT\_B29p,DQ8B**  
**DIFFOUT\_B31n,DQ8B**  
**DIFFOUT\_B31p,DQ8B**

**DIFFOUT\_B33n,DQ11B**  
**DIFFOUT\_B33p,DQ11B**  
**DIFFOUT\_B35n,DQ11B**  
**DIFFOUT\_B35p,DQ11B**  
**DIFFOUT\_B37n,DQ11B**  
**DIFFOUT\_B37p,DQ11B**  
**DIFFOUT\_B39n**  
**DIFFOUT\_B39p**  
**DIFFOUT\_B41n**  
**DIFFOUT\_B41p**

**PLL\_B1\_CLKOUT4,DIFFOUT\_B43n**  
**PLL\_B1\_CLKOUT3,DIFFOUT\_B43p**  
**PLL\_B1\_CLKOUT0n,DIFFOUT\_B45n**  
**PLL\_B1\_CLKOUT0p,DIFFOUT\_B45p**



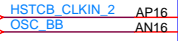
**CLK4n,DIFFIO\_RX\_B24n**  
**CLK4p,DIFFIO\_RX\_B24p**  
**CLK5n,DIFFOUT\_B47n**  
**CLK5p,DIFFOUT\_B47p**

**HSTCB RDN4A** AH9  
**HSTCB RUP4A** AG9  
**HSTCB RX n25** AJ8  
**HSTCB RX p25** AH8  
**HSTCB RX n24** AK7  
**HSTCB RX p24** AJ7  
**HSTCB RX n23** AM5  
**HSTCB RX p23** AL5  
**HSTCB RX n22** AP3  
**HSTCB RX p22** AP3  
**HSTCB RX n21** AP4  
**HSTCB RX p21** AN4  
**HSTCB RX n20** AL9  
**HSTCB RX p20** AK9  
**HSTCB RX n19** AJ11  
**HSTCB RX p19** AH11  
**HSTCB RX n18** AJ12  
**HSTCB RX p18** AH12  
**HSTCB RX n27** AD12  
**HSTCB RX p27** AC12

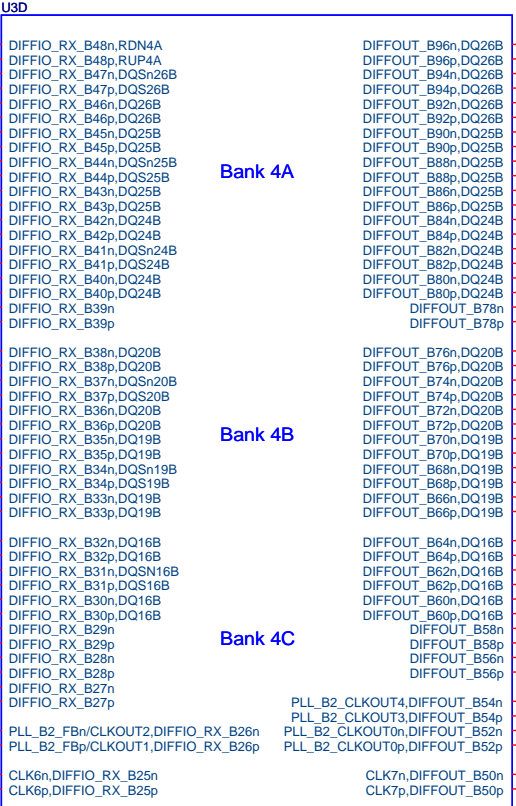
**HSTCB RX n17** AP7  
**HSTCB RX p17** AN7  
**HSTCB RX n16** AL11  
**HSTCB RX p16** AL11  
**HSTCB RX n15** AL12  
**HSTCB RX p15** AK12  
**HSTCB RX n14** AF14  
**HSTCB RX p14** AF13  
**HSTCB RX n13** AN9  
**HSTCB RX p13** AM9  
**HSTCB RX n12** AP10  
**HSTCB RX p12** AN10

**HSTCB RX n11** AP12  
**HSTCB RX p11** AN12  
**HSTCB RX n10** AJ14  
**HSTCB RX p10** AH14  
**HSTCB RX n9** AJ15  
**HSTCB RX p9** AH15  
**HSTCB RX n26** AM14  
**HSTCB RX p26** AL14  
**HSTCB RX n29** AK16  
**HSTCB RX p29** AJ16

**HSTCB RX n28** AM17  
**HSTCB RX p28** AL17



**CLK6n,DIFFIO\_RX\_B25n**  
**CLK6p,DIFFIO\_RX\_B25p**  
**CLK7n,DIFFOUT\_B50n**  
**CLK7p,DIFFOUT\_B50p**



**DIFFIO\_RX\_B48n,RDN4A**  
**DIFFIO\_RX\_B45p,RUP4A**  
**DIFFIO\_RX\_B47n,DQSn26B**  
**DIFFIO\_RX\_B47p,DQSn26B**  
**DIFFIO\_RX\_B46n,DQ26B**  
**DIFFIO\_RX\_B46p,DQ26B**  
**DIFFIO\_RX\_B45n,DQ25B**  
**DIFFIO\_RX\_B45p,DQ25B**  
**DIFFIO\_RX\_B44n,DQSn25B**  
**DIFFIO\_RX\_B44p,DQSn25B**  
**DIFFIO\_RX\_B43n,DQ25B**  
**DIFFIO\_RX\_B43p,DQ25B**  
**DIFFIO\_RX\_B42n,DQ24B**  
**DIFFIO\_RX\_B42p,DQ24B**  
**DIFFIO\_RX\_B41n,DQSn24B**  
**DIFFIO\_RX\_B41p,DQSn24B**  
**DIFFIO\_RX\_B40n,DQ24B**  
**DIFFIO\_RX\_B40p,DQ24B**  
**DIFFIO\_RX\_B39n**  
**DIFFIO\_RX\_B39p**

**DIFFIO\_RX\_B38n,DQ20B**  
**DIFFIO\_RX\_B38p,DQ20B**  
**DIFFIO\_RX\_B37n,DQSn20B**  
**DIFFIO\_RX\_B37p,DQSn20B**  
**DIFFIO\_RX\_B36n,DQ20B**  
**DIFFIO\_RX\_B36p,DQ20B**  
**DIFFIO\_RX\_B35n,DQ19B**  
**DIFFIO\_RX\_B35p,DQ19B**  
**DIFFIO\_RX\_B34n,DQSn19B**  
**DIFFIO\_RX\_B34p,DQSn19B**  
**DIFFIO\_RX\_B33n,DQ19B**  
**DIFFIO\_RX\_B33p,DQ19B**

**DIFFIO\_RX\_B32n,DQ16B**  
**DIFFIO\_RX\_B32p,DQ16B**  
**DIFFIO\_RX\_B31n,DQSn16B**  
**DIFFIO\_RX\_B31p,DQSn16B**  
**DIFFIO\_RX\_B30n,DQ16B**  
**DIFFIO\_RX\_B30p,DQ16B**  
**DIFFIO\_RX\_B29n**  
**DIFFIO\_RX\_B29p**  
**DIFFIO\_RX\_B28n**  
**DIFFIO\_RX\_B28p**  
**DIFFIO\_RX\_B27n**  
**DIFFIO\_RX\_B27p**

**PLL\_B2\_CLKOUT2,DIFFIO\_RX\_B26n**  
**PLL\_B2\_CLKOUT1,DIFFIO\_RX\_B26p**  
**PLL\_B2\_CLKOUT0n,DIFFOUT\_B52n**  
**PLL\_B2\_CLKOUT0p,DIFFOUT\_B52p**



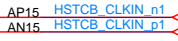
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**CLK7p,DIFFOUT\_B50p**

**DIFFOUT\_B96n,DQ26B**  
**DIFFOUT\_B94n,DQ26B**  
**DIFFOUT\_B94p,DQ26B**  
**DIFFOUT\_B92n,DQ26B**  
**DIFFOUT\_B92p,DQ26B**  
**DIFFOUT\_B90n,DQ25B**  
**DIFFOUT\_B90p,DQ25B**  
**DIFFOUT\_B88n,DQ25B**  
**DIFFOUT\_B88p,DQ25B**  
**DIFFOUT\_B86n,DQ25B**  
**DIFFOUT\_B86p,DQ25B**  
**DIFFOUT\_B84n,DQ24B**  
**DIFFOUT\_B84p,DQ24B**  
**DIFFOUT\_B82n,DQ24B**  
**DIFFOUT\_B82p,DQ24B**  
**DIFFOUT\_B80n,DQ24B**  
**DIFFOUT\_B80p,DQ24B**  
**DIFFOUT\_B78n**  
**DIFFOUT\_B78p**

**DIFFOUT\_B76n,DQ20B**  
**DIFFOUT\_B76p,DQ20B**  
**DIFFOUT\_B74n,DQ20B**  
**DIFFOUT\_B74p,DQ20B**  
**DIFFOUT\_B72n,DQ20B**  
**DIFFOUT\_B72p,DQ20B**  
**DIFFOUT\_B70n,DQ19B**  
**DIFFOUT\_B70p,DQ19B**  
**DIFFOUT\_B68n,DQ19B**  
**DIFFOUT\_B68p,DQ19B**  
**DIFFOUT\_B66n,DQ19B**  
**DIFFOUT\_B66p,DQ19B**

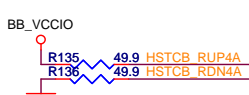
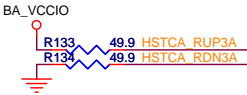
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**DIFFOUT\_B64p,DQ16B**  
**DIFFOUT\_B62n,DQ16B**  
**DIFFOUT\_B62p,DQ16B**  
**DIFFOUT\_B60n,DQ16B**  
**DIFFOUT\_B60p,DQ16B**  
**DIFFOUT\_B58n**  
**DIFFOUT\_B58p**  
**DIFFOUT\_B56n**  
**DIFFOUT\_B56p**

**PLL\_B2\_CLKOUT4,DIFFOUT\_B54n**  
**PLL\_B2\_CLKOUT3,DIFFOUT\_B54p**  
**PLL\_B2\_CLKOUT0n,DIFFOUT\_B52n**  
**PLL\_B2\_CLKOUT0p,DIFFOUT\_B52p**



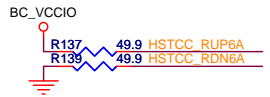
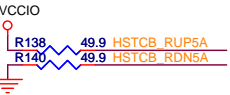
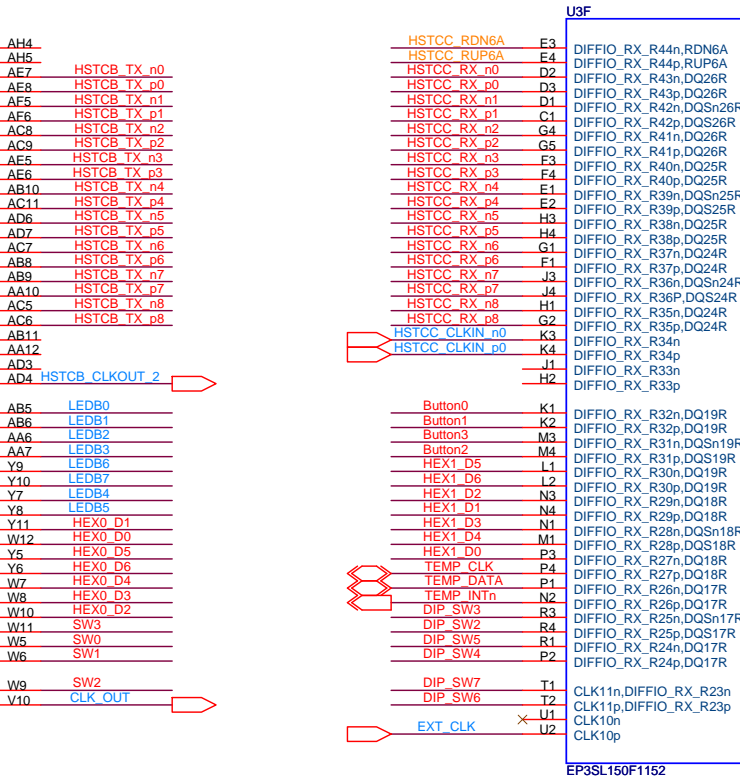
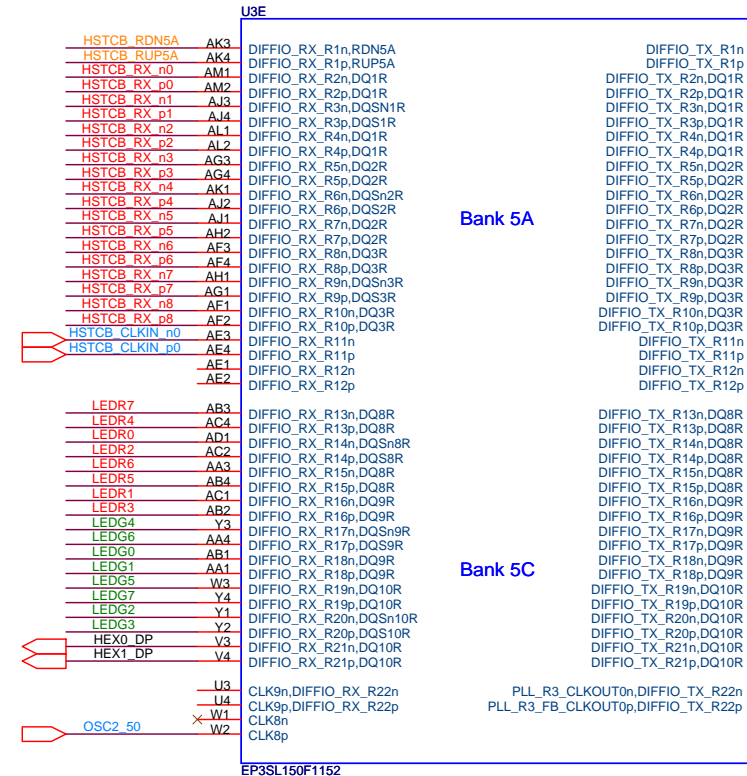
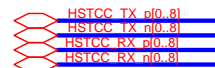
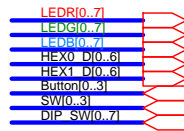
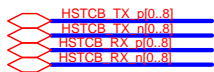
**AD16 HSTCB CLKOUT n0**  
**AD15 HSTCB CLKOUT p0**  
**AD18 HSTCB CLKOUT n1**  
**AD17 HSTCB CLKOUT p1**

**AP15 HSTCB CLKIN n1**  
**AN15 HSTCB CLKIN p1**



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**Title** DE3 Base Board  
**Size** Document Number EP2C70 BANK3 AND BANK 4 Rev 1.1  
**Date** Thursday, September 04, 2008 **Sheet** 18 of 32

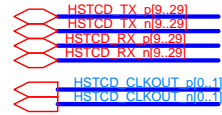
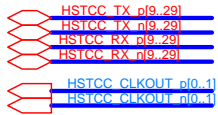


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**Title**  
DE3 Base Board

**Size**  
B Document Number EP2C70 BANKS AND BANK 6 Rev 1.1

**Date:** Thursday, September 04, 2008 **Sheet** 19 of 32

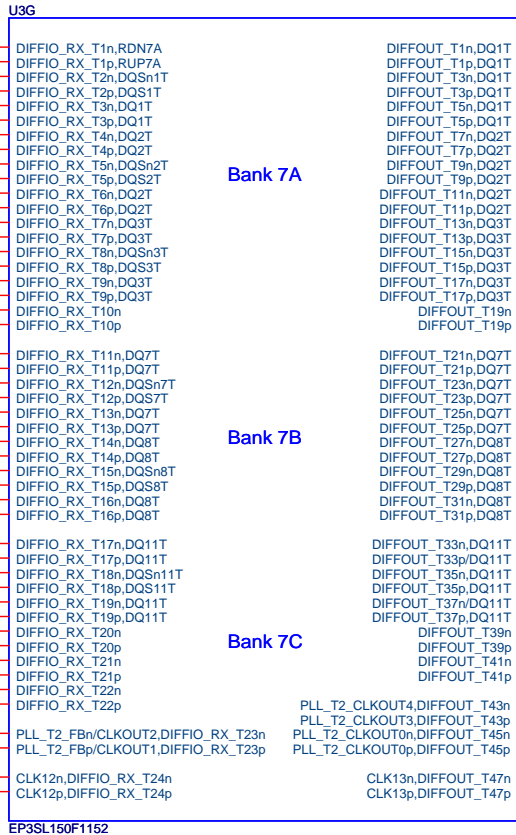
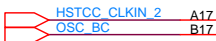


HSTCC_RDN7A	E7
HSTCC_RUP7A	F7
HSTCC_RX_n25	C3
HSTCC_RX_p25	C4
HSTCC_RX_n24	B5
HSTCC_RX_p24	C5
HSTCC_RX_n23	G11
HSTCC_RX_p23	H11
HSTCC_RX_n22	A2
HSTCC_RX_p22	B2
HSTCC_RX_n21	B4
HSTCC_RX_p21	A4
HSTCC_RX_n20	C9
HSTCC_RX_p20	D9
HSTCC_RX_n19	A7
HSTCC_RX_p19	B7
HSTCC_RX_n18	A8
HSTCC_RX_p18	B8
HSTCC_RX_n27	K11
HSTCC_RX_p27	K12

HSTCC_RX_n17	F12
HSTCC_RX_p17	E13
HSTCC_RX_n16	C11
HSTCC_RX_p16	D11
HSTCC_RX_n15	C12
HSTCC_RX_p15	D12
HSTCC_RX_n14	H14
HSTCC_RX_p14	J14
HSTCC_RX_n13	A10
HSTCC_RX_p13	B10
HSTCC_RX_n12	A11
HSTCC_RX_p12	B11

HSTCC_RX_n11	E14
HSTCC_RX_p11	F14
HSTCC_RX_n10	A13
HSTCC_RX_p10	B13
HSTCC_RX_n9	A14
HSTCC_RX_p9	B14
HSTCC_RX_n26	C16
HSTCC_RX_p26	D16
HSTCC_RX_n29	J16
HSTCC_RX_p29	K16
H16	H16

HSTCC_RX_n28	E16
HSTCC_RX_p28	F16

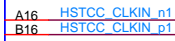


F8	HSTCC_TX_n26
F6	HSTCC_TX_p26
F9	HSTCC_TX_n25
G8	HSTCC_TX_p25
C6	HSTCC_TX_n24
D6	HSTCC_TX_p24
J11	HSTCC_TX_n23
G9	HSTCC_TX_p23
J12	HSTCC_TX_n22
G10	HSTCC_TX_p22
A5	HSTCC_TX_n21
A3	HSTCC_TX_p21
D7	HSTCC_TX_n20
E8	HSTCC_TX_p20
E10	HSTCC_TX_n19
D8	HSTCC_TX_p19
A6	HSTCC_TX_n18
C7	HSTCC_TX_p18
M13	HSTCC_TX_n27
L13	HSTCC_TX_p27

G12	HSTCC_TX_n17
F11	HSTCC_TX_p17
G13	HSTCC_TX_n16
E11	HSTCC_TX_p16
D13	HSTCC_TX_n15
D10	HSTCC_TX_p15
K14	HSTCC_TX_n14
K13	HSTCC_TX_p14
K15	HSTCC_TX_n13
L14	HSTCC_TX_p13
A12	HSTCC_TX_n12
A9	HSTCC_TX_p12

D14	HSTCC_TX_n11
E13	HSTCC_TX_p11
F15	HSTCC_TX_n10
D15	HSTCC_TX_p10
A15	HSTCC_TX_n9
C14	HSTCC_TX_p9
C17	HSTCC_TX_n28
C15	HSTCC_TX_p28
D17	HSTCC_TX_n29
E17	HSTCC_TX_p29

L16	HSTCC_CLKOUT_n0
K16	HSTCC_CLKOUT_p0
K17	HSTCC_CLKOUT_n1
L17	HSTCC_CLKOUT_p1

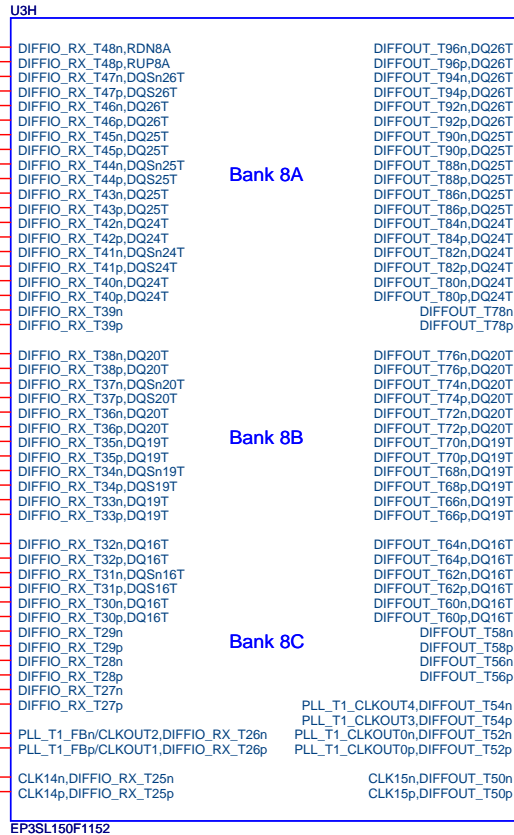
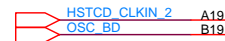


HSTCC_RDN8A	G26
HSTCC_RUP8A	H26
HSTCC_RX_n25	E29
HSTCC_RX_p25	F29
HSTCC_RX_n24	E28
HSTCC_RX_p24	F28
HSTCC_RX_n23	C30
HSTCC_RX_p23	D30
HSTCC_RX_n22	A32
HSTCC_RX_p22	B32
HSTCC_RX_n21	B31
HSTCC_RX_p21	A31
HSTCC_RX_n20	D26
HSTCC_RX_p20	E26
HSTCC_RX_n19	F24
HSTCC_RX_p19	G24
HSTCC_RX_n18	F23
HSTCC_RX_p18	G23
HSTCC_RX_n27	L23
HSTCC_RX_p27	M23

HSTCC_RX_n17	A28
HSTCC_RX_p17	B28
HSTCC_RX_n16	D23
HSTCC_RX_p16	E23
HSTCC_RX_n15	D24
HSTCC_RX_p15	D25
HSTCC_RX_n14	J21
HSTCC_RX_p14	J22
HSTCC_RX_n13	B26
HSTCC_RX_p13	C26
HSTCC_RX_n12	A25
HSTCC_RX_p12	B25

HSTCC_RX_n11	A23
HSTCC_RX_p11	B23
HSTCC_RX_n10	F21
HSTCC_RX_p10	G21
HSTCC_RX_n9	F20
HSTCC_RX_p9	G20
HSTCC_RX_n26	C21
HSTCC_RX_p26	D21
HSTCC_RX_n29	E19
HSTCC_RX_p29	F19
C19	HSTCC_RX_n28
D18	HSTCC_RX_p28

HSTCC_RX_n28	C18
HSTCC_RX_p28	D18

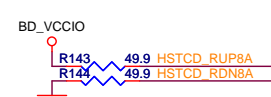
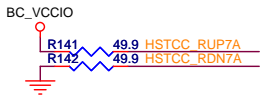


K25	HSTCC_TX_n26
J25	HSTCC_TX_p26
K24	HSTCC_TX_n25
J24	HSTCC_TX_p25
G27	HSTCC_TX_n24
F27	HSTCC_TX_p24
D31	HSTCC_TX_n23
C31	HSTCC_TX_p23
B29	HSTCC_TX_n22
C29	HSTCC_TX_p22
A30	HSTCC_TX_n21
A30	HSTCC_TX_p21
D26	HSTCC_TX_n20
E26	HSTCC_TX_p20
D27	HSTCC_TX_n19
E25	HSTCC_TX_p19
H23	HSTCC_TX_n18
F22	HSTCC_TX_p18
K23	HSTCC_TX_n27
L22	HSTCC_TX_p27

A29	HSTCC_TX_n17
C28	HSTCC_TX_p17
C27	HSTCC_TX_n16
A27	HSTCC_TX_p16
E25	HSTCC_TX_n15
C24	HSTCC_TX_p15
K22	HSTCC_TX_n14
K21	HSTCC_TX_p14
J20	HSTCC_TX_n13
K20	HSTCC_TX_p13
A26	HSTCC_TX_n12
A24	HSTCC_TX_p12

C23	HSTCC_TX_n11
B22	HSTCC_TX_p11
A21	HSTCC_TX_n10
A22	HSTCC_TX_p10
H20	HSTCC_TX_n9
E20	HSTCC_TX_p9
E22	HSTCC_TX_n28
D22	HSTCC_TX_p28
D20	HSTCC_TX_n29
C20	HSTCC_TX_p29

L20	HSTCC_CLKOUT_n0
L19	HSTCC_CLKOUT_p0
J19	HSTCC_CLKOUT_n1
K19	HSTCC_CLKOUT_p1

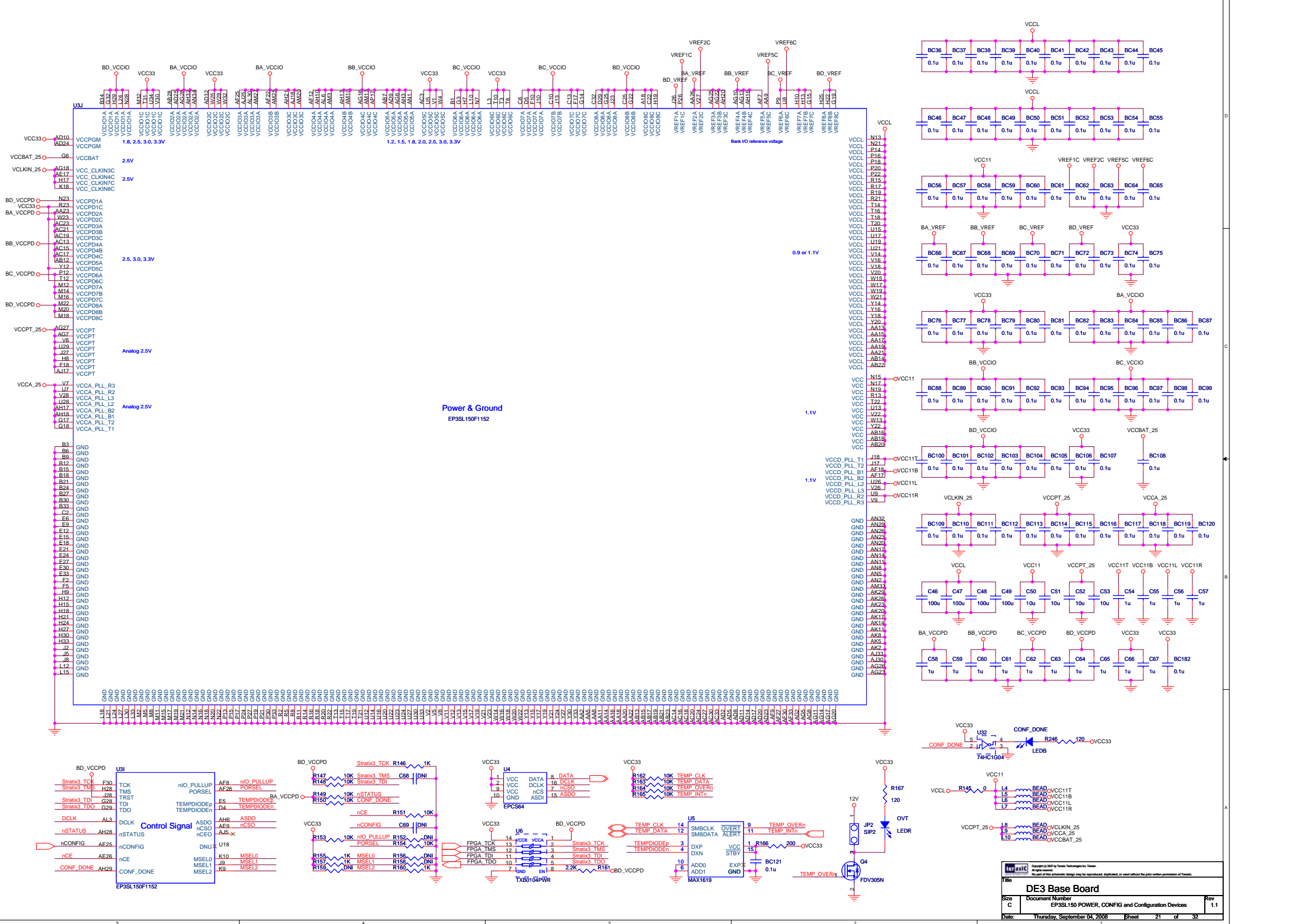


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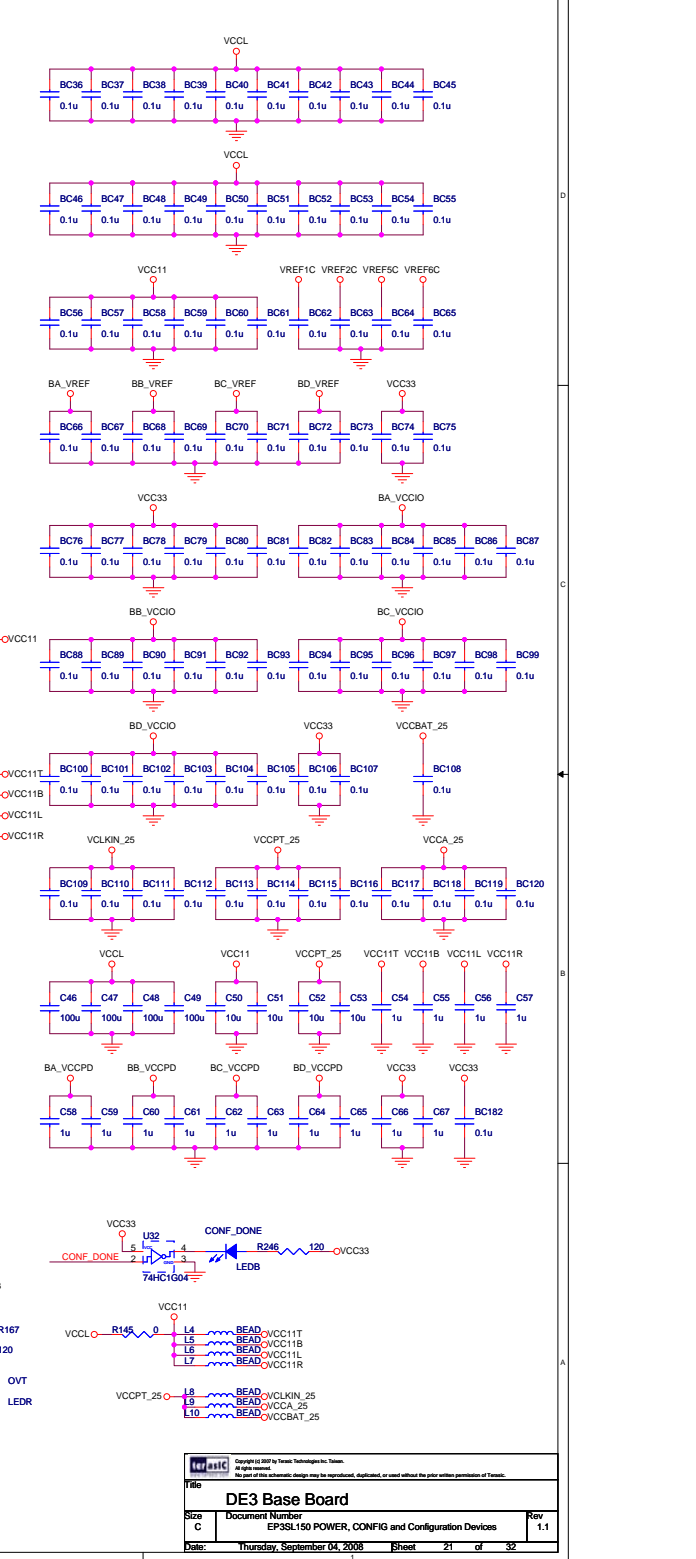
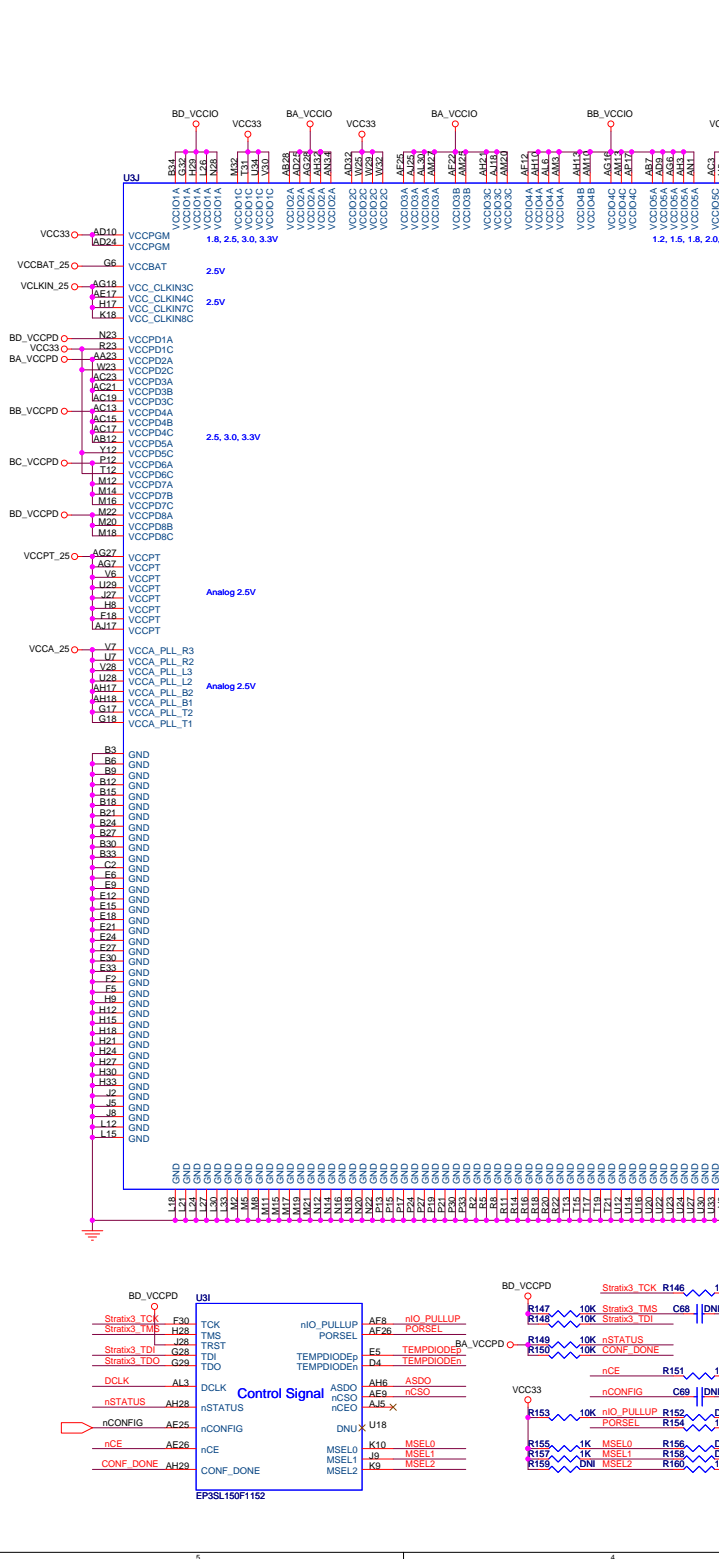
Title: DE3 Base Board

Size B Document Number: EP2C70 BANK7 AND BANK 8 Rev 1.1

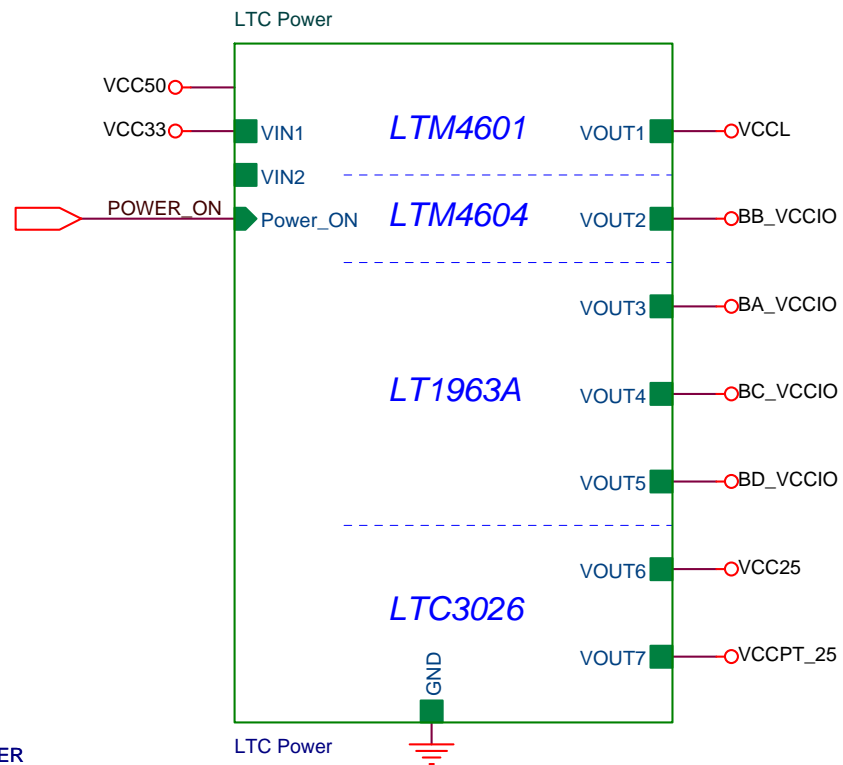
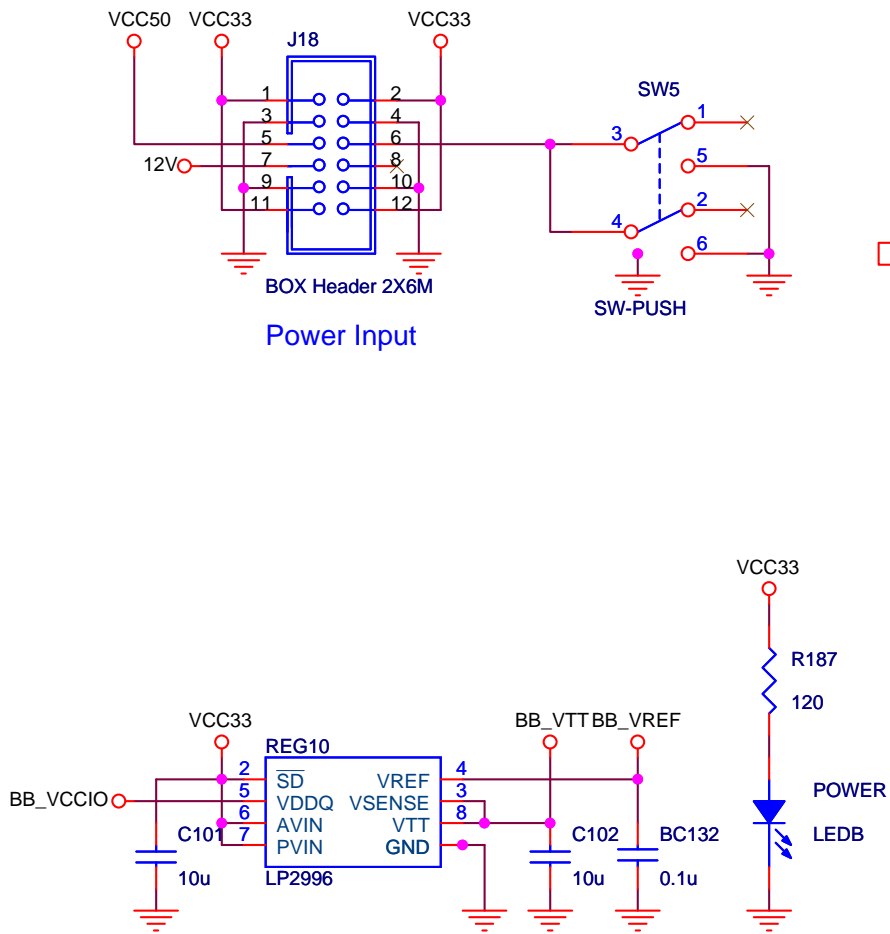
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**Power & Ground**  
EP3SL150F1152



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<b>DE3 Base Board</b>		
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	POWER	1.1
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