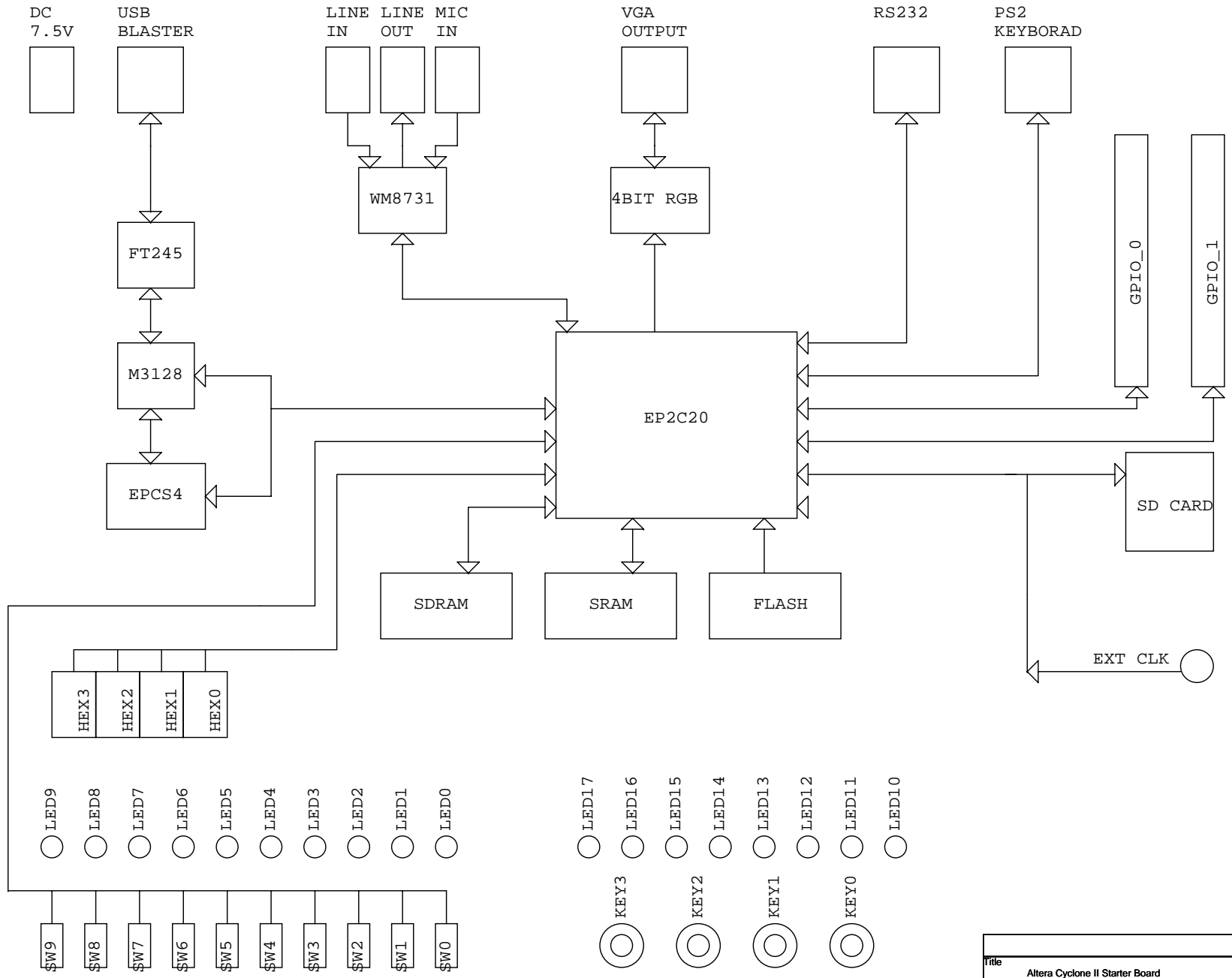
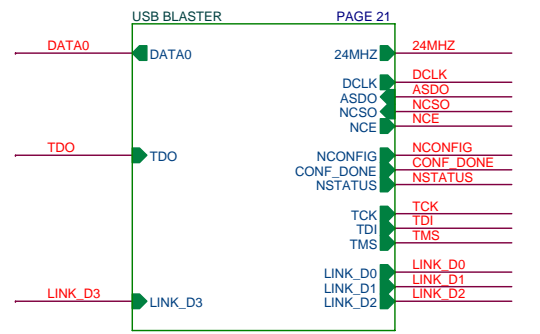
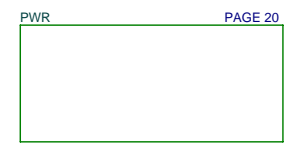
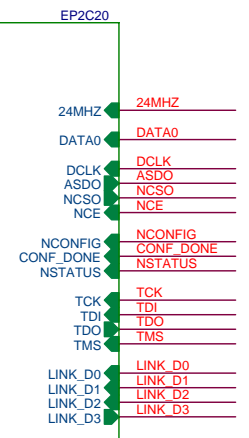
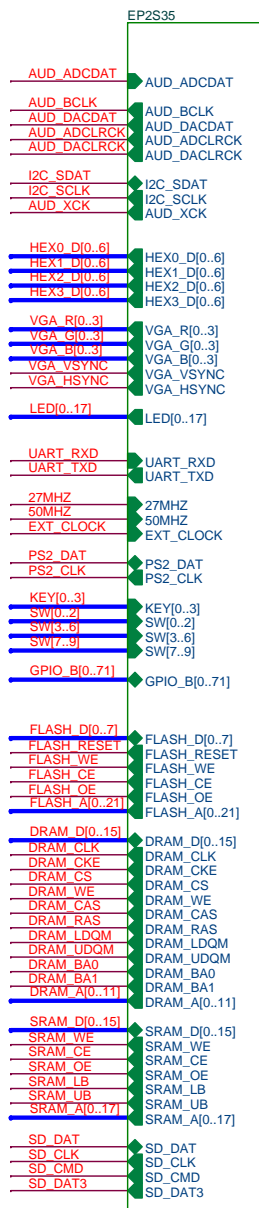
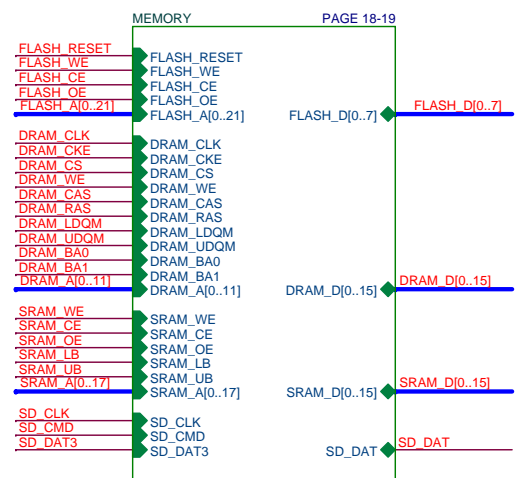
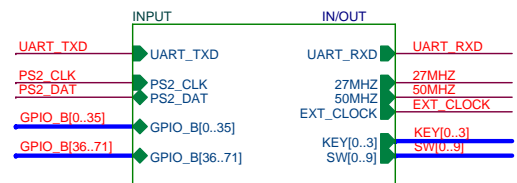
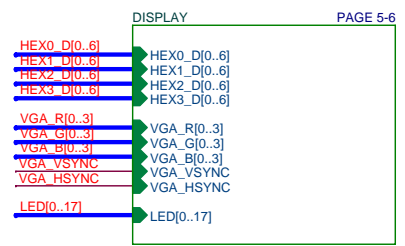
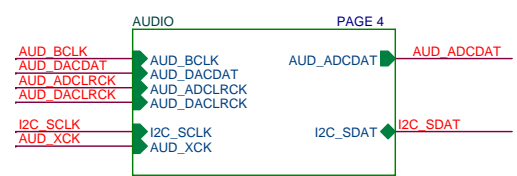


Altera Cyclone II FPGA Starter Board

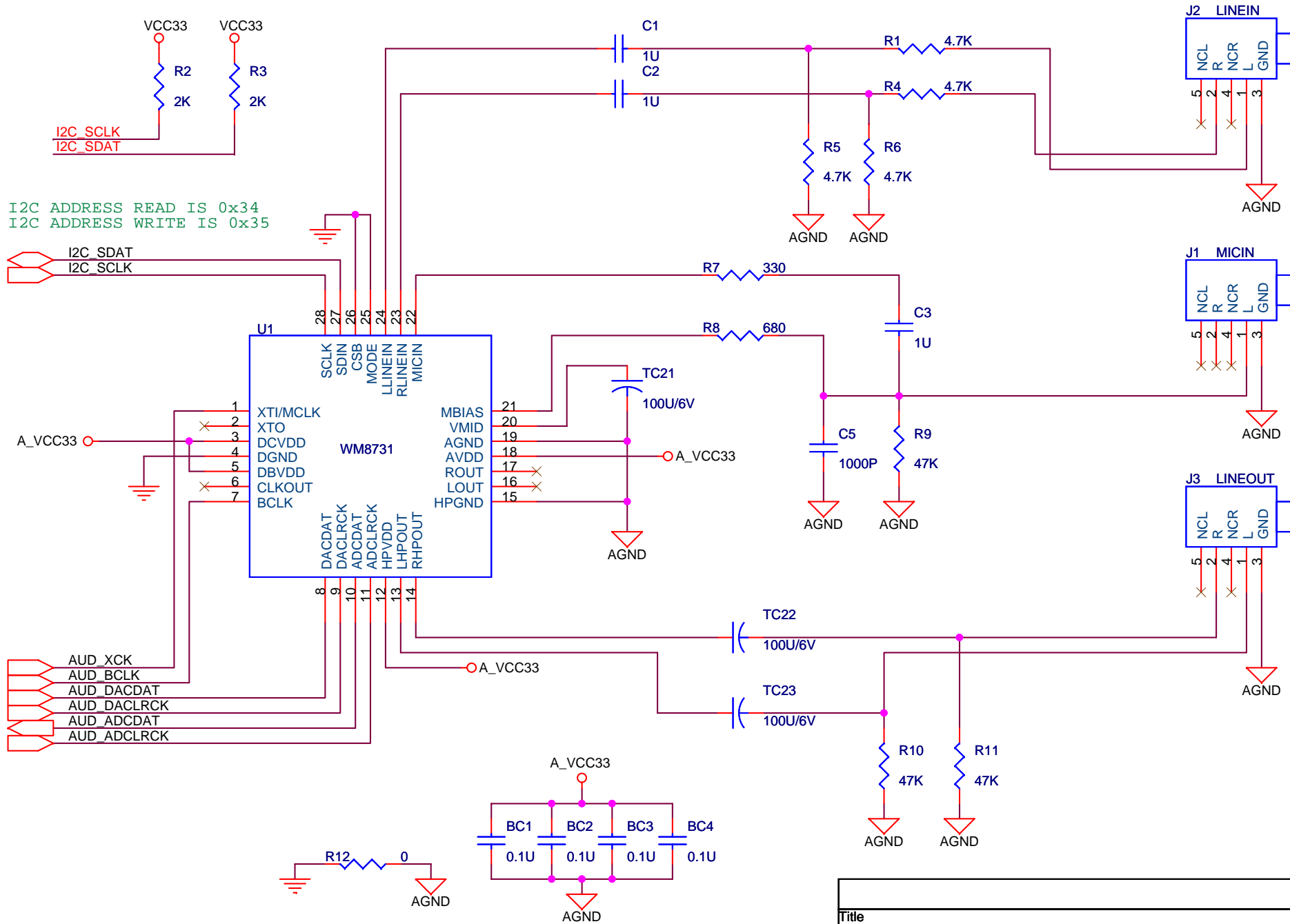
SCHEMATIC	CONTENT	PAGE
TOP	COVER PAGE , TOP	01 ~ 03
AUDIO	WM8731	04 ~ 04
DISPLAY	VGA , 7SEGMENT ,LED	05 ~ 07
EP2C20	EP2C20 BANK1..BANK8 , POWER , CONFIG	08 ~ 12
INPUT	CLOCK , PS2 , RS232 , KEY , SWITCH , CONNECT	13 ~ 17
MEMORY	SRAM , DRAM , FLASH , SD CARD	18 ~ 19
POWER	POWER	20 ~ 20
BLASTER	USB BLASTER	21 ~ 21



Title		
Altera Cyclone II Starter Board		
Size	Document Number	Rev
B	PLACEMENT	1.1A
Date:	Tuesday, October 03, 2006	Sheet 2 of 21

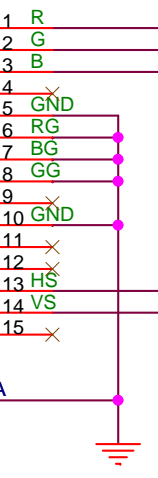
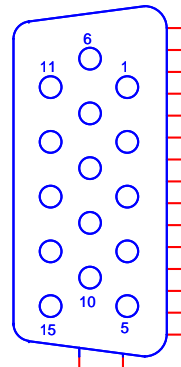


Title		
Altera Cyclone II Starter Board		
Size	Document Number	Rev
B	TOP LEVEL	1.1A
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Title		
Altera Cyclone II Starter Board		
Size	Document Number	Rev
A	AUDIO	1.1A
Date:	Tuesday, October 03, 2006	Sheet 4 of 21

J4



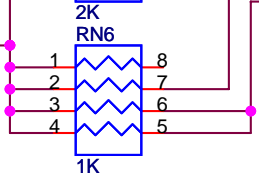
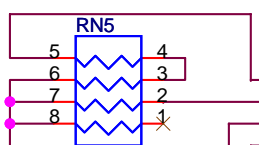
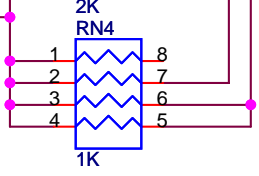
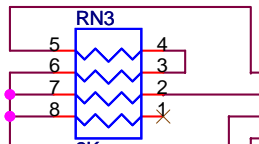
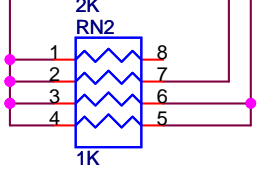
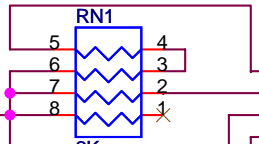
R

G

B

H

V



R13

R14

120

120

VGA_HSYNC

VGA_VSYNC

VGA_R0

VGA_R1

VGA_R2

VGA_R3

VGA_G0

VGA_G1

VGA_G2

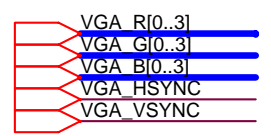
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VGA_B0

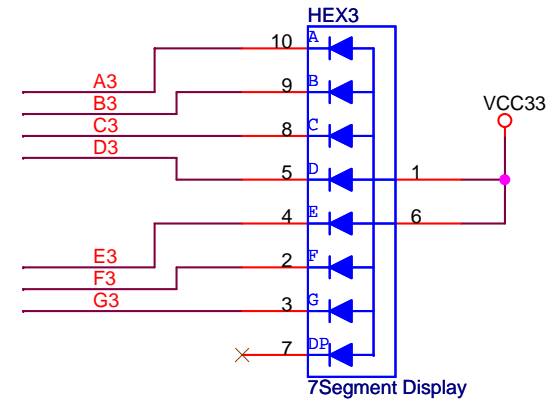
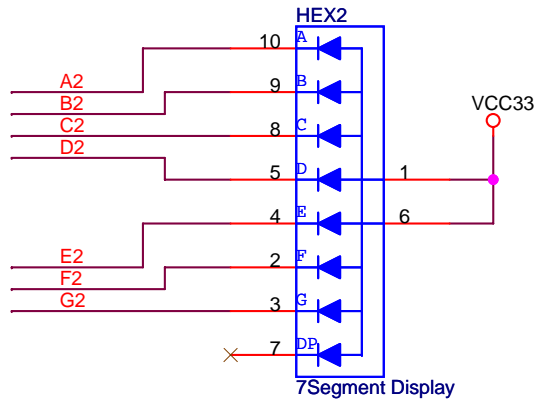
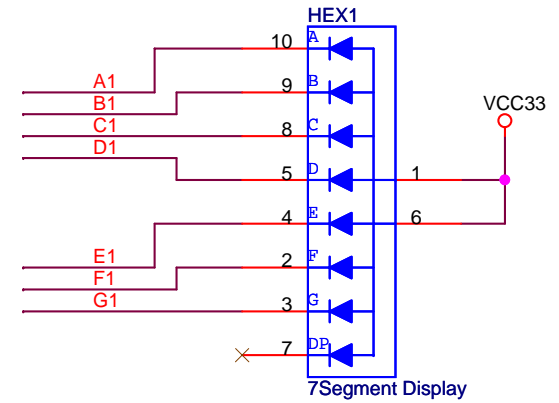
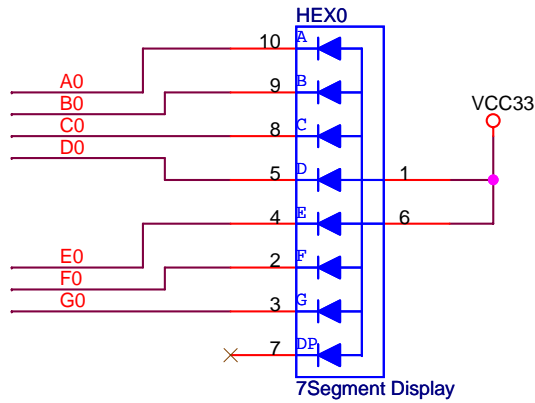
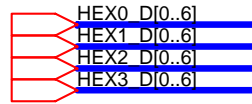
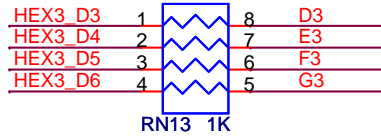
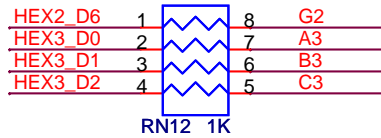
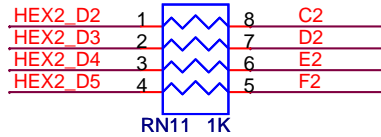
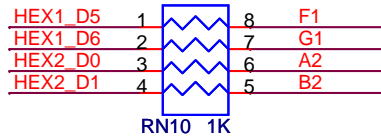
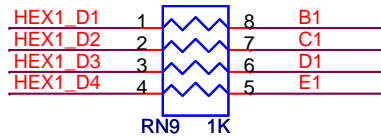
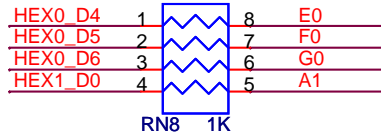
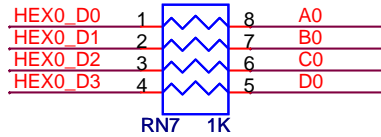
VGA_B1

VGA_B2

VGA_B3

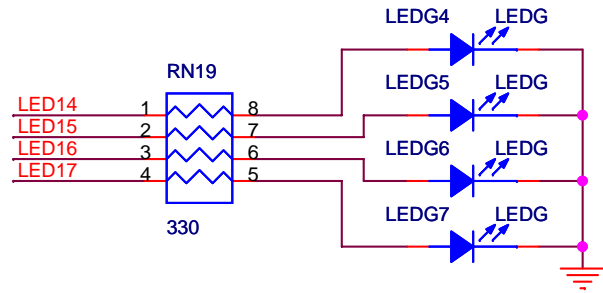
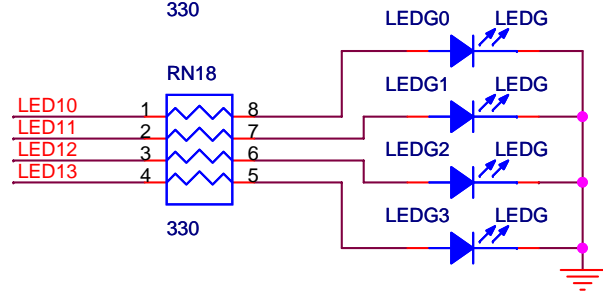
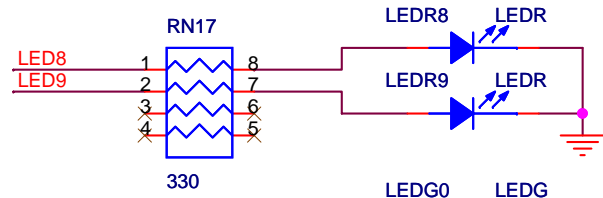
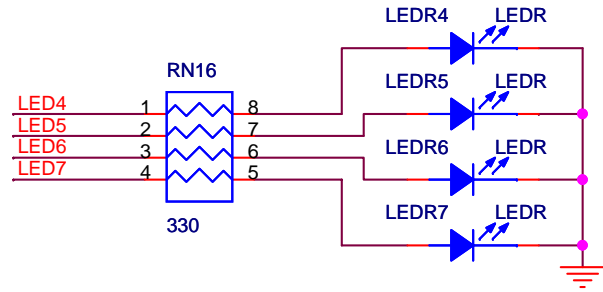
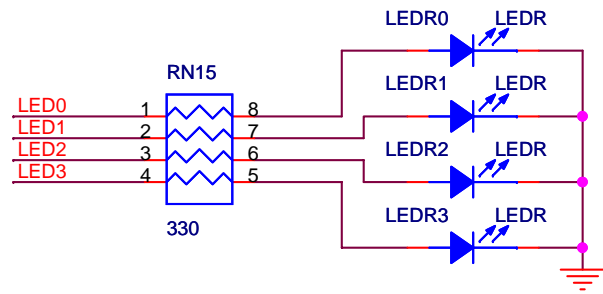


Title		
Altera Cyclone II Starter Board		
Size	Document Number	Rev
A	VGA	1.1A
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Title		
Altera Cyclone II Starter Board		
Size	Document Number	Rev
A	7 SEGMENT	1.1A
Date:	Tuesday, October 03, 2006	Sheet 6 of 21

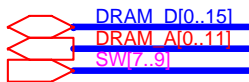
LED[0..17]



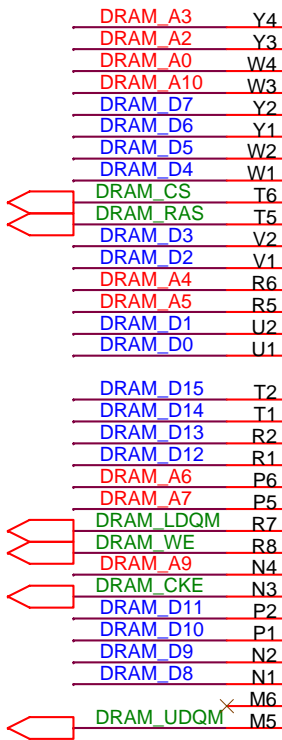
Title		
Altera Cyclone II Starter Board		
Size	Document Number	Rev
A	LED	1.1A
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D

D

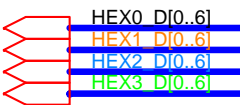
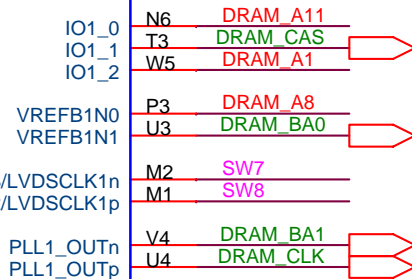


U2A

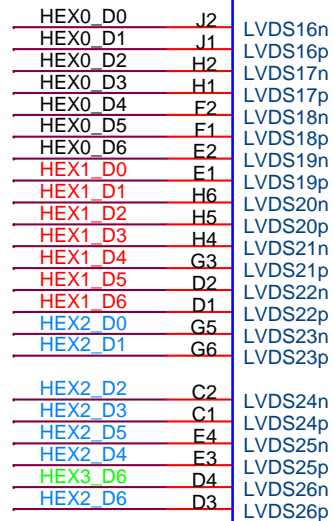


BANK1

CYCLONE II EP2C20

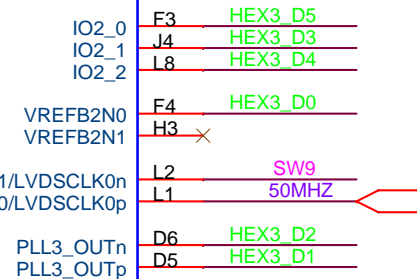


U2B



BANK2

CYCLONE II EP2C20



C

C

B

B

A

A

Title		
Altera Cyclone II Starter Board		
Size	Document Number	Rev
A	EP2C20 BANK1 AND BANK 2	1.1A
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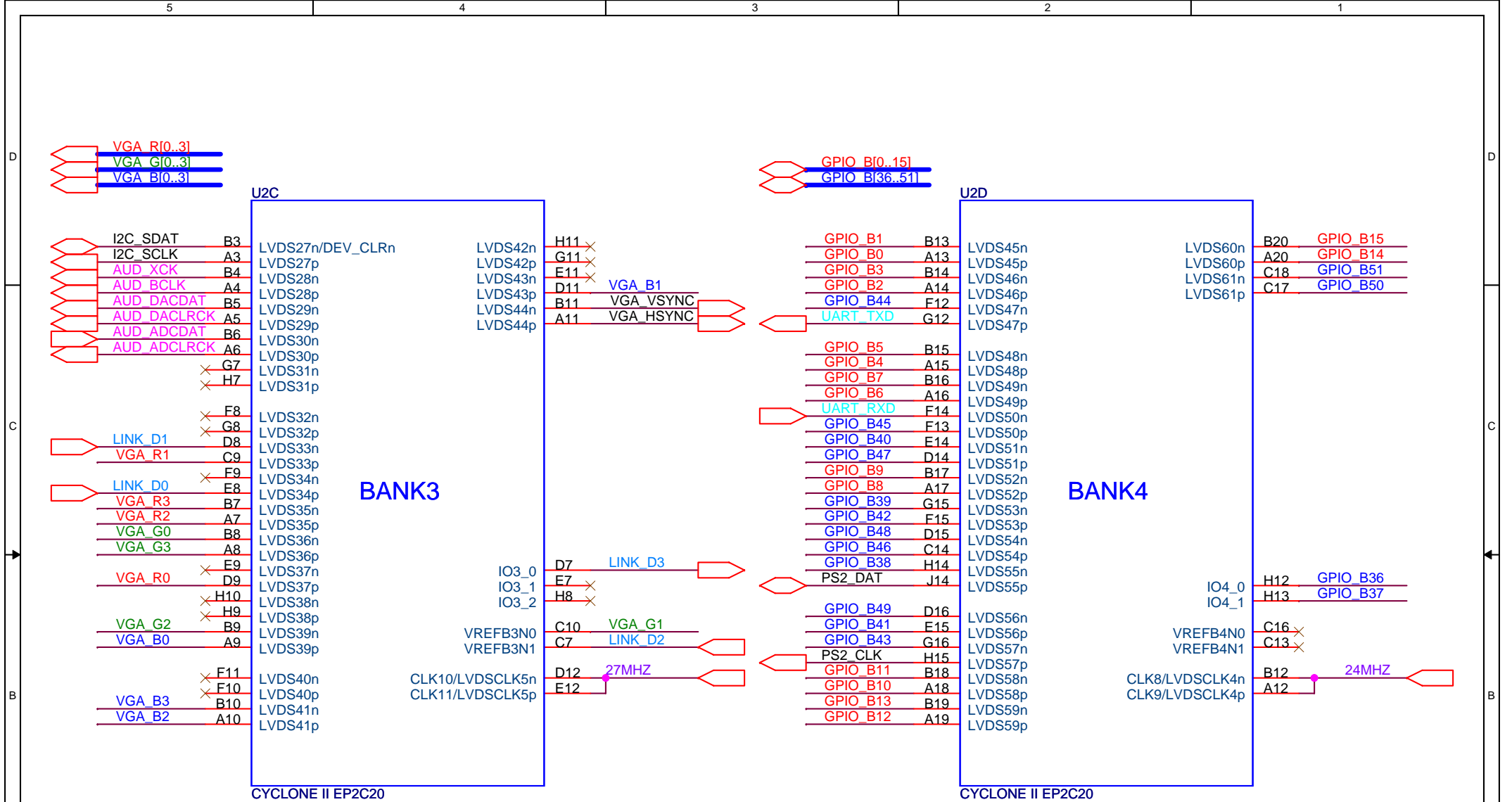
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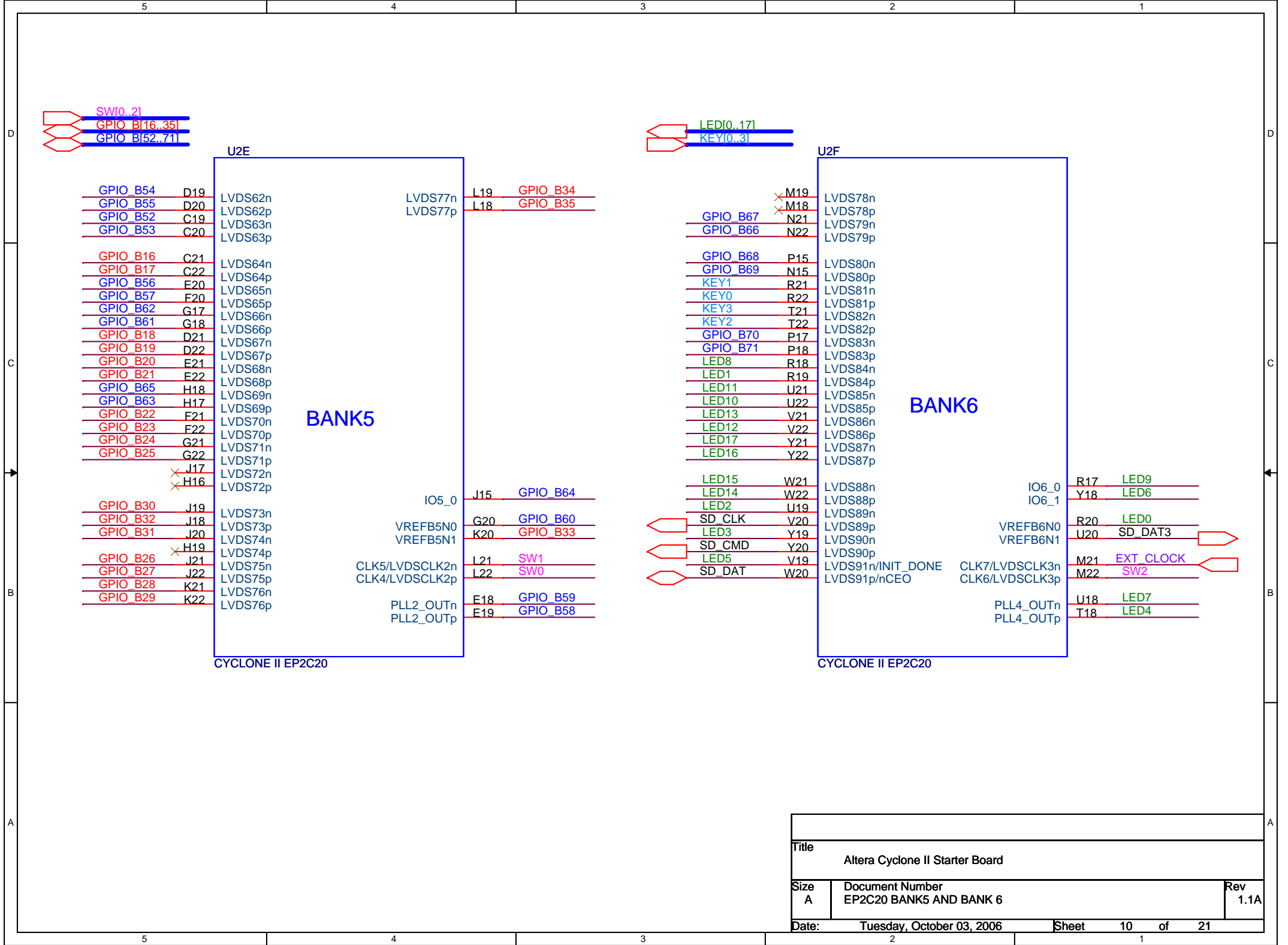
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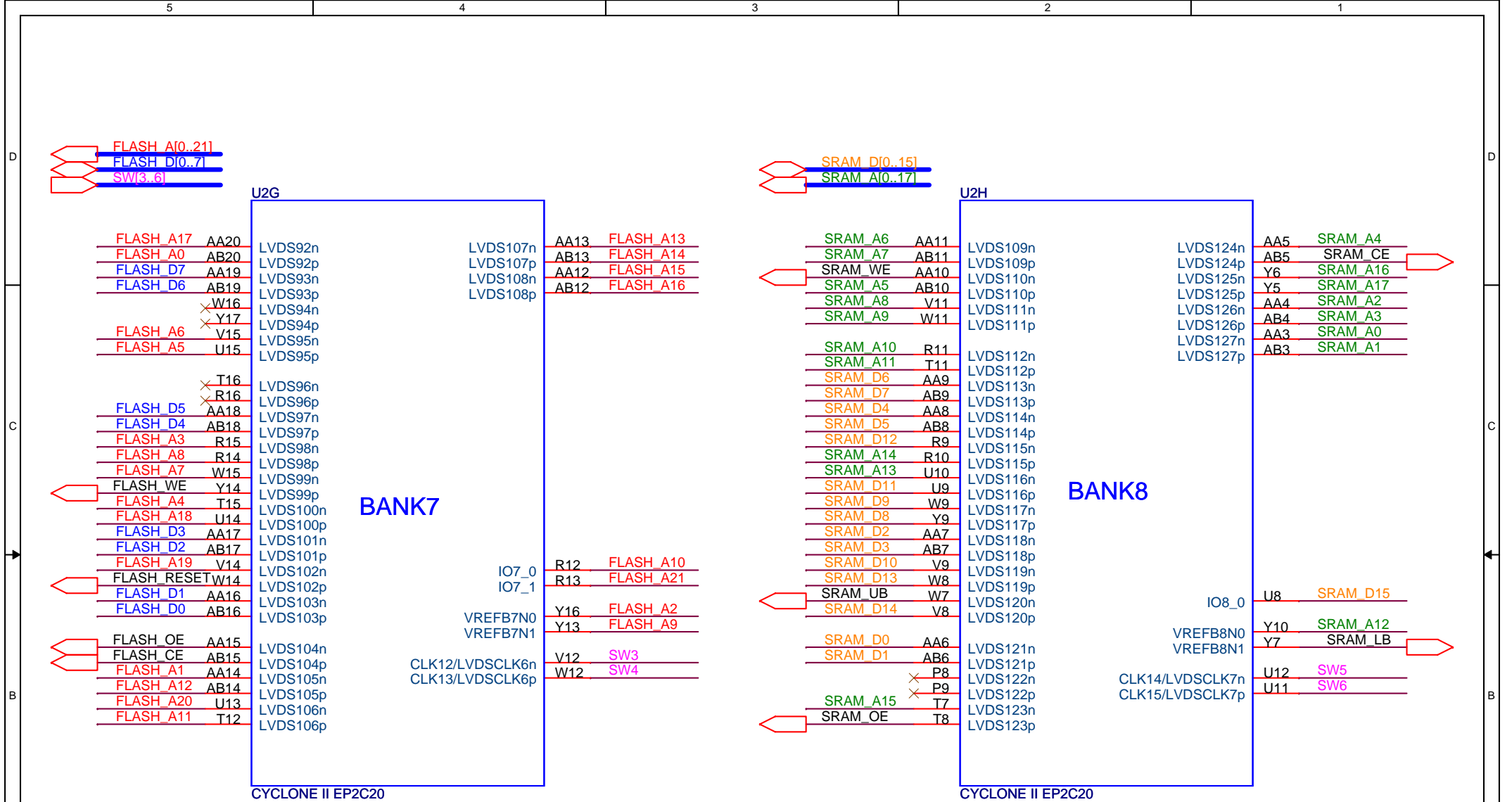
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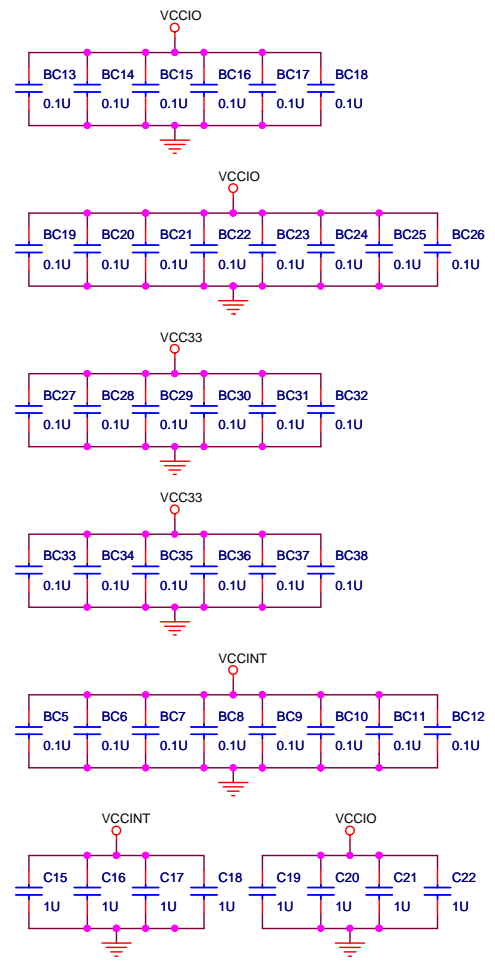
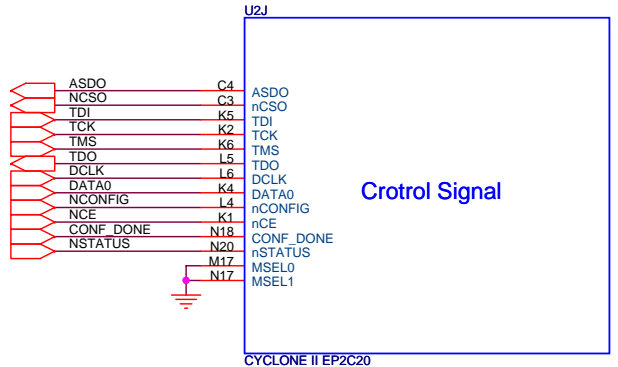
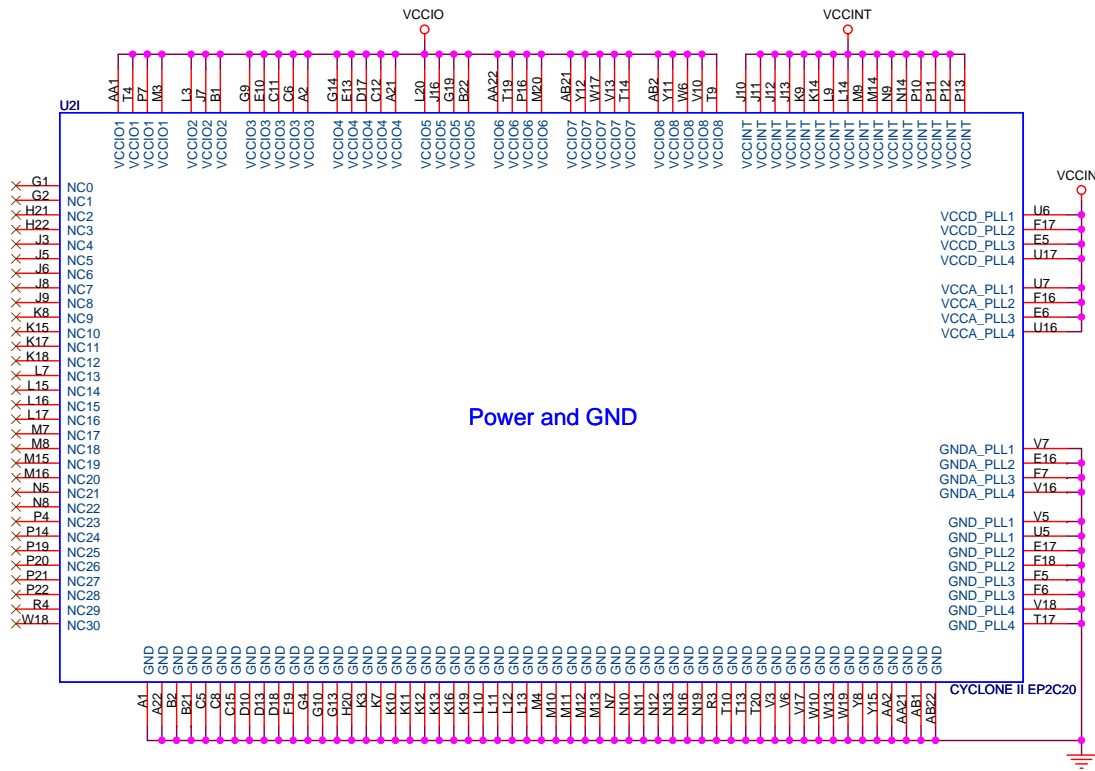
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Altera Cyclone II Starter Board		
Size	Document Number	Rev
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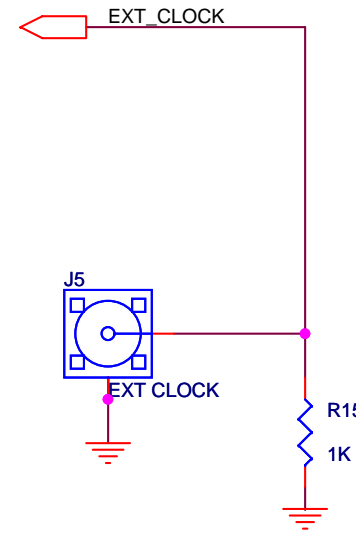
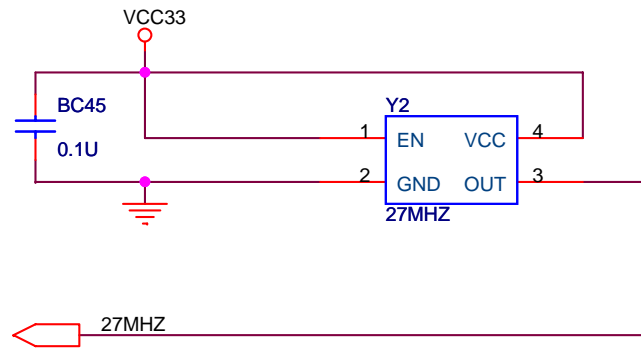
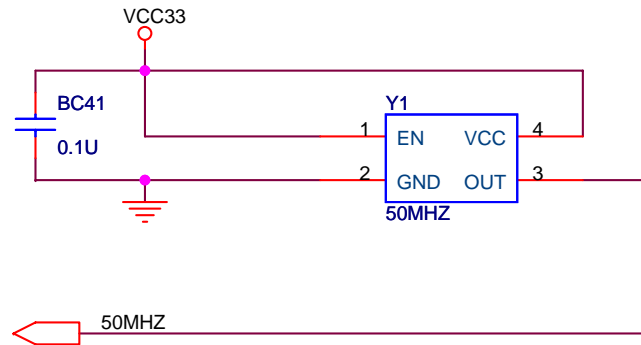
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Size	Document Number	Rev
A	EP2C20 BANK5 AND BANK 6	1.1A
Date:	Tuesday, October 03, 2006	Sheet 10 of 21



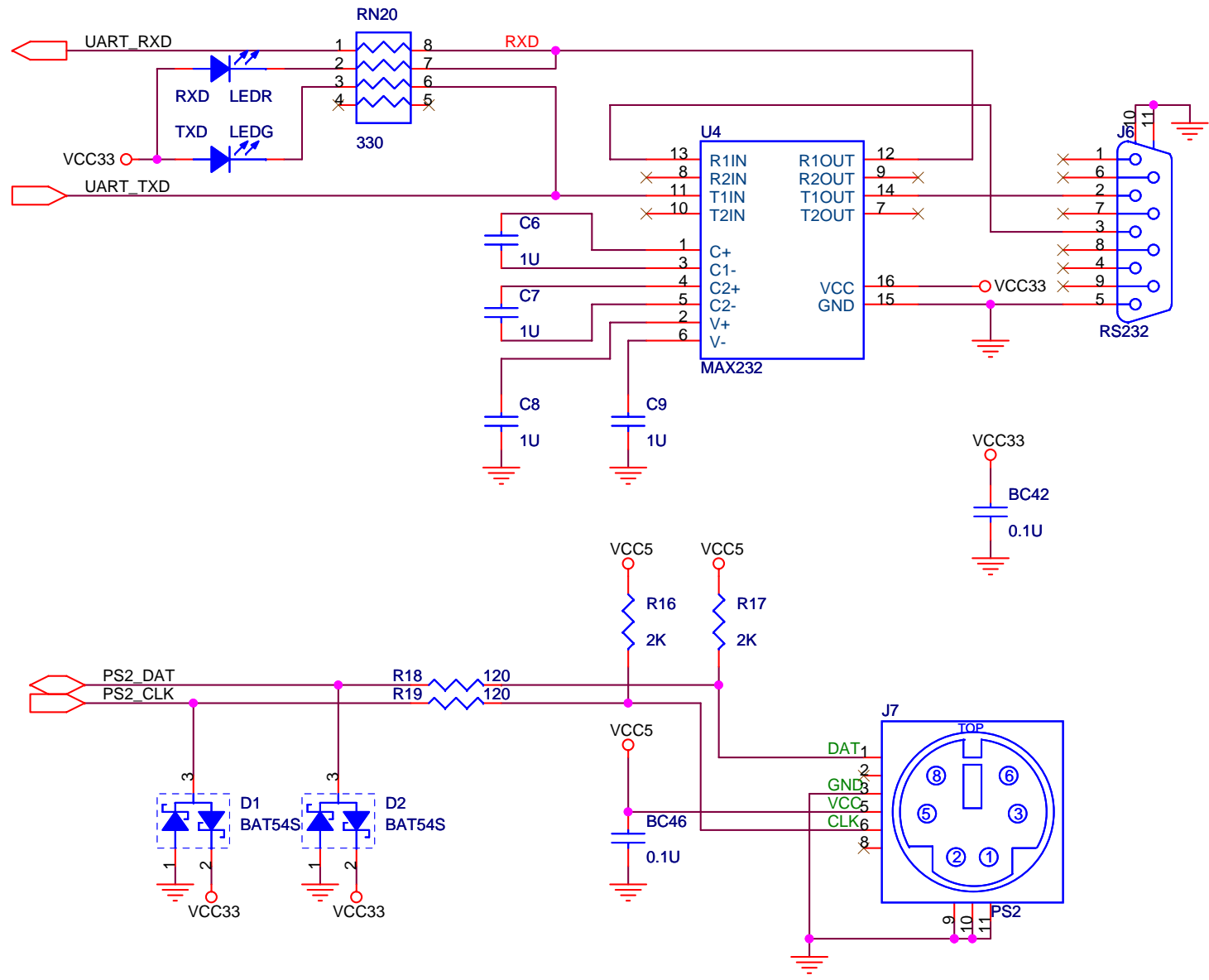
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Altera Cyclone II Starter Board		
Size A	Document Number EP2C20 BANK7 AND BANK 8	Rev 1.1A
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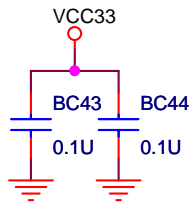
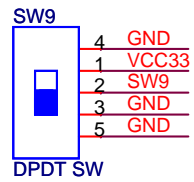
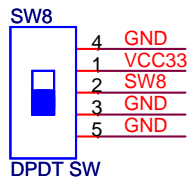
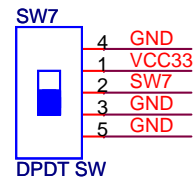
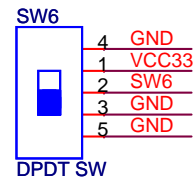
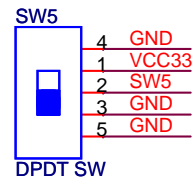
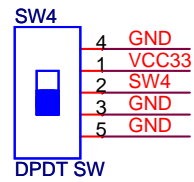
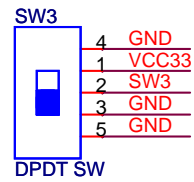
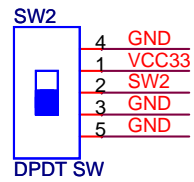
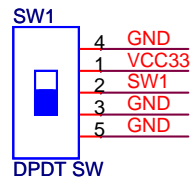
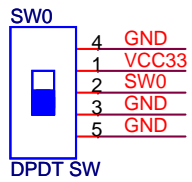
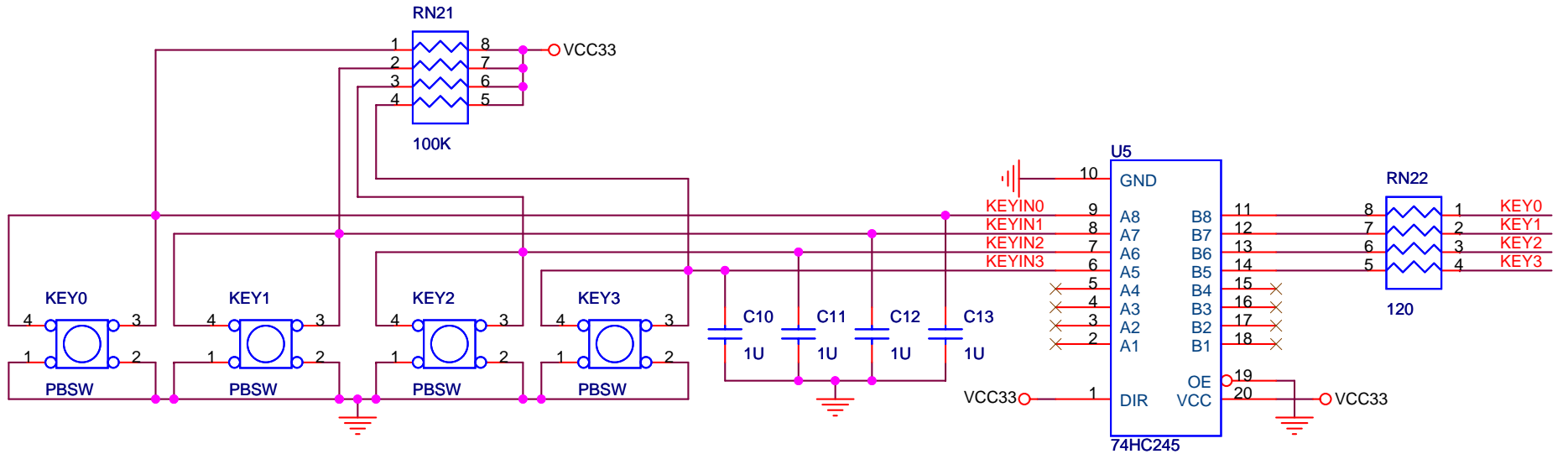
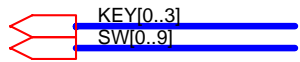
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Altera Cyclone II Starter Board		
Size	Document Number	Rev
B	EP2C20 POWER AND CONFIG	1.1A
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Title		
Altera Cyclone II Starter Board		
Size	Document Number	Rev
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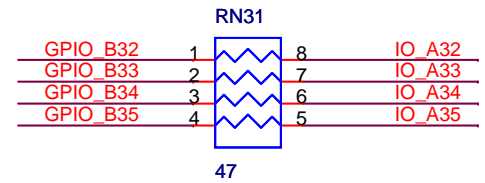
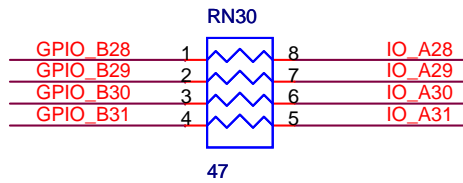
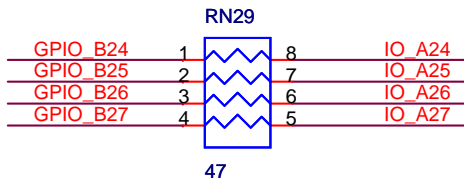
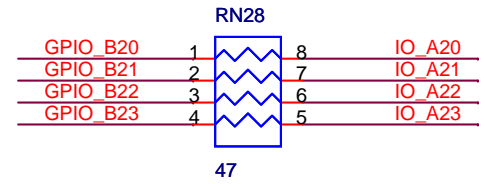
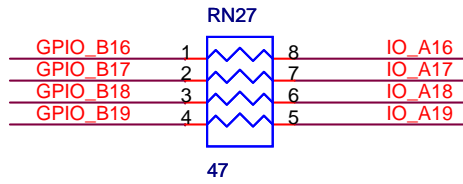
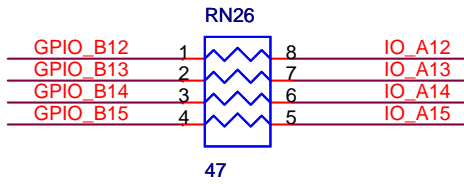
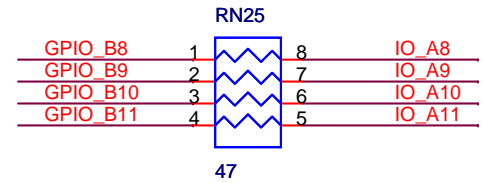
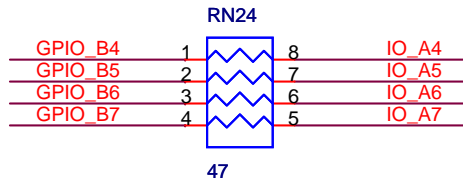
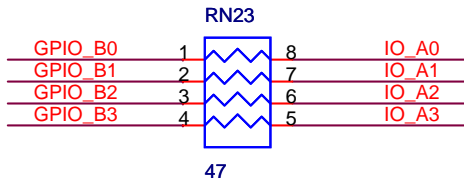


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Altera Cyclone II Starter Board		
Size	Document Number	Rev
A	PS2 AND RS232	1.1A
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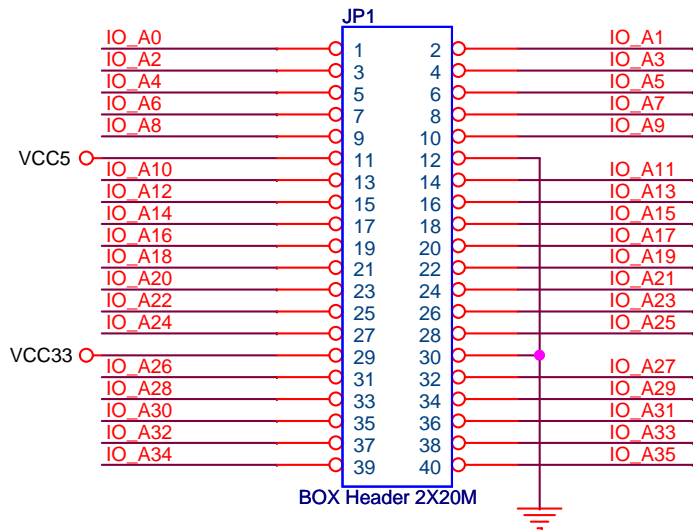


Title		
Altera Cyclone II Starter Board		
Size	Document Number	Rev
A	KEY AND SWITCH	1.1A
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GPIO B[0..35]

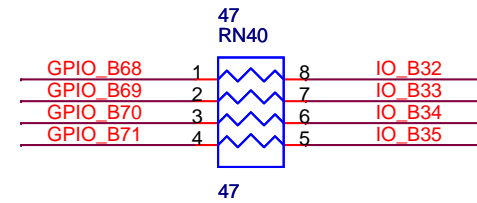
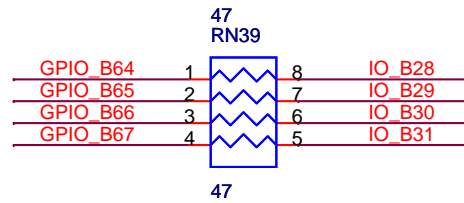
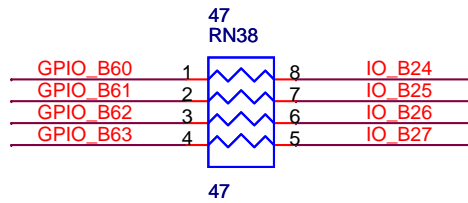
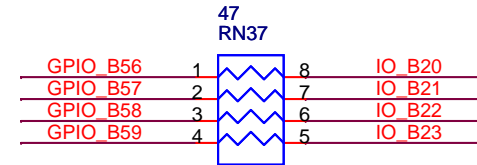
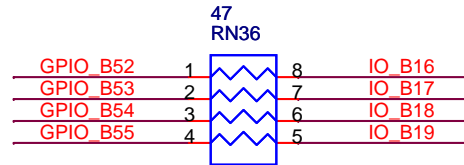
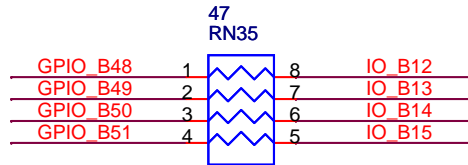
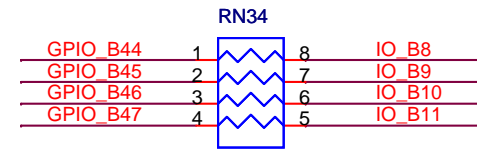
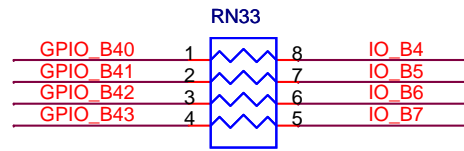
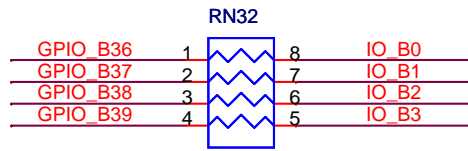


(GPIO 0)

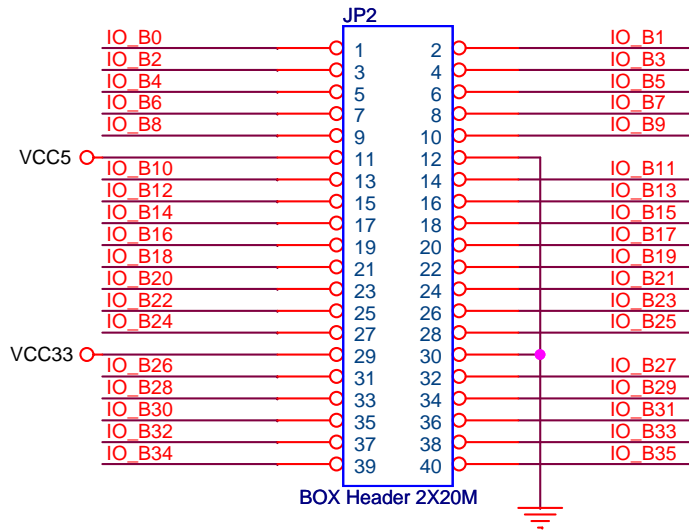


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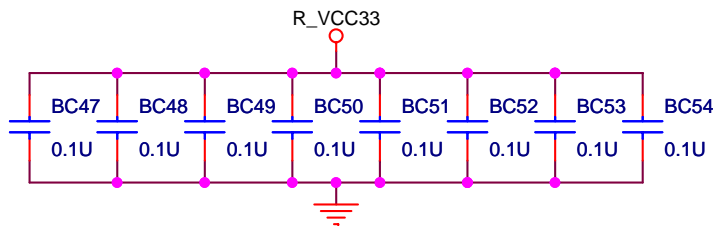
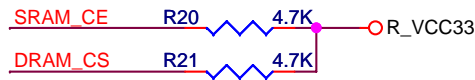
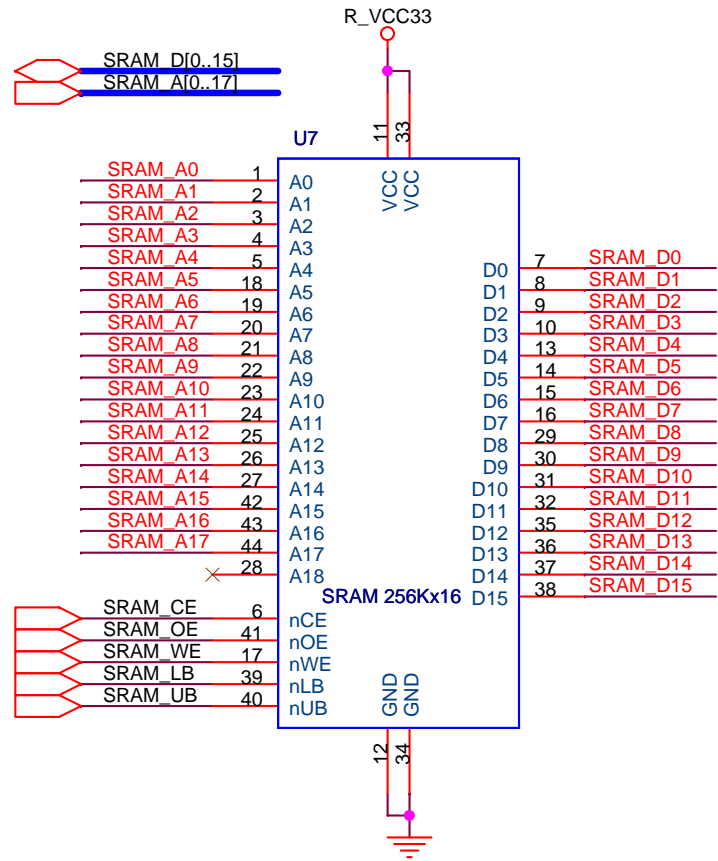
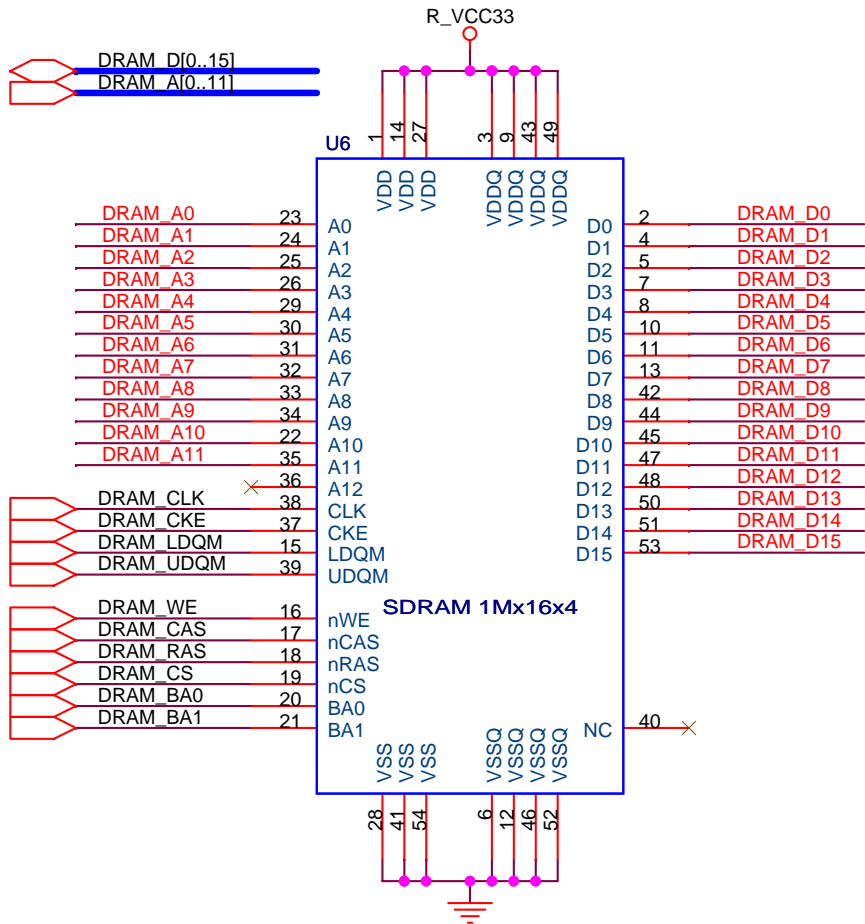
GPIO B[36..71]



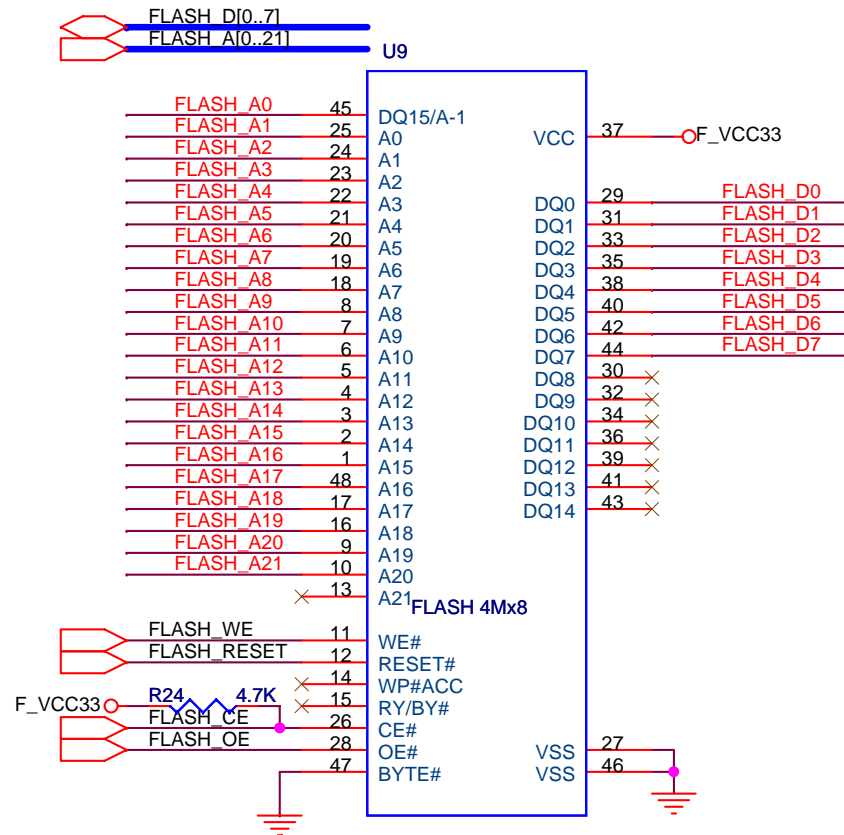
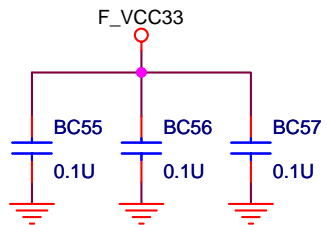
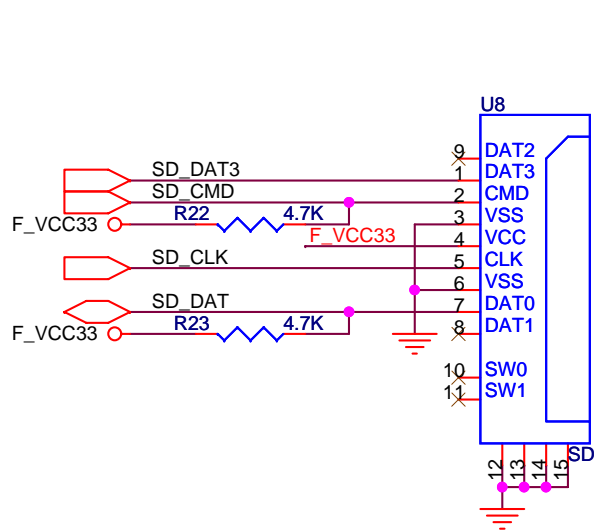
(GPIO 1)



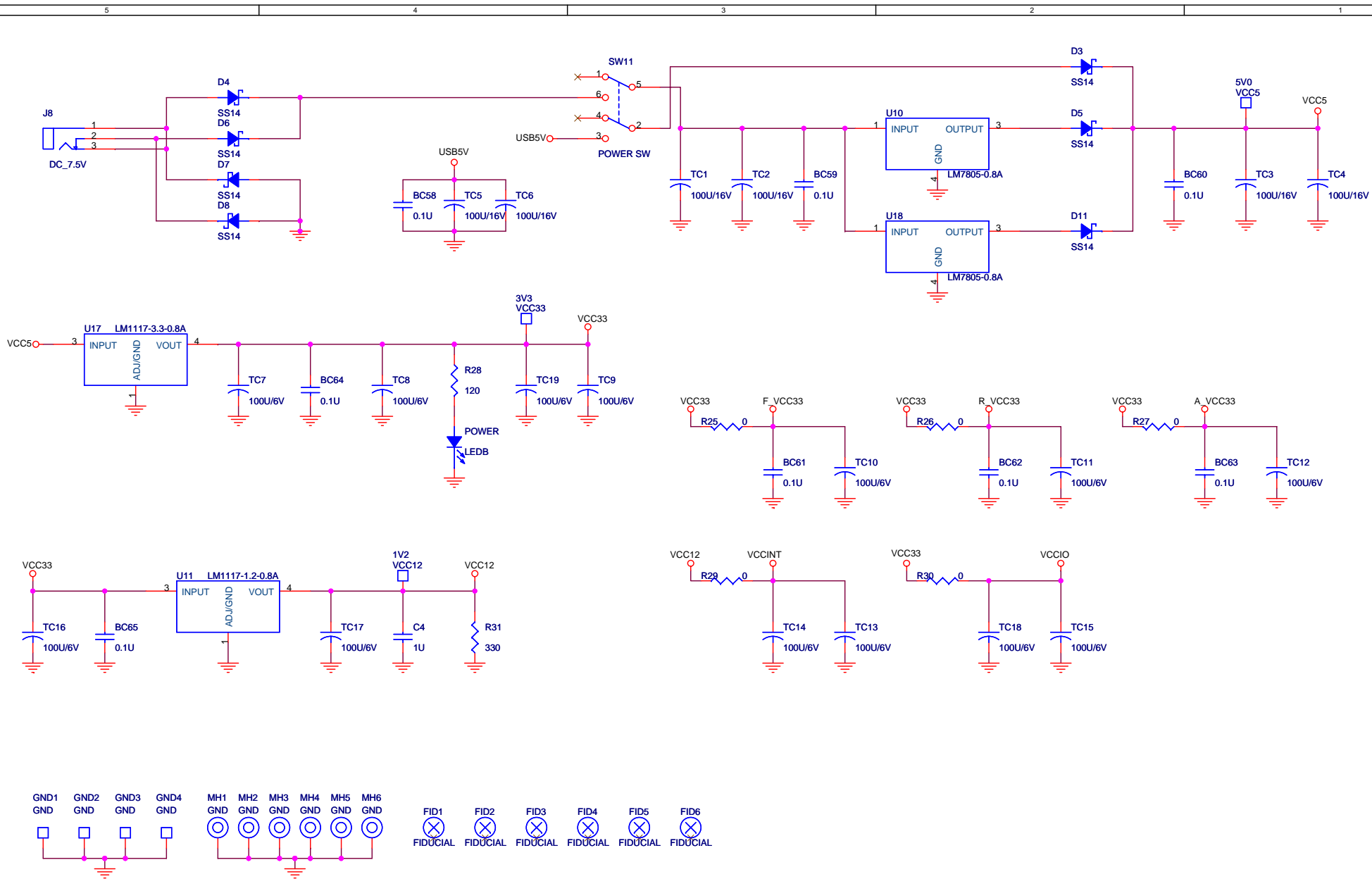
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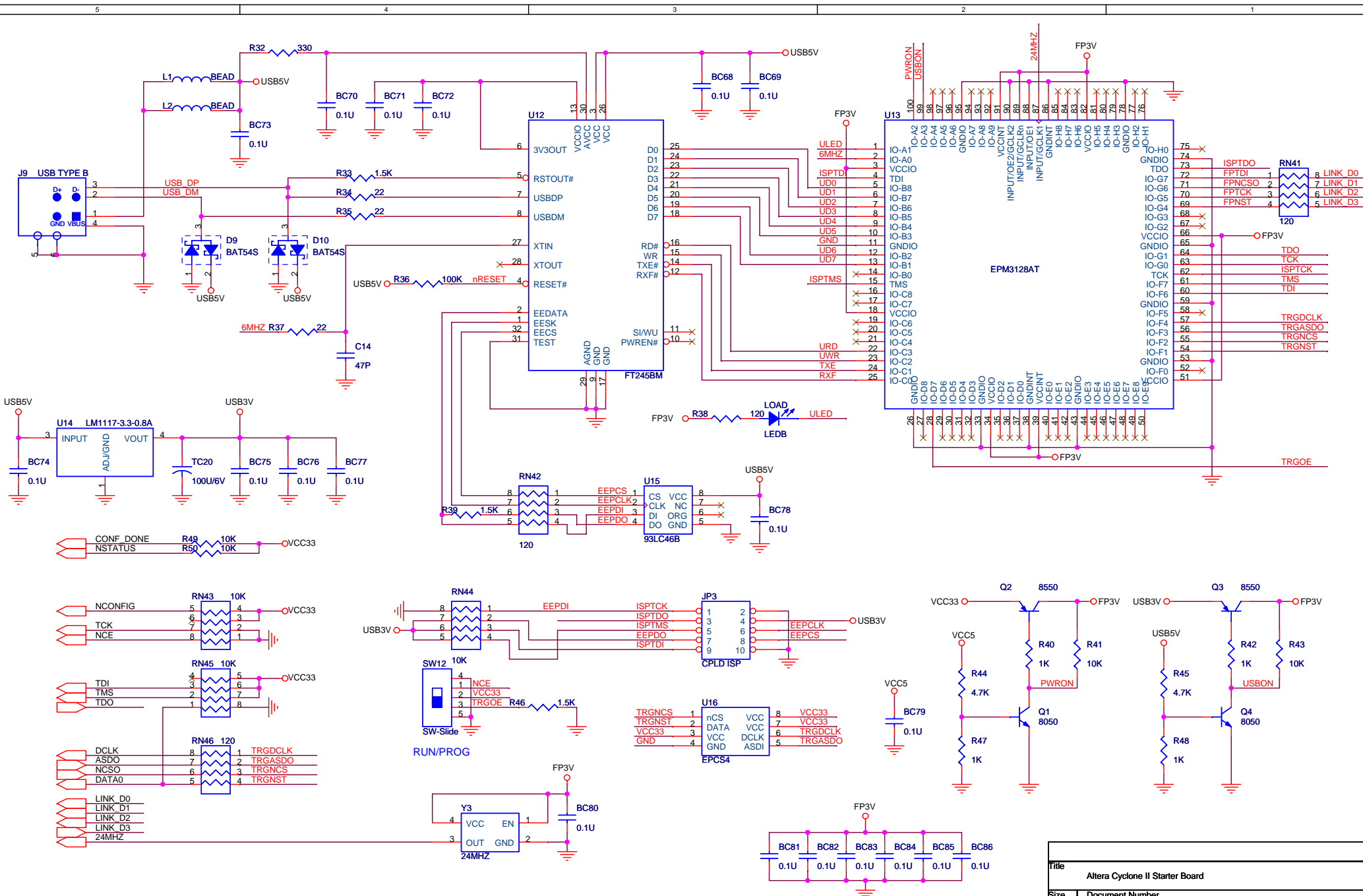
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B	USB BLASTER	1.1A
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