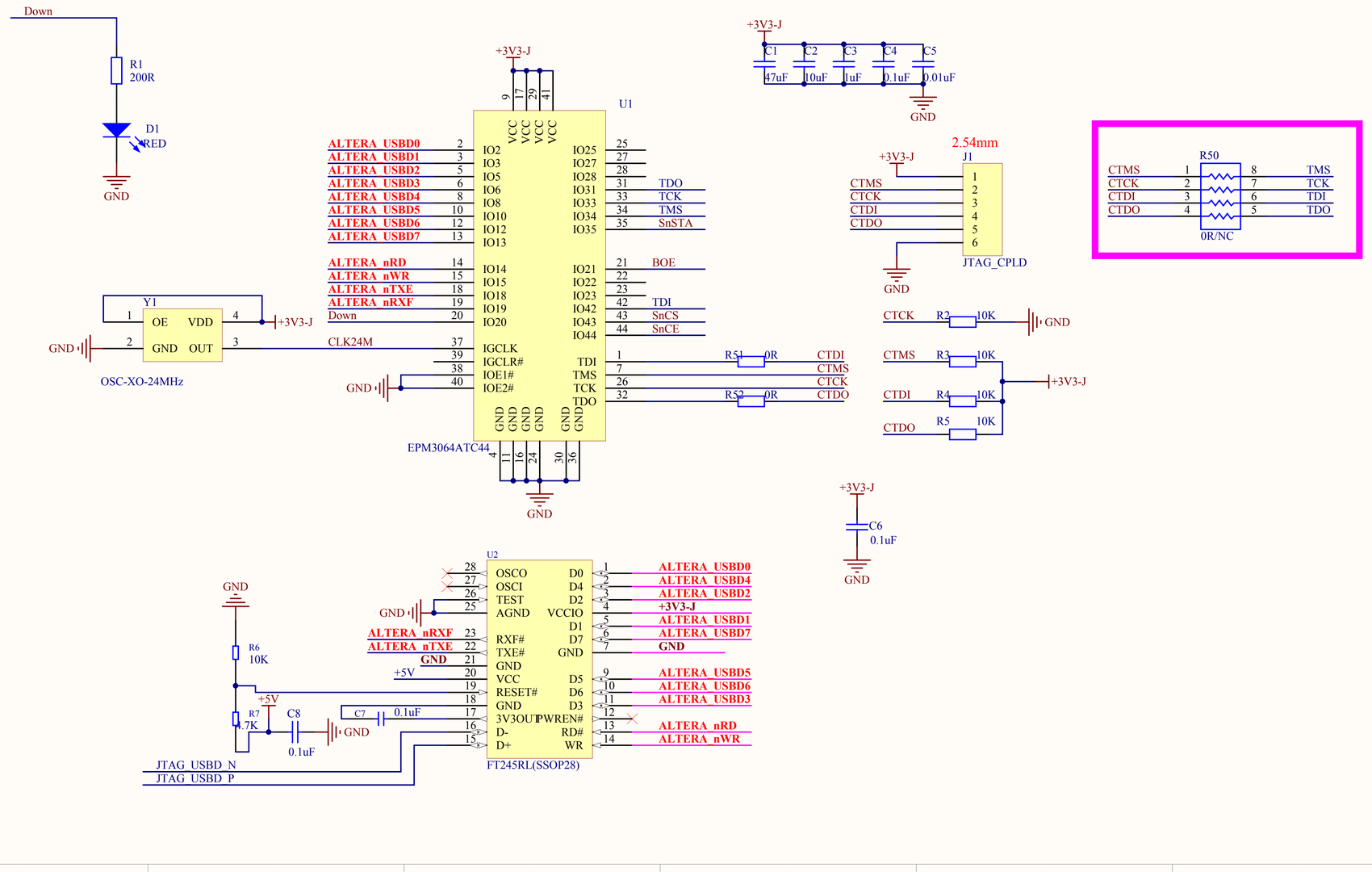
ALTERA USB BLASTER



Title		
Size A3	Number	Revision
Date: 2017/1/11	Sheet of	
File: F:\allboards\..\ALTERA-USBJTAG.SchDoc	Drawn By:	

U3A

BANK 2A

IO, (DIFFIO_TX_L9p, DIFFOUT_L9p, DQ1L)	C2	H7_1
IO, (DIFFIO_TX_L9n, DIFFOUT_L9n)	C1	H1
IO, (DIFFIO_RX_L10p, DIFFOUT_L10p, DQ1L)	G2	H6
IO, (DIFFIO_RX_L10n, DIFFOUT_L10n, DQ1L)	G1	DB4
IO, (DIFFIO_RX_L11p, DIFFOUT_L11p, DQS1L)	D3	H5_1
IO, (DIFFIO_RX_L11n, DIFFOUT_L11n, DQSn1L)	E2	DB2
IO, (DIFFIO_TX_L12p, DIFFOUT_L12p)	L2	EXP-IO38
IO, (DIFFIO_TX_L12n, DIFFOUT_L12n, DQ1L)	L1	EXP-IO37
IO, (DIFFIO_TX_L13p, DIFFOUT_L13p, DQ1L)	N2	PS2_DATA_K
IO, (DIFFIO_TX_L13n, DIFFOUT_L13n, DQ1L)	N1	USB_TXD
IO, (DIFFIO_RX_L14p, DIFFOUT_L14p, DQ1L)	U2	SDATA_I
IO, (DIFFIO_RX_L14n, DIFFOUT_L14n, DQ1L)	U1	SDATA_O
IO, (DIFFIO_RX_L15p, DIFFOUT_L15p)	Y3	CS_SPI_1
IO, (DIFFIO_RX_L15n, DIFFOUT_L15n)	W2	SYNC
IO, (DIFFIO_TX_L16p, DIFFOUT_L16p, DQ1L)	AA2	485_TXD
IO, (DIFFIO_TX_L16n, DIFFOUT_L16n, DQ1L)	AA1	485_R/D

5CEBA2F23C8N

U3B

BANK 3A

IO, DATA8, (DIFFIO_RX_B1p, DIFFOUT_B1p, DQ1B)	R5	INF_IN
IO, DATA6, (DIFFIO_RX_B1n, DIFFOUT_B1n, DQ1B)	R6	RTC_SCLK
IO, DATA7, (DIFFIO_TX_B2p, DIFFOUT_B2p, DQ1B)	U8	EXP-IO46
IO, DATA5, (DIFFIO_TX_B2n, DIFFOUT_B2n)	U7	485_RXD
IO, DATA12, (DIFFIO_RX_B3p, DIFFOUT_B3p, DQS1B)	N6	H7
IO, DATA10, (DIFFIO_RX_B3n, DIFFOUT_B3n, DQSn1B)	P6	H5
IO, DATA11, (DIFFIO_TX_B4p, DIFFOUT_B4p)	W9	SW1
IO, DATA9, (DIFFIO_TX_B4n, DIFFOUT_B4n, DQ1B)	W8	EXP-IO11
IO, CLKUSR, (DIFFIO_RX_B5p, DIFFOUT_B5p, DQ1B)	T8	BITCLK
IO, DATA14, (DIFFIO_RX_B5n, DIFFOUT_B5n, DQ1B)	T7	EXP-IO44
IO, DATA15, (DIFFIO_TX_B6p, DIFFOUT_B6p, DQ1B)	V6	EXP-IO35
IO, DATA13, (DIFFIO_TX_B6n, DIFFOUT_B6n, DQ1B)	U6	RTC_RST
IO, PR_ERROR, (DIFFIO_RX_B7p, DIFFOUT_B7p)	M7	LCD_PSB
IO, PR_DONE, (DIFFIO_RX_B7n, DIFFOUT_B7n)	M6	L8
IO, (DIFFIO_TX_B8p, DIFFOUT_B8p, DQ1B)	P7	PS2_CLK_K
IO, PR_READY, (DIFFIO_TX_B8n, DIFFOUT_B8n, DQ1B)	R7	TEM_IN

5CEBA2F23C8N

U3C

BANK 3B

IO, (DIFFIO_TX_B9p, DIFFOUT_B9p, DQ2B)	AB5	AC_RST#
IO, (DIFFIO_TX_B9n, DIFFOUT_B9n)	AB6	MISO_SPI
IO, (DIFFIO_RX_B10p, DIFFOUT_B10p, DQ2B)	V10	EXP-IO15
IO, (DIFFIO_RX_B10n, DIFFOUT_B10n, DQ2B)	Y9	SCLK_SPI
IO, (DIFFIO_RX_B11p, DIFFOUT_B11p, DQS2B)	N8	DB7
IO, (DIFFIO_RX_B11n, DIFFOUT_B11n, DQSn2B)	P8	LCD_RST
IO, (DIFFIO_TX_B12p, DIFFOUT_B12p)	AB7	EXP-IO10
IO, (DIFFIO_TX_B12n, DIFFOUT_B12n, DQ2B)	AA7	SW0
IO, (DIFFIO_TX_B13p, DIFFOUT_B13p, DQ2B)	AB8	SCL_I2C
IO, (DIFFIO_TX_B13n, DIFFOUT_B13n, DQ2B)	AA8	BUZZ
IO, (DIFFIO_RX_B14p, DIFFOUT_B14p, DQ2B)	U10	EXP-IO14
IO, (DIFFIO_RX_B14n, DIFFOUT_B14n, DQ2B)	T9	CS_SPI_0
IO, CLK0p, FPLL_BL_FBp, (DIFFIO_RX_B15p, DIFFOUT_B15p)	M9	L2
IO, CLK0n, FPLL_BL_FBn, (DIFFIO_RX_B15n, DIFFOUT_B15n)	M8	USB_RXD
IO, (DIFFIO_TX_B16p, DIFFOUT_B16p, DQ2B)	AA9	EXP-IO12
IO, (DIFFIO_TX_B16n, DIFFOUT_B16n, DQ2B)	AA10	SDA_I2C
IO, (DIFFIO_TX_B17p, DIFFOUT_B17p, DQ3B)	Y9	SW2
IO, (DIFFIO_TX_B17n, DIFFOUT_B17n)	Y10	EXP-IO16
IO, (DIFFIO_RX_B18p, DIFFOUT_B18p, DQ3B)	R9	RTC_IO
IO, (DIFFIO_RX_B18n, DIFFOUT_B18n, DQ3B)	T10	MOSI_SPI
IO, (DIFFIO_RX_B19p, DIFFOUT_B19p, DQS3B)	U12	DIP2
IO, (DIFFIO_RX_B19n, DIFFOUT_B19n, DQSn3B)	U11	EXP-IO2
IO, (DIFFIO_TX_B20p, DIFFOUT_B20p)	P12	EXP-IO42
IO, (DIFFIO_TX_B20n, DIFFOUT_B20n, DQ3B)	R12	EXP-IO43
IO, FPLL_BL_CLKOUT0, FPLL_BL_CLKOUTp, FPLL_BL_FB, (DIFFIO_TX_B21p, DIFFOUT_B21p, DQ3B)	AB11	EXP-IO1
IO, FPLL_BL_CLKOUT1, FPLL_BL_CLKOUTn, (DIFFIO_TX_B21n, DIFFOUT_B21n, DQ3B)	AB10	SW3
IO, (DIFFIO_RX_B22p, DIFFOUT_B22p, DQ3B)	R11	DIP1
IO, (DIFFIO_RX_B22n, DIFFOUT_B22n, DQ3B)	R10	EXP-IO40
IO, CLK1p, (DIFFIO_RX_B23p, DIFFOUT_B23p)	N9	EXP-IO41
IO, CLK1n, (DIFFIO_RX_B23n, DIFFOUT_B23n)	P9	EXP-IO39
IO, (DIFFIO_TX_B24p, DIFFOUT_B24p, DQ3B)	AA12	EXP-IO3
IO, (DIFFIO_TX_B24n, DIFFOUT_B24n, DQ3B)	Y11	DIP0

5CEBA2F23C8N

用户/系统时钟、RTC、主I2C以及扩展口

U3D

BANK 4A

IO, (DIFFIO_TX_B25p, DIFFOUT_B25p, DQ4B)	AB12	EXP-IO17
IO, RZQ_0, (DIFFIO_TX_B25n, DIFFOUT_B25n)	AB13	DIP4
IO, (DIFFIO_RX_B26p, DIFFOUT_B26p, DQ4B)	U13	EXP-IO18
IO, (DIFFIO_RX_B26n, DIFFOUT_B26n, DQ4B)	V13	DIP3
IO, (DIFFIO_RX_B27p, DIFFOUT_B27p, DQS4B)	T13	EXP-IO20
IO, (DIFFIO_RX_B27n, DIFFOUT_B27n, DQSn4B)	T12	EXP-IO13
IO, (DIFFIO_TX_B28p, DIFFOUT_B28p)	AA13	EXP-IO4
IO, (DIFFIO_TX_B28n, DIFFOUT_B28n, DQ4B)	AA14	EXP-IO7
IO, (DIFFIO_TX_B29p, DIFFOUT_B29p, DQ4B)	AA15	DIP7
IO, (DIFFIO_TX_B29n, DIFFOUT_B29n, DQ4B)	AB15	EXP-IO19
IO, (DIFFIO_RX_B30p, DIFFOUT_B30p, DQ4B)	Y15	DIP6
IO, (DIFFIO_RX_B30n, DIFFOUT_B30n, DQ4B)	Y14	DIP5
IO, CLK2p, (DIFFIO_RX_B31p, DIFFOUT_B31p)	V15	CLK_USER 蓝色信号不能变更
IO, CLK2n, (DIFFIO_RX_B31n, DIFFOUT_B31n)	V14	GND
IO, (DIFFIO_TX_B32p, DIFFOUT_B32p, DQ4B)	AB18	EXP-IO25
IO, (DIFFIO_TX_B32n, DIFFOUT_B32n, DQ4B)	AB17	DIP8
IO, (DIFFIO_TX_B33p, DIFFOUT_B33p, DQ5B, DQ1B)	AB21	EXP-IO26
IO, (DIFFIO_TX_B33n, DIFFOUT_B33n)	AB20	SW_C2
IO, (DIFFIO_RX_B34p, DIFFOUT_B34p, DQ5B, DQ1B)	Y17	SW_C0
IO, (DIFFIO_RX_B34n, DIFFOUT_B34n, DQ5B, DQ1B)	Y16	EXP-IO5
IO, (DIFFIO_RX_B35p, DIFFOUT_B35p, DQS5B, DQ1B)	U15	EXP-IO23
IO, (DIFFIO_RX_B35n, DIFFOUT_B35n, DQSn5B, DQ1B)	T14	EXP-IO8
IO, (DIFFIO_TX_B36p, DIFFOUT_B36p)	AA18	DIP9
IO, (DIFFIO_TX_B36n, DIFFOUT_B36n, DQ5B, DQ1B)	AA17	EXP-IO9
IO, (DIFFIO_TX_B37p, DIFFOUT_B37p, DQ5B, DQ1B)	AA20	SW_C1
IO, (DIFFIO_TX_B37n, DIFFOUT_B37n, DQ5B, DQ1B)	AA19	DIP10
IO, (DIFFIO_RX_B38p, DIFFOUT_B38p, DQ5B, DQ1B)	W19	DIP11
IO, (DIFFIO_RX_B38n, DIFFOUT_B38n, DQ5B, DQ1B)	V20	EXP-IO28
IO, CLK3p, (DIFFIO_RX_B39p, DIFFOUT_B39p)	W16	CLK_100M 蓝色信号不能变更
IO, CLK3n, (DIFFIO_RX_B39n, DIFFOUT_B39n)	V16	GND
IO, (DIFFIO_TX_B40p, DIFFOUT_B40p, DQ5B, DQ1B)	AA22	EXP-IO27
IO, (DIFFIO_TX_B40n, DIFFOUT_B40n, DQ5B, DQ1B)	AB22	SW_C3
IO, (DIFFIO_TX_B41p, DIFFOUT_B41p, DQ6B, DQ1B)	W22	DIP13
IO, (DIFFIO_TX_B41n, DIFFOUT_B41n)	Y22	DIP14
IO, (DIFFIO_RX_B42p, DIFFOUT_B42p, DQ6B, DQ1B)	Y19	SW_R1
IO, (DIFFIO_RX_B42n, DIFFOUT_B42n, DQ6B, DQ1B)	Y20	DIP12
IO, (DIFFIO_RX_B43p, DIFFOUT_B43p, DQS6B, DQS1B)	R14	EXP-IO24
IO, (DIFFIO_RX_B43n, DIFFOUT_B43n, DQSn6B, DQSn1B)	P14	EXP-IO45
IO, (DIFFIO_TX_B44p, DIFFOUT_B44p)	W21	SW_R2
IO, (DIFFIO_TX_B44n, DIFFOUT_B44n, DQ6B, DQ1B)	Y21	SW_R0
IO, (DIFFIO_TX_B45p, DIFFOUT_B45p, DQ6B, DQ1B)	V21	SW_R3
IO, (DIFFIO_TX_B45n, DIFFOUT_B45n, DQ6B, DQ1B)	U22	EXP-IO33
IO, (DIFFIO_RX_B46p, DIFFOUT_B46p, DQ6B, DQ1B)	V18	UART1_TX +3V3
IO, (DIFFIO_RX_B46n, DIFFOUT_B46n, DQ6B, DQ1B)	V19	UART2_TX +3V3
IO, (DIFFIO_RX_B47p, DIFFOUT_B47p)	U17	UART1_RX +3V3
IO, (DIFFIO_RX_B47n, DIFFOUT_B47n)	U16	UART2_RX +3V3
IO, (DIFFIO_TX_B48p, DIFFOUT_B48p, DQ6B, DQ1B)	U20	EXP-IO32
IO, (DIFFIO_TX_B48n, DIFFOUT_B48n, DQ6B, DQ1B)	U21	EXP-IO49

5CEBA2F23C8N

Title		
Size A3	Number	Revision
Date: 2017/1/11	Sheet of	
File: F:\allboards\..\ALTERA_CV_BANK(2A-3A-3B-4A).SchDoc	Drawn By:	

U3E

BANK 5A

IO, RZQ_1, (DIFFIO_TX_R1p, DIFFOUT_R1p, DQ1R)	T19	DIP15
IO, PR_REQUEST, (DIFFIO_TX_R1n, DIFFOUT_R1n, DQ1R)	T20	LED21
IO, INIT_DONE, (DIFFIO_RX_R2p, DIFFOUT_R2p)	T18	EXP-IO21
IO, CRC_ERROR, (DIFFIO_RX_R2n, DIFFOUT_R2n)	T17	EXP-IO30
IO, nCEO, (DIFFIO_TX_R3p, DIFFOUT_R3p, DQ1R)	T22	EXP-IO31
IO, CvP_CONFDONE, (DIFFIO_TX_R3n, DIFFOUT_R3n, DQ1R)	R22	VGA_BLUE0
IO, (DIFFIO_RX_R4p, DIFFOUT_R4p, DQ1R)	T15	EXP-IO6
IO, (DIFFIO_RX_R4n, DIFFOUT_R4n, DQ1R)	R15	EXP-IO36
IO, DEV_OE, (DIFFIO_TX_R5p, DIFFOUT_R5p)	R21	LED20
IO, DEV_CLRn, (DIFFIO_TX_R5n, DIFFOUT_R5n, DQ1R)	P22	LED19
IO, (DIFFIO_RX_R6p, DIFFOUT_R6p, DQS1R)	R16	EXP-IO22
IO, (DIFFIO_RX_R6n, DIFFOUT_R6n, DQSn1R)	R17	EXP-IO34
IO, (DIFFIO_TX_R7p, DIFFOUT_R7p, DQ1R)	P19	LED17
IO, (DIFFIO_TX_R7n, DIFFOUT_R7n)	P18	EXP-IO29
IO, (DIFFIO_RX_R8p, DIFFOUT_R8p, DQ1R)	P16	EXP-IO47
IO, (DIFFIO_RX_R8n, DIFFOUT_R8n, DQ1R)	P17	VGA_GREEN0

5CEBA2F23C8N

蓝色信号不能变更

U3F

BANK 5B

IO, CLK6p, (DIFFIO_RX_R9p, DIFFOUT_R9p)	N16	SW_RST
IO, CLK6n, (DIFFIO_RX_R9n, DIFFOUT_R9n)	M16	GND
IO, (DIFFIO_TX_R10p, DIFFOUT_R10p, DQ2R)	N20	LED18
IO, (DIFFIO_TX_R10n, DIFFOUT_R10n, DQ2R)	N21	EXP-IO48
IO, (DIFFIO_RX_R11p, DIFFOUT_R11p, DQ2R)	N19	VGA_RED0
IO, (DIFFIO_RX_R11n, DIFFOUT_R11n, DQ2R)	M18	LED_D
IO, FPLL_BR_CLKOUT0, FPLL_BR_CLKOUTp, FPLL_BR_FB, (DIFFIO_TX_R12p, DIFFOUT_R12p, DQ2R)	M22	LED16
IO, FPLL_BR_CLKOUT1, FPLL_BR_CLKOUTn, (DIFFIO_TX_R12n, DIFFOUT_R12n, DQ2R)	L22	LED12
IO, (DIFFIO_RX_R13p, DIFFOUT_R13p, DQS2R)	K17	LED11
IO, (DIFFIO_RX_R13n, DIFFOUT_R13n, DQSn2R)	L17	LED14
IO, (DIFFIO_TX_R14p, DIFFOUT_R14p)	M20	LED15
IO, (DIFFIO_TX_R14n, DIFFOUT_R14n, DQ2R)	M21	VGA_VSYNC
IO, (DIFFIO_RX_R15p, DIFFOUT_R15p, DQ2R)	L19	VGA_HSYNC
IO, (DIFFIO_RX_R15n, DIFFOUT_R15n, DQ2R)	L18	LED13
IO, (DIFFIO_TX_R16p, DIFFOUT_R16p, DQ2R)	K21	LED30
IO, (DIFFIO_TX_R16n, DIFFOUT_R16n)	K22	LED31

5CEBA2F23C8N

U3H

BANK 8A

IO, CLK9p, (DIFFIO_RX_T25p, DIFFOUT_T25p)	G10	L4
IO, CLK9n, (DIFFIO_RX_T25n, DIFFOUT_T25n)	F10	ADC_DIN
IO, (DIFFIO_TX_T26p, DIFFOUT_T26p, DQ4T)	L7	L7
IO, (DIFFIO_TX_T26n, DIFFOUT_T26n, DQ4T)	K7	H2
IO, (DIFFIO_RX_T27p, DIFFOUT_T27p, DQ4T)	J7	DB6
IO, (DIFFIO_RX_T27n, DIFFOUT_T27n, DQ4T)	J8	H8
IO, FPLL_TL_CLKOUT0, FPLL_TL_CLKOUTp, FPLL_TL_FB, (DIFFIO_TX_T28p, DIFFOUT_T28p, DQ4T)	H8	L5
IO, FPLL_TL_CLKOUT1, FPLL_TL_CLKOUTn, (DIFFIO_TX_T28n, DIFFOUT_T28n, DQ4T)	G8	DB3
IO, (DIFFIO_RX_T29p, DIFFOUT_T29p, DQS4T)	J9	EXP-IO50
IO, (DIFFIO_RX_T29n, DIFFOUT_T29n, DQSn4T)	H9	H3
IO, (DIFFIO_TX_T30p, DIFFOUT_T30p)	A10	L6_1
IO, (DIFFIO_TX_T30n, DIFFOUT_T30n, DQ4T)	A9	H6_1
IO, (DIFFIO_RX_T31p, DIFFOUT_T31p, DQ4T)	B10	H3_1
IO, (DIFFIO_RX_T31n, DIFFOUT_T31n, DQ4T)	C9	ADC_SCLK
IO, (DIFFIO_TX_T32p, DIFFOUT_T32p, DQ4T)	A5	L3_1
IO, (DIFFIO_TX_T32n, DIFFOUT_T32n)	B5	L2_1
IO, CLK8p, FPLL_TL_FBp, (DIFFIO_RX_T33p, DIFFOUT_T33p)	E10	L4_1
IO, CLK8n, FPLL_TL_FBn, (DIFFIO_RX_T33n, DIFFOUT_T33n)	F9	DB1
IO, (DIFFIO_TX_T34p, DIFFOUT_T34p, DQ5T)	B6	DB0
IO, (DIFFIO_TX_T34n, DIFFOUT_T34n, DQ5T)	B7	H8_1
IO, (DIFFIO_RX_T35p, DIFFOUT_T35p, DQ5T)	A8	L1_1
IO, (DIFFIO_RX_T35n, DIFFOUT_T35n, DQ5T)	A7	H2_1
IO, (DIFFIO_TX_T36p, DIFFOUT_T36p, DQ5T)	C6	LCD_RS
IO, (DIFFIO_TX_T36n, DIFFOUT_T36n, DQ5T)	D6	L7_1
IO, (DIFFIO_RX_T37p, DIFFOUT_T37p, DQS5T)	E9	ADC_CS
IO, (DIFFIO_RX_T37n, DIFFOUT_T37n, DQSn5T)	D9	H4_1
IO, (DIFFIO_TX_T38p, DIFFOUT_T38p)	D7	LCD_RW
IO, (DIFFIO_TX_T38n, DIFFOUT_T38n, DQ5T)	C8	L5_1
IO, (DIFFIO_RX_T39p, DIFFOUT_T39p, DQ5T)	G6	H4
IO, (DIFFIO_RX_T39n, DIFFOUT_T39n, DQ5T)	H6	L1
IO, (DIFFIO_TX_T40p, DIFFOUT_T40p, DQ5T)	F7	L6
IO, (DIFFIO_TX_T40n, DIFFOUT_T40n)	E7	L8_1

5CEBA2F23C8N

U3G

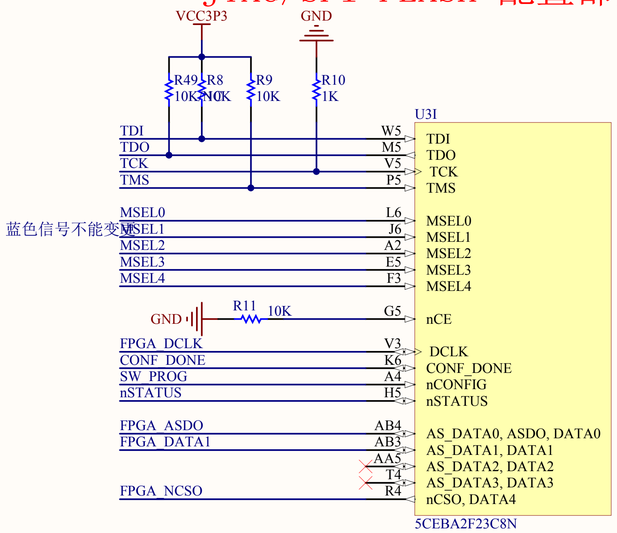
BANK 7A

IO, (DIFFIO_RX_T1p, DIFFOUT_T1p)	K20	LED_C
IO, (DIFFIO_RX_T1n, DIFFOUT_T1n)	K19	LED_A
IO, (DIFFIO_TX_T2p, DIFFOUT_T2p, DQ1T, DQ1T)	B16	LED_S4
IO, (DIFFIO_TX_T2n, DIFFOUT_T2n, DQ1T, DQ1T)	C16	LED22
IO, (DIFFIO_RX_T3p, DIFFOUT_T3p, DQ1T, DQ1T)	D17	LED26
IO, (DIFFIO_RX_T3n, DIFFOUT_T3n, DQ1T, DQ1T)	E16	LED_E
IO, (DIFFIO_TX_T4p, DIFFOUT_T4p, DQ1T, DQ1T)	G17	LED_G
IO, (DIFFIO_TX_T4n, DIFFOUT_T4n, DQ1T, DQ1T)	G16	LED27
IO, (DIFFIO_RX_T5p, DIFFOUT_T5p, DQS1T, DQS1T)	G18	EXP-IO51
IO, (DIFFIO_RX_T5n, DIFFOUT_T5n, DQSn1T, DQSn1T)	H18	LED_B
IO, (DIFFIO_TX_T6p, DIFFOUT_T6p)	J19	LED29
IO, (DIFFIO_TX_T6n, DIFFOUT_T6n, DQ1T, DQ1T)	J18	DB8
IO, (DIFFIO_RX_T7p, DIFFOUT_T7p, DQ1T, DQ1T)	E15	LED25
IO, (DIFFIO_RX_T7n, DIFFOUT_T7n, DQ1T, DQ1T)	F15	LED24
IO, (DIFFIO_TX_T8p, DIFFOUT_T8p, DQ1T, DQ1T)	A15	LED23
IO, (DIFFIO_TX_T8n, DIFFOUT_T8n)	A14	DAC_DI
IO, CLK11p, (DIFFIO_RX_T9p, DIFFOUT_T9p)	H16	LED_DP
IO, CLK11n, (DIFFIO_RX_T9n, DIFFOUT_T9n)	H15	LED9
IO, (DIFFIO_TX_T10p, DIFFOUT_T10p, DQ2T, DQ1T)	J17	
IO, (DIFFIO_TX_T10n, DIFFOUT_T10n, DQ2T, DQ1T)	K16	LED10
IO, (DIFFIO_RX_T11p, DIFFOUT_T11p, DQ2T, DQ1T)	C15	LED4
IO, (DIFFIO_RX_T11n, DIFFOUT_T11n, DQ2T, DQ1T)	B15	LED_S5
IO, (DIFFIO_TX_T12p, DIFFOUT_T12p, DQ2T, DQ1T)	G15	LED8
IO, (DIFFIO_TX_T12n, DIFFOUT_T12n, DQ2T, DQ1T)	F14	LED6
IO, (DIFFIO_RX_T13p, DIFFOUT_T13p, DQS2T, DQ1T)	H14	LED28
IO, (DIFFIO_RX_T13n, DIFFOUT_T13n, DQSn2T, DQ1T)	J13	LED7
IO, (DIFFIO_TX_T14p, DIFFOUT_T14p)	B13	LED2
IO, (DIFFIO_TX_T14n, DIFFOUT_T14n, DQ2T, DQ1T)	A13	LED_S1
IO, (DIFFIO_RX_T15p, DIFFOUT_T15p, DQ2T, DQ1T)	E14	LED_S6
IO, (DIFFIO_RX_T15n, DIFFOUT_T15n, DQ2T, DQ1T)	F13	LED_S7
IO, (DIFFIO_TX_T16p, DIFFOUT_T16p, DQ2T, DQ1T)	J11	
IO, (DIFFIO_TX_T16n, DIFFOUT_T16n)	H10	LCD_EN
IO, CLK10p, (DIFFIO_RX_T17p, DIFFOUT_T17p)	H13	LED5
IO, CLK10n, (DIFFIO_RX_T17n, DIFFOUT_T17n)	G13	LED_F
IO, (DIFFIO_TX_T18p, DIFFOUT_T18p, DQ3T)	G11	
IO, (DIFFIO_TX_T18n, DIFFOUT_T18n, DQ3T)	F12	H1_1
IO, (DIFFIO_RX_T19p, DIFFOUT_T19p, DQ3T)	D13	LED_S2
IO, (DIFFIO_RX_T19n, DIFFOUT_T19n, DQ3T)	C13	LED3
IO, (DIFFIO_TX_T20p, DIFFOUT_T20p, DQ3T)	B12	DAC_CS
IO, (DIFFIO_TX_T20n, DIFFOUT_T20n, DQ3T)	A12	DAC_SCLK
IO, (DIFFIO_RX_T21p, DIFFOUT_T21p, DQS3T)	H11	
IO, (DIFFIO_RX_T21n, DIFFOUT_T21n, DQSn3T)	G12	LED1
IO, (DIFFIO_TX_T22p, DIFFOUT_T22p)	L8	L3
IO, (DIFFIO_TX_T22n, DIFFOUT_T22n, DQ3T)	K9	DB5
IO, (DIFFIO_RX_T23p, DIFFOUT_T23p, DQ3T)	D12	LED0
IO, (DIFFIO_RX_T23n, DIFFOUT_T23n, DQ3T)	E12	LED_S3
IO, (DIFFIO_TX_T24p, DIFFOUT_T24p, DQ3T)	C11	LED_S0
IO, RZQ_2, (DIFFIO_TX_T24n, DIFFOUT_T24n)	B11	ADC_DOUT

5CEBA2F23C8N

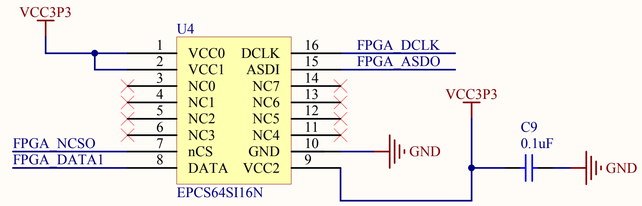
Title		
Size: A3	Number	Revision
Date: 2017/1/11	Sheet of	
File: F:\allboards\..\ALTERA_CV_BANK(5A-5B-7A-8A).SchDoc	Drawn By:	

JTAG/SPI FLASH 配置部分

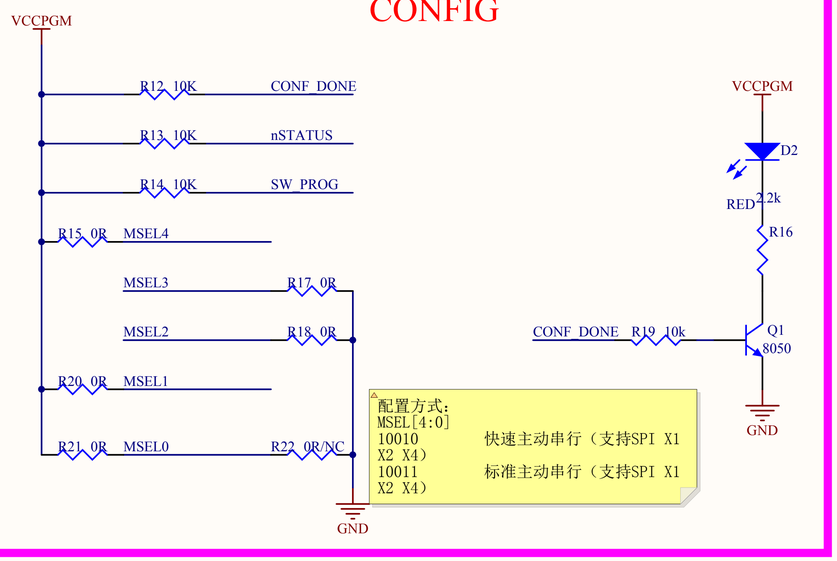


蓝色信号不能变动

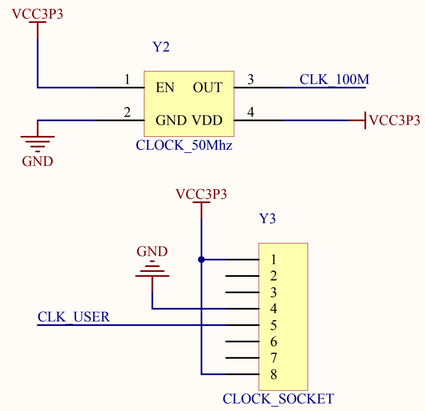
ALTERA 配置器件 SPI X1 模式



CONFIG



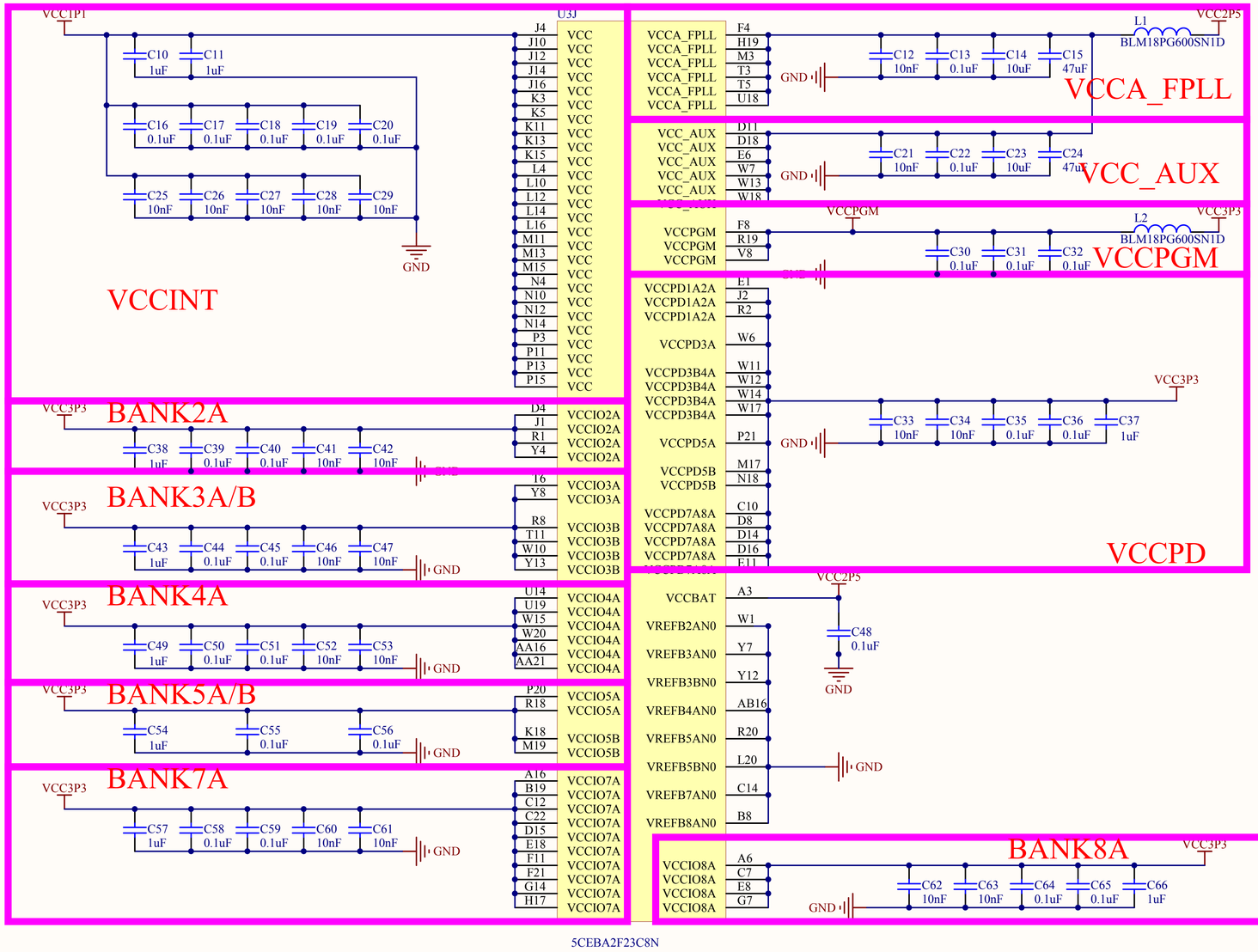
晶振电路

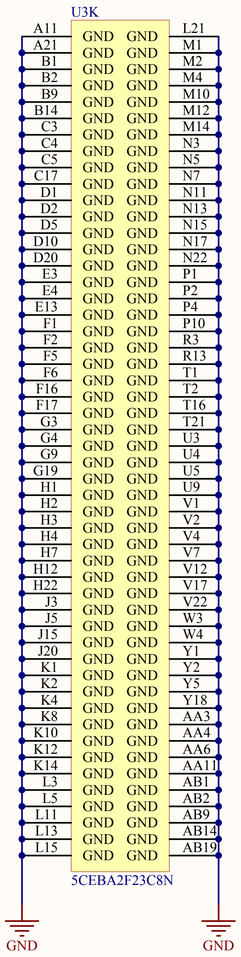


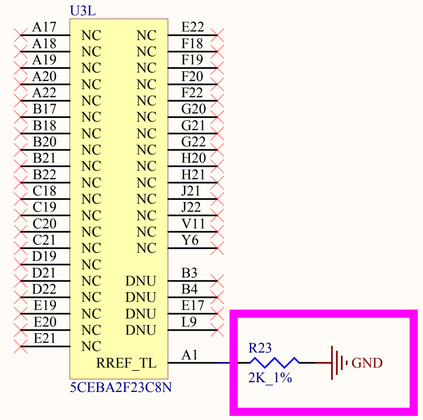
Title		
Size A3	Number	Revision
Date: 2017/1/11	Sheet of	
File: F:\allboards\..\ALTERA_CV_config.SchDoc	Drawn By:	

此页0402封装的电容推荐使用圆焊盘封装，以能将其安置在FPGA相应引脚旁

1、各部分供电引脚电容，按照高、中、低频布局规则放置；
2、FPGA中每个BANK供电电压均为3.3V；
3、VCCPD、VCCPGM供电电压应与相对应BANK一致，也为3.3V，其中VCCPGM供电采用磁珠隔离；
4、VCCA_FPLL、VCC_AUX为2.5V供电，采用磁珠隔离；
5、每个BANK VREFB引脚接地处理，A1（RREF_TL）引脚采用精度为1%的2K电阻接地处理；

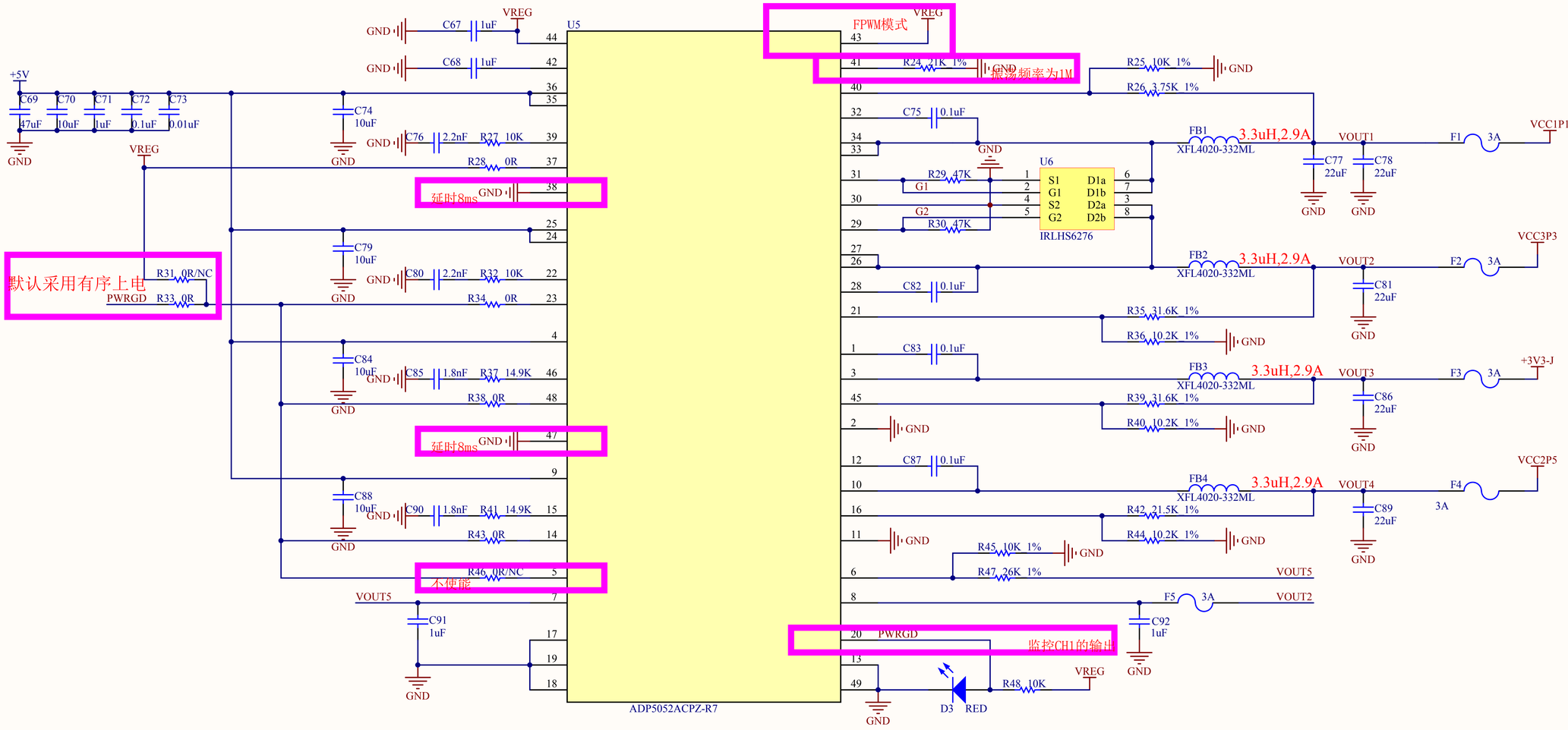






Title		
Size A3	Number	Revision
Date: 2017/1/11	Sheet of	
File: F:\allboards\..\ALTERA_CV_POWER.SchDoc	Drawn By:	

1、此芯片PCB布局参考ADP5052数据手册部分的“电路板布局建议”小节；
2、IRLHS6276、XFL4020-332ML器件PCB封装需要制作；



Title		
Size A3	Number	Revision
Date: 2017/1/11	Sheet of	
File: F:\allboards\..\COREBOARD_POWER.SchDoc	Drawn By:	

底板排针

此排针封装需制作

J2A

GND	A1	A1	B1	B1	GND
+5V	A2	A2	B2	B2	+5V
EXP-IO37	A3	A3	B3	B3	RTC_SCLK
EXP-IO38	A4	A4	B4	B4	RTC_IO
EXP-IO39	A5	A5	B5	B5	RTC_RST
EXP-IO40	A6	A6	B6	B6	UART1_TX_+3V3
EXP-IO41	A7	A7	B7	B7	UART2_TX_+3V3
EXP-IO42	A8	A8	B8	B8	UART1_RX_+3V3
EXP-IO43	A9	A9	B9	B9	UART2_RX_+3V3
EXP-IO44	A10	A10	B10	B10	485_RXD
EXP-IO45	A11	A11	B11	B11	485_R/D
EXP-IO46	A12	A12	B12	B12	485_TXD
EXP-IO47	A13	A13	B13	B13	CS_SPI_1
EXP-IO48	A14	A14	B14	B14	CS_SPI_0
EXP-IO49	A15	A15	B15	B15	SCLK_SPI
EXP-IO10	A16	A16	B16	B16	MISO_SPI
EXP-IO11	A17	A17	B17	B17	MOSI_SPI
EXP-IO12	A18	A18	B18	B18	BUZZ
EXP-IO16	A19	A19	B19	B19	SCL_I2C
EXP-IO15	A20	A20	B20	B20	SDA_I2C
EXP-IO14	A21	A21	B21	B21	EXP-IO1
EXP-IO13	A22	A22	B22	B22	EXP-IO2
EXP-IO17	A23	A23	B23	B23	EXP-IO3
EXP-IO18	A24	A24	B24	B24	EXP-IO4
EXP-IO19	A25	A25	B25	B25	EXP-IO8
EXP-IO20	A26	A26	B26	B26	EXP-IO7
EXP-IO24	A27	A27	B27	B27	EXP-IO6
EXP-IO23	A28	A28	B28	B28	EXP-IO5
EXP-IO22	A29	A29	B29	B29	EXP-IO9
EXP-IO21	A30	A30	B30	B30	SW_C0
EXP-IO25	A31	A31	B31	B31	SW_C1
EXP-IO26	A32	A32	B32	B32	SW_C2
EXP-IO27	A33	A33	B33	B33	SW_C3
EXP-IO28	A34	A34	B34	B34	SW_R0
EXP-IO32	A35	A35	B35	B35	SW_R1
EXP-IO31	A36	A36	B36	B36	SW_R2
EXP-IO30	A37	A37	B37	B37	SW_R3
EXP-IO29	A38	A38	B38	B38	EXP-IO35
+5V	A39	A39	B39	B39	+5V
GND	A40	A40	B40	B40	GND

PinHeader_40x6

J2B

GND	C1	C1	D1	D1	GND
+5V	C2	C2	D2	D2	+5V
SW_RST	C3	C3	D3	D3	LCD_RST
SW_PROG	C4	C4	D4	D4	LCD_PSB
PS2_DATA_K	C5	C5	D5	D5	DB7
PS2_CLK_K	C6	C6	D6	D6	DB6
Tem_IN	C7	C7	D7	D7	DB5
INF_IN	C8	C8	D8	D8	DB4
BITCLK	C9	C9	D9	D9	DB3
SDATA_O	C10	C10	D10	D10	DB2
SDATA_I	C11	C11	D11	D11	DB1
SYNC	C12	C12	D12	D12	DB0
AC_RST#	C13	C13	D13	D13	LCD_EN
USB_TXD	C14	C14	D14	D14	LCD_RW
USB_RXD	C15	C15	D15	D15	LCD_RS
SW0	C16	C16	D16	D16	ADC_CS
SW1	C17	C17	D17	D17	ADC_SCLK
SW2	C18	C18	D18	D18	ADC_DOUT
SW3	C19	C19	D19	D19	ADC_DIN
DIP0	C20	C20	D20	D20	DAC_SCLK
DIP1	C21	C21	D21	D21	DAC_CS
DIP2	C22	C22	D22	D22	DAC_DI
DIP3	C23	C23	D23	D23	EXP-IO51
DIP4	C24	C24	D24	D24	LED22
DIP5	C25	C25	D25	D25	LED23
DIP6	C26	C26	D26	D26	LED24
DIP7	C27	C27	D27	D27	LED25
DIP8	C28	C28	D28	D28	LED26
DIP9	C29	C29	D29	D29	LED27
DIP10	C30	C30	D30	D30	LED28
DIP11	C31	C31	D31	D31	LED29
DIP12	C32	C32	D32	D32	LED30
DIP13	C33	C33	D33	D33	LED31
DIP14	C34	C34	D34	D34	VGA_HSYNC
DIP15	C35	C35	D35	D35	VGA_VSYNC
EXP-IO33	C36	C36	D36	D36	VGA_RED0
EXP-IO34	C37	C37	D37	D37	JTAG_USBD_P
EXP-IO36	C38	C38	D38	D38	JTAG_USBD_N
+5V	C39	C39	D39	D39	+5V
GND	C40	C40	D40	D40	GND

PinHeader_40x6

J2C

GND	E1	E1	F1	F1	GND
+5V	E2	E2	F2	F2	+5V
H5	E3	E3	F3	F3	L8
H7	E4	E4	F4	F4	L7
L2	E5	E5	F5	F5	H2
L3	E6	E6	F6	F6	L1
H8	E7	E7	F7	F7	H4
L5	E8	E8	F8	F8	L6
H6	E9	E9	F9	F9	L4
H3	E10	E10	F10	F10	H1
H5_1	E11	E11	F11	F11	L8_1
H7_1	E12	E12	F12	F12	L7_1
L2_1	E13	E13	F13	F13	H2_1
L3_1	E14	E14	F14	F14	L1_1
H8_1	E15	E15	F15	F15	H4_1
L5_1	E16	E16	F16	F16	L6_1
H6_1	E17	E17	F17	F17	L4_1
H3_1	E18	E18	F18	F18	H1_1
LED_S0	E19	E19	F19	F19	LED0
LED_S3	E20	E20	F20	F20	LED1
LED_S2	E21	E21	F21	F21	LED2
LED_S1	E22	E22	F22	F22	LED3
LED_S7	E23	E23	F23	F23	LED4
LED_S6	E24	E24	F24	F24	LED5
LED_S5	E25	E25	F25	F25	LED6
LED_S4	E26	E26	F26	F26	LED7
LED_E	E27	E27	F27	F27	LED8
LED_F	E28	E28	F28	F28	LED9
LED_G	E29	E29	F29	F29	LED10
LED_DP	E30	E30	F30	F30	LED11
LED_A	E31	E31	F31	F31	LED12
LED_B	E32	E32	F32	F32	LED13
LED_C	E33	E33	F33	F33	LED14
LED_D	E34	E34	F34	F34	LED15
VGA_GREEN0	E35	E35	F35	F35	LED16
VGA_BLUE0	E36	E36	F36	F36	LED17
LED20	E37	E37	F37	F37	LED18
LED21	E38	E38	F38	F38	LED19
+5V	E39	E39	F39	F39	+5V
GND	E40	E40	F40	F40	GND

PinHeader_40x6

Title		
Size: A3	Number	Revision
Date: 2017/1/11		Sheet of
File: F:\allboards\..\PINHEAD.SchDoc		Drawn By: