



Pin Information for the Cyclone® V 5CEBA5 Device
Version 1.0
Note (1)

Bank Number	VREF	Pin Name/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	F484	DQS for X8	DQS for X16
3A		TDO		TDO			M5		
3A		nCS0		DATA4			R4		
3A		TMS		TMS			P5		
3A		AS_DATA3		DATA3			T4		
3A		TCK		TCK			V5		
3A		AS_DATA2		DATA2			AA5		
3A		TDI		TDI			W5		
3A		AS_DATA1		DATA1			AB3		
3A		DCLK		DCLK			V3		
3A		AS_DATA0,ASDO		DATA0			AB4		
3A	VREFB3A0	IO		DATA6	DIFFIO_RX_B1n	DIFFOUT_B1n	R6	DQ1B	
3A	VREFB3A0	IO		DATA5	DIFFIO_TX_B2n	DIFFOUT_B2n	U7		
3A	VREFB3A0	IO		DATA8	DIFFIO_RX_B1p	DIFFOUT_B1p	R5	DQ1B	
3A	VREFB3A0	IO		DATA7	DIFFIO_TX_B2p	DIFFOUT_B2p	U8	DQ1B	
3A	VREFB3A0	IO		DATA10	DIFFIO_RX_B3n	DIFFOUT_B3n	P6	DQS1B	
3A	VREFB3A0	IO		DATA9	DIFFIO_TX_B4n	DIFFOUT_B4n	W8	DQ1B	
3A	VREFB3A0	IO		DATA12	DIFFIO_RX_B3p	DIFFOUT_B3p	N6	DQS1B	
3A	VREFB3A0	IO		DATA11	DIFFIO_TX_B4p	DIFFOUT_B4p	W9		
3A	VREFB3A0	IO		DATA14	DIFFIO_RX_B5n	DIFFOUT_B5n	T7	DQ1B	
3A	VREFB3A0	IO		DATA13	DIFFIO_TX_B6n	DIFFOUT_B6n	U6	DQ1B	
3A	VREFB3A0	IO		CLKUSR	DIFFIO_RX_B5p	DIFFOUT_B5p	T8	DQ1B	
3A	VREFB3A0	IO		DATA15	DIFFIO_TX_B6p	DIFFOUT_B6p	V6	DQ1B	
3A	VREFB3A0	IO		PR_DONE	DIFFIO_RX_B7n	DIFFOUT_B7n	M6		
3A	VREFB3A0	IO		PR_READY	DIFFIO_TX_B8n	DIFFOUT_B8n	R7	DQ1B	
3A	VREFB3A0	IO		PR_ERROR	DIFFIO_RX_B7p	DIFFOUT_B7p	M7		
3A	VREFB3A0	IO			DIFFIO_TX_B8p	DIFFOUT_B8p	P7	DQ1B	
3B	VREFB3B0	IO			DIFFIO_TX_B9n	DIFFOUT_B9n	AB6		
3B	VREFB3B0	IO			DIFFIO_RX_B10n	DIFFOUT_B10n	V9	DQ2B	
3B	VREFB3B0	IO			DIFFIO_TX_B9p	DIFFOUT_B9p	AB5	DQ2B	
3B	VREFB3B0	IO			DIFFIO_RX_B10p	DIFFOUT_B10p	V10	DQ2B	
3B	VREFB3B0	IO			DIFFIO_RX_B11n	DIFFOUT_B11n	P8	DQS2B	
3B	VREFB3B0	IO			DIFFIO_TX_B12n	DIFFOUT_B12n	AA7	DQ2B	
3B	VREFB3B0	IO			DIFFIO_RX_B11p	DIFFOUT_B11p	N8	DQS2B	
3B	VREFB3B0	IO			DIFFIO_TX_B12p	DIFFOUT_B12p	AB7		
3B	VREFB3B0	IO			DIFFIO_TX_B13n	DIFFOUT_B13n	AA8	DQ2B	
3B	VREFB3B0	IO			DIFFIO_RX_B14n	DIFFOUT_B14n	T9	DQ2B	
3B	VREFB3B0	IO			DIFFIO_TX_B13p	DIFFOUT_B13p	AB8	DQ2B	
3B	VREFB3B0	IO			DIFFIO_RX_B14p	DIFFOUT_B14p	U10	DQ2B	
3B	VREFB3B0	IO	CLK0n,FPLL_B1n		DIFFIO_RX_B15n	DIFFOUT_B15n	M8		
3B	VREFB3B0	IO			DIFFIO_TX_B16n	DIFFOUT_B16n	AA10	DQ2B	
3B	VREFB3B0	IO	CLK0p,FPLL_B1p		DIFFIO_RX_B15p	DIFFOUT_B15p	M9		
3B	VREFB3B0	IO			DIFFIO_TX_B16p	DIFFOUT_B16p	AA9	DQ2B	
3B	VREFB3B0	IO			DIFFIO_TX_B17n	DIFFOUT_B17n	Y10		
3B	VREFB3B0	IO			DIFFIO_RX_B18n	DIFFOUT_B18n	T10	DQ3B	
3B	VREFB3B0	IO			DIFFIO_TX_B17p	DIFFOUT_B17p	Y9	DQ3B	
3B	VREFB3B0	IO			DIFFIO_RX_B18p	DIFFOUT_B18p	R9	DQ3B	
3B	VREFB3B0	IO			DIFFIO_RX_B19n	DIFFOUT_B19n	U11	DQS3B	
3B	VREFB3B0	IO			DIFFIO_TX_B20n	DIFFOUT_B20n	R12	DQ3B	
3B	VREFB3B0	IO			DIFFIO_RX_B19p	DIFFOUT_B19p	U12	DQS3B	
3B	VREFB3B0	IO			DIFFIO_TX_B20p	DIFFOUT_B20p	P12		
3B	VREFB3B0	IO	FPLL_B1n,CLKOUT1,FPLL_B1n,CLKOUTn		DIFFIO_TX_B21n	DIFFOUT_B21n	AB10	DQ3B	
3B	VREFB3B0	IO			DIFFIO_RX_B22n	DIFFOUT_B22n	R10	DQ3B	
3B	VREFB3B0	IO	FPLL_B1p,CLKOUT0,FPLL_B1p,CLKOUTp,FPLL_B1p,FB		DIFFIO_TX_B21p	DIFFOUT_B21p	AB11	DQ3B	
3B	VREFB3B0	IO			DIFFIO_RX_B22p	DIFFOUT_B22p	R11	DQ3B	
3B	VREFB3B0	IO	CLK1n		DIFFIO_RX_B23n	DIFFOUT_B23n	P9		
3B	VREFB3B0	IO			DIFFIO_TX_B24n	DIFFOUT_B24n	Y11	DQ3B	
3B	VREFB3B0	IO	CLK1p		DIFFIO_RX_B23p	DIFFOUT_B23p	N9		
3B	VREFB3B0	IO			DIFFIO_TX_B24p	DIFFOUT_B24p	AA12	DQ3B	
4A	VREFB4A0	IO	RZQ_0		DIFFIO_TX_B25n	DIFFOUT_B25n	AB13		
4A	VREFB4A0	IO			DIFFIO_RX_B26n	DIFFOUT_B26n	V13	DQ4B	
4A	VREFB4A0	IO			DIFFIO_TX_B25p	DIFFOUT_B25p	AB12	DQ4B	
4A	VREFB4A0	IO			DIFFIO_RX_B26p	DIFFOUT_B26p	U13	DQ4B	
4A	VREFB4A0	IO			DIFFIO_RX_B27n	DIFFOUT_B27n	T12	DQS4B	
4A	VREFB4A0	IO			DIFFIO_TX_B28n	DIFFOUT_B28n	AA14	DQ4B	
4A	VREFB4A0	IO			DIFFIO_RX_B27p	DIFFOUT_B27p	T13	DQS4B	
4A	VREFB4A0	IO			DIFFIO_TX_B28p	DIFFOUT_B28p	AA13		
4A	VREFB4A0	IO			DIFFIO_TX_B29n	DIFFOUT_B29n	AB15	DQ4B	
4A	VREFB4A0	IO			DIFFIO_RX_B30n	DIFFOUT_B30n	Y14	DQ4B	
4A	VREFB4A0	IO			DIFFIO_TX_B29p	DIFFOUT_B29p	AA15	DQ4B	
4A	VREFB4A0	IO			DIFFIO_RX_B30p	DIFFOUT_B30p	Y15	DQ4B	
4A	VREFB4A0	IO	CLK2n		DIFFIO_RX_B31n	DIFFOUT_B31n	V14		



Pin Information for the Cyclone® V 5CEBA5 Device
Version 1.0
Note (1)

Bank Number	VREF	Pin Name/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	F484	DQS for X8	DQS for X16
4A	VREFB4A0	IO			DIFFIO_TX_B32n	DIFFOOUT_B32n	AB17	DQ4B	
4A	VREFB4A0	IO	CLK2p		DIFFIO_RX_B31p	DIFFOOUT_B31p	V15		
4A	VREFB4A0	IO			DIFFIO_TX_B32p	DIFFOOUT_B32p	AB18	DQ4B	
4A	VREFB4A0	IO			DIFFIO_TX_B33n	DIFFOOUT_B33n	AB20		
4A	VREFB4A0	IO			DIFFIO_RX_B34n	DIFFOOUT_B34n	Y16	DQ5B	DQ1B
4A	VREFB4A0	IO			DIFFIO_TX_B33p	DIFFOOUT_B33p	AB21	DQ5B	DQ1B
4A	VREFB4A0	IO			DIFFIO_RX_B34p	DIFFOOUT_B34p	Y17	DQ5B	DQ1B
4A	VREFB4A0	IO			DIFFIO_RX_B35n	DIFFOOUT_B35n	T14	DQSn6B	DQ1B
4A	VREFB4A0	IO			DIFFIO_TX_B36n	DIFFOOUT_B36n	AA17	DQ5B	DQ1B
4A	VREFB4A0	IO			DIFFIO_RX_B35p	DIFFOOUT_B35p	U15	DQ5B	DQ1B
4A	VREFB4A0	IO			DIFFIO_TX_B36p	DIFFOOUT_B36p	AA18		
4A	VREFB4A0	IO			DIFFIO_TX_B37n	DIFFOOUT_B37n	AA19	DQ5B	DQ1B
4A	VREFB4A0	IO			DIFFIO_RX_B38n	DIFFOOUT_B38n	V20	DQ5B	DQ1B
4A	VREFB4A0	IO			DIFFIO_TX_B37p	DIFFOOUT_B37p	AA20	DQ5B	DQ1B
4A	VREFB4A0	IO			DIFFIO_RX_B38p	DIFFOOUT_B38p	W19	DQ5B	DQ1B
4A	VREFB4A0	IO	CLK3n		DIFFIO_RX_B39n	DIFFOOUT_B39n	V16		
4A	VREFB4A0	IO			DIFFIO_TX_B40n	DIFFOOUT_B40n	AB22	DQ5B	DQ1B
4A	VREFB4A0	IO	CLK3p		DIFFIO_RX_B39p	DIFFOOUT_B39p	W16		
4A	VREFB4A0	IO			DIFFIO_TX_B40p	DIFFOOUT_B40p	AA22	DQ5B	DQ1B
4A	VREFB4A0	IO			DIFFIO_TX_B41n	DIFFOOUT_B41n	Y22		
4A	VREFB4A0	IO			DIFFIO_RX_B42n	DIFFOOUT_B42n	Y20	DQ6B	DQ1B
4A	VREFB4A0	IO			DIFFIO_TX_B41p	DIFFOOUT_B41p	W22	DQ6B	DQ1B
4A	VREFB4A0	IO			DIFFIO_RX_B42p	DIFFOOUT_B42p	Y19	DQ6B	DQ1B
4A	VREFB4A0	IO			DIFFIO_RX_B43n	DIFFOOUT_B43n	P14	DQSn6B	DQSn1B
4A	VREFB4A0	IO			DIFFIO_TX_B44n	DIFFOOUT_B44n	Y21	DQ6B	DQ1B
4A	VREFB4A0	IO			DIFFIO_RX_B43p	DIFFOOUT_B43p	R14	DQSn6B	DQSn1B
4A	VREFB4A0	IO			DIFFIO_TX_B44p	DIFFOOUT_B44p	W21		
4A	VREFB4A0	IO			DIFFIO_TX_B45n	DIFFOOUT_B45n	U22	DQ6B	DQ1B
4A	VREFB4A0	IO			DIFFIO_RX_B46n	DIFFOOUT_B46n	V19	DQ6B	DQ1B
4A	VREFB4A0	IO			DIFFIO_TX_B45p	DIFFOOUT_B45p	V21	DQ6B	DQ1B
4A	VREFB4A0	IO			DIFFIO_RX_B46p	DIFFOOUT_B46p	V18	DQ6B	DQ1B
4A	VREFB4A0	IO			DIFFIO_RX_B47n	DIFFOOUT_B47n	U16		
4A	VREFB4A0	IO			DIFFIO_TX_B48n	DIFFOOUT_B48n	U21	DQ6B	DQ1B
4A	VREFB4A0	IO			DIFFIO_RX_B47p	DIFFOOUT_B47p	U17		
4A	VREFB4A0	IO			DIFFIO_TX_B48p	DIFFOOUT_B48p	U20	DQ6B	DQ1B
5A	VREFB5A0	IO	RZQ_1		DIFFIO_TX_R1p	DIFFOOUT_R1p	T19	DQ1R	
5A	VREFB5A0	IO		INIT_DONE	DIFFIO_RX_R2p	DIFFOOUT_R2p	T18		
5A	VREFB5A0	IO		PR_REQUEST	DIFFIO_TX_R1n	DIFFOOUT_R1n	T20	DQ1R	
5A	VREFB5A0	IO		CRC_ERROR	DIFFIO_RX_R2n	DIFFOOUT_R2n	T17		
5A	VREFB5A0	IO		nCEO	DIFFIO_TX_R3p	DIFFOOUT_R3p	T22	DQ1R	
5A	VREFB5A0	IO			DIFFIO_RX_R4p	DIFFOOUT_R4p	T15	DQ1R	
5A	VREFB5A0	IO		CvP_CONFDONE	DIFFIO_TX_R3n	DIFFOOUT_R3n	R22	DQ1R	
5A	VREFB5A0	IO			DIFFIO_RX_R4n	DIFFOOUT_R4n	R15	DQ1R	
5A	VREFB5A0	IO		DEV_OE	DIFFIO_TX_R5p	DIFFOOUT_R5p	R21		
5A	VREFB5A0	IO			DIFFIO_RX_R6p	DIFFOOUT_R6p	R16	DQSn1R	
5A	VREFB5A0	IO		DEV_CLRn	DIFFIO_TX_R5n	DIFFOOUT_R5n	P22	DQ1R	
5A	VREFB5A0	IO			DIFFIO_RX_R6n	DIFFOOUT_R6n	R17	DQSn1R	
5A	VREFB5A0	IO			DIFFIO_TX_R7p	DIFFOOUT_R7p	P19	DQ1R	
5A	VREFB5A0	IO			DIFFIO_RX_R8p	DIFFOOUT_R8p	P16	DQ1R	
5A	VREFB5A0	IO			DIFFIO_TX_R7n	DIFFOOUT_R7n	P18		
5A	VREFB5A0	IO			DIFFIO_RX_R8n	DIFFOOUT_R8n	P17	DQ1R	
5B	VREFB5B0	IO	CLK6p		DIFFIO_RX_R17p	DIFFOOUT_R17p	N16		
5B	VREFB5B0	IO			DIFFIO_TX_R18p	DIFFOOUT_R18p	N20	DQ2R	
5B	VREFB5B0	IO	CLK6n		DIFFIO_RX_R17n	DIFFOOUT_R17n	M16		
5B	VREFB5B0	IO			DIFFIO_TX_R18n	DIFFOOUT_R18n	N21	DQ2R	
5B	VREFB5B0	IO			DIFFIO_RX_R19p	DIFFOOUT_R19p	N19	DQ2R	
5B	VREFB5B0	IO		FPLL_BR_CLKOUT0,FPLL_BR_CLKOUTp,FPLL_BR_FB	DIFFIO_TX_R20p	DIFFOOUT_R20p	M22	DQ2R	
5B	VREFB5B0	IO			DIFFIO_RX_R19n	DIFFOOUT_R19n	M18	DQ2R	
5B	VREFB5B0	IO		FPLL_BR_CLKOUT1,FPLL_BR_CLKOUTn	DIFFIO_TX_R20n	DIFFOOUT_R20n	L22	DQ2R	
5B	VREFB5B0	IO			DIFFIO_RX_R21p	DIFFOOUT_R21p	K17	DQSn2R	
5B	VREFB5B0	IO			DIFFIO_TX_R22p	DIFFOOUT_R22p	M20		
5B	VREFB5B0	IO			DIFFIO_RX_R21n	DIFFOOUT_R21n	L17	DQSn2R	
5B	VREFB5B0	IO			DIFFIO_TX_R22n	DIFFOOUT_R22n	M21	DQ2R	
5B	VREFB5B0	IO			DIFFIO_RX_R23p	DIFFOOUT_R23p	L19	DQ2R	
5B	VREFB5B0	IO			DIFFIO_TX_R24p	DIFFOOUT_R24p	K21	DQ2R	
5B	VREFB5B0	IO			DIFFIO_RX_R23n	DIFFOOUT_R23n	L18	DQ2R	
5B	VREFB5B0	IO			DIFFIO_TX_R24n	DIFFOOUT_R24n	K22		
7A		GND					F17		
7A	VREFB7A0	IO			DIFFIO_RX_T1p	DIFFOOUT_T1p	H21		
7A	VREFB7A0	IO			DIFFIO_TX_T2p	DIFFOOUT_T2p	E21	DQ1T	DQ1T
7A	VREFB7A0	IO			DIFFIO_RX_T1n	DIFFOOUT_T1n	G21		



Pin Information for the Cyclone® V 5CEBA5 Device
Version 1.0
Note (1)

Bank Number	VREF	Pin Name/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	F484	DQS for X8	DQS for X16
7A	VREFB7A0	IO			DIFFIO_TX_T2n	DIFFOUT_T2n	D21	DQ1T	DQ1T
7A	VREFB7A0	IO			DIFFIO_RX_T3p	DIFFOUT_T3p	E19	DQ1T	DQ1T
7A	VREFB7A0	IO			DIFFIO_TX_T4p	DIFFOUT_T4p	C20	DQ1T	DQ1T
7A	VREFB7A0	IO			DIFFIO_RX_T3n	DIFFOUT_T3n	D19	DQ1T	DQ1T
7A	VREFB7A0	IO			DIFFIO_TX_T4n	DIFFOUT_T4n	B20	DQ1T	DQ1T
7A	VREFB7A0	IO			DIFFIO_RX_T5p	DIFFOUT_T5p	J21	DQS1T	DQS1T
7A	VREFB7A0	IO			DIFFIO_TX_T6p	DIFFOUT_T6p	B18		
7A	VREFB7A0	IO			DIFFIO_RX_T5n	DIFFOUT_T5n	J22	DQSn1T	DQSn1T
7A	VREFB7A0	IO			DIFFIO_TX_T6n	DIFFOUT_T6n	B17	DQ1T	DQ1T
7A	VREFB7A0	IO			DIFFIO_RX_T7p	DIFFOUT_T7p	C21	DQ1T	DQ1T
7A	VREFB7A0	IO			DIFFIO_TX_T8p	DIFFOUT_T8p	G22	DQ1T	DQ1T
7A	VREFB7A0	IO			DIFFIO_RX_T7n	DIFFOUT_T7n	B21	DQ1T	DQ1T
7A	VREFB7A0	IO			DIFFIO_TX_T8n	DIFFOUT_T8n	F22		
7A	VREFB7A0	IO			DIFFIO_RX_T9p	DIFFOUT_T9p	G20		
7A	VREFB7A0	IO			DIFFIO_TX_T10p	DIFFOUT_T10p	E22	DQ2T	DQ1T
7A	VREFB7A0	IO			DIFFIO_RX_T9n	DIFFOUT_T9n	H20		
7A	VREFB7A0	IO			DIFFIO_TX_T10n	DIFFOUT_T10n	D22	DQ2T	DQ1T
7A	VREFB7A0	IO			DIFFIO_RX_T11p	DIFFOUT_T11p	C19	DQ2T	DQ1T
7A	VREFB7A0	IO			DIFFIO_TX_T12p	DIFFOUT_T12p	B22	DQ2T	DQ1T
7A	VREFB7A0	IO			DIFFIO_RX_T11n	DIFFOUT_T11n	C18	DQ2T	DQ1T
7A	VREFB7A0	IO			DIFFIO_TX_T12n	DIFFOUT_T12n	A22	DQ2T	DQ1T
7A	VREFB7A0	IO			DIFFIO_RX_T13p	DIFFOUT_T13p	F19	DQS2T	DQ1T
7A	VREFB7A0	IO			DIFFIO_TX_T14p	DIFFOUT_T14p	E20		
7A	VREFB7A0	IO			DIFFIO_RX_T13n	DIFFOUT_T13n	F18	DQSn2T	DQ1T
7A	VREFB7A0	IO			DIFFIO_TX_T14n	DIFFOUT_T14n	F20	DQ2T	DQ1T
7A	VREFB7A0	IO			DIFFIO_RX_T15p	DIFFOUT_T15p	A18	DQ2T	DQ1T
7A	VREFB7A0	IO			DIFFIO_TX_T16p	DIFFOUT_T16p	A20	DQ2T	DQ1T
7A	VREFB7A0	IO			DIFFIO_RX_T15n	DIFFOUT_T15n	A17	DQ2T	DQ1T
7A	VREFB7A0	IO			DIFFIO_TX_T16n	DIFFOUT_T16n	A19		
7A	VREFB7A0	IO			DIFFIO_RX_T17p	DIFFOUT_T17p	K20		
7A	VREFB7A0	IO			DIFFIO_TX_T18p	DIFFOUT_T18p	B16	DQ3T	DQ2T
7A	VREFB7A0	IO			DIFFIO_RX_T17n	DIFFOUT_T17n	K19		
7A	VREFB7A0	IO			DIFFIO_TX_T18n	DIFFOUT_T18n	C16	DQ3T	DQ2T
7A	VREFB7A0	IO			DIFFIO_RX_T19p	DIFFOUT_T19p	D17	DQ3T	DQ2T
7A	VREFB7A0	IO			DIFFIO_TX_T20p	DIFFOUT_T20p	G17	DQ3T	DQ2T
7A	VREFB7A0	IO			DIFFIO_RX_T19n	DIFFOUT_T19n	E16	DQ3T	DQ2T
7A	VREFB7A0	IO			DIFFIO_TX_T20n	DIFFOUT_T20n	G16	DQ3T	DQ2T
7A	VREFB7A0	IO			DIFFIO_RX_T21p	DIFFOUT_T21p	G18	DQS3T	DQS2T
7A	VREFB7A0	IO			DIFFIO_TX_T22p	DIFFOUT_T22p	J19		
7A	VREFB7A0	IO			DIFFIO_RX_T21n	DIFFOUT_T21n	H18	DQSn3T	DQSn2T
7A	VREFB7A0	IO			DIFFIO_TX_T22n	DIFFOUT_T22n	J18	DQ3T	DQ2T
7A	VREFB7A0	IO			DIFFIO_RX_T23p	DIFFOUT_T23p	E15	DQ3T	DQ2T
7A	VREFB7A0	IO			DIFFIO_TX_T24p	DIFFOUT_T24p	A15	DQ3T	DQ2T
7A	VREFB7A0	IO			DIFFIO_RX_T23n	DIFFOUT_T23n	F15	DQ3T	DQ2T
7A	VREFB7A0	IO			DIFFIO_TX_T24n	DIFFOUT_T24n	A14		
7A	VREFB7A0	IO	CLK11p		DIFFIO_RX_T25p	DIFFOUT_T25p	H16		
7A	VREFB7A0	IO			DIFFIO_TX_T26p	DIFFOUT_T26p	J17	DQ4T	DQ2T
7A	VREFB7A0	IO	CLK11n		DIFFIO_RX_T25n	DIFFOUT_T25n	H15		
7A	VREFB7A0	IO			DIFFIO_TX_T26n	DIFFOUT_T26n	K16	DQ4T	DQ2T
7A	VREFB7A0	IO			DIFFIO_RX_T27p	DIFFOUT_T27p	C15	DQ4T	DQ2T
7A	VREFB7A0	IO			DIFFIO_TX_T28p	DIFFOUT_T28p	G15	DQ4T	DQ2T
7A	VREFB7A0	IO			DIFFIO_RX_T27n	DIFFOUT_T27n	B15	DQ4T	DQ2T
7A	VREFB7A0	IO			DIFFIO_TX_T28n	DIFFOUT_T28n	F14	DQ4T	DQ2T
7A	VREFB7A0	IO			DIFFIO_RX_T29p	DIFFOUT_T29p	H14	DQS4T	DQ2T
7A	VREFB7A0	IO			DIFFIO_TX_T30p	DIFFOUT_T30p	B13		
7A	VREFB7A0	IO			DIFFIO_RX_T29n	DIFFOUT_T29n	J13	DQSn4T	DQ2T
7A	VREFB7A0	IO			DIFFIO_TX_T30n	DIFFOUT_T30n	A13	DQ4T	DQ2T
7A	VREFB7A0	IO			DIFFIO_RX_T31p	DIFFOUT_T31p	E14	DQ4T	DQ2T
7A	VREFB7A0	IO			DIFFIO_TX_T32p	DIFFOUT_T32p	J11	DQ4T	DQ2T
7A	VREFB7A0	IO			DIFFIO_RX_T31n	DIFFOUT_T31n	F13	DQ4T	DQ2T
7A	VREFB7A0	IO			DIFFIO_TX_T32n	DIFFOUT_T32n	H10		
7A	VREFB7A0	IO	CLK10p		DIFFIO_RX_T33p	DIFFOUT_T33p	H13		
7A	VREFB7A0	IO			DIFFIO_TX_T34p	DIFFOUT_T34p	G11	DQ5T	
7A	VREFB7A0	IO	CLK10n		DIFFIO_RX_T33n	DIFFOUT_T33n	G13		
7A	VREFB7A0	IO			DIFFIO_TX_T34n	DIFFOUT_T34n	F12	DQ5T	
7A	VREFB7A0	IO			DIFFIO_RX_T35p	DIFFOUT_T35p	D13	DQ5T	
7A	VREFB7A0	IO			DIFFIO_TX_T36p	DIFFOUT_T36p	B12	DQ5T	
7A	VREFB7A0	IO			DIFFIO_RX_T35n	DIFFOUT_T35n	C13	DQ5T	
7A	VREFB7A0	IO			DIFFIO_TX_T36n	DIFFOUT_T36n	A12	DQ5T	
7A	VREFB7A0	IO			DIFFIO_RX_T37p	DIFFOUT_T37p	H11	DQS5T	
7A	VREFB7A0	IO			DIFFIO_TX_T38p	DIFFOUT_T38p	L8		



Pin Information for the Cyclone® V 5CEBA5 Device
Version 1.0
Note (1)

Bank Number	VREF	Pin Name/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	F484	DQS for X8	DQS for X16
7A	VREFB7A0	IO			DIFFIO_RX_T37n	DIFFOUT_T37n	G12	DQSn5T	
7A	VREFB7A0	IO			DIFFIO_TX_T38n	DIFFOUT_T38n	K9	DQ5T	
7A	VREFB7A0	IO			DIFFIO_RX_T39p	DIFFOUT_T39p	D12	DQ5T	
7A	VREFB7A0	IO			DIFFIO_TX_T40p	DIFFOUT_T40p	C11	DQ5T	
7A	VREFB7A0	IO			DIFFIO_RX_T39n	DIFFOUT_T39n	E12	DQ5T	
7A	VREFB7A0	IO	RZQ_2		DIFFIO_TX_T40n	DIFFOUT_T40n	B11		
8A	VREFB8A0	IO	CLK9p		DIFFIO_RX_T41p	DIFFOUT_T41p	G10		
8A	VREFB8A0	IO			DIFFIO_TX_T42p	DIFFOUT_T42p	L7	DQ6T	
8A	VREFB8A0	IO	CLK9n		DIFFIO_RX_T41n	DIFFOUT_T41n	F10		
8A	VREFB8A0	IO			DIFFIO_TX_T42n	DIFFOUT_T42n	K7	DQ6T	
8A	VREFB8A0	IO			DIFFIO_RX_T43p	DIFFOUT_T43p	J7	DQ6T	
8A	VREFB8A0	IO	FPLL_TL_CLKOUT0,FPLL_TL_CLKOUTp,FPLL_TL_FB		DIFFIO_TX_T44p	DIFFOUT_T44p	H8	DQ6T	
8A	VREFB8A0	IO			DIFFIO_RX_T43n	DIFFOUT_T43n	J8	DQ6T	
8A	VREFB8A0	IO	FPLL_TL_CLKOUT1,FPLL_TL_CLKOUTn		DIFFIO_TX_T44n	DIFFOUT_T44n	G8	DQ6T	
8A	VREFB8A0	IO			DIFFIO_RX_T45p	DIFFOUT_T45p	J9	DQS6T	
8A	VREFB8A0	IO			DIFFIO_TX_T46p	DIFFOUT_T46p	A10		
8A	VREFB8A0	IO			DIFFIO_RX_T45n	DIFFOUT_T45n	H9	DQSn6T	
8A	VREFB8A0	IO			DIFFIO_TX_T46n	DIFFOUT_T46n	A9	DQ6T	
8A	VREFB8A0	IO			DIFFIO_RX_T47p	DIFFOUT_T47p	B10	DQ6T	
8A	VREFB8A0	IO			DIFFIO_TX_T48p	DIFFOUT_T48p	A5	DQ6T	
8A	VREFB8A0	IO			DIFFIO_RX_T47n	DIFFOUT_T47n	C9	DQ6T	
8A	VREFB8A0	IO			DIFFIO_TX_T48n	DIFFOUT_T48n	B5		
8A	VREFB8A0	IO	CLK8p,FPLL_TL_FBp		DIFFIO_RX_T49p	DIFFOUT_T49p	E10		
8A	VREFB8A0	IO			DIFFIO_TX_T50p	DIFFOUT_T50p	B6	DQ7T	
8A	VREFB8A0	IO	CLK8n,FPLL_TL_FBn		DIFFIO_RX_T49n	DIFFOUT_T49n	F9		
8A	VREFB8A0	IO			DIFFIO_TX_T50n	DIFFOUT_T50n	B7	DQ7T	
8A	VREFB8A0	IO			DIFFIO_RX_T51p	DIFFOUT_T51p	A8	DQ7T	
8A	VREFB8A0	IO			DIFFIO_TX_T52p	DIFFOUT_T52p	C6	DQ7T	
8A	VREFB8A0	IO			DIFFIO_RX_T51n	DIFFOUT_T51n	A7	DQ7T	
8A	VREFB8A0	IO			DIFFIO_TX_T52n	DIFFOUT_T52n	D6	DQ7T	
8A	VREFB8A0	IO			DIFFIO_RX_T53p	DIFFOUT_T53p	E9	DQS7T	
8A	VREFB8A0	IO			DIFFIO_TX_T54p	DIFFOUT_T54p	D7		
8A	VREFB8A0	IO			DIFFIO_RX_T53n	DIFFOUT_T53n	D9	DQSn7T	
8A	VREFB8A0	IO			DIFFIO_TX_T54n	DIFFOUT_T54n	C8	DQ7T	
8A	VREFB8A0	IO			DIFFIO_RX_T55p	DIFFOUT_T55p	G6	DQ7T	
8A	VREFB8A0	IO			DIFFIO_TX_T56p	DIFFOUT_T56p	F7	DQ7T	
8A	VREFB8A0	IO			DIFFIO_RX_T55n	DIFFOUT_T55n	H6	DQ7T	
8A	VREFB8A0	IO			DIFFIO_TX_T56n	DIFFOUT_T56n	E7		
9A		MSEL0		MSEL0			L6		
9A		CONF_DONE		CONF_DONE			K6		
9A		MSEL1		MSEL1			J6		
9A		nSTATUS		nSTATUS			H5		
9A		nCE		nCE			G5		
9A		MSEL2		MSEL2			A2		
9A		MSEL3		MSEL3			E5		
9A		nCONFIG		nCONFIG			A4		
9A		MSEL4		MSEL4			F3		
9A		GND					C5		
		GND					F5		
		GND					G4		
		GND					V4		
		GND					U4		
		GND					AB19		
		GND					AB14		
		GND					AB9		
		GND					AB2		
		GND					AB1		
		GND					AA11		
		GND					AA6		
		GND					AA4		
		GND					AA3		
		GND					Y18		
		GND					Y5		
		GND					Y2		
		GND					Y1		
		GND					W4		
		GND					W3		
		GND					V22		
		GND					V17		
		GND					V12		
		GND					V7		



Pin Information for the Cyclone® V 5CEBA5 Device
Version 1.0
Note (1)

Bank Number	VREF	Pin Name/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	F484	DQS for X8	DQS for X16
		GND					V2		
		GND					V1		
		GND					U9		
		GND					U5		
		GND					U3		
		GND					T21		
		GND					T16		
		GND					T2		
		GND					T1		
		GND					R13		
		GND					R3		
		GND					P10		
		GND					P4		
		GND					P2		
		GND					P1		
		GND					N22		
		GND					N17		
		GND					N15		
		GND					N13		
		GND					N11		
		GND					N7		
		GND					N5		
		GND					N3		
		GND					M14		
		GND					M12		
		GND					M10		
		GND					M4		
		GND					M2		
		GND					M1		
		GND					L21		
		GND					L15		
		GND					L13		
		GND					L11		
		GND					L5		
		GND					L3		
		GND					K14		
		GND					K12		
		GND					K10		
		GND					K8		
		GND					K4		
		GND					K2		
		GND					K1		
		GND					J20		
		GND					J15		
		GND					J5		
		GND					J3		
		GND					H22		
		GND					H12		
		GND					H7		
		GND					H4		
		GND					H3		
		GND					H2		
		GND					H1		
		GND					G19		
		GND					G9		
		GND					G3		
		GND					F16		
		GND					F6		
		GND					F2		
		GND					F1		
		GND					E13		
		GND					E4		
		GND					E3		
		GND					D20		
		GND					D10		
		GND					D5		
		GND					D2		
		GND					D1		
		GND					C17		
		GND					C4		
		GND					C3		



Pin Information for the Cyclone® V 5CEBA5 Device
Version 1.0
Note (1)

Bank Number	VREF	Pin Name/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	F484	DQS for X8	DQS for X16
		GND					B14		
		GND					B9		
		GND					B2		
		GND					B1		
		GND					A21		
		GND					A11		
		VCC					P15		
		VCC					P13		
		VCC					P11		
		VCC					N14		
		VCC					N12		
		VCC					N10		
		VCC					M15		
		VCC					M13		
		VCC					M11		
		VCC					L16		
		VCC					L14		
		VCC					L12		
		VCC					L10		
		VCC					K15		
		VCC					K13		
		VCC					K11		
		VCC					J16		
		VCC					J14		
		VCC					J12		
		VCC					J10		
		VCC					P3		
		VCC					K3		
		VCC					L4		
		VCC					N4		
		VCC					K5		
		VCC					J4		
		DNU					B3		
		DNU					B4		
		DNU					E17		
		DNU					L9		
		VCCPGM					V8		
		VCCPGM					R19		
		VCCPGM					F8		
		VCCBAT					A3		
		VCCIO3A					T6		
		VCCIO3A					Y8		
		VCCIO3B					Y13		
		VCCIO3B					W10		
		VCCIO3B					T11		
		VCCIO3B					R8		
		VCCIO4A					U19		
		VCCIO4A					AA21		
		VCCIO4A					AA16		
		VCCIO4A					W20		
		VCCIO4A					W15		
		VCCIO4A					U14		
		VCCIO5A					R18		
		VCCIO5A					P20		
		VCCIO5B					M19		
		VCCIO5B					K18		
		VCCIO7A					B19		
		VCCIO7A					H17		
		VCCIO7A					G14		
		VCCIO7A					F21		
		VCCIO7A					F11		
		VCCIO7A					E18		
		VCCIO7A					D15		
		VCCIO7A					C22		
		VCCIO7A					C12		
		VCCIO7A					A16		
		VCCIO8A					A6		
		VCCIO8A					G7		
		VCCIO8A					E8		
		VCCIO8A					C7		
		VCCPD3A					W6		



Pin Information for the Cyclone® V 5CEBA5 Device
Version 1.0
Note (1)

Bank Number	VREF	Pin Name/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	F484	DQS for X8	DQS for X16
		VCCPD3B4A					W17		
		VCCPD3B4A					W14		
		VCCPD3B4A					W12		
		VCCPD3B4A					W11		
		VCCPD5A					P21		
		VCCPD5B					N18		
		VCCPD5B					M17		
		VCCPD7A8A					E11		
		VCCPD7A8A					D16		
		VCCPD7A8A					D14		
		VCCPD7A8A					D8		
		VCCPD7A8A					C10		
3A	VREFB3AN0	VREFB3AN0					Y7		
3B	VREFB3BN0	VREFB3BN0					Y12		
4A	VREFB4AN0	VREFB4AN0					AB16		
5A	VREFB5AN0	VREFB5AN0					R20		
5B	VREFB5BN0	VREFB5BN0					L20		
7A	VREFB7AN0	VREFB7AN0					C14		
8A	VREFB8AN0	VREFB8AN0					B8		
		NC					Y6		
		NC					V11		
		NC					C2		
		NC					C1		
		NC					G2		
		NC					G1		
		NC					L2		
		NC					L1		
		NC					R2		
		NC					R1		
		NC					W2		
		NC					W1		
		NC					AA2		
		NC					AA1		
		NC					D3		
		NC					D4		
		NC					E1		
		NC					E2		
		NC					J1		
		NC					J2		
		NC					N1		
		NC					N2		
		NC					U1		
		NC					U2		
		NC					Y3		
		NC					Y4		
		RREF TL					A1		
		VCCA_FPLL					T5		
		VCCA_FPLL					F4		
		VCCA_FPLL					U18		
		VCCA_FPLL					H19		
		VCCA_FPLL					M3		
		VCCA_FPLL					T3		
		VCC_AUX					E6		
		VCC_AUX					D18		
		VCC_AUX					W18		
		VCC_AUX					W13		
		VCC_AUX					W7		
		VCC_AUX					D11		

Note:

(1) For more information about pin definition and pin connection guidelines, refer to the [Cyclone V Device Family Pin Connection Guidelines](#).



Pin Information for the Cyclone® V 5CEBA5 Device
Version 1.0
Note (1)

Bank Number	VREF	Pin Name/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	U484	DQS for X8	DQS for X16
3A		TDO		TDO			V3		
3A		nCS0		DATA4			AB6		
3A		TMS		TMS			R4		
3A		AS_DATA3		DATA3			AA5		
3A		TCK		TCK			V5		
3A		AS_DATA2		DATA2			T5		
3A		TDI		TDI			P5		
3A		AS_DATA1		DATA1			W5		
3A		DCLK		DCLK			M5		
3A		AS_DATA0,ASDO		DATA0			AB4		
3A	VREFB3A0	IO		DATA6	DIFFIO_RX_B1n	DIFFOUT_B1n	P6	DQ1B	
3A	VREFB3A0	IO		DATA5	DIFFIO_TX_B2n	DIFFOUT_B2n	U7		
3A	VREFB3A0	IO		DATA8	DIFFIO_RX_B1p	DIFFOUT_B1p	N6	DQ1B	
3A	VREFB3A0	IO		DATA7	DIFFIO_TX_B2p	DIFFOUT_B2p	U6	DQ1B	
3A	VREFB3A0	IO		DATA10	DIFFIO_RX_B3n	DIFFOUT_B3n	M6	DQSn1B	
3A	VREFB3A0	IO		DATA9	DIFFIO_TX_B4n	DIFFOUT_B4n	R5	DQ1B	
3A	VREFB3A0	IO		DATA12	DIFFIO_RX_B3p	DIFFOUT_B3p	M7	DQS1B	
3A	VREFB3A0	IO		DATA11	DIFFIO_TX_B4p	DIFFOUT_B4p	R6		
3A	VREFB3A0	IO		DATA14	DIFFIO_RX_B5n	DIFFOUT_B5n	R7	DQ1B	
3A	VREFB3A0	IO		DATA13	DIFFIO_TX_B6n	DIFFOUT_B6n	L7	DQ1B	
3A	VREFB3A0	IO		CLKUSR	DIFFIO_RX_B5p	DIFFOUT_B5p	T7	DQ1B	
3A	VREFB3A0	IO		DATA15	DIFFIO_TX_B6p	DIFFOUT_B6p	L8	DQ1B	
3A	VREFB3A0	IO		PR_DONE	DIFFIO_RX_B7n	DIFFOUT_B7n	T8		
3A	VREFB3A0	IO		PR_READY	DIFFIO_TX_B8n	DIFFOUT_B8n	P7	DQ1B	
3A	VREFB3A0	IO		PR_ERROR	DIFFIO_RX_B7p	DIFFOUT_B7p	T9		
3A	VREFB3A0	IO			DIFFIO_TX_B8p	DIFFOUT_B8p	P8	DQ1B	
3B	VREFB3B0	IO			DIFFIO_TX_B9n	DIFFOUT_B9n	V8		
3B	VREFB3B0	IO			DIFFIO_RX_B10n	DIFFOUT_B10n	N8	DQ2B	
3B	VREFB3B0	IO			DIFFIO_TX_B9p	DIFFOUT_B9p	W8	DQ2B	
3B	VREFB3B0	IO			DIFFIO_RX_B10p	DIFFOUT_B10p	M8	DQ2B	
3B	VREFB3B0	IO			DIFFIO_RX_B11n	DIFFOUT_B11n	N9	DQSn2B	
3B	VREFB3B0	IO			DIFFIO_TX_B12n	DIFFOUT_B12n	AA7	DQ2B	
3B	VREFB3B0	IO			DIFFIO_RX_B11p	DIFFOUT_B11p	N10	DQS2B	
3B	VREFB3B0	IO			DIFFIO_TX_B12p	DIFFOUT_B12p	AB7		
3B	VREFB3B0	IO			DIFFIO_TX_B13n	DIFFOUT_B13n	Y7	DQ2B	
3B	VREFB3B0	IO			DIFFIO_RX_B14n	DIFFOUT_B14n	U8	DQ2B	
3B	VREFB3B0	IO			DIFFIO_TX_B13p	DIFFOUT_B13p	W7	DQ2B	
3B	VREFB3B0	IO			DIFFIO_RX_B14p	DIFFOUT_B14p	V9	DQ2B	
3B	VREFB3B0	IO	CLK0n,FPLL_B1n		DIFFIO_RX_B15n	DIFFOUT_B15n	R9		
3B	VREFB3B0	IO			DIFFIO_TX_B16n	DIFFOUT_B16n	AB8	DQ2B	
3B	VREFB3B0	IO	CLK0p,FPLL_B1p		DIFFIO_RX_B15p	DIFFOUT_B15p	P9		
3B	VREFB3B0	IO			DIFFIO_TX_B16p	DIFFOUT_B16p	AA8	DQ2B	
3B	VREFB3B0	IO			DIFFIO_TX_B17n	DIFFOUT_B17n	Y10		
3B	VREFB3B0	IO			DIFFIO_RX_B18n	DIFFOUT_B18n	AA9	DQ3B	
3B	VREFB3B0	IO			DIFFIO_TX_B17p	DIFFOUT_B17p	AA10	DQ3B	
3B	VREFB3B0	IO			DIFFIO_RX_B18p	DIFFOUT_B18p	Y9	DQ3B	
3B	VREFB3B0	IO			DIFFIO_RX_B19n	DIFFOUT_B19n	L9	DQSn3B	
3B	VREFB3B0	IO			DIFFIO_TX_B20n	DIFFOUT_B20n	W11	DQ3B	
3B	VREFB3B0	IO			DIFFIO_RX_B19p	DIFFOUT_B19p	M10	DQS3B	
3B	VREFB3B0	IO			DIFFIO_TX_B20p	DIFFOUT_B20p	Y11		
3B	VREFB3B0	IO	FPLL_B1n,CLKOUT1,FPLL_B1n,CLKOUTn		DIFFIO_TX_B21n	DIFFOUT_B21n	AB10	DQ3B	
3B	VREFB3B0	IO			DIFFIO_RX_B22n	DIFFOUT_B22n	U10	DQ3B	
3B	VREFB3B0	IO	FPLL_B1p,CLKOUT0,FPLL_B1p,CLKOUTp,FPLL_B1p,FB		DIFFIO_TX_B21p	DIFFOUT_B21p	AB11	DQ3B	
3B	VREFB3B0	IO			DIFFIO_RX_B22p	DIFFOUT_B22p	U11	DQ3B	
3B	VREFB3B0	IO	CLK1n		DIFFIO_RX_B23n	DIFFOUT_B23n	T10		
3B	VREFB3B0	IO			DIFFIO_TX_B24n	DIFFOUT_B24n	R11	DQ3B	
3B	VREFB3B0	IO	CLK1p		DIFFIO_RX_B23p	DIFFOUT_B23p	R10		
3B	VREFB3B0	IO			DIFFIO_TX_B24p	DIFFOUT_B24p	P12	DQ3B	
4A	VREFB4A0	IO	RZQ_0		DIFFIO_TX_B25n	DIFFOUT_B25n	AA13		
4A	VREFB4A0	IO			DIFFIO_RX_B26n	DIFFOUT_B26n	W12	DQ4B	
4A	VREFB4A0	IO			DIFFIO_TX_B25p	DIFFOUT_B25p	AB13	DQ4B	
4A	VREFB4A0	IO			DIFFIO_RX_B26p	DIFFOUT_B26p	Y12	DQ4B	
4A	VREFB4A0	IO			DIFFIO_RX_B27n	DIFFOUT_B27n	U12	DQSn4B	
4A	VREFB4A0	IO			DIFFIO_TX_B28n	DIFFOUT_B28n	R12	DQ4B	
4A	VREFB4A0	IO			DIFFIO_RX_B27p	DIFFOUT_B27p	T12	DQS4B	
4A	VREFB4A0	IO			DIFFIO_TX_B28p	DIFFOUT_B28p	T13		
4A	VREFB4A0	IO			DIFFIO_TX_B29n	DIFFOUT_B29n	AB15	DQ4B	
4A	VREFB4A0	IO			DIFFIO_RX_B30n	DIFFOUT_B30n	W13	DQ4B	
4A	VREFB4A0	IO			DIFFIO_TX_B29p	DIFFOUT_B29p	AB16	DQ4B	
4A	VREFB4A0	IO			DIFFIO_RX_B30p	DIFFOUT_B30p	V13	DQ4B	
4A	VREFB4A0	IO	CLK2n		DIFFIO_RX_B31n	DIFFOUT_B31n	T14		



Pin Information for the Cyclone® V 5CEBA5 Device
Version 1.0
Note (1)

Bank Number	VREF	Pin Name/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	U484	DQS for X8	DQS for X16
4A	VREFB4A0	IO			DIFFIO_TX_B32n	DIFFOOUT_B32n	AB18	DQ4B	
4A	VREFB4A0	IO	CLK2p		DIFFIO_RX_B31p	DIFFOOUT_B31p	U13		
4A	VREFB4A0	IO			DIFFIO_TX_B32p	DIFFOOUT_B32p	AA18	DQ4B	
4A	VREFB4A0	IO			DIFFIO_TX_B33n	DIFFOOUT_B33n	AA19		
4A	VREFB4A0	IO			DIFFIO_RX_B34n	DIFFOOUT_B34n	Y14	DQ5B	DQ1B
4A	VREFB4A0	IO			DIFFIO_TX_B33p	DIFFOOUT_B33p	Y19	DQ5B	DQ1B
4A	VREFB4A0	IO			DIFFIO_RX_B34p	DIFFOOUT_B34p	W14	DQ5B	DQ1B
4A	VREFB4A0	IO			DIFFIO_RX_B35n	DIFFOOUT_B35n	P14	DQSn6B	DQ1B
4A	VREFB4A0	IO			DIFFIO_TX_B36n	DIFFOOUT_B36n	AA20	DQ5B	DQ1B
4A	VREFB4A0	IO			DIFFIO_RX_B35p	DIFFOOUT_B35p	R14	DQS5B	DQ1B
4A	VREFB4A0	IO			DIFFIO_TX_B36p	DIFFOOUT_B36p	Y20		
4A	VREFB4A0	IO			DIFFIO_TX_B37n	DIFFOOUT_B37n	AA15	DQ5B	DQ1B
4A	VREFB4A0	IO			DIFFIO_RX_B38n	DIFFOOUT_B38n	U15	DQ5B	DQ1B
4A	VREFB4A0	IO			DIFFIO_TX_B37p	DIFFOOUT_B37p	Y15	DQ5B	DQ1B
4A	VREFB4A0	IO			DIFFIO_RX_B38p	DIFFOOUT_B38p	V15	DQ5B	DQ1B
4A	VREFB4A0	IO	CLK3n		DIFFIO_RX_B39n	DIFFOOUT_B39n	R15		
4A	VREFB4A0	IO			DIFFIO_TX_B40n	DIFFOOUT_B40n	AB20	DQ5B	DQ1B
4A	VREFB4A0	IO	CLK3p		DIFFIO_RX_B39p	DIFFOOUT_B39p	T15		
4A	VREFB4A0	IO			DIFFIO_TX_B40p	DIFFOOUT_B40p	AB21	DQ5B	DQ1B
4A	VREFB4A0	IO			DIFFIO_TX_B41n	DIFFOOUT_B41n	AB22		
4A	VREFB4A0	IO			DIFFIO_RX_B42n	DIFFOOUT_B42n	Y16	DQ6B	DQ1B
4A	VREFB4A0	IO			DIFFIO_TX_B41p	DIFFOOUT_B41p	AA22	DQ6B	DQ1B
4A	VREFB4A0	IO			DIFFIO_RX_B42p	DIFFOOUT_B42p	Y17	DQ6B	DQ1B
4A	VREFB4A0	IO			DIFFIO_RX_B43n	DIFFOOUT_B43n	U16	DQSn6B	DQSn1B
4A	VREFB4A0	IO			DIFFIO_TX_B44n	DIFFOOUT_B44n	AA17	DQ6B	DQ1B
4A	VREFB4A0	IO			DIFFIO_RX_B43p	DIFFOOUT_B43p	U17	DQS6B	DQS1B
4A	VREFB4A0	IO			DIFFIO_TX_B44p	DIFFOOUT_B44p	AB17		
4A	VREFB4A0	IO			DIFFIO_TX_B45n	DIFFOOUT_B45n	Y22	DQ6B	DQ1B
4A	VREFB4A0	IO			DIFFIO_RX_B46n	DIFFOOUT_B46n	V18	DQ6B	DQ1B
4A	VREFB4A0	IO			DIFFIO_TX_B45p	DIFFOOUT_B45p	Y21	DQ6B	DQ1B
4A	VREFB4A0	IO			DIFFIO_RX_B46p	DIFFOOUT_B46p	W18	DQ6B	DQ1B
4A	VREFB4A0	IO			DIFFIO_RX_B47n	DIFFOOUT_B47n	W16		
4A	VREFB4A0	IO			DIFFIO_TX_B48n	DIFFOOUT_B48n	W21	DQ6B	DQ1B
4A	VREFB4A0	IO			DIFFIO_RX_B47p	DIFFOOUT_B47p	W17		
4A	VREFB4A0	IO			DIFFIO_TX_B48p	DIFFOOUT_B48p	W22	DQ6B	DQ1B
5A	VREFB5A0	IO	RZQ_1		DIFFIO_TX_R1p	DIFFOOUT_R1p	U22	DQ1R	
5A	VREFB5A0	IO		INIT_DONE	DIFFIO_RX_R2p	DIFFOOUT_R2p	V20		
5A	VREFB5A0	IO		PR_REQUEST	DIFFIO_TX_R1n	DIFFOOUT_R1n	U21	DQ1R	
5A	VREFB5A0	IO		CRC_ERROR	DIFFIO_RX_R2n	DIFFOOUT_R2n	V19		
5A	VREFB5A0	IO		nCEO	DIFFIO_TX_R3p	DIFFOOUT_R3p	T19	DQ1R	
5A	VREFB5A0	IO			DIFFIO_RX_R4p	DIFFOOUT_R4p	T17	DQ1R	
5A	VREFB5A0	IO		CvP_CONFDONE	DIFFIO_TX_R3n	DIFFOOUT_R3n	T20	DQ1R	
5A	VREFB5A0	IO			DIFFIO_RX_R4n	DIFFOOUT_R4n	T18	DQ1R	
5A	VREFB5A0	IO		DEV_OE	DIFFIO_TX_R5p	DIFFOOUT_R5p	T22		
5A	VREFB5A0	IO			DIFFIO_RX_R6p	DIFFOOUT_R6p	R16	DQS1R	
5A	VREFB5A0	IO		DEV_CLRn	DIFFIO_TX_R5n	DIFFOOUT_R5n	R22	DQ1R	
5A	VREFB5A0	IO			DIFFIO_RX_R6n	DIFFOOUT_R6n	R17	DQSn1R	
5A	VREFB5A0	IO			DIFFIO_TX_R7p	DIFFOOUT_R7p	R20	DQ1R	
5A	VREFB5A0	IO			DIFFIO_RX_R8p	DIFFOOUT_R8p	R19	DQ1R	
5A	VREFB5A0	IO			DIFFIO_TX_R7n	DIFFOOUT_R7n	R21		
5A	VREFB5A0	IO			DIFFIO_RX_R8n	DIFFOOUT_R8n	P19	DQ1R	
5B	VREFB5B0	IO	CLK7p.FPLL_BR_FBp		DIFFIO_RX_R9p	DIFFOOUT_R9p	M16		
5B	VREFB5B0	IO			DIFFIO_TX_R10p	DIFFOOUT_R10p	E21	DQ2R	
5B	VREFB5B0	IO	CLK7n.FPLL_BR_FBn		DIFFIO_RX_R9n	DIFFOOUT_R9n	M17		
5B	VREFB5B0	IO			DIFFIO_TX_R10n	DIFFOOUT_R10n	D22	DQ2R	
5B	VREFB5B0	IO			DIFFIO_RX_R11p	DIFFOOUT_R11p	L19	DQ2R	
5B	VREFB5B0	IO			DIFFIO_TX_R12p	DIFFOOUT_R12p	K21	DQ2R	
5B	VREFB5B0	IO			DIFFIO_RX_R11n	DIFFOOUT_R11n	L20	DQ2R	
5B	VREFB5B0	IO			DIFFIO_TX_R12n	DIFFOOUT_R12n	J21	DQ2R	
5B	VREFB5B0	IO			DIFFIO_RX_R13p	DIFFOOUT_R13p	L15	DQS2R	
5B	VREFB5B0	IO			DIFFIO_TX_R14p	DIFFOOUT_R14p	G22		
5B	VREFB5B0	IO			DIFFIO_RX_R13n	DIFFOOUT_R13n	K15	DQSn2R	
5B	VREFB5B0	IO			DIFFIO_TX_R14n	DIFFOOUT_R14n	G21	DQ2R	
5B	VREFB5B0	IO			DIFFIO_RX_R15p	DIFFOOUT_R15p	L18	DQ2R	
5B	VREFB5B0	IO			DIFFIO_TX_R16p	DIFFOOUT_R16p	G20	DQ2R	
5B	VREFB5B0	IO			DIFFIO_RX_R15n	DIFFOOUT_R15n	K19	DQ2R	
5B	VREFB5B0	IO			DIFFIO_TX_R16n	DIFFOOUT_R16n	H21		
5B	VREFB5B0	IO	CLK6p		DIFFIO_RX_R17p	DIFFOOUT_R17p	L17		
5B	VREFB5B0	IO			DIFFIO_TX_R18p	DIFFOOUT_R18p	E20	DQ3R	
5B	VREFB5B0	IO	CLK6n		DIFFIO_RX_R17n	DIFFOOUT_R17n	K17		
5B	VREFB5B0	IO			DIFFIO_TX_R18n	DIFFOOUT_R18n	F20	DQ3R	



Pin Information for the Cyclone® V 5CEBA5 Device
Version 1.0
Note (1)

Bank Number	VREF	Pin Name/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	U484	DQS for X8	DQS for X16
5B	VREFB5B0	IO			DIFFIO_RX_R19p	DIFFOUT_R19p	H20	DQ3R	
5B	VREFB5B0	IO	FPLL_BR_CLKOUT0,FPLL_BR_CLKOUTp,FPLL_BR_FB		DIFFIO_TX_R20p	DIFFOUT_R20p	G18	DQ3R	
5B	VREFB5B0	IO			DIFFIO_RX_R19n	DIFFOUT_R19n	H19	DQ3R	
5B	VREFB5B0	IO	FPLL_BR_CLKOUT1,FPLL_BR_CLKOUTn		DIFFIO_TX_R20n	DIFFOUT_R20n	G17	DQ3R	
5B	VREFB5B0	IO			DIFFIO_RX_R21p	DIFFOUT_R21p	K16	DQS3R	
5B	VREFB5B0	IO			DIFFIO_TX_R22p	DIFFOUT_R22p	F19		
5B	VREFB5B0	IO			DIFFIO_RX_R21n	DIFFOUT_R21n	J16	DQSn3R	
5B	VREFB5B0	IO			DIFFIO_TX_R22n	DIFFOUT_R22n	F18	DQ3R	
5B	VREFB5B0	IO			DIFFIO_RX_R23p	DIFFOUT_R23p	J17	DQ3R	
5B	VREFB5B0	IO			DIFFIO_TX_R24p	DIFFOUT_R24p	J19	DQ3R	
5B	VREFB5B0	IO			DIFFIO_RX_R23n	DIFFOUT_R23n	J18	DQ3R	
5B	VREFB5B0	IO			DIFFIO_TX_R24n	DIFFOUT_R24n	H18		
7A		GND					F17		
7A	VREFB7A0	IO			DIFFIO_RX_T17p	DIFFOUT_T17p	H16		
7A	VREFB7A0	IO			DIFFIO_TX_T18p	DIFFOUT_T18p	C21	DQ1T	DQ1T
7A	VREFB7A0	IO			DIFFIO_RX_T17n	DIFFOUT_T17n	G16		
7A	VREFB7A0	IO			DIFFIO_TX_T18n	DIFFOUT_T18n	C20	DQ1T	DQ1T
7A	VREFB7A0	IO			DIFFIO_RX_T19p	DIFFOUT_T19p	D18	DQ1T	DQ1T
7A	VREFB7A0	IO			DIFFIO_TX_T20p	DIFFOUT_T20p	B20	DQ1T	DQ1T
7A	VREFB7A0	IO			DIFFIO_RX_T19n	DIFFOUT_T19n	E17	DQ1T	DQ1T
7A	VREFB7A0	IO			DIFFIO_TX_T20n	DIFFOUT_T20n	B21	DQ1T	DQ1T
7A	VREFB7A0	IO			DIFFIO_RX_T21p	DIFFOUT_T21p	G15	DQS1T	DQS1T
7A	VREFB7A0	IO			DIFFIO_TX_T22p	DIFFOUT_T22p	B22		
7A	VREFB7A0	IO			DIFFIO_RX_T21n	DIFFOUT_T21n	G14	DQSn1T	DQSn1T
7A	VREFB7A0	IO			DIFFIO_TX_T22n	DIFFOUT_T22n	A22	DQ1T	DQ1T
7A	VREFB7A0	IO			DIFFIO_RX_T23p	DIFFOUT_T23p	E16	DQ1T	DQ1T
7A	VREFB7A0	IO			DIFFIO_TX_T24p	DIFFOUT_T24p	A20	DQ1T	DQ1T
7A	VREFB7A0	IO			DIFFIO_RX_T23n	DIFFOUT_T23n	D17	DQ1T	DQ1T
7A	VREFB7A0	IO			DIFFIO_TX_T24n	DIFFOUT_T24n	A19		
7A	VREFB7A0	IO	CLK11p		DIFFIO_RX_T25p	DIFFOUT_T25p	G13		
7A	VREFB7A0	IO			DIFFIO_TX_T26p	DIFFOUT_T26p	C19	DQ2T	DQ1T
7A	VREFB7A0	IO	CLK11n		DIFFIO_RX_T25n	DIFFOUT_T25n	F14		
7A	VREFB7A0	IO			DIFFIO_TX_T26n	DIFFOUT_T26n	C18	DQ2T	DQ1T
7A	VREFB7A0	IO			DIFFIO_RX_T27p	DIFFOUT_T27p	C16	DQ2T	DQ1T
7A	VREFB7A0	IO			DIFFIO_TX_T28p	DIFFOUT_T28p	B16	DQ2T	DQ1T
7A	VREFB7A0	IO			DIFFIO_RX_T27n	DIFFOUT_T27n	C15	DQ2T	DQ1T
7A	VREFB7A0	IO			DIFFIO_TX_T28n	DIFFOUT_T28n	B15	DQ2T	DQ1T
7A	VREFB7A0	IO			DIFFIO_RX_T29p	DIFFOUT_T29p	G12	DQS2T	DQ1T
7A	VREFB7A0	IO			DIFFIO_TX_T30p	DIFFOUT_T30p	A18		
7A	VREFB7A0	IO			DIFFIO_RX_T29n	DIFFOUT_T29n	H12	DQSn2T	DQ1T
7A	VREFB7A0	IO			DIFFIO_TX_T30n	DIFFOUT_T30n	A17	DQ2T	DQ1T
7A	VREFB7A0	IO			DIFFIO_RX_T31p	DIFFOUT_T31p	F15	DQ2T	DQ1T
7A	VREFB7A0	IO			DIFFIO_TX_T32p	DIFFOUT_T32p	B18	DQ2T	DQ1T
7A	VREFB7A0	IO			DIFFIO_RX_T31n	DIFFOUT_T31n	E14	DQ2T	DQ1T
7A	VREFB7A0	IO			DIFFIO_TX_T32n	DIFFOUT_T32n	B17		
7A	VREFB7A0	IO	CLK10p		DIFFIO_RX_T33p	DIFFOUT_T33p	H10		
7A	VREFB7A0	IO			DIFFIO_TX_T34p	DIFFOUT_T34p	A15	DQ3T	
7A	VREFB7A0	IO	CLK10n		DIFFIO_RX_T33n	DIFFOUT_T33n	G11		
7A	VREFB7A0	IO			DIFFIO_TX_T34n	DIFFOUT_T34n	A14	DQ3T	
7A	VREFB7A0	IO			DIFFIO_RX_T35p	DIFFOUT_T35p	D13	DQ3T	
7A	VREFB7A0	IO			DIFFIO_TX_T36p	DIFFOUT_T36p	C14	DQ3T	
7A	VREFB7A0	IO			DIFFIO_RX_T35n	DIFFOUT_T35n	C13	DQ3T	
7A	VREFB7A0	IO			DIFFIO_TX_T36n	DIFFOUT_T36n	D14	DQ3T	
7A	VREFB7A0	IO			DIFFIO_RX_T37p	DIFFOUT_T37p	H9	DQS3T	
7A	VREFB7A0	IO			DIFFIO_TX_T38p	DIFFOUT_T38p	A13		
7A	VREFB7A0	IO			DIFFIO_RX_T37n	DIFFOUT_T37n	G8	DQSn3T	
7A	VREFB7A0	IO			DIFFIO_TX_T38n	DIFFOUT_T38n	B13	DQ3T	
7A	VREFB7A0	IO			DIFFIO_RX_T39p	DIFFOUT_T39p	E12	DQ3T	
7A	VREFB7A0	IO			DIFFIO_TX_T40p	DIFFOUT_T40p	B12	DQ3T	
7A	VREFB7A0	IO			DIFFIO_RX_T39n	DIFFOUT_T39n	F12	DQ3T	
7A	VREFB7A0	IO	RZQ_2		DIFFIO_TX_T40n	DIFFOUT_T40n	A12		
8A	VREFB8A0	IO	CLK9p		DIFFIO_RX_T41p	DIFFOUT_T41p	G10		
8A	VREFB8A0	IO			DIFFIO_TX_T42p	DIFFOUT_T42p	C11	DQ4T	
8A	VREFB8A0	IO	CLK9n		DIFFIO_RX_T41n	DIFFOUT_T41n	F10		
8A	VREFB8A0	IO			DIFFIO_TX_T42n	DIFFOUT_T42n	B11	DQ4T	
8A	VREFB8A0	IO			DIFFIO_RX_T43p	DIFFOUT_T43p	D11	DQ4T	
8A	VREFB8A0	IO	FPLL_TL_CLKOUT0,FPLL_TL_CLKOUTp,FPLL_TL_FB		DIFFIO_TX_T44p	DIFFOUT_T44p	A8	DQ4T	
8A	VREFB8A0	IO			DIFFIO_RX_T43n	DIFFOUT_T43n	E11	DQ4T	
8A	VREFB8A0	IO	FPLL_TL_CLKOUT1,FPLL_TL_CLKOUTn		DIFFIO_TX_T44n	DIFFOUT_T44n	A7	DQ4T	
8A	VREFB8A0	IO			DIFFIO_RX_T45p	DIFFOUT_T45p	J9	DQS4T	
8A	VREFB8A0	IO			DIFFIO_TX_T46p	DIFFOUT_T46p	F8		



Pin Information for the Cyclone® V 5CEBA5 Device
Version 1.0
Note (1)

Bank Number	VREF	Pin Name/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	U484	DQS for X8	DQS for X16
8A	VREFB8A0	IO			DIFFIO_RX_T45n	DIFFOUT_T45n	J8	DQSn4T	
8A	VREFB8A0	IO			DIFFIO_TX_T46n	DIFFOUT_T46n	E7	DQ4T	
8A	VREFB8A0	IO			DIFFIO_RX_T47p	DIFFOUT_T47p	C10	DQ4T	
8A	VREFB8A0	IO			DIFFIO_TX_T48p	DIFFOUT_T48p	C6	DQ4T	
8A	VREFB8A0	IO			DIFFIO_RX_T47n	DIFFOUT_T47n	C9	DQ4T	
8A	VREFB8A0	IO			DIFFIO_TX_T48n	DIFFOUT_T48n	D7		
8A	VREFB8A0	IO	CLK8p,FPLL_TL_FBp		DIFFIO_RX_T49p	DIFFOUT_T49p	K7		
8A	VREFB8A0	IO			DIFFIO_TX_T50p	DIFFOUT_T50p	A10	DQ5T	
8A	VREFB8A0	IO	CLK8n,FPLL_TL_FBn		DIFFIO_RX_T49n	DIFFOUT_T49n	J7		
8A	VREFB8A0	IO			DIFFIO_TX_T50n	DIFFOUT_T50n	A9	DQ5T	
8A	VREFB8A0	IO			DIFFIO_RX_T51p	DIFFOUT_T51p	D9	DQ5T	
8A	VREFB8A0	IO			DIFFIO_TX_T52p	DIFFOUT_T52p	B6	DQ5T	
8A	VREFB8A0	IO			DIFFIO_RX_T51n	DIFFOUT_T51n	D8	DQ5T	
8A	VREFB8A0	IO			DIFFIO_TX_T52n	DIFFOUT_T52n	B5	DQ5T	
8A	VREFB8A0	IO			DIFFIO_RX_T53p	DIFFOUT_T53p	H8	DQS5T	
8A	VREFB8A0	IO			DIFFIO_TX_T54p	DIFFOUT_T54p	C8		
8A	VREFB8A0	IO			DIFFIO_RX_T53n	DIFFOUT_T53n	G7	DQSn5T	
8A	VREFB8A0	IO			DIFFIO_TX_T54n	DIFFOUT_T54n	B8	DQ5T	
8A	VREFB8A0	IO			DIFFIO_RX_T55p	DIFFOUT_T55p	H6	DQ5T	
8A	VREFB8A0	IO			DIFFIO_TX_T56p	DIFFOUT_T56p	E6	DQ5T	
8A	VREFB8A0	IO			DIFFIO_RX_T55n	DIFFOUT_T55n	G6	DQ5T	
8A	VREFB8A0	IO			DIFFIO_TX_T56n	DIFFOUT_T56n	F7		
9A		MSEL0		MSEL0			L6		
9A		CONF_DONE		CONF_DONE			J6		
9A		MSEL1		MSEL1			K6		
9A		nSTATUS		nSTATUS			G5		
9A		nCE		nCE			H5		
9A		MSEL2		MSEL2			A2		
9A		MSEL3		MSEL3			E5		
9A		nCONFIG		nCONFIG			A4		
9A		MSEL4		MSEL4			C5		
9A		GND					F3		
		GND					G4		
		GND					F5		
		GND					V4		
		GND					U4		
		GND					F21		
		GND					AB19		
		GND					AB2		
		GND					AB1		
		GND					AA16		
		GND					AA11		
		GND					AA4		
		GND					AA3		
		GND					Y13		
		GND					Y8		
		GND					Y5		
		GND					Y2		
		GND					Y1		
		GND					W20		
		GND					W4		
		GND					W3		
		GND					V22		
		GND					V17		
		GND					V2		
		GND					V1		
		GND					U19		
		GND					U14		
		GND					U9		
		GND					U5		
		GND					U3		
		GND					T11		
		GND					T2		
		GND					T1		
		GND					R13		
		GND					R3		
		GND					P10		
		GND					P4		
		GND					P2		
		GND					P1		
		GND					N22		



Pin Information for the Cyclone® V 5CEBA5 Device
Version 1.0
Note (1)

Bank Number	VREF	Pin Name/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	U484	DQS for X8	DQS for X16
		GND					N15		
		GND					N13		
		GND					N11		
		GND					N7		
		GND					N5		
		GND					N3		
		GND					M19		
		GND					M14		
		GND					M12		
		GND					M9		
		GND					M4		
		GND					M2		
		GND					M1		
		GND					L16		
		GND					L13		
		GND					L11		
		GND					L5		
		GND					L3		
		GND					K14		
		GND					K12		
		GND					K10		
		GND					K8		
		GND					K4		
		GND					K2		
		GND					K1		
		GND					J20		
		GND					J15		
		GND					J13		
		GND					J11		
		GND					J5		
		GND					J3		
		GND					H14		
		GND					H4		
		GND					H3		
		GND					H2		
		GND					H1		
		GND					G9		
		GND					G3		
		GND					F16		
		GND					F11		
		GND					F6		
		GND					F2		
		GND					F1		
		GND					E13		
		GND					E4		
		GND					E3		
		GND					D20		
		GND					D10		
		GND					D5		
		GND					D2		
		GND					D1		
		GND					C22		
		GND					C17		
		GND					C7		
		GND					C4		
		GND					C3		
		GND					B14		
		GND					B2		
		GND					B1		
		GND					A21		
		GND					A11		
		GND					A5		
		VCC					J14		
		VCC					P15		
		VCC					P13		
		VCC					P11		
		VCC					N14		
		VCC					N12		
		VCC					M15		
		VCC					M13		
		VCC					M11		



Pin Information for the Cyclone® V 5CEBA5 Device
Version 1.0
Note (1)

Bank Number	VREF	Pin Name/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	U484	DQS for X8	DQS for X16
		VCC					L14		
		VCC					L12		
		VCC					L10		
		VCC					K13		
		VCC					K11		
		VCC					K9		
		VCC					J12		
		VCC					J10		
		VCC					H15		
		VCC					H13		
		VCC					H11		
		VCC					P3		
		VCC					K3		
		VCC					L4		
		VCC					N4		
		VCC					K5		
		VCC					J4		
		DNU					B3		
		DNU					B4		
		DNU					D21		
		DNU					E10		
		VCCPGM					Y6		
		VCCPGM					U20		
		VCCPGM					B7		
		VCCBAT					A3		
		VCCIO3A					T6		
		VCCIO3A					AA6		
		VCCIO3B					V7		
		VCCIO3B					AB9		
		VCCIO3B					W10		
		VCCIO3B					R8		
		VCCIO4A					T16		
		VCCIO4A					AB14		
		VCCIO4A					AA21		
		VCCIO4A					Y18		
		VCCIO4A					W15		
		VCCIO4A					V12		
		VCCIO5A					T21		
		VCCIO5A					R18		
		VCCIO5B					H22		
		VCCIO5B					P20		
		VCCIO5B					N17		
		VCCIO5B					L21		
		VCCIO5B					K18		
		VCCIO5B					G19		
		VCCIO7A					B19		
		VCCIO7A					H17		
		VCCIO7A					E18		
		VCCIO7A					D15		
		VCCIO7A					C12		
		VCCIO7A					A16		
		VCCIO8A					E8		
		VCCIO8A					H7		
		VCCIO8A					B9		
		VCCIO8A					A6		
		VCCPD3A					V6		
		VCCPD3B4A					V16		
		VCCPD3B4A					W9		
		VCCPD3B4A					V14		
		VCCPD3B4A					V10		
		VCCPD5A					P17		
		VCCPD5B					N19		
		VCCPD5B					M18		
		VCCPD7A8A					F13		
		VCCPD7A8A					F9		
		VCCPD7A8A					E15		
		VCCPD7A8A					E9		
3A	VREFB3AN0	VREFB3AN0					W6		
3B	VREFB3BN0	VREFB3BN0					AB12		
4A	VREFB4AN0	VREFB4AN0					AA14		
5A	VREFB5AN0	VREFB5AN0					V21		



Pin Information for the Cyclone® V 5CEBA5 Device
Version 1.0
Note (1)

Bank Number	VREF	Pin Name/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	U484	DQS for X8	DQS for X16
5B	VREFB5BNO	VREFB5BNO					K20		
7A	VREFB7ANO	VREFB7ANO					D16		
8A	VREFB8ANO	VREFB8ANO					B10		
		NC					AB3		
		NC					V11		
		NC					P22		
		NC					P21		
		NC					P18		
		NC					P16		
		NC					N21		
		NC					N20		
		NC					N18		
		NC					N16		
		NC					M22		
		NC					M21		
		NC					M20		
		NC					L22		
		NC					K22		
		NC					J22		
		NC					F22		
		NC					E22		
		NC					C2		
		NC					C1		
		NC					G2		
		NC					G1		
		NC					L2		
		NC					L1		
		NC					R2		
		NC					R1		
		NC					W2		
		NC					W1		
		NC					AA2		
		NC					AA1		
		NC					D3		
		NC					D4		
		NC					E1		
		NC					E2		
		NC					J1		
		NC					J2		
		NC					N1		
		NC					N2		
		NC					U1		
		NC					U2		
		NC					Y3		
		NC					Y4		
		RREF TL					A1		
		VCCA_FPLL					T4		
		VCCA_FPLL					F4		
		VCCA_FPLL					U18		
		VCCA_FPLL					E19		
		VCCA_FPLL					T3		
		VCCA_FPLL					M3		
		VCC_AUX					D6		
		VCC_AUX					D12		
		VCC_AUX					D19		
		VCC_AUX					W19		
		VCC_AUX					AA12		
		VCC_AUX					AB5		

Note:
(1) For more information about pin definition and pin connection guidelines, refer to the [Cyclone V Device Family Pin Connection Guidelines](#).



Pin Information for the Cyclone[®] V 5CEBA5 Device
Version 1.0

Version Number	Date	Changes Made
1.0	11/29/2012	Initial release.