



Bank Number	VREF	PinName/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	F780	DQS for X4	DQS for X8/X9	DQS for X16/ X18	DQS for X32/ X36
GXB_L1		REFCLK3Lp					L22				
GXB_L1		REFCLK3Ln					L23				
GXB_L1		GXB_TX_L11n					D26				
GXB_L1		GXB_TX_L11p					D25				
GXB_L1		GXB_RX_L11n,GXB_REFCLK_L11n					C28				
GXB_L1		GXB_RX_L11p,GXB_REFCLK_L11p					C27				
GXB_L1		GXB_TX_L10n					F26				
GXB_L1		GXB_TX_L10p					F25				
GXB_L1		GXB_RX_L10n,GXB_REFCLK_L10n					E28				
GXB_L1		GXB_RX_L10p,GXB_REFCLK_L10p					E27				
GXB_L1		GXB_TX_L9n					H26				
GXB_L1		GXB_TX_L9p					H25				
GXB_L1		GXB_RX_L9n,GXB_REFCLK_L9n					G28				
GXB_L1		GXB_RX_L9p,GXB_REFCLK_L9p					G27				
GXB_L1		GXB_TX_L8n					K26				
GXB_L1		GXB_TX_L8p					K25				
GXB_L1		GXB_RX_L8n,GXB_REFCLK_L8n					J28				
GXB_L1		GXB_RX_L8p,GXB_REFCLK_L8p					J27				
GXB_L1		GXB_TX_L7n					M26				
GXB_L1		GXB_TX_L7p					M25				
GXB_L1		GXB_RX_L7n,GXB_REFCLK_L7n					L28				
GXB_L1		GXB_RX_L7p,GXB_REFCLK_L7p					L27				
GXB_L1		GXB_TX_L6n					P26				
GXB_L1		GXB_TX_L6p					P25				
GXB_L1		GXB_RX_L6n,GXB_REFCLK_L6n					N28				
GXB_L1		GXB_RX_L6p,GXB_REFCLK_L6p					N27				
GXB_L1		REFCLK2Lp					N23				
GXB_L1		REFCLK2Ln					N24				
GXB_L0		REFCLK1Lp					R22				
GXB_L0		REFCLK1Ln					R23				
GXB_L0		GXB_TX_L5n					T26				
GXB_L0		GXB_TX_L5p					T25				
GXB_L0		GXB_RX_L5n,GXB_REFCLK_L5n					R28				
GXB_L0		GXB_RX_L5p,GXB_REFCLK_L5p					R27				
GXB_L0		GXB_TX_L4n					V26				
GXB_L0		GXB_TX_L4p					V25				
GXB_L0		GXB_RX_L4n,GXB_REFCLK_L4n					U28				
GXB_L0		GXB_RX_L4p,GXB_REFCLK_L4p					U27				
GXB_L0		GXB_TX_L3n					Y26				
GXB_L0		GXB_TX_L3p					Y25				
GXB_L0		GXB_RX_L3n,GXB_REFCLK_L3n					W28				
GXB_L0		GXB_RX_L3p,GXB_REFCLK_L3p					W27				
GXB_L0		GXB_TX_L2n					AB26				
GXB_L0		GXB_TX_L2p					AB25				
GXB_L0		GXB_RX_L2n,GXB_REFCLK_L2n					AA28				
GXB_L0		GXB_RX_L2p,GXB_REFCLK_L2p					AA27				
GXB_L0		GXB_TX_L1n					AD26				
GXB_L0		GXB_TX_L1p					AD25				
GXB_L0		GXB_RX_L1n,GXB_REFCLK_L1n					AC28				
GXB_L0		GXB_RX_L1p,GXB_REFCLK_L1p					AC27				
GXB_L0		GXB_TX_L0n					AF26				
GXB_L0		GXB_TX_L0p					AF25				
GXB_L0		GXB_RX_L0n,GXB_REFCLK_L0n					AE28				
GXB_L0		GXB_RX_L0p,GXB_REFCLK_L0p					AE27				
GXB_L0		REFCLK0Lp					U23				
GXB_L0		REFCLK0Ln					U24				
3A		nCONFIG		nCONFIG			AF23				
3A		TRST		TRST			W19				
3A		TMS		TMS			Y20				
3A		TCK		TCK			AA21				
3A		TDI		TDI			AD22				
3A		TDO		TDO			AB22				
3A		nCS0		nCS0			AE23				
3A		AS_DATA3		AS_DATA3			V19				
3A		AS_DATA2		AS_DATA2			W20				
3A		AS_DATA1		AS_DATA1			Y21				
3A		AS_DATA0,ASDO		AS_DATA0,ASDO			AD23				
3A		DCLK		DCLK			AB21				
3A	VREFB3AN0	IO		CLKUSR	DIFFIO_TX_B1n	DIFFFOUT_B1n	AH23	DQ1B		DQ1B	
3A	VREFB3AN0	IO		CRC_ERROR	DIFFIO_TX_B1p	DIFFFOUT_B1p	AH22	DQ1B		DQ1B	
3A	VREFB3AN0	IO	RZQ_0		DIFFIO_RX_B2n	DIFFFOUT_B2n	AG22	DQS1B		DQ1B	
3A	VREFB3AN0	IO		DEV_OE	DIFFIO_RX_B2p	DIFFFOUT_B2p	AF22	DQS1B		DQ1B/CQn1B	
3A	VREFB3AN0	IO		DEV_CLRn	DIFFIO_TX_B3n	DIFFFOUT_B3n	AH25	DQ1B		DQ1B	
3A	VREFB3AN0	IO		INIT_DONE	DIFFIO_TX_B3p	DIFFFOUT_B3p	AH26	DQ1B		DQ1B	
3A	VREFB3AN0	IO		nCEO	DIFFIO_RX_B4n	DIFFFOUT_B4n	AH21	DQS2B		DQS1B/DQ1B	
3A	VREFB3AN0	IO		DATA0	DIFFIO_RX_B4p	DIFFFOUT_B4p	AG21	DQS2B		DQS1B/CQ1B	
3A	VREFB3AN0	IO		DATA1	DIFFIO_TX_B5n	DIFFFOUT_B5n	AD21	DQ2B		DQ1B	
3A	VREFB3AN0	IO		DATA2	DIFFIO_TX_B5p	DIFFFOUT_B5p	AC21	DQ2B		DQ1B	
3A	VREFB3AN0	IO		DATA3	DIFFIO_RX_B6n	DIFFFOUT_B6n	AF21	DQ2B		DQ1B	
3A	VREFB3AN0	IO		DATA4	DIFFIO_RX_B6p	DIFFFOUT_B6p	AE22	DQ2B		DQ1B	



Bank Number	VREF	PinName/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	F780	DQS for X4	DQS for X8/X9	DQS for X16/ X18	DQS for X32/ X36
3A	VREFB3AN0	IO		DATA5	DIFFIO TX B7n	DIFFOUT B7n	AE20	DQ3B	DQ2B	DQ1B	
3A	VREFB3AN0	IO		DATA6	DIFFIO TX B7p	DIFFOUT B7p	AD19	DQ3B	DQ2B	DQ1B	
3A	VREFB3AN0	IO		DATA7	DIFFIO RX B8n	DIFFOUT B8n	AH19	DQSn3B	DQ2B	DQ1B	
3A	VREFB3AN0	IO		DATA8	DIFFIO RX B8p	DIFFOUT B8p	AG19	DQSn3B	DQ2B/CQn2B	DQ1B	
3A	VREFB3AN0	IO		DATA9	DIFFIO TX B9n	DIFFOUT B9n	AH18	DQ3B	DQ2B	DQ1B	
3A	VREFB3AN0	IO		DATA10	DIFFIO TX B9p	DIFFOUT B9p	AG18	DQ3B	DQ2B	DQ1B	
3A	VREFB3AN0	IO		DATA11	DIFFIO RX B10n	DIFFOUT B10n	AF17	DQSn4B	DQSn2B/DQ2B	DQ1B	
3A	VREFB3AN0	IO		DATA12	DIFFIO RX B10p	DIFFOUT B10p	AF16	DQSn4B	DQSn2B/CQ2B	DQ1B/CQn1B	
3A	VREFB3AN0	IO		DATA13	DIFFIO TX B11n	DIFFOUT B11n	AF19	DQ4B	DQ2B	DQ1B	
3A	VREFB3AN0	IO		DATA14	DIFFIO TX B11p	DIFFOUT B11p	AE19	DQ4B	DQ2B	DQ1B	
3A	VREFB3AN0	IO		DATA15	DIFFIO RX B12n	DIFFOUT B12n	AE17	DQ4B	DQ2B	DQ1B	
3A	VREFB3AN0	IO		DATA16	DIFFIO RX B12p	DIFFOUT B12p	AD18	DQ4B	DQ2B	DQ1B	
3A	VREFB3AN0	IO		DATA17	DIFFIO TX B13n	DIFFOUT B13n	AD20	DQ5B	DQ3B	DQ1B	
3A	VREFB3AN0	IO		DATA18	DIFFIO TX B13p	DIFFOUT B13p	AC20	DQ5B	DQ3B	DQ1B	
3A	VREFB3AN0	IO		DATA19	DIFFIO RX B14n	DIFFOUT B14n	AA19	DQSn5B	DQ3B	DQSn1B/DQ1B	
3A	VREFB3AN0	IO		DATA20	DIFFIO RX B14p	DIFFOUT B14p	Y19	DQSn5B	DQ3B/CQn3B	DQSn1B/CQ1B	
3A	VREFB3AN0	IO		DATA21	DIFFIO TX B15n	DIFFOUT B15n	AB18	DQ5B	DQ3B	DQ1B	
3A	VREFB3AN0	IO		DATA22	DIFFIO TX B15p	DIFFOUT B15p	AB19	DQ5B	DQ3B	DQ1B	
3A	VREFB3AN0	IO		DATA23	DIFFIO RX B16n	DIFFOUT B16n	Y17	DQSn6B	DQSn3B/DQ3B	DQ1B	
3A	VREFB3AN0	IO		DATA24	DIFFIO RX B16p	DIFFOUT B16p	AA18	DQSn6B	DQSn3B/CQ3B	DQ1B	
3A	VREFB3AN0	IO		DATA25	DIFFIO TX B17n	DIFFOUT B17n	AC18	DQ6B	DQ3B	DQ1B	
3A	VREFB3AN0	IO		DATA26	DIFFIO TX B17p	DIFFOUT B17p	AD17	DQ6B	DQ3B	DQ1B	
3A	VREFB3AN0	IO		DATA27	DIFFIO RX B18n	DIFFOUT B18n	AD17	DQ6B	DQ3B	DQ1B	
3A	VREFB3AN0	IO		DATA28	DIFFIO RX B18p	DIFFOUT B18p	AC17	DQ6B	DQ3B	DQ1B	
3B	VREFB3BN0	IO		DATA29	DIFFIO TX B19n	DIFFOUT B19n	AH16	DQ7B	DQ4B	DQ2B	DQ1B
3B	VREFB3BN0	IO		DATA30	DIFFIO TX B19p	DIFFOUT B19p	AG16	DQ7B	DQ4B	DQ2B	DQ1B
3B	VREFB3BN0	IO		DATA31	DIFFIO RX B20n	DIFFOUT B20n	AH15	DQSn7B	DQ4B	DQ2B	DQ1B
3B	VREFB3BN0	IO		PR_DONE	DIFFIO RX B20p	DIFFOUT B20p	AG15	DQSn7B	DQ4B/CQn4B	DQ2B	DQ1B
3B	VREFB3BN0	IO		PR_REQUEST	DIFFIO TX B21n	DIFFOUT B21n	AH13	DQ7B	DQ4B	DQ2B	DQ1B
3B	VREFB3BN0	IO		PR_READY	DIFFIO TX B21p	DIFFOUT B21p	AG13	DQ7B	DQ4B	DQ2B	DQ1B
3B	VREFB3BN0	IO	CLK0n	DIFFIO RX B22n	DIFFOUT B22n	AF13	DQSn8B	DQSn4B/DQ4B	DQ2B	DQ1B	
3B	VREFB3BN0	IO	CLK0p	DIFFIO RX B22p	DIFFOUT B22p	AE13	DQSn8B	DQSn4B/CQ4B	DQ2B/CQn2B	DQ1B	
3B	VREFB3BN0	IO		PR_ERROR	DIFFIO TX B23n	DIFFOUT B23n	AF15	DQ8B	DQ4B	DQ2B	DQ1B
3B	VREFB3BN0	IO		CvP_CONFDONE	DIFFIO TX B23p	DIFFOUT B23p	AE16	DQ8B	DQ4B	DQ2B	DQ1B
3B	VREFB3BN0	IO	CLK1n	DIFFIO RX B24n	DIFFOUT B24n	AF14	DQ8B	DQ4B	DQ2B	DQ1B	
3B	VREFB3BN0	IO	CLK1p	DIFFIO RX B24p	DIFFOUT B24p	AE14	DQ8B	DQ4B	DQ2B	DQ1B	
3B	VREFB3BN0	IO	FPLL_BL_CLKOUT1,FPLL_BL_CLKOUTn	DIFFIO TX B25n	DIFFOUT B25n	AH12	DQ9B	DQ5B	DQ2B	DQ1B	
3B	VREFB3BN0	IO	FPLL_BL_CLKOUT0,FPLL_BL_CLKOUTp,FPLL_BL_FB0	DIFFIO TX B25p	DIFFOUT B25p	AG12	DQ9B	DQ5B	DQ2B	DQ1B	
3B	VREFB3BN0	IO	FPLL_BL_CLKOUT3,FPLL_BL_FBn	DIFFIO RX B26n	DIFFOUT B26n	AF11	DQSn9B	DQ5B	DQSn2B/DQ2B	DQ1B	
3B	VREFB3BN0	IO	FPLL_BL_CLKOUT2,FPLL_BL_FBp,FPLL_BL_FB1	DIFFIO RX B26p	DIFFOUT B26p	AF12	DQSn9B	DQ5B/CQn5B	DQSn2B/CQ2B	DQ1B	
3B	VREFB3BN0	IO		nPERSTL0	DIFFIO TX B27n	DIFFOUT B27n	AH11	DQ9B	DQ5B	DQ2B	DQ1B
3B	VREFB3BN0	IO			DIFFIO TX B27p	DIFFOUT B27p	AH10	DQ9B	DQ5B	DQ2B	DQ1B
3B	VREFB3BN0	IO	CLK2n	DIFFIO RX B28n	DIFFOUT B28n	AE10	DQSn10B	DQSn5B/DQ5B	DQ2B	DQ1B	
3B	VREFB3BN0	IO	CLK2p	DIFFIO RX B28p	DIFFOUT B28p	AE11	DQSn10B	DQSn5B/CQ5B	DQ2B	DQ1B/CQn1B	
3B	VREFB3BN0	IO			DIFFIO TX B29n	DIFFOUT B29n	AG10	DQ10B	DQ5B	DQ2B	DQ1B
3B	VREFB3BN0	IO			DIFFIO TX B29p	DIFFOUT B29p	AF10	DQ10B	DQ5B	DQ2B	DQ1B
3B	VREFB3BN0	IO	CLK3n	DIFFIO RX B30n	DIFFOUT B30n	AH9	DQ10B	DQ5B	DQ2B	DQ1B	
3B	VREFB3BN0	IO	CLK3p	DIFFIO RX B30p	DIFFOUT B30p	AG9	DQ10B	DQ5B	DQ2B	DQ1B	
3B	VREFB3BN0	IO			DIFFIO TX B31n	DIFFOUT B31n	Y16	DQ11B	DQ6B	DQ3B	DQ1B
3B	VREFB3BN0	IO			DIFFIO TX B31p	DIFFOUT B31p	AA16	DQ11B	DQ6B	DQ3B	DQ1B
3B	VREFB3BN0	IO			DIFFIO RX B32n	DIFFOUT B32n	AC15	DQSn11B	DQ6B	DQ3B	DQSn1B/DQ1B
3B	VREFB3BN0	IO			DIFFIO RX B32p	DIFFOUT B32p	AB15	DQSn11B	DQ6B/CQn6B	DQ3B	DQSn1B/CQ1B
3B	VREFB3BN0	IO			DIFFIO TX B33n	DIFFOUT B33n	AD16	DQ11B	DQ6B	DQ3B	DQ1B
3B	VREFB3BN0	IO			DIFFIO TX B33p	DIFFOUT B33p	AD15	DQ11B	DQ6B	DQ3B	DQ1B
3B	VREFB3BN0	IO			DIFFIO RX B34n	DIFFOUT B34n	AD14	DQSn12B	DQSn6B/DQ6B	DQ3B	DQ1B
3B	VREFB3BN0	IO			DIFFIO RX B34p	DIFFOUT B34p	AD13	DQSn12B	DQSn6B/CQ6B	DQ3B/CQn3B	DQ1B
3B	VREFB3BN0	IO			DIFFIO TX B35n	DIFFOUT B35n	Y13	DQ12B	DQ6B	DQ3B	DQ1B
3B	VREFB3BN0	IO			DIFFIO TX B35p	DIFFOUT B35p	AA13	DQ12B	DQ6B	DQ3B	DQ1B
3B	VREFB3BN0	IO			DIFFIO RX B36n	DIFFOUT B36n	AB12	DQ12B	DQ6B	DQ3B	DQ1B
3B	VREFB3BN0	IO			DIFFIO RX B36p	DIFFOUT B36p	AB13	DQ12B	DQ6B	DQ3B	DQ1B
3B	VREFB3BN0	IO			DIFFIO TX B37n	DIFFOUT B37n	Y12	DQ13B	DQ7B	DQ3B	DQ1B
3B	VREFB3BN0	IO			DIFFIO TX B37p	DIFFOUT B37p	AA12	DQ13B	DQ7B	DQ3B	DQ1B
3B	VREFB3BN0	IO			DIFFIO RX B38n	DIFFOUT B38n	AD12	DQSn13B	DQ7B	DQSn3B/DQ3B	DQ1B
3B	VREFB3BN0	IO			DIFFIO RX B38p	DIFFOUT B38p	AC12	DQSn13B	DQ7B/CQn7B	DQSn3B/CQ3B	DQ1B
3B	VREFB3BN0	IO			DIFFIO TX B39n	DIFFOUT B39n	AD11	DQ13B	DQ7B	DQ3B	DQ1B
3B	VREFB3BN0	IO			DIFFIO TX B39p	DIFFOUT B39p	AC11	DQ13B	DQ7B	DQ3B	DQ1B
3B	VREFB3BN0	IO			DIFFIO RX B40n	DIFFOUT B40n	AB10	DQSn14B	DQSn7B/DQ7B	DQ3B	DQ1B
3B	VREFB3BN0	IO			DIFFIO RX B40p	DIFFOUT B40p	AB11	DQSn14B	DQSn7B/CQ7B	DQ3B	DQ1B
3B	VREFB3BN0	IO			DIFFIO TX B41n	DIFFOUT B41n	AD9	DQ14B	DQ7B	DQ3B	DQ1B
3B	VREFB3BN0	IO			DIFFIO TX B41p	DIFFOUT B41p	AD10	DQ14B	DQ7B	DQ3B	DQ1B
3B	VREFB3BN0	IO			DIFFIO RX B42n	DIFFOUT B42n	Y11	DQ14B	DQ7B	DQ3B	DQ1B
3B	VREFB3BN0	IO			DIFFIO RX B42p	DIFFOUT B42p	AA10	DQ14B	DQ7B	DQ3B	DQ1B
3D	VREFB3DN0	IO			DIFFIO TX B67n	DIFFOUT B67n	AH6	DQ23B	DQ8B	DQ4B	
3D	VREFB3DN0	IO			DIFFIO TX B67p	DIFFOUT B67p	AG6	DQ23B	DQ8B	DQ4B	
3D	VREFB3DN0	IO			DIFFIO RX B68n	DIFFOUT B68n	AF7	DQSn23B	DQ8B	DQ4B	
3D	VREFB3DN0	IO			DIFFIO RX B68p	DIFFOUT B68p	AF8	DQSn23B	DQ8B/CQn8B	DQ4B	
3D	VREFB3DN0	IO			DIFFIO TX B69n	DIFFOUT B69n	AH7	DQ23B	DQ8B	DQ4B	
3D	VREFB3DN0	IO			DIFFIO TX B69p	DIFFOUT B69p	AG7	DQ23B	DQ8B	DQ4B	
3D	VREFB3DN0	IO			DIFFIO RX B70n	DIFFOUT B70n	AC8	DQSn24B	DQSn8B/DQ8B	DQ4B	
3D	VREFB3DN0	IO			DIFFIO RX B70p	DIFFOUT B70p	AB8	DQSn24B	DQSn8B/CQ8B	DQ4B/CQn4B	



Bank Number	VREF	PinName/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	F780	DQS for X4	DQS for X8/X9	DQS for X16/ X18	DQS for X32/ X36
3D	VREFB3DN0	IO			DIFFIO TX B71n	DIFFOUT B71n	AE8	DQ24B	DQ8B	DQ4B	
3D	VREFB3DN0	IO			DIFFIO TX B71p	DIFFOUT B71p	AD8	DQ24B	DQ8B	DQ4B	
3D	VREFB3DN0	IO			DIFFIO RX B72n	DIFFOUT B72n	AE7	DQ24B	DQ8B	DQ4B	
3D	VREFB3DN0	IO			DIFFIO RX B72p	DIFFOUT B72p	AD7	DQ24B	DQ8B	DQ4B	
3D	VREFB3DN0	IO			DIFFIO TX B73n	DIFFOUT B73n	W8	DQ25B	DQ9B	DQ4B	
3D	VREFB3DN0	IO			DIFFIO TX B73p	DIFFOUT B73p	Y8	DQ25B	DQ9B	DQ4B	
3D	VREFB3DN0	IO			DIFFIO RX B74n	DIFFOUT B74n	V8	DQSn25B	DQ9B	DQSn4B/DQ4B	
3D	VREFB3DN0	IO			DIFFIO RX B74p	DIFFOUT B74p	U8	DQSn25B	DQ9B/CQn9B	DQSn4B/CQ4B	
3D	VREFB3DN0	IO			DIFFIO TX B75n	DIFFOUT B75n	AB9	DQ25B	DQ9B	DQ4B	
3D	VREFB3DN0	IO			DIFFIO TX B75p	DIFFOUT B75p	AA9	DQ25B	DQ9B	DQ4B	
3D	VREFB3DN0	IO	CLK4n		DIFFIO RX B76n	DIFFOUT B76n	V9	DQSn26B	DQSn9B/DQ9B	DQ4B	
3D	VREFB3DN0	IO	CLK4p		DIFFIO RX B76p	DIFFOUT B76p	U9	DQSn26B	DQSn9B/CQ9B	DQ4B	
3D	VREFB3DN0	IO			DIFFIO TX B77n	DIFFOUT B77n	Y10	DQ26B	DQ9B	DQ4B	
3D	VREFB3DN0	IO			DIFFIO TX B77p	DIFFOUT B77p	Y9	DQ26B	DQ9B	DQ4B	
3D	VREFB3DN0	IO	CLK5n		DIFFIO RX B78n	DIFFOUT B78n	V10	DQ26B	DQ9B	DQ4B	
3D	VREFB3DN0	IO	CLK5p		DIFFIO RX B78p	DIFFOUT B78p	W10	DQ26B	DQ9B	DQ4B	
4D	VREFB4DN0	IO			FPLL BC CLKOUT1,FPLL BC CLKOUTn	DIFFIO TX B91n	AB6	DQ31B	DQ10B	DQ5B	
4D	VREFB4DN0	IO			FPLL BC CLKOUT0,FPLL BC CLKOUTp,FPLL BC FB0	DIFFIO TX B91p	AA6	DQ31B	DQ10B	DQ5B	
4D	VREFB4DN0	IO			FPLL BC CLKOUT3,FPLL BC FBn	DIFFIO RX B92n	AC6	DQSn31B	DQ10B	DQ5B	
4D	VREFB4DN0	IO			FPLL BC CLKOUT2,FPLL BC FBp,FPLL BC FB1	DIFFIO RX B92p	AB5	DQSn31B	DQ10B/CQn10B	DQ5B	
4D	VREFB4DN0	IO				DIFFIO TX B93n	DIFFOUT B93n	AF6	DQ31B	DQ10B	DQ5B
4D	VREFB4DN0	IO				DIFFIO TX B93p	DIFFOUT B93p	AF5	DQ31B	DQ10B	DQ5B
4D	VREFB4DN0	IO	CLK6n		DIFFIO RX B94n	DIFFOUT B94n	AH4	DQSn32B	DQSn10B/DQ10B	DQ5B	
4D	VREFB4DN0	IO	CLK6p		DIFFIO RX B94p	DIFFOUT B94p	AG4	DQSn32B	DQSn10B/CQ10B	DQ5B/CQn5B	
4D	VREFB4DN0	IO			DIFFIO TX B95n	DIFFOUT B95n	AD5	DQ32B	DQ10B	DQ5B	
4D	VREFB4DN0	IO			DIFFIO TX B95p	DIFFOUT B95p	AD6	DQ32B	DQ10B	DQ5B	
4D	VREFB4DN0	IO	CLK7n		DIFFIO RX B96n	DIFFOUT B96n	AF4	DQ32B	DQ10B	DQ5B	
4D	VREFB4DN0	IO	CLK7p		DIFFIO RX B96p	DIFFOUT B96p	AE5	DQ32B	DQ10B	DQ5B	
4D	VREFB4DN0	IO			DIFFIO TX B97n	DIFFOUT B97n	R6	DQ33B	DQ11B	DQ5B	
4D	VREFB4DN0	IO			DIFFIO TX B97p	DIFFOUT B97p	R7	DQ33B	DQ11B	DQ5B	
4D	VREFB4DN0	IO			DIFFIO RX B98n	DIFFOUT B98n	U6	DQSn33B	DQ11B	DQSn5B/DQ5B	
4D	VREFB4DN0	IO			DIFFIO RX B98p	DIFFOUT B98p	T7	DQSn33B	DQ11B/CQn11B	DQSn5B/CQ5B	
4D	VREFB4DN0	IO			DIFFIO TX B99n	DIFFOUT B99n	P6	DQ33B	DQ11B	DQ5B	
4D	VREFB4DN0	IO			DIFFIO TX B99p	DIFFOUT B99p	N6	DQ33B	DQ11B	DQ5B	
4D	VREFB4DN0	IO			DIFFIO RX B100n	DIFFOUT B100n	V6	DQSn34B	DQSn11B/DQ11B	DQ5B	
4D	VREFB4DN0	IO			DIFFIO RX B100p	DIFFOUT B100p	W7	DQSn34B	DQSn11B/CQ11B	DQ5B	
4D	VREFB4DN0	IO			DIFFIO TX B101n	DIFFOUT B101n	AA7	DQ34B	DQ11B	DQ5B	
4D	VREFB4DN0	IO			DIFFIO TX B101p	DIFFOUT B101p	Y7	DQ34B	DQ11B	DQ5B	
4D	VREFB4DN0	IO			DIFFIO RX B102n	DIFFOUT B102n	Y5	DQ34B	DQ11B	DQ5B	
4D	VREFB4DN0	IO			DIFFIO RX B102p	DIFFOUT B102p	Y6	DQ34B	DQ11B	DQ5B	
4A	VREFB4AN0	IO			DIFFIO TX B151n	DIFFOUT B151n	W5	DQ51B	DQ12B	DQ6B	
4A	VREFB4AN0	IO			DIFFIO TX B151p	DIFFOUT B151p	W4	DQ51B	DQ12B	DQ6B	
4A	VREFB4AN0	IO	CLK11n		DIFFIO RX B152n	DIFFOUT B152n	V5	DQSn51B	DQ12B	DQ6B	
4A	VREFB4AN0	IO	CLK11p		DIFFIO RX B152p	DIFFOUT B152p	U5	DQSn51B	DQ12B/CQn12B	DQ6B	
4A	VREFB4AN0	IO			DIFFIO TX B153n	DIFFOUT B153n	R4	DQ51B	DQ12B	DQ6B	
4A	VREFB4AN0	IO			DIFFIO TX B153p	DIFFOUT B153p	T4	DQ51B	DQ12B	DQ6B	
4A	VREFB4AN0	IO	CLK10n		DIFFIO RX B154n	DIFFOUT B154n	AA4	DQSn52B	DQSn12B/DQ12B	DQ6B	
4A	VREFB4AN0	IO	CLK10p		DIFFIO RX B154p	DIFFOUT B154p	AA3	DQSn52B	DQSn12B/CQ12B	DQ6B/CQn6B	
4A	VREFB4AN0	IO			FPLL BR CLKOUT1,FPLL BR CLKOUTn	DIFFIO TX B155n	V3	DQ52B	DQ12B	DQ6B	
4A	VREFB4AN0	IO			FPLL BR CLKOUT0,FPLL BR CLKOUTp,FPLL BR FB0	DIFFIO TX B155p	V4	DQ52B	DQ12B	DQ6B	
4A	VREFB4AN0	IO			FPLL BR CLKOUT3,FPLL BR FBn	DIFFIO RX B156n	AB3	DQ52B	DQ12B	DQ6B	
4A	VREFB4AN0	IO			FPLL BR CLKOUT2,FPLL BR FBp,FPLL BR FB1	DIFFIO RX B156p	AB4	DQ52B	DQ12B	DQ6B	
4A	VREFB4AN0	IO			DIFFIO TX B157n	DIFFOUT B157n	AH2	DQ53B	DQ13B	DQ6B	
4A	VREFB4AN0	IO			DIFFIO TX B157p	DIFFOUT B157p	AH3	DQ53B	DQ13B	DQ6B	
4A	VREFB4AN0	IO	CLK9n		DIFFIO RX B158n	DIFFOUT B158n	AG1	DQSn53B	DQ13B	DQSn6B/DQ6B	
4A	VREFB4AN0	IO	CLK9p		DIFFIO RX B158p	DIFFOUT B158p	AF2	DQSn53B	DQ13B/CQn13B	DQSn6B/CQ6B	
4A	VREFB4AN0	IO			DIFFIO TX B159n	DIFFOUT B159n	AG3	DQ53B	DQ13B	DQ6B	
4A	VREFB4AN0	IO			DIFFIO TX B159p	DIFFOUT B159p	AF3	DQ53B	DQ13B	DQ6B	
4A	VREFB4AN0	IO	CLK8n		DIFFIO RX B160n	DIFFOUT B160n	AE2	DQSn54B	DQSn13B/DQ13B	DQ6B	
4A	VREFB4AN0	IO	CLK8p		DIFFIO RX B160p	DIFFOUT B160p	AE1	DQSn54B	DQSn13B/CQ13B	DQ6B	
4A	VREFB4AN0	IO			DIFFIO TX B161n	DIFFOUT B161n	AD2	DQ54B	DQ13B	DQ6B	
4A	VREFB4AN0	IO			DIFFIO TX B161p	DIFFOUT B161p	AD3	DQ54B	DQ13B	DQ6B	
4A	VREFB4AN0	IO			DIFFIO RX B162n	DIFFOUT B162n	AD4	DQ54B	DQ13B	DQ6B	
4A	VREFB4AN0	IO	RZQ_1		DIFFIO RX B162p	DIFFOUT B162p	AC3	DQ54B	DQ13B	DQ6B	
4A		GND					V1				
4A		nCE		nCE			R3				
4A		nSTATUS		nSTATUS			V2				
4A		CONF_DONE		CONF_DONE			AB1				
4A		nIO_PULLUP		nIO_PULLUP			U2				
4A		MSEL0		MSEL0			W1				
4A		MSEL1		MSEL1			P3				
4A		MSEL2		MSEL2			W2				
4A		MSEL3		MSEL3			AA1				
4A		MSEL4		MSEL4			U3				
7A		GND					G1				
7A	VREFB7AN0	IO	RZQ_4		DIFFIO RX T1p	DIFFOUT T1p	G4	DQ1T			
7A	VREFB7AN0	IO			DIFFIO RX T1n	DIFFOUT T1n	G3	DQ1T			
7A	VREFB7AN0	IO			DIFFIO TX T2p	DIFFOUT T2p	H6	DQ1T			
7A	VREFB7AN0	IO			DIFFIO TX T2n	DIFFOUT T2n	J6	DQ1T			
7A	VREFB7AN0	IO	CLK12p		DIFFIO RX T3p	DIFFOUT T3p	H3	DQSn1T			

Bank Number	VREF	PinName/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	F780	DQS for X4	DQS for X8/X9	DQS for X16/ X18	DQS for X32/ X36
7A	VREFB7A0	IO	CLK12n		DIFFIO RX T3n	DIFFOUT T3n	H4	DQSn1T			
7A	VREFB7A0	IO	CLK13p		DIFFIO RX T5p	DIFFOUT T5p	E2				
7A	VREFB7A0	IO	CLK13n		DIFFIO RX T5n	DIFFOUT T5n	F3				
7A	VREFB7A0	IO	FPLL_TR_CLKOUT2,FPLL_TR_FBp,FPLL_TR_FB1		DIFFIO RX T7p	DIFFOUT T7p	J4	DQ3T			
7A	VREFB7A0	IO	FPLL_TR_CLKOUT3,FPLL_TR_FBn		DIFFIO RX T7n	DIFFOUT T7n	J5	DQ3T			
7A	VREFB7A0	IO	FPLL_TR_CLKOUT0,FPLL_TR_CLKOUTp,FPLL_TR_FB0		DIFFIO TX T8p	DIFFOUT T8p	L1	DQ3T			
7A	VREFB7A0	IO	FPLL_TR_CLKOUT1,FPLL_TR_CLKOUTn		DIFFIO TX T8n	DIFFOUT T8n	L2	DQ3T			
7A	VREFB7A0	IO	CLK14p		DIFFIO RX T9p	DIFFOUT T9p	L3	DQS3T			
7A	VREFB7A0	IO	CLK14n		DIFFIO RX T9n	DIFFOUT T9n	M3	DQSn3T			
7A	VREFB7A0	IO	CLK15p		DIFFIO RX T11p	DIFFOUT T11p	L6				
7A	VREFB7A0	IO	CLK15n		DIFFIO RX T11n	DIFFOUT T11n	M6				
7C	VREFB7C0	IO			DIFFIO RX T37p	DIFFOUT T37p	F8	DQ13T	DQ3T	DQ2T	DQ1T
7C	VREFB7C0	IO			DIFFIO RX T37n	DIFFOUT T37n	E8	DQ13T	DQ3T	DQ2T	DQ1T
7C	VREFB7C0	IO			DIFFIO TX T38p	DIFFOUT T38p	H9	DQ13T	DQ3T	DQ2T	DQ1T
7C	VREFB7C0	IO			DIFFIO TX T38n	DIFFOUT T38n	G9	DQ13T	DQ3T	DQ2T	DQ1T
7C	VREFB7C0	IO			DIFFIO RX T39p	DIFFOUT T39p	G7	DQSn13T	DQSn3T/CQ3T	DQ2T	DQ1T
7C	VREFB7C0	IO			DIFFIO RX T39n	DIFFOUT T39n	G8	DQSn13T	DQSn3T/DQ3T	DQ2T	DQ1T
7C	VREFB7C0	IO			DIFFIO TX T40p	DIFFOUT T40p	H7	DQ14T	DQ3T	DQ2T	DQ1T
7C	VREFB7C0	IO			DIFFIO TX T40n	DIFFOUT T40n	J7	DQ14T	DQ3T	DQ2T	DQ1T
7C	VREFB7C0	IO			DIFFIO RX T41p	DIFFOUT T41p	K7	DQSn14T	DQ3T/CQn3T	DQSn2T/CQ2T	DQ1T
7C	VREFB7C0	IO			DIFFIO RX T41n	DIFFOUT T41n	K8	DQSn14T	DQ3T	DQSn2T/DQ2T	DQ1T
7C	VREFB7C0	IO			DIFFIO TX T42p	DIFFOUT T42p	J9	DQ14T	DQ3T	DQ2T	DQ1T
7C	VREFB7C0	IO			DIFFIO TX T42n	DIFFOUT T42n	J8	DQ14T	DQ3T	DQ2T	DQ1T
7C	VREFB7C0	IO			DIFFIO RX T43p	DIFFOUT T43p	D2	DQ15T	DQ4T	DQ2T	DQ1T
7C	VREFB7C0	IO			DIFFIO RX T43n	DIFFOUT T43n	C2	DQ15T	DQ4T	DQ2T	DQ1T
7C	VREFB7C0	IO			DIFFIO TX T44p	DIFFOUT T44p	C1	DQ15T	DQ4T	DQ2T	DQ1T
7C	VREFB7C0	IO			DIFFIO TX T44n	DIFFOUT T44n	B1	DQ15T	DQ4T	DQ2T	DQ1T
7C	VREFB7C0	IO			DIFFIO RX T45p	DIFFOUT T45p	D4	DQSn15T	DQSn4T/CQ4T	DQ2T/CQn2T	DQ1T
7C	VREFB7C0	IO			DIFFIO RX T45n	DIFFOUT T45n	C3	DQSn15T	DQSn4T/DQ4T	DQ2T	DQ1T
7C	VREFB7C0	IO			DIFFIO TX T46p	DIFFOUT T46p	C4	DQ16T	DQ4T	DQ2T	DQ1T
7C	VREFB7C0	IO			DIFFIO TX T46n	DIFFOUT T46n	C5	DQ16T	DQ4T	DQ2T	DQ1T
7C	VREFB7C0	IO			DIFFIO RX T47p	DIFFOUT T47p	B3	DQSn16T	DQ4T/CQn4T	DQ2T	DQSn1T/CQ1T
7C	VREFB7C0	IO			DIFFIO RX T47n	DIFFOUT T47n	A3	DQSn16T	DQ4T	DQ2T	DQSn1T/DQ1T
7C	VREFB7C0	IO			DIFFIO TX T48p	DIFFOUT T48p	B4	DQ16T	DQ4T	DQ2T	DQ1T
7C	VREFB7C0	IO			DIFFIO TX T48n	DIFFOUT T48n	A4	DQ16T	DQ4T	DQ2T	DQ1T
7C	VREFB7C0	IO			DIFFIO RX T49p	DIFFOUT T49p	F6	DQ17T	DQ5T	DQ3T	DQ1T
7C	VREFB7C0	IO			DIFFIO RX T49n	DIFFOUT T49n	E5	DQ17T	DQ5T	DQ3T	DQ1T
7C	VREFB7C0	IO			DIFFIO TX T50p	DIFFOUT T50p	C6	DQ17T	DQ5T	DQ3T	DQ1T
7C	VREFB7C0	IO			DIFFIO TX T50n	DIFFOUT T50n	C7	DQ17T	DQ5T	DQ3T	DQ1T
7C	VREFB7C0	IO			DIFFIO RX T51p	DIFFOUT T51p	B6	DQSn17T	DQSn5T/CQ5T	DQ3T	DQ1T/CQn1T
7C	VREFB7C0	IO			DIFFIO RX T51n	DIFFOUT T51n	A6	DQSn17T	DQSn5T/DQ5T	DQ3T	DQ1T
7C	VREFB7C0	IO			DIFFIO TX T52p	DIFFOUT T52p	B7	DQ18T	DQ5T	DQ3T	DQ1T
7C	VREFB7C0	IO			DIFFIO TX T52n	DIFFOUT T52n	A7	DQ18T	DQ5T	DQ3T	DQ1T
7C	VREFB7C0	IO			DIFFIO RX T53p	DIFFOUT T53p	E7	DQSn18T	DQSn5T/CQn5T	DQSn3T/CQ3T	DQ1T
7C	VREFB7C0	IO			DIFFIO RX T53n	DIFFOUT T53n	E6	DQSn18T	DQSn5T/DQ3T	DQSn3T/DQ3T	DQ1T
7C	VREFB7C0	IO			DIFFIO TX T54p	DIFFOUT T54p	D7	DQ18T	DQ5T	DQ3T	DQ1T
7C	VREFB7C0	IO			DIFFIO TX T54n	DIFFOUT T54n	D8	DQ18T	DQ5T	DQ3T	DQ1T
7C	VREFB7C0	IO			DIFFIO RX T55p	DIFFOUT T55p	M8	DQ19T	DQ6T	DQ3T	DQ1T
7C	VREFB7C0	IO			DIFFIO RX T55n	DIFFOUT T55n	L8	DQ19T	DQ6T	DQ3T	DQ1T
7C	VREFB7C0	IO			DIFFIO TX T56p	DIFFOUT T56p	M9	DQ19T	DQ6T	DQ3T	DQ1T
7C	VREFB7C0	IO			DIFFIO TX T56n	DIFFOUT T56n	L9	DQ19T	DQ6T	DQ3T	DQ1T
7C	VREFB7C0	IO			DIFFIO RX T57p	DIFFOUT T57p	N7	DQSn19T	DQSn6T/CQ6T	DQ3T/CQn3T	DQ1T
7C	VREFB7C0	IO			DIFFIO RX T57n	DIFFOUT T57n	N8	DQSn19T	DQSn6T/DQ6T	DQ3T	DQ1T
7C	VREFB7C0	IO			DIFFIO TX T58p	DIFFOUT T58p	R8	DQ20T	DQ6T	DQ3T	DQ1T
7C	VREFB7C0	IO			DIFFIO TX T58n	DIFFOUT T58n	P7	DQ20T	DQ6T	DQ3T	DQ1T
7C	VREFB7C0	IO			DIFFIO RX T59p	DIFFOUT T59p	P9	DQSn20T	DQ6T/CQn6T	DQ3T	DQ1T
7C	VREFB7C0	IO			DIFFIO RX T59n	DIFFOUT T59n	N9	DQSn20T	DQ6T	DQ3T	DQ1T
7C	VREFB7C0	IO			DIFFIO TX T60p	DIFFOUT T60p	T8	DQ20T	DQ6T	DQ3T	DQ1T
7C	VREFB7C0	IO			DIFFIO TX T60n	DIFFOUT T60n	R9	DQ20T	DQ6T	DQ3T	DQ1T
7D	VREFB7D0	IO			DIFFIO RX T61p	DIFFOUT T61p	H10	DQ21T	DQ7T	DQ4T	DQ1T
7D	VREFB7D0	IO			DIFFIO RX T61n	DIFFOUT T61n	J10	DQ21T	DQ7T	DQ4T	DQ1T
7D	VREFB7D0	IO			DIFFIO TX T62p	DIFFOUT T62p	K10	DQ21T	DQ7T	DQ4T	DQ1T
7D	VREFB7D0	IO			DIFFIO TX T62n	DIFFOUT T62n	L10	DQ21T	DQ7T	DQ4T	DQ1T
7D	VREFB7D0	IO			DIFFIO RX T63p	DIFFOUT T63p	L11	DQSn21T	DQSn7T/CQ7T	DQ4T	DQ1T
7D	VREFB7D0	IO			DIFFIO RX T63n	DIFFOUT T63n	K11	DQSn21T	DQSn7T/DQ7T	DQ4T	DQ1T
7D	VREFB7D0	IO			DIFFIO TX T64p	DIFFOUT T64p	G11	DQ22T	DQ7T	DQ4T	DQ1T
7D	VREFB7D0	IO			DIFFIO TX T64n	DIFFOUT T64n	G10	DQ22T	DQ7T	DQ4T	DQ1T
7D	VREFB7D0	IO			DIFFIO RX T65p	DIFFOUT T65p	H12	DQSn22T	DQSn7T/CQn7T	DQSn4T/CQ4T	DQ1T
7D	VREFB7D0	IO			DIFFIO RX T65n	DIFFOUT T65n	G12	DQSn22T	DQSn7T/DQ4T	DQSn4T/DQ4T	DQ1T
7D	VREFB7D0	IO			DIFFIO TX T66p	DIFFOUT T66p	J12	DQ22T	DQ7T	DQ4T	DQ1T
7D	VREFB7D0	IO			DIFFIO TX T66n	DIFFOUT T66n	J11	DQ22T	DQ7T	DQ4T	DQ1T
7D	VREFB7D0	IO	CLK19p		DIFFIO RX T67p	DIFFOUT T67p	E10	DQ23T	DQ8T	DQ4T	DQ1T
7D	VREFB7D0	IO	CLK19n		DIFFIO RX T67n	DIFFOUT T67n	E9	DQ23T	DQ8T	DQ4T	DQ1T
7D	VREFB7D0	IO			DIFFIO TX T68p	DIFFOUT T68p	B9	DQ23T	DQ8T	DQ4T	DQ1T
7D	VREFB7D0	IO			DIFFIO TX T68n	DIFFOUT T68n	A9	DQ23T	DQ8T	DQ4T	DQ1T
7D	VREFB7D0	IO	CLK18p		DIFFIO RX T69p	DIFFOUT T69p	D10	DQSn23T	DQSn8T/CQ8T	DQ4T/CQn4T	DQ1T
7D	VREFB7D0	IO	CLK18n		DIFFIO RX T69n	DIFFOUT T69n	C10	DQSn23T	DQSn8T/DQ8T	DQ4T	DQ1T
7D	VREFB7D0	IO			DIFFIO TX T70p	DIFFOUT T70p	B10	DQ24T	DQ8T	DQ4T	DQ1T
7D	VREFB7D0	IO			DIFFIO TX T70n	DIFFOUT T70n	A10	DQ24T	DQ8T	DQ4T	DQ1T
7D	VREFB7D0	IO	FPLL_TC_CLKOUT2,FPLL_TC_FBp,FPLL_TC_FB1		DIFFIO RX T71p	DIFFOUT T71p	E11	DQSn24T	DQ8T/CQn8T	DQ4T	DQ1T



Pin Information for the Arria® V 5AGZME1 Device  
Version 1.0  
Note (1)

Bank Number	VREF	PinName/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	F780	DQS for X4	DQS for X8/X9	DQS for X16/ X18	DQS for X32/ X36
7D	VREFB7DN0	IO	FPLL TC_CLKOUT3,FPLL TC FbN		DIFFIO RX T71n	DIFFOUT T71n	F11	DQSn24T	DQ8T	DQ4T	
7D	VREFB7DN0	IO	FPLL TC_CLKOUT0,FPLL TC_CLKOUTp,FPLL TC_FB0		DIFFIO TX T72p	DIFFOUT T72p	D11	DQ24T	DQ8T	DQ4T	
7D	VREFB7DN0	IO	FPLL TC_CLKOUT1,FPLL TC_CLKOUTn		DIFFIO TX T72n	DIFFOUT T72n	C11	DQ24T	DQ8T	DQ4T	
7D	VREFB7DN0	IO			DIFFIO RX T73p	DIFFOUT T73p	U10	DQ25T	DQ9T		
7D	VREFB7DN0	IO			DIFFIO RX T73n	DIFFOUT T73n	T10	DQ25T	DQ9T		
7D	VREFB7DN0	IO			DIFFIO TX T74p	DIFFOUT T74p	N10	DQ25T	DQ9T		
7D	VREFB7DN0	IO			DIFFIO TX T74n	DIFFOUT T74n	M11	DQ25T	DQ9T		
7D	VREFB7DN0	IO			DIFFIO RX T75p	DIFFOUT T75p	P10	DQSn25T	DQSn9T/CQ9T		
7D	VREFB7DN0	IO			DIFFIO RX T75n	DIFFOUT T75n	R10	DQSn25T	DQSn9T/DQ9T		
7D	VREFB7DN0	IO			DIFFIO TX T76p	DIFFOUT T76p	L12	DQ26T	DQ9T		
7D	VREFB7DN0	IO			DIFFIO TX T76n	DIFFOUT T76n	K13	DQ26T	DQ9T		
7D	VREFB7DN0	IO			DIFFIO RX T77p	DIFFOUT T77p	N13	DQSn26T	DQ9T/CQn9T		
7D	VREFB7DN0	IO			DIFFIO RX T77n	DIFFOUT T77n	M12	DQSn26T	DQ9T		
7D	VREFB7DN0	IO			DIFFIO TX T78p	DIFFOUT T78p	M11	DQ26T	DQ9T		
7D	VREFB7DN0	IO			DIFFIO TX T78n	DIFFOUT T78n	M12	DQ26T	DQ9T		
8D	VREFB8DN0	IO	CLK17p		DIFFIO RX T85p	DIFFOUT T85p	C12	DQ29T	DQ10T	DQ5T	
8D	VREFB8DN0	IO	CLK17n		DIFFIO RX T85n	DIFFOUT T85n	C13	DQ29T	DQ10T	DQ5T	
8D	VREFB8DN0	IO			DIFFIO TX T86p	DIFFOUT T86p	D13	DQ29T	DQ10T	DQ5T	
8D	VREFB8DN0	IO			DIFFIO TX T86n	DIFFOUT T86n	E12	DQ29T	DQ10T	DQ5T	
8D	VREFB8DN0	IO	CLK16p		DIFFIO RX T87p	DIFFOUT T87p	E14	DQSn29T	DQSn10T/CQ10T	DQ5T	
8D	VREFB8DN0	IO	CLK16n		DIFFIO RX T87n	DIFFOUT T87n	E13	DQSn29T	DQSn10T/DQ10T	DQ5T	
8D	VREFB8DN0	IO			DIFFIO TX T88p	DIFFOUT T88p	B13	DQ30T	DQ10T	DQ5T	
8D	VREFB8DN0	IO			DIFFIO TX T88n	DIFFOUT T88n	A13	DQ30T	DQ10T	DQ5T	
8D	VREFB8DN0	IO			DIFFIO RX T89p	DIFFOUT T89p	B12	DQSn30T	DQ10T/CQn10T	DQSn5T/CQ5T	
8D	VREFB8DN0	IO			DIFFIO RX T89n	DIFFOUT T89n	A12	DQSn30T	DQ10T	DQSn5T/DQ5T	
8D	VREFB8DN0	IO			DIFFIO TX T90p	DIFFOUT T90p	D14	DQ30T	DQ10T	DQ5T	
8D	VREFB8DN0	IO			DIFFIO TX T90n	DIFFOUT T90n	C14	DQ30T	DQ10T	DQ5T	
8D	VREFB8DN0	IO			DIFFIO RX T91p	DIFFOUT T91p	G14	DQ31T	DQ11T	DQ5T	
8D	VREFB8DN0	IO			DIFFIO RX T91n	DIFFOUT T91n	G15	DQ31T	DQ11T	DQ5T	
8D	VREFB8DN0	IO			DIFFIO TX T92p	DIFFOUT T92p	J14	DQ31T	DQ11T	DQ5T	
8D	VREFB8DN0	IO			DIFFIO TX T92n	DIFFOUT T92n	K14	DQ31T	DQ11T	DQ5T	
8D	VREFB8DN0	IO			DIFFIO RX T93p	DIFFOUT T93p	H15	DQSn31T	DQSn11T/CQ11T	DQSn5T/CQn5T	
8D	VREFB8DN0	IO			DIFFIO RX T93n	DIFFOUT T93n	J15	DQSn31T	DQSn11T/DQ11T	DQ5T	
8D	VREFB8DN0	IO			DIFFIO TX T94p	DIFFOUT T94p	N14	DQ32T	DQ11T	DQ5T	
8D	VREFB8DN0	IO			DIFFIO TX T94n	DIFFOUT T94n	N15	DQ32T	DQ11T	DQ5T	
8D	VREFB8DN0	IO			DIFFIO RX T95p	DIFFOUT T95p	L14	DQSn32T	DQ11T/CQn11T	DQ5T	
8D	VREFB8DN0	IO			DIFFIO RX T95n	DIFFOUT T95n	M14	DQSn32T	DQ11T	DQ5T	
8D	VREFB8DN0	IO			DIFFIO TX T96p	DIFFOUT T96p	M15	DQ32T	DQ11T	DQ5T	
8D	VREFB8DN0	IO			DIFFIO TX T96n	DIFFOUT T96n	L15	DQ32T	DQ11T	DQ5T	
8C	VREFB8CN0	IO			DIFFIO RX T97p	DIFFOUT T97p	L17	DQ33T	DQ12T	DQ6T	DQ2T
8C	VREFB8CN0	IO			DIFFIO RX T97n	DIFFOUT T97n	K17	DQ33T	DQ12T	DQ6T	DQ2T
8C	VREFB8CN0	IO			DIFFIO TX T98p	DIFFOUT T98p	L16	DQ33T	DQ12T	DQ6T	DQ2T
8C	VREFB8CN0	IO			DIFFIO TX T98n	DIFFOUT T98n	K16	DQ33T	DQ12T	DQ6T	DQ2T
8C	VREFB8CN0	IO			DIFFIO RX T99p	DIFFOUT T99p	J16	DQSn33T	DQSn12T/CQ12T	DQ6T	DQ2T
8C	VREFB8CN0	IO			DIFFIO RX T99n	DIFFOUT T99n	J17	DQSn33T	DQSn12T/DQ12T	DQ6T	DQ2T
8C	VREFB8CN0	IO			DIFFIO TX T100p	DIFFOUT T100p	G16	DQ34T	DQ12T	DQ6T	DQ2T
8C	VREFB8CN0	IO			DIFFIO TX T100n	DIFFOUT T100n	H16	DQ34T	DQ12T	DQ6T	DQ2T
8C	VREFB8CN0	IO			DIFFIO RX T101p	DIFFOUT T101p	G17	DQSn34T	DQ12T/CQn12T	DQSn6T/CQ6T	DQ2T
8C	VREFB8CN0	IO			DIFFIO RX T101n	DIFFOUT T101n	F17	DQSn34T	DQ12T	DQSn6T/DQ6T	DQ2T
8C	VREFB8CN0	IO			DIFFIO TX T102p	DIFFOUT T102p	E16	DQ34T	DQ12T	DQ6T	DQ2T
8C	VREFB8CN0	IO			DIFFIO TX T102n	DIFFOUT T102n	E15	DQ34T	DQ12T	DQ6T	DQ2T
8C	VREFB8CN0	IO			DIFFIO RX T103p	DIFFOUT T103p	B15	DQ35T	DQ13T	DQ6T	DQ2T
8C	VREFB8CN0	IO			DIFFIO RX T103n	DIFFOUT T103n	A15	DQ35T	DQ13T	DQ6T	DQ2T
8C	VREFB8CN0	IO			DIFFIO TX T104p	DIFFOUT T104p	C15	DQ35T	DQ13T	DQ6T	DQ2T
8C	VREFB8CN0	IO			DIFFIO TX T104n	DIFFOUT T104n	C16	DQ35T	DQ13T	DQ6T	DQ2T
8C	VREFB8CN0	IO			DIFFIO RX T105p	DIFFOUT T105p	B16	DQSn35T	DQSn13T/CQ13T	DQ6T/CQn6T	DQ2T
8C	VREFB8CN0	IO			DIFFIO RX T105n	DIFFOUT T105n	A16	DQSn35T	DQSn13T/DQ13T	DQ6T	DQ2T
8C	VREFB8CN0	IO			DIFFIO TX T106p	DIFFOUT T106p	C18	DQ36T	DQ13T	DQ6T	DQ2T
8C	VREFB8CN0	IO			DIFFIO TX T106n	DIFFOUT T106n	C17	DQ36T	DQ13T	DQ6T	DQ2T
8C	VREFB8CN0	IO			DIFFIO RX T107p	DIFFOUT T107p	E17	DQSn36T	DQ13T/CQn13T	DQ6T	DQSn2T/CQ2T
8C	VREFB8CN0	IO			DIFFIO RX T107n	DIFFOUT T107n	D17	DQSn36T	DQ13T	DQ6T	DQSn2T/DQ2T
8C	VREFB8CN0	IO			DIFFIO TX T108p	DIFFOUT T108p	B18	DQ36T	DQ13T	DQ6T	DQ2T
8C	VREFB8CN0	IO			DIFFIO TX T108n	DIFFOUT T108n	A18	DQ36T	DQ13T	DQ6T	DQ2T
8C	VREFB8CN0	IO			DIFFIO RX T109p	DIFFOUT T109p	B19	DQ37T	DQ14T	DQ7T	DQ2T
8C	VREFB8CN0	IO			DIFFIO RX T109n	DIFFOUT T109n	A19	DQ37T	DQ14T	DQ7T	DQ2T
8C	VREFB8CN0	IO			DIFFIO TX T110p	DIFFOUT T110p	D19	DQ37T	DQ14T	DQ7T	DQ2T
8C	VREFB8CN0	IO			DIFFIO TX T110n	DIFFOUT T110n	C19	DQ37T	DQ14T	DQ7T	DQ2T
8C	VREFB8CN0	IO			DIFFIO RX T111p	DIFFOUT T111p	B21	DQSn37T	DQSn14T/CQ14T	DQ7T	DQSn2T/CQn2T
8C	VREFB8CN0	IO			DIFFIO RX T111n	DIFFOUT T111n	A21	DQSn37T	DQSn14T/DQ14T	DQ7T	DQ2T
8C	VREFB8CN0	IO			DIFFIO TX T112p	DIFFOUT T112p	E18	DQ38T	DQ14T	DQ7T	DQ2T
8C	VREFB8CN0	IO			DIFFIO TX T112n	DIFFOUT T112n	E19	DQ38T	DQ14T	DQ7T	DQ2T
8C	VREFB8CN0	IO			DIFFIO RX T113p	DIFFOUT T113p	C20	DQSn38T	DQ14T/CQn14T	DQSn7T/CQ7T	DQ2T
8C	VREFB8CN0	IO			DIFFIO RX T113n	DIFFOUT T113n	D20	DQSn38T	DQ14T	DQSn7T/DQ7T	DQ2T
8C	VREFB8CN0	IO			DIFFIO TX T114p	DIFFOUT T114p	F20	DQ38T	DQ14T	DQ7T	DQ2T
8C	VREFB8CN0	IO			DIFFIO TX T114n	DIFFOUT T114n	E20	DQ38T	DQ14T	DQ7T	DQ2T
8C	VREFB8CN0	IO			DIFFIO RX T115p	DIFFOUT T115p	H18	DQ39T	DQ15T	DQ7T	DQ2T
8C	VREFB8CN0	IO			DIFFIO RX T115n	DIFFOUT T115n	G18	DQ39T	DQ15T	DQ7T	DQ2T
8C	VREFB8CN0	IO			DIFFIO TX T116p	DIFFOUT T116p	J19	DQ39T	DQ15T	DQ7T	DQ2T
8C	VREFB8CN0	IO			DIFFIO TX T116n	DIFFOUT T116n	J18	DQ39T	DQ15T	DQ7T	DQ2T
8C	VREFB8CN0	IO			DIFFIO RX T117p	DIFFOUT T117p	H19	DQSn39T	DQSn15T/CQ15T	DQ7T/CQn7T	DQ2T



Bank Number	VREF	PinName/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	F780	DQS for X4	DQS for X8/X9	DQS for X16/ X18	DQS for X32/ X36
8C	VREFB8C0	IO			DIFFIO_RX_T117n	DIFFOUT_T117n	G19	DQSn39T	DQSn15T/DQ15T	DQ7T	DQ2T
8C	VREFB8C0	IO			DIFFIO_TX_T118p	DIFFOUT_T118p	M17	DQ40T	DQ15T	DQ7T	DQ2T
8C	VREFB8C0	IO			DIFFIO_TX_T118n	DIFFOUT_T118n	L18	DQ40T	DQ15T	DQ7T	DQ2T
8C	VREFB8C0	IO			DIFFIO_RX_T119p	DIFFOUT_T119p	M18	DQS40T	DQ15T/CQn15T	DQ7T	DQ2T
8C	VREFB8C0	IO			DIFFIO_RX_T119n	DIFFOUT_T119n	N18	DQSn40T	DQ15T	DQ7T	DQ2T
8C	VREFB8C0	IO			DIFFIO_TX_T120p	DIFFOUT_T120p	N16	DQ40T	DQ15T	DQ7T	DQ2T
8C	VREFB8C0	IO			DIFFIO_TX_T120n	DIFFOUT_T120n	N17	DQ40T	DQ15T	DQ7T	DQ2T
8A	VREFB8A0	IO	CLK23p		DIFFIO_RX_T145p	DIFFOUT_T145p	G20				
8A	VREFB8A0	IO	CLK23n		DIFFIO_RX_T145n	DIFFOUT_T145n	G21				
8A	VREFB8A0	IO	CLK22p		DIFFIO_RX_T147p	DIFFOUT_T147p	K19				
8A	VREFB8A0	IO	CLK22n		DIFFIO_RX_T147n	DIFFOUT_T147n	L19				
8A	VREFB8A0	IO	FPLL_TL_CLKOUT2,FPLL_TL_FBp,FPLL_TL_FB1		DIFFIO_RX_T149p	DIFFOUT_T149p	G22				
8A	VREFB8A0	IO	FPLL_TL_CLKOUT3,FPLL_TL_FBn		DIFFIO_RX_T149n	DIFFOUT_T149n	G23				
8A	VREFB8A0	IO	FPLL_TL_CLKOUT0,FPLL_TL_CLKOUTp,FPLL_TL_FB0		DIFFIO_TX_T150p	DIFFOUT_T150p	H21				
8A	VREFB8A0	IO	FPLL_TL_CLKOUT1,FPLL_TL_CLKOUTn		DIFFIO_TX_T150n	DIFFOUT_T150n	J21				
8A	VREFB8A0	IO	CLK21p		DIFFIO_RX_T151p	DIFFOUT_T151p	D22				
8A	VREFB8A0	IO	CLK21n		DIFFIO_RX_T151n	DIFFOUT_T151n	C22				
8A	VREFB8A0	IO	CLK20p		DIFFIO_RX_T153p	DIFFOUT_T153p	B22				
8A	VREFB8A0	IO	CLK20n		DIFFIO_RX_T153n	DIFFOUT_T153n	A22				
8A	VREFB8A0	IO			DIFFIO_RX_T155p	DIFFOUT_T155p	D23				
8A	VREFB8A0	IO	RZQ_5		DIFFIO_RX_T155n	DIFFOUT_T155n	C23				
		GND					A26				
		GND					AA25				
		GND					AA26				
		GND					AB27				
		GND					AB28				
		GND					AC25				
		GND					AC26				
		GND					AD27				
		GND					AD28				
		GND					AE25				
		GND					AE26				
		GND					AF27				
		GND					AF28				
		GND					AG25				
		GND					AG26				
		GND					B26				
		GND					B27				
		GND					B28				
		GND					C25				
		GND					C26				
		GND					D27				
		GND					D28				
		GND					E25				
		GND					E26				
		GND					F27				
		GND					F28				
		GND					G25				
		GND					G26				
		GND					H27				
		GND					H28				
		GND					J25				
		GND					J26				
		GND					K21				
		GND					K22				
		GND					K23				
		GND					K24				
		GND					K27				
		GND					K28				
		GND					L21				
		GND					L25				
		GND					L26				
		GND					M21				
		GND					M23				
		GND					M27				
		GND					M28				
		GND					N25				
		GND					N26				
		GND					P22				
		GND					P24				
		GND					P27				
		GND					P28				
		GND					R21				
		GND					R25				
		GND					R26				
		GND					T23				
		GND					T27				
		GND					T28				
		GND					U25				
		GND					U26				



Bank Number	VREF	PinName/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	F780	DQS for X4	DQS for X8/X9	DQS for X16/ X18	DQS for X32/ X36
		GND					V21				
		GND					V22				
		GND					V24				
		GND					V27				
		GND					V28				
		GND					W22				
		GND					W23				
		GND					W24				
		GND					W25				
		GND					W26				
		GND					Y27				
		GND					Y28				
		GND					M1				
		GND					M2				
		GND					N2				
		GND					P1				
		GND					P2				
		GND					R2				
		GND					AA11				
		GND					AA14				
		GND					AA17				
		GND					AA2				
		GND					AA20				
		GND					AA23				
		GND					AA24				
		GND					AA5				
		GND					AA8				
		GND					AB24				
		GND					AC1				
		GND					AC10				
		GND					AC13				
		GND					AC16				
		GND					AC19				
		GND					AC22				
		GND					AC24				
		GND					AC4				
		GND					AC7				
		GND					AD24				
		GND					AE12				
		GND					AE15				
		GND					AE18				
		GND					AE21				
		GND					AE24				
		GND					AE3				
		GND					AE6				
		GND					AE9				
		GND					AF1				
		GND					AF24				
		GND					AG11				
		GND					AG14				
		GND					AG17				
		GND					AG2				
		GND					AG20				
		GND					AG23				
		GND					AG24				
		GND					AG5				
		GND					AG8				
		GND					B11				
		GND					B14				
		GND					B17				
		GND					B2				
		GND					B20				
		GND					B23				
		GND					B5				
		GND					B8				
		GND					C24				
		GND					D1				
		GND					D12				
		GND					D15				
		GND					D18				
		GND					D21				
		GND					D24				
		GND					D3				
		GND					D6				
		GND					D9				
		GND					E24				
		GND					F1				
		GND					F10				
		GND					F13				
		GND					F16				



Bank Number	VREF	PinName/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	F780	DQS for X4	DQS for X8/X9	DQS for X16/ X18	DQS for X32/ X36
		GND					F19				
		GND					F22				
		GND					F24				
		GND					F4				
		GND					F7				
		GND					G24				
		GND					H11				
		GND					H14				
		GND					H17				
		GND					H2				
		GND					H20				
		GND					H23				
		GND					H24				
		GND					H5				
		GND					H8				
		GND					J1				
		GND					J24				
		GND					K12				
		GND					K15				
		GND					K18				
		GND					K3				
		GND					K6				
		GND					K9				
		GND					M10				
		GND					M13				
		GND					M16				
		GND					M19				
		GND					M4				
		GND					M7				
		GND					N20				
		GND					P11				
		GND					P13				
		GND					P15				
		GND					P17				
		GND					P5				
		GND					P8				
		GND					R12				
		GND					R14				
		GND					T11				
		GND					T16				
		GND					T18				
		GND					T3				
		GND					T6				
		GND					T9				
		GND					U1				
		GND					U12				
		GND					U17				
		GND					U20				
		GND					U4				
		GND					U7				
		GND					V11				
		GND					V18				
		GND					W11				
		GND					W13				
		GND					W15				
		GND					W17				
		GND					W21				
		GND					W3				
		GND					W6				
		GND					W9				
		GND					Y1				
		GND					Y18				
		GND					Y24				
		GND					U14				
		VCC					P12				
		VCC					P14				
		VCC					P16				
		VCC					P18				
		VCC					W12				
		VCC					W14				
		VCC					W16				
		VCC					W18				
		VCC					R11				
		VCC					R13				
		VCC					R15				
		VCC					R16				
		VCC					R17				
		VCC					R18				
		VCC					T12				
		VCC					T13				





Bank Number	VREF	PinName/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	F780	DQS for X4	DQS for X8/X9	DQS for X16/ X18	DQS for X32/ X36
		VCC					T14				
		VCC					T15				
		VCC					T17				
		VCC					U11				
		VCC					U15				
		VCC					U16				
		VCC					U18				
		VCC					V12				
		VCC					V13				
		VCC					V15				
		VCC					V16				
		VCC					V17				
		VCC					V14				
		VCCOPT					L13				
		VCCOPT					L20				
		VCCOPT					L7				
		VCCOPT					V20				
		VCCOPT					V7				
		VCCOPT					Y14				
		DNU					AH27				
		DNU					AG27				
		DNU					Y23				
		DNU					AC14				
		DNU					T2				
		DNU					T1				
		DNU					H1				
		DNU					F14				
		DNU					U13				
		VCCPGM					AA22				
		VCCPGM					Y2				
		TEMPDIODEn					J2				
		TEMPDIODEp					K2				
		VCCBAT					Y4				
		VCCIO3A					AH20				
		VCCIO3A					AH24				
		VCCIO3B					AH14				
		VCCIO3B					AH17				
		VCCIO3D					AH8				
		VCCIO4A					AD1				
		VCCIO4D					AH5				
		VCCIO7A					E1				
		VCCIO7C					A2				
		VCCIO7C					A5				
		VCCIO7D					A11				
		VCCIO7D					A8				
		VCCIO8A					A23				
		VCCIO8C					A17				
		VCCIO8C					A20				
		VCCIO8D					A14				
		VCCPD3AB					AF18				
		VCCPD3AB					AF20				
		VCCPD3CD					AF9				
		VCCPD4					AE4				
		VCCPD7					C9				
		VCCPD7					D5				
		VCCPD8					C21				
		VCCPD8					D16				
3A	VREFB3AN0	VREFB3AN0					AB20				
3B	VREFB3BN0	VREFB3BN0					AB16				
3D	VREFB3DN0	VREFB3DN0					AC9				
4A	VREFB4AN0	VREFB4AN0					AC5				
4D	VREFB4DN0	VREFB4DN0					AB7				
7A	VREFB7AN0	VREFB7AN0					F5				
7C	VREFB7CN0	VREFB7CN0					F9				
7D	VREFB7DN0	VREFB7DN0					F12				
8A	VREFB8AN0	VREFB8AN0					F21				
8C	VREFB8CN0	VREFB8CN0					F18				
8D	VREFB8DN0	VREFB8DN0					F15				
		NC					G5				
		NC					G6				
		NC					E3				
		NC					E4				
		NC					L4				
		NC					L5				
		NC					K5				
		NC					K4				
		NC					J20				
		NC					K20				
		NC					H22				
		NC					J22				



Bank Number	VREF	PinName/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	F780	DQS for X4	DQS for X8/X9	DQS for X16/ X18	DQS for X32/ X36
		NC					E22				
		NC					E21				
		NC					B24				
		NC					A24				
		NC					B25				
		NC					A25				
		NC					P19				
		NC					R20				
		NC					T19				
		NC					N3				
		NC					N4				
		NC					P4				
		NC					K1				
		NC					C8				
		VCCG GXBL0					T24				
		VCCG GXBL1					M24				
		VCCR GXBL0					V23				
		VCCR GXBL1					P23				
		VCCG GXBL0					T22				
		VCCG GXBL0					U22				
		VCCG GXBL1					M22				
		VCCG GXBL1					N22				
		VCCHIP_L					N19				
		VCCHIP_L					R19				
		VCCHIP_L					J19				
		RREF_BL					AG28				
		RREF_BR					R1				
		RREF_TL					A27				
		RREF_TR					N1				
		VCCA FPLL					AB23				
		VCCA FPLL					Y15				
		VCCA FPLL					AB2				
		VCCA FPLL					G2				
		VCCA FPLL					J13				
		VCCA FPLL					F23				
		VCCA FPLL					N21				
		VCCA FPLL					U21				
		VCCA FPLL					M5				
		VCCA FPLL					T5				
		VCCA GXBL0					R24				
		VCCA GXBL1					L24				
		VCCHSSI_L					M20				
		VCCHSSI_L					P20				
		VCCHSSI_L					T20				
		VCCD FPLL					AC23				
		VCCD FPLL					AA15				
		VCCD FPLL					AC2				
		VCCD FPLL					F2				
		VCCD FPLL					H13				
		VCCD FPLL					E23				
		VCCD FPLL					P21				
		VCCD FPLL					T21				
		VCCD FPLL					N5				
		VCCD FPLL					R5				
		VCC_AUX					AB14				
		VCC_AUX					G13				
		VCC_AUX					J23				
		VCC_AUX					J3				
		VCC_AUX					Y22				
		VCC_AUX					Y3				

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



Bank Number	VREF	PinName/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	F1152	DQS for X4	DQS for X8/X9	DQS for X16/ X18	DQS for X32/ X36
GXB L1		REFCLK3lp					N28				
GXB L1		REFCLK3ln					N29				
GXB L1		GXB TX L11n					H32				
GXB L1		GXB TX L11p					H31				
GXB L1		GXB RX L11n,GXB REFCLK L11n					J34				
GXB L1		GXB RX L11p,GXB REFCLK L11p					J33				
GXB L1		GXB TX L10n					K32				
GXB L1		GXB TX L10p					K31				
GXB L1		GXB RX L10n,GXB REFCLK L10n					L34				
GXB L1		GXB RX L10p,GXB REFCLK L10p					L33				
GXB L1		GXB TX L9n					M32				
GXB L1		GXB TX L9p					M31				
GXB L1		GXB RX L9n,GXB REFCLK L9n					N34				
GXB L1		GXB RX L9p,GXB REFCLK L9p					N33				
GXB L1		GXB TX L8n					P32				
GXB L1		GXB TX L8p					P31				
GXB L1		GXB RX L8n,GXB REFCLK L8n					R34				
GXB L1		GXB RX L8p,GXB REFCLK L8p					R33				
GXB L1		GXB TX L7n					T32				
GXB L1		GXB TX L7p					T31				
GXB L1		GXB RX L7n,GXB REFCLK L7n					U34				
GXB L1		GXB RX L7p,GXB REFCLK L7p					U33				
GXB L1		GXB TX L6n					V32				
GXB L1		GXB TX L6p					V31				
GXB L1		GXB RX L6n,GXB REFCLK L6n					W34				
GXB L1		GXB RX L6p,GXB REFCLK L6p					W33				
GXB L1		REFCLK2lp					R29				
GXB L1		REFCLK2ln					R30				
GXB L0		REFCLK1lp					U28				
GXB L0		REFCLK1ln					U29				
GXB L0		GXB TX L5n					Y32				
GXB L0		GXB TX L5p					Y31				
GXB L0		GXB RX L5n,GXB REFCLK L5n					AA34				
GXB L0		GXB RX L5p,GXB REFCLK L5p					AA33				
GXB L0		GXB TX L4n					AB32				
GXB L0		GXB TX L4p					AB31				
GXB L0		GXB RX L4n,GXB REFCLK L4n					AC34				
GXB L0		GXB RX L4p,GXB REFCLK L4p					AC33				
GXB L0		GXB TX L3n					AD32				
GXB L0		GXB TX L3p					AD31				
GXB L0		GXB RX L3n,GXB REFCLK L3n					AE34				
GXB L0		GXB RX L3p,GXB REFCLK L3p					AE33				
GXB L0		GXB TX L2n					AF32				
GXB L0		GXB TX L2p					AF31				
GXB L0		GXB RX L2n,GXB REFCLK L2n					AG34				
GXB L0		GXB RX L2p,GXB REFCLK L2p					AG33				
GXB L0		GXB TX L1n					AH32				
GXB L0		GXB TX L1p					AH31				
GXB L0		GXB RX L1n,GXB REFCLK L1n					AJ34				
GXB L0		GXB RX L1p,GXB REFCLK L1p					AJ33				
GXB L0		GXB TX L0n					AK32				
GXB L0		GXB TX L0p					AK31				
GXB L0		GXB RX L0n,GXB REFCLK L0n					AL34				
GXB L0		GXB RX L0p,GXB REFCLK L0p					AL33				
GXB L0		REFCLK0lp					W29				
GXB L0		REFCLK0ln					W30				
3A		nCONFIG		nCONFIG			AE30				
3A		TRST		TRST			Y27				
3A		TMS		TMS			AJ30				
3A		TCK		TCK			AN31				
3A		TDI		TDI			AL29				
3A		TDO		TDO			AK29				
3A		nCS0		nCS0			AC27				
3A		AS_DATA3		AS_DATA3			AF27				
3A		AS_DATA2		AS_DATA2			AC28				
3A		AS_DATA1		AS_DATA1			AA29				
3A		AS_DATA0,ASDO		AS_DATA0,ASDO			AF28				
3A		DCLK		DCLK			AB28				
3A	VREFB3A0	IO		CLKUSR	DIFFIO TX B1n	DIFFOUT B1n	AP32	DQ1B		DQ1B	
3A	VREFB3A0	IO		CRC ERROR	DIFFIO TX B1p	DIFFOUT B1p	AP31	DQ1B		DQ1B	
3A	VREFB3A0	IO	RZQ 0		DIFFIO RX B2n	DIFFOUT B2n	AM30	DQSn1B		DQ1B	
3A	VREFB3A0	IO		DEV OE	DIFFIO RX B2p	DIFFOUT B2p	AM31	DQS1B		DQ1B/CQn1B	
3A	VREFB3A0	IO		DEV CLRn	DIFFIO TX B3n	DIFFOUT B3n	AP30	DQ1B		DQ1B	
3A	VREFB3A0	IO		INIT_DONE	DIFFIO TX B3p	DIFFOUT B3p	AN30	DQ1B		DQ1B	
3A	VREFB3A0	IO		nCEO	DIFFIO RX B4n	DIFFOUT B4n	AP28	DQSn2B		DQSn1B/DQ1B	
3A	VREFB3A0	IO		DATA0	DIFFIO RX B4p	DIFFOUT B4p	AN28	DQS2B		DQS1B/CQ1B	
3A	VREFB3A0	IO		DATA1	DIFFIO TX B5n	DIFFOUT B5n	AP27	DQ2B		DQ1B	
3A	VREFB3A0	IO		DATA2	DIFFIO TX B5p	DIFFOUT B5p	AN27	DQ2B		DQ1B	
3A	VREFB3A0	IO		DATA3	DIFFIO RX B6n	DIFFOUT B6n	AL28	DQ2B		DQ1B	
3A	VREFB3A0	IO		DATA4	DIFFIO RX B6p	DIFFOUT B6p	AM28	DQ2B		DQ1B	
3A	VREFB3A0	IO		DATA5	DIFFIO TX B7n	DIFFOUT B7n	AE29	DQ3B		DQ2B	DQ1B
3A	VREFB3A0	IO		DATA6	DIFFIO TX B7p	DIFFOUT B7p	AD29	DQ3B		DQ2B	DQ1B
3A	VREFB3A0	IO		DATA7	DIFFIO RX B8n	DIFFOUT B8n	AC29	DQSn3B		DQ2B	DQ1B
3A	VREFB3A0	IO		DATA8	DIFFIO RX B8p	DIFFOUT B8p	AC30	DQS3B		DQ2B/CQn2B	DQ1B



Bank Number	VREF	PinName/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	F1152	DQS for X4	DQS for X8/X9	DQS for X16/ X18	DQS for X32/ X36
3A	VREFB3A0	IO		DATA9	DIFFIO TX B9n	DIFFOUT B9n	AF29	DQ3B	DQ2B	DQ1B	
3A	VREFB3A0	IO		DATA10	DIFFIO TX B9p	DIFFOUT B9p	AG30	DQ3B	DQ2B	DQ1B	
3A	VREFB3A0	IO		DATA11	DIFFIO RX B10n	DIFFOUT B10n	AB29	DQSn4B	DQSn2B/DQ2B	DQ1B	
3A	VREFB3A0	IO		DATA12	DIFFIO RX B10p	DIFFOUT B10p	AA30	DQSn4B	DQSn2B/CQ2B	DQ1B/CQn1B	
3A	VREFB3A0	IO		DATA13	DIFFIO TX B11n	DIFFOUT B11n	AE28	DQ4B	DQ2B	DQ1B	
3A	VREFB3A0	IO		DATA14	DIFFIO TX B11p	DIFFOUT B11p	AD28	DQ4B	DQ2B	DQ1B	
3A	VREFB3A0	IO		DATA15	DIFFIO RX B12n	DIFFOUT B12n	AB27	DQ4B	DQ2B	DQ1B	
3A	VREFB3A0	IO		DATA16	DIFFIO RX B12p	DIFFOUT B12p	AA28	DQ4B	DQ2B	DQ1B	
3A	VREFB3A0	IO		DATA17	DIFFIO TX B13n	DIFFOUT B13n	AH27	DQ5B	DQ3B	DQ1B	
3A	VREFB3A0	IO		DATA18	DIFFIO TX B13p	DIFFOUT B13p	AG27	DQ5B	DQ3B	DQ1B	
3A	VREFB3A0	IO		DATA19	DIFFIO RX B14n	DIFFOUT B14n	AJ26	DQSn5B	DQ3B	DQSn1B/DQ1B	
3A	VREFB3A0	IO		DATA20	DIFFIO RX B14p	DIFFOUT B14p	AH26	DQSn5B	DQ3B/CQn3B	DQSn1B/CQ1B	
3A	VREFB3A0	IO		DATA21	DIFFIO TX B15n	DIFFOUT B15n	AK28	DQ5B	DQ3B	DQ1B	
3A	VREFB3A0	IO		DATA22	DIFFIO TX B15p	DIFFOUT B15p	AJ27	DQ5B	DQ3B	DQ1B	
3A	VREFB3A0	IO		DATA23	DIFFIO RX B16n	DIFFOUT B16n	AK26	DQSn6B	DQSn3B/DQ3B	DQ1B	
3A	VREFB3A0	IO		DATA24	DIFFIO RX B16p	DIFFOUT B16p	AK27	DQSn6B	DQSn3B/CQ3B	DQ1B	
3A	VREFB3A0	IO		DATA25	DIFFIO TX B17n	DIFFOUT B17n	AM26	DQ6B	DQ3B	DQ1B	
3A	VREFB3A0	IO		DATA26	DIFFIO TX B17p	DIFFOUT B17p	AL26	DQ6B	DQ3B	DQ1B	
3A	VREFB3A0	IO		DATA27	DIFFIO RX B18n	DIFFOUT B18n	AM25	DQ6B	DQ3B	DQ1B	
3A	VREFB3A0	IO		DATA28	DIFFIO RX B18p	DIFFOUT B18p	AL25	DQ6B	DQ3B	DQ1B	
3B	VREFB3B0	IO		DATA29	DIFFIO TX B19n	DIFFOUT B19n	AP25	DO7B	DQ4B	DQ2B	DO1B
3B	VREFB3B0	IO		DATA30	DIFFIO TX B19p	DIFFOUT B19p	AN25	DO7B	DQ4B	DQ2B	DO1B
3B	VREFB3B0	IO		DATA31	DIFFIO RX B20n	DIFFOUT B20n	AP24	DQSn7B	DQ4B	DQ2B	DO1B
3B	VREFB3B0	IO		PR_DONE	DIFFIO RX B20p	DIFFOUT B20p	AN24	DQSn7B	DQ4B/CQn4B	DQ2B	DO1B
3B	VREFB3B0	IO		PR_REQUEST	DIFFIO TX B21n	DIFFOUT B21n	AM23	DO7B	DQ4B	DQ2B	DO1B
3B	VREFB3B0	IO		PR_READY	DIFFIO TX B21p	DIFFOUT B21p	AL23	DO7B	DQ4B	DQ2B	DO1B
3B	VREFB3B0	IO	CLK0n		DIFFIO RX B22n	DIFFOUT B22n	AK24	DQSn8B	DQSn4B/DQ4B	DQ2B	DO1B
3B	VREFB3B0	IO	CLK0p		DIFFIO RX B22p	DIFFOUT B22p	AK25	DQSn8B	DQSn4B/CQ4B	DQ2B/CQn2B	DO1B
3B	VREFB3B0	IO		PR_ERROR	DIFFIO TX B23n	DIFFOUT B23n	AK23	DO8B	DQ4B	DQ2B	DO1B
3B	VREFB3B0	IO	CvP_CONFDONE		DIFFIO TX B23p	DIFFOUT B23p	AJ23	DO8B	DQ4B	DQ2B	DO1B
3B	VREFB3B0	IO	CLK1n		DIFFIO RX B24n	DIFFOUT B24n	AJ24	DO8B	DQ4B	DQ2B	DO1B
3B	VREFB3B0	IO	CLK1p		DIFFIO RX B24p	DIFFOUT B24p	AH24	DO8B	DQ4B	DQ2B	DO1B
3B	VREFB3B0	IO	FPLL_BL_CLKOUT1,FPLL_BL_CLKOUTn		DIFFIO TX B25n	DIFFOUT B25n	U25	DO9B	DQ5B	DQ2B	DO1B
3B	VREFB3B0	IO	FPLL_BL_CLKOUT0,FPLL_BL_CLKOUTp,FPLL_BL_FB0		DIFFIO TX B25p	DIFFOUT B25p	U26	DO9B	DQ5B	DQ2B	DO1B
3B	VREFB3B0	IO	FPLL_BL_CLKOUT3,FPLL_BL_FBn		DIFFIO RX B26n	DIFFOUT B26n	Y25	DQSn9B	DQ5B	DQSn2B/DQ2B	DO1B
3B	VREFB3B0	IO	FPLL_BL_CLKOUT2,FPLL_BL_FBp,FPLL_BL_FB1		DIFFIO RX B26p	DIFFOUT B26p	W25	DQSn9B	DQ5B/CQn5B	DQSn2B/CQ2B	DO1B
3B	VREFB3B0	IO		nPERSTL0	DIFFIO TX B27n	DIFFOUT B27n	W26	DO9B	DQ5B	DQ2B	DO1B
3B	VREFB3B0	IO			DIFFIO TX B27p	DIFFOUT B27p	V25	DO9B	DQ5B	DQ2B	DO1B
3B	VREFB3B0	IO	CLK2n		DIFFIO RX B28n	DIFFOUT B28n	AB28	DQSn10B	DQSn5B/DQ5B	DQ3B	DO1B
3B	VREFB3B0	IO	CLK2p		DIFFIO RX B28p	DIFFOUT B28p	AA28	DQSn10B	DQSn5B/CQ5B	DQ3B	DO1B/CQn1B
3B	VREFB3B0	IO			DIFFIO TX B29n	DIFFOUT B29n	AA27	DO10B	DQ5B	DQ2B	DO1B
3B	VREFB3B0	IO			DIFFIO TX B29p	DIFFOUT B29p	Y26	DO10B	DQ5B	DQ2B	DO1B
3B	VREFB3B0	IO	CLK3n		DIFFIO RX B30n	DIFFOUT B30n	AB24	DO10B	DQ5B	DQ2B	DO1B
3B	VREFB3B0	IO	CLK3p		DIFFIO RX B30p	DIFFOUT B30p	AB23	DO10B	DQ5B	DQ2B	DO1B
3B	VREFB3B0	IO			DIFFIO TX B31n	DIFFOUT B31n	AF26	DO11B	DQ6B	DQ3B	DO1B
3B	VREFB3B0	IO			DIFFIO TX B31p	DIFFOUT B31p	AE26	DO11B	DQ6B	DQ3B	DO1B
3B	VREFB3B0	IO			DIFFIO RX B32n	DIFFOUT B32n	AD26	DQSn11B	DQ6B	DQ3B	DQSn1B/DQ1B
3B	VREFB3B0	IO			DIFFIO RX B32p	DIFFOUT B32p	AC26	DQSn11B	DQ6B/CQn6B	DQ3B	DQSn1B/CQ1B
3B	VREFB3B0	IO			DIFFIO TX B33n	DIFFOUT B33n	AF25	DO11B	DQ6B	DQ3B	DO1B
3B	VREFB3B0	IO			DIFFIO TX B33p	DIFFOUT B33p	AE25	DO11B	DQ6B	DQ3B	DO1B
3B	VREFB3B0	IO			DIFFIO RX B34n	DIFFOUT B34n	AH25	DQSn12B	DQSn6B/DQ6B	DQ3B	DO1B
3B	VREFB3B0	IO			DIFFIO RX B34p	DIFFOUT B34p	AG25	DQSn12B	DQSn6B/CQ6B	DQ3B/CQn3B	DO1B
3B	VREFB3B0	IO			DIFFIO TX B35n	DIFFOUT B35n	AG24	DO12B	DQ6B	DQ3B	DO1B
3B	VREFB3B0	IO			DIFFIO TX B35p	DIFFOUT B35p	AF24	DO12B	DQ6B	DQ3B	DO1B
3B	VREFB3B0	IO			DIFFIO RX B36n	DIFFOUT B36n	AD24	DO12B	DQ6B	DQ3B	DO1B
3B	VREFB3B0	IO			DIFFIO RX B36p	DIFFOUT B36p	AC24	DO12B	DQ6B	DQ3B	DO1B
3B	VREFB3B0	IO			DIFFIO TX B37n	DIFFOUT B37n	N24	DO13B	DQ7B	DQ3B	DO1B
3B	VREFB3B0	IO			DIFFIO TX B37p	DIFFOUT B37p	N23	DO13B	DQ7B	DQ3B	DO1B
3B	VREFB3B0	IO			DIFFIO RX B38n	DIFFOUT B38n	R26	DQSn13B	DQ7B	DQSn3B/DQ3B	DO1B
3B	VREFB3B0	IO			DIFFIO RX B38p	DIFFOUT B38p	T25	DQSn13B	DQ7B/CQn7B	DQSn3B/CQ3B	DO1B
3B	VREFB3B0	IO			DIFFIO TX B39n	DIFFOUT B39n	T23	DO13B	DQ7B	DQ3B	DO1B
3B	VREFB3B0	IO			DIFFIO TX B39p	DIFFOUT B39p	R24	DO13B	DQ7B	DQ3B	DO1B
3B	VREFB3B0	IO			DIFFIO RX B40n	DIFFOUT B40n	V23	DQSn14B	DQSn7B/DQ7B	DQ3B	DO1B
3B	VREFB3B0	IO			DIFFIO RX B40p	DIFFOUT B40p	U24	DQSn14B	DQSn7B/CQ7B	DQ3B	DO1B
3B	VREFB3B0	IO			DIFFIO TX B41n	DIFFOUT B41n	W24	DO14B	DQ7B	DQ3B	DO1B
3B	VREFB3B0	IO			DIFFIO TX B41p	DIFFOUT B41p	V24	DO14B	DQ7B	DQ3B	DO1B
3B	VREFB3B0	IO			DIFFIO RX B42n	DIFFOUT B42n	AA24	DO14B	DQ7B	DQ3B	DO1B
3B	VREFB3B0	IO			DIFFIO RX B42p	DIFFOUT B42p	Y24	DO14B	DQ7B	DQ3B	DO1B
3D	VREFB3D0	IO			DIFFIO TX B67n	DIFFOUT B67n	AP18	DQ23B	DQ8B	DQ4B	
3D	VREFB3D0	IO			DIFFIO TX B67p	DIFFOUT B67p	AN18	DQ23B	DQ8B	DQ4B	
3D	VREFB3D0	IO			DIFFIO RX B68n	DIFFOUT B68n	AM18	DQSn23B	DQ8B	DQ4B	
3D	VREFB3D0	IO			DIFFIO RX B68p	DIFFOUT B68p	AL19	DQSn23B	DQ8B/CQn8B	DQ4B	
3D	VREFB3D0	IO			DIFFIO TX B69n	DIFFOUT B69n	AM17	DQ23B	DQ8B	DQ4B	
3D	VREFB3D0	IO			DIFFIO TX B69p	DIFFOUT B69p	AL17	DQ23B	DQ8B	DQ4B	
3D	VREFB3D0	IO			DIFFIO RX B70n	DIFFOUT B70n	AK18	DQSn24B	DQSn8B/DQ8B	DQ4B	
3D	VREFB3D0	IO			DIFFIO RX B70p	DIFFOUT B70p	AK17	DQSn24B	DQSn8B/CQ8B	DQ4B/CQn4B	
3D	VREFB3D0	IO			DIFFIO TX B71n	DIFFOUT B71n	AN18	DO24B	DQ8B	DQ4B	
3D	VREFB3D0	IO			DIFFIO TX B71p	DIFFOUT B71p	AG19	DO24B	DQ8B	DQ4B	
3D	VREFB3D0	IO			DIFFIO RX B72n	DIFFOUT B72n	AK19	DO24B	DQ8B	DQ4B	
3D	VREFB3D0	IO			DIFFIO RX B72p	DIFFOUT B72p	AJ18	DO24B	DQ8B	DQ4B	
3D	VREFB3D0	IO			DIFFIO TX B73n	DIFFOUT B73n	Y19	DQ25B	DQ9B	DQ4B	
3D	VREFB3D0	IO			DIFFIO TX B73p	DIFFOUT B73p	W19	DQ25B	DQ9B	DQ4B	
3D	VREFB3D0	IO			DIFFIO RX B74n	DIFFOUT B74n	AA18	DQSn25B	DQ9B	DQSn4B/DQ4B	
3D	VREFB3D0	IO			DIFFIO RX B74p	DIFFOUT B74p	Y17	DQSn25B	DQ9B/CQn9B	DQSn4B/CQ4B	



Pin Information for the Arria® V 5AGZME1 Device  
Version 1.0  
Note (1)

Bank Number	VREF	PinName/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	F1152	DQS for X4	DQS for X8/X9	DQS for X16/ X18	DQS for X32/ X36
3D	VREFB3Dn0	IO			DIFFIO TX B75n	DIFFOUT B75n	Y18	DO25B	DQ9B	DQ4B	
3D	VREFB3Dn0	IO			DIFFIO TX B75p	DIFFOUT B75p	W18	DO25B	DQ9B	DQ4B	
3D	VREFB3Dn0	IO	CLK4n		DIFFIO RX B76n	DIFFOUT B76n	AB19	DQSn26B	DQSn9B/DQ9B	DQ4B	
3D	VREFB3Dn0	IO	CLK4p		DIFFIO RX B76p	DIFFOUT B76p	AB18	DQS26B	DQS9B/CQ9B	DQ4B	
3D	VREFB3Dn0	IO			DIFFIO TX B77n	DIFFOUT B77n	AF19	DO26B	DQ9B	DQ4B	
3D	VREFB3Dn0	IO			DIFFIO TX B77p	DIFFOUT B77p	AE19	DO26B	DQ9B	DQ4B	
3D	VREFB3Dn0	IO	CLK5n		DIFFIO RX B78n	DIFFOUT B78n	AG18	DO26B	DQ9B	DQ4B	
3D	VREFB3Dn0	IO	CLK5p		DIFFIO RX B78p	DIFFOUT B78p	AF18	DO26B	DQ9B	DQ4B	
4D	VREFB4Dn0	IO	FPLL_BC_CLKOUT1,FPLL_BC_CLKOUTn		DIFFIO TX B91n	DIFFOUT B91n	AD17	DQ31B	DQ10B	DQ5B	
4D	VREFB4Dn0	IO	FPLL_BC_CLKOUT0,FPLL_BC_CLKOUTn	FB0	DIFFIO TX B91p	DIFFOUT B91p	AC17	DQ31B	DQ10B	DQ5B	
4D	VREFB4Dn0	IO	FPLL_BC_CLKOUT3,FPLL_BC_FBn		DIFFIO RX B92n	DIFFOUT B92n	W17	DQSn31B	DQ10B	DQ5B	
4D	VREFB4Dn0	IO	FPLL_BC_CLKOUT2,FPLL_BC_FBp,FPLL_BC_FB1		DIFFIO RX B92p	DIFFOUT B92p	Y16	DQS31B	DQ10B/CQn10B	DQ5B	
4D	VREFB4Dn0	IO			DIFFIO TX B93n	DIFFOUT B93n	W16	DQ31B	DQ10B	DQ5B	
4D	VREFB4Dn0	IO			DIFFIO TX B93p	DIFFOUT B93p	W15	DQ31B	DQ10B	DQ5B	
4D	VREFB4Dn0	IO	CLK6n		DIFFIO RX B94n	DIFFOUT B94n	AF17	DQSn32B	DQSn10B/DQ10B	DQ5B	
4D	VREFB4Dn0	IO	CLK6p		DIFFIO RX B94p	DIFFOUT B94p	AF16	DQS32B	DQS10B/CQ10B	DQ5B/CQn5B	
4D	VREFB4Dn0	IO			DIFFIO TX B95n	DIFFOUT B95n	AG15	DQ32B	DQ10B	DQ5B	
4D	VREFB4Dn0	IO			DIFFIO TX B95p	DIFFOUT B95p	AG16	DO32B	DQ10B	DQ5B	
4D	VREFB4Dn0	IO	CLK7n		DIFFIO RX B96n	DIFFOUT B96n	AD16	DO32B	DQ10B	DQ5B	
4D	VREFB4Dn0	IO	CLK7p		DIFFIO RX B96p	DIFFOUT B96p	AE16	DO32B	DQ10B	DQ5B	
4D	VREFB4Dn0	IO			DIFFIO TX B97n	DIFFOUT B97n	AH17	DO33B	DQ11B	DQ5B	
4D	VREFB4Dn0	IO			DIFFIO TX B97p	DIFFOUT B97p	AH16	DO33B	DQ11B	DQ5B	
4D	VREFB4Dn0	IO			DIFFIO RX B98n	DIFFOUT B98n	AK15	DQSn33B	DQ11B	DQSn5B/DQ5B	
4D	VREFB4Dn0	IO			DIFFIO RX B98p	DIFFOUT B98p	AJ15	DQS33B	DQ11B/CQn11B	DQSn5B/CQ5B	
4D	VREFB4Dn0	IO			DIFFIO TX B99n	DIFFOUT B99n	AK16	DO33B	DQ11B	DQ5B	
4D	VREFB4Dn0	IO			DIFFIO TX B99p	DIFFOUT B99p	AJ17	DO33B	DQ11B	DQ5B	
4D	VREFB4Dn0	IO			DIFFIO RX B100n	DIFFOUT B100n	AL16	DQSn34B	DQSn11B/DQ11B	DQ5B	
4D	VREFB4Dn0	IO			DIFFIO RX B100p	DIFFOUT B100p	AM16	DQS34B	DQS11B/CQ11B	DQ5B	
4D	VREFB4Dn0	IO			DIFFIO TX B101n	DIFFOUT B101n	AP16	DO34B	DQ11B	DQ5B	
4D	VREFB4Dn0	IO			DIFFIO TX B101p	DIFFOUT B101p	AN16	DO34B	DQ11B	DQ5B	
4D	VREFB4Dn0	IO			DIFFIO RX B102n	DIFFOUT B102n	AP15	DO34B	DQ11B	DQ5B	
4D	VREFB4Dn0	IO			DIFFIO RX B102p	DIFFOUT B102p	AN15	DO34B	DQ11B	DQ5B	
4B	VREFB4Bn0	IO			DIFFIO TX B127n	DIFFOUT B127n	AC11	DO43B	DQ12B	DO2B	
4B	VREFB4Bn0	IO			DIFFIO TX B127p	DIFFOUT B127p	AD11	DO43B	DQ12B	DO2B	
4B	VREFB4Bn0	IO			DIFFIO RX B128n	DIFFOUT B128n	AB10	DQSn43B	DQ12B	DO2B	
4B	VREFB4Bn0	IO			DIFFIO RX B128p	DIFFOUT B128p	AB11	DQS43B	DQ12B/CQn12B	DO2B	
4B	VREFB4Bn0	IO			DIFFIO TX B129n	DIFFOUT B129n	AE10	DO43B	DQ12B	DO2B	
4B	VREFB4Bn0	IO			DIFFIO TX B129p	DIFFOUT B129p	AE11	DO43B	DQ12B	DO2B	
4B	VREFB4Bn0	IO			DIFFIO RX B130n	DIFFOUT B130n	W11	DQSn44B	DQSn12B/DQ12B	DO2B	
4B	VREFB4Bn0	IO			DIFFIO RX B130p	DIFFOUT B130p	Y11	DO344B	DQSn12B/CQ12B	DO2B	
4B	VREFB4Bn0	IO			DIFFIO TX B131n	DIFFOUT B131n	U11	DO44B	DQ12B	DO2B	
4B	VREFB4Bn0	IO			DIFFIO TX B131p	DIFFOUT B131p	U10	DO44B	DQ12B	DO2B	
4B	VREFB4Bn0	IO			DIFFIO RX B132n	DIFFOUT B132n	Y11	DO44B	DQ12B	DO2B	
4B	VREFB4Bn0	IO			DIFFIO RX B132p	DIFFOUT B132p	Y10	DO44B	DQ12B	DO2B	
4B	VREFB4Bn0	IO			DIFFIO TX B133n	DIFFOUT B133n	AJ11	DO45B	DQ13B	DO2B	
4B	VREFB4Bn0	IO			DIFFIO TX B133p	DIFFOUT B133p	AH11	DO45B	DQ13B	DO2B	
4B	VREFB4Bn0	IO			DIFFIO RX B134n	DIFFOUT B134n	AH10	DQSn45B	DQ13B	DQSn6B/DQ6B	DO2B
4B	VREFB4Bn0	IO			DIFFIO RX B134p	DIFFOUT B134p	AG10	DQS45B	DQ13B/CQn13B	DQSn6B/CQ6B	DO2B
4B	VREFB4Bn0	IO			DIFFIO TX B135n	DIFFOUT B135n	AF10	DO45B	DQ13B	DO2B	
4B	VREFB4Bn0	IO			DIFFIO TX B135p	DIFFOUT B135p	AF9	DO45B	DQ13B	DO2B	
4B	VREFB4Bn0	IO			DIFFIO RX B136n	DIFFOUT B136n	AF8	DQSn46B	DQSn13B/CQ13B	DO2B	
4B	VREFB4Bn0	IO			DIFFIO RX B136p	DIFFOUT B136p	AE8	DQS46B	DQS13B/CQ13B	DO2B/CQn2B	
4B	VREFB4Bn0	IO			DIFFIO TX B137n	DIFFOUT B137n	AJ8	DO46B	DQ13B	DO2B	
4B	VREFB4Bn0	IO			DIFFIO TX B137p	DIFFOUT B137p	AH8	DO46B	DQ13B	DO2B	
4B	VREFB4Bn0	IO			DIFFIO RX B138n	DIFFOUT B138n	AH9	DO46B	DQ13B	DO2B	
4B	VREFB4Bn0	IO			DIFFIO RX B138p	DIFFOUT B138p	AG9	DO46B	DQ13B	DO2B	
4B	VREFB4Bn0	IO			DIFFIO TX B139n	DIFFOUT B139n	AB9	DO47B	DQ14B	DO2B	
4B	VREFB4Bn0	IO			DIFFIO TX B139p	DIFFOUT B139p	AA9	DO47B	DQ14B	DO2B	
4B	VREFB4Bn0	IO			DIFFIO RX B140n	DIFFOUT B140n	AD9	DQSn47B	DQ14B	DQSn2B/DQ2B	
4B	VREFB4Bn0	IO			DIFFIO RX B140p	DIFFOUT B140p	AC9	DQS47B	DQ14B/CQn14B	DQSn2B/CQ2B	
4B	VREFB4Bn0	IO			DIFFIO TX B141n	DIFFOUT B141n	AA8	DO47B	DQ14B	DO2B	
4B	VREFB4Bn0	IO			DIFFIO TX B141p	DIFFOUT B141p	Y9	DO47B	DQ14B	DO2B	
4B	VREFB4Bn0	IO			DIFFIO RX B142n	DIFFOUT B142n	T10	DQSn48B	DQSn14B/DQ14B	DQ7B	
4B	VREFB4Bn0	IO			DIFFIO RX B142p	DIFFOUT B142p	R10	DQS48B	DQS14B/CQ14B	DQ7B/CQn7B	DO2B
4B	VREFB4Bn0	IO			DIFFIO TX B143n	DIFFOUT B143n	W10	DO48B	DQ14B	DQ7B	DO2B
4B	VREFB4Bn0	IO			DIFFIO TX B143p	DIFFOUT B143p	W9	DO48B	DQ14B	DQ7B	DO2B
4B	VREFB4Bn0	IO			DIFFIO RX B144n	DIFFOUT B144n	V10	DO48B	DQ14B	DQ7B	DO2B
4B	VREFB4Bn0	IO			DIFFIO RX B144p	DIFFOUT B144p	U9	DO48B	DQ14B	DQ7B	DO2B
4B	VREFB4Bn0	IO			DIFFIO TX B145n	DIFFOUT B145n	AK11	DO49B	DQ15B	DO2B	
4B	VREFB4Bn0	IO			DIFFIO TX B145p	DIFFOUT B145p	AK10	DO49B	DQ15B	DO2B	
4B	VREFB4Bn0	IO			DIFFIO RX B146n	DIFFOUT B146n	AK9	DQSn49B	DQ15B	DQSn7B/DQ7B	DO2B
4B	VREFB4Bn0	IO			DIFFIO RX B146p	DIFFOUT B146p	AJ9	DQS49B	DQ15B/CQn15B	DQSn7B/CQ7B	DO2B
4B	VREFB4Bn0	IO			DIFFIO TX B147n	DIFFOUT B147n	AM11	DO49B	DQ15B	DO2B	
4B	VREFB4Bn0	IO			DIFFIO TX B147p	DIFFOUT B147p	AL11	DO49B	DQ15B	DO2B	
4B	VREFB4Bn0	IO			DIFFIO RX B148n	DIFFOUT B148n	AM10	DQSn50B	DQSn15B/DQ15B	DO2B	
4B	VREFB4Bn0	IO			DIFFIO RX B148p	DIFFOUT B148p	AL10	DQS50B	DQS15B/CQ15B	DO2B	
4B	VREFB4Bn0	IO			DIFFIO TX B149n	DIFFOUT B149n	AP9	DO50B	DQ15B	DO2B	
4B	VREFB4Bn0	IO			DIFFIO TX B149p	DIFFOUT B149p	AN9	DO50B	DQ15B	DO2B	
4B	VREFB4Bn0	IO			DIFFIO RX B150n	DIFFOUT B150n	AP10	DO50B	DQ15B	DO2B	
4B	VREFB4Bn0	IO			DIFFIO RX B150p	DIFFOUT B150p	AN10	DO50B	DQ15B	DO2B	
4A	VREFB4An0	IO			DIFFIO TX B151n	DIFFOUT B151n	AD8	DO51B	DQ16B	DO2B	
4A	VREFB4An0	IO			DIFFIO TX B151p	DIFFOUT B151p	AD7	DO51B	DQ16B	DO2B	
4A	VREFB4An0	IO	CLK11n		DIFFIO RX B152n	DIFFOUT B152n	AC8	DQSn51B	DQ16B	DO2B	
4A	VREFB4An0	IO	CLK11p		DIFFIO RX B152p	DIFFOUT B152p	AB8	DQS51B	DQ16B/CQn16B	DO2B	



Bank Number	VREF	PinName/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	F1152	DQS for X4	DQS for X8/X9	DQS for X16/ X18	DQS for X32/ X36
4A	VREFB4AN0	IO			DIFFIO TX B153n	DIFFOUT B153n	AG7	DO51B	DQ16B	DQ8B	
4A	VREFB4AN0	IO			DIFFIO TX B153p	DIFFOUT B153p	AF7	DO51B	DQ16B	DQ8B	
4A	VREFB4AN0	IO	CLK10n		DIFFIO RX B154n	DIFFOUT B154n	AB7	DQSn52B	DQSn16B/DQ16B	DQ8B	
4A	VREFB4AN0	IO	CLK10p		DIFFIO RX B154p	DIFFOUT B154p	AB6	DQSn52B	DQSn16B/CQ16B	DQ8B/CQn8B	
4A	VREFB4AN0	IO	FPLL_BR_CLKOUT1,FPLL_BR_CLKOUTn		DIFFIO TX B155n	DIFFOUT B155n	AG6	DO52B	DQ16B	DQ8B	
4A	VREFB4AN0	IO	FPLL_BR_CLKOUT0,FPLL_BR_CLKOUTp,FPLL_BR_FB0		DIFFIO TX B155p	DIFFOUT B155p	AF6	DO52B	DQ16B	DQ8B	
4A	VREFB4AN0	IO	FPLL_BR_CLKOUT3,FPLL_BR_FBn		DIFFIO RX B156n	DIFFOUT B156n	AD6	DO52B	DQ16B	DQ8B	
4A	VREFB4AN0	IO	FPLL_BR_CLKOUT2,FPLL_BR_FBp,FPLL_BR_FB1		DIFFIO RX B156p	DIFFOUT B156p	AC6	DO52B	DQ16B	DQ8B	
4A	VREFB4AN0	IO			DIFFIO TX B157n	DIFFOUT B157n	AL8	DO53B	DQ17B	DQ8B	
4A	VREFB4AN0	IO			DIFFIO TX B157p	DIFFOUT B157p	AK8	DO53B	DQ17B	DQ8B	
4A	VREFB4AN0	IO	CLK9n		DIFFIO RX B158n	DIFFOUT B158n	AM7	DQSn53B	DQ17B	DQSn8B/DQ8B	
4A	VREFB4AN0	IO	CLK9p		DIFFIO RX B158p	DIFFOUT B158p	AL7	DQSn53B	DQ17B/CQn17B	DQSn8B/CQ8B	
4A	VREFB4AN0	IO			DIFFIO TX B159n	DIFFOUT B159n	AP7	DO53B	DQ17B	DQ8B	
4A	VREFB4AN0	IO			DIFFIO TX B159p	DIFFOUT B159p	AN7	DO53B	DQ17B	DQ8B	
4A	VREFB4AN0	IO	CLK8n		DIFFIO RX B160n	DIFFOUT B160n	AP4	DQSn54B	DQSn17B/DQ17B	DQ8B	
4A	VREFB4AN0	IO	CLK8p		DIFFIO RX B160p	DIFFOUT B160p	AN4	DQSn54B	DQSn17B/CQ17B	DQ8B	
4A	VREFB4AN0	IO			DIFFIO TX B161n	DIFFOUT B161n	AP6	DO54B	DQ17B	DQ8B	
4A	VREFB4AN0	IO			DIFFIO TX B161p	DIFFOUT B161p	AN6	DO54B	DQ17B	DQ8B	
4A	VREFB4AN0	IO			DIFFIO RX B162n	DIFFOUT B162n	AM5	DO54B	DQ17B	DQ8B	
4A	VREFB4AN0	IO	RZQ 1		DIFFIO RX B162p	DIFFOUT B162p	AM6	DO54B	DQ17B	DQ8B	
4A		GND					AG5				
4A		nCE		nCE			AN3				
4A		nSTATUS		nSTATUS			AM4				
4A		CONF_DONE		CONF_DONE			AE5				
4A		nIO_PULLUP		nIO_PULLUP			AP3				
4A		MSEL0		MSEL0			AA6				
4A		MSEL1		MSEL1			AA5				
4A		MSEL2		MSEL2			AL5				
4A		MSEL3		MSEL3			AJ5				
4A		MSEL4		MSEL4			AG5				
GXB R0		REFCLK0Rn					W5				
GXB R0		REFCLK0Rp					W6				
GXB R0		GXB_RX_R0p,GXB_REFCLK_R0p					AL2				
GXB R0		GXB_RX_R0n,GXB_REFCLK_R0n					AL1				
GXB R0		GXB_TX_R0p					AK4				
GXB R0		GXB_TX_R0n					AK3				
GXB R0		GXB_RX_R1p,GXB_REFCLK_R1p					AJ2				
GXB R0		GXB_RX_R1n,GXB_REFCLK_R1n					AJ1				
GXB R0		GXB_TX_R1p					AK4				
GXB R0		GXB_TX_R1n					AK3				
GXB R0		GXB_RX_R2p,GXB_REFCLK_R2p					AG2				
GXB R0		GXB_RX_R2n,GXB_REFCLK_R2n					AG1				
GXB R0		GXB_TX_R2p					AF4				
GXB R0		GXB_TX_R2n					AF3				
GXB R0		GXB_RX_R3p,GXB_REFCLK_R3p					AE2				
GXB R0		GXB_RX_R3n,GXB_REFCLK_R3n					AE1				
GXB R0		GXB_TX_R3p					AD4				
GXB R0		GXB_TX_R3n					AD3				
GXB R0		GXB_RX_R4p,GXB_REFCLK_R4p					AC2				
GXB R0		GXB_RX_R4n,GXB_REFCLK_R4n					AC1				
GXB R0		GXB_TX_R4p					AB4				
GXB R0		GXB_TX_R4n					AB3				
GXB R0		GXB_RX_R5p,GXB_REFCLK_R5p					AA2				
GXB R0		GXB_RX_R5n,GXB_REFCLK_R5n					AA1				
GXB R0		GXB_TX_R5p					Y4				
GXB R0		GXB_TX_R5n					Y3				
GXB R0		REFCLK1Rn					UB				
GXB R0		REFCLK1Rp					U7				
GXB R1		REFCLK2Rn					R5				
GXB R1		REFCLK2Rp					R6				
GXB R1		GXB_RX_R6p,GXB_REFCLK_R6p					W2				
GXB R1		GXB_RX_R6n,GXB_REFCLK_R6n					W1				
GXB R1		GXB_TX_R6p					V4				
GXB R1		GXB_TX_R6n					V3				
GXB R1		GXB_RX_R7p,GXB_REFCLK_R7p					U2				
GXB R1		GXB_RX_R7n,GXB_REFCLK_R7n					U1				
GXB R1		GXB_TX_R7p					T4				
GXB R1		GXB_TX_R7n					T3				
GXB R1		GXB_RX_R8p,GXB_REFCLK_R8p					R2				
GXB R1		GXB_RX_R8n,GXB_REFCLK_R8n					R1				
GXB R1		GXB_TX_R8p					P4				
GXB R1		GXB_TX_R8n					P3				
GXB R1		GXB_RX_R9p,GXB_REFCLK_R9p					N2				
GXB R1		GXB_RX_R9n,GXB_REFCLK_R9n					N1				
GXB R1		GXB_TX_R9p					M4				
GXB R1		GXB_TX_R9n					M3				
GXB R1		GXB_RX_R10p,GXB_REFCLK_R10p					L2				
GXB R1		GXB_RX_R10n,GXB_REFCLK_R10n					L1				
GXB R1		GXB_TX_R10p					K4				
GXB R1		GXB_TX_R10n					K3				
GXB R1		GXB_RX_R11p,GXB_REFCLK_R11p					J2				
GXB R1		GXB_RX_R11n,GXB_REFCLK_R11n					J1				
GXB R1		GXB_TX_R11p					H4				
GXB R1		GXB_TX_R11n					H3				



Bank Number	VREF	PinName/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	F1152	DQS for X4	DQS for X8/X9	DQS for X16/ X18	DQS for X32/ X36
GXB_R1		REFCLK3Rn					N6				
GXB_R1		REFCLK3Rp					N7				
7A		GND					J5				
7A	VREFB7A0	IO	RZQ_4		DIFFIO_RX T1p	DIFFOUT T1p	F3	DO1T			
7A	VREFB7A0	IO			DIFFIO_RX T1n	DIFFOUT T1n	F4	DO1T			
7A	VREFB7A0	IO			DIFFIO_TX T2p	DIFFOUT T2p	E2	DO1T			
7A	VREFB7A0	IO			DIFFIO_TX T2n	DIFFOUT T2n	E3	DO1T			
7A	VREFB7A0	IO	CLK12p		DIFFIO_RX T3p	DIFFOUT T3p	E1	DOS1T			
7A	VREFB7A0	IO	CLK12n		DIFFIO_RX T3n	DIFFOUT T3n	D1	DOSn1T			
7A	VREFB7A0	IO	CLK13p		DIFFIO_RX T5p	DIFFOUT T5p	B2				
7A	VREFB7A0	IO	CLK13n		DIFFIO_RX T5n	DIFFOUT T5n	A2				
7A	VREFB7A0	IO	FPLL_TR_CLKOUT2,FPLL_TR_FBp,FPLL_TR_FB1		DIFFIO_RX T7p	DIFFOUT T7p	E4	DO3T			
7A	VREFB7A0	IO	FPLL_TR_CLKOUT3,FPLL_TR_FBn		DIFFIO_RX T7n	DIFFOUT T7n	E5	DO3T			
7A	VREFB7A0	IO	FPLL_TR_CLKOUT0,FPLL_TR_CLKOUTp,FPLL_TR_FB0		DIFFIO_TX T8p	DIFFOUT T8p	F5	DO3T			
7A	VREFB7A0	IO	FPLL_TR_CLKOUT1,FPLL_TR_CLKOUTn		DIFFIO_TX T8n	DIFFOUT T8n	E6	DO3T			
7A	VREFB7A0	IO	CLK14p		DIFFIO_RX T9p	DIFFOUT T9p	D6	DOS3T			
7A	VREFB7A0	IO	CLK14n		DIFFIO_RX T9n	DIFFOUT T9n	D7	DOSn3T			
7A	VREFB7A0	IO	CLK15p		DIFFIO_RX T11p	DIFFOUT T11p	B4				
7A	VREFB7A0	IO	CLK15n		DIFFIO_RX T11n	DIFFOUT T11n	A4				
7B	VREFB7B0	IO			DIFFIO_RX T25p	DIFFOUT T25p	E7	DO8T	DO3T	DO2T	
7B	VREFB7B0	IO			DIFFIO_RX T25n	DIFFOUT T25n	E7	DO8T	DO3T	DO2T	
7B	VREFB7B0	IO			DIFFIO_TX T26p	DIFFOUT T26p	G7	DO8T	DO3T	DO2T	
7B	VREFB7B0	IO			DIFFIO_TX T26n	DIFFOUT T26n	G8	DO8T	DO3T	DO2T	
7B	VREFB7B0	IO			DIFFIO_RX T27p	DIFFOUT T27p	D9	DOS9T	DO3n3T/CO3T	DO2T	
7B	VREFB7B0	IO			DIFFIO_RX T27n	DIFFOUT T27n	C9	DOSn9T	DOSn3T/DO3T	DO2T	
7B	VREFB7B0	IO			DIFFIO_TX T28p	DIFFOUT T28p	F8	DO10T	DO3T	DO2T	
7B	VREFB7B0	IO			DIFFIO_TX T28n	DIFFOUT T28n	F9	DO10T	DO3T	DO2T	
7B	VREFB7B0	IO			DIFFIO_RX T29p	DIFFOUT T29p	E10	DOS10T	DO3T/CO3n3T	DOS2T/CO2T	
7B	VREFB7B0	IO			DIFFIO_RX T29n	DIFFOUT T29n	E9	DOSn10T	DO3T	DOSn2T/DO2T	
7B	VREFB7B0	IO			DIFFIO_TX T30p	DIFFOUT T30p	D10	DO10T	DO3T	DO2T	
7B	VREFB7B0	IO			DIFFIO_TX T30n	DIFFOUT T30n	E11	DO10T	DO3T	DO2T	
7B	VREFB7B0	IO			DIFFIO_RX T31p	DIFFOUT T31p	T9	DO11T	DO4T	DO2T	
7B	VREFB7B0	IO			DIFFIO_RX T31n	DIFFOUT T31n	R9	DO11T	DO4T	DO2T	
7B	VREFB7B0	IO			DIFFIO_TX T32p	DIFFOUT T32p	N10	DO11T	DO4T	DO2T	
7B	VREFB7B0	IO			DIFFIO_TX T32n	DIFFOUT T32n	P10	DO11T	DO4T	DO2T	
7B	VREFB7B0	IO			DIFFIO_RX T33p	DIFFOUT T33p	L10	DOS11T	DO3n4T/CO4T	DO2T/CO2n2T	
7B	VREFB7B0	IO			DIFFIO_RX T33n	DIFFOUT T33n	L9	DOSn11T	DO3n4T/DO4T	DO2T	
7B	VREFB7B0	IO			DIFFIO_TX T34p	DIFFOUT T34p	K9	DO12T	DO4T	DO2T	
7B	VREFB7B0	IO			DIFFIO_TX T34n	DIFFOUT T34n	J9	DO12T	DO4T	DO2T	
7B	VREFB7B0	IO			DIFFIO_RX T35p	DIFFOUT T35p	H10	DOS12T	DO4T/CO4n4T	DO2T	
7B	VREFB7B0	IO			DIFFIO_RX T35n	DIFFOUT T35n	H10	DOSn12T	DO4T	DO2T	
7B	VREFB7B0	IO			DIFFIO_TX T36p	DIFFOUT T36p	G10	DO12T	DO4T	DO2T	
7B	VREFB7B0	IO			DIFFIO_TX T36n	DIFFOUT T36n	Ga	DO12T	DO4T	DO2T	
7C	VREFB7C0	IO			DIFFIO_RX T37p	DIFFOUT T37p	C15	DO13T	DO5T	DO3T	DO1T
7C	VREFB7C0	IO			DIFFIO_RX T37n	DIFFOUT T37n	B14	DO13T	DO5T	DO3T	DO1T
7C	VREFB7C0	IO			DIFFIO_TX T38p	DIFFOUT T38p	A13	DO13T	DO5T	DO3T	DO1T
7C	VREFB7C0	IO			DIFFIO_TX T38n	DIFFOUT T38n	A14	DO13T	DO5T	DO3T	DO1T
7C	VREFB7C0	IO			DIFFIO_RX T39p	DIFFOUT T39p	C16	DOS13T	DOS5T/CO5T	DO3T	DO1T
7C	VREFB7C0	IO			DIFFIO_RX T39n	DIFFOUT T39n	B16	DOSn13T	DOSn5T/DO5T	DO3T	DO1T
7C	VREFB7C0	IO			DIFFIO_TX T40p	DIFFOUT T40p	C13	DO14T	DO5T	DO3T	DO1T
7C	VREFB7C0	IO			DIFFIO_TX T40n	DIFFOUT T40n	B13	DO14T	DO5T	DO3T	DO1T
7C	VREFB7C0	IO			DIFFIO_RX T41p	DIFFOUT T41p	E16	DOS14T	DO5T/CO5n5T	DOS3T/CO3T	DO1T
7C	VREFB7C0	IO			DIFFIO_RX T41n	DIFFOUT T41n	D16	DOSn14T	DO5T	DOSn3T/DO3T	DO1T
7C	VREFB7C0	IO			DIFFIO_TX T42p	DIFFOUT T42p	E15	DO14T	DO5T	DO3T	DO1T
7C	VREFB7C0	IO			DIFFIO_TX T42n	DIFFOUT T42n	D15	DO14T	DO5T	DO3T	DO1T
7C	VREFB7C0	IO			DIFFIO_RX T43p	DIFFOUT T43p	E12	DO15T	DO6T	DO3T	DO1T
7C	VREFB7C0	IO			DIFFIO_RX T43n	DIFFOUT T43n	F12	DO15T	DO6T	DO3T	DO1T
7C	VREFB7C0	IO			DIFFIO_TX T44p	DIFFOUT T44p	D12	DO15T	DO6T	DO3T	DO1T
7C	VREFB7C0	IO			DIFFIO_TX T44n	DIFFOUT T44n	C12	DO15T	DO6T	DO3T	DO1T
7C	VREFB7C0	IO			DIFFIO_RX T45p	DIFFOUT T45p	G11	DOS15T	DO6nT/CO6T	DO3T/CO3n3T	DO1T
7C	VREFB7C0	IO			DIFFIO_RX T45n	DIFFOUT T45n	F11	DOSn15T	DOSn6T/DO6T	DO3T	DO1T
7C	VREFB7C0	IO			DIFFIO_TX T46p	DIFFOUT T46p	D13	DO16T	DO6T	DO3T	DO1T
7C	VREFB7C0	IO			DIFFIO_TX T46n	DIFFOUT T46n	E13	DO16T	DO6T	DO3T	DO1T
7C	VREFB7C0	IO			DIFFIO_RX T47p	DIFFOUT T47p	G15	DOS16T	DO6T/CO6n6T	DO3T	DOS1T/CO1T
7C	VREFB7C0	IO			DIFFIO_RX T47n	DIFFOUT T47n	F15	DOSn16T	DO6T	DO3T	DOSn1T/DO1T
7C	VREFB7C0	IO			DIFFIO_TX T48p	DIFFOUT T48p	F14	DO16T	DO6T	DO3T	DO1T
7C	VREFB7C0	IO			DIFFIO_TX T48n	DIFFOUT T48n	E14	DO16T	DO6T	DO3T	DO1T
7C	VREFB7C0	IO			DIFFIO_RX T49p	DIFFOUT T49p	M12	DO17T	DO7T	DO4T	DO1T
7C	VREFB7C0	IO			DIFFIO_RX T49n	DIFFOUT T49n	L11	DO17T	DO7T	DO4T	DO1T
7C	VREFB7C0	IO			DIFFIO_TX T50p	DIFFOUT T50p	N11	DO17T	DO7T	DO4T	DO1T
7C	VREFB7C0	IO			DIFFIO_TX T50n	DIFFOUT T50n	P11	DO17T	DO7T	DO4T	DO1T
7C	VREFB7C0	IO			DIFFIO_RX T51p	DIFFOUT T51p	N12	DOS17T	DO5n7T/CO7T	DO4T	DO1T/CO1n1T
7C	VREFB7C0	IO			DIFFIO_RX T51n	DIFFOUT T51n	N13	DOSn17T	DOSn7T/DO7T	DO4T	DO1T
7C	VREFB7C0	IO			DIFFIO_TX T52p	DIFFOUT T52p	H11	DO18T	DO7T	DO4T	DO1T
7C	VREFB7C0	IO			DIFFIO_TX T52n	DIFFOUT T52n	G12	DO18T	DO7T	DO4T	DO1T
7C	VREFB7C0	IO			DIFFIO_RX T53p	DIFFOUT T53p	K12	DOS18T	DO7T/CO7n7T	DO4T/CO4T	DO1T
7C	VREFB7C0	IO			DIFFIO_RX T53n	DIFFOUT T53n	J12	DOSn18T	DO7T	DOSn4T/DO4T	DO1T
7C	VREFB7C0	IO			DIFFIO_TX T54p	DIFFOUT T54p	L12	DO18T	DO7T	DO4T	DO1T
7C	VREFB7C0	IO			DIFFIO_TX T54n	DIFFOUT T54n	L13	DO18T	DO7T	DO4T	DO1T
7C	VREFB7C0	IO			DIFFIO_RX T55p	DIFFOUT T55p	H13	DO19T	DO8T	DO4T	DO1T
7C	VREFB7C0	IO			DIFFIO_RX T55n	DIFFOUT T55n	G13	DO19T	DO8T	DO4T	DO1T
7C	VREFB7C0	IO			DIFFIO_TX T56p	DIFFOUT T56p	H14	DO19T	DO8T	DO4T	DO1T
7C	VREFB7C0	IO			DIFFIO_TX T56n	DIFFOUT T56n	G14	DO19T	DO8T	DO4T	DO1T
7C	VREFB7C0	IO			DIFFIO_RX T57p	DIFFOUT T57p	J14	DOS19T	DO5n8T/CO8T	DO4T/CO4n4T	DO1T



Bank Number	VREF	PinName/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	F1152	DQS for X4	DQS for X8/X9	DQS for X16/ X18	DQS for X32/ X36
7C	VREFB7C00	IO			DIFFIO_RX T57n	DIFFOUT T57n	J13	DQSn19T	DQSn8T/DQ8T	DQ4T	DQ1T
7C	VREFB7C00	IO			DIFFIO_TX T58p	DIFFOUT T58p	H16	DQ20T	DQ8T	DQ4T	DQ1T
7C	VREFB7C00	IO			DIFFIO_TX T58n	DIFFOUT T58n	G16	DQ20T	DQ8T	DQ4T	DQ1T
7C	VREFB7C00	IO			DIFFIO_RX T59p	DIFFOUT T59p	J15	DQSn20T	DQ8T/CQn8T	DQ4T	DQ1T
7C	VREFB7C00	IO			DIFFIO_RX T59n	DIFFOUT T59n	K15	DQSn20T	DQ8T	DQ4T	DQ1T
7C	VREFB7C00	IO			DIFFIO_TX T60p	DIFFOUT T60p	K14	DQ20T	DQ8T	DQ4T	DQ1T
7C	VREFB7C00	IO			DIFFIO_TX T60n	DIFFOUT T60n	K13	DQ20T	DQ8T	DQ4T	DQ1T
7D	VREFB7D00	IO			DIFFIO_RX T61p	DIFFOUT T61p	A16	DQ21T	DQ9T	DQ5T	
7D	VREFB7D00	IO			DIFFIO_RX T61n	DIFFOUT T61n	A17	DQ21T	DQ9T	DQ5T	
7D	VREFB7D00	IO			DIFFIO_TX T62p	DIFFOUT T62p	C17	DQ21T	DQ9T	DQ5T	
7D	VREFB7D00	IO			DIFFIO_TX T62n	DIFFOUT T62n	B17	DQ21T	DQ9T	DQ5T	
7D	VREFB7D00	IO			DIFFIO_RX T63p	DIFFOUT T63p	D18	DQSn21T	DQSn9T/CQ9T	DQ5T	
7D	VREFB7D00	IO			DIFFIO_RX T63n	DIFFOUT T63n	E19	DQSn21T	DQSn9T/DQ9T	DQ5T	
7D	VREFB7D00	IO			DIFFIO_TX T64p	DIFFOUT T64p	B19	DQ22T	DQ9T	DQ5T	
7D	VREFB7D00	IO			DIFFIO_TX T64n	DIFFOUT T64n	A19	DQ22T	DQ9T	DQ5T	
7D	VREFB7D00	IO			DIFFIO_RX T65p	DIFFOUT T65p	D19	DQSn22T	DQ9T/CQn9T	DQSn5T/CQ5T	
7D	VREFB7D00	IO			DIFFIO_RX T65n	DIFFOUT T65n	C19	DQSn22T	DQ9T	DQSn5T/DQ5T	
7D	VREFB7D00	IO			DIFFIO_TX T66p	DIFFOUT T66p	B20	DQ22T	DQ9T	DQ5T	
7D	VREFB7D00	IO			DIFFIO_TX T66n	DIFFOUT T66n	A20	DQ22T	DQ9T	DQ5T	
7D	VREFB7D00	IO	CLK19p		DIFFIO_RX T67p	DIFFOUT T67p	J19	DQ23T	DQ10T	DQ6T	
7D	VREFB7D00	IO	CLK19n		DIFFIO_RX T67n	DIFFOUT T67n	J18	DQ23T	DQ10T	DQ6T	
7D	VREFB7D00	IO			DIFFIO_TX T68p	DIFFOUT T68p	J16	DQ23T	DQ10T	DQ6T	
7D	VREFB7D00	IO			DIFFIO_TX T68n	DIFFOUT T68n	K16	DQ23T	DQ10T	DQ6T	
7D	VREFB7D00	IO	CLK18p		DIFFIO_RX T69p	DIFFOUT T69p	H19	DQSn23T	DQSn10T/CQ10T	DQSn5T/CQ5T	
7D	VREFB7D00	IO	CLK18n		DIFFIO_RX T69n	DIFFOUT T69n	G19	DQSn23T	DQSn10T/DO10T	DQ6T	
7D	VREFB7D00	IO			DIFFIO_TX T70p	DIFFOUT T70p	H17	DQ24T	DQ10T	DQ6T	
7D	VREFB7D00	IO			DIFFIO_TX T70n	DIFFOUT T70n	G17	DQ24T	DQ10T	DQ6T	
7D	VREFB7D00	IO	FPLL_TC_CLKOUT2,FPLL_TC_FBp,FPLL_TC_FB1		DIFFIO_RX T71p	DIFFOUT T71p	E17	DQSn24T	DQ10T/CQn10T	DQ6T	
7D	VREFB7D00	IO	FPLL_TC_CLKOUT3,FPLL_TC_FBn		DIFFIO_RX T71n	DIFFOUT T71n	F17	DQSn24T	DQ10T	DQ6T	
7D	VREFB7D00	IO	FPLL_TC_CLKOUT0,FPLL_TC_CLKOUTp,FPLL_TC_FB0		DIFFIO_TX T72p	DIFFOUT T72p	F18	DQ24T	DQ10T	DQ6T	
7D	VREFB7D00	IO	FPLL_TC_CLKOUT0,FPLL_TC_CLKOUTn		DIFFIO_TX T72n	DIFFOUT T72n	E18	DQ24T	DQ10T	DQ6T	
7D	VREFB7D00	IO			DIFFIO_RX T73p	DIFFOUT T73p	J21	DQ25T	DQ11T		
7D	VREFB7D00	IO			DIFFIO_RX T73n	DIFFOUT T73n	J22	DQ25T	DQ11T		
7D	VREFB7D00	IO			DIFFIO_TX T74p	DIFFOUT T74p	K21	DQ25T	DQ11T		
7D	VREFB7D00	IO			DIFFIO_TX T74n	DIFFOUT T74n	J20	DQ25T	DQ11T		
7D	VREFB7D00	IO			DIFFIO_RX T75p	DIFFOUT T75p	G21	DQSn25T	DQSn11T/CQ11T		
7D	VREFB7D00	IO			DIFFIO_RX T75n	DIFFOUT T75n	F21	DQSn25T	DQSn11T/DQ11T		
7D	VREFB7D00	IO			DIFFIO_TX T76p	DIFFOUT T76p	H20	DQ26T	DQ11T		
7D	VREFB7D00	IO			DIFFIO_TX T76n	DIFFOUT T76n	G20	DQ26T	DQ11T		
7D	VREFB7D00	IO			DIFFIO_RX T77p	DIFFOUT T77p	E21	DQSn26T	DQSn11T/CQn11T		
7D	VREFB7D00	IO			DIFFIO_RX T77n	DIFFOUT T77n	D21	DQSn26T	DQ11T		
7D	VREFB7D00	IO			DIFFIO_TX T78p	DIFFOUT T78p	F20	DQ26T	DQ11T		
7D	VREFB7D00	IO			DIFFIO_TX T78n	DIFFOUT T78n	E20	DQ26T	DQ11T		
8D	VREFB8D00	IO	CLK17p		DIFFIO_RX T85p	DIFFOUT T85p	A21	DQ29T	DQ12T	DQ6T	
8D	VREFB8D00	IO	CLK17n		DIFFIO_RX T85n	DIFFOUT T85n	A22	DQ29T	DQ12T	DQ6T	
8D	VREFB8D00	IO			DIFFIO_TX T86p	DIFFOUT T86p	C21	DQ29T	DQ12T	DQ6T	
8D	VREFB8D00	IO			DIFFIO_TX T86n	DIFFOUT T86n	B22	DQ29T	DQ12T	DQ6T	
8D	VREFB8D00	IO	CLK16p		DIFFIO_RX T87p	DIFFOUT T87p	B23	DQSn29T	DQSn12T/CQ12T	DQ6T	
8D	VREFB8D00	IO	CLK16n		DIFFIO_RX T87n	DIFFOUT T87n	A23	DQSn29T	DQSn12T/DQ12T	DQ6T	
8D	VREFB8D00	IO			DIFFIO_TX T88p	DIFFOUT T88p	E24	DQ30T	DQ12T	DQ6T	
8D	VREFB8D00	IO			DIFFIO_TX T88n	DIFFOUT T88n	E23	DQ30T	DQ12T	DQ6T	
8D	VREFB8D00	IO			DIFFIO_RX T89p	DIFFOUT T89p	D22	DQSn30T	DQ12T/CQn12T	DQSn6T/CQ6T	
8D	VREFB8D00	IO			DIFFIO_RX T89n	DIFFOUT T89n	C22	DQSn30T	DQ12T	DQSn6T/DQ6T	
8D	VREFB8D00	IO			DIFFIO_TX T90p	DIFFOUT T90p	C23	DQ30T	DQ12T	DQ6T	
8D	VREFB8D00	IO			DIFFIO_TX T90n	DIFFOUT T90n	D24	DQ30T	DQ12T	DQ6T	
8D	VREFB8D00	IO			DIFFIO_RX T91p	DIFFOUT T91p	M24	DQ31T	DQ13T	DQ6T	
8D	VREFB8D00	IO			DIFFIO_RX T91n	DIFFOUT T91n	M23	DQ31T	DQ13T	DQ6T	
8D	VREFB8D00	IO			DIFFIO_TX T92p	DIFFOUT T92p	M22	DQ31T	DQ13T	DQ6T	
8D	VREFB8D00	IO			DIFFIO_TX T92n	DIFFOUT T92n	L22	DQ31T	DQ13T	DQ6T	
8D	VREFB8D00	IO			DIFFIO_RX T93p	DIFFOUT T93p	L23	DQSn31T	DQSn13T/CQ13T	DQSn6T/CQn6T	
8D	VREFB8D00	IO			DIFFIO_RX T93n	DIFFOUT T93n	K22	DQSn31T	DQSn13T/DQ13T	DQ6T	
8D	VREFB8D00	IO			DIFFIO_TX T94p	DIFFOUT T94p	H22	DQ32T	DQ13T	DQ6T	
8D	VREFB8D00	IO			DIFFIO_TX T94n	DIFFOUT T94n	G22	DQ32T	DQ13T	DQ6T	
8D	VREFB8D00	IO			DIFFIO_RX T95p	DIFFOUT T95p	F23	DQSn32T	DQSn13T/CQn13T	DQ6T	
8D	VREFB8D00	IO			DIFFIO_RX T95n	DIFFOUT T95n	E22	DQSn32T	DQ13T	DQ6T	
8D	VREFB8D00	IO			DIFFIO_TX T96p	DIFFOUT T96p	H23	DQ32T	DQ13T	DQ6T	
8D	VREFB8D00	IO			DIFFIO_TX T96n	DIFFOUT T96n	G23	DQ32T	DQ13T	DQ6T	
8C	VREFB8C00	IO			DIFFIO_RX T97p	DIFFOUT T97p	A26	DQ33T	DQ14T	DQ7T	DQ2T
8C	VREFB8C00	IO			DIFFIO_RX T97n	DIFFOUT T97n	A25	DQ33T	DQ14T	DQ7T	DQ2T
8C	VREFB8C00	IO			DIFFIO_TX T98p	DIFFOUT T98p	C25	DQ33T	DQ14T	DQ7T	DQ2T
8C	VREFB8C00	IO			DIFFIO_TX T98n	DIFFOUT T98n	B25	DQ33T	DQ14T	DQ7T	DQ2T
8C	VREFB8C00	IO			DIFFIO_RX T99p	DIFFOUT T99p	B26	DQSn33T	DQSn14T/CQ14T	DQ7T	DQ2T
8C	VREFB8C00	IO			DIFFIO_RX T99n	DIFFOUT T99n	C27	DQSn33T	DQSn14T/DQ14T	DQ7T	DQ2T
8C	VREFB8C00	IO			DIFFIO_TX T100p	DIFFOUT T100p	B28	DQ34T	DQ14T	DQ7T	DQ2T
8C	VREFB8C00	IO			DIFFIO_TX T100n	DIFFOUT T100n	A28	DQ34T	DQ14T	DQ7T	DQ2T
8C	VREFB8C00	IO			DIFFIO_RX T101p	DIFFOUT T101p	E27	DQSn34T	DQSn14T/CQn14T	DQSn7T/CQn7T	DQ2T
8C	VREFB8C00	IO			DIFFIO_RX T101n	DIFFOUT T101n	D27	DQSn34T	DQSn14T/DQ14T	DQSn7T/DQ7T	DQ2T
8C	VREFB8C00	IO			DIFFIO_TX T102p	DIFFOUT T102p	C28	DQ34T	DQ14T	DQ7T	DQ2T
8C	VREFB8C00	IO			DIFFIO_TX T102n	DIFFOUT T102n	D28	DQ34T	DQ14T	DQ7T	DQ2T
8C	VREFB8C00	IO			DIFFIO_RX T103p	DIFFOUT T103p	L24	DQ35T	DQ15T	DQ7T	DQ2T
8C	VREFB8C00	IO			DIFFIO_RX T103n	DIFFOUT T103n	K24	DQ35T	DQ15T	DQ7T	DQ2T
8C	VREFB8C00	IO			DIFFIO_TX T104p	DIFFOUT T104p	K25	DQ35T	DQ15T	DQ7T	DQ2T
8C	VREFB8C00	IO			DIFFIO_TX T104n	DIFFOUT T104n	J24	DQ35T	DQ15T	DQ7T	DQ2T
8C	VREFB8C00	IO			DIFFIO_RX T105p	DIFFOUT T105p	J25	DQSn35T	DQSn15T/CQ15T	DQ7T/CQn7T	DQ2T





Bank Number	VREF	PinName/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	F1152	DQS for X4	DQS for X8/X9	DQS for X16/ X18	DQS for X32/ X36
BC	VREFB8C0	IO			DIFFIO_RX T105n	DIFFOUT T105n	J26	DQSn35T	DQSn15T/DQ15T	DQ07T	DQ02T
BC	VREFB8C0	IO			DIFFIO_TX T106p	DIFFOUT T106p	L25	DQ36T	DQ15T	DQ07T	DQ02T
BC	VREFB8C0	IO			DIFFIO_TX T108n	DIFFOUT T108n	L26	DQ36T	DQ15T	DQ07T	DQ02T
BC	VREFB8C0	IO			DIFFIO_RX T107p	DIFFOUT T107p	P25	DQSn36T	DQ15T/CQn15T	DQ07T	DQSn2T/CQ2T
BC	VREFB8C0	IO			DIFFIO_RX T107n	DIFFOUT T107n	P26	DQSn36T	DQ15T	DQ07T	DQSn2T/DQ2T
BC	VREFB8C0	IO			DIFFIO_TX T108p	DIFFOUT T108p	N26	DQ36T	DQ15T	DQ07T	DQ02T
BC	VREFB8C0	IO			DIFFIO_TX T108n	DIFFOUT T108n	M26	DQ36T	DQ15T	DQ07T	DQ02T
BC	VREFB8C0	IO			DIFFIO_RX T109p	DIFFOUT T109p	K27	DQ37T	DQ16T	DQ08T	DQ02T
BC	VREFB8C0	IO			DIFFIO_RX T109n	DIFFOUT T109n	J27	DQ37T	DQ16T	DQ08T	DQ02T
BC	VREFB8C0	IO			DIFFIO_TX T110p	DIFFOUT T110p	H25	DQ37T	DQ16T	DQ08T	DQ02T
BC	VREFB8C0	IO			DIFFIO_TX T110n	DIFFOUT T110n	G25	DQ37T	DQ16T	DQ08T	DQ02T
BC	VREFB8C0	IO			DIFFIO_RX T111p	DIFFOUT T111p	G26	DQ37T	DQSn16T/CQ16T	DQ08T	DQ2T/CQn2T
BC	VREFB8C0	IO			DIFFIO_RX T111n	DIFFOUT T111n	G27	DQSn37T	DQSn16T/DQ16T	DQ08T	DQ2T
BC	VREFB8C0	IO			DIFFIO_TX T112p	DIFFOUT T112p	L27	DQ38T	DQ16T	DQ08T	DQ02T
BC	VREFB8C0	IO			DIFFIO_TX T112n	DIFFOUT T112n	M27	DQ38T	DQ16T	DQ08T	DQ02T
BC	VREFB8C0	IO			DIFFIO_RX T113p	DIFFOUT T113p	K28	DQSn38T	DQ16T/CQn16T	DQSn8T/CQ8T	DQ02T
BC	VREFB8C0	IO			DIFFIO_RX T113n	DIFFOUT T113n	J28	DQSn38T	DQ16T	DQSn8T/DQ8T	DQ02T
BC	VREFB8C0	IO			DIFFIO_TX T114p	DIFFOUT T114p	L28	DQ38T	DQ16T	DQ08T	DQ02T
BC	VREFB8C0	IO			DIFFIO_TX T114n	DIFFOUT T114n	L29	DQ38T	DQ16T	DQ08T	DQ02T
BC	VREFB8C0	IO			DIFFIO_RX T115p	DIFFOUT T115p	G24	DQ39T	DQ17T	DQ08T	DQ02T
BC	VREFB8C0	IO			DIFFIO_RX T115n	DIFFOUT T115n	F24	DQ39T	DQ17T	DQ08T	DQ02T
BC	VREFB8C0	IO			DIFFIO_TX T116p	DIFFOUT T116p	F26	DQ39T	DQ17T	DQ08T	DQ02T
BC	VREFB8C0	IO			DIFFIO_TX T116n	DIFFOUT T116n	E26	DQ39T	DQ17T	DQ08T	DQ02T
BC	VREFB8C0	IO			DIFFIO_RX T117p	DIFFOUT T117p	E25	DQSn39T	DQSn17T/CQ17T	DQSn8T	DQ02T
BC	VREFB8C0	IO			DIFFIO_RX T117n	DIFFOUT T117n	D25	DQSn39T	DQSn17T/DQ17T	DQ08T	DQ02T
BC	VREFB8C0	IO			DIFFIO_TX T118p	DIFFOUT T118p	H28	DQ40T	DQ17T	DQ08T	DQ02T
BC	VREFB8C0	IO			DIFFIO_TX T118n	DIFFOUT T118n	G28	DQ40T	DQ17T	DQ08T	DQ02T
BC	VREFB8C0	IO			DIFFIO_RX T119p	DIFFOUT T119p	F27	DQSn40T	DQ17T/CQn17T	DQ08T	DQ02T
BC	VREFB8C0	IO			DIFFIO_RX T119n	DIFFOUT T119n	E28	DQSn40T	DQ17T	DQ08T	DQ02T
BC	VREFB8C0	IO			DIFFIO_TX T120p	DIFFOUT T120p	J29	DQ40T	DQ17T	DQ08T	DQ02T
BC	VREFB8C0	IO			DIFFIO_TX T120n	DIFFOUT T120n	H29	DQ40T	DQ17T	DQ08T	DQ02T
BA	VREFB8A0	IO	CLK23p		DIFFIO_RX T145p	DIFFOUT T145p	B29				
BA	VREFB8A0	IO	CLK23n		DIFFIO_RX T145n	DIFFOUT T145n	A29				
BA	VREFB8A0	IO	CLK22p		DIFFIO_RX T147p	DIFFOUT T147p	B32				
BA	VREFB8A0	IO	CLK22n		DIFFIO_RX T147n	DIFFOUT T147n	A33				
BA	VREFB8A0	IO	FPLL_TL_CLKOUT2,FPLL_TL_FBp,FPLL_TL_FB1		DIFFIO_RX T149p	DIFFOUT T149p	C34				
BA	VREFB8A0	IO	FPLL_TL_CLKOUT3,FPLL_TL_FBn		DIFFIO_RX T149n	DIFFOUT T149n	B34				
BA	VREFB8A0	IO	FPLL_TL_CLKOUT0,FPLL_TL_CLKOUTp,FPLL_TL_FB0		DIFFIO_TX T150p	DIFFOUT T150p	C32				
BA	VREFB8A0	IO	FPLL_TL_CLKOUT1,FPLL_TL_CLKOUTn		DIFFIO_TX T150n	DIFFOUT T150n	C33				
BA	VREFB8A0	IO	CLK21p		DIFFIO_RX T151p	DIFFOUT T151p	E30				
BA	VREFB8A0	IO	CLK21n		DIFFIO_RX T151n	DIFFOUT T151n	D30				
BA	VREFB8A0	IO	CLK20p		DIFFIO_RX T153p	DIFFOUT T153p	E31				
BA	VREFB8A0	IO	CLK20n		DIFFIO_RX T153n	DIFFOUT T153n	D31				
BA	VREFB8A0	IO	RZQ_5		DIFFIO_RX T155p	DIFFOUT T155p	F32				
		GND			DIFFIO_RX T155n	DIFFOUT T155n	F31				
		GND					AA31				
		GND					AA32				
		GND					AB33				
		GND					AB34				
		GND					AC31				
		GND					AC32				
		GND					AD33				
		GND					AD34				
		GND					AE31				
		GND					AE32				
		GND					AF33				
		GND					AF34				
		GND					AG31				
		GND					AG32				
		GND					AH33				
		GND					AH34				
		GND					AJ31				
		GND					AJ32				
		GND					AK33				
		GND					AK34				
		GND					AL31				
		GND					AL32				
		GND					AM32				
		GND					AM33				
		GND					AM34				
		GND					F33				
		GND					F34				
		GND					G31				
		GND					G32				
		GND					G33				
		GND					H33				
		GND					H34				
		GND					I31				
		GND					I32				
		GND					K33				
		GND					K34				
		GND					L31				
		GND					L32				
		GND					M33				



Bank Number	VREF	PinName/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	F1152	DQS for X4	DQS for X8/X9	DQS for X16/ X18	DQS for X32/ X36
		GND					M34				
		GND					N31				
		GND					N32				
		GND					P27				
		GND					P29				
		GND					P33				
		GND					P34				
		GND					R31				
		GND					R32				
		GND					T28				
		GND					T30				
		GND					T33				
		GND					T34				
		GND					U31				
		GND					U32				
		GND					V29				
		GND					V33				
		GND					V34				
		GND					W31				
		GND					W32				
		GND					Y28				
		GND					Y30				
		GND					Y33				
		GND					Y34				
		GND					AA3				
		GND					AA4				
		GND					AB1				
		GND					AB2				
		GND					AC3				
		GND					AC4				
		GND					AD1				
		GND					AD2				
		GND					AE3				
		GND					AE4				
		GND					AF1				
		GND					AF2				
		GND					AG3				
		GND					AG4				
		GND					AH1				
		GND					AH2				
		GND					AJ3				
		GND					AJ4				
		GND					AK1				
		GND					AK2				
		GND					AL3				
		GND					AL4				
		GND					AM1				
		GND					AM2				
		GND					AM3				
		GND					F1				
		GND					F2				
		GND					G2				
		GND					G3				
		GND					G4				
		GND					H1				
		GND					H2				
		GND					J3				
		GND					J4				
		GND					K1				
		GND					K2				
		GND					L3				
		GND					L4				
		GND					M1				
		GND					M2				
		GND					N3				
		GND					N4				
		GND					P1				
		GND					P2				
		GND					P6				
		GND					R3				
		GND					R4				
		GND					T1				
		GND					T2				
		GND					T5				
		GND					T7				
		GND					U3				
		GND					U4				
		GND					U8				
		GND					V1				
		GND					V2				
		GND					V6				
		GND					W3				
		GND					W4				
		GND					Y1				



Bank Number	VREF	PinName/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	F1152	DQS for X4	DQS for X8/X9	DQS for X16/ X18	DQS for X32/ X36
		GND					Y2				
		GND					Y5				
		GND					Y7				
		GND					P13				
		GND					R13				
		GND					T13				
		GND					AA11				
		GND					AA16				
		GND					AA19				
		GND					AA23				
		GND					AA26				
		GND					AA7				
		GND					AB17				
		GND					AB30				
		GND					AB5				
		GND					AC10				
		GND					AC13				
		GND					AC16				
		GND					AC19				
		GND					AC22				
		GND					AC25				
		GND					AC7				
		GND					AD30				
		GND					AD5				
		GND					AE12				
		GND					AE15				
		GND					AE18				
		GND					AE21				
		GND					AE24				
		GND					AE27				
		GND					AE6				
		GND					AE9				
		GND					AF30				
		GND					AF5				
		GND					AG11				
		GND					AG14				
		GND					AG17				
		GND					AG20				
		GND					AG23				
		GND					AG26				
		GND					AG29				
		GND					AG8				
		GND					AH30				
		GND					AH5				
		GND					AJ10				
		GND					AJ13				
		GND					AJ16				
		GND					AJ19				
		GND					AJ22				
		GND					AJ25				
		GND					AJ28				
		GND					AJ7				
		GND					AK30				
		GND					AK5				
		GND					AL12				
		GND					AL15				
		GND					AL18				
		GND					AL21				
		GND					AL24				
		GND					AL27				
		GND					AL6				
		GND					AL9				
		GND					AN11				
		GND					AN14				
		GND					AN17				
		GND					AN20				
		GND					AN23				
		GND					AN26				
		GND					AN29				
		GND					AN32				
		GND					AN5				
		GND					AN8				
		GND					B12				
		GND					B15				
		GND					B18				
		GND					B21				
		GND					B24				
		GND					B27				
		GND					B3				
		GND					B30				
		GND					B33				
		GND					B6				
		GND					B9				
		GND					C1				



Bank Number	VREF	PinName/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	F1152	DQS for X4	DQS for X8/X9	DQS for X16/ X18	DQS for X32/ X36
		GND					D11				
		GND					D14				
		GND					D17				
		GND					D2				
		GND					D20				
		GND					D23				
		GND					D26				
		GND					D29				
		GND					D32				
		GND					D5				
		GND					D8				
		GND					E33				
		GND					F10				
		GND					F13				
		GND					F16				
		GND					F19				
		GND					F22				
		GND					F25				
		GND					F28				
		GND					F7				
		GND					G30				
		GND					H12				
		GND					H15				
		GND					H18				
		GND					H21				
		GND					H24				
		GND					H27				
		GND					H30				
		GND					H5				
		GND					H6				
		GND					H9				
		GND					K11				
		GND					K23				
		GND					K26				
		GND					K29				
		GND					K30				
		GND					K5				
		GND					K8				
		GND					L14				
		GND					L16				
		GND					L18				
		GND					L20				
		GND					L30				
		GND					M10				
		GND					M13				
		GND					M17				
		GND					M21				
		GND					M25				
		GND					M28				
		GND					M29				
		GND					M30				
		GND					M5				
		GND					M7				
		GND					N15				
		GND					N20				
		GND					N22				
		GND					N27				
		GND					N8				
		GND					P14				
		GND					P18				
		GND					P23				
		GND					P8				
		GND					P9				
		GND					R12				
		GND					R17				
		GND					R21				
		GND					R25				
		GND					T11				
		GND					T15				
		GND					T26				
		GND					U23				
		GND					U27				
		GND					V12				
		GND					V14				
		GND					V16				
		GND					V18				
		GND					V20				
		GND					V26				
		GND					V9				
		GND					W23				
		GND					Y13				
		GND					Y15				
		GND					Y20				
		GND					Y8				



Bank Number	VREF	PinName/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	F1152	DQS for X4	DQS for X8/X9	DQS for X16/ X18	DQS for X32/ X36
		GND					U17				
		VCC					L15				
		VCC					L17				
		VCC					L19				
		VCC					L21				
		VCC					V15				
		VCC					V17				
		VCC					V19				
		VCC					V21				
		VCC					M14				
		VCC					M15				
		VCC					M16				
		VCC					M18				
		VCC					M19				
		VCC					M20				
		VCC					N14				
		VCC					N16				
		VCC					N17				
		VCC					N18				
		VCC					N19				
		VCC					N21				
		VCC					P15				
		VCC					P16				
		VCC					P17				
		VCC					P19				
		VCC					P20				
		VCC					P21				
		VCC					R14				
		VCC					R15				
		VCC					R16				
		VCC					R18				
		VCC					R19				
		VCC					R20				
		VCC					T14				
		VCC					T16				
		VCC					T19				
		VCC					T20				
		VCC					T21				
		VCC					U14				
		VCC					U15				
		VCC					U16				
		VCC					U18				
		VCC					U19				
		VCC					U20				
		VCC					U21				
		VCC					T18				
		VCCPT					AA10				
		VCCPT					AA17				
		VCCPT					AB25				
		VCCPT					K19				
		VCCPT					M11				
		VCCPT					N25				
		DNU					AN33				
		DNU					AP33				
		DNU					AL30				
		DNU					AE17				
		DNU					AP2				
		DNU					AN2				
		DNU					GS				
		DNU					K20				
		DNU					T17				
		VCCPGM					AH28				
		VCCPGM					AK7				
		TEMPDIODEn					M6				
		TEMPDIODEp					L5				
		VCCBAT					AH7				
		VCCIO3A					AM27				
		VCCIO3A					AP29				
		VCCIO3B					AP23				
		VCCIO3B					AP26				
		VCCIO3D					AP17				
		VCCIO4A					AP5				
		VCCIO4B					AM9				
		VCCIO4B					AP8				
		VCCIO4D					AM15				
		VCCIO7A					A3				
		VCCIO7B					A5				
		VCCIO7B					A9				
		VCCIO7C					A12				
		VCCIO7C					A15				
		VCCIO7D					A18				
		VCCIO7D					C20				
		VCCIO8A					A30				
		VCCIO8C					A27				



Bank Number	VREF	PinName/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	F1152	DQS for X4	DQS for X8/X9	DQS for X16/ X18	DQS for X32/ X36
		VCCIO8C					C26				
		VCCIO8D					A24				
		VCCPD3AB					AM24				
		VCCPD3AB					AM29				
		VCCPD3CD					AL20				
		VCCPD4					AM12				
		VCCPD4					AM8				
		VCCPD7					C14				
		VCCPD7					C18				
		VCCPD7					C8				
		VCCPD8					C24				
		VCCPD8					C30				
3A	VREFB3AN0	VREFB3AN0					AD27				
3B	VREFB3BN0	VREFB3BN0					AD25				
3D	VREFB3DN0	VREFB3DN0					AD19				
4A	VREFB4AN0	VREFB4AN0					AE7				
4B	VREFB4BN0	VREFB4BN0					AD10				
4D	VREFB4DN0	VREFB4DN0					AB16				
7A	VREFB7AN0	VREFB7AN0					C5				
7B	VREFB7BN0	VREFB7BN0					K10				
7C	VREFB7CN0	VREFB7CN0					J11				
7D	VREFB7DN0	VREFB7DN0					J17				
8A	VREFB8AN0	VREFB8AN0					C29				
8C	VREFB8CN0	VREFB8CN0					H26				
8D	VREFB8DN0	VREFB8DN0					J23				
		NC					B1				
		NC					C2				
		NC					D3				
		NC					C3				
		NC					D4				
		NC					C4				
		NC					B5				
		NC					A5				
		NC					A31				
		NC					A32				
		NC					C31				
		NC					B31				
		NC					F30				
		NC					E29				
		NC					E22				
		NC					D33				
		NC					D34				
		NC					E34				
		NC					AD13				
		NC					AD21				
		NC					AP14				
		NC					AP11				
		NC					AP20				
		NC					AM21				
		NC					AF20				
		NC					AF21				
		NC					AD20				
		NC					AE20				
		NC					AC20				
		NC					AC21				
		NC					AA20				
		NC					C11				
		NC					AB20				
		NC					B11				
		NC					Y21				
		NC					B10				
		NC					AA21				
		NC					C10				
		NC					W21				
		NC					A11				
		NC					W20				
		NC					A10				
		NC					AH20				
		NC					A8				
		NC					AJ21				
		NC					B8				
		NC					AJ20				
		NC					C7				
		NC					AK20				
		NC					C6				
		NC					AG21				
		NC					A7				
		NC					AH21				
		NC					B7				
		NC					AF22				
		NC					J7				
		NC					AG22				
		NC					K7				
		NC					AH22				



Bank Number	VREF	PinName/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	F1152	DQS for X4	DQS for X8/X9	DQS for X16/ X18	DQS for X32/ X36
		NC					H8				
		NC					AH23				
		NC					J8				
		NC					AE23				
		NC					J6				
		NC					AF23				
		NC					K6				
		NC					AD22				
		NC					L8				
		NC					AE22				
		NC					M8				
		NC					AC23				
		NC					V13				
		NC					L6				
		NC					AD23				
		NC					W13				
		NC					L7				
		NC					AB21				
		NC					W14				
		NC					M9				
		NC					AB22				
		NC					Y14				
		NC					N9				
		NC					Y23				
		NC					AA14				
		NC					AA22				
		NC					AB14				
		NC					W22				
		NC					AC14				
		NC					Y22				
		NC					AD14				
		NC					U22				
		NC					AC15				
		NC					V22				
		NC					AD15				
		NC					AK21				
		NC					AA15				
		NC					AK22				
		NC					AB15				
		NC					AN19				
		NC					AF12				
		NC					AM20				
		NC					AF13				
		NC					AN19				
		NC					AF15				
		NC					AP19				
		NC					AF14				
		NC					AL22				
		NC					AG12				
		NC					AM22				
		NC					AF11				
		NC					AN22				
		NC					AH14				
		NC					AP22				
		NC					AH15				
		NC					AN21				
		NC					AH12				
		NC					AP21				
		NC					AJ12				
		NC					AH13				
		NC					AG13				
		NC					Y12				
		NC					W12				
		NC					U12				
		NC					U13				
		NC					AA13				
		NC					AB13				
		NC					AA12				
		NC					AB12				
		NC					AE14				
		NC					AE13				
		NC					AC12				
		NC					AD12				
		NC					AN12				
		NC					AP12				
		NC					AM13				
		NC					AP13				
		NC					AL13				
		NC					AM13				
		NC					AK12				
		NC					AK13				
		NC					AJ14				
		NC					AK14				
		NC					AL14				



Bank Number	VREF	PinName/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	F1152	DQS for X4	DQS for X8/X9	DQS for X16/ X18	DQS for X32/ X36
		NC					AM14				
		VCCH GXBL0					V30				
		VCCH GXBL1					P30				
		VCCH GXBR0					V5				
		VCCH GXBR1					P5				
		VCCR GXBL0					Y29				
		VCCR GXBL1					T29				
		VCCR GXBR0					Y6				
		VCCR GXBR1					T6				
		VCCT GXBL0					V28				
		VCCT GXBL1					W28				
		VCCT GXBL1					P28				
		VCCT GXBL1					R28				
		VCCT GXBR0					V7				
		VCCT GXBR0					W7				
		VCCT GXBR1					P7				
		VCCT GXBR1					R7				
		VCCHIP L					F22				
		VCCHIP L					R22				
		VCCHIP L					T22				
		RREF BL					AN34				
		RREF BR					AN1				
		RREF TL					G34				
		RREF TR					G1				
		VCCA FPLL					AH29				
		VCCA FPLL					AC18				
		VCCA FPLL					AJ6				
		VCCA FPLL					G6				
		VCCA FPLL					K17				
		VCCA FPLL					G29				
		VCCA FPLL					T27				
		VCCA FPLL					W27				
		VCCA FPLL					T8				
		VCCA FPLL					W8				
		VCCA GXBL0					U30				
		VCCA GXBL1					N30				
		VCCA GXBR0					U5				
		VCCA GXBR1					N5				
		VCCHSSI L					P24				
		VCCHSSI L					R24				
		VCCHSSI L					T24				
		VCCHSSI R					P12				
		VCCHSSI R					R11				
		VCCHSSI R					T12				
		VCCD FPLL					AJ29				
		VCCD FPLL					AD18				
		VCCD FPLL					AK6				
		VCCD FPLL					F6				
		VCCD FPLL					K18				
		VCCD FPLL					F29				
		VCCD FPLL					R27				
		VCCD FPLL					V27				
		VCCD FPLL					R8				
		VCCD FPLL					V8				
		VCC AUX					AG28				
		VCC AUX					AH19				
		VCC AUX					AH6				
		VCC AUX					G18				
		VCC AUX					H7				
		VCC AUX					J30				

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





**Pin Information for the Arria<sup>®</sup> V 5AGZME1 Device  
Version 1.0**

<b>Version Number</b>	<b>Date</b>	<b>Changes Made</b>
1.0	10/9/2012	Initial release.