

Bank Number	VREF	Pin Name/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	IO Performance	F256	DQS for X8	DQS X16
1A	VREFB1N0	IO			DIFFIO_RX_L1n	DIFFOUT_L1n	Low_Speed	F5		
1A	VREFB1N0	IO			DIFFIO_RX_L2n	DIFFOUT_L2n	Low_Speed	C4		
1A	VREFB1N0	IO			DIFFIO_RX_L1p	DIFFOUT_L1p	Low_Speed	F4		
1A	VREFB1N0	IO			DIFFIO_RX_L2p	DIFFOUT_L2p	Low_Speed	C3		
1A	VREFB1N0	IO			DIFFIO_RX_L3n	DIFFOUT_L3n	Low_Speed	H5		
1A	VREFB1N0	IO			DIFFIO_RX_L4n	DIFFOUT_L4n	Low_Speed	E3		
1A	VREFB1N0	IO			DIFFIO_RX_L3p	DIFFOUT_L3p	Low_Speed	G5		
1A	VREFB1N0	IO			DIFFIO_RX_L4p	DIFFOUT_L4p	Low_Speed	F2		
1A	VREFB1N0	IO			DIFFIO_RX_L5n	DIFFOUT_L5n	Low_Speed	G2		
1A	VREFB1N0	IO			DIFFIO_RX_L6n	DIFFOUT_L6n	Low_Speed	C2		
1A	VREFB1N0	IO			DIFFIO_RX_L5p	DIFFOUT_L5p	Low_Speed	F1		
1A	VREFB1N0	IO			DIFFIO_RX_L6p	DIFFOUT_L6p	Low_Speed	B2		
1A	VREFB1N0	IO			DIFFIO_RX_L7n	DIFFOUT_L7n	Low_Speed	E1		
1A	VREFB1N0	IO			DIFFIO_RX_L8n	DIFFOUT_L8n	Low_Speed	B1		
1A	VREFB1N0	IO			DIFFIO_RX_L7p	DIFFOUT_L7p	Low_Speed	D1		
1A	VREFB1N0	IO			DIFFIO_RX_L8p	DIFFOUT_L8p	Low_Speed	C1		
1B	VREFB1N0	IO		JTAGEN				G6		
1B	VREFB1N0	IO		TMS	DIFFIO_RX_L17n	DIFFOUT_L17n	Low_Speed	H2		
1B	VREFB1N0	IO	VREFB1N0					J1		
1B	VREFB1N0	IO		TCK	DIFFIO_RX_L17p	DIFFOUT_L17p	Low_Speed	H3		
1B	VREFB1N0	IO		TDI	DIFFIO_RX_L18n	DIFFOUT_L18n	Low_Speed	G1		
1B	VREFB1N0	IO		TDO	DIFFIO_RX_L18p	DIFFOUT_L18p	Low_Speed	H1		
1B	VREFB1N0	IO			DIFFIO_RX_L20n	DIFFOUT_L20n	Low_Speed	J5		
1B	VREFB1N0	IO			DIFFIO_RX_L20p	DIFFOUT_L20p	Low_Speed	H6		
1B	VREFB1N0	IO			DIFFIO_RX_L22n	DIFFOUT_L22n	Low_Speed	J3		
1B	VREFB1N0	IO			DIFFIO_RX_L22p	DIFFOUT_L22p	Low_Speed	J2		
2	VREFB2N0	IO	CLK0n		DIFFIO_RX_L28n	DIFFOUT_L28n	High_Speed	M3		
2	VREFB2N0	IO			DIFFIO_RX_L29n	DIFFOUT_L29n	High_Speed	L1		
2	VREFB2N0	IO	CLK0p		DIFFIO_RX_L28p	DIFFOUT_L28p	High_Speed	L3		
2	VREFB2N0	IO			DIFFIO_RX_L29p	DIFFOUT_L29p	High_Speed	K2		
2	VREFB2N0	IO	CLK1n		DIFFIO_RX_L36n	DIFFOUT_L36n	High_Speed	J6		
2	VREFB2N0	IO			DIFFIO_RX_L37n	DIFFOUT_L37n	High_Speed	M2		
2	VREFB2N0	IO	CLK1p		DIFFIO_RX_L36p	DIFFOUT_L36p	High_Speed	K6		
2	VREFB2N0	IO			DIFFIO_RX_L37p	DIFFOUT_L37p	High_Speed	L2		
2	VREFB2N0	IO	DPCLK0		DIFFIO_RX_L38n	DIFFOUT_L38n	High_Speed	N2		
2	VREFB2N0	IO	VREFB2N0					M1		
2	VREFB2N0	IO	DPCLK1		DIFFIO_RX_L38p	DIFFOUT_L38p	High_Speed	P1		
2	VREFB2N0	IO						N1		
2	VREFB2N0	IO			DIFFIO_RX_L41n	DIFFOUT_L41n	High_Speed	K5		
2	VREFB2N0	IO			DIFFIO_RX_L41p	DIFFOUT_L41p	High_Speed	L6		
2	VREFB2N0	IO	PLL_L_CLKOUTn		DIFFIO_RX_L59n	DIFFOUT_L59n	High_Speed	N3		
2	VREFB2N0	IO	PLL_L_CLKOUTp		DIFFIO_RX_L59p	DIFFOUT_L59p	High_Speed	N4		
3	VREFB3N0	IO			DIFFIO_TX_RX_B1n	DIFFOUT_B1n	High_Speed	P4		
3	VREFB3N0	IO			DIFFIO_RX_B2n	DIFFOUT_B2n	High_Speed	P2		
3	VREFB3N0	IO			DIFFIO_TX_RX_B1p	DIFFOUT_B1p	High_Speed	N5		
3	VREFB3N0	IO			DIFFIO_RX_B2p	DIFFOUT_B2p	High_Speed	R1		
3	VREFB3N0	IO			DIFFIO_TX_RX_B3n	DIFFOUT_B3n	High_Speed	M6		
3	VREFB3N0	IO			DIFFIO_RX_B4n	DIFFOUT_B4n	High_Speed	R3		
3	VREFB3N0	IO			DIFFIO_TX_RX_B3p	DIFFOUT_B3p	High_Speed	L7		
3	VREFB3N0	IO			DIFFIO_RX_B4p	DIFFOUT_B4p	High_Speed	R2		
3	VREFB3N0	IO			DIFFIO_TX_RX_B5n	DIFFOUT_B5n	High_Speed	R4		
3	VREFB3N0	IO			DIFFIO_RX_B6n	DIFFOUT_B6n	High_Speed	T3		
3	VREFB3N0	IO			DIFFIO_TX_RX_B5p	DIFFOUT_B5p	High_Speed	P5		
3	VREFB3N0	IO			DIFFIO_RX_B6p	DIFFOUT_B6p	High_Speed	T2		
3	VREFB3N0	IO			DIFFIO_TX_RX_B13n	DIFFOUT_B13n	High_Speed	R6		
3	VREFB3N0	IO			DIFFIO_RX_B14n	DIFFOUT_B14n	High_Speed	T5		
3	VREFB3N0	IO			DIFFIO_TX_RX_B13p	DIFFOUT_B13p	High_Speed	R5		
3	VREFB3N0	IO			DIFFIO_RX_B14p	DIFFOUT_B14p	High_Speed	T4		
3	VREFB3N0	IO			DIFFIO_TX_RX_B15n	DIFFOUT_B15n	High_Speed	M7		
3	VREFB3N0	IO	VREFB3N0					T7		
3	VREFB3N0	IO			DIFFIO_TX_RX_B15p	DIFFOUT_B15p	High_Speed	L8		
3	VREFB3N0	IO						T6		
3	VREFB3N0	IO			DIFFIO_TX_RX_B16n	DIFFOUT_B16n	High_Speed	R7		
3	VREFB3N0	IO			DIFFIO_RX_B17n	DIFFOUT_B17n	High_Speed	T8		
3	VREFB3N0	IO			DIFFIO_TX_RX_B16p	DIFFOUT_B16p	High_Speed	P6		
3	VREFB3N0	IO			DIFFIO_RX_B17p	DIFFOUT_B17p	High_Speed	R8		
3	VREFB3N0	IO	CLK6n		DIFFIO_TX_RX_B18n	DIFFOUT_B18n	High_Speed	P9		
3	VREFB3N0	IO			DIFFIO_RX_B19n	DIFFOUT_B19n	High_Speed	T9		
3	VREFB3N0	IO	CLK6p		DIFFIO_TX_RX_B18p	DIFFOUT_B18p	High_Speed	P8		
3	VREFB3N0	IO			DIFFIO_RX_B19p	DIFFOUT_B19p	High_Speed	R9		
3	VREFB3N0	IO	CLK7n		DIFFIO_TX_RX_B20n	DIFFOUT_B20n	High_Speed	M8		
3	VREFB3N0	IO	CLK7p		DIFFIO_TX_RX_B20p	DIFFOUT_B20p	High_Speed	M9		
3	VREFB3N0	IO			DIFFIO_TX_RX_B22n	DIFFOUT_B22n	High_Speed	T11		
3	VREFB3N0	IO			DIFFIO_TX_RX_B22p	DIFFOUT_B22p	High_Speed	R10		
4	VREFB4N0	IO			DIFFIO_TX_RX_B34n	DIFFOUT_B34n	High_Speed	P10		
4	VREFB4N0	IO			DIFFIO_RX_B35n	DIFFOUT_B35n	High_Speed	R11		
4	VREFB4N0	IO			DIFFIO_TX_RX_B34p	DIFFOUT_B34p	High_Speed	P11		
4	VREFB4N0	IO			DIFFIO_RX_B35p	DIFFOUT_B35p	High_Speed	R12		
4	VREFB4N0	IO			DIFFIO_TX_RX_B36n	DIFFOUT_B36n	High_Speed	M10		
4	VREFB4N0	IO	VREFB4N0					T13		
4	VREFB4N0	IO			DIFFIO_TX_RX_B36p	DIFFOUT_B36p	High_Speed	L9		
4	VREFB4N0	IO						T12		
4	VREFB4N0	IO			DIFFIO_TX_RX_B37n	DIFFOUT_B37n	High_Speed	P13		
4	VREFB4N0	IO			DIFFIO_TX_RX_B37p	DIFFOUT_B37p	High_Speed	P12		
4	VREFB4N0	IO	PLL_B_CLKOUTn		DIFFIO_TX_RX_B57n	DIFFOUT_B57n	High_Speed	M11		
4	VREFB4N0	IO	PLL_B_CLKOUTp		DIFFIO_TX_RX_B57p	DIFFOUT_B57p	High_Speed	L10		
5	VREFB5N0	IO	RUP		DIFFIO_RX_R1p	DIFFOUT_R1p	High_Speed	P14		
5	VREFB5N0	IO			DIFFIO_RX_R2p	DIFFOUT_R2p	High_Speed	T14		
5	VREFB5N0	IO	RDN		DIFFIO_RX_R1n	DIFFOUT_R1n	High_Speed	R14		
5	VREFB5N0	IO			DIFFIO_RX_R2n	DIFFOUT_R2n	High_Speed	T15		
5	VREFB5N0	IO			DIFFIO_RX_R25p	DIFFOUT_R25p	High_Speed	L11	DQ1R	
5	VREFB5N0	IO			DIFFIO_RX_R25n	DIFFOUT_R25n	High_Speed	L12	DQ1R	
5	VREFB5N0	IO			DIFFIO_RX_R27p	DIFFOUT_R27p	High_Speed	N14	DQ1R	
5	VREFB5N0	IO			DIFFIO_RX_R28p	DIFFOUT_R28p	High_Speed	M15	DQ1R	
5	VREFB5N0	IO			DIFFIO_RX_R27n	DIFFOUT_R27n	High_Speed	P15	DM1R	
5	VREFB5N0	IO			DIFFIO_RX_R28n	DIFFOUT_R28n	High_Speed	M14	DQ1R	
5	VREFB5N0	IO			DIFFIO_RX_R29p	DIFFOUT_R29p	High_Speed	N16		
5	VREFB5N0	IO						R15		

Bank Number	VREF	Pin Name/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	IO Performance	F256	DQS for X8	DQS X16
5	VREFB5N0	IO			DIFFIO_RX_R29n	DIFFOUT_R29n	High_Speed	P16		
5	VREFB5N0	IO	VREFB5N0					R16		
5	VREFB5N0	IO			DIFFIO_RX_R30p	DIFFOUT_R30p	High_Speed	K11	DQ1R	
5	VREFB5N0	IO			DIFFIO_RX_R30n	DIFFOUT_R30n	High_Speed	K12	DQ1R	
5	VREFB5N0	IO			DIFFIO_RX_R32p	DIFFOUT_R32p	High_Speed	K14	DQS1R	
5	VREFB5N0	IO			DIFFIO_RX_R33p	DIFFOUT_R33p	High_Speed	M16	DQ1R	
5	VREFB5N0	IO			DIFFIO_RX_R32n	DIFFOUT_R32n	High_Speed	L15	DQSn1R	
5	VREFB5N0	IO			DIFFIO_RX_R33n	DIFFOUT_R33n	High_Speed	L16	DQ1R	
6	VREFB6N0	IO	CLK2p		DIFFIO_RX_R38p	DIFFOUT_R38p	High_Speed	J11		
6	VREFB6N0	IO			DIFFIO_RX_R39p	DIFFOUT_R39p	High_Speed	J14		
6	VREFB6N0	IO	CLK2n		DIFFIO_RX_R38n	DIFFOUT_R38n	High_Speed	J12		
6	VREFB6N0	IO			DIFFIO_RX_R39n	DIFFOUT_R39n	High_Speed	K15		
6	VREFB6N0	IO	CLK3p		DIFFIO_RX_R40p	DIFFOUT_R40p	High_Speed	J15		
6	VREFB6N0	IO			DIFFIO_RX_R41p	DIFFOUT_R41p	High_Speed	H15		
6	VREFB6N0	IO	CLK3n		DIFFIO_RX_R40n	DIFFOUT_R40n	High_Speed	J16		
6	VREFB6N0	IO			DIFFIO_RX_R41n	DIFFOUT_R41n	High_Speed	H16		
6	VREFB6N0	IO			DIFFIO_RX_R42p	DIFFOUT_R42p	High_Speed	D16		
6	VREFB6N0	IO			DIFFIO_RX_R42n	DIFFOUT_R42n	High_Speed	C16		
6	VREFB6N0	IO			DIFFIO_RX_R44p	DIFFOUT_R44p	High_Speed	H11	DQ2R	
6	VREFB6N0	IO			DIFFIO_RX_R44n	DIFFOUT_R44n	High_Speed	H12	DQ2R	
6	VREFB6N0	IO			DIFFIO_RX_R46p	DIFFOUT_R46p	High_Speed	G14	DQ2R	
6	VREFB6N0	IO			DIFFIO_RX_R47p	DIFFOUT_R47p	High_Speed	G16	DQ2R	
6	VREFB6N0	IO			DIFFIO_RX_R46n	DIFFOUT_R46n	High_Speed	G15	DM2R	
6	VREFB6N0	IO			DIFFIO_RX_R47n	DIFFOUT_R47n	High_Speed	F16	DQ2R	
6	VREFB6N0	IO	DPCLK3		DIFFIO_RX_R50p	DIFFOUT_R50p	High_Speed	G11	DQS2R	
6	VREFB6N0	IO	VREFB6N0					B15		
6	VREFB6N0	IO	DPCLK2		DIFFIO_RX_R50n	DIFFOUT_R50n	High_Speed	G12	DQSn2R	
6	VREFB6N0	IO						B16		
6	VREFB6N0	IO			DIFFIO_RX_R51p	DIFFOUT_R51p	High_Speed	F14	DQ2R	
6	VREFB6N0	IO			DIFFIO_RX_R52p	DIFFOUT_R52p	High_Speed	E15	DQ2R	
6	VREFB6N0	IO			DIFFIO_RX_R51n	DIFFOUT_R51n	High_Speed	E14	DQ2R	
6	VREFB6N0	IO			DIFFIO_RX_R52n	DIFFOUT_R52n	High_Speed	E16	DQ2R	
6	VREFB6N0	IO	PLL_R_CLKOUTp		DIFFIO_RX_R69p	DIFFOUT_R69p	High_Speed	D14		
6	VREFB6N0	IO			DIFFIO_RX_R70p	DIFFOUT_R70p	High_Speed	D15	CK_6	CK_6
6	VREFB6N0	IO	PLL_R_CLKOUTn		DIFFIO_RX_R69n	DIFFOUT_R69n	High_Speed	C14		
6	VREFB6N0	IO			DIFFIO_RX_R70n	DIFFOUT_R70n	High_Speed	C15	CK#_6	CK#_6
7	VREFB7N0	IO			DIFFIO_RX_T1p	DIFFOUT_T1p	High_Speed	D12		
7	VREFB7N0	IO			DIFFIO_RX_T2p	DIFFOUT_T2p	High_Speed	C13		
7	VREFB7N0	IO			DIFFIO_RX_T1n	DIFFOUT_T1n	High_Speed	E11		
7	VREFB7N0	IO			DIFFIO_RX_T2n	DIFFOUT_T2n	High_Speed	C12		
7	VREFB7N0	IO			DIFFIO_RX_T17p	DIFFOUT_T17p	High_Speed	F11		
7	VREFB7N0	IO						A14		
7	VREFB7N0	IO			DIFFIO_RX_T17n	DIFFOUT_T17n	High_Speed	F12		
7	VREFB7N0	IO	VREFB7N0					A15		
7	VREFB7N0	IO			DIFFIO_RX_T28p	DIFFOUT_T28p	High_Speed	F10		
7	VREFB7N0	IO			DIFFIO_RX_T28n	DIFFOUT_T28n	High_Speed	E10		
7	VREFB7N0	IO			DIFFIO_RX_T30p	DIFFOUT_T30p	High_Speed	B13		
7	VREFB7N0	IO			DIFFIO_RX_T30n	DIFFOUT_T30n	High_Speed	A13		
8	VREFB8N0	IO	CLK4p		DIFFIO_RX_T38p	DIFFOUT_T38p	Low_Speed	D9		
8	VREFB8N0	IO	CLK4n		DIFFIO_RX_T38n	DIFFOUT_T38n	Low_Speed	C9		
8	VREFB8N0	IO	CLK5p		DIFFIO_RX_T40p	DIFFOUT_T40p	Low_Speed	F9		
8	VREFB8N0	IO			DIFFIO_RX_T41p	DIFFOUT_T41p	Low_Speed	B12		
8	VREFB8N0	IO	CLK5n		DIFFIO_RX_T40n	DIFFOUT_T40n	Low_Speed	E9		
8	VREFB8N0	IO			DIFFIO_RX_T41n	DIFFOUT_T41n	Low_Speed	B11		
8	VREFB8N0	IO			DIFFIO_RX_T42p	DIFFOUT_T42p	Low_Speed	C10		
8	VREFB8N0	IO			DIFFIO_RX_T43p	DIFFOUT_T43p	Low_Speed	A11		
8	VREFB8N0	IO		DEV_CLRn	DIFFIO_RX_T42n	DIFFOUT_T42n	Low_Speed	B10		
8	VREFB8N0	IO			DIFFIO_RX_T43n	DIFFOUT_T43n	Low_Speed	A12		
8	VREFB8N0	IO		DEV_OE	DIFFIO_RX_T44p	DIFFOUT_T44p	Low_Speed	B8		
8	VREFB8N0	IO						A10		
8	VREFB8N0	IO			DIFFIO_RX_T44n	DIFFOUT_T44n	Low_Speed	B7		
8	VREFB8N0	IO	VREFB8N0					A9		
8	VREFB8N0	IO		CONFIG_SEL				F8		
8	VREFB8N0	IO			DIFFIO_RX_T45p	DIFFOUT_T45p	Low_Speed	B9		
8	VREFB8N0	Input_only		nCONFIG				E8		
8	VREFB8N0	IO			DIFFIO_RX_T45n	DIFFOUT_T45n	Low_Speed	A8		
8	VREFB8N0	IO			DIFFIO_RX_T46p	DIFFOUT_T46p	Low_Speed	B6		
8	VREFB8N0	IO			DIFFIO_RX_T47p	DIFFOUT_T47p	Low_Speed	A7		
8	VREFB8N0	IO			DIFFIO_RX_T46n	DIFFOUT_T46n	Low_Speed	C6		
8	VREFB8N0	IO			DIFFIO_RX_T47n	DIFFOUT_T47n	Low_Speed	A6		
8	VREFB8N0	IO			DIFFIO_RX_T48p	DIFFOUT_T48p	Low_Speed	B5		
8	VREFB8N0	IO			DIFFIO_RX_T49p	DIFFOUT_T49p	Low_Speed	B4		
8	VREFB8N0	IO		CRC_ERROR	DIFFIO_RX_T48n	DIFFOUT_T48n	Low_Speed	C5		
8	VREFB8N0	IO			DIFFIO_RX_T49n	DIFFOUT_T49n	Low_Speed	A5		
8	VREFB8N0	IO		nSTATUS	DIFFIO_RX_T50p	DIFFOUT_T50p	Low_Speed	F7		
8	VREFB8N0	IO			DIFFIO_RX_T51p	DIFFOUT_T51p	Low_Speed	A3		
8	VREFB8N0	IO		CONF_DONE	DIFFIO_RX_T50n	DIFFOUT_T50n	Low_Speed	E7		
8	VREFB8N0	IO			DIFFIO_RX_T51n	DIFFOUT_T51n	Low_Speed	A2		
8	VREFB8N0	IO	PLL_T_CLKOUTp		DIFFIO_RX_T52p	DIFFOUT_T52p	Low_Speed	B3		
8	VREFB8N0	IO	PLL_T_CLKOUTn		DIFFIO_RX_T52n	DIFFOUT_T52n	Low_Speed	A4		
		GND						D2		
		GND						F3		
		GND						E2		
		GND						T16		
		GND						T10		
		GND						T1		
		GND						R13		
		GND						P7		
		GND						P3		
		GND						N9		
		GND						N15		
		GND						N12		
		GND						M4		
		GND						L14		
		GND						K9		
		GND						K7		
		GND						K3		
		GND						K16		

Bank Number	VREF	Pin Name/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	IO Performance	F256	DQS for X8	DQS X16
		GND						K1		
		GND						J10		
		GND						H7		
		GND						H14		
		GND						G8		
		GND						G3		
		GND						G10		
		GND						F15		
		GND						E6		
		GND						E13		
		GND						D6		
		GND						D3		
		GND						C8		
		GND						C11		
		GND						B14		
		GND						A16		
		GND						A1		
		VCC						K8		
		VCC						K10		
		VCC						J9		
		VCC						J8		
		VCC						J7		
		VCC						H9		
		VCC						H8		
		VCC						H10		
		VCC						G9		
		VCC						G7		
		VCC						F6		
		VCCD_PLL1						M5		
		VCCD_PLL2						D13		
		VCCD_PLL3						D4		
		VCCD_PLL4						N13		
		VCCIO1A						H4		
		VCCIO1A						G4		
		VCCIO1B						J4		
		VCCIO2						L4		
		VCCIO2						K4		
		VCCIO3						N8		
		VCCIO3						N7		
		VCCIO3						N6		
		VCCIO4						N11		
		VCCIO4						N10		
		VCCIO5						M13		
		VCCIO5						L13		
		VCCIO5						K13		
		VCCIO6						J13		
		VCCIO6						H13		
		VCCIO6						G13		
		VCCIO6						F13		
		VCCIO7						D11		
		VCCIO7						D10		
		VCCIO8						D8		
		VCCIO8						D7		
		VCCIO8						C7		
		VCCA1						L5		
		VCCA2						E12		
		VCCA3						E4		
		VCCA3						D5		
		VCCA3						E5		
		VCCA4						M12		

Note:
(1) For more information about pin definition and pin connection guidelines, refer to the [MAX 10 FPGA Device Family Pin Connection Guidelines](#).

Bank Number	VREF	Pin Name/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	IO Performance	F484	DQS for X8	DQS for X16
1A	VREFB1N0	IO			DIFFIO_RX_L1n	DIFFOUT_L1n	Low_Speed	F5		
1A	VREFB1N0	IO			DIFFIO_RX_L2n	DIFFOUT_L2n	Low_Speed	E4		
1A	VREFB1N0	IO			DIFFIO_RX_L1p	DIFFOUT_L1p	Low_Speed	F4		
1A	VREFB1N0	IO			DIFFIO_RX_L2p	DIFFOUT_L2p	Low_Speed	E3		
1A	VREFB1N0	IO			DIFFIO_RX_L3n	DIFFOUT_L3n	Low_Speed	J8		
1A	VREFB1N0	IO			DIFFIO_RX_L4n	DIFFOUT_L4n	Low_Speed	G4		
1A	VREFB1N0	IO			DIFFIO_RX_L3p	DIFFOUT_L3p	Low_Speed	J9		
1A	VREFB1N0	IO			DIFFIO_RX_L4p	DIFFOUT_L4p	Low_Speed	F3		
1A	VREFB1N0	IO			DIFFIO_RX_L5n	DIFFOUT_L5n	Low_Speed	J4		
1A	VREFB1N0	IO			DIFFIO_RX_L6n	DIFFOUT_L6n	Low_Speed	H4		
1A	VREFB1N0	IO			DIFFIO_RX_L5p	DIFFOUT_L5p	Low_Speed	H3		
1A	VREFB1N0	IO			DIFFIO_RX_L6p	DIFFOUT_L6p	Low_Speed	G3		
1A	VREFB1N0	IO			DIFFIO_RX_L7n	DIFFOUT_L7n	Low_Speed	K5		
1A	VREFB1N0	IO			DIFFIO_RX_L8n	DIFFOUT_L8n	Low_Speed	K4		
1A	VREFB1N0	IO			DIFFIO_RX_L7p	DIFFOUT_L7p	Low_Speed	K6		
1A	VREFB1N0	IO			DIFFIO_RX_L8p	DIFFOUT_L8p	Low_Speed	J3		
1B	VREFB1N0	IO			DIFFIO_RX_L15n	DIFFOUT_L15n	Low_Speed	K8		
1B	VREFB1N0	IO			DIFFIO_RX_L16n	DIFFOUT_L16n	Low_Speed	D3		
1B	VREFB1N0	IO		JTAGEN	DIFFIO_RX_L15p	DIFFOUT_L15p	Low_Speed	K9		
1B	VREFB1N0	IO			DIFFIO_RX_L16p	DIFFOUT_L16p	Low_Speed	D2		
1B	VREFB1N0	IO	VREFB1N0	TMS	DIFFIO_RX_L17n	DIFFOUT_L17n	Low_Speed	H2		
1B	VREFB1N0	IO		TCK				C1		
1B	VREFB1N0	IO			DIFFIO_RX_L17p	DIFFOUT_L17p	Low_Speed	G2		
1B	VREFB1N0	IO						D1		
1B	VREFB1N0	IO		TDI	DIFFIO_RX_L18n	DIFFOUT_L18n	Low_Speed	L4		
1B	VREFB1N0	IO			DIFFIO_RX_L19n	DIFFOUT_L19n	Low_Speed	K2		
1B	VREFB1N0	IO		TDO	DIFFIO_RX_L18p	DIFFOUT_L18p	Low_Speed	M5		
1B	VREFB1N0	IO			DIFFIO_RX_L19p	DIFFOUT_L19p	Low_Speed	L2		
1B	VREFB1N0	IO			DIFFIO_RX_L20n	DIFFOUT_L20n	Low_Speed	L8		
1B	VREFB1N0	IO			DIFFIO_RX_L21n	DIFFOUT_L21n	Low_Speed	E1		
1B	VREFB1N0	IO			DIFFIO_RX_L20p	DIFFOUT_L20p	Low_Speed	L9		
1B	VREFB1N0	IO			DIFFIO_RX_L21p	DIFFOUT_L21p	Low_Speed	F2		
1B	VREFB1N0	IO			DIFFIO_RX_L22n	DIFFOUT_L22n	Low_Speed	H1		
1B	VREFB1N0	IO			DIFFIO_RX_L23n	DIFFOUT_L23n	Low_Speed	G1		
1B	VREFB1N0	IO			DIFFIO_RX_L22p	DIFFOUT_L22p	Low_Speed	J1		
1B	VREFB1N0	IO			DIFFIO_RX_L23p	DIFFOUT_L23p	Low_Speed	F1		
1B	VREFB1N0	IO			DIFFIO_RX_L24n	DIFFOUT_L24n	Low_Speed	M4		
1B	VREFB1N0	IO			DIFFIO_RX_L25n	DIFFOUT_L25n	Low_Speed	K1		
1B	VREFB1N0	IO			DIFFIO_RX_L24p	DIFFOUT_L24p	Low_Speed	M3		
1B	VREFB1N0	IO			DIFFIO_RX_L25p	DIFFOUT_L25p	Low_Speed	L1		
2	VREFB2N0	IO	CLK0n		DIFFIO_RX_L28n	DIFFOUT_L28n	High_Speed	N4		
2	VREFB2N0	IO			DIFFIO_RX_L29n	DIFFOUT_L29n	High_Speed	P4		
2	VREFB2N0	IO	CLK0p		DIFFIO_RX_L28p	DIFFOUT_L28p	High_Speed	N5		
2	VREFB2N0	IO			DIFFIO_RX_L29p	DIFFOUT_L29p	High_Speed	P5		
2	VREFB2N0	IO	CLK1n		DIFFIO_RX_L36n	DIFFOUT_L36n	High_Speed	M8		
2	VREFB2N0	IO			DIFFIO_RX_L37n	DIFFOUT_L37n	High_Speed	N3		
2	VREFB2N0	IO	CLK1p		DIFFIO_RX_L36p	DIFFOUT_L36p	High_Speed	M9		
2	VREFB2N0	IO			DIFFIO_RX_L37p	DIFFOUT_L37p	High_Speed	N2		
2	VREFB2N0	IO	DPCLK0		DIFFIO_RX_L38n	DIFFOUT_L38n	High_Speed	P3		
2	VREFB2N0	IO	VREFB2N0					M2		
2	VREFB2N0	IO	DPCLK1		DIFFIO_RX_L38p	DIFFOUT_L38p	High_Speed	R3		
2	VREFB2N0	IO						M1		
2	VREFB2N0	IO			DIFFIO_RX_L39n	DIFFOUT_L39n	High_Speed	R4		
2	VREFB2N0	IO			DIFFIO_RX_L40n	DIFFOUT_L40n	High_Speed	T1		
2	VREFB2N0	IO			DIFFIO_RX_L39p	DIFFOUT_L39p	High_Speed	R5		
2	VREFB2N0	IO			DIFFIO_RX_L40p	DIFFOUT_L40p	High_Speed	T2		
2	VREFB2N0	IO			DIFFIO_RX_L41n	DIFFOUT_L41n	High_Speed	N8		
2	VREFB2N0	IO			DIFFIO_RX_L42n	DIFFOUT_L42n	High_Speed	P1		
2	VREFB2N0	IO			DIFFIO_RX_L41p	DIFFOUT_L41p	High_Speed	N9		
2	VREFB2N0	IO			DIFFIO_RX_L42p	DIFFOUT_L42p	High_Speed	N1		
2	VREFB2N0	IO			DIFFIO_RX_L43n	DIFFOUT_L43n	High_Speed	T3		
2	VREFB2N0	IO			DIFFIO_RX_L44n	DIFFOUT_L44n	High_Speed	U1		
2	VREFB2N0	IO			DIFFIO_RX_L43p	DIFFOUT_L43p	High_Speed	U2		
2	VREFB2N0	IO			DIFFIO_RX_L44p	DIFFOUT_L44p	High_Speed	V1		
2	VREFB2N0	IO			DIFFIO_RX_L45n	DIFFOUT_L45n	High_Speed	U4		
2	VREFB2N0	IO			DIFFIO_RX_L46n	DIFFOUT_L46n	High_Speed	U3		
2	VREFB2N0	IO			DIFFIO_RX_L45p	DIFFOUT_L45p	High_Speed	U5		
2	VREFB2N0	IO			DIFFIO_RX_L46p	DIFFOUT_L46p	High_Speed	V3		
2	VREFB2N0	IO			DIFFIO_RX_L47n	DIFFOUT_L47n	High_Speed	P8		
2	VREFB2N0	IO			DIFFIO_RX_L48n	DIFFOUT_L48n	High_Speed	W1		
2	VREFB2N0	IO			DIFFIO_RX_L47p	DIFFOUT_L47p	High_Speed	R7		
2	VREFB2N0	IO			DIFFIO_RX_L48p	DIFFOUT_L48p	High_Speed	W2		
2	VREFB2N0	IO	PLL_L_CLKOUTn		DIFFIO_RX_L59n	DIFFOUT_L59n	High_Speed	T5		
2	VREFB2N0	IO			DIFFIO_RX_L60n	DIFFOUT_L60n	High_Speed	R1		
2	VREFB2N0	IO	PLL_L_CLKOUTp		DIFFIO_RX_L59p	DIFFOUT_L59p	High_Speed	T6		
2	VREFB2N0	IO			DIFFIO_RX_L60p	DIFFOUT_L60p	High_Speed	R2		
3	VREFB3N0	IO			DIFFIO_TX_RX_B1n	DIFFOUT_B1n	High_Speed	W5		
3	VREFB3N0	IO			DIFFIO_RX_B2n	DIFFOUT_B2n	High_Speed	V4		
3	VREFB3N0	IO			DIFFIO_TX_RX_B1p	DIFFOUT_B1p	High_Speed	W6		
3	VREFB3N0	IO			DIFFIO_RX_B2p	DIFFOUT_B2p	High_Speed	V5		
3	VREFB3N0	IO			DIFFIO_TX_RX_B3n	DIFFOUT_B3n	High_Speed	U6		
3	VREFB3N0	IO			DIFFIO_RX_B4n	DIFFOUT_B4n	High_Speed	Y1		
3	VREFB3N0	IO			DIFFIO_TX_RX_B3p	DIFFOUT_B3p	High_Speed	U7		
3	VREFB3N0	IO			DIFFIO_RX_B4p	DIFFOUT_B4p	High_Speed	Y2		
3	VREFB3N0	IO			DIFFIO_TX_RX_B5n	DIFFOUT_B5n	High_Speed	W4		
3	VREFB3N0	IO			DIFFIO_RX_B6n	DIFFOUT_B6n	High_Speed	AA1		
3	VREFB3N0	IO			DIFFIO_TX_RX_B5p	DIFFOUT_B5p	High_Speed	W3		
3	VREFB3N0	IO			DIFFIO_RX_B6p	DIFFOUT_B6p	High_Speed	AA2		
3	VREFB3N0	IO			DIFFIO_TX_RX_B7n	DIFFOUT_B7n	High_Speed	V7		
3	VREFB3N0	IO			DIFFIO_RX_B8n	DIFFOUT_B8n	High_Speed	Y5		
3	VREFB3N0	IO			DIFFIO_TX_RX_B7p	DIFFOUT_B7p	High_Speed	V8		
3	VREFB3N0	IO			DIFFIO_RX_B8p	DIFFOUT_B8p	High_Speed	Y6		
3	VREFB3N0	IO			DIFFIO_TX_RX_B9n	DIFFOUT_B9n	High_Speed	R9		
3	VREFB3N0	IO			DIFFIO_RX_B10n	DIFFOUT_B10n	High_Speed	Y7		
3	VREFB3N0	IO			DIFFIO_TX_RX_B9p	DIFFOUT_B9p	High_Speed	P9		
3	VREFB3N0	IO			DIFFIO_RX_B10p	DIFFOUT_B10p	High_Speed	Y8		
3	VREFB3N0	IO			DIFFIO_TX_RX_B11n	DIFFOUT_B11n	High_Speed	W9		
3	VREFB3N0	IO			DIFFIO_RX_B12n	DIFFOUT_B12n	High_Speed	AB2		
3	VREFB3N0	IO			DIFFIO_TX_RX_B11p	DIFFOUT_B11p	High_Speed	W10		
3	VREFB3N0	IO			DIFFIO_RX_B12p	DIFFOUT_B12p	High_Speed	AB3		
3	VREFB3N0	IO			DIFFIO_TX_RX_B13n	DIFFOUT_B13n	High_Speed	W7		
3	VREFB3N0	IO			DIFFIO_RX_B14n	DIFFOUT_B14n	High_Speed	Y3		
3	VREFB3N0	IO			DIFFIO_TX_RX_B13p	DIFFOUT_B13p	High_Speed	W8		
3	VREFB3N0	IO			DIFFIO_RX_B14p	DIFFOUT_B14p	High_Speed	Y4		

Bank Number	VREF	Pin Name/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	IO Performance	F484	DQS for X8	DQS for X16
3	VREFB3N0	IO			DIFFIO_TX_RX_B15n	DIFFOUT_B15n	High_Speed	R10		
3	VREFB3N0	IO	VREFB3N0					AA3		
3	VREFB3N0	IO			DIFFIO_TX_RX_B15p	DIFFOUT_B15p	High_Speed	P10		
3	VREFB3N0	IO						AB4		
3	VREFB3N0	IO			DIFFIO_TX_RX_B16n	DIFFOUT_B16n	High_Speed	AA6		
3	VREFB3N0	IO			DIFFIO_RX_B17n	DIFFOUT_B17n	High_Speed	AA5		
3	VREFB3N0	IO			DIFFIO_TX_RX_B16p	DIFFOUT_B16p	High_Speed	AA7		
3	VREFB3N0	IO			DIFFIO_RX_B17p	DIFFOUT_B17p	High_Speed	AB5		
3	VREFB3N0	IO	CLK6n		DIFFIO_TX_RX_B18n	DIFFOUT_B18n	High_Speed	V9		
3	VREFB3N0	IO			DIFFIO_RX_B19n	DIFFOUT_B19n	High_Speed	AB6		
3	VREFB3N0	IO	CLK6p		DIFFIO_TX_RX_B18p	DIFFOUT_B18p	High_Speed	V10		
3	VREFB3N0	IO			DIFFIO_RX_B19p	DIFFOUT_B19p	High_Speed	AB7		
3	VREFB3N0	IO	CLK7n		DIFFIO_TX_RX_B20n	DIFFOUT_B20n	High_Speed	R11		
3	VREFB3N0	IO			DIFFIO_RX_B21n	DIFFOUT_B21n	High_Speed	AA8		
3	VREFB3N0	IO	CLK7p		DIFFIO_TX_RX_B20p	DIFFOUT_B20p	High_Speed	P11		
3	VREFB3N0	IO			DIFFIO_RX_B21p	DIFFOUT_B21p	High_Speed	AB8		
3	VREFB3N0	IO			DIFFIO_TX_RX_B22n	DIFFOUT_B22n	High_Speed	Y10		
3	VREFB3N0	IO			DIFFIO_RX_B23n	DIFFOUT_B23n	High_Speed	AA9		
3	VREFB3N0	IO			DIFFIO_TX_RX_B22p	DIFFOUT_B22p	High_Speed	AA10		
3	VREFB3N0	IO			DIFFIO_RX_B23p	DIFFOUT_B23p	High_Speed	AB9		
4	VREFB4N0	IO			DIFFIO_TX_RX_B24n	DIFFOUT_B24n	High_Speed	V11		
4	VREFB4N0	IO			DIFFIO_RX_B25n	DIFFOUT_B25n	High_Speed	W11		
4	VREFB4N0	IO			DIFFIO_TX_RX_B24p	DIFFOUT_B24p	High_Speed	V12		
4	VREFB4N0	IO			DIFFIO_RX_B25p	DIFFOUT_B25p	High_Speed	Y11		
4	VREFB4N0	IO			DIFFIO_TX_RX_B26n	DIFFOUT_B26n	High_Speed	R12		
4	VREFB4N0	IO			DIFFIO_RX_B27n	DIFFOUT_B27n	High_Speed	AB10		
4	VREFB4N0	IO			DIFFIO_TX_RX_B26p	DIFFOUT_B26p	High_Speed	P12		
4	VREFB4N0	IO			DIFFIO_RX_B27p	DIFFOUT_B27p	High_Speed	AB11		
4	VREFB4N0	IO			DIFFIO_TX_RX_B28n	DIFFOUT_B28n	High_Speed	AA11		
4	VREFB4N0	IO			DIFFIO_RX_B29n	DIFFOUT_B29n	High_Speed	AB12		
4	VREFB4N0	IO			DIFFIO_TX_RX_B28p	DIFFOUT_B28p	High_Speed	AA12		
4	VREFB4N0	IO			DIFFIO_RX_B29p	DIFFOUT_B29p	High_Speed	AB13		
4	VREFB4N0	IO			DIFFIO_TX_RX_B34n	DIFFOUT_B34n	High_Speed	V13		
4	VREFB4N0	IO			DIFFIO_RX_B35n	DIFFOUT_B35n	High_Speed	W12		
4	VREFB4N0	IO			DIFFIO_TX_RX_B34p	DIFFOUT_B34p	High_Speed	W14		
4	VREFB4N0	IO			DIFFIO_RX_B35p	DIFFOUT_B35p	High_Speed	W13		
4	VREFB4N0	IO			DIFFIO_TX_RX_B36n	DIFFOUT_B36n	High_Speed	R13		
4	VREFB4N0	IO	VREFB4N0					AA13		
4	VREFB4N0	IO			DIFFIO_TX_RX_B36p	DIFFOUT_B36p	High_Speed	P13		
4	VREFB4N0	IO						AB14		
4	VREFB4N0	IO			DIFFIO_TX_RX_B37n	DIFFOUT_B37n	High_Speed	Y13		
4	VREFB4N0	IO			DIFFIO_RX_B38n	DIFFOUT_B38n	High_Speed	AA14		
4	VREFB4N0	IO			DIFFIO_TX_RX_B37p	DIFFOUT_B37p	High_Speed	Y14		
4	VREFB4N0	IO			DIFFIO_RX_B38p	DIFFOUT_B38p	High_Speed	AB15		
4	VREFB4N0	IO			DIFFIO_TX_RX_B39n	DIFFOUT_B39n	High_Speed	V14		
4	VREFB4N0	IO			DIFFIO_RX_B40n	DIFFOUT_B40n	High_Speed	AA15		
4	VREFB4N0	IO			DIFFIO_TX_RX_B39p	DIFFOUT_B39p	High_Speed	W15		
4	VREFB4N0	IO			DIFFIO_RX_B40p	DIFFOUT_B40p	High_Speed	U16		
4	VREFB4N0	IO			DIFFIO_TX_RX_B41n	DIFFOUT_B41n	High_Speed	U15		
4	VREFB4N0	IO			DIFFIO_RX_B42n	DIFFOUT_B42n	High_Speed	AB16		
4	VREFB4N0	IO			DIFFIO_TX_RX_B41p	DIFFOUT_B41p	High_Speed	V16		
4	VREFB4N0	IO			DIFFIO_RX_B42p	DIFFOUT_B42p	High_Speed	AA16		
4	VREFB4N0	IO			DIFFIO_TX_RX_B43n	DIFFOUT_B43n	High_Speed	AA17		
4	VREFB4N0	IO			DIFFIO_RX_B44n	DIFFOUT_B44n	High_Speed	AB19		
4	VREFB4N0	IO			DIFFIO_TX_RX_B43p	DIFFOUT_B43p	High_Speed	Y17		
4	VREFB4N0	IO			DIFFIO_RX_B44p	DIFFOUT_B44p	High_Speed	AB20		
4	VREFB4N0	IO			DIFFIO_TX_RX_B45n	DIFFOUT_B45n	High_Speed	V15		
4	VREFB4N0	IO			DIFFIO_RX_B46n	DIFFOUT_B46n	High_Speed	AA19		
4	VREFB4N0	IO			DIFFIO_TX_RX_B45p	DIFFOUT_B45p	High_Speed	W16		
4	VREFB4N0	IO			DIFFIO_RX_B46p	DIFFOUT_B46p	High_Speed	Y18		
4	VREFB4N0	IO			DIFFIO_TX_RX_B49n	DIFFOUT_B49n	High_Speed	Y19		
4	VREFB4N0	IO			DIFFIO_RX_B50n	DIFFOUT_B50n	High_Speed	AB21		
4	VREFB4N0	IO			DIFFIO_TX_RX_B49p	DIFFOUT_B49p	High_Speed	W18		
4	VREFB4N0	IO	PLL_B_CLKOUTn		DIFFIO_RX_B50p	DIFFOUT_B50p	High_Speed	AA20		
4	VREFB4N0	IO			DIFFIO_TX_RX_B57n	DIFFOUT_B57n	High_Speed	W17		
4	VREFB4N0	IO			DIFFIO_RX_B58n	DIFFOUT_B58n	High_Speed	AB17		
4	VREFB4N0	IO	PLL_B_CLKOUTp		DIFFIO_TX_RX_B57p	DIFFOUT_B57p	High_Speed	V17		
4	VREFB4N0	IO			DIFFIO_RX_B58p	DIFFOUT_B58p	High_Speed	AB18		
5	VREFB5N0	IO	RUP		DIFFIO_RX_R1p	DIFFOUT_R1p	High_Speed	U18		
5	VREFB5N0	IO			DIFFIO_RX_R2p	DIFFOUT_R2p	High_Speed	AA21		
5	VREFB5N0	IO	RDN		DIFFIO_RX_R1n	DIFFOUT_R1n	High_Speed	U17		
5	VREFB5N0	IO			DIFFIO_RX_R2n	DIFFOUT_R2n	High_Speed	AA22		
5	VREFB5N0	IO			DIFFIO_RX_R19p	DIFFOUT_R19p	High_Speed	V18		
5	VREFB5N0	IO			DIFFIO_RX_R20p	DIFFOUT_R20p	High_Speed	Y22		
5	VREFB5N0	IO			DIFFIO_RX_R19n	DIFFOUT_R19n	High_Speed	U19		
5	VREFB5N0	IO			DIFFIO_RX_R20n	DIFFOUT_R20n	High_Speed	W22		
5	VREFB5N0	IO			DIFFIO_RX_R21p	DIFFOUT_R21p	High_Speed	W19		
5	VREFB5N0	IO			DIFFIO_RX_R22p	DIFFOUT_R22p	High_Speed	Y20		
5	VREFB5N0	IO			DIFFIO_RX_R21n	DIFFOUT_R21n	High_Speed	W20		
5	VREFB5N0	IO			DIFFIO_RX_R22n	DIFFOUT_R22n	High_Speed	Y21		
5	VREFB5N0	IO			DIFFIO_RX_R23p	DIFFOUT_R23p	High_Speed	V20		
5	VREFB5N0	IO			DIFFIO_RX_R24p	DIFFOUT_R24p	High_Speed	V21		
5	VREFB5N0	IO			DIFFIO_RX_R23n	DIFFOUT_R23n	High_Speed	U20		
5	VREFB5N0	IO			DIFFIO_RX_R24n	DIFFOUT_R24n	High_Speed	V22		
5	VREFB5N0	IO			DIFFIO_RX_R25p	DIFFOUT_R25p	High_Speed	R15	DQ1R	
5	VREFB5N0	IO			DIFFIO_RX_R26p	DIFFOUT_R26p	High_Speed	T21		
5	VREFB5N0	IO			DIFFIO_RX_R25n	DIFFOUT_R25n	High_Speed	R14	DQ1R	
5	VREFB5N0	IO			DIFFIO_RX_R26n	DIFFOUT_R26n	High_Speed	T22		
5	VREFB5N0	IO			DIFFIO_RX_R27p	DIFFOUT_R27p	High_Speed	T19	DQ1R	
5	VREFB5N0	IO			DIFFIO_RX_R28p	DIFFOUT_R28p	High_Speed	T20	DQ1R	
5	VREFB5N0	IO			DIFFIO_RX_R27n	DIFFOUT_R27n	High_Speed	T18	DM1R	
5	VREFB5N0	IO			DIFFIO_RX_R28n	DIFFOUT_R28n	High_Speed	R20	DQ1R	
5	VREFB5N0	IO			DIFFIO_RX_R29p	DIFFOUT_R29p	High_Speed	U21		
5	VREFB5N0	IO						R22		
5	VREFB5N0	IO			DIFFIO_RX_R29n	DIFFOUT_R29n	High_Speed	U22		
5	VREFB5N0	IO	VREFB5N0					P22		
5	VREFB5N0	IO			DIFFIO_RX_R30p	DIFFOUT_R30p	High_Speed	P15	DQ1R	
5	VREFB5N0	IO			DIFFIO_RX_R31p	DIFFOUT_R31p	High_Speed	P21		
5	VREFB5N0	IO			DIFFIO_RX_R30n	DIFFOUT_R30n	High_Speed	P14	DQ1R	
5	VREFB5N0	IO			DIFFIO_RX_R31n	DIFFOUT_R31n	High_Speed	N22		
5	VREFB5N0	IO			DIFFIO_RX_R32p	DIFFOUT_R32p	High_Speed	R18	DQS1R	
5	VREFB5N0	IO			DIFFIO_RX_R33p	DIFFOUT_R33p	High_Speed	P19	DQ1R	
5	VREFB5N0	IO			DIFFIO_RX_R32n	DIFFOUT_R32n	High_Speed	P18	DQS1R	
5	VREFB5N0	IO			DIFFIO_RX_R33n	DIFFOUT_R33n	High_Speed	P20	DQ1R	

Bank Number	VREF	Pin Name/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	IO Performance	F484	DQS for X8	DQS for X16
5	VREFB5N0	IO			DIFFIO_RX_R34p	DIFFOUT_R34p	High_Speed	M21		
5	VREFB5N0	IO			DIFFIO_RX_R35p	DIFFOUT_R35p	High_Speed	N21		
5	VREFB5N0	IO			DIFFIO_RX_R34n	DIFFOUT_R34n	High_Speed	L22		
5	VREFB5N0	IO			DIFFIO_RX_R35n	DIFFOUT_R35n	High_Speed	M22		
6	VREFB6N0	IO	CLK2p		DIFFIO_RX_R38p	DIFFOUT_R38p	High_Speed	N14		
6	VREFB6N0	IO			DIFFIO_RX_R39p	DIFFOUT_R39p	High_Speed	H22		
6	VREFB6N0	IO	CLK2n		DIFFIO_RX_R38n	DIFFOUT_R38n	High_Speed	N15		
6	VREFB6N0	IO			DIFFIO_RX_R39n	DIFFOUT_R39n	High_Speed	H21		
6	VREFB6N0	IO	CLK3p		DIFFIO_RX_R40p	DIFFOUT_R40p	High_Speed	K22		
6	VREFB6N0	IO			DIFFIO_RX_R41p	DIFFOUT_R41p	High_Speed	J22		
6	VREFB6N0	IO	CLK3n		DIFFIO_RX_R40n	DIFFOUT_R40n	High_Speed	K21		
6	VREFB6N0	IO			DIFFIO_RX_R41n	DIFFOUT_R41n	High_Speed	J21		
6	VREFB6N0	IO			DIFFIO_RX_R42p	DIFFOUT_R42p	High_Speed	G20		
6	VREFB6N0	IO			DIFFIO_RX_R43p	DIFFOUT_R43p	High_Speed	G22		
6	VREFB6N0	IO			DIFFIO_RX_R42n	DIFFOUT_R42n	High_Speed	G19		
6	VREFB6N0	IO			DIFFIO_RX_R43n	DIFFOUT_R43n	High_Speed	F22		
6	VREFB6N0	IO			DIFFIO_RX_R44p	DIFFOUT_R44p	High_Speed	M15	DQ2R	DQ1R
6	VREFB6N0	IO			DIFFIO_RX_R45p	DIFFOUT_R45p	High_Speed	E22		
6	VREFB6N0	IO			DIFFIO_RX_R44n	DIFFOUT_R44n	High_Speed	M14	DQ2R	DQ1R
6	VREFB6N0	IO			DIFFIO_RX_R45n	DIFFOUT_R45n	High_Speed	E21		
6	VREFB6N0	IO			DIFFIO_RX_R46p	DIFFOUT_R46p	High_Speed	N18	DQ2R	DQ1R
6	VREFB6N0	IO			DIFFIO_RX_R47p	DIFFOUT_R47p	High_Speed	M20	DQ2R	DQ1R
6	VREFB6N0	IO			DIFFIO_RX_R46n	DIFFOUT_R46n	High_Speed	N19	DM2R	DM1R
6	VREFB6N0	IO			DIFFIO_RX_R47n	DIFFOUT_R47n	High_Speed	N20	DQ2R	DQ1R
6	VREFB6N0	IO			DIFFIO_RX_R48p	DIFFOUT_R48p	High_Speed	F21		
6	VREFB6N0	IO			DIFFIO_RX_R49p	DIFFOUT_R49p	High_Speed	D22		
6	VREFB6N0	IO			DIFFIO_RX_R48n	DIFFOUT_R48n	High_Speed	F20		
6	VREFB6N0	IO			DIFFIO_RX_R49n	DIFFOUT_R49n	High_Speed	C22		
6	VREFB6N0	IO	DPCLK3		DIFFIO_RX_R50p	DIFFOUT_R50p	High_Speed	L14	DQS2R	DQS1R
6	VREFB6N0	IO	VREFB6N0					D21		
6	VREFB6N0	IO	DPCLK2		DIFFIO_RX_R50n	DIFFOUT_R50n	High_Speed	L15	DQSn2R	DQSn1R
6	VREFB6N0	IO						C21		
6	VREFB6N0	IO			DIFFIO_RX_R51p	DIFFOUT_R51p	High_Speed	M18	DQ2R	DQ1R
6	VREFB6N0	IO			DIFFIO_RX_R52p	DIFFOUT_R52p	High_Speed	L19	DQ2R	DQ1R
6	VREFB6N0	IO			DIFFIO_RX_R51n	DIFFOUT_R51n	High_Speed	L18	DQ2R	DQ1R
6	VREFB6N0	IO			DIFFIO_RX_R52n	DIFFOUT_R52n	High_Speed	L20	DQ2R	DQ1R
6	VREFB6N0	IO			DIFFIO_RX_R53p	DIFFOUT_R53p	High_Speed	E19		
6	VREFB6N0	IO			DIFFIO_RX_R54p	DIFFOUT_R54p	High_Speed	F19		
6	VREFB6N0	IO			DIFFIO_RX_R53n	DIFFOUT_R53n	High_Speed	F18		
6	VREFB6N0	IO			DIFFIO_RX_R54n	DIFFOUT_R54n	High_Speed	E20		
6	VREFB6N0	IO			DIFFIO_RX_R55p	DIFFOUT_R55p	High_Speed	K14	DQS3R	DQ1R
6	VREFB6N0	IO			DIFFIO_RX_R56p	DIFFOUT_R56p	High_Speed	C20		
6	VREFB6N0	IO			DIFFIO_RX_R55n	DIFFOUT_R55n	High_Speed	K15	DQSn3R	DQ1R
6	VREFB6N0	IO			DIFFIO_RX_R56n	DIFFOUT_R56n	High_Speed	D19		
6	VREFB6N0	IO			DIFFIO_RX_R57p	DIFFOUT_R57p	High_Speed	K18	DQ3R	DQ1R
6	VREFB6N0	IO			DIFFIO_RX_R58p	DIFFOUT_R58p	High_Speed	K19	DQ3R	DQ1R
6	VREFB6N0	IO			DIFFIO_RX_R57n	DIFFOUT_R57n	High_Speed	J18	DQ3R	DQ1R
6	VREFB6N0	IO			DIFFIO_RX_R58n	DIFFOUT_R58n	High_Speed	K20	DQ3R	DQ1R
6	VREFB6N0	IO			DIFFIO_RX_R59p	DIFFOUT_R59p	High_Speed	F17		
6	VREFB6N0	IO			DIFFIO_RX_R60p	DIFFOUT_R60p	High_Speed	B22		
6	VREFB6N0	IO			DIFFIO_RX_R59n	DIFFOUT_R59n	High_Speed	E17		
6	VREFB6N0	IO			DIFFIO_RX_R60n	DIFFOUT_R60n	High_Speed	B21		
6	VREFB6N0	IO			DIFFIO_RX_R61p	DIFFOUT_R61p	High_Speed	J14	DQ3R	DQ1R
6	VREFB6N0	IO			DIFFIO_RX_R62p	DIFFOUT_R62p	High_Speed	B20		
6	VREFB6N0	IO			DIFFIO_RX_R61n	DIFFOUT_R61n	High_Speed	J15	DM3R	DM1R
6	VREFB6N0	IO			DIFFIO_RX_R62n	DIFFOUT_R62n	High_Speed	A21		
6	VREFB6N0	IO			DIFFIO_RX_R63p	DIFFOUT_R63p	High_Speed	H19	DQ3R	DQ1R
6	VREFB6N0	IO			DIFFIO_RX_R64p	DIFFOUT_R64p	High_Speed	J20	DQ3R	DQ1R
6	VREFB6N0	IO			DIFFIO_RX_R63n	DIFFOUT_R63n	High_Speed	H18	DQ3R	DQ1R
6	VREFB6N0	IO			DIFFIO_RX_R64n	DIFFOUT_R64n	High_Speed	H20	DQ3R	DQ1R
6	VREFB6N0	IO	PLL_R_CLKOUTp		DIFFIO_RX_R69p	DIFFOUT_R69p	High_Speed	H17		
6	VREFB6N0	IO			DIFFIO_RX_R70p	DIFFOUT_R70p	High_Speed	D18	CK_6	CK_6
6	VREFB6N0	IO	PLL_R_CLKOUTn		DIFFIO_RX_R69n	DIFFOUT_R69n	High_Speed	G17		
6	VREFB6N0	IO			DIFFIO_RX_R70n	DIFFOUT_R70n	High_Speed	E18	CK#_6	CK#_6
7	VREFB7N0	IO			DIFFIO_RX_T1p	DIFFOUT_T1p	High_Speed	E16		
7	VREFB7N0	IO			DIFFIO_RX_T2p	DIFFOUT_T2p	High_Speed	D17		
7	VREFB7N0	IO			DIFFIO_RX_T1n	DIFFOUT_T1n	High_Speed	E15		
7	VREFB7N0	IO			DIFFIO_RX_T2n	DIFFOUT_T2n	High_Speed	C17		
7	VREFB7N0	IO			DIFFIO_RX_T5p	DIFFOUT_T5p	High_Speed	F16		
7	VREFB7N0	IO			DIFFIO_RX_T6p	DIFFOUT_T6p	High_Speed	C19		
7	VREFB7N0	IO			DIFFIO_RX_T5n	DIFFOUT_T5n	High_Speed	F15		
7	VREFB7N0	IO			DIFFIO_RX_T6n	DIFFOUT_T6n	High_Speed	B19		
7	VREFB7N0	IO			DIFFIO_RX_T7p	DIFFOUT_T7p	High_Speed	C18		
7	VREFB7N0	IO			DIFFIO_RX_T8p	DIFFOUT_T8p	High_Speed	A20		
7	VREFB7N0	IO			DIFFIO_RX_T7n	DIFFOUT_T7n	High_Speed	B17		
7	VREFB7N0	IO			DIFFIO_RX_T8n	DIFFOUT_T8n	High_Speed	A19		
7	VREFB7N0	IO			DIFFIO_RX_T9p	DIFFOUT_T9p	High_Speed	D15		
7	VREFB7N0	IO			DIFFIO_RX_T10p	DIFFOUT_T10p	High_Speed	A18		
7	VREFB7N0	IO			DIFFIO_RX_T9n	DIFFOUT_T9n	High_Speed	E14		
7	VREFB7N0	IO			DIFFIO_RX_T10n	DIFFOUT_T10n	High_Speed	A17		
7	VREFB7N0	IO			DIFFIO_RX_T15p	DIFFOUT_T15p	High_Speed	C16		
7	VREFB7N0	IO			DIFFIO_RX_T16p	DIFFOUT_T16p	High_Speed	B16		
7	VREFB7N0	IO			DIFFIO_RX_T15n	DIFFOUT_T15n	High_Speed	C15		
7	VREFB7N0	IO			DIFFIO_RX_T16n	DIFFOUT_T16n	High_Speed	A16		
7	VREFB7N0	IO			DIFFIO_RX_T17p	DIFFOUT_T17p	High_Speed	H14		
7	VREFB7N0	IO						A15		
7	VREFB7N0	IO			DIFFIO_RX_T17n	DIFFOUT_T17n	High_Speed	J13		
7	VREFB7N0	IO	VREFB7N0					B15		
7	VREFB7N0	IO			DIFFIO_RX_T18p	DIFFOUT_T18p	High_Speed	C14		
7	VREFB7N0	IO			DIFFIO_RX_T19p	DIFFOUT_T19p	High_Speed	A14		
7	VREFB7N0	IO			DIFFIO_RX_T18n	DIFFOUT_T18n	High_Speed	C13		
7	VREFB7N0	IO			DIFFIO_RX_T19n	DIFFOUT_T19n	High_Speed	B14		
7	VREFB7N0	IO			DIFFIO_RX_T20p	DIFFOUT_T20p	High_Speed	D14		
7	VREFB7N0	IO			DIFFIO_RX_T21p	DIFFOUT_T21p	High_Speed	E12		
7	VREFB7N0	IO			DIFFIO_RX_T20n	DIFFOUT_T20n	High_Speed	E13		
7	VREFB7N0	IO			DIFFIO_RX_T21n	DIFFOUT_T21n	High_Speed	D13		
7	VREFB7N0	IO			DIFFIO_RX_T22p	DIFFOUT_T22p	High_Speed	H13		
7	VREFB7N0	IO			DIFFIO_RX_T23p	DIFFOUT_T23p	High_Speed	A13		
7	VREFB7N0	IO			DIFFIO_RX_T22n	DIFFOUT_T22n	High_Speed	J12		
7	VREFB7N0	IO			DIFFIO_RX_T23n	DIFFOUT_T23n	High_Speed	A12		
7	VREFB7N0	IO			DIFFIO_RX_T24p	DIFFOUT_T24p	High_Speed	C12		
7	VREFB7N0	IO			DIFFIO_RX_T25p	DIFFOUT_T25p	High_Speed	A11		
7	VREFB7N0	IO			DIFFIO_RX_T24n	DIFFOUT_T24n	High_Speed	D12		
7	VREFB7N0	IO			DIFFIO_RX_T25n	DIFFOUT_T25n	High_Speed	A10		

Bank Number	VREF	Pin Name/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	IO Performance	F484	DQS for X8	DQS for X16
7	VREFB7N0	IO			DIFFIO_RX_T26p	DIFFOUT_T26p	High_Speed	C11		
7	VREFB7N0	IO			DIFFIO_RX_T27p	DIFFOUT_T27p	High_Speed	B12		
7	VREFB7N0	IO			DIFFIO_RX_T26n	DIFFOUT_T26n	High_Speed	C10		
7	VREFB7N0	IO			DIFFIO_RX_T27n	DIFFOUT_T27n	High_Speed	B11		
7	VREFB7N0	IO			DIFFIO_RX_T28p	DIFFOUT_T28p	High_Speed	H12		
7	VREFB7N0	IO			DIFFIO_RX_T29p	DIFFOUT_T29p	High_Speed	A7		
7	VREFB7N0	IO			DIFFIO_RX_T28n	DIFFOUT_T28n	High_Speed	J11		
7	VREFB7N0	IO			DIFFIO_RX_T29n	DIFFOUT_T29n	High_Speed	A8		
7	VREFB7N0	IO			DIFFIO_RX_T30p	DIFFOUT_T30p	High_Speed	B10		
7	VREFB7N0	IO			DIFFIO_RX_T31p	DIFFOUT_T31p	High_Speed	A9		
7	VREFB7N0	IO			DIFFIO_RX_T30n	DIFFOUT_T30n	High_Speed	C9		
7	VREFB7N0	IO			DIFFIO_RX_T31n	DIFFOUT_T31n	High_Speed	B8		
8	VREFB8N0	IO	CLK4p		DIFFIO_RX_T38p	DIFFOUT_T38p	Low_Speed	E11		
8	VREFB8N0	IO			DIFFIO_RX_T39p	DIFFOUT_T39p	Low_Speed	C8		
8	VREFB8N0	IO	CLK4n		DIFFIO_RX_T38n	DIFFOUT_T38n	Low_Speed	E10		
8	VREFB8N0	IO			DIFFIO_RX_T39n	DIFFOUT_T39n	Low_Speed	C7		
8	VREFB8N0	IO	CLK5p		DIFFIO_RX_T40p	DIFFOUT_T40p	Low_Speed	J10		
8	VREFB8N0	IO			DIFFIO_RX_T41p	DIFFOUT_T41p	Low_Speed	B7		
8	VREFB8N0	IO	CLK5n		DIFFIO_RX_T40n	DIFFOUT_T40n	Low_Speed	H11		
8	VREFB8N0	IO			DIFFIO_RX_T41n	DIFFOUT_T41n	Low_Speed	A6		
8	VREFB8N0	IO			DIFFIO_RX_T42p	DIFFOUT_T42p	Low_Speed	D8		
8	VREFB8N0	IO			DIFFIO_RX_T43p	DIFFOUT_T43p	Low_Speed	A5		
8	VREFB8N0	IO		DEV_CLRn	DIFFIO_RX_T42n	DIFFOUT_T42n	Low_Speed	D9		
8	VREFB8N0	IO			DIFFIO_RX_T43n	DIFFOUT_T43n	Low_Speed	A4		
8	VREFB8N0	IO		DEV_OE	DIFFIO_RX_T44p	DIFFOUT_T44p	Low_Speed	D10		
8	VREFB8N0	IO						C6		
8	VREFB8N0	IO			DIFFIO_RX_T44n	DIFFOUT_T44n	Low_Speed	E9		
8	VREFB8N0	IO	VREFB8N0					D7		
8	VREFB8N0	IO		CONFIG_SEL				H10		
8	VREFB8N0	IO			DIFFIO_RX_T45p	DIFFOUT_T45p	Low_Speed	A2		
8	VREFB8N0	Input_only		nCONFIG				H9		
8	VREFB8N0	IO			DIFFIO_RX_T45n	DIFFOUT_T45n	Low_Speed	A3		
8	VREFB8N0	IO			DIFFIO_RX_T46p	DIFFOUT_T46p	Low_Speed	B3		
8	VREFB8N0	IO			DIFFIO_RX_T47p	DIFFOUT_T47p	Low_Speed	B5		
8	VREFB8N0	IO			DIFFIO_RX_T46n	DIFFOUT_T46n	Low_Speed	B4		
8	VREFB8N0	IO			DIFFIO_RX_T47n	DIFFOUT_T47n	Low_Speed	C4		
8	VREFB8N0	IO			DIFFIO_RX_T48p	DIFFOUT_T48p	Low_Speed	E8		
8	VREFB8N0	IO			DIFFIO_RX_T49p	DIFFOUT_T49p	Low_Speed	C5		
8	VREFB8N0	IO		CRC_ERROR	DIFFIO_RX_T48n	DIFFOUT_T48n	Low_Speed	F7		
8	VREFB8N0	IO			DIFFIO_RX_T49n	DIFFOUT_T49n	Low_Speed	D5		
8	VREFB8N0	IO		nSTATUS	DIFFIO_RX_T50p	DIFFOUT_T50p	Low_Speed	G9		
8	VREFB8N0	IO			DIFFIO_RX_T51p	DIFFOUT_T51p	Low_Speed	B2		
8	VREFB8N0	IO		CONF_DONE	DIFFIO_RX_T50n	DIFFOUT_T50n	Low_Speed	F8		
8	VREFB8N0	IO			DIFFIO_RX_T51n	DIFFOUT_T51n	Low_Speed	B1		
8	VREFB8N0	IO	PLL_T_CLKOUTp		DIFFIO_RX_T52p	DIFFOUT_T52p	Low_Speed	D6		
8	VREFB8N0	IO			DIFFIO_RX_T53p	DIFFOUT_T53p	Low_Speed	C3		
8	VREFB8N0	IO	PLL_T_CLKOUTn		DIFFIO_RX_T52n	DIFFOUT_T52n	Low_Speed	E6		
8	VREFB8N0	IO			DIFFIO_RX_T53n	DIFFOUT_T53n	Low_Speed	C2		
		GND						G5		
		GND						J5		
		GND						K3		
		GND						H5		
		GND						Y9		
		GND						Y15		
		GND						Y12		
		GND						W21		
		GND						V6		
		GND						V2		
		GND						V19		
		GND						U13		
		GND						U10		
		GND						T8		
		GND						T4		
		GND						T16		
		GND						T14		
		GND						R21		
		GND						R19		
		GND						P6		
		GND						P2		
		GND						P17		
		GND						N13		
		GND						N11		
		GND						M7		
		GND						M19		
		GND						M16		
		GND						M10		
		GND						L5		
		GND						L21		
		GND						L17		
		GND						L13		
		GND						K12		
		GND						K10		
		GND						J6		
		GND						J2		
		GND						J19		
		GND						J16		
		GND						G8		
		GND						G6		
		GND						G21		
		GND						G18		
		GND						G15		
		GND						F13		
		GND						F10		
		GND						E7		
		GND						E2		
		GND						D4		
		GND						D20		
		GND						D16		
		GND						D11		
		GND						B9		
		GND						B6		
		GND						B18		
		GND						B13		
		GND						AB22		

Bank Number	VREF	Pin Name/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	IO Performance	F484	DQS for X8	DQS for X16
		GND						AB1		
		GND						AA4		
		GND						AA18		
		GND						A22		
		GND						A1		
		VCC						N12		
		VCC						N10		
		VCC						M13		
		VCC						M12		
		VCC						M11		
		VCC						L12		
		VCC						L11		
		VCC						L10		
		VCC						K13		
		VCC						K11		
		VCC						J7		
		DNU						L3		
		VCCD_PLL1						T7		
		VCCD_PLL2						G16		
		VCCD_PLL3						G7		
		VCCD_PLL4						U16		
		VCCIO1A						L6		
		VCCIO1A						K7		
		VCCIO1B						M6		
		VCCIO1B						L7		
		VCCIO2						R6		
		VCCIO2						P7		
		VCCIO2						N7		
		VCCIO2						N6		
		VCCIO3						U9		
		VCCIO3						U8		
		VCCIO3						T9		
		VCCIO3						T11		
		VCCIO3						T10		
		VCCIO4						U14		
		VCCIO4						U12		
		VCCIO4						U11		
		VCCIO4						T13		
		VCCIO4						T12		
		VCCIO5						T17		
		VCCIO5						R17		
		VCCIO5						R16		
		VCCIO5						P16		
		VCCIO5						N16		
		VCCIO6						N17		
		VCCIO6						M17		
		VCCIO6						L16		
		VCCIO6						K17		
		VCCIO6						K16		
		VCCIO6						J17		
		VCCIO6						H16		
		VCCIO7						G14		
		VCCIO7						G13		
		VCCIO7						G12		
		VCCIO7						F14		
		VCCIO7						F12		
		VCCIO8						G11		
		VCCIO8						G10		
		VCCIO8						F9		
		VCCIO8						F11		
		NC						F6		
		NC						E5		
		VCCA1						R8		
		VCCA2						H15		
		VCCA3						H6		
		VCCA3						H8		
		VCCA3						H7		
		VCCA4						T15		

Note:
(1) For more information about pin definition and pin connection guidelines, refer to the [MAX 10 FPGA Device Family Pin Connection Guidelines](#).

Bank Number	VREF	Pin Name/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	IO Performance	F672	DQS for X8	DQS for X16
1A	VREFB1N0	IO			DIFFIO_RX_L1n	DIFFOUT_L1n	Low_Speed	K7		
1A	VREFB1N0	IO			DIFFIO_RX_L2n	DIFFOUT_L2n	Low_Speed	K6		
1A	VREFB1N0	IO			DIFFIO_RX_L1p	DIFFOUT_L1p	Low_Speed	L7		
1A	VREFB1N0	IO			DIFFIO_RX_L2p	DIFFOUT_L2p	Low_Speed	L6		
1A	VREFB1N0	IO			DIFFIO_RX_L3n	DIFFOUT_L3n	Low_Speed	J7		
1A	VREFB1N0	IO			DIFFIO_RX_L4n	DIFFOUT_L4n	Low_Speed	G7		
1A	VREFB1N0	IO			DIFFIO_RX_L3p	DIFFOUT_L3p	Low_Speed	J8		
1A	VREFB1N0	IO			DIFFIO_RX_L4p	DIFFOUT_L4p	Low_Speed	G6		
1A	VREFB1N0	IO			DIFFIO_RX_L5n	DIFFOUT_L5n	Low_Speed	G4		
1A	VREFB1N0	IO			DIFFIO_RX_L6n	DIFFOUT_L6n	Low_Speed	F6		
1A	VREFB1N0	IO			DIFFIO_RX_L5p	DIFFOUT_L5p	Low_Speed	G3		
1A	VREFB1N0	IO			DIFFIO_RX_L6p	DIFFOUT_L6p	Low_Speed	F5		
1A	VREFB1N0	IO			DIFFIO_RX_L7n	DIFFOUT_L7n	Low_Speed	K5		
1A	VREFB1N0	IO			DIFFIO_RX_L8n	DIFFOUT_L8n	Low_Speed	F4		
1A	VREFB1N0	IO			DIFFIO_RX_L7p	DIFFOUT_L7p	Low_Speed	K4		
1A	VREFB1N0	IO			DIFFIO_RX_L8p	DIFFOUT_L8p	Low_Speed	E4		
1B	VREFB1N0	IO			DIFFIO_RX_L9n	DIFFOUT_L9n	Low_Speed	M5		
1B	VREFB1N0	IO			DIFFIO_RX_L10n	DIFFOUT_L10n	Low_Speed	C4		
1B	VREFB1N0	IO			DIFFIO_RX_L9p	DIFFOUT_L9p	Low_Speed	L4		
1B	VREFB1N0	IO			DIFFIO_RX_L10p	DIFFOUT_L10p	Low_Speed	D4		
1B	VREFB1N0	IO			DIFFIO_RX_L11n	DIFFOUT_L11n	Low_Speed	E3		
1B	VREFB1N0	IO			DIFFIO_RX_L12n	DIFFOUT_L12n	Low_Speed	B3		
1B	VREFB1N0	IO			DIFFIO_RX_L11p	DIFFOUT_L11p	Low_Speed	F3		
1B	VREFB1N0	IO			DIFFIO_RX_L12p	DIFFOUT_L12p	Low_Speed	B2		
1B	VREFB1N0	IO			DIFFIO_RX_L13n	DIFFOUT_L13n	Low_Speed	M6		
1B	VREFB1N0	IO			DIFFIO_RX_L14n	DIFFOUT_L14n	Low_Speed	H3		
1B	VREFB1N0	IO			DIFFIO_RX_L13p	DIFFOUT_L13p	Low_Speed	M7		
1B	VREFB1N0	IO			DIFFIO_RX_L14p	DIFFOUT_L14p	Low_Speed	J4		
1B	VREFB1N0	IO			DIFFIO_RX_L15n	DIFFOUT_L15n	Low_Speed	L10		
1B	VREFB1N0	IO			DIFFIO_RX_L16n	DIFFOUT_L16n	Low_Speed	K3		
1B	VREFB1N0	IO		JTAGEN	DIFFIO_RX_L15p	DIFFOUT_L15p	Low_Speed	L11		
1B	VREFB1N0	IO		TMS	DIFFIO_RX_L16p	DIFFOUT_L16p	Low_Speed	L3		
1B	VREFB1N0	IO	VREFB1N0		DIFFIO_RX_L17n	DIFFOUT_L17n	Low_Speed	C2		
1B	VREFB1N0	IO		TCK	DIFFIO_RX_L17p	DIFFOUT_L17p	Low_Speed	D3		
1B	VREFB1N0	IO						D1		
1B	VREFB1N0	IO		TDI	DIFFIO_RX_L18n	DIFFOUT_L18n	Low_Speed	N7		
1B	VREFB1N0	IO			DIFFIO_RX_L19n	DIFFOUT_L19n	Low_Speed	D2		
1B	VREFB1N0	IO		TDO	DIFFIO_RX_L18p	DIFFOUT_L18p	Low_Speed	N6		
1B	VREFB1N0	IO			DIFFIO_RX_L19p	DIFFOUT_L19p	Low_Speed	C1		
1B	VREFB1N0	IO			DIFFIO_RX_L20n	DIFFOUT_L20n	Low_Speed	M10		
1B	VREFB1N0	IO			DIFFIO_RX_L21n	DIFFOUT_L21n	Low_Speed	H2		
1B	VREFB1N0	IO			DIFFIO_RX_L20p	DIFFOUT_L20p	Low_Speed	M11		
1B	VREFB1N0	IO			DIFFIO_RX_L21p	DIFFOUT_L21p	Low_Speed	H1		
1B	VREFB1N0	IO			DIFFIO_RX_L22n	DIFFOUT_L22n	Low_Speed	E2		
1B	VREFB1N0	IO			DIFFIO_RX_L23n	DIFFOUT_L23n	Low_Speed	J1		
1B	VREFB1N0	IO			DIFFIO_RX_L22p	DIFFOUT_L22p	Low_Speed	F2		
1B	VREFB1N0	IO			DIFFIO_RX_L23p	DIFFOUT_L23p	Low_Speed	K1		
1B	VREFB1N0	IO			DIFFIO_RX_L24n	DIFFOUT_L24n	Low_Speed	M4		
1B	VREFB1N0	IO			DIFFIO_RX_L25n	DIFFOUT_L25n	Low_Speed	G1		
1B	VREFB1N0	IO			DIFFIO_RX_L24p	DIFFOUT_L24p	Low_Speed	M3		
1B	VREFB1N0	IO			DIFFIO_RX_L25p	DIFFOUT_L25p	Low_Speed	F1		
1B	VREFB1N0	IO			DIFFIO_RX_L26n	DIFFOUT_L26n	Low_Speed	N10		
1B	VREFB1N0	IO			DIFFIO_RX_L27n	DIFFOUT_L27n	Low_Speed	J2		
1B	VREFB1N0	IO			DIFFIO_RX_L26p	DIFFOUT_L26p	Low_Speed	N11		
1B	VREFB1N0	IO			DIFFIO_RX_L27p	DIFFOUT_L27p	Low_Speed	J3		
2	VREFB2N0	IO	CLK0n		DIFFIO_RX_L28n	DIFFOUT_L28n	High_Speed	P7		
2	VREFB2N0	IO			DIFFIO_RX_L29n	DIFFOUT_L29n	High_Speed	N1		
2	VREFB2N0	IO	CLK0p		DIFFIO_RX_L28p	DIFFOUT_L28p	High_Speed	P6		
2	VREFB2N0	IO			DIFFIO_RX_L29p	DIFFOUT_L29p	High_Speed	M1		
2	VREFB2N0	IO			DIFFIO_RX_L30n	DIFFOUT_L30n	High_Speed	P11		
2	VREFB2N0	IO			DIFFIO_RX_L31n	DIFFOUT_L31n	High_Speed	R4		
2	VREFB2N0	IO			DIFFIO_RX_L30p	DIFFOUT_L30p	High_Speed	P10		
2	VREFB2N0	IO			DIFFIO_RX_L31p	DIFFOUT_L31p	High_Speed	P4		
2	VREFB2N0	IO			DIFFIO_RX_L32n	DIFFOUT_L32n	High_Speed	M2		
2	VREFB2N0	IO			DIFFIO_RX_L33n	DIFFOUT_L33n	High_Speed	P2		
2	VREFB2N0	IO			DIFFIO_RX_L32p	DIFFOUT_L32p	High_Speed	N3		
2	VREFB2N0	IO			DIFFIO_RX_L33p	DIFFOUT_L33p	High_Speed	P1		
2	VREFB2N0	IO			DIFFIO_RX_L34n	DIFFOUT_L34n	High_Speed	R6		
2	VREFB2N0	IO			DIFFIO_RX_L35n	DIFFOUT_L35n	High_Speed	R3		
2	VREFB2N0	IO			DIFFIO_RX_L34p	DIFFOUT_L34p	High_Speed	R7		
2	VREFB2N0	IO			DIFFIO_RX_L35p	DIFFOUT_L35p	High_Speed	P3		
2	VREFB2N0	IO	CLK1n		DIFFIO_RX_L36n	DIFFOUT_L36n	High_Speed	R11		
2	VREFB2N0	IO			DIFFIO_RX_L37n	DIFFOUT_L37n	High_Speed	R2		
2	VREFB2N0	IO	CLK1p		DIFFIO_RX_L36p	DIFFOUT_L36p	High_Speed	R10		
2	VREFB2N0	IO			DIFFIO_RX_L37p	DIFFOUT_L37p	High_Speed	T3		
2	VREFB2N0	IO	DPCLK0		DIFFIO_RX_L38n	DIFFOUT_L38n	High_Speed	T6		
2	VREFB2N0	IO	VREFB2N0					T1		
2	VREFB2N0	IO	DPCLK1		DIFFIO_RX_L38p	DIFFOUT_L38p	High_Speed	R5		
2	VREFB2N0	IO						R1		
2	VREFB2N0	IO			DIFFIO_RX_L39n	DIFFOUT_L39n	High_Speed	N5		
2	VREFB2N0	IO			DIFFIO_RX_L40n	DIFFOUT_L40n	High_Speed	U3		
2	VREFB2N0	IO			DIFFIO_RX_L39p	DIFFOUT_L39p	High_Speed	N4		
2	VREFB2N0	IO			DIFFIO_RX_L40p	DIFFOUT_L40p	High_Speed	U4		
2	VREFB2N0	IO			DIFFIO_RX_L41n	DIFFOUT_L41n	High_Speed	U10		
2	VREFB2N0	IO			DIFFIO_RX_L42n	DIFFOUT_L42n	High_Speed	U1		
2	VREFB2N0	IO			DIFFIO_RX_L41p	DIFFOUT_L41p	High_Speed	T10		
2	VREFB2N0	IO			DIFFIO_RX_L42p	DIFFOUT_L42p	High_Speed	V2		
2	VREFB2N0	IO			DIFFIO_RX_L43n	DIFFOUT_L43n	High_Speed	U2		
2	VREFB2N0	IO			DIFFIO_RX_L44n	DIFFOUT_L44n	High_Speed	V1		
2	VREFB2N0	IO			DIFFIO_RX_L43p	DIFFOUT_L43p	High_Speed	V3		
2	VREFB2N0	IO			DIFFIO_RX_L44p	DIFFOUT_L44p	High_Speed	W1		
2	VREFB2N0	IO			DIFFIO_RX_L45n	DIFFOUT_L45n	High_Speed	T5		
2	VREFB2N0	IO			DIFFIO_RX_L46n	DIFFOUT_L46n	High_Speed	U6		
2	VREFB2N0	IO			DIFFIO_RX_L45p	DIFFOUT_L45p	High_Speed	T4		
2	VREFB2N0	IO			DIFFIO_RX_L46p	DIFFOUT_L46p	High_Speed	U5		
2	VREFB2N0	IO			DIFFIO_RX_L47n	DIFFOUT_L47n	High_Speed	V7		
2	VREFB2N0	IO			DIFFIO_RX_L48n	DIFFOUT_L48n	High_Speed	V4		

Bank Number	VREF	Pin Name/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	IO Performance	F672	DQS for X8	DQS for X16
2	VREFB2N0	IO			DIFFIO_RX_L47p	DIFFOUT_L47p	High_Speed	V6		
2	VREFB2N0	IO			DIFFIO_RX_L48p	DIFFOUT_L48p	High_Speed	W3		
2	VREFB2N0	IO			DIFFIO_RX_L49n	DIFFOUT_L49n	High_Speed	AA1		
2	VREFB2N0	IO			DIFFIO_RX_L50n	DIFFOUT_L50n	High_Speed	Y1		
2	VREFB2N0	IO			DIFFIO_RX_L49p	DIFFOUT_L49p	High_Speed	AA2		
2	VREFB2N0	IO			DIFFIO_RX_L50p	DIFFOUT_L50p	High_Speed	Y2		
2	VREFB2N0	IO			DIFFIO_RX_L51n	DIFFOUT_L51n	High_Speed	AA4		
2	VREFB2N0	IO			DIFFIO_RX_L52n	DIFFOUT_L52n	High_Speed	W4		
2	VREFB2N0	IO			DIFFIO_RX_L51p	DIFFOUT_L51p	High_Speed	AA5		
2	VREFB2N0	IO			DIFFIO_RX_L52p	DIFFOUT_L52p	High_Speed	Y4		
2	VREFB2N0	IO			DIFFIO_RX_L53n	DIFFOUT_L53n	High_Speed	W7		
2	VREFB2N0	IO			DIFFIO_RX_L54n	DIFFOUT_L54n	High_Speed	Y3		
2	VREFB2N0	IO			DIFFIO_RX_L53p	DIFFOUT_L53p	High_Speed	W6		
2	VREFB2N0	IO			DIFFIO_RX_L54p	DIFFOUT_L54p	High_Speed	AA3		
2	VREFB2N0	IO			DIFFIO_RX_L55n	DIFFOUT_L55n	High_Speed	AD1		
2	VREFB2N0	IO			DIFFIO_RX_L56n	DIFFOUT_L56n	High_Speed	AB1		
2	VREFB2N0	IO			DIFFIO_RX_L55p	DIFFOUT_L55p	High_Speed	AD2		
2	VREFB2N0	IO			DIFFIO_RX_L56p	DIFFOUT_L56p	High_Speed	AC1		
2	VREFB2N0	IO			DIFFIO_RX_L57n	DIFFOUT_L57n	High_Speed	Y5		
2	VREFB2N0	IO			DIFFIO_RX_L58n	DIFFOUT_L58n	High_Speed	AC3		
2	VREFB2N0	IO			DIFFIO_RX_L57p	DIFFOUT_L57p	High_Speed	W5		
2	VREFB2N0	IO			DIFFIO_RX_L58p	DIFFOUT_L58p	High_Speed	AB4		
2	VREFB2N0	IO	PLL_L_CLKOUTn		DIFFIO_RX_L59n	DIFFOUT_L59n	High_Speed	Y7		
2	VREFB2N0	IO			DIFFIO_RX_L60n	DIFFOUT_L60n	High_Speed	AC2		
2	VREFB2N0	IO	PLL_L_CLKOUTp		DIFFIO_RX_L59p	DIFFOUT_L59p	High_Speed	Y6		
2	VREFB2N0	IO			DIFFIO_RX_L60p	DIFFOUT_L60p	High_Speed	AB3		
3	VREFB3N0	IO			DIFFIO_TX_RX_B1n	DIFFOUT_B1n	High_Speed	Y8		
3	VREFB3N0	IO			DIFFIO_RX_B2n	DIFFOUT_B2n	High_Speed	AB6		
3	VREFB3N0	IO			DIFFIO_TX_RX_B1p	DIFFOUT_B1p	High_Speed	Y9		
3	VREFB3N0	IO			DIFFIO_RX_B2p	DIFFOUT_B2p	High_Speed	AC5		
3	VREFB3N0	IO			DIFFIO_TX_RX_B3n	DIFFOUT_B3n	High_Speed	AA7		
3	VREFB3N0	IO			DIFFIO_RX_B4n	DIFFOUT_B4n	High_Speed	AE2		
3	VREFB3N0	IO			DIFFIO_TX_RX_B3p	DIFFOUT_B3p	High_Speed	AA6		
3	VREFB3N0	IO			DIFFIO_RX_B4p	DIFFOUT_B4p	High_Speed	AD3		
3	VREFB3N0	IO			DIFFIO_TX_RX_B5n	DIFFOUT_B5n	High_Speed	AC6		
3	VREFB3N0	IO			DIFFIO_RX_B6n	DIFFOUT_B6n	High_Speed	AE3		
3	VREFB3N0	IO			DIFFIO_TX_RX_B5p	DIFFOUT_B5p	High_Speed	AB7		
3	VREFB3N0	IO			DIFFIO_RX_B6p	DIFFOUT_B6p	High_Speed	AF3		
3	VREFB3N0	IO			DIFFIO_TX_RX_B7n	DIFFOUT_B7n	High_Speed	Y10		
3	VREFB3N0	IO			DIFFIO_RX_B8n	DIFFOUT_B8n	High_Speed	AC4		
3	VREFB3N0	IO			DIFFIO_TX_RX_B7p	DIFFOUT_B7p	High_Speed	AA10		
3	VREFB3N0	IO			DIFFIO_RX_B8p	DIFFOUT_B8p	High_Speed	AD4		
3	VREFB3N0	IO			DIFFIO_TX_RX_B9n	DIFFOUT_B9n	High_Speed	AA9		
3	VREFB3N0	IO			DIFFIO_RX_B10n	DIFFOUT_B10n	High_Speed	AD5		
3	VREFB3N0	IO			DIFFIO_TX_RX_B9p	DIFFOUT_B9p	High_Speed	AA8		
3	VREFB3N0	IO			DIFFIO_RX_B10p	DIFFOUT_B10p	High_Speed	AE4		
3	VREFB3N0	IO			DIFFIO_TX_RX_B11n	DIFFOUT_B11n	High_Speed	AD6		
3	VREFB3N0	IO			DIFFIO_RX_B12n	DIFFOUT_B12n	High_Speed	AF4		
3	VREFB3N0	IO			DIFFIO_TX_RX_B11p	DIFFOUT_B11p	High_Speed	AE6		
3	VREFB3N0	IO			DIFFIO_RX_B12p	DIFFOUT_B12p	High_Speed	AF5		
3	VREFB3N0	IO			DIFFIO_TX_RX_B13n	DIFFOUT_B13n	High_Speed	AA11		
3	VREFB3N0	IO			DIFFIO_RX_B14n	DIFFOUT_B14n	High_Speed	AD7		
3	VREFB3N0	IO			DIFFIO_TX_RX_B13p	DIFFOUT_B13p	High_Speed	Y11		
3	VREFB3N0	IO			DIFFIO_RX_B14p	DIFFOUT_B14p	High_Speed	AD8		
3	VREFB3N0	IO			DIFFIO_TX_RX_B15n	DIFFOUT_B15n	High_Speed	U11		
3	VREFB3N0	IO	VREFB3N0					AF6		
3	VREFB3N0	IO			DIFFIO_TX_RX_B15p	DIFFOUT_B15p	High_Speed	T11		
3	VREFB3N0	IO						AF7		
3	VREFB3N0	IO			DIFFIO_TX_RX_B16n	DIFFOUT_B16n	High_Speed	AB10		
3	VREFB3N0	IO			DIFFIO_RX_B17n	DIFFOUT_B17n	High_Speed	AC8		
3	VREFB3N0	IO			DIFFIO_TX_RX_B16p	DIFFOUT_B16p	High_Speed	AB9		
3	VREFB3N0	IO			DIFFIO_RX_B17p	DIFFOUT_B17p	High_Speed	AC7		
3	VREFB3N0	IO	CLK6n		DIFFIO_TX_RX_B18n	DIFFOUT_B18n	High_Speed	AA12		
3	VREFB3N0	IO			DIFFIO_RX_B19n	DIFFOUT_B19n	High_Speed	AD9		
3	VREFB3N0	IO	CLK6p		DIFFIO_TX_RX_B18p	DIFFOUT_B18p	High_Speed	Y12		
3	VREFB3N0	IO			DIFFIO_RX_B19p	DIFFOUT_B19p	High_Speed	AC9		
3	VREFB3N0	IO	CLK7n		DIFFIO_TX_RX_B20n	DIFFOUT_B20n	High_Speed	U12		
3	VREFB3N0	IO			DIFFIO_RX_B21n	DIFFOUT_B21n	High_Speed	AE7		
3	VREFB3N0	IO	CLK7p		DIFFIO_TX_RX_B20p	DIFFOUT_B20p	High_Speed	T12		
3	VREFB3N0	IO			DIFFIO_RX_B21p	DIFFOUT_B21p	High_Speed	AF8		
3	VREFB3N0	IO			DIFFIO_TX_RX_B22n	DIFFOUT_B22n	High_Speed	AD10		
3	VREFB3N0	IO			DIFFIO_RX_B23n	DIFFOUT_B23n	High_Speed	AE8		
3	VREFB3N0	IO			DIFFIO_TX_RX_B22p	DIFFOUT_B22p	High_Speed	AC10		
3	VREFB3N0	IO			DIFFIO_RX_B23p	DIFFOUT_B23p	High_Speed	AF9		
4	VREFB4N0	IO			DIFFIO_TX_RX_B24n	DIFFOUT_B24n	High_Speed	AB12		
4	VREFB4N0	IO			DIFFIO_RX_B25n	DIFFOUT_B25n	High_Speed	AD11		
4	VREFB4N0	IO			DIFFIO_TX_RX_B24p	DIFFOUT_B24p	High_Speed	AC12		
4	VREFB4N0	IO			DIFFIO_RX_B25p	DIFFOUT_B25p	High_Speed	AC11		
4	VREFB4N0	IO			DIFFIO_TX_RX_B26n	DIFFOUT_B26n	High_Speed	U13		
4	VREFB4N0	IO			DIFFIO_RX_B27n	DIFFOUT_B27n	High_Speed	AE10		
4	VREFB4N0	IO			DIFFIO_TX_RX_B26p	DIFFOUT_B26p	High_Speed	T13		
4	VREFB4N0	IO			DIFFIO_RX_B27p	DIFFOUT_B27p	High_Speed	AF10		
4	VREFB4N0	IO			DIFFIO_TX_RX_B28n	DIFFOUT_B28n	High_Speed	AD13		
4	VREFB4N0	IO			DIFFIO_RX_B29n	DIFFOUT_B29n	High_Speed	AE11		
4	VREFB4N0	IO			DIFFIO_TX_RX_B28p	DIFFOUT_B28p	High_Speed	AD12		
4	VREFB4N0	IO			DIFFIO_RX_B29p	DIFFOUT_B29p	High_Speed	AF11		
4	VREFB4N0	IO			DIFFIO_TX_RX_B30n	DIFFOUT_B30n	High_Speed	AA13		
4	VREFB4N0	IO			DIFFIO_RX_B31n	DIFFOUT_B31n	High_Speed	AE12		
4	VREFB4N0	IO			DIFFIO_TX_RX_B30p	DIFFOUT_B30p	High_Speed	Y13		
4	VREFB4N0	IO			DIFFIO_RX_B31p	DIFFOUT_B31p	High_Speed	AF12		
4	VREFB4N0	IO			DIFFIO_TX_RX_B32n	DIFFOUT_B32n	High_Speed	U14		
4	VREFB4N0	IO			DIFFIO_RX_B33n	DIFFOUT_B33n	High_Speed	AF13		
4	VREFB4N0	IO			DIFFIO_TX_RX_B32p	DIFFOUT_B32p	High_Speed	T14		
4	VREFB4N0	IO			DIFFIO_RX_B33p	DIFFOUT_B33p	High_Speed	AF14		
4	VREFB4N0	IO			DIFFIO_TX_RX_B34n	DIFFOUT_B34n	High_Speed	AB13		
4	VREFB4N0	IO			DIFFIO_RX_B35n	DIFFOUT_B35n	High_Speed	AE14		
4	VREFB4N0	IO			DIFFIO_TX_RX_B34p	DIFFOUT_B34p	High_Speed	AC13		
4	VREFB4N0	IO			DIFFIO_RX_B35p	DIFFOUT_B35p	High_Speed	AF15		

Bank Number	VREF	Pin Name/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	IO Performance	F672	DQS for X8	DQS for X16
4	VREFB4N0	IO			DIFFIO_TX_RX_B36n	DIFFOUT_B36n	High_Speed	T15		
4	VREFB4N0	IO	VREFB4N0					AE15		
4	VREFB4N0	IO			DIFFIO_TX_RX_B36p	DIFFOUT_B36p	High_Speed	U15		
4	VREFB4N0	IO						AD16		
4	VREFB4N0	IO			DIFFIO_TX_RX_B37n	DIFFOUT_B37n	High_Speed	AF16		
4	VREFB4N0	IO			DIFFIO_RX_B38n	DIFFOUT_B38n	High_Speed	AD14		
4	VREFB4N0	IO			DIFFIO_TX_RX_B37p	DIFFOUT_B37p	High_Speed	AF17		
4	VREFB4N0	IO			DIFFIO_RX_B38p	DIFFOUT_B38p	High_Speed	AC14		
4	VREFB4N0	IO			DIFFIO_TX_RX_B39n	DIFFOUT_B39n	High_Speed	Y14		
4	VREFB4N0	IO			DIFFIO_RX_B40n	DIFFOUT_B40n	High_Speed	AD15		
4	VREFB4N0	IO			DIFFIO_TX_RX_B39p	DIFFOUT_B39p	High_Speed	AA14		
4	VREFB4N0	IO			DIFFIO_RX_B40p	DIFFOUT_B40p	High_Speed	AC15		
4	VREFB4N0	IO			DIFFIO_TX_RX_B41n	DIFFOUT_B41n	High_Speed	AA18		
4	VREFB4N0	IO			DIFFIO_RX_B42n	DIFFOUT_B42n	High_Speed	AE18		
4	VREFB4N0	IO			DIFFIO_TX_RX_B41p	DIFFOUT_B41p	High_Speed	Y18		
4	VREFB4N0	IO			DIFFIO_RX_B42p	DIFFOUT_B42p	High_Speed	AE17		
4	VREFB4N0	IO			DIFFIO_TX_RX_B43n	DIFFOUT_B43n	High_Speed	AD17		
4	VREFB4N0	IO			DIFFIO_RX_B44n	DIFFOUT_B44n	High_Speed	AF18		
4	VREFB4N0	IO			DIFFIO_TX_RX_B43p	DIFFOUT_B43p	High_Speed	AC17		
4	VREFB4N0	IO			DIFFIO_RX_B44p	DIFFOUT_B44p	High_Speed	AF19		
4	VREFB4N0	IO			DIFFIO_TX_RX_B45n	DIFFOUT_B45n	High_Speed	AA15		
4	VREFB4N0	IO			DIFFIO_RX_B46n	DIFFOUT_B46n	High_Speed	AD18		
4	VREFB4N0	IO			DIFFIO_TX_RX_B45p	DIFFOUT_B45p	High_Speed	AB15		
4	VREFB4N0	IO			DIFFIO_RX_B46p	DIFFOUT_B46p	High_Speed	AD19		
4	VREFB4N0	IO			DIFFIO_TX_RX_B47n	DIFFOUT_B47n	High_Speed	AA16		
4	VREFB4N0	IO			DIFFIO_RX_B48n	DIFFOUT_B48n	High_Speed	AF20		
4	VREFB4N0	IO			DIFFIO_TX_RX_B47p	DIFFOUT_B47p	High_Speed	AA17		
4	VREFB4N0	IO			DIFFIO_RX_B48p	DIFFOUT_B48p	High_Speed	AE20		
4	VREFB4N0	IO			DIFFIO_TX_RX_B49n	DIFFOUT_B49n	High_Speed	AF21		
4	VREFB4N0	IO			DIFFIO_RX_B50n	DIFFOUT_B50n	High_Speed	AC18		
4	VREFB4N0	IO			DIFFIO_TX_RX_B49p	DIFFOUT_B49p	High_Speed	AE21		
4	VREFB4N0	IO			DIFFIO_RX_B50p	DIFFOUT_B50p	High_Speed	AC19		
4	VREFB4N0	IO			DIFFIO_TX_RX_B51n	DIFFOUT_B51n	High_Speed	AB16		
4	VREFB4N0	IO			DIFFIO_RX_B52n	DIFFOUT_B52n	High_Speed	AD20		
4	VREFB4N0	IO			DIFFIO_TX_RX_B51p	DIFFOUT_B51p	High_Speed	AC16		
4	VREFB4N0	IO			DIFFIO_RX_B52p	DIFFOUT_B52p	High_Speed	AD21		
4	VREFB4N0	IO			DIFFIO_TX_RX_B53n	DIFFOUT_B53n	High_Speed	Y17		
4	VREFB4N0	IO			DIFFIO_RX_B54n	DIFFOUT_B54n	High_Speed	AF22		
4	VREFB4N0	IO			DIFFIO_TX_RX_B53p	DIFFOUT_B53p	High_Speed	Y16		
4	VREFB4N0	IO			DIFFIO_RX_B54p	DIFFOUT_B54p	High_Speed	AF23		
4	VREFB4N0	IO			DIFFIO_TX_RX_B55n	DIFFOUT_B55n	High_Speed	AB20		
4	VREFB4N0	IO			DIFFIO_RX_B56n	DIFFOUT_B56n	High_Speed	AE23		
4	VREFB4N0	IO			DIFFIO_TX_RX_B55p	DIFFOUT_B55p	High_Speed	AC20		
4	VREFB4N0	IO			DIFFIO_RX_B56p	DIFFOUT_B56p	High_Speed	AF24		
4	VREFB4N0	IO	PLL_B_CLKOUTn		DIFFIO_TX_RX_B57n	DIFFOUT_B57n	High_Speed	AB18		
4	VREFB4N0	IO			DIFFIO_RX_B58n	DIFFOUT_B58n	High_Speed	AC21		
4	VREFB4N0	IO	PLL_B_CLKOUTp		DIFFIO_TX_RX_B57p	DIFFOUT_B57p	High_Speed	AB19		
4	VREFB4N0	IO			DIFFIO_RX_B58p	DIFFOUT_B58p	High_Speed	AD22		
5	VREFB5N0	IO	RUP		DIFFIO_RX_R1p	DIFFOUT_R1p	High_Speed	AA19		
5	VREFB5N0	IO			DIFFIO_RX_R2p	DIFFOUT_R2p	High_Speed	Y22		
5	VREFB5N0	IO	RDN		DIFFIO_RX_R1n	DIFFOUT_R1n	High_Speed	AA20		
5	VREFB5N0	IO			DIFFIO_RX_R2n	DIFFOUT_R2n	High_Speed	W22		
5	VREFB5N0	IO			DIFFIO_RX_R3p	DIFFOUT_R3p	High_Speed	AA21		
5	VREFB5N0	IO			DIFFIO_RX_R4p	DIFFOUT_R4p	High_Speed	AC23		
5	VREFB5N0	IO			DIFFIO_RX_R3n	DIFFOUT_R3n	High_Speed	AB22		
5	VREFB5N0	IO			DIFFIO_RX_R4n	DIFFOUT_R4n	High_Speed	AC22		
5	VREFB5N0	IO			DIFFIO_RX_R5p	DIFFOUT_R5p	High_Speed	AD23		
5	VREFB5N0	IO			DIFFIO_RX_R6p	DIFFOUT_R6p	High_Speed	AE24		
5	VREFB5N0	IO			DIFFIO_RX_R5n	DIFFOUT_R5n	High_Speed	AD24		
5	VREFB5N0	IO			DIFFIO_RX_R6n	DIFFOUT_R6n	High_Speed	AE25		
5	VREFB5N0	IO			DIFFIO_RX_R7p	DIFFOUT_R7p	High_Speed	Y19		
5	VREFB5N0	IO			DIFFIO_RX_R8p	DIFFOUT_R8p	High_Speed	AB23		
5	VREFB5N0	IO			DIFFIO_RX_R7n	DIFFOUT_R7n	High_Speed	Y20		
5	VREFB5N0	IO			DIFFIO_RX_R8n	DIFFOUT_R8n	High_Speed	AC24		
5	VREFB5N0	IO			DIFFIO_RX_R9p	DIFFOUT_R9p	High_Speed	Y21		
5	VREFB5N0	IO			DIFFIO_RX_R10p	DIFFOUT_R10p	High_Speed	AA22		
5	VREFB5N0	IO			DIFFIO_RX_R9n	DIFFOUT_R9n	High_Speed	W21		
5	VREFB5N0	IO			DIFFIO_RX_R10n	DIFFOUT_R10n	High_Speed	AA23		
5	VREFB5N0	IO			DIFFIO_RX_R11p	DIFFOUT_R11p	High_Speed	AA24		
5	VREFB5N0	IO			DIFFIO_RX_R12p	DIFFOUT_R12p	High_Speed	AD25		
5	VREFB5N0	IO			DIFFIO_RX_R11n	DIFFOUT_R11n	High_Speed	AB24		
5	VREFB5N0	IO			DIFFIO_RX_R12n	DIFFOUT_R12n	High_Speed	AD26		
5	VREFB5N0	IO			DIFFIO_RX_R13p	DIFFOUT_R13p	High_Speed	U16	DQ0R	DQ0R
5	VREFB5N0	IO			DIFFIO_RX_R14p	DIFFOUT_R14p	High_Speed	AC25		
5	VREFB5N0	IO			DIFFIO_RX_R13n	DIFFOUT_R13n	High_Speed	U17	DQ0R	DQ0R
5	VREFB5N0	IO			DIFFIO_RX_R14n	DIFFOUT_R14n	High_Speed	AC26		
5	VREFB5N0	IO			DIFFIO_RX_R15p	DIFFOUT_R15p	High_Speed	V21	DQ0R	DQ0R
5	VREFB5N0	IO			DIFFIO_RX_R16p	DIFFOUT_R16p	High_Speed	V22	DQ0R	DQ0R
5	VREFB5N0	IO			DIFFIO_RX_R15n	DIFFOUT_R15n	High_Speed	U21	DM0R	DM0R
5	VREFB5N0	IO			DIFFIO_RX_R16n	DIFFOUT_R16n	High_Speed	V23	DQ0R	DQ0R
5	VREFB5N0	IO			DIFFIO_RX_R17p	DIFFOUT_R17p	High_Speed	W23		
5	VREFB5N0	IO			DIFFIO_RX_R18p	DIFFOUT_R18p	High_Speed	AA25		
5	VREFB5N0	IO			DIFFIO_RX_R17n	DIFFOUT_R17n	High_Speed	W24		
5	VREFB5N0	IO			DIFFIO_RX_R18n	DIFFOUT_R18n	High_Speed	AB26		
5	VREFB5N0	IO			DIFFIO_RX_R19p	DIFFOUT_R19p	High_Speed	T17		
5	VREFB5N0	IO			DIFFIO_RX_R20p	DIFFOUT_R20p	High_Speed	AA26		
5	VREFB5N0	IO			DIFFIO_RX_R19n	DIFFOUT_R19n	High_Speed	T16	DQ0R	DQ0R
5	VREFB5N0	IO			DIFFIO_RX_R20n	DIFFOUT_R20n	High_Speed	Y26		
5	VREFB5N0	IO			DIFFIO_RX_R21p	DIFFOUT_R21p	High_Speed	T21	DQS0R	DQS0R
5	VREFB5N0	IO			DIFFIO_RX_R22p	DIFFOUT_R22p	High_Speed	U23	DQ0R	DQ0R
5	VREFB5N0	IO			DIFFIO_RX_R21n	DIFFOUT_R21n	High_Speed	T22	DQS0R	DQS0R
5	VREFB5N0	IO			DIFFIO_RX_R22n	DIFFOUT_R22n	High_Speed	T23	DQ0R	DQ0R
5	VREFB5N0	IO			DIFFIO_RX_R23p	DIFFOUT_R23p	High_Speed	U24		
5	VREFB5N0	IO			DIFFIO_RX_R24p	DIFFOUT_R24p	High_Speed	Y24		
5	VREFB5N0	IO			DIFFIO_RX_R23n	DIFFOUT_R23n	High_Speed	U25		
5	VREFB5N0	IO			DIFFIO_RX_R24n	DIFFOUT_R24n	High_Speed	Y25		
5	VREFB5N0	IO			DIFFIO_RX_R25p	DIFFOUT_R25p	High_Speed	R16	DQ1R	DQ0R
5	VREFB5N0	IO			DIFFIO_RX_R26p	DIFFOUT_R26p	High_Speed	V24		

Bank Number	VREF	Pin Name/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	IO Performance	F672	DQS for X8	DQS for X16
5	VREFB5N0	IO			DIFFIO_RX_R25n	DIFFOUT_R25n	High_Speed	R17	DQ1R	DQ0R
5	VREFB5N0	IO			DIFFIO_RX_R26n	DIFFOUT_R26n	High_Speed	V25		
5	VREFB5N0	IO			DIFFIO_RX_R27p	DIFFOUT_R27p	High_Speed	T20	DQ1R	DQ0R
5	VREFB5N0	IO			DIFFIO_RX_R28p	DIFFOUT_R28p	High_Speed	R22	DQ1R	DQ0R
5	VREFB5N0	IO			DIFFIO_RX_R27n	DIFFOUT_R27n	High_Speed	R20	DM1R	DM0R
5	VREFB5N0	IO			DIFFIO_RX_R28n	DIFFOUT_R28n	High_Speed	R23	DQ1R	DQ0R
5	VREFB5N0	IO			DIFFIO_RX_R29p	DIFFOUT_R29p	High_Speed	T24		
5	VREFB5N0	IO						W26		
5	VREFB5N0	IO			DIFFIO_RX_R29n	DIFFOUT_R29n	High_Speed	R25		
5	VREFB5N0	IO	VREFB5N0					V26		
5	VREFB5N0	IO			DIFFIO_RX_R30p	DIFFOUT_R30p	High_Speed	P17	DQ1R	DQ0R
5	VREFB5N0	IO			DIFFIO_RX_R31p	DIFFOUT_R31p	High_Speed	U26		
5	VREFB5N0	IO			DIFFIO_RX_R30n	DIFFOUT_R30n	High_Speed	P16	DQ1R	DQ0R
5	VREFB5N0	IO			DIFFIO_RX_R31n	DIFFOUT_R31n	High_Speed	T26		
5	VREFB5N0	IO			DIFFIO_RX_R32p	DIFFOUT_R32p	High_Speed	P20	DQS1R	DQ0R
5	VREFB5N0	IO			DIFFIO_RX_R33p	DIFFOUT_R33p	High_Speed	P22	DQ1R	DQ0R
5	VREFB5N0	IO			DIFFIO_RX_R32n	DIFFOUT_R32n	High_Speed	P21	DQS1R	DQ0R
5	VREFB5N0	IO			DIFFIO_RX_R33n	DIFFOUT_R33n	High_Speed	P23	DQ1R	DQ0R
5	VREFB5N0	IO			DIFFIO_RX_R34p	DIFFOUT_R34p	High_Speed	R24		
5	VREFB5N0	IO			DIFFIO_RX_R35p	DIFFOUT_R35p	High_Speed	R26		
5	VREFB5N0	IO			DIFFIO_RX_R34n	DIFFOUT_R34n	High_Speed	P25		
5	VREFB5N0	IO			DIFFIO_RX_R35n	DIFFOUT_R35n	High_Speed	P26		
6	VREFB6N0	IO			DIFFIO_RX_R36p	DIFFOUT_R36p	High_Speed	N26		
6	VREFB6N0	IO			DIFFIO_RX_R37p	DIFFOUT_R37p	High_Speed	K26		
6	VREFB6N0	IO			DIFFIO_RX_R36n	DIFFOUT_R36n	High_Speed	M26		
6	VREFB6N0	IO			DIFFIO_RX_R37n	DIFFOUT_R37n	High_Speed	J26		
6	VREFB6N0	IO	CLK2p		DIFFIO_RX_R38p	DIFFOUT_R38p	High_Speed	N24		
6	VREFB6N0	IO			DIFFIO_RX_R39p	DIFFOUT_R39p	High_Speed	H26		
6	VREFB6N0	IO	CLK2n		DIFFIO_RX_R38n	DIFFOUT_R38n	High_Speed	N25		
6	VREFB6N0	IO			DIFFIO_RX_R39n	DIFFOUT_R39n	High_Speed	G26		
6	VREFB6N0	IO	CLK3p		DIFFIO_RX_R40p	DIFFOUT_R40p	High_Speed	M25		
6	VREFB6N0	IO			DIFFIO_RX_R41p	DIFFOUT_R41p	High_Speed	L25		
6	VREFB6N0	IO	CLK3n		DIFFIO_RX_R40n	DIFFOUT_R40n	High_Speed	M24		
6	VREFB6N0	IO			DIFFIO_RX_R41n	DIFFOUT_R41n	High_Speed	L26		
6	VREFB6N0	IO			DIFFIO_RX_R42p	DIFFOUT_R42p	High_Speed	K25		
6	VREFB6N0	IO			DIFFIO_RX_R43p	DIFFOUT_R43p	High_Speed	F26		
6	VREFB6N0	IO			DIFFIO_RX_R42n	DIFFOUT_R42n	High_Speed	J25		
6	VREFB6N0	IO			DIFFIO_RX_R43n	DIFFOUT_R43n	High_Speed	E26		
6	VREFB6N0	IO			DIFFIO_RX_R44p	DIFFOUT_R44p	High_Speed	N17	DQ2R	DQ1R
6	VREFB6N0	IO			DIFFIO_RX_R45p	DIFFOUT_R45p	High_Speed	H25		
6	VREFB6N0	IO			DIFFIO_RX_R44n	DIFFOUT_R44n	High_Speed	N16	DQ2R	DQ1R
6	VREFB6N0	IO			DIFFIO_RX_R45n	DIFFOUT_R45n	High_Speed	J24		
6	VREFB6N0	IO			DIFFIO_RX_R46p	DIFFOUT_R46p	High_Speed	N21	DQ2R	DQ1R
6	VREFB6N0	IO			DIFFIO_RX_R47p	DIFFOUT_R47p	High_Speed	N23	DQ2R	DQ1R
6	VREFB6N0	IO			DIFFIO_RX_R46n	DIFFOUT_R46n	High_Speed	N22	DM2R	DM1R
6	VREFB6N0	IO			DIFFIO_RX_R47n	DIFFOUT_R47n	High_Speed	M23	DQ2R	DQ1R
6	VREFB6N0	IO			DIFFIO_RX_R48p	DIFFOUT_R48p	High_Speed	K24		
6	VREFB6N0	IO			DIFFIO_RX_R49p	DIFFOUT_R49p	High_Speed	D26		
6	VREFB6N0	IO			DIFFIO_RX_R48n	DIFFOUT_R48n	High_Speed	K23		
6	VREFB6N0	IO			DIFFIO_RX_R49n	DIFFOUT_R49n	High_Speed	C26		
6	VREFB6N0	IO	DPCLK3		DIFFIO_RX_R50p	DIFFOUT_R50p	High_Speed	M17	DQS2R	DQS1R
6	VREFB6N0	IO	VREFB6N0					G25		
6	VREFB6N0	IO	DPCLK2		DIFFIO_RX_R50n	DIFFOUT_R50n	High_Speed	M16	DQS2R	DQS1R
6	VREFB6N0	IO						F25		
6	VREFB6N0	IO			DIFFIO_RX_R51p	DIFFOUT_R51p	High_Speed	M22	DQ2R	DQ1R
6	VREFB6N0	IO			DIFFIO_RX_R52p	DIFFOUT_R52p	High_Speed	L22	DQ2R	DQ1R
6	VREFB6N0	IO			DIFFIO_RX_R51n	DIFFOUT_R51n	High_Speed	M21	DQ2R	DQ1R
6	VREFB6N0	IO			DIFFIO_RX_R52n	DIFFOUT_R52n	High_Speed	L23	DQ2R	DQ1R
6	VREFB6N0	IO			DIFFIO_RX_R53p	DIFFOUT_R53p	High_Speed	J23		
6	VREFB6N0	IO			DIFFIO_RX_R54p	DIFFOUT_R54p	High_Speed	D25		
6	VREFB6N0	IO			DIFFIO_RX_R53n	DIFFOUT_R53n	High_Speed	H23		
6	VREFB6N0	IO			DIFFIO_RX_R54n	DIFFOUT_R54n	High_Speed	C25		
6	VREFB6N0	IO			DIFFIO_RX_R55p	DIFFOUT_R55p	High_Speed	L16	DQS3R	DQ1R
6	VREFB6N0	IO			DIFFIO_RX_R56p	DIFFOUT_R56p	High_Speed	G24		
6	VREFB6N0	IO			DIFFIO_RX_R55n	DIFFOUT_R55n	High_Speed	L17	DQS3R	DQ1R
6	VREFB6N0	IO			DIFFIO_RX_R56n	DIFFOUT_R56n	High_Speed	F24		
6	VREFB6N0	IO			DIFFIO_RX_R57p	DIFFOUT_R57p	High_Speed	L21	DQ3R	DQ1R
6	VREFB6N0	IO			DIFFIO_RX_R58p	DIFFOUT_R58p	High_Speed	K22	DQ3R	DQ1R
6	VREFB6N0	IO			DIFFIO_RX_R57n	DIFFOUT_R57n	High_Speed	K21	DQ3R	DQ1R
6	VREFB6N0	IO			DIFFIO_RX_R58n	DIFFOUT_R58n	High_Speed	J22	DQ3R	DQ1R
6	VREFB6N0	IO			DIFFIO_RX_R59p	DIFFOUT_R59p	High_Speed	G23		
6	VREFB6N0	IO			DIFFIO_RX_R60p	DIFFOUT_R60p	High_Speed	D24		
6	VREFB6N0	IO			DIFFIO_RX_R59n	DIFFOUT_R59n	High_Speed	F23		
6	VREFB6N0	IO			DIFFIO_RX_R60n	DIFFOUT_R60n	High_Speed	E24		
6	VREFB6N0	IO			DIFFIO_RX_R61p	DIFFOUT_R61p	High_Speed	K16	DQ3R	DQ1R
6	VREFB6N0	IO			DIFFIO_RX_R62p	DIFFOUT_R62p	High_Speed	C24		
6	VREFB6N0	IO			DIFFIO_RX_R61n	DIFFOUT_R61n	High_Speed	K17	DM3R	DM1R
6	VREFB6N0	IO			DIFFIO_RX_R62n	DIFFOUT_R62n	High_Speed	B25		
6	VREFB6N0	IO			DIFFIO_RX_R63p	DIFFOUT_R63p	High_Speed	J20	DQ3R	DQ1R
6	VREFB6N0	IO			DIFFIO_RX_R64p	DIFFOUT_R64p	High_Speed	H21	DQ3R	DQ1R
6	VREFB6N0	IO			DIFFIO_RX_R63n	DIFFOUT_R63n	High_Speed	H20	DQ3R	DQ1R
6	VREFB6N0	IO			DIFFIO_RX_R64n	DIFFOUT_R64n	High_Speed	H22	DQ3R	DQ1R
6	VREFB6N0	IO			DIFFIO_RX_R65p	DIFFOUT_R65p	High_Speed	G21		
6	VREFB6N0	IO			DIFFIO_RX_R66p	DIFFOUT_R66p	High_Speed	B24		
6	VREFB6N0	IO			DIFFIO_RX_R65n	DIFFOUT_R65n	High_Speed	G22		
6	VREFB6N0	IO			DIFFIO_RX_R66n	DIFFOUT_R66n	High_Speed	A24		
6	VREFB6N0	IO			DIFFIO_RX_R67p	DIFFOUT_R67p	High_Speed	G20		
6	VREFB6N0	IO			DIFFIO_RX_R68p	DIFFOUT_R68p	High_Speed	B23		
6	VREFB6N0	IO			DIFFIO_RX_R67n	DIFFOUT_R67n	High_Speed	F21		
6	VREFB6N0	IO			DIFFIO_RX_R68n	DIFFOUT_R68n	High_Speed	A23		
6	VREFB6N0	IO	PLL_R_CLKOUTp		DIFFIO_RX_R69p	DIFFOUT_R69p	High_Speed	E22		
6	VREFB6N0	IO			DIFFIO_RX_R70p	DIFFOUT_R70p	High_Speed	D23	CK_6	CK_6
6	VREFB6N0	IO	PLL_R_CLKOUTn		DIFFIO_RX_R69n	DIFFOUT_R69n	High_Speed	E21		
6	VREFB6N0	IO			DIFFIO_RX_R70n	DIFFOUT_R70n	High_Speed	E23	CK#_6	CK#_6
7	VREFB7N0	IO			DIFFIO_RX_T1p	DIFFOUT_T1p	High_Speed	B22		
7	VREFB7N0	IO			DIFFIO_RX_T2p	DIFFOUT_T2p	High_Speed	D22		
7	VREFB7N0	IO			DIFFIO_RX_T1n	DIFFOUT_T1n	High_Speed	A22		
7	VREFB7N0	IO			DIFFIO_RX_T2n	DIFFOUT_T2n	High_Speed	C22		

Bank Number	VREF	Pin Name/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	IO Performance	F672	DQS for X8	DQS for X16
7	VREFB7N0	IO			DIFFIO_RX_T3p	DIFFOUT_T3p	High_Speed	F20		
7	VREFB7N0	IO			DIFFIO_RX_T4p	DIFFOUT_T4p	High_Speed	D20		
7	VREFB7N0	IO			DIFFIO_RX_T3n	DIFFOUT_T3n	High_Speed	E20		
7	VREFB7N0	IO			DIFFIO_RX_T4n	DIFFOUT_T4n	High_Speed	D21		
7	VREFB7N0	IO			DIFFIO_RX_T5p	DIFFOUT_T5p	High_Speed	G19		
7	VREFB7N0	IO			DIFFIO_RX_T6p	DIFFOUT_T6p	High_Speed	C21		
7	VREFB7N0	IO			DIFFIO_RX_T5n	DIFFOUT_T5n	High_Speed	F19		
7	VREFB7N0	IO			DIFFIO_RX_T6n	DIFFOUT_T6n	High_Speed	C20		
7	VREFB7N0	IO			DIFFIO_RX_T7p	DIFFOUT_T7p	High_Speed	G17		
7	VREFB7N0	IO			DIFFIO_RX_T8p	DIFFOUT_T8p	High_Speed	B21		
7	VREFB7N0	IO			DIFFIO_RX_T7n	DIFFOUT_T7n	High_Speed	F17		
7	VREFB7N0	IO			DIFFIO_RX_T8n	DIFFOUT_T8n	High_Speed	A21		
7	VREFB7N0	IO			DIFFIO_RX_T9p	DIFFOUT_T9p	High_Speed	E17		
7	VREFB7N0	IO			DIFFIO_RX_T10p	DIFFOUT_T10p	High_Speed	E18		
7	VREFB7N0	IO			DIFFIO_RX_T9n	DIFFOUT_T9n	High_Speed	E16		
7	VREFB7N0	IO			DIFFIO_RX_T10n	DIFFOUT_T10n	High_Speed	D18		
7	VREFB7N0	IO			DIFFIO_RX_T11p	DIFFOUT_T11p	High_Speed	G18		
7	VREFB7N0	IO			DIFFIO_RX_T12p	DIFFOUT_T12p	High_Speed	D19		
7	VREFB7N0	IO			DIFFIO_RX_T11n	DIFFOUT_T11n	High_Speed	F18		
7	VREFB7N0	IO			DIFFIO_RX_T12n	DIFFOUT_T12n	High_Speed	C19		
7	VREFB7N0	IO			DIFFIO_RX_T13p	DIFFOUT_T13p	High_Speed	C18		
7	VREFB7N0	IO			DIFFIO_RX_T14p	DIFFOUT_T14p	High_Speed	A20		
7	VREFB7N0	IO			DIFFIO_RX_T13n	DIFFOUT_T13n	High_Speed	C17		
7	VREFB7N0	IO			DIFFIO_RX_T14n	DIFFOUT_T14n	High_Speed	A19		
7	VREFB7N0	IO			DIFFIO_RX_T15p	DIFFOUT_T15p	High_Speed	G15		
7	VREFB7N0	IO			DIFFIO_RX_T16p	DIFFOUT_T16p	High_Speed	B19		
7	VREFB7N0	IO			DIFFIO_RX_T15n	DIFFOUT_T15n	High_Speed	F16		
7	VREFB7N0	IO			DIFFIO_RX_T16n	DIFFOUT_T16n	High_Speed	B18		
7	VREFB7N0	IO			DIFFIO_RX_T17p	DIFFOUT_T17p	High_Speed	K15		
7	VREFB7N0	IO						A18		
7	VREFB7N0	IO			DIFFIO_RX_T17n	DIFFOUT_T17n	High_Speed	L15		
7	VREFB7N0	IO	VREFB7N0					A17		
7	VREFB7N0	IO			DIFFIO_RX_T18p	DIFFOUT_T18p	High_Speed	F15		
7	VREFB7N0	IO			DIFFIO_RX_T19p	DIFFOUT_T19p	High_Speed	C16		
7	VREFB7N0	IO			DIFFIO_RX_T18n	DIFFOUT_T18n	High_Speed	E15		
7	VREFB7N0	IO			DIFFIO_RX_T19n	DIFFOUT_T19n	High_Speed	D17		
7	VREFB7N0	IO			DIFFIO_RX_T20p	DIFFOUT_T20p	High_Speed	G14		
7	VREFB7N0	IO			DIFFIO_RX_T21p	DIFFOUT_T21p	High_Speed	D15		
7	VREFB7N0	IO			DIFFIO_RX_T20n	DIFFOUT_T20n	High_Speed	F14		
7	VREFB7N0	IO			DIFFIO_RX_T21n	DIFFOUT_T21n	High_Speed	D14		
7	VREFB7N0	IO			DIFFIO_RX_T22p	DIFFOUT_T22p	High_Speed	L14		
7	VREFB7N0	IO			DIFFIO_RX_T23p	DIFFOUT_T23p	High_Speed	B16		
7	VREFB7N0	IO			DIFFIO_RX_T22n	DIFFOUT_T22n	High_Speed	K14		
7	VREFB7N0	IO			DIFFIO_RX_T23n	DIFFOUT_T23n	High_Speed	B15		
7	VREFB7N0	IO			DIFFIO_RX_T24p	DIFFOUT_T24p	High_Speed	E14		
7	VREFB7N0	IO			DIFFIO_RX_T25p	DIFFOUT_T25p	High_Speed	A16		
7	VREFB7N0	IO			DIFFIO_RX_T24n	DIFFOUT_T24n	High_Speed	D13		
7	VREFB7N0	IO			DIFFIO_RX_T25n	DIFFOUT_T25n	High_Speed	A15		
7	VREFB7N0	IO			DIFFIO_RX_T26p	DIFFOUT_T26p	High_Speed	G13		
7	VREFB7N0	IO			DIFFIO_RX_T27p	DIFFOUT_T27p	High_Speed	C15		
7	VREFB7N0	IO			DIFFIO_RX_T26n	DIFFOUT_T26n	High_Speed	F13		
7	VREFB7N0	IO			DIFFIO_RX_T27n	DIFFOUT_T27n	High_Speed	C14		
7	VREFB7N0	IO			DIFFIO_RX_T28p	DIFFOUT_T28p	High_Speed	L13		
7	VREFB7N0	IO			DIFFIO_RX_T29p	DIFFOUT_T29p	High_Speed	A14		
7	VREFB7N0	IO			DIFFIO_RX_T28n	DIFFOUT_T28n	High_Speed	K13		
7	VREFB7N0	IO			DIFFIO_RX_T29n	DIFFOUT_T29n	High_Speed	A13		
7	VREFB7N0	IO			DIFFIO_RX_T30p	DIFFOUT_T30p	High_Speed	C13		
7	VREFB7N0	IO			DIFFIO_RX_T31p	DIFFOUT_T31p	High_Speed	B12		
7	VREFB7N0	IO			DIFFIO_RX_T30n	DIFFOUT_T30n	High_Speed	B13		
7	VREFB7N0	IO			DIFFIO_RX_T31n	DIFFOUT_T31n	High_Speed	A12		
8	VREFB8N0	IO			DIFFIO_RX_T32p	DIFFOUT_T32p	Low_Speed	G12		
8	VREFB8N0	IO			DIFFIO_RX_T33p	DIFFOUT_T33p	Low_Speed	D12		
8	VREFB8N0	IO			DIFFIO_RX_T32n	DIFFOUT_T32n	Low_Speed	F12		
8	VREFB8N0	IO			DIFFIO_RX_T33n	DIFFOUT_T33n	Low_Speed	E12		
8	VREFB8N0	IO			DIFFIO_RX_T34p	DIFFOUT_T34p	Low_Speed	L12		
8	VREFB8N0	IO			DIFFIO_RX_T35p	DIFFOUT_T35p	Low_Speed	C12		
8	VREFB8N0	IO			DIFFIO_RX_T34n	DIFFOUT_T34n	Low_Speed	K12		
8	VREFB8N0	IO			DIFFIO_RX_T35n	DIFFOUT_T35n	Low_Speed	B11		
8	VREFB8N0	IO			DIFFIO_RX_T36p	DIFFOUT_T36p	Low_Speed	C10		
8	VREFB8N0	IO			DIFFIO_RX_T37p	DIFFOUT_T37p	Low_Speed	A11		
8	VREFB8N0	IO			DIFFIO_RX_T36n	DIFFOUT_T36n	Low_Speed	B10		
8	VREFB8N0	IO			DIFFIO_RX_T37n	DIFFOUT_T37n	Low_Speed	A10		
8	VREFB8N0	IO	CLK4p		DIFFIO_RX_T38p	DIFFOUT_T38p	Low_Speed	E11		
8	VREFB8N0	IO			DIFFIO_RX_T39p	DIFFOUT_T39p	Low_Speed	D10		
8	VREFB8N0	IO	CLK4n		DIFFIO_RX_T38n	DIFFOUT_T38n	Low_Speed	D11		
8	VREFB8N0	IO			DIFFIO_RX_T39n	DIFFOUT_T39n	Low_Speed	D9		
8	VREFB8N0	IO	CLK5p		DIFFIO_RX_T40p	DIFFOUT_T40p	Low_Speed	K11		
8	VREFB8N0	IO			DIFFIO_RX_T41p	DIFFOUT_T41p	Low_Speed	C9		
8	VREFB8N0	IO	CLK5n		DIFFIO_RX_T40n	DIFFOUT_T40n	Low_Speed	K10		
8	VREFB8N0	IO			DIFFIO_RX_T41n	DIFFOUT_T41n	Low_Speed	B9		
8	VREFB8N0	IO			DIFFIO_RX_T42p	DIFFOUT_T42p	Low_Speed	B8		
8	VREFB8N0	IO			DIFFIO_RX_T43p	DIFFOUT_T43p	Low_Speed	A9		
8	VREFB8N0	IO		DEV_CLRn	DIFFIO_RX_T42n	DIFFOUT_T42n	Low_Speed	C7		
8	VREFB8N0	IO			DIFFIO_RX_T43n	DIFFOUT_T43n	Low_Speed	A8		
8	VREFB8N0	IO		DEV_OE	DIFFIO_RX_T44p	DIFFOUT_T44p	Low_Speed	G10		
8	VREFB8N0	IO						A7		
8	VREFB8N0	IO			DIFFIO_RX_T44n	DIFFOUT_T44n	Low_Speed	F11		
8	VREFB8N0	IO	VREFB8N0					A6		
8	VREFB8N0	IO		CONFIG_SEL				F10		
8	VREFB8N0	IO			DIFFIO_RX_T45p	DIFFOUT_T45p	Low_Speed	B7		
8	VREFB8N0	Input_only		nCONFIG				G9		
8	VREFB8N0	IO			DIFFIO_RX_T45n	DIFFOUT_T45n	Low_Speed	B6		
8	VREFB8N0	IO			DIFFIO_RX_T46p	DIFFOUT_T46p	Low_Speed	D6		
8	VREFB8N0	IO			DIFFIO_RX_T47p	DIFFOUT_T47p	Low_Speed	E8		
8	VREFB8N0	IO			DIFFIO_RX_T46n	DIFFOUT_T46n	Low_Speed	C6		
8	VREFB8N0	IO			DIFFIO_RX_T47n	DIFFOUT_T47n	Low_Speed	D8		
8	VREFB8N0	IO			DIFFIO_RX_T48p	DIFFOUT_T48p	Low_Speed	E10		
8	VREFB8N0	IO			DIFFIO_RX_T49p	DIFFOUT_T49p	Low_Speed	C5		

Bank Number	VREF	Pin Name/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	IO Performance	F672	DQS for X8	DQS for X16
8	VREFB8N0	IO		CRC_ERROR	DIFFIO_RX_T48n	DIFFOUT_T48n	Low_Speed	E9		
8	VREFB8N0	IO			DIFFIO_RX_T49n	DIFFOUT_T49n	Low_Speed	D5		
8	VREFB8N0	IO		nSTATUS	DIFFIO_RX_T50p	DIFFOUT_T50p	Low_Speed	F9		
8	VREFB8N0	IO			DIFFIO_RX_T51p	DIFFOUT_T51p	Low_Speed	A5		
8	VREFB8N0	IO		CONF_DONE	DIFFIO_RX_T50n	DIFFOUT_T50n	Low_Speed	F8		
8	VREFB8N0	IO			DIFFIO_RX_T51n	DIFFOUT_T51n	Low_Speed	A4		
8	VREFB8N0	IO	PLL_T_CLKOUTp		DIFFIO_RX_T52p	DIFFOUT_T52p	Low_Speed	E7		
8	VREFB8N0	IO			DIFFIO_RX_T53p	DIFFOUT_T53p	Low_Speed	B4		
8	VREFB8N0	IO	PLL_T_CLKOUTn		DIFFIO_RX_T52n	DIFFOUT_T52n	Low_Speed	D7		
8	VREFB8N0	IO			DIFFIO_RX_T53n	DIFFOUT_T53n	Low_Speed	A3		
		GND						G5		
		GND						J5		
		GND						L1		
		GND						H5		
		GND						Y23		
		GND						W9		
		GND						W25		
		GND						W2		
		GND						W18		
		GND						W15		
		GND						V5		
		GND						V20		
		GND						V16		
		GND						V13		
		GND						V11		
		GND						U7		
		GND						U22		
		GND						U19		
		GND						T9		
		GND						T25		
		GND						T2		
		GND						R8		
		GND						R21		
		GND						R18		
		GND						R14		
		GND						R12		
		GND						P5		
		GND						P24		
		GND						P15		
		GND						N9		
		GND						N2		
		GND						N19		
		GND						N12		
		GND						M20		
		GND						M15		
		GND						M13		
		GND						L5		
		GND						L24		
		GND						L18		
		GND						K8		
		GND						K2		
		GND						K19		
		GND						J21		
		GND						J17		
		GND						J15		
		GND						J10		
		GND						H9		
		GND						H7		
		GND						H4		
		GND						H24		
		GND						H18		
		GND						H13		
		GND						G8		
		GND						G2		
		GND						G16		
		GND						G11		
		GND						F7		
		GND						F22		
		GND						E6		
		GND						E5		
		GND						E25		
		GND						E19		
		GND						E13		
		GND						D16		
		GND						C8		
		GND						C3		
		GND						C23		
		GND						C11		
		GND						B5		
		GND						B26		
		GND						B20		
		GND						B17		
		GND						B14		
		GND						B1		
		GND						AF25		
		GND						AF2		
		GND						AE9		
		GND						AE5		
		GND						AE26		
		GND						AE22		
		GND						AE19		
		GND						AE16		
		GND						AE13		
		GND						AE1		
		GND						AB8		
		GND						AB5		
		GND						AB25		
		GND						AB21		

Bank Number	VREF	Pin Name/Function	Optional Function(s)	Configuration Function	Dedicated Tx/Rx Channel	Emulated LVDS Output Channel	IO Performance	F672	DQS for X8	DQS for X16
		GND						AB2		
		GND						AB17		
		GND						AB14		
		GND						AB11		
		GND						A25		
		GND						A2		
		VCC						R15		
		VCC						R13		
		VCC						P14		
		VCC						P13		
		VCC						P12		
		VCC						N15		
		VCC						N14		
		VCC						N13		
		VCC						M14		
		VCC						M12		
		VCC						K9		
		DNU						L2		
		VCCD_PLL1						W8		
		VCCD_PLL2						H19		
		VCCD_PLL3						H8		
		VCCD_PLL4						W19		
		VCCIO1A						L9		
		VCCIO1A						L8		
		VCCIO1B						P8		
		VCCIO1B						N8		
		VCCIO1B						M9		
		VCCIO1B						M8		
		VCCIO2						V8		
		VCCIO2						U9		
		VCCIO2						U8		
		VCCIO2						T8		
		VCCIO2						T7		
		VCCIO2						R9		
		VCCIO2						P9		
		VCCIO3						W12		
		VCCIO3						W11		
		VCCIO3						W10		
		VCCIO3						V12		
		VCCIO3						V10		
		VCCIO4						Y15		
		VCCIO4						W17		
		VCCIO4						W16		
		VCCIO4						W14		
		VCCIO4						W13		
		VCCIO4						V17		
		VCCIO4						V15		
		VCCIO4						V14		
		VCCIO5						W20		
		VCCIO5						V19		
		VCCIO5						U20		
		VCCIO5						U18		
		VCCIO5						T19		
		VCCIO5						T18		
		VCCIO5						R19		
		VCCIO5						P19		
		VCCIO5						P18		
		VCCIO6						N20		
		VCCIO6						N18		
		VCCIO6						M19		
		VCCIO6						M18		
		VCCIO6						L20		
		VCCIO6						L19		
		VCCIO6						K20		
		VCCIO6						K18		
		VCCIO6						J19		
		VCCIO7						J16		
		VCCIO7						J14		
		VCCIO7						J13		
		VCCIO7						H17		
		VCCIO7						H16		
		VCCIO7						H15		
		VCCIO7						H14		
		VCCIO8						J12		
		VCCIO8						J11		
		VCCIO8						H12		
		VCCIO8						H11		
		VCCA1						H10		
		VCCA2						V9		
		VCCA3						J18		
		VCCA3						J6		
		VCCA3						J9		
		VCCA3						H6		
		VCCA4						V18		

Note:
(1) For more information about pin definition and pin connection guidelines, refer to the [MAX 10 FPGA Device Family Pin Connection Guidelines](#).

Date	Version	Changes Made
September 2014	2014.09.22	Initial release.
December 2014	2014.12.15	-Updated the BOOT_SEL pin name to CONFIG_SEL pin name. -Removed differential pair pins for non-differential function support.
December 2016	2016.12.23	Removed I/O performance for single-ended pins.
February 2017	2017.02.21	Rebranded as Intel.