

# Pin List: XEM6310MT

2020-09-30

Connector	Pin	FPGA Pin	Description	Length (mm)	BRK6310MT
JP2	1		+VDC		JP2A-1
JP2	2		VCCO0		JP2A-2
JP2	3		+VDC		JP2A-3
JP2	4		VCCO0		JP2A-4
JP2	5		+VDC		JP2A-5
JP2	6		+1.2VDD		JP2A-6
JP2	7		+1.8VDD		JP2A-7
JP2	8		+1.2VDD		JP2A-8
JP2	9		+1.8VDD		JP2A-9
JP2	10		DGND		JP2A-10
JP2	11		+3.3VDD		JP2A-11
JP2	12	R8	L59N_2	48.538	JP2A-12
JP2	13		+3.3VDD		JP2A-13
JP2	14		DGND		JP2A-14
JP2	15		+3.3VDD		JP2A-15
JP2	16		DGND		JP2A-16
JP2	17	B20	L65P_0	61.552	JP2A-17
JP2	18	C19	L64P_0	66.977	JP2A-18
JP2	19	A20	L65N_0	59.892	JP2A-19
JP2	20	A19	L64N_0	64.444	JP2A-20
JP2	21	B18	L63P_0	42.809	JP2A-21
JP2	22	C17	L50P_0	51.818	JP2A-22
JP2	23	A18	L63N_0	41.106	JP2A-23
JP2	24	A17	L50N_0	49.117	JP2A-24
JP2	25	C5	L8P_0	31.274	JP2A-25
JP2	26	C4	L6P_0	36.002	JP2A-26
JP2	27	A5	L8N_VREF_0	28.526	JP2A-27
JP2	28	A4	L6N_0	33.201	JP2A-28
JP2	29	B3	L5P_0	24.723	JP2A-29
JP2	30	B2	L3P_0	32.653	JP2A-30
JP2	31	A3	L5N_0	22.942	JP2A-31

Connector	Pin	FPGA Pin	Description	Length (mm)	BRK6310MT
JP2	32	A2	L3N_0	30.429	JP2A-32
JP2	33	C3	L1P_0	27.741	JP2A-33
JP2	34	D4	L2P_0	33.384	JP2A-34
JP2	35	D3	L1N_0	25.163	JP2A-35
JP2	36	D5	L2N_0	34.984	JP2A-36
JP2	37	E5	L4P_0	24.654	JP2A-37
JP2	38	D18	L62P_0	77.825	JP2A-38
JP2	39	E6	L4N_0	26.471	JP2A-39
JP2	40	D19	L62N_VREF_0	75.684	JP2A-40
JP2	41	G8	L32P_0	38.425	JP2B-41
JP2	42	D17	L66P_0	76.936	JP2B-42
JP2	43	F9	L32N_0	40.529	JP2B-43
JP2	44	C18	L66N_0	77.180	JP2B-44
JP2	45	G9	L34P_GCLK19_0	38.322	JP2B-45
JP2	46	F7	L7P_0	45.513	JP2B-46
JP2	47	F10	L34N_GCLK18_0	40.486	JP2B-47
JP2	48	F8	L7N_0	46.088	JP2B-48
JP2	49	H10	L33P_0	39.236	JP2B-49
JP2	50	H13	L38P_0	65.023	JP2B-50
JP2	51	H11	L33N_0	40.683	JP2B-51
JP2	52	G13	L38N_VREF_0	64.538	JP2B-52
JP2	53	F14	L36P_GCLK15_0	54.196	JP2B-53
JP2	54	H14	L49P_0	58.343	JP2B-54
JP2	55	F15	L36N_GCLK14_0	54.118	JP2B-55
JP2	56	G15	L49N_0	59.729	JP2B-56
JP2	57	G16	L51P_0	62.703	JP2B-57
JP2	58	E16	L37P_GCLK13_0	67.989	JP2B-58
JP2	59	F17	L51N_0	63.596	JP2B-59
JP2	60	F16	L37N_GCLK12_0	67.275	JP2B-60
JP2	61	P17	L71P_1	51.143	JP2B-61
JP2	62	M17	L61P_1	55.535	JP2B-62
JP2	63	P18	L71N_1	53.426	JP2B-63
JP2	64	M18	L61N_1	56.435	JP2B-64
JP2	65	R17	L72P_1	51.113	JP2B-65

Connector	Pin	FPGA Pin	Description	Length (mm)	BRK6310MT
JP2	66	N16	L60P_1	61.776	JP2B-66
JP2	67	T17	L72N_1	50.009	JP2B-67
JP2	68	P16	L60N_1	60.975	JP2B-68
JP2	69	T19	L73P_1	51.957	JP2B-69
JP2	70	R15	L70P_1	53.658	JP2B-70
JP2	71	T18	L73N_1	50.429	JP2B-71
JP2	72	R16	L70N_1	57.204	JP2B-72
JP2	73		DGND		JP2B-73
JP2	74	U19	L59P_1	62.361	JP2B-74
JP2	75		DGND		JP2B-75
JP2	76	T20	L59N_1	62.766	JP2B-76
JP2	77	H12	L35P_GCLK17_0	52.817	JP2B-77
JP2	78		DGND		JP2B-78
JP2	79	G11	L35N_GCLK16_0	52.575	JP2B-79
JP2	80		DGND		JP2B-80
JP3	1		DGND		JP3A-1
JP3	2	L22	L43N_GCLK4_1	33.930	JP3A-2
JP3	3		DGND		JP3A-3
JP3	4	L20	L43P_GCLK5_1	35.043	JP3A-4
JP3	5	W22	L51N_1	17.928	JP3A-5
JP3	6		DGND		JP3A-6
JP3	7	W20	L51P_1	19.482	JP3A-7
JP3	8		DGND		JP3A-8
JP3	9	Y22	L52N_1	12.557	JP3A-9
JP3	10	V22	L50N_1	20.673	JP3A-10
JP3	11	Y21	L52P_1	12.671	JP3A-11
JP3	12	V21	L50P_1	21.939	JP3A-12
JP3	13	U22	L49N_1	19.512	JP3A-13
JP3	14	R22	L47N_1	21.910	JP3A-14
JP3	15	U20	L49P_1	21.769	JP3A-15
JP3	16	R20	L47P_1	23.003	JP3A-16
JP3	17	T22	L48N_1	15.054	JP3A-17
JP3	18	P22	L46N_1	21.951	JP3A-18
JP3	19	T21	L48P_1	15.147	JP3A-19

Connector	Pin	FPGA Pin	Description	Length (mm)	BRK6310MT
JP3	20	P21	L46P_1	23.216	JP3A-20
JP3	21	N19	L42N_GCLK6_1	19.989	JP3A-21
JP3	22	N22	L45N_1	21.175	JP3A-22
JP3	23	P20	L42P_GCLK7_1	17.420	JP3A-23
JP3	24	N20	L45P_1	23.443	JP3A-24
JP3	25	M19	L40N_GCLK10_1	20.064	JP3A-25
JP3	26	K16	L21N_1	31.702	JP3A-26
JP3	27	M20	L40P_GCLK11_1	17.873	JP3A-27
JP3	28	L15	L21P_1	29.176	JP3A-28
JP3	29	N15	L58N_1	21.033	JP3A-29
JP3	30	M22	L44N_1	18.876	JP3A-30
JP3	31	M16	L58P_1	19.757	JP3A-31
JP3	32	M21	L44P_1	19.112	JP3A-32
JP3	33	L17	L36N_1	17.747	JP3A-33
JP3	34	K18	L34N_1	25.923	JP3A-34
JP3	35	K17	L36P_1	18.324	JP3A-35
JP3	36	K19	L34P_1	25.432	JP3A-36
JP3	37	J17	L19N_1	24.503	JP3A-37
JP3	38	H20	L33N_1	26.532	JP3A-38
JP3	39	J16	L19P_1	24.090	JP3A-39
JP3	40	J19	L33P_1	26.538	JP3A-40
JP3	41	L19	L38N_1	10.451	JP3A-41
JP3	42	K22	L41N_GCLK8_1	16.338	JP3A-42
JP3	43	K20	L38P_1	9.368	JP3A-43
JP3	44	K21	L41P_GCLK9_1	17.433	JP3A-44
JP3	45	H17	L9N_1	16.585	JP3A-45
JP3	46	J22	L39N_1	16.816	JP3A-46
JP3	47	H16	L9P_1	17.270	JP3A-47
JP3	48	J20	L39P_1	18.961	JP3A-48
JP3	49	H19	L30N_1	11.495	JP3A-49
JP3	50	G22	L35N_1	17.509	JP3A-50
JP3	51	H18	L30P_1	13.003	JP3A-51
JP3	52	G20	L35P_1	19.602	JP3A-52
JP3	53	H22	L37N_1	10.485	JP3A-53

Connector	Pin	FPGA Pin	Description	Length (mm)	BRK6310MT
JP3	54	F20	L29N_1	20.494	JP3A-54
JP3	55	H21	L37P_1	11.776	JP3A-55
JP3	56	G19	L29P_1	22.882	JP3A-56
JP3	57	F22	L31N_1	7.441	JP3A-57
JP3	58	E22	L32N_1	16.990	JP3A-58
JP3	59	F21	L31P_1	8.530	JP3A-59
JP3	60	E20	L32P_1	19.093	JP3A-60
JP3	61	C22	L20N_1	10.151	JP3A-61
JP3	62	B22	L10N_1	17.311	JP3A-62
JP3	63	C20	L20P_1	12.394	JP3A-63
JP3	64	B21	L10P_1	18.609	JP3A-64
JP3	65		+VCCO1		JP3A-65
JP3	66		DGND		JP3A-66
JP3	67		+VCCO1		JP3A-67
JP3	68		DGND		JP3A-68
JP3	69		RFUSE		JP3A-69
JP3	70	R11	L22P_2	35.438	JP3A-70
JP3	71		VREF Bank 1		JP3A-71
JP3	72		JTAG_TDI		JP3A-72, JP4-10
JP3	73		+3.3VDD		JP3A-73
JP3	74		JTAG_TMS		JP3A-74, JP4-4
JP3	75		+3.3VDD		JP3A-75
JP3	76		JTAG_TCK		JP3A-76, JP4-6
JP3	77		+3.3VDD		JP3A-77
JP3	78		JTAG_TDO		JP3A-78, JP4-8
JP3	79		+3.3VDD		JP3A-79
JP3	80		+VBATT		JP3A-80
JP1	1	D7	MGTRXP0_101	5.001 + 24.858	RX101_0+
JP1	2	B16	MGTTXP1_123	20.488	TX123_1+
JP1	3	C7	MGTRXN0_101	5.001 + 24.800	RX101_0-
JP1	4	A16	MGTTXN1_123	20.563	TX123_1-
JP1	5		DGND		
JP1	6		DGND		
JP1	7	B6	MGTTXP0_101	23.029	TX101_0+

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JP1	8	D15	MGTRXP1_123	2.658 + 25.397	RX123_1+
JP1	9	A6	MGTTXN0_101	22.953	TX101_0-
JP1	10	C15	MGTRXN1_123	2.663 + 25.425	RX123_1-
JP1	11		DGND		
JP1	12		DGND		
JP1	13	D9	MGTRXP1_101	5.001 + 24.786	RX101_1+
JP1	14	B14	MGTTXP0_123	22.844	TX123_0+
JP1	15	C9	MGTRXN1_101	4.982 + 24.762	RX101_1-
JP1	16	A14	MGTTXN0_123	22.830	TX123_0-
JP1	17		DGND		
JP1	18		DGND		
JP1	19	B8	MGTTXP1_101	23.599	TX101_1+
JP1	20	D13	MGTRXP0_123	2.678 + 25.773	RX123_0+
JP1	21	A8	MGTTXN1_101	23.503	TX101_1-
JP1	22	C13	MGTRXN0_123	2.664 + 25.738	RX123_0-
JP1	23		DGND		
JP1	24		DGND		
JP1	25				
JP1	26		DGND		
JP1	27				
JP1	28		DGND		
JP1	29		DGND		
JP1	30		DGND		
JP1	31				
JP1	32	A12	MGTREFCLK0P_123	2.969 + 20.248	CLK123_0+
JP1	33				
JP1	34	B12	MGTREFCLK0N_123	2.932 + 21.379	CLK123_0-
JP1	35		DGND		
JP1	36		DGND		
JP1	37	C11	MGTREFCLK1P_101	2.218 + 21.829	CLK101_1+
JP1	38	E12	MGTREFCLK1P_123	2.668 + 31.120	CLK123_1+
JP1	39	D11	MGTREFCLK1N_101	2.241 + 22.257	CLK101_1-
JP1	40	F12	MGTREFCLK1N_123	2.691 + 31.646	CLK123_1-