

# Pin List: XEM6310

2019-01-22

Connector	Pin	FPGA Pin	Description	Length (mm)	I/O Bank	BRK6110	EVB1005
JP2	1		DGND			JP1A-1	
JP2	2		+3.3VDD			JP1A-2	
JP2	3	Vbatt	VBATT				
JP2	4		+3.3VDD			JP1A-4	
JP2	5		JTAG_TCK			JP3-6	
JP2	6		+3.3VDD			JP1A-6	
JP2	7		JTAG_TMS			JP3-4	
JP2	8		JTAG_TDO			JP3-8	
JP2	9		JTAG_TDI			JP3-10	
JP2	10	Bank 1 VREF	VREF_1		1	JP1A-10	
JP2	11	U12	L22N_2	27.043	2	JP1A-11	
JP2	12	Rfuse	Rfuse				
JP2	13		DGND			JP1A-13	
JP2	14		DGND			JP1A-14	
JP2	15	G16	L9P_1	40.050	1	JP1A-15	
JP2	16	G19	L33P_1	61.093	1	JP1A-16	
JP2	17	G17	L9N_1	39.645	1	JP1A-17	
JP2	18	F20	L33N_1	61.369	1	JP1A-18	
JP2	19	H19	L34P_1	41.653	1	JP1A-19	
JP2	20	H20	L38P_1	52.874	1	JP1A-20	
JP2	21	H18	L34N_1	41.439	1	JP1A-21	
JP2	22	J19	L38N_1	52.611	1	JP1A-22	
JP2	23	F16	L10P_1	37.920	1	JP1A-23	
JP2	24	D19	L29P_1	48.369	1	JP1A-24	
JP2	25	F17	L10N_1	37.752	1	JP1A-25	
JP2	26	D20	L29N_1	48.196	1	JP1A-26	
JP2	27	J17	L36P_1	34.325	1	JP1A-27	
JP2	28	F18	L30P_1	40.724	1	JP1A-28	
JP2	29	K17	L36N_1	34.201	1	JP1A-29	
JP2	30	F19	L30N_1	41.050	1	JP1A-30	
JP2	31	K16	L21P_1	28.858	1	JP1A-31	

Connector	Pin	FPGA Pin	Description	Length (mm)	I/O Bank	BRK6110	EVB1005
JP2	32	M16	L58P_1	30.348	1	JP1A-32	
JP2	33	J16	L21N_1	29.421	1	JP1A-33	
JP2	34	L15	L58N_1	29.853	1	JP1A-34	
JP2	35	Bank 1 VCCO	+VCCO1		1	JP1A-35	
JP2	36		DGND			JP1A-36	
JP2	37	V21	L52P_1	16.564	1	JP1A-37	
JP2	38	K20	L40P_GCLK11_1	29.273	1	JP1A-38	
JP2	39	V22	L52N_1	16.617	1	JP1A-39	
JP2	40	K19	L40N_GCLK10_1	29.267	1	JP1A-40	
JP2	41	T21	L50P_1	22.866	1	JP1B-41	
JP2	42	U20	L51P_1	22.557	1	JP1B-42	
JP2	43	T22	L50N_1	22.873	1	JP1B-43	
JP2	44	U22	L51N_1	22.965	1	JP1B-44	
JP2	45	P21	L48P_1	23.069	1	JP1B-45	
JP2	46	R20	L49P_1	26.121	1	JP1B-46	
JP2	47	P22	L48N_1	22.604	1	JP1B-47	
JP2	48	R22	L49N_1	25.746	1	JP1B-48	
JP2	49	M21	L46P_1	25.990	1	JP1B-49	
JP2	50	N20	L47P_1	26.691	1	JP1B-50	
JP2	51	M22	L46N_1	25.930	1	JP1B-51	
JP2	52	N22	L47N_1	26.043	1	JP1B-52	
JP2	53	L20	L45P_1	22.274	1	JP1B-53	
JP2	54	M20	L42P_GCLK7_1	24.052	1	JP1B-54	
JP2	55	Bank 1 VCCO	+VCCO1		1	JP1B-55	
JP2	56		DGND			JP1B-56	
JP2	57	L22	L45N_1	21.859	1	JP1B-57	
JP2	58	L19	L42N_GCLK6_1	24.190	1	JP1B-58	
JP2	59	H21	L41P_GCLK9_1	25.953	1	JP1B-59	
JP2	60	K21	L44P_1	23.920	1	JP1B-60	
JP2	61	H22	L41N_GCLK8_1	25.745	1	JP1B-61	
JP2	62	K22	L44N_1	23.603	1	JP1B-62	
JP2	63	F21	L37P_1	28.198	1	JP1B-63	
JP2	64	G20	L39P_1	27.676	1	JP1B-64	
JP2	65	F22	L37N_1	27.818	1	JP1B-65	

Connector	Pin	FPGA Pin	Description	Length (mm)	I/O Bank	BRK6110	EVB1005
JP2	66	G22	L39N_1	27.153	1	JP1B-66	
JP2	67	D21	L31P_1	32.225	1	JP1B-67	
JP2	68	E20	L35P_1	31.177	1	JP1B-68	
JP2	69	D22	L31N_1	32.358	1	JP1B-69	
JP2	70	E22	L35N_1	31.491	1	JP1B-70	
JP2	71	B21	L19P_1	31.387	1	JP1B-71	
JP2	72	C20	L32P_1	33.951	1	JP1B-72	
JP2	73	B22	L19N_1	30.928	1	JP1B-73	
JP2	74	C22	L32N_1	33.893	1	JP1B-74	
JP2	75	A21	L20N_1	34.457	1	JP1B-75	
JP2	76	A20	L20P_1	34.325	1	JP1B-76	
JP2	77	J20	L43P_GCLK5_1	24.102	1	JP1B-77	
JP2	78		DGND			JP1B-78	
JP2	79	J22	L43N_GCLK4_1	24.092	1	JP1B-79	
JP2	80		DGND			JP1B-80	
JP1	1		+VDC			JP2A-1	
JP1	2		DGND			JP2A-2	
JP1	3		+VDC			JP2A-3	
JP1	4		+1.2VDD			JP2A-4	
JP1	5		+VDC			JP2A-5	
JP1	6		+1.2VDD			JP2A-6	
JP1	7		+1.8VDD			JP2A-7	
JP1	8	T14	L23P_2	51.413	2	JP2A-8	
JP1	9		+3.3VDD			JP2A-9	
JP1	10	Y9	L43P_2	40.650	2	JP2A-10	
JP1	11		+3.3VDD			JP2A-11	
JP1	12	AB9	L43N_2	49.296	2	JP2A-12	
JP1	13		+3.3VDD			JP2A-13	
JP1	14		DGND			JP2A-14	
JP1	15	W20	L60P_1	56.675	1	JP2A-15	
JP1	16	T19	L74P_1	48.345	1	JP2A-16	
JP1	17	W22	L60N_1	56.761	1	JP2A-17	
JP1	18	T20	L74N_1	48.805	1	JP2A-18	
JP1	19	U19	L70P_1	54.643	1	JP2A-19	

Connector	Pin	FPGA Pin	Description	Length (mm)	I/O Bank	BRK6110	EVB1005
JP1	20	P17	L72P_1	44.616	1	JP2A-20	
JP1	21	V20	L70N_1	55.062	1	JP2A-21	
JP1	22	N16	L72N_1	44.403	1	JP2A-22	
JP1	23	C5	L2P_0	27.001	0	JP2A-23	
JP1	24	M17	L71P_1	41.096	1	JP2A-24	
JP1	25	A5	L2N_0	26.950	0	JP2A-25	
JP1	26	M18	L71N_1	40.739	1	JP2A-26	
JP1	27	D14	L49P_0	40.947	0	JP2A-27	
JP1	28	P18	L73P_1	44.240	1	JP2A-28	
JP1	29	C14	L49N_0	41.007	0	JP2A-29	
JP1	30	R19	L73N_1	44.500	1	JP2A-30	
JP1	31	E16	L66P_0	37.216	0	JP2A-31	
JP1	32	D9	L7P_0	28.674	0	JP2A-32	
JP1	33	D17	L66N_0	36.716	0	JP2A-33	
JP1	34	C8	L7N_0	28.161	0	JP2A-34	
JP1	35		DGND			JP2A-35	
JP1	36	Bank 0 VCCO	+VCCO0		0	JP2A-36	
JP1	37	D7	L32P_0	20.627	0	JP2A-37	
JP1	38	D10	L33P_0	26.087	0	JP2A-38	
JP1	39	D8	L32N_0	21.074	0	JP2A-39	
JP1	40	C10	L33N_0	25.915	0	JP2A-40	
JP1	41	L17	L61P_1	44.830	1	JP2B-41	
JP1	42	D11	L36P_GCLK15_0	26.539	0	JP2B-42	
JP1	43	K18	L61N_1	44.340	1	JP2B-43	
JP1	44	C12	L36N_GCLK14_0	26.347	0	JP2B-44	
JP1	45	D6	L3P_0	17.696	0	JP2B-45	
JP1	46	D15	L62P_0	33.337	0	JP2B-46	
JP1	47	C6	L3N_0	17.466	0	JP2B-47	
JP1	48	C16	L62N_VREF_0	33.220	0	JP2B-48	
JP1	49	A3	L1P_HSWAPEN_0	13.928	0	JP2B-49	
JP1	50	B6	L4P_0	12.838	0	JP2B-50	
JP1	51	A4	L1N_VREF_0	13.856	0	JP2B-51	
JP1	52	A6	L4N_0	12.432	0	JP2B-52	LV
JP1	53	B8	L6P_0	18.542	0	JP2B-53	

Connector	Pin	FPGA Pin	Description	Length (mm)	I/O Bank	BRK6110	EVB1005
JP1	54	C7	L5P_0	16.492	0	JP2B-54	FV
JP1	55		DGND			JP2B-55	
JP1	56	Bank 0 VCCO	+VCCO0		0	JP2B-56	
JP1	57	A8	L6N_0	18.153	0	JP2B-57	
JP1	58	A7	L5N_0	16.112	0	JP2B-58	STROBE
JP1	59	B10	L34P_GCLK19_0	20.086	0	JP2B-59	
JP1	60	C9	L8P_0	18.080	0	JP2B-60	PIX11
JP1	61	A10	L34N_GCLK18_0	20.183	0	JP2B-61	
JP1	62	A9	L8N_VREF_0	18.118	0	JP2B-62	PIX10
JP1	63	C13	L38P_0	25.035	0	JP2B-63	SDATA
JP1	64	B12	L37P_GCLK13_0	20.996	0	JP2B-64	PIX9
JP1	65	A13	L38N_VREF_0	24.796	0	JP2B-65	SCLK
JP1	66	A12	L37N_GCLK12_0	20.714	0	JP2B-66	PIX8
JP1	67	C15	L51P_0	25.546	0	JP2B-67	TRIGGER
JP1	68	B14	L50P_0	21.102	0	JP2B-68	PIX7
JP1	69	A15	L51N_0	25.284	0	JP2B-69	RESET
JP1	70	A14	L50N_0	20.868	0	JP2B-70	PIX6
JP1	71	C17	L64P_0	28.088	0	JP2B-71	PIX2
JP1	72	B16	L63P_0	24.506	0	JP2B-72	PIX5
JP1	73	A17	L64N_0	28.351	0	JP2B-73	PIX1
JP1	74	A16	L63N_0	24.536	0	JP2B-74	PIX4
JP1	75	A18	L65N_0	26.666	0	JP2B-75	PIX0
JP1	76	B18	L65P_0	26.755	0	JP2B-76	PIX3
JP1	77	C11	L35P_GCLK17_0	18.067	0	JP2B-77	PIXCLK
JP1	78		DGND			JP2B-78	
JP1	79	A11	L35N_GCLK16_0	18.059	0	JP2B-79	EXTCLK
JP1	80		DGND			JP2B-80	