

# Pin List: XEM3010

2025-02-13

Connector	Pin	FPGA Pin	Description	Length (mm)	I/O Bank	BRK3010	EVB1005
JP2	1		DGND			JP1-2	
JP2	2		+3.3VDD			JP1-1	
JP2	3		+2.5VDD			JP1-4	
JP2	4		+3.3VDD			JP1-3	
JP2	5		JTAG_TCK			JP1-6	
JP2	6		+3.3VDD			JP1-5	
JP2	7		JTAG_TMS			JP1-8	
JP2	8		X_TDO			JP1-7	
JP2	9		X_TDI			JP1-10	
JP2	10					JP1-9	
JP2	11		SYS_CLK4			JP1-12	
JP2	12					JP1-11	
JP2	13		DGND			JP1-14	
JP2	14		DGND		3	JP1-13	
JP2	15	T16	L01P_3	17.196	3	JP1-16	
JP2	16	U18	L16P_3	17.089	3	JP1-15	
JP2	17	T17	L01N_3	12.588	3	JP1-18	
JP2	18	T18	L16N_3	17.172	3	JP1-17	
JP2	19	R16	L17P_3	13.817	3	JP1-20	
JP2	20	R17	L19N_3	18.255	3	JP1-19	
JP2	21	P15	L21N_3	14.607	3	JP1-22	
JP2	22	R18	L19P_3	16.923	3	JP1-21	
JP2	23	P16	L17N_3	13.276	3	JP1-24	
JP2	24	P17	L20P_3	18.006	3	JP1-23	
JP2	25	N15	L21P_3	14.359	3	JP1-26	
JP2	26	P18	L20N_3	16.675	3	JP1-25	
JP2	27	M15	L23N_3	14.442	3	JP1-28	
JP2	28	N17	L24P_3	17.757	3	JP1-27	
JP2	29	M16	L23P_3	13.110	3	JP1-30	
JP2	30	M18	L24N_3	17.426	3	JP1-29	
JP2	31	L15	L34N_3	16.068	3	JP1-32	

Connector	Pin	FPGA Pin	Description	Length (mm)	I/O Bank	BRK3010	EVB1005
JP2	32	L17	L35P_3	18.450	3	JP1-31	
JP2	33	L16	L34P_3	14.736	3	JP1-34	
JP2	34	L18	L35N_3	16.885	3	JP1-33	
JP2	35		VCCO3			JP1-36	
JP2	36		DGND			JP1-35	
JP2	37	N14	L22P_3	13.950	3	JP1-38	
JP2	38	K17	L40N_3	17.509	3	JP1-37	
JP2	39	M14	L22N_3	14.282	3	JP1-40	
JP2	40	K18	L40P_3	16.509	3	JP1-39	
JP2	41	K13	L39N_3	14.951	3	JP2-2	
JP2	42	L14	L27N_3	19.266	3	JP2-1	
JP2	43	K14	L39P_3	13.619	3	JP2-4	
JP2	44	L13	L27P_3	19.935	3	JP2-3	
JP2	45	K15	L01N_3	12.288	3	JP2-6	
JP2	46	J13	IO	21.426	2	JP2-5	
JP2	47	J14	L40P_2	14.316	2	JP2-8	
JP2	48	H13	L27N_2	22.119	2	JP2-7	
JP2	49	J15	L40N_2	12.868	2	JP2-10	
JP2	50	H14	L27P_2	20.539	2	JP2-9	
JP2	51	G14	L22P_2	16.068	2	JP2-12	
JP2	52	J18	L39N_2	15.680	2	JP2-11	
JP2	53	F14	L22N_2	15.736	2	JP2-14	
JP2	54	J17	L39P_2	16.929	2	JP2-13	
JP2	55		VCCO2			JP2-16	
JP2	56		DGND			JP2-15	
JP2	57	H16	L34N_2	10.791	2	JP2-18	
JP2	58	H18	L35P_2	15.515	2	JP2-17	
JP2	59	H15	L34P_2	12.163	2	JP2-20	
JP2	60	H17	L35N_2	16.680	2	JP2-19	
JP2	61	G16	L24P_2	11.205	2	JP2-22	
JP2	62	G18	L23N_2	15.515	2	JP2-21	
JP2	63	G15	L24N_2	12.205	2	JP2-24	
JP2	64	F17	L23P_2	15.686	2	JP2-23	
JP2	65	F15	L21N_2	12.039	2	JP2-26	

Connector	Pin	FPGA Pin	Description	Length (mm)	I/O Bank	BRK3010	EVB1005
JP2	66	E18	L20P_2	14.355	2	JP2-25	
JP2	67	E16	L19P_2	10.956	2	JP2-28	
JP2	68	E17	L20N_2	15.686	2	JP2-27	
JP2	69	E15	L21P_2	12.288	2	JP2-30	
JP2	70	D18	L17P_2	15.018	2	JP2-29	
JP2	71	D16	L19N_2	11.205	2	JP2-32	
JP2	72	D17	L17N_2	16.101	2	JP2-31	
JP2	73	C17	L01P_2	10.785	2	JP2-34	
JP2	74	C18	L16P_2	14.852	2	JP2-33	
JP2	75	C16	L01N_2	11.453	2	JP2-36	
JP2	76	B18	L16N_2	16.601	2	JP2-35	
JP2	77	F10	L32P_1/GCLK4	21.992	1	JP2-38	
JP2	78		DGND			JP2-37	
JP2	79	E10	L32N_1/GCLK5	21.756	1	JP2-40	
JP2	80		DGND			JP2-39	
JP3	1		+VDC			JP3-2	
JP3	2		DGND			JP3-1	
JP3	3		+VDC			JP3-4	
JP3	4		+1.2VDD			JP3-3	
JP3	5		+VDC			JP3-6	
JP3	6		+1.2VDD			JP3-5	
JP3	7					JP3-8	
JP3	8		SYS_CLK5			JP3-7	
JP3	9		+3.3VDD			JP3-10	
JP3	10		USB_SCL			JP3-9	
JP3	11		+3.3VDD			JP3-12	
JP3	12		USB_SDA			JP3-11	
JP3	13		+3.3VDD			JP3-14	
JP3	14		DGND			JP3-13	
JP3	15	U1	L16N_6	17.689	6	JP3-16	
JP3	16	T3	L01N_6	15.573	6	JP3-15	
JP3	17	T1	L16P_6	17.772	6	JP3-18	
JP3	18	T2	L01P_6	17.182	6	JP3-17	
JP3	19	R2	L17N_6	18.855	6	JP3-20	

Connector	Pin	FPGA Pin	Description	Length (mm)	I/O Bank	BRK3010	EVB1005
JP3	20	R3	L19N_6	14.125	6	JP3-19	
JP3	21	R1	L17P_6	17.523	6	JP3-22	
JP3	22	P4	L21P_6	15.207	6	JP3-21	
JP3	23	P2	L20N_6	18.606	6	JP3-24	
JP3	24	P3	L19P_6	13.876	6	JP3-23	
JP3	25	P1	L20P_6	17.275	6	JP3-26	
JP3	26	N4	L21N_6	14.959	6	JP3-25	
JP3	27	N2	L24N_6	18.357	6	JP3-28	
JP3	28	M4	L23P_6	15.042	6	JP3-27	
JP3	29	M1	L24P_6	17.967	6	JP3-30	
JP3	30	M3	L23N_6	13.876	6	JP3-29	
JP3	31	L2	L35N_6	19.050	6	JP3-32	
JP3	32	L4	L34P_6	15.320	6	JP3-31	
JP3	33	L1	L35P_6	17.719	6	JP3-34	
JP3	34	L3	L34N_6	14.155	6	JP3-33	
JP3	35		DGND			JP3-36	
JP3	36		VCCO6			JP3-35	
JP3	37	K2	L40P_6	18.470	6	JP3-38	
JP3	38	N5	L22N_6	14.302	6	JP3-37	
JP3	39	K1	L40N_6	17.139	6	JP3-40	
JP3	40	M5	L22P_6	14.053	6	JP3-39	
JP3	41	K5	L39N_6	20.280	6	JP4-2	
JP3	42	L5	L27P_6	14.136	6	JP4-1	
JP3	43	K4	L39P_6	19.612	6	JP4-4	
JP3	44	L6	L27N_6	14.805	6	JP4-3	
JP3	45	J6	IO	22.436	7	JP4-6	
JP3	46	K6	IO	16.423	6	JP4-5	
JP3	47	J5	L40N_7	20.529	7	JP4-8	
JP3	48	H6	L27P_7	16.213	7	JP4-7	
JP3	49	J4	L40P_7	19.198	7	JP4-10	
JP3	50	H5	L27N_7	14.882	7	JP4-9	
JP3	51	J1	L39N_7	17.602	7	JP4-12	
JP3	52	G5	L22N_7	15.185	7	JP4-11	LV
JP3	53	J2	L39P_7	18.485	7	JP4-14	

Connector	Pin	FPGA Pin	Description	Length (mm)	I/O Bank	BRK3010	EVB1005
JP3	54	F5	L22P_7	15.048	7	JP4-13	FV
JP3	55		DGND			JP4-16	
JP3	56		VCCO7			JP4-15	
JP3	57	H1	L35N_7	16.446	7	JP4-18	
JP3	58	H3	L34P_7	11.971	7	JP4-17	STROBE
JP3	59	H2	L35P_7	17.446	7	JP4-20	
JP3	60	H4	L34N_7	12.971	7	JP4-19	PIX11
JP3	61	G1	L23N_7	16.032	7	JP4-22	
JP3	62	G3	L24P_7	11.556	7	JP4-21	PIX10
JP3	63	F2	L23P_7	16.618	7	JP4-24	SDATA
JP3	64	G4	L24N_7	12.722	7	JP4-23	PIX9
JP3	65	E1	L20P_7	16.612	7	JP4-26	SCLK
JP3	66	F4	L21P_7	12.971	7	JP4-25	PIX8
JP3	67	E2	L20N_7	17.612	7	JP4-28	TRIGGER
JP3	68	E3	L19N_7	11.556	7	JP4-27	PIX7
JP3	69	D1	L17N_7	16.198	7	JP4-30	RESET
JP3	70	E4	L21N_7	13.219	7	JP4-29	PIX6
JP3	71	D2	L17P_7	17.198	7	JP4-32	PIX2
JP3	72	D3	L19P_7	11.805	7	JP4-31	PIX5
JP3	73	C1	L16N_7	15.784	7	JP4-34	PIX1
JP3	74	C2	L01P_7	16.590	7	JP4-33	PIX4
JP3	75	B1	L16P_7	15.369	7	JP4-36	PIX0
JP3	76	C3	L01N_7	16.200	7	JP4-35	PIX3
JP3	77	E9	L32N_0/GCLK7	29.060	0	JP4-38	PIXCLK
JP3	78		DGND			JP4-37	
JP3	79	F9	L32P_0/GCLK6	30.743	0	JP4-40	EXTCLK
JP3	80		DGND			JP4-39	