

# Pin List: XEM5010

2019-01-22

Connector	Pin	FPGA Pin	Description	Length (mm)	BRK5010
JP2	1		+VCCO13		JP2A-1
JP2	2	F24	L0P_SM8P_13	17.920	JP2A-2
JP2	3		+VCCO13		JP2A-3
JP2	4	F25	L0N_SM8N_13	17.945	JP2A-4
JP2	5	E25	L1P_SM7P_13	23.645	JP2A-5
JP2	6	G26	L2P_SM6P_13	18.878	JP2A-6
JP2	7	E26	L1N_SM7N_13	23.253	JP2A-7
JP2	8	H26	L2N_SM6N_13	19.233	JP2A-8
JP2	9	G24	L3P_SM5P_13	21.779	JP2A-9
JP2	10	J25	L4P_13	18.172	JP2A-10
JP2	11	G25	L3N_SM5N_13	21.616	JP2A-11
JP2	12	J26	L4N_VREF_13	18.310	JP2A-12
JP2	13	H24	L5P_SM4P_13	23.678	JP2A-13
JP2	14	L24	L6P_SM3P_13	21.319	JP2A-14
JP2	15	J24	L5N_SM4N_13	23.678	JP2A-15
JP2	16	L25	L6N_SM3N_13	21.635	JP2A-16
JP2	17	K25	L7P_SM2P_13	19.447	JP2A-17
JP2	18	M25	L8P_CC_SM1P_13	18.474	JP2A-18
JP2	19	K26	L7N_SM2N_13	19.558	JP2A-19
JP2	20	M26	L8N_CC_SM1N_13	18.465	JP2A-20
JP2	21	M24	L9P_CC_SM0P_13	23.999	JP2A-21
JP2	22	P26	L10P_CC_13	19.364	JP2A-22
JP2	23	N24	L9N_CC_SM0N_13	24.009	JP2A-23
JP2	24	N26	L10N_CC_13	19.620	JP2A-24
JP2	25	P25	L11P_CC_13	21.800	JP2A-25
JP2	26	R25	L12P_VRN_13	16.344	JP2A-26
JP2	27	P24	L11N_CC_13	21.825	JP2A-27
JP2	28	R26	L12N_VRP_13	16.286	JP2A-28
JP2	29	T24	L13P_13	25.905	JP2A-29
JP2	30	V26	L14P_13	21.300	JP2A-30
JP2	31	T25	L13N_13	25.992	JP2A-31

Connector	Pin	FPGA Pin	Description	Length (mm)	BRK5010
JP2	32	U26	L14N_VREF_13	21.440	JP2A-32
JP2	33	U24	L15P_13	27.261	JP2A-33
JP2	34	W25	L16P_13	17.332	JP2A-34
JP2	35	U25	L15N_13	26.814	JP2A-35
JP2	36	W26	L16N_13	17.317	JP2A-36
JP2	37	Y25	L17P_13	30.170	JP2A-37
JP2	38	AB25	L18P_13	20.699	JP2A-38
JP2	39	Y26	L17N_13	30.139	JP2A-39
JP2	40	AA25	L18N_13	20.744	JP2A-40
JP2	41	AC26	L19P_13	27.374	JP2B-41
JP2	42		+VCCO17		JP2B-42
JP2	43	AB26	L19N_13	27.494	JP2B-43
JP2	44		+VCCO17		JP2B-44
JP2	45	T23	L0P_17	24.936	JP2B-45
JP2	46	R21	L1P_17	19.861	JP2B-46
JP2	47	T22	L0N_17	25.030	JP2B-47
JP2	48	R20	L1N_17	20.027	JP2B-48
JP2	49	T20	L2P_17	23.799	JP2B-49
JP2	50	U22	L3P_17	15.545	JP2B-50
JP2	51	T19	L2N_17	23.861	JP2B-51
JP2	52	U21	L3N_17	15.717	JP2B-52
JP2	53	W24	L4P_17	23.640	JP2B-53
JP2	54	V24	L5P_17	16.826	JP2B-54
JP2	55	W23	L4N_VREF_17	23.730	JP2B-55
JP2	56	V23	L5N_17	17.110	JP2B-56
JP2	57	AA23	L6P_17	19.372	JP2B-57
JP2	58	Y23	L7P_17	15.857	JP2B-58
JP2	59	AA24	L6N_17	19.263	JP2B-59
JP2	60	Y22	L17N_17	15.963	JP2B-60
JP2	61	AC23	L8P_CC_17	24.382	JP2B-61
JP2	62	AB24	L9P_CC_17	17.127	JP2B-62
JP2	63	AC22	L8N_CC_17	24.462	JP2B-63
JP2	64	AC24	L9N_CC_17	16.869	JP2B-64
JP2	65	AB22	L10P_CC_17	26.078	JP2B-65

Connector	Pin	FPGA Pin	Description	Length (mm)	BRK5010
JP2	66	AC21	L11P_CC_17	17.567	JP2B-66
JP2	67	AA22	L10N_CC_17	26.134	JP2B-67
JP2	68	AB21	L11N_CC_17	17.766	JP2B-68
JP2	69	V21	L12P_VRN_17	30.810	JP2B-69
JP2	70	W21	L13P_17	22.734	JP2B-70
JP2	71	V22	L12N_VRP_17	30.914	JP2B-71
JP2	72	W20	L13N_17	23.333	JP2B-72
JP2	73	U19	L14P_17	29.055	JP2B-73
JP2	74	V19	L15P_17	25.259	JP2B-74
JP2	75	U20	L14N_VREF_17	28.799	JP2B-75
JP2	76	W19	L15N_17	25.277	JP2B-76
JP2	77	Y21	L16P_17	33.480	JP2B-77
JP2	78	AD19	L17P_17	27.793	JP2B-78
JP2	79	Y20	L16N_17	33.372	JP2B-79
JP2	80	AC19	L17N_17	27.884	JP2B-80
JP2	81	AB20	L18P_17	51.300	JP2C-81
JP2	82	AA20	L19P_17	29.285	JP2C-82
JP2	83	AB19	L18N_17	51.130	JP2C-83
JP2	84	AA19	L19N_17	29.034	JP2C-84
JP2	85	AD24	L0P_21	25.449	JP2C-85
JP2	86		+VCCO21		JP2C-86
JP2	87	AD23	L0N_21	25.267	JP2C-87
JP2	88		+VCCO21		JP2C-88
JP2	89	AF24	L2P_21	27.536	JP2C-89
JP2	90	AE26	L1P_21	27.294	JP2C-90
JP2	91	AF25	L2N_21	27.395	JP2C-91
JP2	92	AD26	L1N_21	27.552	JP2C-92
JP2	93	AF23	L4P_21	31.210	JP2C-93
JP2	94	AE25	L3P_21	25.709	JP2C-94
JP2	95	AE23	L4N_VREF_21	31.219	JP2C-95
JP2	96	AD25	L3N_21	25.941	JP2C-96
JP2	97	AE20	L6P_21	33.467	JP2C-97
JP2	98	AD20	L5P_21	31.507	JP2C-98
JP2	99	AE21	L6N_21	32.951	JP2C-99

Connector	Pin	FPGA Pin	Description	Length (mm)	BRK5010
JP2	100	AD21	L5N_21	31.433	JP2C-100
JP2	101	AF19	L9P_CC_21	34.414	JP2C-101
JP2	102	AF18	L8P_CC_21	30.297	JP2C-102
JP2	103	AF20	L9N_CC_21	34.361	JP2C-103
JP2	104	AE18	L8N_CC_21	30.250	JP2C-104
JP2	105				
JP2	106	AF15	L12P_VRN_21	39.562	JP2C-106
JP2	107				
JP2	108	AE15	L12N_VRP_21	36.649	JP2C-108
JP2	109				
JP2	110				
JP2	111				
JP2	112				
JP2	113		JTAG_TDI		JP1-10
JP2	114		JTAG_TCK		JP1-6
JP2	115		JTAG_TDO		JP1-8
JP2	116		JTAG_TMS		JP1-4
JP2	117		+3.3VDD		JP2C-117
JP2	118				
JP2	119		+3.3VDD		JP2C-119
JP2	120		EXT_PROG		
JP3	1	D13	L1P_CC_GC_3	33.243	JP3A-1
JP3	2		+VCCO3		JP3A-2
JP3	3	D14	L1N_CC_GC_3	33.452	JP3A-3
JP3	4		+VCCO3		JP3A-4
JP3	5	D15	L3P_GC_3	31.635	JP3A-5
JP3	6	F8	L8P_GC_3	29.217	JP3A-6
JP3	7	E15	L3N_GC_3	33.008	JP3A-7
JP3	8	E8	L8N_GC_3	29.318	JP3A-8
JP3	9	E16	L5P_GC_3	32.911	JP3A-9
JP3	10	F9	L6P_GC_3	34.803	JP3A-10
JP3	11	E17	L5N_GC_3	36.610	JP3A-11
JP3	12	F10	L6N_GC_3	34.662	JP3A-12
JP3	13	E18	L7P_GC_3	34.778	JP3A-13

Connector	Pin	FPGA Pin	Description	Length (mm)	BRK5010
JP3	14	E10	L4P_GC_3	38.438	JP3A-14
JP3	15	F19	L7N_GC_3	36.686	JP3A-15
JP3	16	E11	L4N_GC_VREF_3	38.546	JP3A-16
JP3	17	F18	L9P_GC_3	34.093	JP3A-17
JP3	18	E12	L2P_GC_VRN_3	31.833	JP3A-18
JP3	19	F17	L9N_GC_3	33.077	JP3A-19
JP3	20	F12	L2N_GC_VRP_3	31.838	JP3A-20
JP3	21	E2	L0P_14	12.054	JP3A-21
JP3	22	F14	L0P_CC_GC_3	31.884	JP3A-22
JP3	23	E1	L0N_14	12.088	JP3A-23
JP3	24	E13	L0N_CC_GC_3	31.705	JP3A-24
JP3	25	G1	L2P_14	14.327	JP3A-25
JP3	26	F3	L1P_14	26.258	JP3A-26
JP3	27	H1	L2N_14	14.562	JP3A-27
JP3	28	E3	L1N_14	25.904	JP3A-28
JP3	29	K3	L4P_14	16.062	JP3A-29
JP3	30	F2	L3P_14	20.002	JP3A-30
JP3	31	K2	L4N_VREF_14	15.936	JP3A-31
JP3	32	G2	L3N_14	19.996	JP3A-32
JP3	33	L2	L6P_14	16.838	JP3A-33
JP3	34	H3	L5P_14	23.268	JP3A-34
JP3	35	K1	L6N_14	16.746	JP3A-35
JP3	36	J3	L5N_14	23.276	JP3A-36
JP3	37	M1	L8P_CC_14	11.548	JP3A-37
JP3	38	J1	L7P_14	18.790	JP3A-38
JP3	39	N1	L8N_CC_14	11.549	JP3A-39
JP3	40	H2	L7N_14	18.999	JP3A-40
JP3	41		+VCCO14		JP3B-41
JP3	42	M2	L9P_CC_14	20.953	JP3B-42
JP3	43		+VCCO14		JP3B-43
JP3	44	N2	L9N_CC_14	20.999	JP3B-44
JP3	45	P1	L10P_CC_14	9.879	JP3B-45
JP3	46	T2	L11P_CC_14	20.336	JP3B-46
JP3	47	R1	L10N_CC_14	9.808	JP3B-47

Connector	Pin	FPGA Pin	Description	Length (mm)	BRK5010
JP3	48	R2	L11N_CC_14	20.552	JP3B-48
JP3	49	U2	L12P_VRN_14	14.723	JP3B-49
JP3	50	V2	L13P_14	20.935	JP3B-50
JP3	51	U1	L12N_VRP_14	14.815	JP3B-51
JP3	52	V1	L13N_14	20.812	JP3B-52
JP3	53	Y1	L14P_14	12.271	JP3B-53
JP3	54	AA2	L15P_14	19.339	JP3B-54
JP3	55	W1	L14N_VREF_14	12.325	JP3B-55
JP3	56	Y2	L15N_14	19.314	JP3B-56
JP3	57	AB2	L16P_14	15.090	JP3B-57
JP3	58	AC2	L17P_14	22.247	JP3B-58
JP3	59	AB1	L16N_14	14.949	JP3B-59
JP3	60	AC1	L17N_14	22.021	JP3B-60
JP3	61	AE1	L18P_14	13.076	JP3B-61
JP3	62	AF2	L19P_14	20.487	JP3B-62
JP3	63	AD1	L18N_14	13.151	JP3B-63
JP3	64	AE2	L19N_14	20.412	JP3B-64
JP3	65	V3	L0P_18	20.001	JP3B-65
JP3	66	T5	L1P_18	28.568	JP3B-66
JP3	67	U4	L0N_18	20.156	JP3B-67
JP3	68	T4	L1N_18	28.262	JP3B-68
JP3	69	T7	L2P_18	21.430	JP3B-69
JP3	70	U5	L3P_18	24.062	JP3B-70
JP3	71	U7	L2N_18	21.431	JP3B-71
JP3	72	U6	L3N_18	24.027	JP3B-72
JP3	73	V4	L4P_18	20.349	JP3B-73
JP3	74	W3	L5P_18	26.238	JP3B-74
JP3	75	W4	L4N_VREF_18	20.396	JP3B-75
JP3	76	Y3	L5N_18	26.119	JP3B-76
JP3	77	V6	L6P_18	23.772	JP3B-77
JP3	78	W5	L7P_18	25.073	JP3B-78
JP3	79	V7	L6N_18	23.646	JP3B-79
JP3	80	W6	L7N_18	25.143	JP3B-80
JP3	81	Y6	L8P_CC_18	26.348	JP3C-81

Connector	Pin	FPGA Pin	Description	Length (mm)	BRK5010
JP3	82	AA4	L9P_CC_18	30.165	JP3C-82
JP3	83	Y5	L8N_CC_18	26.439	JP3C-83
JP3	84	AA5	L9N_CC_18	29.876	JP3C-84
JP3	85		+VCCO18		JP3C-85
JP3	86	AB4	L11P_CC_18	27.630	JP3C-86
JP3	87		+VCCO18		JP3C-87
JP3	88	AA3	L11N_CC_18	27.562	JP3C-88
JP3	89	Y7	L10P_CC_18	29.135	JP3C-89
JP3	90	AD4	L13P_18	30.496	JP3C-90
JP3	91	AA7	L10N_CC_18	29.099	JP3C-91
JP3	92	AD3	L13N_18	30.504	JP3C-92
JP3	93	AC4	L12P_VRN_18	26.872	JP3C-93
JP3	94	AC6	L15P_18	31.290	JP3C-94
JP3	95	AC3	L12N_VRP_18	27.008	JP3C-95
JP3	96	AB7	L15N_18	31.355	JP3C-96
JP3	97	AB6	L14P_18	30.749	JP3C-97
JP3	98	AD6	L17P_18	36.735	JP3C-98
JP3	99	AB5	L14N_VREF_18	30.881	JP3C-99
JP3	100	AD5	L17N_18	36.737	JP3C-100
JP3	101	AF3	L16P_18	25.748	JP3C-101
JP3	102	AE6	L19P_18	40.548	JP3C-102
JP3	103	AE3	L16N_18	25.596	JP3C-103
JP3	104	AE5	L19N_18	40.708	JP3C-104
JP3	105	AF5	L18P_18	32.149	JP3C-105
JP3	106				
JP3	107	AF4	L18N_18	32.020	JP3C-107
JP3	108				
JP3	109				
JP3	110				
JP3	111				
JP3	112				
JP3	113		USB_SCL		JP3C-113
JP3	114		USB_SDA		JP3C-114
JP3	115		+VBATT		JP3C-115

<b>Connector</b>	<b>Pin</b>	<b>FPGA Pin</b>	<b>Description</b>	<b>Length (mm)</b>	<b>BRK5010</b>
JP3	116		+VDC		JP3C-116
JP3	117		+1.0VDD		JP3C-117
JP3	118		+VDC		JP3C-118
JP3	119		+1.0VDD		JP3C-119
JP3	120		+VDC		JP3C-120