

# Pin List: XEM7305

2026-06-12

Connector	Pin	FPGA Pin	Description	PCB Length (mm)	Package Length (mm)	BRK7305
MC1	1		DGND			MC1A-01
MC1	2		DGND			MC1A-02
MC1	3		+5VUSB			MC1A-03
MC1	4					MC1A-04
MC1	5		+3.3VDD			MC1A-05
MC1	6		+1.0VDD			MC1A-06
MC1	7		+1.8VDD			MC1A-07
MC1	8		+1.0VDD			MC1A-08
MC1	9		+1.8VDD			MC1A-09
MC1	10		+1.0VDD			MC1A-10
MC1	11		+VDD_DDR3			MC1A-11
MC1	12		VCCO_MC1			MC1A-12
MC1	13		VCCO_MC1			MC1A-13
MC1	14		VCCBATT			MC1A-14
MC1	15	H18	B15_L21P	21.440	8.778	MC1A-15
MC1	16	K16	B15_L19P	18.478	5.875	MC1A-16
MC1	17	G18	B15_L21N	21.455	9.263	MC1A-17
MC1	18	J16	B15_L19N	18.521	5.822	MC1A-18
MC1	19		DGND			MC1A-19
MC1	20		DGND			MC1A-20
MC1	21					MC1A-21
MC1	22					MC1A-22
MC1	23	H15	B15_L18P	23.893	9.152	MC1A-23
MC1	24	K14	B15_L23P	15.913	7.986	MC1A-24
MC1	25	G15	B15_L18N	22.996	9.538	MC1A-25
MC1	26	J15	B15_L23N	15.094	8.707	MC1A-26
MC1	27	G16	B15_L14P	20.387	9.804	MC1A-27
MC1	28	J13	B15_L24P	17.826	6.909	MC1A-28
MC1	29	G17	B15_L14N	19.591	9.507	MC1A-29
MC1	30	J14	B15_L24N	17.035	7.582	MC1A-30
MC1	31	F13	B15_L17P	22.877	10.178	MC1A-31

Connector	Pin	FPGA Pin	Description	PCB Length (mm)	Package Length (mm)	BRK7305
MC1	32	H13	B15_L20P	17.255	8.423	MC1A-32
MC1	33	E13	B15_L17N	22.728	9.931	MC1A-33
MC1	34	H14	B15_L20N	15.742	5.850	MC1A-34
MC1	35	D18	B15_L11P	17.078	10.053	MC1A-35
MC1	36	F18	B15_L16P	10.994	9.815	MC1A-36
MC1	37	C18	B15_L11N	17.053	10.958	MC1A-37
MC1	38	E18	B15_L16N	11.019	9.957	MC1A-38
MC1	39		DGND			MC1A-39
MC1	40		DGND			MC1A-40
MC1	41	D16	B15_L9P	17.290	13.729	MC1B-1
MC1	42	H16	B15_L22P	9.960	10.638	MC1B-2
MC1	43	D17	B15_L9N	16.534	13.467	MC1B-3
MC1	44	H17	B15_L22N	9.197	10.754	MC1B-4
MC1	45	C13	B15_L6P	20.553	9.373	MC1B-5
MC1	46	E16	B15_L10P	11.765	11.260	MC1B-6
MC1	47	C14	B15_L6N	19.71	8.496	MC1B-7
MC1	48	E17	B15_L10N	10.896	11.255	MC1B-8
MC1	49	D14	B15_L12P_MRCC	19.185	9.073	MC1B-9
MC1	50	E14	B15_L15P	13.247	11.966	MC1B-10
MC1	51	D15	B15_L12N_MRCC	18.338	10.18	MC1B-11
MC1	52	E15	B15_L15N	11.758	11.217	MC1B-12
MC1	53	B17	B15_L7P	16.356	13.597	MC1B-13
MC1	54	C17	B15_L8P	8.640	13.553	MC1B-14
MC1	55	A17	B15_L7N	15.810	13.637	MC1B-15
MC1	56	B18	B15_L8N	7.635	13.188	MC1B-16
MC1	57					MC1B-17
MC1	58					MC1B-18
MC1	59		DGND			MC1B-19
MC1	60		DGND			MC1B-20
MC1	61	E12	B15_L5P	24.417	9.187	MC1B-21
MC1	62	B14	B15_L2P	13.18	14.084	MC1B-22
MC1	63	D12	B15_L5N	24.001	10.168	MC1B-23
MC1	64	A14	B15_L2N	12.57	13.764	MC1B-24
MC1	65					MC1B-25

Connector	Pin	FPGA Pin	Description	PCB Length (mm)	Package Length (mm)	BRK7305
MC1	66	B16	B15_L4P	10.575	13.868	MC1B-26
MC1	67	F14	B15_L13P_MRCC	23.176	8.430	MC1B-27
MC1	68	A16	B15_L4N	10.008	13.335	MC1B-28
MC1	69	F15	B15_L13N_MRCC	22.114	8.915	MC1B-29
MC1	70	B15	B15_L3P	12.141	13.635	MC1B-30
MC1	71	G13	B15_IO_0	28.874	2.502	MC1B-31
MC1	72	A15	B15_L3N	11.600	13.444	MC1B-32
MC1	73	K13	B15_IO_25	29.651	4.163	MC1B-33
MC1	74	B13	B15_L1P	14.711	14.13	MC1B-34
MC1	75					MC1B-35
MC1	76	A13	B15_L1N	14.169	13.081	MC1B-36
MC1	77					MC1B-37
MC1	78					MC1B-38
MC1	79					MC1B-39
MC1	80					MC1B-40
MC2	1		DGND			MC2A-1
MC2	2		DGND			MC2A-2
MC2	3	V5	B34_L17P	15.429	9.86	MC2A-3
MC2	4	V3	B34_L16P	19.615	8.738	MC2A-4
MC2	5	V4	B34_L17N	15.091	9.274	MC2A-5
MC2	6	V2	B34_L16N	19.334	8.766	MC2A-6
MC2	7	V7	B34_L20P	16.137	9.738	MC2A-7
MC2	8	R5	B34_L21P	22.298	5.210	MC2A-8
MC2	9	V6	B34_L20N	15.792	8.966	MC2A-9
MC2	10	T4	B34_L21N	21.177	4.328	MC2A-10
MC2	11	U7	B34_L24P	17.746	5.928	MC2A-11
MC2	12	T6	B34_L22P	22.542	3.998	MC2A-12
MC2	13	U6	B34_L24N	17.432	6.261	MC2A-13
MC2	14	T5	B34_L22N	22.209	4.049	MC2A-14
MC2	15	R7	B34_L23P	17.695	6.464	MC2A-15
MC2	16	P6	B34_L19P	23.577	5.504	MC2A-16
MC2	17	R6	B34_L23N	17.293	6.213	MC2A-17
MC2	18	P5	B34_L19N	22.097	4.917	MC2A-18
MC2	19		DGND			MC2A-19

Connector	Pin	FPGA Pin	Description	PCB Length (mm)	Package Length (mm)	BRK7305
MC2	20		DGND			MC2A-20
MC2	21					MC2A-21
MC2	22					MC2A-22
MC2	23	T1	B34_L14P	9.165	7.981	MC2A-23
MC2	24	P2	B34_L11P	16.022	8.186	MC2A-24
MC2	25	U1	B34_L14N	7.641	7.546	MC2A-25
MC2	26	P1	B34_L11N	15.136	9.081	MC2A-26
MC2	27	U3	B34_L15P	11.094	8.486	MC2A-27
MC2	28	R4	B34_L18P	18.608	8.181	MC2A-28
MC2	29	U2	B34_L15N	10.697	7.767	MC2A-29
MC2	30	T3	B34_L18N	17.137	7.445	MC2A-30
MC2	31	M6	B34_L6P	14.960	6.467	MC2A-31
MC2	32	K6	B34_L4P	22.118	8.293	MC2A-32
MC2	33	M5	B34_L6N	13.728	5.271	MC2A-33
MC2	34	L6	B34_L4N	20.730	8.092	MC2A-34
MC2	35	N3	B34_L9P	10.339	8.250	MC2A-35
MC2	36	M1	B34_L8P	13.749	7.145	MC2A-36
MC2	37	N2	B34_L9N	8.961	8.016	MC2A-37
MC2	38	N1	B34_L8N	15.296	7.363	MC2A-38
MC2	39		DGND			MC2A-39
MC2	40		DGND			MC2A-40
MC2	41		VCCO_MC2			MC2B-1
MC2	42		VCCO_MC2			MC2B-2
MC2	43	M3	B34_L7P	10.418	9.652	MC2B-3
MC2	44	N5	B34_L10P	21.288	6.863	MC2B-4
MC2	45	M2	B34_L7N	9.631	9.566	MC2B-5
MC2	46	N4	B34_L10N	19.984	6.431	MC2B-6
MC2	47	C12	B16_L13P	24.340	12.771	MC2B-7
MC2	48	K4	B34_L1P	18.425	7.122	MC2B-8
MC2	49	C11	B16_L13N	23.307	12.289	MC2B-9
MC2	50	L4	B34_L1N	20.380	6.835	MC2B-10
MC2	51	A10	B16_L12P	21.920	12.951	MC2B-11
MC2	52	K1	B34_L3P	16.268	7.112	MC2B-12
MC2	53	A9	B16_L12N	20.605	13.564	MC2B-13

Connector	Pin	FPGA Pin	Description	PCB Length (mm)	Package Length (mm)	BRK7305
MC2	54	L1	B34_L3N	17.911	6.932	MC2B-14
MC2	55	B11	B16_L14P	20.755	14.813	MC2B-15
MC2	56	L5	B34_L5P	23.036	3.825	MC2B-16
MC2	57	A11	B16_L14N	21.896	14.620	MC2B-17
MC2	58	M4	B34_L5N	21.596	3.856	MC2B-18
MC2	59		DGND			MC2B-19
MC2	60		DGND			MC2B-20
MC2	61	C10	B16_L11P	18.153	13.912	MC2B-21
MC2	62	K3	B34_L2P	20.409	8.651	MC2B-22
MC2	63	C9	B16_L11N	16.934	14.359	MC2B-23
MC2	64	K2	B34_L2N	19.667	8.230	MC2B-24
MC2	65	D10	B16_L19N	23.987	8.445	MC2B-25
MC2	66	P7	B34_IO_25	25.047	2.791	MC2B-26
MC2	67	D11	B16_L6N	27.374	4.917	MC2B-27
MC2	68	J6	B34_IO_0	21.343	4.056	MC2B-28
MC2	69					MC2B-29
MC2	70		+1.8VDD			MC2B-30
MC2	71	J10	XADC_VP			MC2B-31
MC2	72	D9	FPGA_TCK			MC2B-32
MC2	73	K9	XADC_VN			MC2B-33
MC2	74	R9	FPGA_TDI			MC2B-34
MC2	75	R3	B34_L13P_MRCC	28.574	6.454	MC2B-35
MC2	76	T9	FPGA_TMS			MC2B-36
MC2	77	T2	B34_L13N_MRCC	28.379	6.424	MC2B-37
MC2	78	T8	FPGA_TDO			MC2B-38
MC2	79		DGND			MC2B-39
MC2	80		DGND			MC2B-40