

JX1 Pin	MicroZed Net Name	Zynq Pin	Zynq Name	Swarmbot Net
1	JTAG_TCK	F9	TCK_0	-
2	JTAG_TMS	J6	TMS_0	-
3	JTAG_TDO	F6	TDO_0	-
4	JTAG_TDI	G6	TDI_0	-
5	NetJX1_5	-	-	PWR_EN
6	NetJX1_6	-	-	-
7	FPGA_VBATT	F11	VCCBATT_0	-
8	FPGA_DONE	R11	DONE_0	FPGA_DONE
9	JX1_SE_0	R19	IO_0_34	JX1_IO00
10	JX1_SE_1	T19	IO_25_34	JX1_IO01
11	JX1_LVDS_0_P	T11	IO_L1P_T0_34	JX1_IO02
12	JX1_LVDS_1_P	T12	IO_L2P_T0_34	JX1_IO03
13	JX1_LVDS_0_N	T10	IO_L1N_T0_34	JX1_IO04
14	JX1_LVDS_1_N	U12	IO_L2N_T0_34	JX1_IO05
15	GND	A8	GND	GND
16	GND	A8	GND	GND
17	JX1_LVDS_2_P	U13	IO_L3P_T0_DQS_PUDC_B_34	JX1_IO06
18	JX1_LVDS_3_P	V12	IO_L4P_T0_34	JX1_IO07
19	JX1_LVDS_2_N	V13	IO_L3N_T0_DQS_34	JX1_IO08
20	JX1_LVDS_3_N	W13	IO_L4N_T0_34	JX1_IO09
21	GND	A8	GND	GND
22	GND	A8	GND	GND
23	JX1_LVDS_4_P	T14	IO_L5P_T0_34	JX1_IO10
24	JX1_LVDS_5_P	P14	IO_L6P_T0_34	JX1_IO11
25	JX1_LVDS_4_N	T15	IO_L5N_T0_34	JX1_IO12
26	JX1_LVDS_5_N	R14	IO_L6N_T0_VREF_34	JX1_IO13
27	GND	A8	GND	GND
28	GND	A8	GND	GND
29	JX1_LVDS_6_P	Y16	IO_L7P_T1_34	JX1_IO14
30	JX1_LVDS_7_P	W14	IO_L8P_T1_34	JX1_IO15
31	JX1_LVDS_6_N	Y17	IO_L7N_T1_34	JX1_IO16
32	JX1_LVDS_7_N	Y14	IO_L8N_T1_34	JX1_IO17
33	GND	A8	GND	GND
34	GND	A8	GND	GND
35	JX1_LVDS_8_P	T16	IO_L9P_T1_DQS_34	JX1_IO18
36	JX1_LVDS_9_P	V15	IO_L10P_T1_34	JX1_IO19
37	JX1_LVDS_8_N	U17	IO_L9N_T1_DQS_34	JX1_IO20
38	JX1_LVDS_9_N	W15	IO_L10N_T1_34	JX1_IO21
39	GND	A8	GND	GND
40	GND	A8	GND	GND
41	JX1_LVDS_10_P	U14	IO_L11P_T1_SRCC_34	JX1_IO22
42	JX1_LVDS_11_P	U18	IO_L12P_T1_MRCC_34	JX1_IO23
43	JX1_LVDS_10_N	U15	IO_L11N_T1_SRCC_34	JX1_IO24
44	JX1_LVDS_11_N	U19	IO_L12N_T1_MRCC_34	JX1_IO25
45	GND	A8	GND	GND
46	GND	A8	GND	GND
47	JX1_LVDS_12_P	N18	IO_L13P_T2_MRCC_34	JX1_IO26

48	JX1_LVDS_13_P	N20	IO_L14P_T2_SRCC_34	JX1_IO27
49	JX1_LVDS_12_N	P19	IO_L13N_T2_MRCC_34	JX1_IO28
50	JX1_LVDS_13_N	P20	IO_L14N_T2_SRCC_34	JX1_IO29
51	GND	A8	GND	GND
52	GND	A8	GND	GND
53	JX1_LVDS_14_P	T20	IO_L15P_T2_DQS_34	JX1_IO30
54	JX1_LVDS_15_P	V20	IO_L16P_T2_34	JX1_IO31
55	JX1_LVDS_14_N	U20	IO_L15N_T2_DQS_34	JX1_IO32
56	JX1_LVDS_15_N	W20	IO_L16N_T2_34	JX1_IO33
57	VIN_HDR	#N/A	#N/A	VCC
58	VIN_HDR	#N/A	#N/A	VCC
59	VIN_HDR	#N/A	#N/A	VCC
60	VIN_HDR	#N/A	#N/A	VCC
61	JX1_LVDS_16_P	Y18	IO_L17P_T2_34	JX1_IO34
62	JX1_LVDS_17_P	V16	IO_L18P_T2_34	JX1_IO35
63	JX1_LVDS_16_N	Y19	IO_L17N_T2_34	JX1_IO36
64	JX1_LVDS_17_N	W16	IO_L18N_T2_34	JX1_IO37
65	GND	A8	GND	GND
66	GND	A8	GND	GND
67	JX1_LVDS_18_P	R16	IO_L19P_T3_34	JX1_IO38
68	JX1_LVDS_19_P	T17	IO_L20P_T3_34	JX1_IO39
69	JX1_LVDS_18_N	R17	IO_L19N_T3_VREF_34	JX1_IO40
70	JX1_LVDS_19_N	R18	IO_L20N_T3_34	JX1_IO41
71	GND	A8	GND	GND
72	GND	A8	GND	GND
73	JX1_LVDS_20_P	V17	IO_L21P_T3_DQS_34	JX1_IO42
74	JX1_LVDS_21_P	W18	IO_L22P_T3_34	MIC_CM_CLK
75	JX1_LVDS_20_N	V18	IO_L21N_T3_DQS_34	MIC_SCL
76	JX1_LVDS_21_N	W19	IO_L22N_T3_34	MIC_SDA
77	GND	A8	GND	GND
78	VCCO_34	N19	VCCO_34	VCCIO
79	VCCO_34	N19	VCCO_34	VCCIO
80	VCCO_34	N19	VCCO_34	VCCIO
81	JX1_LVDS_22_P	N17	IO_L23P_T3_34	MIC_DATA0
82	JX1_LVDS_23_P	P15	IO_L24P_T3_34	MIC_DATA1
83	JX1_LVDS_22_N	P18	IO_L23N_T3_34	MIC_DATA2
84	JX1_LVDS_23_N	P16	IO_L24N_T3_34	MIC_DATA3
85	GND	A8	GND	GND
86	GND	A8	GND	GND
87	BANK13_LVDS_0_P	U7	IO_L11P_T1_SRCC_13	RGB00
88	BANK13_LVDS_1_P	T9	IO_L12P_T1_MRCC_13	RGB01
89	BANK13_LVDS_0_N	V7	IO_L11N_T1_SRCC_13	RGB02
90	BANK13_LVDS_1_N	U10	IO_L12N_T1_MRCC_13	RGB03
91	BANK13_LVDS_2_P	V8	IO_L15P_T2_DQS_13	RGB04
92	BANK13_LVDS_3_P	T5	IO_L19P_T3_13	RGB05
93	BANK13_LVDS_2_N	W8	IO_L15N_T2_DQS_13	JX1_TP00
94	BANK13_LVDS_3_N	U5	IO_L19N_T3_VREF_13	JX1_TP01
95	GND	A8	GND	GND
96	GND	A8	GND	GND
97	NetJX1_97	K9	VP_0	JX1_ADC_P0

98	NetJX1_98	M9	DXP_0	GND
99	NetJX1_99	L10	VN_0	JX1_ADC_N0
100	NetJX1_100	M10	DXN_0	GND

JX2 Pin	MicroZed Net Name	Zynq Pin	Zynq Name	Swarmbot Net
1	PMOD_D0	E8	PS_MIO13_500	-
2	PMOD_D1	E9	PS_MIO10_500	-
3	PMOD_D2	C6	PS_MIO11_500	-
4	PMOD_D3	D9	PS_MIO12_500	-
5	#VALUE!	#VALUE!	#VALUE!	-
6	PMOD_D5	B5	PS_MIO9_500	-
7	PMOD_D6	C5	PS_MIO14_500	-
8	PMOD_D7	C8	PS_MIO15_500	-
9	NetJX2_9	R10	INIT_B_0	-
10	NetJX2_10	L6	PROGRAM_B_0	VCCIO_EN
11	PG_MODULE	C7	PS_POR_B_500	PG_MODULE
12	VIN_HDR	#N/A	#N/A	VCC
13	JX2_SE_0	G14	IO_0_35	JX2_IO00
14	JX2_SE_1	J15	IO_25_35	BUZ_PWM0
15	GND	A8	GND	GND
16	GND	A8	GND	GND
17	JX2_LVDS_0_P	C20	IO_L1P_T0_AD0P_35	JX2_IO01
18	JX2_LVDS_1_P	B19	IO_L2P_T0_AD8P_35	BUZ_PWM1
19	JX2_LVDS_0_N	B20	IO_L1N_T0_AD0N_35	JX2_IO02
20	JX2_LVDS_1_N	A20	IO_L2N_T0_AD8N_35	JX2_IO03
21	GND	A8	GND	GND
22	GND	A8	GND	GND
23	JX2_LVDS_2_P	E17	IO_L3P_T0_DQS_AD1P_35	JX2_IO04
24	JX2_LVDS_3_P	D19	IO_L4P_T0_35	JX2_IO05
25	JX2_LVDS_2_N	D18	IO_L3N_T0_DQS_AD1N_35	JX2_IO06
26	JX2_LVDS_3_N	D20	IO_L4N_T0_35	JX2_IO07
27	GND	A8	GND	GND
28	GND	A8	GND	GND
29	JX2_LVDS_4_P	E18	IO_L5P_T0_AD9P_35	JX2_IO8
30	JX2_LVDS_5_P	F16	IO_L6P_T0_35	JX2_IO9
31	JX2_LVDS_4_N	E19	IO_L5N_T0_AD9N_35	JX2_IO10
32	JX2_LVDS_5_N	F17	IO_L6N_T0_VREF_35	JX2_IO11
33	GND	A8	GND	GND
34	GND	A8	GND	GND
35	JX2_LVDS_6_P	L19	IO_L9P_T1_DQS_AD3P_35	JX2_IO12
36	JX2_LVDS_7_P	M19	IO_L7P_T1_AD2P_35	JX2_IO13
37	JX2_LVDS_6_N	L20	IO_L9N_T1_DQS_AD3N_35	JX2_IO14
38	JX2_LVDS_7_N	M20	IO_L7N_T1_AD2N_35	JX2_IO15
39	GND	A8	GND	GND
40	GND	A8	GND	GND
41	JX2_LVDS_8_P	M17	IO_L8P_T1_AD10P_35	JX2_IO16
42	JX2_LVDS_9_P	K19	IO_L10P_T1_AD11P_35	JX2_IO17
43	JX2_LVDS_8_N	M18	IO_L8N_T1_AD10N_35	JX2_IO18
44	JX2_LVDS_9_N	J19	IO_L10N_T1_AD11N_35	JX2_IO19

45	GND	A8	GND	GND
46	GND	A8	GND	GND
47	JX2_LVDS_10_P	L16	IO_L11P_T1_SRCC_35	JX2_IO20
48	JX2_LVDS_11_P	K17	IO_L12P_T1_MRCC_35	JX2_IO21
49	JX2_LVDS_10_N	L17	IO_L11N_T1_SRCC_35	JX2_IO22
50	JX2_LVDS_11_N	K18	IO_L12N_T1_MRCC_35	JX2_IO23
51	GND	A8	GND	GND
52	GND	A8	GND	GND
53	JX2_LVDS_12_P	H16	IO_L13P_T2_MRCC_35	JX2_IO24
54	JX2_LVDS_13_P	J18	IO_L14P_T2_AD4P_SRCC_35	JX2_IO25
55	JX2_LVDS_12_N	H17	IO_L13N_T2_MRCC_35	JX2_IO26
56	JX2_LVDS_13_N	H18	IO_L14N_T2_AD4N_SRCC_35	JX2_IO27
57	VIN_HDR	#N/A	#N/A	VIN
58	VIN_HDR	#N/A	#N/A	VIN
59	VIN_HDR	#N/A	#N/A	VIN
60	VIN_HDR	#N/A	#N/A	VIN
61	JX2_LVDS_14_P	G17	IO_L16P_T2_35	JX2_IO28
62	JX2_LVDS_15_P	F19	IO_L15P_T2_DQS_AD12P_35	JX2_IO29
63	JX2_LVDS_14_N	G18	IO_L16N_T2_35	JX2_IO30
64	JX2_LVDS_15_N	F20	IO_L15N_T2_DQS_AD12N_35	JX2_IO31
65	GND	A8	GND	GND
66	GND	A8	GND	GND
67	JX2_LVDS_16_P	G19	IO_L18P_T2_AD13P_35	JX2_IO32
68	JX2_LVDS_17_P	J20	IO_L17P_T2_AD5P_35	JX2_IO33
69	JX2_LVDS_16_N	G20	IO_L18N_T2_AD13N_35	JX2_IO34
70	JX2_LVDS_17_N	H20	IO_L17N_T2_AD5N_35	JX2_IO35
71	GND	A8	GND	GND
72	GND	A8	GND	GND
73	JX2_LVDS_18_P	K14	IO_L20P_T3_AD6P_35	JX2_IO36
74	JX2_LVDS_19_P	H15	IO_L19P_T3_35	JX2_ADC_P1
75	JX2_LVDS_18_N	J14	IO_L20N_T3_AD6N_35	JX2_IO37
76	JX2_LVDS_19_N	G15	IO_L19N_T3_VREF_35	JX2_ADC_N1
77	GND	A8	GND	GND
78	VCCO_35	C19	VCCO_35	VCCIO
79	VCCO_35	C19	VCCO_35	VCCIO
80	VCCO_35	C19	VCCO_35	VCCIO
81	JX2_LVDS_20_P	N15	IO_L21P_T3_DQS_AD14P_35	ENC0A
82	JX2_LVDS_21_P	L14	IO_L22P_T3_AD7P_35	JX2_ADC_P2
83	JX2_LVDS_20_N	N16	IO_L21N_T3_DQS_AD14N_35	ENC0B
84	JX2_LVDS_21_N	L15	IO_L22N_T3_AD7N_35	JX2_ADC_N2
85	GND	A8	GND	GND
86	GND	A8	GND	GND
87	JX2_LVDS_22_P	M14	IO_L23P_T3_35	ENC1A
88	JX2_LVDS_23_P	K16	IO_L24P_T3_AD15P_35	JX2_ADC_P3
89	JX2_LVDS_22_N	M15	IO_L23N_T3_35	ENC1B
90	JX2_LVDS_23_N	J16	IO_L24N_T3_AD15N_35	JX2_ADC_N3
91	GND	A8	GND	GND

92	GND	A8	GND	GND
93	BANK13_LVDS_4_P	Y12	IO_L20P_T3_13	JX2_IO38
94	BANK13_LVDS_5_P	V11	IO_L21P_T3_DQS_13	JX2_TP00
95	BANK13_LVDS_4_N	Y13	IO_L20N_T3_13	JX2_TP01
96	BANK13_LVDS_5_N	V10	IO_L21N_T3_DQS_13	M0_PWM0
97	BANK13_LVDS_6_P	V6	IO_L22P_T3_13	M1_PWM1
98	VCCO_13	T8	VCCO_13	VCCIO
99	BANK13_LVDS_6_N	W6	IO_L22N_T3_13	M1_PWM0
100	BANK13_SE_0	V5	IO_L6N_T0_VREF_13	M0_PWM1

CON1 - M0 Driver Header			
Header Pin	Zynq Pin	Swarmbot Net	Remark
1	-	GND	
2	-	ENC0A	
3	-	ENC0B	
4	-	VCCIO	3.3V
5	-	M0_OUT1	
6	-	M0_OUT2	
CON2 - M1 Driver Header			
Header Pin	Zynq Pin	Swarmbot Net	Remark
1	-	GND	
2	-	ENC1A	
3	-	ENC1B	
4	-	VCCIO	3.3V
5	-	M1_OUT1	
6	-	M1_OUT2	
CON3 - Microphone Header			
Header Pin	Zynq Pin	Swarmbot Net	Remark
1	-	MIC_DATA3	
2	-	MIC_DATA2	
3	-	MIC_DATA1	
4	-	MIC_DATA0	
5	-	GND	
6	-	VCCIO	3.3V
7	-	MIC_CM_CLK	
8	-	MIC_SDA	
9	-	MIC_SCL	
10	-	N/C	
11	-	GND	
12	-	VCCIO	3.3V
CON4 - ADC Header			
Header Pin	Zynq Pin	Swarmbot Net	Remark
1	K9	VAUX_P0	Connected through anti-aliasing filter
2	L10	VAUX_N0	
3	K16	VAUX_P3	
4	J16	VAUX_N3	
5	L14	VAUX_P2	
6	L15	VAUX_N2	
7	H15	VAUX_P1	
8	G15	VAUX_N1	
P1 - Power Header			
Header Pin	Zynq Pin	Swarmbot Net	Remark
1	-	VBATT	Battery voltage
2	-	VCC	5V
3	-	VCCIO	3.3V
4	-	2V5REF	2.5V reference
5	-	GND	
P2 - Test Header			
Header Pin	Zynq Pin	Swarmbot Net	Remark
1	V11	JX1 TP00	

2	Y13	JX1_TP01	
3	W8	JX2_TP00	
4	U5	JX2_TP01	
P4 - Audio Header			
Header Pin	Zynq Pin	Swarmbot Net	Remark
1	-	VBATT	Battery voltage
2	B19	BUZ_PWM1	
3	J15	BUZ_PWM0	
4	-	GND	

GPIO Header 1 - CON5			
CON5 Pin	Zynq Pin	Swarmbot Net	Remark
1	-	GND	
2	-	GND	
3	R19	JX1_IO00	
4	T19	JX1_IO01	
5	T11	JX1_IO02	
6	T12	JX1_IO03	
7	T10	JX1_IO04	
8	U12	JX1_IO05	
9	U13	JX1_IO06	
10	V12	JX1_IO07	
11	V13	JX1_IO08	
12	W13	JX1_IO09	
13	T14	JX1_IO10	
14	P14	JX1_IO11	
15	T15	JX1_IO12	
16	R14	JX1_IO13	
17	Y16	JX1_IO14	
18	W14	JX1_IO15	
19	Y17	JX1_IO16	
20	Y14	JX1_IO17	
21	T16	JX1_IO18	
22	V15	JX1_IO19	
23	U17	JX1_IO20	
24	W15	JX1_IO21	
25	U14	JX1_IO22	
26	U18	JX1_IO23	
27	U15	JX1_IO24	
28	U19	JX1_IO25	
29	-	VCC	5V
30	-	VCC	5V
31	-	GND	
32	-	GND	
33	N18	JX1_IO26	
34	N20	JX1_IO27	
35	P19	JX1_IO28	
36	P20	JX1_IO29	
37	T20	JX1_IO30	
38	V20	JX1_IO31	
39	U20	JX1_IO32	
40	W20	JX1_IO33	
41	Y18	JX1_IO34	
42	V16	JX1_IO35	
43	Y19	JX1_IO36	
44	W16	JX1_IO37	
45	R16	JX1_IO38	
46	T17	JX1_IO39	
47	R17	JX1_IO40	
48	R18	JX1_IO41	

49	V17	JX1_IO42	
50	W18	MIC_CM_CLK	Also connected to CON3
51	V18	MIC_SCL	Also connected to CON3
52	W19	MIC_SDA	Also connected to CON3
53	N17	MIC_DATA0	Also connected to CON3
54	P15	MIC_DATA1	Also connected to CON3
55	P18	MIC_DATA2	Also connected to CON3
56	P16	MIC_DATA3	Also connected to CON3
57	-	VCCIO	3.3V
58	-	VCCIO	3.3V
59	-	GND	
60	-	GND	

GPIO Header 2 - CON6			
CON6 Pin	Zynq Pin	Swarmbot Net	Remark
1	-	GND	
2	-	GND	
3	C7	PG_MODULE	
4	J15	BUZ_PWM0	
5	G14	JX2_IO00	
6	B19	BUZ_PWM1	
7	C20	JX2_IO01	
8	B20	JX2_IO02	
9	A20	JX2_IO03	
10	E17	JX2_IO04	
11	D19	JX2_IO05	
12	D18	JX2_IO06	
13	D20	JX2_IO07	
14	E18	JX2_IO08	
15	F16	JX2_IO09	
16	E19	JX2_IO10	
17	F17	JX2_IO11	
18	L19	JX2_IO12	
19	M19	JX2_IO13	
20	L20	JX2_IO14	
21	M20	JX2_IO15	
22	M17	JX2_IO16	
23	K19	JX2_IO17	
24	M18	JX2_IO18	
25	J19	JX2_IO19	
26	L16	JX2_IO20	
27	K17	JX2_IO21	
28	L17	JX2_IO22	
29		VCC	5V
30		VCC	5V
31		GND	
32		GND	
33	K18	JX2_IO23	
34	H16	JX2_IO24	
35	J18	JX2_IO25	
36	H17	JX2_IO26	
37	H18	JX2_IO27	
38	G17	JX2_IO28	
39	F19	JX2_IO29	
40	G18	JX2_IO30	
41	F20	JX2_IO31	
42	G19	JX2_IO32	
43	J20	JX2_IO33	
44	G20	JX2_IO34	
45	H20	JX2_IO35	
46	K14	JX2_IO36	
47	J14	JX2_IO37	
48	Y12	JX2_IO38	

49	N15	ENCOA	Also connected to CON1
50	M15	ENC1B	Also connected to CON2
51	N16	ENC0B	Also connected to CON1
52	M14	ENC1A	Also connected to CON2
53	V10	M0_PWM0	Also connected to Q4
54	V5	M0_PWM1	Also connected to Q4
55	W6	M1_PWM0	Also connected to Q8
56	V6	M1_PWM1	Also connected to Q8
57	-	VCCIO	3.3V
58	-	VCCIO	3.3V
59	-	GND	
60	-	GND	