

Product Name		Standard		Pin Numbers		Standard		Product Name	
Igloo		Pin Type		Top	Bottom	Pin Type		Igloo	
Pin Type	Pin Type					Pin Type	Pin Type		
+3.3V	+3.3V	1	2	GND				GND	
GND	GND	3	4	+5V MTB		+5V MTB		+5V MTB	
+5V MTB	+5V MTB	5	6	+5V MTB		+5V MTB		+5V MTB	
+5V MTB	+5V MTB	7	8	GND		GND		GND	
GND	GND	9	10	JTAG_SEL		JTAG_SEL		JTAG_SEL	
POR/	POR/	11	12	GND		GND		GND	
TDO	TDO	13	14	RESET/		RESET/		RESET/	
GND	GND	15	16	TDI		TDI		TDI	
TMS	TMS	17	18	GND		GND		GND	
TRST	TRST	19	20	I00 / CTS1					
GND	GND	21	22	+5V DTB		+5V DTB		+5V DTB	
+5V DTB	+5V DTB	23	24	GND		GND		GND	
SCL1	I01 / SCL1	25	26	TCK		TCK		TCK	
GND	GND	27	28	GND		GND		GND	
Tx1	I02 / Tx1	29	30	I03 / SDA1		SDA1		SDA1	
Rx1	I04 / Rx1	31	32	I05 / RTS1					
+5V MTB	+5V MTB	33	34	+5V MTB		+5V MTB		+5V MTB	
+5V MTB	+5V MTB	35	36	+5V MTB		+5V MTB		+5V MTB	
+5V MTB	+5V MTB	37	38	+5V MTB		+5V MTB		+5V MTB	
GND	GND	39	40	GND		GND		GND	
GND	GND	41	42	GND		GND		GND	
P1_1	I06	43	44	I07		I07		P1_2	
P1_3	I08	45	46	I09		I09		P1_4	
GND	I010	47	48	I0110				GND	
P1_5	I012 / SCLK1	49	50	I013 / MOS1 / QS1_0				P1_6	
P1_7	I014 / MISO1 / QS1_1	51	52	I015 / QS1_2				P1_8	
GND	GND	53	54	GND		GND		GND	
P2_1	I016 / QS1_3	55	56	I017		I017		P2_2	
P2_3	I018	57	58	I019		I019		P2_4	
GND	I020	59	60	I021		I021		GND	
P2_5	I022	61	62	I023		I023		P2_6	
P2_7	I024	63	64	I025		I025		P2_8	
GND	GND	65	66	GND		GND		GND	
P3_1	I026	67	68	I027		I027		P3_2	
P3_3	I028	69	70	I029		I029		P3_4	
GND	I030	71	72	I031		I031		GND	
P3_5	I032	73	74	I033		I033		P3_6	
P3_7	I034	75	76	I035		I035		P3_8	
GND	GND	77	78	GND		GND		GND	
	DIFF1-A / CANL	79	80	DIFF1-B / CANH					
+3.3V	+3.3V	81	82	+3.3V		+3.3V		+3.3V	
P4_1	I036	83	84	I037		I037		P4_2	
P4_3	I038	85	86	I039		I039		P4_4	
+3.3V	+3.3V	87	88	+3.3V		+3.3V		+3.3V	
P8_6	I040	89	90	I041		I041		P4_6	
P4_7	I042	91	92	I043		I043		P4_8	
	I044	93	94	I045		I045			
+3.3V	+3.3V	95	96	+3.3V		+3.3V		+3.3V	
	I046	97	98	I047		I047			
	I048	99	100	I049		I049			
	I050	101	102	I051		I051			
+3.3V	+3.3V	103	104	+3.3V		+3.3V		+3.3V	
	I052	105	106	I053		I053			
	I054	107	108	I055		I055			
	I056	109	110	I057		I057			
+3.3V	+3.3V	111	112	+3.3V		+3.3V		+3.3V	
	I058	113	114	I059		I059			
	I060	115	116	I061		I061			
+3.3V	+3.3V	117	118	+3.3V		+3.3V		+3.3V	
	DIFF2-A	119	120	DIFF2-B					
GND	GND	121	122	GND		GND		GND	
P5_1	I062 / MDC	123	124	I063 / MDIO		I063		P5_2	
P5_3	I064 / INTR	125	126	I065 / nRESET		I065		P5_4	
GND	I066 / CRS	127	128	I067 / COL		I067		GND	
P5_5	I068 / TX_CLK	129	130	I069 / GTX_CLK		I069		P5_6	
P5_7	I070 / TX_EN	131	132	GND		GND		GND	
GND	GND	133	134	I071 / TX_ER		I071		P5_8	
	I072 / TXD0	135	136	I073 / TXD1		I073			
	I074 / TXD2	137	138	GND		GND		GND	
GND	GND	139	140	I075 / TXD3		I075			
	I076 / TXD4	141	142	I077 / TXD5		I077			
	I078 / TXD6	143	144	GND		GND		GND	
GND	GND	145	146	I079 / TXD7		I079			
P6_1	I080 / RX_CLK	147	148	I081 / RX_DV		I081		P6_2	
GND	I082 / RX_ER	149	150	I083 / RXD0		I083		GND	
P6_3	I084 / RXD1	151	152	I085 / RXD2		I085		P6_4	
P6_5	I086 / RXD3	153	154	I087 / RXD4		I087		P6_6	
GND	GND	155	156	GND		GND		GND	
P6_7	I088 / RXD5	157	158	I089 / RXD6		I089		P6_8	
	I090 / RXD7	159	160	I091		I091			
GND	GND	161	162	GND		GND		GND	
	DIFF3-A / SDA2	163	164	DIFF3-B / SCL2					
GND	GND	165	166	DIFF4-A / Tx2					
	DIFF4-B / Rx2	167	168	GND		GND		GND	
	DIFF5-A / RTS2	169	170	DIFF5-B / CTS2					
GND	GND	171	172	GND		GND		GND	
P7_1	I092 / SCLK2	173	174	I093 / MOS2 / QS2_0				P7_2	
P7_3	I094 / MISO2 / QS2_1	175	176	I095 / QS2_2				P7_4	
GND	GND	177	178	GND		GND		GND	
P7_5	I096 / QS2_3	179	180	I097		I097		P7_6	
P7_7	I098	181	182	I099		I099		P7_8	
GND	I0100	183	184	I0101		I0101		GND	
P8_1	I0102	185	186	I0103		I0103		P8_2	
GND	GND	187	188	DIFF6-A				P8_3	
P8_4	DIFF6-B	189	190	GND		GND		GND	
P8_5	I0104	191	192	I0105		I0105		P4_5	
GND	I0106	193	194	I0107		I0107		P8_7	
P8_8	I0108	195	196	I0109		I0109		GND	
	I0110	197	198	I0111		I0111			
+3.3V	+3.3V	199	200	GND		GND		GND	

FREE PINS (no NC) : 0  
FREE PINS (NC comprised) : 42

Signals names as seen from the daughterboard if not specified otherwise (e.g. Tx is the output of FPGA's UART block)

GND	Common ground
+3.3V	Daughterboard 3.3V output (max 1.5 [A])
+5V DTB	Daughterboard 5V output (LOW CURRENT CONSUMPTION IF RUNNING ON USB !)
+5V MTB	Motherboard 5V output
Txx	JTAG signals /JTAG_SEL : 1 = no extra chip, 0 = extra JTAG line used)
RESET/	Daughterboard reset input (active low)
POR/	Daughterboard PowerOnReset signal output (active low)
DIFFx-A/B	Differential pair I/O preferred pins (can be used as standard I/O)
I0x	Input / output pin
Tx / Rx	3.3V EUSART signals, any I/O for complementary (CTR, DTS ...)
SCL / SDA	3.3V I2C signals
SCLK / MOSI / MISO	3.3V SPI signals, any I/O as slave select
QS	SPI dual/quad interface
CANL / CANH	3.3V CAN signals (REQUIRES A TRANSCEIVER ON THE MOTHERBOARD !)
TXD, RXD, ...	Gigabit ethernet signals ((G)MII, MDC/MDIO, interrupt)

Jedec 4.20.11-1 link :

- Power pins, except pin 200 (added as GND), 199 and 1 as standard +3.3V
- 69, 83, 120 and 163 (test pins) as standard I/Os
- 30, 32, 164 and 166 (clock outputs) as standard I/Os
- Fixed JTAG signals, + RESET/ and POR/