

**Comment: In/Out pins** must be tested with a **fixed direction: no change on direction**  
 The direction is fixed by the input **reverse\_enable\_low** (rev\_en\_low pin 54)  
 Most test vectors will run with **rev\_en\_low=1**, only very short tests will run with **rev\_en**,

All GND pads must be connected together to same GND plane.

All VCC\_IO pads must be connected together to the same 3.3 V plane

All VCC\_core pads must be connected together to the same 1.0 V plane

PAD NUMBER	Name of PAD	DIR		
1	gnd		<b>TOT = 17 senza VCC e GND</b>	
2	patt_data_a_16	In/Out		
3	SAout_Low	Out		bit 0 - 5 - 10 c
4	Bus2_6	In		bit 1- 6 - 11 co
5	Bus2_5	In		bit 2 - 7- 12 co
6	tdi	In		bit 3 - 8 - 13 co
7	tck	In		bit 4 - 9 - 14 c
8	Bus2_4	In		
9	Bus2_3	In		
10	Bus2_2	In		
11	Bus2_1	In		
12	DAin_Low	In		
13	gnd			
14	vcc_core			
15	Bus2_0	In		
16	tms	In		
17	patt_data_a_15	In/Out		
18	vcc_IO			
19	patt_data_a_14	In/Out		
20	patt_data_a_13	In/Out		
21	patt_data_a_12	In/Out		
22	patt_data_a_11	In/Out		
23	patt_data_a_10	In/Out		
24	patt_data_a_9	In/Out		
25	gnd			
26	vcc_IO			
27	patt_data_a_8	In/Out		
28	patt_data_a_7	In/Out		
29	patt_data_a_6	In/Out		
30	patt_data_a_5	In/Out		
31	patt_data_a_4	In/Out		
32	patt_data_a_3	In/Out		
33	vcc_IO			
34	vcc_core			
35	patt_data_a_2	In/Out		
36	trst	In		
37	patt_data_a_1	In/Out		
38	gnd			
39	patt_data_a_0	In/Out		

40	init_ev	In
41	Bus0_0	In
42	Bus0_1	In
43	Bus0_2	In
44	Bus0_3	In
45	Bus0_4	In
46	Bus0_5	In
47	Bus0_6	In
48	Bus0_7	In
49	OPCODE_0	In
50	vcc_IO In_M1 (??)	
51	gnd	
52	vcc_IO	

53	vcc_IO		<b>TOT = 16 senza VCC e GND</b>
54	rev_en_Low	In	
55	vcc_core		
56	Bus0_8	In	
57	Bus0_9	In	
58	Bus0_10	In	
59	Bus0_11	In	
60	Bus0_12	In	
61	Bus0_13	In	
62	Bus0_14	In	
63	Bus0_15	In	
64	Bus0_16	In	
65	Bus0_17	In	
66	gnd		
67	Bus5_0	In	
68	Bus5_1	In	
69	Bus5_2	In	
70	Bus5_3	In	
71	vcc_core		
72	Bus5_4	In	
73	Bus5_5	In	
74	Bus5_6	In	
75	Bus5_7	In	
76	Bus5_8	In	
77	NC IN_INIT_FPGA		
78	vcc_IO		
79	gnd		
80	clk	In	
81	Bus5_9	In	
82	Bus5_10	In	
83	Bus5_11	In	
84	Bus5_12	In	
85	Bus5_13	In	
86	vcc_core		

87	Bus5_14	In
88	Bus5_15	In
89	Bus5_16	In
90	Bus5_17	In
91	gnd	
92	Bus1_17	In
93	Bus1_16	In
94	Bus1_15	In
95	Bus1_14	In
96	Bus1_13	In
97	Bus1_12	In
98	Bus1_11	In
99	Bus1_10	In
100	Bus1_9	In
101	Bus1_8	In
102	OPCODE_1	In
103	gnd	
104	NC OUT_Done	

105	vcc_IO		<b>TOT = 15 senza VCC e GND</b>
106	NC (in_Program)		Program_PAM?
107	OPCODE_3	In	
108	OPCODE_2	In	
109	Bus1_7	In	
110	Bus1_6	In	
111	Bus1_5	In	
112	Bus1_4	In	
113	Bus1_3	In	
114	Bus1_2	In	
115	Bus1_1	In	
116	Bus1_0	In	
117	patt_data_b_0	In/Out	
118	gnd		
119	patt_data_b_1	In/Out	
120	patt_data_b_2	In/Out	
121	vcc_IO		
122	debug_2	Out	
123	debug_1	Out	
124	patt_data_b_3	In/Out	
125	patt_data_b_4	In/Out	
126	patt_data_b_5	In/Out	
127	patt_data_b_6	In/Out	
128	patt_data_b_7	In/Out	
129	patt_data_b_8	In/Out	
130	vcc_IO		
131	gnd		
132	patt_data_b_9	In/Out	
133	patt_data_b_10	In/Out	

134	patt_data_b_11	In/Out	
135	patt_data_b_12	In/Out	
136	patt_data_b_13	In/Out	
137	patt_data_b_14	In/Out	
138	debug_0	Out	
139	vcc_core		
140	vcc_IO		
141	patt_data_b_15	In/Out	
142	Bus3_0	In	
143	gnd		
144	wiredDA_Low !!PAD	Out	1.5 kohm pullup needed
145	DAout_Low	Out	
146	Bus3_1	In	
147	Bus3_2	In	
148	Bus3_3	In	
149	Bus3_4	In	
150	vcc_core		
151	SAin_Low	In	
152	Bus3_5	In	
153	Bus3_6	In	
154	patt_data_b_16	In/Out	
155	NC IN_CCLK		
156	vcc_IO		
157	tdo	Out	TOT = 16 senza VCC e GND
158	gnd		
159	Bus3_7	In	
160	patt_data_b_17	In/Out	
161	Bus3_8	In	
162	Bus3_9	In	
163	Bus3_10	In	
164	Bus3_11	In	
165	Bus3_12	In	
166	Bus3_13	In	
167	Bus3_14	In	
168	Bus3_15	In	
169	Bus3_16	In	
170	gnd		
171	Bus3_17	In	
172	Bus4_17	In	
173	vcc_core		
174	Bus4_16	In	
175	Bus4_15	In	
176	Bus4_14	In	
177	Bus4_13	In	
178	Bus4_12	In	
179	Bus4_11	In	
180	Bus4_10	In	

181	Bus4_9	In
182	gnd	
183	vcc_IO	
184	Bus4_8	In
185	Bus4_7	In
186	Bus4_6	In
187	Bus4_5	In
188	Bus4_4	In
189	Bus4_3	In
190	Bus4_2	In
191	Bus4_1	In
192	vcc_core	
193	Bus4_0	In
194	Bus2_17	In
195	gnd	
196	Bus2_16	In
197	Bus2_15	In
198	Bus2_14	In
199	Bus2_13	In
200	Bus2_12	In
201	Bus2_11	In
202	Bus2_10	In
203	Bus2_9	In
204	Bus2_8	In
205	patt_data_a_17	In/Out
206	Bus2_7	In
207	vcc_core	
208	vcc_IO	

on during tests!

\_low=0

onnessi a pad 10

onnessi a pad 11

onnessi a pad 12

onnessi a pad 13

onnessi a pad 14









