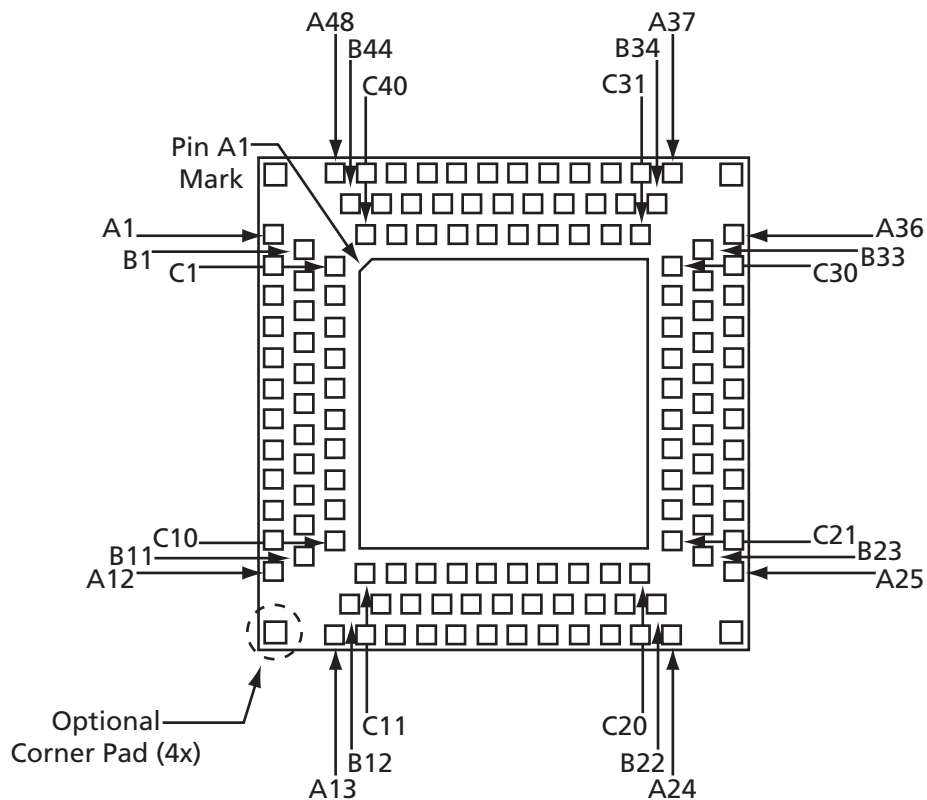


Package Pin Assignments

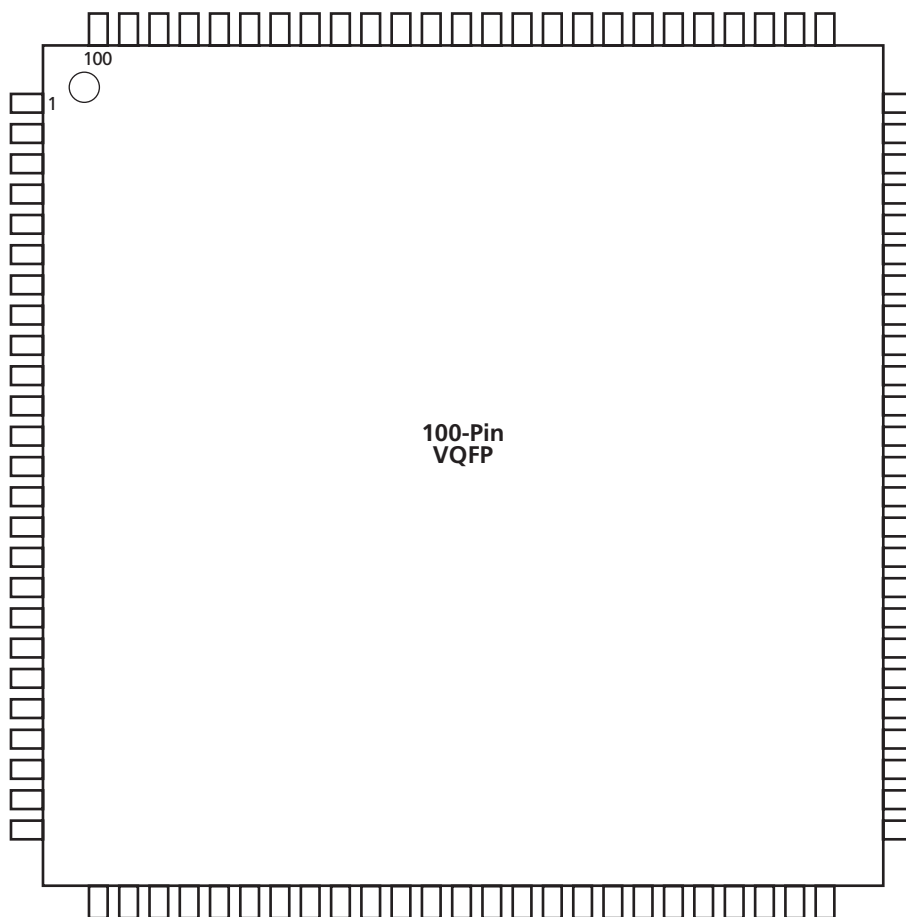
132-Pin QFN



Note

For Package Manufacturing and Environmental information, visit Resource center at <http://www.actel.com/products/rescenter/package/index.html>.

100-Pin VQFP



Note

For Package Manufacturing and Environmental information, visit Resource center at <http://www.actel.com/products/rescenter/package/index.html>.

100-Pin VQFP*	
Pin Number	A3P060 Function
1	GND
2	GAA2/IO51RSB1
3	IO52RSB1
4	GAB2/IO53RSB1
5	IO95RSB1
6	GAC2/IO94RSB1
7	IO93RSB1
8	IO92RSB1
9	GND
10	GFB1/IO87RSB1
11	GFB0/IO86RSB1
12	V _{COMPLF}
13	GFA0/IO85RSB1
14	V _{CCPLF}
15	GFA1/IO84RSB1
16	GFA2/IO83RSB1
17	V _{CC}
18	V _{CC} B1
19	GEC1/IO77RSB1
20	GEB1/IO75RSB1
21	GEB0/IO74RSB1
22	GEA1/IO73RSB1
23	GEA0/IO72RSB1
24	VMV1
25	GNDQ
26	GEA2/IO71RSB1
27	GEB2/IO70RSB1
28	GEC2/IO69RSB1
29	IO68RSB1
30	IO67RSB1
31	IO66RSB1
32	IO65RSB1
33	IO64RSB1
34	IO63RSB1
35	IO62RSB1
36	IO61RSB1

100-Pin VQFP*	
Pin Number	A3P060 Function
37	V _{CC}
38	GND
39	V _{CC} B1
40	IO60RSB1
41	IO59RSB1
42	IO58RSB1
43	IO57RSB1
44	GDC2/IO56RSB1
45	GDB2/IO55RSB1
46	GDA2/IO54RSB1
47	TCK
48	TDI
49	TMS
50	VMV1
51	GND
52	V _{PUMP}
53	NC
54	TDO
55	TRST
56	V _{JTAG}
57	GDA1/IO49RSB0
58	GDC0/IO46RSB0
59	GDC1/IO45RSB0
60	GCC2/IO43RSB0
61	GCB2/IO42RSB0
62	GCA0/IO40RSB0
63	GCA1/IO39RSB0
64	GCC0/IO36RSB0
65	GCC1/IO35RSB0
66	V _{CC} B0
67	GND
68	V _{CC}
69	IO31RSB0
70	GBC2/IO29RSB0
71	GGB2/IO27RSB0
72	IO26RSB0

100-Pin VQFP*	
Pin Number	A3P060 Function
73	GBA2/IO25RSB0
74	VMV0
75	GNDQ
76	GBA1/IO24RSB0
77	GBA0/IO23RSB0
78	GGB1/IO22RSB0
79	GGB0/IO21RSB0
80	GBC1/IO20RSB0
81	GBC0/IO19RSB0
82	IO18RSB0
83	IO17RSB0
84	IO15RSB0
85	IO13RSB0
86	IO11RSB0
87	V _{CC} B0
88	GND
89	V _{CC}
90	IO10RSB0
91	IO09RSB0
92	IO08RSB0
93	GAC1/IO07RSB0
94	GAC0/IO06RSB0
95	GAB1/IO05RSB0
96	GAB0/IO04RSB0
97	GAA1/IO03RSB0
98	GAA0/IO02RSB0
99	IO01RSB0
100	IO00RSB0

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

100-Pin VQFP*	
Pin Number	A3P125 Function
1	GND
2	GAA2/IO67RSB1
3	IO68RSB1
4	GAB2/IO69RSB1
5	IO132RSB1
6	GAC2/IO131RSB1
7	IO130RSB1
8	IO129RSB1
9	GND
10	GFB1/IO124RSB1
11	GFB0/IO123RSB1
12	V _{COMPLF}
13	GFA0/IO122RSB1
14	V _{CCPLF}
15	GFA1/IO121RSB1
16	GFA2/IO120RSB1
17	V _{CC}
18	V _{CC} B1
19	GEC0/IO111RSB1
20	GEB1/IO110RSB1
21	GEB0/IO109RSB1
22	GEA1/IO108RSB1
23	GEA0/IO107RSB1
24	VMV1
25	GNDQ
26	GEA2/IO106RSB1
27	GEB2/IO105RSB1
28	GEC2/IO104RSB1
29	IO102RSB1
30	IO100RSB1
31	IO99RSB1
32	IO97RSB1
33	IO96RSB1
34	IO95RSB1
35	IO94RSB1
36	IO93RSB1

100-Pin VQFP*	
Pin Number	A3P125 Function
37	V _{CC}
38	GND
39	V _{CC} B1
40	IO87RSB1
41	IO84RSB1
42	IO81RSB1
43	IO75RSB1
44	GDC2/IO72RSB1
45	GDB2/IO71RSB1
46	GDA2/IO70RSB1
47	TCK
48	TDI
49	TMS
50	VMV1
51	GND
52	V _{PUMP}
53	NC
54	TDO
55	TRST
56	V _{JTAG}
57	GDA1/IO65RSB0
58	GDC0/IO62RSB0
59	GDC1/IO61RSB0
60	GCC2/IO59RSB0
61	GCB2/IO58RSB0
62	GCA0/IO56RSB0
63	GCA1/IO55RSB0
64	GCC0/IO52RSB0
65	GCC1/IO51RSB0
66	V _{CC} B0
67	GND
68	V _{CC}
69	IO47RSB0
70	GBC2/IO45RSB0
71	GBB2/IO43RSB0
72	IO42RSB0

100-Pin VQFP*	
Pin Number	A3P125 Function
73	GBA2/IO41RSB0
74	VMV0
75	GNDQ
76	GBA1/IO40RSB0
77	GBA0/IO39RSB0
78	GGB1/IO38RSB0
79	GGB0/IO37RSB0
80	GBC1/IO36RSB0
81	GBC0/IO35RSB0
82	IO32RSB0
83	IO28RSB0
84	IO25RSB0
85	IO22RSB0
86	IO19RSB0
87	V _{CC} B0
88	GND
89	V _{CC}
90	IO15RSB0
91	IO13RSB0
92	IO11RSB0
93	IO09RSB0
94	IO07RSB0
95	GAC1/IO05RSB0
96	GAC0/IO04RSB0
97	GAB1/IO03RSB0
98	GAB0/IO02RSB0
99	GAA1/IO01RSB0
100	GAA0/IO00RSB0

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

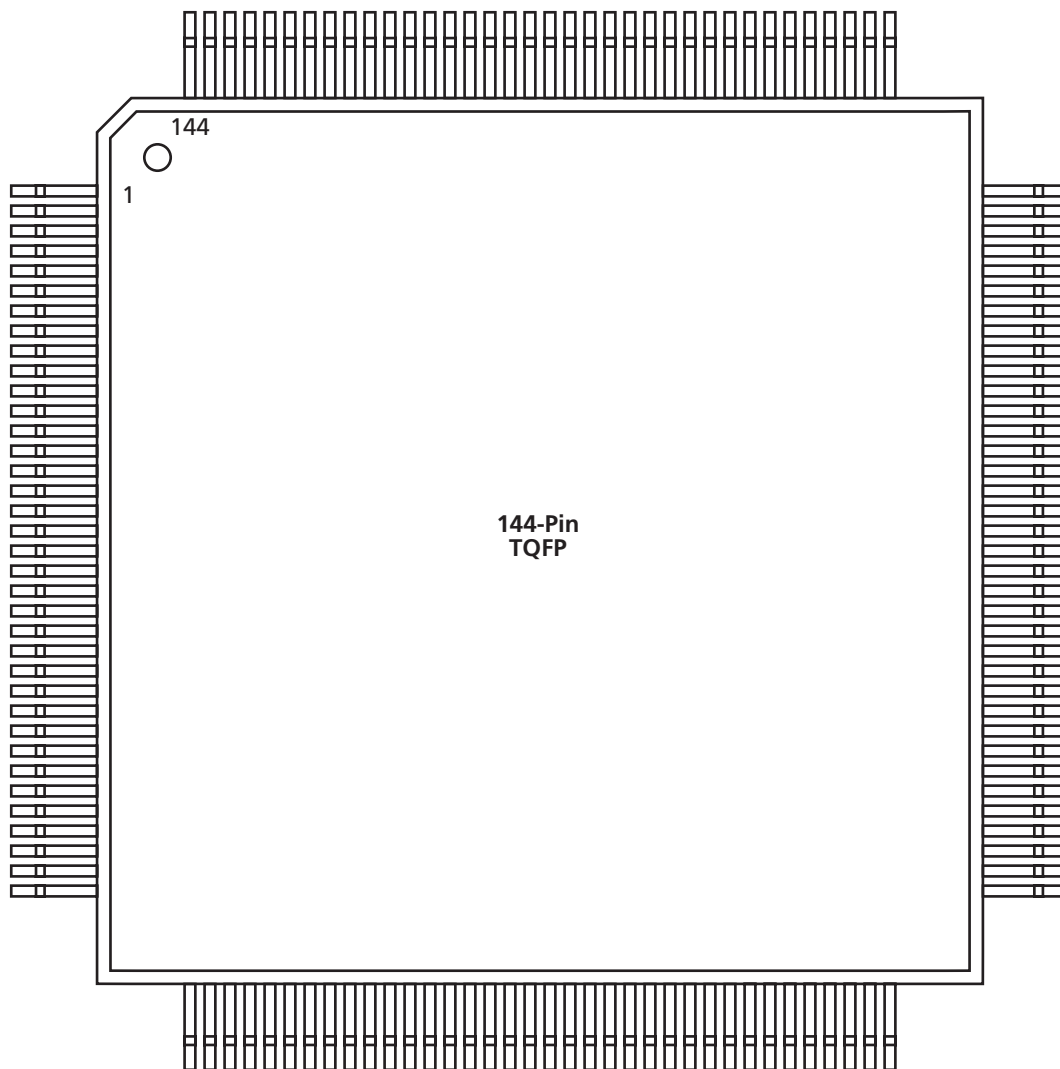
100-Pin VQFP*	
Pin Number	A3P250 Function
1	GND
2	GAA2/IO118UDB3
3	IO118VDB3
4	GAB2/IO117UDB3
5	IO117VDB3
6	GAC2/IO116UDB3
7	IO116VDB3
8	IO112PSB3
9	GND
10	GFB1/IO109PDB3
11	GFBO/IO109NDB3
12	V _{COMPLF}
13	GFA0/IO108NPB3
14	V _{CCPLF}
15	GFA1/IO108PPB3
16	GFA2/IO107PSB3
17	V _{CC}
18	V _{CCjB3}
19	GFC2/IO105PSB3
20	GEC1/IO100PDB3
21	GEC0/IO100NDB3
22	GEA1/IO98PDB3
23	GEA0/IO98NDB3
24	VMV3
25	GNDQ
26	GEA2/IO97RSB2
27	GEB2/IO96RSB2
28	GEC2/IO95RSB2
29	IO93RSB2
30	IO92RSB2
31	IO91RSB2
32	IO90RSB2
33	IO88RSB2
34	IO86RSB2
35	IO85RSB2
36	IO84RSB2

100-Pin VQFP*	
Pin Number	A3P250 Function
37	V _{CC}
38	GND
39	V _{CCjB2}
40	IO77RSB2
41	IO74RSB2
42	IO71RSB2
43	GDC2/IO63RSB2
44	GDB2/IO62RSB2
45	GDA2/IO61RSB2
46	GNDQ
47	TCK
48	TDI
49	TMS
50	VMV2
51	GND
52	V _{PUMP}
53	NC
54	TDO
55	TRST
56	V _{JTAG}
57	GDA1/IO60USB1
58	GDC0/IO58VDB1
59	GDC1/IO58UDB1
60	IO52NDB1
61	GCB2/IO52PDB1
62	GCA1/IO50PDB1
63	GCA0/IO50NDB1
64	GCC0/IO48NDB1
65	GCC1/IO48PDB1
66	V _{CCjB1}
67	GND
68	V _{CC}
69	IO43NDB1
70	GBC2/IO43PDB1
71	GBB2/IO42PSB1
72	IO41NDB1

100-Pin VQFP*	
Pin Number	A3P250 Function
73	GBA2/IO41PDB1
74	VMV1
75	GNDQ
76	GBA1/IO40RSB0
77	GBA0/IO39RSB0
78	GBB1/IO38RSB0
79	GBB0/IO37RSB0
80	GBC1/IO36RSB0
81	GBC0/IO35RSB0
82	IO29RSB0
83	IO27RSB0
84	IO25RSB0
85	IO23RSB0
86	IO21RSB0
87	V _{CCjB0}
88	GND
89	V _{CC}
90	IO15RSB0
91	IO13RSB0
92	IO11RSB0
93	GAC1/IO05RSB0
94	GAC0/IO04RSB0
95	GAB1/IO03RSB0
96	GAB0/IO02RSB0
97	GAA1/IO01RSB0
98	GAA0/IO00RSB0
99	GNDQ
100	VMV0

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

144-Pin TQFP



Note

For Package Manufacturing and Environmental information, visit Resource center at <http://www.actel.com/products/rescenter/package/index.html>.

144-Pin TQFP*	
Pin Number	A3P060 Function
1	GAA2/IO51RSB1
2	IO52RSB1
3	GAB2/IO53RSB1
4	IO95RSB1
5	GAC2/IO94RSB1
6	IO93RSB1
7	IO92RSB1
8	IO91RSB1
9	V _{CC}
10	GND
11	V _{CC} B1
12	IO90RSB1
13	GFC1/IO89RSB1
14	GFC0/IO88RSB1
15	GFB1/IO87RSB1
16	GFB0/IO86RSB1
17	V _{COMPLF}
18	GFA0/IO85RSB1
19	V _{CC} PLF
20	GFA1/IO84RSB1
21	GFA2/IO83RSB1
22	GFB2/IO82RSB1
23	GFC2/IO81RSB1
24	IO80RSB1
25	IO79RSB1
26	IO78RSB1
27	GND
28	V _{CC} B1
29	GEC1/IO77RSB1
30	GEC0/IO76RSB1
31	GEB1/IO75RSB1
32	GEB0/IO74RSB1
33	GEA1/IO73RSB1
34	GEA0/IO72RSB1
35	VMV1
36	GNDQ

144-Pin TQFP*	
Pin Number	A3P060 Function
37	NC
38	GEA2/IO71RSB1
39	GEB2/IO70RSB1
40	GEC2/IO69RSB1
41	IO68RSB1
42	IO67RSB1
43	IO66RSB1
44	IO65RSB1
45	V _{CC}
46	GND
47	V _{CC} B1
48	NC
49	IO64RSB1
50	NC
51	IO63RSB1
52	NC
53	IO62RSB1
54	NC
55	IO61RSB1
56	NC
57	NC
58	IO60RSB1
59	IO59RSB1
60	IO58RSB1
61	IO57RSB1
62	NC
63	GND
64	NC
65	GDC2/IO56RSB1
66	GDB2/IO55RSB1
67	GDA2/IO54RSB1
68	GNDQ
69	TCK
70	TDI
71	TMS
72	VMV1

144-Pin TQFP*	
Pin Number	A3P060 Function
73	V _{PUMP}
74	NC
75	TDO
76	TRST
77	V _{JTAG}
78	GDA0/IO50RSB0
79	GDB0/IO48RSB0
80	GDB1/IO47RSB0
81	V _{CC} B0
82	GND
83	IO44RSB0
84	GCC2/IO43RSB0
85	GCB2/IO42RSB0
86	GCA2/IO41RSB0
87	GCA0/IO40RSB0
88	GCA1/IO39RSB0
89	GCB0/IO38RSB0
90	GCB1/IO37RSB0
91	GCC0/IO36RSB0
92	GCC1/IO35RSB0
93	IO34RSB0
94	IO33RSB0
95	NC
96	NC
97	NC
98	V _{CC} B0
99	GND
100	V _{CC}
101	IO30RSB0
102	GBC2/IO29RSB0
103	IO28RSB0
104	GBB2/IO27RSB0
105	IO26RSB0
106	GBA2/IO25RSB0
107	VMV0
108	GNDQ

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

144-Pin TQFP*	
Pin Number	A3P060 Function
109	NC
110	NC
111	GBA1/IO24RSB0
112	GBA0/IO23RSB0
113	GBB1/IO22RSB0
114	GBB0/IO21RSB0
115	GBC1/IO20RSB0
116	GBC0/IO19RSB0
117	V _{CC} B0
118	GND
119	V _{CC}
120	IO18RSB0
121	IO17RSB0
122	IO16RSB0
123	IO15RSB0
124	IO14RSB0
125	IO13RSB0
126	IO12RSB0
127	IO11RSB0
128	NC
129	IO10RSB0
130	IO09RSB0
131	IO08RSB0
132	GAC1/IO07RSB0
133	GAC0/IO06RSB0
134	NC
135	GND
136	NC
137	GAB1/IO05RSB0
138	GAB0/IO04RSB0
139	GAA1/IO03RSB0
140	GAA0/IO02RSB0
141	IO01RSB0
142	IO00RSB0
143	GNDQ
144	VMV0

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

144-Pin TQFP*	
Pin Number	A3P125 Function
1	GAA2/IO67RSB1
2	IO68RSB1
3	GAB2/IO69RSB1
4	IO132RSB1
5	GAC2/IO131RSB1
6	IO130RSB1
7	IO129RSB1
8	IO128RSB1
9	V _{CC}
10	GND
11	V _{CC} B1
12	IO127RSB1
13	GFC1/IO126RSB1
14	GFC0/IO125RSB1
15	GFB1/IO124RSB1
16	GFB0/IO123RSB1
17	V _{COMPLF}
18	GFA0/IO122RSB1
19	V _{CC} PLF
20	GFA1/IO121RSB1
21	GFA2/IO120RSB1
22	GFB2/IO119RSB1
23	GFC2/IO118RSB1
24	IO117RSB1
25	IO116RSB1
26	IO115RSB1
27	GND
28	V _{CC} B1
29	GEC1/IO112RSB1
30	GEC0/IO111RSB1
31	GEB1/IO110RSB1
32	GEB0/IO109RSB1
33	GEA1/IO108RSB1
34	GEA0/IO107RSB1
35	VMV1
36	GNDQ

144-Pin TQFP*	
Pin Number	A3P125 Function
37	NC
38	GEA2/IO106RSB1
39	GEB2/IO105RSB1
40	GEC2/IO104RSB1
41	IO103RSB1
42	IO102RSB1
43	IO101RSB1
44	IO100RSB1
45	V _{CC}
46	GND
47	V _{CC} B1
48	IO99RSB1
49	IO97RSB1
50	IO95RSB1
51	IO93RSB1
52	IO92RSB1
53	IO90RSB1
54	IO88RSB1
55	IO86RSB1
56	IO84RSB1
57	IO83RSB1
58	IO82RSB1
59	IO81RSB1
60	IO80RSB1
61	IO79RSB1
62	V _{CC}
63	GND
64	V _{CC} B1
65	GDC2/IO72RSB1
66	GDB2/IO71RSB1
67	GDA2/IO70RSB1
68	GNDQ
69	TCK
70	TDI
71	TMS
72	VMV1

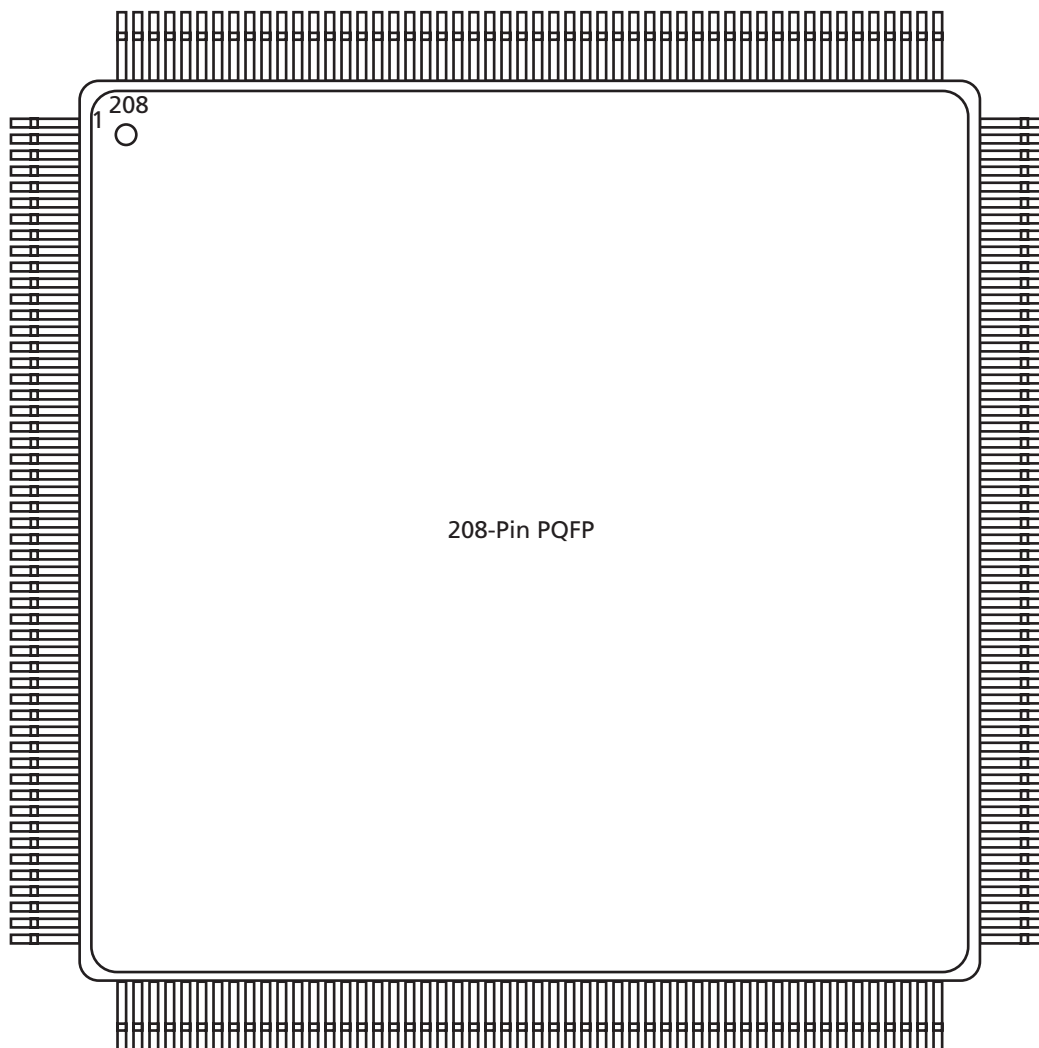
144-Pin TQFP*	
Pin Number	A3P125 Function
73	V _{PUMP}
74	NC
75	TDO
76	TRST
77	V _{JTAG}
78	GDA0/IO66RSB0
79	GDB0/IO64RSB0
80	GDB1/IO63RSB0
81	V _{CC} B0
82	GND
83	IO60RSB0
84	GCC2/IO59RSB0
85	GCB2/IO58RSB0
86	GCA2/IO57RSB0
87	GCA0/IO56RSB0
88	GCA1/IO55RSB0
89	GCB0/IO54RSB0
90	GCB1/IO53RSB0
91	GCC0/IO52RSB0
92	GCC1/IO51RSB0
93	IO50RSB0
94	IO49RSB0
95	NC
96	NC
97	NC
98	V _{CC} B0
99	GND
100	V _{CC}
101	IO47RSB0
102	GBC2/IO45RSB0
103	IO44RSB0
104	GBB2/IO43RSB0
105	IO42RSB0
106	GBA2/IO41RSB0
107	VMV0
108	GNDQ

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

144-Pin TQFP*	
Pin Number	A3P125 Function
109	GBA1/IO40RSB0
110	GBA0/IO39RSB0
111	GBB1/IO38RSB0
112	GBB0/IO37RSB0
113	GBC1/IO36RSB0
114	GBC0/IO35RSB0
115	IO34RSB0
116	IO33RSB0
117	V _{CC} B0
118	GND
119	V _{CC}
120	IO29RSB0
121	IO28RSB0
122	IO27RSB0
123	IO25RSB0
124	IO23RSB0
125	IO21RSB0
126	IO19RSB0
127	IO17RSB0
128	IO16RSB0
129	IO14RSB0
130	IO12RSB0
131	IO10RSB0
132	IO08RSB0
133	IO06RSB0
134	V _{CC} B0
135	GND
136	V _{CC}
137	GAC1/IO05RSB0
138	GAC0/IO04RSB0
139	GAB1/IO03RSB0
140	GAB0/IO02RSB0
141	GAA1/IO01RSB0
142	GAA0/IO00RSB0
143	GNDQ
144	VMV0

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

208-Pin PQFP



Note

For Package Manufacturing and Environmental information, visit Resource center at <http://www.actel.com/products/rescenter/package/index.html>.

208-Pin PQFP*	
Pin Number	A3P125 Function
1	GND
2	GAA2/IO67RSB1
3	IO68RSB1
4	GAB2/IO69RSB1
5	IO132RSB1
6	GAC2/IO131RSB1
7	NC
8	NC
9	IO130RSB1
10	IO129RSB1
11	NC
12	IO128RSB1
13	NC
14	NC
15	NC
16	V _{CC}
17	GND
18	V _{CC} B1
19	IO127RSB1
20	NC
21	GFC1/IO126RSB1
22	GFC0/IO125RSB1
23	GFB1/IO124RSB1
24	GFB0/IO123RSB1
25	V _{COMPLF}
26	GFA0/IO122RSB1
27	V _{CCPLF}
28	GFA1/IO121RSB1
29	GND
30	GFA2/IO120RSB1
31	NC
32	GFB2/IO119RSB1
33	NC
34	GFC2/IO118RSB1
35	IO117RSB1
36	NC

208-Pin PQFP*	
Pin Number	A3P125 Function
37	IO116RSB1
38	IO115RSB1
39	NC
40	V _{CC} B1
41	GND
42	IO114RSB1
43	IO113RSB1
44	GEC1/IO112RSB1
45	GEC0/IO111RSB1
46	GEB1/IO110RSB1
47	GEB0/IO109RSB1
48	GEA1/IO108RSB1
49	GEA0/IO107RSB1
50	VMV1
51	GNDQ
52	GND
53	NC
54	NC
55	GEA2/IO106RSB1
56	GEB2/IO105RSB1
57	GEC2/IO104RSB1
58	IO103RSB1
59	IO102RSB1
60	IO101RSB1
61	IO100RSB1
62	V _{CC} B1
63	IO99RSB1
64	IO98RSB1
65	GND
66	IO97RSB1
67	IO96RSB1
68	IO95RSB1
69	IO94RSB1
70	IO93RSB1
71	V _{CC}
72	V _{CC} B1

208-Pin PQFP*	
Pin Number	A3P125 Function
73	IO92RSB1
74	IO91RSB1
75	IO90RSB1
76	IO89RSB1
77	IO88RSB1
78	IO87RSB1
79	IO86RSB1
80	IO85RSB1
81	GND
82	IO84RSB1
83	IO83RSB1
84	IO82RSB1
85	IO81RSB1
86	IO80RSB1
87	IO79RSB1
88	V _{CC}
89	V _{CC} B1
90	IO78RSB1
91	IO77RSB1
92	IO76RSB1
93	IO75RSB1
94	IO74RSB1
95	IO73RSB1
96	GDC2/IO72RSB1
97	GND
98	GDB2/IO71RSB1
99	GDA2/IO70RSB1
100	GNDQ
101	TCK
102	TDI
103	TMS
104	VMV1
105	GND
106	V _{PUMP}
107	NC
108	TDO

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

208-Pin PQFP*	
Pin Number	A3P125 Function
109	TRST
110	V _{JTAG}
111	GDA0/IO66RSB0
112	GDA1/IO65RSB0
113	GDB0/IO64RSB0
114	GDB1/IO63RSB0
115	GDC0/IO62RSB0
116	GDC1/IO61RSB0
117	NC
118	NC
119	NC
120	NC
121	NC
122	GND
123	V _{CC1} B0
124	NC
125	NC
126	V _{CC}
127	IO60RSB0
128	GCC2/IO59RSB0
129	GCB2/IO58RSB0
130	GND
131	GCA2/IO57RSB0
132	GCA0/IO56RSB0
133	GCA1/IO55RSB0
134	GCB0/IO54RSB0
135	GCB1/IO53RSB0
136	GCC0/IO52RSB0
137	GCC1/IO51RSB0
138	IO50RSB0
139	IO49RSB0
140	V _{CC1} B0
141	GND
142	V _{CC}
143	IO48RSB0
144	IO47RSB0

208-Pin PQFP*	
Pin Number	A3P125 Function
145	IO46RSB0
146	NC
147	NC
148	NC
149	GBC2/IO45RSB0
150	IO44RSB0
151	GBB2/IO43RSB0
152	IO42RSB0
153	GBA2/IO41RSB0
154	VMV0
155	GNDQ
156	GND
157	NC
158	GBA1/IO40RSB0
159	GBA0/IO39RSB0
160	GBB1/IO38RSB0
161	GBB0/IO37RSB0
162	GND
163	GBC1/IO36RSB0
164	GBC0/IO35RSB0
165	IO34RSB0
166	IO33RSB0
167	IO32RSB0
168	IO31RSB0
169	IO30RSB0
170	V _{CC1} B0
171	V _{CC}
172	IO29RSB0
173	IO28RSB0
174	IO27RSB0
175	IO26RSB0
176	IO25RSB0
177	IO24RSB0
178	GND
179	IO23RSB0
180	IO22RSB0

208-Pin PQFP*	
Pin Number	A3P125 Function
181	IO21RSB0
182	IO20RSB0
183	IO19RSB0
184	IO18RSB0
185	IO17RSB0
186	V _{CC1} B0
187	V _{CC}
188	IO16RSB0
189	IO15RSB0
190	IO14RSB0
191	IO13RSB0
192	IO12RSB0
193	IO11RSB0
194	IO10RSB0
195	GND
196	IO09RSB0
197	IO08RSB0
198	IO07RSB0
199	IO06RSB0
200	V _{CC1} B0
201	GAC1/IO05RSB0
202	GAC0/IO04RSB0
203	GAB1/IO03RSB0
204	GAB0/IO02RSB0
205	GAA1/IO01RSB0
206	GAA0/IO00RSB0
207	GNDQ
208	VMV0

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

208-Pin PQFP*	
Pin Number	A3P250 Function
1	GND
2	GAA2/IO118UDB3
3	IO118VDB3
4	GAB2/IO117UDB3
5	IO117VDB3
6	GAC2/IO116UDB3
7	IO116VDB3
8	IO115UDB3
9	IO115VDB3
10	IO114UDB3
11	IO114VDB3
12	IO113PDB3
13	IO113NDB3
14	IO112PDB3
15	IO112NDB3
16	V _{CC}
17	GND
18	V _{CC} B3
19	IO111PDB3
20	IO111NDB3
21	GFC1/IO110PDB3
22	GFC0/IO110NDB3
23	GFB1/IO109PDB3
24	GFB0/IO109NDB3
25	V _{COMPLF}
26	GFA0/IO108NPB3
27	V _{CCPLF}
28	GFA1/IO108PPB3
29	GND
30	GFA2/IO107PDB3
31	IO107NDB3
32	GFB2/IO106PDB3
33	IO106NDB3
34	GFC2/IO105PDB3
35	IO105NDB3
36	NC

208-Pin PQFP*	
Pin Number	A3P250 Function
37	IO104PDB3
38	IO104NDB3
39	IO103PSB3
40	V _{CC} B3
41	GND
42	IO101PDB3
43	IO101NDB3
44	GEC1/IO100PDB3
45	GEC0/IO100NDB3
46	GEB1/IO99PDB3
47	GEB0/IO99NDB3
48	GEA1/IO98PDB3
49	GEA0/IO98NDB3
50	VMV3
51	GNDQ
52	GND
53	NC
54	NC
55	GEA2/IO97RSB2
56	GEB2/IO96RSB2
57	GEC2/IO95RSB2
58	IO94RSB2
59	IO93RSB2
60	IO92RSB2
61	IO91RSB2
62	V _{CC} B2
63	IO90RSB2
64	IO89RSB2
65	GND
66	IO88RSB2
67	IO87RSB2
68	IO86RSB2
69	IO85RSB2
70	IO84RSB2
71	V _{CC}
72	V _{CC} B2

208-Pin PQFP*	
Pin Number	A3P250 Function
73	IO83RSB2
74	IO82RSB2
75	IO81RSB2
76	IO80RSB2
77	IO79RSB2
78	IO78RSB2
79	IO77RSB2
80	IO76RSB2
81	GND
82	IO75RSB2
83	IO74RSB2
84	IO73RSB2
85	IO72RSB2
86	IO71RSB2
87	IO70RSB2
88	V _{CC}
89	V _{CC} B2
90	IO69RSB2
91	IO68RSB2
92	IO67RSB2
93	IO66RSB2
94	IO65RSB2
95	IO64RSB2
96	GDC2/IO63RSB2
97	GND
98	GDB2/IO62RSB2
99	GDA2/IO61RSB2
100	GNDQ
101	TCK
102	TDI
103	TMS
104	VMV2
105	GND
106	V _{PUMP}
107	NC
108	TDO

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

208-Pin PQFP*	
Pin Number	A3P250 Function
109	TRST
110	V _{JTAG}
111	GDA0/IO60VDB1
112	GDA1/IO60UDB1
113	GDB0/IO59VDB1
114	GDB1/IO59UDB1
115	GDC0/IO58VDB1
116	GDC1/IO58UDB1
117	IO57VDB1
118	IO57UDB1
119	IO56NDB1
120	IO56PDB1
121	IO55RSB1
122	GND
123	V _{CC1} B1
124	NC
125	NC
126	V _{CC}
127	IO53NDB1
128	GCC2/IO53PDB1
129	GCB2/IO52PSB1
130	GND
131	GCA2/IO51PSB1
132	GCA1/IO50PDB1
133	GCA0/IO50NDB1
134	GCB0/IO49NDB1
135	GCB1/IO49PDB1
136	GCC0/IO48NDB1
137	GCC1/IO48PDB1
138	IO47NDB1
139	IO47PDB1
140	V _{CC1} B1
141	GND
142	V _{CC}
143	IO46RSB1
144	IO45NDB1

208-Pin PQFP*	
Pin Number	A3P250 Function
145	IO45PDB1
146	IO44NDB1
147	IO44PDB1
148	IO43NDB1
149	GBC2/IO43PDB1
150	IO42NDB1
151	GBB2/IO42PDB1
152	IO41NDB1
153	GBA2/IO41PDB1
154	VMV1
155	GNDQ
156	GND
157	NC
158	GBA1/IO40RSB0
159	GBA0/IO39RSB0
160	GBB1/IO38RSB0
161	GBB0/IO37RSB0
162	GND
163	GBC1/IO36RSB0
164	GBC0/IO35RSB0
165	IO34RSB0
166	IO33RSB0
167	IO32RSB0
168	IO31RSB0
169	IO30RSB0
170	V _{CC1} B0
171	V _{CC}
172	IO29RSB0
173	IO28RSB0
174	IO27RSB0
175	IO26RSB0
176	IO25RSB0
177	IO24RSB0
178	GND
179	IO23RSB0
180	IO22RSB0

208-Pin PQFP*	
Pin Number	A3P250 Function
181	IO21RSB0
182	IO20RSB0
183	IO19RSB0
184	IO18RSB0
185	IO17RSB0
186	V _{CC1} B0
187	V _{CC}
188	IO16RSB0
189	IO15RSB0
190	IO14RSB0
191	IO13RSB0
192	IO12RSB0
193	IO11RSB0
194	IO10RSB0
195	GND
196	IO09RSB0
197	IO08RSB0
198	IO07RSB0
199	IO06RSB0
200	V _{CC1} B0
201	GAC1/IO05RSB0
202	GAC0/IO04RSB0
203	GAB1/IO03RSB0
204	GAB0/IO02RSB0
205	GAA1/IO01RSB0
206	GAA0/IO00RSB0
207	GNDQ
208	VMV0

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

208-Pin PQFP*	
Pin Number	A3P400 Function
1	GND
2	GAA2/IO155UDB3
3	IO155VDB3
4	GAB2/IO154UDB3
5	IO154VDB3
6	GAC2/IO153UDB3
7	IO153VDB3
8	IO152UDB3
9	IO152VDB3
10	IO151UDB3
11	IO151VDB3
12	IO150PDB3
13	IO150NDB3
14	IO149PDB3
15	IO149NDB3
16	V _{CC}
17	GND
18	V _{CC} B3
19	IO148PDB3
20	IO148NDB3
21	GFC1/IO147PDB3
22	GFC0/IO147NDB3
23	GFB1/IO146PDB3
24	GFB0/IO146NDB3
25	V _{COMPLF}
26	GFA0/IO145NPB3
27	V _{CCPLF}
28	GFA1/IO145PPB3
29	GND
30	GFA2/IO144PDB3
31	IO144NDB3
32	GFB2/IO143PDB3
33	IO143NDB3
34	GFC2/IO142PDB3
35	IO142NDB3
36	NC

208-Pin PQFP*	
Pin Number	A3P400 Function
37	IO141PSB3
38	IO140PDB3
39	IO140NDB3
40	V _{CC} B3
41	GND
42	IO138PDB3
43	IO138NDB3
44	GEC1/IO137PDB3
45	GEC0/IO137NDB3
46	GEB1/IO136PDB3
47	GEB0/IO136NDB3
48	GEA1/IO135PDB3
49	GEA0/IO135NDB3
50	VMV3
51	GNDQ
52	GND
53	VMV2
54	NC
55	GEA2/IO134RSB2
56	GEB2/IO133RSB2
57	GEC2/IO132RSB2
58	IO131RSB2
59	IO130RSB2
60	IO129RSB2
61	IO128RSB2
62	V _{CC} B2
63	IO125RSB2
64	IO123RSB2
65	GND
66	IO121RSB2
67	IO119RSB2
68	IO117RSB2
69	IO115RSB2
70	IO113RSB2
71	V _{CC}
72	V _{CC} B2

208-Pin PQFP*	
Pin Number	A3P400 Function
73	IO112RSB2
74	IO111RSB2
75	IO110RSB2
76	IO109RSB2
77	IO108RSB2
78	IO107RSB2
79	IO106RSB2
80	IO104RSB2
81	GND
82	IO102RSB2
83	IO101RSB2
84	IO100RSB2
85	IO99RSB2
86	IO98RSB2
87	IO97RSB2
88	V _{CC}
89	V _{CC} B2
90	IO94RSB2
91	IO92RSB2
92	IO90RSB2
93	IO88RSB2
94	IO86RSB2
95	IO84RSB2
96	GDC2/IO82RSB2
97	GND
98	GDB2/IO81RSB2
99	GDA2/IO80RSB2
100	GNDQ
101	TCK
102	TDI
103	TMS
104	VMV2
105	GND
106	V _{PUMP}
107	NC
108	TDO

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

208-Pin PQFP*	
Pin Number	A3P400 Function
109	TRST
110	V _{JTAG}
111	GDA0/IO79VDB1
112	GDA1/IO79UDB1
113	GDB0/IO78VDB1
114	GDB1/IO78UDB1
115	GDC0/IO77VDB1
116	GDC1/IO77UDB1
117	IO76VDB1
118	IO76UDB1
119	IO75NDB1
120	IO75PDB1
121	IO74RSB1
122	GND
123	V _{CC1} B1
124	NC
125	NC
126	V _{CC}
127	IO72NDB1
128	GCC2/IO72PDB1
129	GCB2/IO71PSB1
130	GND
131	GCA2/IO70PSB1
132	GCA1/IO69PDB1
133	GCA0/IO69NDB1
134	GCB0/IO68NDB1
135	GCB1/IO68PDB1
136	GCC0/IO67NDB1
137	GCC1/IO67PDB1
138	IO66NDB1
139	IO66PDB1
140	V _{CC1} B1
141	GND
142	V _{CC}
143	IO65RSB1
144	IO64NDB1

208-Pin PQFP*	
Pin Number	A3P400 Function
145	IO64PDB1
146	IO63NDB1
147	IO63PDB1
148	IO62NDB1
149	GBC2/IO62PDB1
150	IO61NDB1
151	GBB2/IO61PDB1
152	IO60NDB1
153	GBA2/IO60PDB1
154	VMV1
155	GNDQ
156	GND
157	VMV0
158	GBA1/IO59RSB0
159	GBA0/IO58RSB0
160	GBB1/IO57RSB0
161	GBB0/IO56RSB0
162	GND
163	GBC1/IO55RSB0
164	GBC0/IO54RSB0
165	IO52RSB0
166	IO49RSB0
167	IO46RSB0
168	IO43RSB0
169	IO40RSB0
170	V _{CC1} B0
171	V _{CC}
172	IO36RSB0
173	IO35RSB0
174	IO34RSB0
175	IO33RSB0
176	IO32RSB0
177	IO31RSB0
178	GND
179	IO29RSB0
180	IO28RSB0

208-Pin PQFP*	
Pin Number	A3P400 Function
181	IO27RSB0
182	IO26RSB0
183	IO25RSB0
184	IO24RSB0
185	IO23RSB0
186	V _{CC1} B0
187	V _{CC}
188	IO21RSB0
189	IO20RSB0
190	IO19RSB0
191	IO18RSB0
192	IO17RSB0
193	IO16RSB0
194	IO15RSB0
195	GND
196	IO13RSB0
197	IO11RSB0
198	IO09RSB0
199	IO07RSB0
200	V _{CC1} B0
201	GAC1/IO05RSB0
202	GAC0/IO04RSB0
203	GAB1/IO03RSB0
204	GAB0/IO02RSB0
205	GAA1/IO01RSB0
206	GAA0/IO00RSB0
207	GNDQ
208	VMV0

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

208-Pin PQFP*	
Pin Number	A3P600 Function
1	GND
2	GAA2/IO170PDB3
3	IO170NDB3
4	GAB2/IO169PDB3
5	IO169NDB3
6	GAC2/IO168PDB3
7	IO168NDB3
8	IO167PDB3
9	IO167NDB3
10	IO166PDB3
11	IO166NDB3
12	IO165PDB3
13	IO165NDB3
14	IO164PDB3
15	IO164NDB3
16	V _{CC}
17	GND
18	V _{CC} B3
19	IO163PDB3
20	IO163NDB3
21	GFC1/IO161PDB3
22	GFC0/IO161NDB3
23	GFB1/IO160PDB3
24	GFB0/IO160NDB3
25	V _{COMPLF}
26	GFA0/IO159NPB3
27	V _{CC} PLF
28	GFA1/IO159PPB3
29	GND
30	GFA2/IO158PDB3
31	IO158NDB3
32	GFB2/IO157PDB3
33	IO157NDB3
34	GFC2/IO156PDB3
35	IO156NDB3
36	V _{CC}
37	IO147PDB3
38	IO147NDB3

208-Pin PQFP*	
Pin Number	A3P600 Function
39	IO146PSB3
40	V _{CC} B3
41	GND
42	IO145PDB3
43	IO145NDB3
44	GEC1/IO144PDB3
45	GEC0/IO144NDB3
46	GEB1/IO143PDB3
47	GEB0/IO143NDB3
48	GEA1/IO142PDB3
49	GEA0/IO142NDB3
50	VMV3
51	GNDQ
52	GND
53	NC
54	GEA2/IO141RSB2
55	GEB2/IO140RSB2
56	GEC2/IO139RSB2
57	IO138RSB2
58	IO137RSB2
59	IO136RSB2
60	IO135RSB2
61	IO134RSB2
62	V _{CC} B2
63	IO133RSB2
64	IO131RSB2
65	GND
66	IO129RSB2
67	IO127RSB2
68	IO125RSB2
69	IO123RSB2
70	IO121RSB2
71	V _{CC}
72	V _{CC} B2
73	IO118RSB2
74	IO117RSB2
75	IO116RSB2
76	IO115RSB2

208-Pin PQFP*	
Pin Number	A3P600 Function
77	IO114RSB2
78	IO113RSB2
79	IO112RSB2
80	IO110RSB2
81	GND
82	IO109RSB2
83	IO108RSB2
84	IO107RSB2
85	IO106RSB2
86	IO105RSB2
87	IO104RSB2
88	V _{CC}
89	V _{CC} B2
90	IO102RSB2
91	IO100RSB2
92	IO98RSB2
93	IO96RSB2
94	IO94RSB2
95	IO90RSB2
96	GDC2/IO89RSB2
97	GND
98	GDB2/IO88RSB2
99	GDA2/IO87RSB2
100	GNDQ
101	TCK
102	TDI
103	TMS
104	VMV2
105	GND
106	V _{PUMP}
107	GNDQ
108	TDO
109	TRST
110	V _{JTAG}
111	GDA0/IO86NDB1
112	GDA1/IO86PDB1
113	GDB0/IO85NDB1
114	GDB1/IO85PDB1

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

208-Pin PQFP*	
Pin Number	A3P600 Function
115	GDC0/IO84NDB1
116	GDC1/IO84PDB1
117	IO82NDB1
118	IO82PDB1
119	IO80NDB1
120	IO80PDB1
121	IO79PSB1
122	GND
123	V _{CC} B1
124	IO75NDB1
125	IO75PDB1
126	NC
127	IO73NDB1
128	GCC2/IO73PDB1
129	GCB2/IO72PSB1
130	GND
131	GCA2/IO71PSB1
132	GCA1/IO70PDB1
133	GCA0/IO70NDB1
134	GCB0/IO69NDB1
135	GCB1/IO69PDB1
136	GCC0/IO68NDB1
137	GCC1/IO68PDB1
138	IO66NDB1
139	IO66PDB1
140	V _{CC} B1
141	GND
142	V _{CC}
143	IO65PSB1
144	IO64NDB1
145	IO64PDB1
146	IO63NDB1
147	IO63PDB1
148	IO62NDB1
149	GBC2/IO62PDB1
150	IO61NDB1
151	GBB2/IO61PDB1
152	IO60NDB1

208-Pin PQFP*	
Pin Number	A3P600 Function
153	GBA2/IO60PDB1
154	VMV1
155	GNDQ
156	GND
157	NC
158	GBA1/IO59RSB0
159	GBA0/IO58RSB0
160	GBB1/IO57RSB0
161	GBB0/IO56RSB0
162	GND
163	GBC1/IO55RSB0
164	GBC0/IO54RSB0
165	IO52RSB0
166	IO50RSB0
167	IO48RSB0
168	IO46RSB0
169	IO44RSB0
170	V _{CC} B0
171	V _{CC}
172	IO36RSB0
173	IO35RSB0
174	IO34RSB0
175	IO33RSB0
176	IO32RSB0
177	IO31RSB0
178	GND
179	IO29RSB0
180	IO28RSB0
181	IO27RSB0
182	IO26RSB0
183	IO25RSB0
184	IO24RSB0
185	IO23RSB0
186	V _{CC} B0
187	V _{CC}
188	IO20RSB0
189	IO19RSB0
190	IO18RSB0

208-Pin PQFP*	
Pin Number	A3P600 Function
191	IO17RSB0
192	IO16RSB0
193	IO14RSB0
194	IO12RSB0
195	GND
196	IO10RSB0
197	IO09RSB0
198	IO08RSB0
199	IO07RSB0
200	V _{CC} B0
201	GAC1/IO05RSB0
202	GAC0/IO04RSB0
203	GAB1/IO03RSB0
204	GAB0/IO02RSB0
205	GAA1/IO01RSB0
206	GAA0/IO00RSB0
207	GNDQ
208	VMV0

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

208-Pin PQFP*	
Pin Number	A3P1000 Function
1	GND
2	GAA2/IO225PDB3
3	IO225NDB3
4	GAB2/IO224PDB3
5	IO224NDB3
6	GAC2/IO223PDB3
7	IO223NDB3
8	IO222PDB3
9	IO222NDB3
10	IO220PDB3
11	IO220NDB3
12	IO218PDB3
13	IO218NDB3
14	IO216PDB3
15	IO216NDB3
16	V _{CC}
17	GND
18	V _{CC} B3
19	IO212PDB3
20	IO212NDB3
21	GFC1/IO209PDB3
22	GFC0/IO209NDB3
23	GFB1/IO208PDB3
24	GFB0/IO208NDB3
25	V _{CC} PLF
26	GFA0/IO207NPB3
27	V _{CC} PLF
28	GFA1/IO207PPB3
29	GND
30	GFA2/IO206PDB3
31	IO206NDB3
32	GFB2/IO205PDB3
33	IO205NDB3
34	GFC2/IO204PDB3
35	IO204NDB3
36	V _{CC}

208-Pin PQFP*	
Pin Number	A3P1000 Function
37	IO199PDB3
38	IO199NDB3
39	IO197PSB3
40	V _{CC} B3
41	GND
42	IO191PDB3
43	IO191NDB3
44	GEC1/IO190PDB3
45	GEC0/IO190NDB3
46	GEB1/IO189PDB3
47	GEB0/IO189NDB3
48	GEA1/IO188PDB3
49	GEA0/IO188NDB3
50	VMV3
51	GNDQ
52	GND
53	VMV2
54	GEA2/IO187RSB2
55	GEB2/IO186RSB2
56	GEC2/IO185RSB2
57	IO184RSB2
58	IO183RSB2
59	IO182RSB2
60	IO181RSB2
61	IO180RSB2
62	V _{CC} B2
63	IO178RSB2
64	IO176RSB2
65	GND
66	IO174RSB2
67	IO172RSB2
68	IO170RSB2
69	IO168RSB2
70	IO166RSB2
71	V _{CC}
72	V _{CC} B2

208-Pin PQFP*	
Pin Number	A3P1000 Function
73	IO162RSB2
74	IO160RSB2
75	IO158RSB2
76	IO156RSB2
77	IO154RSB2
78	IO152RSB2
79	IO150RSB2
80	IO148RSB2
81	GND
82	IO143RSB2
83	IO141RSB2
84	IO139RSB2
85	IO137RSB2
86	IO135RSB2
87	IO133RSB2
88	V _{CC}
89	V _{CC} B2
90	IO128RSB2
91	IO126RSB2
92	IO124RSB2
93	IO122RSB2
94	IO120RSB2
95	IO118RSB2
96	GDC2/IO116RSB2
97	GND
98	GDB2/IO115RSB2
99	GDA2/IO114RSB2
100	GNDQ
101	TCK
102	TDI
103	TMS
104	VMV2
105	GND
106	V _{PUMP}
107	GNDQ
108	TDO

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

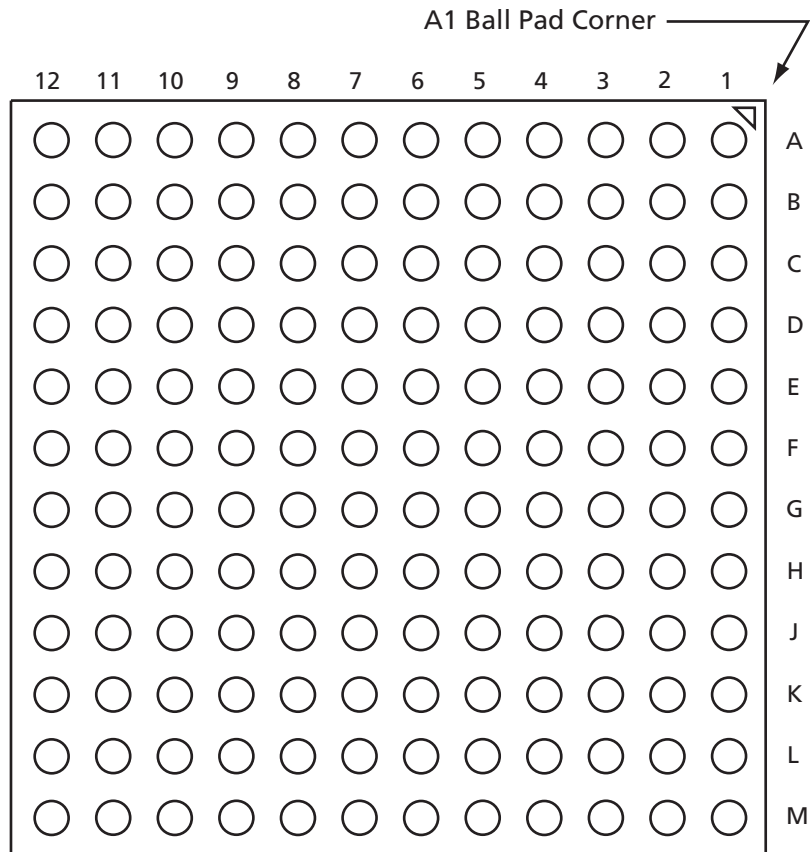
208-Pin PQFP*	
Pin Number	A3P1000 Function
109	TRST
110	V _{JTAG}
111	GDA0/IO113NDB1
112	GDA1/IO113PDB1
113	GDB0/IO112NDB1
114	GDB1/IO112PDB1
115	GDC0/IO111NDB1
116	GDC1/IO111PDB1
117	IO109NDB1
118	IO109PDB1
119	IO106NDB1
120	IO106PDB1
121	IO104PSB1
122	GND
123	V _{CCI} B1
124	IO99NDB1
125	IO99PDB1
126	NC
127	IO96NDB1
128	GCC2/IO96PDB1
129	GCB2/IO95PSB1
130	GND
131	GCA2/IO94PSB1
132	GCA1/IO93PDB1
133	GCA0/IO93NDB1
134	GCB0/IO92NDB1
135	GCB1/IO92PDB1
136	GCC0/IO91NDB1
137	GCC1/IO91PDB1
138	IO88NDB1
139	IO88PDB1
140	V _{CCI} B1
141	GND
142	V _{CC}
143	IO86PSB1
144	IO84NDB1

208-Pin PQFP*	
Pin Number	A3P1000 Function
145	IO84PDB1
146	IO82NDB1
147	IO82PDB1
148	IO80NDB1
149	GBC2/IO80PDB1
150	IO79NDB1
151	GBB2/IO79PDB1
152	IO78NDB1
153	GBA2/IO78PDB1
154	VMV1
155	GNDQ
156	GND
157	VMV0
158	GBA1/IO77RSB0
159	GBA0/IO76RSB0
160	GBB1/IO75RSB0
161	GBB0/IO74RSB0
162	GND
163	GBC1/IO73RSB0
164	GBC0/IO72RSB0
165	IO70RSB0
166	IO67RSB0
167	IO63RSB0
168	IO60RSB0
169	IO57RSB0
170	V _{CCI} B0
171	V _{CC}
172	IO54RSB0
173	IO51RSB0
174	IO48RSB0
175	IO45RSB0
176	IO42RSB0
177	IO40RSB0
178	GND
179	IO38RSB0
180	IO35RSB0

208-Pin PQFP*	
Pin Number	A3P1000 Function
181	IO33RSB0
182	IO31RSB0
183	IO29RSB0
184	IO27RSB0
185	IO25RSB0
186	V _{CCI} B0
187	V _{CC}
188	IO22RSB0
189	IO20RSB0
190	IO18RSB0
191	IO16RSB0
192	IO15RSB0
193	IO14RSB0
194	IO13RSB0
195	GND
196	IO12RSB0
197	IO11RSB0
198	IO10RSB0
199	IO09RSB0
200	V _{CCI} B0
201	GAC1/IO05RSB0
202	GAC0/IO04RSB0
203	GAB1/IO03RSB0
204	GAB0/IO02RSB0
205	GAA1/IO01RSB0
206	GAA0/IO00RSB0
207	GNDQ
208	VMV0

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

144-Pin FBGA



Note

For Package Manufacturing and Environmental information, visit Resource center at <http://www.actel.com/products/rescenter/package/index.html>.

144-Pin FBGA*	
Pin Number	A3P060 Function
A1	GNDQ
A2	VMV0
A3	GAB0/IO04RSB0
A4	GAB1/IO05RSB0
A5	IO08RSB0
A6	GND
A7	IO11RSB0
A8	V _{CC}
A9	IO16RSB0
A10	GBA0/IO23RSB0
A11	GBA1/IO24RSB0
A12	GNDQ
B1	GAB2/IO53RSB1
B2	GND
B3	GAA0/IO02RSB0
B4	GAA1/IO03RSB0
B5	IO00RSB0
B6	IO10RSB0
B7	IO12RSB0
B8	IO14RSB0
B9	GBB0/IO21RSB0
B10	GBB1/IO22RSB0
B11	GND
B12	VMV0
C1	IO95RSB1
C2	GFA2/IO83RSB1
C3	GAC2/IO94RSB1
C4	V _{CC}
C5	IO01RSB0
C6	IO09RSB0
C7	IO13RSB0
C8	IO15RSB0
C9	IO17RSB0
C10	GBA2/IO25RSB0
C11	IO26RSB0
C12	GBC2/IO29RSB0

144-Pin FBGA*	
Pin Number	A3P060 Function
D1	IO91RSB1
D2	IO92RSB1
D3	IO93RSB1
D4	GAA2/IO51RSB1
D5	GAC0/IO06RSB0
D6	GAC1/IO07RSB0
D7	GBC0/IO19RSB0
D8	GBC1/IO20RSB0
D9	GBB2/IO27RSB0
D10	IO18RSB0
D11	IO28RSB0
D12	GCB1/IO37RSB0
E1	V _{CC}
E2	GFC0/IO88RSB1
E3	GFC1/IO89RSB1
E4	V _{CC} B1
E5	IO52RSB1
E6	V _{CC} B0
E7	V _{CC} B0
E8	GCC1/IO35RSB0
E9	V _{CC} B0
E10	V _{CC}
E11	GCA0/IO40RSB0
E12	IO30RSB0
F1	GFB0/IO86RSB1
F2	V _{CC} COMPLF
F3	GFB1/IO87RSB1
F4	IO90RSB1
F5	GND
F6	GND
F7	GND
F8	GCC0/IO36RSB0
F9	GCB0/IO38RSB0
F10	GND
F11	GCA1/IO39RSB0
F12	GCA2/IO41RSB0

144-Pin FBGA*	
Pin Number	A3P060 Function
G1	GFA1/IO84RSB1
G2	GND
G3	V _{CC} PLF
G4	GFA0/IO85RSB1
G5	GND
G6	GND
G7	GND
G8	GDC1/IO45RSB0
G9	IO32RSB0
G10	GCC2/IO43RSB0
G11	IO31RSB0
G12	GCB2/IO42RSB0
H1	V _{CC}
H2	GFB2/IO82RSB1
H3	GFC2/IO81RSB1
H4	GEC1/IO77RSB1
H5	V _{CC}
H6	IO34RSB0
H7	IO44RSB0
H8	GDB2/IO55RSB1
H9	GDC0/IO46RSB0
H10	V _{CC} B0
H11	IO33RSB0
H12	V _{CC}
J1	GEB1/IO75RSB1
J2	IO78RSB1
J3	V _{CC} B1
J4	GEC0/IO76RSB1
J5	IO79RSB1
J6	IO80RSB1
J7	V _{CC}
J8	TCK
J9	GDA2/IO54RSB1
J10	TDO
J11	GDA1/IO49RSB0
J12	GDB1/IO47RSB0

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

144-Pin FBGA*	
Pin Number	A3P060 Function
K1	GEB0/IO74RSB1
K2	GEA1/IO73RSB1
K3	GEA0/IO72RSB1
K4	GEA2/IO71RSB1
K5	IO65RSB1
K6	IO64RSB1
K7	GND
K8	IO57RSB1
K9	GDC2/IO56RSB1
K10	GND
K11	GDA0/IO50RSB0
K12	GDB0/IO48RSB0
L1	GND
L2	VMV1
L3	GEB2/IO70RSB1
L4	IO67RSB1
L5	V _{CC} B1
L6	IO62RSB1
L7	IO59RSB1
L8	IO58RSB1
L9	TMS
L10	V _{JTAG}
L11	VMV1
L12	TRST
M1	GNDQ
M2	GEC2/IO69RSB1
M3	IO68RSB1
M4	IO66RSB1
M5	IO63RSB1
M6	IO61RSB1
M7	IO60RSB1
M8	NC
M9	TDI
M10	V _{CC} B1
M11	V _{PUMP}
M12	GNDQ

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

144-Pin FBGA*	
Pin Number	A3P125 Function
A1	GNDQ
A2	VMV0
A3	GAB0/IO02RSB0
A4	GAB1/IO03RSB0
A5	IO11RSB0
A6	GND
A7	IO18RSB0
A8	V _{CC}
A9	IO25RSB0
A10	GBA0/IO39RSB0
A11	GBA1/IO40RSB0
A12	GNDQ
B1	GAB2/IO69RSB1
B2	GND
B3	GAA0/IO00RSB0
B4	GAA1/IO01RSB0
B5	IO08RSB0
B6	IO14RSB0
B7	IO19RSB0
B8	IO22RSB0
B9	GBB0/IO37RSB0
B10	GBB1/IO38RSB0
B11	GND
B12	VMV0
C1	IO132RSB1
C2	GFA2/IO120RSB1
C3	GAC2/IO131RSB1
C4	V _{CC}
C5	IO10RSB0
C6	IO12RSB0
C7	IO21RSB0
C8	IO24RSB0
C9	IO27RSB0
C10	GBA2/IO41RSB0
C11	IO42RSB0
C12	GBC2/IO45RSB0

144-Pin FBGA*	
Pin Number	A3P125 Function
D1	IO128RSB1
D2	IO129RSB1
D3	IO130RSB1
D4	GAA2/IO67RSB1
D5	GAC0/IO04RSB0
D6	GAC1/IO05RSB0
D7	GBC0/IO35RSB0
D8	GBC1/IO36RSB0
D9	GBB2/IO43RSB0
D10	IO28RSB0
D11	IO44RSB0
D12	GCB1/IO53RSB0
E1	V _{CC}
E2	GFC0/IO125RSB1
E3	GFC1/IO126RSB1
E4	V _{CC} B1
E5	IO68RSB1
E6	V _{CC} B0
E7	V _{CC} B0
E8	GCC1/IO51RSB0
E9	V _{CC} B0
E10	V _{CC}
E11	GCA0/IO56RSB0
E12	IO46RSB0
F1	GFB0/IO123RSB1
F2	V _{COMPLF}
F3	GFB1/IO124RSB1
F4	IO127RSB1
F5	GND
F6	GND
F7	GND
F8	GCC0/IO52RSB0
F9	GCB0/IO54RSB0
F10	GND
F11	GCA1/IO55RSB0
F12	GCA2/IO57RSB0

144-Pin FBGA*	
Pin Number	A3P125 Function
G1	GFA1/IO121RSB1
G2	GND
G3	V _{CC} PLF
G4	GFA0/IO122RSB1
G5	GND
G6	GND
G7	GND
G8	GDC1/IO61RSB0
G9	IO48RSB0
G10	GCC2/IO59RSB0
G11	IO47RSB0
G12	GCB2/IO58RSB0
H1	V _{CC}
H2	GFB2/IO119RSB1
H3	GFC2/IO118RSB1
H4	GEC1/IO112RSB1
H5	V _{CC}
H6	IO50RSB0
H7	IO60RSB0
H8	GDB2/IO71RSB1
H9	GDC0/IO62RSB0
H10	V _{CC} B0
H11	IO49RSB0
H12	V _{CC}
J1	GEB1/IO110RSB1
J2	IO115RSB1
J3	V _{CC} B1
J4	GEC0/IO111RSB1
J5	IO116RSB1
J6	IO117RSB1
J7	V _{CC}
J8	TCK
J9	GDA2/IO70RSB1
J10	TDO
J11	GDA1/IO65RSB0
J12	GDB1/IO63RSB0

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

144-Pin FBGA*	
Pin Number	A3P125 Function
K1	GEB0/IO109RSB1
K2	GEA1/IO108RSB1
K3	GEA0/IO107RSB1
K4	GEA2/IO106RSB1
K5	IO100RSB1
K6	IO98RSB1
K7	GND
K8	IO73RSB1
K9	GDC2/IO72RSB1
K10	GND
K11	GDA0/IO66RSB0
K12	GDB0/IO64RSB0
L1	GND
L2	VMV1
L3	GEB2/IO105RSB1
L4	IO102RSB1
L5	V _{CCI} B1
L6	IO95RSB1
L7	IO85RSB1
L8	IO74RSB1
L9	TMS
L10	V _{JTAG}
L11	VMV1
L12	TRST
M1	GNDQ
M2	GEC2/IO104RSB1
M3	IO103RSB1
M4	IO101RSB1
M5	IO97RSB1
M6	IO94RSB1
M7	IO86RSB1
M8	IO75RSB1
M9	TDI
M10	V _{CCI} B1
M11	V _{PUMP}
M12	GNDQ

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

144-Pin FBGA*	
Pin Number	A3P250 Function
A1	GNDQ
A2	VMV0
A3	GAB0/IO02RSB0
A4	GAB1/IO03RSB0
A5	IO16RSB0
A6	GND
A7	IO29RSB0
A8	V _{CC}
A9	IO33RSB0
A10	GBA0/IO39RSB0
A11	GBA1/IO40RSB0
A12	GNDQ
B1	GAB2/IO117UDB3
B2	GND
B3	GAA0/IO00RSB0
B4	GAA1/IO01RSB0
B5	IO14RSB0
B6	IO19RSB0
B7	IO22RSB0
B8	IO30RSB0
B9	GBB0/IO37RSB0
B10	GBB1/IO38RSB0
B11	GND
B12	VMV1
C1	IO117VDB3
C2	GFA2/IO107PPB3
C3	GAC2/IO116UDB3
C4	V _{CC}
C5	IO12RSB0
C6	IO17RSB0
C7	IO24RSB0
C8	IO31RSB0
C9	IO34RSB0
C10	GBA2/IO41PDB1
C11	IO41NDB1
C12	GBC2/IO43PPB1

144-Pin FBGA*	
Pin Number	A3P250 Function
D1	IO112NDB3
D2	IO112PDB3
D3	IO116VDB3
D4	GAA2/IO118UPB3
D5	GAC0/IO04RSB0
D6	GAC1/IO05RSB0
D7	GBC0/IO35RSB0
D8	GBC1/IO36RSB0
D9	GBB2/IO42PDB1
D10	IO42NDB1
D11	IO43NPB1
D12	GCB1/IO49PPB1
E1	V _{CC}
E2	GFC0/IO110NDB3
E3	GFC1/IO110PDB3
E4	V _{CC} B3
E5	IO118VPB3
E6	V _{CC} B0
E7	V _{CC} B0
E8	GCC1/IO48PDB1
E9	V _{CC} B1
E10	V _{CC}
E11	GCA0/IO50NDB1
E12	IO51NDB1
F1	GFB0/IO109NPB3
F2	V _{CC} COMPLF
F3	GFB1/IO109PPB3
F4	IO107NPB3
F5	GND
F6	GND
F7	GND
F8	GCC0/IO48NDB1
F9	GCB0/IO49NPB1
F10	GND
F11	GCA1/IO50PDB1
F12	GCA2/IO51PDB1

144-Pin FBGA*	
Pin Number	A3P250 Function
G1	GFA1/IO108PPB3
G2	GND
G3	V _{CC} PLF
G4	GFA0/IO108NPB3
G5	GND
G6	GND
G7	GND
G8	GDC1/IO58UPB1
G9	IO53NDB1
G10	GCC2/IO53PDB1
G11	IO52NDB1
G12	GCB2/IO52PDB1
H1	V _{CC}
H2	GFB2/IO106PDB3
H3	GFC2/IO105PSB3
H4	GEC1/IO100PDB3
H5	V _{CC}
H6	IO79RSB2
H7	IO65RSB2
H8	GDB2/IO62RSB2
H9	GDC0/IO58VPB1
H10	V _{CC} B1
H11	IO54PSB1
H12	V _{CC}
J1	GEB1/IO99PDB3
J2	IO106NDB3
J3	V _{CC} B3
J4	GEC0/IO100NDB3
J5	IO88RSB2
J6	IO81RSB2
J7	V _{CC}
J8	TCK
J9	GDA2/IO61RSB2
J10	TDO
J11	GDA1/IO60UDB1
J12	GDB1/IO59UDB1

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

144-Pin FBGA*	
Pin Number	A3P250 Function
K1	GEB0/IO99NDB3
K2	GEA1/IO98PDB3
K3	GEA0/IO98NDB3
K4	GEA2/IO97RSB2
K5	IO90RSB2
K6	IO84RSB2
K7	GND
K8	IO66RSB2
K9	GDC2/IO63RSB2
K10	GND
K11	GDA0/IO60VDB1
K12	GDB0/IO59VDB1
L1	GND
L2	VMV3
L3	GEB2/IO96RSB2
L4	IO91RSB2
L5	V _{CC} B2
L6	IO82RSB2
L7	IO80RSB2
L8	IO72RSB2
L9	TMS
L10	V _{JTAG}
L11	VMV2
L12	TRST
M1	GNDQ
M2	GEC2/IO95RSB2
M3	IO92RSB2
M4	IO89RSB2
M5	IO87RSB2
M6	IO85RSB2
M7	IO78RSB2
M8	IO76RSB2
M9	TDI
M10	V _{CC} B2
M11	V _{PUMP}
M12	GNDQ

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

144-Pin FBGA*	
Pin Number	A3P400 Function
A1	GNDQ
A2	VMV0
A3	GAB0/IO02RSB0
A4	GAB1/IO03RSB0
A5	IO16RSB0
A6	GND
A7	IO30RSB0
A8	V _{CC}
A9	IO34RSB0
A10	GBA0/IO58RSB0
A11	GBA1/IO59RSB0
A12	GNDQ
B1	GAB2/IO154UDB3
B2	GND
B3	GAA0/IO00RSB0
B4	GAA1/IO01RSB0
B5	IO14RSB0
B6	IO19RSB0
B7	IO23RSB0
B8	IO31RSB0
B9	GBB0/IO56RSB0
B10	GBB1/IO57RSB0
B11	GND
B12	VMV1
C1	IO154VDB3
C2	GFA2/IO144PPB3
C3	GAC2/IO153UDB3
C4	V _{CC}
C5	IO12RSB0
C6	IO17RSB0
C7	IO25RSB0
C8	IO32RSB0
C9	IO53RSB0
C10	GBA2/IO60PDB1
C11	IO60NDB1
C12	GBC2/IO62PPB1

144-Pin FBGA*	
Pin Number	A3P400 Function
D1	IO149NDB3
D2	IO149PDB3
D3	IO153VDB3
D4	GAA2/IO155UPB3
D5	GAC0/IO04RSB0
D6	GAC1/IO05RSB0
D7	GBC0/IO54RSB0
D8	GBC1/IO55RSB0
D9	GBB2/IO61PDB1
D10	IO61NDB1
D11	IO62NPB1
D12	GCB1/IO68PPB1
E1	V _{CC}
E2	GFC0/IO147NDB3
E3	GFC1/IO147PDB3
E4	V _{CC} B3
E5	IO155VPB3
E6	V _{CC} B0
E7	V _{CC} B0
E8	GCC1/IO67PDB1
E9	V _{CC} B1
E10	V _{CC}
E11	GCA0/IO69NDB1
E12	IO70NDB1
F1	GFB0/IO146NPB3
F2	V _{CC} PLF
F3	GFB1/IO146PPB3
F4	IO144NPB3
F5	GND
F6	GND
F7	GND
F8	GCC0/IO67NDB1
F9	GCB0/IO68NPB1
F10	GND
F11	GCA1/IO69PDB1
F12	GCA2/IO70PDB1

144-Pin FBGA*	
Pin Number	A3P400 Function
G1	GFA1/IO145PPB3
G2	GND
G3	V _{CC} PLF
G4	GFA0/IO145NPB3
G5	GND
G6	GND
G7	GND
G8	GDC1/IO77UPB1
G9	IO72NDB1
G10	GCC2/IO72PDB1
G11	IO71NDB1
G12	GCB2/IO71PDB1
H1	V _{CC}
H2	GFB2/IO143PDB3
H3	GFC2/IO142PSB3
H4	GEC1/IO137PDB3
H5	V _{CC}
H6	IO75PDB1
H7	IO75NDB1
H8	GDB2/IO81RSB2
H9	GDC0/IO77VPB1
H10	V _{CC} B1
H11	IO73PSB1
H12	V _{CC}
J1	GEB1/IO136PDB3
J2	IO143NDB3
J3	V _{CC} B3
J4	GEC0/IO137NDB3
J5	IO125RSB2
J6	IO116RSB2
J7	V _{CC}
J8	TCK
J9	GDA2/IO80RSB2
J10	TDO
J11	GDA1/IO79UDB1
J12	GDB1/IO78UDB1

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

144-Pin FBGA*	
Pin Number	A3P400 Function
K1	GEB0/IO136NDB3
K2	GEA1/IO135PDB3
K3	GEA0/IO135NDB3
K4	GEA2/IO134RSB2
K5	IO127RSB2
K6	IO121RSB2
K7	GND
K8	IO104RSB2
K9	GDC2/IO82RSB2
K10	GND
K11	GDA0/IO79VDB1
K12	GDB0/IO78VDB1
L1	GND
L2	VMV3
L3	GEB2/IO133RSB2
L4	IO128RSB2
L5	V _{CCI} B2
L6	IO119RSB2
L7	IO114RSB2
L8	IO110RSB2
L9	TMS
L10	V _{JTAG}
L11	VMV2
L12	TRST
M1	GNDQ
M2	GEC2/IO132RSB2
M3	IO129RSB2
M4	IO126RSB2
M5	IO124RSB2
M6	IO122RSB2
M7	IO117RSB2
M8	IO115RSB2
M9	TDI
M10	V _{CCI} B2
M11	V _{PUMP}
M12	GNDQ

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

144-Pin FBGA*	
Pin Number	A3P1000 Function
A1	GNDQ
A2	VMV0
A3	GAB0/IO02RSB0
A4	GAB1/IO03RSB0
A5	IO10RSB0
A6	GND
A7	IO44RSB0
A8	V _{CC}
A9	IO69RSB0
A10	GBA0/IO76RSB0
A11	GBA1/IO77RSB0
A12	GNDQ
B1	GAB2/IO224PDB3
B2	GND
B3	GAA0/IO00RSB0
B4	GAA1/IO01RSB0
B5	IO13RSB0
B6	IO26RSB0
B7	IO35RSB0
B8	IO60RSB0
B9	GBB0/IO74RSB0
B10	GBB1/IO75RSB0
B11	GND
B12	VMV1
C1	IO224NDB3
C2	GFA2/IO206PPB3
C3	GAC2/IO223PDB3
C4	V _{CC}
C5	IO16RSB0
C6	IO29RSB0
C7	IO32RSB0
C8	IO63RSB0
C9	IO66RSB0
C10	GBA2/IO78PDB1
C11	IO78NDB1
C12	GBC2/IO80PPB1
D1	IO213PDB3

144-Pin FBGA*	
Pin Number	A3P1000 Function
D2	IO213NDB3
D3	IO223NDB3
D4	GAA2/IO225PPB3
D5	GAC0/IO04RSB0
D6	GAC1/IO05RSB0
D7	GBC0/IO72RSB0
D8	GBC1/IO73RSB0
D9	GBB2/IO79PDB1
D10	IO79NDB1
D11	IO80NPB1
D12	GCB1/IO92PPB1
E1	V _{CC}
E2	GFC0/IO209NDB3
E3	GFC1/IO209PDB3
E4	V _{CC} B3
E5	IO225NPB3
E6	V _{CC} B0
E7	V _{CC} B0
E8	GCC1/IO91PDB1
E9	V _{CC} B1
E10	V _{CC}
E11	GCA0/IO93NDB1
E12	IO94NDB1
F1	GFB0/IO208NPB3
F2	V _{CC} COMPLF
F3	GFB1/IO208PPB3
F4	IO206NPB3
F5	GND
F6	GND
F7	GND
F8	GCC0/IO91NDB1
F9	GCB0/IO92NPB1
F10	GND
F11	GCA1/IO93PDB1
F12	GCA2/IO94PDB1
G1	GFA1/IO207PPB3
G2	GND

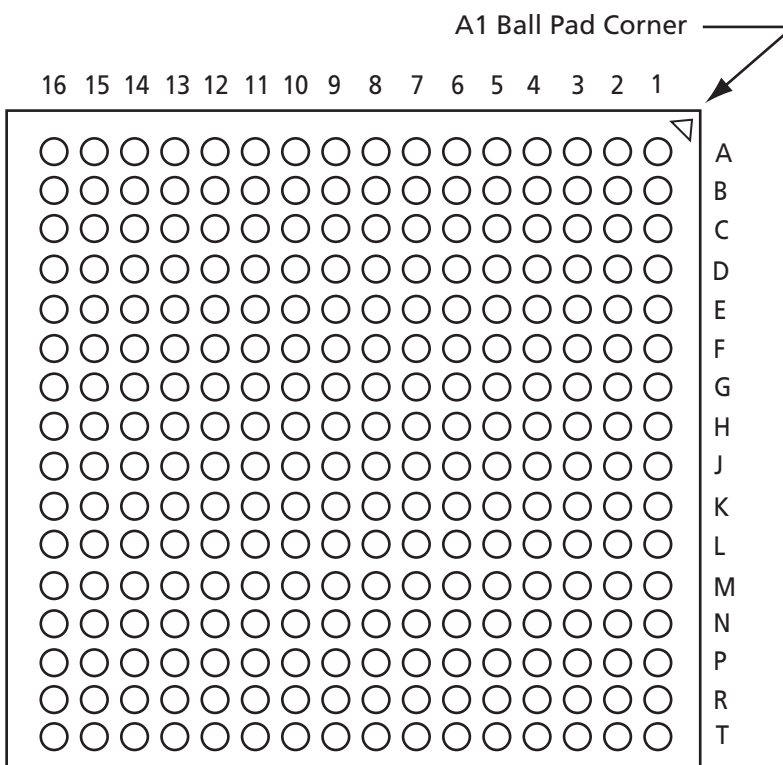
144-Pin FBGA*	
Pin Number	A3P1000 Function
G3	V _{CC} PLF
G4	GFA0/IO207NPB3
G5	GND
G6	GND
G7	GND
G8	GDC1/IO111PPB1
G9	IO96NDB1
G10	GCC2/IO96PDB1
G11	IO95NDB1
G12	GCB2/IO95PDB1
H1	V _{CC}
H2	GFB2/IO205PDB3
H3	GFC2/IO204PSB3
H4	GEC1/IO190PDB3
H5	V _{CC}
H6	IO105PDB1
H7	IO105NDB1
H8	GDB2/IO115RSB2
H9	GDC0/IO111NPB1
H10	V _{CC} B1
H11	IO101PSB1
H12	V _{CC}
J1	GEB1/IO189PDB3
J2	IO205NDB3
J3	V _{CC} B3
J4	GEC0/IO190NDB3
J5	IO160RSB2
J6	IO157RSB2
J7	V _{CC}
J8	TCK
J9	GDA2/IO114RSB2
J10	TDO
J11	GDA1/IO113PDB1
J12	GDB1/IO112PDB1
K1	GEB0/IO189NDB3
K2	GEA1/IO188PDB3
K3	GEA0/IO188NDB3

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

144-Pin FBGA*	
Pin Number	A3P1000 Function
K4	GEA2/IO187RSB2
K5	IO169RSB2
K6	IO152RSB2
K7	GND
K8	IO117RSB2
K9	GDC2/IO116RSB2
K10	GND
K11	GDA0/IO113NDB1
K12	GDB0/IO112NDB1
L1	GND
L2	VMV3
L3	GEB2/IO186RSB2
L4	IO172RSB2
L5	V _{CC} B2
L6	IO153RSB2
L7	IO144RSB2
L8	IO140RSB2
L9	TMS
L10	V _{JTAG}
L11	VMV2
L12	TRST
M1	GNDQ
M2	GEC2/IO185RSB2
M3	IO173RSB2
M4	IO168RSB2
M5	IO161RSB2
M6	IO156RSB2
M7	IO145RSB2
M8	IO141RSB2
M9	TDI
M10	V _{CC} B2
M11	V _{PUMP}
M12	GNDQ

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

256-Pin FBGA



Note

For Package Manufacturing and Environmental information, visit Resource center at <http://www.actel.com/products/rescenter/package/index.html>.

256-Pin FBGA*	
Pin Number	A3P250 Function
A1	GND
A2	GAA0/IO00RSB0
A3	GAA1/IO01RSB0
A4	GAB0/IO02RSB0
A5	IO07RSB0
A6	IO10RSB0
A7	IO11RSB0
A8	IO15RSB0
A9	IO20RSB0
A10	IO25RSB0
A11	IO29RSB0
A12	IO33RSB0
A13	GBB1/IO38RSB0
A14	GBA0/IO39RSB0
A15	GBA1/IO40RSB0
A16	GND
B1	GAB2/IO117UDB3
B2	GAA2/IO118UDB3
B3	NC
B4	GAB1/IO03RSB0
B5	IO06RSB0
B6	IO09RSB0
B7	IO12RSB0
B8	IO16RSB0
B9	IO21RSB0
B10	IO26RSB0
B11	IO30RSB0
B12	GBC1/IO36RSB0
B13	GBB0/IO37RSB0
B14	NC
B15	GBA2/IO41PDB1
B16	IO41NDB1
C1	IO117VDB3
C2	IO118VDB3
C3	NC
C4	NC

256-Pin FBGA*	
Pin Number	A3P250 Function
C5	GAC0/IO04RSB0
C6	GAC1/IO05RSB0
C7	IO13RSB0
C8	IO17RSB0
C9	IO22RSB0
C10	IO27RSB0
C11	IO31RSB0
C12	GBC0/IO35RSB0
C13	IO34RSB0
C14	NC
C15	IO42NPB1
C16	IO44PDB1
D1	IO114VDB3
D2	IO114UDB3
D3	GAC2/IO116UDB3
D4	NC
D5	GNDQ
D6	IO08RSB0
D7	IO14RSB0
D8	IO18RSB0
D9	IO23RSB0
D10	IO28RSB0
D11	IO32RSB0
D12	GNDQ
D13	NC
D14	GBB2/IO42PPB1
D15	NC
D16	IO44NDB1
E1	IO113PDB3
E2	NC
E3	IO116VDB3
E4	IO115UDB3
E5	VMV0
E6	V _{CC} B0
E7	V _{CC} B0
E8	IO19RSB0

256-Pin FBGA*	
Pin Number	A3P250 Function
E9	IO24RSB0
E10	V _{CC} B0
E11	V _{CC} B0
E12	VMV1
E13	GBC2/IO43PDB1
E14	IO46RSB1
E15	NC
E16	IO45PDB1
F1	IO113NDB3
F2	IO112PPB3
F3	NC
F4	IO115VDB3
F5	V _{CC} B3
F6	GND
F7	V _{CC}
F8	V _{CC}
F9	V _{CC}
F10	V _{CC}
F11	GND
F12	V _{CC} B1
F13	IO43NDB1
F14	NC
F15	IO47PPB1
F16	IO45NDB1
G1	IO111NDB3
G2	IO111PDB3
G3	IO112NPB3
G4	GFC1/IO110PPB3
G5	V _{CC} B3
G6	V _{CC}
G7	GND
G8	GND
G9	GND
G10	GND
G11	V _{CC}
G12	V _{CC} B1

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

256-Pin FBGA*	
Pin Number	A3P250 Function
G13	GCC1/IO48PPB1
G14	IO47NPB1
G15	IO54PDB1
G16	IO54NDB1
H1	GFB0/IO109NPB3
H2	GFA0/IO108NDB3
H3	GFB1/IO109PPB3
H4	V _{COMPLF}
H5	GFC0/IO110NPB3
H6	V _{CC}
H7	GND
H8	GND
H9	GND
H10	GND
H11	V _{CC}
H12	GCC0/IO48NPB1
H13	GCB1/IO49PPB1
H14	GCA0/IO50NPB1
H15	NC
H16	GCB0/IO49NPB1
J1	GFA2/IO107PPB3
J2	GFA1/IO108PDB3
J3	V _{CCPLF}
J4	IO106NDB3
J5	GFB2/IO106PDB3
J6	V _{CC}
J7	GND
J8	GND
J9	GND
J10	GND
J11	V _{CC}
J12	GCB2/IO52PPB1
J13	GCA1/IO50PPB1
J14	GCC2/IO53PPB1
J15	NC
J16	GCA2/IO51PDB1

256-Pin FBGA*	
Pin Number	A3P250 Function
K1	GFC2/IO105PDB3
K2	IO107NPB3
K3	IO104PPB3
K4	NC
K5	V _{CC} B3
K6	V _{CC}
K7	GND
K8	GND
K9	GND
K10	GND
K11	V _{CC}
K12	V _{CC} B1
K13	IO52NPB1
K14	IO55RSB1
K15	IO53NPB1
K16	IO51NDB1
L1	IO105NDB3
L2	IO104NPB3
L3	NC
L4	IO102RSB3
L5	V _{CC} B3
L6	GND
L7	V _{CC}
L8	V _{CC}
L9	V _{CC}
L10	V _{CC}
L11	GND
L12	V _{CC} B1
L13	GDB0/IO59VPB1
L14	IO57VDB1
L15	IO57UDB1
L16	IO56PDB1
M1	IO103PDB3
M2	NC
M3	IO101NPB3
M4	GEC0/IO100NPB3

256-Pin FBGA*	
Pin Number	A3P250 Function
M5	VMV3
M6	V _{CC} B2
M7	V _{CC} B2
M8	NC
M9	IO74RSB2
M10	V _{CC} B2
M11	V _{CC} B2
M12	VMV2
M13	NC
M14	GDB1/IO59UPB1
M15	GDC1/IO58UDB1
M16	IO56NDB1
N1	IO103NDB3
N2	IO101PPB3
N3	GEC1/IO100PPB3
N4	NC
N5	GNDQ
N6	GEA2/IO97RSB2
N7	IO86RSB2
N8	IO82RSB2
N9	IO75RSB2
N10	IO69RSB2
N11	IO64RSB2
N12	GNDQ
N13	NC
N14	V _{JTAG}
N15	GDC0/IO58VDB1
N16	GDA1/IO60UDB1
P1	GEB1/IO99PDB3
P2	GEB0/IO99NDB3
P3	NC
P4	NC
P5	IO92RSB2
P6	IO89RSB2
P7	IO85RSB2
P8	IO81RSB2

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

256-Pin FBGA*	
Pin Number	A3P250 Function
P9	IO76RSB2
P10	IO71RSB2
P11	IO66RSB2
P12	NC
P13	TCK
P14	V _{PUMP}
P15	TRST
P16	GDA0/IO60VDB1
R1	GEA1/IO98PDB3
R2	GEA0/IO98NDB3
R3	NC
R4	GEC2/IO95RSB2
R5	IO91RSB2
R6	IO88RSB2
R7	IO84RSB2
R8	IO80RSB2
R9	IO77RSB2
R10	IO72RSB2
R11	IO68RSB2
R12	IO65RSB2
R13	GDB2/IO62RSB2
R14	TDI
R15	NC
R16	TDO
T1	GND
T2	IO94RSB2
T3	GEB2/IO96RSB2
T4	IO93RSB2
T5	IO90RSB2
T6	IO87RSB2
T7	IO83RSB2
T8	IO79RSB2
T9	IO78RSB2
T10	IO73RSB2
T11	IO70RSB2
T12	GDC2/IO63RSB2

256-Pin FBGA*	
Pin Number	A3P250 Function
T13	IO67RSB2
T14	GDA2/IO61RSB2
T15	TMS
T16	GND

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

256-Pin FBGA	
Pin Number	A3P400 Function
A1	GND
A2	GAA0/IO00RSB0
A3	GAA1/IO01RSB0
A4	GAB0/IO02RSB0
A5	IO16RSB0
A6	IO17RSB0
A7	IO22RSB0
A8	IO28RSB0
A9	IO34RSB0
A10	IO37RSB0
A11	IO41RSB0
A12	IO43RSB0
A13	GBB1/IO57RSB0
A14	GBA0/IO58RSB0
A15	GBA1/IO59RSB0
A16	GND
B1	GAB2/IO154UDB3
B2	GAA2/IO155UDB3
B3	IO12RSB0
B4	GAB1/IO03RSB0
B5	IO13RSB0
B6	IO14RSB0
B7	IO21RSB0
B8	IO27RSB0
B9	IO32RSB0
B10	IO38RSB0
B11	IO42RSB0
B12	GBC1/IO55RSB0
B13	GBB0/IO56RSB0
B14	IO44RSB0
B15	GBA2/IO60PDB1
B16	IO60NDB1
C1	IO154VDB3
C2	IO155VDB3
C3	IO11RSB0
C4	IO07RSB0

256-Pin FBGA	
Pin Number	A3P400 Function
C5	GAC0/IO04RSB0
C6	GAC1/IO05RSB0
C7	IO20RSB0
C8	IO24RSB0
C9	IO33RSB0
C10	IO39RSB0
C11	IO45RSB0
C12	GBC0/IO54RSB0
C13	IO48RSB0
C14	VMV0
C15	IO61NPB1
C16	IO63PDB1
D1	IO151VDB3
D2	IO151UDB3
D3	GAC2/IO153UDB3
D4	IO06RSB0
D5	GNDQ
D6	IO10RSB0
D7	IO19RSB0
D8	IO26RSB0
D9	IO30RSB0
D10	IO40RSB0
D11	IO46RSB0
D12	GNDQ
D13	IO47RSB0
D14	GBB2/IO61PPB1
D15	IO53RSB0
D16	IO63NDB1
E1	IO150PDB3
E2	IO08RSB0
E3	IO153VDB3
E4	IO152VDB3
E5	VMV0
E6	V _{CC} B0
E7	V _{CC} B0
E8	IO25RSB0

256-Pin FBGA	
Pin Number	A3P400 Function
E9	IO31RSB0
E10	V _{CC} B0
E11	V _{CC} B0
E12	VMV1
E13	GBC2/IO62PDB1
E14	IO65RSB1
E15	IO52RSB0
E16	IO66PDB1
F1	IO150NDB3
F2	IO149NPB3
F3	IO09RSB0
F4	IO152UDB3
F5	V _{CC} B3
F6	GND
F7	V _{CC}
F8	V _{CC}
F9	V _{CC}
F10	V _{CC}
F11	GND
F12	V _{CC} B1
F13	IO62NDB1
F14	IO49RSB0
F15	IO64PPB1
F16	IO66NDB1
G1	IO148NDB3
G2	IO148PDB3
G3	IO149PPB3
G4	GFC1/IO147PPB3
G5	V _{CC} B3
G6	V _{CC}
G7	GND
G8	GND
G9	GND
G10	GND
G11	V _{CC}
G12	V _{CC} B1

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

256-Pin FBGA	
Pin Number	A3P400 Function
G13	GCC1/IO67PPB1
G14	IO64NPB1
G15	IO73PDB1
G16	IO73NDB1
H1	GFB0/IO146NPB3
H2	GFA0/IO145NDB3
H3	GFB1/IO146PPB3
H4	V _{COMPLF}
H5	GFC0/IO147NPB3
H6	V _{CC}
H7	GND
H8	GND
H9	GND
H10	GND
H11	V _{CC}
H12	GCC0/IO67NPB1
H13	GCB1/IO68PPB1
H14	GCA0/IO69NPB1
H15	NC
H16	GCB0/IO68NPB1
J1	GFA2/IO144PPB3
J2	GFA1/IO145PDB3
J3	V _{CCPLF}
J4	IO143NDB3
J5	GFB2/IO143PDB3
J6	V _{CC}
J7	GND
J8	GND
J9	GND
J10	GND
J11	V _{CC}
J12	GCB2/IO71PPB1
J13	GCA1/IO69PPB1
J14	GCC2/IO72PPB1
J15	NC
J16	GCA2/IO70PDB1

256-Pin FBGA	
Pin Number	A3P400 Function
K1	GFC2/IO142PDB3
K2	IO144NPB3
K3	IO141PPB3
K4	IO120RSB2
K5	V _{CC} B3
K6	V _{CC}
K7	GND
K8	GND
K9	GND
K10	GND
K11	V _{CC}
K12	V _{CC} B1
K13	IO71NPB1
K14	IO74RSB1
K15	IO72NPB1
K16	IO70NDB1
L1	IO142NDB3
L2	IO141NPB3
L3	IO125RSB2
L4	IO139RSB3
L5	V _{CC} B3
L6	GND
L7	V _{CC}
L8	V _{CC}
L9	V _{CC}
L10	V _{CC}
L11	GND
L12	V _{CC} B1
L13	GDB0/IO78VPB1
L14	IO76VDB1
L15	IO76UDB1
L16	IO75PDB1
M1	IO140PDB3
M2	IO130RSB2
M3	IO138NPB3
M4	GEC0/IO137NPB3

256-Pin FBGA	
Pin Number	A3P400 Function
M5	VMV3
M6	V _{CC} B2
M7	V _{CC} B2
M8	IO108RSB2
M9	IO101RSB2
M10	V _{CC} B2
M11	V _{CC} B2
M12	VMV2
M13	IO83RSB2
M14	GDB1/IO78UPB1
M15	GDC1/IO77UDB1
M16	IO75NDB1
N1	IO140NDB3
N2	IO138PPB3
N3	GEC1/IO137PPB3
N4	IO131RSB2
N5	GNDQ
N6	GEA2/IO134RSB2
N7	IO117RSB2
N8	IO111RSB2
N9	IO99RSB2
N10	IO94RSB2
N11	IO87RSB2
N12	GNDQ
N13	IO93RSB2
N14	V _{JTAG}
N15	GDC0/IO77VDB1
N16	GDA1/IO79UDB1
P1	GEB1/IO136PDB3
P2	GEB0/IO136NDB3
P3	VMV2
P4	IO129RSB2
P5	IO128RSB2
P6	IO122RSB2
P7	IO115RSB2
P8	IO110RSB2

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

256-Pin FBGA	
Pin Number	A3P400 Function
P9	IO98RSB2
P10	IO95RSB2
P11	IO88RSB2
P12	IO84RSB2
P13	TCK
P14	V _{PUMP}
P15	TRST
P16	GDA0/IO79VDB1
R1	GEA1/IO135PDB3
R2	GEA0/IO135NDB3
R3	IO127RSB2
R4	GEC2/IO132RSB2
R5	IO123RSB2
R6	IO118RSB2
R7	IO112RSB2
R8	IO106RSB2
R9	IO100RSB2
R10	IO96RSB2
R11	IO89RSB2
R12	IO85RSB2
R13	GDB2/IO81RSB2
R14	TDI
R15	NC
R16	TDO
T1	GND
T2	IO126RSB2
T3	GEB2/IO133RSB2
T4	IO124RSB2
T5	IO116RSB2
T6	IO113RSB2
T7	IO107RSB2
T8	IO105RSB2
T9	IO102RSB2
T10	IO97RSB2
T11	IO92RSB2
T12	GDC2/IO82RSB2

256-Pin FBGA	
Pin Number	A3P400 Function
T13	IO86RSB2
T14	GDA2/IO80RSB2
T15	TMS
T16	GND

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

256-Pin FBGA*	
Pin Number	A3P600 Function
A1	GND
A2	GAA0/IO00RSB0
A3	GAA1/IO01RSB0
A4	GAB0/IO02RSB0
A5	IO12RSB0
A6	IO14RSB0
A7	IO19RSB0
A8	IO26RSB0
A9	IO31RSB0
A10	IO37RSB0
A11	IO41RSB0
A12	IO47RSB0
A13	GBB1/IO57RSB0
A14	GBA0/IO58RSB0
A15	GBA1/IO59RSB0
A16	GND
B1	GAB2/IO169PDB3
B2	GAA2/IO170PDB3
B3	GNDQ
B4	GAB1/IO03RSB0
B5	IO10RSB0
B6	IO15RSB0
B7	IO18RSB0
B8	IO24RSB0
B9	IO32RSB0
B10	IO40RSB0
B11	IO43RSB0
B12	GBC1/IO55RSB0
B13	GBB0/IO56RSB0
B14	IO49RSB0
B15	GBA2/IO60PDB1
B16	IO60NDB1
C1	IO169NDB3
C2	IO170NDB3
C3	VMV3
C4	IO06RSB0
C5	GAC0/IO04RSB0

256-Pin FBGA*	
Pin Number	A3P600 Function
C6	GAC1/IO05RSB0
C7	IO17RSB0
C8	IO25RSB0
C9	IO33RSB0
C10	IO38RSB0
C11	IO42RSB0
C12	GBC0/IO54RSB0
C13	IO52RSB0
C14	IO51RSB0
C15	IO50RSB0
C16	IO61NPB1
D1	IO166NDB3
D2	IO166PDB3
D3	GAC2/IO168PDB3
D4	IO168NDB3
D5	GNDQ
D6	IO13RSB0
D7	IO16RSB0
D8	IO22RSB0
D9	IO36RSB0
D10	IO39RSB0
D11	IO46RSB0
D12	GNDQ
D13	IO53RSB0
D14	GBB2/IO61PPB1
D15	IO63PPB1
D16	IO65PDB1
E1	IO165NDB3
E2	IO165PDB3
E3	IO167PDB3
E4	IO167NDB3
E5	VMV0
E6	V _{CC1} B0
E7	V _{CC1} B0
E8	IO29RSB0
E9	IO30RSB0
E10	V _{CC1} B0

256-Pin FBGA*	
Pin Number	A3P600 Function
E11	V _{CC1} B0
E12	VMV1
E13	GBC2/IO62PDB1
E14	IO63NPB1
E15	IO64PPB1
E16	IO65NDB1
F1	IO154PSB3
F2	IO162PPB3
F3	IO164PDB3
F4	IO164NDB3
F5	V _{CC1} B3
F6	GND
F7	V _{CC}
F8	V _{CC}
F9	V _{CC}
F10	V _{CC}
F11	GND
F12	V _{CC1} B1
F13	IO62NDB1
F14	IO64NPB1
F15	IO66PPB1
F16	IO67PPB1
G1	IO155NDB3
G2	IO155PDB3
G3	IO162NPB3
G4	GFC1/IO161PPB3
G5	V _{CC1} B3
G6	V _{CC}
G7	GND
G8	GND
G9	GND
G10	GND
G11	V _{CC}
G12	V _{CC1} B1
G13	GCC1/IO68PPB1
G14	IO66NPB1
G15	IO67NPB1

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

256-Pin FBGA*	
Pin Number	A3P600 Function
G16	IO71NPB1
H1	GFB0/IO160NPB3
H2	GFA0/IO159NDB3
H3	GFB1/IO160PPB3
H4	V _{COMPLF}
H5	GFC0/IO161NPB3
H6	V _{CC}
H7	GND
H8	GND
H9	GND
H10	GND
H11	V _{CC}
H12	GCC0/IO68NPB1
H13	GCB1/IO69PPB1
H14	GCA0/IO70NPB1
H15	IO73NPB1
H16	GCB0/IO69NPB1
J1	GFA2/IO158PPB3
J2	GFA1/IO159PDB3
J3	V _{CCPLF}
J4	IO157NDB3
J5	GFB2/IO157PDB3
J6	V _{CC}
J7	GND
J8	GND
J9	GND
J10	GND
J11	V _{CC}
J12	GCB2/IO72PPB1
J13	GCA1/IO70PPB1
J14	GCC2/IO73PPB1
J15	IO77PPB1
J16	GCA2/IO71PPB1
K1	GFC2/IO156PPB3
K2	IO158NPB3
K3	IO151PDB3
K4	IO151NDB3

256-Pin FBGA*	
Pin Number	A3P600 Function
K5	V _{CC} B3
K6	V _{CC}
K7	GND
K8	GND
K9	GND
K10	GND
K11	V _{CC}
K12	V _{CC} B1
K13	IO72NPB1
K14	IO82PDB1
K15	IO79PDB1
K16	IO77NPB1
L1	IO149PDB3
L2	IO156NPB3
L3	IO147PDB3
L4	IO147NDB3
L5	V _{CC} B3
L6	GND
L7	V _{CC}
L8	V _{CC}
L9	V _{CC}
L10	V _{CC}
L11	GND
L12	V _{CC} B1
L13	GDB0/IO85NPB1
L14	IO82NDB1
L15	IO79NDB1
L16	IO80PDB1
M1	IO149NDB3
M2	IO146PDB3
M3	IO146NDB3
M4	GEC0/IO144NPB3
M5	VMV3
M6	V _{CC} B2
M7	V _{CC} B2
M8	IO111RSB2
M9	IO110RSB2

256-Pin FBGA*	
Pin Number	A3P600 Function
M10	V _{CC} B2
M11	V _{CC} B2
M12	VMV2
M13	IO81NDB1
M14	GDB1/IO85PPB1
M15	GDC1/IO84PDB1
M16	IO80NDB1
N1	IO145PDB3
N2	IO145NDB3
N3	GEC1/IO144PPB3
N4	IO137RSB2
N5	GNDQ
N6	GEA2/IO141RSB2
N7	IO120RSB2
N8	IO113RSB2
N9	IO106RSB2
N10	IO99RSB2
N11	IO94RSB2
N12	GNDQ
N13	IO81PDB1
N14	V _{JTAG}
N15	GDC0/IO84NDB1
N16	GDA1/IO86PDB1
P1	GEB1/IO143PDB3
P2	GEB0/IO143NDB3
P3	IO138RSB2
P4	IO135RSB2
P5	IO134RSB2
P6	IO128RSB2
P7	IO121RSB2
P8	IO115RSB2
P9	IO108RSB2
P10	IO100RSB2
P11	IO95RSB2
P12	VMV1
P13	TCK
P14	V _{PUMP}

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

256-Pin FBGA*	
Pin Number	A3P600 Function
P15	TRST
P16	GDA0/IO86NDB1
R1	GEA1/IO142PDB3
R2	GEA0/IO142NDB3
R3	IO136RSB2
R4	GEC2/IO139RSB2
R5	IO130RSB2
R6	IO125RSB2
R7	IO119RSB2
R8	IO114RSB2
R9	IO107RSB2
R10	IO101RSB2
R11	IO96RSB2
R12	IO90RSB2
R13	GDB2/IO88RSB2
R14	TDI
R15	GNDQ
R16	TDO
T1	GND
T2	IO133RSB2
T3	GEB2/IO140RSB2
T4	IO132RSB2
T5	IO127RSB2
T6	IO123RSB2
T7	IO117RSB2
T8	IO112RSB2
T9	IO109RSB2
T10	IO102RSB2
T11	IO97RSB2
T12	GDC2/IO89RSB2
T13	IO91RSB2
T14	GDA2/IO87RSB2
T15	TMS
T16	GND

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

256-Pin FBGA*	
Pin Number	A3P1000 Function
A1	GND
A2	GAA0/IO00RSB0
A3	GAA1/IO01RSB0
A4	GAB0/IO02RSB0
A5	IO16RSB0
A6	IO22RSB0
A7	IO28RSB0
A8	IO35RSB0
A9	IO45RSB0
A10	IO50RSB0
A11	IO55RSB0
A12	IO61RSB0
A13	GBB1/IO75RSB0
A14	GBA0/IO76RSB0
A15	GBA1/IO77RSB0
A16	GND
B1	GAB2/IO224PDB3
B2	GAA2/IO225PDB3
B3	GNDQ
B4	GAB1/IO03RSB0
B5	IO17RSB0
B6	IO21RSB0
B7	IO27RSB0
B8	IO34RSB0
B9	IO44RSB0
B10	IO51RSB0
B11	IO57RSB0
B12	GBC1/IO73RSB0
B13	GBB0/IO74RSB0
B14	IO71RSB0
B15	GBA2/IO78PDB1
B16	IO81PDB1
C1	IO224NDB3
C2	IO225NDB3
C3	VMV3
C4	IO11RSB0
C5	GAC0/IO04RSB0
C6	GAC1/IO05RSB0

256-Pin FBGA*	
Pin Number	A3P1000 Function
C7	IO25RSB0
C8	IO36RSB0
C9	IO42RSB0
C10	IO49RSB0
C11	IO56RSB0
C12	GBC0/IO72RSB0
C13	IO62RSB0
C14	VMV0
C15	IO78NDB1
C16	IO81NDB1
D1	IO222NDB3
D2	IO222PDB3
D3	GAC2/IO223PDB3
D4	IO223NDB3
D5	GNDQ
D6	IO23RSB0
D7	IO29RSB0
D8	IO33RSB0
D9	IO46RSB0
D10	IO52RSB0
D11	IO60RSB0
D12	GNDQ
D13	IO80NDB1
D14	GBB2/IO79PDB1
D15	IO79NDB1
D16	IO82NSB1
E1	IO217PDB3
E2	IO218PDB3
E3	IO221NDB3
E4	IO221PDB3
E5	VMV0
E6	V _{CC} I B0
E7	V _{CC} I B0
E8	IO38RSB0
E9	IO47RSB0
E10	V _{CC} I B0
E11	V _{CC} I B0
E12	VMV1

256-Pin FBGA*	
Pin Number	A3P1000 Function
E13	GBC2/IO80PDB1
E14	IO83PPB1
E15	IO86PPB1
E16	IO87PDB1
F1	IO217NDB3
F2	IO218NDB3
F3	IO216PDB3
F4	IO216NDB3
F5	V _{CC} I B3
F6	GND
F7	V _{CC}
F8	V _{CC}
F9	V _{CC}
F10	V _{CC}
F11	GND
F12	V _{CC} I B1
F13	IO83NPB1
F14	IO86NPB1
F15	IO90PPB1
F16	IO87NDB1
G1	IO210PSB3
G2	IO213NDB3
G3	IO213PDB3
G4	GFC1/IO209PPB3
G5	V _{CC} I B3
G6	V _{CC}
G7	GND
G8	GND
G9	GND
G10	GND
G11	V _{CC}
G12	V _{CC} I B1
G13	GCC1/IO91PPB1
G14	IO90NPB1
G15	IO88PDB1
G16	IO88NDB1
H1	GFB0/IO208NPB3
H2	GFA0/IO207NDB3

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

256-Pin FBGA*	
Pin Number	A3P1000 Function
H3	GFB1/IO208PPB3
H4	V _{COMPLF}
H5	GFC0/IO209NPB3
H6	V _{CC}
H7	GND
H8	GND
H9	GND
H10	GND
H11	V _{CC}
H12	GCC0/IO91NPB1
H13	GCB1/IO92PPB1
H14	GCA0/IO93NPB1
H15	IO96NPB1
H16	GCB0/IO92NPB1
J1	GFA2/IO206PSB3
J2	GFA1/IO207PDB3
J3	V _{CCPLF}
J4	IO205NDB3
J5	GFB2/IO205PDB3
J6	V _{CC}
J7	GND
J8	GND
J9	GND
J10	GND
J11	V _{CC}
J12	GCB2/IO95PPB1
J13	GCA1/IO93PPB1
J14	GCC2/IO96PPB1
J15	IO100PPB1
J16	GCA2/IO94PSB1
K1	GFC2/IO204PDB3
K2	IO204NDB3
K3	IO203NDB3
K4	IO203PDB3
K5	V _{CCIB3}
K6	V _{CC}
K7	GND
K8	GND

256-Pin FBGA*	
Pin Number	A3P1000 Function
K9	GND
K10	GND
K11	V _{CC}
K12	V _{CCIB1}
K13	IO95NPB1
K14	IO100NPB1
K15	IO102NDB1
K16	IO102PDB1
L1	IO202NDB3
L2	IO202PDB3
L3	IO196PPB3
L4	IO193PPB3
L5	V _{CCIB3}
L6	GND
L7	V _{CC}
L8	V _{CC}
L9	V _{CC}
L10	V _{CC}
L11	GND
L12	V _{CCIB1}
L13	GDB0/IO112NPB1
L14	IO106NDB1
L15	IO106PDB1
L16	IO107PDB1
M1	IO197NSB3
M2	IO196NPB3
M3	IO193NPB3
M4	GEC0/IO190NPB3
M5	VMV3
M6	V _{CCIB2}
M7	V _{CCIB2}
M8	IO147RSB2
M9	IO136RSB2
M10	V _{CCIB2}
M11	V _{CCIB2}
M12	VMV2
M13	IO110NDB1
M14	GDB1/IO112PPB1

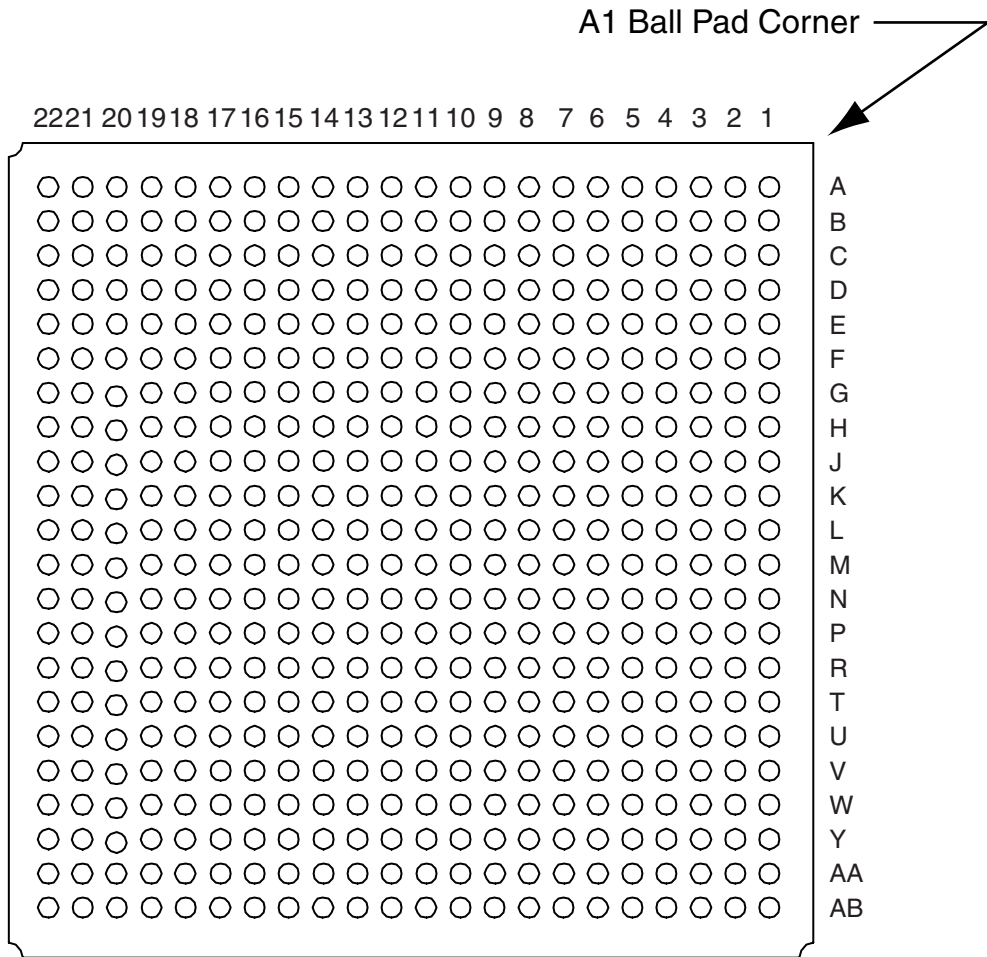
256-Pin FBGA*	
Pin Number	A3P1000 Function
M15	GDC1/IO111PDB1
M16	IO107NDB1
N1	IO194PSB3
N2	IO192PPB3
N3	GEC1/IO190PPB3
N4	IO192NPB3
N5	GNDQ
N6	GEA2/IO187RSB2
N7	IO161RSB2
N8	IO155RSB2
N9	IO141RSB2
N10	IO129RSB2
N11	IO124RSB2
N12	GNDQ
N13	IO110PDB1
N14	V _{JTAG}
N15	GDC0/IO111NDB1
N16	GDA1/IO113PDB1
P1	GEB1/IO189PDB3
P2	GEB0/IO189NDB3
P3	VMV2
P4	IO179RSB2
P5	IO171RSB2
P6	IO165RSB2
P7	IO159RSB2
P8	IO151RSB2
P9	IO137RSB2
P10	IO134RSB2
P11	IO128RSB2
P12	VMV1
P13	TCK
P14	V _{PUMP}
P15	TRST
P16	GDA0/IO113NDB1
R1	GEA1/IO188PDB3
R2	GEA0/IO188NDB3
R3	IO184RSB2
R4	GEC2/IO185RSB2

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

256-Pin FBGA*	
Pin Number	A3P1000 Function
R5	IO168RSB2
R6	IO163RSB2
R7	IO157RSB2
R8	IO149RSB2
R9	IO143RSB2
R10	IO138RSB2
R11	IO131RSB2
R12	IO125RSB2
R13	GDB2/IO115RSB2
R14	TDI
R15	GNDQ
R16	TDO
T1	GND
T2	IO183RSB2
T3	GEB2/IO186RSB2
T4	IO172RSB2
T5	IO170RSB2
T6	IO164RSB2
T7	IO158RSB2
T8	IO153RSB2
T9	IO142RSB2
T10	IO135RSB2
T11	IO130RSB2
T12	GDC2/IO116RSB2
T13	IO120RSB2
T14	GDA2/IO114RSB2
T15	TMS
T16	GND

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

484-Pin FBGA



Note

For Package Manufacturing and Environmental information, visit Resource center at <http://www.actel.com/products/rescenter/package/index.html>.

484-Pin FBGA*	
Pin Number	A3P400 Function
A1	GND
A2	GND
A3	V _{CC} I _{B0}
A4	NC
A5	NC
A6	IO15RSB0
A7	IO18RSB0
A8	NC
A9	NC
A10	IO23RSB0
A11	IO29RSB0
A12	IO35RSB0
A13	IO36RSB0
A14	NC
A15	NC
A16	IO50RSB0
A17	IO51RSB0
A18	NC
A19	NC
A20	V _{CC} I _{B0}
A21	GND
A22	GND
AA1	GND
AA2	V _{CC} I _{B3}
AA3	NC
AA4	NC
AA5	NC
AA6	NC
AA7	NC
AA8	NC
AA9	NC
AA10	NC
AA11	NC
AA12	NC
AA13	NC
AA14	NC

484-Pin FBGA*	
Pin Number	A3P400 Function
AA15	NC
AA16	NC
AA17	NC
AA18	NC
AA19	NC
AA20	NC
AA21	V _{CC} I _{B1}
AA22	GND
AB1	GND
AB2	GND
AB3	V _{CC} I _{B2}
AB4	NC
AB5	NC
AB6	IO121RSB2
AB7	IO119RSB2
AB8	IO114RSB2
AB9	IO109RSB2
AB10	NC
AB11	NC
AB12	IO104RSB2
AB13	IO103RSB2
AB14	NC
AB15	NC
AB16	IO91RSB2
AB17	IO90RSB2
AB18	NC
AB19	NC
AB20	V _{CC} I _{B2}
AB21	GND
AB22	GND
B1	GND
B2	V _{CC} I _{B3}
B3	NC
B4	NC
B5	NC
B6	NC

484-Pin FBGA*	
Pin Number	A3P400 Function
B7	NC
B8	NC
B9	NC
B10	NC
B11	NC
B12	NC
B13	NC
B14	NC
B15	NC
B16	NC
B17	NC
B18	NC
B19	NC
B20	NC
B21	V _{CC} I _{B1}
B22	GND
C1	V _{CC} I _{B3}
C2	NC
C3	NC
C4	NC
C5	GND
C6	NC
C7	NC
C8	V _{CC}
C9	V _{CC}
C10	NC
C11	NC
C12	NC
C13	NC
C14	V _{CC}
C15	V _{CC}
C16	NC
C17	NC
C18	GND
C19	NC
C20	NC

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

484-Pin FBGA*	
Pin Number	A3P400 Function
C21	NC
C22	V _{CC} I _B 1
D1	NC
D2	NC
D3	NC
D4	GND
D5	GAA0/IO00RSB0
D6	GAA1/IO01RSB0
D7	GAB0/IO02RSB0
D8	IO16RSB0
D9	IO17RSB0
D10	IO22RSB0
D11	IO28RSB0
D12	IO34RSB0
D13	IO37RSB0
D14	IO41RSB0
D15	IO43RSB0
D16	GBB1/IO57RSB0
D17	GBA0/IO58RSB0
D18	GBA1/IO59RSB0
D19	GND
D20	NC
D21	NC
D22	NC
E1	NC
E2	NC
E3	GND
E4	GAB2/IO154UDB3
E5	GAA2/IO155UDB3
E6	IO12RSB0
E7	GAB1/IO03RSB0
E8	IO13RSB0
E9	IO14RSB0
E10	IO21RSB0
E11	IO27RSB0
E12	IO32RSB0

484-Pin FBGA*	
Pin Number	A3P400 Function
E13	IO38RSB0
E14	IO42RSB0
E15	GBC1/IO55RSB0
E16	GBB0/IO56RSB0
E17	IO44RSB0
E18	GBA2/IO60PDB1
E19	IO60NDB1
E20	GND
E21	NC
E22	NC
F1	NC
F2	NC
F3	NC
F4	IO154VDB3
F5	IO155VDB3
F6	IO11RSB0
F7	IO07RSB0
F8	GAC0/IO04RSB0
F9	GAC1/IO05RSB0
F10	IO20RSB0
F11	IO24RSB0
F12	IO33RSB0
F13	IO39RSB0
F14	IO45RSB0
F15	GBC0/IO54RSB0
F16	IO48RSB0
F17	VMV0
F18	IO61NBP1
F19	IO63PDB1
F20	NC
F21	NC
F22	NC
G1	NC
G2	NC
G3	NC
G4	IO151VDB3

484-Pin FBGA*	
Pin Number	A3P400 Function
G5	IO151UDB3
G6	GAC2/IO153UDB3
G7	IO06RSB0
G8	GNDQ
G9	IO10RSB0
G10	IO19RSB0
G11	IO26RSB0
G12	IO30RSB0
G13	IO40RSB0
G14	IO46RSB0
G15	GNDQ
G16	IO47RSB0
G17	GBB2/IO61PPB1
G18	IO53RSB0
G19	IO63NDB1
G20	NC
G21	NC
G22	NC
H1	NC
H2	NC
H3	V _{CC}
H4	IO150PDB3
H5	IO08RSB0
H6	IO153VDB3
H7	IO152VDB3
H8	VMV0
H9	V _{CC} I _B 0
H10	V _{CC} I _B 0
H11	IO25RSB0
H12	IO31RSB0
H13	V _{CC} I _B 0
H14	V _{CC} I _B 0
H15	VMV1
H16	GBC2/IO62PDB1
H17	IO65RSB1
H18	IO52RSB0

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

484-Pin FBGA*	
Pin Number	A3P400 Function
H19	IO66PDB1
H20	V _{CC}
H21	NC
H22	NC
J1	NC
J2	NC
J3	NC
J4	IO150NDB3
J5	IO149NPB3
J6	IO09RSB0
J7	IO152UDB3
J8	V _{CCJ} B3
J9	GND
J10	V _{CC}
J11	V _{CC}
J12	V _{CC}
J13	V _{CC}
J14	GND
J15	V _{CCJ} B1
J16	IO62NDB1
J17	IO49RSB0
J18	IO64PPB1
J19	IO66NDB1
J20	NC
J21	NC
J22	NC
K1	NC
K2	NC
K3	NC
K4	IO148NDB3
K5	IO148PDB3
K6	IO149PPB3
K7	GFC1/IO147PPB3
K8	V _{CCJ} B3
K9	V _{CC}
K10	GND

484-Pin FBGA*	
Pin Number	A3P400 Function
K11	GND
K12	GND
K13	GND
K14	V _{CC}
K15	V _{CCJ} B1
K16	GCC1/IO67PPB1
K17	IO64NPB1
K18	IO73PDB1
K19	IO73NDB1
K20	NC
K21	NC
K22	NC
L1	NC
L2	NC
L3	NC
L4	GFB0/IO146NPB3
L5	GFA0/IO145NDB3
L6	GFB1/IO146PPB3
L7	V _{COMPLF}
L8	GFC0/IO147NPB3
L9	V _{CC}
L10	GND
L11	GND
L12	GND
L13	GND
L14	V _{CC}
L15	GCC0/IO67NPB1
L16	GCB1/IO68PPB1
L17	GCA0/IO69NPB1
L18	NC
L19	GCB0/IO68NPB1
L20	NC
L21	NC
L22	NC
M1	NC
M2	NC

484-Pin FBGA*	
Pin Number	A3P400 Function
M3	NC
M4	GFA2/IO144PPB3
M5	GFA1/IO145PDB3
M6	V _{CCPLF}
M7	IO143NDB3
M8	GFB2/IO143PDB3
M9	V _{CC}
M10	GND
M11	GND
M12	GND
M13	GND
M14	V _{CC}
M15	GCB2/IO71PPB1
M16	GCA1/IO69PPB1
M17	GCC2/IO72PPB1
M18	NC
M19	GCA2/IO70PDB1
M20	NC
M21	NC
M22	NC
N1	NC
N2	NC
N3	NC
N4	GFC2/IO142PDB3
N5	IO144NPB3
N6	IO141PPB3
N7	IO120RSB2
N8	V _{CCJ} B3
N9	V _{CC}
N10	GND
N11	GND
N12	GND
N13	GND
N14	V _{CC}
N15	V _{CCJ} B1
N16	IO71NPB1

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

484-Pin FBGA*	
Pin Number	A3P400 Function
N17	IO74RSB1
N18	IO72NPB1
N19	IO70NDB1
N20	NC
N21	NC
N22	NC
P1	NC
P2	NC
P3	NC
P4	IO142NDB3
P5	IO141NPB3
P6	IO125RSB2
P7	IO139RSB3
P8	V _{CC} B3
P9	GND
P10	V _{CC}
P11	V _{CC}
P12	V _{CC}
P13	V _{CC}
P14	GND
P15	V _{CC} B1
P16	GDB0/IO78VPB1
P17	IO76VDB1
P18	IO76UDB1
P19	IO75PDB1
P20	NC
P21	NC
P22	NC
R1	NC
R2	NC
R3	V _{CC}
R4	IO140PDB3
R5	IO130RSB2
R6	IO138NPB3
R7	GEC0/IO137NPB3
R8	VMV3

484-Pin FBGA*	
Pin Number	A3P400 Function
R9	V _{CC} B2
R10	V _{CC} B2
R11	IO108RSB2
R12	IO101RSB2
R13	V _{CC} B2
R14	V _{CC} B2
R15	VMV2
R16	IO83RSB2
R17	GDB1/IO78UPB1
R18	GDC1/IO77UDB1
R19	IO75NDB1
R20	V _{CC}
R21	NC
R22	NC
T1	NC
T2	NC
T3	NC
T4	IO140NDB3
T5	IO138PPB3
T6	GEC1/IO137PPB3
T7	IO131RSB2
T8	GNDQ
T9	GEA2/IO134RSB2
T10	IO117RSB2
T11	IO111RSB2
T12	IO99RSB2
T13	IO94RSB2
T14	IO87RSB2
T15	GNDQ
T16	IO93RSB2
T17	V _{JTAG}
T18	GDC0/IO77VDB1
T19	GDA1/IO79UDB1
T20	NC
T21	NC
T22	NC

484-Pin FBGA*	
Pin Number	A3P400 Function
U1	NC
U2	NC
U3	NC
U4	GEB1/IO136PDB3
U5	GEB0/IO136NDB3
U6	VMV2
U7	IO129RSB2
U8	IO128RSB2
U9	IO122RSB2
U10	IO115RSB2
U11	IO110RSB2
U12	IO98RSB2
U13	IO95RSB2
U14	IO88RSB2
U15	IO84RSB2
U16	TCK
U17	V _{PUMP}
U18	TRST
U19	GDA0/IO79VDB1
U20	NC
U21	NC
U22	NC
V1	NC
V2	NC
V3	GND
V4	GEA1/IO135PDB3
V5	GEA0/IO135NDB3
V6	IO127RSB2
V7	GEC2/IO132RSB2
V8	IO123RSB2
V9	IO118RSB2
V10	IO112RSB2
V11	IO106RSB2
V12	IO100RSB2
V13	IO96RSB2
V14	IO89RSB2

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

484-Pin FBGA*	
Pin Number	A3P400 Function
V15	IO85RSB2
V16	GDB2/IO81RSB2
V17	TDI
V18	NC
V19	TDO
V20	GND
V21	NC
V22	NC
W1	NC
W2	NC
W3	NC
W4	GND
W5	IO126RSB2
W6	GEB2/IO133RSB2
W7	IO124RSB2
W8	IO116RSB2
W9	IO113RSB2
W10	IO107RSB2
W11	IO105RSB2
W12	IO102RSB2
W13	IO97RSB2
W14	IO92RSB2
W15	GDC2/IO82RSB2
W16	IO86RSB2
W17	GDA2/IO80RSB2
W18	TMS
W19	GND
W20	NC
W21	NC
W22	NC
Y1	V _{CC} B3
Y2	NC
Y3	NC
Y4	NC
Y5	GND
Y6	NC

484-Pin FBGA*	
Pin Number	A3P400 Function
Y7	NC
Y8	V _{CC}
Y9	V _{CC}
Y10	NC
Y11	NC
Y12	NC
Y13	NC
Y14	V _{CC}
Y15	V _{CC}
Y16	NC
Y17	NC
Y18	GND
Y19	NC
Y20	NC
Y21	NC
Y22	V _{CC} B1

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

484-Pin FBGA*	
Pin Number	A3P600 Function
A1	GND
A2	GND
A3	V _{CC} B0
A4	NC
A5	NC
A6	IO08RSB0
A7	IO09RSB0
A8	NC
A9	NC
A10	IO21RSB0
A11	IO23RSB0
A12	IO27RSB0
A13	IO28RSB0
A14	NC
A15	NC
A16	IO35RSB0
A17	IO45RSB0
A18	NC
A19	NC
A20	V _{CC} B0
A21	GND
A22	GND
B1	GND
B2	V _{CC} B3
B3	NC
B4	NC
B5	NC
B6	IO07RSB0
B7	IO11RSB0
B8	NC
B9	NC
B10	IO20RSB0
B11	NC
B12	NC
B13	IO34RSB0
B14	NC

484-Pin FBGA*	
Pin Number	A3P600 Function
B15	NC
B16	IO44RSB0
B17	IO48RSB0
B18	NC
B19	NC
B20	NC
B21	V _{CC} B1
B22	GND
C1	V _{CC} B3
C2	NC
C3	NC
C4	NC
C5	GND
C6	NC
C7	NC
C8	V _{CC}
C9	V _{CC}
C10	NC
C11	NC
C12	NC
C13	NC
C14	V _{CC}
C15	V _{CC}
C16	NC
C17	NC
C18	GND
C19	NC
C20	NC
C21	NC
C22	V _{CC} B1
D1	NC
D2	NC
D3	NC
D4	GND
D5	GAA0/IO00RSB0
D6	GAA1/IO01RSB0

484-Pin FBGA*	
Pin Number	A3P600 Function
D7	GAB0/IO02RSB0
D8	IO12RSB0
D9	IO14RSB0
D10	IO19RSB0
D11	IO26RSB0
D12	IO31RSB0
D13	IO37RSB0
D14	IO41RSB0
D15	IO47RSB0
D16	GBB1/IO57RSB0
D17	GBA0/IO58RSB0
D18	GBA1/IO59RSB0
D19	GND
D20	NC
D21	NC
D22	NC
E1	NC
E2	NC
E3	GND
E4	GAB2/IO169PDB3
E5	GAA2/IO170PDB3
E6	GNDQ
E7	GAB1/IO03RSB0
E8	IO10RSB0
E9	IO15RSB0
E10	IO18RSB0
E11	IO24RSB0
E12	IO32RSB0
E13	IO40RSB0
E14	IO43RSB0
E15	GBC 1/IO55RSB0
E16	GBB0/IO56RSB0
E17	IO49RSB0
E18	GBA2/IO60PDB1
E19	IO60NDB1
E20	GND

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

484-Pin FBGA*	
Pin Number	A3P600 Function
E21	NC
E22	NC
F1	NC
F2	NC
F3	NC
F4	IO169NDB3
F5	IO170NDB3
F6	VMV3
F7	IO06RSB0
F8	GAC0/IO04RSB0
F9	GAC1/IO05RSB0
F10	IO17RSB0
F11	IO25RSB0
F12	IO33RSB0
F13	IO38RSB0
F14	IO42RSB0
F15	GBC0/IO54RSB0
F16	IO52RSB0
F17	IO51RSB0
F18	IO50RSB0
F19	IO61NPB1
F20	NC
F21	NC
F22	NC
G1	IO163NDB3
G2	IO163PDB3
G3	NC
G4	IO166NDB3
G5	IO166PDB3
G6	GAC2/IO168PDB3
G7	IO168NDB3
G8	GNDQ
G9	IO13RSB0
G10	IO16RSB0
G11	IO22RSB0
G12	IO36RSB0

484-Pin FBGA*	
Pin Number	A3P600 Function
G13	IO39RSB0
G14	IO46RSB0
G15	GNDQ
G16	IO53RSB0
G17	GBB2/IO61PPB1
G18	IO63PPB1
G19	IO65PDB1
G20	NC
G21	NC
G22	NC
H1	NC
H2	NC
H3	V _{CC}
H4	IO165NDB3
H5	IO165PDB3
H6	IO167PDB3
H7	IO167NDB3
H8	VMV0
H9	V _{CC} B0
H10	V _{CC} B0
H11	IO29RSB0
H12	IO30RSB0
H13	V _{CC} B0
H14	V _{CC} B0
H15	VMV1
H16	GBC2/IO62PDB1
H17	IO63NPB1
H18	IO64PPB1
H19	IO65NDB1
H20	V _{CC}
H21	NC
H22	NC
J1	IO153PDB3
J2	IO154NDB3
J3	NC
J4	IO154PDB3

484-Pin FBGA*	
Pin Number	A3P600 Function
J5	IO162PPB3
J6	IO164PDB3
J7	IO164NDB3
J8	V _{CC} B3
J9	GND
J10	V _{CC}
J11	V _{CC}
J12	V _{CC}
J13	V _{CC}
J14	GND
J15	V _{CC} B1
J16	IO62NDB1
J17	IO64NPB1
J18	IO66PPB1
J19	IO67PPB1
J20	NC
J21	IO74PDB1
J22	IO74NDB1
K1	IO153NDB3
K2	NC
K3	NC
K4	IO155NDB3
K5	IO155PDB3
K6	IO162NPB3
K7	GFC1/IO161PPB3
K8	V _{CC} B3
K9	V _{CC}
K10	GND
K11	GND
K12	GND
K13	GND
K14	V _{CC}
K15	V _{CC} B1
K16	GCC1/IO68PPB1
K17	IO66NPB1
K18	IO67NPB1

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

484-Pin FBGA*	
Pin Number	A3P600 Function
K19	IO71NPB1
K20	NC
K21	NC
K22	IO75PDB1
L1	NC
L2	IO152PDB3
L3	NC
L4	GFB0/IO160NPB3
L5	GFA0/IO159NDB3
L6	GFB1/IO160PPB3
L7	V _{COMPLF}
L8	GFC0/IO161NPB3
L9	V _{CC}
L10	GND
L11	GND
L12	GND
L13	GND
L14	V _{CC}
L15	GCC0/IO68NPB1
L16	GCB1/IO69PPB1
L17	GCA0/IO70NPB1
L18	IO73NPB1
L19	GCB0/IO69NPB1
L20	NC
L21	NC
L22	IO75NDB1
M1	NC
M2	IO152NDB3
M3	NC
M4	GFA2/IO158PPB3
M5	GFA1/IO159PDB3
M6	V _{CCPLF}
M7	IO157NDB3
M8	GFB2/IO157PDB3
M9	V _{CC}
M10	GND

484-Pin FBGA*	
Pin Number	A3P600 Function
M11	GND
M12	GND
M13	GND
M14	V _{CC}
M15	GCB2/IO72PPB1
M16	GCA1/IO70PPB1
M17	GCC2/IO73PPB1
M18	IO77PPB1
M19	GCA2/IO71PPB1
M20	NC
M21	IO76PDB1
M22	NC
N1	IO150PPB3
N2	NC
N3	NC
N4	GFC2/IO156PPB3
N5	IO158NPB3
N6	IO151PDB3
N7	IO151NDB3
N8	V _{CCIB3}
N9	V _{CC}
N10	GND
N11	GND
N12	GND
N13	GND
N14	V _{CC}
N15	V _{CCIB1}
N16	IO72NPB1
N17	IO82PDB1
N18	IO79PDB1
N19	IO77NPB1
N20	NC
N21	IO76NDB1
N22	NC
P1	NC
P2	IO150NPB3

484-Pin FBGA*	
Pin Number	A3P600 Function
P3	NC
P4	IO149PDB3
P5	IO156NPB3
P6	IO147PDB3
P7	IO147NDB3
P8	V _{CCIB3}
P9	GND
P10	V _{CC}
P11	V _{CC}
P12	V _{CC}
P13	V _{CC}
P14	GND
P15	V _{CCIB1}
P16	GDB0/IO85NPB1
P17	IO82NDB1
P18	IO79NDB1
P19	IO80PDB1
P20	NC
P21	NC
P22	IO78PDB1
R1	NC
R2	IO148PDB3
R3	V _{CC}
R4	IO149NDB3
R5	IO146PDB3
R6	IO146NDB3
R7	GEC0/IO144NPB3
R8	VMV3
R9	V _{CCIB2}
R10	V _{CCIB2}
R11	IO111RSB2
R12	IO110RSB2
R13	V _{CCIB2}
R14	V _{CCIB2}
R15	VMV2
R16	IO81NDB1

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

484-Pin FBGA*	
Pin Number	A3P600 Function
R17	GDB1/IO85PPB1
R18	GDC1/IO84PDB1
R19	IO80NDB1
R20	V _{CC}
R21	IO83PDB1
R22	IO78NDB1
T1	NC
T2	IO148NDB3
T3	NC
T4	IO145PDB3
T5	IO145NDB3
T6	GEC1/IO144PPB3
T7	IO137RSB2
T8	GNDQ
T9	GEA2/IO141RSB2
T10	IO120RSB2
T11	IO113RSB2
T12	IO106RSB2
T13	IO99RSB2
T14	IO94RSB2
T15	GNDQ
T16	IO81PDB1
T17	V _{JTAG}
T18	GDC0/IO84NDB1
T19	GDA1/IO86PDB1
T20	NC
T21	IO83NDB1
T22	NC
U1	NC
U2	NC
U3	NC
U4	GEB1/IO143PDB3
U5	GEB0/IO143NDB3
U6	IO138RSB2
U7	IO135RSB2
U8	IO134RSB2

484-Pin FBGA*	
Pin Number	A3P600 Function
U9	IO128RSB2
U10	IO121RSB2
U11	IO115RSB2
U12	IO108RSB2
U13	IO100RSB2
U14	IO95RSB2
U15	VMV1
U16	TCK
U17	V _{PUMP}
U18	TRST
U19	GDA0/IO86NDB1
U20	NC
U21	NC
U22	NC
V1	NC
V2	NC
V3	GND
V4	GEA1/IO142PDB3
V5	GEA0/IO142NDB3
V6	IO136RSB2
V7	GEC2/IO139RSB2
V8	IO130RSB2
V9	IO125RSB2
V10	IO119RSB2
V11	IO114RSB2
V12	IO107RSB2
V13	IO101RSB2
V14	IO96RSB2
V15	IO90RSB2
V16	GDB2/IO88RSB2
V17	TDI
V18	GNDQ
V19	TDO
V20	GND
V21	NC
V22	NC

484-Pin FBGA*	
Pin Number	A3P600 Function
W1	NC
W2	NC
W3	NC
W4	GND
W5	IO133RSB2
W6	GEB2/IO140RSB2
W7	IO132RSB2
W8	IO127RSB2
W9	IO123RSB2
W10	IO117RSB2
W11	IO112RSB2
W12	IO109RSB2
W13	IO102RSB2
W14	IO97RSB2
W15	GDC2/IO89RSB2
W16	IO91RSB2
W17	GDA2/IO87RSB2
W18	TMS
W19	GND
W20	NC
W21	NC
W22	NC
Y1	V _{CCIB3}
Y2	NC
Y3	NC
Y4	NC
Y5	GND
Y6	NC
Y7	NC
Y8	V _{CC}
Y9	V _{CC}
Y10	NC
Y11	NC
Y12	NC
Y13	NC
Y14	V _{CC}

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

484-Pin FBGA*	
Pin Number	A3P600 Function
Y15	V _{CC}
Y16	NC
Y17	NC
Y18	GND
Y19	NC
Y20	NC
Y21	NC
Y22	V _{CC} B1
AA1	GND
AA2	V _{CC} B3
AA3	NC
AA4	NC
AA5	NC
AA6	IO131RSB2
AA7	IO126RSB2
AA8	NC
AA9	NC
AA10	IO116RSB2
AA11	NC
AA12	NC
AA13	IO103RSB2
AA14	NC
AA15	NC
AA16	IO93RSB2
AA17	NC
AA18	NC
AA19	NC
AA20	NC
AA21	V _{CC} B1
AA22	GND
AB1	GND
AB2	GND
AB3	V _{CC} B2
AB4	NC
AB5	NC
AB6	IO129RSB2

484-Pin FBGA*	
Pin Number	A3P600 Function
AB7	IO124RSB2
AB8	IO122RSB2
AB9	IO118RSB2
AB10	NC
AB11	NC
AB12	IO105RSB2
AB13	IO104RSB2
AB14	NC
AB15	NC
AB16	IO98RSB2
AB17	IO92RSB2
AB18	NC
AB19	NC
AB20	V _{CC} B2
AB21	GND
AB22	GND

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

484-Pin FBGA*	
Pin Number	A3P1000 Function
A1	GND
A2	GND
A3	V _{CC} I _{B0}
A4	IO07RSB0
A5	IO09RSB0
A6	IO13RSB0
A7	IO18RSB0
A8	IO20RSB0
A9	IO26RSB0
A10	IO32RSB0
A11	IO40RSB0
A12	IO41RSB0
A13	IO53RSB0
A14	IO59RSB0
A15	IO64RSB0
A16	IO65RSB0
A17	IO67RSB0
A18	IO69RSB0
A19	NC
A20	V _{CC} I _{B0}
A21	GND
A22	GND
AA1	GND
AA2	V _{CC} I _{B3}
AA3	NC
AA4	IO181RSB2
AA5	IO178RSB2
AA6	IO175RSB2
AA7	IO169RSB2
AA8	IO166RSB2
AA9	IO160RSB2
AA10	IO152RSB2
AA11	IO146RSB2
AA12	IO139RSB2
AA13	IO133RSB2
AA14	NC

484-Pin FBGA*	
Pin Number	A3P1000 Function
AA15	NC
AA16	IO122RSB2
AA17	IO119RSB2
AA18	IO117RSB2
AA19	NC
AA20	NC
AA21	V _{CC} I _{B1}
AA22	GND
AB1	GND
AB2	GND
AB3	V _{CC} I _{B2}
AB4	IO180RSB2
AB5	IO176RSB2
AB6	IO173RSB2
AB7	IO167RSB2
AB8	IO162RSB2
AB9	IO156RSB2
AB10	IO150RSB2
AB11	IO145RSB2
AB12	IO144RSB2
AB13	IO132RSB2
AB14	IO127RSB2
AB15	IO126RSB2
AB16	IO123RSB2
AB17	IO121RSB2
AB18	IO118RSB2
AB19	NC
AB20	V _{CC} I _{B2}
AB21	GND
AB22	GND
B1	GND
B2	V _{CC} I _{B3}
B3	NC
B4	IO06RSB0
B5	IO08RSB0
B6	IO12RSB0

484-Pin FBGA*	
Pin Number	A3P1000 Function
B7	IO15RSB0
B8	IO19RSB0
B9	IO24RSB0
B10	IO31RSB0
B11	IO39RSB0
B12	IO48RSB0
B13	IO54RSB0
B14	IO58RSB0
B15	IO63RSB0
B16	IO66RSB0
B17	IO68RSB0
B18	IO70RSB0
B19	NC
B20	NC
B21	V _{CC} I _{B1}
B22	GND
C1	V _{CC} I _{B3}
C2	IO220PDB3
C3	NC
C4	NC
C5	GND
C6	IO10RSB0
C7	IO14RSB0
C8	V _{CC}
C9	V _{CC}
C10	IO30RSB0
C11	IO37RSB0
C12	IO43RSB0
C13	NC
C14	V _{CC}
C15	V _{CC}
C16	NC
C17	NC
C18	GND
C19	NC
C20	NC

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

484-Pin FBGA*	
Pin Number	A3P1000 Function
C21	NC
C22	V _{CC} I _{B1}
D1	IO219PDB3
D2	IO220NDB3
D3	NC
D4	GND
D5	GAA0/IO00RSB0
D6	GAA1/IO01RSB0
D7	GAB0/IO02RSB0
D8	IO16RSB0
D9	IO22RSB0
D10	IO28RSB0
D11	IO35RSB0
D12	IO45RSB0
D13	IO50RSB0
D14	IO55RSB0
D15	IO61RSB0
D16	GBB1/IO75RSB0
D17	GBA0/IO76RSB0
D18	GBA1/IO77RSB0
D19	GND
D20	NC
D21	NC
D22	NC
E1	IO219NDB3
E2	NC
E3	GND
E4	GAB2/IO224PDB3
E5	GAA2/IO225PDB3
E6	GNDQ
E7	GAB1/IO03RSB0
E8	IO17RSB0
E9	IO21RSB0
E10	IO27RSB0
E11	IO34RSB0
E12	IO44RSB0

484-Pin FBGA*	
Pin Number	A3P1000 Function
E13	IO51RSB0
E14	IO57RSB0
E15	GBC1/IO73RSB0
E16	GBB0/IO74RSB0
E17	IO71RSB0
E18	GBA2/IO78PDB1
E19	IO81PDB1
E20	GND
E21	NC
E22	IO84PDB1
F1	NC
F2	IO215PDB3
F3	IO215NDB3
F4	IO224NDB3
F5	IO225NDB3
F6	VMV3
F7	IO11RSB0
F8	GAC0/IO04RSB0
F9	GAC1/IO05RSB0
F10	IO25RSB0
F11	IO36RSB0
F12	IO42RSB0
F13	IO49RSB0
F14	IO56RSB0
F15	GBC0/IO72RSB0
F16	IO62RSB0
F17	VMV0
F18	IO78NDB1
F19	IO81NDB1
F20	IO82PPB1
F21	NC
F22	IO84NDB1
G1	IO214NDB3
G2	IO214PDB3
G3	NC
G4	IO222NDB3

484-Pin FBGA*	
Pin Number	A3P1000 Function
G5	IO222PDB3
G6	GAC2/IO223PDB3
G7	IO223NDB3
G8	GNDQ
G9	IO23RSB0
G10	IO29RSB0
G11	IO33RSB0
G12	IO46RSB0
G13	IO52RSB0
G14	IO60RSB0
G15	GNDQ
G16	IO80NDB1
G17	GBB2/IO79PDB1
G18	IO79NDB1
G19	IO82NPB1
G20	IO85PDB1
G21	IO85NDB1
G22	NC
H1	NC
H2	NC
H3	V _{CC}
H4	IO217PDB3
H5	IO218PDB3
H6	IO221NDB3
H7	IO221PDB3
H8	VMV0
H9	V _{CC} I _{B0}
H10	V _{CC} I _{B0}
H11	IO38RSB0
H12	IO47RSB0
H13	V _{CC} I _{B0}
H14	V _{CC} I _{B0}
H15	VMV1
H16	GBC2/IO80PDB1
H17	IO83PPB1
H18	IO86PPB1

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

484-Pin FBGA*	
Pin Number	A3P1000 Function
H19	IO87PDB1
H20	V _{CC}
H21	NC
H22	NC
J1	IO212NDB3
J2	IO212PDB3
J3	NC
J4	IO217NDB3
J5	IO218NDB3
J6	IO216PDB3
J7	IO216NDB3
J8	V _{CC} B3
J9	GND
J10	V _{CC}
J11	V _{CC}
J12	V _{CC}
J13	V _{CC}
J14	GND
J15	V _{CC} B1
J16	IO83NPB1
J17	IO86NPB1
J18	IO90PPB1
J19	IO87NDB1
J20	NC
J21	IO89PDB1
J22	IO89NDB1
K1	IO211PDB3
K2	IO211NDB3
K3	NC
K4	IO210PPB3
K5	IO213NDB3
K6	IO213PDB3
K7	GFC1/IO209PPB3
K8	V _{CC} B3
K9	V _{CC}
K10	GND

484-Pin FBGA*	
Pin Number	A3P1000 Function
K11	GND
K12	GND
K13	GND
K14	V _{CC}
K15	V _{CC} B1
K16	GCC1/IO91PPB1
K17	IO90NPB1
K18	IO88PDB1
K19	IO88NDB1
K20	IO94NPB1
K21	IO98NDB1
K22	IO98PDB1
L1	NC
L2	IO200PDB3
L3	IO210NPB3
L4	GFB0/IO208NPB3
L5	GFA0/IO207NDB3
L6	GFB1/IO208PPB3
L7	V _{COMPLF}
L8	GFC0/IO209NPB3
L9	V _{CC}
L10	GND
L11	GND
L12	GND
L13	GND
L14	V _{CC}
L15	GCC0/IO91NPB1
L16	GCB1/IO92PPB1
L17	GCA0/IO93NPB1
L18	IO96NPB1
L19	GCB0/IO92NPB1
L20	IO97PDB1
L21	IO97NDB1
L22	IO99NPB1
M1	NC
M2	IO200NDB3

484-Pin FBGA*	
Pin Number	A3P1000 Function
M3	IO206NDB3
M4	GFA2/IO206PDB3
M5	GFA1/IO207PDB3
M6	V _{CC} PLF
M7	IO205NDB3
M8	GFB2/IO205PDB3
M9	V _{CC}
M10	GND
M11	GND
M12	GND
M13	GND
M14	V _{CC}
M15	GCB2/IO95PPB1
M16	GCA1/IO93PPB1
M17	GCC2/IO96PPB1
M18	IO100PPB1
M19	GCA2/IO94PPB1
M20	IO101PPB1
M21	IO99PPB1
M22	NC
N1	IO201NDB3
N2	IO201PDB3
N3	NC
N4	GFC2/IO204PDB3
N5	IO204NDB3
N6	IO203NDB3
N7	IO203PDB3
N8	V _{CC} B3
N9	V _{CC}
N10	GND
N11	GND
N12	GND
N13	GND
N14	V _{CC}
N15	V _{CC} B1
N16	IO95NPB1

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

484-Pin FBGA*	
Pin Number	A3P1000 Function
N17	IO100NPB1
N18	IO102NDB1
N19	IO102PDB1
N20	NC
N21	IO101NPB1
N22	IO103PDB1
P1	NC
P2	IO199PDB3
P3	IO199NDB3
P4	IO202NDB3
P5	IO202PDB3
P6	IO196PPB3
P7	IO193PPB3
P8	V _{CC} B3
P9	GND
P10	V _{CC}
P11	V _{CC}
P12	V _{CC}
P13	V _{CC}
P14	GND
P15	V _{CC} B1
P16	GDB0/IO112NPB1
P17	IO106NDB1
P18	IO106PDB1
P19	IO107PDB1
P20	NC
P21	IO104PDB1
P22	IO103NDB1
R1	NC
R2	IO197PPB3
R3	V _{CC}
R4	IO197NPB3
R5	IO196NPB3
R6	IO193NPB3
R7	GEC0/IO190NPB3
R8	VMV3

484-Pin FBGA*	
Pin Number	A3P1000 Function
R9	V _{CC} B2
R10	V _{CC} B2
R11	IO147RSB2
R12	IO136RSB2
R13	V _{CC} B2
R14	V _{CC} B2
R15	VMV2
R16	IO110NDB1
R17	GDB1/IO112PPB1
R18	GDC1/IO111PDB1
R19	IO107NDB1
R20	V _{CC}
R21	IO104NDB1
R22	IO105PDB1
T1	IO198PDB3
T2	IO198NDB3
T3	NC
T4	IO194PPB3
T5	IO192PPB3
T6	GEC1/IO190PPB3
T7	IO192NPB3
T8	GNDQ
T9	GEA2/IO187RSB2
T10	IO161RSB2
T11	IO155RSB2
T12	IO141RSB2
T13	IO129RSB2
T14	IO124RSB2
T15	GNDQ
T16	IO110PDB1
T17	V _{JTAG}
T18	GDC0/IO111NDB1
T19	GDA1/IO113PDB1
T20	NC
T21	IO108PDB1
T22	IO105NDB1

484-Pin FBGA*	
Pin Number	A3P1000 Function
U1	IO195PDB3
U2	IO195NDB3
U3	IO194NPB3
U4	GEB1/IO189PDB3
U5	GEB0/IO189NDB3
U6	VMV2
U7	IO179RSB2
U8	IO171RSB2
U9	IO165RSB2
U10	IO159RSB2
U11	IO151RSB2
U12	IO137RSB2
U13	IO134RSB2
U14	IO128RSB2
U15	VMV1
U16	TCK
U17	V _{PUMP}
U18	TRST
U19	GDA0/IO113NDB1
U20	NC
U21	IO108NDB1
U22	IO109PDB1
V1	NC
V2	NC
V3	GND
V4	GEA1/IO188PDB3
V5	GEA0/IO188NDB3
V6	IO184RSB2
V7	GEC2/IO185RSB2
V8	IO168RSB2
V9	IO163RSB2
V10	IO157RSB2
V11	IO149RSB2
V12	IO143RSB2
V13	IO138RSB2
V14	IO131RSB2

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

484-Pin FBGA*	
Pin Number	A3P1000 Function
V15	IO125RSB2
V16	GDB2/IO115RSB2
V17	TDI
V18	GNDQ
V19	TDO
V20	GND
V21	NC
V22	IO109NDB1
W1	NC
W2	IO191PDB3
W3	NC
W4	GND
W5	IO183RSB2
W6	GEB2/IO186RSB2
W7	IO172RSB2
W8	IO170RSB2
W9	IO164RSB2
W10	IO158RSB2
W11	IO153RSB2
W12	IO142RSB2
W13	IO135RSB2
W14	IO130RSB2
W15	GDC2/IO116RSB2
W16	IO120RSB2
W17	GDA2/IO114RSB2
W18	TMS
W19	GND
W20	NC
W21	NC
W22	NC
Y1	V _{CC} I B3
Y2	IO191NDB3
Y3	NC
Y4	IO182RSB2
Y5	GND
Y6	IO177RSB2

484-Pin FBGA*	
Pin Number	A3P1000 Function
Y7	IO174RSB2
Y8	V _{CC}
Y9	V _{CC}
Y10	IO154RSB2
Y11	IO148RSB2
Y12	IO140RSB2
Y13	NC
Y14	V _{CC}
Y15	V _{CC}
Y16	NC
Y17	NC
Y18	GND
Y19	NC
Y20	NC
Y21	NC
Y22	V _{CC} I B1

Note: *Refer to the "User I/O Naming Convention" section on page 2-46.

