

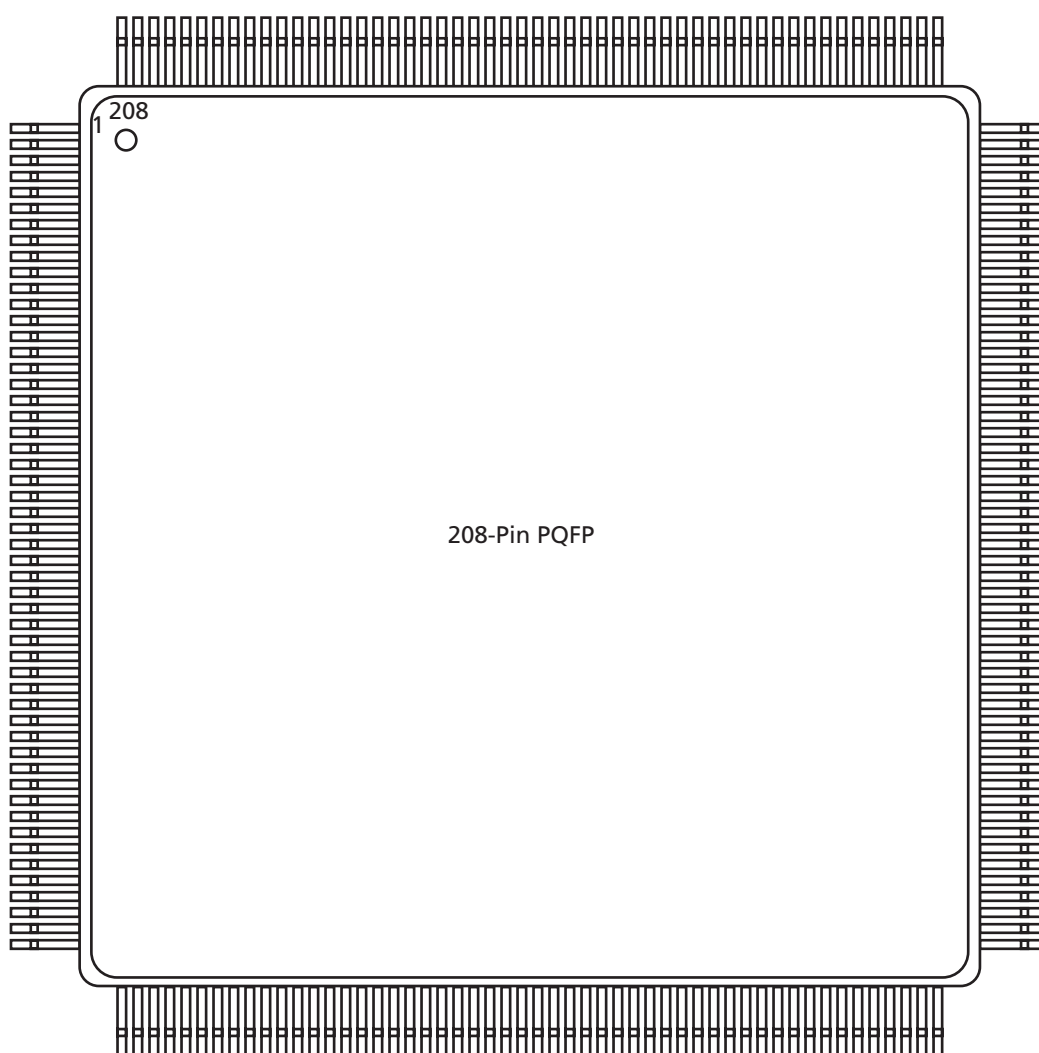
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# Package Pin Assignments

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## 208-Pin PQFP

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### Note

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

208-Pin PQFP*	
Pin Number	A3PE600 Function
1	GND
2	GNDQ
3	VMV7
4	GAB2/IO133PSB7V1
5	GAA2/IO134PDB7V1
6	IO134NDB7V1
7	GAC2/IO132PDB7V1
8	IO132NDB7V1
9	IO130PDB7V1
10	IO130NDB7V1
11	IO127PDB7V1
12	IO127NDB7V1
13	IO126PDB7V0
14	IO126NDB7V0
15	IO124PSB7V0
16	V <sub>CC</sub>
17	GND
18	V <sub>CC</sub> B7
19	IO122PPB7V0
20	IO121PSB7V0
21	IO122NPB7V0
22	GFC1/IO120PSB7V0
23	GFB1/IO119PDB7V0
24	GFB0/IO119NDB7V0
25	V <sub>COMPLF</sub>
26	GFA0/IO118NPB6V1
27	V <sub>CC</sub> PLF
28	GFA1/IO118PPB6V1
29	GND
30	GFA2/IO117PDB6V1
31	IO117NDB6V1
32	GFB2/IO116PPB6V1
33	GFC2/IO115PPB6V1
34	IO116NPB6V1
35	IO115NPB6V1
36	V <sub>CC</sub>
37	IO112PDB6V1
38	IO112NDB6V1

208-Pin PQFP*	
Pin Number	A3PE600 Function
39	IO108PSB6V0
40	V <sub>CC</sub> B6
41	GND
42	IO106PDB6V0
43	IO106NDB6V0
44	GEC1/IO104PDB6V0
45	GEC0/IO104NDB6V0
46	GEB1/IO103PPB6V0
47	GEA1/IO102PPB6V0
48	GEB0/IO103NPB6V0
49	GEA0/IO102NPB6V0
50	VMV6
51	GNDQ
52	GND
53	VMV5
54	GNDQ
55	IO101NDB5V2
56	GEA2/IO101PDB5V2
57	IO100NDB5V2
58	GEB2/IO100PDB5V2
59	IO99NDB5V2
60	GEC2/IO99PDB5V2
61	IO98PSB5V2
62	V <sub>CC</sub> B5
63	IO96PSB5V2
64	IO94NDB5V1
65	GND
66	IO94PDB5V1
67	IO92NDB5V1
68	IO92PDB5V1
69	IO88NDB5V0
70	IO88PDB5V0
71	V <sub>CC</sub>
72	V <sub>CC</sub> B5
73	IO85NPB5V0
74	IO84NPB5V0
75	IO85PPB5V0
76	IO84PPB5V0

208-Pin PQFP*	
Pin Number	A3PE600 Function
77	IO83NPB5V0
78	IO82NPB5V0
79	IO83PPB5V0
80	IO82PPB5V0
81	GND
82	IO80NDB4V1
83	IO80PDB4V1
84	IO79NPB4V1
85	IO78NPB4V1
86	IO79PPB4V1
87	IO78PPB4V1
88	V <sub>CC</sub>
89	V <sub>CC</sub> B4
90	IO76NDB4V1
91	IO76PDB4V1
92	IO72NDB4V0
93	IO72PDB4V0
94	IO70NDB4V0
95	GDC2/IO70PDB4V0
96	IO68NDB4V0
97	GND
98	GDA2/IO68PDB4V0
99	GDB2/IO69PSB4V0
100	GNDQ
101	TCK
102	TDI
103	TMS
104	VMV4
105	GND
106	V <sub>PUMP</sub>
107	GNDQ
108	TDO
109	TRST
110	V <sub>JTAG</sub>
111	VMV3
112	GDA0/IO67NPB3V1
113	GDB0/IO66NPB3V1
114	GDA1/IO67PPB3V1

**Note:** \*Refer to the "User I/O Naming Convention" section on page 2-50.

208-Pin PQFP*	
Pin Number	A3PE600 Function
115	GDB1/IO66PPB3V1
116	GDC0/IO65NDB3V1
117	GDC1/IO65PDB3V1
118	IO62NDB3V1
119	IO62PDB3V1
120	IO58NDB3V0
121	IO58PDB3V0
122	GND
123	V <sub>CC</sub> B3
124	GCC2/IO55PSB3V0
125	GCB2/IO54PSB3V0
126	NC
127	IO53NDB3V0
128	GCA2/IO53PDB3V0
129	GCA1/IO52PPB3V0
130	GND
131	V <sub>CC</sub> PLC
132	GCA0/IO52NPB3V0
133	V <sub>COM</sub> PLC
134	GCB0/IO51NDB2V1
135	GCB1/IO51PDB2V1
136	GCC1/IO50PSB2V1
137	IO49NDB2V1
138	IO49PDB2V1
139	IO48PSB2V1
140	V <sub>CC</sub> B2
141	GND
142	V <sub>CC</sub>
143	IO47NDB2V1
144	IO47PDB2V1
145	IO44NDB2V1
146	IO44PDB2V1
147	IO43NDB2V0
148	IO43PDB2V0
149	IO40NDB2V0
150	IO40PDB2V0
151	GBC2/IO38PSB2V0
152	GBA2/IO36PSB2V0

208-Pin PQFP*	
Pin Number	A3PE600 Function
153	GBB2/IO37PSB2V0
154	VMV2
155	GNDQ
156	GND
157	VMV1
158	GNDQ
159	GBA1/IO35PDB1V1
160	GBA0/IO35NDB1V1
161	GBB1/IO34PDB1V1
162	GND
163	GBB0/IO34NDB1V1
164	GBC1/IO33PDB1V1
165	GBC0/IO33NDB1V1
166	IO31PDB1V1
167	IO31NDB1V1
168	IO27PDB1V0
169	IO27NDB1V0
170	V <sub>CC</sub> B1
171	V <sub>CC</sub>
172	IO23PPB1V0
173	IO22PSB1V0
174	IO23NPB1V0
175	IO21PDB1V0
176	IO21NDB1V0
177	IO19PPB0V2
178	GND
179	IO18PPB0V2
180	IO19NPB0V2
181	IO18NPB0V2
182	IO17PPB0V2
183	IO16PPB0V2
184	IO17NPB0V2
185	IO16NPB0V2
186	V <sub>CC</sub> B0
187	V <sub>CC</sub>
188	IO15PDB0V2
189	IO15NDB0V2
190	IO13PDB0V2

208-Pin PQFP*	
Pin Number	A3PE600 Function
191	IO13NDB0V2
192	IO11PSB0V1
193	IO09PDB0V1
194	IO09NDB0V1
195	GND
196	IO07PDB0V1
197	IO07NDB0V1
198	IO05PDB0V0
199	IO05NDB0V0
200	V <sub>CC</sub> B0
201	GAC1/IO02PDB0V0
202	GAC0/IO02NDB0V0
203	GAB1/IO01PDB0V0
204	GAB0/IO01NDB0V0
205	GAA1/IO00PDB0V0
206	GAA0/IO00NDB0V0
207	GNDQ
208	VMV0

**Note:** \*Refer to the "User I/O Naming Convention" section on page 2-50.

208-Pin PQFP*	
Pin Number	A3PE1500 Function
1	GND
2	GNDQ
3	VMV7
4	GAB2/IO213PSB7V3
5	GAA2/IO214PDB7V3
6	IO214NDB7V3
7	GAC2/IO212PDB7V3
8	IO212NDB7V3
9	IO210PDB7V3
10	IO210NDB7V3
11	IO208PDB7V2
12	IO208NDB7V2
13	IO204PDB7V2
14	IO204NDB7V2
15	IO200PSB7V1
16	V <sub>CC</sub>
17	GND
18	V <sub>CC</sub> B7
19	IO196PDB7V1
20	IO196NDB7V1
21	IO193PSB7V0
22	GFC1/IO188PSB7V0
23	GFB1/IO187PDB7V0
24	GFB0/IO187NDB7V0
25	V <sub>COMPLF</sub>
26	GFA0/IO186NPB6V2
27	V <sub>CC</sub> PLF
28	GFA1/IO186PPB6V2
29	GND
30	GFA2/IO185PDB6V2
31	IO185NDB6V2
32	GFB2/IO184PPB6V2
33	GFC2/IO183PPB6V2
34	IO184NPB6V2
35	IO183NPB6V2
36	V <sub>CC</sub>
37	IO180PDB6V2
38	IO180NDB6V2

208-Pin PQFP*	
Pin Number	A3PE1500 Function
39	IO176PSB6V1
40	V <sub>CC</sub> B6
41	GND
42	IO172PDB6V1
43	IO172NDB6V1
44	GEC1/IO165PDB6V0
45	GEC0/IO165NDB6V0
46	GEB1/IO164PPB6V0
47	GEA1/IO163PPB6V0
48	GEB0/IO164NPB6V0
49	GEA0/IO163NPB6V0
50	VMV6
51	GNDQ
52	GND
53	VMV5
54	GNDQ
55	IO162NDB5V3
56	GEA2/IO162PDB5V3
57	IO161NDB5V3
58	GEB2/IO161PDB5V3
59	IO160NDB5V3
60	GEC2/IO160PDB5V3
61	IO159PSB5V3
62	V <sub>CC</sub> B5
63	IO157PSB5V3
64	IO153NDB5V2
65	GND
66	IO153PDB5V2
67	IO149NDB5V2
68	IO149PDB5V2
69	IO145NDB5V1
70	IO145PDB5V1
71	V <sub>CC</sub>
72	V <sub>CC</sub> B5
73	IO141NDB5V1
74	IO141PDB5V1
75	IO140NDB5V1
76	IO140PDB5V1

208-Pin PQFP*	
Pin Number	A3PE1500 Function
77	IO138NDB5V0
78	IO138PDB5V0
79	IO135NDB5V0
80	IO135PDB5V0
81	GND
82	IO123NDB4V3
83	IO123PDB4V3
84	IO122NDB4V2
85	IO122PDB4V2
86	IO119NDB4V2
87	IO119PDB4V2
88	V <sub>CC</sub>
89	V <sub>CC</sub> B4
90	IO115NDB4V2
91	IO115PDB4V2
92	IO111NDB4V1
93	IO111PDB4V1
94	IO109NDB4V1
95	GDC2/IO109PDB4V1
96	IO108NDB4V0
97	GND
98	GDB2/IO108PDB4V0
99	GDA2/IO107PSB4V0
100	GNDQ
101	TCK
102	TDI
103	TMS
104	VMV4
105	GND
106	V <sub>PUMP</sub>
107	GNDQ
108	TDO
109	TRST
110	V <sub>JTAG</sub>
111	VMV3
112	GDA0/IO106NPB3V2
113	GDB0/IO105NPB3V2
114	GDA1/IO106PPB3V2

**Note:** \*Refer to the "User I/O Naming Convention" section on page 2-50.

208-Pin PQFP*	
Pin Number	A3PE1500 Function
115	GDB1/IO105PPB3V2
116	GDC0/IO104NDB3V2
117	GDC1/IO104PDB3V2
118	IO101NDB3V2
119	IO101PDB3V2
120	IO97NDB3V1
121	IO97PDB3V1
122	GND
123	V <sub>CC</sub> B3
124	GCC2/IO86PSB3V0
125	GCB2/IO85PSB3V0
126	NC
127	IO84NDB3V0
128	GCA2/IO84PDB3V0
129	GCA1/IO83PPB3V0
130	GND
131	V <sub>CC</sub> PLC
132	GCA0/IO83NPB3V0
133	V <sub>CC</sub> OMPLC
134	GCB0/IO82NDB2V3
135	GCB1/IO82PDB2V3
136	GCC1/IO81PSB2V3
137	IO79NDB2V3
138	IO79PDB2V3
139	IO77PSB2V3
140	V <sub>CC</sub> B2
141	GND
142	V <sub>CC</sub>
143	IO70NDB2V2
144	IO70PDB2V2
145	IO67NDB2V2
146	IO67PDB2V2
147	IO66NDB2V1
148	IO66PDB2V1
149	IO63NDB2V1
150	IO63PDB2V1
151	GBC2/IO60PSB2V0
152	GBA2/IO58PSB2V0

208-Pin PQFP*	
Pin Number	A3PE1500 Function
153	GBB2/IO59PSB2V0
154	VMV2
155	GNDQ
156	GND
157	VMV1
158	GNDQ
159	GBA1/IO57PDB1V3
160	GBA0/IO57NDB1V3
161	GBB1/IO56PDB1V3
162	GND
163	GBB0/IO56NDB1V3
164	GBC1/IO55PDB1V3
165	GBC0/IO55NDB1V3
166	IO51PDB1V2
167	IO51NDB1V2
168	IO47PDB1V1
169	IO47NDB1V1
170	V <sub>CC</sub> B1
171	V <sub>CC</sub>
172	IO42PSB1V1
173	IO41PDB1V1
174	IO41NDB1V1
175	IO38PDB1V0
176	IO38NDB1V0
177	IO31PDB0V3
178	GND
179	IO31NDB0V3
180	IO28PDB0V3
181	IO28NDB0V3
182	IO26PDB0V3
183	IO26NDB0V3
184	IO23PDB0V2
185	IO23NDB0V2
186	V <sub>CC</sub> B0
187	V <sub>CC</sub>
188	IO18PDB0V2
189	IO18NDB0V2
190	IO15PDB0V1

208-Pin PQFP*	
Pin Number	A3PE1500 Function
191	IO15NDB0V1
192	IO12PSB0V1
193	IO11PDB0V1
194	IO11NDB0V1
195	GND
196	IO08PDB0V1
197	IO08NDB0V1
198	IO05PDB0V0
199	IO05NDB0V0
200	V <sub>CC</sub> B0
201	GAC1/IO02PDB0V0
202	GAC0/IO02NDB0V0
203	GAB1/IO01PDB0V0
204	GAB0/IO01NDB0V0
205	GAA1/IO00PDB0V0
206	GAA0/IO00NDB0V0
207	GNDQ
208	VMV0

**Note:** \*Refer to the "User I/O Naming Convention" section on page 2-50.

208-Pin PQFP*	
Pin Number	A3PE3000 Function
1	GND
2	GNDQ
3	VMV7
4	GAB2/IO303PSB7V3
5	GAA2/IO304PDB7V3
6	IO304NDB7V3
7	GAC2/IO302PDB7V3
8	IO302NDB7V3
9	IO298PDB7V3
10	IO298NDB7V3
11	IO294PDB7V2
12	IO294NDB7V2
13	IO290PDB7V2
14	IO290NDB7V2
15	IO286PSB7V1
16	V <sub>CC</sub>
17	GND
18	V <sub>CC</sub> B7
19	IO282PDB7V1
20	IO282NDB7V1
21	IO278PSB7V0
22	GFC1/IO274PSB7V0
23	GFB1/IO273PDB7V0
24	GFB0/IO273NDB7V0
25	V <sub>CC</sub> PLF
26	GFA0/IO272NPB6V4
27	V <sub>CC</sub> PLF
28	GFA1/IO272PPB6V4
29	GND
30	GFA2/IO271PDB6V4
31	IO271NDB6V4
32	GFB2/IO270PPB6V4
33	GFC2/IO269PPB6V4
34	IO270NPB6V4
35	IO269NPB6V4
36	V <sub>CC</sub>

208-Pin PQFP*	
Pin Number	A3PE3000 Function
37	IO250PDB6V2
38	IO250NDB6V2
39	IO246PSB6V1
40	V <sub>CC</sub> B6
41	GND
42	IO242PDB6V1
43	IO242NDB6V1
44	GEC1/IO234PPB6V0
45	GEB1/IO233PPB6V0
46	GEC0/IO234NPB6V0
47	GEB0/IO233NPB6V0
48	GEA1/IO232PDB6V0
49	GEA0/IO232NDB6V0
50	VMV6
51	GNDQ
52	GND
53	VMV5
54	GNDQ
55	IO231NDB5V4
56	GEA2/IO231PDB5V4
57	IO230NDB5V4
58	GEB2/IO230PDB5V4
59	IO229NDB5V4
60	GEC2/IO229PDB5V4
61	IO228PSB5V4
62	V <sub>CC</sub> B5
63	IO216NDB5V3
64	IO216PDB5V3
65	GND
66	IO212PSB5V2
67	IO210NDB5V2
68	IO210PDB5V2
69	IO206NDB5V1
70	IO206PDB5V1
71	V <sub>CC</sub>
72	V <sub>CC</sub> B5

208-Pin PQFP*	
Pin Number	A3PE3000 Function
73	IO200NDB5V1
74	IO200PDB5V1
75	IO196NDB5V0
76	IO196PDB5V0
77	IO195NDB5V0
78	IO195PDB5V0
79	IO192NDB5V0
80	IO192PDB5V0
81	GND
82	IO182NDB4V3
83	IO182PDB4V3
84	IO178NDB4V3
85	IO178PDB4V3
86	IO174NDB4V2
87	IO174PDB4V2
88	V <sub>CC</sub>
89	V <sub>CC</sub> B4
90	IO168NDB4V2
91	IO168PDB4V2
92	IO164NDB4V1
93	IO164PDB4V1
94	IO154NDB4V0
95	GDC2/IO154PDB4V0
96	IO153NDB4V0
97	GND
98	GDB2/IO153PDB4V0
99	GDA2/IO152PSB4V0
100	GNDQ
101	TCK
102	TDI
103	TMS
104	VMV4
105	GND
106	V <sub>PUMP</sub>
107	GNDQ
108	TDO

**Note:** \*Refer to the "User I/O Naming Convention" section on page 2-50.

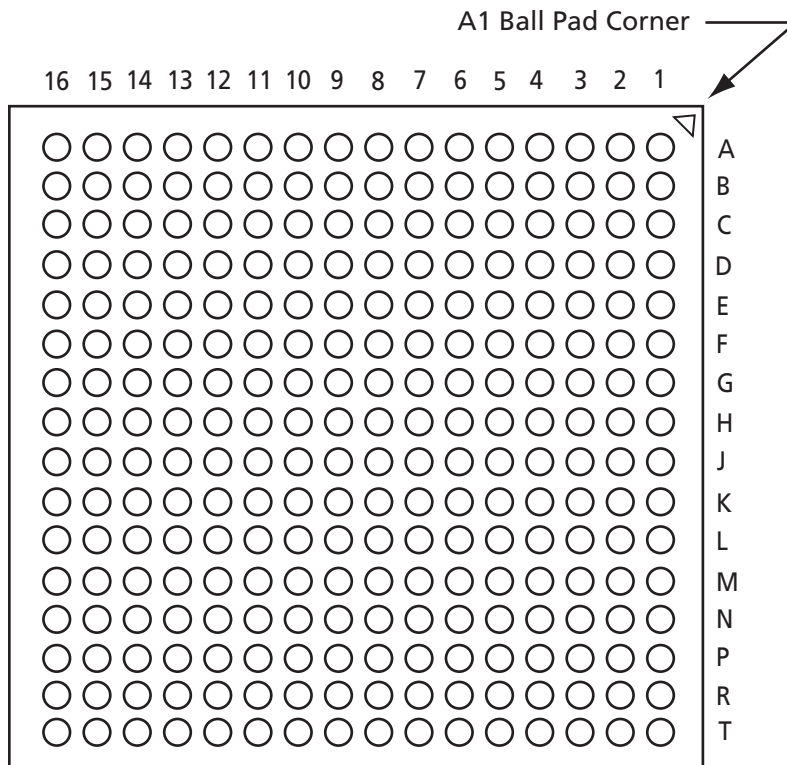
208-Pin PQFP*	
Pin Number	A3PE3000 Function
109	TRST
110	V <sub>JTAG</sub>
111	VMV3
112	GDA0/IO151NPB3V4
113	GDB0/IO150NPB3V4
114	GDA1/IO151PPB3V4
115	GDB1/IO150PPB3V4
116	GDC0/IO149NDB3V4
117	GDC1/IO149PDB3V4
118	IO146NDB3V4
119	IO146PDB3V4
120	IO142NDB3V3
121	IO142PDB3V3
122	GND
123	V <sub>CC</sub> B3
124	GCC2/IO117PSB3V0
125	GCB2/IO116PSB3V0
126	NC
127	IO115NDB3V0
128	GCA2/IO115PDB3V0
129	GCA1/IO114PPB3V0
130	GND
131	V <sub>CC</sub> PLC
132	GCA0/IO114NPB3V0
133	V <sub>COMPLC</sub>
134	GCB0/IO113NDB2V3
135	GCB1/IO113PDB2V3
136	GCC1/IO112PSB2V3
137	IO110NDB2V3
138	IO110PDB2V3
139	IO106PSB2V3
140	V <sub>CC</sub> B2
141	GND
142	V <sub>CC</sub>
143	IO99NDB2V2
144	IO99PDB2V2

208-Pin PQFP*	
Pin Number	A3PE3000 Function
145	IO96NDB2V1
146	IO96PDB2V1
147	IO91NDB2V1
148	IO91PDB2V1
149	IO88NDB2V0
150	IO88PDB2V0
151	GBC2/IO84PSB2V0
152	GBA2/IO82PSB2V0
153	GBB2/IO83PSB2V0
154	VMV2
155	GNDQ
156	GND
157	VMV1
158	GNDQ
159	GBA1/IO81PDB1V4
160	GBA0/IO81NDB1V4
161	GBB1/IO80PDB1V4
162	GND
163	GBB0/IO80NDB1V4
164	GBC1/IO79PDB1V4
165	GBC0/IO79NDB1V4
166	IO74PDB1V4
167	IO74NDB1V4
168	IO70PDB1V3
169	IO70NDB1V3
170	V <sub>CC</sub> B1
171	V <sub>CC</sub>
172	IO67PSB1V3
173	IO66PDB1V3
174	IO66NDB1V3
175	IO63PDB1V2
176	IO63NDB1V2
177	IO40PDB0V4
178	GND
179	IO40NDB0V4
180	IO37PDB0V4

208-Pin PQFP*	
Pin Number	A3PE3000 Function
181	IO37NDB0V4
182	IO35PDB0V4
183	IO35NDB0V4
184	IO32PDB0V3
185	IO32NDB0V3
186	V <sub>CC</sub> B0
187	V <sub>CC</sub>
188	IO28PDB0V3
189	IO28NDB0V3
190	IO24PDB0V2
191	IO24NDB0V2
192	IO21PSB0V2
193	IO16PDB0V1
194	IO16NDB0V1
195	GND
196	IO11PDB0V1
197	IO11NDB0V1
198	IO08PDB0V0
199	IO08NDB0V0
200	V <sub>CC</sub> B0
201	GAC1/IO02PDB0V0
202	GAC0/IO02NDB0V0
203	GAB1/IO01PDB0V0
204	GAB0/IO01NDB0V0
205	GAA1/IO00PDB0V0
206	GAA0/IO00NDB0V0
207	GNDQ
208	VMV0

**Note:** \*Refer to the "User I/O Naming Convention" section on page 2-50.

## 256-Pin FBGA



### Note

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



256-Pin FBGA*	
Pin Number	A3PE600 Function
A1	GND
A2	GAA0/IO00NDB0V0
A3	GAA1/IO00PDB0V0
A4	GAB0/IO01NDB0V0
A5	IO05PDB0V0
A6	IO10PDB0V1
A7	IO12PDB0V2
A8	IO16NDB0V2
A9	IO23NDB1V0
A10	IO23PDB1V0
A11	IO28NDB1V1
A12	IO28PDB1V1
A13	GBB1/IO34PDB1V1
A14	GBA0/IO35NDB1V1
A15	GBA1/IO35PDB1V1
A16	GND
B1	GAB2/IO133PDB7V1
B2	GAA2/IO134PDB7V1
B3	GNDQ
B4	GAB1/IO01PDB0V0
B5	IO05NDB0V0
B6	IO10NDB0V1
B7	IO12NDB0V2
B8	IO16PDB0V2
B9	IO20NDB1V0
B10	IO24NDB1V0
B11	IO24PDB1V0
B12	GBC1/IO33PDB1V1
B13	GBB0/IO34NDB1V1
B14	GNDQ
B15	GBA2/IO36PDB2V0
B16	IO42NDB2V0
C1	IO133NDB7V1
C2	IO134NDB7V1
C3	VMV7
C4	V <sub>CCPLA</sub>
C5	GAC0/IO02NDB0V0

256-Pin FBGA*	
Pin Number	A3PE600 Function
C6	GAC1/IO02PDB0V0
C7	IO15NDB0V2
C8	IO15PDB0V2
C9	IO20PDB1V0
C10	IO25NDB1V0
C11	IO27PDB1V0
C12	GBC0/IO33NDB1V1
C13	V <sub>CCPLB</sub>
C14	VMV2
C15	IO36NDB2V0
C16	IO42PDB2V0
D1	IO128PDB7V1
D2	IO129PDB7V1
D3	GAC2/IO132PDB7V1
D4	V <sub>COMPLA</sub>
D5	GNDQ
D6	IO09NDB0V1
D7	IO09PDB0V1
D8	IO13PDB0V2
D9	IO21PDB1V0
D10	IO25PDB1V0
D11	IO27NDB1V0
D12	GNDQ
D13	V <sub>COMPLB</sub>
D14	GBB2/IO37PDB2V0
D15	IO39PDB2V0
D16	IO39NDB2V0
E1	IO128NDB7V1
E2	IO129NDB7V1
E3	IO132NDB7V1
E4	IO130PDB7V1
E5	VMV0
E6	V <sub>CCIB0</sub>
E7	V <sub>CCIB0</sub>
E8	IO13NDB0V2
E9	IO21NDB1V0
E10	V <sub>CCIB1</sub>

256-Pin FBGA*	
Pin Number	A3PE600 Function
E11	V <sub>CCIB1</sub>
E12	VMV1
E13	GBC2/IO38PDB2V0
E14	IO37NDB2V0
E15	IO41NDB2V0
E16	IO41PDB2V0
F1	IO124PDB7V0
F2	IO125PDB7V0
F3	IO126PDB7V0
F4	IO130NDB7V1
F5	V <sub>CCIB7</sub>
F6	GND
F7	V <sub>CC</sub>
F8	V <sub>CC</sub>
F9	V <sub>CC</sub>
F10	V <sub>CC</sub>
F11	GND
F12	V <sub>CCIB2</sub>
F13	IO38NDB2V0
F14	IO40NDB2V0
F15	IO40PDB2V0
F16	IO45PSB2V1
G1	IO124NDB7V0
G2	IO125NDB7V0
G3	IO126NDB7V0
G4	GFC1/IO120PPB7V0
G5	V <sub>CCIB7</sub>
G6	V <sub>CC</sub>
G7	GND
G8	GND
G9	GND
G10	GND
G11	V <sub>CC</sub>
G12	V <sub>CCIB2</sub>
G13	GCC1/IO50PPB2V1
G14	IO44NDB2V1
G15	IO44PDB2V1

**Note:** \*Refer to the "User I/O Naming Convention" section on page 2-50.

256-Pin FBGA*	
Pin Number	A3PE600 Function
G16	IO49NSB2V1
H1	GFB0/IO119NPB7V0
H2	GFA0/IO118NDB6V1
H3	GFB1/IO119PPB7V0
H4	V <sub>COMPLF</sub>
H5	GFC0/IO120NPB7V0
H6	V <sub>CC</sub>
H7	GND
H8	GND
H9	GND
H10	GND
H11	V <sub>CC</sub>
H12	GCC0/IO50NPB2V1
H13	GCB1/IO51PPB2V1
H14	GCA0/IO52NPB3V0
H15	V <sub>COMPLC</sub>
H16	GCB0/IO51NPB2V1
J1	GFA2/IO117PSB6V1
J2	GFA1/IO118PDB6V1
J3	V <sub>CCPLF</sub>
J4	IO116NDB6V1
J5	GFB2/IO116PDB6V1
J6	V <sub>CC</sub>
J7	GND
J8	GND
J9	GND
J10	GND
J11	V <sub>CC</sub>
J12	GCB2/IO54PPB3V0
J13	GCA1/IO52PPB3V0
J14	GCC2/IO55PPB3V0
J15	V <sub>CCPLC</sub>
J16	GCA2/IO53PSB3V0
K1	GFC2/IO115PSB6V1
K2	IO113PPB6V1
K3	IO112PDB6V1
K4	IO112NDB6V1

256-Pin FBGA*	
Pin Number	A3PE600 Function
K5	V <sub>CCIB6</sub>
K6	V <sub>CC</sub>
K7	GND
K8	GND
K9	GND
K10	GND
K11	V <sub>CC</sub>
K12	V <sub>CCIB3</sub>
K13	IO54NPB3V0
K14	IO57NPB3V0
K15	IO55NPB3V0
K16	IO57PPB3V0
L1	IO113NPB6V1
L2	IO109PPB6V0
L3	IO108PDB6V0
L4	IO108NDB6V0
L5	V <sub>CCIB6</sub>
L6	GND
L7	V <sub>CC</sub>
L8	V <sub>CC</sub>
L9	V <sub>CC</sub>
L10	V <sub>CC</sub>
L11	GND
L12	V <sub>CCIB3</sub>
L13	GDB0/IO66NPB3V1
L14	IO60NDB3V1
L15	IO60PDB3V1
L16	IO61PDB3V1
M1	IO109NPB6V0
M2	IO106NDB6V0
M3	IO106PDB6V0
M4	GEC0/IO104NPB6V0
M5	VMV5
M6	V <sub>CCIB5</sub>
M7	V <sub>CCIB5</sub>
M8	IO84NDB5V0
M9	IO84PDB5V0

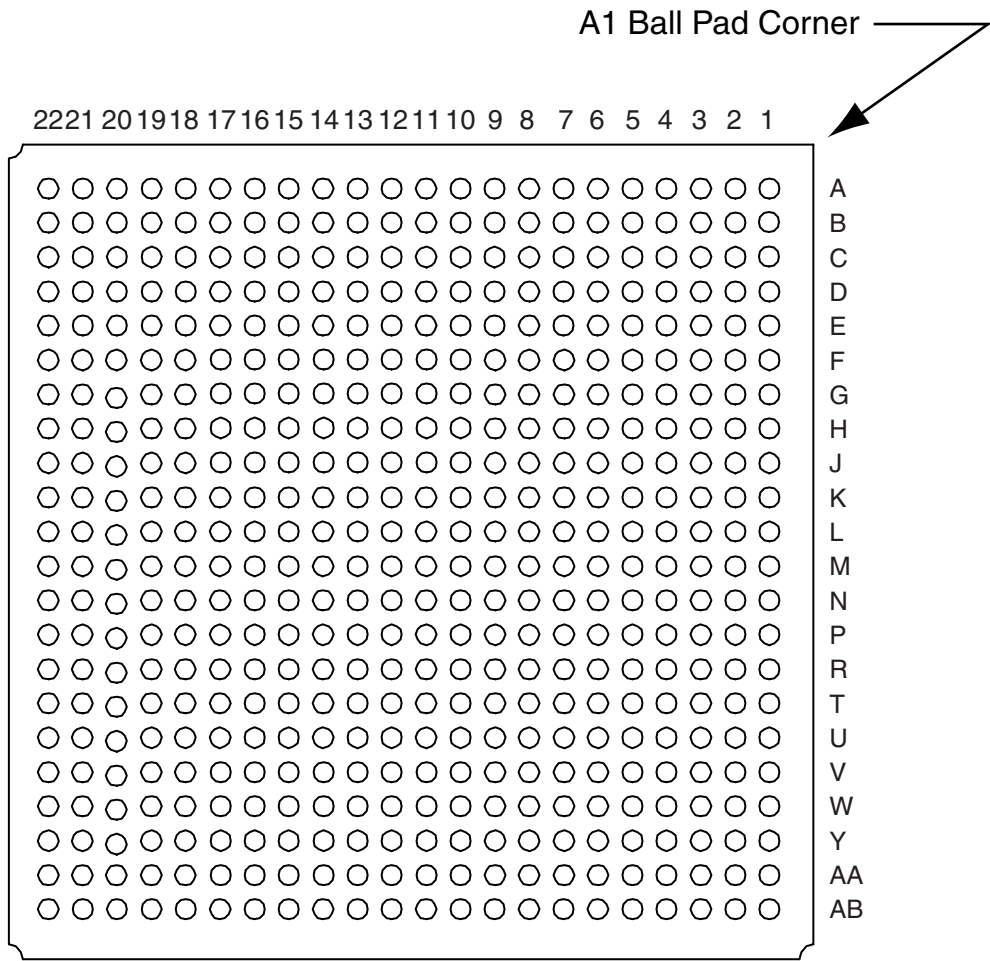
256-Pin FBGA*	
Pin Number	A3PE600 Function
M10	V <sub>CCIB4</sub>
M11	V <sub>CCIB4</sub>
M12	VMV3
M13	V <sub>CCPLD</sub>
M14	GDB1/IO66PPB3V1
M15	GDC1/IO65PDB3V1
M16	IO61NDB3V1
N1	IO105PDB6V0
N2	IO105NDB6V0
N3	GEC1/IO104PPB6V0
N4	V <sub>COMPLE</sub>
N5	GNDQ
N6	GEA2/IO101PPB5V2
N7	IO92NDB5V1
N8	IO90NDB5V1
N9	IO82NDB5V0
N10	IO74NDB4V1
N11	IO74PDB4V1
N12	GNDQ
N13	V <sub>COMPLD</sub>
N14	V <sub>JTAG</sub>
N15	GDC0/IO65NDB3V1
N16	GDA1/IO67PDB3V1
P1	GEB1/IO103PDB6V0
P2	GEB0/IO103NDB6V0
P3	VMV6
P4	V <sub>CCPLE</sub>
P5	IO101NPB5V2
P6	IO95PPB5V1
P7	IO92PDB5V1
P8	IO90PDB5V1
P9	IO82PDB5V0
P10	IO76NDB4V1
P11	IO76PDB4V1
P12	VMV4
P13	TCK
P14	V <sub>PUMP</sub>

**Note:** \*Refer to the "User I/O Naming Convention" section on page 2-50.

256-Pin FBGA*	
Pin Number	A3PE600 Function
P15	TRST
P16	GDA0/IO67NDB3V1
R1	GEA1/IO102PDB6V0
R2	GEA0/IO102NDB6V0
R3	GNDQ
R4	GEC2/IO99PDB5V2
R5	IO95NPB5V1
R6	IO91NDB5V1
R7	IO91PDB5V1
R8	IO83NDB5V0
R9	IO83PDB5V0
R10	IO77NDB4V1
R11	IO77PDB4V1
R12	IO69NDB4V0
R13	GDB2/IO69PDB4V0
R14	TDI
R15	GNDQ
R16	TDO
T1	GND
T2	IO100NDB5V2
T3	GEB2/IO100PDB5V2
T4	IO99NDB5V2
T5	IO88NDB5V0
T6	IO88PDB5V0
T7	IO89NSB5V0
T8	IO80NSB4V1
T9	IO81NDB4V1
T10	IO81PDB4V1
T11	IO70NDB4V0
T12	GDC2/IO70PDB4V0
T13	IO68NDB4V0
T14	GDA2/IO68PDB4V0
T15	TMS
T16	GND

**Note:** \*Refer to the "User I/O Naming Convention" section on page 2-50.

## 484-Pin FBGA



### Note

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

484-Pin FBGA*	
Pin Number	A3PE600 Function
A1	GND
A2	GND
A3	V <sub>CC</sub> B0
A4	IO06NDB0V1
A5	IO06PDB0V1
A6	IO08NDB0V1
A7	IO08PDB0V1
A8	IO11PDB0V1
A9	IO17PDB0V2
A10	IO18NDB0V2
A11	IO18PDB0V2
A12	IO22PDB1V0
A13	IO26PDB1V0
A14	IO29NDB1V1
A15	IO29PDB1V1
A16	IO31NDB1V1
A17	IO31PDB1V1
A18	IO32NDB1V1
A19	NC
A20	V <sub>CC</sub> B1
A21	GND
A22	GND
B1	GND
B2	V <sub>CC</sub> B7
B3	NC
B4	IO03NDB0V0
B5	IO03PDB0V0
B6	IO07NDB0V1
B7	IO07PDB0V1
B8	IO11NDB0V1
B9	IO17NDB0V2
B10	IO14PDB0V2
B11	IO19PDB0V2
B12	IO22NDB1V0
B13	IO26NDB1V0
B14	NC

484-Pin FBGA*	
Pin Number	A3PE600 Function
B15	NC
B16	IO30NDB1V1
B17	IO30PDB1V1
B18	IO32PDB1V1
B19	NC
B20	NC
B21	V <sub>CC</sub> B2
B22	GND
C1	V <sub>CC</sub> B7
C2	NC
C3	NC
C4	NC
C5	GND
C6	IO04NDB0V0
C7	IO04PDB0V0
C8	V <sub>CC</sub>
C9	V <sub>CC</sub>
C10	IO14NDB0V2
C11	IO19NDB0V2
C12	NC
C13	NC
C14	V <sub>CC</sub>
C15	V <sub>CC</sub>
C16	NC
C17	NC
C18	GND
C19	NC
C20	NC
C21	NC
C22	V <sub>CC</sub> B2
D1	NC
D2	NC
D3	NC
D4	GND
D5	GAA0/IO00NDB0V0
D6	GAA1/IO00PDB0V0

484-Pin FBGA*	
Pin Number	A3PE600 Function
D7	GAB0/IO01NDB0V0
D8	IO05PDB0V0
D9	IO10PDB0V1
D10	IO12PDB0V2
D11	IO16NDB0V2
D12	IO23NDB1V0
D13	IO23PDB1V0
D14	IO28NDB1V1
D15	IO28PDB1V1
D16	GBB1/IO34PDB1V1
D17	GBA0/IO35NDB1V1
D18	GBA1/IO35PDB1V1
D19	GND
D20	NC
D21	NC
D22	NC
E1	NC
E2	NC
E3	GND
E4	GAB2/IO133PDB7V1
E5	GAA2/IO134PDB7V1
E6	GNDQ
E7	GAB1/IO01PDB0V0
E8	IO05NDB0V0
E9	IO10NDB0V1
E10	IO12NDB0V2
E11	IO16PDB0V2
E12	IO20NDB1V0
E13	IO24NDB1V0
E14	IO24PDB1V0
E15	GBC1/IO33PDB1V1
E16	GBB0/IO34NDB1V1
E17	GNDQ
E18	GBA2/IO36PDB2V0
E19	IO42NDB2V0
E20	GND

**Note:** \*Refer to the "User I/O Naming Convention" section on page 2-50.

484-Pin FBGA*	
Pin Number	A3PE600 Function
E21	NC
E22	NC
F1	NC
F2	IO131NDB7V1
F3	IO131PDB7V1
F4	IO133NDB7V1
F5	IO134NDB7V1
F6	VMV7
F7	V <sub>CCPLA</sub>
F8	GAC0/IO02NDB0V0
F9	GAC1/IO02PDB0V0
F10	IO15NDB0V2
F11	IO15PDB0V2
F12	IO20PDB1V0
F13	IO25NDB1V0
F14	IO27PDB1V0
F15	GBC0/IO33NDB1V1
F16	V <sub>CCPLB</sub>
F17	VMV2
F18	IO36NDB2V0
F19	IO42PDB2V0
F20	NC
F21	NC
F22	NC
G1	IO127NDB7V1
G2	IO127PDB7V1
G3	NC
G4	IO128PDB7V1
G5	IO129PDB7V1
G6	GAC2/IO132PDB7V1
G7	V <sub>COMPLA</sub>
G8	GNDQ
G9	IO09NDB0V1
G10	IO09PDB0V1
G11	IO13PDB0V2
G12	IO21PDB1V0

484-Pin FBGA*	
Pin Number	A3PE600 Function
G13	IO25PDB1V0
G14	IO27NDB1V0
G15	GNDQ
G16	V <sub>COMPLB</sub>
G17	GBB2/IO37PDB2V0
G18	IO39PDB2V0
G19	IO39NDB2V0
G20	IO43PDB2V0
G21	IO43NDB2V0
G22	NC
H1	NC
H2	NC
H3	V <sub>CC</sub>
H4	IO128NDB7V1
H5	IO129NDB7V1
H6	IO132NDB7V1
H7	IO130PDB7V1
H8	VMV0
H9	V <sub>CCB0</sub>
H10	V <sub>CCB0</sub>
H11	IO13NDB0V2
H12	IO21NDB1V0
H13	V <sub>CCB1</sub>
H14	V <sub>CCB1</sub>
H15	VMV1
H16	GBC2/IO38PDB2V0
H17	IO37NDB2V0
H18	IO41NDB2V0
H19	IO41PDB2V0
H20	V <sub>CC</sub>
H21	NC
H22	NC
J1	IO123NDB7V0
J2	IO123PDB7V0
J3	NC
J4	IO124PDB7V0

484-Pin FBGA*	
Pin Number	A3PE600 Function
J5	IO125PDB7V0
J6	IO126PDB7V0
J7	IO130NDB7V1
J8	V <sub>CCB7</sub>
J9	GND
J10	V <sub>CC</sub>
J11	V <sub>CC</sub>
J12	V <sub>CC</sub>
J13	V <sub>CC</sub>
J14	GND
J15	V <sub>CCB2</sub>
J16	IO38NDB2V0
J17	IO40NDB2V0
J18	IO40PDB2V0
J19	IO45PDB2V1
J20	NC
J21	IO48PDB2V1
J22	IO46PDB2V1
K1	IO121NDB7V0
K2	IO121PDB7V0
K3	NC
K4	IO124NDB7V0
K5	IO125NDB7V0
K6	IO126NDB7V0
K7	GFC1/IO120PPB7V0
K8	V <sub>CCB7</sub>
K9	V <sub>CC</sub>
K10	GND
K11	GND
K12	GND
K13	GND
K14	V <sub>CC</sub>
K15	V <sub>CCB2</sub>
K16	GCC1/IO50PPB2V1
K17	IO44NDB2V1
K18	IO44PDB2V1

**Note:** \*Refer to the "User I/O Naming Convention" section on page 2-50.

484-Pin FBGA*	
Pin Number	A3PE600 Function
K19	IO49NPB2V1
K20	IO45NDB2V1
K21	IO48NDB2V1
K22	IO46NDB2V1
L1	NC
L2	IO122PDB7V0
L3	IO122NDB7V0
L4	GFB0/IO119NPB7V0
L5	GFA0/IO118NDB6V1
L6	GFB1/IO119PPB7V0
L7	V <sub>COMPLF</sub>
L8	GFC0/IO120NPB7V0
L9	V <sub>CC</sub>
L10	GND
L11	GND
L12	GND
L13	GND
L14	V <sub>CC</sub>
L15	GCC0/IO50NPB2V1
L16	GCB1/IO51PPB2V1
L17	GCA0/IO52NPB3V0
L18	V <sub>COMPLC</sub>
L19	GCB0/IO51NPB2V1
L20	IO49PPB2V1
L21	IO47NDB2V1
L22	IO47PDB2V1
M1	NC
M2	IO114NDB6V1
M3	IO117NDB6V1
M4	GFA2/IO117PDB6V1
M5	GFA1/IO118PDB6V1
M6	V <sub>CCPLF</sub>
M7	IO116NDB6V1
M8	GFB2/IO116PDB6V1
M9	V <sub>CC</sub>
M10	GND

484-Pin FBGA*	
Pin Number	A3PE600 Function
M11	GND
M12	GND
M13	GND
M14	V <sub>CC</sub>
M15	GCB2/IO54PPB3V0
M16	GCA1/IO52PPB3V0
M17	GCC2/IO55PPB3V0
M18	V <sub>CCPLC</sub>
M19	GCA2/IO53PDB3V0
M20	IO53NDB3V0
M21	IO56PDB3V0
M22	NC
N1	IO114PDB6V1
N2	IO111NDB6V1
N3	NC
N4	GFC2/IO115PDB6V1
N5	IO113PPB6V1
N6	IO112PDB6V1
N7	IO112NDB6V1
N8	V <sub>CCIB6</sub>
N9	V <sub>CC</sub>
N10	GND
N11	GND
N12	GND
N13	GND
N14	V <sub>CC</sub>
N15	V <sub>CCIB3</sub>
N16	IO54NPB3V0
N17	IO57NPB3V0
N18	IO55NPB3V0
N19	IO57PPB3V0
N20	NC
N21	IO56NDB3V0
N22	IO58PDB3V0
P1	NC
P2	IO111PDB6V1

484-Pin FBGA*	
Pin Number	A3PE600 Function
P3	IO115NDB6V1
P4	IO113NPB6V1
P5	IO109PPB6V0
P6	IO108PDB6V0
P7	IO108NDB6V0
P8	V <sub>CCIB6</sub>
P9	GND
P10	V <sub>CC</sub>
P11	V <sub>CC</sub>
P12	V <sub>CC</sub>
P13	V <sub>CC</sub>
P14	GND
P15	V <sub>CCIB3</sub>
P16	GDB0/IO66NPB3V1
P17	IO60NDB3V1
P18	IO60PDB3V1
P19	IO61PDB3V1
P20	NC
P21	IO59PDB3V0
P22	IO58NDB3V0
R1	NC
R2	IO110PDB6V0
R3	V <sub>CC</sub>
R4	IO109NPB6V0
R5	IO106NDB6V0
R6	IO106PDB6V0
R7	GEC0/IO104NPB6V0
R8	VMV5
R9	V <sub>CCIB5</sub>
R10	V <sub>CCIB5</sub>
R11	IO84NDB5V0
R12	IO84PDB5V0
R13	V <sub>CCIB4</sub>
R14	V <sub>CCIB4</sub>
R15	VMV3
R16	V <sub>CCPLD</sub>

**Note:** \*Refer to the "User I/O Naming Convention" section on page 2-50.

484-Pin FBGA*	
Pin Number	A3PE600 Function
R17	GDB1/IO66PPB3V1
R18	GDC1/IO65PDB3V1
R19	IO61NDB3V1
R20	V <sub>CC</sub>
R21	IO59NDB3V0
R22	IO62PDB3V1
T1	NC
T2	IO110NDB6V0
T3	NC
T4	IO105PDB6V0
T5	IO105NDB6V0
T6	GEC1/IO104PPB6V0
T7	V <sub>COMPLE</sub>
T8	GNDQ
T9	GEA2/IO101PPB5V2
T10	IO92NDB5V1
T11	IO90NDB5V1
T12	IO82NDB5V0
T13	IO74NDB4V1
T14	IO74PDB4V1
T15	GNDQ
T16	V <sub>COMPLD</sub>
T17	V <sub>JTAG</sub>
T18	GDC0/IO65NDB3V1
T19	GDA1/IO67PDB3V1
T20	NC
T21	IO64PDB3V1
T22	IO62NDB3V1
U1	NC
U2	IO107PDB6V0
U3	IO107NDB6V0
U4	GEB1/IO103PDB6V0
U5	GEB0/IO103NDB6V0
U6	VMV6
U7	V <sub>CCPLE</sub>
U8	IO101NPB5V2

484-Pin FBGA*	
Pin Number	A3PE600 Function
U9	IO95PPB5V1
U10	IO92PDB5V1
U11	IO90PDB5V1
U12	IO82PDB5V0
U13	IO76NDB4V1
U14	IO76PDB4V1
U15	VMV4
U16	TCK
U17	V <sub>PUMP</sub>
U18	TRST
U19	GDA0/IO67NDB3V1
U20	NC
U21	IO64NDB3V1
U22	IO63PDB3V1
V1	NC
V2	NC
V3	GND
V4	GEA1/IO102PDB6V0
V5	GEA0/IO102NDB6V0
V6	GNDQ
V7	GEC2/IO99PDB5V2
V8	IO95NPB5V1
V9	IO91NDB5V1
V10	IO91PDB5V1
V11	IO83NDB5V0
V12	IO83PDB5V0
V13	IO77NDB4V1
V14	IO77PDB4V1
V15	IO69NDB4V0
V16	GDB2/IO69PDB4V0
V17	TDI
V18	GNDQ
V19	TDO
V20	GND
V21	NC
V22	IO63NDB3V1

484-Pin FBGA*	
Pin Number	A3PE600 Function
W1	NC
W2	NC
W3	NC
W4	GND
W5	IO100NDB5V2
W6	GEB2/IO100PDB5V2
W7	IO99NDB5V2
W8	IO88NDB5V0
W9	IO88PDB5V0
W10	IO89NDB5V0
W11	IO80NDB4V1
W12	IO81NDB4V1
W13	IO81PDB4V1
W14	IO70NDB4V0
W15	GDC2/IO70PDB4V0
W16	IO68NDB4V0
W17	GDA2/IO68PDB4V0
W18	TMS
W19	GND
W20	NC
W21	NC
W22	NC
Y1	V <sub>CC</sub> B6
Y2	NC
Y3	NC
Y4	IO98NDB5V2
Y5	GND
Y6	IO94NDB5V1
Y7	IO94PDB5V1
Y8	V <sub>CC</sub>
Y9	V <sub>CC</sub>
Y10	IO89PDB5V0
Y11	IO80PDB4V1
Y12	IO78NPB4V1
Y13	NC
Y14	V <sub>CC</sub>

**Note:** \*Refer to the "User I/O Naming Convention" section on page 2-50.

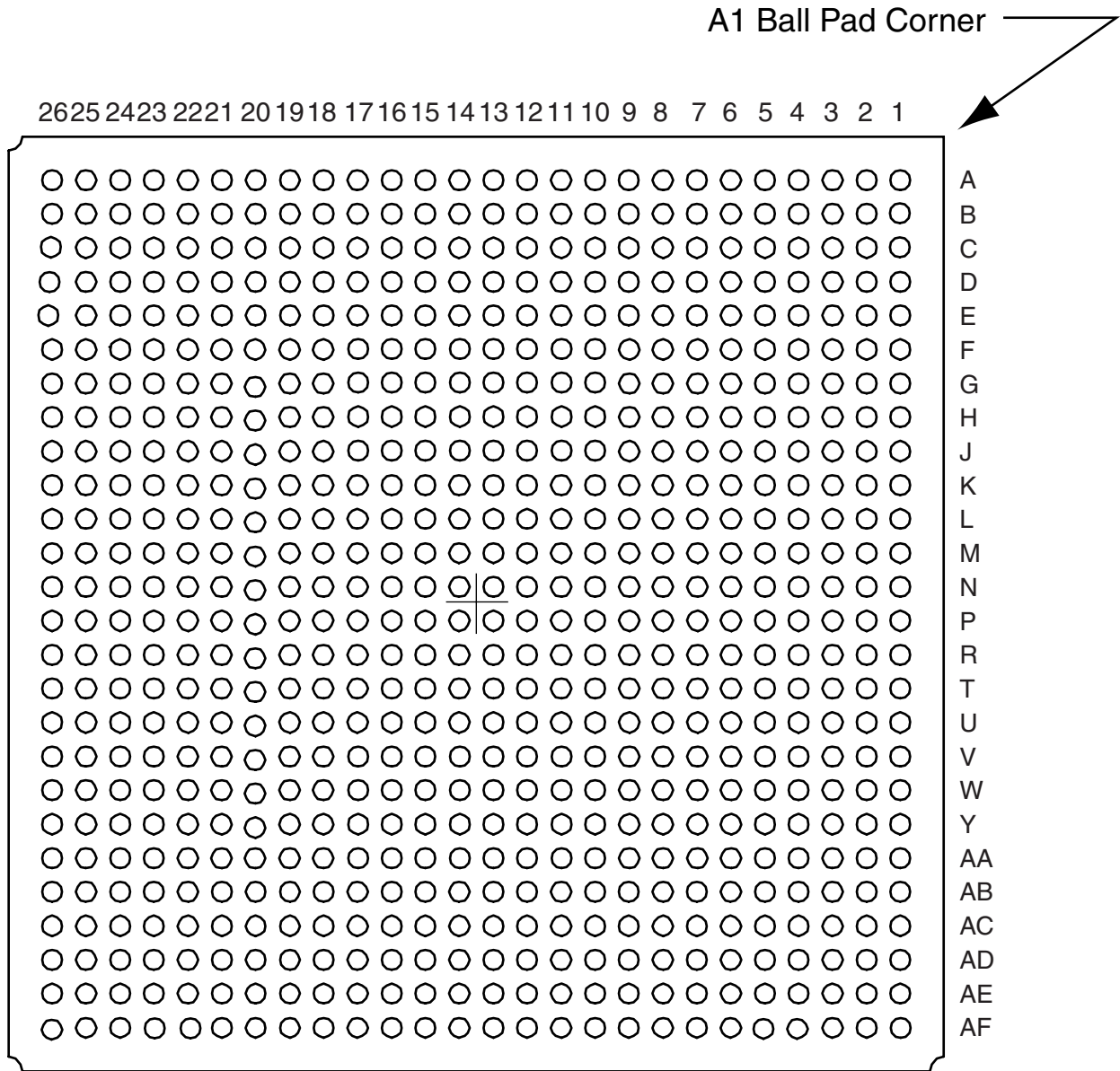


484-Pin FBGA*	
Pin Number	A3PE600 Function
Y15	V <sub>CC</sub>
Y16	NC
Y17	NC
Y18	GND
Y19	NC
Y20	NC
Y21	NC
Y22	V <sub>CC</sub> B3
AA1	GND
AA2	V <sub>CC</sub> B6
AA3	NC
AA4	IO98PDB5V2
AA5	IO96NDB5V2
AA6	IO96PDB5V2
AA7	IO86NDB5V0
AA8	IO86PDB5V0
AA9	IO85PDB5V0
AA10	IO85NDB5V0
AA11	IO78PPB4V1
AA12	IO79NDB4V1
AA13	IO79PDB4V1
AA14	NC
AA15	NC
AA16	IO71NDB4V0
AA17	IO71PDB4V0
AA18	NC
AA19	NC
AA20	NC
AA21	V <sub>CC</sub> B3
AA22	GND
AB1	GND
AB2	GND
AB3	V <sub>CC</sub> B5
AB4	IO97NDB5V2
AB5	IO97PDB5V2
AB6	IO93NDB5V1

484-Pin FBGA*	
Pin Number	A3PE600 Function
AB7	IO93PDB5V1
AB8	IO87NDB5V0
AB9	IO87PDB5V0
AB10	NC
AB11	NC
AB12	IO75NDB4V1
AB13	IO75PDB4V1
AB14	IO72NDB4V0
AB15	IO72PDB4V0
AB16	IO73NDB4V0
AB17	IO73PDB4V0
AB18	NC
AB19	NC
AB20	V <sub>CC</sub> B4
AB21	GND
AB22	GND

**Note:** \*Refer to the "User I/O Naming Convention" section on page 2-50.

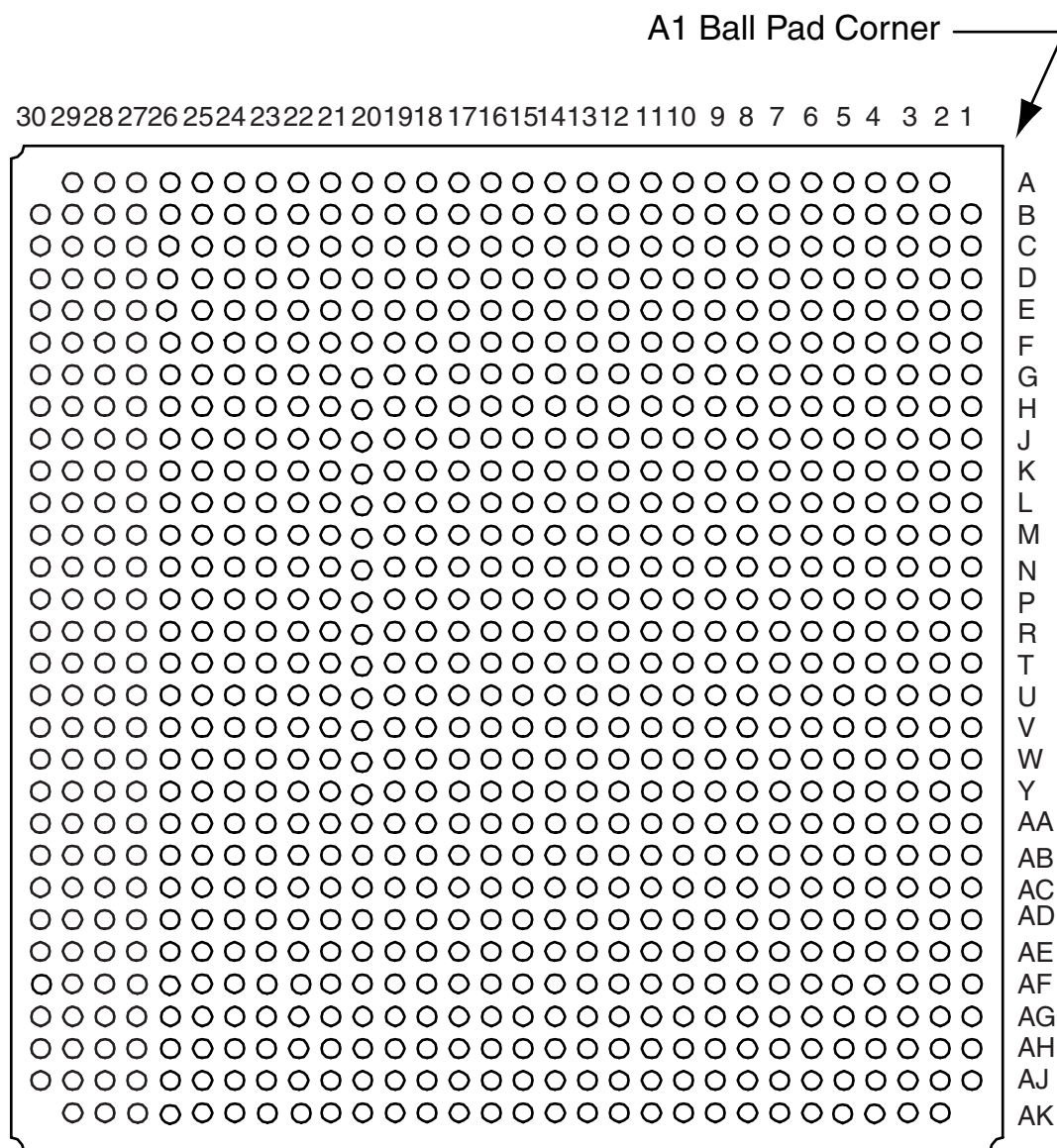
## 676-Pin FBGA



### Note

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

## 896-Pin FBGA



### Note

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

