



Cypress Semiconductor Corporation, 198 Champion Court, San Jose, CA 95134. Tel: (408) 943-2600

PRODUCT CHANGE NOTIFICATION

PCN: PCN165103

Date: December 23, 2016

Subject: Qualification of Cypress Bangkok as an additional Assembly Site for select 36, 48, 121 and 165 Ball Grid Array (BGA) Products.

Description of Change:

Cypress announces the qualification of Cypress Bangkok (formerly Spansion Bangkok) for the assembly of select 36, 48, 121 and 165 Ball Grid Array (BGA) products. Cypress Bangkok is a world-class assembly facility, qualified to build standard grade as well as automotive grade products consistent with AEC-Q100. Cypress Bangkok is certified to several international quality standards, including ISO/TS16949, OHSAS18001 and ANSI/ESD S20.20. The qualification of this facility will enable Cypress to tailor assembly operations to meet our customers' stringent quality and reliability requirements in our effort to continually provide world-class service.

Effective 90 days from the date of this notification, all shipments of the part numbers affected by this PCN will be assembled at Cypress Bangkok or other approved assembly sites.

36, 48, 121 and 165 BGA packages are assembled at Cypress Bangkok using the following Bill of materials:

36BGA		
Assembly Site	ASE Taiwan	CY Bangkok
Mold Compound	Kyocera KEG2250	ShinEtsu KMC-3580
Die Attach	Henkel 2025D	Sumitomo CRM-1577DB Henkel QMI 546
Bond Wire	0.8 mil Cu-Pd	0.8 mil Cu-Pd
Solder Ball	98.5% Sn, 1.0% Ag, 0.5% Cu	98.5% Sn, 1.0% Ag, 0.5% Cu

48BGA			
Assembly Site	CY Philippines	ASE Taiwan	CY Bangkok
Mold Compound	Henkel GR9810	Kyocera KEG2250	ShinEtsu KMC-3580
Die Attach	Henkel QMI 506	Henkel 2025D	Sumitomo CRM-1577DB Henkel QMI 546
Bond Wire	0.8 mil Cu-Pd	0.8 mil Cu-Pd	0.8 mil Cu-Pd
Solder Ball	98.5% Sn, 1.0% Ag, 0.5%Cu	98.5% Sn, 1.0% Ag, 0.5% Cu	98.5% Sn, 1.0% Ag, 0.5% Cu

121BGA		
Assembly Site	CY Philippines	CY Bangkok
Mold Compound	Kyocera KE-G2270	ShinEtsu KMC-3580
Die Attach	Henkel QMI 506	Sumitomo CRM-1577DB Henkel QMI 546
Bond Wire	0.8 mil Au	0.8 mil Au
Solder Ball	98.5% Sn, 1.0% Ag, 0.5%Cu	98.5% Sn, 1.0% Ag, 0.5% Cu

165BGA		
Assembly Site	CY Philippines	CY Bangkok
Mold Compound	Henkel GR9810	ShinEtsu KMC-3580
Die Attach	Henkel ATB-125US1	Hitachi HR9050G
Bond Wire	0.8 mil Cu-Pd	0.8 mil Cu-Pd
Solder Ball	95.5% Sn, 4.0% Ag, 0.5% Cu	95.5% Sn, 4.0% Ag, 0.5% Cu
	62.0% Sn, 36.0% Pb, 2.0% Ag	63.0% Sn, 37.0% Pb

Benefit of Change:

Qualification of alternate manufacturing sites is part of the ongoing flexible manufacturing initiative announced by Cypress. The goal of the flexible manufacturing initiative is to provide the means for Cypress to continue to meet delivery commitments through dynamic, changing market conditions.

Affected Parts Numbers: 137

Affected Parts: See the attached 'Affected Parts List' file for the list of part numbers affected by this change. Note that any new 36, 48, 121 or 165 BGA parts that are introduced after the publication of this PCN may also be manufactured at the Cypress Bangkok facility.

Qualification Status:

As per specific list of major changes, these packages are being qualified through series of tests planned on the Qualification Test Plan # 164305, 164202, 164905 and 164906. The reports for these QTPs can be found in the attachment to this PCN.

Sample Status:

Qualification samples are not built ahead of time for all part numbers affected by this change. Please review the attached 'Affected parts list' file for the list of affected part numbers with their associated sample ordering part numbers. Sample requests for products without sample order part numbers are not built ahead of time, they will be built to order and subject to standard lead times. Please contact your sales representative as soon as possible, but within 30 days of the date of this PCN, to place any sample orders.

Approximate Implementation Date:

Effective 90 days from the date of this notification or upon customer approval, whichever comes first, all shipments of the affected part numbers in the attached file will be supplied from Cypress Bangkok or any other approved assembly sites.

Anticipated Impact:

None anticipated. Customers may receive parts from Cypress Bangkok or other approved assembly sites.

Method of Identification:

Cypress maintains traceability of product to wafer level, including wafer fabrication location, through the lot number marked on the package.

Response Required:

No response is required.

For additional information regarding this change, contact your local sales representative or contact the PCN Administrator at pcn_adm@cypress.com.

Sincerely,

Cypress PCN Administration

Item	Marketing Part Number	Sample Order Part Number	Package
1	CY14B116M-BZ45XI	CY14B116M-BZ45XIKK; subject to lead time	165-ball BGA
2	CY14B116M-BZ45XIT	CY14B116M-BZ45XIKK; subject to lead time	165-ball BGA
3	CY14B116N-BZ25XI	CY14B116N-BZ25XIKK; subject to lead time	165-ball BGA
4	CY14B116N-BZ25XIT	CY14B116N-BZ25XIKK; subject to lead time	165-ball BGA
5	CY14B116S-BZ25XI	CY14B116S-BZ25XIKK	165-ball BGA
6	CY14B116S-BZ25XIT	CY14B116S-BZ25XIKK	165-ball BGA
7	CY14V116G7-BZ30XI	CY14V116G7-BZ30XIKK; subject to lead time	165-ball BGA
8	CY14V116G7-BZ30XIT	CY14V116G7-BZ30XIKK; subject to lead time	165-ball BGA
9	CY14V116N-BZ30XI	CY14V116N-BZ30XIKK; subject to lead time	165-ball BGA
10	CY14V116N-BZ30XIT	CY14V116N-BZ30XIKK; subject to lead time	165-ball BGA
11	CY62138EV30LL-45BVXI	CY62138EV30LL-45BXIKK	36-ball BGA
12	CY62138EV30LL-45BVXIT	CY62138EV30LL-45BXIKK	36-ball BGA
13	CY62138FV30LL-45BVXI	CY62138FV30LL-45BXIKK	36-ball BGA
14	CY62138FV30LL-45BVXIT	CY62138FV30LL-45BXIKK	36-ball BGA
15	CY62146G30-45BVXI	CY62146G30-45BVXIKK; subject to lead time	48-ball BGA
16	CY62146G30-45BVXIT	CY62146G30-45BVXIKK; subject to lead time	48-ball BGA
17	CY62146GE30-45BVXI	CY62146GE30-45BVXIKK; subject to lead time	48-ball BGA
18	CY62146GE30-45BVXIT	CY62146GE30-45BVXIKK; subject to lead time	48-ball BGA
19	CY62146GN30-45BVXI	CY62146GN30-45BVXIKK; subject to lead time	48-ball BGA
20	CY62146GN30-45BVXIT	CY62146GN30-45BVXIKK; subject to lead time	48-ball BGA
21	CY62147G18-55BVXI	CY62147G18-55BVXIKK; subject to lead time	48-ball BGA
22	CY62147G18-55BVXIT	CY62147G18-55BVXIKK; subject to lead time	48-ball BGA
23	CY62147G30-45B2XI	CY62147G30-45B2XIKK; subject to lead time	48-ball BGA
24	CY62147G30-45B2XIT	CY62147G30-45B2XIKK; subject to lead time	48-ball BGA
25	CY62147G30-45BVXI	CY62147G30-45BVXIKK; subject to lead time	48-ball BGA
26	CY62147G30-45BVXIT	CY62147G30-45BVXIKK; subject to lead time	48-ball BGA
27	CY62147GE18-55BVXI	CY62147GE18-55BVXIKK; subject to lead time	48-ball BGA
28	CY62147GE18-55BVXIT	CY62147GE18-55BVXIKK; subject to lead time	48-ball BGA
29	CY62147GE30-45BVXI	CY62147GE30-45BVXIKK; subject to lead time	48-ball BGA
30	CY62147GE30-45BVXIT	CY62147GE30-45BVXIKK; subject to lead time	48-ball BGA
31	CY62147GN18-55BVXI	CY62147GN18-55BVXIKK; subject to lead time	48-ball BGA
32	CY62147GN18-55BVXIT	CY62147GN18-55BVXIKK; subject to lead time	48-ball BGA
33	CY62147GN30-45B2XI	CY62147GN30-45B2XIKK; subject to lead time	48-ball BGA
34	CY62147GN30-45B2XIT	CY62147GN30-45B2XIKK; subject to lead time	48-ball BGA
35	CY62147GN30-45BVXI	CY62147GN30-45BVXIKK; subject to lead time	48-ball BGA
36	CY62147GN30-45BVXIT	CY62147GN30-45BVXIKK; subject to lead time	48-ball BGA
37	CY62148EV30LL-45BVI	CY62148EV30LL-45BVIKK; subject to lead time	36-ball BGA
38	CY62148EV30LL-45BVIT	CY62148EV30LL-45BVIKK; subject to lead time	36-ball BGA
39	CY62148EV30LL-45BVXI	CY62148EV30LL-45BXIKK	36-ball BGA
40	CY62148EV30LL-45BVXIT	CY62148EV30LL-45BXIKK	36-ball BGA
41	CY62156HSL-45BVXI	CY62156HSL-45BVXIKK; subject to lead time	48-ball BGA
42	CY62157H30-45BVXI	CY62157H30-45BVXIKK; subject to lead time	48-ball BGA
43	CY62157H30-45BVXIT	CY62157H30-45BVXIKK; subject to lead time	48-ball BGA
44	CY62167G18-55BVXI	CY62167G18-55BVXIKK; subject to lead time	48-ball BGA
45	CY62167G18-55BVXIT	CY62167G18-55BVXIKK; subject to lead time	48-ball BGA
46	CY62167G30-45BVXI	CY62167G30-45BVXIKK; subject to lead time	48-ball BGA
47	CY62167G30-45BVXIT	CY62167G30-45BVXIKK; subject to lead time	48-ball BGA
48	CY62167G-45BVXI	CY62167G-45BVXIKK; subject to lead time	48-ball BGA
49	CY62167G-45BVXIT	CY62167G-45BVXIKK; subject to lead time	48-ball BGA
50	CY62167GE18-55BVXI	CY62167GE18-55BVXIKK; subject to lead time	48-ball BGA
51	CY62167GE18-55BVXIT	CY62167GE18-55BVXIKK; subject to lead time	48-ball BGA
52	CY62167GE30-45BV1XI	CY62167GE30-45BV1XIKK; subject to lead time	48-ball BGA
53	CY62167GE30-45BV1XIT	CY62167GE30-45BV1XIKK; subject to lead time	48-ball BGA
54	CY62167GE30-45BVXI	CY62167GE30-45BVXIKK; subject to lead time	48-ball BGA

55	CY62167GE30-45BVXIT	CY62167GE30-45BVXIKK; subject to lead time	48-ball BGA
56	CY62167GN18-55BVXI	CY62167GN18-55BVXIKK; subject to lead time	48-ball BGA
57	CY62167GN18-55BVXIT	CY62167GN18-55BVXIKK; subject to lead time	48-ball BGA
58	CY62167GN30-45BVXI	CY62167GN30-45BVXIKK; subject to lead time	48-ball BGA
59	CY62167GN30-45BVXIT	CY62167GN30-45BVXIKK; subject to lead time	48-ball BGA
60	CY62168G18-55BVXI	CY62168G18-55BVXIKK; subject to lead time	48-ball BGA
61	CY62168G18-55BVXIT	CY62168G18-55BVXIKK; subject to lead time	48-ball BGA
62	CY62168G30-45BVXI	CY62168G30-45BVXIKK; subject to lead time	48-ball BGA
63	CY62168G30-45BVXIT	CY62168G30-45BVXIKK; subject to lead time	48-ball BGA
64	CY62168GE30-45BVXI	CY62168GE30-45BVXIKK; subject to lead time	48-ball BGA
65	CY62168GE30-45BVXIT	CY62168GE30-45BVXIKK; subject to lead time	48-ball BGA
66	CY62168GN30-45BVXI	CY62168GN30-45BVXIKK; subject to lead time	48-ball BGA
67	CY62168GN30-45BVXIT	CY62168GN30-45BVXIKK; subject to lead time	48-ball BGA
68	CY7C1041G18-15BVXI	CY7C1041G18-15BVXIKK; subject to lead time	48-ball BGA
69	CY7C1041G18-15BVXIT	CY7C1041G18-15BVXIKK; subject to lead time	48-ball BGA
70	CY7C1041G30-10BVJXI	CY7C1041G30-10BVJXIKK; subject to lead time	48-ball BGA
71	CY7C1041G30-10BVJXIT	CY7C1041G30-10BVJXIKK; subject to lead time	48-ball BGA
72	CY7C1041G30-10BVXI	CY7C1041G30-10BVXIKK; subject to lead time	48-ball BGA
73	CY7C1041G30-10BVXIT	CY7C1041G30-10BVXIKK; subject to lead time	48-ball BGA
74	CY7C1041GE30-10BVXI	CY7C1041GE30-10BVXIKK; subject to lead time	48-ball BGA
75	CY7C1041GE30-10BVXIT	CY7C1041GE30-10BVXIKK; subject to lead time	48-ball BGA
76	CY7C1041GN30-10BVJXI	CY7C1041GN30-10BVJXIKK; subject to lead time	48-ball BGA
77	CY7C1041GN30-10BVJXIT	CY7C1041GN30-10BVJXIKK; subject to lead time	48-ball BGA
78	CY7C1041GN30-10BVXI	CY7C1041GN30-10BVXIKK; subject to lead time	48-ball BGA
79	CY7C1041GN30-10BVXIT	CY7C1041GN30-10BVXIKK; subject to lead time	48-ball BGA
80	CY7C1061G-10BV1XI	CY7C1061G-10BV1XIKK; subject to lead time	48-ball BGA
81	CY7C1061G-10BV1XIT	CY7C1061G-10BV1XIKK; subject to lead time	48-ball BGA
82	CY7C1061G-10BVJXI	CY7C1061G-10BVJXIKK; subject to lead time	48-ball BGA
83	CY7C1061G-10BVJXIT	CY7C1061G-10BVJXIKK; subject to lead time	48-ball BGA
84	CY7C1061G-10BVXI	CY7C1061G-10BVXIKK	48-ball BGA
85	CY7C1061G-10BVXIT	CY7C1061G-10BVXIKK	48-ball BGA
86	CY7C1061G18-15BV1XI	CY7C1061G18-15BV1XIKK; subject to lead time	48-ball BGA
87	CY7C1061G18-15BV1XIT	CY7C1061G18-15BV1XIKK; subject to lead time	48-ball BGA
88	CY7C1061G18-15BVJXI	CY7C1061G18-15BVJXIKK; subject to lead time	48-ball BGA
89	CY7C1061G18-15BVJXIT	CY7C1061G18-15BVJXIKK; subject to lead time	48-ball BGA
90	CY7C1061G18-15BVXI	CY7C1061G18-15BVXIKK; subject to lead time	48-ball BGA
91	CY7C1061G18-15BVXIT	CY7C1061G18-15BVXIKK; subject to lead time	48-ball BGA
92	CY7C1061G30-10BV1XI	CY7C1061G30-10BV1XIKK; subject to lead time	48-ball BGA
93	CY7C1061G30-10BV1XIT	CY7C1061G30-10BV1XIKK; subject to lead time	48-ball BGA
94	CY7C1061G30-10BVJXI	CY7C1061G30-10BVJXIKK; subject to lead time	48-ball BGA
95	CY7C1061G30-10BVJXIT	CY7C1061G30-10BVJXIKK; subject to lead time	48-ball BGA
96	CY7C1061G30-10BVXI	CY7C1061G30-10BVXIKK; subject to lead time	48-ball BGA
97	CY7C1061G30-10BVXIT	CY7C1061G30-10BVXIKK; subject to lead time	48-ball BGA
98	CY7C1061GE-10BV1XI	CY7C1061GE-10BV1XIKK; subject to lead time	48-ball BGA
99	CY7C1061GE-10BV1XIT	CY7C1061GE-10BV1XIKK; subject to lead time	48-ball BGA
100	CY7C1061GE-10BVJXI	CY7C1061GE-10BVJXIKK; subject to lead time	48-ball BGA
101	CY7C1061GE-10BVJXIT	CY7C1061GE-10BVJXIKK; subject to lead time	48-ball BGA
102	CY7C1061GE-10BVXI	CY7C1061GE-10BVXIKK; subject to lead time	48-ball BGA
103	CY7C1061GE-10BVXIT	CY7C1061GE-10BVXIKK; subject to lead time	48-ball BGA
104	CY7C1061GE18-15BV1XI	CY7C1061GE18-15BV1XIKK; subject to lead time	48-ball BGA
105	CY7C1061GE18-15BV1XIT	CY7C1061GE18-15BV1XIKK; subject to lead time	48-ball BGA
106	CY7C1061GE18-15BVJXI	CY7C1061GE18-15BVJXIKK; subject to lead time	48-ball BGA
107	CY7C1061GE18-15BVJXIT	CY7C1061GE18-15BVJXIKK; subject to lead time	48-ball BGA
108	CY7C1061GE18-15BVXI	CY7C1061GE18-15BVXIKK; subject to lead time	48-ball BGA
109	CY7C1061GE18-15BVXIT	CY7C1061GE18-15BVXIKK; subject to lead time	48-ball BGA

110	CY7C1061GE30-10BV1XI	CY7C1061GE30-10B1XIKK; subject to lead time	48-ball BGA
111	CY7C1061GE30-10BV1XIT	CY7C1061GE30-10B1XIKK; subject to lead time	48-ball BGA
112	CY7C1061GE30-10BVJXI	CY7C1061GE30-10BJXIKK; subject to lead time	48-ball BGA
113	CY7C1061GE30-10BVJXIT	CY7C1061GE30-10BJXIKK; subject to lead time	48-ball BGA
114	CY7C1061GE30-10BVXI	CY7C1061GE30-10BVXIKK; subject to lead time	48-ball BGA
115	CY7C1061GE30-10BVXIT	CY7C1061GE30-10BVXIKK; subject to lead time	48-ball BGA
116	CY7C1061GN30-10BV1XI	CY7C1061GN30-10B1XIKK; subject to lead time	48-ball BGA
117	CY7C1061GN30-10BV1XIT	CY7C1061GN30-10B1XIKK; subject to lead time	48-ball BGA
118	CY7C1061GN30-10BVJXI	CY7C1061GN30-10BJXIKK; subject to lead time	48-ball BGA
119	CY7C1061GN30-10BVJXIT	CY7C1061GN30-10BJXIKK; subject to lead time	48-ball BGA
120	CY7C1061GN30-10BVXI	CY7C1061GN30-10BVXIKK; subject to lead time	48-ball BGA
121	CY7C1061GN30-10BVXIT	CY7C1061GN30-10BVXIKK; subject to lead time	48-ball BGA
122	CY7C1069G-10BVXI	CY7C1069G-10BVXIKK; subject to lead time	48-ball BGA
123	CY7C1069G-10BVXIT	CY7C1069G-10BVXIKK; subject to lead time	48-ball BGA
124	CY7C1069G30-10BVXI	CY7C1069G30-10BVXIKK; subject to lead time	48-ball BGA
125	CY7C1069G30-10BVXIT	CY7C1069G30-10BVXIKK; subject to lead time	48-ball BGA
126	CY7C1069GN30-10BVXI	CY7C1069GN30-10BVXIKK; subject to lead time	48-ball BGA
127	CY7C1069GN30-10BVXIT	CY7C1069GN30-10BVXIKK; subject to lead time	48-ball BGA
128	CY7S1041G30-10BVXI	CY7S1041G30-10BVXIKK; subject to lead time	48-ball BGA
129	CY7S1041G30-10BVXIT	CY7S1041G30-10BVXIKK; subject to lead time	48-ball BGA
130	CY7S1041GE30-10BVXI	CY7S1041GE30-10BVXIKK; subject to lead time	48-ball BGA
131	CY7S1041GE30-10BVXIT	CY7S1041GE30-10BVXIKK; subject to lead time	48-ball BGA
132	CY7S1061G30-10BVXI	CY7S1061G30-10BVXIKK; subject to lead time	48-ball BGA
133	CY7S1061G30-10BVXIT	CY7S1061G30-10BVXIKK; subject to lead time	48-ball BGA
134	CY7S1061GE30-10BVXI	CY7S1061GE30-10BVXIKK; subject to lead time	48-ball BGA
135	CY7S1061GE30-10BVXIT	CY7S1061GE30-10BVXIKK; subject to lead time	48-ball BGA
136	CYWB0224ABS-BZXI	CYWB0224ABS-BZXIKK	121-ball BGA
137	CG7941AA	CG7941KKA	121-ball BGA