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## PRODUCT INFORMATION NOTIFICATION

**PIN:** PIN135261

**Date:** December 13, 2013

**Subject:** Qualification of Polyimide Process for 1Mb, 2Mb, 4Mb, 8Mb, 16Mb, 32Mb, and 64Mb MoBL® Asynchronous SRAM Devices

**To:** PCN ADMIN  
CYPRESS  
pcn\_adm@cypress.com

**Change Type:** Minor

### **Description of Change:**

Cypress is adding a polyimide stress-relief layer to the 90nm process technology based 1Mb, 2Mb, 4Mb, 8Mb, 16Mb, 32Mb, and 64Mb MoBL® (low-power) Asynchronous SRAM devices. The devices are fabricated at Cypress Minnesota. The polyimide layer is applied on top of the existing nitride passivation layer for stress relief. A polyimide layer on top of passivation is widely used by the semiconductor industry as a best practice for stress relief. There are no changes to the existing circuits or processing of the device die itself.

The polyimide process is being introduced as part of Cypress' continuous quality improvement program for the 90nm process technology node.

There are no changes to the existing datasheets, which can be downloaded from the Cypress website ([www.cypress.com](http://www.cypress.com)).

### **Benefit of Change:**

The polyimide layer protects the die from package stresses thereby improving its reliability.

**Affected Part Numbers:** 352

**Affected Parts:** Please see attachment for list of parts

**Customer Part Numbers Affected:**

**Affected Parts:** Not Applicable

### **Qualification Status:**

This polyimide process has been qualified through a series of tests identified with the results added to the existing product Qual Reports. See the table below.

The product qualification (QTP) reports can be found in the attachment to this notification or by

visiting [www.cypress.com](http://www.cypress.com), typing the QTP number in the search window, and clicking on the magnifying glass icon.

**Approximate Implementation Date:**

Effective 90 days from the date of this notification, Cypress will start transition to shipments of the affected part numbers with polyimide material.

**Anticipated Impact:**

Products manufactured are completely compatible with existing product from a functional, parametric, and quality performance perspective.

Cypress also recommends that customers take this opportunity to review these changes against current application notes, system design considerations and customer environment conditions to assess impact (if any) to their application.

**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:**

This is an information only announcement. 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](mailto:pcn_adm@cypress.com).

Sincerely,

Cypress PCN Administration

Item	Marketing Part Number	Density (Mb)
1	CY62126ESL-45ZSXA	1
2	CY62126ESL-45ZSXAT	1
3	CY62126ESL-45ZSXI	1
4	CY62126ESL-45ZSXIT	1
5	CY62126EV30LL-45BVXI	1
6	CY62126EV30LL-45BVXIT	1
7	CY62126EV30LL-45ZSXA	1
8	CY62126EV30LL-45ZSXAT	1
9	CY62126EV30LL-45ZSXI	1
10	CY62126EV30LL-45ZSXIT	1
11	CY62126EV30LL-55BVXE	1
12	CY62126EV30LL-55BVXET	1
13	CY62126EV30LL-55ZSXE	1
14	CY62126EV30LL-55ZSXET	1
15	CY62128ELL-45SXA	1
16	CY62128ELL-45SXAT	1
17	CY62128ELL-45SXI	1
18	CY62128ELL-45SXIT	1
19	CY62128ELL-45ZAXI	1
20	CY62128ELL-45ZAXIT	1
21	CY62128ELL-45ZXA	1
22	CY62128ELL-45ZXAT	1
23	CY62128ELL-45ZXI	1
24	CY62128ELL-45ZXIT	1
25	CY62128ELL-55SXE	1
26	CY62128ELL-55SXET	1
27	CY62128ELL-55ZAXE	1
28	CY62128ELL-55ZAXET	1
29	CY62128EV30LL-45SXA	1
30	CY62128EV30LL-45SXAT	1
31	CY62128EV30LL-45SXI	1
32	CY62128EV30LL-45SXIT	1
33	CY62128EV30LL-45ZAXA	1
34	CY62128EV30LL-45ZAXAT	1
35	CY62128EV30LL-45ZAXI	1
36	CY62128EV30LL-45ZAXIT	1
37	CY62128EV30LL-45ZXA	1
38	CY62128EV30LL-45ZXAT	1
39	CY62128EV30LL-45ZXI	1
40	CY62128EV30LL-45ZXIT	1
41	CY62128EV30LL-55SXE	1
42	CY62128EV30LL-55SXET	1
43	CY62128EV30LL-55ZXE	1
44	CY62128EV30LL-55ZXET	1
45	CG6707AM	1
46	CG6707AMT	1

47	CG6708AM	1
48	CG6708AMT	1
49	CG6710AM	1
50	CG6710AMT	1
51	CG6740AT	1
52	CG6740ATT	1
53	CG6749AT	1
54	CG6749ATT	1
55	CG7429AA	1
56	CG7429AAT	1
57	CG7517AA	1
58	CG7517AAT	1
59	CG7644AA	1
60	CG7644AAT	1
61	CG7679AA	1
62	CG7679AAT	1
63	CG7762AA	1
64	CG7762AAT	1
65	CG7794AA	1
66	CG7794AAT	1
67	CG7795AA	1
68	CG7795AAT	1
69	CG7918AA	1
70	CG7918AAT	1
71	CY62136ESL-45ZSXI	2
72	CY62136ESL-45ZSXIT	2
73	CY62136EV30LL-45BVXI	2
74	CY62136EV30LL-45BVXIT	2
75	CY62136EV30LL-45ZSXI	2
76	CY62136EV30LL-45ZSXIT	2
77	CY62136FV30LL-45BVXI	2
78	CY62136FV30LL-45BVXIT	2
79	CY62136FV30LL-45ZSXA	2
80	CY62136FV30LL-45ZSXAT	2
81	CY62136FV30LL-45ZSXI	2
82	CY62136FV30LL-45ZSXIT	2
83	CY62136FV30LL-55ZSXE	2
84	CY62136FV30LL-55ZSXET	2
85	CY62137EV30LL-45BVXI	2
86	CY62137EV30LL-45BVXIT	2
87	CY62137EV30LL-45ZSXI	2
88	CY62137EV30LL-45ZSXIT	2
89	CY62137FV18LL-55BVXI	2
90	CY62137FV18LL-55BVXIT	2
91	CY62137FV30LL-45BVXI	2
92	CY62137FV30LL-45BVXIT	2
93	CY62137FV30LL-45ZSXA	2

94	CY62137FV30LL-45ZSXAT	2
95	CY62137FV30LL-45ZSXI	2
96	CY62137FV30LL-45ZSXIT	2
97	CY62137FV30LL-55ZSXE	2
98	CY62137FV30LL-55ZSXET	2
99	CY62138EV30LL-45BVXI	2
100	CY62138EV30LL-45BVXIT	2
101	CY62138FLL-45SXI	2
102	CY62138FLL-45SXIT	2
103	CY62138FV30LL-45BVXI	2
104	CY62138FV30LL-45BVXIT	2
105	CY62138FV30LL-45SXI	2
106	CY62138FV30LL-45SXIT	2
107	CY62138FV30LL-45ZAXA	2
108	CY62138FV30LL-45ZAXAT	2
109	CY62138FV30LL-45ZAXI	2
110	CY62138FV30LL-45ZAXIT	2
111	CY62138FV30LL-45ZXI	2
112	CY62138FV30LL-45ZXIT	2
113	CG7087AM	2
114	CG7087AMT	2
115	CG7559AA	2
116	CG7559AAT	2
117	CG7613AA	2
118	CG7613AAT	2
119	CG7684AA	2
120	CG7684AAT	2
121	CG7779AA	2
122	CG7779AAT	2
123	CG7781AA	2
124	CG7781AAT	2
125	CG7783AA	2
126	CG7783AAT	2
127	CG7796AA	2
128	CG7796AAT	2
129	CG7797AA	2
130	CG7797AAT	2
131	CG7920AA	2
132	CG7920AAT	2
133	CG7921AA	2
134	CG7921AAT	2
135	CY62146ELL-45ZSXA	4
136	CY62146ELL-45ZSXAT	4
137	CY62146ELL-45ZSXI	4
138	CY62146ELL-45ZSXIT	4
139	CY62146ESL-45ZSXI	4
140	CY62146ESL-45ZSXIT	4

141	CY62146EV30LL-45BVXI	4
142	CY62146EV30LL-45BVXIT	4
143	CY62146EV30LL-45ZSXA	4
144	CY62146EV30LL-45ZSXAT	4
145	CY62146EV30LL-45ZSXI	4
146	CY62146EV30LL-45ZSXIT	4
147	CY621472E30LL-45ZSXI	4
148	CY621472E30LL-45ZSXIT	4
149	CY621472EV30LL-45ZSXI	4
150	CY62147EV18LL-55BVXI	4
151	CY62147EV18LL-55BVXIT	4
152	CY62147EV30LL-45B2XA	4
153	CY62147EV30LL-45B2XAT	4
154	CY62147EV30LL-45B2XI	4
155	CY62147EV30LL-45B2XIT	4
156	CY62147EV30LL-45BVI	4
157	CY62147EV30LL-45BVIT	4
158	CY62147EV30LL-45BVXA	4
159	CY62147EV30LL-45BVXAT	4
160	CY62147EV30LL-45BVXI	4
161	CY62147EV30LL-45BVXIT	4
162	CY62147EV30LL-45ZSXA	4
163	CY62147EV30LL-45ZSXAT	4
164	CY62147EV30LL-45ZSXI	4
165	CY62147EV30LL-45ZSXIT	4
166	CY62147EV30LL-55ZSXE	4
167	CY62147EV30LL-55ZSXET	4
168	CY62148ELL-45ZSXA	4
169	CY62148ELL-45ZSXAT	4
170	CY62148ELL-45ZSXI	4
171	CY62148ELL-45ZSXIT	4
172	CY62148ELL-55SXA	4
173	CY62148ELL-55SXAT	4
174	CY62148ELL-55SXI	4
175	CY62148ELL-55SXIT	4
176	CY62148ESL-55ZAXA	4
177	CY62148ESL-55ZAXAT	4
178	CY62148ESL-55ZAXI	4
179	CY62148ESL-55ZAXIT	4
180	CY62148EV30LL-45BVI	4
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182	CY62148EV30LL-45BVXI	4
183	CY62148EV30LL-45BVXIT	4
184	CY62148EV30LL-45ZSXA	4
185	CY62148EV30LL-45ZSXAT	4
186	CY62148EV30LL-45ZSXI	4
187	CY62148EV30LL-45ZSXIT	4

188	CY62148EV30LL-55SXI	4
189	CY62148EV30LL-55SXIT	4
190	CY62148EV30LL-55ZSXE	4
191	CY62148EV30LL-55ZSXET	4
192	CG6711AM	4
193	CG6711AMT	4
194	CG6713AM	4
195	CG6713AMT	4
196	CG6727AM	4
197	CG6727AMT	4
198	CG6821AM	4
199	CG6821AMT	4
200	CG7035AM	4
201	CG7035AMT	4
202	CG7097AM	4
203	CG7097AMT	4
204	CG7441AF	4
205	CG7441AFT	4
206	CG7442AF	4
207	CG7442AFT	4
208	CG7443AF	4
209	CG7443AFT	4
210	CG7462AF	4
211	CG7462AFT	4
212	CG7512AM	4
213	CG7512AMT	4
214	CG7645AA	4
215	CG7645AAT	4
216	CG7646AA	4
217	CG7646AAT	4
218	CG7671AA	4
219	CG7671AAT	4
220	CG7689AA	4
221	CG7689AAT	4
222	CG7690AA	4
223	CG7690AAT	4
224	CG7695AA	4
225	CG7695AAT	4
226	CG7711AA	4
227	CG7711AAT	4
228	CG7780AA	4
229	CG7780AAT	4
230	CG7782AA	4
231	CG7782AAT	4
232	CG7859AA	4
233	CG7859AAT	4
234	CG7885AA	4

235	CG7902AA	4
236	CG7902AAT	4
237	CG7948AA	4
238	CG7948AAT	4
239	CY62156ESL-45BVXI	8
240	CY62156ESL-45BVXIT	8
241	CY62157ELL-45ZSXI	8
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243	CY62157ELL-55BVXE	8
244	CY62157ELL-55BVXET	8
245	CY62157ELL-55ZSXE	8
246	CY62157ELL-55ZSXET	8
247	CY62157ESL-45ZSXI	8
248	CY62157ESL-45ZSXIT	8
249	CY62157EV18LL-55BVXI	8
250	CY62157EV18LL-55BVXIT	8
251	CY62157EV30LL-45BVI	8
252	CY62157EV30LL-45BVIT	8
253	CY62157EV30LL-45BVXA	8
254	CY62157EV30LL-45BVXAT	8
255	CY62157EV30LL-45BVXI	8
256	CY62157EV30LL-45BVXIT	8
257	CY62157EV30LL-45ZSXA	8
258	CY62157EV30LL-45ZSXAT	8
259	CY62157EV30LL-45ZSXI	8
260	CY62157EV30LL-45ZSXIT	8
261	CY62157EV30LL-45ZXA	8
262	CY62157EV30LL-45ZXAT	8
263	CY62157EV30LL-45ZXI	8
264	CY62157EV30LL-45ZXIT	8
265	CY62157EV30LL-55ZSXE	8
266	CY62157EV30LL-55ZSXET	8
267	CY62157EV30LL-55ZXE	8
268	CY62157EV30LL-55ZXET	8
269	CY62158ELL-45ZSXI	8
270	CY62158ELL-45ZSXIT	8
271	CY62158EV30LL-45BVXI	8
272	CY62158EV30LL-45BVXIT	8
273	CY62158EV30LL-45ZSXI	8
274	CY62158EV30LL-45ZSXIT	8
275	CG6834AM	8
276	CG6834AMT	8
277	CG7099AM	8
278	CG7099AMT	8
279	CG7420AF	8
280	CG7420AFT	8
281	CG7425AF	8



282	CG7425AFT	8
283	CG7647AA	8
284	CG7647AAT	8
285	CG7691AA	8
286	CG7691AAT	8
287	CG7725AA	8
288	CG7725AAT	8
289	CG7740AA	8
290	CG7740AAT	8
291	CG7757AA	8
292	CG7757AAT	8
293	CG7798AA	8
294	CG7798AAT	8
295	CS7978AA	8
296	CS7978AAT	8
297	CY62167EV18LL-55BVI	16
298	CY62167EV18LL-55BVIT	16
299	CY62167EV18LL-55BVXI	16
300	CY62167EV18LL-55BVXIT	16
301	CY62167EV30LL-45BVI	16
302	CY62167EV30LL-45BVIT	16
303	CY62167EV30LL-45BVXA	16
304	CY62167EV30LL-45BVXAT	16
305	CY62167EV30LL-45BVXI	16
306	CY62167EV30LL-45BVXIT	16
307	CY62167EV30LL-45ZXA	16
308	CY62167EV30LL-45ZXAT	16
309	CY62167EV30LL-45ZXI	16
310	CY62167EV30LL-45ZXIT	16
311	CY62168EV30LL-45BVXI	16
312	CY62168EV30LL-45BVXIT	16
313	CG7083AM	16
314	CG7083AMT	16
315	CG7084AM	16
316	CG7084AMT	16
317	CG7423AF	16
318	CG7423AFT	16
319	CG7424AF	16
320	CG7424AFT	16
321	CG7435AF	16
322	CG7435AFT	16
323	CG7761AA	16
324	CG7761AAT	16
325	CG7800AA	16
326	CG7800AAT	16
327	CG7844AA	16
328	CG7844AAT	16

329	CG7917AA	16
330	CG7917AAT	16
331	CG7926AT	16
332	CG7926ATT	16
333	CS7338AA	16
334	CS7338AAT	16
335	CY62167ELL-45ZXI	16
336	CY62167ELL-45ZXIT	16
337	CY62177ESL-55ZXI	32
338	CY62177ESL-55ZXIT	32
339	CY62177EV18LL-70BAXI	32
340	CY62177EV18LL-70BAXIT	32
341	CY62177EV30LL-55BAXI	32
342	CY62177EV30LL-55BAXIT	32
343	CY62177EV30LL-55ZXI	32
344	CY62177EV30LL-55ZXIT	32
345	CG7552AT	32
346	CG7552ATT	32
347	CG7801AA	32
348	CG7801AAT	32
349	CG7807AA	32
350	CG7807AAT	32
351	CY62187EV30LL-55BAXI	64
352	CY62187EV30LL-55BAXIT	64