



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

PRODUCT TERMINATION NOTIFICATION

PTN: PTN184403

Date: November 07, 2018

Subject: November 2018 Immediate Product End-Of-Life Notification

Product Obsolescence Information:

Cypress announces the immediate end of life for select products and kits from its Automotive MCU and MM MCU portfolios. The affected Development Kits (as identified per the Item Catalog Category in the attached file) are being immediately discontinued as inventory has been depleted and the kits can no longer be produced. All other affected parts for Auto MCU and MM MCU in the attached list are legacy parts built from Aizu Fujitsu Semiconductor wafer fab, which is shutdown, and inventory levels are now depleted. Effective immediately, no further orders will be taken on the list of affected parts. Last Time Ship (LTS) dates are provided for each product to ensure all remaining orders will be supported as currently scheduled.

Part Numbers Affected: 363

Please see the attached file for a list of part numbers and Last Time Ship Dates.

Approximate Implementation Date:

This change is effective with this notification.

Response Required:

No response required. For additional information regarding this notice, contact the personnel listed in the table below, your local sales representative, or the PCN Administrator at pcn_adm@cypress.com.

Contact	Country	Phone Number	Email	Family of Parts
Hideki Hosoda	Japan	+81-44-920-8233	hhos@cypress.com	MM MCU
Hiroshi Ota	Japan	+81-44-920-8201	hiot@cypress.com	Development kits

Contact	Country	Phone Number	Email	Family of Parts
Tsukasa Tatsumi	Japan	+81-44-920-8193	ttat@cypress.com	Auto MCU

Sincerely,

Cypress PCN Administration

Item	Marketing Part Number	Last Time Buy Date	Last Time Ship Date	Drop-in Repl	Next Best Alt
1	ADA-91460-88121-FLEXRAY	None	29-Apr-19	None	None
2	ADA-91V460-91F467D	None	29-Apr-19	None	None
3	ADA-96340-88121-FLEXRAY	None	29-Apr-19	None	None
4	ADA-DISPMULTIIO-001	None	29-Apr-19	None	None
5	DISP-KIT-800480-LVDS-001	None	29-Apr-19	None	None
6	EMA-ET-176-001	None	29-Apr-19	None	None
7	EMA-ET-320-001	None	29-Apr-19	None	None
8	EMA-FT-176P-M07-001	None	29-Apr-19	None	None
9	EMA-FT-176P-M07-002	None	29-Apr-19	None	None
10	EMA-FT-320P-M06-001	None	29-Apr-19	None	None
11	EMA-HD-176-001	None	29-Apr-19	None	None
12	EMA-MB91F460P-176M07	None	29-Apr-19	None	None
13	EMA-MB91F460Q-320M06	None	29-Apr-19	None	None
14	EMA-MB91F460S-176M07	None	29-Apr-19	None	None
15	EMA-MB91F465X-NLS-100M20	None	29-Apr-19	None	None
16	EMA-MB91F467B-LS144M08B	None	29-Apr-19	None	None
17	EMA-MB91F467C-NLS-144M08	None	29-Apr-19	None	None
18	EMA-MB91F467D-LS-208M04	None	29-Apr-19	None	None
19	EMA-MB91F467S-LS-176M07	None	29-Apr-19	None	None
20	EMA-MB91F467T-LS-144M08	None	29-Apr-19	None	None
21	EMA-MB91F469G-LS-320M06	None	29-Apr-19	None	None
22	EMA-MB91FV460B-001	None	29-Apr-19	None	None
23	EMA-MB91V460A-002B-80	None	29-Apr-19	None	None
24	EMA-MB91V460A-003	None	29-Apr-19	None	None
25	EMA-MB91V460A-100	None	29-Apr-19	None	None
26	FLEXTINY FR 8221S	None	29-Apr-19	None	None
27	FR360-PROBE-120	None	29-Apr-19	None	None
28	FR360-PROBE-160	None	29-Apr-19	None	None
29	FR360-PROBE-364	None	29-Apr-19	None	None
30	FR-RAM-STACK-3V-100P-M06	None	29-Apr-19	None	None
31	LEVEL-SHIFTER-BOARD	None	29-Apr-19	None	None
32	LPT66-V08P	None	29-Apr-19	None	None
33	MB2000	None	29-Apr-19	None	None
34	MB2006-01	None	29-Apr-19	None	None
35	MB2006-03	None	29-Apr-19	None	None
36	MB2132-466	None	29-Apr-19	None	None
37	MB2197-127	None	29-Apr-19	None	None
38	MB2197-127-3V3	None	29-Apr-19	None	None
39	MB88387SK-RX	None	29-Apr-19	None	None
40	MB88387SK-TX	None	29-Apr-19	None	None
41	MB88388SK-BD	None	29-Apr-19	None	None
42	MDE-2008-FR460	None	29-Apr-19	None	None
43	MDEBUG16LX	None	29-Apr-19	None	None
44	MDE-S-FR265/FR470	None	29-Apr-19	None	None
45	PB-91460-91362-208PFV	None	29-Apr-19	None	None
46	PB-91464A-NLS-100PMC	None	29-Apr-19	None	None
47	PB-91467D-LS-208PFV	None	29-Apr-19	None	None
48	PB-91467D-NLS-208PFV	None	29-Apr-19	None	None
49	PB-91469G-LS-256BGA	None	29-Apr-19	None	None
50	S6T3J200312A176A2	None	29-Apr-19	None	None
51	SI3US-ESD	None	29-Apr-19	None	None
52	SK-16FX-EUROSCOPE	None	29-Apr-19	None	None
53	SK-16FX-EUROSCOPE-WW	None	29-Apr-19	None	None
54	SK-91460-91F467D-208PFV	None	29-Apr-19	None	None

55	SK-91460-MAIN	None	29-Apr-19	None	None
56	SK-91460P-176PMC	None	29-Apr-19	None	None
57	SK-91460P-176PMC-GPIO	None	29-Apr-19	None	None
58	SK-91F467D-208PFV	None	29-Apr-19	None	None
59	SK-91F467-FLEXRAY	None	29-Apr-19	None	None
60	STARTERKITMB91360	None	29-Apr-19	None	None
61	STARTERKITMB91360-ADA120	None	29-Apr-19	None	None
62	STARTERKITMB91360-ADA160	None	29-Apr-19	None	None
63	STARTERKITMB91364	None	29-Apr-19	None	None
64	SUPERPRO/5004EGP	None	29-Apr-19	None	None
65	MB3771PF-GT-BND-TKERE1	None	1-Jul-19	None	None
66	MB432114A-WF	None	1-Jul-19	None	None
67	MB86619BPFF-G-BNDE1	None	30-Sep-19	None	None
68	MB89165PFV-G-296-BND-RE1	None	28-Oct-19	None	None
69	MB89165PFV-G-297-BND-RE1	None	28-Oct-19	None	None
70	MB89165PFV-G-299-BND-RE1	None	28-Oct-19	None	None
71	MB89165PFV-G-343-BND-RE1	None	28-Oct-19	None	None
72	MB89165PFV-G-369-BND-RE1	None	28-Oct-19	None	None
73	MB89165PFV-G-386-BND-RE1	None	28-Oct-19	None	None
74	MB89193APF-G-168-BND-RE1	None	28-Oct-19	None	None
75	MB89193APF-G-179-BND-RE1	None	30-Sep-19	None	None
76	MB89193APF-G-197-BND-RE1	None	28-Oct-19	None	None
77	MB89193APF-G-201-BND-RE1	None	28-Oct-19	None	None
78	MB89193APF-G-210-BND-RE1	None	28-Oct-19	None	None
79	MB89193APF-G-219-BND-RE1	None	28-Oct-19	None	None
80	MB89193APF-G-237-BND-RE1	None	28-Oct-19	None	None
81	MB89193APF-G-257-BND-RE1	None	28-Oct-19	None	None
82	MB89193APF-G-258-EF-RE1	None	28-Oct-19	None	None
83	MB89193APF-G-261-BND-RE1	None	28-Oct-19	None	None
84	MB89193APF-G-262-BND-RE1	None	28-Oct-19	None	None
85	MB89193APF-G-267-BND-RE1	None	28-Oct-19	None	None
86	MB89193APF-G-298-BND-RE1	None	28-Oct-19	None	None
87	MB89193APF-G-319-BND-RE1	None	28-Oct-19	None	None
88	MB89193APF-G-338-BND-RE1	None	28-Oct-19	None	None
89	MB89193APF-G-345-BND-RE1	None	28-Oct-19	None	None
90	MB89193APF-G-346-BND-RE1	None	28-Oct-19	None	None
91	MB89193APF-G-387-BND-RE1	None	28-Oct-19	None	None
92	MB89193APF-G-397-BND-RE1	None	28-Oct-19	None	None
93	MB89193APF-G-431-BND-RE1	None	28-Oct-19	None	None
94	MB89193APF-G-443-BND-RE1	None	28-Oct-19	None	None
95	MB89193APF-G-449-BND-RE1	None	28-Oct-19	None	None
96	MB89193APF-G-450-BND-RE1	None	28-Oct-19	None	None
97	MB89193APF-G-453-BND-RE1	None	28-Oct-19	None	None
98	MB89193APF-G-454-BND-RE1	None	28-Oct-19	None	None
99	MB89193PF-G-186-BND-RE1	None	28-Oct-19	None	None
100	MB89193PF-G-326-BND-RE1	None	28-Oct-19	None	None
101	MB89193PF-G-364-BND-RE1	None	28-Oct-19	None	None
102	MB89193PF-G-401-BND-RE1	None	28-Oct-19	None	None
103	MB89193PF-G-409-BND-RE1	None	28-Oct-19	None	None
104	MB89193PF-G-412-BND-RE1	None	28-Oct-19	None	None
105	MB89193PF-G-474-ER-RE1	None	30-Sep-19	None	None
106	MB89193PF-G-496-ER-RE1	None	30-Sep-19	None	None
107	MB89498PMC-G-112E1	None	28-Oct-19	None	None
108	MB89535BPMC-GS-534-BNDE1	None	30-Sep-19	None	None
109	MB89537APFM-G-546-BNDE1	None	30-Sep-19	None	None

110	MB89538APFM-G-1048E1	None	28-Oct-19	None	None
111	MB89567APFV-GS-232-BNDE1	None	28-Oct-19	None	None
112	MB89567APFV-GS-242-BNDE1	None	28-Oct-19	None	None
113	MB89567APFV-GS-248E1	None	28-Oct-19	None	None
114	MB89615RPFM-G-653-BNDE1	None	28-Oct-19	None	None
115	MB89635PF-GT-1026-BNDE1	None	30-Sep-19	None	None
116	MB89635PF-GT-1034-BNDE1	None	30-Sep-19	None	None
117	MB89635PF-GT-1041-BNDE1	None	30-Sep-19	None	None
118	MB89635PF-GT-1052-BNDE1	None	30-Sep-19	None	None
119	MB89635PF-GT-1086-BNDE1	None	30-Sep-19	None	None
120	MB89635PF-GT-1094-BNDE1	None	30-Sep-19	None	None
121	MB89635PF-GT-1111-BNDE1	None	30-Sep-19	None	None
122	MB89635PF-GT-1112-BNDE1	None	30-Sep-19	None	None
123	MB89635PF-GT-1165-BNDE1	None	30-Sep-19	None	None
124	MB89635PF-GT-1187-BNDE1	None	30-Sep-19	None	None
125	MB89635PF-GT-1198-BNDE1	None	30-Sep-19	None	None
126	MB89635PF-GT-1199-BNDE1	None	30-Sep-19	None	None
127	MB89635PF-GT-1205-BNDE1	None	30-Sep-19	None	None
128	MB89635PF-GT-1206-BNDE1	None	30-Sep-19	None	None
129	MB89635PF-GT-1242-BNDE1	None	30-Sep-19	None	None
130	MB89635PF-GT-1250-BNDE1	None	30-Sep-19	None	None
131	MB89635PF-GT-1265-BNDE1	None	30-Sep-19	None	None
132	MB89635PF-GT-1269-BNDE1	None	30-Sep-19	None	None
133	MB89635PF-GT-1277-BNDE1	None	30-Sep-19	None	None
134	MB89635PF-GT-1297-BNDE1	None	30-Sep-19	None	None
135	MB89635PF-GT-1303-BNDE1	None	30-Sep-19	None	None
136	MB89635PF-GT-1305-BNDE1	None	30-Sep-19	None	None
137	MB89635PF-GT-1319-BNDE1	None	30-Sep-19	None	None
138	MB89635PF-GT-1333-BNDE1	None	30-Sep-19	None	None
139	MB89635PF-GT-1334-BNDE1	None	30-Sep-19	None	None
140	MB89635PF-GT-1336-BNDE1	None	30-Sep-19	None	None
141	MB89635PF-GT-1337-BNDE1	None	30-Sep-19	None	None
142	MB89635PF-GT-1344-BNDE1	None	30-Sep-19	None	None
143	MB89635PF-GT-1352-BNDE1	None	30-Sep-19	None	None
144	MB89635PF-GT-1359-BNDE1	None	30-Sep-19	None	None
145	MB89635PF-GT-1383-BNDE1	None	30-Sep-19	None	None
146	MB89635PF-GT-1390-BNDE1	None	30-Sep-19	None	None
147	MB89635PF-GT-1407-BNDE1	None	30-Sep-19	None	None
148	MB89635PF-GT-1408-BNDE1	None	30-Sep-19	None	None
149	MB89635PF-GT-1409-BNDE1	None	30-Sep-19	None	None
150	MB89635PF-GT-1469E1	None	30-Sep-19	None	None
151	MB89635PF-GT-1471E1	None	30-Sep-19	None	None
152	MB89635PF-GT-184-BNDE1	None	30-Sep-19	None	None
153	MB89635PF-GT-205-BNDE1	None	30-Sep-19	None	None
154	MB89635PF-GT-229-BNDE1	None	30-Sep-19	None	None
155	MB89635PF-GT-255-BNDE1	None	30-Sep-19	None	None
156	MB89635PF-GT-257-BNDE1	None	30-Sep-19	None	None
157	MB89635PF-GT-274-BNDE1	None	30-Sep-19	None	None
158	MB89635PF-GT-324-BNDE1	None	30-Sep-19	None	None
159	MB89635PF-GT-333-BNDE1	None	30-Sep-19	None	None
160	MB89635PF-GT-341-BNDE1	None	30-Sep-19	None	None
161	MB89635PF-GT-343-BNDE1	None	30-Sep-19	None	None
162	MB89635PF-GT-362-BNDE1	None	30-Sep-19	None	None
163	MB89635PF-GT-363-BNDE1	None	30-Sep-19	None	None
164	MB89635PF-GT-367-BNDE1	None	30-Sep-19	None	None

165	MB89635PF-GT-401-BNDE1	None	30-Sep-19	None	None
166	MB89635PF-GT-413-BNDE1	None	30-Sep-19	None	None
167	MB89635PF-GT-440-BNDE1	None	30-Sep-19	None	None
168	MB89635PF-GT-442-BNDE1	None	30-Sep-19	None	None
169	MB89635PF-GT-453-BNDE1	None	30-Sep-19	None	None
170	MB89635PF-GT-483-BNDE1	None	30-Sep-19	None	None
171	MB89635PF-GT-484-BNDE1	None	30-Sep-19	None	None
172	MB89635PF-GT-494-BNDE1	None	30-Sep-19	None	None
173	MB89635PF-GT-515-BNDE1	None	30-Sep-19	None	None
174	MB89635PF-GT-653-BNDE1	None	30-Sep-19	None	None
175	MB89635RPF-G-1032-BNDE1	None	28-Oct-19	None	None
176	MB89635RPF-G-1128-BNDE1	None	28-Oct-19	None	None
177	MB89635RPF-G-1282-BNDE1	None	30-Sep-19	None	None
178	MB89635RPF-G-1411-BNDE1	None	28-Oct-19	None	None
179	MB89635RPF-G-1444E1	None	28-Oct-19	None	None
180	MB89635RPF-G-1460E1	None	28-Oct-19	None	None
181	MB89635RPF-G-1499E1	None	30-Sep-19	None	None
182	MB89637PF-GT-1035-BNDE1	None	30-Sep-19	None	None
183	MB89637PF-GT-1129-BNDE1	None	30-Sep-19	None	None
184	MB89637PF-GT-1154-BNDE1	None	30-Sep-19	None	None
185	MB89637PF-GT-1164-BNDE1	None	30-Sep-19	None	None
186	MB89637PF-GT-1166-BNDE1	None	30-Sep-19	None	None
187	MB89637PF-GT-1176-BNDE1	None	28-Oct-19	None	None
188	MB89637PF-GT-1185-BNDE1	None	28-Oct-19	None	None
189	MB89637PF-GT-1233-BNDE1	None	30-Sep-19	None	None
190	MB89637PF-GT-1255-BNDE1	None	28-Oct-19	None	None
191	MB89637PF-GT-1256-BNDE1	None	28-Oct-19	None	None
192	MB89637PF-GT-1261-BNDE1	None	28-Oct-19	None	None
193	MB89637PF-GT-1288-BNDE1	None	28-Oct-19	None	None
194	MB89637PF-GT-1306-BNDE1	None	28-Oct-19	None	None
195	MB89637PF-GT-1307-BNDE1	None	30-Sep-19	None	None
196	MB89637PF-GT-1362-BNDE1	None	28-Oct-19	None	None
197	MB89637PF-GT-1374-BNDE1	None	30-Sep-19	None	None
198	MB89637PF-GT-1379-BNDE1	None	30-Sep-19	None	None
199	MB89637PF-GT-1415-BNDE1	None	30-Sep-19	None	None
200	MB89637PF-GT-1428E1	None	28-Oct-19	None	None
201	MB89637PF-GT-1430E1	None	28-Oct-19	None	None
202	MB89637PF-GT-1432E1	None	28-Oct-19	None	None
203	MB89637PF-GT-1465E1	None	30-Sep-19	None	None
204	MB89637PF-GT-1477E1	None	30-Sep-19	None	None
205	MB89637PF-GT-345-BNDE1	None	30-Sep-19	None	None
206	MB89637PF-GT-359-BNDE1	None	30-Sep-19	None	None
207	MB89637PF-GT-369-BNDE1	None	30-Sep-19	None	None
208	MB89637PF-GT-389-BNDE1	None	30-Sep-19	None	None
209	MB89637PF-GT-405-BNDE1	None	30-Sep-19	None	None
210	MB89637PF-GT-418-BNDE1	None	30-Sep-19	None	None
211	MB89637PF-GT-436-BNDE1	None	30-Sep-19	None	None
212	MB89637PF-GT-445-BNDE1	None	30-Sep-19	None	None
213	MB89637PF-GT-455-BNDE1	None	28-Oct-19	None	None
214	MB89637PF-GT-468-BNDE1	None	30-Sep-19	None	None
215	MB89637PF-GT-510-BNDE1	None	28-Oct-19	None	None
216	MB89637PF-GT-537-BNDE1	None	30-Sep-19	None	None
217	MB89637PF-GT-569-BNDE1	None	30-Sep-19	None	None
218	MB89637PF-GT-572-BNDE1	None	30-Sep-19	None	None
219	MB89637PF-GT-577-BNDE1	None	30-Sep-19	None	None

220	MB89637PF-GT-581-BNDE1	None	30-Sep-19	None	None
221	MB89637PF-GT-582-BNDE1	None	30-Sep-19	None	None
222	MB89637PF-GT-589-BNDE1	None	30-Sep-19	None	None
223	MB89637PF-GT-657-BNDE1	None	30-Sep-19	None	None
224	MB89637PF-GT-658-BNDE1	None	30-Sep-19	None	None
225	MB89637PF-GT-682-BNDE1	None	30-Sep-19	None	None
226	MB89637RPF-G-1023-BNDE1	None	30-Sep-19	None	None
227	MB89663PF-GT-114-BNDE1	None	30-Sep-19	None	None
228	MB89663PF-GT-117-BNDE1	None	30-Sep-19	None	None
229	MB89663PF-GT-118-BNDE1	None	30-Sep-19	None	None
230	MB89663PF-GT-123-BNDE1	None	30-Sep-19	None	None
231	MB89663PF-GT-131-BNDE1	None	30-Sep-19	None	None
232	MB89663PF-GT-143-BNDE1	None	30-Sep-19	None	None
233	MB89663PF-GT-149-BNDE1	None	30-Sep-19	None	None
234	MB89663PF-GT-151-BNDE1	None	30-Sep-19	None	None
235	MB89663PF-GT-154-BNDE1	None	30-Sep-19	None	None
236	MB89663PF-GT-167-BNDE1	None	30-Sep-19	None	None
237	MB89663PF-GT-169-BNDE1	None	30-Sep-19	None	None
238	MB89663PF-GT-198-BNDE1	None	30-Sep-19	None	None
239	MB89663RPF-G-179-BNDE1	None	30-Sep-19	None	None
240	MB89663RPF-G-190-BNDE1	None	30-Sep-19	None	None
241	MB89663RPF-G-194-BNDE1	None	30-Sep-19	None	None
242	MB89663RPF-G-202-BNDE1	None	30-Sep-19	None	None
243	MB89663RPF-GT-141-BNDE1	None	30-Sep-19	None	None
244	MB89663RPF-GT-144-BNDE1	None	30-Sep-19	None	None
245	MB89665PF-GT-147-BNDE1	None	30-Sep-19	None	None
246	MB89665PF-GT-156-BNDE1	None	30-Sep-19	None	None
247	MB89665RPF-GT-173-BNDE1	None	30-Sep-19	None	None
248	MB89665RPF-GT-175-BNDE1	None	30-Sep-19	None	None
249	MB89925PF-G-114-BNDE1	None	30-Sep-19	None	None
250	MB89925PF-G-127-BNDE1	None	30-Sep-19	None	None
251	MB89925PF-G-133-BNDE1	None	30-Sep-19	None	None
252	MB89925PF-G-147-BNDE1	None	30-Sep-19	None	None
253	MB89925PF-G-166-BNDE1	None	30-Sep-19	None	None
254	MB89925PF-G-170-BNDE1	None	30-Sep-19	None	None
255	MB89925PF-G-171-BNDE1	None	30-Sep-19	None	None
256	MB89925PF-G-182-BNDE1	None	30-Sep-19	None	None
257	MB89925PF-G-184-BNDE1	None	30-Sep-19	None	None
258	MB89925PF-G-186-BNDE1	None	30-Sep-19	None	None
259	MB89925PF-G-193-BNDE1	None	30-Sep-19	None	None
260	MB89925PF-G-198-BNDE1	None	28-Oct-19	None	None
261	MB89925PF-G-202-BNDE1	None	30-Sep-19	None	None
262	MB89925PF-G-206-BNDE1	None	30-Sep-19	None	None
263	MB89925PF-G-214-BNDE1	None	28-Oct-19	None	None
264	MB89925PF-G-227-BNDE1	None	30-Sep-19	None	None
265	MB89925PF-G-232-BNDE1	None	30-Sep-19	None	None
266	MB89925PF-G-240E1	None	30-Sep-19	None	None
267	MB89935BPFV-G-152BNDERE1	None	28-Oct-19	None	None
268	MB89935BPFV-G-169-ERE1	None	30-Sep-19	None	None
269	MB89935BPFV-G-173BNDERE1	None	28-Oct-19	None	None
270	MB89935BPFV-G-175BNDERE1	None	28-Oct-19	None	None
271	MB89935BPFV-G-184BNDERE1	None	28-Oct-19	None	None
272	MB89935BPFV-G-196BNDERE1	None	28-Oct-19	None	None
273	MB89935BPFV-G-197BNDERE1	None	28-Oct-19	None	None
274	MB89935BPFV-G-201BNDERE1	None	28-Oct-19	None	None

275	MB89935BPFV-G-210BNDE1	None	28-Oct-19	None	None
276	MB89935BPFV-G-229BNDE1	None	28-Oct-19	None	None
277	MB89935BPFV-G-263BNDE1	None	28-Oct-19	None	None
278	MB89935BPFV-G-266BNDE1	None	28-Oct-19	None	None
279	MB89935BPFV-G-274BNDE1	None	28-Oct-19	None	None
280	MB89935BPFV-G-304-ERE1	None	30-Sep-19	None	None
281	MB89935BPFV-G-312-ERE1	None	28-Oct-19	None	None
282	MB89935BPFV-G-339E1	None	28-Oct-19	None	None
283	MB89935BPFV-GS-397-ERE1	None	30-Sep-19	None	None
284	MB89951APMC-G-111-BNDE1	None	28-Oct-19	None	None
285	MB89P165-103PFV-GE1	None	28-Oct-19	None	None
286	MB89P185-102PF-GE1	None	28-Oct-19	None	None
287	MB89P558A-201PFV-GE1	None	28-Oct-19	None	None
288	MB89P637-201PF-GT-5043E1	None	30-Sep-19	None	None
289	MB89P637-201PF-GT-5051E1	None	28-Oct-19	None	None
290	MB89P637-201PF-GT-5057E1	None	28-Oct-19	None	None
291	MB89P637-201PF-GTE1	None	28-Oct-19	None	None
292	MB89P637PF-GT-5038E1	None	30-Sep-19	None	None
293	MB89P637PF-GT-5074E1	None	30-Sep-19	None	None
294	MB89P637PF-GT-5086E1	None	30-Sep-19	None	None
295	MB89P637PF-GT-5095E1	None	30-Sep-19	None	None
296	MB89P637PF-GT-5098E1	None	30-Sep-19	None	None
297	MB89P928PF-G-5006E1	None	28-Oct-19	None	None
298	MB90151PFQ-GT-BNDE1	None	1-Jul-19	None	None
299	MB90212PF-GT-289-BNDE1	None	30-Sep-19	None	None
300	MB90212PF-GT-325-BNDE1	None	30-Sep-19	None	None
301	MB90497GPFM-G-107-BNDE1	None	30-Sep-19	None	None
302	MB90497GPFM-G-126-BNDE1	None	30-Sep-19	None	None
303	MB90497GPFM-G-132-BNDE1	None	30-Sep-19	None	None
304	MB90497GPFM-G-135-BNDE1	None	30-Sep-19	None	None
305	MB90497GPFM-G-137-BNDE1	None	30-Sep-19	None	None
306	MB90497GPFM-G-167-BNDE1	None	30-Sep-19	None	None
307	MB90497GPFM-G-171-BNDE1	None	30-Sep-19	None	None
308	MB90497GPFM-GS-205E1	None	30-Sep-19	None	None
309	MB90497GPFM-GS-227E1	None	30-Sep-19	None	None
310	MB90497GPFM-GS-228E1	None	30-Sep-19	None	None
311	MB90497GPFM-GS-229E1	None	30-Sep-19	None	None
312	MB90497GPFM-GS-232E1	None	30-Sep-19	None	None
313	MB90548GPFM-GS-424E1	None	30-Sep-19	None	None
314	MB90561APFM-G-265-BNDE1	None	28-Oct-19	None	None
315	MB90561APFM-GS-343-BNDE1	None	30-Sep-19	None	None
316	MB90561PFM-G-319-JNE1	None	28-Oct-19	None	None
317	MB90562APFM-G-260-BNDE1	None	28-Oct-19	None	None
318	MB90562APFM-G-317-BNDE1	None	28-Oct-19	None	None
319	MB90562APFM-G-386-JNE1	None	28-Oct-19	None	None
320	MB90562APFM-G-451-JNE1	None	28-Oct-19	None	None
321	MB90562APFM-GS-432E1	None	28-Oct-19	None	None
322	MB90663APFM-G-204-JNE1	None	28-Oct-19	None	None
323	MB90671PF-G-324-BND-CE1	None	28-Oct-19	None	None
324	MB90673PF-G-200-BND-BE1	None	30-Sep-19	None	None
325	MB90673PF-G-269-BND-BE1	None	28-Oct-19	None	None
326	MB90673PF-G-286-BND-BE1	None	28-Oct-19	None	None
327	MB90673PF-G-310-BND-BE1	None	28-Oct-19	None	None
328	MB90673PF-G-361-BND-BE1	None	30-Sep-19	None	None
329	MB90673PF-G-381-BND-BE1	None	30-Sep-19	None	None

330	MB90673PF-G-397-BE1	None	28-Oct-19	None	None
331	MB90673PF-GT-172-BND-BE1	None	28-Oct-19	None	None
332	MB90673PF-GT-306-BND-BE1	None	30-Sep-19	None	None
333	MB90673PF-GT-342-BND-BE1	None	28-Oct-19	None	None
334	MB90673PF-GT-353-BND-BE1	None	28-Oct-19	None	None
335	MB90678PF-G-157-BND-BE1	None	30-Sep-19	None	None
336	MB90678PF-G-188-BND-BE1	None	28-Oct-19	None	None
337	MB90678PF-G-198-BND-BE1	None	28-Oct-19	None	None
338	MB90678PF-G-211-BND-BE1	None	28-Oct-19	None	None
339	MB90678PF-G-215-BND-BE1	None	28-Oct-19	None	None
340	MB90678PF-G-216-BND-BE1	None	28-Oct-19	None	None
341	MB90678PF-G-217-BND-BE1	None	30-Sep-19	None	None
342	MB90678PF-G-218-BND-BE1	None	30-Sep-19	None	None
343	MB90678PF-G-220-BND-BE1	None	28-Oct-19	None	None
344	MB90678PF-G-221-BND-BE1	None	28-Oct-19	None	None
345	MB90678PF-G-223-BND-BE1	None	28-Oct-19	None	None
346	MB90678PF-G-224-BND-BE1	None	28-Oct-19	None	None
347	MB90678PF-G-225-BND-BE1	None	28-Oct-19	None	None
348	MB90678PF-G-229-BND-BE1	None	30-Sep-19	None	None
349	MB90678PF-G-235-BND-BE1	None	28-Oct-19	None	None
350	MB90678PF-G-238-BND-BE1	None	30-Sep-19	None	None
351	MB90678PF-G-239-BND-BE1	None	28-Oct-19	None	None
352	MB90678PF-G-241-BND-BE1	None	28-Oct-19	None	None
353	MB90678PF-G-247-BND-BE1	None	30-Sep-19	None	None
354	MB90678PF-G-248-BND-BE1	None	30-Sep-19	None	None
355	MB90678PF-G-249-BND-BE1	None	28-Oct-19	None	None
356	MB90678PF-G-250-BND-BE1	None	30-Sep-19	None	None
357	MB90678PF-G-255-BND-BE1	None	28-Oct-19	None	None
358	MB90678PF-G-256-BND-BE1	None	28-Oct-19	None	None
359	MB90678PF-G-264-BND-BE1	None	28-Oct-19	None	None
360	MB90678PF-G-274-BND-BE1	None	28-Oct-19	None	None
361	MB90678PF-G-293-BE1	None	30-Sep-19	None	None
362	MB90P678PF-G-5012E1	None	28-Oct-19	None	None
363	MB90P678PF-GE1	None	30-Sep-19	None	None