



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

PRODUCT CHANGE NOTIFICATION

PCN: PCN193602

Date: September 10, 2019

Subject: Introduction of Die Overcoat for Select Automotive NOR Flash Memory Product Family

Change Type: Major

Description of Change:

Cypress has qualified a die overcoat process for select 65nm Automotive NOR Flash Memory products manufactured at Fab 25 (5204 East Ben White Boulevard, Austin, TX 78741, USA).

Cypress is adding a polybenzoxazole (PBO) layer on the topside of the wafer. Cypress has successfully utilized a die overcoat process on non-Flash products for over a decade. Cypress is now extending this best practice to Fab 25 for the FL-S, FS-S, KL-S/KS-S Automotive NOR Flash Memory products.

Benefit of Change:

The die overcoat will provide a higher level of protection to the silicon surface during production (fab, sort and assembly). As a result, it will minimize the risk of latent failures due to surface damage. Functionality and specifications remain unchanged.

Part Numbers Affected: 258

See the attached 'Affected Parts List' file for the list of part numbers affected by this change. The 'Affected Parts List' includes the customer PPAP Part number (Marketing Part number) and the corresponding Sample Part number. Note that any new parts that are introduced after the publication of this PCN will include all changes outlined in this PCN.

Qualification Status:

The change has been qualified through a series of tests documented in Qualification Test Plans summarized in the table below. The QTP reports can be found as attachments to this notification or by visiting www.cypress.com, and typing the QTP number in the keyword search window.

QTP Number	Qualification
162903	FL512S SO3016 and FS512S SO3016 Qualification
171704	FL128S WNG008 Qualification
171705	FL256S FAB024 Qualification
171706	KL/KS512S, KL/KS256S and KL/KS128S (VAA024) Qualification
002-21508	AECQ100 – PBO Qual Report

Sample Status:

Qualification samples are not built ahead of time for all part numbers affected by this change. Please refer to the affected parts list file for a list of affected part numbers with their associated sample ordering part numbers. If you require qualification samples, please contact your sales representative as soon as possible, but within 60 days of the date of this PCN. Estimated lead time for qualified samples is 2-4 weeks from order entry.

Approximate Implementation Date:

Effective 90 days from the date of notification or upon customer approval, whichever comes first, all shipments of Automotive non-PPAP part numbers in the attached file will have die overcoat.

For Automotive PPAP part numbers, this change will be effective upon customer approval.

Anticipated Impact:

None anticipated. Products manufactured with the new process are completely compatible with existing products from a functional, parametric, and quality performance perspective.

Based on our history and experience, Cypress sees this as a low-risk change to series production. The Die Overcoat process is a very mature process. It is applied on top of the existing passivation layer and has no electrical interaction with the circuit. Cypress is confident that the implementation of this change will not require our customers to perform extensive qualifications.

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:

Please share any additional qualification and test requirements if needed.

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	Item	Marketing Part Number	Item	Marketing Part Number	Item	Marketing Part Number	Item	Marketing Part Number
1	8611200594	53	A2C02144400 A	105	IS26KS256S-DPBLA300-TR	157	S25FS128SAGBHM203	209	S26KL128SDABHB020
2	8909008440	54	A2C02457200 A	106	IS26KS512S-DPBLA100	158	S25FS128SAGMFB100	210	S26KL128SDABHB023
3	8909008441	55	A2C02502800 A	107	IS26KS512S-DPBLA100-TR	159	S25FS128SAGMFB101	211	S26KL128SDABHB030
4	00003354733	56	A2C02523700 A	108	IS26KS512S-DPBLA200	160	S25FS128SAGMFB103	212	S26KL128SDABHM030
5	05529-135/0000	57	A2C02779000 A	109	IS26KS512S-DPBLA200-TR	161	S25FS128SAGNFM100	213	S26KL256SDABHA020
6	0791080939RCP00	58	A2C02865700 A	110	IS26KS512S-DPBLA300	162	S25FS128SAGNFM103	214	S26KL256SDABHA030
7	0791081069RCP00	59	A2C02919800 A	111	IS26KS512S-DPBLA300-TR	163	S25FS128SDSBHB200	215	S26KL256SDABHB020
8	0791083189RCP00	60	A2C03252500 A	112	LKE5EF-TI00	164	S25FS128SDSBHB203	216	S26KL256SDABHB023
9	09706-247/0000	61	A2C03296900 A	113	LKE5FFPTI00	165	S25FS128SDSBHM200	217	S26KL256SDABHB030
10	10233523	62	A2C03496600 A	114	N270P03910	166	S25FS128SDSBHM203	218	S26KL256SDABHM030
11	1034030-00-A	63	B103918A	115	NIOH-P1003705	167	S25FS256SAGBHM200	219	S26KL512SDABHA020
12	1089244-00-A	64	C08-0628-0002-0	116	P770003DFSC000	168	S25FS256SAGBHM203	220	S26KL512SDABHA030
13	1120204-00-A	65	C3FBRY000091	117	P770003D-FSC000	169	S25FS256SAGMFB000	221	S26KL512SDABHB020
14	170-0249-000	66	E151958	118	P770018DF2C000	170	S25FS256SAGMFB000HA	222	S26KL512SDABHB023
15	170-0317-000	67	E3203006443	119	P770018D-F2C000	171	S25FS256SAGMFB001	223	S26KL512SDABHB030
16	170-0383-000	68	E3203010373	120	P770030DF9C000	172	S25FS256SAGMFB003	224	S26KL512SDABHM030
17	28576411 A	69	E3203010591	121	P770030D-F9C000	173	S25FS256SAGMFM000	225	S70FL01GSAGBHAC10
18	28576411 B	70	EAN64535601	122	P770045DF80000	174	S25FS256SAGMFM001	226	S70FL01GSAGBHC10
19	28586389 A	71	EAN65606401	123	P770045D-F80000	175	S25FS256SAGMFM003	227	S70FL01GSAGBHC13
20	28586389 A	72	F010109087	124	P7700910F0C000	176	S25FS256SDSBHB200	228	S70FL01GSAGBHC10
21	28605353 A	73	F010109089	125	P7700910-F0C000	177	S25FS256SDSBHB203	229	S70FL01GSAGBHC13
22	28636813 A	74	H00.025-93	126	P770091DF0C000	178	S25FS256SDSBHM200	230	S70FL01GSDSBHC10
23	28636813 A	75	HE-FL128SAGNFB003	127	P780003D-F0C000	179	S25FS256SDSBHM203	231	S70FL01GSDSBHC13
24	28636813 A	76	IS26KL128S-DABLA100	128	R8J77951	180	S25FS256SDSBHM300	232	S70FL01GSDSBHC10
25	28682863 A	77	IS26KL128S-DABLA100-TR	129	S25FL128SAGNFA000	181	S25FS256SDSBHM303	233	S70FL01GSDSBHC13
26	28683084 A	78	IS26KL128S-DABLA200	130	S25FL128SAGNFA003	182	S25FS512SAGBHB210	234	S70FS01GSAGBHB210
27	2ICZ00347A	79	IS26KL128S-DABLA200-TR	131	S25FL128SAGNFB000	183	S25FS512SAGBHB213	235	S70FS01GSAGBHB213
28	34256350A.02	80	IS26KL128S-DABLA300	132	S25FL128SAGNFB003	184	S25FS512SAGBHM210	236	S70FS01GSAGBHM210
29	34264348A.02	81	IS26KL128S-DABLA300-TR	133	S25FL128SAGNFM000	185	S25FS512SAGBHM213	237	S70FS01GSAGBHM213
30	34268156A.02	82	IS26KL256S-DABLA100	134	S25FL128SAGNFM003	186	S25FS512SAGMFB010	238	S70FS01GSAGMFM010
31	50700000018A	83	IS26KL256S-DABLA100-TR	135	S25FL256SAGNFB000	187	S25FS512SAGMFB013	239	S70FS01GSAGMFM013
32	51-40300Z01	84	IS26KL256S-DABLA200	136	S25FL256SAGNFB003	188	S25FS512SAGMFM010	240	S70FS01GSDSBHB210
33	520966231626	85	IS26KL256S-DABLA200-TR	137	S25FL256SDPNFB000	189	S25FS512SAGMFM013	241	S70FS01GSDSBHB213
34	520966232007	86	IS26KL256S-DABLA300	138	S25FL256SDPNFB003	190	S25FS512SAGNFA010	242	S70FS01GSDSBHM210
35	8611200244	87	IS26KL256S-DABLA300-TR	139	S25FS064SAGBHB020	191	S25FS512SAGNFA013	243	S70FS01GSDSBHM213
36	8611200245	88	IS26KL512S-DABLA100	140	S25FS064SAGBHB023	192	S25FS512SAGNFB010	244	S71KL256SC0BHB000
37	8611200593	89	IS26KL512S-DABLA100-TR	141	S25FS064SAGMFB010	193	S25FS512SAGNFM010	245	S71KL256SC0BHB003
38	8909007117	90	IS26KL512S-DABLA200	142	S25FS064SAGMFB011	194	S25FS512SDSBA210	246	S71KL512SC0BHB000
39	8909007444	91	IS26KL512S-DABLA200-TR	143	S25FS064SAGMFB013	195	S25FS512SDSBA213	247	S71KL512SC0BHB003
40	8909007445	92	IS26KL512S-DABLA300	144	S25FS064SAGMFM010	196	S25FS512SDSBHB210	248	S79FL01GSDSBHAC10
41	8909007819	93	IS26KL512S-DABLA300-TR	145	S25FS064SAGMFM013	197	S25FS512SDSBHB213	249	S79FL01GSDSBHAC13
42	8909008289	94	IS26KS128S-DPBLA100	146	S25FS064SAGNFB030	198	S25FS512SDSBHM210	250	S79FL01GSDSBHC10
43	8909008290	95	IS26KS128S-DPBLA100-TR	147	S25FS064SAGNFB033	199	S25FS512SDSBHM213	251	S79FS01GSFABHB210
44	8909B02540	96	IS26KS128S-DPBLA200	148	S25FS064SAGNFM030	200	S25FS512SDSMFB010	252	S79FS01GSFABHB213
45	8928919956	97	IS26KS128S-DPBLA200-TR	149	S25FS064SAGNFM033	201	S25FS512SDSMFB013	253	S98FL256SDSMFBG00
46	9022693	98	IS26KS128S-DPBLA300	150	S25FS064SDSMFA010	202	S25FS512SDSNFB010	254	S98FL256SDSMFBG03
47	9023260	99	IS26KS128S-DPBLA300-TR	151	S25FS064SDSMFA013	203	S25FS512SDSNFB011	255	S98FL512SDSMFBG00
48	90700000010A	100	IS26KS256S-DPBLA100	152	S25FS064SDSMFB010	204	S25FS512SDSNFB013	256	S99-50561
49	A2C01602900 A	101	IS26KS256S-DPBLA100-TR	153	S25FS064SDSMFB013	205	S25FS512SFABHB210	257	S99-50568
50	A2C01603300 A	102	IS26KS256S-DPBLA200	154	S25FS064SDSMFM010	206	S25FS512SFABHB213	258	SRC100074449-A
51	A2C01697900 A	103	IS26KS256S-DPBLA200-TR	155	S25FS064SDSMFM013	207	S26KL128SDABHA020		
52	A2C02144300 A	104	IS26KS256S-DPBLA300	156	S25FS128SAGBHM200	208	S26KL128SDABHA030		