

Product/process change notification

PCN224303

Please find attached our Infineon Technologies AG PCN:

Introduction of Copper (Cu) BEOL process at Cypress Semiconductor Corporation (Fab 25), Austin, USA for 4-Mbit and 8-Mbit Industrial-grade nvSRAM products

Important information for your attention:

- Please respond to this PCN by indicating your decision on the approval form, sign it and return to your sales partner before **07 Dec 2022**
- Infineon aligns with the widely-recognized JEDEC STANDARD “**JESD46**“, which stipulates: **“Lack of acknowledgement of the PCN within 30 days constitutes acceptance of the change.”**

Your prompt reply will help Infineon Technologies to assure a smooth and well executed transition. If Infineon does not hear from your side by the due date, we will assume your full acceptance to this proposed change and its implementation.

Your attention and response to this matter is greatly appreciated.



On 16 April 2020, Infineon acquired Cypress.
We are now in the process of merging and consolidating our tools and processes for PCN, Information Notes, Errata and Product Discontinuance.
For further details, please visit our website:
<https://www.infineon.com/cms/en/about-infineon/company/cypress-acquisition/>

► **Products affected:** Please refer to attached affected product list [77]

► **Detailed change information:**

Subject: Introduction of Cypress Semiconductor Corporation (Fab 25), Austin, USA with Copper (Cu) BEOL process for 4-Mbit and 8-Mbit Industrial-grade nvSRAM products.

Reason: This qualification is a part of the flexible manufacturing initiative that allows Infineon to meet its delivery commitments to customers in dynamic and changing market conditions.

Description:	<u>Old</u>	<u>New</u>
	<ul style="list-style-type: none"> ■ Aluminum (Al) Backend of Line (BEOL) process (Al BEOL) 	<ul style="list-style-type: none"> ■ Aluminum (Al) Backend of Line (BEOL) process (Al BEOL) and ■ Copper (Cu) Backend of Line (BEOL) process (Cu BEOL)
	<ul style="list-style-type: none"> ■ 3 Al metal layers 	<ul style="list-style-type: none"> ■ Cu BEOL process: 3 Cu metal layers + 1 bond pad Al metal layer
	<ul style="list-style-type: none"> ■ Tungsten (W) plugs and Ti/TiN/Al metallization 	<ul style="list-style-type: none"> ■ Cu BEOL process: Cu plugs and Cu damascene with Ta/TaN barriers

► **Product identification:** Infineon maintains traceability of product to wafer level, including wafer fabrication location through the lot number marked on the package.

► **Impact of change:** Products manufactured at Fab 25 with Cu BEOL process are completely compatible with existing product from a form, fit, functional, parametric, and quality performance perspectives. Infineon 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.

► **Attachments:** Affected product list [77]
Supporting document qualification report

► **Time schedule:**

- | | |
|-------------------------------|------------|
| ■ Final qualification report: | available |
| ■ First samples available: | 2022-11-30 |
| ■ Intended start of delivery: | 2023-01-31 |

If you have any questions, please do not hesitate to contact your local sales office.

[PRODUCT CHANGE NOTIFICATION] N° [PCN224303]

Introduction of Copper (Cu) BEOL process at Cypress Semiconductor Corporation
(Fab 25), Austin, USA for 4-Mbit and 8-Mbit Industrial-grade nvSRAM products



Item	Marketing Part Number	Family	Sample Order Part Number	Sample Availability
1	CY14B104K-ZS25XI	NVSRAM	CY14B104K7-ZS25XI	Available
2	CY14B104K-ZS25XIT	NVSRAM	CY14B104K7-ZS25XI	Available
3	CY14B104K-ZS45XI	NVSRAM	CY14B104K7-ZS45XI	Available
4	CY14B104K-ZS45XIT	NVSRAM	CY14B104K7-ZS45XI	Available
5	CY14B104LA-BA25XI	NVSRAM	CY14B104LA7-BA25XI	Subject to lead time
6	CY14B104LA-BA25XIT	NVSRAM	CY14B104LA7-BA25XI	Subject to lead time
7	CY14B104LA-BA45XI	NVSRAM	CY14B104LA7-BA45XI	Available
8	CY14B104LA-BA45XIT	NVSRAM	CY14B104LA7-BA45XI	Available
9	CY14B104LA-ZS20XI	NVSRAM	CY14B104LA7-ZS20XI	Subject to lead time
10	CY14B104LA-ZS20XIT	NVSRAM	CY14B104LA7-ZS20XI	Subject to lead time
11	CY14B104LA-ZS25XI	NVSRAM	CY14B104LA7-ZS25XI	Available
12	CY14B104LA-ZS25XIT	NVSRAM	CY14B104LA7-ZS25XI	Available
13	CY14B104LA-ZS45XI	NVSRAM	CY14B104LA7-ZS45XI	Available
14	CY14B104LA-ZS45XIT	NVSRAM	CY14B104LA7-ZS45XI	Available
15	CY14B104M-ZSP25XI	NVSRAM	CY14B104M7-ZSP25XI	Subject to lead time
16	CY14B104M-ZSP25XIT	NVSRAM	CY14B104M7-ZSP25XI	Subject to lead time
17	CY14B104M-ZSP45XI	NVSRAM	CY14B104M7-ZSP45XI	Available
18	CY14B104M-ZSP45XIT	NVSRAM	CY14B104M7-ZSP45XI	Available
19	CY14B104NA-BA20XI	NVSRAM	CY14B104NA7-BA20XI	Subject to lead time
20	CY14B104NA-BA20XIT	NVSRAM	CY14B104NA7-BA20XI	Subject to lead time
21	CY14B104NA-BA25XI	NVSRAM	CY14B104NA7-BA25XI	Available
22	CY14B104NA-BA25XIT	NVSRAM	CY14B104NA7-BA25XI	Available
23	CY14B104NA-BA45XI	NVSRAM	CY14B104NA7-BA45XI	Available
24	CY14B104NA-BA45XIT	NVSRAM	CY14B104NA7-BA45XI	Available
25	CY14B104NA-ZS20XI	NVSRAM	CY14B104NA7-ZS20XI	Subject to lead time
26	CY14B104NA-ZS20XIT	NVSRAM	CY14B104NA7-ZS20XI	Subject to lead time
27	CY14B104NA-ZS25XI	NVSRAM	CY14B104NA7-ZS25XI	Available
28	CY14B104NA-ZS25XIT	NVSRAM	CY14B104NA7-ZS25XI	Available
29	CY14B104NA-ZS45XI	NVSRAM	CY14B104NA7-ZS45XI	Available
30	CY14B104NA-ZS45XIT	NVSRAM	CY14B104NA7-ZS45XI	Available
31	CY14B104NA-ZSP25XI	NVSRAM	CY14B104NA7-ZSP25XI	Subject to lead time
32	CY14B104NA-ZSP25XIT	NVSRAM	CY14B104NA7-ZSP25XI	Subject to lead time
33	CY14B104NA-ZSP45XI	NVSRAM	CY14B104NA7-ZSP45XI	Available
34	CY14B104NA-ZSP45XIT	NVSRAM	CY14B104NA7-ZSP45XI	Available
35	CY14B108K-ZS25XI	NVSRAM	CY14B108K7-ZS25XI	Subject to lead time
36	CY14B108K-ZS25XIT	NVSRAM	CY14B108K7-ZS25XI	Subject to lead time

37	CY14B108K-ZS45XI	NVSRAM	CY14B108K7-ZS45XI	Available
38	CY14B108K-ZS45XIT	NVSRAM	CY14B108K7-ZS45XI	Available
39	CY14B108L-BA25XI	NVSRAM	CY14B108L7-BA25XI	Subject to lead time
40	CY14B108L-BA25XIT	NVSRAM	CY14B108L7-BA25XI	Subject to lead time
41	CY14B108L-BA45XI	NVSRAM	CY14B108L7-BA45XI	Subject to lead time
42	CY14B108L-BA45XIT	NVSRAM	CY14B108L7-BA45XI	Subject to lead time
43	CY14B108L-ZS20XI	NVSRAM	CY14B108L7-ZS20XI	Subject to lead time
44	CY14B108L-ZS20XIT	NVSRAM	CY14B108L7-ZS20XI	Subject to lead time
45	CY14B108L-ZS25XI	NVSRAM	CY14B108L7-ZS25XI	Subject to lead time
46	CY14B108L-ZS25XIT	NVSRAM	CY14B108L7-ZS25XI	Subject to lead time
47	CY14B108L-ZS45XI	NVSRAM	CY14B108L7-ZS45XI	Available
48	CY14B108L-ZS45XIT	NVSRAM	CY14B108L7-ZS45XI	Available
49	CY14B108M-ZSP25XI	NVSRAM	CY14B108M7-ZSP25XI	Available
50	CY14B108M-ZSP25XIT	NVSRAM	CY14B108M7-ZSP25XI	Available
51	CY14B108M-ZSP45XI	NVSRAM	CY14B108M7-ZSP45XI	Available
52	CY14B108M-ZSP45XIT	NVSRAM	CY14B108M7-ZSP45XI	Available
53	CY14B108N-BA25XI	NVSRAM	CY14B108N7-BA25XI	Available
54	CY14B108N-BA25XIT	NVSRAM	CY14B108N7-BA25XI	Available
55	CY14B108N-BA45XI	NVSRAM	CY14B108N7-BA45XI	Available
56	CY14B108N-BA45XIT	NVSRAM	CY14B108N7-BA45XI	Available
57	CY14B108N-ZSP25XI	NVSRAM	CY14B108N7-ZSP25XI	Available
58	CY14B108N-ZSP25XIT	NVSRAM	CY14B108N7-ZSP25XI	Available
59	CY14B108N-ZSP45XI	NVSRAM	CY14B108N7-ZSP45XI	Available
60	CY14B108N-ZSP45XIT	NVSRAM	CY14B108N7-ZSP45XI	Available
61	CG10061AM	NVSRAM	CY14B104NA7-BA25XI	Available
62	CG10061AMT	NVSRAM	CY14B104NA7-BA25XI	Available
63	CG7285AT	NVSRAM	CY14B104NA7-ZS45XI	Subject to lead time
64	CG7832AA	NVSRAM	CY14B104LA7-ZS45XI	Available
65	CG7832AAT	NVSRAM	CY14B104LA7-ZS45XI	Available
66	CG8866AF	NVSRAM	CY14B108M7-ZSP25XI	Available
67	CG8866AFT	NVSRAM	CY14B108M7-ZSP25XI	Available
68	CG8970AM	NVSRAM	CY14B104NA7-BA45XI	Available
69	CG8970AMT	NVSRAM	CY14B104NA7-BA45XI	Available
70	CG9066AM	NVSRAM	CY14B104NA7-ZS25XI	Available
71	CG9066AMT	NVSRAM	CY14B104NA7-ZS25XI	Available
72	CG9187AA	NVSRAM	CY14B104NA7-ZS45XI	Available
73	CG9187AAT	NVSRAM	CY14B104NA7-ZS45XI	Available
74	CG9229AA	NVSRAM	CY14B104NA7-ZS25XI	Subject to lead time
75	CG9229AAT	NVSRAM	CY14B104NA7-ZS25XI	Subject to lead time
76	CS8134AA	NVSRAM	CY14B104NA7-BA45XI	Available
77	CS8134AAT	NVSRAM	CY14B104NA7-BA45XI	Available
78	CG8986AM	NVSRAM	CY14B104NA7-ZS45XI	Available
79	CG8986AMT	NVSRAM	CY14B104NA7-ZS45XI	Available