Product/process change notification

PCN224303

Dear

TOKYO ELECTRON DEVICE
TELDEVICE
cy-inside@teldevice.co.jp

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 **08 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/

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

▸ Products affected:

Please refer to attached affected product list [79]

▸ 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:

Old	New
■ Aluminum (Al) Backend of Line (BEOL) process (Al BEOL)	■ Aluminum (Al) Backend of Line (BEOL) process (Al BEOL) and ■ Copper (Cu) Backend of Line (BEOL) process (Cu BEOL)
■ 3 Al metal layers	■ Cu BEOL process: 3 Cu metal layers + 1 bond pad Al metal layer
■ Tungsten (W) plugs and Ti/TiN/Al metallization	■ 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 [79]

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.