Advance Product Change Notification

202110016A : SGTL5000 New Part Numbers with Sawn QFN Conversion Due to ASECL Punch QFN Line End-of-Service

Note: This notice is NXP Company Proprietary.

Issue Date: Oct 22, 2021

Management summary

Advanced PCN issued due to NXP Semiconductors’ assembly subcontractor ASE Chung-Li (ASECL) Taiwan announcement of Punch QFN production line End-of-Service / Decommission, effective 31-Mar-2022, affecting NXP product SGTL5000XNAA3 and SGTL5000XNAA3R2. New SGTL5000 part numbers are created with Sawn QFN conversion for customer supply assurance. Please see details below.

Change Category

☐ Wafer Fab Process
☑ Assembly Process
☐ Product Marking
☐ Test Process
☐ Design
☐ Wafer Fab Materials
☑ Assembly Materials
☐ Mechanical Specification
☐ Test Equipment
☐ Errata
☐ Wafer Fab Location
☐ Assembly Location
☐ Packing/Shipping/Labeling
☐ Test Location
☐ Electrical spec./Test coverage
☐ Firmware
☐ Other

PCN Overview

Description

NXP Semiconductors’ assembly subcontractor ASE Chung-Li (ASECL) Taiwan announced the punch QFN production line End-of-Service / Decommission, effective 31-Mar-2022, affecting NXP product SGTL5000XNAA3 and SGTL5000XNAA3R2. Impacted products will be migrated from Punch QFN to

Sawn QFN at the current ASE Chung-Li Taiwan site. Note that ASECL has considerable experience with NXP products in sawn QFN configurations – very low risk change.

New orderable part numbers SGTL5000XNBA3 and SGTL5000XNBA3R2 are offered with sawn QFN package option. Customers are encouraged to migrate to the new part numbers as current part numbers SGTL5000XNAA3 and SGTL5000XNAA3R2 will undergo End-of-Life / Product Discontinuation upon ASECL punch QFN line decommission Mar 2022.

The conversion from Punch QFN to Sawn QFN results in the following change summary:
- Change of lead frame design from punch to sawn
- No change to lead frame material, thickness, ring type, lead length…
- No change to die attach epoxy material.
- Change of mold compound material from EME-G700L-Y to EME-G700LA Type L-A Ver.P
- Change of bond wire from Cu_Alloy 0.8mil_PD EX1 to Cu_Alloy 0.8mil_PD EX1P PLUS
- Change of package outline drawing to 98ASA01814D / SOT617-27 from 98ARE10739D / SOT617-15
- Change of exposed pad size (slight increase) to 3.5 x 3.5 mm from 3.3 x 3.3 mm

Current punch QFN package outline drawing 98ARE10739D / SOT617-15 is attached, and can be found at: https://www.nxp.com.cn/docs/en/package-information/SOT617-15.pdf

New sawn QFN package outline drawing 98ASA01814D / SOT617-27 is attached, and can be found at: https://www.nxp.com.cn/docs/en/package-information/SOT617-27.pdf

Upon qualification completion, NXP will issue a Final PCN to relay results, and update the product data sheet to include new orderable part numbers, and new sawn QFN package outline drawing.

Please see the attached files for additional details.

Reason

ASE Chung-Li (ASECL) Taiwan issued an End-of-Service Notice for Punch QFN manufacturing affecting NXP product SGTL5000XNAA3 and SGTL5000XNAA3R2, with effective date 31-Mar-2022. Punch to sawn QFN conversion is required for customer supply assurance.

Identification of Affected Products

Top side marking: New part numbers are created for ASECL sawn QFN package option.

Product Availability

Sample Information

Samples are available upon request
Samples available for SGTL5000XNBA3

Production

Planned first shipment Mar 01, 2022

Anticipated Impact on Form, Fit, Function, Reliability or Quality

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Updates to form and fit as described in the accompanying documentation. No impact to function, reliability or quality.

Data Sheet Revision

A new datasheet will be issued

Disposition of Old Products

Old part numbers will undergo End-of-Life / Product Discontinuation upon ASECL Punch QFN line End-of-Service / Decommission 31-Mar-2021

Additional information

Self qualification: view online

Additional documents: view online

Timing and Logistics

The Self Qualification Report will be ready on Feb 01, 2022.

The Final PCN is planned to be issued on: Mar 01, 2022.

In compliance with JEDEC J-STD-046, your acknowledgement of this change is expected by Nov 21, 2021.

Contact and Support

For all inquiries regarding the ePCN tool application or access issues, please contact NXP "Global Quality Support Team".

For all Quality Notification content inquiries, please contact your local NXP Sales Support team.

For specific questions on this notice or the products affected please contact our specialist directly:

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At NXP Semiconductors we are constantly striving to improve our product and processes to ensure they reach the highest possible Quality Standards. Customer Focus, Passion to Win.

NXP Quality Management Team.

About NXP Semiconductors

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