



Final Product Change Notification

202407003F01 : Dual-source TSMC / UMC Fabrication for 88Q9098-NYBA and AW690HNB

Note: This notice is NXP Company Proprietary.

Issue Date: Dec 20, 2024

Effective Date: May 30, 2025

Management summary

Addition of UMC as second-source 28nm foundry to current 88Q9098-NYBA and AW690HNB product lines which are presently fabricated at TSMC-15 in Taichung, Taiwan. UMC-12A (Tainan, Taiwan) will be added as a second source foundry that will run concurrently with the original TSMC-15 wafer fabrication for the 88Q9098-A2-NYBA, 88Q9098SA2-NYBA, and AW690HNB product lines.

☒ Wafer Fab Process

☒ Product Marking

☒ Wafer Fab Location

☒ Firmware

Notification Overview

Description

1. Addition of second-source 28nm foundry to current 88Q9098-NYBA and AW690HNB product lines which are presently fabricated at TSMC-15 in Taichung, Taiwan. UMC-12A (Tainan, Taiwan) will be added as a second source foundry that will run concurrently with the original TSMC-15 wafer fabrication for the 88Q9098-NYBA and AW690HNB product lines.

2. No changes to existing assembly flow for the 88Q9098-NYBA and AW690HNB parts.

3. Planned Fabrication + Assembly + Final-Test flows are as follows:

Previously qualified flows:

- o TSMC-15 fabrication + NXP-Bangkok (ATBK) assembly + ASE-CL final test
- o TSMC-15 fabrication + NXP-Bangkok (ATBK) assembly + NXP-ATKH final test

Newly qualified flows:

- o UMC-12A fabrication + NXP-Bangkok (ATBK) assembly + ASE-CL final test
- o UMC-12A fabrication + NXP-Bangkok (ATBK) assembly + NXP-ATKH final test

4. Parts fabricated with UMC vs. TSMC production flows will be distinguishable based on the first two letters in the third line of top-of-package markings, please see attached slides for explanation and illustration.

5. All final test sites will use identical ATE vendor equipment model, identical final test program, and ATE / FT-program configuration as the current TSMC-based product variants. Final test implementation into production will be cross-correlated across all sites to ensure manufacturing and quality equivalency.

6. Products affected by this FPCN will dual-source both TSMC and UMC -based production flows under the same existing part numbers currently in use. All customers will need to be ready to accept dual-sourced parts fabricated at either foundry by 30-May-2025. Please see attached overview for additional details.

7. Key milestones and sample / production availability are as follows:

- UMC-based Customer Qualification Samples: Now
- AEC-Q100 Qualification report for 88Q9098-A2-NYBA / 88Q9098SA2-NYBA / AW690HNB variants: Now
- 88Q9098 / AW690 Datasheet update: Now
- Updated 88Q9098-A2-NYBA / 88Q9098SA2-NYBA / AW690HNB PPAPs: 10-Jan-2025
- Required customer dual-source readiness: 30-May-2025

Reason

Foundry second-sourcing is being done to ensure robust supply throughout the life of the 88Q9098 and AW690 programs.

Identification of Affected Products

- Top Side Marking
- Packing Labels

Product Availability

Sample Information

Samples are available upon request

Production

Planned first shipment May 30, 2025

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

No Impact on form, fit, function, reliability or quality

Data Sheet Revision

A new data sheet will be issued

Disposition of Old Products

All customers will need to be ready to accept dual-sourced parts fabricated at either foundry by 30-May-2025.

Additional information

Self qualification:[view online](#)

Additional documents: [view online](#)

Timing and Logistics

In compliance with JEDEC J-STD-046, your acknowledgement of this change is expected by Jan 19, 2025.

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:

Name	Trent Bartow
e-mail address	trent.bartow@nxp.com

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NXP Semiconductors
High Tech Campus, 5656 AG Eindhoven, The Netherlands

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