Final Product Change Notification

202102025F01 : Smart Power SO8 and SO16 Capacity Expansion from ASEN to ATBK

Note: This notice is NXP Company Proprietary.

Issue Date: Apr 01, 2021 **Effective date:Jun 30, 2021**

Dear Gordon Love,

Here is your personalized notification about a NXP general announcement.
For detailed information we invite you to view this notification online

Management summary

Capacity expansion for SO8 and SO16 in the mainstream Cu-wire technology in our internal assembly facility in Bangkok.

Change Category

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

PCN Overview

Description

Add assembly and test capacity in SO8 (SOT96) and SO16 (SOT109) next to ASEN also in ATBK combined with Cu-wire introduction.
ASEN will continue assembling in Gold wire.
Full traceability available on the origin of products via packing, packing label and assembly date code.
For TEA2016AAT/1/S30 and TEA2016AATH1/1/S30 only: change MSL level from MSL 1 to MSL 3 (shelf life change only).

Reason

In view of increased demand for Smart Power products and semiconductors in particular, we have qualified a second source for a part of our product portfolio being our internal assembly fab in Bangkok Thailand.
Additional benefit of qualifying an internal industrial facility is that we are able to deal with fluctuations in customer demand having a more reliable commitment on production capacity needed.
In the light of standardization and process- and capacity optimization, we qualified the main stream Cu wire technology and related bill of material for products concerned.

Identification of Affected Products

Top Side Marking

ASEN and ATBK use identical Marking blank
Line 1, no changes: marking will be the same for both ASEN as ATBK
Line 2, no changes: Diffusion lot number / batch ID + Assembly sequence ID of Die
Line 3: assembly location indicator “X” or ASEN and “n” for ATBK

Line 3 coding: Manufacturing code to NX3-00130 (Traceability requirements) + RoHS indicator + Date code + Mask version + Release status code

Line 3 examples:
ASEN: rXDywwn, "X" is ASEN location
ATBK: rnDywwn, "n" is ATBK location

Product Availability

Sample Information
Samples are available upon request
Production
Planned first shipment Jun 30, 2021

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

No Impact on form, fit, function, reliability or quality
Data Sheet Revision
No impact to existing datasheet
Disposition of Old Products
Existing inventory will be shipped until depleted

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 May 01, 2021.

Remarks

PCN abbreviations:
• ASE: Assembly site ASE, Suzhou China
• ASID: Assembly sequence ID of die
• ATBK: NXP Assembly and Test site Bangkok, Thailand
• ATE: Automated Test Equipment
• ATKH: NXP Assembly and Test site Kaohsiung, Taiwan
• ConAna: construction analysis
• DBID: Diffusion lot number / Batch ID
• Effective date: date after which NXP can start delivering the updated products according to the involved PCN
• ESD-CDM: Electrical Discharge Charged Device Model
• ESD-HBM: Electrical Discharge Human Body Model
• FPCN: Final Product Change Notification
• HTOL: reliability test method, high-temperature operating life
• ICN8: NXP Semiconductors ICN8 Nijmegen, The Netherlands
• MSL: Moisture Sensitivity Level
• MSLA: Moisture Sensitivity Level Assessment
• PCN: Product Change Notification

• PCON / PC: Preconditioning
• PQIP: Product Quality Information Package
• RoHS: Restriction of Hazardous Substances
• SSMC: Systems on Silicon Manufacturing Co, waferfab, Singapore
• TC / TMCL: reliability test method, temperature cycling
• THB: reliability test method, temperature, humidity, bias
• UHST: reliability test method, unbiassed highly accelerated stress test
• VIS: Vanguard International Semiconductor Corporation waferfab, Hsinchu Taiwan
• WiDi: Wiring Diagram

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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NXP Quality Management Team.

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