Final Product/Process Change Notification

Document #:FPCN25580Z
Issue Date:10 Oct 2023

Title of Change:	Transfer of SOIC assembly from Amkor to Hana
Proposed Changed Material First Ship Date:	15 Apr 2024 or earlier if approved by customer
Current Material Last Order Date:	N/A *Orders received after the Current Material Last Order Date expiration are to be considered as orders for new changed material as described in this PCN. Orders for current (unchanged) material after this date will be per mutual agreement and current material inventory availability*.
Current Material Last Delivery Date:	N/A *The Current Material Last Delivery Date may be subject to change based on build and depletion of the current (unchanged) material inventory*
Product Category:	Active components – Integrated circuits
Contact information:	Contact your local onsemi Sales Office or john.butchko@onsemi.com
PCN Samples Contact:	Contact your local onsemi Sales Office to place sample order. Sample requests are to be submitted no later than 45 days after publication of this change notification. Samples delivery timing will be subject to request date, sample quantity and special customer packing/label requirements.
Sample Availability Date:	22 Dec 2023
PPAP Availability Date:	31 Jan 2024
Additional Reliability Data:	Contact your local onsemi Sales Office or Chielo.Basa@onsemi.com
Type of Notification:	This is a Final Product/Process Change Notification (FPCN) sent to customers. The change will be implemented at 'Proposed Change Material First Ship Date' in compliance to J-STD-46 or ZVEI, or earlier upon customer approval, or per our signed agreements. onsemi will consider this proposed change and it's conditions acceptable, unless an inquiry is made in writing within 45 days of delivery of this notice. To do so, contact PCN.Support@onsemi.com.

Change Category

Category	**Type of Change**
Equipment	Production from a new equipment/tool which uses the same basic technology (replacement equipment or extension of existing equipment pool) without change of process.
Process - Assembly	Move of all or part of assembly to a different location/site/subcontractor., Change of mold compound, Die attach material, Change of lead frame finishing material / area (internal), Change of specified assembly process sequence (deletion and/or additional process step), Change of lead and heat slug plating material/plating thickness (external)

Description and Purpose:

This Final Product Change Notification (FPCN) is to announce the qualification/ transfer of assembly site from Amkor (ATP1), Philippines to Hana Semiconductor (Ayutthaya) Co., Ltd., Thailand for exposed pad SOIC assembly.

Upon expiration of this FPCN, manufacturing assembly site of Hana Semiconductor (Ayutthaya) Co., Ltd., Thailand will be utilized to produce the exposed SOIC products in this notice.

There are no product marking changes as a result of this change.

	From	To
Assembly Site	Amkor (ATP1), Philippines	Hana Semiconductor (Ayutthaya) Co., Ltd., Thailand
LeadFrame finishing material	Roughened/Preplated	Ag plating
Die Attach	ABLESTIK 8290	EN4900LC-18
Bond Wire	Au	No change
Lid	N/A	No change
Mold Compound	G700LS	CV8214C
Metal Can	N/A	No change
Package Substrate	N/A	No change
Heat Slug plating material	e4 (NiPdAu)	e3 (Sn)

Reason / Motivation for Change:	Source/Supply/Capacity Changes
Anticipated impact on fit, form, function, reliability, product safety or manufacturability:	The device has been qualified and validated based on the same Product Specification. The device has successfully passed the qualification tests. Potential impacts can be identified, but due to testing performed by onsemi in relation to the PCN, associated risks are verified and excluded. No anticipated impacts.

Sites Affected:

onsemi Sites	**External Foundry/Subcon Sites**
None	ATP1 - Amkor Technology Philippines P1
	HANA Semiconductor, Thailand

Marking of Parts/ Traceability of Change:	Changed material can be identified by lot code or assembly plant code.

Reliability Data Summary:

Test	Specification	Condition	Interval	Results
HTOL	JESD22-A108	Ta= 125°C	2016 hrs	0/231
ELFR	AECQ100-008	Ta= 125°C	48 hrs	0/2400
HTSL	JESD22-A103	Ta= 150°C	2016 hrs	0/231
TC	JESD22-A104	Ta= -65°C to + 150°C	1000 cyc	0/231
THB	JESD22-A101-B	85°C, 85% RH, 18.8psig, bias	1008 hrs	0/231
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
PC	J-STD-020 JESD-A113	MSL 3 @ 260°C		0/693
SD	JSTD002	Ta = 245C, 10 sec		0/ 45
PD	JESD22-B100 and JESD22-B108	Per Case Outline		0/30

Refer to the attached AEC1 Pager for more details.

To view attachments:
1. Download pdf copy of the PCN to your computer
2. Open the downloaded pdf copy of the PCN
3. Click on the paper clip icon available on the menu provided in the left/bottom portion of the screen to reveal the Attachment field
4. Then click on the attached file.

Electrical Characteristics Summary:

Electrical characteristics are not impacted.

List of Affected Parts:

Note: *Only the standard (off the shelf) part numbers are listed in the parts list. Any custom parts affected by this PCN are shown in the customer specific PCN addendum in the PCN email notification, or on the* ***PCN Customized Portal****.*

Current Part Number	New Part Number	Qualification Vehicle
FAN3224TUM1X-F085	NA	FAN3224TUM1X-F085
FAN3122TM1X-F085	NA	FAN3224TUM1X-F085
FAN3224TM1X-F085	NA	FAN3224TUM1X-F085