Final Product/Process Change Notification

Document #:FPCN24381Z
Issue Date:20 Jan 2022

Title of Change:	Automotive SOIC8 MOSFET Wire & Leadframe Change in Hana
Proposed Changed Material First Ship Date:	10 Dec 2022 or earlier if approved by customer
Current Material Last Order Date:	31 Aug 2022 *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:	09 Dec 2022 *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 – Discrete components
Contact information:	Contact your local onsemi Sales Office or Peter.Lee@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:	31 Jan 2022
PPAP Availability Date:	31 Jan 2022
Additional Reliability Data:	Contact your local onsemi Sales Office or Shiela.Crosby@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	Change of direct material supplier, Change of wire bonding

Description and Purpose:

onsemi would like to notify customers of change to Cu wire with Ultra high density leadframe for our SOIC-8 products running in our subcon, HANA Thailand. There will be no change in leadframe dimension and the package outline associated with these BOM changes:

	Before Change Description	After Change Description
Lead frame	High Density (HD) Lead frame PPF	Ultra High Density (UHD) Lead frame PPF
Bond Wire	Au wire 2 mils	CuPdAu wire 2 mils

This change also related with machine change as following:

	Before Change Description	After Change Description
Wire bond machine model	ASM Twin Eagle	ASM Aero

There is no product marking change as a result of this change

Reason / Motivation for Change:	Process/Materials Change
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	HANA Semiconductor, Thailand

Marking of Parts/ Traceability of Change:	no change on marking and traceability.

Reliability Data Summary:

QV DEVICE NAME: HUFA76407DK8T-F085
RMS: U76430, O76721
PACKAGE: SOIC-8

Test	Specification	Condition	Interval	Results
HTSL	JESD22-A103	Ta = 150°C	1008hrs, 2016 hrs	0/231
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	15000cyc, 30000 cyc	0/231
TC	JESD22-A104	Ta= -55°C to +150°C	1000cy, 2000 cyc	0/231
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96hrs, 192 hrs	0/231
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
PC	J-STD-020, JESD-A113	MSL 1 @ 260 °C		0/924
RSH	JESD22- B106	Ta = 265C, 10 sec		0/30
SD	JSTD002	Ta = 245C, 5 sec		0/45
PD	JESD22 B100			0/30
WBS	MIL-STD-750 Method 2037			0/30
BS	AEC Q101-003			0/30

NOTE: AEC-1pager is attached.

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
HUFA76407DK8T-F085	NA	HUFA76407DK8T-F085