



Initial Product/Process Change Notification

Document #: IPCN25736Z

Issue Date: 29 Sep 2023

Title of Change:	D2PAK-EG Outsource from Seremban to Goodark for 936AB case outline
Proposed Changed Material First Ship Date:	30 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 Albert.Tanyag@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.
Additional Reliability Data:	Contact your local onsemi Sales Office or AbdulRasyid.Ruslan@onsemi.com N/A
Type of Notification:	This is an Initial Product/Process Change Notification (IPCN) sent to customers. An IPCN is an advance notification about an upcoming change and contains general information regarding the change details and devices affected. It also contains the preliminary reliability qualification plan. The completed qualification and characterization data will be included in the Final Product/Process Change Notification (FPCN). This IPCN notification will be followed by a Final Product/Process Change Notification (FPCN) at least 6 months prior to implementation of the change. In case of questions, contact < PCN.Support@onsemi.com >.
Change Category	
Category	Type of Change
Test Flow	Move of all or part of electrical wafer test and/or final test to a different location/site/subcontractor
Equipment	Production from a new equipment/tool which uses a different basic technology or which due to its unique form or function can be expected to influence the integrity of the final product
Process - Assembly	Move of all or part of assembly to a different location/site/subcontractor., Change of mold compound, Die attach material, Change of direct material supplier, Change of specified assembly process sequence (deletion and/or additional process step)

Description and Purpose:

Change Assembly site and FT site from onsemi Seremban to subcon GoodArk, China.

	From	To
Assembly / Test Site	onsemi, Seremban, Malaysia	Good-Ark Electronics Co.ltd., Suzhou, China
Die Attach	Pb95Sn5	Pb92.5Sn5Ag2.5
Mold Compound	Sumitomo G600	Sumitomo G700HF
Lead Frame Supplier	Kobe Malaysia	SDI Taiwan
Post Mold Cure (PMC) Process	w/o PMC flow	w/ PMC flow Equip: C SUN & SMO-4S
Tester	MOTOROLA – DTS / ETS88	Accotest STS8200

Reason / Motivation for Change:

Source/Supply/Capacity Changes Process/Materials Change

Anticipated impact on fit, form, function, reliability, product safety or manufacturability:

The device will be qualified and validated based on the same Product Specification. No anticipated impacts.

Sites Affected:

onsemi Sites

None

External Foundry/Subcon Sites

Good-Ark, China

Marking of Parts/ Traceability of Change:

The affected products will be identified with date code

Reliability Data Summary:

CASE OUTLINE: 936AB

RMS: S86793, S86961, S90212, S92694

PACKAGE: D2PAK 7LD EG

Test	Specification	Condition	Interval
High Temperature Operating Life	JESD22-A108	Ta=125°C, 100 % max rated Vcc	1008 hrs
Early Life Failure Rate	JESD22-A108	Ta=125°C, 100 % max rated Vcc	48 hrs
High Temperature Storage Life	JESD22-A103	Ta= 150°C	1008 hrs
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 245 °C	
Temperature Cycling	JESD22-A104	Ta= -55°C to +150°C, mounted form air to air	1000 cyc
Power Temperature Cycling	JESD22 A105	Tj= -40°C to +125°C, bias	1000 cyc
Highly Accelerated Stress Test	JESD22-A110	110°C, 85% RH, 18.8psig, bias	264 hrs
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs
Resistance to Solder Heat	JESD22- B106	Ta = 265°C, 10 sec	
Solderability	JSTD002	Ta = 245°C, 5 sec	
Physical Dimensions	JESD22-B120		

Estimated time of Rel Completion: **Wk43'2023**

Electrical Characteristics Summary:

Electrical characteristics are not impacted.



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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
NCV8505D2T50R4G	NA	NCV8505D2T50R4G