ON Semiconductor



Final Product/Process Change Notification

Document # : FPCN20927XA Issue Date: 10 June 2015

Title of Change:	Packing Method Change due to MSL Classification fo (MSL 2 to MSL 3)	or SSOP 36 EP devices using micro pre-plated leadframes.
Proposed first ship date:	17 September 2015 or earlier upon customer approv	val
Contact information:	Contact your local ON Semiconductor Sales Office or Dennis.Remolacio@onsemi.com	r <u>Ryan. Trinidad@onsemi.com</u> or
Samples:	Contact your local ON Semiconductor Sales Office	
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or <u>Dennis.Remolacio@onsemi.com</u>	r <u>Ryan. Trinidad@onsemi.com</u> or
Type of notification:	to implementation of the change.	FPCN) sent to customers. FPCNs are issued 90 days prior ed unless specific conditions of acceptance are provided in o so, contact <pcn.support@onsemi.com>.</pcn.support@onsemi.com>
Change Part Identification:	There will be no change to part nomenclature or ord date code and material will not ship prior to the PCN acceptance is provided.	dering code. Product implementation will be controlled by I effectivity date provided, unless early customer
Change category(s): Uafer Fab Change Assembly Change Test Change	 Manufacturing Site Change/Addition Manufacturing Process Change Material Change 	 Product specific change Datasheet/Product Doc change Shipping/Packaging/Marking Other:
Sites Affected: All site(s) not applicable ON Semiconductor site(s) : External Foundry/Subcon site		<u>Site 2</u>

Description and Purpose:

ON Semiconductor is notifying of the intent to change the packaging of SSOP 36-EP devices from MSL 2 to MSL 3. This change will affect all SSOP 36-EP devices that are using leadframe part number N42423E711 and N42423E712 (uPPF leadframe type) which are susceptible to lead discoloration due to tarnishing effect of the leadframe with a silver layer. This will in effect limit the MET (manufacturing exposure time) at customer side from 1 year to 7 days and needed to inspect the units once the 7 days limit is exceeded.

There are no changes to product design, electrical specifications, or physical dimensions as a result of this notification. Full reliability information has been completed and all products will continue to meet or exceed ON Semiconductor reliability standards.

Reliability Data Summary:

Staging evaluation was conducted in order to identify the impact of environment on lead discoloration for uPPF product. Results shows discoloration on units after 2 weeks (Final test cycle time: 7 days) and it is highly recommended to bag the units and limit the manufacturing exposure time at customer.



	SSUPS6 EVALUA	ATION (STAGE @ Trin	h and Formj		
E	valuation Done after Trim a	nd Form Process (Temp: 1	8~27 degC, RH: 35~55%)		
EXPOSURE TIME	BENDING (w/ forming process)		NO BEND (w/out forming Process)		
EXPOSORE HIME	Solderability Test	Visual Inspection	Solderability Test	Visual Inspection	
No Staging (Control)	PASS	No Discolor	PASS	No Discolor	
4 days	PASS	No Discolor	PASS	No Discolor	
7 days	PASS	No Discolor	0/10	No Discolor	
2 weeks	FAIL - 4/10	With discoloration	FAIL - 3/10	With discoloration	
Extra High - 1 month	FAIL - 1/10	With discoloration	FAIL - 6/10	With discoloration	
Note: Final Test cyle time is 7 days.					

There are no changes in electrical performance. Datasheet specifications are not affected by this change.

List of affected Standard Parts: XCV70627DQ001G

List of affected Customer Specific Parts: 00LDA-001-XTP