



Title of Change:	Add Plasma Coating and 1x Reflow process for D2PAK devices.	
Proposed Changed Material First Ship Date:	13 March 2020	
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 – Discrete components	
Contact information:	Contact your local ON Semiconductor Sales Office or < JiaNi.Wu@onsemi.com >	
Samples:	Contact your local ON Semiconductor Sales Office to place sample order or < PCN.samples@onsemi.com > Sample requests are to be submitted no later than 45 days after publication of this change notification.	
Sample Availability Date:	31 March 2019 .	
PPAP Availability Date:	31 March 2019	
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or < Jayoung.Hong@onsemi.com >.	
Type of Notification:	This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 12 months prior to implementation of the change or earlier upon customer approval. ON Semiconductor 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	Type of Change	
Process – Assembly	Change of specified assembly process sequence (deletion and/or additional process step)	
Description and Purpose:		
This Final Notification announces to the customers the addition of Reflow process for D2PAK devices listed below.		
	Before Change Description	After Change Description
Assembly process	No Plasma Coating and reflow process	With Plasma Coating and reflow process
There is no product marking change as a result of this change.		
Reason / Motivation for Change:	<ul style="list-style-type: none"> - To activate latent failure by reflow process. - To increase the adhesion between EMC and lead frame to eliminate delamination triggered from 1x strip level. 	
Anticipated impact on fit, form, function, reliability, product safety or manufacturability	<p>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 ON Semiconductor in relation to the PCN, associated risks are verified and excluded.</p> <p>No anticipated impacts.</p>	



Sites Affected:	ON Semiconductor Sites: ON Suzhou, China	External Foundry/Subcon Sites: None
Marking of Parts/ Traceability of Change:	Affected products will be identified with date code.	

Reliability Data Summary:

QV DEVICE NAME
FDB045AN08A0-F085

RMS: N/A
PACKAGE: TO263

Test	Specification	Condition	Interval	Results
TC	JESD22-A104	Ta= -55°C to +150°C	1000 <u>cyc</u>	0/231
TCDT	AEC-Q101 Rev. D1	Post TC 1000cyc, C-scan		0/231
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 <u>hrs</u>	0/231
<u>uHAST</u>	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 <u>hrs</u>	0/231
PC	J-STD-020 JESD-A113	MSL 1 @ 245 °C	Humidity 168hrs	0/693
PKG dimension	JESD22B-100	Data sheet		0/30
DPA	AEC-Q101 Rev.D1	Post TC 1000cyc		0/ 24
DPA	AEC-Q101 Rev. D1	Post HAST 96hr		0/15
SD	JSTD002	Ta = 245C, 10 sec		0/ 33
<u>Rth</u>	JESD24-3, 24-4, 24-6	Thermal resistance, data sheet		0/10

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/s

Electrical Characteristic 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	Qualification Vehicle
FQB7P20TM-F085P	FDB045AN08A0-F085
FQB34P10TM-F085P	



Appendix A: Changed Products

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Product	Customer Part Number	New Part Number	Qualification Vehicle
FQB34P10TM-F085P		NA	FDB045AN08A0-F085