ON Semiconductor®



Final Product/Process Change Notification Document # : FPCN21715X

Issue Date: 02 May 2017

Title of Change:	Change passivation composition for ON Semiconductor product EFC2J004NUZTDG.				
Proposed first ship date:	09 August 2017				
Contact information:	Contact your local ON Semiconductor Sales Office or < <u>Osamu.Akaki@onsemi.com></u>				
Samples:	Contact your local ON Semiconductor Sales Office				
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or < <u>Yasuhiro.lgarashi@onsemi.com>.</u>				
Type of notification:	This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 90 days prior to implementation of the change. ON Semiconductor will consider this change accepted, unless an inquiry is made in writing within 30 days of delivery of this notice. To do so, contact < <u>PCN.Support@onsemi.com>.</u>				
Change Part Identification:	Date code				
Change category:	Wafer Fab Change Assembly Change Test Change Other				
Change Sub-Category(s): Manufacturing Site Change/Addition Material Change Product specific change Other: Other: Sites Affected: ON Semiconductor site(s) : External Foundry/Subcon site(s) UNITED MICROELECTRONICS CORPUSA					
Description and Purpose: ON Semiconductor qualified new passivation composition for more robust die mounting. This Final PCN is providing the detail pertinent to the change. This change represents robust structure of product.					
Material to be changed	Before Change Description	After Change Description			
Passivation	Silicon nitride	Oxide, Silicon nitride and polyimide			



Reliability Data Summary:

QV DEVICE NAME EFC8822R-TF				
RMS: <u>38779, 39127</u>				
PACKAGE: WLCSP6				

Test	Specification	Condition	Interval	Results	
HTRB	JESD22-A108	Ta=150°C, 80% max rated V	1,008 hrs	0/231	
HTGB	JESD22-A108	Ta=150°C, 100% max rated Vgss	1,008 hrs	0/231	
HTSL	JESD22-A103	Ta=150°C	1,008 hrs	0/231	
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	15,000 cyc	0/231	
TC	JESD22-A104	Ta= -40°C to +125°C	1,000 cyc	0/231	
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/231	
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231	
ESD HBM	IEC61000-4	C=100pF, R=1.5KΩ	±2,000V	0/9	

Electrical Characteristic Summary:

Electrical characteristics are not impacted.

List of Affected Standard Parts:

Part Number	Qualification Vehicle
EFC2J004NUZTDG	EFC8822R-TF