



Title of Change:	Qualification of CDAF515 as Die Attach Film material for NCP1031MNTXG.		
Proposed first ship date:	25 January 2017 <i>or earlier upon customer approval.</i>		
Contact information:	Contact your local ON Semiconductor Sales Office or <Clarence.Wong@onsemi.com>		
Samples:	Contact your local ON Semiconductor Sales Office or <Bruce.Xu@onsemi.com>		
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or <Phine.Guevarra@onsemi.com>.		
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 <PCN.Support@onsemi.com>.		
Change Part Identification:	Affected parts will be identified by the date code.		
Change category:	<input type="checkbox"/> Wafer Fab Change <input checked="" type="checkbox"/> Assembly Change <input type="checkbox"/> Test Change <input type="checkbox"/> Other _____		
Change Sub-Category(s):	<input type="checkbox"/> Manufacturing Site Change/Addition <input type="checkbox"/> Manufacturing Process Change	<input checked="" type="checkbox"/> Material Change <input type="checkbox"/> Product specific change	<input type="checkbox"/> Datasheet/Product Doc change <input type="checkbox"/> Shipping/Packaging/Marking <input type="checkbox"/> Other: _____
Sites Affected:	<input type="checkbox"/> All site(s) <input type="checkbox"/> not applicable	<input checked="" type="checkbox"/> ON Semiconductor site(s) : ON Seremban, Malaysia _____	<input type="checkbox"/> External Foundry/Subcon site(s) _____
Description and Purpose:			
This Final Change Notification announces the qualification of Conductive Die Attach Film of CDAF515 in replacement of Epoxy CRM1084P as die attach material for NCP1031MNTXG which is currently assembled in DFN 4 x 4 x 1mm 8 leads package in ON Seremban, Malaysia.			
CDAF515 is able to eliminate the high variation on epoxy fillet height by means of pre fixed film thickness to attain consistent "Bond Line Thickness" (BLT).			
There is no impact to the package case outline or significant electrical performance of the affected device based on this change.			
	Before Change	After Change	
Die attach material	CRM1084P	CDAF515	



Reliability Data Summary:

Qualification Vehicle Device Name: NCP1031MNTXG

Package: DFN 4x4x1mm 8 leads

Test	Name	Specification	Condition	Read Point	Result (rej. / ss)
HTOL	High Temp Operating Life	JESD22-A108	TA = 125°C for 1008 hours	1008 Hrs	0/252
HTSL	High Temp Storage Life	JESD22 A103	TA = 150°C for 1008 hours	1008 Hrs	0/252
PC	Preconditioning	J STD 020, JESD22-A113	MSL 1 @ 260°C		0/756
TC-PC	Temperature Cycling + PC	JESD22 A104	Ta= -65°C to 150°C , air to air	500 Cycles	0/252
AC-PC	Autoclave + PC	JESD22 A102	121°C, 100%RH, 15psig	96 Hrs	0/252
HAST-PC	Highly Accelerated Stress Test + PC	JESD22 A110	Temp= +130°C, RH=85% p = 18.8 psig, bias	96 Hrs	0/252
SAT	Scanning Acoustic Analysis	Compare to existing data	Compare for delamination pre- and post- PC	Pre- and Post-PC	Pass
DPA	Destructive Physical Analysis	AEC Q101	TA = 25°C	Post TC-PC	Pass
DPA	Destructive Physical Analysis	AEC Q101	TA = 25°C	Post HAST-PC	Pass
DSS	Die Shear Strength	Mil Std 883 Method 2019	TA = 25°C	Tested pass units	0/90
ED	Electrical Distribution	Tri-Temperature, per 48A document of the device.	Tri-Temperature per 48A document of the device.	Tested pass units	0/30

Electrical Characteristic Summary:

Electrical characteristics are not impacted from this change.

List of Affected Standard Parts:

Part Number	Qualification Vehicle
NCP1031MNTXG	NCP1031MNTXG