ON Semiconductor®

Final Product/Process Change Notification

Document # : FPCN21748X
Issue Date: 5 July 2017

Title of Change:	New Enthone SC40 Chemistry for Electroplated Cu RDL and UBM
Proposed first ship date:	12 October 2017 or earlier upon customer approval
Contact information:	Contact your local ON Semiconductor Sales Office
Samples:	Contact your local ON Semiconductor Sales Office
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or <Jim.Workman@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:	Can differentiate units with change by date code marking
Change category:	☐ Wafer Fab Change ☒ Assembly Change ☐ Test Change ☐ Other _____

Change Sub-Category(s):

☐ 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(s)
FLIPCHIP INTERNATIONAL LLC

Description and Purpose:

FLIPCHIP INTERNATIONAL LLC (FCI) to use Enthone SC40, a faster Cu plating rate chemistry using the same chemical supplier but a newer version of the existing chemistry already used at FCI.

The new chemistry will be the same sulfuric acid based Cu plating chemistry with a higher copper content and slightly modified additives to assure faster plating rate

Material to be changed	Before Change	After Change
	Description	**Description**
Cu plating chemistry	Enthone SC28	Enthone SC40 – from same supplier, same sulfuric acid based Cu plating chemistry as SC28 – with a higher copper content

Reliability Data Summary:

Test	Condition	Interval	Result
High Temperature Storage	150 C	1000 Hours	0 /25
Multiple Reflow	Standard Reflow Conditions	10X reflows	0 /25
Auto Clave	121C 100% RH	48 hours	0 /25

Electrical Characteristic Summary:

Electrical characteristics are not impacted

List of affected Standard Parts:

Part Number	Qualification Vehicle
NCP391FCALT2G	Subcon Qual vehicle
NCP1850FCCT1G	
NCP6338FCT1G	
NCP6361AFCCT1G	
NCP6361BFCCT1G	
NCP6914AFCAT1G	
NCP6914AFCCLT1G	
NCP6914AFCDT1G	
NCP6915AFCCLT1G	
NCP6924AFCET1G	
NCP6924AFCHT1G	
NCP6924BFCHT1G	
NCT218FCT2G	