



Title of Change:	Qualification of ON Semiconductor Philippines (OSPI) as an additional site for the assembly of the 3X3 QFN16 Packages.																		
Proposed first ship date:	5 January 2017 or earlier upon customer approval																		
Contact information:	Contact your local ON Semiconductor Sales Office or Peter.Vo@onsemi.com																		
Samples:	Contact your local ON Semiconductor Sales Office or Riley Beck@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 products will be identified by the assembly site code "P" in the marking along with the date code.																		
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) : ON Carmona, Philippines ☐ External Foundry/Subcon site(s)																			
Description and Purpose: This is the final change notification to announce the qualification of ON Semiconductor in Carmona, Philippines (OSPI) as an additional source for the assembly manufacturing of 3X3 QFN16 packages. This will allow for additional manufacturing capacity and manufacturing flexibility. Affected products can be manufactured at either the current site, UTAC Thailand or OSPI. Products from OSPI have a change to the die attach epoxy that is a standard qualified material at OSPI. There is no impact to the package case outline or electrical performance of affected devices based on this change.																			
	<table border="1"> <thead> <tr> <th></th> <th>Before Change</th> <th colspan="2">After Change</th> </tr> <tr> <th></th> <th>Description</th> <th colspan="2">Description</th> </tr> </thead> <tbody> <tr> <td>Assembly site</td> <td>UTAC Thailand</td> <td>UTAC Thailand</td> <td>ON Semiconductor Carmona, Philippines</td> </tr> <tr> <td>Die attach material</td> <td>8008HT</td> <td>8008HT</td> <td>CRM-1076WB</td> </tr> </tbody> </table>			Before Change	After Change			Description	Description		Assembly site	UTAC Thailand	UTAC Thailand	ON Semiconductor Carmona, Philippines	Die attach material	8008HT	8008HT	CRM-1076WB	
	Before Change	After Change																	
	Description	Description																	
Assembly site	UTAC Thailand	UTAC Thailand	ON Semiconductor Carmona, Philippines																
Die attach material	8008HT	8008HT	CRM-1076WB																

**Reliability Data Summary:**

Reliability data are covered as generic data from an 8X8 QFN52 qualification, NQFP_SP_B01.

QV DEVICE NAME: 20241-010-XTD

PACKAGE: 8X8 QFN52

Test	Specification	Condition	Interval	Results
HTOL	JESD22-A108	Ta= 125°C, 100 % max rated Vcc	1008 hrs	0/219
HTSL	JESD22-A103	Ta= 150°C	1008 hrs	0/80
TC	JESD22-A104	Ta= -65°C to +150°C	500 cyc	0/240
HAST	JESD22-A110	110°C, 85% RH, 18.8psig, bias	264 hrs	0/238
uHAST	JESD22-A118	110°C, 85% RH, 18.8psig, unbiased	264 hrs	0/240
PC	J-STD-020 JESD-A113	MSL 3 @ 260 °C		0/720
SD	JSTD002	Ta = 245C, 10 sec		0/ 45

Reliability is further validated below.

QV DEVICE NAME: NCS37013MNTWG

PACKAGE: 3X3 QFN16

Test	Specification	Condition	Interval	Results
TC	JESD22-A104	Ta= -65°C to +150°C	500 cyc	0/240
PC	J-STD-020 JESD-A113	MSL 3 @ 260 °C		

Electrical Characteristic Summary:

Electrical characteristics are not impacted from this change.

List of affected Standard Parts:

Part Number	Qualification Vehicle
NCS37010MNTWG	20241-010-XTD NCS37013MNTWG
NCS37012MNTWG	
NCS37013MNTWG	