



Title of Change:	Qualification of VHVIC (Very High Voltage IC) Technology at AFSM (Aizu Fujitsu Semiconductor Manufacturing) Japan.							
Proposed first ship date:	20 July 2018							
Contact information:	Contact your local ON Semiconductor Sales Office or < marquita.jones@onsemi.com >.							
Samples:	Contact your local ON Semiconductor Sales Office							
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or < jacob.saliba@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:	Product will be identified by having a date code of 1815 or newer. As material from different FABs cannot be combined in to (1) reel, product from AFSM will show CS: JP (CS = Custom Source) on the label of the reel and box. Please see sample MPN on page 2 at the following link http://www.onsemi.com/pub_link/Collateral/LABELRM-D.PDF to see the location of the CS identifier.							
Change category:	<input checked="" type="checkbox"/> Wafer Fab Change <input type="checkbox"/> Assembly Change <input type="checkbox"/> Test Change <input type="checkbox"/> Other: _____							
Change Sub-Category(s):	<input checked="" type="checkbox"/> Manufacturing Site Change/Addition <input type="checkbox"/> Material Change <input type="checkbox"/> Datasheet/Product Doc change <input type="checkbox"/> Manufacturing Process Change <input type="checkbox"/> Product specific change <input type="checkbox"/> Shipping/Packaging/Marking <input type="checkbox"/> Other: _____							
Sites Affected:	ON Semiconductor Sites: None	External Foundry/Subcon Sites: Aizu Fujitsu, Japan						
Description and Purpose:								
<p>ON Semiconductor would like to inform our customers that we have qualified our Very High Voltage IC (VHVIC) technology at the AFSM (Aizu Fujitsu Semiconductor Manufacturing) FAB in Aizu, Japan. This qualification enables expanded capacity for this technology.</p> <p>All products listed in this FPCN may be dual sourced from its current ON Semiconductor wafer fab in Gresham and AFSM.</p>								
<table border="1"> <thead> <tr> <th>Material to be changed</th> <th>Before Change Description</th> <th>After Change Description</th> </tr> </thead> <tbody> <tr> <td>Wafer Fabrication Site</td> <td>ON Semiconductor Gresham, OR USA</td> <td>AFSM (Aizu, Japan) or ON Semiconductor (Gresham, USA)</td> </tr> </tbody> </table>			Material to be changed	Before Change Description	After Change Description	Wafer Fabrication Site	ON Semiconductor Gresham, OR USA	AFSM (Aizu, Japan) or ON Semiconductor (Gresham, USA)
Material to be changed	Before Change Description	After Change Description						
Wafer Fabrication Site	ON Semiconductor Gresham, OR USA	AFSM (Aizu, Japan) or ON Semiconductor (Gresham, USA)						



Reliability Data Summary:

QV DEVICE NAME: NCP1236BD65R2G

PACKAGE: SOIC 8 (Less Pin 7)

Test	Specification	Condition	Interval	Results
HTOL	JESD22-A108	Ta=125°C, 500V	1000 hrs	0/231
HTSL	JESD22-A103	Ta= 150°C	1000 hrs	0/231
PC-TC	JESD22-A104	Ta= -65°C to +150°C	500 cyc	0/231
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/231
PC-uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/693

QV DEVICE NAME: NCP1396ADR2G

PACKAGE: SOIC-16

Test	Specification	Condition	Interval	Results
HTOL	JESD22-A108	Ta=125°C, 600V	1000 hrs	0/231
HTSL	JESD22-A103	Ta= 150°C	1000 hrs	0/231
PC-TC	JESD22-A104	Ta= -65°C to +150°C	500 cyc	0/231
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/231
PC-uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/693

QV DEVICE NAME: NCP1399AADR2G

PACKAGE: SOIC-16

Test	Specification	Condition	Interval	Results
HTOL	JESD22-A108	Ta=125°C, 600V	1000 hrs	0/77

QV DEVICE NAME: NCP1615C3DR2G

PACKAGE: SOIC-16 (Less Pin 15)

Test	Specification	Condition	Interval	Results
HTOL	JESD22-A108	Ta=125°C, 700V	1000 hrs	0/77

QV DEVICE NAME: NCP1380BDR2G

PACKAGE: SOIC-8

Test	Specification	Condition	Interval	Results
HTOL	JESD22-A108	Ta=125°C, 30V	1000 hrs	0/77



QV DEVICE NAME: NCP4304ADR2G

PACKAGE: SOIC-8

Test	Specification	Condition	Interval	Results
HTOL	JESD22-A108	Ta=125°C, 200V	1000 hrs	0/231
HTSL	JESD22-A103	Ta= 150°C	1000 hrs	0/231
PC-TC	JESD22-A104	Ta= -65°C to +150°C	500 cyc	0/231
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/231
PC-uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/693

Electrical Characteristic Summary:

As the process was copied and matched from the sending FAB, electrical characteristics are not impacted by this change. Characterization reports available upon request

List of Affected Standard Parts:

Part Number	Qualification Vehicle
NCP1340B1DR2G	NCP1615C3DR2G
NCP1340B3D1R2G	NCP1615C3DR2G
NCP1341B1D1R2G	NCP1615C3DR2G
NCP1341B1DR2G	NCP1615C3DR2G



Appendix A: Changed Products

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Product	Customer Part Number	Qualification Vehicle
NCP1340B1DR2G		NCP1615C3DR2G
NCP1340B3D1R2G		NCP1615C3DR2G
NCP1341B1D1R2G		NCP1615C3DR2G
NCP1341B1DR2G		NCP1615C3DR2G