



Title of Change:	Copper Wire change for PDIP7 Products in ASE Kunshan, China.																					
Proposed first ship date:	28 October 2016																					
Contact information:	Contact your local ON Semiconductor Sales Office or <marty.paul@onsemi.com>																					
Samples:	Contact your local ON Semiconductor Sales Office																					
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or <andy.esteva@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 with date code 1642																					
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 checked="" type="checkbox"/> Material Change <input type="checkbox"/> Datasheet/Product Doc change <input checked="" type="checkbox"/> Manufacturing Process Change <input type="checkbox"/> Product specific 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 type="checkbox"/> ON Semiconductor site(s) : <input checked="" type="checkbox"/> External Foundry/Subcon site(s) ASE KUNSHAN																					
<p>Description and Purpose: A General Announcement (GA#16200) was published on 1-29-09 regarding the ongoing Copper Wirebond conversion program at ON Semiconductor. This is a FPCN to notify customers that it has completed qualification of Copper Wire (in place of Gold Wire) on PDIP7 packages assembled at the ASE, Kunshan, China assembly location for the VHVIC products listed in this announcement.</p> <p>In addition, as a consequence, all products identified below in List 1 of this FPCN will change wire diameter from 1.3mil to 1.0mil. Power Temp Cycle (PTC) and full characterization of peak switch current were done to confirm no issues with reduced wire diameter. Products shown in List 2 did not change wire size.</p>																						
<table border="1"> <thead> <tr> <th rowspan="2">Piece Part</th> <th colspan="2">Before Change</th> <th colspan="2">After Change</th> </tr> <tr> <th>Part Number</th> <th>Description</th> <th>Part Number</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Wire*</td> <td>1-GW-01-0000181L</td> <td>1.3mil Au wire</td> <td>1-CW-01-0000001</td> <td>1.0mil PdCu wire</td> </tr> <tr> <td>Wire**</td> <td>1-GW-01-0000189L</td> <td>1.0mil Au wire</td> <td>1-CW-01-0000001</td> <td>1.0mil PdCu wire</td> </tr> </tbody> </table>				Piece Part	Before Change		After Change		Part Number	Description	Part Number	Description	Wire*	1-GW-01-0000181L	1.3mil Au wire	1-CW-01-0000001	1.0mil PdCu wire	Wire**	1-GW-01-0000189L	1.0mil Au wire	1-CW-01-0000001	1.0mil PdCu wire
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<p>* Applies to parts in List 1 below ** Applies to parts in List 2 below</p> <p>Reliability Qualification and full electrical characterization has now been completed on the designated package qualification vehicles.</p>																						

**Reliability Data Summary:**QV DEVICE NAME: NCP1027P065GPACKAGE: PDIP7 (Less Pin 6)

Test	Specification	Condition	Interval	Results
TC	JESD22-A104	Ta= -65°C to +150°C	500 cyc	0/240
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/240
Autoclave	JESD22-A102	121°C, 100% RH, 15psig, unbiased	96 hrs	0/240
HTOL	JESD22-A108	Ta=125°C, 500V	1000 hrs	0/240
HTSL	JESD22-A103	Ta= 150°C	1000 hrs	0/135
RSH	JESD22-106	265°C 10 sec dwell	10 sec	0/30

QV DEVICE NAME: NCP1076P065GPACKAGE: PDIP7 (Less Pin 6)

Test	Specification	Condition	Interval	Results
TC	JESD22-A104	Ta= -65°C to +150°C	500 cyc	0/240
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/240
Autoclave	JESD22-A102	121°C, 100% RH, 15psig, unbiased	96 hrs	0/240
HTOL	JESD22-A108	Ta=125°C, 500V	1000 hrs	0/240
HTSL	JESD22-A103	Ta= 150°C	1000 hrs	0/135
RSH	JESD22-106	265°C 10 sec dwell	10 sec	0/30

QV DEVICE NAME: NCP1014AP065GPACKAGE: PDIP7 (Less Pin 6)

Test	Specification	Condition	Interval	Results
TC	JESD22-A104	Ta= -65°C to +150°C	500 cyc	0/240
Autoclave	JESD22-A102	121°C, 100% RH, 15psig, unbiased	96 hrs	0/240
PTC	JESD22-A105	Ta= -40°C to +150°C	1000 cyc	0/45
RSH	JESD22-106	265°C 10 sec dwell	10 sec	0/30

Electrical Characteristic Summary:

There is no electrical characterization difference in products assembled with copper wire. Electrical data is available on request.



List 1 of affected Standard Parts:

Products currently containing 1.3mil Au wire changing to 1.0mil PdCu wire:

Part Number	Qualification Vehicle
NCP1010AP065G	NCP1014AP065G
NCP1010AP100G	NCP1014AP065G
NCP1010AP130G	NCP1014AP065G
NCP1011AP065G	NCP1014AP065G
NCP1011AP100G	NCP1014AP065G
NCP1011AP130G	NCP1014AP065G
NCP1012AP065G	NCP1014AP065G
NCP1012AP100G	NCP1014AP065G
NCP1012AP133G	NCP1014AP065G
NCP1013AP065G	NCP1014AP065G
NCP1013AP100G	NCP1014AP065G
NCP1013AP133G	NCP1014AP065G
NCP1014AP065G	NCP1014AP065G
NCP1014AP100G	NCP1014AP065G
NCP1015AP065G	NCP1014AP065G
NCP1015AP100G	NCP1014AP065G



List 2 of affected Standard Parts:
Products currently containing 1.0mil Au wire changing to 1.0mil PdCu wire:

Part Number	Qualification Vehicle
NCP1060AP060G	NCP1076P065G
NCP1060AP100G	NCP1076P065G
NCP1063AP060G	NCP1076P065G
NCP1063AP100G	NCP1076P065G
NCP1070P065G	NCP1076P065G
NCP1070P100G	NCP1076P065G
NCP1070P130G	NCP1076P065G
NCP1071P065G	NCP1076P065G
NCP1071P100G	NCP1076P065G
NCP1071P130G	NCP1076P065G
NCP1072P065G	NCP1076P065G
NCP1072P100BG	NCP1076P065G
NCP1072P100G	NCP1076P065G
NCP1072P130G	NCP1076P065G
NCP1075P065G	NCP1076P065G
NCP1075P100G	NCP1076P065G
NCP1075P130G	NCP1076P065G
NCP1076P065G	NCP1076P065G
NCP1076P100G	NCP1076P065G
NCP1076P130G	NCP1076P065G
NCP1077P065G	NCP1076P065G
NCP1077P100G	NCP1076P065G
NCP1077P130G	NCP1076P065G
NCP1271P100G	NCP1076P065G
NCP1271P65G	NCP1076P065G
NCP1027P065G	NCP1027P065G
NCP1027P100G	NCP1027P065G
NCP1028P065G	NCP1027P065G
NCP1028P100G	NCP1027P065G
NCP1216AP100G	NCP1027P065G
NCP1216AP133G	NCP1027P065G
NCP1216AP65G	NCP1027P065G


List 2 of affected Standard Parts (continued):
Products currently containing 1.0mil Au wire changing to 1.0mil PdCu wire:

Part Number	Qualification Vehicle
NCP1216P100G	NCP1027P065G
NCP1216P133G	NCP1027P065G
NCP1216P65G	NCP1027P065G
NCP1217AP100G	NCP1027P065G
NCP1217AP133G	NCP1027P065G
NCP1217AP65G	NCP1027P065G
NCP1217P100G	NCP1027P065G
NCP1217P133G	NCP1027P065G
NCP1217P65G	NCP1027P065G
NCP1230P100G	NCP1027P065G
NCP1230P133G	NCP1027P065G
NCP1230P65G	NCP1027P065G
NCP1337PG	NCP1027P065G
NCP1377BPG	NCP1027P065G
NCP1377PG	NCP1027P065G