



<b>Title of Change:</b>	Hydrazine elimination in ON Semiconductor Niigata Co., Ltd. (OSNC) and change of lead frame raw metal.																
<b>Proposed first ship date:</b>	22 November 2018																
<b>Contact information:</b>	Contact your local ON Semiconductor Sales Office or <Tetsuya.Fukushima@onsemi.com>																
<b>Samples:</b>	Samples should be available after completion of qualification. Contact your local ON Semiconductor Sales Office.																
<b>Type of notification:</b>	<p>This is an Initial Product/Process Change Notification (IPCN) sent to customers. IPCNs are issued at least 30 days prior to the issuance of the Final Change Notice (FPCN). An IPCN is an advance notification about an upcoming change and contains general information regarding the change details and devices affected. It also contains the preliminary reliability qualification plan.</p> <p>The completed qualification and characterization data will be included in the Final Product/Process Change Notification (FPCN). This IPCN notification will be followed by a Final Product/Process Change Notification (FPCN) at least 90 days prior to implementation of the change. In case of questions, contact &lt;PCN.Support@onsemi.com&gt;.</p>																
<b>Change Part Identification:</b>	Date Code																
<b>Change category:</b>	<input checked="" type="checkbox"/> Wafer Fab Change <input checked="" type="checkbox"/> Assembly Change <input type="checkbox"/> Test Change <input type="checkbox"/> Other _____																
<b>Change Sub-Category(s):</b>	<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: _____																
<b>Sites Affected:</b>	ON Semiconductor Sites: ON Tarlac City, Philippines ON Niigata, Japan	External Foundry/Subcon Sites: None															
<b>Description and Purpose:</b>																	
<p>This announces the elimination of Hydrazine in ON Semiconductor Niigata Co., Ltd. for parts listed in this PCN.</p> <p>Hydrazine was identified as a prohibited chemical in ON Semiconductor as it is considered as a carcinogenic substance and has high risk of fire and explosion.</p> <p>In addition to change the lead frame raw material from C50710 to C19400.</p>																	
	<table border="1"> <thead> <tr> <th>Change Point</th> <th>Before Change Description</th> <th>After Change Description</th> </tr> </thead> <tbody> <tr> <td>Fab (OSNC)</td> <td>N1 Fab (Minimum rule=0.8um, Class=100)</td> <td>N1 Fab (Minimum rule=0.8um, Class=100) AND N2 Fab (Minimum rule=0.25um, Class=10)</td> </tr> <tr> <td>Wire material</td> <td>Aluminum (without Anti-reflected Layer)</td> <td>Aluminum (with Anti-reflected Layer)</td> </tr> <tr> <td>Interlayer material</td> <td>Silicon nitride and Polyimide or Polyimide</td> <td>Silicon nitride and Silicon oxide or Oxide</td> </tr> <tr> <td>Lead frame</td> <td>Raw material of C50710</td> <td>Raw material of C19400</td> </tr> </tbody> </table>		Change Point	Before Change Description	After Change Description	Fab (OSNC)	N1 Fab (Minimum rule=0.8um, Class=100)	N1 Fab (Minimum rule=0.8um, Class=100) AND N2 Fab (Minimum rule=0.25um, Class=10)	Wire material	Aluminum (without Anti-reflected Layer)	Aluminum (with Anti-reflected Layer)	Interlayer material	Silicon nitride and Polyimide or Polyimide	Silicon nitride and Silicon oxide or Oxide	Lead frame	Raw material of C50710	Raw material of C19400
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**Qualification Plan:**

QV DEVICE NAME LB11870-TRM-E

PACKAGE HSSOP48 (375 mil)

Test	Specification	Condition	Interval
HTOL	JESD22-A108	Tj=150°C, 100 % max rated Vcc	1008 hrs
HTSL	JESD22-A103	Ta= 150°C	1008 hrs
TC	JESD22-A104	Ta= -65°C to +150°C	500 cyc
THB	JESD22-A101	85°C, 85% RH, bias	1008 hrs
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig,	96 hrs
PC	J-STD-020 JESD-A113	MSL 3 @ 260 °C	-
HBM	JS001	100pF,1.5kohm	-
CDM	JS002		-

**List of Affected Standard Parts:**

Part Number	Qualification Vehicle
LB11696V-W-AH	LB11870-TRM-E
LB11867FV-W-AH	LB11870-TRM-E
LB11867RV-W-AH	LB11870-TRM-E
LB8503V-W-AH	LB11870-TRM-E



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## Appendix A: Changed Products

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Product	Customer Part Number	Qualification Vehicle
LB8503V-W-AH		LB11870-TRM-E