



<b>Title of Change:</b>	Reliability data Update to FPCN20386XB - Qualification of ON Semiconductor Vietnam (OSV) for the Assembly and Test of the listed SCR products in DPAK package.																																																																						
<b>Proposed first ship date:</b>	23 May 2016 or earlier upon customers approval																																																																						
<b>Contact information:</b>	Contact your local ON Semiconductor Sales Office or <Gk.Sua@onsemi.com>																																																																						
<b>Samples:</b>	Contact your local ON Semiconductor Sales Office or <Dong.Ta@onsemi.com>																																																																						
<b>Additional Reliability Data:</b>	Contact your local ON Semiconductor Sales Office or <Cheanching.Sim@onsemi.com>																																																																						
<b>Type of notification:</b>	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>.																																																																						
<b>Change category:</b>	<input type="checkbox"/> Wafer Fab Change <input checked="" type="checkbox"/> Assembly Change <input checked="" type="checkbox"/> Test Change <input type="checkbox"/> Other _____																																																																						
<b>Change Sub-Category(s):</b>	<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: _____																																																																						
<b>Sites Affected:</b>	<input type="checkbox"/> All site(s) <input type="checkbox"/> not applicable <input checked="" type="checkbox"/> ON Semiconductor site(s) : <input type="checkbox"/> External Foundry/Subcon site(s) ON Dong Nai Province, Vietnam ON Seremban, Malaysia																																																																						
<b>Description and Purpose:</b>	<p>This Update Notification is issued to customers to provide updated modification Reliability data of HTRB and HTFB test from the qualification vehicle of MCR12DSNT4G.</p> <p>FPCN 20386XB was issued on 15th Feb, 2016 to include additional SCR devices.</p> <p>This FPCN announces the planned capacity expansion of ON Semiconductor’s assembly and test operations of DPAK discrete packaged products, currently built at ON Semiconductor Seremban, Malaysia facility to ON Semiconductor Vietnam (OSV).</p> <p>Upon the expiration of this FPCN, SCR devices may be processed at either location. These products have been qualified to commodity/commercial requirements. These products will continue being Pb-free, Halide free and RoHS compliant.</p>																																																																						
<b>Reliability Data Summary:</b>	<p><b>QV DEVICE NAME:</b> MCR12DSNT4G  <b>PACKAGE:</b> DPAK</p> <table border="1"> <thead> <tr> <th>Test</th> <th>Specification</th> <th>Condition</th> <th>Interval</th> <th>Sample size</th> <th>Results</th> </tr> </thead> <tbody> <tr> <td>HTRB</td> <td>JESD22-A108</td> <td>Ta= 100°C, Tj(est) =110C, 80% max rated V</td> <td>1008 hrs</td> <td>84 pcs/3 lots</td> <td>0/252</td> </tr> <tr> <td>HTFB</td> <td>JESD22-A108</td> <td>Ta= 100°C, Tj(est) =110C, 80% max rated V</td> <td>1008 hrs</td> <td>84 pcs/3 lots</td> <td>0/252</td> </tr> <tr> <td>HTSL</td> <td>JESD22-A103</td> <td>Ta= 150°C</td> <td>1008 hrs</td> <td>84 pcs/3 lots</td> <td>0/252</td> </tr> <tr> <td>IOL</td> <td>MIL-STD-750 (M1037) AEC-Q101</td> <td>Ta= +25°C, delta Tj= 100°C On/off = 2min</td> <td>15000 cyc</td> <td>84 pcs/3 lots</td> <td>0/252</td> </tr> <tr> <td>TC</td> <td>JESD22-A104</td> <td>Ta= -65°C to +150°C</td> <td>1000 cyc</td> <td>84 pcs/3 lots</td> <td>0/252</td> </tr> <tr> <td>H3TRB</td> <td>JESD22-A101</td> <td>85°C, 85% RH, 18.8psig, bias</td> <td>1008 hrs</td> <td>84 pcs/3 lots</td> <td>0/252</td> </tr> <tr> <td>AC</td> <td>JESD22-A102</td> <td>121°C, 100% RH, 15psig, unbiased</td> <td>96 hrs</td> <td>84 pcs/3 lots</td> <td>0/252</td> </tr> <tr> <td>PC</td> <td>J-STD-020 JESD-A113</td> <td>MSL 1 @ 260°C</td> <td></td> <td>336 pcs/3 lots</td> <td>0/1008</td> </tr> <tr> <td>RSH</td> <td>JESD22- B106</td> <td>Ta= 265°C, 10 sec</td> <td></td> <td>30 pcs/3 lots</td> <td>0/90</td> </tr> <tr> <td>SD</td> <td>JSTD002</td> <td>Ta= 245°C, 10 sec</td> <td></td> <td>15 pcs/3 lots</td> <td>0/45</td> </tr> </tbody> </table>					Test	Specification	Condition	Interval	Sample size	Results	HTRB	JESD22-A108	Ta= 100°C, Tj(est) =110C, 80% max rated V	1008 hrs	84 pcs/3 lots	0/252	HTFB	JESD22-A108	Ta= 100°C, Tj(est) =110C, 80% max rated V	1008 hrs	84 pcs/3 lots	0/252	HTSL	JESD22-A103	Ta= 150°C	1008 hrs	84 pcs/3 lots	0/252	IOL	MIL-STD-750 (M1037) AEC-Q101	Ta= +25°C, delta Tj= 100°C On/off = 2min	15000 cyc	84 pcs/3 lots	0/252	TC	JESD22-A104	Ta= -65°C to +150°C	1000 cyc	84 pcs/3 lots	0/252	H3TRB	JESD22-A101	85°C, 85% RH, 18.8psig, bias	1008 hrs	84 pcs/3 lots	0/252	AC	JESD22-A102	121°C, 100% RH, 15psig, unbiased	96 hrs	84 pcs/3 lots	0/252	PC	J-STD-020 JESD-A113	MSL 1 @ 260°C		336 pcs/3 lots	0/1008	RSH	JESD22- B106	Ta= 265°C, 10 sec		30 pcs/3 lots	0/90	SD	JSTD002	Ta= 245°C, 10 sec		15 pcs/3 lots	0/45
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**Electrical Characteristic Summary:**  
 Electrical characteristics are not impacted.

**List of Affected Standard Parts:**

Part Number	Qualification Vehicle
MCR12DCMT4G	MCR12DSNT4G
MCR8DCNT4G	MCR12DSNT4G
MCR8DSNT4G	MCR12DSNT4G