



<b>Title of Change:</b>	Addition of ASMC (Advanced Semiconductor Manufacturing Corp. LTD) Shanghai, China as qualified wafer foundry facilities for ON Semiconductor of NSPU5221MUTBG product.	
<b>Proposed First Ship date:</b>	31 January 2020	
<b>Contact Information:</b>	Contact your local ON Semiconductor Sales Office or < <a href="mailto:Norhayati.othman@onsemi.com">Norhayati.othman@onsemi.com</a> >	
<b>Samples:</b>	Contact your local ON Semiconductor Sales Office or < <a href="mailto:Norhayati.othman@onsemi.com">Norhayati.othman@onsemi.com</a> >	
<b>Type of Notification:</b>	<p>This is an Initial Product/Process Change Notification (IPCN) sent to customers. 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;<a href="mailto:PCN.Support@onsemi.com">PCN.Support@onsemi.com</a>&gt;</p>	
<b>Change Part Identification:</b>	N/A	
<b>Change Category:</b>	<input checked="" type="checkbox"/> Wafer Fab Change <input type="checkbox"/> Assembly Change <input type="checkbox"/> Test Change <input type="checkbox"/> Other _____	
<b>Change Sub-Category(s):</b>	<input checked="" type="checkbox"/> Manufacturing Site Addition <input type="checkbox"/> Material Change <input type="checkbox"/> Datasheet/Product Doc change <input type="checkbox"/> Manufacturing Site Transfer <input type="checkbox"/> Product specific change <input type="checkbox"/> Shipping/Packaging/Marking <input type="checkbox"/> Manufacturing Process Change <input type="checkbox"/> Other: _____	
<b>Sites Affected:</b>	ON Semiconductor Sites: None	External Foundry/Subcon Sites: ADVANCED SEMICONDUCTOR MANUFACTURING CORP LTD
<b>Description and Purpose:</b>		
<p>ON Semiconductor is notifying customers of the qualification of ASMC (Advanced Semiconductor Manufacturing Corporation Limited in Shanghai, China) as second source foundry facilities to the current ON Semiconductor ISMF fabrication facility in Seremban, Malaysia for NSPU5221MUTBG.</p> <p>The ASMC and ISMF fabrication facilities have standardized wafer process flows that are compatible in order to meet ON Semiconductor quality requirements.</p> <p>Qualification tests are designed to show that the reliability of the transferred devices will continue to meet or exceed ON Semiconductor standards.</p>		



**Qualification Plan:**

**QV Device Name:** NSPU5221MUTBG

**RMS:** 59373 (SBN), 59378 (TARLAC)

**Package:** UDFN6

Test	Specification	Condition	Interval
HTRB	JESD22-A108	Ta = 150°C, bias= 100% of rated VRWM (Not to exceed max rated)	1008 hrs
HTSL	JESD22-A103	Ta =Max rate storage temp for device	1008 hrs
PC	J STD 020 , JESD22-A113	IR reflow at 245C or 260C (pkg dependant)	
HAST+PC	JESD22-A110	Temp = 130C, 85% RH, ~ 18.8 psig, bias = 100% of rated VRWM or 100V max	192 hrs
TC+PC	JESD22-A104	Temp = -65°C to +150°C	1000 cyc
UHAST+ PC	JESD22-A118	Temp = 130C, RH=85%, ~ 18.8 psig	96 hrs
IOL+PC	MIL STD750, M 1037 AEC Q101	Ta=+25°C, deltaTj=100°C max, 2 min Ton =Toff is pkg dependent	15000 cyc
RSH	JESD22-B106	Ta=265C 10 sec dwell B106	
SAT	12MSB17722C SAT	12MSB17722C SAT	

**List of Affected Part:**

**Note:** Only the standard (off the shelf) part numbers are listed in the parts list. Any custom parts affected by this PCN are shown in the customer specific PCN addendum in the PCN email notification, or on the [PCN Customized Portal](#).

Part Number	Qualification Vehicle
NSPU5221MUTBG	NSPU5221MUTBG



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## Appendix A: Changed Products

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Product	Customer Part Number	Qualification Vehicle
NSPU5221MUTBG		NSPU5221MUTBG