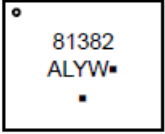




<b>Title of Change:</b>	Addition of Assembly and Post Wafer Fab sites for NCP81382MNTXG and NCP81382HMNTXG.
<b>Proposed first ship date:</b>	29 May 2017
<b>Contact information:</b>	Contact your local ON Semiconductor Sales Office or <Mel.Trinidad@onsemi.com>
<b>Samples:</b>	Contact your local ON Semiconductor Sales Office
<b>Additional Reliability Data:</b>	Contact your local ON Semiconductor Sales Office or <Nicky.siu@onsemi.com>.
<b>Type of notification:</b>	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>.
<b>Change Part Identification:</b>	The Assembly Location will be identified by the first character of the Trace Code information. Units assembled in UTAC will have the character "G" as the Assembly Location.  
<b>Change category:</b>	<input type="checkbox"/> Wafer Fab Change <input checked="" type="checkbox"/> Assembly Change <input type="checkbox"/> Test Change <input checked="" type="checkbox"/> Other <u>Post Wafer Fab</u>
<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 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>	<input type="checkbox"/> All site(s) <input type="checkbox"/> not applicable <input checked="" type="checkbox"/> ON Semiconductor site(s) : ON Gresham, Oregon ON Seremban, Malaysia _____ <input checked="" type="checkbox"/> External Foundry/Subcon site(s) UTAC Thai Limited _____
<b>Description and Purpose:</b>	<p>This FPCN is to notify customers of two changes to the production flow for NCP81382MNTXG and NCP81382HMNTXG.</p> <p>The first change involves the addition of United Test and Assembly Center (UTAC) Thai Ltd as a qualified assembly site for the two affected devices. There is no impact to the products' form, fit or function except the assembly bill of material is different for that vendor. Performance and quality of the product passed all the testing needed to qualify this site.</p> <p>The second change involves the qualification and release of an alternate Post wafer fab processing site for the two affected devices, particularly the HS FET Die. ON Semiconductor has successfully qualified Gresham, located in Oregon USA for STM processing, ON Semiconductor SBN for Unit Probe and Backgrind/backmetal processing.</p> <p>All material processed through this flow were verified to pass all requirements and were confirmed to have no impact on form, fit or function.</p> <p>The addition of these two sites will strengthen our ability to support our customers' demands.</p>

**Reliability Data Summary:****United Test and Assembly Center (UTAC) Assembly Site Qualification**

Test	Specification	Condition	Interval	Results
<b>Device/Package Qual</b>				
HTOL	JESD22-A108	Ta=125°C	504 hrs	0/80
HTSL	JESD22-A103	Ta=150°C	504 hrs	0/240
PC	J-STD-020, JESD-A113	MSL 3 @ 260 °C	-	-
PC+TC	JESD22-A104	Ta= -55°C to +150°C	500 cyc	0/240
PC+HAST	JESD22-A110	Ta= +130°C, RH = 85%, PSIG= 18.8, bias	96 hrs	0/240
PC+uHAST	JESD22-A118	Ta= +130°C, RH = 85%, PSIG= 18.8, No bias	96 hrs	0/240
RSH	JESD22- B106	Ta = 260°C Immersion, 10s	Post RSH	0/90
SD	J-STD-002	Ta= 245°C, 10	Post SD	0/45
<b>HS FET</b>				
HTRB	JESD22-A108	Ta=150°C, 80% max rated V	504 hrs	0/240
HTGB	JESD22-A108	Ta=150°C, 100% max rated Vgss	504 hrs	0/240
HTSL	JESD22-A103	Ta=150°C	504 hrs	0/240
PC	J-STD-020 JESD-A113	MSL 3 @ 260 °C	-	-
PC+IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 mins	7500 cyc	0/240
PC+TC	JESD22-A104	Ta= -55°C to +150°C	500 cyc	0/240
PC+HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/240
PC+uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/240
<b>LS FET</b>				
HTRB	JESD22-A108	Ta=150°C, 80% max rated V	504 hrs	0/240
HTGB	JESD22-A108	Ta=150°C, 100% max rated Vgss	504 hrs	0/240
HTSL	JESD22-A103	Ta=150°C	504 hrs	0/240
PC	J-STD-020 JESD-A113	MSL 3 @ 260 °C	-	-
PC+IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 mins	7500 cyc	0/240
PC+TC	JESD22-A104	Ta= -55°C to +150°C	500 cyc	0/240
PC+H3TRB	JESD22 A101	Ta= 85C, RH=85%, bias = 80% max rated V	1008 hrs	0/240
PC+uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/240



**Gresham STM and ISMF Backgrid/Backmetal Process Qualification - HS FET**

Test	Specification	Condition	Interval	Results
HS FET				
PC	J-STD-020 JESD-A113	MSL 3 @ 260 °C	-	-
PC+IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 mins	7500 cyc	0/240
PC+TC	JESD22-A104	Ta= -55°C to +150°C	500 cyc	0/240
PC+HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/240
RSH	JESD22- B106	Ta = 260°C Immersion, 10s	Post RSH	0/90

**Electrical Characteristic Summary:**

Electrical characteristics are not impacted.

**List of Affected Standard Parts:**

Part Number	Qualification Vehicle
NCP81382MNTXG	NCP81382MNTXG
NCP81382HMNTXG	