



Title of Change:	Qualification of UTAC Thai Limited site 3 (TH6) factory as additional production site for DFN 2x2 and QFN 4x3, 4x4 (non-medical, non-automotive, PPF Leadframe material) package.	
Proposed first ship date:	27 December 2019 or earlier upon customer approval.	
Contact information:	Contact your local ON Semiconductor Sales Office or <nopanan.suwanpanang@onsemi.com>	
Samples:	Contact your local ON Semiconductor Sales Office or <PCN.samples@onsemi.com> Sample requests are to be submitted no later than 30 days from the date of first notification, Initial PCN or Final PCN, for this change. Samples delivery timing will be subject to request date, sample quantity and special customer packing/label requirements.	
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or <shiela.crosby@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:	Date code will identify for unit build at UTL3 (TH6)	
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 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: _____	
Sites Affected:	ON Semiconductor Sites: None	External Foundry/Subcon Sites: UTAC Thai limited.
Description and Purpose:		
<p>The Final Notification announces to customers the plan to have UTAC Thai Limited site 3 (UTL3) (TH6) factory as additional production site for DFN 2x2 and QFN 4x3, 4x4 (non-medical, non-automotive, PPF Leadframe material) package.</p> <p>The UTAC Thai Limited site 3 (UTL3) (TH6) is certified with ISO/TS 16949:2009 and is currently running production for DFN & QFN packages.</p> <p>These products will continue being Pb-free, Halide free and RoHS compliant. Qualification tests are designed to show that the reliability of the qualified devices will continue to meet or exceed ON Semiconductor standards.</p> <p>Additional Assembly in sourcing for DFN 2x2 and QFN 4x3, 4x4.</p>		
	Before Change Description	After Change Description
Assembly site	UTAC Thai Limited site 1 (UTL1) (TH3)	UTAC Thai Limited site 1 (UTL1) (TH3) UTAC Thai Limited site 3 (UTL3) (TH6)
<p>There are no product material changes as a result of this change.</p> <p>There is no product marking change as a result of this change.</p>		



Reliability Data Summary:

QV DEVICE NAME: NCP81166MNTBGRMS : S44162, S50249PACKAGE : DFN 2x2, 8L

Test	Specification	Condition	Interval	Results
HTOL	JESD22-A108	Ta=125°C, 100 % max rated Vcc	1008 hrs	0/231
HTSL	JESD22-A103	Ta=150°C	1008 hrs	0/231
TC	JESD22-A104	Ta= -65°C to +150°C	500 cyc	0/231
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/231
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/693
RSH	JESD22- B106	Ta = 265C, 10 sec		0/30
SD	JSTD002	Ta = 245C, 10 sec		0/45
PD	JESD22 B100, B108			0/30
WBS	AEC-Q100-001			0/90
WBP	Mil-Std-883 Meth 2011			0/90

QV DEVICE NAME: NB3V60113GV2MTR2GRMS : S52001PACKAGE : WDFN

Test	Specification	Condition	Interval	Results
HTSL	JESD22-A103	Ta= 150°C	1008 hrs	0/231
TC	JESD22-A104	Ta= -65°C to +150°C	500 cyc	0/231
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C		0/462
RSH	JESD22- B106	Ta = 265C, 10 sec		0/30
SD	JSTD002	Ta = 245C, 10 sec		0/45
PD	JESD22 B100, B108			0/30
WBS	AEC-Q100-001			0/90
WBP	Mil-Std-883 Meth 2011			0/90

Electrical Characteristic Summary:

Data are available upon request.

List of Affected Parts:

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
NCP81166MNTBG	NCP81166MNTBG
NCP81166HMNTBG	NCP81166MNTBG



NB3V60113GV2MTR2G	NB3V60113GV2MTR2G
NB3V60113GV3MTR2G	NB3V60113GV2MTR2G
NLAS4717EPMTR2G	NB3V60113GV2MTR2G
NLAS5123MNR2G	NB3V60113GV2MTR2G
NLAS5223BLMNR2G	NB3V60113GV2MTR2G
NLAS5223BMNR2G	NB3V60113GV2MTR2G
NLAS7222AMTR2G	NB3V60113GV2MTR2G
NLASB3157MTR2G	NB3V60113GV2MTR2G
NS5A4684SMNTAG	NB3V60113GV2MTR2G
NS5A4684SMNTBG	NB3V60113GV2MTR2G
NB3H60113G00MTR2G	NB3V60113GV2MTR2G
NB3H60113GH1MTR2G	NB3V60113GV2MTR2G
NB3V1102CMTTBG	NB3V60113GV2MTR2G
NB3V1104CMTTBG	NB3V60113GV2MTR2G
NB3V60113G00MTR2G	NB3V60113GV2MTR2G

Japanese translation of the notification starts here.
通知の日本語訳はここから始まります。

Note: The Japanese version is for reference only. In case of any differences between the English and Japanese version, the English version shall control.

注：日本語版は参照用です。英語版と日本語版の違いがある場合は、英語版が優先されます。



信頼性データの要約:

デバイス名: NCP81166MNTBGRMS : S44162, S50249パッケージ : DFN 2x2, 8L

テスト	仕様	条件	間隔	結果
HTOL	JESD22-A108	Ta=125°C, 100 % max rated Vcc	1008 hrs	0/231
HTSL	JESD22-A103	Ta=150°C	1008 hrs	0/231
TC	JESD22-A104	Ta= -65°C to +150°C	500 cyc	0/231
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/231
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/693
RSH	JESD22- B106	Ta = 265C, 10 sec		0/30
SD	JSTD002	Ta = 245C, 10 sec		0/45
PD	JESD22 B100, B108			0/30
WBS	AEC-Q100-001			0/90
WBP	Mil-Std-883 Meth 2011			0/90

デバイス名: NB3V60113GV2MTR2GRMS : S52001パッケージ : WDFN

テスト	仕様	条件	間隔	結果
HTSL	JESD22-A103	Ta= 150°C	1008 hrs	0/231
TC	JESD22-A104	Ta= -65°C to +150°C	500 cyc	0/231
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C		0/462
RSH	JESD22- B106	Ta = 265C, 10 sec		0/30
SD	JSTD002	Ta = 245C, 10 sec		0/45
PD	JESD22 B100, B108			0/30
WBS	AEC-Q100-001			0/90
WBP	Mil-Std-883 Meth 2011			0/90

電気的特性の要約: データはご要望に応じてご提出いたします。

影響を受ける部品の一覧:

注: 部品一覧には標準部品番号 (既製品) のみが記載されています。本 PCN の影響を受けるカスタム部品番号は、PCN メールで提供される顧客個別の付録、または PCN カスタマイズポータルに記載されています。

部品番号	認定試験用ピークル
NCP81166MNTBG	NCP81166MNTBG
NCP81166HMNTBG	NCP81166MNTBG
NB3V60113GV2MTR2G	NB3V60113GV2MTR2G
NB3V60113GV3MTR2G	NB3V60113GV2MTR2G



最終製品 / プロセス変更通知

文書番号# : FPCN22750X

発行日 : 20 September 2019

NLAS4717EPMTR2G	NB3V60113GV2MTR2G
NLAS5123MNR2G	NB3V60113GV2MTR2G
NLAS5223BLMNR2G	NB3V60113GV2MTR2G
NLAS5223BMNR2G	NB3V60113GV2MTR2G
NLAS7222AMTR2G	NB3V60113GV2MTR2G
NLASB3157MTR2G	NB3V60113GV2MTR2G
NS5A4684SMNTAG	NB3V60113GV2MTR2G
NS5A4684SMNTBG	NB3V60113GV2MTR2G
NB3H60113G00MTR2G	NB3V60113GV2MTR2G
NB3H60113GH1MTR2G	NB3V60113GV2MTR2G
NB3V1102CMTTBG	NB3V60113GV2MTR2G
NB3V1104CMTTBG	NB3V60113GV2MTR2G
NB3V60113G00MTR2G	NB3V60113GV2MTR2G

Appendix A: Changed Products

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Product	Customer Part Number	Qualification Vehicle
NB3H60113G00MTR2G		NB3V60113GV2MTR2G
NB3V1102CMTTBG		NB3V60113GV2MTR2G
NB3V1104CMTTBG		NB3V60113GV2MTR2G
NB3V60113G00MTR2G		NB3V60113GV2MTR2G
NB3V60113GV2MTR2G		NB3V60113GV2MTR2G
NCP81166MNTBG		NCP81166MNTBG
NLAS4717EPMTR2G		NB3V60113GV2MTR2G
NLAS5123MNR2G		NB3V60113GV2MTR2G
NLAS5223BLMNR2G		NB3V60113GV2MTR2G
NLAS5223BMNR2G		NB3V60113GV2MTR2G
NLAS7222AMTR2G		NB3V60113GV2MTR2G
NLASB3157MTR2G		NB3V60113GV2MTR2G
NS5A4684SMNTAG		NB3V60113GV2MTR2G
NS5A4684SMNTBG		NB3V60113GV2MTR2G