

PCN Number:	20131220002		PCN Date:	12/27/2013										
Title:	Qualification of UTAC as Alternate Assembly/Test site for select QFN Devices													
Customer Contact:	PCN Manager	Phone:	+1(214)480-6037	Dept:	Quality Services									
Proposed 1st Ship Date:	03/27/2014		Estimated Sample Availability:	03/15/2014										
Change Type:														
<input checked="" type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Assembly Process	<input checked="" type="checkbox"/>	Assembly Materials									
<input type="checkbox"/>	Design	<input type="checkbox"/>	Electrical Specification	<input type="checkbox"/>	Mechanical Specification									
<input checked="" type="checkbox"/>	Test Site	<input type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process									
<input type="checkbox"/>	Wafer Bump Site	<input type="checkbox"/>	Wafer Bump Material	<input type="checkbox"/>	Wafer Bump Process									
<input type="checkbox"/>	Wafer Fab Site	<input type="checkbox"/>	Wafer Fab Materials	<input type="checkbox"/>	Wafer Fab Process									
	<input type="checkbox"/>	Part number change												
PCN Details														
Description of Change:														
Texas Instruments is pleased to announce the qualification of UTAC as an alternate assembly and test site for the Select QFN devices. Material Difference are noted below:														
<table border="1"> <thead> <tr> <th></th> <th>TIEM</th> <th>UTAC</th> </tr> </thead> <tbody> <tr> <td>Mount Compound</td> <td>8001111</td> <td>PZ0031</td> </tr> <tr> <td>Lead Finish</td> <td>Matte Sn</td> <td>NiPdAu</td> </tr> </tbody> </table>							TIEM	UTAC	Mount Compound	8001111	PZ0031	Lead Finish	Matte Sn	NiPdAu
	TIEM	UTAC												
Mount Compound	8001111	PZ0031												
Lead Finish	Matte Sn	NiPdAu												
Upon expiry of this PCN, TI will combine lead free solutions in a single <u>standard part number</u> , for example; <u>LM25010SD/NOPB</u> – can ship with both Matte Sn and NiPdAu.														
Reason for Change:														
Continuity of Supply														
Anticipated impact on Fit, Form, Function, Quality or Reliability (positive / negative):														
None														

Changes to product identification resulting from this PCN:

Assembly Site		
TI Melaka (TIEM)	Assembly Site Origin (22L)	ASO: CU6
UTAC	Assembly Site Origin (22L)	ASO: NSE

Sample product shipping label (not actual product label)

TEXAS INSTRUMENTS
 MADE IN: Malaysia
 2DC: 20:
 MSL '2 /260C/1 YEAR SEAL DT
 MSL 1 /235C/UNLIM 03/29/04
 OPT:
 ITEM: 39
LBL: 5A (L)T0:1750
G4
 (1P) SN74LS07NSR
 (Q) 2000 (D) 0336
 (31T) LOT: 3959047MLA
 (4W) TKY (1T) 7523483SI2
 (P)
 (2P) REV: (V) 0033317
 (20L) CSO: SHE (21L) CCO:USA
 (22L) ASO: MLA (23L) ACO: MYS

G4 = NiPdAu
 G3= MATTE Sn

Topside Device marking:

Assembly site code for CU6= U

Assembly site code for NSE= J

Product Affected

LM25010SD/NOPB	LM5035BSQ/NOPB	LP2951CSDX/NOPB	LP38691SD-5.0/NOPB
LM25010SDX/NOPB	LM5035CSQ/NOPB	LP2992AILD-1.8/NOPB	LP38691SD-ADJ/NOPB
LM26480SQ-AA/NOPB	LM5035SQ/NOPB	LP2992AILD-3.3/NOPB	LP38691SDX-1.8/NOPB
LM26480SQ-AA/S7002404	LM5101ASD-1/NOPB	LP2992AILD-5.0/NOPB	LP38691SDX-5.0/NOPB
LM26480SQX-AA/NOPB	LM5101ASD/NOPB	LP2992AILDX-3.3/NOPB	LP38691SDX-ADJ/NOPB
LM27402SQ/NOPB	LM5101ASD/S7002858	LP2992AILDX-5.0/NOPB	LP38693SD-1.8/NOPB
LM2941LD/NOPB	LM5101ASDX/NOPB	LP2992ILD-1.8/NOPB	LP38693SD-3.3/NOPB
LM2941LDX/NOPB	LM5101BSD/NOPB	LP2992ILD-3.3/NOPB	LP38693SD-5.0/NOPB
LM3658SD-A/NOPB	LM5101CSD/NOPB	LP2992ILD-5.0/NOPB	LP38693SD-ADJ/NOPB
LM3658SD-B/NOPB	LM5105SD/NOPB	LP2992ILD-1.5/NOPB	LP38693SDX-3.3/NOPB
LM3658SD/NOPB	LM5105SDX/NOPB	LP2992ILD-3.3/NOPB	LP38693SDX-ADJ/NOPB
LM3658SDX-B/NOPB	LM5106SD/NOPB	LP38502ASD-ADJ/NOPB	LP3878SD-1.0/NOPB
LM3658SDX/NOPB	LM5106SDX/NOPB	LP38502ASDX-ADJ/NOPB	LP3878SD-ADJ/J7002766
LM4510SD/NOPB	LM5109ASD/NOPB	LP38502SD-ADJ/NOPB	LP3878SD-ADJ/NOPB
LM4510SDX/NOPB	LM5109ASDX/NOPB	LP38690SD-1.8/NOPB	LP3878SDX-ADJ/NOPB
LM5007SD/NOPB	LM5109BSD/NOPB	LP38690SD-3.3/NOPB	LP3981ILD-3.0/NOPB
LM5007SDX/NOPB	LM5109BSDX/NOPB	LP38690SD-5.0/NOPB	LP3981ILD-3.3/NOPB
LM5008ASD/NOPB	LM5110-1SD/NOPB	LP38690SD-ADJ/J7002355	LP3981ILD-2.7/NOPB
LM5008SD/NOPB	LM5110-2SD/NOPB	LP38690SD-ADJ/NOPB	LP3981ILD-2.83/NOPB
LM5008SDC/NOPB	LM5112SD/NOPB	LP38690SDX-3.3/NOPB	LP3982ILD-3.0/NOPB
LM5008SDCX/NOPB	LM5112SDX/NOPB	LP38690SDX-5.0/NOPB	LP3982ILD-3.3/NOPB
LM5010ASD/NOPB	LP2951ACSD/NOPB	LP38690SDX-ADJ/NOPB	LP3982ILD-ADJ/NOPB
LM5010SD/NOPB	LP2951ACSDX-3.3/NOPB	LP38691SD-1.8/NOPB	LP3982ILD-3.3/NOPB
LM5010SDX/NOPB	LP2951CSD-3.0/NOPB	LP38691SD-2.5/NOPB	LP3982ILD-ADJ/NOPB
LM5035ASQ/NOPB	LP2951CSD/NOPB	LP38691SD-3.3/NOPB	

Qualification Plan				
This qualification has been developed for the validation of this change. The qualification data validates that the proposed change meets the applicable released technical specifications.				
Qual Vehicle#1: LM26480SQ-AA/NOPB (MSL 1-260C)				
Qualification Schedule:	Start:	January 2014	End:	March 2014
Package Construction Details				
Assembly Site:	NSE	Mold Compound:	8095387	
# Pins-Designator, Family:	24-RTW, WQFN	Mount Compound:	8001111	
Lead Finish	NiPdAu	Bond Wire:	1.3mil Au	
Qualification: <input checked="" type="checkbox"/> Plan <input type="checkbox"/> Test Results				
Reliability Test	Conditions	Sample Size/Fail		
		Lot#1	Lot#2	Lot#3
High Temp Operating Life	150C (300 Hrs)	77/0	--	--
**Unbiased HAST	130C/85%RH/33.3 psia (96 hrs)	77/0	--	--
**T/C -65C/150C	-65C/+150C (500 Cyc)	77/0	77/0	77/0
Ball Bond Shear	76 balls, 3 units min	76/0	76/0	76/0
Bond Pad Cratering Check	Per Manufacturing specifications	2/0	2/0	2/0
Bond Pull	76 Wire, 3 units min	76/0	76/0	76/0
Notes ** - Preconditioning sequence: Level 1-260C.				

Qualification Plan				
This qualification has been developed for the validation of this change. The qualification data validates that the proposed change meets the applicable released technical specifications.				
Qual Vehicle: LM27402SQ/NOPB (MSL1-260C)				
Qualification Schedule:	Start:	January 2014	End:	March 2014
Package Construction Details				
Assembly Site:	NSE	Mold Compound:	8095387	
# Pins-Designator, Family:	16-RUM, WQFN	Mount Compound:	8001111	
Lead Finish	NiPdAu	Bond Wire:	1.3mil Au	
Qualification: <input checked="" type="checkbox"/> Plan <input type="checkbox"/> Test Results				
Reliability Test	Conditions	Sample Size/Fail		
		Lot#1	Lot#2	
High Temp Operating Life	150C (300 Hrs)	77/0	--	
**High Temp. Storage Bake	150C (500,1000hrs)	77/0	77/0	
**Biased HAST	130C/85%RH (96 Hrs)	77/0	77/0	
**Unbiased HAST	130C/85%RH/33.3 psia (96 hrs)	77/0	77/0	
**T/C -65C/150C	-65C/+150C (500 Cyc)	77/0	77/0	
Ball Bond Shear	76 balls, 3 units min	76/0	76/0	
Bond Pad Cratering Check	Per Manufacturing specifications	2/0	2/0	
Bond Pull	76 Wire, 3 units min	76/0	76/0	
** - Test requires Moisture Preconditioning (MSL1-260C)				

Qualification Plan

This qualification has been developed for the validation of this change. The qualification data validates that the proposed change meets the applicable released technical specifications.

Qual Vehicle: LM5035BSQ/NOPB (MSL1-260C)

Qualification Schedule:	Start:	January 2014	End:	March 2014
Package Construction Details				
Assembly Site:	NSE	Mold Compound:	8095387	
# Pins-Designator, Family:	24-NHZ, WQFN	Mount Compound:	8001111	
Lead Finish	NiPdAu	Bond Wire:	1.3mil Au	
Qualification: <input checked="" type="checkbox"/> Plan <input type="checkbox"/> Test Results				
Reliability Test	Conditions	Sample Size/Fail		
		Lot#1	Lot#2	
High Temp Operating Life	150C (300 Hrs)	77/0	--	
**High Temp. Storage Bake	150C (500,1000hrs)	77/0	77/0	
**Biased HAST	130C/85%RH (96 Hrs)	77/0	77/0	
**Unbiased HAST	130C/85%RH/33.3 psia (96 hrs)	77/0	77/0	
**T/C -65C/150C	-65C/+150C (500 Cyc)	77/0	77/0	
ESD CDM	+/- 250V, 500V	3/0	3/0	
Ball Bond Shear	76 balls, 3 units min	2/0	2/0	
Bond Pad Cratering Check	Per Manufacturing specifications	2/0	2/0	
Bond Pull	76 Wire, 3 units min	76/0	76/0	
** - Test requires Moisture Preconditioning (MSL1-260C)				

For questions regarding this notice, e-mails can be sent to the regional contacts shown below or your local Field Sales Representative.

Location	E-Mail
USA	PCNAmericasContact@list.ti.com
Europe	PCNEuropeContact@list.ti.com
Asia Pacific	PCNAsiaContact@list.ti.com
Japan	PCNJapanContact@list.ti.com