

PCN Number:	20130909000			PCN Date:	09/27/2013															
Title:	Qualification of selected TSSOP devices in TI Malaysia																			
Customer Contact:	PCN Manager	Phone:	+1(214)480-6037	Dept:	Quality Services															
Proposed 1st Ship Date:	12/27/2013	Estimated Sample Availability:	12/20/2013																	
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 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"/>			<input type="checkbox"/>	Part number change																
PCN Details																				
Description of Change:																				
Qualification of TI Malaysia as an additional assembly/test site for selected devices in the TSSOP family. Material differenced are noted below:																				
	TI Melaka	Amkor	Unisem	TI Malaysia																
Mold Compound	8095181	101374416	47160037	4206193																
Mount Compound	8075531	101374994	47000003	4042500																
Lead Finish	Matte Sn	Matte Sn	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>LM25574MTX/NOPB</u> – can ship with both Matte Sn and NiPdAu/Ag.																				
Example:																				
<ul style="list-style-type: none"> - Customer order for 7500units of LM25574MTX/NOPB with 2500 units SPQ (Standard Pack Quantity per Reel). - TI can satisfy the above order in one of the following ways. <ul style="list-style-type: none"> I. 3 Reels of NiPdAu finish. II. 3 Reels of Matte Sn finish III. 2 Reels of Matte Sn and 1 reel of NiPdAu finish. IV. 2 Reels of NiPdAu and 1 reel of Matte Sn finish. 																				
Reason for Change:																				
Business Continuity																				
Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):																				
None																				
Changes to product identification resulting from this PCN:																				
<table border="1"> <tr> <td colspan="3">Assembly Site</td> </tr> <tr> <td>TI Melaka</td> <td>Assembly Site Origin (22L)</td> <td>ASO: CU6</td> </tr> <tr> <td>Unisem</td> <td>Assembly Site Origin (22L)</td> <td>ASO: UNM</td> </tr> <tr> <td>Amkor</td> <td>Assembly Site Origin (22L)</td> <td>ASO: AKR</td> </tr> <tr> <td>TI Malaysia</td> <td>Assembly Site Origin (22L)</td> <td>ASO: MLA</td> </tr> </table>						Assembly Site			TI Melaka	Assembly Site Origin (22L)	ASO: CU6	Unisem	Assembly Site Origin (22L)	ASO: UNM	Amkor	Assembly Site Origin (22L)	ASO: AKR	TI Malaysia	Assembly Site Origin (22L)	ASO: MLA
Assembly Site																				
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Amkor	Assembly Site Origin (22L)	ASO: AKR																		
TI Malaysia	Assembly Site Origin (22L)	ASO: MLA																		

Sample product shipping label (not actual product label)

TEXAS INSTRUMENTS
 MADE IN: Malaysia
 2DC: 2Q:
 MSL 2 /260C/1 YEAR SEAL DT
 MSL 1 /235C/UNLIM 03/29/04
 OPT:
 ITEM: 39
LBL: 5A (L)T0:1750
 (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 TI Melaka = U
 Assembly site code for Unisem = H
 Assembly site code for Amkor = 4 or Z
 Assembly site code for TI Malaysia = K

Product Affected:

LM25574MTX/NOPB	LM3447MTX/NOPB	LM5025MTCX/NOPB	LMH6683MTX/NOPB
LM2727MTCX/NOPB	LM3450AMTX/NOPB	LM5026MTX/NOPB	LMV324MTX/NOPB
LM2737MTCX/NOPB	LM3450MTX/NOPB	LM5071MTX-50/NOPB	LMV344MTX/NOPB
LM2742MTCX/NOPB	LM5025AMTCX/NOPB	LM5071MTX-80/NOPB	LMV774MTX/NOPB
LM2743MTCX/NOPB	LM5025BMTCX/NOPB	LM5574MTX/NOPB	LMV824MTX/NOPB
LM2745MTCX/NOPB	LM5025CMTCE/NOPB	LME49743MTX/NOPB	LMV934MTX/NOPB
LM2747MTCX/NOPB	LM5025CMTCX/NOPB	LMH6644MTX/NOPB	

Qualification Plan

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

Qualification Schedule: Start: September 2013 End: December 2013

Qualification Device: LM3447MTX/NOPB (MSL 1-260C)

Package Construction Details

Assembly Site:	TI Malaysia A/T	Mold Compound:	4206193
# Pins-Designator, Family:	14-PW, TSSOP	Mount Compound:	4208458
Lead Finish:	NiPdAu	Bond Wire:	1.0 Mil Dia., Au

Qualification: Plan Test Results

Reliability Test	Conditions	Sample Size / Fail
Electrical Characterization	Datasheet	30/0
**High Temp. Storage Bake	170C (420hrs)	77/0
**Autoclave 121C	121C, 2 atm (96 Hrs)	77/0
**T/C -65C/150C	-65C/+150C (500 Cyc)	77/0

Notes: **Tests require preconditioning sequence: MSL1-260C

Qualification Plan

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

Qualification Schedule: **Start:** September 2013 **End:** December 2013

Qualification Device: LM3450MTX/NOPB (MSL 1-260C)

Package Construction Details

Assembly Site:	TI Malaysia A/T	Mold Compound:	4206193
# Pins-Designator, Family:	16-PW, TSSOP	Mount Compound:	4208458
Lead Finish:	NiPdAu	Bond Wire:	1.3 Mil Dia., Au

Qualification: **Plan** **Test Results**

Reliability Test	Conditions	Sample Size / Fail		
		Lot 1	Lot 2	Lot 3
Electrical Characterization	Datasheet	30/0	--	--
**High Temp. Storage Bake	170C (420 Hrs)	77/0	77/0	77/0
**Autoclave 121C	121C, 2 atm (96 Hrs)	77/0	77/0	77/0
**T/C -65C/150C	-65C/+150C (500 Cyc)	77/0	77/0	77/0

Notes: **Tests require preconditioning sequence: MSL1-260C

Qualification Plan

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

Qualification Schedule: **Start:** September 2013 **End:** December 2013

Qualification Device: LM5026MTX/NOPB (MSL 1-260C)

Package Construction Details

Assembly Site:	TI Malaysia A/T	Mold Compound:	4206193
# Pins-Designator, Family:	16-PW, TSSOP	Mount Compound:	4208458
Lead Finish:	NiPdAu	Bond Wire:	1.0 Mil Dia., Au

Qualification: **Plan** **Test Results**

Reliability Test	Conditions	Sample Size / Fail		
		Lot 1	Lot 2	Lot 3
HTOL	125C (1000 Hrs)	77/0	77/0	77/0
Electrical Characterization	Datasheet	30/0	--	--
**High Temp. Storage Bake	170C (420 Hrs)	77/0	77/0	77/0
**Biased HAST	130C/85%RH (96 Hrs)	77/0	77/0	77/0
**Autoclave 121C	121C, 2 atm (96 Hrs)	77/0	77/0	77/0
**T/C -65C/150C	-65C/+150C (500 Cyc)	77/0	77/0	77/0

Notes: **Tests require preconditioning sequence: MSL1-260C

Qualification Plan

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

Qualification Schedule:	Start:	September 2013	End:	December 2013
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Qualification Device: LMH6644MTX /NOPB (MSL 1-260C)

Package Construction Details

Assembly Site:	TI Malaysia A/T	Mold Compound:	4206193
# Pins-Designator, Family:	14-PW, TSSOP	Mount Compound:	4208458
Lead Finish:	NiPdAu	Bond Wire:	1.0 Mil Dia., Au

Qualification: **Plan** **Test Results**

Reliability Test	Conditions	Sample Size / Fail
Electrical Characterization	Datasheet	30/0

Notes: **Tests require preconditioning sequence: MSL1-260C

Qualification Plan

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

Qualification Schedule:	Start:	September 2013	End:	December 2013
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Qualification Device: LMV934MTX/NOPB (MSL 1-260C)

Package Construction Details

Assembly Site:	TI Malaysia A/T	Mold Compound:	4206193
# Pins-Designator, Family:	14-PW, TSSOP	Mount Compound:	4208458
Lead Finish:	NiPdAu	Bond Wire:	1.0 Mil Dia., Au

Qualification: **Plan** **Test Results**

Reliability Test	Conditions	Sample Size / Fail
Electrical Characterization	Datasheet	30/0

**High Temp. Storage Bake	170C (420hrs)	77/0
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**Autoclave 121C	121C, 2 atm (96 Hrs)	77/0
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**T/C -65C/150C	-65C/+150C (500 Cyc)	77/0
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Notes: **Tests require preconditioning sequence: 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