PCN Number:	20130909000B	**PCN Date:**	06/16/2014

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:	09/16/2011	**Estimated Sample Availability:**	Available upon request

Change Type:

☒	Assembly Site	☐	Assembly Process	☒	Assembly Materials
☐	Design	☐	Electrical Specification	☐	Mechanical Specification
☐	Test Site	☐	Packing/Shipping/Labeling	☐	Test Process
☐	Wafer Bump Site	☐	Wafer Bump Material	☐	Wafer Bump Process
☐	Wafer Fab Site	☐	Wafer Fab Materials	☐	Wafer Fab Process
		☐	Part number change		

PCN Details

Description of Change:

Revision B is to announce the addition of pack variations of the devices that were included on the original PCN notification. These pack variation devices are highlighted and **bolded** in the device list below. The expected first shipment date for these new devices will be 90 days from this notice for these newly added devices only.

Qualification of TI Malaysia as an additional assembly/test site for selected devices in the TSSOP family. Material differenced are noted below:

	TI Melaka	**Unisem**	**TI Malaysia**
Mold Compound	8095181	47160037	**4206193**
Mount Compound	8075531	47000003	**4042500**
Lead Finish	Matte Sn	Matte Sn	**NiPdAu**

Upon expiry of this PCN TI will combine lead free solutions in a single ***standard part number***, for example; ***LM25574MTX/NOPB*** – can ship with both Matte Sn and NiPdAu/Ag.

Example:

- 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.
  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:

Assembly Site		
TI Melaka	Assembly Site Origin (22L)	ASO: CU6
Unisem	Assembly Site Origin (22L)	ASO: UNM
TI Malaysia	Assembly Site Origin (22L)	ASO: MLA

Sample roduct 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)TO: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 TI Melaka = U
Assembly site code for Unisem = H
Assembly site code for TI Malaysia = K

Product Affected:

LM25574MT/NOPB	LM3447MTX/NOPB	LM5026MTX/NOPB	**LMV344MT/NOPB**
LM25574MTX/NOPB	**LM3450AMT/NOPB**	**LM5071MT-50/NOPB**	LMV344MTX/NOPB
LM2727MTC/NOPB	LM3450AMTX/NOPB	**LM5071MT-80/NOPB**	**LMV604MT/NOPB**
LM2727MTCX/NOPB	**LM3450MT/NOPB**	LM5071MTX-50/NOPB	**LMV604MTX/NOPB**
LM2737MTC/NOPB	LM3450MTX/NOPB	LM5071MTX-80/NOPB	**LMV614MT/NOPB**
LM2737MTCX/NOPB	**LM5025AMTC/NOPB**	**LM5574MT/NOPB**	**LMV614MTX/NOPB**
LM2742MTC/NOPB	LM5025AMTCX/NOPB	LM5574MTX/NOPB	**LMV774MT/NOPB**
LM2742MTCX/NOPB	**LM5025AMTCX/S7002719**	**LME49743MT/NOPB**	LMV774MTX/NOPB
LM2743MTC/NOPB	**LM5025BMTC/NOPB**	LME49743MTX/NOPB	**LMV824MT/NOPB**
LM2743MTCX/NOPB	LM5025BMTCX/NOPB	**LMH6644MT/NOPB**	**LMV824MTX/E7000973**
LM2745MTC/NOPB	**LM5025CMTC/NOPB**	LMH6644MTX/NOPB	LMV824MTX/NOPB
LM2745MTCX/NOPB	LM5025CMTCE/NOPB	**LMH6683MT/NOPB**	**LMV824MTX/S7001910**
LM2747MTC/NOPB	LM5025CMTCX/NOPB	LMH6683MTX/NOPB	**LMV934MT/NOPB**
LM2747MTCX/NOPB	**LM5025MTC/NOPB**	**LMV324MT/NOPB**	LMV934MTX/NOPB
LM3447MT/NOPB	LM5025MTCX/NOPB	LMV324MTX/NOPB	**LV16000MTX/NOPB**
LM3447MTE/NOPB	**LM5026MT/NOPB**		

Qualification Data – #1

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 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:	4042500
Lead Finish:	NiPdAu	Bond Wire:	1.0 Mil Dia., Au

Qualification: ☐ **Plan** ☒ **Test Results**

Reliability Test	Conditions	Sample Size / Fail
Electrical Characterization	Datasheet	Pass
**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 Data – #2

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 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:	4042500
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	Pass	--	--
**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 Data – #3

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 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:	4042500
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	Pass	--	--
**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 Data – #4

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 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:	4042500
Lead Finish:	NiPdAu	Bond Wire:	1.0 Mil Dia., Au

Qualification: ☐ Plan ☒ Test Results		
Reliability Test	Conditions	Sample Size / Fail
Electrical Characterization	Datasheet	Pass
Notes: **Tests require preconditioning sequence: MSL1-260C		

Qualification Data – #5

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 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:	4042500
Lead Finish:	NiPdAu	Bond Wire:	1.0 Mil Dia., Au

Qualification: ☐ Plan ☒ Test Results		
Reliability Test	Conditions	Sample Size / Fail
Electrical Characterization	Datasheet	Pass
**T/C -65C/150C	-65C/+150C (500 Cyc)	77/0
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