PCN Number:	2	20130909000						PCN I	Date:	09/27/	2013
Title: Qualifica	tion of	selecte	ed TSS	SOP devic	es in TI	Malaysia	a				
Customer Contac	: <b>t:</b> <u>P</u> (	CN Mana	ager	<b>Phone</b> :	+1(21	4)480-6	5037	Dept	: Qu	ality Ser	vices
Proposed 1 <sup>st</sup> Shij	Date	12	2/27/2	013 E	stimate	d Sam	ple /	Availab	ility:	12/20/	2013
Change Type:											
Assembly Site		Assembly Process					Assembly Materials				
Design				cal Specif		Mechanical Specification					
Test Site									est Process /afer Bump Process		
Wafer Bump S			Wafer Bump Material Wafer Fab Materials								
Wafer Fab Site	5							Wafer	-ab Pr	ocess	
			Partin	umber ch	Detail:	-					
Description of Ch	2000			PCN	Detail	5					
Qualification of TI amily. Material di	fferenc		noted			Unis				Ilaysia	
		809518		101374		4716					
Mold Compound				101374994			47000003				
Mold Compound Mount Compour		807553	31	101374	1994	4700	0003		404	2500	
Mount Compour Lead Finish Jpon expiry of this or example; LM2 Example: – Cust	PCN T	Matte S I will c TX/N	Sn combir <u>OPB</u> - or 750	Matte	Sn ee solutio with bo LM2557	Matt ons in a th Matte	e Sn sing e Sn	jle <u>stan</u> and NiP	NiP <u>dard j</u> dAu/A	e <b>dAu</b> p <u>art nun</u> g.	<u>nber</u> ,
Mount Compour Lead Finish Jpon expiry of this or example; LM2 Example: – Cust (Sta	omer ondard l	Matte S I will c TX/N Pack Q Sfy the 3 R 3 R 2 R	Sn combir OPB or 750 uantit e abov ceels o ceels o ceels o	Matte ne lead fro - can ship Ounits of	Sn ee solutio with bo LM2557 I). n one of finish. n finish n and 1	Matt ons in a th Matte 4MTX/N the follo reel of I	e Sn sing Sn OPB owing NiPd/	le <u>stan</u> and NiP with 25 g ways. Au finish	NiP dard y dAu/A 00 un	e <b>dAu</b> p <u>art nun</u> g.	nber,
Mount Compour Lead Finish Jpon expiry of this or example; LM2 Example: – Cust (Sta – TI c	omer ondard lan sati II. III. IV.	Matte S I will c TX/N Pack Q Sfy the 3 R 3 R 2 R	Sn combir OPB or 750 uantit e abov ceels o ceels o ceels o	Matte ne lead fro can ship Ounits of y per Ree re order ir of NiPdAu of Matte S of Matte S	Sn ee solutio with bo LM2557 I). n one of finish. n finish n and 1	Matt ons in a th Matte 4MTX/N the follo reel of I	e Sn sing Sn OPB owing NiPd/	le <u>stan</u> and NiP with 25 g ways. Au finish	NiP dard y dAu/A 00 un	e <b>dAu</b> p <u>art nun</u> g.	nber,
Mount Compour Lead Finish Jpon expiry of this for example; LM2 Example: - Cust (Sta - TI c Reason for Chang Business Continuit	omer condard l an sati I. II. III. IV. ge:	Matte S I will c TX/N Pack Q Sfy the 3 R 2 R 2 R 2 R	Sn Combir OPB - Or 750 uantit e abov ceels o ceels o ceels o ceels o	Matte ne lead fro - can ship 00units of y per Ree re order ir of NiPdAu of Matte S of Matte S of Matte S	Sn ee solutio with bo LM2557 l). n one of finish. n finish n and 1 and 1 re	Matt ons in a th Matte 4MTX/N the follo reel of I el of Ma	e Sn sing Sn OPB owing NiPd/ atte S	le <u>stan</u> and NiP with 25 g ways. Au finish	NiP dard y dAu/A 00 un	o <mark>dAu</mark> g. its SPQ	
Mount Compour Lead Finish Jpon expiry of this for example; LM22 Example: - Cust (Sta - TI of Business Continuit Anticipated impa	omer condard l an sati I. II. III. IV. ge:	Matte S I will c TX/N Pack Q Sfy the 3 R 2 R 2 R 2 R	Sn Combir OPB - Or 750 uantit e abov ceels o ceels o ceels o ceels o	Matte ne lead fro - can ship 00units of y per Ree re order ir of NiPdAu of Matte S of Matte S of Matte S	Sn ee solutio with bo LM2557 l). n one of finish. n finish n and 1 and 1 re	Matt ons in a th Matte 4MTX/N the follo reel of I el of Ma	e Sn sing Sn OPB owing NiPd/ atte S	le <u>stan</u> and NiP with 25 g ways. Au finish	NiP dard y dAu/A 00 un	o <mark>dAu</mark> g. its SPQ	
Mount Compour Lead Finish Jpon expiry of this for example; LM2 Example: - Cust (Sta - TI c Reason for Chan Business Continuit Anticipated impa	omer condard l an sati I. III. IV. ge:	Matte S I will c TX/N order fc Pack Q Sfy the 3 R 3 R 2 R 2 R 2 R 2 R	Sn combir OPB - or 750 uantit e abov eels o ceels o ceels o ceels o ceels o ceels o ceels o	Matte ne lead fro can ship Ounits of y per Ree re order ir of NiPdAu of Matte S of Matte S of Matte S of Matte S	Sn ee solution with boom LM2557 el). In one of finish. In finish In and 1 and 1 re Quality	Matt ons in a th Matte 4MTX/N the follo reel of I el of Ma or Rel	e Sn sing Sn OPB owing NiPd/ atte S	le <u>stan</u> and NiP with 25 g ways. Au finish	NiP dard y dAu/A 00 un	o <mark>dAu</mark> g. its SPQ	
Mount Compour Lead Finish Jpon expiry of this for example; LM2 Example: - Cust (Sta - TI c Reason for Chan Business Continuit Anticipated impa	omer condard l an sati I. III. IV. ge:	Matte S I will c TX/N order fc Pack Q Sfy the 3 R 3 R 2 R 2 R 2 R 2 R	Sn combir OPB - or 750 uantit e abov eels o ceels o ceels o ceels o ceels o ceels o ceels o	Matte ne lead fro can ship Ounits of y per Ree re order ir of NiPdAu of Matte S of Matte S of Matte S of Matte S	Sn ee solution with boom LM2557 el). In one of finish. In finish In and 1 and 1 re Quality	Matt ons in a th Matte 4MTX/N the follo reel of I el of Ma or Rel	e Sn sing Sn OPB owing NiPd/ atte S	le <u>stan</u> and NiP with 25 g ways. Au finish	NiP dard y dAu/A 00 un	o <mark>dAu</mark> g. its SPQ	
Mount Compour Lead Finish Jpon expiry of this or example; LM22 Example: - Cust (Sta - TI of Business Continuit Anticipated impate None Changes to prode	omer condard l an sati I. III. IV. ge:	Matte S I will c TX/N order fc Pack Q Sfy the 3 R 3 R 2 R 2 R 2 R 2 R	Sn combir OPB - or 750 uantit e abov eels o ceels o ceels o ceels o ceels o ceels o ceels o	Matte ne lead fro can ship Ounits of y per Ree re order ir of NiPdAu of Matte S of Matte S of Matte S of Matte S	Sn ee solution with boom LM2557 el). In one of finish. In finish In and 1 and 1 re Quality	Matt ons in a th Matte 4MTX/N the follo reel of I el of Ma or Rel	e Sn sing Sn OPB owing NiPd/ atte S	le <u>stan</u> and NiP with 25 g ways. Au finish	NiP dard y dAu/A 00 un	o <mark>dAu</mark> g. its SPQ	
Mount Compour Lead Finish Jpon expiry of this or example; LM23 Example: - Cust (Sta - TI of Business Continuit Anticipated impated None Changes to produce Assembly Site	omer condard l an sati I. III. IV. ge:	Matte S I will c TX/N order fc Pack Q Sfy the 3 R 3 R 2 R 2 R 2 R 2 R	Sn combir OPB - or 750 uantit e abov ceels o ceels o ceels o ceels o ceels o ceels o ceels o ceels o	Matte ne lead fro - can ship 00units of y per Ree e order ir of NiPdAu of Matte S of Matte S of Matte S of Matte S of Matte S of Matte S of Matte S	Sn ee solution with boom LM2557 el). In one of finish. In finish. In and 1 and 1 re Quality g from t	Matt ons in a th Matte 4MTX/N the follo reel of I el of Ma or Rel	e Sn sing Sn OPB owing NiPd/ atte S	le <u>stan</u> and NiP with 25 g ways. Au finish	NiP dard y dAu/A 00 un	rdAu p <u>art nun</u> g. its SPQ / negat	
Mount Compour Lead Finish Jpon expiry of this for example; LM22 Example: - Cust (Sta - TI of Business Continuit Anticipated impa None Changes to produce Assembly Site TI Melaka	omer condard l an sati I. III. IV. ge:	Matte S I will c TX/N order fc Pack Q Sfy the 3 R 3 R 2 R 2 R 2 R 2 R	Sn combir OPB - or 750 uantit e abov ceels o ceels o ceel	Matte ne lead fro- can ship Ounits of y per Ree re order ir of NiPdAu of Matte S of Matte S	Sn ee solution with boom LM2557 el). In one of finish. In finish In and 1 and 1 re Quality g from t ite Origin	Matt ons in a th Matte 4MTX/N the follo reel of I el of Ma or Rel his PCI	e Sn sing Sn OPB owing NiPd/ atte S	le <u>stan</u> and NiP with 25 g ways. Au finish	NiP dard y dAu/A 00 un	rdAu part nun g. its SPQ / negat	
Mount Compour Lead Finish Jpon expiry of this or example; LM2 Example: - Cust (Sta - TI of Business Continuit Anticipated impa None Changes to produ	omer condard l an sati I. III. IV. ge:	Matte S I will c TX/N order fc Pack Q Sfy the 3 R 3 R 2 R 2 R 2 R 2 R	Sn combir OPB - or 750 uantit e abov ceels o ceels o ceel	Matte ne lead fro - can ship 00units of y per Ree e order ir of NiPdAu of Matte S of Matte S of Matte S of Matte S of Matte S of Matte S of Matte S	Sn ee solution with boom LM2557 el). In one of finish. In finish In and 1 and 1 re Quality g from t ite Origin ite Origin	Matt ons in a th Matte 4MTX/N the follo reel of I el of Ma or Rel his PCI	e Sn sing Sn OPB owing NiPd/ atte S	le <u>stan</u> and NiP with 25 g ways. Au finish	NiP dard y dAu/A 00 un	dAu part num g. its SPQ / negat	

Sample product shipping TEXAS INSTRUMENTS MADE IN: Malaysia 2DC: 20: MSL '2 /260C/1 YEAR MSL 1 /235C/UNLIM OPT: ITEM: 39 LBL: 5A (L)T0:175			(a) 2000 (a) 2000 (b) 2000 (c) 200 (c) 2	(D) ()336 59047MLA 7523483S	7		
<b>Topside Device markin</b> Assembly site code for T Assembly site code for U Assembly site code for A Assembly site code for T	I Melak nisem mkor =	G3: (a = U = H = 4 or Z	= NiPdAu = MATTE Sn				
Product Affected:							
LM25574MTX/NOPB	LM25574MTX/NOPB LM3447			LM5025MTCX/NOPB		LMH6683MTX/NOPB	
LM2727MTCX/NOPB	LM3450	DAMTX/NOPB	LM5026MTX/	NOPB	LMV	324MTX/NOPB	
LM2737MTCX/NOPB	LM3450	DMTX/NOPB	LM5071MTX-50/NOPB LM		LMV	V344MTX/NOPB	
LM2742MTCX/NOPB	LM502	5AMTCX/NOPB	LM5071MTX-80/NOPB LM\		LMV	774MTX/NOPB	
LM2743MTCX/NOPB	LM5025BMTCX/NOPB LM5574MTX/NOPB LMV824MTX/NOPB					824MTX/NOPB	
LM2745MTCX/NOPB	LM502	5CMTCE/NOPB	LME49743MTX/NOPB LMV		934MTX/NOPB		
LM2747MTCX/NOPB	LM502	5CMTCX/NOPB	LMH6644MT>	K/NOPB			
This qualification has been s validates that the proposed		lly developed for					
Qualification Schedule		Start: Septe	ember 2013	End:	Dece	mber 2013	
	I	Device: LM344			1-26	50C)	
<b>.</b>		Package Con		•			
Assembly Site:	alaysia A/T	Mold Compound:		4206193			
# Pins-Designator, Family:	,		Mount Compound:		4208458		
Lead Finish:			Bond Wire:			1.0 Mil Dia., Au	
Qualification: 🛛 Pla	_	<b>Test Results</b>			1		
Reliability Test		Conditions				Sample Size / Fail	
Electrical Characterization	1	Datasheet		30/0			
**High Temp. Storage Ba		170C (420hrs)		77/0			
**Autoclave 121C		121C, 2 atm (		77/0			
**T/C -65C/150C		-	-65C/+150C (500 Cyc)				
Notes: **Tests require pr	econdi			С		77/0	

		Qua	alific	ation Plan					
This qualification has been sp validates that the proposed c							alification	data	
Qualification Schedule:	Start:	tart: September 2013 End: [			Decembe	December 2013			
Qualification Device: LM3450MTX/NOPB (MSL 1-260C)									
		Packag	e Con	struction De	tails				
Assembly Site:	Aalaysia A/T Mold Compound			Compound:	4206193				
# Pins-Designator, Family:	N, TSSOF	D	Mount	Compound:	4208458				
Lead Finish:	۸u			Bond Wire:	1.3 Mil D	ia., Au			
Qualification: 🛛 🕅 Plan		Test Re	sults						
Reliability Test		Conditi	ons				ple Size	/ Fail	
•						Lot 1	Lot 2	Lot 3	
Electrical Characterization		Datash				30/0			
**High Temp. Storage Bak	e	170C (				77/0	77/0 77/0	77/0	
**Autoclave 121C **T/C -65C/150C				(96 Hrs) (500 Cyc)		77/0	77/0	77/0	
Notes: **Tests require pre	condit				C	///0	///0	///0	
	contan			ation Plan	<u> </u>				
This qualification has been sp validates that the proposed c		ly develop	oed for	the validation			alification	data	
Qualification Schedule:	Start:	Sept	ember 2013	Decembe	r 2013				
Qualific	ation	Device	: LM5	026MTX/NO	PB (MSL 1	-260C)			
		Packag	e Con	struction De	tails				
Assembly Site:	laysia A/T Mold Compound:			4206193					
# Pins-Designator, Family:	N, TSSOP Mount Compound:			4208458					
	\			1 0 Mil D	1.0 Mil Dia., Au				
Lead Finish:	NiPdA	Au			Bond Wire:	110 1111 D			
Lead Finish: Qualification: Z Plan		Test Re	sults		Bond Wire:	1.0 1 11 0			
Qualification: 🛛 Plan		Test Re			Bond Wire:	Sam	ple Size		
Qualification: 🛛 Plan Reliability Test		Test Re Conditi	ons		Bond Wire:	Sam Lot 1	Lot 2	Lot 3	
Qualification: Reliability Test HTOL		Test Re Conditi 125C (	ons 1000 I	Hrs)	Bond Wire:	Sam Lot 1 77/0	•		
Qualification:Image: PlanReliability TestHTOLElectrical Characterization		Test Re Conditi 125C ( Datash	ons 1000 I eet		Bond Wire:	Sam Lot 1 77/0 30/0	Lot 2 77/0 	Lot 3 77/0 	
Qualification:Image: PlanReliability TestHTOLElectrical Characterization**High Temp. Storage Bak		Test Re Conditi 125C ( Datash 170C (	ons 1000 I eet 420 H	rs)	Bond Wire:	Sam Lot 1 77/0 30/0 77/0	Lot 2 77/0  77/0	Lot 3 77/0  77/0	
Qualification:Image: PlanReliability TestHTOLElectrical Characterization**High Temp. Storage Bak**Biased HAST		Test Re   Conditi   125C (   Datash   170C (   130C/8	ons 1000 I eet 420 H 35%RF	rs) 1 (96 Hrs)	Bond Wire:	Sam Lot 1 77/0 30/0 77/0 77/0	Lot 2 77/0  77/0 77/0	Lot 3 77/0  77/0 77/0	
Qualification:Image: PlanReliability TestHTOLElectrical Characterization**High Temp. Storage Bak		Test Re   Conditi   125C (   Datash   170C (   130C/8   121C, 2	ons 1000 I eet 420 H 35%RF 2 atm	rs)	Bond Wire:	Sam Lot 1 77/0 30/0 77/0	Lot 2 77/0  77/0	Lot 3 77/0 	

		Qua	alific	ation Plan					
This qualification has been spo validates that the proposed ch									
Qualification Schedule:		Start:	Sept	ember 2013	End:	December 2013			
Qualificat	ion I	Device: L	MH66	44MTX /NO	PB (MSI	. 1-2	60C)		
		Packag	e Con	struction De	tails				
Assembly Site: TI M		Malaysia A/T		Mold Compound: 4			4206193		
# Pins-Designator, Family:	# Pins-Designator, Family: 14-P		D	Mount	Mount Compound: 4		8458		
Lead Finish:					Bond Wire:		Mil Dia., Au		
Qualification: 🛛 Plan		] Test Re	sults						
Reliability Test		Conditio	ons				Sample Size / Fail		
Electrical Characterization		Datashe					30/0		
Notes: **Tests require pre	cond				С				
		<u> </u>		ation 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.									
<b>Qualification Schedule:</b>	Qualification Schedule:		Start: September 2013 End: D			Dece	mber 2013		
Qualification Device: LMV934MTX/NOPB (MSL 1-260C)							)C)		
Package Construction Details									
Assembly Site: TI Ma		Malaysia A/T		Mold Compound:		4206193			
# Pins-Designator, Family: 14-P		-PW, TSSOP		Mount Compound:		4208458			
Lead Finish: NiPd/		lAu		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 Bak	170C (420hrs)					77/0			
**Autoclave 121C	121C, 2 atm (96 Hrs)					77/0			
**T/C -65C/150C	-65C/+150C (500 Cyc) 77/0					77/0			
Notes: **Tests require pre	cond	itioning se	equenc	ce: MSL1-260	С				

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