PCN Number:		20140411001					PCN Date:		04/14/2014		
Title: Qualification of TI Taiwan as Alternate Assembly/Test site for the TPS54526PWP											
<b>Customer Contact:</b>		PCN Manager		Phone:	+1(214)480-6037		037	Dept:	Quality Services		
Propose	d 1 <sup>st</sup> Ship Da	ite:	(	07/14/2014 Estimated Sample Avai		Availa	bility:	04/15/2014			
Change	Туре:										
	mbly Site			Assembly	Process			Asse	sembly Materials		
Desi	gn			Electrical S	Specificat	ion		Mec	hanical S	pecif	ication
	Site			Packing/S	hipping/L	abeling		Test	Process		
Wafe	er Bump Site			Wafer Bun	np Materi	al		Waf	fer Bump Process		
Wafe				Waf	fer Fab Process						
			Part number change								
PCN Details											
Description of Change:											
TI Taiwan is being qualified as an additional Assembly/Test site for the TPS54526PWP. There are no BOM differences between devices assembled at Amkor Philippines versus the current Assembly site.											
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 Malaysia	Assembly Site Origin (22L)	ASO: MLA
TI Taiwan	Assembly Site Origin (22L)	ASO: TAI

Sample product shipping label (not actual product label)





(1P) \$N74L\$07N\$R (Q) 2000 (D) 0336 (31T)LOT: 3959047MLA (4W) TKY(1T) 7523483\$12 (P) (2P) REV: (V) 0033317 (20L) C\$0: SHE (21L) CCO:USA (22L) A\$0: MLA (23L) ACO: MYS

## **Topside Device marking:**

Assembly site code for TI Malaysia= K
Assembly site code for TAI= T

<b>Product Affected</b>		
TPS54526PWP	TPS54526PWPR	

Reference Qualification Data: Approved March, 2014					
This qualification has been specif	This qualification has been specifically developed for the validation of this change. The qualification data				
validates that the proposed chan	ge meets the applicable	released technical specifica	tions.		
Qualifica	tion Device: TPS54	526PWP (MSL2-2600	<b>(2)</b>		
Package Construction Details					
Assembly Site:	TI Taiwan	Mold Compound:	4205443		
# Pins-Designator, Family:	14-PWP, TSSOP	Mount Compound:	4208458		
Lead frame (Finish, Base):	NiPdAu, Cu	Bond Wire:	1.98 Mil Dia., Cu		
Qualification:  Plan  Test Results					
Reliability Test	Conditions		Sample Size / Fail		
Ball Bond Shear	76 balls, 3 units min		Pass		
Bond Pull	76 balls, 3 units min		Pass		

Qualification Data - Approved February, 2008						
This qualification has been developed for the validation of this change. The qualification data						
		he applicable released			cification	ns.
Reference	Reference Qualification #1: TAS5162DDV (MSL 3-260C)					
Package Construction Details						
Assembly Site:	TI Taiwan	Mold Compound:	42	05443		
# Pins-Designator, Family:	44-DDV, TSSOP	Mount Compound:	42	06201		
Lead frame (Finish, Base):	NiPdAu, Cu	Bond Wire:	1.9	98mil, Cu	I	
Qualification:  Plan			-			
D. I. Lilli T. I	C !:::			Sample Size/Fail		
Reliability Test	Conditions			Lot#1	Lot#2	Lot#3
**HTOL	155C (240 Hrs)		116/0	116/0	116/0	
ELFR	155C (24 Hrs)			800/0	800/0	800/0
**Biased HAST	130C/85%RH (96 Hrs)			77/0	77/0	77/0
**Autoclave	121C (96hrs) (96 Hr	rs)		77/0	77/0	77/0
**T/C -65C/150C	-65C/+150C (500 Cyc)			77/0	77/0	77/0
High Temp Storage Bake	170C (420 Hrs)		77/0	77/0	77/0	
Notes **- Preconditioning	sequence: Level 3-	260C.				
		proved Decembe				
This qualification has been s						data
		the applicable released tec				
Reference Qualification# 2: BUF11704AIPWPR (MSL 2-260C)						
	Package Cons	struction Details	-			
Assembly Site:	TI- Taiwan Mold Compound:		nd:	: 4205443		
# Pins-Designator, Family:	28-PWP, TSSOP	Mount Compour	nd:	4208458		
Lead frame (Finish, Base):	NiPdAu, Cu	Bond Wi	re:	0.95 Mi	l Dia., A	J

Qualification: Plan  Test Results					
Reliability Test	Conditions	Sample Size/Fail			
**T/C -65C/150C	-65C/+150C (500 Cyc)	77/0			
**High Temp Storage Bake	170C (420hrs)	77/0			
**Autoclave	121C (96hrs)	77/0			
Bond Pull	76 Wire, 3 units min	Pass			
Ball Bond Shear	76 balls, 5 units min	Pass			
Die Shear	(per mfg. Site specification)	Pass			
Notes **- Preconditioning sequence: Level 2-260C.					

Qualification Data - Approved December, 2012				
	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.				
Reference	Qualification# 3: T	HS6184PWP (MSL 2-	260C)	
	Package Constru	ction Details		
Assembly Site:	TI- Taiwan	Mold Compound:	4205443	
# Pins-Designator, Family:	20-PWP, TSSOP	Mount Compound:	4208458	
Lead frame (Finish, Base):	NiPdAu, Cu	Bond Wire:	0.95 Mil Dia., Au	
Qualification:  Plan	☐ Test Results			
Reliability Test	Conditions		Sample Size/Fail	
**T/C -65C/150C	-65C/+150C (500	Cyc)	77/0	
**High Temp Storage Bake	170C (420hrs)		77/0	
**Autoclave	121C (96hrs)		77/0	
Bond Pull	76 Wire, 3 units m	in	Pass	
Ball Bond Shear	76 balls, 5 units m	76 balls, 5 units min		
Die Shear	(per mfg. Site spec	(per mfg. Site specification)		
Die Shear (per mfg. Site specification) Pass  Notes **- Preconditioning sequence: Level 2-260C.				
Qualification Data - Approved December, 2012				
This qualification has been sp				
		pplicable released technic		
Reference (	<u>-</u>	S2283ADCAR (MSL 3	-260C)	
	Package Constru	ction Details		
Assembly Site:	TI- Taiwan	Mold Compound:	4205443	
# Pins-Designator, Family:	56-DCA, TSSOP	Mount Compound:	4208458	
Lead frame (Finish, Base):	NiPdAu, Cu	Bond Wire:	0.95 Mil Dia., Au	
Qualification:  Plan	<b>☐</b> Test Results			
Reliability Test	Conditions	Conditions		
**T/C -65C/150C	-65C/+150C (500	-65C/+150C (500 Cyc)		
**High Temp Storage Bake	170C (420hrs)	, ,		
**Autoclave	121C (96hrs)	121C (96hrs)		
Bond Pull	76 Wire, 3 units m	76 Wire, 3 units min		
Ball Bond Shear	76 balls, 5 units m	76 balls, 5 units min		
Die Shear (per mfg. Site specification) Pass			Pass	
Notes **- Preconditioning	sequence: Level 3-260	C		

Qualification Data – Approved December, 2009					
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.					
Reference Qualification# 5: TPA6030A4PWP (MSL 4-260C)					
Package Construction Details					
Assembly Site:	TI- Taiwan	Mold Compound:	4205443		
# Pins-Designator, Family:	28-PWP, TSSOP	Mount Compound:	4206201		
Lead frame (Finish, Base):	NiPdAu, Cu	Bond Wire:	0.96 Mil Dia., Cu		
Qualification:  Plan  Test Results					
Reliability Test	Conditions	Conditions			
**T/C -65C/150C	-65C/+150C (500	-65C/+150C (500 Cyc)			
**High Temp Storage Bake	170C (420hrs)	170C (420hrs)			
**Thermal Shock	-65C/+150C (500	-65C/+150C (500 Cyc)			
**Autoclave	121C (96hrs)	121C (96hrs)			
Notes **- Preconditioning sequence: Level 4-260C.					

Qualification Data - Approved February, 2011						
This qualification has been specifically developed for the validation of this change. The qualification data						
validates that the prop	validates that the proposed change meets the applicable released technical specifications.					
Reference	Reference Qualification# 6: TLS2602RDCA (MSL 3-260C)					
	Package Construction Details					
Assembly Site:	TI- Taiwan	Mold Compound:	4205443			
# Pins-Designator, Family:	56-DCA, TSSOP	Mount Compound:	4208458			
Lead frame (Finish, Base):	NiPdAu, Cu	iPdAu, Cu Bond Wire:				
Qualification:  Plan  Test Results						
Reliability Test	Conditions	Conditions				
**T/C -65C/150C	-65C/+150C (500	-65C/+150C (500 Cyc)				
**Autoclave	121C (96hrs)	121C (96hrs)				
Notes **- Preconditioning sequence: Level 3-260C.						

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