

PCN Number:	20130926001	PCN Date:	02/12/2014
Title:	BCB Elimination for 0.4 & 0.5mm Pitch WCSP Bump <=25 Bump Count		
Customer Contact:	PCN Manager	Phone:	+1(214)480-6037
Dept:	Quality Services		
Proposed 1st Ship Date:	05/12/2014	Estimated Sample Availability:	Date Provided at Sample Request
Change Type:			
<input type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Assembly Process
<input type="checkbox"/>	Design	<input type="checkbox"/>	Electrical Specification
<input type="checkbox"/>	Test Site	<input type="checkbox"/>	Mechanical Specification
<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 Material	<input checked="" type="checkbox"/>	Wafer Bump Process
<input type="checkbox"/>	Wafer Fab Site	<input type="checkbox"/>	Wafer Fab Materials
<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 Incorporated is announcing the qualification of BCB (benzocyclobutene) layer elimination on 0.4 and 0.5 mm pitch Thin Micro SMD for 25 bumps. Only non-trim devices are applicable. The affected devices are listed in the "Product Affected" section.			
Reason for Change:			
Continuity of Supply.			
Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):			
None.			
Changes to product identification resulting from this PCN:			
None.			
Product Affected:			
ARC9TLVOTL/NOPB	LM3655TLX	LM94023BITME/NOPB	LP3985ITLX-2.7/NOPB
BP18TM/NOPB	LM3686TLE-AADW/NO	LM94023BITMX/NOPB	LP3985ITLX-2.8/E7001676
BP18TMX/NOPB	LM3686TLE-AADW/NOPB	LMC555CTP/NOPB	LP3985ITLX-2.8/NO
BP6TME/NOPB	LM3686TLE-AAED/NO	LMC555CTPX/NOPB	LP3985ITLX-2.8/NOPB
BP6TMX/NOPB	LM3686TLE-AAED/NOPB	LMC6035ITL/NOPB	LP3985ITLX-2.8/S1
BP8TLE/NOPB	LM3686TLE-AAEF/NO	LMC6035ITLX	LP3985ITLX-2.9/NO
BP9TME/NOPB	LM3686TLE-AAEF/NOPB	LMC6035ITLX/NOPB	LP3985ITLX-2.9/NOPB
BP9TMX/NOPB	LM3686TLX-AADW/NO	LMC8101TP/NOPB	LP3985ITLX-285/NO
EU13LMH2110TM/NOPB	LM3686TLX-AADW/NOPB	LMC8101TPX/NOPB	LP3985ITLX-285/NOPB
LM10502TLE/NOPB	LM3686TLX-AAED/NO	LMH2100TM/NOPB	LP3985ITLX-3.0/NO
LM10502TLX/NOPB	LM3686TLX-AAED/NOPB	LMH2100TMX/NOPB	LP3985ITLX-3.0/NOPB
LM20LVTME/NOPB	LM3686TLX-AAEF/NO	LMH2110TM/NOPB	LP3985ITLX-3.1/NO
LM20LVTMX/NOPB	LM3686TLX-AAEF/NOPB	LMH2110TMX/NOPB	LP3985ITLX-3.1/NOPB
LM20SITL/NOPB	LM3695YFQR	LMH2110TMX/S1	LP3985ITLX-3.2/NO
LM20SITLX/NOPB	LM393TL	LMH2110TMX/S7002718	LP3985ITLX-3.2/NOPB
LM2755TM/NOPB	LM393TL/NOPB	LMH2121TME/NOPB	LP3985ITLX-3.3/NO
LM2755TMX/NOPB	LM393TLX	LMH2121TMX/NOPB	LP3985ITLX-3.3/NOPB
LM2903ITL/NOPB	LM393TLX/NOPB	LMH2180TM/NOPB	LP3985ITLX-4.75/NO
LM2903ITLX	LM4665ITL/NOPB	LMH2180TMX/NOPB	LP3985ITLX-4.75/NOPB
LM2903ITLX/NOPB	LM4667ITL	LMH2190TM-38/NOPB	LP3985ITLX-4.8/NO
LM2904ITP/NOPB	LM4667ITL/NOPB	LMH2190TMX-38/NOPB	LP3985ITLX-4.8/NOPB

LM2904ITPX/NOPB	LM4670ITL/NOPB	LMH2191TME/NOPB	LP3985ITLX-5.0/NO
LM317LITP/NOPB	LM4670ITLX/NOPB	LMH2191TMX/NOPB	LP3985ITLX-5.0/NOPB
LM317LITPX/NOPB	LM4671ITL/NOPB	LMR70503TM/NOPB	LP3987ITL-2.5/NOPB
LM3291TME/NOPB	LM4671ITLX/NOPB	LMR70503TMX/NOPB	LP3987ITL-2.6/NOPB
LM3291TMX/NOPB	LM4673TM/NOPB	LMS4684ITL	LP3987ITL-2.8/NOPB
LM34904ITM/NOPB	LM4673TMX/NOPB	LMS4684ITL/NOPB	LP3987ITL-2.85/NO
LM34904ITMX/NOPB	LM4674ATL/NOPB	LMS4684ITLX	LP3987ITL-2.85/NOPB
LM34908TM-3.5/NOPB	LM4674ATLX/NOPB	LMS4684ITLX/NOPB	LP3987ITL-3.0/NOPB
LM34908TM-5.7/NOPB	LM4674TLX/NOPB	LMV1090TL/NOPB	LP3987ITLX-2.5/NO
LM34908TM-ADJ/NOPB	LM4675TL/NOPB	LMV1090TLX/NOPB	LP3987ITLX-2.5/NOPB
LM34908TM-ADJA/NO	LM4675TLX/NOPB	LMV225TL/NOPB	LP3987ITLX-2.6/NO
LM34908TM-ADJA/NOPB	LM48311TL/NOPB	LMV225TLX/NOPB	LP3987ITLX-2.6/NOPB
LM34908TM-ADJA2/NO	LM48311TLX/NOPB	LMV226TL/NOPB	LP3987ITLX-2.8/NO
LM34908TM-ADJA2/NOPB	LM48312TLE/NOPB	LMV226TLX/NOPB	LP3987ITLX-2.8/NOPB
LM34908TM-ADJB/NO	LM48312TLX/NOPB	LMV228TL/NOPB	LP3987ITLX-2.85/E7001675
LM34908TM-ADJB/NOPB	LM48340TM/NOPB	LMV228TLX/NOPB	LP3987ITLX-2.85/NO
LM34908TMX-3.5/NO	LM48411TL/NOPB	LMV232TL/NOPB	LP3987ITLX-2.85/NOPB
LM34908TMX-3.5/NOPB	LM48411TL/S7002599	LMV232TLX/NOPB	LP3987ITLX-2.85/S1
LM34908TMX-5.7/NO	LM48411TLX/NOPB	LMV7272TL/J7002014	LP3987ITLX-3.0/NO
LM34908TMX-5.7/NOPB	LM48411TLX/S1	LMV7272TL/NOPB	LP3987ITLX-3.0/NOPB
LM34908TMX-ADJ/NO	LM48411TLX/S7002606	LMV7272TLX/J7002015	LP3999ITL-1.8/NOPB
LM34908TMX-ADJ/NOPB	LM48413TL/NOPB	LMV7272TLX/NOPB	LP3999ITLX-1.8/E7000583
LM34908TMX-ADJA/NO	LM48413TLX/NOPB	LMV7272TLX/S1	LP3999ITLX-1.8/NO
LM34908TMX-ADJA/NOPB	LM48512TL/NOPB	LMV981TL/NOPB	LP3999ITLX-1.8/NOPB
LM34908TMX-ADJB/NO	LM48512TLX/NOPB	LMV981TLX/J7002010	LP3999ITLX-1.8/S1
LM34908TMX-ADJB/NOPB	LM48513TL/NOPB	LMV981TLX/NOPB	LP5522TM/NOPB
LM34908UM-3.5/NOPB	LM48513TLX/NOPB	LP3907TL-JJ11/NOPB	LP5522TMX/NOPB
LM34908UMX-3.5/NO	LM48555TL/NOPB	LP3907TL-JJCP/NOPB	LP5524TM-5/NOPB
LM34908UMX-3.5/NOPB	LM48555TLX/NOPB	LP3907TL-JSXS/NOPB	LP5524TMX-5/NOPB
LM34940TM-ADJ/NOPB	LM48556TL/NOPB	LP3907TL-PLNTO/NO	LP5562TME/NOPB
LM34940TMX-ADJ/NO	LM48556TLX/NOPB	LP3907TL-PLNTO/NOPB	LP5562TMX/NOPB
LM34940TMX-ADJ/NOPB	LM48557TL/NOPB	LP3907TL-SMP1/NOPB	LP5952TL-0.7/NOPB
LM3532TME-40/NOPB	LM48557TLX/NOPB	LP3907TLX-0B/NOPB	LP5952TL-1.0/NOPB
LM3532TME-40A/NOPB	LM48557TLX/S1	LP3907TLX-JJ11/NO	LP5952TL-1.2/NOPB
LM3532TMX-40/NOPB	LM48557TLX/S7002424	LP3907TLX-JJ11/NOPB	LP5952TL-1.3/NOPB
LM3532TMX-40A/NOPB	LM48560TL/NOPB	LP3907TLX-JJCP/NO	LP5952TL-1.4/NOPB
LM3532TMX-40A/S1	LM48560TLX/NOPB	LP3907TLX-JJCP/NOPB	LP5952TL-1.5/NOPB
LM3532TMX-40A/S7003106	LM48580TL/NOPB	LP3907TLX-JSXS/NO	LP5952TL-1.6/NOPB
LM3533TME-40/NOPB	LM48580TLX/NOPB	LP3907TLX-JSXS/NOPB	LP5952TL-1.8/NOPB
LM3533TMX-40/NOPB	LM4879ITL/NOPB	LP3907TLX-PLNTO/NO	LP5952TL-2.0/NOPB
LM3534TME-A1/NOPB	LM48821TL/NOPB	LP3907TLX-PLNTO/NOPB	LP5952TLX-0.7/NOPB
LM3534TME/NOPB	LM48821TLX/NOPB	LP3918TL-A/NOPB	LP5952TLX-1.0/NOPB
LM3534TMX/NOPB	LM48822TL/NOPB	LP3918TL-L/NOPB	LP5952TLX-1.2/NOPB

LM3555TLE/NOPB	LM48822TLX/NOPB	LP3918TL/NOPB	LP5952TLX-1.3/NOPB
LM3555TLX/NOPB	LM48823TL/NOPB	LP3918TLX-A/NOPB	LP5952TLX-1.4/NOPB
LM3556TME/NOPB	LM48823TLX/NOPB	LP3918TLX-L/NOPB	LP5952TLX-1.5/NOPB
LM3556TMX/NOPB	LM48824TM/NOPB	LP3918TLX/NOPB	LP5952TLX-1.6/NOPB
LM3559TLE/NOPB	LM48824TMX/NOPB	LP3928TLX-1828/NO	LP5952TLX-1.8/NOPB
LM3559TLE/S7002732	LM48860TL/NOPB	LP3928TLX-1828/NOPB	LP5952TLX-2.0/NOPB
LM3559TLX/NOPB	LM48860TLX/NOPB	LP3983ITL-2.5/NOPB	LP8557AYFQR
LM3559TLX/S7002731	LM48861TM/NOPB	LP3983ITLX-1.6/NO	LP8557AYFQT
LM3560TLE-20/NOPB	LM48861TMX/NOPB	LP3983ITLX-1.6/NOPB	LP8557E00AYFQR
LM3560TLE/NOPB	LM48861TMX/S1	LP3985ITL-2.5/NOPB	LP8557E00AYFQT
LM3560TLX-20/NOPB	LM48861TMX/S7002583	LP3985ITL-2.6/NOPB	LP8711TLE/NOPB
LM3560TLX/NOPB	LM49120TL/NOPB	LP3985ITL-2.7/NOPB	LP8711TLX/NOPB
LM3561TME/NOPB	LM49120TLX/NOPB	LP3985ITL-2.8/NOPB	LP8720TLE-B/NOPB
LM3561TMX/NOPB	LM4921ITL/NOPB	LP3985ITL-2.9/NOPB	LP8720TLE-SMP1/NO
LM3563A3TME/NOPB	LM4921ITLX/NOPB	LP3985ITL-285/NOPB	LP8720TLE-SMP1/NOPB
LM3563TME/NOPB	LM4941TM/NOPB	LP3985ITL-3.0/NOPB	LP8720TLE/NOPB
LM3565TLE/NOPB	LM4941TMX/NOPB	LP3985ITL-3.1/NOPB	LP8720TLX-B/NOPB
LM3565TLX/NOPB	LM4954TL/NOPB	LP3985ITL-3.2/NOPB	LP8720TLX/NOPB
LM358TP/NOPB	LM4990ITL/NOPB	LP3985ITL-3.3/NOPB	LP8727TME-B/NOPB
LM358TPX/NOPB	LM4990ITLX/NOPB	LP3985ITL-4.75/NO	LP8727TME-SMP1/NO
LM3630ATME	LM78L05ITP/NOPB	LP3985ITL-4.75/NOPB	LP8727TME-SMP1/NOPB
LM3630ATMX	LM78L05ITPX/NOPB	LP3985ITL-4.8/NOPB	LP8727TME/NOPB
LM3630TME/NOPB	LM78L09ITPX/NOPB	LP3985ITL-5.0/NOPB	LP8727TMX-B/NOPB
LM3630TMX/NOPB	LM79L05ACTL/NOPB	LP3985ITLX-2.5/NO	LP8727TMX/NOPB
LM3642TLE-LT/NOPB	LM79L05ACTLX	LP3985ITLX-2.5/NOPB	NE139LMH2191TM/NO
LM3642TLE/NOPB	LM79L05ACTLX/NOPB	LP3985ITLX-2.6/NO	NE139LMH2191TM/NOPB
LM3642TLX-LT/NOPB	LM8335TLE/NOPB	LP3985ITLX-2.6/NOPB	PLM3534TMXA1/J
LM3642TLX/NOPB	LM8335TLX/NOPB	LP3985ITLX-2.7/NO	

Qualification Data: Approved 1/23/2014

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: LP3907TLX-PLNTO/NOPB(CL)**Package Construction Details**

Assembly & Bump Site:	TIEM – MALACCA / TIEM-BP	Bump Composition:	SnAgCu
# Pins-Designator, Family:	25-WCSP, WCSP	Bump Diameter:	300um

Qualification: Plan Test Results

Reliability Test	Conditions	Sample Size / Fail		
		Lot#1	Lot#2	Lot#3
**Biased HAST	130C/85%RH (96 Hours)	77/0	--	--
**Life Test	150C (500 Hours)	77/0	--	--
Temperature Cycle	-40/125C (500 Cycles)	77/0	--	--

Notes: **Preconditioning: MSL 1@260C peak +5/0C

Qual Vehicle 2: LP3907TLXPK4J3(TL)**Package Construction Details**

Assembly & Bump Site:	TIEM – MALACCA / TIEM-BP	Bump Composition:	SnAgCu
# Pins-Designator, Family:	25-WCSP, WCSP	Bump Diameter:	300um

Qualification: Plan Test Results

Reliability Test	Conditions	Sample Size / Fail		
		Lot#1	Lot#2	Lot#3
**Biased HAST	130C/85%RH (96 Hours)	77/0	77/0	77/0
**Life Test	150C (500 Hours)	77/0	--	--
Temperature Cycle	-40/125C (500 Cycles)	77/0	77/0	77/0

Notes: **Preconditioning: MSL 1@260C peak +5/0C

Qualification Data: Approved 12/20/2013

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: LP8727TMXBNOPB(CL)**Package Construction Details**

Assembly & Bump Site:	TIEM – MALACCA / TIEM-BP	Bump Composition:	SnAgCu
# Pins-Designator, Family:	25-WCSP, WCSP	Bump Diameter:	250um

Qualification: <input type="checkbox"/> Plan <input checked="" type="checkbox"/> Test Results				
Reliability Test	Conditions	Sample Size /Fail		
		Lot#1	Lot#2	Lot#3
**Biased HAST	130C/85%RH (96 Hours)	77/0	--	--
**Life Test	125C (500 Hours)	77/0	--	--
Temperature Cycle	-40/125C (500 Cycles)	77/0	--	--
Notes: **Preconditioning: MSL 1@260C peak +5/0C				
Qual Vehicle 2: LP8727TMXBNOPB(TL)				
Package Construction Details				
Assembly & Bump Site:	TIEM – MALACCA / TIEM-BP	Bump Composition:	SnAgCu	
# Pins-Designator, Family:	25-WCSP, WCSP	Bump Diameter:	250um	
Qualification: <input type="checkbox"/> Plan <input checked="" type="checkbox"/> Test Results				
Reliability Test	Conditions	Sample Size /Fail		
		Lot#1	Lot#2	Lot#3
**Biased HAST	130C/85%RH (96 Hours)	77/0	77/0	77/0
**Life Test	125C (500 Hours)	77/0	--	--
Temperature Cycle	-40/125C (500 Cycles)	77/0	77/0	77/0
Notes: **Preconditioning: MSL 1@260C peak +5/0C				

For questions regarding this notice, e-mails can be sent to the regional contacts shown below or to 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